

*Appendices*

# Investment Grade Traffic and Revenue Study U.S. 36 Managed Lanes

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*In association with:*

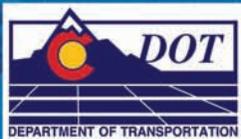
All Traffic Data Services, Inc.  
Economic & Planning Systems, Inc.  
Felsburg, Holt and Ullevig  
Resource Systems Group, Inc.

*Appendices*

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*Prepared for:*

Colorado Department of Transportation/  
High Performance Transportation Enterprise



*Prepared by:*

**WilburSmith**  
ASSOCIATES

*In association with:*

All Traffic Data Services, Inc.  
Economic & Planning Systems, Inc.  
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Resource Systems Group, Inc.

**Appendix 1: Denver-Boulder Stated Preference Survey Report**

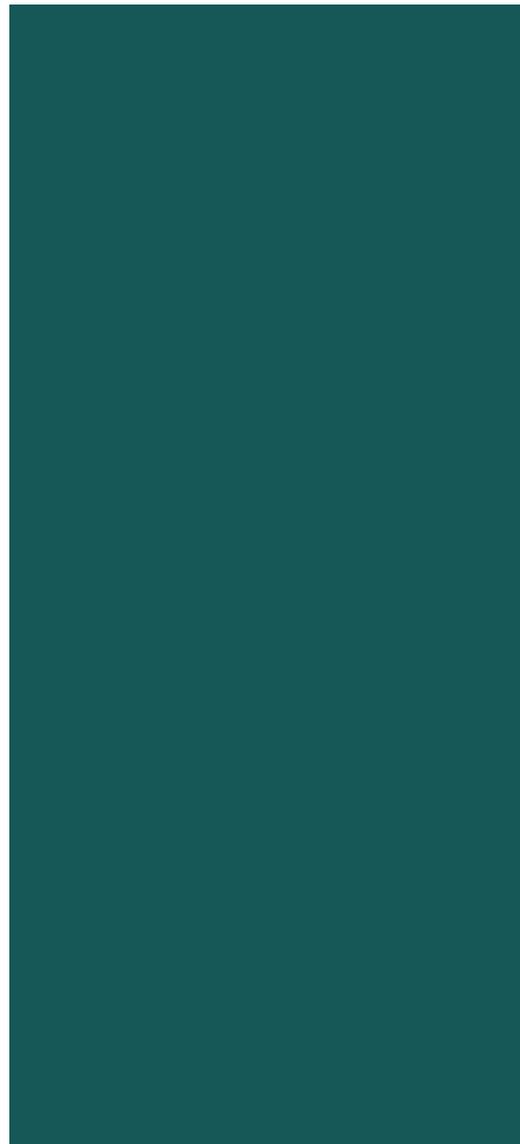


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# **Denver-Boulder Stated Preference Survey Report**

**Prepared for Wilbur  
Smith Associates**

December 2010



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## 1.0 INTRODUCTION

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The Colorado Department of Transportation (CDOT) High Performance Transportation Enterprise (HPTE) was formed to pursue innovative means of more efficiently financing important surface transportation infrastructure projects. The HPTE is evaluating a plan to reduce congestion and encourage more energy efficient modes of transportation on a section of US 36 between Boulder and Denver. The proposed project would include one managed lane in each direction on U.S. 36; bus rapid transit operations for the corridor; a commuter bikeway; and an intelligent transportation system for toll collection and incident management.

In November 2010, Resource Systems Group, Inc. (RSG) conducted a stated preference (SP) survey for automobile drivers in the greater Denver-Boulder area. RSG collaborated with Wilbur Smith Associates (WSA) to conduct the survey to support WSA's travel demand forecasting for the proposed US 36 project.

The primary purpose of the survey was to estimate values of the toll sensitivity, or value of time (VOT) of travelers in the Denver-Boulder area who use or could reasonably use US 36 between Boulder and Denver. Estimates of travelers' time and cost sensitivities will be used to support WSA's estimates of highway traffic and toll revenue.

RSG developed and implemented a stated preference survey questionnaire that gathered information from automobile travelers who recently made a trip in the US 36 corridor. The questionnaire collected data on current travel behaviors, presented respondents with information about the proposed Managed Lanes, and used stated preference experiments to collect data that were used to estimate travelers' VOT and propensity to use the proposed new Managed Lanes under a range of possible future conditions.

The survey approach employed a computer-assisted self-interview (CASI) technique developed by RSG. The stated preference survey instrument was customized for each respondent by presenting questions and modifying wording based on respondents' previous answers. These dynamic survey features provide an accurate and efficient means of data collection and allow presentation of realistic future conditions that correspond with the respondents' reported experiences. The customized, proprietary software was programmed for online administration to targeted audiences.

The survey was fielded online in November of 2010 to more than 5,000 residents in the greater Denver-Boulder metropolitan area. Data from the stated preference survey were analyzed using accepted statistical techniques to estimate coefficients of a multinomial logit (MNL) model for four traveler segments. The coefficients of the MNL model can be used to estimate travelers' value of time. In addition, mixed multinomial logit models were developed to estimate distributions of the value of time within each traveler segment.

This report documents the development and administration of the survey questionnaire, presents survey results, and summarizes the discrete choice model estimation methodology and findings. The full text of the survey questionnaire, survey screen captures, response tabulations, and respondents' comments about the project appear as appendices to this report.

## 2.0 SURVEY QUESTIONNAIRE

---

The survey questionnaire was designed to collect information about a recent trip that the respondent made in the greater Denver-Boulder area and to find out how they might make that same trip if Managed Lanes were



constructed on US 36 between Boulder and Denver. The survey questions were grouped into four main sections:

1. Screening and trip characteristic questions
2. Stated preference questions
3. Debrief and opinion questions
4. Demographic questions

The complete text of the questionnaire is included in Appendix A and example survey screens are included in Appendix B.

## 2.1 Screener and Trip Characteristic Questions

After being presented with basic instructions about how to navigate the computer-based instrument and a brief introduction to the purpose of the study, respondents answered a set of screening questions. To qualify for the survey, respondents must have entered a home ZIP code from the state of Colorado, and they must have made a recent automobile trip that met the following conditions:

- Used or could have reasonably used US 36 between Boulder and Denver
- Made within the past month
- Made in a personal vehicle
- Made on a weekday
- Took at least 15 minutes

Respondents who indicated that they had not made a trip that met all of these criteria were terminated from the survey. Figure 2.1 shows a screen capture of the trip qualification question.



Figure 2.1: Survey Sample Screen: Trip Qualification Question



## Denver-Boulder Travel Study

**Were you the driver for a recent trip anywhere in the highlighted corridor between Denver and Boulder that met all of the following conditions?**

- Used, or reasonably could have used, at least 3 miles of US 36
- Made within the past month
- Made in a personal vehicle (e.g. car, pickup truck, minivan)
- Made on a weekday
- Took at least 15 minutes

Yes, I have made a recent trip that used US 36 and that meets **all** of these conditions

---

Yes, I have made a recent trip that did not use, but reasonably could have used US 36 that meets **all** of these conditions

---

No, I have not made a recent trip that used or could have used US 36 that meets all of these conditions



Denver-Boulder Corridor  
© Google Maps 2010

[Next Question](#)

Qualifying respondents were asked to focus on their most recent trip that met all of the screening criteria as they continued through the survey. This most recent trip, referred to as the respondent's reference trip, formed the basis for the rest of the survey. Respondents were asked to think of the one-way portion of their trip, rather than their entire round trip, and were asked a series of questions regarding the specific details of their reference trip, including:

- Day of week
- Purpose
- Beginning and ending locations
- US 36 entrance and exit ramps
- Use of alternate routes to avoid congestion
- Trip start time
- Travel time
- Travel delays
- Vehicle occupants
- Tolls paid
- Ownership of electronic toll collection (ETC) transponders
- Trip frequency
- Use of I-25 Express Lanes



- Frequency of transit use

The specifics of these questions are described in detail below.

First, respondents were asked to select the day of the week they made their trip and the primary purpose of their trip. Focusing on their trip in one direction only, respondents were asked to report where their trip began and ended. Respondents then identified their origin and destination by either entering a business name, a street intersection, or a full address (Figure 2.2), or by using an interactive map (Figure 2.3).

**Figure 2.2: Sample Survey Screen: Beginning Location Address Form**

The screenshot shows a survey form titled "Denver-Boulder Travel Study" with a "36" shield logo. The main heading is "You reported a work trip that BEGAN at home. Where is your home located?\*" followed by instructions: "Please enter an address (with street number), the nearest intersection, or a business name (if applicable) in the boxes below. If you do not know this information or you would prefer to find the location on a map, please select 'I would rather use a map.'" There is a checkbox for "I would rather use a map". Below are three input fields: "Find a Business (optional)", "Address or Intersection", and "City". The "City" field is followed by "State" (with "CO" selected) and "Zip Code". A "Search" button is at the bottom. A note at the bottom states: "\*Note: Your information will be kept strictly confidential and will only be used for this survey. Your responses will never be linked back to your personal information."



Figure 2.3: Sample Survey Screen: Ending Location Interactive Mapping Interface



## Denver-Boulder Travel Study

You reported a work trip that ENDED at work. Where is your workplace located?\*

I would rather use a map

**To use the map:**

1. Click on the map to zoom in on your location
2. Keep clicking until a marker  appears
3. Continue to drag the map and click on the location until the marker is in the right place (**the street number does not have to be exact**)
4. Click "Next Question" to proceed



**\*Note:** Your information will be kept strictly confidential and will only be used for this survey. Your responses will never be linked back to your personal information.

These locations were geocoded using a Google Maps™ application programming interface to provide a latitude and longitude for both the trip origin and destination. The latitude and longitude coordinates were used to verify that the trip began and ended in two different locations in the study corridor. Trip distance and estimated travel time were calculated so that they could be compared to the reported travel times. If the locations suggested an invalid trip, respondents were reminded to describe a one-way portion of the trip and asked if they needed to change the beginning or ending location. Respondents who did not change their origin or destination were thanked and terminated from the survey.

Respondents were then provided a list of the exit/entrance ramps along the US 36 study corridor and were asked to indicate where they entered, or could have entered, US 36 and where they exited, or could have exited, off of US 36. If a respondent indicated a travel distance on US 36 of less than two miles, the respondent was terminated from the survey.

Respondents entered their trip departure time. Those who did not start their trip during peak hours were asked if the reason for traveling during the off-peak was to avoid traffic congestion, and if so, what their preferred departure time would have been (Figure 2.4).



Figure 2.4: Sample Survey Screen: Preferred Departure Time

It looks like you did not begin your trip during peak hours, or "rush hours" (6-9 AM or 3-7 PM).

**Did you start your trip at 11:45 AM to minimize the impact of traffic congestion on your trip?**

Yes  
 No

**If there were no traffic congestion, what time would you have preferred to start your trip?**

I would have preferred to start my trip at: **Please slide the blue box to select the time.**

6:00 AM      Noon      6:00 PM

Next Question →

All respondents were then asked to enter the time that they spent traveling, door-to-door, between their origin and destination and if they encountered any delay on their trip (Figure 2.5). Reported travel times were compared to travel times obtained from a Google Maps™ driving directions algorithm, an online map service created and maintained by Google™. Respondents who entered comparably longer or shorter travel times were asked to confirm or correct their trip duration.

Figure 2.5: Sample Survey Screen: Delay Experienced on US 36 Due to Traffic Congestion

**Did you encounter any delay due to traffic congestion on US 36 during your trip?**

Yes  
 No

You reported your trip took **50 minutes** with some delay due to congestion.

**If there were NO delays due to congestion on US 36, how long would this trip have taken you?**

With no delay, my trip would take: **Please slide the blue box to select the time.**

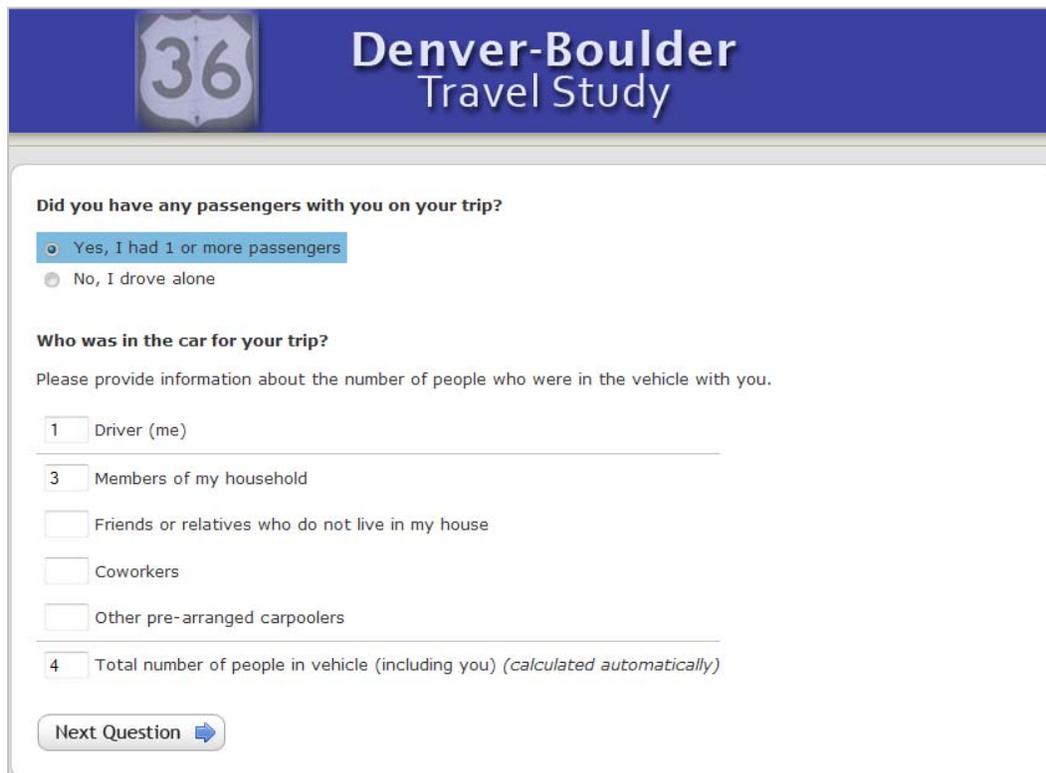
30 mins      2 hours      4 hours

Next Question →

Respondents were then asked to detail any passengers in their automobile during the trip, including the number and type of occupants (Figure 2.6), whether or not they paid any tolls, and whether or not they owned a transponder for electronic toll collection (ETC).



Figure 2.6: Sample Survey Screen: Vehicle Occupancy



**Denver-Boulder  
Travel Study**

**Did you have any passengers with you on your trip?**

Yes, I had 1 or more passengers

No, I drove alone

**Who was in the car for your trip?**

Please provide information about the number of people who were in the vehicle with you.

Driver (me)

Members of my household

Friends or relatives who do not live in my house

Coworkers

Other pre-arranged carpoolers

Total number of people in vehicle (including you) (calculated automatically)

Next Question →

To conclude this section, respondents were asked to indicate how frequently they make this same one-way trip, how frequently they use the I-25 Express Lanes, and how frequently they use public transportation in the Denver-Boulder area.

## 2.2 Stated Preference Questions

The stated preference questions were designed to construct quantitative experiments to estimate respondents' travel preferences and behavioral response under hypothetical future conditions. The details of each respondent's reference trip were used to build a set of eight stated preference scenarios that included two or three travel alternatives for making their trip in the future:

1. Current route (US 36 regular lanes or alternative route to US 36)
2. US 36 proposed Managed Lane
3. US 36 proposed Managed Lane with additional passengers

Respondents who reported a trip with two or fewer total occupants (SOV or HOV2) were presented with all three alternatives. Respondents with three or more vehicle occupants (HOV3+) were only presented with the first two alternatives.

Each alternative was described by at least two attributes: travel time and toll cost. A third attribute, the number of additional passengers, was presented for those who were shown the third alternative. The values of the attributes varied across the eight questions, and respondents were asked to select the alternative they preferred the most under the conditions that were presented. Figure 2.7 shows an example of a question with three alternatives, while Figure 2.8 shows an example of a stated preference question with two alternatives. In order to avoid potential bias associated with the layout of the alternatives, the order of these alternatives



was randomized for each respondent. Additional examples of stated preference exercises can be found in Appendix B.

**Figure 2.7: Sample Survey Screen: Stated Preference Question with Three Alternatives**

Below are 3 different travel options for your trip with no passengers. These options include information on travel time, toll cost, and number of passengers. Please assume that all other travel costs are the same as they are now.

**If these options were the only options available for your trip, which would you choose?**

Click on one of the three boxes below to select your preferred choice.

Information in **bold** will vary from screen to screen.

	US 36 Managed Lane in a carpool	US 36 Managed Lane	US 36 Regular Lanes
	Travel time (door-to-door): <b>34 minutes</b>	Travel time (door-to-door): <b>31 minutes</b>	Travel time (door-to-door): <b>42 minutes</b>
	Managed Lane toll: <b>\$1.85</b>	Managed Lane toll: <b>\$1.85</b>	Toll free
	2 additional passenger(s)		
	<input type="radio"/> I prefer this option	<input type="radio"/> I prefer this option	<input type="radio"/> I prefer this option

Question 1 of 8

Next Question

**Figure 2.8: Sample Survey Screen: Stated Preference Question with Two Alternatives**

**If these options were the only options available for your trip, which would you choose?**

Note: information in **bold** may have changed.

	US 36 Managed Lane	US 36 Regular Lanes
	Travel time (door-to-door): <b>37 minutes</b>	Travel time (door-to-door): <b>50 minutes</b>
	Managed Lane toll: <b>\$3.05</b>	Toll free
	<input type="radio"/> I prefer this option	<input type="radio"/> I prefer this option

Question 2 of 8

Next Question



The attribute values presented in each question varied around a set of base values. To ensure that the scenarios were realistic, the trip characteristics of each respondent's reference trip were used to calculate the base values for travel time and toll cost. The base values for the attributes were varied by multiplying or adding one of several factors to give the level required by the experimental design for that particular scenario. By varying the travel time, toll cost, and number of passengers shown in each experiment, the respondent was faced with different time savings for different costs, allowing them to demonstrate their travel preferences across a range of values of time. Table 2.1 details the formulas that were used to calculate the attribute values.

**Table 2.1: Stated Preference Attribute Levels**

Attribute	Level #	Alternative 1: US 36 General Purpose Lane/Non-36 current route		Alternative 2: US 36 Managed Lane		Alternative 3: US 36 Managed Lane HOV	
		Description	Level	Description	Level	Description	Level
Travel Time	1		1.00		0.88		0.00
	2	Reported Travel Time * Level	1.05	Reported Travel Time * Level (factored by reported delay)	0.90	Alternative 2 Travel Time + Level	3.00
	3		1.10		0.93		6.00
	4		1.20		0.95		9.00
Toll Cost	1						\$ 2.00
	2			\$ 6.00	0.50		
	3			\$ 10.00	0.75		
	4	Toll Free		Level * (Alt. 1 travel time - Alt. 2 travel time) / 60	\$ 14.00	1.00	
	5				\$ 18.00		
	6				\$ 22.00		
	7				\$ 26.00		
	8				\$ 35.00		
Occupancy	1					Current Occupancy + Level	1
	2						2

The specific levels used in each stated preference experiment were determined by using an orthogonal experimental design, which ensured that information was collected from respondents in a statistically efficient manner. This technique is commonly used in constructing experimental plans. The experimental design for this survey contained 64 experiments which were divided into eight groups of eight. One of the eight groups was randomly chosen for each respondent and the eight experiments were shown to the respondent in a randomized order.

## 2.3 Debrief Questions

After completing the eight stated preference scenarios, respondents answered a series of questions to assess underlying rationales for their choices and to identify any potential strategic bias in their responses.

Respondents who never selected a Managed Lane alternative or the carpooling alternative were asked to select the primary reason for these choices. Additionally, respondents who selected at least one Managed Lane alternative in the SP section and reported a trip with two or more occupants who were coworkers or



other prearranged carpoolers were asked to indicate whether or not they would consider breaking up their carpool and paying the full toll amount to drive alone in the Managed Lanes.

In order to assess the likelihood that travelers would use a proposed bus option that would use the Managed Lanes, respondents were presented with a two-alternative scenario: the alternative the respondent selected in the final stated preference experiment, and a bus option with an associated travel time and fare (Figure 2.9). The travel time and fare amounts for the bus alternative were pivoted off of the levels from the selected alternative in the respondent's eighth experiment. Given the two scenarios, respondents indicated how likely they would be to choose the bus option.

**Figure 2.9: Sample Survey Screen: Likelihood of Using Managed Lane Bus Option**

**36** **Denver-Boulder**  
Travel Study

Below are two alternatives: one is the option you selected in the previous set of questions and the other is the same trip using an express bus. In the future, you will be able to take a bus that travels in the Managed Lanes on US 36 that could be accessed at several park-and-rides in the US 36 corridor. These buses would run every 10 minutes during the morning and afternoon rush hours and every 20 minutes during the rest of the day.

	Current Route	Bus Option (Express Lane)
	Travel time (door-to-door): <b>52 minutes</b>	Travel time (door-to-door): <b>42 minutes</b>
	Toll free	Bus fare: <b>\$2.00</b>

If these options were available for you to make your work trip how likely would you be to use the bus option to make your trip?

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely

Next Question 

Respondents who stated that they do not own a transponder for electronic toll collection and selected at least one tolled alternative in the stated preference questions were asked how likely they would be to get a transponder to pay the toll. The transponder toll was compared with a more expensive license plate tolling option as shown in Figure 2.10. The amount of the license plate tolling surcharge varied from respondent to respondent. Those who were not likely to pay with a transponder were asked to select the reason(s) for their preference.

Figure 2.10: Sample Survey Screen: Likelihood of Acquiring Electronic Toll Transponder

**36** Denver-Boulder  
Travel Study

In one of the previous scenarios, you said you would use the US 36 Managed Lanes if your trip took 33 minutes and cost \$1.50.

If the toll for that trip using a transponder was \$1.35, and without a transponder the license plate toll was \$1.50, how would you pay the toll? Would you be...

- Very likely to get a transponder for paying the toll
- Somewhat likely to get a transponder for paying the toll
- Not sure
- Somewhat likely to pay by license plate tolling (would not get a transponder)
- Very likely to pay by license plate tolling (would not get a transponder)

Next Question ➔

Respondents were asked for their overall opinion of the proposed US 36 Managed Lane project, on a five point scale from strongly favor to strongly oppose. Those with a non-neutral opinion were asked a follow-up question to identify why they were in favor or opposed to the project. Respondents were then asked the degree to which they agreed or disagree with a series of attitudinal statements regarding tolls, carbon emissions, and changing travel behavior.

In the final questions of the Debrief section, respondents were asked to report the resources they typically consult when checking traffic conditions before and during their trips.

## 2.4 Demographic Questions

To finish the survey, demographic questions were asked in order to classify respondents, identify differences in responses among traveler segments, and confirm that the sample contained a diverse cross section of the traveling population that is served by US 36.

All respondents answered demographic questions relating to the following topics:

- Gender
- Age
- Employment status
- Household size
- Vehicle ownership
- Annual household income

Before finishing the survey, respondents were given the opportunity to leave comments about the survey and/or the proposed US 36 Managed Lanes. These open-ended comments are provided in Appendix D.



## 3.0 SURVEY ADMINISTRATION

RSG worked closely with the project team to design an administration plan to produce a generally representative sample of US 36 corridor travelers in an efficient, timely, and cost-effective way. The sampling plan was designed to include a sufficient range of travelers and trip types to support the statistical estimation of coefficients of a choice model. By collecting data from a range of traveler and trip types, it is possible to identify the ways in which different characteristics affect mode and route choice behavior. These differences can then be reflected in the structure and coefficients of the resulting choice model. The survey sample that supports choice model estimation does not need to be perfectly population proportional as long as:

1. Any behavioral differences are properly represented in the model, and
2. The model is applied for forecasting using appropriate population proportions and/or sample weights.

The survey instrument was administered entirely online through RSG's rsgsurvey.com website. Many different sources were used to recruit potential respondents to the survey website, including:

1. ExpressToll users who recently used the Northwest Parkway/E-470
2. Businesses and organizations located near the US 36 corridor
3. An online market research panel

RSG began administration on November 15, 2010 and concluded on December 3, 2010. A total of 5,819 surveys were completed during this time. The administration methods and number of complete surveys are presented in Table 3.1.

**Table 3.1: Survey Administration Methods**

Data Source	Completed Surveys
EXpressToll users	3,696
Businesses and organizations	1,515
Online research panel	608
<b>Total</b>	<b>5,819</b>

### 3.1 EXpressToll Users

RSG worked with E-470 to reach out to travelers who had used their EXpressToll transponder within the month prior to survey administration. Travelers who recently used the Northwest Parkway and E-470 were targeted specifically. These travelers were sent an email invitation to the survey that contained a link to the survey website. This method of recruitment was highly successful and resulted in a total of 3,696 completes.

### 3.2 Businesses and Organizations

RSG contacted numerous businesses and organizations located in the Denver-Boulder area to participate in the survey. Several organizations agreed to participate, including the coalition group "36 Commuting Solutions," the Denver Metro Chamber of Commerce, the National Oceanic and Atmospheric Administration, the Boulder Medical Center, the Geological Society of America, and the Southwest Research Institute, among others. RSG provided each group with a unique survey link and example email invitation text, which was then distributed to employees and/or coalition member organizations. This method of recruitment was also highly



successful and resulted in 1,515 complete surveys. Within this group, “36 Commuting Solutions” was the largest participant, with 1,286 complete surveys.

### 3.3 Online Research Panel

RSG contracted with online market research panel Research Now to provide 600 respondents. Panel members were targeted by county of residence, and qualifying members were sent an email invitation to the stated preference survey that contained a link with a unique identifier. Respondents completed the survey on RSG’s server before being redirected back to the panel provider’s website. The online panel yielded a total of 608 completes.

## 4.0 SURVEY RESULTS

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A total of 5,819 respondents completed the survey before it was closed. The number of records was reduced to 5,340 after completing data checks and outlier analysis during the model estimation work, which is described in more detail in Section 5.0 (Model Estimation) of this report. The descriptive analysis of the data presented in this section of the report is based on the 5,340 respondents who were included in the model estimation and is provided in four sections: trip characteristic questions, stated preference questions, debrief questions, and demographic questions.

For the purposes of statistical modeling, respondents were grouped into four segments:

1. Peak work trips
2. Peak non-work trips
3. Off-peak work trips
4. Off-peak non-work trips

Many of the tabulations presented in the remainder of this report and in the appendices are segmented by these categories. Work trips include all commute trips to or from work as well as business-related trips, while all other trip purposes are categorized as non-work trips. Both work and non-work trips were segmented into peak and off-peak trips, where the peak period segments include respondents who made a trip in the peak period (6:00 AM to 8:59 AM or 3:00 PM to 6:59 PM). A complete set of tabulations of survey questions by segment is shown in Appendix C.

### 4.1 Trip Characteristic Questions

At the beginning of the trip characteristic section, respondents were asked about their most recent trip in the US 36 corridor. Of the 5,340 total respondents, 5,068 (95%) reported a recent trip that used US 36, while the remaining 272 (5%) reported a trip that did not use but could have reasonably used US 36.

Forty percent of respondents reported a trip to/from work, 20% reported a business-related trip, and almost 20% reported a shopping trip (Table 4.2). The trip purposes of respondents varied by segment; a majority (62%) of off-peak work trips were for “business-related travel”, whereas peak-work trips were composed primarily (77%) of commute trips.



**Table 4.1: Trip Purpose**

Purpose	Count	Percent
Go to/from work	2,125	40%
Business-related travel	1,055	20%
Attend school/college/university or drop off/pick up a student	143	3%
Go to/from the airport	220	4%
Shopping	349	7%
Social or recreational	907	17%
Other personal business	541	10%
<b>Total</b>	<b>5,340</b>	<b>100%</b>

A significant majority (72%) of trips began at home. The most commonly reported trip originated at home and ended at a location other than home or work. This particular trip type categorized 38% of respondents. Table 4.2 describes the distribution of beginning and ending locations.

**Table 4.2: Distribution of Trip Origins and Destinations**

		Destination			
		Home	Work	Another place	Total
Origin	Home	0%	34%	38%	<b>73%</b>
	Work	6%	1%	12%	<b>19%</b>
	Another place	4%	1%	3%	<b>8%</b>
	<b>Total</b>	<b>10%</b>	<b>37%</b>	<b>54%</b>	<b>100%</b>

The specific locations of the trip origins and destinations are displayed by zip code in Figure 4.1 and Figure 4.2. These maps show similar distributions which are heavily clustered around the US 36 corridor and Boulder.



Figure 4.1: Map of Respondent Trip Origins

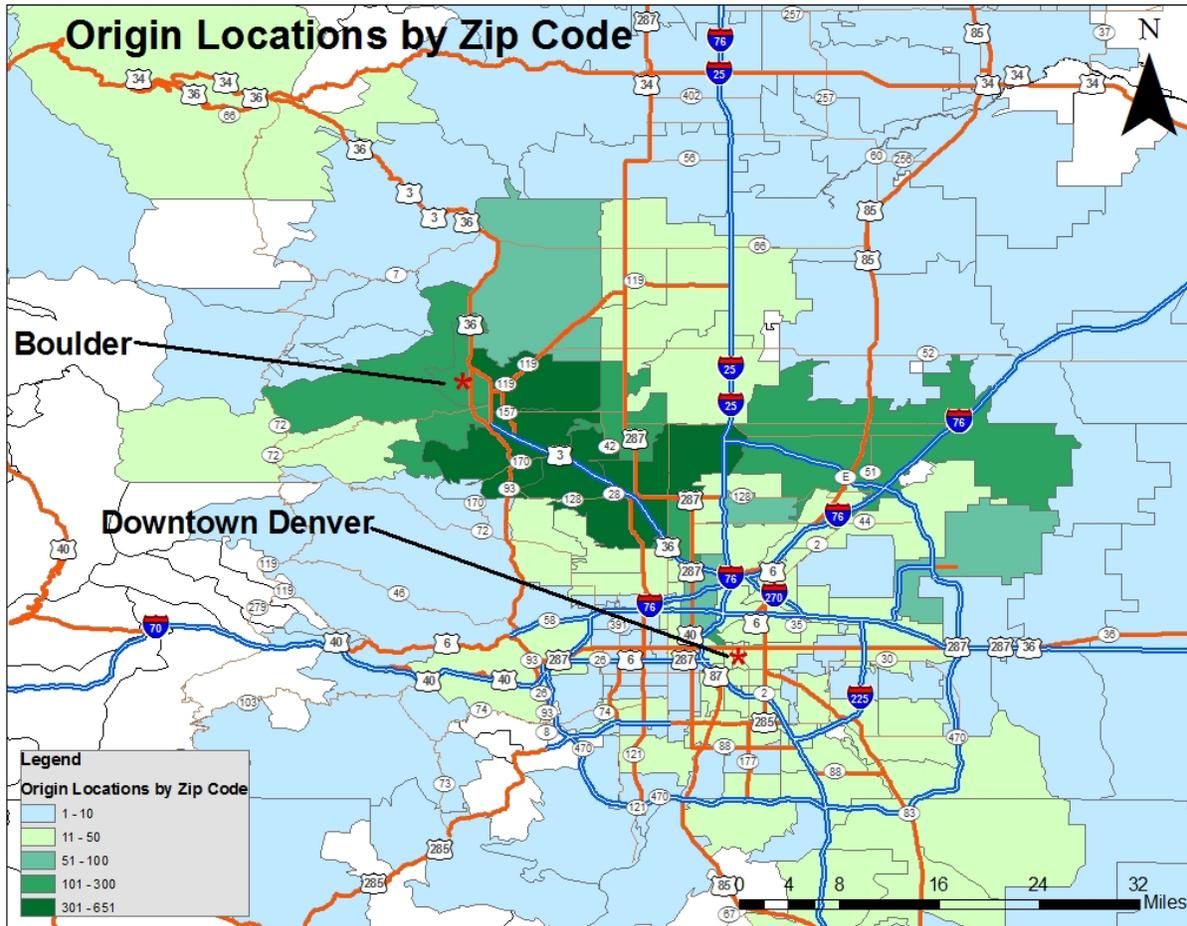
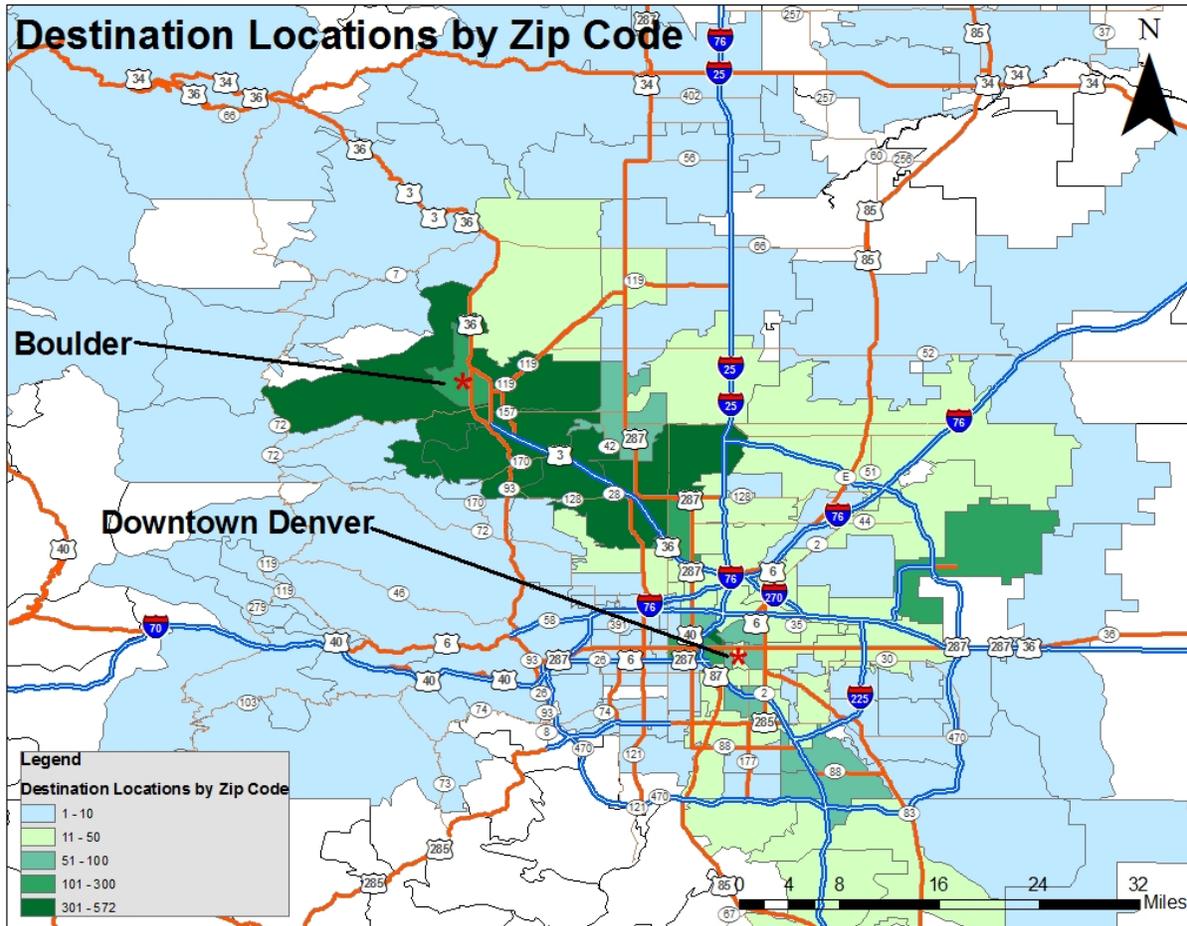


Figure 4.2: Map of Respondent Trip Destinations

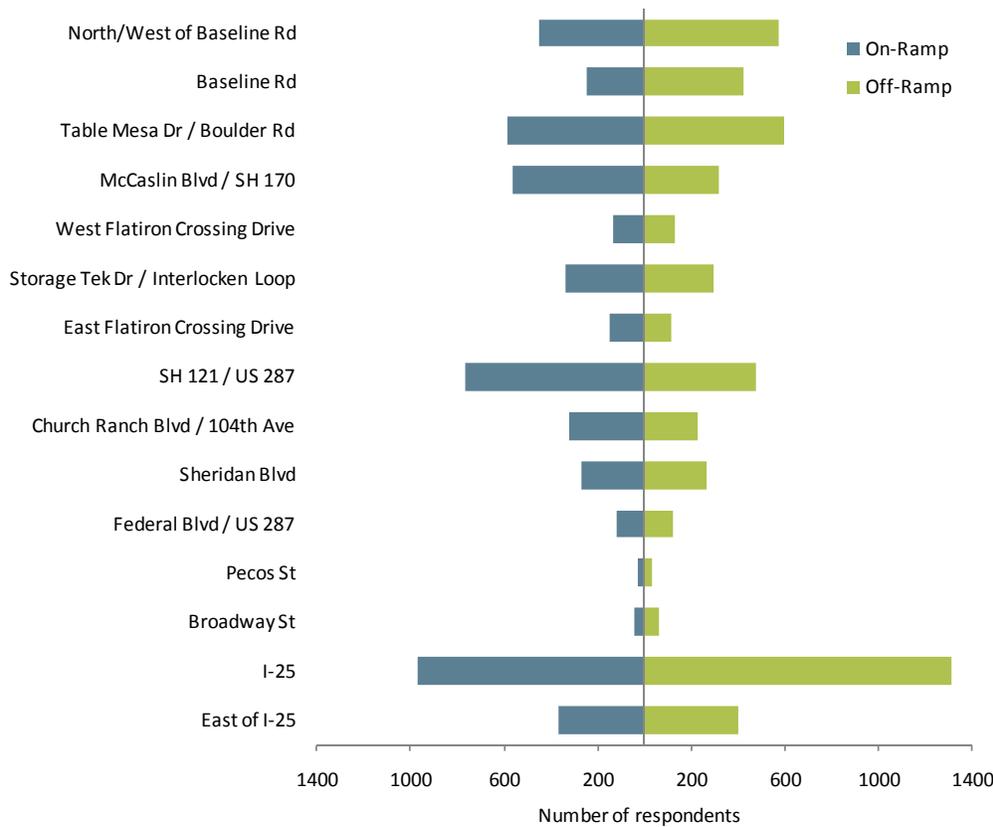


The latitude and longitude coordinates for each origin-destination pair were used to calculate the trip distance using a Google Maps™ travel direction algorithm. The median trip distance was 22 miles.

Respondents selected the entrance and exit ramps they used, or could have used, on US 36. Figure 4.3 below presents an overview of the ramps used by the survey sample. It should be noted that the I-25 entrance and exit ramps were used the most, but respondents reported a significantly greater usage of the I-25 ramp as an exit ramp off of US 36.



**Figure 4.3: US 36 Entrance and Exit Ramps**



Reported travel times ranged from ten minutes to three hours, with a mean travel time of 45 minutes and a median travel time of 40 minutes for the entire sample. Travel times varied somewhat by segment, with trips made in the peak period slightly longer in duration than trips made in the off-peak period. Table 4.3 shows the mean and median travel time, trip distance, and distance on US 36 for each segment.

**Table 4.3: Travel Time, Trip Distance, and US 36 Distance by Segment**

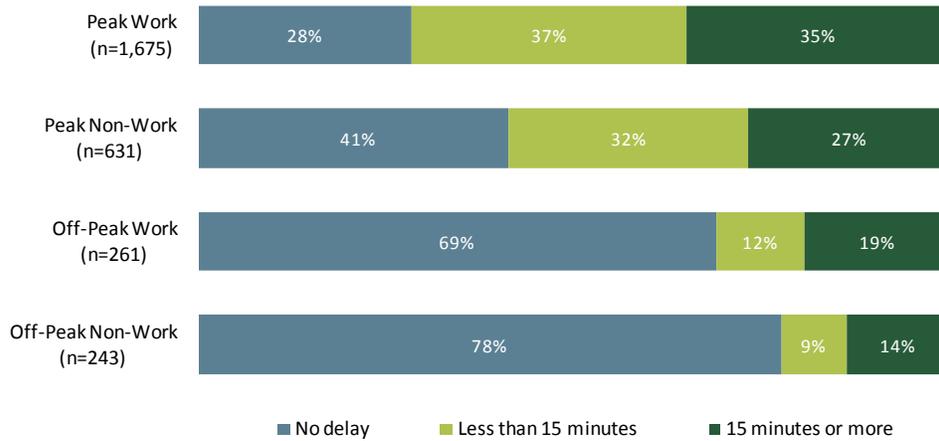
Segment	Total Trip Travel Time (miles)		Total Trip Distance (miles)		US 36 Distance* (miles)	
	Mean	Median	Mean	Median	Mean	Median
Peak Work	46	45	24.1	21.8	10.4	9.1
Peak Non-Work	48	45	26.3	22.4	10.6	9.1
Off-Peak Work	41	40	25.8	24.6	11.4	11.0
Off-Peak Non-Work	42	40	26.3	22.3	10.4	9.1
<b>Total</b>	<b>45</b>	<b>40</b>	<b>25.3</b>	<b>22.4</b>	<b>10.6</b>	<b>9.1</b>

\* Distance on the study portion of US 36 only (between Table Mesa Dr and I-25)

Overall, 53% of respondents reported delays due to traffic congestion on US 36, with significant variation by time of day. Seventy-two percent of peak work trips and 59% of peak non-work trips experienced delay, while only 31% of off-peak work and 22% of off-peak non-work trips experienced delay due to traffic congestion. In addition to experiencing delays more frequently, respondents who traveled during peak hours also reported longer delays as shown in Figure 4.4.

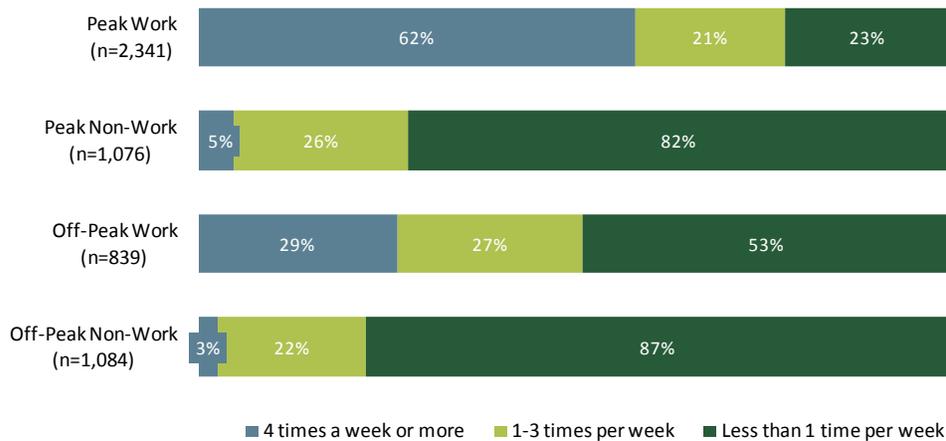


**Figure 4.4: Delay due to Traffic Congestion by Segment**



Sixty-two percent of all peak work trips are made four or more times per week. Off-peak work trips were made less frequently, which can be explained by the fact that the majority (62%) of off-peak work trips were for work-related business. Non-work trips were made much less frequently than work trips (Figure 4.5).

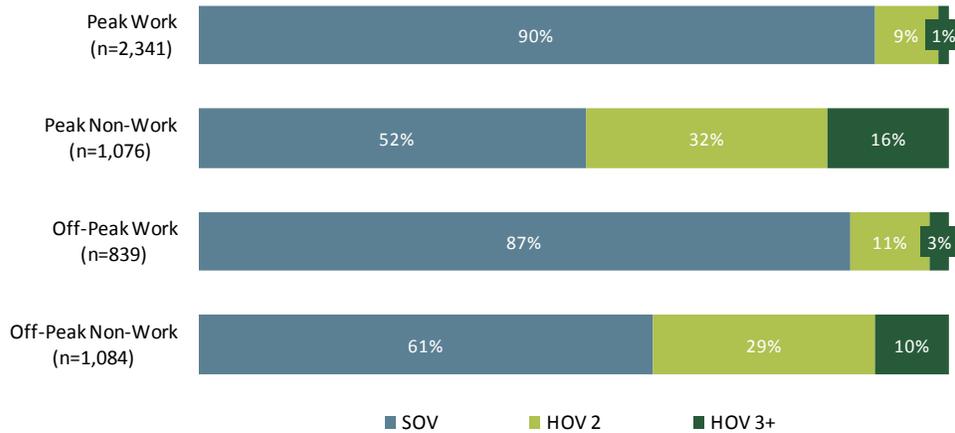
**Figure 4.5: Trip Frequency by Segment**



Work trips had lower occupancy than non-work trips. Peak and off-peak work trips had a mean occupancy of 1.12 and 1.17, respectively, while peak non-work and off-peak non work trips had a mean occupancy of 1.74 and 1.54, respectively. Figure 4.6 presents the distribution of SOV, HOV2, and HOV3+ respondents across the four segments.



**Figure 4.6: Vehicle Occupancy by Segment**



Seventy-four percent of the aggregate sample reported owning an electronic toll transponder and no segment of the sample featured greater than 77% or less than 70% ownership. All respondents were asked if they had ever used the I-25 Express Lanes, with 69% reporting having used the lanes at least once before.

## 4.2 Stated Preference Questions

Respondents chose the current route alternative in approximately 64% of stated preference scenarios, and the Managed Lane alternative in 28% of scenarios. The Managed Lane alternative with additional passengers was selected in 8% of the scenarios where it was presented (Table 4.4).

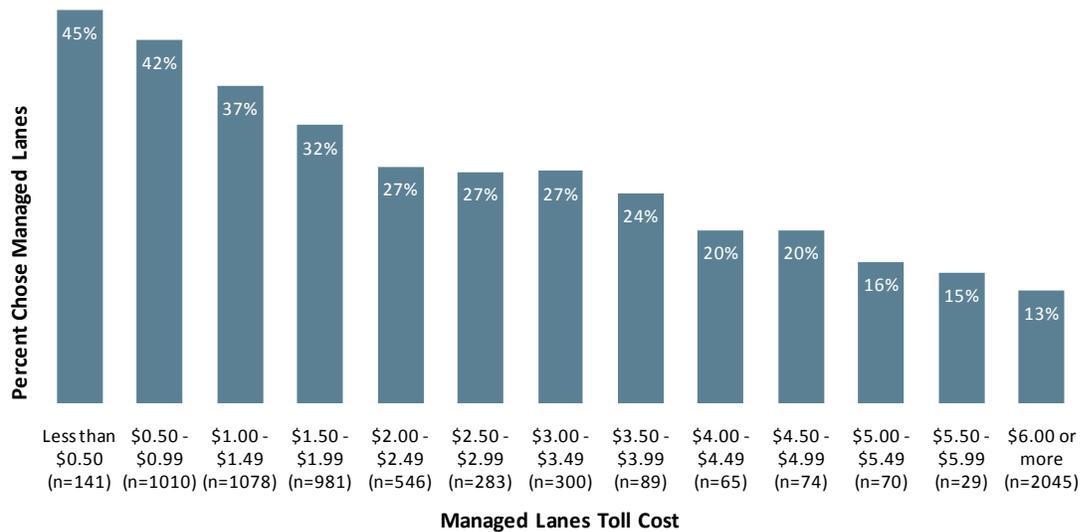
**Table 4.4: Stated Preference Choice by Choice Availability**

Alternative	Number of Experiments Shown	Number of Experiments Selected	Percent Selected
Alternative 1: Current Route	42,720	27,227	64%
Alternative 2: Managed Lane	42,720	12,142	28%
Alternative 3: Managed Lane as an HOV	40,000	3,351	8%

As a general rule, respondents were less likely to choose the Managed Lane alternative as the toll cost increased. Figure 4.7 presents the percent of times the Managed Lanes alternative (alternative 2) was chosen in the stated preference experiments at different toll rates. Because each respondent was presented with eight questions, the total number of choice observations is 42,720. Analysis of the stated preference data will be described in more detail in the Model Estimation section of this report.



**Figure 4.7: Percent of Time Non-HOV Managed Lane Selected by Toll Cost**



### 4.3 Debrief Questions

Upon completing the stated preference experiments, respondents were asked to answer a series of debrief questions to understand the underlying reasons for their choices in the eight stated preference questions.

If a respondent never chose a Managed Lane alternative in the stated preference scenarios, they were asked to select the primary reason they did not select a Managed Lane alternative. The option that was cited most frequently (46% of respondents) was that the time savings presented in the experiments was not high enough to justify the cost (Table 4.5).

**Table 4.5: Main Reason for Not Choosing Managed Lane Alternative by Segment**

Reason	Peak Work		Peak Non-work		Off-peak Work		Off-peak Non-work	
	Count	Pct.	Count	Pct.	Count	Pct.	Count	Pct.
Time savings not worth the toll cost	176	47%	89	44%	95	47%	131	43%
Opposed to paying tolls	115	31%	62	31%	67	33%	98	32%
Not enough time savings	38	10%	22	11%	24	12%	47	16%
Other	37	10%	22	11%	15	7%	21	7%
Current route is more convenient	1	0%	3	1%	2	1%	4	1%
Do not want to pay tolls electronically	5	1%	3	1%	1	0%	1	0%
<b>Total</b>	<b>190</b>	<b>51%</b>	<b>106</b>	<b>53%</b>	<b>106</b>	<b>52%</b>	<b>166</b>	<b>55%</b>

Those respondents who were presented with the carpool alternative in the stated preference experiments and never selected this option were asked why they chose not to carpool. Forty percent of respondents stated that their primary reason for choosing to travel alone is that they like the flexibility of independent travel. The results of this question are broken down by segment in Table 4.6.

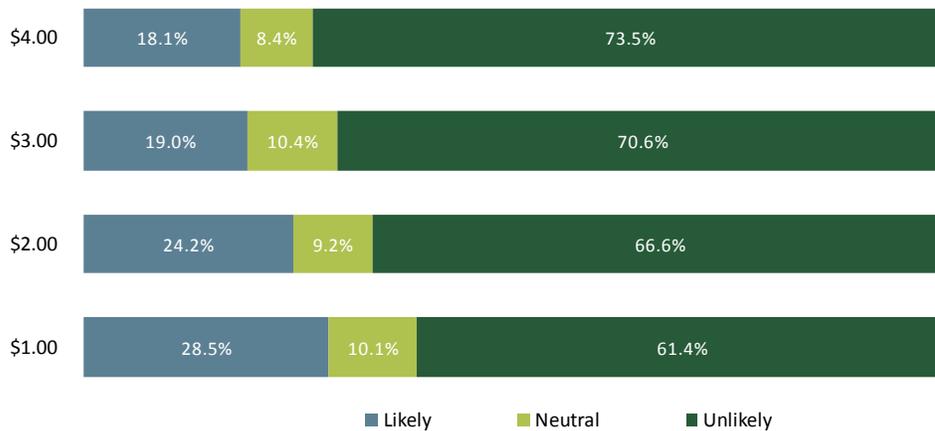


**Table 4.6: Main Reason for Not Choosing Carpool Alternative by Segment**

Reason	Peak Work		Peak Non-work		Off-peak Work		Off-peak Non-work	
	Count	Pct.	Count	Pct.	Count	Pct.	Count	Pct.
Like flexibility of traveling alone	694	43%	159	33%	217	36%	260	41%
Other	388	24%	123	25%	209	34%	184	29%
Don't know others to carpool with	314	19%	121	25%	105	17%	108	17%
Too much time required to coordinate with others	160	10%	46	10%	57	9%	53	8%
Like privacy of traveling alone	58	4%	34	7%	18	3%	30	5%
<b>Total</b>	<b>1,614</b>	<b>100%</b>	<b>483</b>	<b>100%</b>	<b>606</b>	<b>100%</b>	<b>635</b>	<b>100%</b>

All respondents were presented with a follow-up question in which their selected alternative from the eighth stated preference scenario was shown against an express bus option that would travel in the Managed Lanes. The express bus option was presented at different fare amounts. A majority of respondents reported that they would be unlikely to use the express bus option, with decreasing likelihood as the express bus fare increased (Figure 4.8).

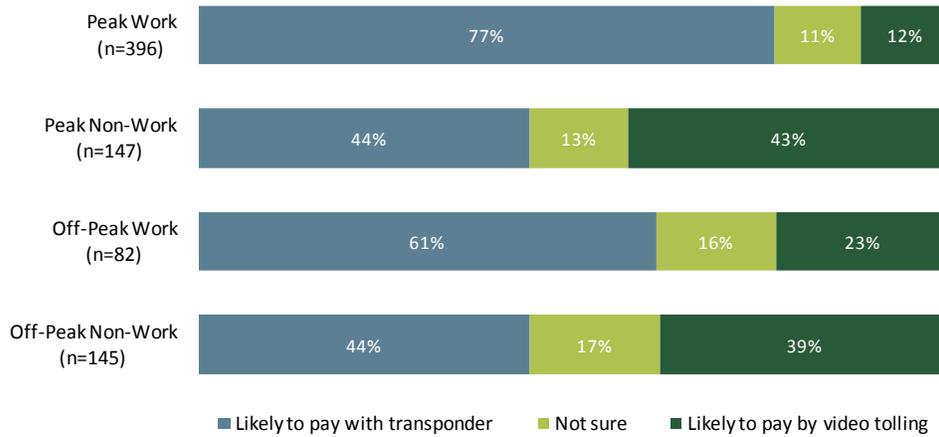
**Figure 4.8: Likelihood of Choosing Express Bus Option by Express Bus Fare**



Respondents who reported not owning an ETC, but selected at least one of the tolled alternatives in the stated preference section were asked how likely they would be to pay a toll using an ETC transponder given a toll discount. Figure 4.9 shows that travelers in the work segments were substantially more likely to obtain a transponder to pay the toll.

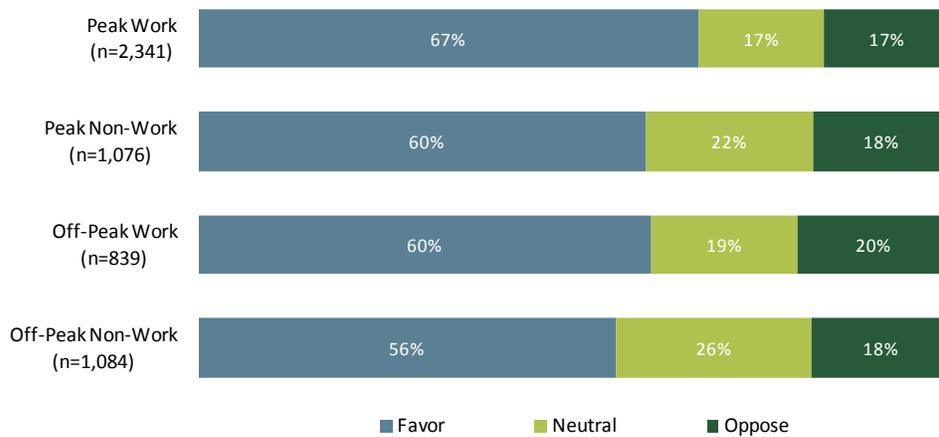


**Figure 4.9: Toll Payment Options by Segment**



The overall opinion of the proposed project varied only slightly by sample segment. Approximately 62% of the aggregate sample favors the project, whereas only 18% of respondents oppose the project. Figure 4.10 shows that peak work respondents were the most likely to favor the project and off-peak non-work travelers were the least likely to favor the project.

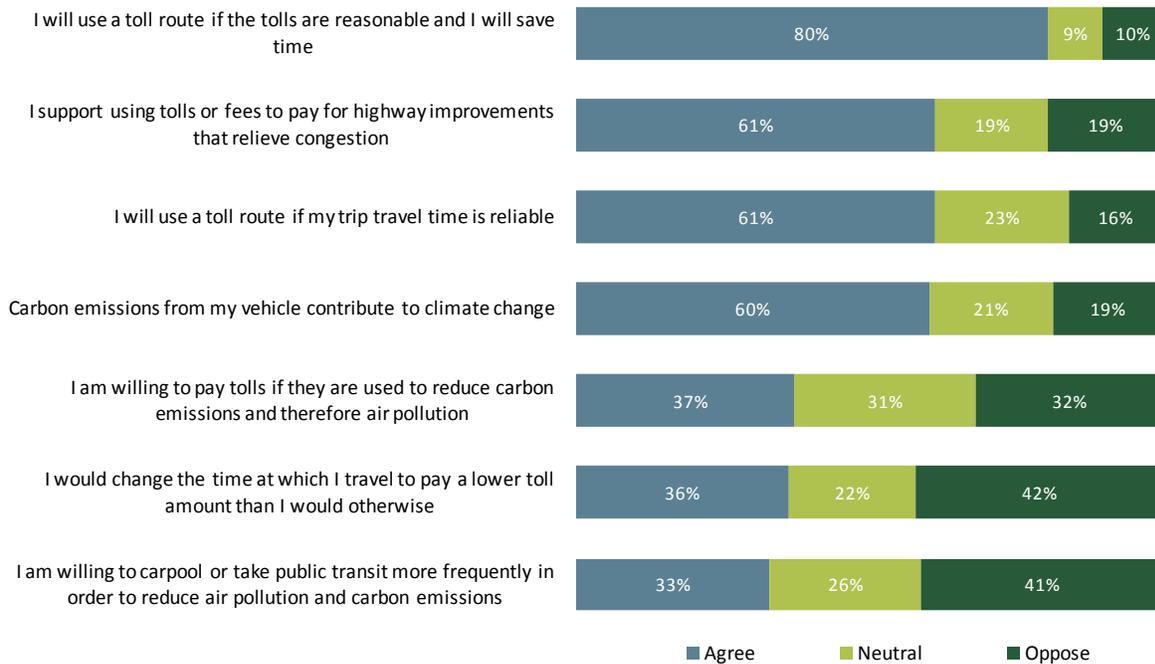
**Figure 4.10: Project Opinion by Segment**



When presented with a series of questions regarding their attitudes towards tolls, respondents were most likely to agree that they will use a toll route if the tolls are reasonable and they will save time (Figure 4.11). Conversely, respondents were unlikely to pay higher tolls in order to reduce air pollution and emissions.



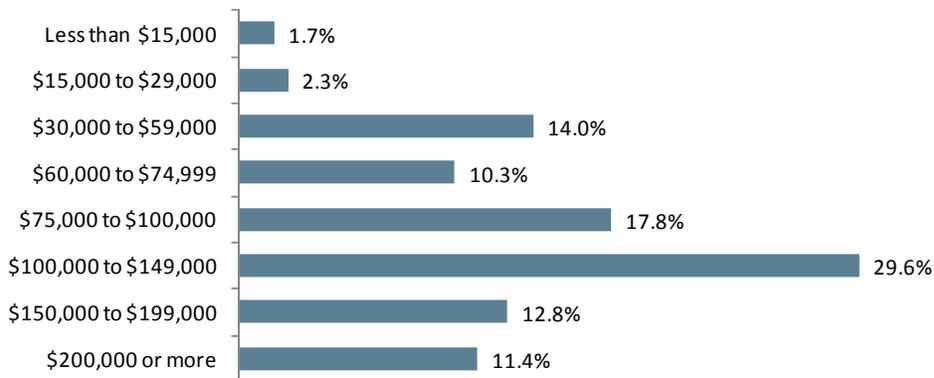
**Figure 4.11: Attitude Statements**



## 4.4 Demographic Questions

Of the 5,340 respondents, slightly over half were male (54%), and the median age of the sample fell in the 45-54 year old category. Forty-two percent of respondents live in a two-person household and 47% of respondents have two household vehicles. A majority of respondents (72%) are employed full-time, while 10% reported self-employment, and only 2% reported that they are not currently employed. The median household income of respondents was in the \$100,000-\$134,999 income category, with a distribution as shown below in Figure 4.12.

**Figure 4.12: Annual Household Income**



A proxy for the true mean income can be calculated by taking the average of the income category midpoints. The peak work segment had the highest annual household income, while the off-peak non-work segment had the lowest (Table 4.7).

**Table 4.7: Mean and Median Annual Household Income by Segment**

Segment	Mean Income	Median Income (category midpoint)
Peak Work	\$118,658	\$117,500
Peak Non-Work	\$108,780	\$117,500
Off-Peak Work	\$114,902	\$117,500
Off-Peak Non-Work	\$106,621	\$82,500
<b>Total</b>	<b>\$113,634</b>	<b>\$117,500</b>

## 5.0 MODEL ESTIMATION

Statistical analysis and discrete choice model estimation were carried out using the stated preference survey data. Responses from the stated preference scenarios were expanded into a dataset containing eight observations for each respondent.

### 5.1 Methodology and Alternatives

The statistical estimation and specification testing were completed using a conventional maximum likelihood procedure that estimated a set of coefficients for a multinomial logit (MNL) model<sup>1</sup> for four market segments. The model coefficients provide information about the respondents' sensitivities to the attributes that were tested in the tradeoff scenarios. The sensitivities will serve as inputs into the travel demand model to forecast behavioral response, traffic, and revenue for the proposed US 36 Managed Lanes.

In each stated preference scenario, the following three alternatives were presented for making a future trip in the area:

1. Current route (US 36 or alternative route to US 36)
2. US 36 proposed Managed Lane
3. US 36 proposed Managed Lane with additional passengers

The third alternative was only seen by respondents who reported a single occupancy trip (SOV) or a high occupancy trip with two occupants (HOV2). Respondents were asked to choose the option they preferred the most under the conditions that were presented. The alternatives presented to each respondent are described in more detail in Section 2.2.

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<sup>1</sup> The multinomial logit model has the general form  $p(i) = \frac{e^{U_i}}{\sum_{AllModes} e^{U_j}}$ , where  $p(i)$  is the probability that mode  $i$  will be

chosen and  $U_i$  is the "utility" of mode  $i$ , a function of service and other variables. See, for example, M. E. Ben-Akiva and S. R. Lerman, *Discrete Choice Analysis*, MIT Press, 1985 for details on the model structure and statistical estimations procedures.



## 5.2 Identification of Outliers

The choice data were screened to ensure that all observations included in the model estimation represented realistic trips and reasonable trade-offs in the stated preference exercises. Several variables were used for screening purposes, including an examination of total survey duration, stated preference duration, and inconsistent or irrational choice behavior.

After reviewing these variables and the effects that extreme values had on the models, it was determined that respondents who met the following conditions should be excluded from the final analysis:

- Respondents demonstrating inconsistent or irrational choice behavior in the stated preference exercises. For example, respondents who established a certain dollar amount for willingness to pay for time savings and then rejected paying less money for equal or more time savings (197 respondents, 1,576 choice observations).
- Respondents whose implied speed for their trip was greater than 75 mph or less than 5 mph or whose total trip delay was more than 60 minutes (164 respondents, 1,312 choice observations).
- Respondents who completed the survey before November 15, 2010 or on Thursday, November 25, 2010 (Thanksgiving) or Friday, November 26, 2010 (45 respondents, 360 choice observations).
- Respondents who completed the entire survey in less than six minutes or who completed the SP section of the survey in less than 24 seconds, or 3 seconds per SP experiment (29 respondents, 232 choice observations).
- Respondents whose travel time was more than three hours (19 respondents, 152 choice observations).
- Respondents who reported a total trip distance of less than two miles according to Google's estimate (15 respondents, 120 choice observations).
- Respondents whose open-ended comments indicated that they were not paying attention to the survey or not providing serious answers in the survey (10 respondents, 80 choice observations).

Based on this outlier analysis, a total of 5,340 respondents (42,720 observations) were used to estimate the models presented in this report.

## 5.3 Segmentation

Automobile traveler segment models were estimated for four market segments based on day of week and trip purpose: peak work travelers, peak non-work travelers, off-peak work travelers, and off-peak non-work travelers. This final segmentation scheme was chosen based on the behavioral differences observed between the segments, expected application of the choice models, and the reasonableness and intuitiveness of the segmented results. The same model specification was developed for each of the individual segments. The characteristics of each segment can be found in Figure 5.1.



**Figure 5.1: Model Segments**

Segment	Time of Day	Trip Purpose
Peak Work (n=2,341)	<ol style="list-style-type: none"> <li>1. 6:00 AM to 8:59 AM</li> <li>2. 3:00 PM to 6:59 PM</li> </ol>	<ol style="list-style-type: none"> <li>1. Commute trips</li> <li>2. Business-related trips</li> </ol>
Peak Non-Work (n=1,076)	<ol style="list-style-type: none"> <li>1. 6:00 AM to 8:59 PM</li> <li>2. 3:00 PM to 6:59 AM</li> </ol>	<ol style="list-style-type: none"> <li>1. School trips</li> <li>2. Airport trips</li> <li>3. Shopping trips</li> <li>4. Social/recreational trips</li> <li>5. Other personal business trips</li> </ol>
Off-Peak Work (n=893)	<ol style="list-style-type: none"> <li>1. 9:00 AM to 2:59 PM</li> <li>2. 7:00 PM to 5:59 AM</li> </ol>	<ol style="list-style-type: none"> <li>1. Commute trips</li> <li>2. Business-related trips</li> </ol>
Off-Peak Non-Work (n=1,084)	<ol style="list-style-type: none"> <li>1. 9:00 AM to 2:59 PM</li> <li>2. 7:00 PM to 5:59 AM</li> </ol>	<ol style="list-style-type: none"> <li>1. School trips</li> <li>2. Airport trips</li> <li>3. Shopping trips</li> <li>4. Social/recreational trips</li> <li>5. Other personal business trips</li> </ol>

## 5.4 Model Specification

Several utility equation structures were tested using the variables included in the stated preference scenarios, as well as trip characteristics, attitudinal indicators, and demographic variables. The general structure of these specifications was similar to the final specifications used; however, other variables were introduced, one at a time, to test potential interactions with the toll cost and travel time coefficients. These model specifications were developed to determine whether other characteristics of the respondents' trip or demographic information significantly influenced their choices in the stated preference scenarios. The variables that were tested included:

- Travel time
- Time of day
- Trip Purpose
- Opinion
- Income
- Trip distance
- Trip direction
- Trip frequency
- Delay
- Occupancy
- Data source
- Use of I-25 Express Lanes

After reviewing the significance of each variable, the final model specification was chosen based on model fit, the intuitiveness and reasonableness of the model coefficients, and the expected application of the model



results. In addition to the variables included in the stated preference scenarios, income, trip distance, and opinion were found to be statistically significant variables.

The final model specification includes variables for travel time, toll cost, and vehicle occupancy. To account for potential bias, separate travel time and toll cost coefficients were estimated based on respondents' opinion of the project. The time and cost sensitivities for those respondents strongly opposed to the project were statistically different than the rest of the sample. The impact of income and total trip distance on toll sensitivity was found to be statistically significant. A non-linear transformation of the toll cost coefficient by household income and trip distance was estimated to capture the relationship between toll cost sensitivity and these variables. Finally, alternative specific constants are included for both Managed Lanes alternatives. Figure 5.2 describes the utility equations used in the MNL models, including the income and trip distance transformations applied to the toll cost variable.

**Figure 5.2: Utility Equations**

$U(\text{Current Route}) =$	$\beta_{TT\text{NotOpposed}} * a_{1TT\text{NotOpposed}} + \beta_{TTOpposed} * a_{1TTOpposed}$
$U(\text{Managed Lanes}) =$	$\beta_{TT\text{NotOpposed}} * a_{2TT\text{NotOpposed}} + \beta_{TTOpposed} * a_{2TTOpposed} + ((\beta_{Cost\text{NotOpposed}} * a_{2Cost\text{NotOpposed}}) * ((\text{incomemidpoint} / \text{meanincome})^\lambda \text{income})) * ((\text{distance} / \text{meandistance})^\lambda \text{distance}) + \beta_{Cost\text{Opposed}} * a_{2Cost\text{Opposed}} + \beta_{ML\text{Constant}}$
$U(\text{Managed Lanes as HOV}) =$	$\beta_{TT\text{NotOpposed}} * a_{3TT\text{NotOpposed}} + \beta_{TTOpposed} * a_{3TTOpposed} + ((\beta_{Cost\text{NotOpposed}} * a_{3Cost\text{NotOpposed}}) * ((\text{incomemidpoint} / \text{meanincome})^\lambda \text{income})) * ((\text{distance} / \text{meandistance})^\lambda \text{distance}) + \beta_{Cost\text{Opposed}} * a_{3Cost\text{Opposed}} + \beta_{occ} * a_{3occ} + \beta_{ML\text{ConstantHOV}}$

## 5.5 Model Coefficients: Multinomial Logit Models

The coefficient values, robust standard errors, robust t-statistics, and general model statistics are presented for the aggregate sample as well as each model segment in Table 5.1 through Table 5.5. The statistics included for each model are the number of observations, Log Likelihood at zero, at constants only, and at convergence, the number of estimated parameters, Rho-Squared (model fit measure), and adjusted Rho-Squared (another model fit measure that incorporates the number of estimated parameters). In addition to these model statistics, the mean income midpoint and the mean trip distance are included for each segment.



**Table 5.1: Aggregate Model Coefficients**

<b>Aggregate Trips Model Parameters</b>					
<b>Parameters</b>	<b>Units</b>	<b>Description</b>	<b>Value</b>	<b>Robust Std. Error</b>	<b>Robust t-stat</b>
<i><math>\beta_{TTNotOpposed}</math></i>	Minutes	Not Opposed Travel Time	-0.108	0.002	-54.27
<i><math>\beta_{TTOpposed}</math></i>	Minutes	Opposed Travel Time	-0.0348	0.00711	-4.89
<i><math>\beta_{CostNotOpposed}</math></i>	Dollars	Not Opposed Toll Cost	-0.437	0.00765	-57.12
<i><math>\beta_{CostOpposed}</math></i>	Dollars	Opposed Toll Cost	-0.874	0.0685	-12.76
<i><math>\beta_{Occ}</math></i>	Persons	Vehicle Occupancy - 1 additional passenger	-0.839	0.0448	-18.73
<i><math>\beta_{MLConstant}</math></i>	(0,1)	Managed Lanes Constant	-0.67	0.0205	-32.71
<i><math>\beta_{MLHOVConstant}</math></i>	(0,1)	Managed Lanes HOV Constant	-1.39	0.061	-22.82
<i><math>\lambda_{Income}</math></i>	--	Cost - Income Elasticity	-0.0888	0.023	-3.86
<i><math>\lambda_{Distance}</math></i>	--	Cost - Distance Elasticity	-0.228	0.0165	-13.8
<b>Model Statistics</b>					
Number of estimated parameters:		9			
Number of observations:		42720			
Number of individuals:		5340			
Null log-likelihood:		-45829.852			
Init log-likelihood:		-45829.852			
Final log-likelihood:		-29661.913			
Likelihood ratio test:		32335.877			
Rho-square:		0.353			
Adjusted rho-square:		0.353			
Mean income midpoint (\$)		113,634			
Mean trip distance (miles)		25.26			



**Table 5.2: Peak Work Trips Model Coefficients**

<b>Peak Work Trips Model Parameters</b>					
<b>Parameters</b>	<b>Units</b>	<b>Description</b>	<b>Value</b>	<b>Robust Std. Error</b>	<b>Robust t-stat</b>
<i><math>\beta_{TTNotOpposed}</math></i>	Minutes	Not Opposed Travel Time	-0.0993	0.00233	-42.54
<i><math>\beta_{TTOpposed}</math></i>	Minutes	Opposed Travel Time	-0.0265	0.00734	-3.61
<i><math>\beta_{CostNotOpposed}</math></i>	Dollars	Not Opposed Toll Cost	-0.449	0.00834	-53.86
<i><math>\beta_{CostOpposed}</math></i>	Dollars	Opposed Toll Cost	-0.934	0.104	-8.98
<i><math>\beta_{Occ}</math></i>	Persons	Vehicle Occupancy - 1 additional passenger	-0.717	0.0647	-11.09
<i><math>\beta_{MLConstant}</math></i>	(0,1)	Managed Lanes Constant	-0.419	0.0329	-12.74
<i><math>\beta_{MLHOVConstant}</math></i>	(0,1)	Managed Lanes HOV Constant	-1.41	0.0967	-14.6
<i><math>\lambda_{Income}</math></i>	--	Cost - Income Elasticity	-0.136	0.0257	-5.29
<i><math>\lambda_{Distance}</math></i>	--	Cost - Distance Elasticity	-0.221	0.0181	-12.18
<b>Model Statistics</b>					
Number of estimated parameters:		9			
Number of observations:		18728			
Number of individuals:		2341			
Null log-likelihood:		-20461.281			
Init log-likelihood:		-20461.281			
Final log-likelihood:		-13185.015			
Likelihood ratio test:		14552.531			
Rho-square:		0.356			
Adjusted rho-square:		0.355			
Mean income midpoint (\$)		118,658			
Mean trip distance (miles)		24.10			



**Table 5.3: Peak Non-Work Trips Model Coefficients**

<b>Peak Non-Work Trips Model Parameters</b>					
<b>Parameters</b>	<b>Units</b>	<b>Description</b>	<b>Value</b>	<b>Robust Std. Error</b>	<b>Robust t-stat</b>
<i><math>\beta_{TTNotOpposed}</math></i>	Minutes	Not Opposed Travel Time	-0.114	0.00303	-37.62
<i><math>\beta_{TTOpposed}</math></i>	Minutes	Opposed Travel Time	-0.0428	0.00999	-4.28
<i><math>\beta_{CostNotOpposed}</math></i>	Dollars	Not Opposed Toll Cost	-0.521	0.0131	-39.93
<i><math>\beta_{CostOpposed}</math></i>	Dollars	Opposed Toll Cost	-1.66	0.185	-8.97
<i><math>\beta_{Occ}</math></i>	Persons	Vehicle Occupancy - 1 additional passenger	-0.404	0.0468	-8.63
<i><math>\beta_{MLConstant}</math></i>	(0,1)	Managed Lanes Constant	-0.67	0.0205	-32.71
<i><math>\beta_{MLHOVConstant}</math></i>	(0,1)	Managed Lanes HOV Constant	-1.39	0.061	-22.82
<i><math>\lambda_{Income}</math></i>	--	Cost - Income Elasticity	-0.0658	0.0266	-2.47
<i><math>\lambda_{Distance}</math></i>	--	Cost - Distance Elasticity	-0.15	0.019	-7.92
<b>Model Statistics</b>					
Number of estimated parameters:		9			
Number of observations:		8608			
Number of individuals:		1076			
Null log-likelihood:		-8889.203			
Init log-likelihood:		-8889.203			
Final log-likelihood:		-5886.402			
Likelihood ratio test:		6005.604			
Rho-square:		0.338			
Adjusted rho-square:		0.337			
Mean income midpoint (\$)		108,780			
Mean trip distance (miles)		26.27			



**Table 5.4: Off-Peak Work Trips Model Coefficients**

<b>Off-Peak Work Trips Model Parameters</b>					
<b>Parameters</b>	<b>Units</b>	<b>Description</b>	<b>Value</b>	<b>Robust Std. Error</b>	<b>Robust t-stat</b>
<i><math>\beta_{TTNotOpposed}</math></i>	Minutes	Not Opposed Travel Time	-0.127	0.0045	-28.13
<i><math>\beta_{TTOpposed}</math></i>	Minutes	Opposed Travel Time	-0.0449	0.0129	-3.48
<i><math>\beta_{CostNotOpposed}</math></i>	Dollars	Not Opposed Toll Cost	-0.562	0.0189	-29.74
<i><math>\beta_{CostOpposed}</math></i>	Dollars	Opposed Toll Cost	-1.05	0.119	-8.78
<i><math>\beta_{Occ}</math></i>	Persons	Vehicle Occupancy - 1 additional passenger	-0.802	0.0562	-14.26
<i><math>\beta_{MLConstant}</math></i>	(0,1)	Managed Lanes Constant	-0.67	0.0205	-32.71
<i><math>\beta_{MLHOVConstant}</math></i>	(0,1)	Managed Lanes HOV Constant	-1.39	0.061	-22.82
<i><math>\lambda_{Income}</math></i>	--	Cost - Income Elasticity	-0.143	0.0421	-3.41
<i><math>\lambda_{Distance}</math></i>	--	Cost - Distance Elasticity	-0.268	0.0306	-8.75
<b>Model Statistics</b>					
Number of estimated parameters:		9			
Number of observations:		6712			
Number of individuals:		839			
Null log-likelihood:		-7302.524			
Init log-likelihood:		-7302.524			
Final log-likelihood:		-4497.552			
Likelihood ratio test:		5609.944			
Rho-square:		0.384			
Adjusted rho-square:		0.383			
Mean income midpoint (\$)		114,902			
Mean trip distance (miles)		25.83			



**Table 5.5: Off-Peak Work Trips Model Coefficients**

<b>Off-Peak Non-Work Trips Model Parameters</b>					
<b>Parameters</b>	<b>Units</b>	<b>Description</b>	<b>Value</b>	<b>Robust Std. Error</b>	<b>Robust t-stat</b>
<i><math>\beta_{TTNotOpposed}</math></i>	Minutes	Not Opposed Travel Time	-0.126	0.00415	-30.39
<i><math>\beta_{TTOpposed}</math></i>	Minutes	Opposed Travel Time	-0.0474	0.0201	-2.36
<i><math>\beta_{CostNotOpposed}</math></i>	Dollars	Not Opposed Toll Cost	-0.592	0.0177	-33.54
<i><math>\beta_{CostOpposed}</math></i>	Dollars	Opposed Toll Cost	-2.04	0.243	-8.39
<i><math>\beta_{Occ}</math></i>	Persons	Vehicle Occupancy - 1 additional passenger	-0.472	0.0479	-9.87
<i><math>\beta_{MLConstant2}</math></i>	(0,1)	Managed Lanes Constant	-0.67	0.0205	-32.71
<i><math>\beta_{MLConstant3}</math></i>	(0,1)	Managed Lanes HOV Constant	-1.39	0.061	-22.82
<i><math>\lambda_{Income}</math></i>	--	Cost - Income Elasticity	-0.205	0.0339	-6.05
<i><math>\lambda_{Distance}</math></i>	--	Cost - Distance Elasticity	-0.197	0.0243	-8.1
<b>Model Statistics</b>					
Number of estimated parameters:	9				
Number of observations:	8672				
Number of individuals:	1084				
Null log-likelihood:	-9176.844				
Init log-likelihood:	-9176.844				
Final log-likelihood:	-5750.106				
Likelihood ratio test:	6853.476				
Rho-square:	0.373				
Adjusted rho-square:	0.372				
Mean income midpoint (\$)	106621				
Mean trip distance (miles)	26.33				

## 5.6 Values of Time

One way to evaluate the sensitivities that are estimated in the MNL models is to calculate the values of time for the different model segments. The marginal rate of substitution of the travel time and toll cost coefficients provides the implied value that travelers place on their time in terms of their willingness to pay a toll for travel time savings offered on the US 36 Managed Lanes. The values of time evaluated at the mean income and distance for each segment are shown below in Table 5.6.

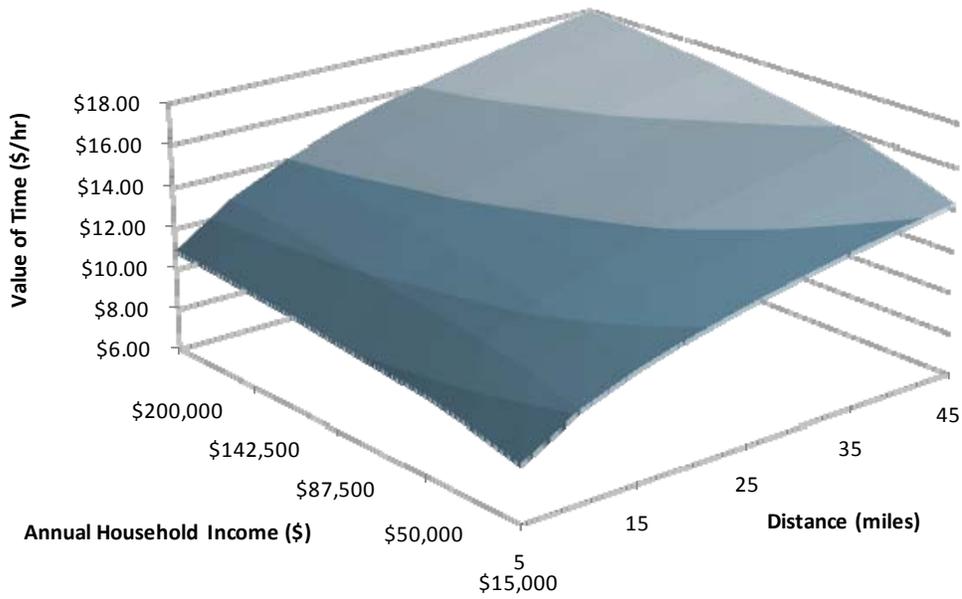
**Table 5.6: Value of Time**

<b>Segment</b>	<b>Mean Income (\$)</b>	<b>Mean Distance (miles)</b>	<b>VOT (\$/hr)</b>
Aggregate	\$113,634	25.26	\$14.31
Peak Work	\$118,658	24.10	\$14.83
Peak Non-work	\$108,780	26.27	\$13.13
Off-peak Work	\$114,902	25.83	\$13.56
Off-peak Non-work	\$106,621	26.33	\$12.77

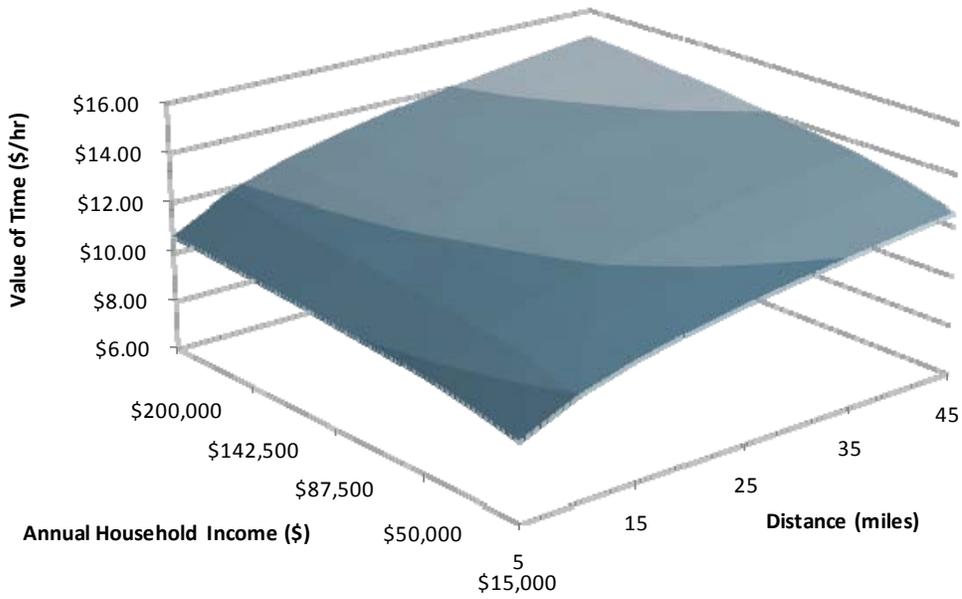
Because the sensitivity to cost varied by annual household income and trip distance in the model segments, the resulting values of time also vary with household income and trip distance. Figure 5.3 through Figure 5.6 show the relationship between annual household income, trip distance, and value of time for each segment.



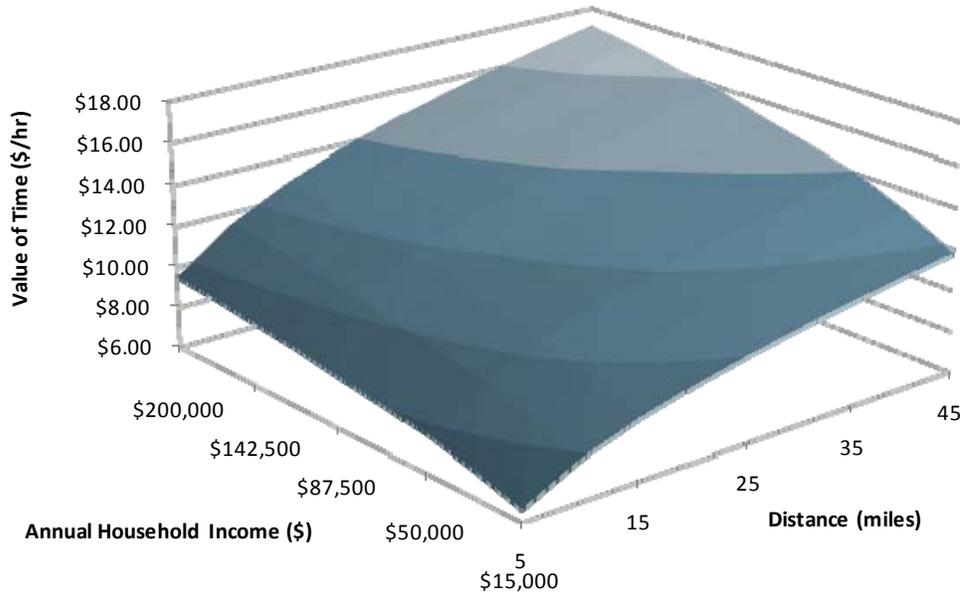
**Figure 5.3: Peak Work Values of Time by Income and Distance**



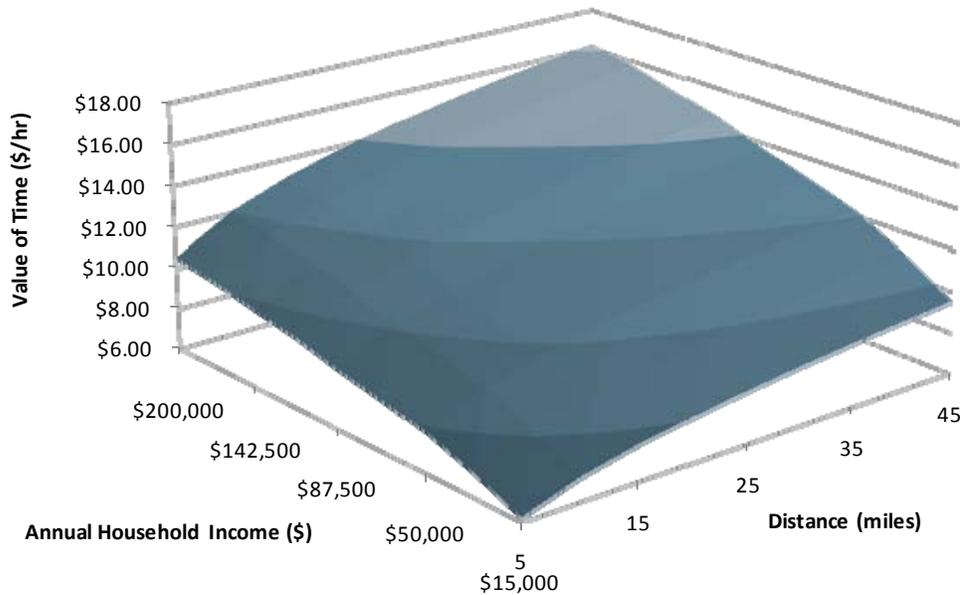
**Figure 5.4: Peak Non-work Values of Time by Income and Distance**



**Figure 5.5: Off-peak Work Values of Time by Income and Distance**



**Figure 5.6: Off-peak Non-work Values of Time by Income and Distance**



## 6.0 CONCLUSION

RSG successfully developed and implemented a stated preference survey questionnaire that gathered information from 5,340 automobile travelers in the Denver-Boulder region. The questionnaire collected data on current travel behaviors, presented respondents with information about the proposed Managed Lanes, and engaged the travelers in a series of stated preference scenarios.



Choice models were developed to produce estimates of value of time (VOT) of travelers for four market segments: peak work, peak non-work, off-peak work, and off-peak non-work. The magnitude and signs of the sensitivity estimates are reasonable and intuitively correct, and the values of time that were estimated are within the ranges found in other major metropolitan areas across the country. The values of time varied by trip purpose, time of day, income, and distance, and generally fell within a range of \$6.00/hr to \$18.00 per hour. The off-peak non-work segment had the lowest values of time, while the peak work segment had the highest values of time.

The survey and choice model results indicate the addition of Managed Lanes on US 36 could have a significant impact on travel behavior. The incorporation of these results into the updated regional travel demand model will allow Wilbur Smith Associates and the HTPE to evaluate a wide range of tolling scenarios and travel conditions.



## **Appendix 1A: Survey Questionnaire**

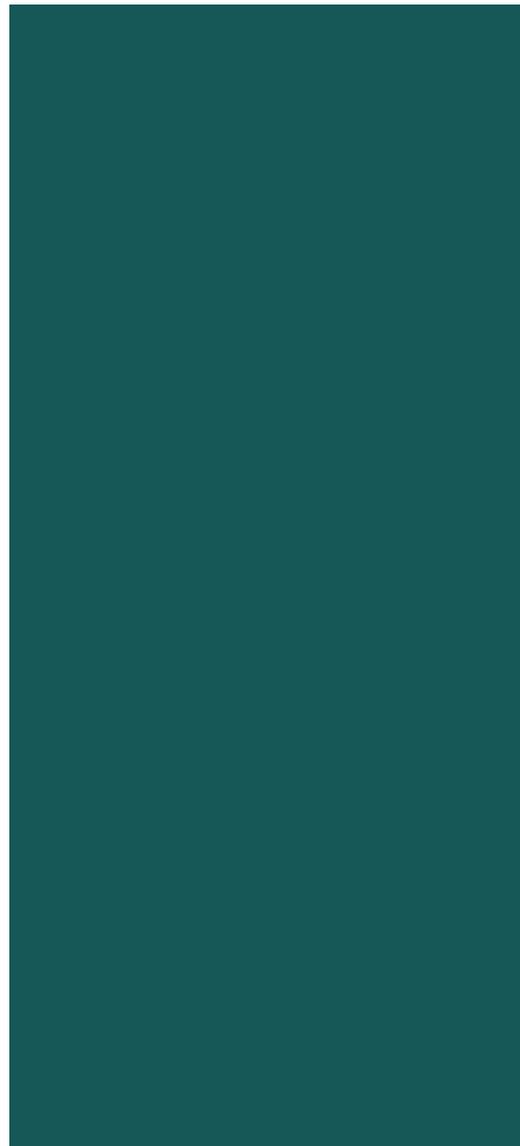


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# Denver-Boulder Stated Preference Survey Report

## Appendix A Survey Questionnaire

December 2010



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## 1.0 SURVEY QUESTIONNAIRE

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### 1.1 Recruitment Methodology and Sample Size

- Targeted total sample size of 1,000 respondents
- All qualifying respondents must be 18 years or older and must have made a trip within the past two weeks that:
  - Occurred on a weekday
  - Traveled in the Denver-Boulder region
- Respondents will be asked to focus on their most recent trip as they answer a set of background questions, including trip purpose, travel time, trip duration, and trip frequency.
- Respondents will be recruited using four methods:
  - Through an online research panel
  - Through current EXpressToll users
  - Through businesses within or near the study corridor via email invitation

### 1.2 Instructions for Reviewers

- Text in [ ] square brackets appearing before a question indicates a question that will not be seen by all respondents and the logic for the respondents who will see that question. For example: “[If a transit user] How much did it cost to ride the metro on your trip?”
- Text in < > angle brackets within the text of a question is dynamically inserted based on each respondent’s answers to previous questions. For example: “In the questions that follow, please continue to think about your ONE-WAY <trip purpose> trip.”
- Text in [ ] square brackets appearing after a question indicates the online survey page name for that question. This is a useful reference point for reviewing the survey online. For example: “What is your age? [age]”

## 2.0 SURVEY TEXT

---

### 2.1 Survey Introduction

1. Welcome. Please enter your password \_\_\_\_\_

For information email [US36study@rsgsurvey.com](mailto:US36study@rsgsurvey.com) [password]

2. Thank you for participating in the Denver US 36 Travel Study.

The purpose of this survey is to gather input from you and other travelers about different travel options between Denver and Boulder.

Your answers will be kept confidential and will be used only for this study.

[Survey Instructions](#)



Please use the “Next Question” button in the lower left corner of the screen to go forward. If you back up to change an answer, please be sure to click “Next Question” to continue forward. It is important that you do NOT use your web browser’s “forward” button because your new answers will not be recorded.

To review a previous question, use the browser’s “back” button, which is the left-pointing arrow in the upper left corner of the screen.

Answering all of the questions will take about 10–15 minutes.

Please click “Next Question” to begin. [intro]

## 2.2 Screener & Trip Characteristic Questions

3. What is your home ZIP code? [zip]
  - 1 \_\_\_\_\_ [Terminate if not CO ZIP Code]
  
4. [If respondent enters a CO ZIP code] Were you the driver for a recent trip anywhere in the highlighted corridor between Boulder and Denver that met all of the following conditions? [screener]
  - Used, or reasonably could have used, at least 3 miles of US 36
  - Made within the past month
  - Made in a personal vehicle (e.g. car, pickup truck, minivan)
  - Made on a weekday
  - Took at least 15 minutes

[Map of study area shown.]

  - 1 Yes, I have made a recent trip that used US 36 and that meets **all** of these conditions
  - 2 Yes, I have made a recent trip that did not use, but reasonably could have used US 36 that meets **all** of these conditions
  - 3 No, I have not made a recent trip that used or could have used US 36 that meets **all** of these conditions [Terminate]
  
5. [If could have used US 36] What is the primary reason that you did not use US 36 for this trip? [yno36]
  - 1 US 36 is too congested
  - 2 Had to make intermediate stops
  - 3 US 36 is not convenient for my trip
  - 4 Other, please specify:
  
6. [If respondent is terminated] Thank you for taking the time to participate in this study. Unfortunately, your answers indicate that you would not benefit from the potential transportation improvements being studied in this survey. Although we appreciate your interest, we cannot invite you to continue with the survey.

Thank you again for your time. You may close your browser to exit. [nothanks]



7. The rest of the questions in this survey will ask about your MOST RECENT weekday trip of at least 15 minutes that <used/could have used> US 36 between Boulder and Denver. Please think about your trip in one direction only, not the complete round trip.

What day of the week did you make your MOST RECENT trip? [dow]

- 1 Monday
- 2 Tuesday
- 3 Wednesday
- 4 Thursday
- 5 Friday

8. What was the primary purpose of your most recent trip? [purp]

- 1 Go to/from work
- 2 Business-related travel (such as going to a meeting, sales call, etc.)
- 3 Attend school/college/university or drop off/pick up a student
- 4 Go to/from the airport
- 5 Shopping
- 6 Social or recreational (such as going to a restaurant, visiting a friend, or going to a sporting event)
- 7 Other personal business (such as a medical appointment)

9. Where did you begin and end your one-way trip?

Please describe only the ONE-WAY portion of your most recent trip, not the complete round-trip.

My trip began at: [begloc]

- 1 My home
- 2 My workplace
- 3 Another place

My trip ended at: [endloc]

- 1 My home
- 2 My workplace
- 3 Another place

10. [If respondent's beginning and ending locations are the same] You indicated your trip began at <begin location> and ended at <end location>.

Are these two physically different locations? [locwarn]

- 1 Yes
- 2 No

[Note: If no is selected, send respondent back to previous page to modify answer.]

11. You reported a <purp> trip that began at <beg location>. Where is this located?\* [geolocationsO]



Please enter an address (with street number), the nearest intersection, or a business name in the boxes below. If you do not know this information or you would prefer to find the location on a map, please select "I would rather use a map."

I would rather use a map

Find a Business *(optional)*

\_\_\_\_\_

Address or Intersection

\_\_\_\_\_

(examples: Colorado State Capitol, or 200 E Colfax Ave, or Colfax Ave & Lincoln St)

City

State

Zip Code

\_\_\_\_\_

\*Note: Your information will be kept strictly confidential and will only be used for this survey. Your responses will never be linked to your personal information.

[If respondent searches for an address or business location] We found the following address:

[Address(es) yielded by search shown]

If this address is correct, select it, and click Next Question to continue. If it is not correct, please double check the address you typed and correct it, modify it, or use the map.

[If respondent selects to use the map] To use the map:

1. Click on the map to zoom in on your location
2. Keep zooming until a marker  appears
3. Continue to drag the map and click on the location until the marker is in the right place (the street number does not have to be exact)
4. Click "Next Question" to proceed

12. You reported a <purp> trip that ended at <end location>. Where is this located?\* [geoloationsD]

Please enter an address (with street number), the nearest intersection, or a business name in the boxes below. If you do not know this information or you would prefer to find the location on a map, please select "I would rather use a map."

I would rather use a map

Find a Business *(optional)*

\_\_\_\_\_

Address or Intersection

\_\_\_\_\_

(examples: Colorado State Capitol, or 200 E Colfax Ave, or Colfax Ave & Lincoln St)

City

State

Zip Code

\_\_\_\_\_



\*Note: Your information will be kept strictly confidential and will only be used for this survey. Your responses will never be linked to your personal information.

[If respondent searches for an address or business location] We found the following address:

[Address(es) yielded by search shown]

If this address is correct, select it, and Click Next Question to continue. If it is not correct, please double check the address you typed and correct it, modify it, or use the map.

[If respondent selects to use the map] To use the map:

1. Click on the map to zoom in on your location
2. Keep zooming until a marker  appears
3. Continue to drag the map and click on the location until the marker is in the right place (the street number does not have to be exact)
4. Click "Next Question" to proceed

13. [If origin and destination locations indicate a trip that is not valid] Based on the locations you provided, it appears that your trip could not have reasonably used US 36 between Boulder and Denver.

Remember, we are asking you to describe your most recent trip that used or could have used US 36 in the region between Boulder and Denver. Do you need to change beginning or ending location of your trip? [invalidtrip]

- 1 Yes
- 2 No

[Note: if yes is selected, send respondent back to 'geolocations0' page.]

14. [If no is selected] Can you think of another recent trip anywhere in the corridor between Boulder and Denver and met all of the following conditions? [screener]

- Used, or reasonably could have used, at least 3 miles of US 36
- Made within the past month
- Made in a personal vehicle (e.g. car, pickup truck, minivan)
- Made on a weekday
- Took at least 15 minutes

[Map of study area shown.]

- 1 Yes, I have made a recent trip that used US 36 and that meets all of these conditions
- 2 Yes, I have made a recent trip that did not use, but reasonably could have used US 36 that meets all of these conditions
- 3 No, I have not made a recent trip that used US 36 that meets all of these conditions [Terminate]

[Note: if yes is selected, send respondent back to question 7.]



15. [If used US 36] Where did you ENTER onto US 36 for your trip?

[If could have used US 36] Where would you have entered US 36 if you had used it for your trip?  
[entramp]

- 1 East of I-25
- 2 I-25
- 3 Broadway St
- 4 Pecos St
- 5 Federal Blvd / US 287
- 6 Sheridan Blvd (SH 95 / 92nd Ave)
- 7 Church Ranch Blvd / 104th Ave
- 8 SH 121 / US 287 (Broomfield / Lafayette / Arvada)
- 9 East Flatiron Crossing Dr
- 10 StorageTek Dr / Interlocken Loop (Broomfield / Louisville)
- 11 West Flatiron Crossing Dr
- 12 McCaslin Blvd / SH 170 (Superior / Louisville)
- 13 Table Mesa Dr / South Boulder Rd / Foothills Parkway / SH 157
- 14 Baseline Rd
- 15 North/West of Baseline Rd

16. Where did you EXIT off of US 36 for your trip>?

[If could have used US 36] Where would you have exited US 36 if you had used it for your trip?  
[extramp]

- 1 East of I-25
- 2 I-25
- 3 Broadway St
- 4 Pecos St
- 5 Federal Blvd / US 287
- 6 Sheridan Blvd (SH 95 / 92nd Ave)
- 7 Church Ranch Blvd / 104th Ave
- 8 SH 121 / US 287 (Broomfield / Lafayette / Arvada)
- 9 East Flatiron Crossing Dr
- 10 StorageTek Dr / Interlocken Loop (Broomfield / Louisville)
- 11 West Flatiron Crossing Dr
- 12 McCaslin Blvd / SH 170 (Superior / Louisville)
- 13 Table Mesa Dr / South Boulder Rd / Foothills Parkway / SH 157
- 14 Baseline Rd
- 15 North/West of Baseline Rd

[Note: If trip on US 36 is less than 3 miles, terminate.]

17. [If used US 36] Do you ever use an alternate route to avoid traffic congestion on US 36? [altroute]

- 1 Yes



2 No

18. [If yes] Which route(s) do you use to avoid traffic congestion on US 36?

Select all that apply. [altroute]

- 1 W 104th Ave
- 2 Baseline Rd
- 3 W Dillon Rd/W 144th Ave
- 4 E-470
- 5 I-25
- 6 I-70
- 7 I-76
- 8 I-270
- 9 Northwest Parkway
- 10 US 7/Arapahoe Rd
- 11 US 34
- 12 US 93
- 13 US 95/Sheridan Blvd
- 14 US 121/Wadsworth Blvd
- 15 US 128/120th Ave
- 16 US 287/Federal Blvd
- 17 Other, please specify:

19. [If did not use US 36] Which of the following road(s) did you use on your trip?

Select all that apply. [route]

- 1 W 104th Ave
- 2 Baseline Rd
- 3 W Dillon Rd/W 144th Ave
- 4 E-470
- 5 I-25
- 6 I-70
- 7 I-76
- 8 I-270
- 9 Northwest Parkway
- 10 US 7/Arapahoe Rd
- 11 US 34
- 12 US 93
- 13 US 95/Sheridan Blvd
- 14 US 121/Wadsworth Blvd
- 15 US 128/120th Ave
- 16 US 287/Federal Blvd
- 17 Other, please specify:



20. What time did you begin your trip? [begtime]
- 1 My trip started at: Please slide the blue box to select the time.
21. [If begin time is not during peak hours] It looks like you did not begin your trip during peak hours, or "rush hours" (6-9 AM or 3-7 PM). Did you start your trip at <begtime> to minimize the impact of traffic congestion on your trip? [prefpeak]
- 1 Yes
  - 2 No
22. [If yes] You started your trip at <begtime>.
- If there were no traffic congestion, what time would you have preferred to start your trip?
- 1 I would have preferred to start my trip at: Please slide the blue box to select the time. [preftime]
23. Approximately how long did it take you, door to door, to drive from <begin location> to <end location>?
- Please include only the time you spent driving and not time spent at any intermediate stops you may have made along the way. [travtime]
- 1 My trip took: Please slide the blue box to select the time.
24. [If time validation estimates using Google Maps are inconsistent with respondent reported time] Based on the locations you provided earlier, it appears that your time of <travtime> is significantly <longer/shorter> than what we estimate it should take to make your trip.
- Remember, please tell us how long it took you to drive from <begin location> to <end location> in one direction only. Please do not include time spent at any stops you may have made along the way.
- Do you need to change your reported time? [timewarn]
- 1 Yes
  - 2 No
25. [If yes is selected] Please re-enter the time it took you, door to door, to drive from <begin location> to <end location>. [travtime2]
- 1 My trip took: Please slide the blue box to select the time.
26. Did you encounter any delay due to traffic congestion during your trip? [delay]
- 1 Yes
  - 2 No
27. [If respondent encountered delay] You reported your trip took <travtime> with some delay due to congestion.
- If there were NO delays due to congestion on U S 36, how long would this trip have taken you?
- [If reported travel time without delay exceeds travel time cited encountering delay, the following warning will be inserted here] Your travel time without delay should be less than the travel time with delay. [delaytime]
- 1 With no delay, my trip would take: Please slide the blue box to select the time.



28. Did you have any passengers with you on your trip? [pass]
- 1 Yes, I had 1 or more passengers
  - 2 No, I drove alone
29. [If yes] Who was in the car for your trip? Please provide information about the number of people who were in the vehicle with you. [occ]
- 1 \_\_\_ Members of my household
  - 2 \_\_\_ Friends or relatives who do not live in my house
  - 3 \_\_\_ Co-workers
  - 4 \_\_\_ Other pre-arranged carpoolers
  - 5 \_\_\_ Total number of people in vehicle (including you) (calculated automatically)
30. Did you pay any tolls on your trip? [toll]
- 1 Yes
  - 2 No
31. [If yes] How much did you pay in tolls (in one direction only)?  
If you are not sure, please enter your best estimate. [tollamt]
- 1 I paid: Please side the blue box to select your toll cost.
32. Do you currently have an EXpressToll transponder\* in your car for electronic toll collection? [etc]
- 1 Yes, I have an EXpressToll transponder
  - 2 No, but I have another type of electronic toll transponder
  - 3 No, I don't have an EXpressToll or other electronic toll transponder
- \*A transponder is an electronic device that is mounted inside the windshield of your vehicle. When your vehicle passes through a toll plaza, an antenna at the toll plaza reads the account information contained in the transponder. The appropriate toll is then deducted from your prepaid account.
- [Note: The first 'EXpressToll' displayed as a clickable link to website.]
33. How often do you make this same trip, in this direction, between <beg location> and <end location>? [freq]
- 1 6 or more times per week
  - 2 4-5 times per week
  - 3 2-3 times per week
  - 4 1 time per week
  - 5 2-3 times per month
  - 6 1 time per month
  - 7 Less than 1 time per month



34. Have you ever used the I-25 Express Lanes north of Denver? [use25]

- 1 Yes
- 2 No

35. [If yes] How often do you use the I-25 Express Lanes? [freq25]

- 1 6 or more times per week
- 2 4-5 times per week
- 3 2-3 times per week
- 4 1 time per week
- 5 2-3 times per month
- 6 1 time per month
- 7 Less than 1 time per month

Do you usually carpool or drive alone when you use the I-25 Express Lanes? [occ25]

- 1 Usually carpool
- 2 Usually drive alone
- 3 Both carpool and drive alone

36. How often do you use public transportation (RTD bus, light rail, skyRide, etc.) in the Denver Metropolitan area? [tranfreq]

- 1 6 or more times per week
- 2 4-5 times per week
- 3 2-3 times per week
- 4 1 time per week
- 5 1-3 times per month
- 6 Less than 1 time per month
- 7 Never

## 2.3 Stated Preference Questions

37. Information:

The Colorado Department of Transportation (CDOT) High Performance Transportation Enterprise (HPTE) is evaluating a plan to improve mobility and connectivity on US 36 between Denver and Boulder. The proposed plan is to add 1 additional lane in each direction along US 36 between I-25 to the east and Table Mesa/S. Boulder Road to the west.

These new lanes would be built as "Managed Lanes" and the following options are being considered for the improved US 36 corridor:

- The existing regular lanes along US 36 would be available for all travelers and would continue to be toll-free.
- The Managed Lanes would be tolled for single occupant vehicles.
- Carpools could pay a discounted toll or travel toll-free in the Managed Lanes.
- Tolls could vary by time of day. For example, tolls might be higher during peak times (i.e. "rush hour") to keep traffic moving at the posted speed limit in the Managed Lanes.



- Access into and out of the Managed Lanes would be through transition areas from the regular lanes.

Please click "Next Question" to continue. [slide1]

38. Information:

Two payment options would be available when using the proposed lanes. Neither requires you to stop at a toll booth or gate to pay the toll:

- **Transponder:** An EXpressToll transponder is mounted inside your vehicle's windshield and tolls would be automatically deducted from your EXpressToll pre-paid account each time you use the Managed Lanes. EXpressToll transponders are currently being used on the Northwest Parkway, E-470, and I-25 Express Lanes.
- **License Plate Tolling:** Instead of having a transponder, your vehicle's license plate is read by a camera each time you use the Managed Lanes. You would arrange for payment in a prepaid account or wait for a bill to be sent by mail to the vehicle's registered owner.

Please click "Next Question" to continue. [slide2]

39. Instructions:

On each of the next 8 screens, you will be asked to choose between <2/3> different options for making the trip you just told us about. In addition to <the existing US 36 regular lanes/your current route>, imagine that you have the option of using the proposed US 36 Managed Lanes to make your trip. The Managed Lanes could save you a certain amount of travel time compared to <the US 36 regular lanes/your current route>.

For each screen, please look at closely at the options and tell us which one you MOST prefer.

When making your decision, please assume that:

- The options shown on each screen are hypothetical.
- The <2/3> options shown are the ONLY options available to you, even if they are all different from the options that are available to you now.
- All costs shown are per-vehicle costs.
- Fuel costs, reimbursement rates, and parking costs are the same as now.

Please click "Next Question" to continue. [slide3]

40. Below are <2/3> different travel options for your trip with <occ> passenger. These options include information on travel time, toll cost, and number of passengers. Please assume that all other travel costs are the same as they are now.

If the options below are the only options available for your trip, which would you choose?

Click on one of the three boxes below to select your preferred choice.

[For first question] Information in bold will vary from screen to screen.

[For questions 2 and higher] Information in bold may have changed. [cbc]

1. <US 36 Regular Lanes/Current Route>
  - a. Travel time: X min
  - b. Toll free
  - c. <current occ>
2. US 36 Managed Lanes



- a. Travel time: X min
- b. Toll Cost: \$Y
- c. <current occ>
- 3. [If SOV or HOV2] US 36 Managed Lanes with Additional Passengers
  - a. Travel time: X min
  - b. Toll cost: \$Y
  - c. Number of additional passengers: Z

**Table 2.1: Stated Preference Attribute Levels**

Attribute	Level	Alternative 1		Alternative 2		Alternative 3	
		General Purpose/Non-36 current route		US 36 Managed Lane		US 36 Managed Lane HOV	
Travel Time	1		1.00		0.88		0.00
	2	Reported Travel Time *	1.05	Reported Travel Time *	0.90	Alternative 2 Travel Time + Level	3.00
	3	level (factored by delay)	1.10	Level (factored by delay)	0.93		6.00
	4		1.20		0.95		9.00
Toll Cost	1			\$ 2.00	Alternative 2 Toll Cost * Level		0.00
	2			\$ 6.00		0.50	
	3			\$ 10.00		0.75	
	4			\$ 14.00		1.00	
	5			\$ 18.00			
	6			\$ 22.00			
	7			\$ 26.00			
	8			\$ 35.00			
Occupancy	1					Current Occupancy + Level	1
	2						2

## 2.4 Debrief Questions

41. [If never chose Managed Lanes alternative] What is the primary reason why you never chose the proposed US 36 Managed Lanes option in the previous section? [ynomnl]
- 1 Not enough time savings
  - 2 Time savings not worth the toll cost
  - 3 Opposed to paying tolls
  - 4 [If did not use US 36] Current route is more convenient
  - 5 [If does not already have EXpressToll] Do not want to pay tolls electronically
  - 6 Other, please specify:

[Note: Answer choices will be shown in random order.]

42. [If respondent never selected carpool alternative] In the previous set of questions, what is the main reason you did not choose to carpool for your trip? [ynocrpool]
- 1 Don't know others to carpool with



- 2 Too much time required to coordinate with others
- 3 Like privacy of traveling alone
- 4 Like flexibility of traveling alone
- 5 Other, please specify:

[Note: Answer choices will be shown in random order.]

43. [If current HOV with coworkers or other prearranged carpoolers and selected at least 1 managed lanes alternative] Would you consider driving alone on the Managed Lanes and paying the full toll instead of carpooling? [hovtosov]

- 1 Yes
- 2 No

44. Below are two alternatives: one is the option you selected in the previous set of questions and the other is the same trip using a bus. In the future, you will be able to take a bus that travels in the Managed Lanes on US 36 that could be accessed at several park-and-rides in the US 36 corridor. These buses would run every 10 minutes during the morning and afternoon rush hours and every 20 minutes during the rest of the day. [transit]

1. <Option selected in 8<sup>th</sup> SP experiment>
  - a. Travel time: X min
  - b. <Toll/Toll Free>
  - c. <current occ>
2. BRT alternative
  - a. Travel time: X min
  - b. Fare: \$Y

If these options were available for you to make your <purpose> trip how likely would you be to use the bus option to make your trip?

- 1 Very likely
- 2 Likely
- 3 Neither likely nor unlikely
- 4 Unlikely
- 5 Very unlikely

[Note: only the alternative selected in the 8th stated preference experiment will be shown along with bus alternative.

Travel time levels:

- If comparing to Managed Lanes: +3, +6, +9, +12 minutes
- If comparing to general purpose lanes: -10, -5, 0, +5 minutes

Fare levels: \$1.00, \$2.00, \$3.00, \$4.00]

45. [If does not currently own transponder and selected toll option ] In one of the previous scenarios, you said you would use the proposed US 36 Managed Lanes if your trip took <travel time from one of experiment where US 36 Managed Lanes was chosen> and cost <toll shown in same experiment>.



If the toll for that trip using video tolling was <toll shown in SP experiment>, but <toll shown in SP experiment \* [discount]> if you paid using an EXpressToll transponder, how would you pay the toll? Would you be... [getetc]

- 1 Very likely to pay the toll with a transponder
- 2 Somewhat likely to pay the toll with a transponder
- 3 Not sure
- 4 Somewhat likely to pay by video tolling (would not get a transponder)
- 5 Very likely to pay by video tolling (would not get a transponder)

*[Note: the experiment for comparison will be selected at random from one of the experiments where a managed lanes alternative was selected. EXpressToll discount levels: 10%, 20%, 30%.]*

46. [If not somewhat or very likely to pay by video tolling] Which of the following best describes why you would be unlikely to pay the toll with a transponder?

Select all that apply.

- 1 Do not know enough about electronic toll collection
- 2 Will not use the proposed Managed Lanes often enough
- 3 Do not like idea of electronic tolling
- 4 Do not want a transponder in my car
- 5 Do not want to set up an account
- 6 Do not want to prepay tolls
- 7 Too expensive
- 8 Concerned about privacy
- 9 Too difficult to maintain account
- 10 Other, please specify:

[Note: Answer choices will be shown in random order.]

47. Based on the information provided in this survey, which of the following best describes how you feel about the proposed Managed Lanes along US 36 between Denver and Boulder? [opinion]

- 1 Strongly favor
- 2 Somewhat favor
- 3 Neutral
- 4 Somewhat opposed
- 5 Strongly opposed

48. [If respondent favors the proposed road] Please indicate the main reason you are in favor of the proposed Managed Lanes along US 36 between Denver and Boulder. [yfavor]

- 1 Faster travel times
- 2 Less congestion
- 3 More reliable travel times
- 4 Safe road conditions



- 5 Reduced emissions and improved air quality
- 6 User fees are a fair way to pay for highway improvements
- 7 Other, please specify:

[Note: Answer choices will be shown in random order.]

49. [If respondent opposes the proposed road] Please indicate the main reason you are opposed to the proposed Managed Lanes along US 36 between Denver and Boulder. [yoppose]
- 1 Opposed to paying fee/toll
  - 2 The fee/toll is too high
  - 3 Adverse environmental impact
  - 4 It will bring too much traffic/development
  - 5 Opposed to new roads/lanes in general
  - 6 Do not want to pay tolls electronically
  - 7 Other, please specify:

[Note: Answer choices will be shown in random order.]

50. How strongly do you agree or disagree with each of the following statements?

- I will use a toll route if the tolls are reasonable and I will save time
  - I will use a toll route if my trip travel time is reliable
  - I support using tolls or fees to pay for highway improvements that relieve congestion
  - I would change the time at which I travel to pay a lower toll amount than I would otherwise
  - Carbon emissions from my vehicle contribute to climate change
  - I am willing to carpool or take public transit more frequently in order to reduce air pollution and carbon emissions
  - I am willing to pay tolls if they are used to reduce carbon emissions and therefore air pollution [tollatt]
- 1 Strongly Agree
  - 2 Agree
  - 3 Neutral
  - 4 Disagree
  - 5 Strongly Disagree

[Note: These statements will be shown in random order.]

51. Which of the following resources do you typically consult for information about traffic conditions BEFORE your trip? [begintrip]

Please select all that apply.

- 1 TV
- 2 Internet (Google Maps, Map Quest, news station website, etc.)
- 3 Radio



- 4 Cell phone (text message or other phone service)
- 5 Word of mouth (friend, colleague, etc.)
- 6 GPS unit
- 7 Other, please specify:
- 8 None of the above

52. Which of the following resources do you typically consult for information about traffic conditions DURING your trip? [duringtrip]

Please select all that apply.

- 1 Radio
- 2 Cell phone (text message or other phone service)
- 3 Word of mouth (talking to a friend, colleague, etc. on the phone)
- 4 Electronic road/traffic signs
- 5 GPS unit
- 6 Other, please specify:
- 7 None of the above

## 2.5 Demographics Questions

53. What is your gender? [gender]

- 1 Female
- 2 Male

What is your age? [age]

- 1 16-24
- 2 25-34
- 3 35-44
- 4 45-54
- 5 55-64
- 6 65-74
- 7 75 or older

54. What is your employment status? [employ]

- 1 Employed full-time
- 2 Employed part-time
- 3 Self-employed
- 4 Student
- 5 Student and employed
- 6 Homemaker
- 7 Retired
- 8 Disabled
- 9 Unemployed and looking for work



10 Unemployed and not looking for work

55. How many people live in your household? [hhsz]

- 1 1 (I live alone)
- 2 2 people
- 3 3 people
- 4 4 people
- 5 5 or more people

56. How many vehicles are there in your household?

Please include all cars, pickup trucks, minivans, and motorcycles that you own or lease. [numveh]

- 1 0 (no vehicles)
- 2 1 vehicle
- 3 2 vehicles
- 4 3 vehicles
- 5 4 vehicles
- 6 5 or more vehicles

57. What is your annual household income?

\*Note: This information is only used to make sure we have received a representative sample of the greater Denver population. [income]

- 1 Less than \$15,000
- 2 \$15,000-\$19,999
- 3 \$20,000-\$29,999
- 4 \$30,000-\$39,999
- 5 \$40,000-\$49,999
- 6 \$50,000-\$59,999
- 7 \$60,000-\$74,999
- 8 \$75,000-\$99,999
- 9 \$100,000-\$134,999
- 10 \$135,000-\$149,999
- 11 \$150,000-\$199,999
- 12 \$200,000 or more

[Note: programmer to store midpoint of income range for modeling purposes]

58. Thank you again for participating.

If you have additional comments or suggestions, please enter them in the box below and click the "End Survey" button.

Otherwise, please click "End Survey" to complete the survey. [comment]

[Text box for Comments]



59. Thank you for taking the time to complete this survey. All of your responses have been saved, so you may now exit your browser.

This survey is conducted by Resource Systems Group, Inc. (RSG) (Link to <http://www.rsginc.com>)

For Wilbur Smith Associates (Link to <http://www.wilbursmith.com>)

On behalf of The Colorado Department of Transportation High Performance Transportation Enterprise (Link to <http://www.coloradodot.info/about/high-performance-transportation-enterprise-hpte>) [end]

[Each organization's logo displayed as a clickable link to websites cited]



## **Appendix 1B: Survey Screen Captures**

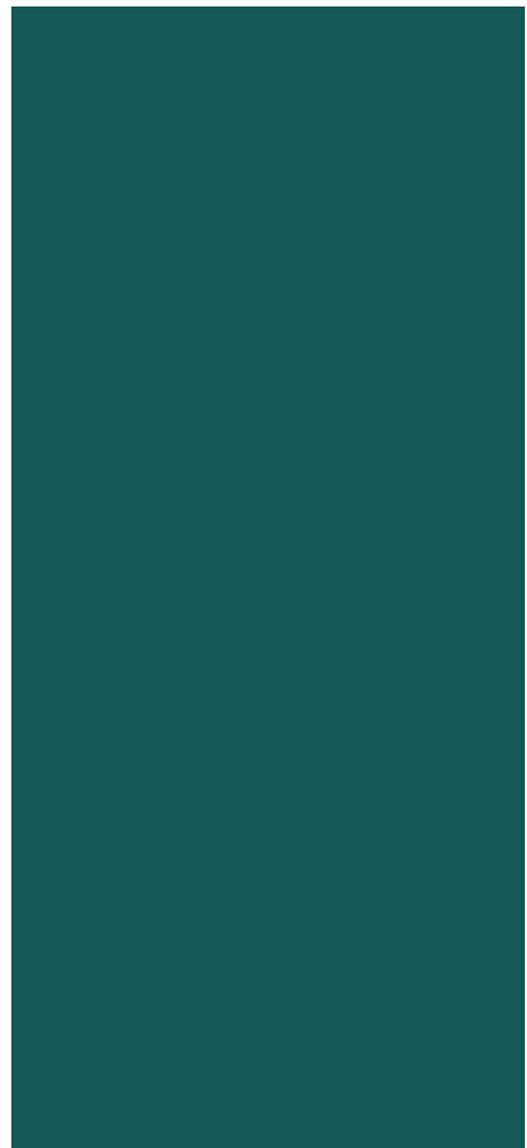


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# Denver-Boulder Stated Preference Survey Report

## Appendix B Survey Screen Captures

December 2010



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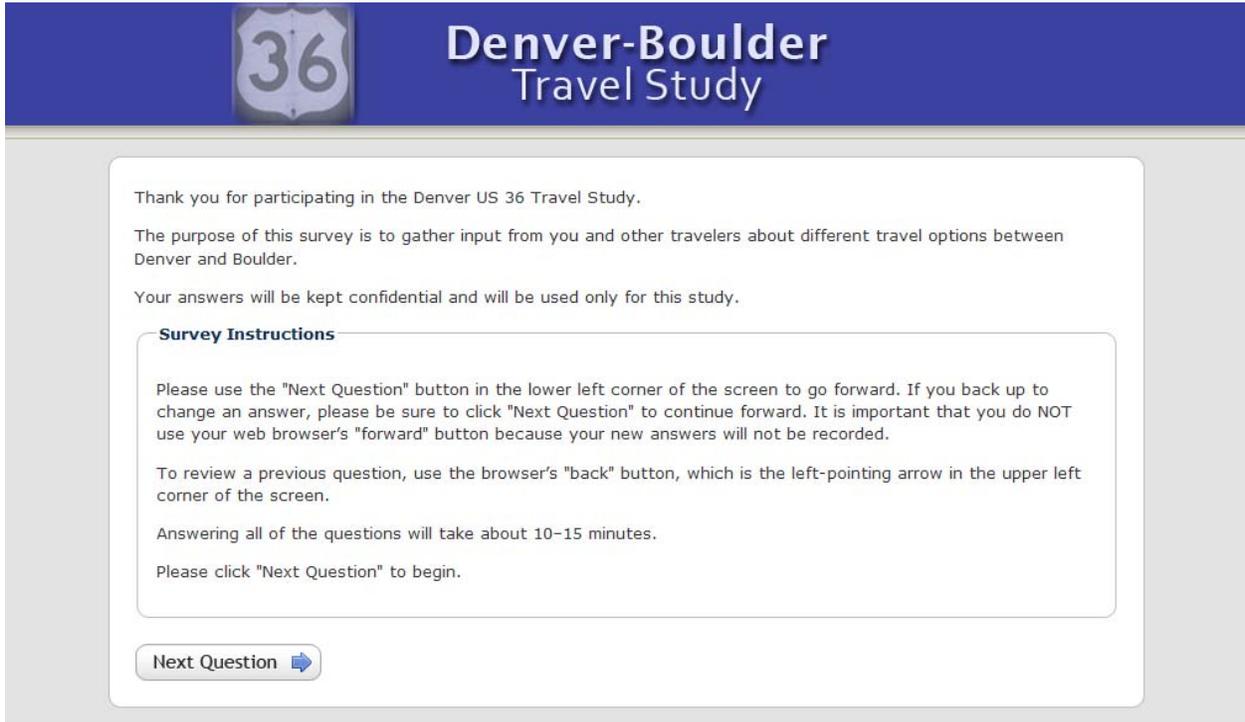


## 1.0 SURVEY SCREENSHOTS

---

### 1.1 Introduction

*Introduction and instructions*



The screenshot shows the introduction screen for the Denver-Boulder Travel Study. At the top, there is a blue header with a shield icon containing the number 36 and the text "Denver-Boulder Travel Study". Below the header, the main content area is white with a light gray border. It contains the following text:

Thank you for participating in the Denver US 36 Travel Study.

The purpose of this survey is to gather input from you and other travelers about different travel options between Denver and Boulder.

Your answers will be kept confidential and will be used only for this study.

**Survey Instructions**

Please use the "Next Question" button in the lower left corner of the screen to go forward. If you back up to change an answer, please be sure to click "Next Question" to continue forward. It is important that you do NOT use your web browser's "forward" button because your new answers will not be recorded.

To review a previous question, use the browser's "back" button, which is the left-pointing arrow in the upper left corner of the screen.

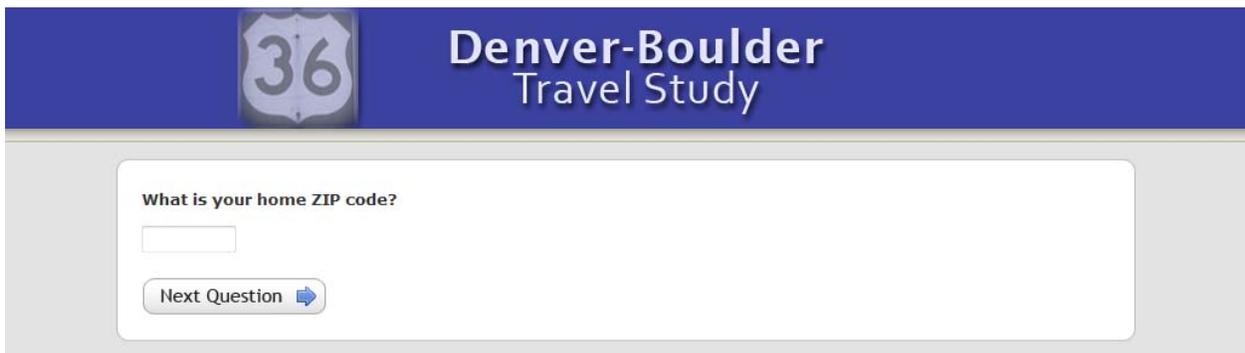
Answering all of the questions will take about 10-15 minutes.

Please click "Next Question" to begin.

At the bottom of the main content area, there is a button labeled "Next Question" with a blue arrow pointing to the right.

### 1.2 Screener and Trip Characteristic Questions

*Respondent home ZIP code*



The screenshot shows the screener question for the Denver-Boulder Travel Study. At the top, there is a blue header with a shield icon containing the number 36 and the text "Denver-Boulder Travel Study". Below the header, the main content area is white with a light gray border. It contains the following text:

What is your home ZIP code?

Below the question, there is a text input field.

At the bottom of the main content area, there is a button labeled "Next Question" with a blue arrow pointing to the right.



Trip qualification



## Denver-Boulder Travel Study

**Were you the driver for a recent trip anywhere in the highlighted corridor between Denver and Boulder that met all of the following conditions?**

- Used, or reasonably could have used, at least 3 miles of US 36
- Made within the past month
- Made in a personal vehicle (e.g. car, pickup truck, minivan)
- Made on a weekday
- Took at least 15 minutes

Yes, I have made a recent trip that used US 36 and that meets **all** of these conditions

Yes, I have made a recent trip that did not use, but reasonably could have used US 36 that meets **all** of these conditions

No, I have not made a recent trip that used or could have used US 36 that meets all of these conditions

[Next Question](#)



Denver-Boulder Corridor  
© Google Maps 2010

Termination



## Denver-Boulder Travel Study

Thank you for taking the time to participate in this study. Although we appreciate your interest, we cannot invite you to continue with the survey.



*Reason for not using US 36*



## Denver-Boulder Travel Study

**What is the primary reason that you did not use US 36 for this trip?**

- US 36 is too congested
- Had to make intermediate stops
- US 36 is not convenient for my trip
- Other, please specify:

[Next Question](#) ➔

*Trip day of week*



## Denver-Boulder Travel Study

The rest of the questions in this survey will ask about your MOST RECENT weekday trip of at least 15 minutes that reasonably could have used US 36 between Denver and Boulder. Please think about your trip in one direction only, not the complete round trip.

**What day of the week did you make your MOST RECENT trip?**

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday

[Next Question](#) ➔



*Trip purpose*



## Denver-Boulder Travel Study

**What was the primary purpose of your most recent trip?**

- Go to/from work
- Business-related travel (such as going to a meeting, sales call, etc.)
- Attend school/college/university or drop off/pick up a student
- Go to/from the airport
- Shopping
- Social or recreational (such as going to a restaurant, visiting a friend, or going to a sporting event)
- Other personal business (such as a medical appointment)

Next Question →

*Trip beginning and ending locations*



## Denver-Boulder Travel Study

**Where did you begin and end your one-way trip?**

Please describe only the ONE-WAY portion of your trip, not the complete round-trip.

**My trip began at:**

- My home
- My workplace
- Another place

→

**My trip ended at:**

- My home
- My workplace
- Another place

Next Question →

*If indicated same type of origin and destination: location reminder*



## Denver-Boulder Travel Study

You indicated your trip began at **home** and ended at **home**.

**Are these two physically different locations?**

- Yes
- No

Next Question →





## Denver-Boulder Travel Study

**You reported a work trip that BEGAN at home. Where is your home located?\***

Please enter an address (with street number), the nearest intersection, or a business name (if applicable) in the boxes below. If you do not know this information or you would prefer to find the location on a map, please select "I would rather use a map."

I would rather use a map

**Find a Business** *(optional)*

**Address or Intersection**

(Examples: Colorado State Capitol, or 200 E Colfax Ave, or Colfax Ave & Lincoln St)

**City**  **State**  **Zip Code**

**\*Note:** Your information will be kept strictly confidential and will only be used for this survey. Your responses will never be linked back to your personal information.



Trip destination using map



# Denver-Boulder Travel Study

You reported a work trip that ENDED at work. Where is your workplace located?\*

I would rather use a map

**To use the map:**

1. Click on the map to zoom in on your location
2. Keep clicking until a marker  appears
3. Continue to drag the map and click on the location until the marker is in the right place (**the street number does not have to be exact**)
4. Click "Next Question" to proceed



**\*Note:** Your information will be kept strictly confidential and will only be used for this survey. Your responses will never be linked back to your personal information.



*If invalid trip: need to change origin and destination*



## Denver-Boulder Travel Study

Based on the locations you provided, it appears that your trip could not have reasonably used US 36 between Denver and Boulder.

Remember, we are asking you to describe your most recent trip that used or could have used US 36 in the region between Denver and Boulder.

**Do you need to change the beginning or ending locations of your trip?**

Yes

No

[Next Question](#) 

*If invalid trip and need to change origin and destination: think of alternate trip*



## Denver-Boulder Travel Study

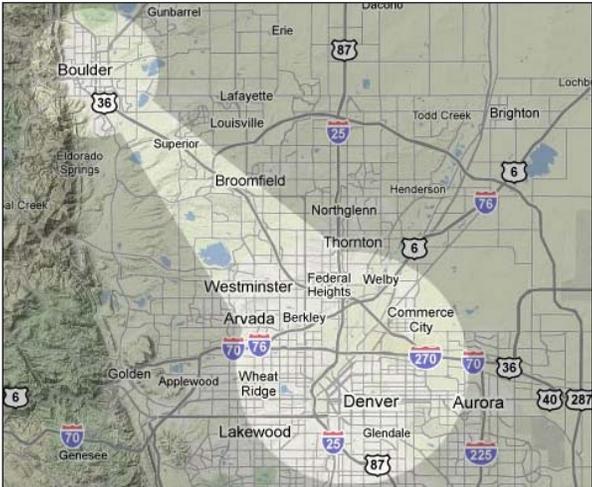
**Can you think of another recent trip that you made anywhere in the corridor between Denver and Boulder that met all of the following conditions?**

- Used, or reasonably could have used, at least 3 miles of US 36
- Made within the past month
- Made in a personal vehicle (e.g. car, pickup truck, minivan)
- Made on a weekday
- Took at least 15 minutes

Yes, I have made a recent trip that used or could have used US 36 and that meets **all** of these conditions

No, I have not made a recent trip that used or could have used US 36 that meets all of these conditions

[Next Question](#) 



© Google Maps 2010





## Denver-Boulder Travel Study

Where did you ENTER and EXIT US 36?

Enter	Exit	Road/Ramp
<input type="radio"/>	<input type="radio"/>	North / West of Baseline Rd
<input type="radio"/>	<input type="radio"/>	Baseline Rd
<input type="radio"/>	<input type="radio"/>	Table Mesa Dr / Boulder Rd / Foothills Parkway / SH 157
<input type="radio"/>	<input type="radio"/>	McCaslin Blvd / SH 170 (Superior / Louisville)
<input type="radio"/>	<input type="radio"/>	West Flatiron Crossing Drive
<input type="radio"/>	<input type="radio"/>	Storage Tek Dr / Interlocken Loop (Broomfield / Louisville)
<input type="radio"/>	<input type="radio"/>	East Flatiron Crossing Drive
<input type="radio"/>	<input type="radio"/>	SH 121 / US 287 (Broomfield / Lafayette / Arvada)
<input type="radio"/>	<input type="radio"/>	Church Ranch Blvd / 104th Ave
<input type="radio"/>	<input type="radio"/>	Sheridan Blvd (SH 95 / 92nd Ave)
<input type="radio"/>	<input type="radio"/>	Federal Blvd / US 287
<input type="radio"/>	<input type="radio"/>	Pecos St
<input type="radio"/>	<input type="radio"/>	Broadway St
<input type="radio"/>	<input type="radio"/>	I-25
<input type="radio"/>	<input type="radio"/>	East of I-25

Next Question



If used US 36: alternate route



## Denver-Boulder Travel Study

**Do you ever use an alternate route to avoid traffic congestion on US 36?**

Yes  
 No

**Which route(s) do you use to avoid traffic congestion on US 36?**

Select all that apply.

<input type="checkbox"/> W 104th Ave	<input type="checkbox"/> US 7/Arapahoe Rd
<input type="checkbox"/> Baseline Rd	<input type="checkbox"/> US 34
<input type="checkbox"/> W Dillon Rd/W 144th Ave	<input type="checkbox"/> US 93
<input type="checkbox"/> E-470	<input type="checkbox"/> US 95/Sheridan Blvd
<input type="checkbox"/> I-25	<input type="checkbox"/> US 121/Wadsworth Blvd
<input type="checkbox"/> I-70	<input type="checkbox"/> US 128/120th Ave
<input type="checkbox"/> I-76	<input type="checkbox"/> US 287/Federal Blvd
<input type="checkbox"/> I-270	<input type="checkbox"/> Other, please specify: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> Northwest Parkway	

[Next Question](#)

If did not use US 36: which routes used



## Denver-Boulder Travel Study

**Which of the following road(s) did you use on your trip?**

Select all that apply.

<input type="checkbox"/> W 104th Ave	<input type="checkbox"/> US 7/Arapahoe Rd
<input type="checkbox"/> Baseline Rd	<input type="checkbox"/> US 34
<input type="checkbox"/> W Dillon Rd/W 144th Ave	<input type="checkbox"/> US 93
<input type="checkbox"/> E-470	<input type="checkbox"/> US 95/Sheridan Blvd
<input type="checkbox"/> I-25	<input type="checkbox"/> US 121/Wadsworth Blvd
<input type="checkbox"/> I-70	<input type="checkbox"/> US 128/120th Ave
<input type="checkbox"/> I-76	<input type="checkbox"/> US 287/Federal Blvd
<input type="checkbox"/> I-270	<input type="checkbox"/> Other, please specify: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> Northwest Parkway	

[Next Question](#)



*Trip begin time*

**36** **Denver-Boulder**  
**Travel Study**

**What time did you begin your trip?**

My trip started at: **Please slide the blue box to select the time.**

6:00 AM      Noon      6:00 PM

Next Question ➔

*If started trip during off-peak hours and prefer to start trip during peak hours: preferred start time*

**36** **Denver-Boulder**  
**Travel Study**

It looks like you did not begin your trip during peak hours, or "rush hours" (6-9 AM or 3-7 PM).

**Did you start your trip at 11:45 AM to minimize the impact of traffic congestion on your trip?**

Yes  
 No

**If there were no traffic congestion, what time would you have preferred to start your trip?**

I would have preferred to start my trip at: **Please slide the blue box to select the time.**

6:00 AM      Noon      6:00 PM

Next Question ➔



Travel time

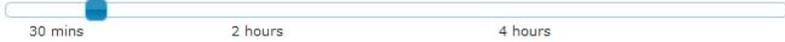


## Denver-Boulder Travel Study

**Approximately how long did it take you, door to door, to drive from your home to your workplace?**

Please include only the time you spent driving and not time spent at any intermediate stops you may have made along the way.

My trip took: **50 minutes**



Next Question →

Travel time warning



## Denver-Boulder Travel Study

**Based on the locations you provided earlier, it appears that your time of **5 hours and 55 minutes** is significantly longer than what we estimate it should take to make your trip.**

**Remember, please tell us how long it took you to drive from home to work in one direction only. Please do not include time spent at any stops you may have made along the way.**

**Do you need to change your reported time?**

Yes

No

**Please re-enter the time it took you, door to door, to drive from **home to work**.**

My trip took: **Please slide the blue box to select your travel time.**



Next Question →



Trip delay



## Denver-Boulder Travel Study

**Did you encounter any delay due to traffic congestion on US 36 during your trip?**

Yes  
 No

You reported your trip took **50 minutes** with some delay due to congestion.

**If there were NO delays due to congestion on US 36, how long would this trip have taken you?**

With no delay, my trip would take: **Please slide the blue box to select the time.**

30 mins      2 hours      4 hours

Next Question →

Vehicle occupancy



## Denver-Boulder Travel Study

**Did you have any passengers with you on your trip?**

Yes, I had 1 or more passengers  
 No, I drove alone

**Who was in the car for your trip?**

Please provide information about the number of people who were in the vehicle with you.

Driver (me)

---

Members of my household

Friends or relatives who do not live in my house

Coworkers

Other pre-arranged carpoolers

---

Total number of people in vehicle (including you) *(calculated automatically)*

Next Question →



Trip tolls



## Denver-Boulder Travel Study

**Did you pay any tolls on your trip?**

Yes  
 No

**How much did you pay in tolls (in one direction only)?**

If you are not sure, please enter your best estimate.

I paid: **Please slide the blue box to select your toll.**

\$1.00      \$4.00      \$7.00      \$10.00

Next Question →

Transponder ownership



## Denver-Boulder Travel Study

**Do you currently have an EXpress Toll transponder\* in your car for electronic toll collection?**

Yes, I have an EXpress Toll transponder  
 No, but I have another type of electronic toll transponder  
 No, I don't have an EXpress Toll or other electronic toll transponder

**\*Note:** A transponder is an electronic device that is mounted inside the windshield of your vehicle. When your vehicle passes through a toll plaza, an antenna at the toll plaza reads the account information contained in the transponder. The appropriate toll is then deducted from your prepaid account.

Next Question →



Trip frequency



## Denver-Boulder Travel Study

**How often do you make this same trip, in this direction, between home and work?**

- 6 or more times per week
- 4-5 times per week
- 2-3 times per week
- 1 time per week
- 2-3 times per month
- 1 time per month
- Less than 1 time per month

Next Question ➔

I-25 Express Lane usage



## Denver-Boulder Travel Study

**Have you ever used the Express Lanes on I-25 north of Denver?**

- Yes
- No

**How often do you use the I-25 Express Lanes?**

- 6 or more times per week
- 4-5 times per week
- 2-3 times per week
- 1 time per week
- 2-3 times per month
- 1 time per month
- Less than 1 time per month

**Do you usually carpool or drive alone when you use the I-25 Express Lanes?**

- Usually carpool
- Usually drive alone
- Both carpool and drive alone

Next Question ➔





## Denver-Boulder Travel Study

**How often do you use public transportation (RTD bus, light rail, skyRide, etc.) in the Denver Metropolitan area?**

- 6 or more times per week
- 4-5 times per week
- 2-3 times per week
- 1 time per week
- 1-3 times per month
- Less than 1 time per month
- Never

[Next Question](#) ➔

### 1.3 Stated Preference Questions

#### 1.3.1 Introduction and Instructions

*Project information*



## Denver-Boulder Travel Study

**Information:**

The Colorado Department of Transportation (CDOT) High Performance Transportation Enterprise (HPTE) is evaluating a plan to improve mobility and connectivity on US 36 between Denver and Boulder. The proposed plan is to add 1 additional lane in each direction along US 36 between I-25 to the east and Table Mesa/S. Boulder Rd to the west.

These new lanes would be built as "Managed Lanes" and the following options are being considered for the improved US 36 corridor:

- The existing regular lanes along US 36 would be available for all travelers and would continue to be toll-free.
- The new Managed Lanes would be tolled for single occupant vehicles.
- Carpools could pay a discounted toll or travel toll-free in the Managed Lanes.
- Tolls could vary by time of day. For example, tolls might be higher during peak times (i.e. "rush hour") to keep traffic moving at the posted speed limit in the Managed Lanes.
- Access into and out of the Managed Lanes would be through transition areas from the regular lanes.

Please click "Next Question" to continue.

[Next Question](#) ➔



Managed Lanes payment options



## Denver-Boulder Travel Study

**Information:**

**Two payment options would be available when using the proposed lanes. Neither requires you to stop at a toll booth or gate to pay the toll:**

- **Transponder:** An Express Toll transponder is mounted inside your vehicle's windshield and tolls would be automatically deducted from your EXpress Toll prepaid account each time you use the Managed Lanes. EXpress Toll transponders are currently being used on the Northwest Parkway, E-470, and I-25 Express Lanes.
- **License Plate Tolling:** Instead of having a transponder, your vehicle's license plate is read by a camera each time you use the Managed Lanes. You would arrange for payment in a prepaid account or wait for a bill to be sent by mail to the vehicle's registered owner.

Please click "Next Question" to continue.

Next Question →

Stated preference question instructions



## Denver-Boulder Travel Study

**Instructions:**

**On each of the next 8 screens, you will be asked to choose between 2 different options for making the trip you just told us about. In addition to your current route, imagine that you have the option of using the proposed US 36 Managed Lanes to make your trip. The Managed Lanes could save you a certain amount of travel time compared to your current route.**

**For each screen, please look closely at the options and tell us which one you MOST prefer.**

**When making your decision, please assume that:**

- The options shown on each screen are hypothetical.
- The 2 options shown are the ONLY options available to you, even if they are all different from the options that are available to you now.
- All costs shown are per-vehicle costs.
- Fuel costs, reimbursement rates, and parking costs are the same as now.

Please click "Next Question" to continue.

Next Question →



### 1.3.2 Stated Preference Questions

Stated preference question with two alternatives: Screen#1



## Denver-Boulder Travel Study

Below are 2 different travel options for your trip with 3 passengers. These options include information on travel time, toll cost, and number of passengers. Please assume that all other travel costs are the same as they are now.

**If these options were the only options available for your trip, which would you choose?**

Click on one of the three boxes below to select your preferred choice.

Information in **bold** will vary from screen to screen.

	Current Route	US 36 Managed Lane
 →	Travel time (door-to-door): <b>1 hour</b>	Travel time (door-to-door): <b>27 minutes</b>
 →	Toll free	Managed Lane toll: <b>\$3.30</b>
	<input type="radio"/> I prefer this option	<input type="radio"/> I prefer this option

Question 1 of 8

[Next Question](#) →

Stated preference question with two alternatives: Screen#2



## Denver-Boulder Travel Study

**If these options were the only options available for your trip, which would you choose?**

Note: information in **bold** may have changed.

	Current Route	US 36 Managed Lane
 →	Travel time (door-to-door): <b>55 minutes</b>	Travel time (door-to-door): <b>30 minutes</b>
 →	Toll free	Managed Lane toll: <b>\$10.00</b>
	<input type="radio"/> I prefer this option	<input type="radio"/> I prefer this option

Question 2 of 8

[Next Question](#) →



If SOV or HOV2 trip, stated preference question with three alternatives: Screen#1



## Denver-Boulder Travel Study

Below are 3 different travel options for your trip with no passengers. These options include information on travel time, toll cost, and number of passengers. Please assume that all other travel costs are the same as they are now.

**If these options were the only options available for your trip, which would you choose?**

Click on one of the three boxes below to select your preferred choice.

Information in **bold** will vary from screen to screen.

	US 36 Managed Lane in a carpool	US 36 Managed Lane	US 36 Regular Lanes
 →	Travel time (door-to-door): <b>34 minutes</b>	Travel time (door-to-door): <b>31 minutes</b>	Travel time (door-to-door): <b>42 minutes</b>
 →	Managed Lane toll: <b>\$1.85</b>	Managed Lane toll: <b>\$1.85</b>	Toll free
 →	2 additional passenger(s)		
	<input type="radio"/> I prefer this option	<input type="radio"/> I prefer this option	<input type="radio"/> I prefer this option

Question 1 of 8

Next Question →

If SOV or HOV2 trip, stated preference question with three alternatives



## Denver-Boulder Travel Study

**If these options were the only options available for your trip, which would you choose?**

Note: information in **bold** may have changed.

	US 36 Managed Lane in a carpool	US 36 Managed Lane	US 36 Regular Lanes
 →	Travel time (door-to-door): <b>33 minutes</b>	Travel time (door-to-door): <b>33 minutes</b>	Travel time (door-to-door): <b>38 minutes</b>
 →	Managed Lane toll: <b>\$1.10</b>	Managed Lane toll: <b>\$1.50</b>	Toll free
 →	2 additional passenger(s)		
	<input type="radio"/> I prefer this option	<input type="radio"/> I prefer this option	<input type="radio"/> I prefer this option

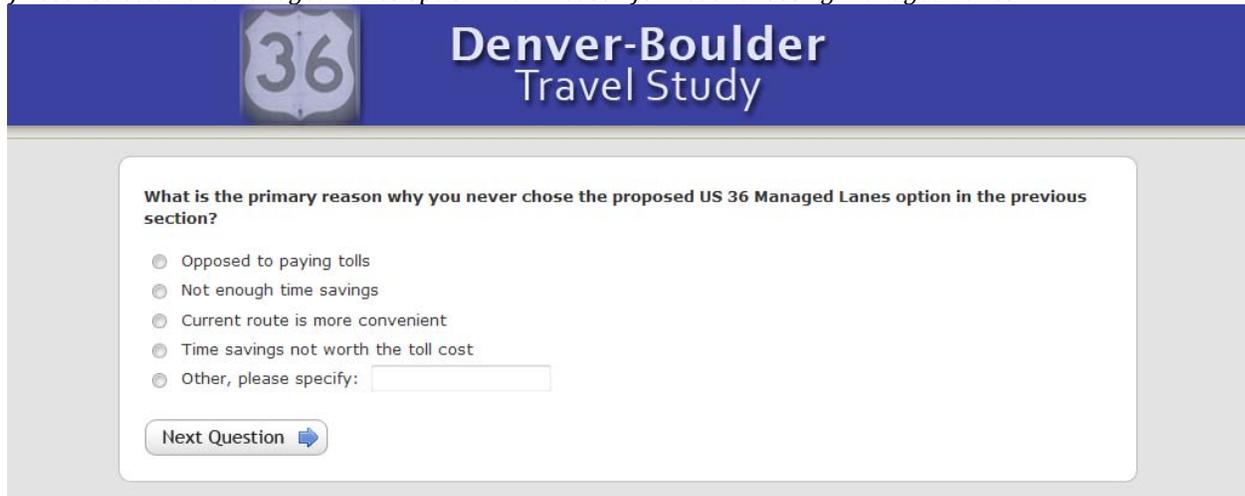
Question 2 of 8

Next Question →



## 1.4 Debrief Questions

*If never selected the Managed Lanes option: main reason for never choosing Managed Lanes*



**Denver-Boulder Travel Study**

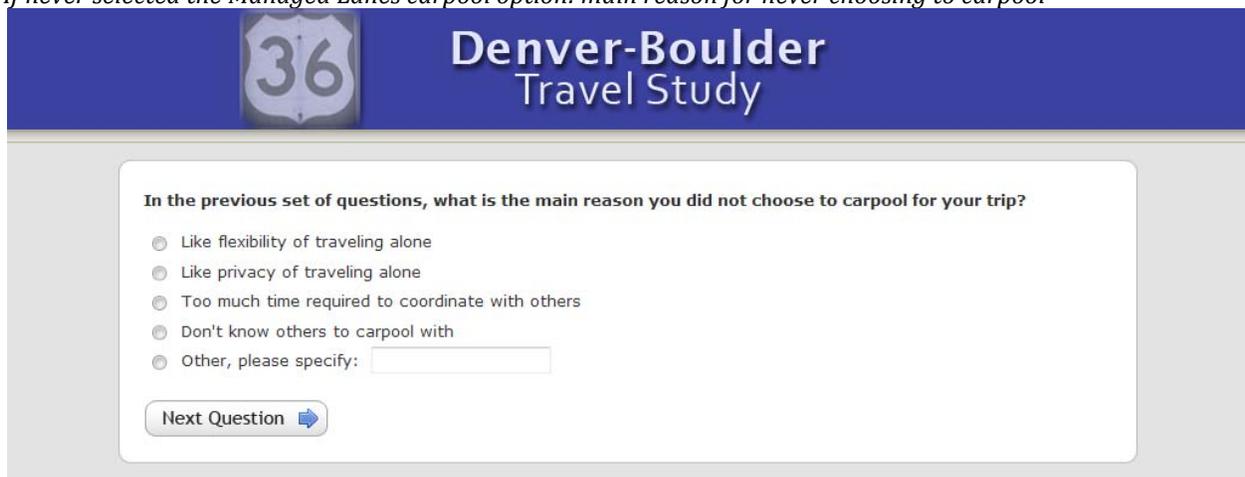
**36**

**What is the primary reason why you never chose the proposed US 36 Managed Lanes option in the previous section?**

- Opposed to paying tolls
- Not enough time savings
- Current route is more convenient
- Time savings not worth the toll cost
- Other, please specify:

Next Question →

*If never selected the Managed Lanes carpool option: main reason for never choosing to carpool*



**Denver-Boulder Travel Study**

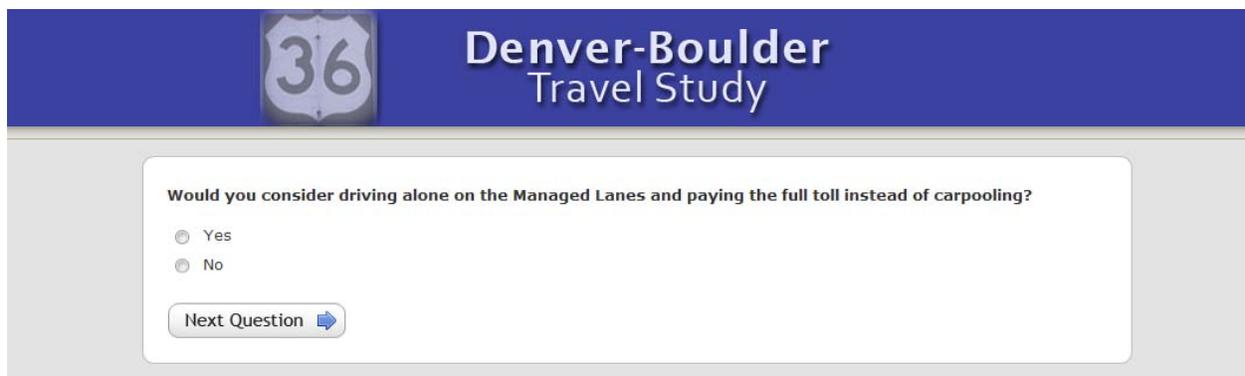
**36**

**In the previous set of questions, what is the main reason you did not choose to carpool for your trip?**

- Like flexibility of traveling alone
- Like privacy of traveling alone
- Too much time required to coordinate with others
- Don't know others to carpool with
- Other, please specify:

Next Question →

*If current HOV2+ single occupancy trip consideration*



**Denver-Boulder Travel Study**

**36**

**Would you consider driving alone on the Managed Lanes and paying the full toll instead of carpooling?**

- Yes
- No

Next Question →



Express bus likelihood



## Denver-Boulder Travel Study

Below are two alternatives: one is the option you selected in the previous set of questions and the other is the same trip using an express bus. In the future, you will be able to take a bus that travels in the Managed Lanes on US 36 that could be accessed at several park-and-rides in the US 36 corridor. These buses would run every 10 minutes during the morning and afternoon rush hours and every 20 minutes during the rest of the day.

	Current Route	Bus Option (Express Lane)
 →	Travel time (door-to-door): <b>52 minutes</b>	Travel time (door-to-door): <b>42 minutes</b>
 →	Toll free	Bus fare: <b>\$2.00</b>

If these options were available for you to make your work trip how likely would you be to use the bus option to make your trip?

- Very likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Very unlikely

[Next Question](#) →

If do not own transponder and selected a toll option in the SP section: likelihood of obtaining transponder



## Denver-Boulder Travel Study

In one of the previous scenarios, you said you would use the US 36 Managed Lanes if your trip took 33 minutes and cost \$1.50.

If the toll for that trip using a transponder was **\$1.35**, and without a transponder the license plate toll was **\$1.50**, how would you pay the toll? Would you be...

- Very likely to get a transponder for paying the toll
- Somewhat likely to get a transponder for paying the toll
- Not sure
- Somewhat likely to pay by license plate tolling (would not get a transponder)
- Very likely to pay by license plate tolling (would not get a transponder)

[Next Question](#) →



*If unlikely to pay the toll using transponder: reasons for not using transponder*



## Denver-Boulder Travel Study

**Which of the following best describes why you would be unlikely to pay the toll with a transponder?**

- Do not want to prepay tolls
- Do not like idea of electronic tolling
- Do not want to set up an account
- Too expensive
- Will not use the proposed Managed Lanes often enough
- Too difficult to maintain account
- Concerned about privacy
- Do not want a transponder in my car
- Do not know enough about electronic toll collection
- Other, please specify

Next Question 

*Opinion of US 36 Managed Lanes project*



## Denver-Boulder Travel Study

**Based on the information provided in this survey, which of the following best describes how you feel about the proposed Managed Lanes along US 36 between Denver and Boulder?**

- Strongly favor
- Somewhat favor
- Neutral
- Somewhat opposed
- Strongly opposed

Next Question 



*If in favor of the project, primary reason for favoring project*



## Denver-Boulder Travel Study

**Please indicate the main reason you are in favor of the proposed Managed Lanes along US 36 between Denver and Boulder.**

- More reliable travel times
- User fees are a fair way to pay for highway improvements
- Reduced emissions and improved air quality
- Less congestion
- Faster travel times
- Safe road conditions
- Other, please specify:

Next Question

*If opposed to the project, primary reason for opposing project*



## Denver-Boulder Travel Study

**Please indicate the main reason you are opposed to the proposed Managed Lanes along US 36 between Denver and Boulder.**

- Opposed to paying fee/toll
- The fee/toll is too high
- Do not want to pay tolls electronically
- Adverse environmental impact
- It will bring too much traffic/development
- Opposed to new roads/lanes in general
- Other, please specify:

Next Question



Toll attitude statements

## Denver-Boulder Travel Study

**How strongly do you agree or disagree with each of the following statements?**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I support using tolls or fees to pay for highway improvements that relieve congestion	<input type="radio"/>				
I am willing to carpool or take public transit more frequently in order to reduce air pollution and carbon emissions	<input type="radio"/>				
I will use a toll route if my trip travel time is reliable	<input type="radio"/>				
I will use a toll route if the tolls are reasonable and I will save time	<input type="radio"/>				
I am willing to pay tolls if they are used to reduce carbon emissions and therefore air pollution	<input type="radio"/>				
I would change the time at which I travel to pay a lower toll amount than I would otherwise	<input type="radio"/>				
Carbon emissions from my vehicle contribute to climate change	<input type="radio"/>				

➔

Sources of information used before trip

## Denver-Boulder Travel Study

**Which of the following resources do you typically consult for information about traffic conditions BEFORE your trip?**

Please select all that apply.

- TV
- Internet (Google Maps, Map Quest, news station website, etc.)
- Radio
- Cell phone (text message or other phone service)
- Word of mouth (friend, colleague, etc.)
- GPS unit
- Other, please specify
- None of the above

➔



Sources of information used during trip



## Denver-Boulder Travel Study

**Which of the following resources do you typically consult for information about traffic conditions DURING the course of your trip?**

Please select all that apply.

- Radio
- Cell phone (text message or other phone service)
- Word of mouth (talking to a friend, colleague, etc. on the phone)
- Electronic road/traffic signs
- GPS unit
- Other, please specify
- None of the above

Next Question 

## 1.5 Demographic Questions

Gender



## Denver-Boulder Travel Study

**What is your gender?**

- Male
- Female

Next Question 



Age



## Denver-Boulder Travel Study

**What is your age?**

- 16–24
- 25–34
- 35–44
- 45–54
- 55–64
- 65–74
- 75 or older

Next Question →

Employment status



## Denver-Boulder Travel Study

**What is your employment status?**

- Employed full-time
- Employed part-time
- Self-employed
- Student
- Student and employed
- Homemaker
- Retired
- Disabled
- Unemployed and looking for work
- Unemployed and not looking for work

Next Question →



*Household size*



## Denver-Boulder Travel Study

**How many people live in your household?**

- 1 (I live alone)
- 2 people
- 3 people
- 4 people
- 5 or more people

[Next Question](#)

*Number of household vehicles*



## Denver-Boulder Travel Study

**How many vehicles are there in your household?**

Please include all cars, pickup trucks, minivans, and motorcycles that you own or lease.

- 0 (no vehicles)
- 1 vehicle
- 2 vehicles
- 3 vehicles
- 4 vehicles
- 5 or more vehicles

[Next Question](#)



Income



## Denver-Boulder Travel Study

**What is your annual household income?**

**\*Note:** This information is only used to make sure we have received a representative sample of the Denver Metropolitan population.

- Less than \$15,000
- \$15,000—\$19,999
- \$20,000—\$29,999
- \$30,000—\$39,999
- \$40,000—\$49,999
- \$50,000—\$59,999
- \$60,000—\$74,999
- \$75,000—\$99,999
- \$100,000—\$134,999
- \$135,000—\$149,999
- \$150,000—\$199,999
- \$200,000 or more

[Next Question](#)

Comments



## Denver-Boulder Travel Study

Thank you again for participating.

**If you have additional comments or suggestions, please enter them in the box below and click the "End Survey" button.**

Otherwise, please click "End Survey" to complete the survey.

[End Survey](#)



End of survey



## Denver-Boulder Travel Study

Thank you for taking the time to complete this survey. All of your responses have been saved, so you may now exit your browser.

This survey is conducted by Resource Systems Group, Inc. (RSG)



For Wilbur Smith Associates



On behalf of the Colorado Department of Transportation High Performance Transportation Enterprise



## **Appendix 1C: Tabulations**

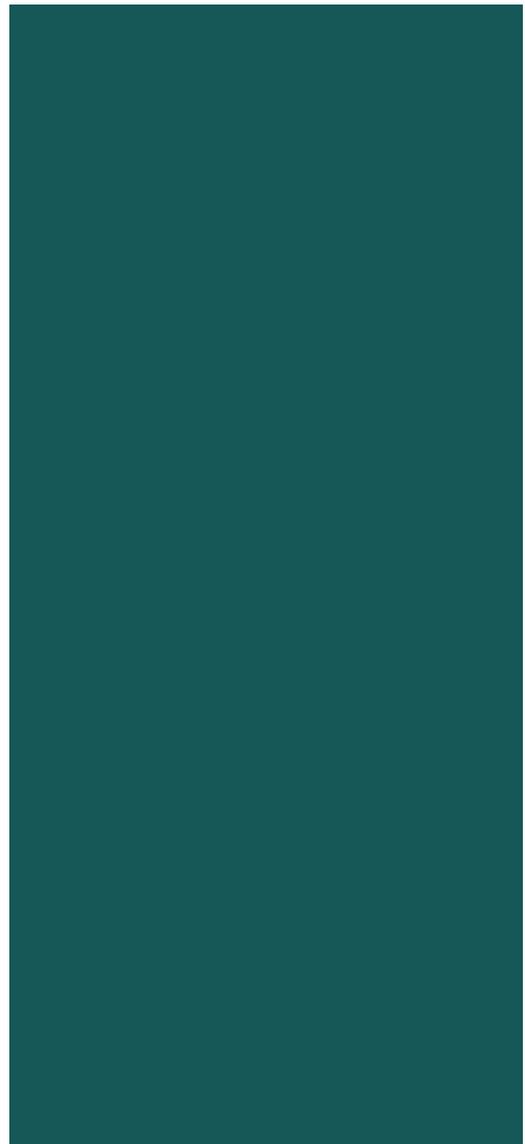


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# Denver-Boulder Stated Preference Survey Report

## Appendix C Tabulations

December 2010



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## 1.0 SURVEY TABULATIONS

### 1.1 Trip Detail Questions

#### Trip qualification

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes, I have made a recent trip that used US 36 and that meets all of these conditions	2267	96.8%	994	92.4%	812	96.8%	995	91.8%	5068	94.9%
Yes, I have made a recent trip that did not use, but reasonably could have used US 36 that meets all of these conditions	74	3.2%	82	7.6%	27	3.2%	89	8.2%	272	5.1%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

#### Day of week

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Monday	364	15.5%	168	15.6%	105	12.5%	137	12.6%	774	14.5%
Tuesday	546	23.3%	222	20.6%	224	26.7%	228	21.0%	1220	22.8%
Wednesday	705	30.1%	201	18.7%	191	22.8%	207	19.1%	1304	24.4%
Thursday	387	16.5%	197	18.3%	180	21.5%	214	19.7%	978	18.3%
Friday	339	14.5%	288	26.8%	139	16.6%	298	27.5%	1064	19.9%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**Primary trip purpose**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Go to/from work	1810	77.3%	0	.0%	315	37.5%	0	.0%	2125	39.8%
Business-related travel (such as going to a meeting, sales call, etc.)	531	22.7%	0	.0%	524	62.5%	0	.0%	1055	19.8%
Social or recreational (such as going to a restaurant, visiting a friend, or going to a sporting event)	0	.0%	522	48.5%	0	.0%	385	35.5%	907	17.0%
Other personal business (such as a medical appointment)	0	.0%	250	23.2%	0	.0%	291	26.8%	541	10.1%
Shopping	0	.0%	104	9.7%	0	.0%	245	22.6%	349	6.5%
Go to/from the airport	0	.0%	107	9.9%	0	.0%	113	10.4%	220	4.1%
Attend school/college/university or drop off/pick up a student	0	.0%	93	8.6%	0	.0%	50	4.6%	143	2.7%
<b>Total</b>	<b>2341</b>	<b>100.0%</b>	<b>1076</b>	<b>100.0%</b>	<b>839</b>	<b>100.0%</b>	<b>1084</b>	<b>100.0%</b>	<b>5340</b>	<b>100.0%</b>

**Trip beginning location**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
My home	1834	78.3%	762	70.8%	471	56.1%	806	74.4%	3873	72.5%
My workplace	422	18.0%	211	19.6%	282	33.6%	124	11.4%	1039	19.5%
Another place	85	3.6%	103	9.6%	86	10.3%	154	14.2%	428	8.0%
<b>Total</b>	<b>2341</b>	<b>100.0%</b>	<b>1076</b>	<b>100.0%</b>	<b>839</b>	<b>100.0%</b>	<b>1084</b>	<b>100.0%</b>	<b>5340</b>	<b>100.0%</b>



**Trip ending location**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
My home	264	11.3%	87	8.1%	50	6.0%	110	10.1%	511	9.6%
My workplace	1608	68.7%	13	1.2%	332	39.6%	11	1.0%	1964	36.8%
Another place	469	20.0%	976	90.7%	457	54.5%	963	88.8%	2865	53.7%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**US 36 entrance ramp used**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
East of I-25	181	7.7%	54	5.0%	70	8.3%	64	5.9%	369	6.9%
I-25	406	17.3%	188	17.5%	176	21.0%	198	18.3%	968	18.1%
Broadway St	12	.5%	7	.7%	12	1.4%	10	.9%	41	.8%
Pecos St	9	.4%	4	.4%	3	.4%	10	.9%	26	.5%
Federal Blvd / US 287	67	2.9%	20	1.9%	7	.8%	27	2.5%	121	2.3%
Sheridan Blvd (SH 95 / 92nd Ave)	155	6.6%	37	3.4%	38	4.5%	42	3.9%	272	5.1%
Church Ranch Blvd / 104th Ave	161	6.9%	51	4.7%	58	6.9%	50	4.6%	320	6.0%
SH 121 / US 287 (Broomfield / Lafayette / Arvada)	359	15.3%	147	13.7%	116	13.8%	141	13.0%	763	14.3%
East Flatiron Crossing Drive	60	2.6%	43	4.0%	20	2.4%	23	2.1%	146	2.7%
StorageTek Dr / Interlocken Loop (Broomfield / Louisville)	147	6.3%	85	7.9%	46	5.5%	61	5.6%	339	6.3%
West Flatiron Crossing Drive	61	2.6%	19	1.8%	13	1.5%	38	3.5%	131	2.5%
McCaslin Blvd / SH 170 (Superior / Louisville)	252	10.8%	114	10.6%	65	7.7%	130	12.0%	561	10.5%
Table Mesa Dr / Boulder Rd / Foothills Parkway / SH 157	227	9.7%	133	12.4%	91	10.8%	133	12.3%	584	10.9%
Baseline Rd	78	3.3%	57	5.3%	40	4.8%	72	6.6%	247	4.6%
North/West of Baseline Rd	166	7.1%	117	10.9%	84	10.0%	85	7.8%	452	8.5%
<b>Total</b>	<b>2341</b>	<b>100.0%</b>	<b>1076</b>	<b>100.0%</b>	<b>839</b>	<b>100.0%</b>	<b>1084</b>	<b>100.0%</b>	<b>5340</b>	<b>100.0%</b>



**US 36 exit ramp used**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
East of I-25	181	7.7%	78	7.2%	67	8.0%	71	6.5%	397	7.4%
I-25	638	27.3%	261	24.3%	240	28.6%	171	15.8%	1310	24.5%
Broadway St	28	1.2%	9	.8%	11	1.3%	16	1.5%	64	1.2%
Pecos St	12	.5%	2	.2%	8	1.0%	10	.9%	32	.6%
Federal Blvd / US 287	48	2.1%	27	2.5%	22	2.6%	24	2.2%	121	2.3%
Sheridan Blvd (SH 95 / 92nd Ave)	99	4.2%	66	6.1%	45	5.4%	58	5.4%	268	5.0%
Church Ranch Blvd / 104th Ave	85	3.6%	59	5.5%	40	4.8%	45	4.2%	229	4.3%
SH 121 / US 287 (Broomfield / Lafayette / Arvada)	259	11.1%	65	6.0%	85	10.1%	69	6.4%	478	9.0%
East Flatiron Crossing Drive	37	1.6%	30	2.8%	12	1.4%	37	3.4%	116	2.2%
StorageTek Dr / Interlocken Loop (Broomfield / Louisville)	108	4.6%	75	7.0%	38	4.5%	76	7.0%	297	5.6%
West Flatiron Crossing Drive	28	1.2%	39	3.6%	11	1.3%	50	4.6%	128	2.4%
McCaslin Blvd / SH 170 (Superior / Louisville)	114	4.9%	66	6.1%	34	4.1%	101	9.3%	315	5.9%
Table Mesa Dr / Boulder Rd / Foothills Parkway / SH 157	280	12.0%	92	8.6%	105	12.5%	115	10.6%	592	11.1%
Baseline Rd	182	7.8%	91	8.5%	48	5.7%	99	9.1%	420	7.9%
North/West of Baseline Rd	242	10.3%	116	10.8%	73	8.7%	142	13.1%	573	10.7%
<b>Total</b>	<b>2341</b>	<b>100.0%</b>	<b>1076</b>	<b>100.0%</b>	<b>839</b>	<b>100.0%</b>	<b>1084</b>	<b>100.0%</b>	<b>5340</b>	<b>100.0%</b>



**Total trip distance**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Less than 5 miles	11	.5%	8	.7%	5	.6%	17	1.6%	41	.8%
5-15 miles	474	20.2%	258	24.0%	148	17.6%	290	26.8%	1170	21.9%
15-30 miles	1255	53.6%	478	44.4%	427	50.9%	427	39.4%	2587	48.4%
30-45 miles	507	21.7%	222	20.6%	213	25.4%	236	21.8%	1178	22.1%
45-60 miles	71	3.0%	73	6.8%	30	3.6%	76	7.0%	250	4.7%
60 or more miles	23	1.0%	37	3.4%	16	1.9%	38	3.5%	114	2.1%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

**US 36 trip distance (between Table Mesa Dr and I-25)**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Less than 3 miles	78	3.3%	47	4.4%	24	2.9%	48	4.4%	197	3.7%
3-6 miles	344	14.7%	153	14.2%	88	10.5%	177	16.3%	762	14.3%
6-9 miles	581	24.8%	283	26.3%	198	23.6%	294	27.1%	1356	25.4%
9-12 miles	604	25.8%	225	20.9%	204	24.3%	196	18.1%	1229	23.0%
12-15 miles	221	9.4%	91	8.5%	69	8.2%	100	9.2%	481	9.0%
15 or more miles	513	21.9%	277	25.7%	256	30.5%	269	24.8%	1315	24.6%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**If used US 36: ever use alternative route to avoid traffic congestion on US 36**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes	1539	67.9%	647	65.1%	538	66.3%	626	62.9%	3350	66.1%
No	728	32.1%	347	34.9%	274	33.7%	369	37.1%	1718	33.9%
Total	2267	100.0%	994	100.0%	812	100.0%	995	100.0%	5068	100.0%



**If used US 36: alternate route(s) used to avoid traffic congestion on US 36 (select all that apply)**

	Peak Work	Peak Non-Work	Off-Peak Work	Off-Peak Non-Work	Total
	Count	Count	Count	Count	Count
Northwest Parkway	362	206	168	208	944
US 287/Federal Blvd	412	163	131	136	842
W Dillon Rd/W 144th Ave	341	186	126	165	818
US 121/Wadsworth Blvd	393	150	142	133	818
US 7/Arapahoe Rd	303	148	122	136	709
E-470	272	153	129	141	695
US 93	272	133	110	135	650
Baseline Rd	280	144	91	132	647
US 128/120th Ave	274	95	115	106	590
Other	281	102	77	101	561
US 95/Sheridan Blvd	264	95	81	66	506
I-25	206	79	82	71	438
W 104th Ave	176	71	75	74	396
I-70	91	32	26	15	164
I-270	46	21	24	17	108
I-76	44	13	18	18	93
US 34	11	2	5	6	24



If did not use US 36: route(s) used as alternative to US 36 (select all that apply)

	Peak Work	Peak Non-Work	Off-Peak Work	Off-Peak Non-Work	Total
	Count	Count	Count	Count	Count
I-25	27	22	8	23	80
Other	19	11	1	23	54
Northwest Parkway	7	20	3	15	45
US 287/Federal Blvd	12	15	3	11	41
US 7/Arapahoe Rd	13	12	3	12	40
US 121/Wadsworth Blvd	10	4	5	14	33
E-470	4	11	3	14	32
Baseline Rd	9	12	1	8	30
US 95/Sheridan Blvd	8	9	6	7	30
W Dillon Rd/W 144th Ave	7	9	1	11	28
US 128/120th Ave	8	10	1	6	25
US 93	6	6	3	9	24
I-70	2	7	4	7	20
W 104th Ave	4	6	3	6	19
I-270	2	9	3	4	18
I-76	0	6	3	4	13
US 34	2	2	1	1	6



**Trip begin time**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
AM Peak (6:00 AM - 8:59 AM)	1887	80.6%	268	24.9%	0	.0%	0	.0%	2155	40.4%
Midday (9:00 AM - 2:59 PM)	0	.0%	0	.0%	661	78.8%	975	89.9%	1636	30.6%
PM Peak (3:00 PM - 6:59 PM)	454	19.4%	808	75.1%	0	.0%	0	.0%	1262	23.6%
Nighttime (7:00 PM - 5:59 AM)	0	.0%	0	.0%	178	21.2%	109	10.1%	287	5.4%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

**If trip began in off-peak: began trip in off-peak to avoid traffic congestion**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes	0	.0%	0	.0%	366	43.6%	365	33.7%	731	38.0%
No	0	.0%	0	.0%	473	56.4%	719	66.3%	1192	62.0%
Total	0	.0%	0	.0%	839	100.0%	1084	100.0%	1923	100.0%

**If trip was made in off-peak to minimize traffic congestion, preferred trip begin time**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
AM Peak (6:00 AM - 8:59 AM)	0	.0%	0	.0%	250	68.3%	143	39.2%	393	53.8%
Midday (9:00 AM - 2:59 PM)	0	.0%	0	.0%	66	18.0%	127	34.8%	193	26.4%
PM Peak (3:00 PM - 6:59 PM)	0	.0%	0	.0%	40	10.9%	92	25.2%	132	18.1%
Nighttime (7:00 PM - 5:59 AM)	0	.0%	0	.0%	10	2.7%	3	.8%	13	1.8%
Total	0	.0%	0	.0%	366	100.0%	365	100.0%	731	100.0%



**Trip travel time**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
10-19 minutes	48	2.1%	33	3.1%	37	4.4%	67	6.2%	185	3.5%
20-29 minutes	318	13.6%	153	14.2%	139	16.6%	234	21.6%	844	15.8%
30-39 minutes	466	19.9%	209	19.4%	218	26.0%	215	19.8%	1108	20.7%
40-49 minutes	560	23.9%	229	21.3%	210	25.0%	239	22.0%	1238	23.2%
50-59 minutes	365	15.6%	158	14.7%	108	12.9%	136	12.5%	767	14.4%
60 minutes or more	584	24.9%	294	27.3%	127	15.1%	193	17.8%	1198	22.4%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

**Encountered delay due to traffic congestion on US 36**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes	1675	71.6%	631	58.6%	261	31.1%	243	22.4%	2810	52.6%
No	666	28.4%	445	41.4%	578	68.9%	841	77.6%	2530	47.4%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**If encountered delay due to traffic congestion on US 36: amount of time trip was delayed**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
5-9 minutes	231	9.9%	75	7.0%	56	6.7%	58	5.4%	420	7.9%
10-14 minutes	414	17.7%	165	15.4%	86	10.3%	66	6.1%	731	13.7%
15-19 minutes	387	16.6%	132	12.3%	43	5.1%	57	5.3%	619	11.6%
20-24 minutes	251	10.8%	106	9.9%	31	3.7%	27	2.5%	415	7.8%
25-29 minutes	158	6.8%	48	4.5%	15	1.8%	15	1.4%	236	4.4%
30 minutes or more	234	10.0%	105	9.8%	30	3.6%	20	1.8%	389	7.3%
I don't know	658	28.2%	443	41.2%	578	68.9%	839	77.5%	2518	47.3%
Total	2333	100.0%	1074	100.0%	839	100.0%	1082	100.0%	5328	100.0%

**Passengers in car for trip**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes, I had 1 or more passengers	235	10.0%	520	48.3%	111	13.2%	427	39.4%	1293	24.2%
No, I drove alone	2106	90.0%	556	51.7%	728	86.8%	657	60.6%	4047	75.8%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**Total number of vehicle occupants**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1 person	2106	90.0%	556	51.7%	728	86.8%	657	60.6%	4047	75.8%
2 people	200	8.5%	345	32.1%	89	10.6%	319	29.4%	953	17.8%
3 people	20	.9%	93	8.6%	14	1.7%	70	6.5%	197	3.7%
4 people	12	.5%	66	6.1%	4	.5%	31	2.9%	113	2.1%
5 or more people	3	.1%	16	1.5%	4	.5%	7	.6%	30	.6%
<b>Total</b>	<b>2341</b>	<b>100.0%</b>	<b>1076</b>	<b>100.0%</b>	<b>839</b>	<b>100.0%</b>	<b>1084</b>	<b>100.0%</b>	<b>5340</b>	<b>100.0%</b>

**If traveled with passengers: number of passengers who were members of my household**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1 passenger	96	93.2%	302	74.8%	33	97.1%	267	80.4%	698	80.0%
2 passengers	5	4.9%	62	15.3%	0	.0%	39	11.7%	106	12.1%
3 passengers	2	1.9%	31	7.7%	1	2.9%	24	7.2%	58	6.6%
4 passengers	0	.0%	8	2.0%	0	.0%	2	.6%	10	1.1%
5 passengers	0	.0%	1	.2%	0	.0%	0	.0%	1	.1%
<b>Total</b>	<b>103</b>	<b>100.0%</b>	<b>404</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>	<b>332</b>	<b>100.0%</b>	<b>873</b>	<b>100.0%</b>



**If traveled with passengers: number of passengers who were friends or relatives who do not live in my house**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1 passenger	18	90.0%	92	63.4%	7	87.5%	89	79.5%	206	72.3%
2 passengers	2	10.0%	37	25.5%	1	12.5%	18	16.1%	58	20.4%
3 passengers	0	.0%	13	9.0%	0	.0%	3	2.7%	16	5.6%
4 passengers	0	.0%	2	1.4%	0	.0%	2	1.8%	4	1.4%
5 passengers	0	.0%	1	.7%	0	.0%	0	.0%	1	.4%
Total	20	100.0%	145	100.0%	8	100.0%	112	100.0%	285	100.0%

**If traveled with passengers: number of passengers who were coworkers**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1 passenger	88	81.5%	5	71.4%	51	75.0%	8	88.9%	152	79.2%
2 passengers	10	9.3%	0	.0%	10	14.7%	1	11.1%	21	10.9%
3 passengers	7	6.5%	1	14.3%	3	4.4%	0	.0%	11	5.7%
4 passengers	2	1.9%	1	14.3%	4	5.9%	0	.0%	7	3.6%
6 passengers	1	.9%	0	.0%	0	.0%	0	.0%	1	.5%
Total	108	100.0%	7	100.0%	68	100.0%	9	100.0%	192	100.0%



**If traveled with passengers: number of passengers who were other pre-arranged carpoolers**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1 passenger	6	75.0%	3	50.0%	0	.0%	1	33.3%	10	52.6%
2 passengers	1	12.5%	2	33.3%	2	100.0%	2	66.7%	7	36.8%
3 passengers	1	12.5%	1	16.7%	0	.0%	0	.0%	2	10.5%
Total	8	100.0%	6	100.0%	2	100.0%	3	100.0%	19	100.0%

**Paid toll on trip**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes	394	16.8%	159	14.8%	69	8.2%	130	12.0%	752	14.1%
No	1947	83.2%	917	85.2%	770	91.8%	954	88.0%	4588	85.9%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

**Total amount paid in tolls**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Less than \$1.50	51	12.9%	17	10.7%	16	23.2%	28	21.5%	112	14.9%
\$1.50-\$2.99	127	32.2%	31	19.5%	23	33.3%	16	12.3%	197	26.2%
\$3.00-\$4.49	187	47.5%	42	26.4%	19	27.5%	22	16.9%	270	35.9%
\$4.50-\$5.99	9	2.3%	14	8.8%	4	5.8%	11	8.5%	38	5.1%
\$6.00 or more	20	5.1%	55	34.6%	7	10.1%	53	40.8%	135	18.0%
Total	394	100.0%	159	100.0%	69	100.0%	130	100.0%	752	100.0%



### Transponder ownership

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes, I have an EXpress Toll transponder	1720	73.5%	798	74.2%	644	76.8%	752	69.4%	3914	73.3%
No, I don't have an EXpress Toll or other electronic toll transponder	612	26.1%	269	25.0%	190	22.6%	323	29.8%	1394	26.1%
No, but I have another type of electronic toll transponder	9	.4%	9	.8%	5	.6%	9	.8%	32	.6%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

### Trip frequency

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
6 or more times per week	169	7.2%	13	1.2%	28	3.3%	6	.6%	216	4.0%
4-5 times per week	1277	54.5%	46	4.3%	213	25.4%	27	2.5%	1563	29.3%
2-3 times per week	351	15.0%	137	12.7%	154	18.4%	110	10.1%	752	14.1%
1 time per week	143	6.1%	145	13.5%	72	8.6%	127	11.7%	487	9.1%
2-3 times per month	208	8.9%	309	28.7%	173	20.6%	277	25.6%	967	18.1%
1 time per month	62	2.6%	156	14.5%	78	9.3%	195	18.0%	491	9.2%
Less than 1 time per month	131	5.6%	270	25.1%	121	14.4%	342	31.5%	864	16.2%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**Ever used I-25 Express Lanes**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes	1569	67.0%	770	71.6%	573	68.3%	747	68.9%	3659	68.5%
No	772	33.0%	306	28.4%	266	31.7%	337	31.1%	1681	31.5%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

**If have used I-25 Express Lanes: frequency of use**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
6 or more times per week	36	2.3%	11	1.4%	4	.7%	6	.8%	57	1.6%
4-5 times per week	160	10.2%	15	1.9%	20	3.5%	7	.9%	202	5.5%
2-3 times per week	154	9.8%	41	5.3%	45	7.9%	23	3.1%	263	7.2%
1 time per week	115	7.3%	50	6.5%	38	6.6%	40	5.4%	243	6.6%
2-3 times per month	355	22.6%	160	20.8%	135	23.6%	161	21.6%	811	22.2%
1 time per month	224	14.3%	176	22.9%	122	21.3%	154	20.6%	676	18.5%
Less than 1 time per month	525	33.5%	317	41.2%	209	36.5%	356	47.7%	1407	38.5%
Total	1569	100.0%	770	100.0%	573	100.0%	747	100.0%	3659	100.0%



**If have used I-25 Express Lanes: usually drive alone or carpool**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Usually carpool	513	32.7%	369	47.9%	171	29.8%	379	50.7%	1432	39.1%
Usually drive alone	767	48.9%	217	28.2%	270	47.1%	195	26.1%	1449	39.6%
Both carpool and drive alone	289	18.4%	184	23.9%	132	23.0%	173	23.2%	778	21.3%
Total	1569	100.0%	770	100.0%	573	100.0%	747	100.0%	3659	100.0%

**Frequency of transit use in Denver-Boulder Metropolitan area**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
6 or more times per week	25	1.1%	21	2.0%	9	1.1%	7	.6%	62	1.2%
4-5 times per week	94	4.0%	27	2.5%	20	2.4%	25	2.3%	166	3.1%
2-3 times per week	75	3.2%	26	2.4%	21	2.5%	19	1.8%	141	2.6%
1 time per week	50	2.1%	30	2.8%	16	1.9%	20	1.8%	116	2.2%
1-3 times per month	168	7.2%	74	6.9%	44	5.2%	80	7.4%	366	6.9%
Less than 1 time per month	686	29.3%	375	34.9%	251	29.9%	339	31.3%	1651	30.9%
Never	1243	53.1%	523	48.6%	478	57.0%	594	54.8%	2838	53.1%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



## 1.2 Debrief Questions

### If never selected Managed Lanes option in SP section: main reason why

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Time savings not worth the toll cost	176	47.3%	89	44.3%	95	46.6%	131	43.4%	491	45.5%
Opposed to paying tolls	115	30.9%	62	30.8%	67	32.8%	98	32.5%	342	31.7%
Not enough time savings	38	10.2%	22	10.9%	24	11.8%	47	15.6%	131	12.1%
Other	37	9.9%	22	10.9%	15	7.4%	21	7.0%	95	8.8%
Do not want to pay tolls electronically	5	1.3%	3	1.5%	1	.5%	1	.3%	10	.9%
Current route is more convenient	1	.3%	3	1.5%	2	1.0%	4	1.3%	10	.9%
Total	372	100.0%	201	100.0%	204	100.0%	302	100.0%	1079	100.0%

### If never selected carpool option in SP section: main reason why

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Like flexibility of traveling alone	694	43.0%	159	32.9%	217	35.8%	260	40.9%	1330	39.8%
Other	388	24.0%	123	25.5%	209	34.5%	184	29.0%	904	27.1%
Don't know others to carpool with	314	19.5%	121	25.1%	105	17.3%	108	17.0%	648	19.4%
Too much time required to coordinate with others	160	9.9%	46	9.5%	57	9.4%	53	8.3%	316	9.5%
Like privacy of traveling alone	58	3.6%	34	7.0%	18	3.0%	30	4.7%	140	4.2%
Total	1614	100.0%	483	100.0%	606	100.0%	635	100.0%	3338	100.0%



**If current HOV with coworkers or prearranged carpoolers and chose Managed Lanes option at least once in SP section: consider driving alone in Managed Lanes**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes	83	41.5%	188	54.5%	49	55.1%	157	49.2%	477	50.1%
No	117	58.5%	157	45.5%	40	44.9%	162	50.8%	476	49.9%
Total	200	100.0%	345	100.0%	89	100.0%	319	100.0%	953	100.0%

**Likelihood of choosing bus alternative under given conditions**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Very likely	301	12.9%	93	8.6%	73	8.7%	78	7.2%	545	10.2%
Likely	321	13.7%	129	12.0%	86	10.3%	119	11.0%	655	12.3%
Neither likely nor unlikely	219	9.4%	105	9.8%	71	8.5%	113	10.4%	508	9.5%
Unlikely	471	20.1%	262	24.3%	156	18.6%	240	22.1%	1129	21.1%
Very unlikely	1029	44.0%	487	45.3%	453	54.0%	534	49.3%	2503	46.9%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**If does not own transponder and chose Managed Lanes option at least once in SP section: likelihood of purchasing Express Toll transponder**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Very likely to pay the toll with a transponder	210	53.0%	32	21.8%	28	34.1%	29	20.0%	299	38.8%
Somewhat likely to pay the toll with a transponder	94	23.7%	33	22.4%	22	26.8%	35	24.1%	184	23.9%
Not sure	45	11.4%	19	12.9%	13	15.9%	25	17.2%	102	13.2%
Somewhat likely to pay by video tolling (would not get a transponder)	15	3.8%	29	19.7%	10	12.2%	22	15.2%	76	9.9%
Very likely to pay by video tolling (would not get a transponder)	32	8.1%	34	23.1%	9	11.0%	34	23.4%	109	14.2%
Total	396	100.0%	147	100.0%	82	100.0%	145	100.0%	770	100.0%



**If somewhat or very unlikely to purchase transponder: reason(s) why (select all that apply)**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Will not use the proposed Managed Lanes often enough	12	25.5%	33	52.4%	6	31.6%	29	51.8%	80	43.2%
Do not want to set up an account	4	8.5%	7	11.1%	3	15.8%	9	16.1%	23	12.4%
Do not want to prepay tolls	9	19.1%	7	11.1%	1	5.3%	4	7.1%	21	11.4%
Do not want a transponder in my car	8	17.0%	4	6.3%	3	15.8%	2	3.6%	17	9.2%
Do not know enough about electronic toll collection	2	4.3%	6	9.5%	2	10.5%	3	5.4%	13	7.0%
10	2	4.3%	4	6.3%	1	5.3%	4	7.1%	11	5.9%
Do not like idea of electronic tolling	3	6.4%	0	.0%	1	5.3%	3	5.4%	7	3.8%
Too expensive	3	6.4%	1	1.6%	0	.0%	1	1.8%	5	2.7%
Too difficult to maintain account	2	4.3%	0	.0%	2	10.5%	0	.0%	4	2.2%
Concerned about privacy	2	4.3%	1	1.6%	0	.0%	1	1.8%	4	2.2%

**Opinion of proposed US 36 Managed Lanes**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Strongly favor	755	32.3%	258	24.0%	218	26.0%	223	20.6%	1454	27.2%
Somewhat favor	803	34.3%	383	35.6%	288	34.3%	379	35.0%	1853	34.7%
Neutral	393	16.8%	239	22.2%	163	19.4%	284	26.2%	1079	20.2%
Somewhat opposed	213	9.1%	109	10.1%	88	10.5%	119	11.0%	529	9.9%
Strongly opposed	177	7.6%	87	8.1%	82	9.8%	79	7.3%	425	8.0%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**If in favor of proposed US 36 Managed Lanes Project: main reason why**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Less congestion	486	31.2%	233	36.3%	180	35.6%	232	38.5%	1131	34.2%
Faster travel times	578	37.1%	190	29.6%	160	31.6%	144	23.9%	1072	32.4%
More reliable travel times	265	17.0%	106	16.5%	82	16.2%	89	14.8%	542	16.4%
User fees are a fair way to pay for highway improvements	101	6.5%	63	9.8%	44	8.7%	71	11.8%	279	8.4%
Reduced emissions and improved air quality	58	3.7%	23	3.6%	13	2.6%	22	3.7%	116	3.5%
Other	41	2.6%	11	1.7%	14	2.8%	23	3.8%	89	2.7%
Safe road conditions	29	1.9%	15	2.3%	13	2.6%	21	3.5%	78	2.4%
<b>Total</b>	<b>1558</b>	<b>100.0%</b>	<b>641</b>	<b>100.0%</b>	<b>506</b>	<b>100.0%</b>	<b>602</b>	<b>100.0%</b>	<b>3307</b>	<b>100.0%</b>

**If opposed to proposed US 36 Managed Lanes Project: main reason why**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Opposed to paying fee/toll	168	43.1%	92	46.9%	84	49.4%	101	51.0%	445	46.6%
Other	107	27.4%	45	23.0%	40	23.5%	38	19.2%	230	24.1%
The fee/toll is too high	85	21.8%	39	19.9%	33	19.4%	38	19.2%	195	20.4%
It will bring too much traffic/development	12	3.1%	7	3.6%	8	4.7%	5	2.5%	32	3.4%
Opposed to new roads/lanes in general	11	2.8%	8	4.1%	3	1.8%	9	4.5%	31	3.2%
Adverse environmental impact	7	1.8%	3	1.5%	2	1.2%	4	2.0%	16	1.7%
Do not want to pay tolls electronically	0	.0%	2	1.0%	0	.0%	3	1.5%	5	.5%
<b>Total</b>	<b>390</b>	<b>100.0%</b>	<b>196</b>	<b>100.0%</b>	<b>170</b>	<b>100.0%</b>	<b>198</b>	<b>100.0%</b>	<b>954</b>	<b>100.0%</b>



**I will use a toll route if the tolls are reasonable and I will save time**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Strongly Agree	931	39.8%	414	38.5%	315	37.5%	351	32.4%	2011	37.7%
Agree	981	41.9%	473	44.0%	346	41.2%	483	44.6%	2283	42.8%
Neutral	195	8.3%	92	8.6%	87	10.4%	130	12.0%	504	9.4%
Disagree	129	5.5%	52	4.8%	41	4.9%	79	7.3%	301	5.6%
Strongly Disagree	105	4.5%	45	4.2%	50	6.0%	41	3.8%	241	4.5%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

**I will use a toll route if my trip travel time is reliable**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Strongly Agree	477	20.4%	200	18.6%	167	19.9%	198	18.3%	1042	19.5%
Agree	958	40.9%	469	43.6%	340	40.5%	467	43.1%	2234	41.8%
Neutral	511	21.8%	257	23.9%	194	23.1%	245	22.6%	1207	22.6%
Disagree	259	11.1%	96	8.9%	77	9.2%	126	11.6%	558	10.4%
Strongly Disagree	136	5.8%	54	5.0%	61	7.3%	48	4.4%	299	5.6%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**I support using tolls or fees to pay for highway improvements that relieve congestion**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Strongly Agree	468	20.0%	232	21.6%	160	19.1%	205	18.9%	1065	19.9%
Agree	976	41.7%	450	41.8%	325	38.7%	462	42.6%	2213	41.4%
Neutral	449	19.2%	202	18.8%	160	19.1%	214	19.7%	1025	19.2%
Disagree	240	10.3%	105	9.8%	91	10.8%	116	10.7%	552	10.3%
Strongly Disagree	208	8.9%	87	8.1%	103	12.3%	87	8.0%	485	9.1%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

**I would change the time at which I travel to pay a lower toll amount than I would otherwise**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Strongly Agree	204	8.7%	70	6.5%	82	9.8%	102	9.4%	458	8.6%
Agree	628	26.8%	255	23.7%	246	29.3%	349	32.2%	1478	27.7%
Neutral	450	19.2%	262	24.3%	193	23.0%	255	23.5%	1160	21.7%
Disagree	644	27.5%	330	30.7%	186	22.2%	280	25.8%	1440	27.0%
Strongly Disagree	415	17.7%	159	14.8%	132	15.7%	98	9.0%	804	15.1%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**Carbon emissions from my vehicle contribute to climate change**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Strongly Agree	625	26.7%	306	28.4%	207	24.7%	294	27.1%	1432	26.8%
Agree	801	34.2%	379	35.2%	252	30.0%	356	32.8%	1788	33.5%
Neutral	507	21.7%	200	18.6%	175	20.9%	237	21.9%	1119	21.0%
Disagree	190	8.1%	83	7.7%	87	10.4%	108	10.0%	468	8.8%
Strongly Disagree	218	9.3%	108	10.0%	118	14.1%	89	8.2%	533	10.0%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

**I am willing to carpool or take public transit more frequently in order to reduce air pollution and carbon emissions**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Strongly Agree	224	9.6%	122	11.3%	61	7.3%	112	10.3%	519	9.7%
Agree	501	21.4%	293	27.2%	170	20.3%	284	26.2%	1248	23.4%
Neutral	595	25.4%	279	25.9%	207	24.7%	299	27.6%	1380	25.8%
Disagree	537	22.9%	219	20.4%	198	23.6%	237	21.9%	1191	22.3%
Strongly Disagree	484	20.7%	163	15.1%	203	24.2%	152	14.0%	1002	18.8%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**I am willing to pay tolls if they are used to reduce carbon emissions and therefore air pollution**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Strongly Agree	233	10.0%	121	11.2%	73	8.7%	132	12.2%	559	10.5%
Agree	620	26.5%	308	28.6%	198	23.6%	303	28.0%	1429	26.8%
Neutral	724	30.9%	328	30.5%	268	31.9%	337	31.1%	1657	31.0%
Disagree	414	17.7%	155	14.4%	126	15.0%	187	17.3%	882	16.5%
Strongly Disagree	350	15.0%	164	15.2%	174	20.7%	125	11.5%	813	15.2%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

**Resource(s) consulted before trip begins (select all that apply)**

	Peak Work	Peak Non-Work	Off-Peak Work	Off-Peak Non-Work	Total
	Count	Count	Count	Count	Count
Radio	1126	424	374	410	2334
Internet (Google Maps, Map Quest, news station website, etc.)	754	434	291	424	1903
TV	746	280	244	358	1628
None of the above	434	240	170	243	1087
GPS unit	235	136	113	119	603
Cell phone (text message or other phone service)	270	122	87	99	578
Word of mouth (friend, colleague, etc.)	215	111	64	125	515
Other	41	19	21	20	101



**Resource(s) consulted during trip (select all that apply)**

	Peak Work	Peak Non-Work	Off-Peak Work	Off-Peak Non-Work	Total
	Count	Count	Count	Count	Count
Radio	1665	650	566	678	3559
None of the above	338	218	125	223	904
Electronic road/traffic signs	320	220	137	210	887
Cell phone (text message or other phone service)	369	183	120	143	815
GPS unit	310	155	145	145	755
Word of mouth (talking to a friend, colleague, etc. on the phone)	155	70	61	78	364
Other	28	20	18	20	86

### 1.3 Demographic Questions

**Gender**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Male	1268	54.2%	541	50.3%	550	65.6%	508	46.9%	2867	53.7%
Female	1073	45.8%	535	49.7%	289	34.4%	576	53.1%	2473	46.3%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**Age**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
16-24	48	2.1%	32	3.0%	7	.8%	23	2.1%	110	2.1%
25-34	484	20.7%	189	17.6%	110	13.1%	148	13.7%	931	17.4%
35-44	628	26.8%	279	25.9%	223	26.6%	208	19.2%	1338	25.1%
45-54	715	30.5%	286	26.6%	255	30.4%	281	25.9%	1537	28.8%
55-64	408	17.4%	222	20.6%	209	24.9%	303	28.0%	1142	21.4%
65-74	54	2.3%	63	5.9%	32	3.8%	106	9.8%	255	4.8%
75 or older	4	.2%	5	.5%	3	.4%	15	1.4%	27	.5%
<b>Total</b>	<b>2341</b>	<b>100.0%</b>	<b>1076</b>	<b>100.0%</b>	<b>839</b>	<b>100.0%</b>	<b>1084</b>	<b>100.0%</b>	<b>5340</b>	<b>100.0%</b>

**Employment status**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Employed full-time	1997	85.3%	724	67.3%	600	71.5%	543	50.1%	3864	72.4%
Employed part-time	118	5.0%	42	3.9%	48	5.7%	83	7.7%	291	5.4%
Self-employed	166	7.1%	93	8.6%	160	19.1%	133	12.3%	552	10.3%
Student	1	.0%	23	2.1%	0	.0%	24	2.2%	48	.9%
Student and employed	24	1.0%	29	2.7%	6	.7%	27	2.5%	86	1.6%
Homemaker	1	.0%	38	3.5%	0	.0%	61	5.6%	100	1.9%
Retired	15	.6%	101	9.4%	11	1.3%	171	15.8%	298	5.6%
Disabled	1	.0%	6	.6%	1	.1%	8	.7%	16	.3%
Unemployed and looking for work	17	.7%	17	1.6%	13	1.5%	29	2.7%	76	1.4%
Unemployed and not looking for work	1	.0%	3	.3%	0	.0%	5	.5%	9	.2%
<b>Total</b>	<b>2341</b>	<b>100.0%</b>	<b>1076</b>	<b>100.0%</b>	<b>839</b>	<b>100.0%</b>	<b>1084</b>	<b>100.0%</b>	<b>5340</b>	<b>100.0%</b>



### Household size

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
1 (I live alone)	338	14.4%	173	16.1%	96	11.4%	181	16.7%	788	14.8%
2 people	937	40.0%	462	42.9%	335	39.9%	484	44.6%	2218	41.5%
3 people	461	19.7%	174	16.2%	158	18.8%	186	17.2%	979	18.3%
4 people	424	18.1%	190	17.7%	187	22.3%	168	15.5%	969	18.1%
5 or more people	181	7.7%	77	7.2%	63	7.5%	65	6.0%	386	7.2%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%

### Number of household vehicles

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
0 (no vehicles)	1	.0%	2	.2%	0	.0%	2	.2%	5	.1%
1 vehicle	391	16.7%	214	19.9%	108	12.9%	234	21.6%	947	17.7%
2 vehicles	1169	49.9%	492	45.7%	374	44.6%	499	46.0%	2534	47.5%
3 vehicles	503	21.5%	249	23.1%	239	28.5%	233	21.5%	1224	22.9%
4 vehicles	178	7.6%	77	7.2%	86	10.3%	75	6.9%	416	7.8%
5 or more vehicles	99	4.2%	42	3.9%	32	3.8%	41	3.8%	214	4.0%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



**Annual household income**

	Peak Work		Peak Non-Work		Off-Peak Work		Off-Peak Non-Work		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Less than \$15,000	20	.9%	32	3.0%	13	1.5%	26	2.4%	91	1.7%
\$15,000-\$19,999	6	.3%	11	1.0%	1	.1%	15	1.4%	33	.6%
\$20,000-\$29,999	29	1.2%	21	2.0%	12	1.4%	30	2.8%	92	1.7%
\$30,000-\$39,999	58	2.5%	38	3.5%	23	2.7%	46	4.2%	165	3.1%
\$40,000-\$49,999	105	4.5%	59	5.5%	46	5.5%	61	5.6%	271	5.1%
\$50,000-\$59,999	141	6.0%	65	6.0%	46	5.5%	62	5.7%	314	5.9%
\$60,000-\$74,999	217	9.3%	104	9.7%	99	11.8%	130	12.0%	550	10.3%
\$75,000-\$99,999	396	16.9%	201	18.7%	155	18.5%	197	18.2%	949	17.8%
\$100,000-\$134,999	563	24.0%	234	21.7%	175	20.9%	218	20.1%	1190	22.3%
\$135,000-\$149,999	201	8.6%	73	6.8%	51	6.1%	67	6.2%	392	7.3%
\$150,000-\$199,999	320	13.7%	132	12.3%	116	13.8%	117	10.8%	685	12.8%
\$200,000 or more	285	12.2%	106	9.9%	102	12.2%	115	10.6%	608	11.4%
Total	2341	100.0%	1076	100.0%	839	100.0%	1084	100.0%	5340	100.0%



## **Appendix 1D: Survey Comments**

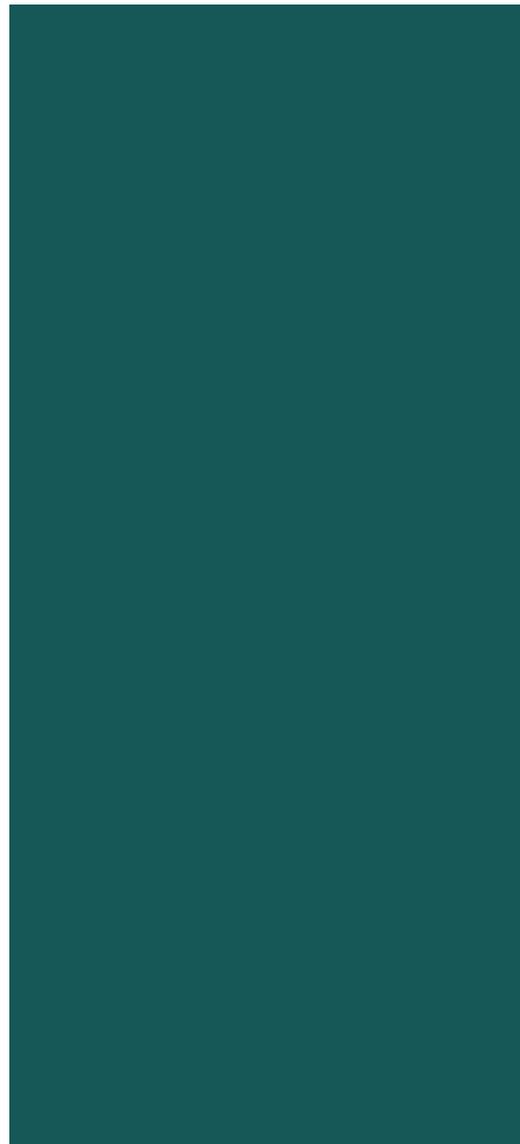


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# Denver-Boulder Stated Preference Survey

## Appendix D Survey Comments

December 2010



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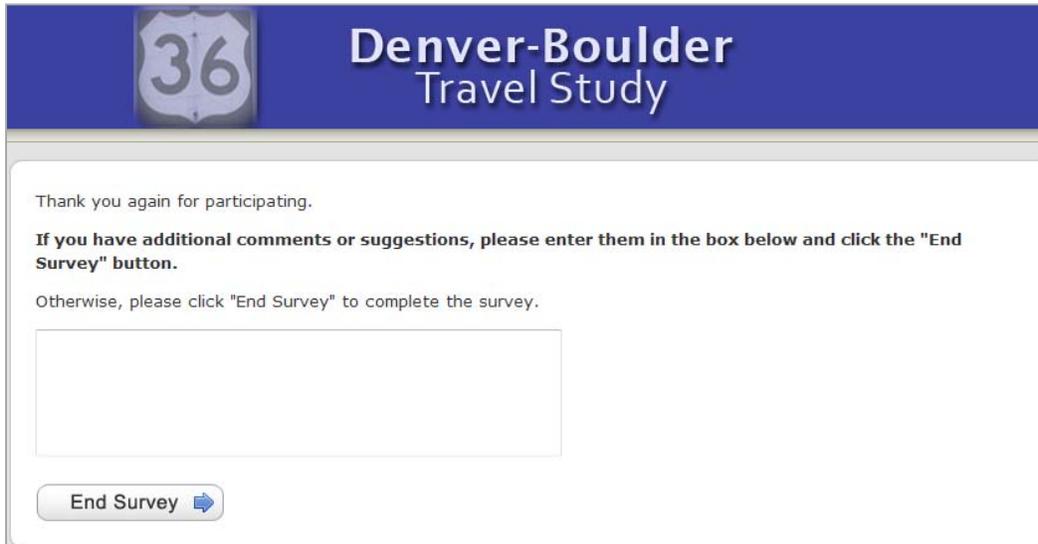
<b>1.0</b>	<b>SURVEY COMMENTS .....</b>	<b>1</b>
1.1	Survey Comments .....	1



## 1.0 SURVEY COMMENTS

Before clicking the “End Survey” button on the last page of the survey, respondents had the opportunity to leave open-ended comments (Figure 1.1). These unfiltered comments about the project and the survey itself are included in this Appendix.

**Figure 1.1: Screenshot of Comment Page**



Thank you again for participating.

**If you have additional comments or suggestions, please enter them in the box below and click the "End Survey" button.**

Otherwise, please click "End Survey" to complete the survey.

End Survey →

In general, there was a mix of positive and negative comments regarding the project. Many respondents favored the project by indicating their wish for construction to begin soon. However, many other respondents expressed concern about the extent of tolling on other roadways in the Denver area and stated that they did not want to see another tolled roadway. Another large group of respondents expressed their desire for this funding to be used for public transit in the area. All of the unfiltered comments are below.

### 1.1 Survey Comments

- I believe a lot of the congestion around Boulder could be greatly improved by simply adding a third lane on the uphill side of the hill in and out of Boulder. Slow-moving vehicles climbing the hill are a big contributor to slowing.
- My work schedule is flexible, at the client's home, by appointment. I always schedule travel to appointments at non-rush hour times when possible.
- currently my schedule isn't set enough to warrant taking the bus - but when i start working again, i would use the bus at least 3 times a week.
- The toll road option is a great idea-I am a Denver native and remember my parents paying a toll at Broomfield for the then Denver-Boulder turnpike. Thank You
- I don't travel to Boulder very often - so the Tolls probably would not affect my decision on the route I take. I know that a lot of people commute & if they could get to Downtown Denver quicker then an Express Toll lane may be helpful.
- Sorry, but this survey was a real hassle to negotiate! Colorado toll charges are usurious!
- I came to Colorado from the state of New jersey. Toll roads in NJ began as "temporary" fees to pay off the cost of construction. They never went away and exist to this day. Bureaucrats will always find justification to impose fees to fix short term problems. Eventually the fees rise and funds become just another financial burden to the people without any measurable benefit. The condition of the toll roads in NJ is just as bad today as it was in the mid-70's despite 35 continuous years of revenue collection.



- Just improve the highways with the taxes I already pay for roads.
- I would favor a combination of bus-rapid-transit and dedicated toll-lanes, and encourage use of public-private partnerships for both construction and operation.
- I don't use the transponder as much as I'd like to because tolls have increased so much on E470
- I don't commute everyday to Denver from Boulder, but if I did, any more than \$1.00 a day would be more than I am willing to pay to use the managed lanes. most people would not be able to afford to pay. If I could save 20 minutes on my trip and I knew with a lot of certainty how long it would take each day, then I would consider public transport. Bus travel seems much less predictable than rail/train travel, and I would be less likely to use bus than rail. Having less traffic congestion benefits the entire community, and so the burden of paying for such improvements should not necessarily be placed only on those that use those roads.
- Too long... you better appreciate that I took the time... ridiculous as I know it costs money to develop surveys. The bottom line people will on a daily basis decide if the money is worth it to save time, depending on whats going on in traffic at the moment.
- LIGHT RAIL!!
- I'm not your typical commuter.
- I feel most strongly that there should be a Urban Rail system in place along this route.
- Would like to see a light rail system instead of more highway lanes.
- The only reason I wouldn't use public transportation or carpooling is because when I go to Denver, I usually go for a couple of work related reasons that are likely to not be close to each other or convenient to access by public transportation. I travel to Denver about once or twice a month and try to pack it all in when I go. I stated that we have 4 vehicles: We have two cars and two motorcycles- the motorcycles are specifically to cut down on our fuel costs and emissions. But we only use the motorcycles in Boulder.
- I'm coming from Colorado Springs, so I wouldn't want to deal with switching to a bus. I would definitely take a bus that left from Colorado Springs and went to Boulder.
- I need to travel to babysit my grandson once a week so can't really carpool.
- I enjoy the time in my car listening to audio books. I am not looking to reduce it. I would take the bus, since my work will pay for a yearly pass, but I have to take 4 different buses and walk over two miles make the trip to work.
- The extra lane should be for everyone - not tolled. Spend the money on light rail from Denver-Boulder.
- I'm simply excited that there are plans to improve the commute on highway 36 :-). I would be less likely to use the tolls, but I do enjoy taking the bus. If the bus can go into the new lane, that's good enough for me.
- My experience is that additional lanes are not currently needed in both directions. Traffic is heaviest westbound in the a.m. an eastbound at night. The trouble spots that would be exceptions to that seem to be eastbound 36 between Church Ranch and 88th in he a.m. (largely because traffic entering u.s. 36 has to merge with two lanes instead of having a third continuous lane) and westbound between Pecos and Sheridan p.m. I would suggest directional lanes similar to those on I-25 as a starting point up until traffic merits additional lanes in both directions. You should explore the gas and carbon emissions and traffic delays/wintertime accidents re Davidson Mesa. Would a tunnel have any sort of long term environmental and cost benefits? It's nice that the tax-averse politicians served their constituents in the south suburbs with light rail and TREX first and Boulder County gets screwed on Fastracks. Now we're going to be the pilot for tolling existing capacity? Screwed again. I drive a hybrid and would expect that it would be allowed in any managed lane for free.
- I would use light-rail or bus service if it ran often enough to make it convenient.
- Need an option for rail to Denver. I would rather take a trip to denver using Rail, even if it took 45 - 55 minutes, and could read a book or work, instead of driving a car. Please consider this an option, as well.
- I would love to see light rail expansion to Denver/Boulder route.
- I recommend just adding a free third lane from McCaslin to Table Mesa. When you enter on 36 at McCaslin you can just stay in that lane until table Mesa. It would be the same traveling east. This is where all the traffic is and it is mostly caused by the slow moving vehicles up the hill between the two exits. I really don't see the need to add toll lanes the whole length of 36. The toll I have to pay on E-470 is already ludicrous. It has gone from \$2 to \$3.10 in a very short amount of time. I desperately do NOT want another toll added onto that. Please NO TOLLS!!!!
- Need more lanes on I-25 from U.S. 36 to 120th Ave.



- I drive to and from Boulder on the off hours...I work nights as a waitress. I see cars backed up heading east out of Boulder every time I drive in. I am always glad that I am not headed east with all the other shmucks. A carpool/hov lane sounds good, but it needs alot of police attention, US36 is so much safer and more enjoyable to drive on vs. I25. I25 just plain sucks and is more prone to accidents. Thanks for doing a survey!
- You should have a way to go back and review and change responses. One of the questions said "Faster travel times," but time doesn't go faster. I think you meant "Less travel time." There needs to be a minimum speed limit in the toll lanes to keep the pokey Joes moving along.
- I love the safety and uncluttered driving on the toll ways, esp when I'm trying to get to the airport and back. And I really enjoy using the single toll heading north out of Denver after sporting events. Very convenient. Great service, thank you!
- Strongly in favor of light rail/train along US 36 corridor; preferable to bus
- If you used the money collected for fuel tax only for what it is intended for, you wouldn't need tollways. This survey is only about how to present it to the people in the least offensive way.
- This is the first time in years I had gone that way and I had my windshield cracked from a rock thrown up by an over-sized cement truck. I hate going that way.
- The tolls on Colorado roads are ridiculously high. Stop trying to use public money to enforce/encourage your own polital agenda and stick with traffic management.
- Why managed lanes to Table Mesa Drive in Boulder? How about just to McCaslin Blvd/Louisville?
- make the toll lanes free for hybrid vehicles, many other states do that
- Have CDOT considered that the condition of the road is more likely the reason for delays on the 36 corridor? Pot holes, narrowing lanes, merging lanes, etc all contribute to driver behavior. They swerve to avoid a pothole, traffic slams on the brakes, the ripple effect takes place and then a back up. The entry lane at Federal is so long that by the time you are permitted to merge the traffic up ahead has slowed and drivers will not allow you to merge. What do drivers do? They merge before the lanes permit. Forcing themselves at a slower pace in to traffic that is already traveling at the speed limit. Brakes slam on, the ripple effect takes place and bumper to bumper starts to build.
- It needs to be cheap 50 cents or less. The bus is bad for me as I have no was/direct stops near me to get into boulder and up to valmont and foothills it takes me considerably longer than dealing with congestion the foot hills portion of my drive takes just as long as my 36 drive
- If bus service were more frequent and more reliable, I would use them more often.
- Some of my answers only make sense because I drive a Prius and therefore count as a carpool even when alone.
- What about a train from Denver to Boulder?
- I would be highly inclined to take a bus route during off-hours. Taking it for business purposes would not be practical since I have to take more tools than I can carry.
- If you have plans to alter the highway 36 corridor, please make sure to leave room for a light rail option, or even partner with RTD FasTracks to build the railway at the same time. This could remove thousands of cars from the road daily.
- Reduce fees to increase traffic on your toll roads! Supply and demand.
- This survey does not take into consideration my multiple stops along 36 for different purposes. I travel 36 frequently but enter and exit different exits based on my business needs. The biggest bottle neck is between federal and Sheridan.
- I pay for the roads that CDOT already fails to maintain. Why should I pay a toll for a lane that should have been added in the 1990s????
- At times, I would pay a higher toll than I indicated due to personal scheduling issues. If I'm late, there's almost no toll too high.
- Building managed lanes will require massive construction to build something like the center lanes on I25, with little traffic flow improvement. Why not just 2 more lanes that help improve everyone's travel time instead of some elite group that can afford to pay tolls? Buses, there are already Denver-Boulder buses. People that would use them already are. To have a vehicle on either end of the route to enable using the bus route, doesn't make any sense at all according to this survey.
- If public transportation had reliable internet access it would be more appealing.
- Something needs to be done about the US 36 congestion, however, if the result is an added toll lane the toll needs to be reasonable--particularly given the costly toll that already exists to bypass I-25 to downtown.



- I would be disinclined to pay a one-way toll from the Boulder / Superior area to downtown Denver for more than fifty cents total. I would be willing to pay an additional fifty cents to get back home, for a total \$1.00 in toll fees for my trip.
- need a light rail from boulder - louisville - denver
- Highway 36 should be expanded to ease congestion and at the very least, many sections should be repaired as the road is in really bad condition with the worn in groves. I would prefer to see this prior to adding toll lanes.
- I would like to see a rail system that links up with I 25. Not pleased that only South Denver has one. I think it would eliminate a lot of congestion on US 36 as well as I 25 through the Thornton and Westminster areas. I would also like to see a rail system that goes to the Mountains along I70. If you could get from Boulder to Denver and up into the mountains and North and East of Denver. You would eliminate a lot of congestion and carbon emission.
- I do not believe that the initiation of a toll road is going to even contribute to any road maintenance or otherwise. What are you people thinking?
- I use E470 a lot to avoid I225 and I25 Congestion. The tolls are outrageously high. They are the highest I've encountered in the nation. I believe the public is being ripped off in the Denver area.
- Although Colorado has a "Keep right except to pass" law, it is totally ignored by most drivers. Also, portions of 36 are hilly, and drivers do not attempt to maintain speed going uphill. Strategically placed reminders of those basic rules would help in some circumstances.
- If the managed lanes are only separated by striping, I hope there will be better enforcement of the lanes from people just hopping in it briefly, but not carpooling or paying the toll.
- The toll rates you proposed in the survey are too high. Tolls need to be reasonable enough to cover some of the costs of implementation and the costs of operation. They should not be utilized to generate revenue or save the environment...
- Thanks for trying, and hopefully doing, something about the congestion on 36!
- I do not feel I should ever HAVE to pay to drive on a public road.
- 1. If you add managed lanes, it will reduce congestion in the toll-free lanes, so even though I would not use managed lanes unless the time savings was significant and the cost was minimal, I would benefit. 2. The simple truth is that unless you live at a bus stop for a bus that goes exactly to your destination with no transfers, there is no possibility that a bus trip is anything close to as rapid as a car. Your hypothetical on the dollar bus was ludicrous. 3. For most working adults, car-pooling isn't an option - even if you find someone living in the same area and going to the same destination, there are too many times when work requirements or personal requirements mean you won't be traveling at the same time. 4. We don't drive in order to pollute; we drive because that is the frequently the only way to get where we need to be.
- Offer the managed lane where carpool is only 1 additional person and a low or no toll, similar to the lanes on I-70 north of Denver.
- In low use times there should be no to little toll. Like after 8 or 9 at night to 5 or 6 in the morning.
- Tolls are only worth the money for me if my total tolls for the day is less than \$2. \$3.40/4.20 for a one-way trip toll is outrageous! And \$10 is highway robbery--literally.
- Need to have some way to remove accidents more quickly. Terrible traffic jams in both directions today due to damaged vehicles being left in lanes.
- I'd use the toll lanes more often if the police radar was not aimed right at me. Have the police actually police and not be a hazard on the road. I don't speed but I've had what looks like a gun aimed at me way too often on the freeway by the police with their radar revenue generators. How many accidents do they cause?
- need longer HOV lanes on north I-25
- Rail transportation Boulder to Denver or Certainly Denver to Summit county would be the best option
- Reduce the cost of the toll lanes and more people will utilize them, \$3.50 for the toll from 36 to downtown is extremely high. I would use the tollway more often if the high was 1.00 to 1.50. Thank you
- I grew up in Colorado and never saw a toll road until I went East. (FL and NJ). In my mind, it's not normal throwing money out the window for tolls. Have used E-470 sparingly, since it's around \$8 one-way. Too spendy for a fairly short run! Also picked up a nail and got a flat tire once on E-470 too.
- Because I only travel to denver for business a few times per month, I use the I 25 toll lanes and love them. It would be too expensive for me if I commuted daily.



- The current state of Hwy 36 leaves me questioning where my current taxes/toll fees go already. When will those be fixed?
- I am hoping for something similar to be built on I-25 up to at least 120th Avenue too. I live in Broomfield near 144th and Lowell. I can use either I-25 or US 36 then Sheridan to get home from Denver, and would use I-25 more often if the toll lanes continued north of the US 36 junction on I-25. I have a sister in Boulder and I am up there at least once per month on average, plus we ski at Eldora too, so your proposed US 36 improvements would be welcome here.
- Tolls are fine if reasonable - but the cost to go from Broomfield to DIA is ridiculous, and those types of tolls make me avoid toll roads at all costs in the Denver area.
- In any other city I travel to, the HOV lanes have hours posted for carpools. (i.e. 6:00-9:30 and 3:30-6:30), after which time the lanes are open for regular traffic. Any car that has more than 1 person in it outside of these hours is not a carpool but merely several people riding together that day. It is ridiculous to see 2 lanes being used midday, when it could be spread out over 3 lanes. Hopefully, someone from CDOT actually gets out of the state to see what others are doing.
- I would use the existing E-470 and Northwest Parkway much more often, but the tolls are much too high, so I use it a little as possible.
- I think I entered my destination incorrectly--rather than home, it should have been to the airport. Not sure if the trip from airport to home counted as one way. Sorry about that! Thanks for asking my opinion.
- I would love a bus or train option on Hwy 36; however, I don't have a reasonable way to get from the hwy exit to my place of employment in Arvada. I also have not found a person with whom to carpool (I have tried multiple resources), so that is not a realistic option for me. Given the expense I already pay for gas and car repair, I am not willing to pay to drive on managed lanes that have formerly been free. Would be too expensive for the middle class. I am willing to pay for an option (bus/train) that enables me to avoid car and gas expenses, but not one in addition to those. Hwy traffic going east in the a.m and west in the p.m. is not very congested. Where I exit at Sheridan and Wadsworth are congested. I would rather see development of a train/trolley/bus option rather than just adding a new lane and charging people for it.
- Completing the C-470/E-470 loop would be MUCH more effective in reducing traffic on 36
- The expressway tolls have more than doubled since they first opened making them to expensive to consider. Example: it costs me \$7.00 to drive from I-25 to flatirons and back. I will drive miles around them to avoid paying the outrageous tolls. The time and mileage reductions are not worth the cost. If Hwy36 follows suite I will avoid it as well. The problem with managed lanes is they only benefit a small portion of the commuting population.
- Most of your toll questions, the cost was way to high. I also thing using "lower emissions" as a reason to charge the prices in your question is stupid....Reducing emission for cars on one road hardly fixes the problem. Questions like that reduces your credibility.
- I might take B to downtown.. but the parking fees TAKE TIME and also blow away the economics of taking the bus. It puts me in the mode of always driving because you made it too painful to take the B or BX.. which I did for years. Note also I don't care whatsoever about the carbon emissions thing... it is all wishful thinking. I make my decisions based on time and money.
- i seldom use toll roads in Denver because of the costs
- I have seen how much the existing lanes improved US36 and would welcome more. I do not take the bus because it takes too long to get from Market street station to my job. If there were buses from the park & ride I use (Sheridan & US36) to the Civic Center station i would definitely use them.
- 36 should be 3 open lanes (each way) plus two additional carpool lanes that can switch direction. The congestion seems particularly bad leaving Boulder in the afternoon. The City of Boulder is unrealistic and naive in their road management.
- Add an additional toll free lane to 36 and eliminate tolls from 470 which would alleviate 36 traffic.
- Good survey! However, the presumptions on "climate change" are not factually based!
- A commuter rail system is the better option. Busses are horrible; i'd never use. Trains I would
- lower tolls then e-470 would be optimal!
- I really wish I could take mass transit from Boulder County to downtown Denver (union station) much faster than driving...I would reduce my US36 usage if bus lines we almost as fast as personal driving....really want light rail to Boulder...that is the dream!
- i use the toll lane most of my trips from i-25 to hwy 36. i also go to boulder quite often and would love to see the lane extended. other areas of the country successfully use toll roads to expand and maintain their highways. CO needs to tap into this form of revenue with so many new residents and cars on the roads.



- Nicely designed website and survey. Thanks for asking for input.
- The tolls are simply too damn high over the whole system. The north end of the metro area has been given the short end of the stick for the 40 years I have lived here, and I will simply not use any toll where the charges are like they are now. How about a quarter like Chicago?? I have no option on taking the car, I need it often during the day. Further, I will NEVER vote for another tax increase for FasTrax after having voted for every single one....we get NOTHING for any of it - and if you think I am just one opinion...wait til the next vote!
- I take service calls in Boulder on computer equipment, time varies greatly on my driving times.
- I would rather use light rail and not increase automobile traffic and/or increased lanes in this corridor.
- Quit trying to jam toll roads down our throats. See the W-470 referendum for reference. Instead, consider using take the ownership tax we pay on our vehicles for transportation instead of school districts. Replace lost revenues to school districts with a slight increase in sales tax. About managed lanes, they are too underused to justify their cost. Instead make them available to everyone for free.
- Extend e-470 through Golden to connect with I-70 and C-470.
- You don't seem to understand that your job is not to artificially make travel for working class people more difficult and expensive. These are the people you are penalizing. Add free lanes of traffic!!! Make cars more efficient. Assholes!
- In Jefferson County, we are paying for FastTracks. The light rail commuter line will NEVER be built along I-36, so we are paying for something we can never use. Now, you want to charge us to drive on our only existing route of transportation. Typical government bureaucracy! Eliminate my tax payments to FastTracks, and I will be happy to put it towards another lane along I-36--but I don't want to pay for both!
- Carbon emissions are not the only emissions of concern. I am more interested in keeping Denver's notorious and poisonous brown cloud at bay by using public transport than anything else you had as a factor in your survey. I use my transponder whenever time pressure requires and on 470. I understand that expenses of keeping the roads drivable is high, but it seems like there is a captive market here and prices keep going up - and don't really relate to actual miles of road maintained. Just an observation since I don't look at the books. But 470 sure seems expensive for such a short distance.
- Colorado needs to continue to invest in transportation -- roads, rail, etc. Being able to move about the front range efficiently is both a personal and business desire.
- I especially like the idea of express buses. I would ride RTD more, but \$10 per day round-trip is just too cost prohibitive for me. \$2 one way for an express bus like you suggest is an amazing idea, and one I would surely use!
- sometimes i drive north on 25 out of denver between 5-6pm. the express lane is useless - the traffic jam is just as the northbound express lane ends, so it costs you money and does nothing for you.
- My workplace is all over the front range and during rush hour I avoid US 36 if at all possible. It is faster to use back streets at times.
- Allow single passenger vehicles to pay a toll to use the (usually) empty HOV lanes between Broomfield and I-25
- The HOV lane ending at Federal west bound needs to be marked more clearly as to who has the right of way..I get cut off there all the time by people flying up the HOV lane thinking they have the right of way and moving into the fast lane only to slow down and cause a severe slow down in all lanes.
- Manage lanes are a good idea. Tolls need to be kept very reasonable though or they will not be used.
- I don't use public transportation to work because there are too many changes involved and it would take to long to get there. I would have to get up at 3:00am to make it to work by 6:am on a bus. Using the car I only have to get up at 4:00am.
- My closet bus stop is 88th and Sheridan. If you don't get there by 6:45 am, there is never parking. It takes 15 minutes longer to park in the garage across the street. Make better parking on the south side of the street and I am happy to take the bus every day and avoid all congestion.
- For those that travel this highway daily and have no choice but to drive solo, I would recommend that any fare that may be imposed should allow us to continue using that route. If not, it will only congest side streets and other thoroughfares in an effort to avoid excess fees. I used to travel E470 daily to the tech center and that cost me \$17.00 per day. Ridiculous. Do NOT make that happen along US36. We all have to work and can't afford to spend money getting there. PLEASE
- I used to ride the bus but the poor direct evening schedule to Longmont made it impossible to continue. Toll lanes are rarely used now, an additional toll lane will not increase toll lane usage. We've paid \$B's to RTD for rail to run 7x24 along 36 and



North I25... where is it? Let's get what we're owed first. I25 North of DT to 136 is a much worse problem than 36. Fix I25 and you will fix 36. I use 36 because I25 is so bad.

- We definitely need additional lanes on 36, but I don't think having a toll lane is the answer. Let's talk toll lane after we have problems with 3 or 4 lanes going each way, the WHOLE way between Boulder and Denver/I-25.
- We need more help on I-25 north valley then US36
- Please make the signs on US 36 southbound indicating the exit for E470 much more clear. There are several exits in a row and the signs indicating 470 are too small.
- Bus rates must be reasonable and must be less than the amount of gas used during a week of travel to and from work. And it must equal less time traveled than the time spent driving now. As an example I spend \$35 a week in gas for travel to and from work. If the bus fee is \$40 for the week then I am losing money. If it takes 1 hour to drive to work but takes 1.5 hours to bus there then I will continue to drive. Regarding the toll rates; The \$10 each way toll rate in this survey is much, much to high. \$2.50 each way is much more palatable in this economy. That's \$5200 vs. \$1300 per year.
- Having an additional lane in each direction is a GREAT IDEA. However, having a toll will drastically reduce the number of people who will use the lanes and not reduce congestion much. Considering the insanely high prices of the current tolls I would never use the lanes. I suggest just adding 1 regular lane in each direction.
- Lane expansion is positive for traffic flow, but it should not be tolled. In fact, e470 and the northwest pkwy should be toll-free as well because some residents have limited options to get from point A to point B...and sometimes it forces use of the toll roads.
- I'm still not sure why 36 is the focus of any improvements. Ask ANYONE who lives on the north side of Denver and they'll tell you the problem area is I25. Has a study ever been done on this area?? Every morning the radio/TV says the same thing, "typical slowing" -- while 36 moves well. Not sure how this decision was made.
- I would most like to have safe bike paths along the corridor
- Could CDOT purchase or subsidize E470 and NW Parkway to lower tolls significantly, increase use and alleviate congestion to a greater degree than currently?
- rail or light rail on the US 36 corridor would be awesome over buses.
- i would take e470 to avoid a lot of 36 if the toll was half the price.
- The main factor on using the toll roads is the cost. \$3.00 per trip is way too much. I avoid e470 unless I am traveling on business but would use it much more frequently if the toll charges were less. Predictable travel times are worthwhile but the toll charges you listed here are not worth the time savings in my opinion. The only one that was acceptable was the \$0.35/trip option. Thanks.
- Something has to be done
- I would prefer to see a public transportation system that was not completely downtown-centric. Currently, there is no time-efficient way for me to travel from Boulder county to my work-place south of Downtown without changing modes of transportation in Downtown Denver. If there was light-rail along US 36 that had a stop at Gates - it is highly likely that I would use that mode of transportation. Currently, my only choice for public transportation is to take a bus to Downtown, and pick up light rail there to my work place - this option requires more than 1.5 hours of travel time in one direction.
- The US 36 Turnpike was paid for in just 2 years and has been free ever since. Please add a lane and let us use it free. If you must recoup the cost of the added lane, please open it up once you have recouped the cost of those new lanes. I do NOT support a paid lane in perpetuity.
- The tolls on E-470 are outrageous. Don't do the same on 36.
- I would rather see some sort of a transit system (i.e. high-speed rail) put in along Hwy 36 rather than additional lanes for cars.
- Trains?
- would like to see light rail as an option
- I would use E-470 more often if it weren't so expensive from my work to my home. There are just so many tolls between the two.
- I would prefer there were no tolls. If there are tolls, lets keep them lower then E470 and Northwest parkway.



- 1) Need signs to remind slower traffic to MOVE OVER into the right lane, rather than causing congestion in the left lane by going the same speed as traffic in the right lane. This is a HUGE cause of congestion. 2) I am for the extra lanes, but opposed to fees- this should be done as a matter of need- not for a company to profit off with tolls.
- The HOV/Toll lanes are only as good as the enforcement on them. The current US-36 HOV lane is most often used by scofflaws with only one person in the car because of very-very lax enforcement. If these people were being charged a toll- I would have no problem with it, and would likely take advantage of that opportunity as-well.
- I know it's not a part of US36, but I-270 has some of the worst road surfaces in the Denver-Metro area. US36 is not that far behind. The massive grooves in the road between Flatirons and the rest stop/viewing area, a mile before Foothills Parkway, are really bad. Appreciate the fact you're looking for public input.
- Love the idea of managed lanes, but I'm not willing to pay more than \$1.00 to use them
- If you could park in Denver for free, say at 2 locations, or have a bus-pass that includes parking, and there was an light rail, portal to portal, and 2 stops in Boulder, and the trip took 35 minutes, with rush hour service every 20 minutes, with a milk run every 20 minutes, then I would take public transportation. Carbon? Are you kidding? Light rail would work because the stop time with loading and unloading is minimized. Make the trip 40 minutes with parking - then you have a winner. Make it 1 hour and you have a loser. Small difference, but you need to consider this as a round trip time allocation. 30 minutes is 1 hour rt, 60 minutes is 2 hours rt. Sorry, but 1.5-2 hours on public transportation is a loser and this survey may be recording good intentions and not actual behavior. Carbon? Are you kidding? I mention this twice because "from each according to their ability and to each according to their need" is a philosophy with a problem. My advice, optimize the trip time vs. cost with an emphasis on decreasing trip time and limit portal access with the use of feeders. Even if you add two lanes in each direction, you cannot increase the ability of Boulder to adsorb the traffic or the highway network of Denver to adsorb the glut on the other end. Invest in a computerized, fast, clean, efficient light rail link with the intention of diverting ridership from the single occupant vehicle. Carbon? Let's get real. How about the effect of Medical Marijuana on transportation.
- I disagree with the use of tolls. US 36 needs to be increased to 3 lanes each way. A lightrail also needs to be developed between Boulder and Denver.
- Understand the need for managed roads, toll and otherwise. Right now we avoid US36 at peak rush hour times using various surface roads for travel. We also avoid E470 due to the high costs, though it's lightly traveled and would be nice to use, the cost factor doesn't make it worth the convenience.
- I'm confused as to why there is a massive undertaking for additional car lanes when there have been light rail plans between Boulder and Denver for some time.
- Toll roads are fine if they would be areawide shared it costs. C-470 should be toll all the way around. HOV lanes are a big waste of hwy. space. The amount of roadway that is utilized for HOV lanes could easily be converted into one or two lanes each direction. As it is now the lanes are only used in one direction at a time thus cutting out the persons going the other way. Use a little intelligence with planning would go a long ways. RTD is a good way of going if two things happen. 1. If it can get you to your destination reasonably time wise. 2. If you need it on a regular basis and the cost is reasonable. It is already tax base funded by several separate sources.
- poorly worded survey and why does carpooling now require 2 passengers (and 1 driver)? Lanes now only require 1 passenger and 1 driver. Dumb
- There needs to be an HOV lane for buses to use both directions on 270 and I70 in order to make using the bus more practical. It is ridiculous that we take the bus and have to sit in the traffic just like everyone driving their cars.
- I would prefer to take the bus than to drive, but my employer does not provide a bus pass, and bus fares are more expensive than driving.
- The current Free HOV lane on I-25 only requires 1 passenger or a motorcycle. Any additional HOV lanes should do the same. Also the main reason I don't use the HOV on I-25 more is there are too few entry and exit points. This should be considered when planning for Hwy.36
- I voted in favor of Fast Tracks, and have been paying taxes now for over a decade for this program. I cannot tell you how upset I am at receiving absolutely nothing in return - US 36 has received NO benefits and my commute is worse now than ever. Now we are being asked to pay tolls on top of the tax, and all we get is a friggin' "managed lane"? Pathetic.
- Public Transportation would be the best if it was timely and easy to access. I feel that over time managed lanes really don't reduce traffic, they just reconfigure the traffic jam.



- RTD buses tend to be very unreliable and crowded on snow days. I prefer to drive those days early in the morning to avoid highway congestion and ridiculous crowds on the bus. I generally leave Boulder before 6am and try to leave Denver around 4pm (or earlier depending on severity of storm). Being able to have a more reliable travel schedule, especially using RTD on snow days is much desired. Thanks for looking at what is needed.
- I believe that if someone has an Express Toll Transponder, they should be able to currently use the HOV lane to help relieve congestion, since they are paying for the toll and contributing to road improvement.
- US 36 is obviously overloaded. There are incongruous or obsolete on and off ramp plans such as the "fly-over" mess at Wadsworth and at McCaslin that are dangerous and traffic snarling during rush periods. Social engineering in Boulder County has created commuting patterns and high traffic volume, because those who work in Boulder cannot afford to live in Boulder. Illogical residential growth patterns along the US 36 corridor and incompetent traffic pattern planning have resulted in dangerous and incongruous interchanges at busy arterial on and off ramps. Anti-business policies by municipalities, counties, and the state have made for illogical commercial development along US 36 and contributed to the overcrowding and subsequently dangerous and inadequate traffic situation on US 36.
- Good luck! I really support this
- Survey didn't cover my trip because I run a livery service and I picked up a passenger and had to use the NW tollway. I would love to see a complete improvement of US36 from Denver to Boulder because I have been stranded on the roadway before during rush hour to pick up a passenger for a trip that would normally take me about 45 to 50 mins. - and even after 80 mins I still hadn't my destination. One more suggestion, how about extending the NW Tollway uninterrupted to US36?
- I resist the notion that we need to always be paying as we go for travel. Why should we have to do this? We pay taxes, and tax money should be used for road construction and maintenance. I cannot afford to be shelling out \$10 or more per day just to drive on our roads. These lanes should be built using tax money, and there should be NO tolls.
- Most of the roads in Denver area need immediate improvement. 36 and 270 are very dangerous to drive on because of the severe deterioration of the pavement.
- 3 lanes going both to/from boulder will greatly improve the drive time for all drivers and need to be free to all users before adding any toll lanes. Once the 3 lanes are met then adding a 4th managed lane is OK. Another improvement will be to extend the on-ramps to be at least 1/4-1/3 mile. Many of the jams on 36 are in the areas where traffic gets on the highway. Also the hill coming out of Boulder must be increased to 3 lanes, toll free for all users. I believe the managed lanes are "Feel Good, Money Maker" for RTD and will not server the needs of the greater public.
- I would greatly prefer additional mass transit options rather than new road lanes.
- Traffic during non rush hours is good
- I could never afford the tolls on this survey. Under 2 dollars is reasonable. I go early to work and come home later to avoid paying the 3.50 toll now.
- My trips to Superior are short enough that it would be easier to drive than take the bus, and a few extra minutes is not a problem for me. Also, buying groceries would make it hard to take the bus. However, when I go to Denver from Boulder, I almost always take the bus if I am alone. I drive when there are one or more others going with me, and I use the carpool lanes. The bus involves so much less hassle than driving when I am alone.
- In a time crunch, I will pay a toll, no problem. But on a regular/daily basis I wont - I will plan my travel time accordingly. If it gets too bad, I would consider changing jobs.
- Lightrail is a great option and since we have it in the southern part of denver to the tech center, I don't understand why we are not looking to do it from Boulder to Denver. I would use the lightrail as it has many drop off's in downtown denver. I already pay 6.20 a day to drive the northwest parkway, 5 years ago it was 2.50 a day, I can't afford to keep paying tolls as the answer to congested highways. We need better solutions!!
- I don't mind tolls if they aren't burdensome. I would travel e-470 everyday (versus 36) if it wasn't so expensive.
- Put in a train instead
- I would be a bigger supporter of "managed" toll lanes if existing I-25 toll / car pool lanes were managed better. Too often they are open in the wrong direction of the greatest volume of traffic. I.e. open outbound from Denver on Friday @5pm when there are Rockies and Broncos games happening downtown that evening.
- These Questions were way too long and way out of context with the content of the survey.. You get a D- for this survey..



- I believe people who use the roads should pay for the roads. Put tolls on all lanes and not just on express lanes. If you keep building more and more lanes, no one will ever take the mass transit. Right now there are no options for me to take mass transit without having to either drive to an RTD stop or take a total of 4 buses/shuttles which makes mass transit much longer than driving. As long as the transit is longer than driving, no one will get out of their cars.
- Utilizing tolls as a source of revenue is an acceptable idea. However, encouraging people into public transportation is not cost effective and can be a poor use of public funds.
- I have often used the 36 to Speer carpool lane and overall find it a big more than I would like to pay and therefore use mainly when desperate or work will pay I think the cost of NW Pkwy toll is way too high between 287 and Flatirons given it is around 2 miles (>.80 cents) at least with the 36 to Speer Blvd exchange it covers a great distance and is worth the cost per mile. I would use the NW Pkwy a lot more if cost was more reasonable (ie .50)
- I will do almost anything - drive miles out of my way to avoid rush hour traffic morning or evening on Hwy 36.
- Hwy 7 Corridor from I-25 toward Boulder is dangerous and needs some focus from the state. You need to connect Hwy 7 to Arapahoe Road soon.
- Lower your toll price and I will use you more.
- Adding a 3rd lane for the entire stretch of US 36 from I-25 to the Table Mesa exit may not be needed at this time. Observations while driving during rush hour show that a 3rd lane be added only between Table Mesa and McCaslin Blvd would reduce congestion and backup in both directions.
- The survey may not be very accurate because many of the questions did not factor in my gym schedule. So I leave early because of that. And hypothetical are difficult because I would change my behavior. I think more general questions would have been better. I'm sure the study was created by engineers, not psychologists. One question, why does the electronic sign above Hwy. 36 in Boulder rarely have information like traffic conditions. Most of the time its blank!
- The coming toll increase for E-470 is completely unacceptable! This road is useful but I will stop using it, which will only increase US36 congestion. I STRONGLY OBJECT to the increases for trips that already involve nearly extortionate toll levels. Instead of investing a bunch of money in modifying US36 (and adding new tolls), \*\*please\*\* put it into keeping E470 tolls more reasonable.
- Colorado voters approved the fast tracks construction project. It was proposed and approved by the people. Rather than come up with another program keep the one already approved moving forward. In the interim use another system that will complement fast tracks. Follow thru on the initial commitment you made to colorado people and put this 36 corridor as 1st priority
- I don't know how tolls based on the number of passengers would work with a transponder. If sometimes I have passengers and sometimes I don't ... currently on I-25 there are 2 lanes, one for toll and one for carpool. But, I don't see room for that on US36. I think adding a lane in each direction is a great idea.
- i would support a train between denver and boulder more than managed lanes. But managed lanes are better than nothing I suppose
- I am in outside sales and travel from place during the day this impacts my ability to take public transit and I don't go to just one location a day but 8. It also impacts my answers to many of the survey questions.
- Charging people tolls should be a last resort, it is not always the answer, though it seems to be the easiest route for CDOT. There also needs to be a high-speed train along this corridor. It is the only long-term solution that makes sense. If there is a toll it should be a FLAT RATE. It's ridiculous that people who commute during common work hours get charged more for use of the same road. This is simply an unfair way to increase revenue and does nothing to encourage travel during different hours. Work starts at a certain time and some people don't have the option to adjust their schedule and arrive two hours earlier. I am extremely opposed to this practice.
- I-25 South between US 36 and my destination is a much bigger traffic congestion problem for me than US 36.
- Please, please, please, put another lane between Table Mesa Drive and McCaslin!
- I think train service should be put in
- open all lanes for all cars , open shoulders at peek traffic and move all accidents from traffic immediately do not have cars w/ flashing lights on the highways at any time this causes slowing, remove all police cars from traffic as when one sees a police car they hit the brakes and cause additional slowing. In the West we like our cars and are not going to use public trans, more lanes must be made available. savings in the state budget can be achieved by converting the current PERA program from a Defined



Benefit to Defined contribution and increasing the retirement age to 65, cut agencies such as State patrol, have the County Sheriff take responsibilities, Do not allow local municipalities to use the highways as income sources (Laser/motorcycles hiding in the bushes) increase all freeway speeds and let volume of traffic control speeds, modern cars are very able to handle higher speeds, contract out more highway maintenance and eliminate government employees and unionized groups as they are far more expensive, contract for police/fire services

- I'd like to see a high speed train option introduced between Boulder and Denver. Adding lanes and charging a premium is not something I support. I'm interested in making a more environmentally and time efficient option and I believe a train will be used by many more people. I will happily pay a train fare however less expensive tolls would not encourage me to car pool. Sometimes carpooling is just not an option.
- I support any kind of positive change to improve the HWY 36 corridor. It is extremely sporadic, and it's flows have great impact on my family's local movements on a very regular basis.
- I am opposed to toll roads. I like HOV/Bus lanes, but toll roads are a rip off.
- Make the new lanes free for carpools and add a significant toll for solo drivers.
- We need to do something for this road! I will pay to have a safer, quicker daily commute!
- A lower toll cost during off-peak hours will improve the chances of me using the toll lanes.
- If light rail were available, I would take it every day. Nobody seems to have figured out what you do once you get to a Park&Ride. I am a huge fan of public transport, but the way it works outside of downtown Denver does not work. 36 is a miserably badly designed and built highway. All of the traffic is from Louisville to Sheridan. That is the main cause of congestion. All you need is to make a three lane highway. I think it is ridiculous for me to have to pay for the "privilege" of driving on a wider highway. It is just one lane that is needed between those two points. That is where the congestion is every single morning and night...and I am traveling in what used to be called a "reverse commute." Now it is congested all the time. I have to come in at 6am to have a somewhat predictable commute time. Going back to Denver every night is completely unpredictable. Clogged by everyone in office parks going 2-4 exits. An extra lane would relieve the burden of those short commutes on the thru traffic.
- Am most interested in completing the 470 loop from 36 South and West to Golden. Should help the most with the excessive 36 traffic load.
- Please don't confuse traffic flow improvements with certain parties' social engineering agendas. Thanks!
- Why not the option of a train? It think that would be much more useful.
- I drive a Prius; I always use tollway to DIA (go there more often than your surveyed area); the tolls seem WAY TOO HIGH (5x the gas price) but I pay them anyway to save time and travel more safely. I believe STRONGLY in Pay For Use funding - I-70/Mtns included!
- I believe a similar study to this one should be undertaken for the section of I25 (both Northbound and Southbound) North of where the current HOV lane ends/begins through around 120th. During rush hour, this part of the highway is extremely slow.
- Why aren't there any park-n-ride lots for carpools? One time I tried to carpool with a colleague, and she was just about chased out of the lot in Broomfield by and RTD employee because she wasn't taking the bus. If there were convenient places to meet and park along 36, more people would carpool. Any chance you'll be fixing the tire track divets in US 36 soon? They are a real hazard and cause cars to weave. Thanks!
- Tolls on Denver area toll roads are insanely expensive. I drive to Kansas City regularly. To travel from Topeka to Kansas City on the Kansas Turnpike costs about \$2.00 for 60 miles. Here, to travel from Broomfield to Parker costs about \$10 for 42 miles. That's nuts.
- I don't commute to work very far & don't get on 36 to do it. I might be willing to pay a lot if I commuted to Denver from Boulder. I do cross over 36 at 112th & the traffic looks horrible. Good luck finding a solution!
- I would use public transportation and have in the past when I didn't need my car for work and when I had a direct route. I am a sales person and have to make frequent trips with my car during the day. On the days that I don't need to use my car I would take public transportation if there was a time effective way to do so. The best the bus can currently do between my work place and home is 1.5 hours.
- light rail!!!!!!!!!!



- I purchased the transponder thinking I could use the HOV lane going South on 36 between 92nd and entering the I-25 HOV lane, lots of congestion on 36 would be relieved just being able to do that, coming off 25 it is ok to stay in that lane until it ends, seems counterproductive.
- Current toll lanes are tremendously helpful but do not start close enough to Boulder for access by people with transponders but not carpooling (you can't get in until Pecos). Additional lanes should have limited access and allow non-carpoolers to use with transponder.
- widen 36 to 4 lanes each way - the toll lane that runs between 36 and I-25 is inefficient. Poor planning on the developers part.
- Please, we need better and affordable public transportation
- I think that if we had the same tram or train you have down south to Down town would work much better. Alot more people would use it. I know all my friends and family would.
- I pay all kinds of taxes that are supposed to be used for these projects. E-470 rates are already higher than other toll roads around the country and increase yearly. When are my tax dollars going to be used more efficiently?
- The tolls on I-470 are too high between I-25 and Boulder. I think there would be less congestion on Dillon Rd if the tolls were lower.
- Something needs to be done and the sooner the better. Thanks.
- Since I actually live in Erie, there are NO easy options for me to get to work. I go to Boulder only about once a month, either from my house or from work. I rarely travel US36, so it's not worth the money for me to pay a toll since there are other routes. If US36 became a toll road, I would probably almost never use it, unless it saved me time. I don't even use the NW Parkway from US287 to 96th St. because it's horrid to spend that much money with little time savings.
- All tolls in Denver are too high! I grew up in NY and the toll to travel 500 miles is less than the toll around Denver on E-470 (47 miles). IF the savings in time is enough, and the toll is reasonable I will take it... but the express toll lanes on I-25 are 90% of the time not worth it.
- Light rail! Cut down need for cars rathertha. Provide for more cars. Don't kill us with thie toll road construction for years and en do it again for light rail.
- I would use the bus more often if the Cherry Creek bike trail were better maintained in winter. Too much ice for a bike- difficult to ride from home to the bus terminal on 16th.
- Full electric (not hybrids) vehicles should be allowed to use any existing and future managed lanes without paying a fee.
- I think that the solutions are very short sighted. It is unfair to discriminate against people that live in this area. There are other traffic problems and the solutions aren't "pay to drive there" solutions. We pay taxes too to fund the other roads that people drive on for free and now we are going to be expected to pay tolls (a complete scam)just because we live in an area. Why isn't there a toll on I-25 south of the city. It is congested. I think it is unfair and clearly a way to make others pay for poor planning of our road systems. Please reevaluate and get this right.
- Please consider light rail - no traffic jams !
- The tolls are far too high. over \$5 to save ten minutes? That's \$30/hr, far more than most people make, and a truly insane amount. Do you really think people might spend \$250/month to save 20 minutes a day? Tolls on 470 are already too high, and I have started using surface streets to avoid them except when necessary. The quality of 470 should be that of an Autobahn for the prices, and it's far from that. And the sudden leap in pricing AFTER going all electronic, hacking jobs? I can drive the ENTIRE Pennsylvania Turnpike for less than it costs to go from Boulder to Parker. I wont pay tolls similar to - nor higher than - 470 on 36 if this is ever developed.
- Lower tolls with more volume in paying tolls is a better way than charging higher tolls to make same revenue. \$3.10 between US287 and I25 is very high and I avoid this stretch of road when heading to/from the airport.
- I'd rather see train service.
- The condition of 36 has been really bad for a long time. It would be good if the road condntions were improved as well as creating an express lane/s.
- One purpose of charging tolls is to be able to provide alternative routes, distributing traffic evenly. Charging too much does not work as too few cars take a high priced road/lane - look at E-470 for example. High priced toll does very little to decrease congestion on neighboring roads. It's only good for the few cars willing to spend the money, but not for the general benefit of the public. Wouldn't more cars paying less toll bring in equal funds, but better help distribute traffic?



- I am retired and I have the time to leave early to counteract the possibility of heavy traffic. I think that the proposed toll would have to be minimal (below a \$1) to get the average person to consider this as something to use. Most people would not have enough extra money in their budget to consider this if priced at \$5+ as one scenario proposed.
- There was no option for a free carpool lane for two people in a vehicle. Why not?
- I would be more likely to take public transit if there were fewer transfers involved. I currently take the toll road to avoid the unpredictability of US36, and because getting to 36 from my house involves a lot of cross town traffic.
- I usually ride RTD downtown for work. I would be more likely to ride more often in poor weather if the parking were closer to the bus stop at Broomfield and Church Ranch park n rides. It is a difficult walk in bad weather, long at Church Ranch and up and down steps at Broomfield.
- There is a fine line between the convenience of using a toll road/lane and the time saved. At some point you price it out of use. The NW parkway is a beautiful road with no traffic however I can't afford to use it.
- User fees are the best way to fund highway improvements. Let those who use the roads pay for the expansion--while not penalizing others (via a higher gasoline tax) for the improvements they do not use. Public/Private toll roads are the way to expand our infrastructure as proposed by the "super slab" east of Denver.
- I don't always use the toll because the price changes and I'd rather sit in traffic for a few minutes than pay \$3.00 Money is tight and it makes a difference. The fees I think have gone up too much and you would get more people using the toll if it was a fixed price. Why not charge the people not using the toll?
- I would use public transportation or carpool if possible, but as I travel to 10-15 homes per day for homecare, I cannot. My partner uses public transportation everyday - he is a student.
- If my occupation would allow for carpooling I would take advantage however my daily schedule varies. Generally, my commute to Boulder is a breeze as I am flexible on my departure. It is the commute at the end of the day between 3pm and 6pm that is the dreaded drive. Thank you and have a great day.
- I have no idea why Denver is so behind the times as far as public transportation is concerned. I travel to many other large cities in the US and most of them seem to have a very nice, affordable train service. The one in Denver is way too expensive and doesn't even go to DIA, Boulder, or even north Denver. Making a Toll lane from Denver to Boulder would help, but putting a bunch of smog producing buses on it is no real alternative especially for a State known for its green energy. You should be building an affordable train service from Denver to Boulder down the 36 corridor and also from Denver to DIA and get us back into the 21st century.
- Why would you add to the congestion on 36 with several years of construction for two new lanes only to charge \$10 round trip once there completed? The majority of the traffic is due to people driving to work on a daily basis. The end result after the years of added congestion would be a toll of \$10+ a day to travel back and forth? Surprise, hardly anyone is going to pay that toll. Look at C470. The toll from Louisville to I25 is \$3+ ONE WAY. If you travel this route during rush hour there's hardly anyone using it. Why? because it's way too expensive. Try charging \$.50 and see how much traffic is diverted off of 36 and how much more revenue is produced. Who's proposing these ideas - create two new lanes on 36 - create additional congestion - charge \$10+ to use them once it's finished?! Try changing the toll on the short stretch from Louisville to 25 first and see what happens. Guaranteed less congestion on 36 and more revenue. Sounds like a no brainer, huh?
- I dislike having the rates change based on time of day or congestion. If there is going to be a toll, then I think that toll should be static (like E470)
- I really like the HOV lanes on 36 close to Denver. It is only because of the nature of this trip that I did not prefer HOV. I think this is the best way to go for the alternative lane.
- Why are you dragging your feet on a rail system? Every major city in the US has efficient, cheap and reliable rail service across their entire metro area. It's not lack of space, there's nothing but empty land along 25 and 36. Get your act together, this should have been done 30 years ago. I travel from Boulder to Denver about 10 times a year for entertainment because bus system is horrendous and I have to drive. If you had a rail system in place, I'd be in Denver at least once a week. Most people I know feel the same way. Way to go putting in a useless light rail system where 1% of the population goes. Not to mention train service up to the mountains, but that's another issue. The level of incompetence at CDOT is astounding.
- My challenge is I don't go to the same place day in, day out. So carpooling and mass transit options aren't really options for me. When there is a consistent location, it's often from Broomfield to DTC or even further south and current mass transit options are simply too time intensive.



- toll lanes seem to be a waste. very few people use these lanes while the masses still sit in traffic. Open ALL lanes to ALL traffic, ALL the time. That will be the best use of space and reduce congestion the most. Trying to FORCE people to pay with the threat of pay or sit in traffic, doesn't work, just look at the highways w/ toll lanes during rush hour. 2 perfectly good lanes on I-25 going to waste while the masses sit in traffic. Tolls sound good, unless you are the guy who has to shell out 10 extra dollars or more each day to get to work. Hell, tolls cost more than the fuel he uses to commute, which is why so few use those lanes. If your commute costs doubled, only to save 20 minutes, would it be a good idea?? Nope, us either.
- I oppose toll roads and HOV lanes in general unless there is a foreseeable end to the toll. Creating lanes with the "privilege" of less travel time/congestion for an additional tax/toll is not fair - unless the improvements and maintenance of these lanes are funded solely by the tolls collected from users, not additional taxes, fees or tolls or bonds paid for by the general public.
- Northern Denver traffic is horrible. I feel improvements are needed for 36 & for I-25.
- I have no problem paying tolls as long as they are fair. US-36 should be a three lane highway with access to all lanes without the managed lane and that would alieve the congestion problem. A managed lane would not alieve the congestion but only make it easier for the traveler that is willing to pay a toll to ride in that lane.
- Traffic is typically congested travelling east bound on US-36 starting at Sheridan and continuing through the exits for I-25 and 270. My suggestion would be to: (i) open the entirety of the carpool lane to all vehicles willing to pay the toll and (ii) slightly reduce the tolls to encourage more people to use the HOV lanes. I think this would reduce slowing and congestion where US-36 ends and aid in reducing traffic on I-25 south through the downtown exits where there is always a problem.
- Like idea of managed lanes for cars/buses. Buses need to accommodate more bikes so people can have better start/end point optins and not always have to drive to a park and ride. Actually a bike trail for regular and electric bikes would be a great thing to have between Den-Bldr. Anything to get people out of cars/buses is good IMO!
- I think the lanes would work best if everyone could use them for free.
- Add light rail / rapid train transit - get less buses and cars on the roads. Colorado / Denver is by far the worst mass transit I see and I travel to many large cities like NY, Boston, Philadelphia, Chicago, Dallas, LA very regularly.
- I'm in favor of promoting carpooling with carpool lanes or tolls for single passengers. Rarely are the managed lanes on I-25 helpful to me to avoid congestion based on direction.
- I'd rather have the train between Boulder, Denver, and DIA than extra lanes on 36.
- I am more likely to utilize the managed lane if it is free for carpool. I would not pay to use this lane if I am in a carpool. The current system in place through Denver works well and would be something I would support on the 36 corridor.
- Bus travel out of Broomfield has become very difficult, and many people that used to support it no longer use it as they DO NOT want to have to cross the highway for one direction -- particularly in bad weather. The Broomfield Park N' Ride used to be wonderful. Park your car, get on the bus and travel to Denver, return, get off the bus and into your car to go home. The new Park N Ride is definitely not an improvement.
- I would use the evening drive on the toll road (entering near Coors Field heading north on I-25) more often if it were less than \$3.50 per day. Seems expensive, especially since it may only save 5 minutes on days when I-25 isn't too bad. (Also would be nice to indicate on the sign the estimated time saving based on live traffic updates).
- Just as much emphasis on improvement needs to placed on I-25 from 120th to Mouse Trap (SB) and Mouse Trap to 84th (NB). Why is there not a survey for this I-corridor!!!
- I have to do service calls in Denver. This makes it impossible to carpool or use public transportation as I need to go to many locations at different times during the week.
- As a single parent relying on others to take care of children until I can get there, knowing that I will arrive, and not be stuck in a traffic accident for 30 minutes or more, is very important.
- Adding lanes with a toll essentially equates to special lanes for people wealthy enough to use them. I strongly disagree with this plan. The city needs to find some other means of having a road system that can handle Colorado's population. Giving special roads to the rich is not an answer.
- Good luck - we need this!
- I voted to increase taxes to pay for traffic improvements to this section of highway. They are being spent and continue to be spent on something else! I'm not willing to pay a dime more until I see my money spent where it was supposed to go. I take a toll road administered by CDOT and the sign says \$.50, but I get charged \$2.50 and they don't credit my account. I'm tired of incompetence and I'm not willing to spend my money on so called improvements until I see they really are improvements. It's



hard enough to find one person to car pool with and now you are considering making it at least 3 people in the car! Are you kidding me?

- HOV lanes are a great idea. However, like I-25 N bound, the HOV exit back to I-25 is terrible. It dumps out at 3 major highway interchanges and the beginning of a highly populated area. 84th to 120th is a joke. Please route this I-36 proposal with a little more consideration.
- the trip fee both ways needs to be less than \$5.00 for me to feel that I can afford it.
- If Light Rail ran up the I-36 corridor I would likely take that every day other ways from 9 mile to my destination thus greatly reducing traffic.
- Above all, I would most prefer a public transportation option. I'm not particularly concerned with cost on this, but very concerned with convenience in terms of frequency of buses/trains. I travel to the airport a lot, and the once-an-hour schedule (in the early morning) is not sufficient - so against my own desires, I drive.
- Cost to build and maintain is a factor. Increasing taxes to pay for the construction and maintenance should have been factored already into the vehicle registrations and other taxes. We need to manage much better and have those who benefit (drivers who travel that route frequently) carry the burden.
- I may have considered forms of shared or public transit, but my job requires me to use my car for client visits
- I rarely travel between Boulder and Denver. Most of my HWY 36 travel is to the toll road to the airport.
- I would like to see the I-25 Express Toll extend to US 36, but I don't feel I should have to pay a separate toll when I enter through the I-25 Express Toll lane. That feels like double dipping to me!
- Congestion only when accidents or snow.
- We desperately need to do something about the traffic on 36. I grew up here and am just sad about the current mess. I don't go to Denver just to avoid the traffic. Thanks, good luck
- I-25 Express could be used more often, IF, they were available in both directions, all the time.
- I am against toll lanes and car pool lanes. I want lanes that every driver can use as needed.
- I drive a Hybrid vehicle, with a HOV pass, which allows me to drive the current HOV lane. I hope this would still allow me to drive in the proposed "Managed" lanes for free, or at least a reduced rate.
- I really like the idea, I hope we can implement soon.
- if I had regular business further along the corridor I would absolutely use managed toll lanes for reliability.
- Please remember that congestion in the "reverse commute" direction (toward Boulder in the morning, toward Denver in the evening) often seems to be worse on 36 than congestion in the opposite direction. There is virtually always a backup from around Sheridan up to Broomfield, for no apparent reason except maybe that the road goes from 3 lanes to 2.
- If tolls are implemented, increases should be logical and scheduled. When paying to drive, speed limits should be revised and enforcement reduced.
- One additional lane for traffic will not make a difference. The amount of traffic is too great. In addition to the new lanes, you also need to add light rail. The other option, and best option, is to build another 4 lane highway from I25 to Boulder. It was irresponsible to let all this development along 36 take place without having a new highway to handle the growth.
- Fast Tracks Bus system is VITAL to congestion, travel time consistency and the environment. We must make more Bus Systems available and at the lowest price to increase use of the system. We also need a light rail or additional system running along I-25 North of Denver all the way up to 144th. In both directions of course. Instead of making overpass improvements that are small now, they should be made over time but should be made with a light rail system in mind. It may span 10 years, but the overpasses will not have to be redone yet again. Congestion on I-25 north of Denver is getting worse as well!!!!!!
- My use of toll lanes is determined by two factors: 1) speed/reliability of travel times; 2) avoiding spending time stopped in traffic. Toll amounts would only be a factor where the tolls are unreasonably high or if I were not traveling on business.
- A third lane on the "turnpike" is a MUST!! Recently, on the weekend, the road was at capacity. The incidences of "road rage" behavior - violent driving - are much too frequent. Adding a third lane will calm people down. That road has been maxed out for years and a third AND FOURTH lane is desperately needed. Why stop at three lanes when clearly a fourth would be beneficial! Go all the way and plan for the future. The best communities are those that plan for the future. The Boulder turnpike has been stuck in the dusty dark ages for far too long. Expand that freeway NOW!!
- If I worked daily in Boulder I would be more likely to take public transportation carpool or use fastback lanes or toll route.



- A train would be a far better long term solution and I'm not sure why no progress has been made while other communities like Golden are coming close to being online
- I'm sure these highway changes will create a mess with the road construction and would probably make my commute worse while under construction. Since I plan on retiring in 2 years and will not be doing this commute after that, I would prefer to not have my last couple of years at work made more stressful by road construction that typically takes forever.
- Toll roads cost way too much in Colorado. If the tolls were much more reasonable, more people would use them, instead those in charge keep raising the rates. In Pennsylvania, I can go for drive for 50 miles for about \$3. To go 35 miles here is \$9. I think a reasonable toll on my commute for 36 (I-76 to 287/Wadsworth) would be about 25. But even then, I would probably not use it much. Unless there is an emergency at home or work, I will not pay a toll to drive on 36.
- Survey crashed a numerous times (around 10) - very unprofessional. my biggest problem with public transport is the timing - it always requires a 2x the time compared to the normal travel time. And busses can't fly above traffic either, so you pay and are stuck in traffic anyways. And the cost is comparable to fuel costs + parking. Why would i waste 2x my time and not gain any monetary benefit? The only bus with benefit is the AB. That being said - i would support the train corridor between Boulder and the airport so long as it had the same departure schedule as the AB (every 20 min or so).
- I would prefer to pay taxes to a light rail rather than building another traffic lane. How many lanes will we be able to build to handle population growth and traffic congestion? A light rail is long overdue.
- Good Luck with this effort
- I am willing to pay as long as it does not impact my monthly expenses where i have to make a choice, i will not choose a toll over my other expenses. I agree changes have to be made, one suggestion, the short on ramps to 36 has to be the worst design i have seen in all the states i have lived in, they need to be longer because folks here in CO do not understand that you need to merge going the similar speed of the oncoming traffic.
- I take the bus when I'm working downtown and my company pays for that cost so I believe that should be taken into consideration for the survey. I don't think that additional lanes will solve the problems - those will just become congested as well. We need fast tracks
- It makes much sense to me on the Hwy 36 corridor to apply tolls to the use of the "managed" lane during commute hours where legitimate time savings are available, but during non-commute hours the tolls should be eliminated.
- Highways have improved dramatically for the better in the past 45 years. People (daily commuter use)who use express toll roads in relieving congestion should be given a discount that would appeal to the consumer as wages of the economy does not allow them to use in their budget for it is to high as a choice. Tolls can be more affordable to the public for choice. Volume for tolls should be very lucrative rather than a few.
- I believe that a gas tax would be very effective at reducing traffic, reducing greenhouse gas emissions from cars and encouraging mass transit. It would also be the simplest solution to implement.
- I do not factor in "climate change" when making my driving decisions. Our family income is now less than half of what it had been for the previous 5 years, and money is a key factor in most of my decisions. I feel adding a non-managed HOV lane (California-style) would benefit the US 36 corridor most, both in easing travel times and traffic congestion, and saving money. I have used the I-25 HOV/toll lanes (sometimes as an HOV, sometimes as a toll-paying customer), and feel that this is not the right answer for the US-36 corridor. I am disappointed to see that the surveys were not done before the decision was made to do the managed lanes.
- we use RTD bus to airport and love the service. we all have bus passes either from work or neighborhood.
- Stop wasting money trying to fix hi36. Build a rail-line from Denver to Boulder right up the heart of hi36.
- I fear this will turn out like the E470 project where once the road is built the toll price will be set ridiculously high. Also, I don't want to put up with years of road construction for a toll lane that no one will be able to afford once the project is complete.
- The right size for colorado roads are not planned very well. 10 years ago, Hwy 36 was congested. THEN the Hwy 36 corridor between I-25 West was greatly expanded with housing and condo and business construction. Aren't building plans for areas dependant on the access to that area? Perhaps in the future, contracts for large or even smaller developments could contribute a portion of the total construction costs to aide in HWY upgrades. Traveling in a carpool lane or other special access lane only helps if everyone isn't trying to travel that same lane. On Hwy 36 between Hwy 287 and Superior, currently the ruts in the road contribute to driving issues, it is difficult to maintain one lane because the ruts pull vehicles one way or the other. Adding rain or snow only makes the possibly of accidents increase. Hwy 36 could probably use two extra lanes in each direction with



one of those or two of those being toll lanes. Adding a train or lightrail system to move people longer distances would be a great idea if the access to other public transportation from the train were reasonable and convenient.

- I suggest that at various times/days/dates you make C-470 / northwest pkwy FREE !! SO many people would use it if it were at least cheaper or free or there was some more incentives available. It's gotten too expensive over the years and no longer is an attractive option to traffic.
- will there ever be an even more sensible solution such as a train to/from Denver/Boulder???
- Relieving congestion results in increased traffic and urban sprawl. Studies have shown that while this fixes the problem for a period of time, it never actually relieves the problem. I agree with encouraging carpools. I do not agree with enabling those that have more money (me) take advantage of the carpool lanes (tolls). If we are to invest in this city, it should not be carpools, but creation a transit system that actually meets the needs of the market, much as has been done in Washington DC and NYC and throughout Europe. These minor fixes as just that minor.
- I would use light rail if we had it; much preferred to a bus line.
- please do not do all of the construction it would take on 36 to simply put in a managed or toll lane. there is currently a HOV lane E and W on 36 and it sits vacant A LOT. There are hundreds and thousands of cars sitting in the right lanes while a few people zoom by on the left...and that doesnt even cost anything. The population in Broomfield, Superior, etc has boomed and there simply needs to be at least 1 more lane of traffic each direction all the way to Boulder. Also, if there was a toll lane on 36 it would have to be the 4th lane on the highway not the 3rd.
- I would use a rail line before I would use a bus route for this particular trip.
- Following are the options i am really interested in 1. improvements to US-36 to make my travel faster and predictable 2. public transport (rail or bus) that takes no more than 50% more time than my car travel
- The proposed tolls are completely out of line and the carbon footprint issue is something with which I completely disagree. If you'd like me to do more business in another state, go for this. But... then again, I assume that's \_exactly\_ what the developers and interpreters of this study would like. Do that enough, and at some point there \_will\_ be a problem in paying for the maintenance you need -- never mind the improvements. The economy is such that Gens X and Y cannot afford to contribute their "fare" share on this yet, so in interpreting the results, keep in mind that you'll be relying to an unreasonable degree on disagreeable old coots like me to fund your project, or not. You can't pay for everything by voter consent, especially when the voters don't have the funds to pony up for what they've approved.
- Building additional traffic lanes - managed or otherwise - does NOT relieve traffic congestion. There is 20 years of research data demonstrating that additional lanes do NOT relieve congestion - look at the entire state of California. This money should be used on public transportation options.
- Living where I do, I rarely use US 36 to get to/from Boulder. But my partner often has to go to CU for business. When she travels during rush hour, she uses US 36 and 470 to avoid traffic on the other routes; she would welcome Managed lanes to reduce US 36 congestion and improve travel times. Presumably, improved travel times would reduce pollution and carbon emissions as well, but improved travel times would be the primary reason for supporting managed lanes.
- I own a Toyota Prius and have an HOV exemption transponder that allows me to be in the HOV/Toll express lanes right now. If that exemption went away, I would either drive in the congested lanes if I needed the flexibility of using my car, or take the bus. Taking the express bus from Broomfield or Church Ranch to downtown Denver only takes 17 minutes. However, to get to DU, I have to take the light rail and then walk to my office. All together, it takes over 1 hour to travel one way to work. Going home takes longer due to wait and walking times.
- I think the HOT lanes with variable pricing based on time of day is the way to go - Little less talk, little more action. This has been under discussion for 20 years now.
- Toll roads are a step in the right direction but are not a solution - mass transit (i.e. light rail) is much better. More lanes doesn't reduce the number of cars on the road, it doesn't give people an incentive to carpool or take public transportation.
- I feel putting a light rail between boulder and denver would be the best
- My departure time for work is inflexible due to kids' needs. My preference is to carpool and pay minimal fees/tolls. I have been carpooling for 4 years with 1-4 coworkers on average, 4 days per week (1 day driving alone).
- I am very interested in CARPOOL lanes between Boulder and Denver. I am not at all interested in PAYING to use the carpool lane when there is more than one person in my car. I think the idea of allowing single drivers to use the managed lanes via a toll is fine, much like the current system on I-25. I do not support the idea of charging carpooling vehicles to use the lanes.



- More wasted money for another study. You never offered a toll for a fixed time period to pay for construction, nor a sunset provision. Another boondoggle similar to the useless mandatory vehicle emissions program.
- Widen US36 if you could and improve the way of entering I-25, this area is congested from Federal Blvd to the interchange.
- 1) For your survey I would recommend you explain what passengers means at the "Below are 3 different travel options for your trip with no passengers. These options include information on travel time, toll cost, and number of passengers." I am assuming that if you have 2 additional passengers, you are saying that with 2 passengers, the toll would be 4.20? Or, with two passengers there would be no toll?
- I paid to use the toll lane even before buying a Prius, but once I did, I received the exemption that allows me to use the HOV lanes. I would use the toll lanes regardless, however, for the time and aggravation they save me. I am a MUCH happier person when I can drive the HOV lanes.
- PLEASE ... make some effort to enforce existing laws ... specifically, keep slow vehicles out of the "passing" lane and keep these idiots off their cell phones. Use cops, cameras, spy satellites, paid informants or whatever but ENFORCE THESE LAWS and MAKE OFFENDERS PAY! Then you wouldn't need more lanes.
- I feel that I would use Light rail to go from 36 to downtown and vice versa a lot more than a bus as I have ridden a bus twice in the last 4 years.
- Would always use commuter lanes, but have received numerous speeding tickets in those lanes --- which seems to defeat purpose of even having those lanes available.
- Why don't you just buy the Northwest Pky and reduce the toll so more people will travel a few extra miles north to take it?
- License fees are already too high in Colorado! Thoughts of raising fees to accommodate a special interest (zipper lanes...skiers) are unreasonable. A Handicap Placard should allow free access to tolls. CDOT needs to do a better job of managing their existing funds and employees.
- If Express lane tolls are used along 36, there must be a way of either preventing freeriders (ie, segregated lanes like I-25) or enforcement. The current HOV lane at the end of 36 is heavily abused by solo drivers every day. They ignore that the toll lane entrance is not until right before the access ramp. Also, I am irritated with the police SPEED enforcement along the I-25 corridor. When there is no congestion, drivers in the regular lanes are going much faster than those in the toll lanes because there is no speeding enforcement on I-25, but very strict enforcement in the express toll lanes. This discourages me from using them.
- There should be more signs at each exit about how traffic is doing up ahead and what types of detours are available if its REALLLY bad. Usually if you're already on the hwy and its bad bad..you're too late.
- I appreciate the DOT's efforts to relieve traffic congestion. However, I frequently see lanes closed off with orange cones for many miles (esp. on I-25) when little or no work is being done. This causes unnecessary delays, congestion & stress. More judicious use of lane closures would be v helpful.
- My trips using the 36 corridor are either for business reasons or to attend concerts in Denver and surrounds. I generally have no flexibility with respect to the times I must travel.
- Building more lanes will cause even more congestion during the construction period--NOT worth it!!
- Thank You!
- The extra lane would be very welcome. Hopefully it is not a toll lane or the toll is \$1 or less. The E-470 tolls are getting ridiculous with the constant toll increases. I also think the short merge lanes from the on-ramps also contribute to the slow and congested traffic on highway 36.
- Light Rail! Not another traffic lane!
- Do NOT limit Entrance/Exit from Regular lanes to Managed lanes (and vice-versa) - it should be allowed anywhere along the path of travel. Prohibiting entrance/exit to Managed lanes may result in getting stuck behind another in the Managed lane going sl  
Toll roads/lanes are convenient but if the tolls are expensive (over \$1/trip) then they become prohibitive to use on a regular basis. I support the addition of a toll lane with a low fare. However, my preference would be to ride on a fast track train instead of to drive or to take a bus.
- E-470 to DIA from Boulder is wonderful - makes the trip time very predictable and stress free. Paying a toll is a small price. Can 36 ever be that way? Probably not? If I added "toll" or "express" lanes to 36, they would be fixed speed lanes - the vehicle must travel at the post speed or face a fine (equally onerous for under speed as over speed.) The problem with 36 (and many



highways) it only takes one vehicle (car or truck) going below the speed limit to cause congestions. Now with that said, there are choke points with traffic entering the highway, but those could be fixed ... the "toll" for 36 should be based on your time going from one entrance to an exit. Get there too soon, ticket, too slow, ticket (adjusted for the current speed.) (Or "speed cameras" to capture speeders and slow pokes every 1/4 mile.) Only takes on car traveling 40 miles to ruin the commute for the rush.

- I only go into Denver for hair cuts or shopping or to the museums or Botanic Gardens so sometimes it's a solo trip or with one other person. I use toll road to avoid traffic congestion during rush hours but otherwise use regular highway
- What I would really like to see along the corridor is #1-Light Rail and #2-Bicycle Lanes. With good bike lanes to light rail, I would be much more inclined to change my travel habits to more environmentally friendly travel.
- Regarding the question for entry/exit to US 36, the web page would not allow input to use the same exit for both entry & exit.
- Why is light rail NOT a option? I would not be a end user of public transportation because I have an unpredictable schedule and use my vehicle during the day to reach projects, however I believe people need options that do work a normal day especially the Boulder to Denver commuters
- I think the best option for future development would be to have 3 traffic lanes with a 4th toll/carpool lane
- I travel from McCaslin into Denver every weekday and have an eco-pass and also regularly use Skyride (to the airport but not home). I also use Route 0 and the commuter bikes in Denver for dr. appts. I have been very impressed with the current RTD service.
- My only concern is the overall cost of tolls. The current prices on our toll roads now are very cost prohibitive. Why in many other large cities these tolls are considerably cheaper. I travel extensively on the east cost and I have always wondered why they can reduce the cost. I would use the toll much more often if it was more economical.
- Fast Tracks. I would love to see light rail along the corridor. Boulder has such great public transportation that a light rail would compliment and would relieve a lot of traffic coming into and within Boulder
- I found the questions about the managed lanes confusing...I am willing to carpool (I do on a regular basis), but the instructions said to consider the trip I told you about, which included a passenger. Thus, I was already carpooling, but I think I may have selected options of not carpooling because I thought that meant passengers additional to the one I already mentioned...just a thought.
- I favor the managed lanes if CDOT can project reduced congestion for all highway users. It seems fair that those who can afford to pay should if there is also benefit for those who cannot. Something has been to do about Highway 36 and in this era of tight budgets the managed lane solution seems like a good way to fund improvements.
- I like taking the toll roads because it is a faster trip and allows me time to take my kids to school and get to work on time, However, at the current toll rates I pay almost \$6.00 on way and I will no longer be able to take them as it is costing me at least \$100 a month which is too much for me at this time.
- I think that this is a great idea. The drive in and out of Boulder is almost always congested, and I think that this would help reduce it significantly.
- Put in light rail. Connect the front range and the mountains. Let move into the 21st century. The toll road on I 470 has been terrible.
- Time is valuable to me (I am a CFO) and cost of a \$2-5 toll in order to save 5-10 minutes is a preferred option. Those who can afford tolls to drive solo in HOV lanes have higher time value than others so such options are good. I would never carpool or take public transportation given my job and socio-economic level. Additionally, bus travel takes roughly double the time, door to door, hence why I never consider it. For Hwy36 planning, creating additional HOV/Toll ("managed") lane(s) seem intuitively helpful to me. My usual commute is Louisville to Golden, I only occasionally have to go downtown, and ALWAYS pay the HOV Toll lane to avoid the 36/25 congestion.
- Concern that road work for this project could cause years of disruption during the build period.
- Not carpooling has more to do with that I am the chauffeur for my household getting them to and from activities. My schedule is not dictated by my needs alone and I have to have flexibility in meeting the demands of my family.
- 10.00 toll is too high, I would use alternate route.
- I do not depend on radio during my commute because they haven't figured out yet that people commute from the north. Fast Lanes hasn't figured out that there is a huge need for traffic assistance coming from the Boulder, Superior, Broomfield area.  
WAKE UP DOT.



- The traffic going east on I36 towards denver in the morning is usually not bad. So I would only pay the tolls if they were reasonable. Every once in awhile there is an accident (like this am) and I would definitely sue the toll lane in this case. I36 going west towards Boulder is usually horribel in the moring so you would probably get more people wanting the tolls going this way.
- Your survey doesn't actually allow me to enter the correct amount of tolls I pay - which is \$13 one way.
- Good Luck! I'd love to see some relief on the turnpike.
- I would be more likely to use alternative transport in the form of bike lanes or light rail. Buses get stuck in the same traffic I do and don't feel as predictable as a train.
- I wouldn't mind paying the tolls for a amount of time to help pay for lane expantion. But I dont think that it's rite that only the people who can afford to pay the toll will get to work on time
- I wish for the light rail to connect more of the metro area, including Boulder - Up to Ft. Collins / Greeley and all the way down to Co. Springs.
- We always use the toll road from Boulder to DIA. The toll on US 36 should have stayed on and paid for additional lanes and improvements.
- If there were a toll assessed for the Managed Lane on US 36, it would be nice if the tolls to use I-25 were lowered. This way I would probably use the Managed Lane. I would not want to spend anymore than I presently am to drive to work.
- Make income question optional.
- Instead of making us pay to use an extra lane, why don't you just open up a new lane in each direction for free and repair the crappy road conditions that are currently plaguing traffic. Also, if you would sink that money into light rail service, I think you would get a much better response. I know I would pay a good amount of money to use the lightrail if it meant that I didn't have to sit in that damn traffic everyday.
- I am more supportive and interested in light rail (train) options. Rail in and out of the airport into Denver and extending current light rail are what I would most support.
- I think carpooling should be encouraged via free travel. Single users should pay top dollar for the advantage of speedier travel.
- Lite rail!!!!!! Frequent buses
- Bus would be a fine option if it went up Foothills pkwy and had appropriate stops. Nothing comes close enough to my work.
- The current tolls on the route from 36 to i-25 in the AM are too high. You go a few miles and pay like \$3.50. That's a ridiculous price for that short of a trip. If it cost about \$0.50 I would take it everyday. Right now I only use it if I HAVE to be to work at a certain time. And even then, its frustrating how you get dumped downtown and you sit in more traffic.
- I've always felt a light rail system on the 36 corridor would be the best way to manage current traffic congestion. It would help reduce DUIs for sporting events and casual diners having a glass of wine during their meal. The existing Park & Ride locations could be used as light rail stations. It would also help encourage commerce between communities. I frequently attend Colorado Avalanche games. It would be great to have a couple beers and be able to take the train home.
- I think it's a really good idea to charge different tolls depending on the time of day. For exp. I was on the toll road to the airport at around 10:00a.m. on a weekday, and nobody else was on it, however, if the toll were lowered at that time of day, I bet more people would use it...I also don't take the toll road back from airport at night because why pay the \$6 if I'm only saving 5-10 minutes. However, if it were \$2, then there is really nothing to lose...
- Tolls are too high, share this with 2 passenger vehicles. Free and unreasonable are too disparate
- Taxes pay for public roads for all to use. Tolls are way to high!. More would use 470 and Northwest to reduce traffic if tolls were reasonable. I only use Parkway when I need to get to and from Boulder swiftly or to the Airport. Tolls are extremely high.
- We need another lane on 36, but why does it have to be a toll road? Eventually toll roads become privatized and the tolls become increasingly too high. What are the point of taxes to pay for the road if we just have to pay again to drive on them?
- Please do not let the tolls go up above 5.00, if so I will not use the express lanes
- I also strongly believe Denver to Boulder direction improvments could be made to the 36 corridor that would improve typical congestion hotspots that would not require an additional lane (managed or otherwise) for the entire length of the span. Rather, improving the off ramp access (e.g. extra lanes on 36 preceding offramps) at these congestion hotspots. Specifically Shreridan and Chruuch Ranch.



- I don't mind paying the toll fees, if the plan is to PAYOFF the highway AND remove the toll like they did back in the 60's/70's with US 36. This is why 470 isn't used much, plus the fees keep going up.
- I don't commute, I drive from my home during the day for my job. So for me, managed toll lanes are a good option.
- The quality of 36 in parts is absolutely UNACCEPTABLE. It is a disgrace to the state to have road quality and safety come second to "being green" I would gladly pay a toll if I could drive in a lane that wasn't destroyed, didn't violently pull my car in either direction, and was reasonably quiet
- CCOT should find try to Federal funds or levy a state gas tax for this project and minimize the out of pocket cost to commuters. Tolls don't work well in CO!
- I do not use the Northwest Parkway as often because the price has gone up too much. It has become a Lexus lane instead of a reasonably priced alternative to back roads. For any toll lane the price has to be in line. Instead of raising rates (which lowers the number of vehicles), a toll road must balance rates and the number of vehicles using the road. A road cannot continue to milk a limited number of users, especially when costs like snow removal are mostly independent of the number of users.
- Make 36 like E470... excellent road, well cared for, and yes, it's a toll road. I've been here since 1977 and we STILL can't figure out the mess that is Rt 36!!!!
- I go lot many places in Denver, but infrequently. Some are reasonable by RTD (DIA, downtown Denver, but others are not as accessible or convenient
- Would love to see more light-rail options up and down the major highways (I-25, US 85, US36, I70, I225...) So more people can take that option. I don't like the motion of a bus, but do like the light rail system. It provides a smooth and comfortable ride.
- I think the Global Warming Crap needs taken out of this survey. It has no bearing on the topic.
- Why not light rail all the way to Denver? NO Parking No waiting for buses in bad weather.
- Could the HOV PLEASE be opened to southbound traffic wanting to get to the Bronco Games on Sundays? Now it is opened northbound, and people living south of the stadium already have access to the lightrail, busses and the HOV. It would also eliminate single and double busses on I-25 southbound during Bronco traffic. Please! And what about a lane with a sign stating that there is a home game at Invesco, and Bronco traffic will be using the far two right lanes. Millions of people all scoot far over to the right hand lanes when there is traffic, never even realizing that that is where everyone else is trying to move into. Do you know there is not even one sign for Invesco on Southbound I-25? None. Other cities have stadium exit signs, but none in Denver. It would help avoid a lot of the accidents.
- The disincentive for taking the bus is the length of the walk from the bus stop to my office. It adds a good 15 minutes onto my commute each day. Also, with school-aged children, the infrequency of the buses back to Boulder during the day are a problem; if one of my children gets sick and needs to be picked up early, I have had to wait in excess of 40 minutes for a bus.
- I find most of the problem on normal days to be with I-25. But if there is one accident on I-36, the whole freeway gets backed up and getting to work is difficult. Adding the managed lanes would help in these cases and during days of bad weather.
- I strongly favor adding another lane to Highway 36 regardless of whether it is toll or not.
- I like to use the HOV lanes on north I-25 when possible and am willing to pay tolls to use the Northwest Parkway as it saves CONSIDERABLE time traveling to DIA. I would pay tolls on US-36 if it releived congestion and/or saved considerable time. Many questions in the survey indicated less than 10 minutes. This is not enough time savings to promote paying a toll for me.
- Why Waste the money on a proposed motor vehicle lane when you could put in a light rail/rail system? The only serious issues with US 36 at the moment are the construction at Federal and the 1st Bank center- which seriously slows traffic and idiots trying to drive too fast and weaving in and out of traffic. If everyone would maintain a LOWER, steadier speed, rather than trying to drive REALLY fast and then slamming on their brakes - you would have better traffic flow, fewer accidents (which would again, improve traffic flow), and way less stress. I know - it's not your job to teach idiots how to drive.
- why is there no option for new train or improved bus transportation that is more frequent and reliable? for commuting and for attracting visitors to our community, ease of travel with bus or train would do wonders.
- Lite-Rail is another viable option that should be pursued.
- Would rather see light rail that connects to Denver from Boulder along Hwy 36
- I use the NW Parkway when I want to get to DIA or the Frederick/Ft. Collins area quickly. I will be using it less now that it has gone up to \$3 per site, as a trip to DIA and back now costs nearly \$20. I'd rather save my \$20 for gas.



- Add light rail as well as managed lanes. DO SOMETHING YOU STUPID ASSES!!!! I've lived here 30 years and you have known about this increasing problem. I remember 36 being a toll road. Get off your butts, get done with you surveys and DO SOMETHING ABOUT IT!!!!!!!
- I commute every day from Bldr to Denver. Biggest challenge in using public transportation to S. Broadway is the downtown transition to light rail and price. 36 is a mess though, during fall the sun glare slows eastbound down quite a bit in the am. I am willing to pay for usage of a fast lane, but it should not be 2 or \$3, it should be .50. So many will use it that the overall impact will be small but will still be helpful and likely help avoid many of the small slinky type of accidents (minor) from folks bumping each other.
- I have a hybrid vehicle and the HOV exemption sticker which lets me travel for free on I-25, US 36 & Santa Fe. This affected some of my answers. I think it's funny tolls may come back - I still call it the Boulder "Turnpike"
- I travel 1x/week to visit my Dad in an assisted living home and I usually take him places such as restaurants, shops, Dr. appts.
- You only had 1 question about public transportation, which I answered as unlikely to use because I understood it to mean that I could only get to a park & ride from my house in Denver via bus. If there was an option that allowed me to get door-to-door from my home in central Denver to my office in Louisville (at Colorado Tech Center off of Dillon Rd between 287 and 96th) with a max 20% increase in commute time I would strongly consider that, because I would be able to utilize my commute time productively. My average 1 way commute is 45 minutes, if I could get door-to-door TO MY OFFICE in 55 minutes I would do it. RUN MORE BUSES TO MORE PLACES. If buses were everywhere, very quick pick up times and lots of options area wide, more people would use than just people who can't afford a car. Thanks.
- We need for light rail
- I love the easy pass and enjoy traveling from Boulder to DIA on the toll road. I love that there is no construction or traffic and that people behave on these roads. And its affordable. I am glad to pay the fee to use these roads. There seems to be no patrol on 36 from Boulder to Denver that addresses speeders, people who drive slow in the fast lane even though the signs say stay right unless you're passing, and aggressive/dangerous drivers. The roads on 36 are in exceptionally poor shape with lots of grooves and ruts making it a dangerous drive. The lines in the road are barely visible, making driving at night or in rainy/snowy weather very dangerous. Just a bad drive all the way around.
- i would strongly support a HOV/toll lane but the tolls should only be charged to single passenger cars not carpools to encourage carpooling
- I support managed/tolled lanes as part of an overall solution to congestion that primarily should include widening and improving roads in general, not just adding managed lanes. Infrastructure should be the state's primary focus. Entitlement spending should be severely cut or completely eliminated, and that money redirected to infrastructure. The state collects plenty of tax dollars to accommodate road improvements. The money just needs to be allocated appropriately.
- The tolls on C470 are too high for personal travel. It's not fair that south west c470 is toll free and north and east have toll. Tolls are not fair to low income taxes based on the value of your auto are more fair. Mass transit is good. Most mass transit planning is political. It doesn't provide transportation to where people want to go. It goes where politicians want it to go. They also don't provide enough parking. If you have to take three forms of mass transit to get to where you are going it's not usable, because you loose too much time waiting for each leg of the trip. C470 is too political and there is too much waste by c470 management and too high of salaries.
- I balance my time needs versus paying a toll. I enjoy the option and find it very beneficial. I am happy to pay a user fee and carpool when I can to reduce the toll.
- Should be DEEPER DISCOUNTS for frequent TOLL ROAD users. I use them every single day, and it really cuts into my job-profits! PLEASE HELP! Thank you!
- I like the HOV exempt program for high efficiency vehicles.
- Please patrol the HOV lanes on a more consistent basis. I do use the HOV lanes (and pay for it) and every day see many cars using it for free - ie not going through the toll lane, etc. Please!! Frustrating when I pay....
- Never required household income figures
- I don't believe that an extra lane (toll or otherwise) will solve the problem. most of the Traffic issues are caused by bottle necks and adding an extra lane just gives commuters another lane to wait in. The cost involved with construction and tolls does not seem to balance out with the benefit. Look at I-25 it has an expressway/toll yet the highway is still packed with traffic, has it helped? for those who take the bus and carpool, yes... but what is the ratio of people who actually use it vs those who don't. and is that ratio worth the cost??



- I'd rather see a light-rail link between Boulder and Denver, I think this would get LOTS of support in Boulder and I'd rather take a train than a bus!
- If there were reliable express bus service to the Pepsi Center for Avalanche/Nugget/Mammoth games or the Theatre Complex, we would DEFINITELY use that as an alternate transportation choice. They have them for Broncos/Rockies games. We have transponders on both of our personal vehicles and on my husband's work vehicle and use them as needed to avoid heavy congestion areas between I-25, I-36 and home.
- \$10 is outrageous.
- I appreciate my bus pass provided by my employer. There is no park and ride in lower downtown. Going downtown takes me in the wrong direction. I prefer the express bus and the locals don't run frequently enough to make connections in the evening. I prefer a rail option. Light rail on 36 would have been the best option.
- Light-rail service that could get me from my home to my office would be the only public transportation option that I would consider. I've used bus service in the past and find it somewhat unreliable, particularly in winter weather. I have childcare constraints that inhibit my flexibility with when I go to work and get off work.
- I have a hybrid so my tolls are minimal. Also my work is field work and requires the use of my car all day. Carpool is therefore not an option.
- I'm really glad to see that a comprehensive plan is being considered to manage this traffic corridor, and I would welcome one that includes both a managed lane as well as light rail options with good public transport connections at the stations; having options is always good! I appreciate the chance to provide feedback.
- The current toll road fees are slowly becoming too expensive to justify the savings in travel time, especially in round trips from Boulder to DIA.
- Something needs to be done to address congestion in this area. Travel times are currently very unpredictable.
- Why not build one middle lane and have it switch directions based on traffic flow?
- I would much rather see rail in the US36 corridor that connects to existing rail lines - the current rail configuration in the Metro area is unusable for those of us up north. I am unable to use any kind of public transportation at this time because nothing goes from the US 36 corridor to the Denver Tech center area in any kind of timely fashion.
- The public transit system is not user friendly (i.e. not a direct route from home to work; must make transfers within route). Not all people work 8 am to 5 pm. Carpooling is more in line for those with 'regular' work hours among the group carpooling. Tired of paying to use 'our' roadways. We already pay through fuel taxes, license fees, use tax fees, etc. Our pockets are running the same course as the government's...in the red.
- Thanks for asking for input!
- Light Rail seems like a much better option than adding additional lanes. We need better solutions than just expanding highways.
- When I consider the toll cost versus the mileage of toll road for the price, I think the tolls are entirely very high. I believe this is a direct cause why the toll lane/road options are so incredibly under utilized. Bring these toll rates down by AT LEAST 60%, and I think responsible citizens will happily pay and therefore reduce congestion on our main travel arteries. In the meantime I am very disappointed in what is NOT happening with getting the light rail established into Boulder County. The voters approved, but it seems the various agencies can't deliver as promised. This outcome does challenge my faith in the long-term transportation planners who lead these efforts.
- Glad you're considering this. Tolls are a smart way to pay for road improvements. Those that want to pay the tax can, those that don't needn't.
- Toll roads are already ridiculous in Denver area.
- I think you should add light rail to the middle of 36.
- 36 Needs a 3rd lane both directions from Boulder all the way to Sheridan. No Tolls or carpool lanes.
- I support a toll lane that is free for 2 or more in the vehicle like on I-25. I like the I-25 toll lane system.
- Tolls need to be less than \$1.50. I avoid E470 and especially the Northwest Parkway whenever possible because the tolls have become outrageously high for the time and distance traveled.



- At this time, I avoid hwy 36 b/t Boulder and Denver whenever I can. This is mostly due to not going to downtown Denver. The second reason is the scenic alt routes. I wish E-470 was not a toll, more people would take it, alleviating other roads. Good Luck Folks!
- Given I travel along 36 at least 10 times a week, the toll would have to be VERY cheap for me to choose to pay it, however I might choose that option occasionally if I am in a rush to get home or to work. I would not likely use it every day.
- I work late night hours and buses are usually not an option on the current schedule. would prefer light-rail and Fast-tracks plan that we approved.
- It is always worth the price to use the tollways when there is bad weather. Also having the option of managed lanes that you can use and exit from would be nice. Currently, a driver cannot use the express lane on eastbound 36 unless you're heading into Denver. I would pay to use the lane and then exit the express lane to continue on to the I-270/I-76 area. I typically commute opposite the rush hour traffic of Hwy 36. In the mornings I will take E470/NWPKY from Brighton to my son's school, then Hwy 36 to work in Henderson. In the evenings, I'll use Hwy 36 to return to Louisville and then Hwy 7 home to avoid Hwy 36 traffic. I WOULD USE THE CARPOOL MANAGED LANES in the evenings if I wasn't forced onto I-25 south.
- for me it is all about the time to and from work, but mainly from work to home as i have to be at daycare by a specific time. i currently drive a hybrid and so get my tolls for free right now. i do care about emissions but more about time.
- If you want more people to use the HOV lanes get the police to quit using the lanes to pick off drivers for the purpose of ticketing them. The "regular" lanes of I-25 will have cars ripping along w/out a cop in sight but the cops sit in the HOV lanes ticketing drivers who are going slower than those on I-25. Ridiculous!!! You are a sitting duck in the HOV lane and you pay for the right to be targeted!!!!
- Global warming and climate change are a hoax. I would not pay a dime to save the environment based upon junk science
- Although i like the idea of more lanes i would much more PREFER and USE a train option. If the RTD rail project is ever in place, that would be my travel method of choice...ALWAYS
- I rarely use the Express Lanes on I-25 during peak times due to the higher toll rate. Almost dropped my Express Toll transponder when the fees increased at the NW Parkway from 50 to 80 cents.
- I'm in sales and spend A LOT of time traveling regularly around Denver metro. The primary issue for me is reliability in travel times. I'm willing to pay any amount of \$\$\$ to insure consistent travel times that I can plan around. Under no conditions would I sacrifice larger and/or random travel times for less toll costs.
- It is unclear whether one lane addition will affect the traffic flow problems that are on US 36. However, I would still rather drive at times to avoid the traffic than pay a toll.
- Do not agree with paying tolls, I use them because it is the most direct route. Cost of tolls in Colorado are extremely high and over priced.
- keeping toll prices reasonable is most important
- The problem is traffic enforcement. Ticket tailgaters and left lanes hogs. If I wanted to pay tolls every time I got behind the wheel I'd move to freakin Chicago. Tolls on E470 are ridiculously high but I pay them because it is the only viable option to get to DIA. I will not pay a toll to travel 36 under any circumstance. Stop limited use of the roads!
- For my commute, congestion on US 36 is nothing compared to what the congestion is like along 270. 270, in my opinion is one of the worst roads around - not just the congestion, but the wear and tear on a vehicle on that road is very bad and is costly
- I used to take the RTD bus from Boulder to DIA, but the fares have gotten so expensive, and now I cannot park in the Park and Ride for free, so I feel I have been forced to drive my private vehicle. It is simply too expensive to take the bus to DIA for work (I am a pilot).
- I would rather carpool than pay the proposed \$10 in the scenarios provided. The tolls should be within an amount that is beneficial to time being saved in travel. Creating a more frequent bus service would be a great help.
- The survey ignores light rail which should be funded ahead of highway expansion!!!!
- Thanks for doing this survey, but it is really remiss not to ask about the proposed light rail from Denver to Boulder to Longmont. This is my preference by far and I would eagerly use it to go to Denver. I sincerely don't want a privatized toll lane if that is what the plan is. Go rail!
- Current tolls on I-25 express lanes and E-470/NW Pkway are too high for short distances covered. US36 managed lanes should offer toll exemption for PZEV-designated or better vehicles.



- my job is flexible but unpredictable--otherwise I would be more likely to use public transportation or carpool. I choose to start my commute earlier (6:45) or later (8:40) to avoid traffic and idling. If I am going to pay a toll, I want to save a significant amount of time (10 minutes or more, or 25% or more of travel time)
- The morning commute is normally congestion free. The evening commute has some slow down but is generally minor.
- Add more unrestricted lanes.
- I drive a lot from client to client and use E-470 and NWP to avoid traffic and get to my appointments faster quite a bit. I know a lot of routes to circumvent traffic at rush hour and would welcome faster and easier ways to get to my clients on time. Thank you.
- I would love to take the bus more often and don't mind paying but it takes way too much time on most of my journeys--I have explored this several times and unless it's point-to-point (near my office to 16th Street) it becomes an epic adventure I don't have time for.
- They need to widen the road, and make a carpool lane longer and more user friendly for all exits. The road is very poorly managed!!!!
- More people would use the toll roads if they didn't cost so much. I would spend \$2 per day for round trip but I will not pay \$20 per day for round trip. Seems the more volume the more dollars collected.
- I would take public transportation if the door-to-door travel time was equal to or faster than it would take to drive there in traffic; regardless of cost. I would take the bus if it was considerably cheaper than driving if it increased the time by 25%. Additionally, since I don't live in Boulder, my I-36 route doesn't take me home. After my trip from Denver to Boulder, I still need to commute home from Boulder to Longmont. Currently, my car is the most economical and flexible option.
- I live in a sorority house so my answers at the end were little bit skewed with how many people live in my house, cars, and income
- live/work in Boulder. If I worked in Denver I would like the 10 minute bus option with an ecopass, not \$4.00 each way.
- I would take the bus more if the bus schedule mapped better onto airline schedules, or if there were an easier way to get around downtown Denver from the bus station.
- Thanks for putting together the survey and sending it out.
- A public transportation option would be much more desirable if it were a rail system rather than a road based system.
- I am not sure what "Managed" means, but unlike I-25 where you only have the 1 entrance /exit point, 36 needs to have multiple. The current entrance is good, one farther back would be good too. I understand this would make the toll process harder.
- Have the toll lane be free for non-rush hour and toll only when headed into Denver in the am and out of Denver in the pm.
- Just fix the current road. This road is very dangerous! It has holes and rolls and is in very bad shape. I would take another route if I could until it gets fixed. This is one of the worst roads that I have to drive.
- rail is the way to go along this corridor.
- The only real congestion is when one arrives on I-25. 36 is usually ok except when there is construction.
- I personally feel that the grade (steep hills) of 36 in two areas contributes to the sometimes slow down, and accidents. As an engineer, it seems to me that "flattening" of these two areas would have the most long term positive impact. And would be far cheaper than trying to add lanes to the entire length. I can see where single managed lanes are actually worse than the current conditions due to this grade. So we will see if alternate proposals such as this gain any merit. They did this on highway 287, (in the widening project) and it has helped a lot. My proposal would be two step. Flatten the grades and also widen (the uphill grades) just those areas. Evaluate. Then extend and toll if still required.
- I have been extremely impressed by the bus system since moving to Colorado from London last year. I am pleased that I can commute by bus regularly and, even more so, that almost every bus I take is nearly full--indicating a shared appreciation for public transport here. I think it would be great to have a sort of pay-as-you-go plan, whereby one could purchase an RTD card and regularly put credit on it online, and then scan the card at the beginning/end of each journey (depending on travel time). This would be very handy for people like me who have to drive to work once a week and, therefore, would not fully benefit from a \$164 monthly card. In addition, it eliminates paper waste that can occur with ten pack tickets/transfers. For senior citizens/others who get reduced fares, they would need to apply for their card in person and have a picture on the card to verify identity. This is something we had in London and it was really great. Just a thought, though!
- Allow Hybrids to drive Free...



- I think that Managed Lanes should cost less during heavy traffic hours to encourage commuters to use it. If I were a commuter, I would feel penalized by the higher cost of the managed lanes.
- While I think tolls MAY be a fair way to subsidize road projects, I'd like to better understand that tax dollars/appropriations also contribute. At some point, budgets were set based on taxes and appropriations and it seems like we're more than double dipping.
- i make this drive everyday. tolls add up quickly and i cannot afford to pay hefty fees everyday. in my opinion, take the h.o.v. out of the eastbound 36 corridor and make it 3 lanes. most of the people using this h.o.v. lane are traveling solo anyways. i see this everyday with my own eyes.
- I would be more willing to take RTD if there were an option to get to and from the bus stop. It is too far from the bus stop to my job.
- I love the toll road, as I take the express bus 4 times a week. On those days I must drive because I'm staying in Denver til 9 and far from a bus lane, I love the toll lanes because people there drive more slowly (!) because sometimes a sheriff's vehicle is there to enforce the 55 mph speed
- I would like to see additional lanes available to drivers without any fees/tolls.
- I often ride my bike to work (yes, I'm not joking) and would really love to see more bike lanes or a well maintained bike path between Denver and boulder. I would ABSOLUTELY pay a toll for riding it on it also!
- Just do it!
- Your survey is invalid because it completely focuses on expanding 36 and not on alternate rail lines. Please drop your mission to complete 470 to Golden. People don't want to drive in circles around Denver, they need to get from Boulder to Golden. Fix up highway 93, no more private toll roads that don't relieve congestion because they are priced too high.
- Would prefer to take light rail if it would connect from the US 36 Corridor to the DTC.
- Light Rail to DIA from this corridor!
- There should be LIGHTRAIL from Denver to Boulder. This would be the most appealing option for me.
- The current HOV lane does not shorten the drive time from Louisville to DTC. If there were better options for public transit; i.e. light rail, from Boulder, it would be worth taking. As the current light rail from Downtown to DTC takes about 1 hour, it is not a viable option either.
- I like the idea of tolls but not if they exceed my ability to pay every day. Ideally, it would cost me no more than \$1.50 each way during peak times.
- I rarely use the toll lane, maybe once a month, and I only use the toll lane when there is sit still traffic and I am running a little late. Otherwise I would take an alternate route. I am unable to carpool or use public transportation because I need to be able to drop off and pick up my children in a timely manner and then get to work.
- Endless expansion of highways to accommodate endlessly increasing volumes of traffic is no answer. Jobs should be created through the completion of the light rail and commuter rail system. The south end of the metro area has benefited from the buildout of light rail and it's unfair that residents of the north metro area are considered to be second class in that regard. The mentality of Jon Caldera has kept this region backwards in terms of transportation for far too long.
- If tolls are to be used, I would like to suggest the non peak hours be a lesser amount as many retired seniors travel while others are at work. However, they may avoid the toll all together due to their lower income status.
- Don't know that I'm representative of most commuters, but I do use Denver metro highways regularly.
- If you can build extra lanes on 36 why should commuters have to pay tolls? I think you should just build them and that will help ease some congestion. I try to carpool twice a week, but it is logistically difficult. I find it expensive to live and work here and having to pay a toll to go to work would increase my frustration.
- I would prefer light rail to buses. Buses to the airport are unreliable because they can be full before your pickup. Bus seats are uncomfortable for tall people, not enough leg room for a 30 min trip to LODO
- I would like to be able to tune-in a local radio station that gives constant/continuous traffic conditions throughout the Denver metro area during rush hours. No such information is available on the radio now, to my knowledge.
- What happened to the light rail that was supposed to go along the US 36 corridor???
- I would gladly take the bus to/fro work but the times are not feasible - the last bus to Denver leaves so early and the last bus from Denver leaves too early. If there was a 7.30 or 7.45 bus there and a 5.15 or 5.30pm bus back, I'd take it all the time!



- How about some decent rail lines around here?
- Why should we pay tolls for your bad planning!
- I would take rtd if it was less expensive like in other cities
- Willing to support tolls if they ultimately go down and then away away, instead of up and up forever. I avoid tollways like E-470 because of the ridiculous fees after so long, even though it is a superior route in many cases... it is under utilized in my opinion due to the toll amounts and increases. We are taxed enough already
- US 36 has decent traffic conditions and a good bus system, further money to improve these is not the best economical solution. A lightrail system will add a 3rd means of transport for a completely different user and will help relieve congestion. I would prefer to see funds to support a lightrail system versus more traffic lanes
- CO2 is not a pollutant, regardless of the politically correct decision made by the EPA. This AGW stuff by you government types is fraud, and you better cut it out.
- My most recent trip to Denver on US 36 was not representative of my normals travels on US 36. I was attending a meeting that I couldn't have others drive with me and it was in the middle of the day that meant going by bus wasn't going to save me time or stress for the trip. I am opposed to adding additional traffic lanes on US 36. Adding light rail has been talked about for probably 30 years. Way back when RTD took over the Denver Boulder bus lines light rail was looked at because the bus traffic was so successful. By adding additional lanes of traffic will just be a short term fix. I would be much more in favor of putting tolls back on the road (as US 36 was originally a toll road) and using that money to fund light rail.
- 1. I will actively oppose any plan that highlights carbon reduction as the \_primary\_ purpose. The effect of such a change on US36 would have a minuscule contribution to global carbon reduction. 2. Tolls must be reasonable (<\$5 end to end), or the "E-470 Effect" will occur. E-470 was a huge waste of resources for the amount of use it receives at present. (If you want to debate carbon reduction, don't do E-470 projects!) 3. Carpooling is not an option for me due to a flexible work schedule requirement. 4. I would use the buses if outlined and there was enough capacity during rush hours. I currently do not use the buses due to an increase in my commute time from ~40min to over 90min per trip. Several times I have had to stand through the entire trip in violation of Federal capacity standards or been refused boarding due to over crowding. 5. Increasing the availability of bike lockers at non-transit center locations would help with a bus commute. B-cycle type systems would also be a possible alternative if available in Boulder. 6. Buses to Boulder need to stay on the EAST side of town, not go to the Boulder Transit Center downtown. Getting from the downtown center to the east side of town is slow. The buses serving this area from Denver take too many stops along the way and require too much time for commuting.
- I carpool with one other passenger (through DRCOG RideArrangers) once or twice a week -- I would love to see the managed lane have reasonable fees for a 2 person carpool. I would also love to see bus rapid transit on 36! Once the transit village is built in Boulder, it will be close enough to my office that I won't have to transfer to another bus, and I will be much more likely to take the bus.
- If I could take a bus to work from Broomfield to Gunbarrel in less than an hour I would love to do it, but the closest buses to 144th and Sheridan are either midway or 287 (both at least 2 miles away). Even if I were to catch those buses, the buses to Gunbarrel require multiple transfers which makes the trip an hour and half each way - that is just too long for reasonable public transportation.
- I only use the toll roads in urgent situations. The tolls are TOO HIGH! Up to \$0.75 each way from downtown to boulder is reasonable.
- I have been devoted Express Bus commuter until I had my baby. Because of the daycare arrangements on the way to work I (unfortunately) have to drive my car now. So, I am driving alone to work not from my choice but need.
- My concern is that this corridor might have multiple toll collection/transponder sites like E-470, where you travel through 3 sites that charge you before you get to the airport from Hwy 287. This is outrageous & greatly reduces the number of cars that utilize the road. Who can afford that? It should be a flat fee no matter where you enter the toll area.
- do it soon
- bus only works if it is convenient
- If you make tolls affordable, or bus rates affordable, more people would be willing to take them instead of sitting in traffic.
- Build more HOV/ toll roads!
- I live in Longmont and most days ride the RTD Longmont Express but to Denver, but 2-3 times per month I drive to work. I take Hwy 287 to US 36 because it gets me to work faster than if I take I-25 south to Denver from Longmont. The traffic on I-25



north of Thornton is awful and I think you really need to look at that section of highway before you look at US 36 from Boulder to Denver. The traffic is much worse on I-25 than it is on US 36. The Longmont Express bus is actually called the Hwy 52 Express, but in the morning, we always take Hwy 287 to US 36 due to the traffic on I-25. The bus doesn't even go on Hwy 52 anymore. An HOV lane north on I-25 would be much more helpful in my opinion.

- HOV lanes are a visible failure and should be discontinued. Opening the third lane on southbound 36 would dramatically reduce overall congestion. "Light Rail" is a visible failure (and requires absurdly expensive subsidies as well). It should be discontinued.
- Reduce Express Toll payments and more people would use that route and less people would be on 36!!
- Very supportive of Bus Rapid Transit and commuter rail between Boulder and Denver.
- Those of us in marketing/sales don't have the luxury of carpooling as we have to meet clients "off route" for bus travel.
- For a minimal fee, I am willing to use the Express Toll route, but I feel it must be free if a driver has at least 1 other person in the vehicle. The toll should not be more than \$1.50, otherwise it defeats the purpose. Also, in my opinion, Light Rail is a better option than all others mentioned in the survey.
- Extending the HOV lanes (free for 2+ vehicles) to Boulder and BRT along with the FasTracks program are my preferred options.
- Carpooling and Mass transit are bad options for Denver - it is too spread out. The only sensible option is to get vehicles with higher fuel performance, maybe even consider a motorcycle only lane.
- I think additional lanes would be beneficial if they are not managed/toll lanes. The existing HOV lane seems to be rarely used, except by busses. An additional regular lane would better so all cars could spread out more to ease congestion, not just the ones with multiple riders. A small toll (\$0.25) would be okay; more would be undesirable. Raising the speed limit from 55 to either 60 or 65 would help traffic flow between I-25 and Wadsworth. The speed limit drops to 55 in this section, but the cars continue going 65+ because the limit is 65 coming from the east on 270 and from the west on US-36 between Boulder and Wadsworth.
- RTD fair is too expensive to consider; if it were lower, more patrons would choose this option and clear congestion. It costs me twice as much a month to take RTD, versus driving my personal car and paying for gas.
- Good idea to study this...the concept of tolls from Boulder into the city when people coming in from areas south of Denver have light rail etc. is somewhat objectionable, unless ALL the tolls are designated to programs that will put light rail into the discussion from Boulder into Denver.
- As I ride the bus for most of my trips, I am in favor of managed lanes. When I do drive my car I will generally avoid the tolls unless there is some critical time constraint. Will use NW Parkway and E470 only when I go to Airport, and then only when I have time constraints or it is rush hour. Otherwise, toll charges currently levied are too high and not worth saving 10 minutes. I agree with demand pricing in principle, but if toll is too high I will fight the traffic or take alternative route.
- The neighborhoods along the 36 corridor are greatly impacted by the highway noise and pollution. Before we add even more cars to this nightmare, we need to lower the speed limit within Boulder City limits (to lower the noise) and allow for the building of some type of barrier to reduce the noise pollution. Property values are automatically lower for the houses along the frontage roads even in a high end neighborhood like Frasier Meadows. Increasing the capacity without helping those who have to live with the results of the increase is irresponsible.
- Please include noise mitigation along US 36 as it enters Boulder. It would be quieter if speed limits were decreased to 55 mph. Thank you.
- I think that for frequent toll users, there should be a use 10, get 1 free reward implemented. Even such a small reward (2.25 for transponder customers) reduces the 'guilt' for taking E470 when congestion on Hwy 36 is overwhelming.
- I would take a train to work every day. Please make a Denver-Boulder train that could get me to work in 40-45 minutes.
- I currently do not commute. Several times per month I make a client visit somewhere in Denver/Colorado Springs using US 36. Normally I have equipment that fits in the car but could not be brought on public transportation. Carpooling is insane. I would definitely pay a toll to skip traffic, but I do seem to have a threshold at about \$5 -- if the toll is more than \$5 then I would probably try and schedule the visit for a less trafficky time. I use the airport toll road every time I go to the airport, although I do wish that was less expensive.
- The current situation on hwy 36 is dangerous as too much traffic and all at times comes to a complete stop! extra lanes are needed. I don't know if just 3 lanes each direction is enough. Could be in addition to the 3 lanes to a managed lane like on I25 that can accommodate traffic both directions.



- Add an on ramp from 1-76 to 470 that goes west
- More speed limit signs along 36 between 121/287 and pecos would move people along at the speed limit; Longer merge/on-ramp lanes; turn metering lights on earlier to stop the glut of cars merging at one time thus tying up both lanes of 36.
- Thank you for including me. My transit to Boulder varies due to season and class times. I travel more frequently in the spring and summer than fall and winter. My sports are not popular (flying trapeze and aerial fabric ) so it is difficult to find others to carpool with that live in my same area. I would happily take a bus if it was faster than 1 hours and 32 minutes. More like 45-55 minutes and I would bring my bike and could make it to class on time still from the bus drop off area. But since buses are still not any faster than my worst day on the road in my car, I choose to be willing to pay a toll to speed up my commute time. I do care about the environment and ride my bike to work or walk everyday as I live close to work. But for my sports there is just no easy way to get there other than driving. There is no trapeze rig close to my location.
- Emphasizing that the survey responder think of one specific trip may not be representative of the responder's overall opinions.
- Just build the lane without the toll
- Need better options than toll roads that have the highest cost to those who need the road most & can least afford it. Where are the light rail, monorail, enhanced bicycle options? Where are the charges to businesses in the corridor who don't step up to the indirect environmental costs they engender? Where are the plans to provide protection from weather for the folks who take advantage public transportation or bicycles? Where is the innovative thinking that takes us out of the box, i.e. cars? Whatever happened to the free transport, similar to the Denver Tech Center bus that goes between business, shopping & arterial parking/transport hubs. Try walking from the Broomfield PNR to Oracle on a blustery winter day! Where is the encouragement of smaller vehicles, or electric vehicles or human/electric vehicles? Instead of charging to use the road, why not charge to exit the road into high-priced shopping venues, e.g. Nordstrom's, Macy's, etc.? Really, let's not bring back tolls to the only tollroad in American history which had them removed once the road was paid for? Thanks for asking!
- Train. Train. Train.
- I have a hybrid HOV exemption pass -- this survey didn't have a category for that class of vehicles.
- US 36 needs noise mitigation in Boulder south of Baseline. I live not far from this corridor and the noise levels are so loud that I have not been able to sleep with my windows open this millenia. This concerns many thousands of people living in south Boulder. Please remedy this.
- Yo. Make the tolls on E470 a little cheaper. This will make more people use it, just do not lower prices so badly that it also becomes very congested. The end.
- The tolls on the Northwest Parkway are so high that I go out of my to avoid them. If you're serious about reducing pollution, try reducing the tolls! I am on the road at least an additional 10 minutes to avoid the ridiculously high tolls. Try getting a response from anyone with the Northwest Parkway contact by the way.
- I would love to be able to take public transport, but the only direct bus from Boulder to the DTC leaves at 6:30am. That is just not realistic. The last bus leaves the DTC at 5:15pm. If I do not take the direct bus I have to take 4 buses and my travel time is over 2hrs one way. It just isn't an option.
- state of colorado should supply free road to all citizens. Implement the taxes necessary to support this concept. Eliminate toll roads
- Use of 1 extra passenger in carpool lane, at no cost, vs cost for 1 person, would encourage higher carpooling.
- I would prefer to have higher fuel taxes rather than tolls or registration fee increases. Fuel taxes more fairly distribute the costs of using the road system and promote the use of more efficient vehicles.
- If you toll a road you should not be putting speed traps on them, ala the Northwest Parkway and Broomfield/Lafayette cops.
- Please add another lane to US36! Thank you for asking!
- People are not willing to pay for the lanes until congestion is very high
- I would prefer a TRAIN over all automobile options. It would make ALL the difference, for travel along the Front Range
- Public transportation should be considered over adding new lanes. The Express bus from Denver to Boulder is full a lot of the time. Light rail lines should be seriously considered along the 36 corridor over adding a toll lane.
- you should probably ignore my answers! i 99% of time take bus if i leave boulder - my car doesn't work. the trip described was taking my friends car to airport since she came back from a trip the day i left for a trip. i think the GAS TAX should be increased a lot and also the car registration. it's too easy to decide to drive a car here - it needs to be more expensive and less catered to.



- I'm strongly opposed to charging any toll to carpools
- I love the toll I do suggest that bus should not ride on the single lane. Bus should use the HOV+2 lane. I hate it because I pay alot of money to ride alone and the buss cant keep up with the traffic! they should get a Fine! just like I would if I was riding in the 2people lane and did not have a passenger.
- Thank you for investing your time in trying to find an answer for this problem!!!
- better carpool matching services/boards would be helpful too.
- You need to know that I drive a Prius so that entitles me to drive in the HOV lane free and that affects my decisions.
- If we want to reduce traffic why is it required for us to break our wallets to use a toll. I think people would use Tolls if they were not so expensive and honestly that would reduce traffic on 36.
- I would have strongly supported the toll money to be used to improve or maintain the road quality.
- Trains!!! Forget the buses and "managed" lanes. Figure out a way to build trains. Expansion of Fasttracks is the answer.
- You might want to throw out my survey--I rarely travel this route so am not the best person to ask. I occasionally use US36 for a specific business purpose during which carpooling would not make sense.
- I support any options which enhance my safety, decrease my travel time, and decrease congestion.
- Please erect a sound wall for the portion of US 36 that borders Martin Acres in Boulder.
- I suggest eliminating the Regional LX bus altogether and allowing all north metro folks onto the L. The L should NOT stop anywhere along 36, instead traveling directly to 287 north and the Lafayette P&R as the first stop. In this way, the rout up to Longmont would not be much longer than the current LX rout via I25 and HWY 52, and would serve more riders effectively. Why, when there are so many other ways to get to the Westminster or the Broomfield P&R, does there need to be a L "Local"? Why not one L serving Lafayette and Longmont? The LX to Longmont has many fewer riders than the L, but runs much more frequently in peek hours. I would ride the L bus every day if I knew I had the flexibility to catch an L numerous times between 4-7. As is, if I miss my L in the afternoon, I must wait a full hour before another arrives. If I work past 7 or 8, I have no reliable public transport back to Lafayette. This makes me need to drive my own vehicle more often, since I can't count on a bus being available when I'm ready to go home (my schedule changes, day-to-day). During a peak hour, 3 LX buses to Longmont have left Market St. Station w/ 8-12 passengers and the 30 folks who need to go to Lafayette remain waiting for another hour. I don't mind paying a little more to take public transport than I would pay to drive, but I need the flexibility. The L provides none. Just a thought. Also: build more vehicle lanes. Although fixed rail is nice, I no longer believe any fixed rail will ever serve the north metro area, or will provide the kind of increased flexibility I'm looking for in a public transport system. More vehicle lanes and more buses are a better, more flexible way to move people where and when they need or want to go. Fixed rail, not so much... Thanks!!
- I think the best option is to put in a train between Boulder and Denver (lightrail or otherwise)
- I am willing to use the toll road during traffic backups, etc especially if I need to get home for another obligation. I cannot afford to pay a high toll daily for my commute..so I end up using it a few times a month, though this week I have had to use it twice in one week.
- I am strongly opposed to more roads!! PLEASE invest in better public transportation to relieve congestion, such as light rail, more frequent bus service, more bus stops for local bus service, rentable electric carts at bus stops for making short trips to shops, schools etc, (before returning to bus stop) along the Hwy 36 corridor. More roads just encourages more individual driving, decreasing air quality, encouraging sprawl, and contributing to climate change. Congestion for single passenger vehicles encourages public transportation usage.
- Please lower the speed limit on U.S. 36 to 60 mph from 65 mph on the section between Table Mesa Drive and Baseline Road in Boulder. 12 years ago the speed limit there was raised from 55 mph with no forewarning to the neighborhood that backs onto that highway, and no noise mitigation. The resulting noise increase is unacceptable. It would be easily fixed with a decrease in speed limit.
- tolls on E470 are TOO HIGH, but sometimes I am forced to use it anyways.
- Would also strongly suggest extending the HOV/toll lanes past downtown to the DTC. My commute is fine except for the stretch of I-25 between 20th and Colorado Blvd. I've stopped using the highway entirely because I can make it to work on time using I-25.
- If tolls are inexpensive \$0.25 or less and travel time is reduced by at least 5 minutes, I would use the toll lanes.



- The survey doesn't capture the reason I sometimes use the toll lanes - which is when I am running late. If I'm not late, I don't use them but it is nice to have the option if I'm in a hurry.
- extend NW Parkway all the way through Golden to I-70
- I drive US36 everyday and I have become very skeptical of HOV lanes. First, I feel that RTD busses should use these lanes, to reduce congestion in regular lanes, as the buses often travel slower than the overall speed of traffic and tend to park in the left-hand lane (NOT the far-left HOV lane). It is extremely frustrating to see empty HOV lanes, while buses go 55 in the left lane in a 65 mph speed zone. Secondly, when I do see people using the HOV lane, it is typically a car in violation of the rules. Either they have pulled out to pass a slower driver in the left-hand lane, or they are bypassing a general slowdown. I see HOV lanes as wasted space. They have NOT encouraged carpooling, and have reduced the available space for other drivers. Why don't I carpool? My work hours are inconsistent I work with clients, so it's never the same day twice. In addition, I come/go from the office for external meetings, making me unable to rely on other drivers. Finally, I have small children in day care, who occasionally get sick, and require me to leave work to come get them. Where are my alternatives for these days? Why don't I use RTD? The closest express bus drop off is over a mile away from my work, with no pedestrian access to cross Wadsworth Parkway safely, and no shuttle to the office park. I am unwilling to spend an hour on the bus and walk another 20 minutes, lugging a briefcase and laptop bag, wearing high heels. Plus, see carpool comments above.
- More lanes just get filled up and are a temporary solution. What ever happened to light rail?
- I am in favor of tolls to pay for roads and then remove the tolls when the expenses have been recovered. I believe that any part of an existing loop i.e. C-470 that is part of a toll loop E-470 should be a toll road until the entire loop is free.
- I would be extremely likely to pay for 2 express light rail lines. Much more so than tolls or buses. 1 from Boulder to downtown Denver and 1 from Boulder to the airport
- My decision to take a toll/managed lane often depends on how much of a time constraint I have for my destination. I make an evaluation each trip, rather than an overall yes/no.
- Something that influenced the way I answered many questions is my inability to ride the bus or find a carpool to my work in Boulder. I cannot ride the bus because the bus stop is 3 miles from my work and it would take an extra hour to transfer buses or walk. Also, I have had a very difficult time finding a carpooling partner, the services offered on your site don't seem to connect people well. My preference would be to make more responsible travel options available to people, instead of cars, rather to expand lanes and encourage more people to drive.
- E-470 is far too pricy to travel I don't feel US 36 should be the same.
- I would love to see light rail between Boulder and Denver, Boulder and the airport, and Boulder and the western slope.
- Decreased toll for low emission/hybrid vehicles regardless of how many passengers in vehicle.
- In your eight scenarios, I wanted you to know that if I were pressed for time, I would definitely take a toll option. However, when not pressed for time, I don't mind the extra 5-10 minutes to save the change. I love toll lanes, and often ride the bus.
- These questions are misleading and do not get to the core problems of the area. The area you are investigating is simply a pass-thru for me. A bus is not convenient as it will NOT get me to where I need to go, nor does the timing ever work out correctly. (Prior RTD user)
- I'll fight this if you reduce the number of lanes currently to increase the number of managed lanes. If it is an expansion then I support it, but if it is a repurposing I will fight it.
- Great survey; thanks!
- Use the region's scarce financial resources to provide better bus service!
- Please do not charge carpools since carpooling helps reduce congestion and emissions. I support charging single occupant cars. I did not think you asked very good questions about the bus. The bus is a good option especially when it has the use of these fast lanes.
- - I reduce my carbon footprint using a 40 mpg vehicle. Others should too. - I think everyone should pay a smaller toll. - I think toll / fee cheaters should get hammered with a stiff fine.
- I believe an additional way to solve traffic congestion is to require drivers to pass a written test every 3 years and a driver safety behind the wheel exam every 5 years. People are dying due or getting injured due to poor driving skills/habits. Congestion often happens due to accidents and poor vehicle maintenance, who knows, maybe training can improve our results.



- Hwy. 36 is not the problem. It's rarely crowded at my travel times (or any time). I-25 is horribly crowded. That's the reason it takes me over an hour in my commute--NOT 36. And now construction on 36 will make my commute a nightmare. Leave it alone.
- Yes!! Please add another lane at all costs!! :)
- The bus usually takes as long or longer than driving myself, so that is why I avoid it. They never figure the amount of time I spend standing at a cold bus stop into the travel time. Light rail would be awesome when it is finished as long as it is reliable.
- Managed lanes have been used in the Denver metro area for quite some time, and they are empty most of the time with most people electing to use the regular lanes. Managed lanes are a costly investment with little benefit to the majority of drivers. If extra lanes are to be built for the supposed benefit of the community, then let everyone use them instead of trying to conduct social experiments about who you want to let travel and who you want to restrict.
- I do not support additional lanes, but I do support additional public transportation. If you add lanes now, by the end of construction you will probably need to add more lanes. However, if you foster public transportation, additional lanes aren't necessary.
- LIMIT TOLLS! The cost of paying \$7 roundtrip does not justify the benefit of saving 15 min. Minimize tolls to entice more users and everyone wins.
- At a minimum please repair HWY 36. It is in bad shape.
- Put in a train. From Denver to Boulder, or from Denver to Ft. Collins via 287. Don't care. But I would probably sell my car if there was a train.
- I appreciate the Hwy 36 to I-25 commuter lane and gladly pay the \$3.75 each way. I wish it went across I-25 and continued east on I-270!
- SO MUCH of the traffic problems and congestion is 'rubber necking' to see a daily wreck in the opposite lane!! Signs should be posted along 36 saying that 'rubber necking' only to slow to look at a wreck in the opposite going lanes is punishable by fine!!!
- Please focus on VALUE by balancing quick and cheap.
- I am interested in seeing the Jefferson Parkway (last 14-miles of the beltway) developed to connect Golden to Broomfield, CO., ASAP! Thanks.
- Managed lanes would be amazing and a step in the right direction!
- US36 needs two additional lanes on each side. Normal people lanes. Then you need to put real lightrail (not bus rapid transit as in the last proposal) down the middle. Make it like the rail line from downtown to lincoln. Boulder is growing too fast, and no one wants to live there. By the time you finished building managed lanes, you would already need more. I'm astounded that this problem wasn't seen coming a decade ago. This is the worst drive consistently in the Denver Metro area.
- Highway expansion should be a part of normal growth, and the taxes from that normal growth should be used to pay for infrastructure improvements.
- Make ALL lanes available to ALL drivers, for best use of highways. Pay by increasing gas tax, as incentive for most efficient use of trips.
- DO IT!! The worst is going to Denver for an evening. The Boulder to Denver commute is a reverse one, so I try to avoid leaving Boulder in the early evening. Could really use that third lane..and a second one each direction north of Boulder.
- We moved here from another state, and I'm just amazed we don't have an outerbelt that completely goes around the city. 470 currently costs a fortune. I used to take the northwest tollway, now I go out of my way to use back roads. cdot spent more money decorating the toll booths with flowers than improving the roads. it costs way too much to use the tolls in this state. would rather sit in traffic than pay the ridiculous tolls. have you done a cost analysis to see if you had reduced tolls that perhaps more people would use the toll roads, instead of increasing them and having people flee? just a thought.
- Thank you for the opportunity to give my opinion. Keep the tolls low and I feel you will have more success.
- I am opposed to a "fee system" since there are already too many taxes which should cover such improvements AND continue to cover existing maintenance of current systems.
- I would use E470 and Northwest parkway if the tolls were not so High.
- I would love to use E-470 more often but it is just way too expensive. It would be approx. \$30 round trip per day to use to and from work. Any toll roads need to be affordable so people will use it. For Example, it is only \$1.80 to travel about 40 miles on a



toll in NY state and only a couple for the Kansas turnpike vs. approx. \$15 for around 30 miles on E-470/Northwest Parkway. We have this great road that could help with the traffic but no one can afford it!

- Us 36 needs lanes for all drivers. A \$1.00 toll from all drivers would work well to pay. I hate that tax dollars are spent so that car pools get a lane to themselves. My family obligations and work situation preclude me from carpooling. The bus does not go to my place of work. Stop trying to make society "greener" based on your values. The Colorado legislature has done a huge disservice to the state by diverting road improvement funds. Good luck with this one.
- I currently avoid E-470 and Northwest Parkway as much as possible due to the tolls being too high. I travel to the airport numerous times per month and would use E-470 between Brighton and Pena Blvd more often if the tolls were at least 50% less. Based on the amount of traffic congestion on Tower road, there are lots of other people avoiding E-470 as well due to the high cost to use it.
- If you can keep the toll to about \$1.50 per trip or less I will be quite likely to use it. Otherwise, I will not. I believe charging user fees for improvements is a reasonable action but I also think that public has the right to use public facilities so the fees have to be reasonable or you price people out of using them.
- If the Northwest Parkway were not so expensive more would use it, as it is now I believe that people drive by it to a free route. The Northwest Parkway is not a reasonable choice for most.
- Do not agree with the ever increasing tolls on E-470 and the HWY 36 to I-25 corridor. They are getting ridiculous and it cannot be justified to charge people over \$10/week for using the toll road when they travel to work on a daily basis. If I do not use toll road, it will take me 90 minutes instead of 45.
- My interest in using toll routes directly relates to the cost of the tolls. Some of the current toll costs, specifically NW Parkway and some other areas of 470, are too high. Anything over \$2 is ridiculous.
- It would be nice to have an exit off 36 once you pass Superior in case you want to change your mind and try an alternate way into Boulder. Working on 36 once you get into Boulder with less lights and use of exits I think could help but it would be a mess during construction. Too many business off of the main road and too many lights. I think that is half of the problem.
- I would be willing to pay a higher toll if it was just temporary till the hwy was pd for then the toll was removed and hwy becomes free to all.
- Please keep speed limit at 55mph or lower coming into Boulder for Sound Mitigation for the Martin Acres Neighborhood and build a sound wall for noise mitigation. Bike lanes along 36 would be excellent if walled off.
- I believe that the toll people pay is expensive to the point that it deters people from using toll roads. For example, a trip to the airport back and forth would cost me \$22. Make rate more reasonable so people use the toll roads.
- I think the more highway lanes we add, the more people will chose to drive. I would rather see an improved mass transit system, like FASTRACs, than larger and wider highways, so people will get out of their cars.
- My concern about the toll road is that it would in some way change the direction of the current road. i.e. E-470 changed Dillon Road near Broomfield. For me to travel on Dillon it now takes me twice the amount of time to reach my destination. Also toll prices on E-470 started around \$1.50 and now that amount is \$2.75?? I believe that if a toll road goes in the toll amounts will increase faster than inflation. I also believe that I pay a lot in taxes to cover things like roads, and snow removal on the roads. Thank you and good luck.
- General Purpose lanes are the fairest and most efficient use of tax dollars.
- The toll lanes now on eastbound 36 should begin at Sheridan rather than almost to Pecos. I would be more willing to pay a toll to enter at Sheridan.
- 
- I think you should learn from E470. They had to launch a marketing campaign to beg people to use it. Also, in this economy who can pay tolls? Most people aren't working and we will find other routes in/out of boulder to avoid tolls. Like E470. However, many employers in Boulder provide free eco-passes to employees for RTD. Trains are faster than buses, look at BART in San Fransisco, they are eco friendly and faster than driving. Give employers incentives to offer free passes. In a different economy this may work, but not this one.
- More busses would encourage more use. Every 3 minutes during rush hour(s), every 5-7 minutes during day. PLUS ... easy way to see bus transfers at destination. Pay for one day usage ANYWHERE in metro Denver.
- This survey effects those who commute via bus, therefore it should NOT LOCK ME OUT for specifying that I do not "drive" to work.



- income irrelevant
- Not sure we need an extra lane each direction. However a time-controlled single or 2 lane is useful (like between Pecos and 20th street). Adds an extra lane when needed.
- Make the passing lanes no texting and no cell phones in use lanes. If people would focus on driving they'd be better drivers, there would be fewer accidents, and travel times would decrease. And hey, maybe the need for more and wider roads would decrease!
- The reason for not using public transportation in this survey is that my schedule and route are not consistent on a daily basis.
- Reliable traffic routes is what I prefer... I travel from Longmont to Denver by way of 36, not I25. The HOV on I25 does not go North enough so traffic is always heavy. I am faster right now going 36. Any improvements to 36 will keep my route the same.
- Traffic should be relieved in congested areas at no extra expense to residents, just like the expansion of I-25
- Light rail and cheaper buses! Give me an option to not have to drive and I will use it. I would use those and many people my age would as well!
- I take the bus as often as I can (>80% of the time) to save trouble and carbon emissions. My commute is short enough to make time savings unimportant. I heavily favor managed bus lanes.
- Why are we paying for a toll lane anyway? Can't another lane be added to alleviate the horrific drive every morning? A solution must be found - the commute is truly horrific and extremely maddening
- I object to being required to report my annual household income.
- Please do not make us pay tolls they are contributing to the highways but not to our pockets times are too hard for everyone right now to be paying a toll every day they go to work we might as well work an hour for free just to get to work and this is not right.
- I usually take the bus between denver and boulder for work because the traffic is insane. I don't think adding a special lane that you pay to get to go in is the answer. In addition, your question comparing your selecting with a \$2.00 bus fare is misleading. The bus is \$4.50 each way from Denver to Boulder right now and going up to \$5.00 in 2011. That is a big difference.
- I believe that CDOT is relying too heavily on spped concrete pavement and that the spped pavement detracts from gas mileage 3 to 4 mpg hwy, and therefore increases carbon emissions. A FACT that I discovered on a recent trip to Texas.
- I appreciate that the survey is trying to find out how people value their time and related elasticities. It's too bad the survey was unable to account for paid parking at either end of the US 36 trip, which I think plays a strong role in a commuter choosing transit over an SOV.
- I would prefer there be a train system between Denver and Boulder. Colorado is such an environmentally aware State, but we are unable to develop reliable public transportation. Buses are not an effective solution. Light rail would be so much more effective and I would utilize that more often than a bus.
- The toll roads around Denver are far too expensive. You should look at how places like Chicago do tolling, or some of the toll roads back east. It takes me 45 minutes to get to work. Taking a bus would more than double that time, plus I would need to walk about a mile to get to work. The best option to relieve congestion is to build more lanes.
- I would love to see more options on the route from Boulder to Denver. I use public transportation (bus) often if I think I will be drinking on my visit to Denver. I would love to see other options for this purpose, but they have to be affordable, also. It is right now about the same price for two people to take the bus round trip for a game or event, as it is to park. When I drive, it's quicker. It's a toss up. I would love to see an option, like the light rail, connecting Boulder and Denver, also.
- Disheartened about lack of accounting oversight from e470 and xprs toll. The selling of the NW Parkway to Brazil. We pay same taxes or more than other states who have better spent it and have NICER roads and Hwys! 36 was already tolled, and paid for. Why wasn't money put away for later improvements? Everyone has their hand in my pocket.
- It seems difficult to discuss solutions regarding congestion on HWY 36 without discussing the opportunity to utilize alternate forms of transportation besides buses. Pushing the Light Rail project through to connect Denver to Boulder would probably be the wisest choice. The addition of bike lanes removed, but following, from 36 could alleviate traffic congestion slightly and seasonally. It is well documented that people "are willing to pay for" things on surveys but not in real life. People may not be willing to pay a fee hoping others will in their stead. What about a nominal fee for everyone that drives all three lanes of 36? People can find alternative routes if they don't want to pay but spreading the costs out to a larger group of people will reduce everyone's cost while leaving all lanes open. Remember the Boulder "Turnpike"? Quite honestly this road is terribly



maintained and congested and I think everyone would be willing to pay \$0.50 a day or something small to improve these conditions. 50,000+ daily drivers multiplied by \$1.00 = \$50,000/day multiplied by 20 ( work days ) = \$1,000,000 / month + weekend traffic may ease some of the burden on costs. Total cost for light rail = 680 million? At least its a drop in the bucket and puts people to work. I could go on and on but its just an opinion.

- I think it is wrong to use tolls for the building of roads. This discriminates against those who are poorer and can't afford the tolls!! That is why we are a land of taxes. We allow all people of this country the same road space to move on! The environmental impact is higher with tolls because the poor will take longer to travel to avoid them! If 470 was toll free the other roads like 25 would not be so packed and slow and smogged up!
- one of the survey options for toll asked if I would be willing to pay a toll if it reduced pollution. paying a toll will not reduce pollution. paying a toll only collects money. also I used to use the northwest parkway on a regular basis. when the toll was \$1.50 that was reasonable. unfortunately the toll has increased to point where it is not worth the price. there is a serious catch-22. fewer people use the parkway therefore the toll must be increased, which results in fewer people using the parkway therefore the toll must be increased.
- I'm excited to learn that plans are coming together to improve 36. The condition of the existing road is horrendous. I would suggest that at the same time lanes are added, that the existing lanes are redone and are built "strong enough" to support the heavy traffic that 36 has. Adding road signs that gave travel time updates would be really helpful. There are no sign now and I would appreciate knowing in advance if there is a travel delay so I can jump off 36 to take an alternate route. Thanks!
- A managed lane between Boulder and Denver is long overdue, I am happy to help pay for it!
- I have to drop my kids off at school on the way to work. My wife generally walks to work (at the neighborhood school my kids attend), so we have reduced our carbon footprint to some extent. Bus service simply does not work for me given my job realities. I am willing to pay a small toll (less than \$1.00 for my commute from the Louisville-Superior exchange to Boulder or vice versa) to improve traffic flow along Highway 36, but not to the point where my income is dramatically impacted.
- Please do something about the rut's on 36. They are horrible.
- e-470 is too expensive. Do not over price your work to Boulder.
- I have tried riding the bus, the cost was as expensive as my car and it took longer. no savings anywhere. I have tried carpooling, I wasted a lot of time waiting for people. I could not run errands on the way home from work which often meant that I had to get out on the weekend and run them. What did this save? I'm all for carpooling, saving the atmosphere, saving money saving gas... but I don't think these did any of the above. There should be some benefit to outweigh the inconveniences. There were none. I have taken the subway in New York. You can go anywhere for a reasonable amount. It is quicker in most cases than the car. Colorado is way behind times and not competitive when it comes to mass transit. Nothing but inconveniences.
- I think that the additional lanes are needed and should not be a charge to the public. I would prepare for the growth and unlike last time build an extra lane on each side. Be proactive, not reactive.
- If I could change the time of day of when I have to travel, it would solve most of my problems, I've occasionally made the trip in the daytime, and it's MUCH faster. Redoing that whole HWY287/36 interchange in Broomfield would be a godsend, that place is a mess during rushhour.
- An affordable express bus with frequent timing would be a much more viable option than paying tolls. I commute to and from Boulder in the Gunbarrel area every week day. 36 has become so congested that the trip home frequently takes over an hour and a half. I would take the bus if it didn't entail an even longer commute and costs that almost equal gas expenses for driving alone. Regardless of tolls or buses, more lanes are definitely needed on 36.
- Shouldn't there be two lanes in each direction added? The traffic is horrible on US36 at rush hour. Why do the lanes need to be toll lanes?
- I usually take the bus. I love the bus and the bus should be allowed to use any HOV or managed lane.
- Survey assumes that support equates with useage. I support it though I would rarely use it. If others want to pay to save 5 minutes it is OK with me. Sometimes when I have a time crunch I might use it.
- Because i travel alone, I only use the toll during poor weather conditions (to reduce travel time and be safer with less traffic), or when i am in a hurry (to reduce travel time). If the toll on 36 was more than \$2-3 (total from end to end one way), i would never use it. Price is an big factor.
- I strongly support an off peak toll option.



- My trip actually occurred on a SUNDAY, but that was NOT AN OPTION in your survey!
- I expect my gas tax and income taxes to pay for road improvements. I don't mind an "Elective" option, if reasonably priced. I would support a sales tax for road improvement if it applied to ALL citizens, irregardless of income.
- Get light rail on 36!
- Carbon emissions contribute to global warming question? You have got to be kidding.
- I favor light rail over managed lanes.
- I would use light rail more than I would use the bus.
- I would use public transportation if there was a reasonable time frame to get to work, but at this point I have to transfer and it doubles my time to get to work.
- Let's use trains to transport people down the Hwy 36 corridor. Much more efficient than busses.
- I work in Cherry Creek, if you had an express but that went from the Boulder area to Cherry Creek I would consider taking it. Just getting to downtown Denver isn't much help when you have to then take a local which takes as long as the express bus.
- Very happy to see that there is a study being done to relieve the traffic congestion. It would be nice to have more direct bus routes to Interlocken from Boulder.
- I am eager for the Denver Metro area to embrace non-petroleum mass transit options and I think a high gas tax should be implemented nationwide to reduce vehicle emissions.
- I do not support tolls. after reading articles about cities "agreeing" to adjust streets signals to slow down traffic so peopls will become more frustrated with stopping at lights and then take toll roads, I will always opppose toll roads
- I pay taxes to pave and maintain highways. U.S. 36 is an absolute hazard with pot hols and huge ruts in the blacktop. I am surprised there are not multiple accidents daily.
- It would be nice if you would just fix the lanes on the highway.
- I am open to positive change.
- I'd use lightrail if it had a stop at 36 & Sheridan.
- Extra lanes would be good in the Foothill onramp towards Denver. That is a nightmare. We haven't driven that in a while, but getting ON 36 there has taken 45 min in the past @ or about 4pm. That is the clog that stops traffic from Boulder. Would consider a small small toll, ot just take back roads. Also, not everyone has 3 people to carpool with.
- Use tax revenues to build roads and smarter engineering to improve traffic flow
- put the money in light-rail!
- I typically have travelled from Colorado Springs to Boulder to attend Technical meetings once a month or so but just recently my son started classes at UC Boulder which will increase the number of trips my wife and I make there. I generally do not like Toll lanes if they are in place of HOV lanes and I really don't like privately run permanent Toll Roads. The State government should build the roads (or public transportation facilities) the people need and if Bond funds are not immediately available temporary tolling of that road (until paid for) is a reasonable solution.
- I only use 36 occasionally, I know my son would use a bus in the managed lanes for a low cost to travel between denver and boulder.
- I would use a safe and direct bicycle route nearly every day if there was one.
- I do not favor the high tolls (over \$5.00) that were proposed in the survey.
- with kids, hard to go door-to door, cuz then you have to go get them. not in favor of another toll road or expanding the interstate - if you build it they will come. and by the time its done, it will be outgrown. rather see light rail go in.
- The toll roads in Denver are way too high. The only time I use e-470 or the parkway is if it is snowing. And then you gouge my wallet. A one way trip costs 6.00. Totally ridiculous!!
- The survey seems to be slanted to a predictable outcome.
- My answers were influenced somewhat by the fact that I travel to work very early in the morning, before traffic is bad and leave work by 3 pm before evening rush.
- build the FasTracks northwest rail corridor and i'll have a workable alternative
- I think light rail is an even better idea than the additional lane.



- Enough with the tolls already. It's the laziest way to say you're working on reducing carbon emissions. Make convenient, usable public transportation available that runs late and people will use it. And what's with RTD charging for and time-limiting park 'n' rides? That's self-defeating.
- I'm all for the toll lanes, because I'm always running late. However, there has to be a tipping point: time vs. charged toll.
- I do not like the fact that foreign corporations OWN the Toll Ways in Colorado. All of our roads should be owned by this state with funds and revenue used for maintenance, including Toll Booth Operators salaries and health care, plus seasonal snow removal, and repairs. There must be A LOT of money at stake if foreign interests are investing in OUR Colorado Toll Ways and Roads!!! Thank you, Fran Allison 303-525-8662
- Most days I cannot carpool because my work involves traveling around denver w/ a bunch of tools! Otherwise I would all the time! I think off peak travel (before 6am) tolls should be much cheaper, which would spread out "rush hour".
- Review how larger cities do it. I just went to Chicago and took the El (elevated train) for \$2.25 and then got a transfer for \$0.25 and traveled 45 miles in 75 minutes for \$2.50. Toll roads can be a good thing if they have a focused objective. Do we want to make a little money off a lot of people (YES) or lot of money off a few people (NO). We live in a smart city, so let's do something smart, efficient and effective.
- I almost always use the Northwest Parkway and E470 when I am going to the Boulder/Louisville/Lafayette area. Highway 7 and US36 take much longer than your survey suggested for my travel. I would very much like an exit at Quebec and E470.
- Light Rail?
- Tolls are becoming unreasonable. Not reasonable to expect those kind of daily expenses for the average commuter. You will increase usage if tolls are reduced. Issue for me is transportation once I get to my location, so buses don't always work for me.
- Regardless of the long-term plan, please resurface US 36 as soon as possible. It is in terrible condition.
- Survey was well done ... enforcing on-ramp metering would help mitigate congestion.
- Build extra lanes and not a toll road. No body uses the car pool lanes in the first place going east. At least make the car pool lane a regular lane and add another lane to the west bound lanes.
- I drive a hybrid. Although I use the 1-25 toll several times a week, I do so at NO COST because I drive a hybrid. How I would answer the previous questions really depends on how alternative fuel vehicles are taken in to consideration.
- I would likely take the bus more often if there was a stop at Federal Blvd.
- Please consider using the emergency lane right shoulder of the road and make it a regular traffic lane. All it would require is to repaint the lane lines. Please answer me at david@djmdistribution.com
- I like the idea of an alternative toll road although if the toll gets too high, as is the case on 470 toward the Airport...I'll simply find an alternate route. Talk about greed...Make it affordable and people will use it. Jack the prices and you end up with what you have now. An under-utilized toll road.
- Please add a south-east-bound lane between the Pecos off-ramp and the Pecos on-ramp. At that point 4 lanes are funneled into 2 and then expand to 3. This causes huge unnecessary congestion. The pavement is there, it just needs to be remarked and a few barricades removed. Also the pavement is rutted between Wadsworth and StorageTek. It can pull the steering wheel out of your hands.
- I like toll free roads for 2 or more people in a car and collect tolls for single driver in car.
- I grew up on US36 handing my Dad's 25 cents to the toll taker at Broomfield. I agree with those old folks in Boulder who think US36 expansion is not being paid for enough by the expanded populations from Superior, Broomfield and Westminster. This proposed expansion is the first effort to improve Boulder's use of the hiway that Boulder paid for.
- Improved intersections analogous to Arapahoe and 75th street (2 thru lanes, left and right turn lanes) in a lot more locations.
- The lack of ANY rail service in the foothills makes it very unlikely that I would use mass transit, despite my being a strong environmentalist and having used mass transit in NYC, Philadelphia, D.C., & Baltimore. Busses are unreliable and do not travel my route in any sane way.
- Adding more lanes to 36 is a waste of time and money. Just put in light rail and be done with it.
- If I am taking guests to or from DIA, I use the toll road--less congestion, conducive to visiting. If I or my husband and I travel, we use RTD, the AB.
- just happened to travel this route recently for a sporting event.... I take this route about 1 time in 3 years.



- My work day starts at either 0300 or 0400. I usually leave home an hour prior to my start time at work. Apart from road closures/delays due to weather or construction I have no delays in my 30 mile transit to work. I am neutral about RTD due to the fact that I leave for work at such an early hour and I usually am returning home prior to the afternoon rush hour. If RTD or Light Rail ran at my travel time that would be an entirely different issue. A 45 minute RTD transit schedule at 0200 or 0300 out of Boulder to Henderson will only happen when pigs fly or when Nancy Pelosi becomes a Republican!
- We use the light rail as much as possible in our household. If you built a lightrail we would use it especially when going to concerts at the Broomfield Events Center.
- I have traveled US36 for 23 years and seen a lot of construction activities. I believe in road improvements but I also believe that we pay for these in gas tax and motor vehicle taxes and should not have to supplement with tolls
- I am so disappointed Denver doesn't have a metro system like Washington DC or New York. The Denver/Boulder corridor would be a great place to start a real metro system. Why keep building traffic lanes? Seems crazy!
- Build the road to benefit everyone, not just those who can afford tolls, or can carpool. Were the new lanes added during TREX restricted? Of course not. Were the new lanes of I25 @ Castle Pines PKWY-Lincoln Ave or HWY 7-HWY 66 "managed lanes"? Again, no they weren't. 36 has needed to be widened for 20 yrs so if you are going to do it, for God's sake, DO IT RIGHT! Don't let the arrogance of Boulder's best and brightest put limits on a good thing. Don't hide behind something as cowardly as carbon emissions. How much was pumped into the atmosphere in Front Range fires of Sept. and Oct.? This will ultimately be funded by the taxpayer, so allow us all access. Ask Ed DeLozier (I hope that's how he spells it) at the PHA about how much money NW Parkway is losing, then ask yourself if the people of Boulder/Broomfield/JeffCo will honestly (and earnestly) financially support another privately funded road.
- I like to idea of public transportation to reduce congestion, however my job entails visiting multiple locations in an irregular, non-predictable fashion. I think I am stuck driving!
- My work hrs are such that I miss the 'rush' hr going to and returning from work. My answers would have been different if I had to negotiate 36 during the rush hrs, which I've had to do a few times and it wasn't pretty.
- I use 36 on business, I use a variety of cars depending on the task required, car for sales calls, truck to deliver goods, van if co-workers are needed to complete ordered services. Express Toll would be a hassle to set up on all vehicles. Transponder hassle to set up. I use US 36 three times a year every time we leave at 5am in hopes of returning to office by 5pm.
- I am adamantly opposed to any toll solution where future revenue contracts are sold to private interests for toll collection.
- I have no respect for toll roads or their operators. I understand the purposes of taxes and how the money spent on roads is supposed to benefit the taxpayers of Colorado (stingy though they are). The toll roads we have seen in Colorado so far are very high cost with weak use. More toll roads are not the answer. In unrelated news, they should make US 36 one-way ... let everyone into Boulder who wants to go, but don't let the Boulderites OUT. Ha ha...
- I support another lane to reduce congestion, whether managed or not. The bus commute time is significantly longer because I would have to take the call and ride to get from the park and ride to work. Not worth the time. I often make side trips on the way home from work. This saves trips I would make other times. This prevents car pooling and using mass transit.
- Toll signs must agree with toll actually collected. Present signs attract to the express lane but are almost always less than the real toll. THIS SUCKS
- i've been waiting for toll lanes on 36!! :)
- Please make another lane!!! People in Colorado do not know how to drive in traffic or when there are more than 20 cars on the road!!! It would be best to have an extra lane that is not tolled, but having a SMALL toll fee would not be too bad. US 36 from Boulder to Denver is in desperate need for another lane or two!!!
- I don't drive to Boulder all that often, but when I do it's for several days in the same week. There's even bigger congestion on 270 before it turns into 36 (around Vasquez). I'm usually driving with rush hour traffic to Boulder, but late-night hardly any traffic coming back. I can see the advantage of a High Occupancy Vehicle lane.
- I would much more likely use RTD if the fares were lower or if my work helped with a subsidy.
- The pollution questions are BS. Use common sense and do whats right for the diving conditions, and ECONOMIC sustainability. If you make it easier for business's and people to get to and from Boulder you'll have more tax revenue to "clean" the human pollution in Boulder.



- My answers may be skewed in one direction because the reason for my trip was to cater food to the Omni Financial Group. I wouldn't use public transportation because my job requires me to use a company vehicle and I can't be flexible in my drive times. I am at the mercy of my clients' requests.
- Thrilled to get your survey and to participate. Highway 36 is a death trap. My boys (ages 19 and 21...both CU students) have been run off the road driving on it and the oldest was two cars back from the fatal pedestrian accident a couple weeks back on eastbound 36 just east of McCaslin. It's not only a traffic jam nighmare, it's a scary safety proposition with nowhere to go in a pinch. It's also treacherous in times of snow with the way the wind goes across it etc. Something's gotta give. Glad you are considering major changes as EVERYONE has a Highway 36 story, none of which are good. Thank you...here's to making it safer at all costs!
- try planning for future growth. for instance, by the time you finish adding a lane, it will be obsolete. and in the mean time all you've accomplished is making traffic worse during construction, thus, in retrospect, accomplishing nothing.
- The logistics and nature of my job do not allow me to carpool or use public transit, however I strongly believe in this option for those that are able. I would take advantage of both of those options on a regular basis if I were able. But when you only get discounts for multiple passengers, and the tolls keep going up, using the toll-way is not worth the price either. I just simply cannot afford it, and have driven out of my way numerous times instead of using the tollway because of this. If the prices were lower I strongly believe it would be made up for with added use of them by more drivers.
- No additional comments
- i firmly believe that car pool lanes, managed lanes or similar do not help reduce traffic. Growth will occur and to try to manage it with fee's to pay for a faster trip will only help those with the resources to pay for them and leave the rest of the people fuming over crowd free lanes
- Traffic on 36 isn't bad IF one goes south during the morning & north during afternoon; that's typically what I do. What every happened to the light rail? Why not run a train down the center of 36 instead of adding lanes? Study BART in the Bay Area; it was built 30 years ago. Why not look at BART and copy what they do? BART is popular & they chose to run it between the lanes (mostly) on the big freeways. Buses only work when you don't have to transfer. I rode RTD bus to downtown Denver from Table Mesa & it was great. However, I could walk from the downtown location. If I took a bus from Table Mesa to where I need to go in Westminster there would be a transfer and the buses run so infrequently I'll bet it would take hours to get to work. I watch the buses around Heatherwood (Gunbarrel) and if there's anybody on the bus it's a rarity! Do away with most of the scattered bus routes in favor of light rail and point-to-point bus service. Thanks for considering my thoughts & good luck.
- If you would have a campaign to show people how to accelerate in the acceleration lane and how people already on the highway should create space for these people, you might reduce or eliminate the big jam Denver bound between 5 & 6 pm at the Broomfield exit. If you did not send multiple snow plows down the turnpike all the way across the highway prior to evening traffic, you might significantly increase traffic flow.
- I judge how much gas money I'll end up saving in comparison to the toll and the amount of time I'd be driving extra. Ex: why wouldn't I pay 2.00 to save 20 minutes when I'm probably paying just about that much in gas anyways going the extra 20 minutes not on the toll? But if the toll was 5.00 to save me ten minutes... it wouldn't be worth the extra money because it would just be on top of what I spent on gas.
- I travel this route on a daily basis. The biggest problem I see is people driving 5 to 10 mph under the speed limit. The people of this state are not very well educated drivers. If you made everyone take a fee based internet driving course before renewing their drivers license you would have smarter, safer drivers on the roads. If you had better drivers on the road you would not have to spend billions of dollars to build more roads. If you do build this toll road it would be nice if, since I have to pay to use it, I could drive faster on it. For instance 75 instead of 55 or 65. Please make it worth my money.
- I prefer Commuter Rail, what happened to that idea? Looks like a train to no-where out to DIA, with limited ridership, while the North and NorthWest routes which need it the most are left to suffer. What about geographic equity? We paid for FastTracks too, but only the South end has light rail... I DO NOT want this instead of FastTracks. This should ONLY be in addition to.
- I'll be more in favor of rail service because it wouldn't be affected by weather as much as extra lanes or bus.
- Seems to me that an HOV lane should be used for 2 or more people in a car. I like the way US85 aka Santa Fe Blvd is set up South of Denver where the lanes can be used at varying times of day... allows more traffic to flow without being divided. Also, I think it would be good to have more patrol of these lanes to keep people out of them that shouldn't be in them. Also, keeping the tolls lower will allow more people to use them. I am sure there is a fine balance between the tolls vs. usage to get the project paid off.



- I live in the South Metro area so do not travel to Boulder that often. I do use the lightrail and bus system to and from work daily and think it is a great system.
- I favor a increased in the gas tax to pay for roads and public transportation. This is the fairest and easiest option to implement. However, the public is to stupid to understand that and is against any tax increase to pay for the services demanded.
- I strongly support the concept of "user fees" and wouldn't mind tolls all the way across the road, in all lanes but different prices for express lanes vs slow lanes.
- I have traveled US36 from Broomfield/Boulder for over 20years..I am so glad that we are FINALLY interested in coming to some conclusion that this hwy is the worst ever! Thanks...
- Look at the section of Sante Fe Drive HOV lanes that cost millions for less than 1% of traffic to use. Spread traffic out over all of the lanes and delays and commute time will decrease.
- Light rail would be my first choice.
- can't wait for the light rail/ train to longmont i feel that our traffic problem is not as bad as other metro citys and i have lived here for over 30 years. try new york or CA roads. thanks for the great job.
- I DO believe in public transit and carpooling but it does NOT work for me for a number of reasons. I try to offset the fact that I don't take part in rideshare / public transit by owning & driving a ULEV vehicle (ultra-low emissions), combining trips to avoid unnecessary trips, and avoiding traveling during peak rush hours. I am very cognizant of the fact that a lot of time, money, and pollution is spent sitting in traffic congestion. I want to do my part and I have tried in the best ways I can. HOWEVER, I also think that simply adding lanes isn't necessarily "the solution". For instance, I-70 is a disaster during ski season but it SELF-REGULATES. People who do not want to be in traffic know that the commute will be horrible, and plan accordingly by either changing their travel times or not traveling at all. Choosing to travel on I-70 comes with a certain set of circumstances the user must be willing to accept. I think the US 36 toll lanes should be the same way. What is in place already works just fine. It's the people who need to change their behavior. Some people need more incentives than others, but I believe adding lanes will not fix the problem.
- The congestion on US36 is an issue that must be addressed in a rapid fashion. I am hopeful for the light-rail system that has been proposed, but I feel a toll express lane will also be needed as a long-term strategy. The growth in this region is not going to curb anytime soon.
- Toll lanes take up too much room. For example, the two toll lanes along I-25 takes the same amount of space as four lanes with one divider. Instead of wasting the space, I=25 could have had two extra lanes going in both directions. I appoose the turn-pike toll lanes to be constructed the same way I appose the I-25 toll lanes because it is so inefficient since the tolls only travel in one direction at a time at different times of the day. What a waste of money at tax-payers expense. If I had my way, I would make the two toll lanes along I-25 into four lanes. Like I said, add two lanes in each direction along hwy-36 and see how it goes. If climate change is all you're worried about then adding toll lanes isn't going to make any difference. Why isn't light-rail considered if you're so worried about the non-existent climate change bs. But if light rail is added, keep it away from hwy-36 so that the four lanes can still be added, two each way.
- Traffic on 36 is SOOOO frustrating!
- Forget the managed lanes go with public transit/train I think you would get better use for the money.
- Tolls need to be very reasonable. I would pay \$30 per month to have reliable travel times anytime of day, multiple trips per day.
- I STRONGLY believe that at least an HOV lane would greatly improve travel times, congestion & air quality for all travelers & buses. The sooner the better!
- No comments were made in this survey for hybrid or electric vehicles in the managed lane. Currently, hybrid is treated as carpool status on many managed lanes. I have hybrid and think that this is a critical addition.
- Some of the questions were difficult for me to personally answer as I strictly ride RTD... perhaps there should be an N/A option for some of the questions.
- no tolls
- Having the option of varied cost to use HOV (like I25 has now) is an excellent option. Charging for lane usage when carpooling - I would NOT use it.
- Do not use any of the existing lanes. You must add lane or another alternative would be light-rail.



- Winter driving/road conditions need improvement. Accident traffic jams could be greatly improved if new, 1st responder protocols were implemented. There are many ways to keep traffic flow moving AND keep responders safe. Assign traffic flow to an officer on sight, use traffic cones, Have tow trucks at the ready, move ALL minor accidents off the highway ASAP, Public education etc. etc. etc. (If there was a will their could be a way) This needs to be metro wide not just Denver.
- More info on radio about the entire metro area during congestion would be helpful when traveling. Alternate routes could be made Buses don't help when you have business meetings and they don't always take you to exactly where you need to go. I have yet to figure out how to take the bus from my home to work without taking at least an hour. I am willing to put up with being stuck in traffic because it is still less time overall. Different work hours (10 hr days) don't let you have the same opportunities to carpool as the 8 hr day.
- Toll lanes and HOV Lanes are rarely used. All drivers would benefit from the availability of an additional lane. HOV lanes in other states have proven ineffective.
- I drive 35-40K per year for work. I sometimes use the toll lanes in an absolute time emergency, but feel that they are way overpriced, especially the NW parkway lanes. I am very disappointed that the toll lanes have so few travelers, but they have been made cost prohibitive for most people. Cut the tolls in half, and you would reduce congestion because twice as many people would use the toll lanes!! The toll revenue would not change, and there would still be plenty of room on the toll lanes. Also, it is my understanding that the NW Parkway is managed by a private company? This is completely inappropriate if this is the case.
- I would like to see bike lane options. At a minimum, the ability to take your bike on public transit.
- US-36 should definitely be expanded to have at least one additional lane in each direction. If a toll is needed to pay for this expansion, so be it. However, I would prefer to pay more taxes or fund this through a bond or referendum or something than have to nickle and dime my way through my daily commute.
- All major highways should be toll roads and our state and fuel taxes should be lowered in compensation for it. Turn I-70 over to a private concern that will charge tolls. They'll figure out the best way to relieve traffic. Same is true for Highway 36, privatize it!
- Currently, HOV lanes are "against me" (going wrong direction) during my commute. I would be in favor of HOV lanes in both north and south directions during both rush hours so both sides have lanes for buses, commuters, and those willing to pay. I am favor of these type changes for better travel times NOT CARBON ANYTHING! If I hear more about carbon I'm going to buy a HumVee to commute to work in! Just make travel times easier and folks will burn less gas and SAVE MONEY AND TIME, that's all.
- would like to take public transportation if more time efficient!
- I am unlikely to use transit along the 36 corridor because my current job is in a location not served by transit.
- You should spending time completing the beltway. Not augmenting US36.
- I strongly support opening managed/ carpool lanes to high efficiency vehicles like hybrids, DIESEL PASSENGER CARS, and other ultra-high-efficiency- gasoline-engined cars as a means to encourage their use and reduce emissions.
- 1. I don't think there should be a difference between 2 people in the car and 3 people in the car. 2. I think that carpooling should make you exempt from tolls. 3. If tolls are kept under \$1 per trip, I am more likely to consider them fair and get a transponder if necessary.
- I would love to ride the bus to work everyday but there aren't enough bus stops in the Interlocken area.
- need to have more lanes from i-25 to boulder
- The reason I don't feel I should have to pay a toll to use the highway is our car registration fees are already excessive. Use some of that money to improve road conditions first and then think about charging a toll.
- There are no buses from the Flatirons Park-n-ride to my work on Hwy 128.
- RTD screwed us. Where is the train?
- Please have more traffic enforcement along US 36 between Table Mesa and Boulder to curb reckless driving.
- Instead of widening by two lanes, we should spend the money and widen by 4 so it actually reduces traffic. Should simultaneously add the remaining piece of the northwest parkway as a toll road to connect to I 70 in Golden. This would be worth the money spent. Just widening by 1 lane each way increases costs but really does not decompress traffic.
- Expand HOV lanes BOTH directions



- Don't use HOV lane because it is always counter to my direction of travel for work. Why not extend and make permanent the current HOV lane extensions in both directions with the existing applicable rules? Marginalizing the incentive for HOVs would most likely be a mistake as the threshold for use (even at a small fee) would likely cause many to avoid using the service and possibly avoid actively seeking carpoolers. Also don't use the bus often as the main P&R was just moved 10 minutes further from the office centers in Broomfield/Flatirons and we have no way to get to work (without a 30 minute walk). This was quite the gaff, x million dollars for less people served, but I'm sure the First Bank Center is happy, fail...
- I am in favor of toll lanes if the cost is reasonable. Working people do not have lots of discretionary income for additional transportation fees. Even the \$3.50 on the I-25 lanes adds up really quickly and I find myself in a dilemma when I'm late due to traffic and I have to choose the toll lane. What else can I spend that \$3.50 on? Or, for a week \$20? Please don't make this expensive. I appreciate the opportunity to comment. Good Luck as we need the help between Boulder and Denver.
- I believe that all "express" or "managed" lanes should be free for HOV vehicles, and then tolls should be charged for 1 occupant vehicles. This encourages car pooling, but also gives the option for folks to pay a toll if they wish. Or instead of toll/managed lanes, create express lanes that only offer 1 or 2 exits on 36 so that folks who are driving the entire stretch can carry on with their trip in a more efficient manner.
- I typically only drive during September and October; most months I take RTD, as I have an EcoPass from work. However, during September and October, my after-work activities require me to have more flexible travel situations, and thus I drive my own vehicle a lot during those months.
- Build it and they will come. None of the proposed scenarios is a solution. You offered very short term band-aids that will not offset the inconvenience of the initial construction. US 36 will be overflowing with autos again in short order.
- I travel to many different locations and do not have any flexibility when it comes to times, they are set appointments and am alone because I'm working and self employed. Therefore, my choices are restricted by the appt time, location and need to go to another location. This is why I would not use public transportation, as I have to move on to a very different location most days. I only work part time and am also disabled.
- Given the small time differences -- 2-5 minute savings -- I would be unlikely to pay the toll. For more time savings I would definitely consider it. I use the toll road to the airport during peak hours quite often.
- Toll lanes do not work and are only used to generate revenue for the "city". The I25 toll lanes are a perfect example of this. if the toll would be lower more cars would use the toll lanes and traffic congestion would be lightened on the normal lanes. But who can afford to pay 3.50 each way to go ~7 miles. Also they took four possible lanes of traffic and made them into two flex use lanes. You have shoulder, wall, shoulder, 2 lanes of toll traffic, shoulder, wall, shoulder. That could be 2 N and S bounds lanes of traffic full time but for some reason someone decided that 2 flex use lanes is much better use of resources. Please stop using the CO2 emissions as an excuse to push the type BS, we all know that water vapor is the number one green house gas and until we address that problem CO2 is meaningless.
- If bus fares were more reasonable, I would prefer to use the bus more often. But I drive an (old) efficient vehicle, and it is cheaper for me to drive than to take the bus.
- The main factors reducing my use of public transportation are no car to use for lunch activities, walk in bad weather to work from RTD. Travel time and transfers on RTD to get to work.
- I live so close now, prefer to drive myself. I used to drive to the Tech Center and rode in a Van Pool.
- Ensure public transportation and carpools get priority to result in behavior change for single car drivers. They should pay the highest tolls despite time of travel. Additionally ensure hybrids can also access lanes
- What about an electric light rail system that runs from Denver to Boulder and stops at all the major locations such as the University of Colorado, Research Park, Flatirons, etc...? It seems like that would be a better use of money and resources than just building another lane that people are charged to drive on.
- I believe we pay enough taxes on gas to pay for improvements. . . unless that money has gone somewhere else? The road needs to be widened one lane is nice but we all know by the end of the construction 2 will be what we needed. Split the difference, one toll lane, one additional lane so we don't have to do this again in 5 years.
- Adding more lanes or highways isn't the answer to our problems. History shows that by building more roads the traffic only increases. We need to think outside the box. While 'managed lanes' may be a step in the right direction, we need to think long term. Light rail/increased bus service/cycling lanes would be far more appropriate.
- Hope this helps to make a right choice to make the roads more easier to travel.



- The tolls on the NW parkway/e-470 are far too high for the service offered. I only use these routes when I'm being reimbursed, and will NEVER pay that much out of pocket. With a transponder it should be under a buck..
- Since you are modifying the bridge over US 36 for 80th, why not put in an off ramp there to reduce the wait time at the Sheridan exit. Especially if there is an accident or weather related delays.
- FasTracks Light Rail?
- I think the survey should have include what you would choose if the regular lanes were backed up due to a traffic accident or unusually high traffic. That is when I select a side street or would consider using public transportation to Boulder.
- Condition of 36 is a big concern. I have no choice on times as I am a student driving straight from class to work on a daily basis.
- Current on I-25 Tolls are too high to justify in such a short distance. Keep tolls on US 36 less than \$5 in today's dollars
- If there was a reliable light rail connection between Boulder, Louisville, the I-25 corridor and Denver or DIA I would definitely support it. I think the lack of easy bus transportation as well as proper bus stop shelters, deters me from taking public transportation. I have often seen no bench or shelter at busstops. That does not encourage people to stand out there in the weather and wait for a bus.
- I drive a Prius and have a HOV sticker that I can drive in the HOV lane free at all times. This has been fantastic and I highly appreciate that these stickers were given out a few years ago. Please continue to approve these stickers!
- Would like to see additional routes improved as well like Wadsworth south to 1-&70 or Federal to 1-70 or 1 270 travel time improved with additional lanes for commuters I cannot carpool because of my location and time of work
- To be candid, the idea of tolling is idiotic and short-sighted. Numerous studies have shown that the lane use and revenue predictions always fall short. If you are going to spend the money on new construction, make it available to all that use the roadway.
- I think we should have no charge "express lanes" like Chicago. That is lanes for thru traffic from Denver to Boulder with only 3-4 access/exit point the entire route. This gives the long haul driver a smoother route with the slowing down for the constant merging traffic from all of the exits.
- How about light rail?
- Why are there no questions here regarding use of passenger rail in the corridor? Transportation dollars in this corridor should be invested in fast and efficient rail service - downtown Denver to Boulder - and feeder bus service.
- The majority of users during rush hour are travelling on 36 to Foothills to the Diagonal and then to Niwot and Longmont. Most users are not going to the City of Boulder. Traffic backs up westbound at Superior partially due to the steep grade, but mostly due to merging traffic. By adding a third unrestricted lane all the way to Table Mesa, much of that congestion can be mitigated. If the lane is an exclusive bus lane part or all of the way, traffic will continue to back up. The intent is to make more people ride the bus, reducing pollution. However, the amount of pollution being emitted when there are thousands of vehicles moving at a crawl, far exceeds the pollution savings from making people ride the bus. If we want to reduce emissions there needs to be a third unrestricted lane both directions
- I am a self employed service technician. I carry heavy equipment. My calls are made on site at clients. I work alone. I purchased a hybrid vehicle although I had to pay more for the vehicle because I make so many single passenger trips. None of the plans proposed address hybrid vehicles.
- I would love to take the bus to work; except there is no bus line between the broomfield PnR and my work that does not require to me to walk at least a mile.
- Free to Carpools with toll for singles. Seems to make the most sense and encourages carpooling
- I have had to travel the 36 corridor on a daily basis to get to my workplace in the past. There has always been a sense of entitlement of some of the people driving it and it can be very dangerous. I have seen people pass on the emergency lane (inside) because they were not willing to wait for traffic, I have seen people chase others that cut them off to the next exit. and I have seen the invariable impatient ass that waits for no-one on 36. Because of the inconsistency of the drivers and their feeling of entitlement, it is one of the most dangerous roads I have ever traveled. It will be about traffic control and giving options to driving which will make it better. Try light rail.
- I would be very interested in hearing more about a train/rail system to give us alternatives to the existing congestion and pollution issues that are and will continue to be a problem.
- My most recent trip on US 36 used in this survey was a very unusual one. I almost always take the BX to/from my place of work in downtown Denver. I have made this commute since 1985.



- Just adding an extra lane between Sheridan and Boulder would help in congestion. It's when it goes from 3 lanes westbound to 2 there is considerable congestion.
- I would love to see lanes such as the carpool/toll lane that already exists on the east end of the turnpike/I-25 extended Boulder with exits at Church Ranch, McCaslin, and Table Mesa. We use the existing turnpike/I-25 express lane whenever it is open as we love to get out of "traffic" and have a safer ride. I think a new express lane to Boulder should be a carpool with toll optional as already exists on the turnpike/I-25 express lane. I think this is a fair system and use it whenever I am in a carpool. Though I would never pay the toll to ride solo, I understand that many other people would do this, so it is good to have that option. I would like to take the bus, but it does not go where I need to go once I get off of the turnpike. So while I can see that a better bus system between Boulder and Denver would be very useful to a lot of people, I could not take advantage of it with where I need to drop off kids in the morning.
- A underground metro system that we just used every day in europe was the best way to get around 1 euro each way and very easy and very happy...
- Thanks. I am very concerned that the RTD fare is being raised to \$5 each way in 2011. I used to take the bus into work and back everyday, but found it cheaper and more convenient to carpool. Even when my carpool is not available, I am finding driving in is a more economical choice than the bus. I like taking the bus, but to pay \$10 to get to & from work is unreasonable.
- I have no problem paying tolls, if I know that the tolls ONLY go towards the road I am traveling on (i.e. E470/NWP.) I think there needs to be a 3rd general use lane Southbound between Table Mesa and McCaslin AND large/semi truck lane restrictions.
- I use toll roads like e-470 because I prefer to drive around as few cars as possible. I occasionally will use the express lane from downtown denver to 36 just to avoid a lot of cars - and the \$.50 is reasonable.
- This needs to be done for I-25 North up to Longmont.
- If there was a bus I COULD take without 3-4 transfers and lots of time i would.
- 1) I actually don't know why there is a toll charge. Don't our taxes pay for road work? 2) Why can't you just add the 2 lanes (one each way) and make them free carpool lanes? That should decrease the time it takes all of us to drive AND rewards those who do carpool- they shouldn't be penalized by having to pay to use the lane.
- I'm probably not a good subject to ask these questions. I rarely use US 36, and if I do I make sure to go during off-peak travel times. I feel extra lanes are unnecessary, and the bus service between Boulder/Denver is superb. The only reason I drove that one time was to coordinate three different Denver activities (theatre, marathon, trip to airport). Otherwise I ALWAYS take the bus. Other people can too. No new lanes, please.
- We want light rail on 36!!!
- I drive a Prius downtown and use the HOV lane. I would like there to be an exemption available for Hybrids on these lanes also.
- Public transportation needs to be more available and cheaper. A light rail on US 36 would relieve a lot of congestion and reduce emissions. Take the money you're planning to spend on highway construction and build a light rail with it instead.
- I understand the proposed need for tolls to pay for state road solutions, however, I believe my state taxes should already be providing for this kind of solution and if state tax dollars were spent more wisely, then the tolls wouldn't be necessary.
- I am required to have a vehicle at my workplace, therefore I cannot take advantage of public transportation at this time.
- Toll roads are well maintained in winter. Speeds on toll roads should be increased. single people with transponers should be able to use HOV lane on HW 36
- I would love for there to be a toll lane. I also would like the highway repaved because currently the ruts are extremely bad and there are a great deal of potholes.
- Some other transportation geeks and I were discussing the fact that you completely dismiss all transit users up front. You might be able to get some good info from us! (Since I drive to Denver once in a rare while (2 x per year) i did fill out the survey. Also, -- and I just emailed the study group -- it would be nice to know what the bus travel time would be under this new managed lane scenario... The passenger icon on the screens was a little confusing -- ie - would the managed lane require carpooling as a possible scenario? That wasn't entirely clear.
- I'm strongly opposed to additional lanes on 36, the money could be better spent on more buses and rail.
- Please keep the bus affordable and allow us to carpool with one other person for free! I use the carpool lane everyday for my commute now (either by bus or carpooling) and the reason I do it is that it is free/affordable! Charging people to carpool/ride the bus is not fair!!!!



- I personally would not utilize the "managed" lanes based on the cost. I would not utilize the bus based in large part that the bus is subjected to the same delays on the highway for the most part, but would utilize the light rail if it was in place and ran along the US 36 corridor.
- don't waste money on the denver/boulder/longmont train
- We pay enough in taxes and gasoline to accommodate appropriate upgrades to our transportation system. Tolls are too expensive, and are a disguised form of taxation which I am opposed to. I'd like to see better use of our taxes.
- I believe that US 36 should have been widened to three (3) lanes each direction 25 years ago and to four (4) lanes each direction 10 years ago, between I-25 and 28th street. Do not punish people for wanting to drive their own car from point A to point B. Do not create Managed Lanes that charge a toll that is never ending, just for widening the road and just for people that want to pay for the convenience of getting somewhere faster. We should all receive that benefit. Charge a toll that widens the road and improves safety and increases average speed, then remove the toll once the road is paid for. Create optional transportation options for those that want to use them. People generally don't like the bus because it doesn't start or stop in locations that are convenient to the riders. Airport buses are better because the airport is the final destination, however I don't want to leave my car parked in a park N ride garage for fear it will be damaged or stolen. I live 3 blocks from the SKIP and I don't want to roll my suitcase(s) to catch this bus, put the bag(s) on the bus, exit the bus at Walnut & Broadway then roll my stuff 3 more blocks to the main Boulder bus station and continue to deal with my bags throughout this whole process until I am at the airport. Additionally, doesn't it defeat the purpose of not using a personal vehicle if I still have to get my car out of my garage to DRIVE to the bus station?? PLEASE use federal and state money to widen this road, this will create happier drivers and will help reduce gridlock. It should improve air pollution currently caused by idling cars stuck in traffic. This applies to I-25 north of US 36 to Ft. Collins as well. PS. I pay taxes for this!!
- More efficient alternative routs would be strongly advised.
- I do not believe in Tolls! I think roads are a part of what our taxes pay for and if that is not enough, tolls are an excuse for poor management of funds.
- I am very willing to use a managed lane. My usage would be primarily based on cost. \$1 per trip is ok but over \$3 a trip isn't
- I always take into account rush hour when planning trips to Denver and avoid those times of day whenever possible. However, when traffic is tied up for many exits during rush hour(s) and during special events in Denver, I would support an extra AFFORDABLE lane to relieve congestion. I believe there are enough vehicles that travel US36 that a small fee would net CDOT ample funds to build/maintain this improvement. The Northwest Parkway and 470 are relatively empty, I believe, because of extraordinary high tolls. Our only justification to use these highways is on the way TO the airport to assure we will not be late due to traffic issues. We never use it on the way home when time is not a primary consideration - just not worth paying these tolls.
- I think improving public transit is a better solution to congestion than adding lanes to the highway. No matter how much road you build, it will fill to capacity. I commute by bus 90% of the time because my work gives me an ecopass. Tolls really rub me the wrong way; the only one I'll ever pay is E-470 to the airport when I absolutely have to get there by a particular time and I-70/76 is a mess.
- The existing Hwy 36 is in desperate need of repairs. Nothing about tolls is acceptable until the road way is improved for smooth travel. 36 needs to be completely re-built and provide a minimum 4 lanes each way.
- Talk to whoever needs to be consulted about putting an on ramp from Tower heading South on to westbound Pena. For the love of god.
- I do not mind paying tolls, but if the tolls went up over 3.00 I would not be willing to pay them even if it made my time shorter. Definitely having a 5-10 dollar toll is ridiculous
- I come in from I 76. This option was not included at all. The drive in from I 76 is bad in the morning. It is even dangerous when I have to pull onto US 36 from I 76. Something needs to be done there because of the backed up traffic trying to merge onto I 25.
- The RTD buses drive poorly in the current toll/HOV lanes. Many drive in the toll lane instead of in the HOV lane. Sometimes they drive side-by-side, one in the HOV lane and one in the toll lane, going 50 mph and not allowing any cars through. I have also witnessed many near-miss accidents at HWY 36 as busses are entering the highway at Sheridan when they try to cross over 3 lanes of traffic to get to the HOV lane. I can not wait until we have a light rail up the hwy 36 corridor. I will FOR SURE take the light rail when it is completed.



- Please have the road crew that picks up the cones in the HOV/Toll lane at 7:45-7:50am easbound just east of Federal PLEASE stop their truck in the emergency lane rather than in the middle of the HOV lane!! Thank you.
- i think the regulated on ramps make things slower as the merging traffic isn't up to the highway speed due to very short acceleration lanes. i would also like to see longer merge lanes and an extra lane in each direction from sheridan bl to boulder.
- I notice that most of the cars on US 36 every day while I travel to work are occupied by only one person. This is not the case in the evening, when I drive home. Is it possible to offer the toll only in the a.m.?
- I am not a commuter, but I would much rather see the managed traffic lanes on US36 if it would diminish the need for wasting gobs of money on the never-to-be-used Fastracks program. Thank you for asking my opinion.
- I am strongly in favor of additional lanes on US36. Whether that is just a free 3rd lane, or a "managed lane" is ok; so long as the toll for the managed lane is not ridiculous. For example, if a one way 15 mile trip is more than \$2, then I would opt for the "free" lanes. In that scenario I would prefer simply adding a 3rd "free" lane.
- I strongly favor toll free lanes for 2 or more occupants!!
- I would use the toll roads daily if the tolls were reasonable. \$2.00 or more per toll station is egregious. Who in their right mental capacity would pay \$10 to \$15 a day to travel to and from work when non-toll options exist? If it cost \$2 each way or \$4 a day I would drive it every day. I have written e-mails in the past and received your generic statement about time, mileage, fuel cost, ect. I know many people, personally, who avoid using the toll roads due to the expense. Currently I use the toll once to twice a month, and only take it one way (\$10 per trip X 2 trips per month = \$20 a month X 12 month a year = \$240 per year.) If it cost \$2 from Thornton to Boulder I would drive it everyday both ways (\$2 each way = \$4 a day X 6 day per week = \$24 X 52 weeks a year = \$1248 per year.) Thats over \$1000 a year you loss out on because of your unreasonable toll. There would be more as I make frequent trips from Thornton to Parker but I currently take Tower Road to avoid paying the toll. Lower Tolls would equal more usage, less traffic congestion on other highways and more money for you. Less money over a much larger quantity would have a faster and greater pay off over larger tolls on almost no traffic.
- Opposed to toll lanes as we already pay federal and state highway taxes and those funds are diverted to the federal and state general fund. Put the fuel taxes back on highways where it belongs.
- You have indicated (door to door) service and times. In my personal vehicle, going the speed limit, with no congestion on I-270, Hwy 36, Foothills Pkwy and Hwy 119, it takes 45 minutes to travel approximately 35 miles at 6:00 AM. There would have to be significant improvements made to other roadways in the Denver/Boulder area to meet the times that you suggested in the survey, particularly in the 3-7 PM time frame. You only asked for information based on the last trip, mine was this morning. Due to heavy congestion on Foothills Pkwy and Hwy 36 at 5 PM, I don't use that route in the PM. Instead I take Hwy 52 and I-25, this is a little bit longer mileage wise but at least the traffic is moving at the posted speed limit.
- I have an eco pass and would take the bus as frequently as possible but the time it takes to transfer and take a bus to my office location is prohibitive so I end up driving.
- If you had done the rail system that we are PAYING for in our taxes and it was up and running like in the rest of the city, we would not have to have this discussion.
- US 36 Boulder to Denver is in terrible condition. I am surprised more accidents don't happen due to poor road surface!!!
- I don't mind paying tolls on E470 to help with maintenance because everyone must do the same. The same is not true for managed lanes on US36, all drivers would benefit from the help of the few. Therefore, I would only be in favor if the toll is minimal. I agree that US36 is in major need of expansion and repair, but I think a light rail would be more likely to be used instead of more buses.
- There needs to be something to ease the congestion. If you have to travel during morning or evening during going to and from work US 36 is horrible. You really don't have any options in and out of Boulder.
- I already believe that the northwest parkway is under used because of the very high toll cost. Maybe if the tolls on 470 were less and reasonable people would use the road and prevent congestion on other routes Why add more tolls??
- I would rather see a light rail instead of a managed lane
- I really think that creating a managed/toll lane is behind the times. There needs to be light rail (no emissions) from Denver to Boulder. People will use it, if it cuts time. A toll is way to generate revenue, but not cut down on car use or increase carpooling. Be a model city, not adhering to an outdated transportation plan.
- I think the 3rd lane's should be added and without cost to all users to be fair to people who can't afford to pay tolls.



- I am opposed to 36 becoming a toll road for all lanes. I am not 100% sure how I feel about toll lanes. I do not use them now and probably would not use them on 36.
- How about a light rail option that would go from Boulder to Denver. This would be a huge improvement and would benefit nearly everyone that makes the commute both for work and pleasure. (I.E. CU games, night on the town, etc.)
- Keep the toll fee's low and people will use them more. It will pay for its self faster with more user's.
- We make isolated trips for meetings, medical appointments etc. A managed lane would help us plan for trip time. However, it would be only for a rare occasion that we would consider paying a \$7.50 or more toll ONE WAY to get where we are going (example: to get to our parent's house to help them in an "emergency" type situation). In that particular situation though, a Managed Lane would be appreciated.
- The tributaries feeding into 36 at peak times do cause a lot of delays, but having a major highway limited to 2 lanes is the issue, you see this everywhere, look at rte 270 north of DC or I-70 in the mtns. Having only 2 lanes causes major, major backups, all it takes is one bonehead to back things up for hours. Additionally, you haven't taken into consideration the price elasticity of the toll lane pricing, esp on I-25. Around 5 PM on I-25 N, it's flashing upwards of \$3 to drive the toll road north of Speer and it is empty, when it should be like \$1 to encourage more vehicles to use it (and hence more revenue for CDOT).
- I know I should take the bus but I don't very much except for the airport. I don't like toll roads; it feels like I'm being tracked and I thought we were supposed to be free to move about at citizens. Are rich people the only one that have that right? And I don't like that foreign countries own our roads. Stop selling our public assets. Add some lanes and build a train. I liked the BART in the Bay Area to go play in SF. I would use the train like that if it was fast. Otherwise, just add a stinking lane or two.
- It's a 60-year-old road that is way over capacity. In snow, it closes just like Ted's Place and I-70. We can not wait another 30 years for FasTracks to maybe arrive. The bus service is minimum and only works if you work normal 9 to 5 hours so driving is the only option I have. I have paid for TRex and I-225 to be build and am still on the original road. When will it be our time? The road is going down for the last time.
- Just build the extra lane and let everyone and anyone use it anytime for free. Quit trying to social engineer outcomes that are unobtainable in the context of our economic and infrastructural situation. And open up the carpool lanes, which are usually less than 25% of capacity even during rush hour, to everyone. By restricting the use of lanes you're effectively decreasing the number of lanes.
- I think it's a shame that the way to ease congestion on US 36 is through a toll road. The road has been in disrepair for years, the traffic has been horrible for years and the state should have paid for maintenance and expansion a long time ago. I don't feel that the development of US 36 should be the financial responsibility of the users at this point. We have already paid for it. Additionally, I would probably be more interested in a toll road if I knew what the tolls were going to be. But the tolls right now are way to high of a price to pay for a little convenience. Make it cheaper and more people would use the roads and ease the I-25 congestion we already have.
- The Parkway is way toooo expensive to save 10minutes!
- I drive an average of 50,000 miles a year along the front range for my job. US 36 is the worst highway that I encounter.any ??? 303-809-7561
- You need to find other solutions and stop increasing taxation without representation which is what toll roads are! Nothing but a subterfuge!
- The section between Federal and Sheridan and really beyond really need to be widened in both directions. The tolls are also too high during rush hour. And I wish if we have to use Express lanes they went both directions simultaneously on I-25.
- The current toll roads are outrageous in the fee's. The company that provided information to the gov't on the toll roads was shown to be not only wrong, but intentionally wrong. Lack of faith the cost will be 'reasonable'. Why spend tax money on a road AND have to pay a toll?
- Tolls cannot be \$7 each way each day...way too much...under \$5 might work. What about dedicated bus lanes? Is that not in the mix?
- The bus option questions did not address the problem of schedules. Currently the last bus to Boulder leaves too soon after the end of the arts/cultural events that I attend for me to reliably take advantage. Therefore, the choice of driving versus public transportation was moot. Also, it's rather misleading to compare car toll of \$3.95 to bus fare of \$4.00. It sounds like a no brainer, but 2 people makes the bus fare \$8; 3 makes it \$12 and so on. Driving and parking often costs less.
- 1.) I dislike tolls as it seems they force traffic onto alternate roads, i.e. Dillon Rd carries too much traffic while the NW Pkwy runs virtually empty in the morning (I can see from my kitchen window), we are almost unable to exit our subdivision onto



Dillon Rd during rush hours. We often wonder what Dillon Rd would look like if the NW pkwy were free? 2.) Also we avoid 36 almost completely due to congestion (using Dillon Rd crossing at McCaslin to Marshall Rd to Hwy 93). We have 2 students open enrolled in Boulder schools on different schedules so both parents are making multiple trips back & forth to Boulder, been doing this for 4 years. Two days a week we carpool for one school 3.) 36 bus service is not helpful for students, there is no 'connectivity' from the stops along 36 into the community. In the morning, it would take as long to get them to the bus stop (by the Events center) as to just drive them to Boulder, mainly due to the traffic on the bridges over 36 at Wadsworth/287. Three afternoons a week they do take RTD buses from school to Wadsworth PnR only because I work at RMMA airport & am right there for pick up. It takes them 50 min & requires a change of buses in Boulder. Not their favorite with loaded backpacks, school projects, sports gear, forget adverse weather with all the junk they have to carry to school. Thanks for reading, good luck! You can call me if you have more questions, Linda Cangilla 303-466-4163

- I travel to Denver for medical reasons. My route is not accommodated by bus easily. I usually try to combine a trip with other errands or attractions like museum visits when I go there to save gas / emissions.
- Using a toll road is a decision made at the time of a trip depending upon what the needs are at that specific time. Therefore, while I will not volunteer to pay additional tolls, I will opt to use a toll road if it meets my needs for that particular trip on that particular day. In other words, I will use it for my convenience, if available.
- Tolls and License Plate fees for road repairs that don't happen are not helpful. Adding new fees for poorly supported roadways like US 36 and W470 is not appealing, well Obama might like it. Study questions should be created to discover the issues. This study was quite obviously written by a female or a female like mind. One who thinks they understand the issues is not the best person to employ to write questions to acquire real data. The multiple choice screen indicates an entry level subordinate. Thanks for letting me play! Really? Are you at CDOT this lousy? I'm beginning to think so.
- More electronic signs that specify location of "accident ahead." Extra time to opt for an alternate route would help all travelers.
- have more locations where you can buy or turn in transponder. I have one from a previous car that I have not used for almost two years and cannot get to a location to turn it back in. Tolls during times people would use them more are too high. I only use tolls in bad weather, traffic or if I am late.
- If the tolls on the Northwest Parkway/C470 were more reasonable I would use it regularly.
- A barrier or lane restriction for the first couple of hundred feet at the merging of Foothills Parkway and US36 in combination with the traffic flow light would allow cars to get to speed before merging. I have observed that much of the slowing at that merge is from drivers trying to merge before they are at prevailing speed. I also think a tax incentive for larger business to stagger work hours could be effective in traffic reduction at "rush hour".
- I've stopped using E470 to DIA (I travel every other week, b/c it is too expensive. I-25 tolls get too expensive at 1.25-3.00 per trip. Lower income, higher expenses, taxes, etc. It's not sustainable to keep jacking up prices and tolls. Thanks.
- If toll price is too expensive, lanes won't be used as they aren't as much on e470.
- I would love to use public transportation but I live in Ken Caryl Valley and to get to my workplace, it takes two transfers and more time than it takes to drive.
- Please also look into a way to improve Highway 7 between Boulder and North Thornton. . . or deliver some faster route between Boulder and North Thornton. Any travel route before and after work is awful and paying close to \$5 one way on E-470 isn't worth it if you get stuck on 36.
- I think it's more important to have an outer belt that goes completely around our city. I think most cities our size have a real outer belt. Please don't let one city stop our ease of travel.
- we run a construction company so participating in a carpool isn't possible for our household although our employees routinely carpool to avoid traffic and save gas
- An express bus to Denver does not get me to my workplace, bus from downtown Denver to my workplace (15 Limited) is VERY slow. I could take the D bus down Colorado Blvd. But also very slow. My schedule is very unpredictable which makes car use easier. I am from Europe so very used to taking public transport but find it problematic here due to limited schedules, expense, dependence on traffic conditions as no extra lanes for public transport alone or managed lanes for public transport.
- I live near E-470 and looked at my annual toll charges. I can use that expensive toll money for other family needs. I hear tolls will be increased Jan 1st, it will now be easier for me to stay off E-470.
- I would use both E470 and W470 more if the fees were more reasonable, like 1/2 the current rate. So would many others I have talked too, \$19 a day to go from I-25 to County Line. Why not try a test for a week or even a month and advertise the benefits with the lower price. The E470 road is already getting wavy and breaking up, poor road base used and the traffic is



light. A CHEAP road! For example, I will not pay the 3.50 for the I-25 toll in either the AM or PM, that is ridiculous, but I will pay the \$0.50 earlier or later in the day.

- We are very appreciative of the toll road to the airport.
- What's wrong with multi directional (depending on the time of day) lanes? Why do the tolls have to be so outrageous? (ie see C470/Northwest Parkway), taxes should cover it provided you eliminate the fat from the budget.
- Would you consider installing a light rail system?
- I think one of the biggest problems in this state is that slower cars are allowed to be in the left(passing) lane, causing large blocks of congestion with much wasted area in between. In many states this is prohibited and laws actively enforced by the police. In this state, the passing lane is on the right and road rage is everywhere.
- I usually only use the toll/HOV lanes if I am running late. I decide on the fly but generally use the regular lanes.
- I also commute to Boulder from the McCaslin exit to Foothills and this area needs help it backs up severely.
- I/my husband use bus to DIA; however, when family & friends come to town, we drive there to get them. We really prefer bus because of less pollution and toll fees, but if visitors come, we drive.
- There are consistent "hot spots" where traffic locks up at certain times of the day. 36 and federal, 36 and wads, flatirons crossing, and particularly mccaslin blvd. 36 has also experienced a reversal in traffic flow over the past 5yrs whereby AM flow is into boulder and PM flow is out of boulder. this is opposite of what it used to be. there are poor, if any, alternatives to 36 and the overall maintenance and clearing of accidents is pathetic and slow.
- widen the road to three lanes each way...there is room for it on most of the road already...
- I have tried using RTD Express buses, but it takes too long mainly because of the infrequency of buses from Denver to Boulder after 6 pm or later. I would use bus more (and or train if that were available) if they ran frequently into the late evening. You should also consider reduced tolls for most efficient vehicles to encourage solo drivers to use them more.
- if there was no speed limit and thus no speed enforcement in the "managed lanes" I would reconsider.
- I'm for the HOV/HOT lanes, but don't allow the HOV/HOT traffic to get so heavy that it slows down the BRT buses. That would defeat the purpose of the BRT idea.
- I have a hybrid exemption and use the HOV lanes EVERY DAY both ways to and from work. While I normally travel I25, it is easy for me to use I36 as well. I LOVE having the exemption and feel that it was a wonderful decision to implement. It encourages alternative fuel vehicles and has saved me so much time and money that I find the program absolutely invaluable! Please keep it under consideration in your survey results.
- Keep the tolls reasonable.
- We definitely need an additional lane or lane on Hwy 36 especially around rush hour times.
- For a predefined route that I traveled every day, I would definitely take public transit. A shopping trip though has very different requirements than a daily trip to the office. One problem with the RTD bus system though is that if you have to transfer buses, it ends up taking you an extra 30 minutes minimum to get to your destination, usually even an hour.
- I am completely against all toll roads. The reason we pay taxes, in part, are to provide roadways.
- If the park and ride was more convenient for parking I would consider them when they changed the one at church ranch park n ride I quit taking the bus
- We pay way too much in taxes to consider another toll road. I have quite using the local toll roads due to the increase in rates.
- I am more likely to use toll roads because I do not have to pay for them - I drive a hybrid and am cleared to drive in HOV/HOT lanes.
- I-25 Still jams up...even after the Trex project. Not sure how there were no HOV lanes built between Downtown and DTC? What a joke! If you are going to add lanes I hope you have a good plan to NOT affect existing traffic during the construction! There is already bridge work past Sheridan on 36 and it clogs up everyday both ways during rush hour.
- When weather is bad 36 turns into a true nightmare. Better controls of the roads when the weather starts to turn. Know sometimes it's difficult, but need to try to stay on top of it from the beginning.
- I'm not opposed to paying a toll if it's reasonable, however, I am totally against tolls so high they discourage use of the road as is the case with so much of the 470 system. Note how few vehicles are on that road at any one time. What a waste of taxpayer's \$. I'd rather see a .50 toll with a well used arterial than \$3.00 for an underutilized roadway.



- I oppose managed lanes and would even like to see the current HOV lanes on I-25 opened up for all access. It is inefficient and not used to its capacity.
- High tolls on e-470 stifles usage, basically wasting a potentially great resource. Let us not repeat the same mistake with the U.S. 36 corridor.
- I need to have my vehicle during the day to make trips to various business with whom I work or I would be happy to take a bus.
- A huge chunk of any commute I do from home involves slow progress on 287 S and across the overpass to merge on 36. I hope that the Broomfield overpass will be revamped as part of any 36 plan.
- I could use the alternate route of the Northwest Parkway and E-470 to make my trip, but don't unless pressed for time because of the high tolls. The higher the tolls go, the less I use it.
- I am traveling with young children to school and thus the bus option is not viable for us at this juncture. As our kids get older it will be (I think) more appealing.
- I appreciate the interest in public sentiment, however more lanes are not the way to go. I know my wife and I would visit Denver more often if we could take a train to restaurants, shows, bars, sporting events, etc. and not have to worry about driving home or paying for parking, but at the moment this is not possible and so we make trips to Denver much less than we would otherwise.
- have an rtd bus that goes directly without many stops to airport every 1/2 hour
- I am pleased to take part in a survey that could help make a tremendous difference in the quality of life as it relates to travel to and from work.
- If new lanes are built the best way to relieve congestion is to open those lanes to everyone, not limit them to carpools or those paying tolls. It is a waste to have a lane with little traffic in it.
- the scenarios you opresented are either too expensivefor time saved or involve carpooling. pooling doesnt work for me as I travel 36 irregularly. i despise public transportation. use stimulus or other source of cash. dont raise my taxes opr tolls.
- Please Please Please put in light rail! i would use that 100 times more than another stupid car lane!
- US 36 was built as a toll road, and was paid for ahead of schedule decades ago. THAT should have been the sign to expand US36 - CDOT is dealing with this problem too late, which is driving up costs. I'm annoyed that CDOT made promises to people using US 36 when it was first built, but is now asking for even more money (in the form of direct tolls) to solve the problem that was supposed to be solved almost 50 years ago.
- The toll charge has to be reasonable. The conditions of 36 have ruts and cracks in the road and are becoming unsafe. I often take alternate routes because of this. The road should be properly maintained and have adequate lanes without tolls. That is why we pay high gas taxes and registration fees.
- I would LOVE to take the light rail to work at Good Samaritan Medical Center. Currently there is no light rail to ride to work, so I drive. Some buses travel out there, but are not reliable enough and it takes an extra 1/2 hr to get to work taking the bus, so I drive. Most people who work in a hospital do not work 9-5. Many of us end up being at work for 13 or more hours at a time. With the current bus schedule, I would end up having to call a cab to take me home or to work most days. I have co-workers who have to do that. I would rather just drive myself and know that I am going to get to work on time and have a ride home.
- Make some improvements to I-270. That has more congestion than US36.
- The reason I don't take the bus more frequently is that my workdays vary and I often have to stay past the last bus that picks up near work. Instead of managed lanes on 36 I would prefer more buses (more trips on the same routes). Or better still, RAIL!! Even heavy rail would be a vast improvement over driving, would reduce congestion, and reduce carbon emissions. Thanks.
- If you lower the tolls on the EXPRESSWAY you would get more users.
- train from the broomfield park and ride to boulder?
- My questions pertained to entering Hwy 36 @ 287 BUT if I was coming from Boulder (Table Mesa entrance), I would TOTALLY support added lanes and tolls as it would save much more time and make the cost justified. I could mae my whole trip on Hwy 36 but I wouldn't dream of it b/c of the congestion. Thanks for trying to think up ways to change the situation. \*\*Also, I have long been interested in busing but the 45 minute trip would require nearly 2 hours to complete ONE WAY b/c of connections, which makes it unthinkable. I would totally bus, if there was a more direct route from Longmont to Hwy 36 & Broadway.



- I get to expense my tolls when the trip is for business. I would probably sit in traffic or take an alternate route if the trip was for personal reasons. 93-C470 is a relatively traffic free route for me that is a reliable 1 hour trip to my office.
- Why not consider managing the revenue you receive now to fix this problem. You know, MANAGE, MY TAX DOLLARS RESPONSIBLY.
- Efficient public transportation is great - we should invest more in that. The bus from Boulder/Louisville to DIA is great. Local Boulder area buses work well. Train/light rail into downtown Denver from Boulder would be a hit - don't give up on that! In the interim, I do believe express buses will be good. I also think the express/managed lanes on I25 North of Denver have been pretty good. I believe the NW parkway and E470 are outrageously expensive, and find the fees completely inappropriate.
- Would also love a train option from Boulder to Union Station
- I would love to see Express buses for working commuters that by pass CU area on Broadway I have to login at work on time all the time. Students with bikes and backpacks that slow their entrance and exit onto buses add atleast 15 mins. to my commute time daily because I have to take the B via Broadway to get to my connection on Walnut in Boulder. There should be buses that are labled C for commuters and only working class commuter should be picked up on those routes. How about a bus that has a good connection from Denver to IBM plant, not multiple buses connections, but a single bus you get on and take to IBM where it turns around and goes back the way it came? It could start at Market St, at Broomfield go to Lafayette/Louisville area via 287, turn onto 52 and go right into IBM's entrance area. There are thousands of workers at the IBM plant these days, and they do not live in Boulder, we can't afford to any more, most are contractors who have undependable cars, who use the bus but spend 70+ mins. if the buses are on time and the Bolt out of IBM is often very late, and we still take it because the traffic on 36 is so bad, not to mention the winter driving conditions. I have no need go to Boulder downtown, at the very least a bus that goes 36, then the Foothills parkway to the Diagonal and to IBM. It is just logical stopping spot for a route. Why on earth doesn't RTD have a route to that major employer????
- Disappointed that there is no plan to put in a safe and dedicated bicycle route between Denver and Boulder!!! This is way overdue!!!
- I pay taxes every year to have free roads to drive on. Paying a toll to me is double dipping into my pocketbook. We are suppose to be a free country where everything is not govt by taxes. and fees.
- Just put the lanes in and let everyone drive on them at no cost.
- right now the HOV lane on us 36 is a joke. I have traveled this route for over 15 years and 95% of the cars from the Sheridan exit to Pecos are single people in the cars, they use it as the fast lane also as a passing lane. Rarely have I seen any enforcement during the morning evening commute. It is very frustrating to drive in the other two lanes and watch this day after day and nothing being done about it.
- If traffic continues to be an issue we will move our company out of this corridor.
- I would use E-470 and express lane on I-25 more if it was less expensive. My paycheck has been going down not up like the tolls. I believe that the express toll way along I-25 adds significantly to the congestion at highway 36 and before Speer blvd. I believe one extra lane in each direction could have made less congestion.
- If Boulder County and the City of Boulder had not pissed off the State of Colorado fighting over rights-of-way years ago, then in the 2020 traffic study, this highway would have been shown as congested and money would be available to fix it. Instead, the 2020 study said it was impossible to widen 36 through Boulder open space because the land rights could not be obtained. FOOLS!
- I am not sure this was helpful - I only took this one trip last week - longer trips do happen and I am all for improving emissions and traffic flow.
- Public transportation is not conducive for my business (real estate sales). I do use it for personal round trip purposes like Rockies' games, and strongly encourage it for those who commute to jobs that have them in one place all day.
- I would prefer to pay for these improvements with higher gas taxes. It seems to me that using tolls helps those who can afford them at the expense of those who, like me, can not afford and extra \$80.00 to \$240.00/month.
- Why are all the new roads toll roads? What are my fuel taxes paying for if not maintenance on current roads and new road construction?
- Why did the managed lanes take more time than regular lanes in your survey? Is that reality?
- Toll roads are idiotic. I am only in favor of a gas tax, increased over a period of about 2 decades to allow for consumers to make different living choices. Road construction, based on every study that I have ever read and I have studied urban design, is



expensive. You won't listen to me. Our system is geared toward your backwards proposals. I never, ever, ever take the toll road to the airport. I have more education than many, and your ideas to reduce anything are ineffective to the point of being insulting.

- You need to increase and extend the metered access ramps on US 36. Wadsworth and Sheridan access ramps need to be more restricted so they don't clog the 36 flow rate!
- I've used our great RTD bus transport when working in downtown Denver and wish more people would use it. My US 36 travel now is mostly for infrequent errands and or trips to the airport when Skyride is not an option
- -Please connect the NW Parkway to Golden Add Rail Transit from Boulder-Denver soon ---People who travel don't necessarily have an 8a-5p job. Thanks
- Build a light rail system and everyone would ride or build a "dedicated bus lane" in which no other vehicles are allowed.
- On days where I did not have additional driving I would choose light rail/monorail over driving. Bus does not work. Higher speed transit is the only other option I would choose.
- TRAINS!!! This state was founded because of trains. Every other city uses them. It is an amazing way to keep the schedule time accurate, reduce carbon emissions, and reduce road congestion. Examples...New York, Chicago, San Francisco. A train expands the reach of the city's population and allows it to grow. Increasing the number of lanes doesn't eliminate carbon emissions, it just reduces traffic congestion. Thank you, have a good day! Michael
- Go to a straight toll fee for all vehicles as was used to pay for the "Boulder Turnpike" originally. Once the highway is paid for, lower to a "maintenance" based toll. Have the Highway sponsored and paid for and managed by private sector. Government will screw it up.
- Some answers would be different at a different time of day. Managed Lanes are more important during rush hour.
- My main use of 36 is to get my son at CU so I probably use it in non peak hours most of the time. If the managed lanes are open i will use them.
- There have been no significant improvements to US 36 in over 50 years. It is time to add an HOV/carpool to improve safety and travel times, which will improve air quality. Except for the cost, this is a no brainer.
- I am ok with certain lane use strategies. Santa Fe, that is a carpool/hov lane only during rush hour on the applicable direction of travel seems to offer the best of all worlds. Taxing the use of new infrastructure is the perfect way to assure its less used. It also separates people by income, or one could say, fiscal responsibility. The wealthy doesn't blink at a \$7.00 toll. One that is struggling has a serious decision to make when considering spending \$2.50 on a toll.
- Please consider reduced tolls for hybrid electric and all-electric vehicles.
- I am a teacher thus I can not be late for work. currently I have to pay \$3.10 toll to get to my job. I feel this is extremely high for such a short stretch of the toll road I take. Customers who take daily this road, should get a discounted price, instead of the \$3.10 toll road. You may contact me at 720-872-6489. Thanks.
- I no longer commute to Denver on a regular basis but used to work in the Tech Center and used an RTD ecopass to commute or carpoled. I am in favor of RTD but the ecopass rates are getting expensive and services have been reduced due to the economy making it more difficult to rely on the service when I was working at the Tech Center. Also, the toll fees on Northwest Parkway and E-470 are in my opinion very expensive - I only use that route to DIA when I know the alternative route will be congested and unreliable to make my plane or if my company is paying the toll. I beleive more people would use the tollroad if the cost was 60% less - I would use it every time if the rates were reduced. Also, I work in Loveland in a hotel and our guests are directed to use E-470 to save time and help reduce air pollution. But, the toll cost is a deterrant for our location vs. other Denver metro locations where they can travel the same amount of time but not pay a toll to get there. Thanks.
- Tolls were too high in the choices and times were not enough different. I do take E-470 and NE extension to the airport often due to the guaranteed time I can get there - 36/270 is too unpredictable for timing. But I go back and forth to the airport alone and can't always choose the timing. Public transport doesn't get to our house north of Boulder.
- Would be nice to have public transportation that reaches the surrounding Boulder/Denver area. Very inconvenient to use if you are north of 120th. A light rail between Denver & Boulder would be great!
- I think it's great that we are looking for ways to improve congestion and reduce emissions. I don't like HOV lanes and such because a lot of people don't reject carpooling because of personal preferences but because we don't live in a 9-5 world anymore and it isn't an option. When I'm on 25 the HOV lane is usually empty - what a waste!



- Something needs to be done with US 36 immediately. The highway is grossly inadequate! Add lanes, climbing, toll, or otherwise, as soon as possible. I am considering moving out of the corridor because traveling US 36 has become hectic, stressful, and a hassle.
- This survey seemed to be biased to try to get the results that show that people are willing to pay for toll roads, carpool, and use public transportation. I suspect this is so that you can use the results to support your push for toll roads and public transportation. This is not practical for a great many workers. I believe your results will be inaccurate as a result of the bias in the questions. I wish you had consulted with someone who is an expert in survey creation.
- Not sure what age, gender, household occupancy and ESPECIALLY income had to do with this survey.
- reasonable tolls are great; high tolls, I would consider alternate routes leaving more time for the trip. Most of my trips are leisure/shopping and are not regular or related to work commute
- Congestion I-25 North of Downtown needs to be resolved more than the Denver - Boulder Route.
- I argue an additional lane between Flatirons Mall and Boulder would significantly improve congestion and travel times eastbound. I also believe Light rail should be extended from Denver to the Flatirons mall in Broomfield.
- The managed lane option is a decent idea, but I would not pay \$10 each way to reduce my travel time as the cost is far too high (\$100/week). I don't know anyone to carpool with so that option is unavailable to me and most others. The additional lane is very necessary and I would be willing to pay a more reasonable toll fee as I believe this to be the fairest way to pay for road improvements.
- light rail train service along US 36 would be great!
- Additional lanes is one option toll or no toll, is it the only option? How about light rail? Any project like this will take years and cost millions, what is the transportation picture 10 years from now?
- Would rather pay a small toll so long as it was not necessary to carpool and was a longer trip such as from Boulder to Denver.
- We seem to pay plenty in taxes, so a toll doesn't seem fair. If it didn't take so many "studies" to get things done, we could save a ton of \$\$\$. Take the ridiculous amount of money spent so far on Fast Trax (which should be renamed "slow trax") for studies - too much government, job securing studies!!!
- I think the "managed lanes" should essentially be HOB lanes restricted to ONLY buses and multi-occupant vehicles, and there multi-occupant restriction should be strictly enforced.
- I believe if you make another lane it should be free and open to everyone to use. Right now the HOV lane on 36 is used by almost no one, while the other two lanes back up. Funny enough, even people with two or more in the car often do not use it, because traffic gets so backed up I think they are afraid they won't be able to get back over into the lane they need to exit onto I25. Also, 36 used to flow better onto I25 when the far left lane merged onto the southbound ramp, but now everyone tries to fit into the middle lane and it backs things up.
- I suggest tolls for motorcycles be the same as the carpooling rates. Especially since having a passenger is incredibly unlikely while commuting.
- E470 is a better alternative for us when traveling from Aurora to Boulder since it avoids most of the heavy traffic. Even though it is expensive, we only make the trip less than once a month.
- I like the option of toll if I am running late, I would be willing to pay unless the toll is unreasonably high- then, I don't think you would see as much success with it.
- If you do this do not make the tolls so outrageous that no one will use it except for those who get reimbursed for their travel. There are those of us who work part time self employed and are retired who can not afford high tolls.
- I feel that I am already paying for the additional lanes and improvements on US 36 in taxes and raised license fees. And that there should not be any new tolls on the US 36 corridor. I also feel that all new businesses and residences along US 36 should be paying the bulk of the improvement costs. Also it seems really stupid to me that the Northwest Parkway does not have its own ramp on and off of US 36 directly.
- Toll roads should be converted into public no pay roads according to original plans. They should not remain toll roads forever.
- I was unable to enter my estimate of time required to drive from work to the airport. Feedback told me it appeared unreasonably long. One hour from Boulder to DIA I don't think is unreasonably long! There seems to be a problem with how departure and destination distances are calculated by the software.
- I am in favor of a rapid transit system between Denver and Boulder and DIA



- I would take the bus more often if the routes were easier and with more options
- Tolls are too high. No tolls should be charged for car pooling.
- While 36 can get slow and congested, a bigger problem I experience in my commute is the bottleneck on I-270. I-270 is woefully inadequate.
- It's a shame that 36 hasn't already been expanded to 3 lanes (all major highways in the metro area need to be at LEAST 3 lanes!) since traffic has been a severe issue for MANY years. My commute is not just 36, but 270 and 225 as well, which are both 2 lanes for a majority of their stretch. This should be a public-road standard in a metro area the size of Denver. It's a shame that I have to pay \$25 round trip to use E470 just so I can get to & from work in a reasonable amount of time.
- Please; CO dodged a dangerous revenue issue with the defeat of prop. 101, yet it is things like 'tolls' & 'fees', that circumvent the intent of TABOR that was in part, responsible for the petitioners getting that initiative on the state ballot. As for US36, the intent is clearly driven by the 'anti-car'/climate change frenzy. We just need one added lane in each direction, for all traffic to use. Better yet, restrict Comm. Trucks AND RTD buses to the far right lanes and it will speed up commutes as well. The tolls on 470 have become outrageous, even for the time saved getting to the airport, which is the only reason I use it. SkyRide, forget it, try adding at least an hour to your trip there, and then you have to sit in filthy seats. Now, if there were a MAGLEV, 150mph train or monorail to DIA, I would gladly pay and use that mode, but RTD, never again. Don't let the GOBoulder pundits drive this US36 expansion - they want the jobs but do not want to provide decent roadway expansion to handle the increased population this area has seen in the last fifteen years.
- Thank you for the survey. I am NOT a fan of License Plate Tolling. For me, paying to use a lane to get to work with less congestion and on time is worth paying for. If you make it license plate tolling, then everyone will pop into the HOV lane and then just pay later which basically makes it just another lane on the highway. Additionally, collecting money on license plate billing and the number of people that won't pay their bills - is a horrible waste of time, money and resources.
- I would recommend a model similar to that in the DC area. To utilize the HOV you must have three occupants. This greatly encourages carpooling, for every car in the HOV lane there is potentially a reduction of cars on the road by two. Please quit trying to sell me on carbon, economics and convenience are far more important. Review the SLUG system in DC it is amazing how people will work out a system that costs the Govt nothing but is highly efficient. Tolls suck all they will do is push traffic off the toll way IE Tower road, every time E-470 raises the tolls how much does the traffic count increase there? The roads are not a revenue source. Plagiarism of a successful system is a good thing, the SLUG model works and doesn't require any more government.
- CDOT should expand US 36 on their own. Boulder has always been a metropolis, and this congestion should have been expected with the population growth of both Denver and Boulder and their respective suburbs.
- The reason for not taking a bus is the number of connections/time and the regional fare.
- Since I travel against traffic in both directions on US 36 during off peak times, most of the congestion I encounter is I-70 and 270.
- On airport trips, we pay tolls in order to have a more relaxed drive, save a little time and reduce the chance of being delayed by traffic. Kinda simple, really.
- Your questions didn't really apply to my type of trip at that time of day. When I go to downtown Denver for volunteering for the business day, I take the bus 80% of the time. We do not take the bus when we go to Denver for recreation/entertainment.
- While waiting for all of this to happen, can we at least get some climbing lanes in and out of Boulder over the Mesa? And a third lane between McCaslin and Flatirons Mall, and between Wadsworth and Sheridan. And maybe fix the potholes???
- Add more bike routes from Boulder/ Superior to 120th and I-25.
- If you put in a rail from DIA to Boulder, I would ride that instead of driving.
- Bus routes to my destination would need to improve for me to use the bus - it would take 45 minutes to get to my destination by bus!
- Toll are a rich mans highway only! It is a weak politicians way to tax us!
- The particular example used was not typical of the person who would most benefit from Hwy 36 improvements. I used to work downtown Denver and would have greatly appreciated these changes if they had been available then.
- Would use tolls if they were in the \$0.10 range.
- Why don't you add another lane wherever possible, even if it is just between two exits where the most congestion is: i.e. Broomfield to Sheridan exits...



- I think light rail would make more sense in this corridor than managed lanes. The problem will be with traffic congestion once you get to Boulder or Broomfield.
- If you create lanes that give preferential treatment, I think it is imperative that you have a means of consistently enforcing their use - the 'cheaters' that jump in and out of the HOV lanes on US 36 as you come into Denver are a major annoyance and violate the norms of 'fairness' that I think most people expect in order to agree to comply to laws. Same goes for those with 'reflective' license plate covers that are intended to make their plates unreadable to cameras.
- tolling is acceptable if the fees are low. Except for business travel, I will not pay tolls. Mass transit doesn't work for most people because of the time to get from ones home to place is too long and takes too many changes. Downtown - Downtown mass transit is about the only transit with high ridership. Most buses are empty except at rush hour.
- Traffic congestion needs to be addressed but this does not sound like a good plan. Adding 1 "Managed Lane" is not going to be worth the benefit. The time alone to build an additional lane will not be worth it for this outcome. As well as the fact that Toll Road 470 continuously raises their fee's which is exactly what will happen with this plan. Ideas should be focused on alternative means of transportation (ie. light rail). Other ideas include looking at improving exit ramps (maybe extend those lanes to assist more) and opening up 3 lanes again to where Hwy 36 merges with I25. At Sheridan to I25 is where traffic is the worst and that should be the area of focus.
- I think the toll is too expensive. If this were cheaper or and more reasonable, I would probably take it twice a day. Taking the toll could save me up to 30 minutes a day, but the fee is just too high.
- Where does all the other money go that was suppose to be used for highway improvements ie: Lottery and other funds.
- As an overall statement, I am in favor of high toll costs and light rail service between Denver and Boulder to cut down on emissions and the number of people using their cars as primary transportation.
- I know driving is not always the best choice but in my line of business my travel times/days are so random. I did purchase a Hybrid vehicle to have the best of both worlds.
- I would prefer light rail to Boulder and/or expanded light rail to Union station and Market Street Station in order to more easily/quickly access the existing express bus. More lanes just means more cars.
- Build homes closer to work!
- I used to take the RTD bus to and from work. I no longer do that because the available times that I could take it were eliminated. Moreso, it was costing me more to take the bus than if I drove myself--total disincentive.
- I would suggest allowing hybrid cars to use the corridor for free just like they get to do on I-25. We use that option for our Prius on I-25.
- I will only pay tolls if traveling for business and am running late or likely to run late due to traffic. Tolls on existing roads are much too high to pay on a regular basis or for non-work reasons.
- The grooves and bumps on 36 make driving dangerous and need to be fixed now.
- No mention of light rail or fast tracks, I would utilize this if it was in place on a daily basis.
- I would prefer having a toll free extra lane with a VARIABLE SPEED LIMIT - I have seen this work very well in Europe. The heavier the congestion, the slower the speed - allows traffic to keep moving at a higher density.
- I support the extra lanes for traffic, but I was under the impression that we have already collect tax dollars for the rail system which apparently isn't happening. Where will those tax dollars go? Can they be used for these extra lanes so that the extra lanes do not have to be a toll?
- I favor expanding lanes - not sure I like the toll idea. A carpool lane is fine so long as it is free. I don't see paying ANY toll for carpooling. 36 just needs to be wider, not necessarily with a toll lane.
- Toll must be reasonable to use the managed lanes.
- I make over \$200,000 per year and I am not about to let some stranger in my car to carpool. I am sick of paying tolls on E470 and having you keep raising them. I now avoid E470 when I travel to DIA and I advise all of my staff to as well and they do. Stop raping us in tolls and Fees! Were sick of it! Thank you.
- The higher to toll the better if it limits use by others. I love C470!
- More lanes!!!! Also the ruts in the pavement between Broomfield & Superior are dangerous!
- Repave the Highway the Grooves in the road are more like ditches. The road is extremely unsafe to drive on.



- We like the managed lane option - but feel strongly that there should be no charge with more than one person in vehicle. Only charge those who are traveling alone.
- I'd would rather see a rail option (light or otherwise) between the Northwest Metro Area (Boulder/Longmont/etc) and downtown Denver. I believe it makes much more sense than adding additional lanes to an already crowded corridor. There are already more vehicles (buses included) on the road than this corridor can handle. Why must we continue to encourage people to drive?
- I would use a light rail option between boulder and denver religiously.
- I use the toll roads to get to the airport (only to pick up others). I resent the high fees and consider it highway robbery to be charged a toll (\$10.00 one way) and then get an invoice in the mail. Since the traffic is always minimal on these toll roads, it further demonstrates that the TOLLS are very unpopular. Due to the tolls I now take the bus for my own airport trips and will find another way to avoid them on all future road excursions.
- Instead of investing all this money encouraging people to continue to drive, how about subsidizing the busses or **INSTALLING LIGHT RAIL ON US 36 CORRIDOR!!!!**
- I do not commute because I work out of my home office; but when I do go to Denver, I normally take the bus to save money, reduce car emissions, and the bus service is terrific and reliable. I try to avoid paying parking and tolls.
- I am concerned that increasing the lanes and the size of US 36 will only increase the traffic. What about light-rail options along US 36 - isn't that part of Fastracks? US 36 now is crowded and unsafe. Making it larger won't necessarily change that.
- Public roads serve the primary purpose of enhancing commerce, we already pay taxes on our fuel, why should we pay more. Kill the RTD Fast tracks and put it into the roads.
- finish the commitment to light rail
- I would like to see the public bus service improved .... much cheaper fee for short trip,( for example: \$1.75 for round trip between boulder and Superior), much more bus service, much more direct bus service line ( no need to change buses),it helps much a lot to cut the pollution. We should not use money to build a new lane for more pollution. otherwise, Boulder or nearby will no longer to be a nice county. Great bus service is the best improvement for traffic.
- I am not in favor of a light rail. This option will be very expensive and the result questionable. Didn't do much good on I-25. Trust me, I used to commute from downtown to Dry Creek Road before and after the project. I am in favor of expanding the entire highway to three or four lanes each side. Seems like there is plenty of land. The issue with public transportation is amount of time spent getting to a legitimate hub and then waiting. It doesn't save time. Also, it reduces the flexibility of my schedule
- Building light rail between Denver and Boulder is the only reasonable option. Building another lane does little to cut down on congestion and single occupant driving even with tolls - just look at the I-25 corridor. Why isn't light rail even being considered an option? I would definitely take public transportation if I were able to utilize light rail for the entire trip and only need to rely on buses in heavily populated urban areas. The buses between Boulder-Denver run infrequently and at limited times. The bus also takes too long to be utilized if I must be at a location at a specific time. The entire light rail system should be built out so it is reasonable to travel relatively long distances (for example, Boulder to the Tech Center in SW Denver) by only needing to switch trains. And the system is complete enough to be able to easily travel between my home in Superior to Boulder or Denver for short trips. I hate traveling by car alone to do quick errands in either city but cannot avoid it all the time. I do not want more options to be able to drive or more options to pay tolls. I do not want more roads/lanes or more tolls. More lanes and more tolls do not solve mobility issues for the vast majority of Americans - only the relatively wealthy who can afford to travel by car alone and pay the tolls. The people who are willing to (or must) carpool or utilize the current public transportation system already do so. Also, and my major concern, adding more lanes and tolls (or more buses) does nothing to eliminate our reliance on fossil fuels or reduce emissions. Wise up and think long term about transportation.
- I am opposed to tolls on the roads. There is already an expensive tollway in Colorado that I usually avoid. We pay enough already for the privilege of driving a vehicle. Please don't make us pay more.
- Keep the tolls low - NW Pkwy is a joke, if the tolls are high, no one will use it!
- I enjoy using the HOV lanes and free tolls with my Prius which has the special HOV/free toll permit sticker. This should also be an option in the proposed 36 corridor.
- Express lanes work well. I suggest building them elsewhere too (south of downtown, north of I-25, US 36 junction). You may also want to consider dynamic speed limits, i.e. posted limits adapting to current traffic conditions throughout the day, volumen of traffic, etc.



- I don't believe changes to highway 36 will change traffic problem. Investment needs to be made for affordable public transport. I would use current public transport if it was cheaper. Right now one way to work costs me \$1.00 in fuel cost. Bus transport would cost me \$3.75 one way. It is hard for me to justify taking the bus when it is three times the cost. Design a better cheaper public transport system and people will use it. If the bus would be \$1.00 or even \$1.50 I would use it. RTD right now is a rip off.
- Rebuild the 287/wadsworth/US36 interchange to improve flow on the US36 off ramps. Needs off-ramps without traffic lights. The off-ramp traffic backs up onto US36 which causes the biggest jams on US36.
- One issue I have that has not been covered is the lack of accuracy of the transponder readers. I can be in a dual carpool/toll lane with two people and even if I am in the correct lane, my transponder goes off. Therefore, I avoid these lanes. Also I take toll roads when I absolutely need to get somewhere by a certain time and can't risk the congestion. I HATE E-470 and its deceptive toll collection, lack of signs and prices and would not use it if I didn't have to get to the airport on time.
- Don't have it be a big set of lanes that are inaccessible except for the beginning and end. Utah and several other states operate HOV/Toll lanes that allow for people to exit and enter the lanes at any point along the way. There is no barricade between the lanes and regular traffic. The I-25 Lanes are great if you are going downtown, but if you want to exit at say 58th St and use the lanes you are unable to, and if you are trying to avoid traffic it is a hit or miss once you get on the lanes....
- Mass transit is a great idea for those who commute regularly to a specific place, but is rarely appropriate for those in the service industry or business consulting as demands vary too much
- Great idea, but what about expediting the Light Train/Rail option!?
- Expand light rail not highways! Bring light rail to Boulder, the I-70 corridor fort Collins and Colorado Springs.
- I am against paying ANY tolls for roads my tax dollars are already used to maintain. 36 must be expanded to handle the increased traffic PERIOD! I do not see where the existing HOV lanes on 36 or 25 have relieved congestion and see it mostly empty and unused. In fact it harbors a speed trap that the Denver Police take advantage of. Many new businesses have sprouted along the 36 corridor and are bringing in more city and county taxes, add in the new taxes on car registrations that recently were levied on us all and you should have plenty of tax dollars to add the two new lanes to 36.
- My husband commutes to DTC and drives the entire way because there isn't a bus that leaves/arrives at a convenient time. He would take it if it could leave later in the morning and evening. It would be nice to have reasonable tolls for him to get home faster on Rt. 36, but often by the time he leaves work, it's I-25 that is more backed up than Rt. 36.
- Prices for buses are high and travel times are the same as driving, therefore no benefit. If buses took the managed lane and saved time, I'd consider using them if you could purchase discounted packages. I'm most in favor of a light rail or train system. Lastly, 36 needs some major road work. Potholes and tracks left my big trucks make driving dangerous.
- I think a managed lane that allows 2 or more people (including driver), buses, motorcycles or hybrid vehicles without an extra toll to be very acceptable. 50% of the time I do have an additional passenger that I carpool with so it is frustrating not having a carpool lane. However, I think requiring 3 people, minimum, to use a managed lane is unacceptable. I think the minimum should be 2. I also think hybrid vehicles should have access to managed/carpool lanes without restrictions. If there was an express bus from the Sheridan Park-n-ride to Longmont (stop near Oscar Blues on 119 or Front Range) then I would take the bus every day. Unfortunately that route does not exist. Light rail would be nice.
- Why not just make all lanes available to all drivers instead of having specified toll lanes. This would spread more traffic over more lanes, thereby maximizing the congestion uniformly for all travelers. If tolls are charged, fewer drivers will take the "managed" lanes than would use that lane as an extra lane for all travelers. This approach seems most fair to most travelers. Tolling on high use routes where there is no reasonable alternative route amounts to a regressive tax policy, and while I can afford to use toll roads, I think tolling on such routes is blatantly unfair to the general public.
- I think toll roads are very good. I only wish they would incorporate this system with the rest of the toll roads. In the East one transponder does it all
- This is moronic that it is just NOW being thought about. This is a problem that has been going on for a long time. Get it done. Everyweek I see wrecks and now I'm one of them. I have sever injuries due to the negligence and stupidity administer by the state. Add the lane! Also no passing zones between exits foothills and Mccalin!
- HOT lanes are a great concept and should be add between Boulder and Denver. In addition, the current HOT lanes should allow users with transponders to access at Sheridan Boulevard (eastbound) rather than waiting until Pecos. The highest toll is supposed to reflect the bus fare. It is inequitable to shortchange HOT users from the full length of the HOT lanes.



- I think widening 36 is needed and a reasonable toll is fine but it should be prorated by how long one uses the road. And not a flat rate.
- Hwy 36 ABSOLUTELY needs new lanes but they should NOT be restricted to toll lanes! Look at I-25... The toll lanes are empty every day but traffic is bumper to bumper in the unrestricted lanes. Toll lanes DO NOT relieve congestion!!!!
- I drive between Denver and Broomfield everyday. Rarely do I see vehicles using the Express lanes on I-25, and when I do, there are normally 2 or more people in the vehicle, meaning the lanes are free. I also travel to Missouri via I-70 through Kansas. Part of that route is toll road, and is heavily traveled, because the tolls are cheap. The roadway has always been in kept in good condition, despite the years of weather and traffic, including semi's. According to their website, <http://ksturnpike.com/files/class2.pdf>, a 2 axle vehicle can travel all 236 miles of the turnpike for a total of \$10.75. That is a reasonable toll, not \$3.00, \$6.00, \$9.00+ to drive less than 30 miles. One only needs to look at the lack of use of the Northwest Parkway in Broomfield and E-470 to see what the area population thinks of the toll rates here. Keep the tolls down to \$0.50 or less for the whole route, and you will have people use it. Otherwise it will just be money wasted.
- I would use toll roads when they are available if I have time constraints. The trip I referred to did not have those constraints on it. Otherwise my answers may have been different. I would also carpool when a colleague was attending the same meeting.
- ANYTHING that can reduce the congestion on Hwy 36 and the H287 corridor would be GREATLY appreciated!
- I would use 470 more if the prices weren't so high.
- Why only one lane each way. Hasn't Colorado learned by now that small improvements are a waste of time. Every time they add one lane by the time the construction is done the population has exceeded the improvement. Think bigger. The Trex project hasn't seemed to have increase the speed thru downtown. I still get stuck in traffic as often as I did prior to Trex. Thanks
- 36 certainly needs more lanes available in both directions to help alleviate traffic, however, the toll lanes are already minimally used so it would be best to allow all drivers to access these lanes for free thus alleviating the most traffic
- My top preference would be to have more frequent buses (especially express) available that don't cost \$5.00 each way. Subsidize the buses or other public transit options rather than more roads.
- I would not change this trip because it's not during rush hour so it's generally not a problem. I DO NOT use US36 to travel to or from Boulder during rush hour -- it's not worth it. I take Cherryvale and Marshall. If I still commuted, and US36 was my only option, I would alter my departure time to avoid traffic. I prefer US36, as it's the direct route, but traffic negates that. Traffic mitigation lanes would probably change my habits, especially if the fee were small. In bad weather, traffic mitigation lanes would be moot -- the hill into and out of Boulder (Davidson Mesa?) is impossible in slick conditions, and I would take Cherryvale.
- I carpool as much as possible. I would definitely make a better effort to carpool if the managed lanes were free for 2 or more passengers.
- Make US 36 3 lanes from Boulder to Denver
- The forced response on your last question is highly inappropriate. Should have prefer not option.
- I want light rail from Boulder to Denver along the 36 corridor with express bus options to Gunbarrel
- The managed lanes will only be effective if they reduce travel times for RTD regional routes, HOV & toll users. You MUST separate the general purpose lanes from the managed lanes with a median to get my support. The current toll users, HOV, and Buses frequently miss drivers that "choose" the managed lanes after they see their free flow conditions. I would be happy to supply video of this situation as it occurs quite frequently. I am in full support of the lanes if they are separated from the general purpose lanes like the current sections along I-25. The current managed lanes from Sheridan to Pecos are dangerous and minimize the travel time benefit of this important investment. Please build the lanes, but ensure that slip ramps in and out of the managed lanes (at the interchanges) are the only places that toll users, HOV, and RTD regional routes access the managed lanes.
- There needs to be more monitoring of the HOV Lanes on the Boulder Turnpike in the morning on weekdays. I have been driving it everyday for the last four years and there is NOT A SINGLE DAY that I didn't see single passenger vehicles in the lane. It is not fair to those of us who follow the rules. The new park-n-rides on US 36 are not very convenient. It takes longer to drive to the new lots, park and walk half a mile to the bus stop. It takes less time to just drive from home to work. Time is money and because RTD can't make it convenient, they are losing riders. I prefer to use public transportation, but when it takes twice as long as it does to drive, it doesn't make sense.



- I would not be on the 36 if Broomfield extended Midway westward to connect with the Flatirons mall. Lunch traffic would find this connection useful too and would cut down on 36 traffic and overall distance. EXTEND MIDWAY please.
- Toll roads are a further burden on over-burdened taxpayers. Colorado should learn how to better govern it's infrastructure expenditures, and hire individuals who actually "think" about how to build EFFICIENT road systems.
- A lot of the questions do not work for my situation. I am a self employed contractor. I work by my self and have to drive my work truck with tools & supplies.
- I would love to have a toll lane, but it must be cheap. Less than \$1 per entire trip for me to use it regularly. Otherwise I will only use it when running late.
- It's not fair that some people without transponders use the toll road and are not charged because their license plates are not found (eg. Mexican, Canadian plates)
- I am already paying taxes and fees like emissions. Manage your budget better.
- At this time I prefer to take an alternate route into Boulder which is faster and there is less traffic!
- I'm willing to pay tolls if rate and results make sense. I wish there was more rail service. I lived in Europe for a while and miss that convenience inter-urban rail provided. I know that won't happen here for years but we can work in that direction. Thanks.
- I choose not to use a bus because the time it takes to get to the bus or wait for transfers greatly increases the travel time. If I drive back and forth to work from my house, 35-40 minutes door to door. If I take the bus(es), over 2 hours door-to-door.
- My survey answers may have changed had I selected another day/time option. I chose Friday evening - traffic is not usually as heavy on my drive then. I am more likely to use the toll roads in the morning and it always depends on timing issues.
- I like the idea of letting lone drivers pay a toll to drive in an HOV lane, while leaving it free to carpoolers. Perhaps one already exist, but a smart phone app that has audible voice alerts (hands and eyes free) to report problems, updates, and estimates based on actual data from other transponders, for a pre selected route.
- This survey was very one sided towards not getting a toll lane. In the section with three choices "managed toll lane, managed toll lane w/ carpool, regular lanes" the regular lanes were always less travel time than the managed toll lanes w/ carpool! And FREE. Of course everyone is going to pick the regular lane option over the managed lane. If the travel time showed up as less than the regular lanes, I'd have chosen the managed lanes. We are definitely in need of an additional lane through Boulder. The traffic during rush hour is CRAZY!
- I use the toll lanes primarily to avoid the stop and go congestion and lane changers more so than to save time. I find driving in congested traffic stressful and pay the higher toll fee during rush hour traffic to minimize those conditions, saving time is the added bonus.
- I would prefer to have a light rail option instead of extra lanes, since I use public transportation often.
- Next time provide a back button, if we'd like to reconsider an answer. Thanks for asking our preferences on HWY 36 and mass transit. My 1 hour door-to-door takes 1.4 hours using bus and light rail today.
- It would be nice if you had a special bus service for the CU students. Typically the bus service is not ideal since the student usually takes home backpack, laptop and clothes. This is a lot to carry to a bus and then to take back to their dorm. If you had this service I would pay for it for my daughter while she is attending college and avoid driving on US 36.
- Your question regarding the express bus is silly. The express buses are point to point buses and generally a transfer is required to get to the final destination. Comparing a trip in an express lane to a ride on a bus in completely unrealistic.
- I have always checked bus routes for regular commutes. Unfortunately our home location (3-5 miles outside any population center) does not facilitate using such public transport.
- My commute is primarily due to my 15 yo son going to school in Denver near his Mother's house. My son will soon be taking the bus and/or driving himself to reduce my commuting.
- For the question asking if I would carpool or take the bus in order to conserve energy and better emissions, I would take the bus. I don't think I would ever carpool with anyone.
- Would rather have a light rail service from Denver to Boulder.
- I have a vehicle and DOT sticker that allow me to use HOT lanes free of charge. No option for this in your choices. My commute is long or I would use public transportation instead of commuting. I have an ecopass. I have very unusual work hours or I would carpool. My situation is unusual, so I am not very representative of anything.
- focus on fastrax development to reduce traffic congestion. DC metro was nice and reduced the miles I drove by 50%



- The highway needs refinishing. The roads are filled with pot holes and the entire section from Flaitirons Mall to Boulder needs to be redone. Traffic is only one of the issues.
- I think public transportation is very useful and helps the environment. At this point in my life I have such variable trip times due to kids that I do not take public transportation. If there were a light rail option via the 36th route I would take that. Thanks
- I am in support of faster, more frequent bus service between Superior and Boulder. And I would use that mode of transportation. I feel the majority of traffic tie-ups are due to traffic accidents due to driver error. What can be done about that?
- What ever happened to the light rail that was supposed to run between Denver and Boulder? I thought that we approved the sales tax increase 5 years ago to fund its development....While I support the carpool lanes, I am discouraged that we are not pursuing the light rail program.
- I think the improvements you are trying to make are smart and necessary. No one likes to pay a more for their commute but if it prevents traffic problems and reduces air pollution I'm all for it. Also, I would carpool more but I travel to my office very inconsistently throughout the week making it difficult.
- Please keep it cheap. The tolls on I-25 are already too expensive. I use them ONLY if I absolutely have to be at work at a certain time & I know it will save me time.
- 36 is a horrible drive. Especially between Sheridan and Wadsworth. The sooner the highway could be fixed the better.
- the existing tolls are too expensive for the common driver on a daily basis. Reduce the amount and you will raise the usage. I drove across the state of Ohio for less than what it costs to go around the city of denver on E-470
- Perhaps repainting the lines and giving up the inside shoulder should be considered. There's room for another lane and it isn't any different than how parts of I25 are used currently
- I am opposed to tolls. I live alone and do not work in the area and so I only occasionally use US 36. I usually use E470 to get to school in Broomfield. As a person who lives alone I feel discriminated against when there are toll free lanes for people with one or more passengers.
- It would be beneficial to make the carpool lane that begins just east of Sheridan on East-bound 36 an optional toll lane as well. Many non-carpool drivers use the HOV lane starting at Sheridan if there is traffic. It does relieve congestion, and many EZ pass users assume they can drive there. Why not charge a toll for using that portion of the highway? It makes sense as long as traffic must enter at Sheridan and not exit until the lane ends, either back onto Eastbound 36 or continuing onto the I-25 south HOV/Toll lane. Too many people are already using that lane for their convenience, and passing in and out whenever they want. Make us pay for it! I would be happy to if it means I can get to work safely and on time.
- Please don't put any more on ramps or exit ramps on US 36.
- I prefer a managed option that favors carpool defined as driver +1. I do NOT prefer options that define carpool as driver +2. Consider having hybrid cars being able to be like a carpool. The 70th/Broadway Park n Ride should be removed from Service under the new managed lane as the ridership does not support its presence.
- Tolls on E 470 are too high. Bring them down so more people would participate!
- I support the Boulder Transit Village and trains rather than additional vehicle lanes, which would promote additional vehicle use.
- I support reducing carbon emissions very much, but I think a free HOV/carpool lane like the one on I-25 is the best option. I wouldn't pay a toll to drive on a road.
- I do occasionally take "express" busses from Superior into Denver, and would increase my frequency if the schedule locations and times increased.
- Building light rail along the 36 corridor is the best option. I would reduce my driving to Denver from Boulder by ~80%.
- To be clear, I seldom leave Boulder and I never use the bus. The cost of redesigning 36 so that it has the extra lanes sounds very high, and the disruption of traffic during construction will be awful. Therefore, I am not interested in seeing this project go forward.
- Require that anyone using a cell phone for any purposes pull off the road. The road is for driving, not eating, talking, texting, watching videos. If drivers would pay attention, do the speed limit, and keep up with traffic, congestion would be reduced. I can't use the bus option because my job requires me to drive my car to various locations as part of my duties.
- I would have liked to changed some of my answers. Unfortunately, this survey did not allow me to go back.



- Please end the congestion on 36 soon!
- Travel north/west bound on I-36 can be better managed in the morning by departing my home at an earlier hour; it is far less manageable on the return trip between 4-6 PM
- I dislike the discrimination against single drivers. It is impossible for me to carpool due to my work hour variations. I believe the purpose of the express lanes should be to reduce congestion - so either charge everyone or no-one.
- I require my car to do my job. I make home visits to clients. I carpool for social activities in Denver and Boulder with my husband, children, and friends.
- it would help the congestion on 36 if they would lower the tolls on E470 as more people would then use E470 over 36. I now take 36 a lot more since tolls continue to go up on E470. 36 is even out of my way and a longer travel time for me.
- Put our tax dollars to work and fix it.
- Would be willing to travel the Northwest Parkway everyday. However due to the high cost of tolls I avoid this road. If the tolls were more reasonable I believe this road would be utilized more often. I would definitely travel this road everyday if the tolls were lowered and were affordable daily - thank you!!
- The only workable solution is additional travel lanes for ALL to use. Everyone pays for the asphalt via taxation, everyone should be able to use the lanes. RTD is unworkable
- I would use a toll lane if the price isn't too high. I think the current rates are too high. The toll lane that is available for Hwy 36 & I-25 is only reasonable when the traffic isn't too heavy. If the rates were more reasonable on toll roads I feel they would get more usage. Right now, the toll for E-470 is basically highway robbery to me. My husband will use it, but I won't. Of course, he doesn't ever see the bill. I think you need to think about how much more usage you would have if you lowered the tolls. The tolls keep escalating. Why? Hasn't the cost of the road been made, and if it hasn't you need to think about what you can do to get more people to use it. To me it's simple. If you want someone to buy your product you either improve it greatly or lower the price.
- 36 NEEDS to add lanes, but they should NOT be toll lanes
- I would be more likely to use the RTD if there were a stop along I25 further north than 120th. By the time I get there I have already gone through half the congestion between here and Denver. Tolls are fine if they are reasonable however too much money is wasted in maintaining the roads and too much profit extracted to warrant them. Have toll roads deter commercial development as they can not attract employees who are willing to pay the premium to get to work.
- Is the likely hood of rail service too far off in the future. I would not be opposed to using bus service. But there is not connecting bus service from the Sheridan RTD stop to my place of work ( a school).
- I am disappointed that this survey was so biased to driving a car to travel along the US36 corridor. Why weren't more public transit options offered?
- I usually only travel to Denver to visit family.
- The current toll lanes, NW Parkway and E470 are too expensive and do nothing to contribute to solving the transportation problem in the metro area. A toll of \$3 - \$4 per toll booth or reader may not sound like much on the surface. But when you start adding up all the tolls, it quickly becomes oppressive. I currently live in Superior and work in Aurora at I70 and Pena. Tolls one way w/transponder are \$7.60 or \$15.2/day, \$76/wk, \$3800/yr. I make over \$100K/yr but I can not afford \$3800/yr to drive the toll road to work. I will use it occasionally during extreme weather, when I have to be someplace. I beg you, please do not put a toll lane on 36. Make driving 36 easier for everyone and not just the uber-rich. I am so tired of discriminated against because I can not afford to pay to get around the metro area. I literally sit in a stand still looking at an empty lane next to me daily (toll/HOV lane starting at Sheridan in Westminster). A lane of traffic with no cars is a waste of resources. I can not help but wonder how much easier the traffic would flow if more cars were allowed to use that lane. If you absolutely have to charge a toll, make it reasonable so more people can afford it. NO MORE THAN 50 CENTS for the entire length of US 36!!!! There is no reason the toll roads in the Denver Metro area have to be the most expensive in the nation! Be a part of the solution instead of propagating the problem!
- \$12 to get to the other side of Denver is too high. I would use the tollway dozens of times if it were more reasonable. Lower the cost (fix fee), and you'll start to see the usage increase, as well as your revenue. Keep the cost high, and the congestion on 36 will remain high. When I take NW Parkway is generally not busy, yet 36 & I25 are very congested... that's because the toll is too high! Please listen to your customers. Thanks.
- It's ridiculous to keep adding toll fees to roads. It just congests other road possibilities so that a toll can be avoided. Bus service sucks and is unreliable. I'm sick of supporting a government that can't manage money. No, I didn't vote for 60, 61, 101.



- Light rail from Boulder to Denver & Boulder to DIA! I rather take a train that can't get stuck in traffic than the bus that does and has to exit the highway to make stops.
- I would prefer Light Rail connecting the two cities. By expanding the highway we are just promoting more car travel.
- Thank you for asking for input for this important decision. I don't use 36 a lot, and one of the main reasons for that is all the traffic. In addition, 36 is in poor condition. Anything we can do to promote public transportation is good. We need to make it as easy and inexpensive as possible. Otherwise, people won't use it. \$4 each way from Broomfield to Boulder seems pretty steep for me. All options need to be explored I think -- before going ahead with adding another lane. And I'm sure you've talked about that too. A high-speed rail would be nice. That would take more vehicles off the road, be quick and easy, and possibly a tourist attraction as well. The initial costs would be higher I'm sure, but hopefully would pay off in the long run. I took the bus almost every day of the week until the Broomfield park and ride was relocated early this year. With parking on only one side of Hwy 36, this has become very inconvenient for me. I would much rather take the bus than drive, so I hope there are plans to open another parking area on the north side of Hwy 36. I've witnessed several snowstorms on Hwy 36 where there were no snowplows to be seen (I was stuck on a bus on Hwy 36 for 8 hours in 2007.) Will the managed lanes be plowed better than the regular lanes? Until some drastic improvements are made, I'll avoid 36 at all costs during bad weather.
- This was a difficult survey because I was asked specifically about my last weekday trip on 36, which is not typical of my normal trips. Also, it was unclear as to whether the managed lanes would be available any time of the day. For example, I use the HOV lanes on I-25 and 36 to travel to CU football games, but those lanes are not open to me during the week on my trips to and from work because I am traveling the opposite direction. I use the NW Parkway and E-470 as often as I can, route permitting, because I appreciate the higher speed limit and the lower congestion. I believe in the free market: I am willing to pay for the convenience if there is actual convenience.
- I think 36 should be 3 lanes from Boulder to I-25 but I do not want it to be a toll road. There should definitely be an HOV lane the entire way.
- Seems odd to me that I-25 expanded its north-bound capacity to Longmont without imposing tolls on drivers, yet the US36 approach relies on tolls to accomplish the same. Given the NW population expansion and lack of alternate efficient routes from Denver to Boulder, it seems unusual and poorly planned to have waited all these years to finally even consider a 1-lane capacity expansion (to three lanes) of US36. Yet, the expansion would be accomplished via "managed" or toll lanes. I'm sure there are compelling reasons for maintaining US36 as-is, but the highway seems to be a logical extension of I-270 - an interstate-type highway and not a state highway. Overall, having driven many different freeway systems in several different states for a number of years, I find Colorado's strategic highway planning strange (highways not particularly organized to support the population; think I-225...), unusually slow in construction, and already overwhelmed by the time a tiny expansion finally completes after 2-3 years in highly disruptive construction. I've observed modest Colorado highway projects extend for literally years, and in the end seemingly provide small, if any improvements to traffic flow. For example, the stretch of US36 from Sheridan to I-25; went from 2 lanes and a carpool lane to 2 lanes and a carpool lane after an 18 month construction project to widen bridges and create a false sense of capacity expansion. Same with I-225. Same with the "mousetrap" transitions from I-25 to I-70, arguably two of the busiest interstates in the intermountain west, connecting not much better than they did prior to the massive mousetrap construction project. I don't get it...
- You might increase bus ridership if: - major bus stops had bikes/cars available for cheap rental for short trips - each bus had a GPS locator so people could look up when it was going to arrive - busses had internet access
- I only use Highway 36 for unplanned shopping or recreation trips. My answers might be different if I needed to commute to work on a daily basis.
- Toll roads sold to foreign businesses are a very BAD idea.
- My survey trip was not typical - happened to be a return trip from airport after returning from a 2 week trip.
- I carpool most every day and cops do not enforce violators or deal with road rage. I do not believe your 'managed' lanes will do anything than cost more money. Also, this should be done on I-70 and not 36. I would use I-70 if there was carpool lanes.
- More lanes would be nice. Having expensive tolls/ restricted HOV lanes make no sense. Add lanes but have them available at all times to all vehicles.
- I would love to use the park and ride to take the bus. However, once downtown it takes 45 minutes to travel in a bus to Denver Health! This is way too much time. Buses frequently are not available on the shifts that I work



- My work related travel route does not have any other options (that are direct with least amt of miles) and I have never experienced heavy traffic at the time I travel 36. Do not make the same mistakes of E470. More people would use E470 if it wasn't so expensive. I use it only when I have to because of cost.
- Although I mainly picked the "free" lanes, I would use all three solutions (paying, carpool, and regular) depending on the traffic conditions.
- I don't believe adding a lane is a long term solution compared to some type of light rail solution. I think the tolls will end up being as high as E470 which are very high to be used on a daily basis.
- multiple lanes would be much more feasible - the managed type lanes (or bi-directional) lanes currently used on I25 do not help much for congestion. More train routes would be more reliable and traveler friendly than the buses currently in use
- what about a train between denver (I25) and boulder? why waste money building more lanes when it could be used to build rail infrastructure?
- I drive a Hybrid Honda so currently I can use the I-25 / Hwy 36 corridor at no charge (This programme has had funding extended several times thruout 2010 hopefully this programme will continue to be funded). I leave for work later to not have so much traffic - which is sometimes worse after 9a - I enjoy the HOV lanes for the ease in travel and the reduced stress is the most important part, even tho it is only 6 miles on I-25 a little more than 6 minutes, psychologically the reduction in stress is amazing. Traffic is still backed up by the time I merge back into I-25. My trip is usually about 40-45 minutes the best time was 31 minutes from Erie. I have noticed that about 5ish that the HOV lanes are crowded. I'm hopin that with the lane expansion it doesn't reach capacity immediately after opening. hats off to the Colo State Patrol for keeping folks "honest" out there by stopping the major speeders & the scofflaws that don't have transponders. We have 3 accounts with you folks & I may add another for a friend of mine. Phillip Bradbury Erie Colo
- From observation, i think most of the congestion on US 36 is caused by people merging on to the highway at a low speed, creating the accordion slowing effect (most people immediately attempt to merge into the 55 / 65 mph highway at speeds as low as 30 mph in my experience, not using the entire merge lane). if merge lanes were longer (where possible), had a barrier between them and the faster moving traffic for some portion of the length of the merge lane (even just those flexible reflector posts), and signs that say either "INCREASE SPEED TO 55 MPH" or "MINIMUM HIGHWAY MERGE SPEED 50 MPH", something to get people to merge at a safer speed, i think it would help congestion tremendously. extra lanes will certainly help, but may also contribute to the problem stated above because people may be hastily merging into fast moving traffic to maneuver over to the managed lanes. thanks for the survey and hearing our comments.
- Please be sure you consider equally input from all users of US36, not just those from the more politically motivated Boulder area. Said another way, considering engineering, traffic efficiency, and commerce and not so much non-highway non-traffic causes. And no bicycle lanes on the highway!
- You did not ask about a rail option. I know it would be the most difficult/costly to make happen, but I think it would be a good choice. I have tried to take the bus, but it usually doubles my travel time, which is not an option. If you can make the Express buses as quick as a rail line, with less energy use - great. Also - this survey - asking about my most recent trip does not give the opportunity to comment on my typical experience of all traffic on 36 bogging- down from the merge at Sheridan to I-25. That is where the traffic seems to become unmanageable. I look forward to seeing what you decide!
- Traffic congestion leaving Boulder for Denver, on 36 between Table Mesa/Foothills and McCaslin, c. 3:30 to 7 pm, is the worst and should be a high priority to address. A general use lane from Table Mesa/Foothills to McCaslin (Louisville/Superior) should be included in any plans.
- We need the more frequent bus options and toll lanes for those who carpool. There's not much sense in single drivers paying a toll to clog up the HOV lanes.
- I think toll roads are basically unfair in Colorado because they are not evenly distributed. One area is heavily tolled (Northwest metro), while others are not. For example, I rarely use I-25 South of Denver (T-REX), tax money was used to improve it, and there are no tolls there. There are no tolls on C470 which I rarely use. In the Northwest metro area, we desperately need road improvements, US36 must be widened, the beltway should be completed that connects E470 and Northwest Pkwy to C470, CO93 should be made into a multi-lane highway because it is overwhelmed and unsafe. if US36 becomes a toll road, then most of the highways that I use would be tolled - NOT FAIR!. I think that widening US36 should be funded by taxes because this is a basic infrastructure improvement that has been neglected, not a nice-to-have. We have already passed tax increased to improve traffic flow and to create light rail in the US36 corridor. These project should immediately go forward without tolls. The only way I would support tolling would be that the tolling stops once the road is paid for, and that ALL road improvements in the metro area are funded this way. Again, tolling is unfair unless it is evenly applied. It has been the legacy in Colorado to



force the Northwest area to pay more for infrastructure improvements. After all, isn't that why US36 got it's nickname the "turnpike" because it was created only because it was a toll road?

- I am strongly opposed to tolls and "Managed Lanes" because I already pay taxes that go towards the building and upkeep of roads and highways. To pay taxes that build highway lanes and not be able to use them is unjust. Further, the tolls will be paid by the wealthy, who can easily absorb the cost. They will then be moving along on lanes that I helped pay for, but cannot use. That further financially stratifies society, a role in which government should not have a part. Also, the toll rates are too unreliable. The toll rates that are being discussed now do not usually reflect the real (higher) rates that are implemented when the Managed Lanes actually open. The toll rates also will go up at any time without any input by the people traveling the highway. The tolls are also frequently not connected to highway maintenance. They are used to make up for shortfalls in other areas of the state/county/city budgets. To avoid all of this trouble, unfairness, and inequality, tolls and managed lanes should be avoided.
- Express bus would need to be 20 min or less for my route. Now I have to take 2 buses from McCaslin or 3 from home. It takes hours. Need to travel to Longmont and Lafayette for work during day and buses are also way too slow for that
- I do feel toll roads are a good thing, to help pay for the roads, but i do feel we need to keep the cost down so more people can afford to use them. I feel the charges on n/w parkway are way too high. I would use it far more if the price was lower as well as other members of my family. It just adds up to be too much, when you use it daily.
- build a better I70 from Golden (or DIA) to Vail-- including high speed mass transit
- Your survey is skewed.....I do not want to pay additional fees or taxes for what I have already paid for over and over and over again! it's about time the state gets its act together! You have improved everyone else's roadways except fo Boulder County! Look how many millions you have spent on road improvements in all of the Republican strongholds at boulder County's expense! I'm tired of being screwed by the very people who are supposed to be taking care of us. The improvements to US 36 are years over due and paid for numerous times over! The original US 36 "Turnpike" was paid off by tolls. Now you want to screw us again!
- I would rather use rail so I don't have to sit in traffic.
- I am very wary of toll based solutions.
- The bus does work for me because I often run errands at lunch or take clients out for lunch.
- The reason my co-worker and I cannot use public transportation is that we would get dumped off at Church Ranch and have no way to get east to our work without it taking hours. It is much easier to just take turns driving which is what we do. We rarely have to go slower than the speed limit due to congestion (just snowstorms or occasional accidents). My biggest complaint is that the road is in such terrible condition right now. But, we see the terrible congestion going the other direction each commute and say to each other that we couldn't stand it if we had to do the opposite commute. So, I totally support whatever you have to do to relieve it for those poor folks coming in to Boulder in the am and leaving in the evening.
- I do not use 36 as much as I used to, due to moving to a different city. When I did use it more frequently, I would use I-25 to avoid the traffic on 36.
- There are some simple alternatives to ease congestion before adding managed lanes. For instance, build an acceleration land for vehicles entering 36 Westbound at Superior that prevents merging until they have attained highway speed climbing Davidson Mesa.
- Look at 470 - that toll is ridiculous! Don't even start. Then you'll raise it. My husband got shoved out of his job. There are no jobs for us. I'm the only one in my family left employed. Nobody else can find a job. Don't add tolls to our misery! Leave us alone! Or give us jobs! If we're over 50, nobody wants us!
- Park & Ride facilities are too small. Can't count on getting a space for a trip to DIA. Rail is NOT the answer. More buses and bus lanes will help at far less cost.
- The gasoline tax is meant for h'way improvement, but has been misused for years. Gov. Romer didn't build 1 inch of road in 8 years, for example. Gov't collects enough money. Reprogram those funds and build more travel lanes, period. Stop nickel and diming the citizens who pay your salaries.
- The biggest obstacle to using public transportation is that it doesn't go where I need to go when I need to go there or I may be carrying items not easily carried on a bus.
- By restricting the access to HOV lanes to only those who are traveling from the area allowed to enter and only to where the lanes merge again to regular lanes of traffic reduces peoples opportunities to use these lanes even when carpooling is a good choice.



- Light rail that we have already been taxed for should be built!
- I would like to see a Light Rail line between Denver and Boulder.
- I strongly oppose new general purpose lanes because people need disincentives to drive single person vehicles. I also oppose any new lanes for existing traffic congestion on 36. The message is loud and clear. Live near where you work or suffer, IDIOTS!
- I'm afraid my feeling is that this survey is mis-guided. The most important development that the Denver Metro and Front Range area should be working on is the Light Rail. You can improve roads constantly forever (and will... and do...) but it will NEVER solve the problem. Until a means is provided to remove un-skilled vehicle operators from the road by providing them with a convenient, cost-effective, and reliable means of mass-transit, Denver's problems will only get worse.
- I am quite opposed to tolls being used as a means for the wealthy to get places faster. I think in general, the roads should be improved by tax dollars and everyone should be able to use them without paying additional fees.
- while the need for relieving the traffic congestion in the Denver/Boulder 36 corridor is long, long, overdue, and desperately needs to be fixed...(I have lived in this area for 38 years, and that corridor is primarily the way it was way back then, with the exception of the short distance from I-25 to/from Federal Blvd.)...I oppose any type of toll option, and would rather see the improvements paid for from tax/bond issues and/or govt. assistance. Imposing tolls on people for an indeterminate amount of time is not a proper solution.
- Please put your energy and taxpayer money into building commuter rail systems for the US 36 corridor as soon as possible. Thanks!
- i used to take the bus to denver to work but stopped b/c of the time it took and also b/c i work night shift and sometimes get to leave early and didn't feel safe on the bus at night
- Thank you for the survey and the opportunity to provide input. I have been commuting from Boulder to the Denver Tech Center for 6 years. There is no easy travel way to get to my place of employment due to the lack of walkability at the DCT. Therefore, I am very willing to support a toll lane to reduce traffic congestion and decrease commuting times. Currently, I will take the NW Parkway to save time although this route is the longest. However, the traffic is minimal the commute time is predictable.
- I do not support adding toll lanes on HWY 36. I think that just allows people with extra money to buy their way past traffic. I do think more lanes are needed, but they should not be toll roads. We pay enough taxes as it is now. I would support adding car pool and bus lanes as that may reduce the overall number of vehicles on the road and encourage people to car pool and/or take public transit.
- I don't have a problem paying a toll for traffic improvements as long as the tolls are distributed throughout the system. It is not fair to "toll" the US 36 corridor and then not e-470 and/or other areas who were constructed and improved earlier.
- Would like to see the current High Occupancy lane extended from Federal/Pecos to Table Mesa. Would like it to be used for Eastbound traffic OUT of Boulder in the afternoons. This is important for carpool and Regional bus heading EAST at the end of the work day. Very clogged b/t Table Mesa to Flatiron Crossing, sometimes. Would also like an additional high occupancy lane (thus, one for each direction) from Sheridan to Denver to accommodate peak load that heads both east and west on US 36 in the afternoon. The RTD Regional bus took 1.5 hours to get me to campus one afternoon around 4pm heading from Boulder to Denver. No accidents. Driver said it was common; there is no high-occupancy choice for the bus during that time slot.
- Will never use buses to commute because the actual home to office time is more than doubled since I don't live or work next to the transit centers.
- It's difficult to use the bus to Interlocken because there are no conveniently located bus stops near where I work. If that were the case I would take the bus.
- I more strongly support light rail between Denver and Boulder rather than adding toll lanes. Also, a third regular (not toll) lane eastbound between Sheridan and I-25 - such as in the westbound lanes - would ease congestion considerably.
- additional lanes to US 36 should have been added over 20 years ago. As is typical, with Govt planning, too little too late.
- If the toll fees are too high, then I figure other wealthy folks in Boulder will pay them. I won't. If I go to Boulder, I have to go at a certain time, so if there is a mandatory fee, I will find another way around or go elsewhere if it involves shopping. Most of our trips are weekend trips to Boulder and 28th can be a total nightmare. The same trip from Gateway to our home in Superior has taken as long as 35-40 minutes in total gridlock on 28th. I think something has to be done beyond Table Mesa or congestion will just occur when you begin entering town, even though you have had the brief bypass, and the gain will not be worth the toll.



- Just add another lane in each direction on top of what we have, maybe an HOV if there is \$\$\$\$. HOV lanes are nice, but they are a waste of tax dollars as the volume of traffic on them is very light.
- the completion of the Jefferson Parkway from Broomfield to Golden would help to substantially reduce the amount of traffic congestion on I-36.
- In answering questions regarding toll charges, it is unclear if the fare is one way or round trip.
- I am in favor of one more lane each direction between Boulder and Denver, or light rail down the center. The groves in the current pavement are really bad.
- I would very much like to see a bike path following a similar route as US 36 to Denver and back to Boulder.
- The taxes I pay should cover the cost of highway improvements. No restrictions should be placed on taxpayers for using new lanes when built.
- I would like a train line
- you ask about willingness to use public transportation. We need light rail from Boulder to Downtown with easy connections to DTC. Then we could use. Right now a one hour plus commute from Boulder to the DTC would be prohibitively long with just bus access to downtown.
- I noticed that the third scenario in each of the 8 questions in the middle of the survey included 2 passengers, never one. For various reasons, I almost always drive with one passenger. If having only one passenger (two people in the car) will no longer allow free use of the extra lane, I suggest that there at least be a toll discount for having more than one person in the car. Thanks for listening...
- I think it's a great idea to add the third lane depending on when I go and leave work it is so backed up.
- I think managed lanes are reasonable so long as the prices are reasonable. Most of the prices in this survey seemed incredibly high - but I don't drive to work on 36 so that might change my opinion.
- I support the idea of having tolls pay for usage, but like the other managed lanes on 36 I wouldn't use them. People who have extra money every month for that should feel free to pay extra. If you were to impose a toll on 36 in general I would find another way to work.
- please expended the highway but without charging a toll
- I am opposed to fees however do like the idea of an additional lane or FREE carpool options.
- The project should be considered from economic standpoint. Better roads add to infrastructure we need to promote growth and sustainable development. What is the cost of NOT having it?
- East Bound US36 out of Boulder slows dramatically due to the hill. Regardless of managed lanes, this problem needs to be addressed.
- I would prefer alternate transportation, such as buses or trains, to decrease the number of cars and emissions.
- Much more strongly favor expansion of bus and rail rapid transit and bike lanes than congestion-reducing private vehicles lanes, tolled or free. Congestion or high cost of private vehicle travel is necessary to force people into carbon-reducing modes.
- I primarily use CO-128 because of heavy congestion and poor road maintenance on US-36 on my daily commute from Westminster to Boulder. There are too many potholes and ruts along US-36. I can't even remember the last time it was repaved. Please not only add additional lanes but maintain the road properly. Thank You.
- I prefer light rail instead of managed rail
- I entered and exited my trip at Hwy 287 in Broomfield but your survey would not allow me to use the same intersection for both. :( Your plans to not state what will happen to existing HOV lanes between Sheridan and I-25 (currently free to carpool).
- I appreciate your taking this survey. I don't think this additional lane addresses the long term transportation needs of the metro area. It's more akin to a band aid. Highways should be paid for by gasoline taxes, not road tolls.
- I need a seamless way to get from North of Denver - either US 36 or I-25 to the DTC trains without time consuming stops in downtown Denver. Help me move through the I-25 corridor on mass transit from 144th to Lincoln Pkwy with feeders off that main route. I tried RTD and they can't even find a way for me to get from Longmont to Belleview in under 2 hours so I have to drive. It would also be helpful if the Express lanes continued well past the 270/36 cluster/mess. That would save a LOT more time Northbound.
- Why just one lane? Add two lanes or more lanes on both sides while you are reconstructing the road. If the tolls are too high, I will drive an alternate route. The tolls for carpools would take away the positive effects of carpooling. I would not pay a toll or



bus fare unless the commute time is cut more than 2/3 the time. It is important to remove congestion both ways because it deters people from visiting either city and all the opportunities between; effecting their tax bases and economics.

- I have considered taking the bus to work but due to the area in which I live and the bus schedules it would take me over two hours to get to and from work each day (one way). Also, coordinating my work schedule with carpools and/or public transportation is prohibitive. Thank you.
- I am MUCH more in support of something similar to Cal-Train or light-rail than widening highway 36.
- Good luck getting most people to complete a survey this long.
- Because of the economical problems, I would find it difficult to want the Express Lane due to an increase in taxes from the middle class, even though I am in favor of trying to eliminate most of the congestion. One lane in each direction will not eliminate the current problems, but just prolong the ultimate solution which is to build two more lanes in each direction. This should have been done twenty years ago.
- I'm pretty sure the people traveling 36 during rush hour would be more interested in the managed lanes. I don't have cause for concern.
- The questions regarding the public transit option are problematic in my opinion. Unless more park-n-rides/express stops are built closer to Denver, or there is an improvement in the reliability of feeder buses that connect with a Boulder bound bus, there is no time saving benefit for me to use a Denver-Boulder bus, since I would need to spend time either riding the 44 to near Union station, or driving part way up 36 anyway to catch a Boulder bound bus.
- Please include provisions for hybrid / electric cars in your managed lane scenario. Thanks
- I believe global warming or cooling occurs naturally and we neither can nor will change the cycle. Global pollution is another topic. These topics should be addressed separately.
- I only drive on US 36 once per week on Monday evenings. Otherwise, I take a rare trip to Broomfield. I prefer to take a bus to airport.
- hurry up and build it!
- I would rather see a restricted bicycle lane along 36 rather than more lanes for cars. It would be cheaper and healthier.
- Please improve the bus transportation by eliminating the drive-to park and ride stops and increasing the number of ramp stops. The BX bus is one of the best I have ever used, but the Church Ranch stop is horrible on the B.
- Highway 36 between McCaslin and Church Ranch Rd. is in terrible condition, ie, grooved tire tracks in both directions. It will need to be resurfaced before construction begins in 2013 for RTD light rail, etc. The road condition on 36 in this section will only deteriorate in the next two years. This section WILL NOT survive in that time frame. Is there a plan in place to avoid accidents due to declining road conditions on Highway 36 between Louisville and Westminster in both directions?
- Please do something. It's unbearable! Thanks,
- U.S. 36 is the worst maintained highway in Metro Denver. There are large ruts on the road between mm 44 and 48. Snow Plowing is an afterthought. There is frequent congestion, and there will continue to be frequent congestion using the suggested remedies. There should be 3 full use lanes in each direction. I do not favor an additional toll road.
- Keep free motorcycle access to managed lanes -- to reduce congestion, carbon emissions, and to increase safety.
- I won't pay \$10 to go 8 miles. Because of the congestion, I take NW Parkway/E470 home and pay \$12 for 30+ miles. That's still expensive but worth it for consistent travel times.
- my tax dollars should pay for this not tolls
- Currently it would take me over 2 hours to bus one way from home to work... I would bus EVERY DAY if I could get there in a reasonable amount of time.
- I drive myself to work everyday. If there was a bus that could get me from Boulder to Lowry in a reasonable amount of time (1 hour to 1.25 hours) I would take the bus frequently. Currently it would take me more than 2 hours to get to work with the current bus schedule.
- I said I would not pay tolls because I was counting on going in a managed lane free due to traveling with at least 2 passengers besides me. I support HOV/toll lanes like there are currently on I-25.
- Everytime I have been on E470 there has been very little traffic and that is because the tolls are too high. I believe that if the tolls were lowered then more people would use the toll road and therefore bring in higher revenues. The toll charge can regulate the amount of traffic and there needs to be an increase of traffic on the Denver area toll roads.



- I think they should consider free days or discounted days when using the toll. I agree they should add lanes on hwy. us 36.
- It is about time that the government stops nickeling and diming its citizens. A toll is just another tax on the average citizen for highways that were already paid for!!!!
- Rather than continuing to expand the road systems in CO, I favor moving to public transportation such as light rail. I chose the answers I did in this survey because I only occasionally travel to the Boulder area from Greeley. If I needed to commute on a daily basis, most of the managed lane and toll options would have been preferable.
- I would like to see a light rail parallel to US 36.
- I believe the onramps are a main reason for the heavy congestion on 36. If you were to remove the stoplights from the onramps and increase the length of the onramps, I believe there would not be as much congestion.
- This survey focuses only on the Boulder-Denver part of U.S. 36 and the added lane option. The planning for U.S 36 should also deal with the matter of U.S. 36's routing through Boulder. The major problem with any trip south on U.S. 36 from north of Boulder, or vice versa, is that it runs on 28th Street through Boulder with all the stoplights. It is very poor design that all traffic to and from Denver or SE of Boulder to Lyons and Rocky Mountain National Park has to go through Boulder on 28th Street. That unnecessarily jams up a city street, not only with cars, but also RVs and trucks, especially in summer. 28th Street is the major slowdown and the largest cause of pollution for such trips. The Foothills Parkway should be designated as U.S. 36 around Boulder and should be connected to U.S. 36 on the north side of Boulder in the Iris-Diagonal or Jay Road areas. The Parkway also should be continuous, (no stop lights) with overpasses at each intersection as at Pearl St.
- I would be much more likely to take the B bus if it ran more often between 9 and 10am. As it stands, I just miss when I need to be at work or I have to leave a half hour earlier.
- I would like additional lanes on 36 but NO TOLLS!
- Stop the toll roads, cut spending, find less expensive solutions and no more taxes.
- Adding a third lane without tolls seems most reasonable to me. When I travel I25, I see very few vehicles use the toll lanes. This could be a result of my travel times. I use E470 toll route only when visiting a relative, because I don't have directions using 225. An added fuel tax or once a year construction tax or fee for the construction cost for those using Rt 36 regularly also seems reasonable. A third lane without tolls would be beneficial to the environment as, cars would be moving rather than stopping and going. A light rail system might also be a good partial solution. As the population will continue to grow and therefore travel on Rt. 36 will continue to increase, no matter what solution is chosen now. Light rail and the third lane going both directions between Denver and Boulder seems most reasonable and efficient as well as best for the environment. Car manufacturers should take it upon themselves to produce more fuel efficient vehicles that are better for the environment. That should be part of their heritage and gift to future generations. Highway and city planners should be planning for travel in 20-50 years ahead, not trying to solve problems years after they have been created.
- I already ride the RTD on a daily basis even though they recently canceled my preferred route. I'm opposed to paying an additional toll for riding the bus because I feel I'm already doing my part. I would prefer a light rail solution and let those who drive be stuck in traffic.
- Currently the HOV lanes on 36 are rarely used, or they are used by single occupant cars. This initiative is not working. Congestion on 36 would be alleviated by allowing all drivers legal access to the lanes.
- It is obvious we need additional lanes. More people, more road capacity. No need to get fancy about it. The notion of carpooling or taking public transit are completely impractical for most people, and are obviously a bad idea. Only politically correct myopia even leads to this being part of the conversation - for the vast majority of people commuting from highly dispersed suburbs to highly dispersed businesses the frictional losses may public transport and/or carpooling an incredible waste of time, profoundly lengthening the trip even if the part on highways is faster. Most people with normal jobs have to driving to and from a bus stop, wait for a bus (and maybe doing this twice), or coordinating with someone who lives miles from your home and is not on the way. I do take the carpool lanes frequently - whenever I happen to be going out to dinner in Denver with my family, or when I am taking one of my kids somewhere. I never "carpool" in the sense of trying on using fewer trips by putting more people in a car - I just use the carpool lanes when I happen to have more people in the car. Look around, and this is basically what the so-called carpool lanes are for. In this context, since no behavior is changed, there is absolutely no impact on the amount of traffic - you are just giving me a faster lane when I take my daughter to the store, as opposed to leaving her home with my wife. What a stupid policy. Tolls for normal roads are abhorrent. As a society we need public infrastructure for everything we do. The reason I pay taxes is for roads, in particular the road to work. If my CDOT taxes don't pay for the road to work, I want them eliminated. (I know this is silly, but you get the point - I pay road taxes most importantly for the most important trip I take, and if they don't pay for that, then I am getting screwed, while people who can get to work



without toll roads are taking advantage of me). Maybe if we got a bill for every road used every time that would be fair - but don't single me out because I use 36 and not 6th Ave or the highway to Longmont. When you make just some roads toll, it is obviously unfair.

- I'm not certain this survey took into account the fact that I exited highway 36 \*due to\* congestion. If I had remained on 36 my overall trip time would have been much longer than the 35 minutes I indicated. If highway 36 were not congested at the point I exited I would have remained on the highway.
- The new slip ramps work very well on US 36, saving a lot of time. Bus service is great for most trips to downtown!
- for the trip in question for the bulk of this survey -- a work trip requiring tools so precluding public transportation.
- Why is it that the carpool options took more time? I didn't understand how having an extra passenger in my car would make the time longer using the same managed lanes.
- For public transportation, I would love to see a light rail or tram option. I no longer work downtown on a full time basis and have other obligations on the day I do work downtown forcing me to drive, but when I did work downtown full time I rode the bus daily. In my opinion, frequent light rail or tram service would be more beneficial than an additional toll lane, accomplishing the same goal of reducing congestion.
- The problem with the tolls suggested by this survey is that they are too high just as the tolls on E-470 are much too high. It should not be an all or nothing proposition regarding tolls. They could be used to differ some of the costs but they would be used more often and more money generated if the tolls were reasonable. The existing tolls going to Denver are more reasonable than those suggested in this survey.
- 36 is a mess. Suggest the Governor take a ride in the morning or around 5:30 at night. The road itself is in need of repair.
- US 36 should have BOTH tollfree lanes and hov/toll lanes added to improve traffic flow during rush hour periods. HOV/toll lanes alone will not solve the problem.
- I support the creation of rail service to and from Boulder much more than additional Toll lanes or "managed" lanes, and would be more inclined to use Rail Service than Bus Service as it currently exists
- I own an LEV; typically get over 40 miles per gallon, always passes emissions test. I would like to see toll discounts for those who are individually contributing to the lower emission opportunities. Make those that are non compliant get their vehicles in proper operating order before they are allowed in any express and/or toll lanes
- Fast commuter rail was approved years ago. Those who have failed to install it should be incarcerated.
- If you get the trucks off the highway during rush hour, and if you get the people of the Cell Phones while they are driving, and stop the Cell Phone Texting while driving, then I-36 traffic flow will improve all by itself without building more roadway, or changing lane usage, or charging any Damn TOLLS! Fact, I-36 should have been a 4-lane highway 20 years ago! So do what you should have done 20 years ago, -- build two additional NON-TOLL traffic lanes for each direction of I-36, get the truck off the highway during RUSH HOUR, and get the people off their Cell Phones with their heads up their Cell Phone Asses while they are Driving! ---- Fact, most of the traffic problems on I-36 are caused by trucks during rush hour traffic and car accidents cause by people driving while talking and texting on the Damn Cell Phones, and the failure of BOULDER COUNTY to clear the roadways of Ice and Snow in a preplanned and timely maner!!!
- I would use bus service in trips down 36 if it was any different than being in my own car. If the bus gets snarled in traffic, it can't make my trip any faster than having my own transportation. I have a bus pass provided by employer, and even though the ride is perceived to be "free to me", I wouldn't take it unless it can get me to my destination with less challenges than a personal vehicle.
- The managed toll lane is a great idea! Please push forward. The biggest improvement is the addition of a morning Boulder-bound express lane and an afternoon Denver-bound express lane. This will speed the RTD regional B/BX bus times and make this a more attractive option for travel!
- This is one of the worst roads to travel especially during inclement weather or when there is an accident. If there is an accident or inclement weather you can easily add an additional 40 minutes to the drive. Also the current lanes on us36 have grooves in them that are so deep they actually take control of your vehicle if you are not careful. This highway really is in need of repair in addition to an additional lane.
- Provide and extended turn lane to table mesa into boulder. Too many people wait until the last minute to merge from the left lane into the right lane to turn on table mesa. Not only a huge safety issue, but also creates problems for the left lane people who want to maintain speed. This right turn lane should start a few miles back up the hill and be a right turn lane only at some point to prevent the last minute merges from left lane. Also, provide a longer merge lane east bound from table mesa onto 36.



Again, this is always a bottleneck, especially since people do not know the correct merge procedures. This lane should be increased by a mile or so, again, to prevent people from coming straight out of the table mesa merge lanes, cutting across both lanes of 36 just to be in the left lane. Starting now, tickets should be issued to the inconsiderate drivers both westbound who merge at the last minute, and the east bound 2 lane crossers. There is also the issue of people not maintaining 65mph eastbound up the hill, especially in the left lane. 50mph up the hill is unacceptable in the left lane, especially if they mirror someone going the same speed in the right lane. If not tickets for these terrible driving antics, then warnings or signs along the road explaining how to drive properly. I would be happy to sit with anyone who would listen and explain these issues and resolutions further. Al Schmidt 303-423-4058. The complete stops eastbound up the hill are unacceptable. Toll lanes are also unacceptable - one lane used for tolls or carpools will only create havoc in the remaining lane as most people will not pay the toll amount. This could create the potential for triple the amount of cars in the non-toll lane. Ultimately, 3 lane US 36, or put in a light rail to Boulder not only from Denver, but from the Northern Suburbs along E470 from I25 or all the way to the Airport. At the minimum, teach refresher courses to people on proper driving techniques and smart driving. The people who think not reaching the speed limit in the east bound lane up the hill from Boulder just to save gas, are the ones creating most of the backups and accidents.

- I don't support toll roads to ease traffic congestion. The taxes we already pay should be used to maintain and upgrade highways when necessary; this should include construction of additional lanes (toll-free lanes) on US 36 to ease congestion. Our taxes have gone up through the years, but there have been very few real improvements to US 36. What are our taxes used for?
- is there an option for adding an extra lane both east and west bound 36 from Boulder to I-25? what about light rail system
- I could not afford to live in Boulder. I work in Boulder. Commuting is not optional for me. I also have two young children that need to be dropped off at two different schools making bussing time and cost prohibitive. I pay taxes and believe my taxes should cover the costs to maintain roads that get me to and from work. I cannot afford to pay extra to commute and would likely use alternative routes to get to work rather than alter arrival time (I have school and work schedules that are not optional) or pay tolls.
- A HOV/toll lane has been needed along US 36 for a VERY long time. We carpool everyday and have resorted to taking alternate routes now, especially when CU is in session. Driving times and conditions really back up then. I really hope this survey not only shows the need for an HOV/toll lane, but also that it happens in the very near future!
- build more affordable light rail and axe the toll road plans
- Just follow the best example of CA's highways: 4 lanes, long on/off ramps.
- The trip times given in most of your samples are unrealistic. I have used bus travel between Denver and Boulder at various times, the door to door travel time was never less than 1.5 hours door to door, in fact it was never less than 1.5 hours bus stop to bus stop. At the Boulder end there was typically a 5-10 minute walk, in Denver it was more of a 10 -25 minute walk to the final destination. That's four hours of transit time verses 1.75 hours drive time per day. To make it worth my time -time alone- RTD would need to pay me about \$25 per trip -50\$ per day. Carbon costs do make a difference to the equation, but the per person carbon 'cost' difference is minimal when the extra -nearly double- travel time-distance is correctly accounted for in terms of Carbon produced. In addition, if a suitably performing electric -not hybrid- car becomes available, seems likely sometime in the next 10 years, I would cheerfully switch, the buses will still be diesel, though hopefully bio-diesel.
- No new Taxes. Get the illegals out of our country and you wouldn't need more lanes.
- 1. COST OF CURRENT TOLLS NW PRWY AND 470 ARE TOO HIGH. More people would use the road if the fees were lower. I use the toll road to go to the airport, because many times the bus schedule makes me wait too much time, it is much safer and there is a great deal less risks for slow ups. RTD should change the route and use the toll road. (AB AIRPORT ROUTE) I just came home from a trip from FL where I never had to pay more than \$1.00 for a segment. sometimes it was only \$.25. 2. 36 I think the uphill lanes used for climbing the Davidson Mesa between Table Mesa and Louisville should be re-restricted, taking away most of the shoulder and using it as a 3rd lane. This would be a temp. solution until an official 3rd lane could be built sometime in the future. It's done in many other places and on even busier streets like I-70, The morning and afternoon slow downs cause a great deal of pollution and breakdowns AND TIME FOR THOSE WHO COMMUTE DAILY. HOV LANES should not require more than 2 people.
- I think we are continually asked to pay more and more for the roads and "improvements" but they fail to appear. RTD gets higher all the time and the service gets worse in my opinion.



- Managed lanes should always be free for carpools / HOV. I'm okay with tolls for single drivers. However, I'm unlikely to utilize the toll as a single driver unless the road is very congested (usually due to construction or accident). I would use a free HOV lane when I have passengers.
- My advice: Forget the additional lanes, and install a reliable rail service along the 36 corridor. Most of my travel along this corridor is to common destinations (airport, downtown, etc...). I would MUCH rather use rail than a bus (i.e., rail permits reading, dozing, etc...). It is embarrassing that most of the rest of the developed world has advanced rail while don't even have basic rail service. Creating more lanes will only put us further back on the development path, as well as waste riders' time by having to control a vehicle rather than read, use their smart phone of PCs, etc... Let's get with the rest of the world already.
- I don't quite understand why there have been improvements on the north end of town, like there have been on the south. I would love to take light rail downtown, but it is not an option here. Here we have bottlenecks that no one can seem to improve. 36 doesn't need more lanes, it needs fewer cars.
- I don't travel 36 often, but when I do, I would like the option of managed/HOV lanes. Thank you.
- I have two son's on the corridor and they need new solutions. They could not afford some of these tolls on a regular basis, but a toll of \$3 or less is very reasonable on a day when they have an appointment to meet. Also, they regularly ride the bus, but the buses have proved to be unreliable in bad weather. If they get stuck in Boulder they end up standing in Denver - usually in inclement weather for an hour or longer.
- In the survey i answered that I don't take public transportation very often, but this is because it doesn't go where I need it to go (i.e. from golden to boulder during the middle of the day, and later evening), however I think the corridor between denver and boulder would be perfect for a light rail system. Especially because the boulder bus system is so coordinated.
- Instead of adding more lanes (and they just finished adding lanes last year!), make every effort to bring the north metro/Boulder area into the Light Rail loop. It amazes me that we are constantly being ignored. I would use Light Rail on a daily basis if it were available. The north metro area commutes just as much as the south metro area - as evidenced by the congestion on 36 and southbound 25. More lanes just means more congestion.
- The entrance lanes westbound at sheridan, church ranch and flatirons crossing are too short for a safe entry to the highway.
- Global warming is not happening as a result of human activity. I was a geology major and its a load of crock. I am sensitive, however, to stop and go traffic. I love the toll road going to the airport!!! I would pay that any day to avoid driving through Denver's I-70 which is always jam packed with cars
- Widen Rte 93, too. It should be 4 lanes (at least) from Golden to Boulder.
- I strongly prefer unrestricted access. The population has grown. We need new roads. Build them. Busses and carpooling are a silly notion for the vast majority of people who live in one suburb (Lakewood) and work in another (outside of Boulder). Fooling around with park-and-ride or finding someone who lives and works nearby and has the same schedule is impractical. When I lived in Chicago suburbs and worked downtown taking the train was fine, but that hub-and-spoke model doesn't exist for commuting to Boulder.
- I'd rather take a train down Hwy. 36 -
- Please note that your survey was hard for me to answer. My employer gives me an EcoPass and I almost NEVER drive my car to work in Boulder. I drive to Littleton Light Rail, take the train downtown and switch to the Boulder express bus at Union Station. I reverse this process on my way home. It is time-consuming, but I do it for the environment.
- We clearly need another lane on 36. Given that carpooling or public transport are hugely impractical for me given my home and work, I don't approve of being punished for not doing one of the two. In principle, I do not think we should take necessary public roads (which are part of our society's "commons") and restrict access to people with more money. We need roads and should build them and have them free. We already have a problem where most roads are free, but if you are unlucky enough to require a toll road to get to work you are treated worse than someone who drives the same distance on a non-toll road. I appreciate getting road funding is hard, but I look at the taj mahal of brand new overpasses on 36 at Cherryvale, at the FirstBank Center, and some street I can't identify in Westminster, and it is clear to me that there is more than enough money for road expansions we don't need (or at least need far less than we need more lanes on 36). Get your priorities in order and invest where there are traffic backups, not on roads that don't exist or a minor country road that goes to a handful of farms. Do that, and I'd be supportive of you getting even more money, but as it is I see lots (3) of recent projects where the unmet need is very minor, meanwhile we have huge backups every day getting out of Boulder and plenty of space to build another lane (or a reversible lane), and you do nothing for decades. When that combination of misplaced priorities is in front of your eyes every day (while stuck in a logjam on 36), it is hard to think that CDOT is competent.



- Time is the most valuable thing to me in both my professional and personal life.
- I strongly encourage your organization to not add any more toll roads to the Denver metro area. It strikes me and many other citizens of Colorado that revenue from toll roads merely support the toll road infrastructure.
- Why so expensive to get from Boulder to Broomfield if it is only 50 cents all the way through Denver? Look at the speed limits... 65 to 55 is crazy. Make it all 60. Ticket the lousy drivers causing hold ups and issues, and also driving below speed limit in left lane. Don't make a mistake like the new bridge in Broomfield to 120th that goes no where and is very difficult to get on from either end of it. What a ridiculous bridge, goes no where, hard to get on and off of and has saved no time for anyone. No one uses it. Table Mesa should be 2 lanes to get on it from HWY 36. Table Mesa should be 2 lanes to get off of it on to highway 36. Extend the the 2 lanes from that stop light for a couple miles. The afternoon is ridiculous trying to get on to 36. Then at Flat Irons shopping center it all comes to a halt. Make Arapahoe 4 lanes with a turning lane all the way from Boulder to Lafayette to I25. Get the bike traffic off of Arapahoe, no room there for a shoulder let alone 2 bikes riding side by side in rush hour. Get a better entry way onto Arapahoe from the the High School so that the traffic keeps moving when you are unable to get on to 36.
- I drive a prius. I also have a spcial needs child that I may jhave to pick up at a moment's notice from school
- Multiple adult passengers in a vehicle should always be given the option to use a toll free express lane. Passengers below driving age should not apply towards passenger count.
- increase the gas tax to pay for roads - users are the payers - no private or government funding of TOLL solutions
- Colorado does not need toll roads. We pay enough taxes to support FREE roads
- A light-rail train between denver and boulder would be a better option than a bus in a managed lane for high-density movement of people. Buses are unreliable (break down a lot/are not always on schedule), crowded and expensive. I have attempted to commute to boulder via bus and found that my travel time increased by almost 3 times, and I was spending more on bus fares than I was on gasoline and car maintenance; out of sheer economics and scheduling I was forced to return to my single-occupancy vehicle for commuting, as it is cheaper, more reliable and quicker. I would possibly consider taking the bus if the fares were greatly reduced and/or the reliability was greatly increased. The only way I see that happening is if my workplace decides to subsidize my bus fare or a dedicated bus lane were build on the 36, as a managed lane on that poorly designed highway will just end up as crowded as the other lanes, once again making the bus trip take 1.5-2hrs station to station, not to mention the increased time it takes to get to Downtown Denver to take the bus out to boulder to begin with, which can add 30-60min. each way to the commute.
- I don't use RTD because I use an electric powered wheelchair. I drive a specially adapted Dodge Caravan.
- being that the toll lanes will be installed west of baseline, I don't think I'll use them much I regularly get off at table mesa but I think its a good idea
- One of the biggest problems I have with buses is getting to/from stations from both home and work. However, I would like to see the Northwest light rail system implemented, in which case I'd park near downtown Old Louisville and bring a bike to get to work from the nearest rail station.
- I think Fast Tracks is a better long-term solution than building more roads!
- Make the lanes similar in approach to the existing Fast Pass lanes on US 36 to Downtown with varing fares for times of day. With a lane each way usage would be higher through the day and night.
- Thanks for the survey. Just to clarify- one reason why I did not choose the managed lane option is that I have many other options to get from Westminster to Denver other than US-36. Because I only use US-36 up to the Sheridan- 92nd Avenue exit I have these options. Just taking Federal, Lowell, or Sheridan from Denver to Westminster takes about 25 minutes. So if I have to choose between paying for a toll lane and saving only a few minutes versus taking Federal, etc. I will probably just stay on the back roads. It seems to be that people that go further towards Boulder on US-36 could really benefit from the managed lanes. Would love to get rail all the way up to Boulder!!
- If additional lanes are added, they should be for both directions at once. Should there be an accident, the toll should be waived for the stretch behind it so anyone can use it until the wreck is cleared.
- I opt to take buses when the connections are good and the bus runs frequently enough. As a faculty member at CU, I do not have to pay bus fares (with exception to go to DIA). The buses are great--I use them every weekday to go to and from work.
- I ride a motorcycle that gets 96 MPG. It is light weight and its' carbon emissions and contributions to air pollution and road wear are minute. During good weather, it is my primary means of transportation. Please consider motorcycles when building the managed traffic lanes. Motorcycles should receive the same considerations as carpool vehicles, ie: access to the managed



lanes and reduced (or removed) tolls. It is difficult to attach a transponder to a motorcycle, so the license-plate photo option would have to be used.

- Boulder turnpike apparently was effective as a toll road with all lanes open to all vehicles. I feel tolls discriminate against us less wealthy folks. Public transportation does not work because you have to drive to access it, might as well continue to drive rather than to park and ride. My fuel cost is \$3. a day, insurance remains the same whether I drive or not. Most public transportation vehicles are GROSS, and so are some of the co-riders. Also the "managed lanes" cross access creates road hazards IE: I25 and 20th street vicinity, I25 and 84th avenue, US 36 where the high occupancy vehicle has to cross several lanes of traffic, what an example of engineering stupidity.
- Tolls need to be lowered and it needs to be CLEARLY posted that you will be billed by license plate.
- Having traffic lights on main streets that lead to US 36 in sync would help. Too many time I sit and wait 5 or more minutes to get on or off the exit ramps. I know others feel the same way and this only cause impatience when getting on the highway and people not paying attention and acting stupid which results in accidents.
- Why don't you ever consider ways to reduce travel? It seems the simplest solution to the traffic problem would be to change the laws that mandate unnecessary travel.
- During the part of the survey where starting and ending addresses were typed in, the option of "Next Question" did not appear, so I had to type in the map option.
- Ease of use for the toll lanes is also a big factor. If I happen to have more than one passenger in the car and the I-25 lanes are open in my direction I will often take it because there is less traffic making it an easier drive. I used to have a transponder and would use the E-470 toll route on snowy days because it was safer as there were not as many cars on the road
- Our primary driving car is a Toyota Prius Hybrid bought to reduce our carbon generation. It may be feasible to permit hybrids/all electric cars access to managed lanes toll free or at least reduced toll fees.
- I am happy to take this survey as I travel this route often, and hope my participation has been helpful!
- US 36 should be 3 lanes each direction AND have a reversible managed lane between I25 and Boulder. I have seen MAJOR backups in this route every week.
- I think it is very unfair to put tolls on 36 unless they are put on all the highways in the metro area. Why should the residents in the NW area pay a toll for better roads when T=REX users pay nothing?
- My usage of the turnpike is mostly recreational; occasionally for business. Because I work in Lakewood and live in Westminster, using the bus for business or recreation is not really a good option.
- Tolls are stupid and rarely decrease travel time... why would I use them? I carpool as much as possible, but as a private contractor, I can't be certain where I'll end up or when I will start/finish on any given day. I avoid E470 at almost any cost because I think it is ridiculous to pay \$2 to go 1 mile. If I wanted to pay tolls I'd live in Illinois or on the east coast... Maybe you should just build decent roads that are AHEAD of what is currently needed, planning for future population growth.... but that would require the government actually being organized and intelligent.
- More signs that say "slow traffic stay in right lane." Txt messages to receive traffic alerts. Please fix ruts in roads near Broomfield - they are dangerous. Expediting light rail to/from Boulder would be a higher priority for me unless these improvements would not hinder that process.
- My preferred method of travel to and from work is the express bus.
- I think adding an additional lane to each side of 36 would be great for relieving some congestion on the road. I think it should be more for people merging onto the road and off the road than a toll lane.
- On-ramp traffic to US36 needs to be more heavily controlled at peak times.
- More lanes need to be added to 36, as well as most other interstates around the metro area. Do something about it before we end up like L.A.
- Instead of building additional highway lanes and encouraging car use, I think the money should instead be used to build light rail lines and even high-speed rail lines between Denver and Boulder and other surrounding areas. This would reduce pollution, reduce traffic, and provide an easy means of transportation for those without vehicles.
- Have special exceptions for Hybrids
- why all the fuss - the road needs expanding, not carpool or bus lanes that only a tiny minority can use (+ tolls for the rich)



- Sun glare tends to be the biggest reason for delays. I would encourage higher center dividers to avoid people looking at accidents on the other side of the highway. I cannot tolerate curiosity slowing, and I never look at accidents on either side of the highway. I wish people would just drive!
- My work schedule requires frequent multi-day trips. Due to Park&Ride overnight fees I no longer use SkyRide. The same issue would generally preclude commuting to Denver via RTD. re: US36 southbound merge from Table Mesa/Foothills- the climb up Davidson Mesa should be restriped to 3 lanes, with no lane changes permitted until cresting the mesa. Most congestion is caused by incompetent/aggressive merges due to differential speed.
- Commuter rail lines are in use throughout the USA and are very popular, yet Colorado insists on spending more money and creating more traffic and pollution by building more highways when a more environmentally friendly and efficient method of transport is available.
- Bus Rapid Transit should be priority No. 1. I'm all for Light Rail, carpool lanes, toll lanes, etc., but if you give me a fast, express bus between downtown Denver and downtown Boulder that has a reliable travel time, I will take that bus every day.
- If I were to use the toll route everyday, the cost would have to be far less than what the NWP and E470 charge. Those tolls are outrageous. A round trip to the airport is \$16 per day from Boulder. That comes to about \$320/ month. I would love to use it everyday, but refuse to be raped just to travel those roads. What about the other two existing lanes. There had better be plans to "fix" these abominable lanes. There are stretches of these lanes that are in just incredible disrepair. Pot holes, ruts, roller coaster sections, bumps, delamination of pavement mats. Unbelievable that these situations are not addressed prior to even contemplating an additional lane each way. Fix what we have before building more.
- I think if you're doing construction anyway you should add more than 1 lane in each direction. Maybe 1 new managed toll lane and 1 regular lane in each direction.
- The trip I used in this survey is one that does not provide me with the opportunity to carpool or use public transportation because I go to Longmont right afterward. If my work situation didn't require me to have a car I might use public transportation. If there were anyone to carpool with I would.
- What happened to the light-rail option? I prefer light-rail to bus and it should go from Boulder to Denver with an option to go from Boulder to the Airport.
- There is also much congestion on the interior roads between I-25 and Boulder. If the tolls were more reasonable on 470, believe that many more would use this route and alleviate that congestion as well. Note that the tolls have tripled since we have been using this road resulting in much less usage which I know is a contributing factor to increases, however, need to lower to get the demand back up.
- One of the key reasons for my answers are that I need a car at work to travel to Customer sites and that my work schedule is not consistent enough for car pooling. I think you need to add this to your questionnaire as I know a lot of people that have these same constraints.
- A high-speed commuter train would be nice. Having lived in the Mid-Atlantic and New England states, I know the value for reducing congestion. I see lots of construction on HWY 36. I know it costs the state quite a bit but is appreciated by those of us who rely on this route to get to work and back.
- my hours vary too much to carpool and some nights I get off as late as 1 am so I would NOT feel safe riding a bus or waiting for a bus in aurora at that time of night
- Build more lanes = proportionately more traffic
- The additional lanes in both directions will improve quality of life and business in the corridor. It's not a question of if it will come, it's when. Let's plan for it and manage it. We also need to extend the The NW Parkway to Golden. Similar problems occur to the southwest... CO 93 is overloaded and dangerous. Please consider this as well.
- I travel into Boulder everyday starting at McCaslin. The traffic isn't too bad. If I entered 36 before McCaslin I may have different responses. I think that traffic starts before McCaslin in the morning going west.
- Electric Trolley using Marshal Road and Broadway like they did almost 100 years ago. It was called the Kite Route, and went from Denver to Boulder.
- I would take a bus to and from work, but do not have a reliable, time-efficient way to get from the park and ride in Boulder to my office.
- I prefer rail over bus and recommend that Boulder County supports this option all the way to downtown Denver.



- Get rid of the on ramp stop lights. They are ineffective. They just force you to use more gas to stop and start, create road rage when forcing 2 lanes to take off from a dead stop to merge onto the highway. They make you stop even though the highway is not congested. If the highway is already congested you are already stopping so what good are they?
- I like the idea of adding lanes, but why make them "managed lanes"? Why not simply add lanes and disperse the traffic over the additional lane. Each time I drive by one of these so called managed lanes, I don't see anyone driving on them. So here we all sit, paying taxes for roads to be built and maintained in the first place, and then the newest roads go unused for the most part. If the Boulder turnpike becomes a toll road, I will navigate around it, or use the non-managed lanes along with 80% of everyone else.
- Tolls on e470 are too high. If tolls were less there might not be so much traffic on 36
- I am opposed to toll roads.
- I would prefer light rail to the bus.
- These answers would be vastly different depending on which type of trip I was making. Costco shopping can't be done on a bus. Managed lanes are more helpful if driving to the airport or into Denver.
- People complain a lot about traffic in Denver, but it is nothing compared to L.A. or Chicago. However, the issue with carbon footprint of vehicle travel and fossil fuel consumption is a reality, not simply an idea anymore. If I had to commute everyday, however, I'm sure I'd complain daily! The bottom line, it seems, is that Coloradans are busy, work hard, and probably do not want to spend an extra hour or 2 each day commuting, even though they may care about the environment and impact of car travel. This is why light rail seems like a good idea. If you can save commuters time, you will get buy in!
- I prefer to pay tolls for good roads and smooth sailing. I hope that these extra lanes are enough? Hardly seems like 1 lane in each direction will do the trick.
- I strongly support carpool lanes with ONE extra passenger, but requiring an extra 2 passengers seems excessive. Also, I do support allowing people without passengers to drive in toll lanes only if the tolls are large (in your example, maybe \$5), AND only if the carpool lanes are not only not congested, but also are not being used much. I am much more in favor of paying for carpool lanes by general tax dollars, where the entire community pays for cleaner air - not JUST the people who drive that particular route. I'm also VERY much in favor of public transportation, but until a comprehensive approach is implemented that can get me within close walking distance (a block or 2) of both my starting location AND my destination, and doesn't triple my commute time, I'm not likely to use it.
- I understand the need to raise highway funds but it does seem a bit unfair that if you're wealthy, you can afford to have a shorter trip. If you're poor, you're screwed. Also, carpooling is not always so easy if you work where your schedule fluctuates dramatically. I used to commute daily from Boulder to Denver and one of the reasons that I stopped taking public transportation was that the schedule was really inconvenient outside of rush hour (2 hours total commute) when I could drive my car in 30 minutes, and the price wasn't significantly higher.
- I would prefer not to commute for work at all because I don't like spending my time that way or contributing to the commuting problems such as congestion and emissions, but until another option is available, I need to commute in my own vehicle due to my work schedule (never know for sure when I will leave the office) and because I get car sick on buses. I don't like paying for the HOV lane and really can't afford it but prefer to do so over being in multiple lanes of traffic whether congested or not. I trust my driving but not others. I heard about possible Federal funding to add a toll lane to 36 but was disappointed when the report said it would go from the existing toll lane only to Broomfield. It really needs to be extended all the way to Boulder and needs to be available in both directions. I work a slight flex schedule and catch the end of the rush hour both directions, Boulder to Denver in the am and Denver to Boulder in the pm. I absolutely hate my drive but am very thankful I'm not going the other direction. Traffic backups going into Boulder all the way from Denver even between 8:30 & 9:00 a.m. are absurd. If I ever have to leave work early and go back to Boulder in the prime rush hour, it's the same situation. You should really be adding two lanes in each direction in addition to any future FasTracks options. Traffic in the Denver Metro area is absurd, and I'm sorry that I help contribute to the problem. Good luck with the study and future improvements!
- Too many years have gone by when US36 should have been widened. The high traffic volumes justify investment in a wider road, and failure to do so is contributing to a high risk of accidents. Penalizing drivers in certain areas to pay for toll roads which would be free in other areas is unfair, and should be funded through taxes. Increased taxes are ok where long term infrastructure development is required.
- Thank you for opening my eyes to the possibility of riding the bus between Westm and Boulder. I will look into that.



- I would like to see the train option that was supposed to be part of Fast Tracks implemented instead of a toll lane. The road is always very crowded and there are many choke points.
- I would use the bus rapid transit if it would take an hour or less from Colorado Blvd light rail station. Currently, I can start at Colorado station with the DD line, or take rail to union station and take the B line, but it can take 90 minutes to 3 hours depending on weather and traffic. That is too much time, I would love to take the bus if it were less time consuming. I never use toll roads if I can avoid them, have never used C470 toll and don't intend to start using toll on US 36. Car pools do not work for me because I have variable work hours and also telecommute one day a week (wish it were more, as I work for a telecommunications company, but they will not let me). Promoting telecommuting is also a very good idea.
- I strongly support the development of Light Rail for the 36/I-25 corridor, and for Hwy 93 Boulder to Golden. Light Rail...is the way to go
- Tolls are not the solution, Better Highway construction on thru-fares, fix the busted exits and on ramps (McClaslin exit heading east from Boulder is very dangerous, merge of traffic poorly engineered. Add better RTD service into Boulder, lower the bus fare, currently I pay nearly \$7.00 dollars a day when riding RTD with transfers to other bus lines and get charged when I load a new bus enroute.
- I live in Longmont and take US36 only from work to my elderly mother's apartment in Denver.
- I think that the tolls on E 470 have crept up and yet, you are using less staff and no toll booths, I believe that this is not helping us manage our budgets.
- Innovation is usually counterproductive. Approach it with great caution.
- I have a Prius and would like to retain the HOV status for my vehicle (in regards to charges and lane access).
- You did not have options about hybrid passes
- In the survey you assert that the door-to-door trip from our house to DIA via bus is 55 minutes - that assertion is wildly inaccurate and fully ignores the reality of how relevant timing is for arriving at the airport to meet a flight. After too many experiences of being forced to arrive significantly before my flight or just missing the bus on the return, I have given up on using the bus to go to DIA.
- Please, please please bring rail service from Denver, through Broomfield and Louisville, to Boulder and Longmont. Please DO NOT just increase the number of lanes. That is a short-term band aid solution that does not fix the root issue. Please also make it more equitable and fair to get an eco pass. (Current bus pass rates are not reasonable unless you have a way to get an eco pass). Also, please consider high speed commuter busses with bus platforms (like they have in Curitiba, Brazil and other places) so that commuting times can be reduced. Also, is there a way to speed up the time it takes for people to pay for their tickets? Finally, please add a mobile application for an iphone/droid that I can use to access bus and train schedules. thanks very much, Sam
- Not sure how well this survey captures my preferences and beliefs. I rode in and at times drove a van in a public transpo initiative (Boulder "Go") for years and would like to do so again, but I have not been able to find others that live in my area and are interested. Public transpo does not get close enough to my office building to be convenient, but I would like this option. Kind of stuck driving solo at this point, like many others. I do not believe extra toll lanes are the answer ....
- Boulder has a lack of affordable housing options for its employment base so traffic coming into Boulder in the AM is horrific as well as leaving Boulder in the PM. I travel in reverse so never have a traffic delay on Hwy 36 unless an accident closes down lanes between Foothills and McCaslin and that never makes the TV or Radio news.
- From 2005-2008, I worked in Denver and I took the RTD bus from Boulder to Denver everyday of the week.
- Have you considered lowering the toll fee on E470/NW toll to help alleviate congestion on 36?
- Not looking forward to the construction project to add the additional lanes, but they do pretty well about keeping things moving around here.
- The managed lanes are in large part an effort to reduce emissions, therefore Hybrd vehicles should be allowed to travel for free in these lanes. I am disappointed that RTD and CDOT has mismanaged the funding for light rail along the 36 corridor. Light rail would be far better than manageable lanes. manageable lanes is only a stop gap solution. Light rail is the solution to emissions and traffic congestion.
- There should be more questions about bus use and other alternatives on this survey. You don't have the info here to measure how the public weighs these alternatives against tolls. This is a Denver-Boulder \*driving\* study only.



- I would gladly take a bus for my trips to/from work more often as I have a free bus pass but the current bus service organization is cumbersome and not always reliable.
- Why is the option of adding additional lanes for public use, without tolls or other management, using available tax resources, not on the table? If congestion is projected to increase due to development, why not tax the new development accordingly? The toll option is essentially a new tax on the community as it currently exists.
- I think a toll lane on 36 is a spectacular idea. I worry about there being more congestion in such a lane than there is in the I-25 toll lane due to what seems like more people in more of a hurry to get to Boulder. Also, I'm wondering about how many exits there would be to get out of the toll lane. Just at Boulder? Is there an option for an exit at Flatirons or at Louisville? I'm mostly just wondering. I go both of those places but not as much as I go to Boulder. I'd use the toll lane even if it only went straight to Boulder. How much will the construction process to build the new lanes affect traffic and for long? I worry I would go insane waiting for the improvements. Good luck sorting it out. Can't wait to see what happens.
- The best answer is not to build more lanes on the road but to increase the frequency of the express bus service and have buses leave from places aside from downtown, ideally connected to the light rail line. Right now after 9am, the BX only runs once an hour, which means the bus is usually quite crowded and frequently inconvenient. I ONLY drive, because the BX doesn't run often enough in the 9-11am time slot.
- I would like to ride the bus to Boulder from Westminster if there was an easy park and ride at Storage Tek and 36.
- A cost effective additional lane would be on all up hill sections where people loose speed (unwilling to down shift, small engine, etc) and from Federal to I-25 east bound. Another option is to mare the shoulder a lane during rush hour, Like I-66 in Fairfax county in Virginia.
- Additional lanes ARE needed, but not for a toll. Express buses from east Denver/Stapleton ARE needed, not the slow regional buses. I would prefer a fast tracks train - when are we getting one?!
- Managing the merging at the on/off ramp and teaching drivers how to use them properly at heigh traffic location would help the traffic flow.
- Drives should not be able to buy out of waiting like everyone else. Bus trips can be expensive but are often inconvenient (end too soon in day; make you wait a long time in the code to transfer). If they aren't, I do use them.
- I am for paying a toll as long as it is comparable to the cost of the equivalent in gas for the trip and the time for the bus route is reasonable. It takes me 20 minutes to drive, so 30-40 minutes is reasonable. I drive 25 miles round trip from Broomfield, so ~the cost of 1 gallon of gas for tolls both ways.
- A carpool lane would be very nice, with a toll for single drivers. I believe that would cut down on a lot of congestion. It would also be very nice to have the light rail from Denver to Boulder and beyond. Possibly to Estes Park. I would be much more likely to ride the light rail than the bus. I have rode the bus several times and delays (especially during winter weather) prevent me from utilizing it further.
- I think that paying tolls to get to and from work is ridiculous especially because I am a taxpayer and my taxes are supposed to be going towards fixing roads and when you look at US36 the highway have many huge potholes and needs to be repaved. also, just patching the holes doesn't work because the next snow storm they are back and have been ripped up due to heave traffic and snow plows. FIX THE ROAD!!!!!! Tolls are ridiculous and there is no room to add these so called managed lanes due to surrounding environment. so that means you would have to take out one land to add these, which will make traffic even more congested.
- Managed Lanes would be an improvement to the current situation, but a lightrail line would be better. If the Managed Lanes project negates or delays the possibility of getting lightrail up here, then I would rather wait and get a real solution, rather than throw money at a temporary fix. Thanks for considering public opinion on this idea.
- I would favor the installation of light rail along the 36 corridor as a way to relieve congestion.
- I would love to use an Express bus, but I have to transport my dog back and forth. As I am commuting to see my boyfriend in Denver, there is no one who wants to commute to the same place with the same purpose. If there was a transit option that allowed pets, I would ride that every time I went to Denver.
- Please look into the rapid transit bus systems now being put into place in Cleveland and elsewhere. The bus system is very sound here but even more people would use it if buses were more frequent during rush hour and if it were considered a luxury way of travel (free wifi in the buses and slightly more leg room would be a help).
- Please do not build extra lanes unless you can get it done free of charge. We need to conserve our resources to pay for the very obviously and desperately needed TRAIN.



- Please strongly consider some sort of light rail public transportation along US 36. If additional lanes are the only plan, then PLEASE restrict them to public transportation vehicles ONLY (i.e. RTD buses)! US 36 clearly cannot handle the current load of vehicles, even with additional lanes based on my observations due to all of the additional subdivisions along the corridor.
- I'd take the bus but it would take too long and my work schedule varies daily. don't want to take the bus home at 9 p.m.
- I travel with my toddler who has daycare in my workplace city. It would be helpful to include children as a passenger in the carpool definition. If we could take a bus that was readily available every 10 minutes along US36, that would be a helpful alternative. However, I would choose to keep my toddler in my car due to inclement weather conditions and in consideration of other bus passengers. Please take this population in consideration when assessing information about driver behaviors.
- I would like to see an additional all use lane in each direction as well as the restricted lanes. Thanks!
- I would support switching from diesel rail to light rail even if we have to wait longer.
- If RTD could use a carpool lane that would reduce travel time I would take the bus every day (my employer gives me a free bus pass). I hope you are also considering light rail!
- Stricter enforcement of texting and cell phone usage would be a huge help. People are IDIOTS and you can always tell when someone is on the phone or texting bc they slow EVERYTHING up. Also, curiosity is a major problem. I travel this road every work day and so many times there is NO reason for traffic. People just cannot drive!
- Have you performed a survey to find out why people have to commute to and from the Boulder area? Maybe a porportion of your highway construction funds could be used as a grant process to help people that work in Boulder purchase a place to live in Boulder. That might reduce the number of people having to drive to Boulder from Westminster/Broomfield/Louisville and other north Denver areas in order to get to work.
- Why don't we just add an extra lane for people to use? I don't understand why we need to include a toll lane when we pay taxes to the state that should fund this. There are three lanes from Sheridan to Denver on 36 and no toll - why can't we have that from Boulder to Sheridan? The traffic congestion is horrible especially around Foothills and 287 and as citizens of Colorado I think it only fair to provide us with adequate roads to travel to and from our businesses that help the state's economy. I am in full support of adding a lane but I will not pay any tolls unless they are less than \$0.50 and even then I will not be likely to. Please provide Colorado residents with the transportation infrastructure we deserve. And PLEASE GET THE LIGHTRAIL going! LIGHTRAIL WILL BE THE ANSWER TO OUR TRAFFIC PROBLEMS!!
- I fully support an extra lane being added to US-36 in each direction; however, as a single adult living alone and barely making ends meet, paying tolls is not within my budget. I would very much enjoy taking an RTD bus to save on carbon emissions, but the nearest regional transit station is 2 miles from my home and taking the bus adds and extra 1 1/2 hours to my daily roundtrip commute.
- I would not pay tolls especially the amount daily that you have listed in this survey. The bus trips going every 10 minutes especially from Broomfield would work well. The B bus is always packed and most get off at Broomfield.
- managed toll roads would be better than no improvements. However, I would prefer a mass transit option instead of more lanes-- lightrail, express train, more bus options, etc. An additional lane will work for 3-5 years, and then we'll need more lanes.  
 Many of the questions in this survey are (deliberately) poorly worded and will give the wrong results because it is impossible to answer them honestly and/or correctly. It is highly unscientific. The bottom line is that public/mass transit needs to be \*both\* improved and given priority so that people can & will use it. Currently, RTD is utterly unusable for most people. I am lucky in that I am able to use it almost every day without significantly increasing my commute time or going out of my way. Tolls for single people in HOV lanes are unacceptable and do not affect congestion or increase revenue in any meaningful way.
- I highly suggest making the managed lanes free for motorcycles.
- Toll lanes do not get removed after the time needed to pay for the freeway improvement so this is a government lie. Removal of the HOV lane to a full working lane would be a benefit. An addition of a fourth NON-TOLL lane will help. The on-ramps are an issue. This is what really slows traffic down as cars try to merge and other cars try to switch lanes. Traffic is congested due to road lines that are not reflective as people have a hard time seeing them at night and in the rain. 36 should be a four lane highway with lightrail running from denver to boulder. But this also requires a way to get from the lightrail stop to place of business.
- Would rather see public funding invested in reliable mass transport
- Thank you for trying to come up with a plan to help the congestion. Unfortunately it will only get worse if nothing happens, so thank you! Best of luck in the planning!



- Give us more lanes!!!!
- For all of the transportation options posed to me here, I would have chosen to simply avoid 36 and drive around it.
- Lane ruts on 36 westbound from Broomfield to the bottom of the hill before Boulder are dangerous.
- US 36 should have been addressed long ago with the opening of Flatirons Mall and the development which entailed. Each way into and out of Boulder needs an extra lane - I can't believe they will be restricted to a paying option. I'm sure many people will take advantage, however. CDOT does a lousy job of clearing snow during major snow events. Very different than 15-20 years ago - you could count on making it home - not so anymore. Also, many, many students commute using this highway - it is assumed they all live in Boulder and they do not! Buses are so over crowded during the school year. The last time I rode the bus, I stood the entire way home - will not do anymore - it is NOT SAFE.
- My taxes pay for roads, don't make me pay a second time via tolls. I won't pay tolls, large or small, since I see it as theft. You know you need more lanes on this road (and several others) - stop looking for ways to weasel-out of building them: none of those alternates work & you know it. Just build the lanes, make them publically available & stop wasting money on things like carpool lanes & busses that are empty most of the time.
- What about the Light rail option?
- The extra lane should be added without tolls. This is the reason we pay so much in taxes to have these services provided to the public.
- The traffic impact on the northern portion of 36 (btw Broomfield and Boulder) is not enough to make me desire an extra toll lane. There is rarely traffic during the hours of my commute (9-9:30 am and 7-7:30 pm). Also you neglected to include any type of hybrid vehicle credit/no fee option for drivers who are aware of their impact and driving fuel efficient low emissions vehicles already (I drive a hybrid already).
- Connect Boulder 36 via Highway 93 to complete the 470 loop to reduce traffic. This is the only solution that makes complete sense and improves the economic base along travel routes. Connecting 36 to I-70 on the Boulder end of the route.
- You will never be able to ease the congestion on 36 because the flow of people into the area will never stop. CU just finished a building that likely will add another 500 people to the congestion.
- If there is room for a managed lane, there is room for another lane. Traffic on 36 would move much more smoothly if there was an additional lane; the problem is that cars are constantly merging in and exiting from one of only two traffic lanes. It slows everyone down.
- Again... this is entirely the wrong approach. You need to do a comprehensive study that looks at investing in long-term, sustainable travel and commute options... WITHOUT all of your preconceived 19th-century assumptions about social mobilization. More cars and more buses solves NOTHING!!! And you are way wrong if you think we are going willingly subsidize this. You want my support and my hard-earned dollars? Then get to work right NOW on a 21st-century option. We need an extensive, high-speed, state of the art rail supplemented with local transport options (clean buses, bike shares, walking, etc. Anything short is clearly a b.a.u. political cop-out, as well as, both economically and environmentally unsustainable. Why do you continue to promote such a dumb and unpopular, short-term solution that will need to be revamped in the fairly nearly and then cost even more??? and p.s.: we no longer buy your unsubstantiated argument that we need cho-cho trains on US 36 because high speed rail won't work well on Davidson Mesa. I have traveled all over Europe on high-speed rail. Despite the highly variable terrain, it works very well and I happily pay the rates. Come-on; get with the new energy economy program and stop spending our transit dollars on these ridiculous canned-targeted user-etts and surveys. Clearly, your consultants have made enough money on these! so.... now ask me how I really feel.
- I am all for putting up new lanes on US36. However, I hardly see the HOV/toll lanes on I-25 used, even during rush hour. I personally feel making new lanes open to everybody without toll relieves congestion better than restricting them, because more people will actually use them. Encouraging carpooling is dubious because it takes 5 more minutes to get your stupid carpool buddies in the car to begin with, so you're gonna have to save me more than 5 minutes to make it worth it. In addition, the HOV lane on US 36 eastbound before you hit the gates at Pecos is abused ALL THE TIME by non-HOV vehicles, vehicles that have transponders and think that that section is a transponder section and not an HOV ONLY lane, and even those with neither a transponder nor passenger, and I think the police enforcement is very poor for that lane. If you put a HOV lane in on US36, it's gonna have to have a barrier, not just a painted line, to stop cheaters. Anyway, I'd prefer that Colorado tax pay for an OPEN lane. Paying \$1.00 extra to save 2 minutes off my commute is NOT worth it - it'll get me home 2 minutes early and that means I'm paying a rate of \$30 an hour for relaxing at home. NO THANKS! I can buy a ticket to water world and get way more fun for what amounts to \$5 an hour. If you're gonna charge more than what amounts to a couple bucks an hour for your managed lane, I'll just keep taking the back route on 93 for free.



- Tolls should be kept very low. -IF- we must have them. We have to go to Denver & so many are hit with so many expenses. Tolls add up. We could probably do a Managed Lane free for 2+ with low toll for single driver. Rush hour toll increases do make sense for Managed Lane. My husband commutes to Denver every day with no possibility of carpooling.
- Did not take into account hybrid vehicles. Should get lower toll. They also save on GHG
- I avoid tolls as often as possible because they are ridiculously high, and come too often along the highway. Even with discounts they are too high. We have a trailer and it counts as 4 axles for numerous tolls just to get to Wyoming.
- extend rail service to Boulder/Louisville/Longmont
- I take the bus MWF. Using a connector bus (#104) to meet up with a B is easy because the B's are frequent. The \*return\* trip by bus is the one of unpredictable length because a) the B bus can hit traffic that adds 20 minutes, just enough to miss the hourly connector going home. Then, a 50-minute-total trip can turn into 110-minutes!! Allowing B buses to use managed lanes AND stop at multiple park'n'rides would be great because the bus users who are inbetween what are BX stops now would be able to have reliable travel times.
- Like the more frequent bus proposition, as long as the \$1.00 was not in addition to having a bus pass. I carpool when applicable, but don't want to be constrained to go at a reasonable speed to when my friends want to go somewhere. Not enough people will take advantage of the managed lane. Traffic is always better in the eastbound direction east of Sheridan when the third lane opens up. Just add a third regular lane all the way from Boulder.
- I greatly appreciate the Northwest Parkway to 470 for the trip to DIA. Even with bad weather roads we can make the trip adding only five minutes to the normal 40 minute trip.
- The managed lanes need to be free to all vehicles. One can not always involve another passenger in the trip to and from Denver when going to a private residence which is not near a bus route.
- Boulder County has, for far too long, used its political will to thwart the addition of two non-toll lanes in each direction. Such lanes would have been a boon to other counties and workers. I favor these previous desires of the other counties even if High Speed Rail will eventually come along this route. (Though probably not in my work-life. I have been traveling this route for 30 years.)
- I would like to see bus only lanes or monorails with feeder parking lots available with walk ways to get to the buses or rails. With frequent transportation schedules to choose from.
- Rail service between Denver and Boulder would be better than more lanes for cars.
- Simply add another lane. We already approved a tax hike for this a few years ago. You might also think about adding a bike lane along the highway, if you are serious about carbon reduction.
- I really hope you do something about U.S. 36 in coming years. We really need a better way to get around town and our city. It is nice to see our tax payers money going to good use. Keep up the good work.
- This was a lengthy survey, but I think it will help to better plan for the new improvements.
- It would be more cost efficient to deal with how traffic exits in Boulder perhaps make the streets one way or even limit light changes. The end is poorly designed and the amount of traffic getting off onto side streets in Boulder is the reason everything is backed up. Adding lanes and tolls will not help fix this problem and will be a waste of money and resources.
- Make a bike path along 36 between Westminster and Boulder!
- I have a car (Buick Rendezvous) that will not work with any transponder. I am not happy about that, I would have a transponder if I could.
- I'm no traffic engineer, but it seems like traffic on 36 always backs up in very predictable areas. Why focus on such an expensive solution that includes a new lane all the way from I-25 to Boulder? Focus on the slow speed areas, and put in a few shorter sections with an extra lane. For example, coming out of Boulder, is almost always slow coming up the mesa... Why not put an extra lane where the meters are from Foothills all the way to the McCaslin exit or even just to the top of the hill. That alone is only a mile or so of pavement and would practically eliminate the slowdown. All it takes is one slow car that can't climb that hill to slow down all of the other traffic. There are plenty of other areas where similar shorter stretches could be fixed. Additionally, why not look at legislation to give Colorado based employers tax incentives to allow more telecommuting. Instead of building more capacity, let's focus on cutting down the demand instead. I appreciate what you are trying to do, and hope you come up with a great solution. I just hope you will consider all options instead of just falling back on the lazy solution of adding a toll road.



- We need a zero-emission public rail system for the 36 corridor, and have for decades. If tolls and a managed lane could get us closer to that goal of light rail, it would be worth it. Rail is the answer to traffic congestion and emissions, but until then we desperately need a dedicated bus/HOV lane like that which runs along I-25.
- My commute basically comes down to choice. Do I want to pay more (gas) to get to work faster, or pay less (bus) and spend even longer en route and have to wait on a once-an-hour bus? I use RTD probably 50% of the time. I'm in favor of adding the lane, solely to reduce congestion. I have no intention of paying any extra money than I already do, just to get to work.
- I don't believe that transitions between the proposed managed lanes would be practical, especially during rush hour(s). I support using tolls to pay for road improvements, but that didn't seem to work very well with the E-470 project...? If the 36 corridor becomes a toll road I would probably purchase a transponder/toll reader.
- It would be nice to have an express bus to boulder from the thornnton area or say from I25 and Hwy 7 currently the time it takes from my house on the bus is from 1.5 to 2 hours one way, driving is 40 minutes. if a bus was 1 hour i would take it
- We need to manage growth in the state and stop the influx of people coming here. Managing the growth will cut down on traffic, costs to maintain the roads, lessen the no such thing as carbon (just another tax hype).
- I would MUCH prefer a train option for travel along the Rt 36 corridor, and am disappointed that it is not being seriously considered. I also believe that it is the responsibility of the State of Colorado to build infrastructure that adequately meets existing and future population projections \*without\* tolls.
- I can't stand driving US36. There is a glut of heavy traffic westbound in the a.m. rush hour that creeps eastward every day. I still don't know why it exists. It is a very frustrating drive and inspires feelings of uncontrollable road rage each and every day.
- I suggest that there is no toll for carpool use, only for single use on the managed lanes similar to the other highways in the vicinity.
- I drive 36 and 25 every day and I have noticed in the last 2 years that 36 is becoming a major problem that has to be fixed. Buses and trains only work in dense areas; the 36 corridor is not dense so the only solution is another lane. Toll lanes seem at first to make sense but the reality is that the toll lane is usually empty with the remaining lanes chocked with traffic stopped or going slow pumping carbon into the atmosphere. The only way to reduce congestion, reduce carbon emission and improve business efficiency in the area is to add another open lane.
- I would take public transit if it was more convenient. I don't like the idea of spending more than 2 hours each way to take the light rail/bus. Also, this alternative is MUCH more expensive than driving and also consumes MUCH more of my time. If I could take light rail all the way to Broomfield from Lone Tree, I would...if they lowered prices.
- I would also love to see a light rail option on the Boulder-Denver corridor.
- I always choose public transit (RTD) when there is a convenient route - I don't mind if it takes longer and costs more. But I will NOT carpool with strangers or pay a toll to save time!
- I would rather the CDOT widen US 36 in both directions to allow for better traffic flow without charging a toll to use the additional lanes. However, if the tolls were reasonable (in my opinion, anything above \$2 is unreasonable), I would consider using a toll lane.
- Highway 93 is quite busy and not as safe due to undivided lanes. Completion of the 470 loop is necessary.
- Even though my commute to/from work is less than 8 miles, and would rarely need to use a payed toll road, I would agree that this is needed for other commuters using Hwy 36 to reduce traffic and emissions. I am in favor of it.
- I really think the money would be better used and the environment better served by putting in a lightrail corridor from downtown Denver to Boulder.
- I have no problem using the bus if it were accessible but the time for the bus is almost double then driving. I use carpool lanes but I won't pay to use them. Up to date or accurate traffic reports don't exist north of 104th ANYWHERE. Even south of 104th is not reliable. And forget the weekends or after 5:00PM.
- Please include timely, mass transit options in your decision making. I travel alone because I am responsible for my children when my husband travels; a personal vehicle enables greater assurance I can pick up my children before daycare closes than reliance on the bus--which is caught in the same traffic as my car. A dedicated mass transit system not reliant on highways (i.e. light rail) that had a greater assurance of arrival/departure times would be my strongest preference.
- I am in favor of tolls, assuming they are reasonable and actually provide me with a faster method of traveling from point A to point B, and there is no stopping (at booths) required. I am also very much in favor of riding the bus and used to do this as often as possible. I'm willing to take longer to reach my destination if someone else is driving and I can read the paper!



- The survey incorrectly calculated my express bus time versus my drive time. MY commute takes 30mins after providing my home location the survey still compared a drive time of roughly 30mins to a bus time of 26 mins (or similar) this is not a fair comparison as 10-15mins of my drive time is driving surface streets, the same streets I would drive to get to the park and ride, the calculation didnt seem to take that into account. I am a support of public transport but only when it makes sense.
- Repairs to the existing lanes between Broomfield and Louisville would be a great improvement.
- Toll roads are a brilliant way to spend money to get empty patches of concrete. Since I'm not much interested in spending money to get empty patches of concrete, I'm generally quite skeptical of them. Further, we are currently spending rather large sums of money collected from excise (and other) taxes to build roads. Please be good enough to build roads usable by everybody using that money.
- Needs to be an off-ramp on US36 east to connect with Old Wadsworth.
- my income is none of your business and has no bearing on this survey
- Don't build more lanes. Move to LA if you think adding lanes solves traffic problems. Build convenient light rail for a lasting transportation solution. Bus Rapid Transit is just an excuse to avoid making the investment rail, but rail is ultimately a better solution.
- I travel this route twice a day, five time a week. The congestion around 104th/Church Ranch is horrible and now congestion by the bus pick-drop off zone - very frustrating!
- I think adding a toll lane or making 36 a toll road will definitely reduce traffic. Just look at NW Parkway 470. Nobody uses it because of the ridiculous tolls. Drive east on Dillon Road or Hiway 7 during peak driving times and all you will see is solid lines of cars with transponders in them all heading to I25. I wonder why that is\$\$\$\$
- I have appreciated being able to drive my hybrid vehicle in the HOV lanes on I-25 at no charge when driving alone. That is something I would like to see continued -- being rewarded for investing in more fuel efficient and lower-emissions vehicles.
- Widen the lanes along US 36 or establish a managed lane.
- Yes I think that option toll lanes are fine, I think maybe if e-470 wasn't a toll road people would use that more and there wouldn't be so much congestion on I-36. People in Colorado are sick of paying high taxes to drive on the roads and then being required to pay tolls as well pick one or the other.
- Currently the HOT lanes are not available for my direction of travel. I believe that HOT lanes should be free of charge for carpoolers. I wish it were more convenient for bus traffic to get from my home to the office. (I think it would take two hours and a couple of transfers to make it work.) My commute today was easy, as it is the week following a holiday and there were no accidents. Throw in a bit of snow or rain and/or an accident or two, and the commute from home to office or office to home has extended to three hours for snow or two hours in the summer time on a Friday night Rockies night. Some days, it can take as long as 1.5 hours with no weather or traffic involved.
- Create an integrated (arterial buses, neighborhood circulator buses, rail, and taxi) transit system that uses GPS (vehicles and riders) and computers to provide real-time routing calculations, selection of normal/expedited/premium transit options, dispatch of taxis, re-routing of neighborhood circulators, and on-line payment. If FedEx could do it for overnight packages in the 1970's, we can certainly do it for people with modern computing power. Public transportation must: 1) meet door-to-door transportation needs 2) provide inherent flexibility 3) support choices for expedited transit 4) remove uncertainty around pick-up times 5) run with the frequency that allows for flexibility Much of that can be addressed via technology. The last point requires critical mass. If we keep investing in facilitating POV traffic, it becomes that much harder public transit to be view as an attractive choice (and thus, no critical mass).
- Get a pass for e470. reasonable fee i.e. 140.00 month...frees up traffic on i76 and 270.. could be used M-F. I am comming from Parker to Broomfield...It would be a great pass.
- I estimate tolls to be ~2.50/day x 2 x 5 x 4 = \$100 or more (depending upon usage) per month. Cannot afford.
- creating more lanes is a temporary solution to a growing problem. give people more WAYS to get to work and they will explore them. i fear making more lanes makes more cars. what do other cities tell you? sidenote: i would LOVE a lightrail from boulder to downtown that ran until bar close. talk about PERFECT. and safe. and environmentally helpful.
- Lanes should be added on both sides of the highway, instead of a shared lane like on I-25. The I-25 configuration wastes space and money on medians, retaining walls, space buffers, transponder points and billing, etc... Whereas, HOV lanes added on both sides would allow use of the lanes in both directions by everyone at all times.



- Have commuted in Denver on I-36 and I-25 for 25 years. Feel that toll lanes are "okay" but underutilized. I don't understand why the Denver/Boulder route doesn't have light rail already, as it's notoriously congested. Also, since CDOT doesn't like sanding that big hill into Boulder when it snows, maybe light rail would help. A semi truck slid backwards, almost into my car, on that hill when it was icy! On a positive note, the Express buses are great.
- The traffic from Denver to Boulder is horrific during rushour in the morning and from 4-6 pm. I love going to Boulder, but it almost makes it impossible to do so after work for fear of trying to get OUT of boulder towards Denver. Something needs to change, but I don't think tolls are the answer. People do not want to pay to drive. widen the lanes, make the speed limit 65 the whole way from denver to the 1-25 ramp, etc
- Try not to make the tolls too high. E470 is not a congested road, but the fees have become unreasonable, fewer users, equate fewer dollars.
- Because of the short distance between Pecos and the 1st Broomfield exit a toll would not be an advantage for me. And because I work 2nd shift hours the Hwy 36 is not to busy at my travel times, 1 pm and 11 pm..
- thanks for taking the time to produce this survey
- If I were to pay to take public transportation, I would expect the time traveled to be reduced or I would not be interested. My issue with the travel to and from work along HW36 is the congestion. I would do anything or pay anything to reduce my travel time! It has become ridiculous, enough to quit my job.
- I would love to take public transportation if I could get from home to work without numerous transfers and long sections of walking.
- I would use a light rail alternative if it were available. Otherwise, forget the tolls. Find another way to pay for improvements.
- Tolls for carpoolers is unfair
- I live in Erie, CO, work in Boulder, CO, and go to school in Denver, CO. To do th triangle from Erie to Boulder to Denver to Erie is not possible on a bus currently, therefore, I have to drive. Also, being a young female, I am not comfortable walking from the Auraria campus to Market Street Station by myself at 10pm at night, therefore, I drive. I would like to have better eco-options, but there just don't seem to be many for me currently.
- EZPass does not require a transponder and I get a discount to charge it directly to my credit card. Express Toll requires the purchase of a \$40 transponder that I will NOT buy. NWT & C470 use is complicated by both systems at the same time. Consequently, I only use it when absolutely necessary. I would use it much more often if EZPass was the only collector.
- Putting electronic traffic congestion signs on US 36 as you approach I-25 would be helpful. If these signs could indicate travel time (like the signs on I-70 in the mountains) to the DTC, or DIA or I-25 and University, it would help me to plan alternative routes.
- Hwy 36 has generally needed a 3rd lane for years as the population of the area has grown. Managed lanes does not serve the people evenly; they serve those who could carpool (not everyone can), have more money, or who could use public transport (your assertion that a public transport could be door to door was pure deceptive BS! If the bus dropped each of us at our workplaces, that route would be hours and hours longer!)
- traffic monitoring on access ramps should be put in force earlier in the rush hours (7:00am is too late), and last for a longer period of time. Vehicles entering should also be spaced farther apart. The "green light" needs to be set for a longer time period between cycles. The lights should also be placed further back from the actual merge point, giving cars more time to accelerate to an appropriate merging speed.
- Please, please, please don't spend years adding another lane - and causing worse delays than what we already suffer through - when what we really need is a light rail!!!! And please, please, please consider putting in a bike path that runs along 36. I have to take back roads to bike to work now, which adds on several miles to my commute - so I rarely ever do so...it just takes too long. If there was a bike path along 36, I'd bike to work several days a week - and so would many people I know!!
- Your proposal for travel time using the bus system is very unrealistic. It takes about 2 hours by bus, not 38 minutes. I can't justify spending that much time on the bus.
- I will not pay to go to work. I would use an alternate route through Louisville to avoid tolls even if it means an increase in travel time.
- toll lanes are not the solution. Build a light rail line.
- The information provided is for my morning commute. My answers would differ for my evening commute. Also I have changed my work schedule recently because of the traffic congestion on Hwy 36. I now work 4 10-hour days (7am-6pm) and therefore



don't have the morning delays that I used to have (which made me intensely unhappy). I would be willing to pay a fee for a managed lane and/or use the RTD system IF it meant a shorter commute. Thanks for doing this - it is LONG overdue!

- I really do think that if the focus was put on public transit being faster, then congestion would be reduced. Express bus lanes that allow buses to travel outside of normal traffic flow could potentially cut bus times from Denver to Boulder. I am not in favor of adding more car lanes, however.
- I think money and time would be better spent building out FasTracks, rather than putting in additional lanes. More lanes initially fix congestion, and then more people start using the road, making it more congested.
- I would be more inclined to take the bus if there was a better route that could get me to my workplace, Front Range Community College. But as it is right now, it would take me at least an hour+ (usually longer) and three busses to get from my house in south Boulder to FRCC in Westminster. I don't live near anyone that I work with, so I currently don't have anyone to carpool with for my commute. I would be MUCH more in favor of a HIGH SPEED TRAIN along 36 between Boulder and Denver. Not only would it make my commute more feasible, but my husband and I would be much more likely to travel down to Denver on the train (public transportation) more frequently-- and would gladly leave our car behind. Adding another lane (that is toll controlled) isn't going to help the traffic congestion in the long run. This area is only getting more and more developed, and population continues to grow. In another few years, we'd be faced with the EXACT same issue of adding on yet ANOTHER lane. We need to act with foresight and what is best for our communities and environment now. The HIGH SPEED TRAIN makes the most sense! Europe has efficient and effective travel that is utilized by millions. We need to get on board, get people out of their cars (reduce carbon emissions) and create a system that makes sense! Thank you!
- Light Rail!!!
- How can we do this when we can't maintain 36 as is? It's like slot car racing out there
- Like the carpool/express lane options offered on I25. Would pay toll if \$.50 or less for managed lanes to Boulder.
- A climbing/smv lane out of Boulder would be great.
- It would be even better if you could have 3 lanes of traffic both ways (east and west) that were ALL toll free... That would be the BEST option in these economic times.
- I would much rather have light rail than more traffic lanes. Please use our transportation dollars for the future - not just for now. Thank you.
- Look at the Eastern US corridor toll roads for good examples of how toll roads can work. The cost examples in the Denver area are in a word "excessive." There is a reason why the Denver area toll roads are called "Lexus Lanes." In the Chicago area, for example, the toll one way at the 80/90 connection is 75 cents ALWAYS and tens of thousands of cars traverse that stretch of road. Additionally, you can pay with change at unmanned change drop points.
- If I have to start paying a toll on 36 I will start using Sheridan and or Wadsworth, 80th, 88th, 112th to get across town. To get across town in this city is almost impossible with public transportation. If one works downtown it's a breeze. Public transportation is a breeze too if you go back and forth from Boulder to Denver. I was taking the bus from Denver to Boulder 40 yrs ago, it's easier now. It's not worth it now because I only travel a short distance on 36. What's up with all the merging lights anyway? It makes it more dangerous when the traffic is moving at maximum speed!
- Please do something soon. I HATE this commute.
- The tolls are too high and they never come down additionally I do not want a stored account and electronic equipment I would rather stop and pay cash for my trip.
- I drop my children off at school before I go to work, and pick them up after I leave work. It would be difficult for me to use public transportation to go to work and be able to drop off and pick up my children at school.
- What about light rail?!!!!
- No more fees, we already pay taxes for highways and highways that never seem to get fixed. Full of pot holes, horrible pavement. I wouldn't give another dime for any highway work. I'm already taxed to death!!
- My commute goes counter to the congestion. Every day I see the other side of US 36 backed up (both in the A.M and in the P.M). If I was required to travel in that mess every day, I would definitely be more receptive to tolls, etc. to reduce commute time, pollution, et.al.
- Adding another lane of highway is not the answer. Why not build a lightrail system? Do the right thing from the get go instead of wasting our time and money!
- what about the taxes i pay, shouldn't those pay for the roads?



- I'd be willing to pay a toll if it were reasonable, but only at certain times of the day. 36 is my only available highway option and I use it to get 99% of the places I go. I am worried that adding in a lane that encourages people to make 3 lane exits and/or change lanes quickly to get into or out of a toll lane in controlled entrance/exit zone might make traffic in free lanes worse. Too me that would defeat the purpose of a new lane (to aid in congestion) and make the project simply a way to force people to pay more to get places.
- How long are you going to study this!! put the shovels in the ground on this and light rail. the costs keep going up. reduce the tolls on E 470 and watch the usership go up. Volume vs price!!
- Given the volume of traffic on US36, it ought to be a three lane highway.
- All roads should be equally accessible by all people. Tolls are a form of discrimination and should be avoided in all metro area planning. When tolls are used in Colorado, I have found them to be overpriced. To put this in perspective, it costs as much to take E470 around Denver as it does to cross Pennsylvania on the PA Turnpike. Please--NO MORE toll roads.
- It is not worth paying a toll when it will only reduce my trip time by 1 minute. If there was a more drastic time savings I might be interested.
- Homes and buildings account for twice as much of the emissions and climate change than cars do.
- good survey; get's participants to think a little bit more about the reasons why public transportation and "carpool" lanes are necessary. we all want to do our part to help, but we also want convenience. it's good to get people thinking more about environment/road improvements. 36 is in dire need of improvement between exit 287 and McCaslin. The ruts/tracks in the road pull a car like a roller coaster. In poor weather conditions & high winds, this can be really dangerous. The new Park N Ride by the event center is a great improvement, but good/quick access from Broomfield to the Park N Ride is needed. If it was easier to take the bus from my house to Boulder, I would definitely consider that option, but it's probably quicker to ride my bike to the Park N Ride than it is to take a local bus to the Express bus. I don't always have the time.
- Consider a bus route from either Sheridan & 36 OR 104th & 36 DIRECTLY to/from Front Range Community College. That's a good way to get FRCC commuters on 36 to move to public transportation. Park n Ride without direct routes to campus not attractive.
- I really think that the rail system should be built between Boulder and Denver and not additional lanes.



## **Appendix 2: Economic Growth Analysis**

*The Economics of Land Use*



## Final Report

# Economic Growth Analysis

## US 36 Investment Grade Traffic and Revenue Study

Prepared for:

Colorado Department of Transportation/  
High Performance Transportation Enterprise

Prepared by:

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January 26, 2011

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# *EXECUTIVE SUMMARY*

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## **Introduction**

The purpose of this report is to provide an overview of the work Economic & Planning Systems (EPS) has completed in making adjustments to the Denver Regional Council of Governments (DRCOG) 2035 projections for the Denver Metropolitan Area. The findings from this study will be used as a basis for the travel demand model which, in turn, will generate estimates of traffic and revenue potential for the US 36 Corridor.

EPS conducted the study to provide an independent evaluation of economic conditions and to establish growth projections that account for the recent economic contraction and its effect on long-term growth potentials for the Denver region. Because economic conditions have fluctuated significantly in the recent past, an independent assessment of previously issued DRCOG forecasts is warranted. The resulting adjusted forecast accounts for a full range of factors and grounds the larger study with a comprehensive analysis of market and economic data.

This report presents the analysis of economic, demographic, residential, and commercial market trends and conditions that form the basis to EPS' adjustments. The report also presents a summary of each major planned or approved development plan in the vicinity of the US 36 Corridor. The concluding section of the report summarizes how the analyses of these conditions have informed the adjustment to the 2010 base, as well as the 2015 to 2035 projections.

## **Methodology**

EPS made a variety of adjustments to the DRCOG projections. Because the projections are complex, EPS broke the types of adjustments into three components: adjustments to the base forecast year, 2010; county level adjustments to address macro trends; and TAZ level adjustments to address specific trends in the US 36 Corridor. Each component of adjustment used research and analysis of primary and secondary data.

### **Base Year Adjustments**

The current DRCOG forecast was released before the recession began. The adjustments made to the 2010 forecasts have been informed by a variety of independent regional data sources for employment and demographics, as described below.

### **County Adjustments**

A variety of secondary independent data sources are used in the adjustment of these DRCOG growth forecasts, including historic growth trends and independent forecasts of population and households.

## TAZ Adjustments

It is generally understood that an analysis of projections at a subarea, or TAZ level, produces results with a generally high degree of specificity. As such, EPS takes the approach of making adjustments to subareas or TAZ projections only when market information and research provides a clear basis. The following factors concerning market information and research were used to make these decisions with a clear basis.

- Development Plans
- Entitlement Process
- TAZ Attributes
- Market Studies
- Market Pressure
- Proximity to Transportation
- Capital Improvements
- Ownership Patterns

## Historic Trends

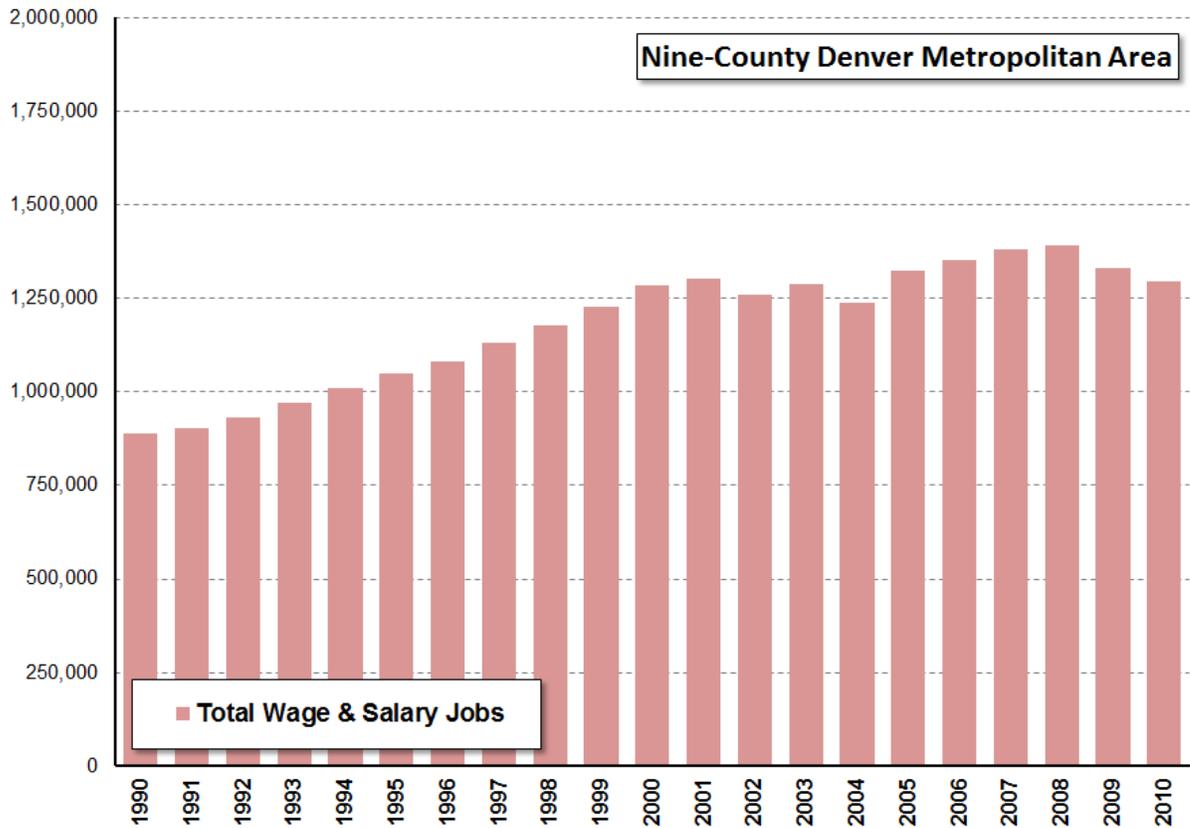
The following section presents a summary of historical economic and demographic trends for the metro area. EPS analyzed these trends at multiple geographical levels in the course of making adjustments to the DRCOG projections. These represent the major three trends assessed—employment, population, and households (residential building activity).

### Employment

Information on the number of wage and salary positions for each of the counties of the DRCOG planning area comes from the BLS. By many accounts, the past decade has been called the “lost decade” as gains in the early and mid-part of the decade, which were substantial, were generally eliminated during the 2007 to 2009 recession, as shown in **Figure 1**.

From 1990 to 2000, the metro area experienced a high rate of growth. Total employment grew at 3.7 percent annually, adding nearly 40,000 jobs per year. Between 2000 and 2010, however, the level of employment remained nearly the same notwithstanding significant growth or contraction on an annual basis. Averaged over 20 years, the nine counties grew at 1.8 percent per year, or an average increase of approximately 20,000 jobs per year. From a base of approximately 890,000 jobs in 1990 to a base of approximately 1.3 million jobs in 2010, the nine-county metro area added more than 404,000 jobs.

**ES Figure 1**  
**Metro Area Jobs**  
**US 36 HOT Lanes Analysis**



## Population

From 1990 to 2000, the nine counties grew at 2.5 percent annually, adding more than 20,000 persons per year. Douglas County added the largest number of persons during this time. From a base of approximately 21,000 persons in 1990, more than 40,000 moved to the County by 2000, reflecting a growth rate of 11.3 percent. Jefferson and Arapahoe counties also added large numbers to their populations. Jefferson County added nearly 40,000, and Arapahoe County added more than 36,000.

From 2000 to 2009, the population in the nine-county metro area grew by an average of 1.8 percent annually. The fastest growing counties in the region were Douglas County, followed by Broomfield and Adams. Accounting for more than 25 percent of population growth, Douglas County added the most persons of all to the metro area. More than 115,000 people moved to the County during the decade. Adams, Arapahoe, and Denver counties added a combined 227,000, accounting for more than half of all the metro area's population growth.

Over the 20-year period, the nine counties grew at 2.1 percent per year, or an average of approximately 19,000 persons. From a base of approximately 740,000 in 1990 to a base of approximately 1.1 million in 2009, the area population grew by nearly 364,000 persons.

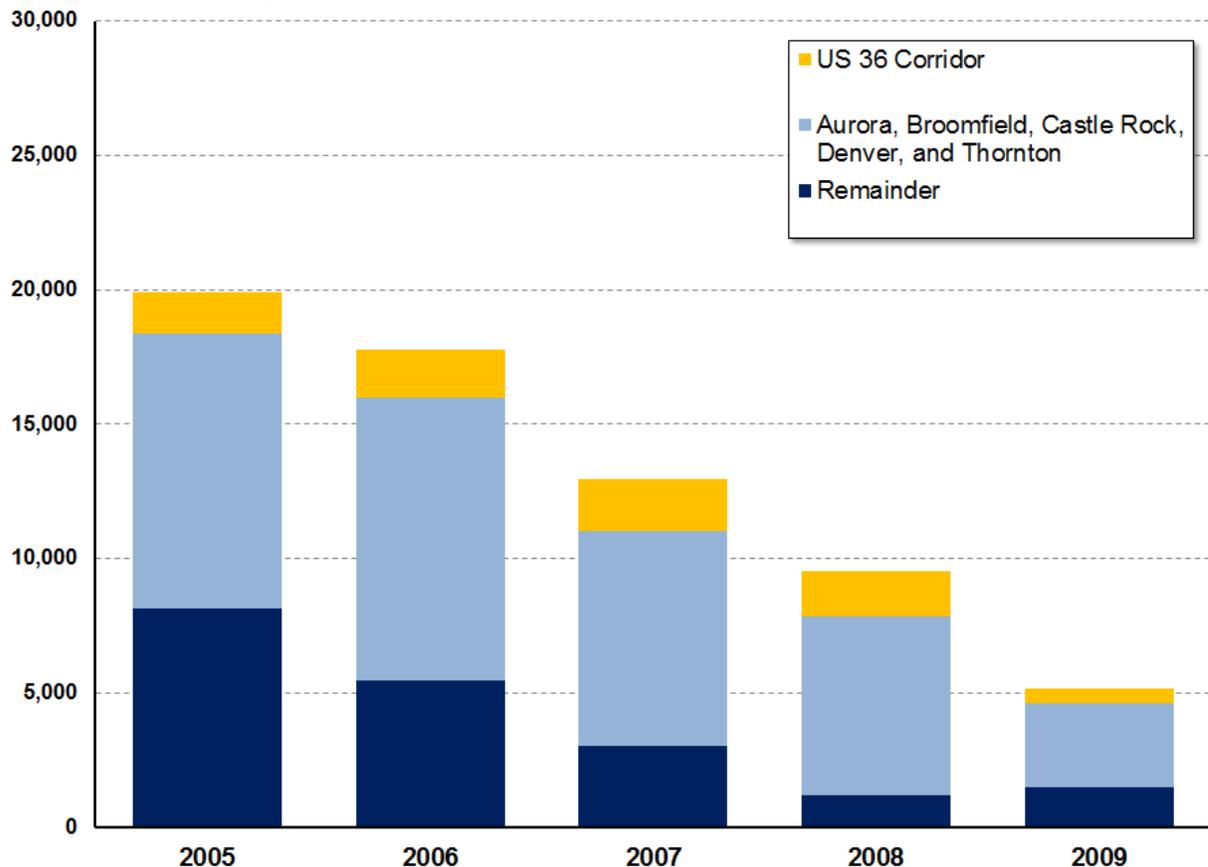
## Households and Housing Units

Trends in residential building permits are used to gauge recent and historical residential construction activity. The trends are also a critical element to estimating the increase in total households for the nine counties of the metro area.

Overall, there were more than 65,000 permits issued in the metro area from 2005 to 2009, as indicated in **Figure 2**. On average, this reflects approximately 13,000 housing units per year. By municipality, however, the annual production rates vary significantly. Activity in 2005 and 2006 was substantially higher than the activity after the contraction that began in 2006. Aurora, Broomfield, Castle Rock, Denver, and Thornton issued the highest number of permits during this time, representing nearly 60 percent of the total metro area's activity.

Among the jurisdictions that represent the US 36 Corridor (Boulder, Broomfield, Lafayette, Louisville, and Westminster), approximately 7,500 units were permitted. At an average of 1,500 units per year, this represented more than 10 percent of the average annual building activity for the metro area.

**ES Figure 2**  
**Metro Area Permits**  
**US 36 HOT Lanes Analysis**



## Current Economic Background

The forecasts analyzed and adjusted were released by DRCOG in 2007. Although DRCOG did account for the housing contraction that began in the fourth quarter of 2006, it did not project the effects of a major recession. The purpose of analyzing DRCOG's 2035 forecasts is to apply current information and market knowledge to make adjustments at the county or city and TAZ levels.

### Approach

EPS approached the task of adjusting DRCOG's forecasts from the following perspectives. Each perspective sheds light on the different parameters EPS used to inform the adjustments.

- **Understanding the DRCOG Model:** EPS met with DRCOG's Regional Modeling Manager and economist who oversee the forecasting process. A meeting was conducted to enable EPS to make informed adjustments to the forecasts after more thoroughly understanding the underlying assumptions and possible limitations of the 2035 projections. DRCOG is not planning a recalibration of the planning area economic forecast until it is scheduled to produce 2040 forecasts. It does, however, acknowledge that the effects of the recession may result in a change to near-term projections, if not the 2035 control totals.
- **Geographic Scope:** EPS' analysis includes the extent of DRCOG's nine-county planning area, with the exception of the portions of Weld and Elbert counties located on its periphery. Some aspects of the analysis focused on trends at the county level, and some aspects of the analysis focused on trends at the municipal or sub-municipal level. Other aspects of the analysis focused on trends and conditions at a TAZ (site-specific or development project) level. For the TAZ level analyses, the refined focus primarily targeted the geography surrounding the US 36 Corridor.
- **Economic and Demographic Trend Research:** The analysis and adjustments of county, municipal, or sub-municipal level trends and forecasts were informed by several secondary data sources, such as those outlined earlier in this summary. These regional and sub-regional trends were used to benchmark the DRCOG forecasts with historic capture of economic and demographic growth.
- **Market Research:** EPS conducted research of major transit and conventional development within the US 36 Corridor. The scale of these developments, their land uses, and timing of developments were identified. In addition, information was gathered about residential building activity, as well as office, industrial, and retail market conditions and trends to inform adjustments.
- **Capital Investment:** Additionally, one of the major assumptions used in EPS' analysis relates to the timing of RTD's FasTracks system. EPS assumes that metro area voters are likely to approve a 0.2 percent sales tax extension to fund the project shortfall. RTD estimates that under this level of sales tax increase the entire system would be completed by 2027. Under this assumption, the Northwest Rail Corridor would be constructed by approximately 2020. All these assumptions are critical to the timing adjustments of development, particularly TOD along the US 36 Corridor.

- **Adjustments:** EPS recognizes that DRCOG uses a robust travel demand model based on a variety of factors, which are calibrated to an independent economic forecast for the entire metro area. While DRCOG uses information at the TAZ level to inform its projections, it is generally understood that analysis of smaller areas within the region produces results with variable degrees of accuracy. As such, EPS has taken the approach of making adjustments to the DRCOG forecast estimates only when market information and research provides a clear basis.

## **Short-Term Economic Outlook**

### ***Center for Business and Economic Forecasting (CBEF)***

CBEF is a private research firm that prepares long-term and short-term regional economic and demographic forecasts. According to a presentation at the 2011 Colorado Business Economic Outlook, the CBEF anticipates job growth to increase at a slow, steady pace, adding approximately 10,100 jobs in 2011.

### ***Metro Denver Economic Development Corporation (Metro Denver EDC)***

The Metro Denver EDC is an affiliate of the Denver Metro Chamber of Commerce and represents the interests of its 70 cities, counties, and economic development organizations in the seven-county Metro Denver and two-county Northern Colorado region. The Metro Denver EDC's outlook for 2010 projected a 1.1 percent job loss for the metro area, higher than its projected loss of 0.4 percent for 2009.

### ***Colorado Legislative Council***

Colorado Legislative Council staff serves as the nonpartisan research arm of the Colorado General Assembly. According to staff, the State and the metro area in particular, is currently experiencing a gradual recovery, but that tight credit, high unemployment and debt levels, and a generally weak housing market will hinder recovery. The job market in the Denver metro area has stabilized, but growth is slower than initially projected. Similarly, single and multi-family construction permits have increased, pointing to an improvement in the housing market.

### ***National Association of Realtors (NAR)***

The NAR tracks measures of market performance regularly and provides updates and short-term outlooks on the conditions relevant to the real estate industry. In 2010, the NAR Chief economist stated that the Denver market is stronger than most areas of the nation, and it is likely to rebound faster. Contrary to conditions in other national housing markets, the Denver Metro Area did not overbuild during the real estate bubble to the extent that some cities did, such as Phoenix and Las Vegas.

## **DRCOG Original Forecast**

### **Employment**

DRCOG forecasts that employment through 2035 will grow at an average of 2.0 percent per year. Total jobs are projected to grow from a base of 1.3 million in 2005 to nearly 2.2 million by 2035. Between 2010 and 2020, this represents an increase of more than 29,000 jobs per year, and from 2020 to 2035, an increase of more than 37,000 jobs per year. While these trends indicate a consistent growth rate, they assume an increasing number of jobs added per year.

### **Households**

The 2035 household forecast indicates that growth will occur at an average rate of 1.7 percent per year. In total, the area is projected to add more than 600,000 households at a rate of more than 24,000 per year. From 2010 to 2020, this represents an increase of approximately 20,000 households per year, yet from 2020 to 2035 the forecast indicates an increase of nearly 27,000 households per year. Similar to DRCOG's employment projections, these indicate a relatively consistent rate of growth that do not reflect a tapering growth rate over time.

### **Population**

The 2035 population forecast indicates that growth will occur at an average rate of 1.6 percent per year. In total, the area is projected to add more than 1,360,000 persons at a rate of more than 54,000 per year. From 2010 to 2020 this represents an increase of approximately 50,000 per year, and from 2020 to 2035 the forecast indicates an increase of nearly 57,000 persons per year.

In EPS' analysis, population projections are related to the household projections by the average household size factor. Over time, DRCOG projects the regional average household size to diminish from approximately 2.47 persons per household in 2010 to approximately 2.40 persons per household by 2035. EPS has applied this assumption to the adjusted household forecast estimates for each TAZ to determine the adjusted population forecasts.

## **Adjustments to DRCOG Forecast**

This section outlines EPS' adjustments to the DRCOG forecasts. Adjustments are made to the base forecast year 2010, as well as the subsequent forecast years. EPS made two types of adjustments to the forecast years 2015 and beyond. The first type of adjustment applied to county and municipal levels, and the second was made at the TAZ (site-specific) level.

### **A. Base Year Regional Adjustments**

#### ***Households***

EPS adjusted DRCOG's 2010 household forecast using records of residential building activity, as reported previously. DRCOG projected households to increase by approximately 90,000 between 2005 and 2010, or at a rate of nearly 1.7 percent per year. However, residential building activity trends indicated that approximately 65,300 units were built during this time. Adjusted for vacancy (5 percent through 2007 and 10 percent through 2009), this indicates an increase of an

estimated 61,300 households. While this still represents an increase in households, it is approximately 30 percent lower than the DRCOG forecast. EPS applied various methodologies to apportion this change to the 2010 household forecast. In most cases, sufficient information was available to apply the adjusted household count by municipality. In other cases, EPS selected sub-geographies within a few municipalities (or counties) to distribute the growth. Overall, many adjustments assumed that a predominant portion of growth occurred within urban areas. At an annualized rate, this adjustment represents a reduction in the growth rate between 2005 and 2010 to 1.2 percent per year from 1.7 percent per year.

### **Employment**

The 2010 DRCOG employment forecasts were adjusted using records of wage and salary jobs from the BLS. Job growth, like household growth, occurred at a slower rate than projected, given the recession and associated job losses. In the nine counties of the DRCOG planning area, EPS made adjustments to reflect total employment levels by county. Adjustments were made to reflect the number of jobs gained and lost during that period.

BLS records indicated that the nine-county area lost approximately 20,000 jobs during this period. DRCOG had projected employment to increase by more than 15,000 jobs from 2005 to 2010. EPS made adjustments to reflect the net job loss over this five-year period with the largest changes occurring in Denver, Jefferson, and Arapahoe counties. At an annualized rate, this adjustment represents a reduction in the growth rate between 2005 and 2010 to negative 0.3 percent per year from 0.2 percent per year.

### **Population**

As described previously, EPS' adjusted population forecasts have been estimated by applying using DRCOG's average household size factors by TAZ level to the adjusted household projection. DRCOG had projected population to increase by more than 177,000 persons between 2005 and 2010, reaching nearly 2.8 million persons. After adjustments to the household forecast, the adjusted 2010 population base is approximately 2.7 million, a reduction of 2.8 percent to the original DRCOG forecast. At an annualized rate, this adjustment represents a reduction in the growth rate between 2005 and 2010 to 0.8 percent per year from 1.3 percent per year.

## **B. County Adjustments**

Adjustments to the household forecasts incorporated information from the Department of Local Affairs' (DOLA) forecast of population growth for the metro area and other counties. Adjustments to the employment forecasts incorporated information from two independent sources: the Bureau of Labor Statistics (BLS) records on wage and salary jobs, and the Center for Business and Economic Forecasting (CBEF) forecast of employment growth for the metro area and other counties.

The original DRCOG forecast projected employment to grow between 2010 and 2035 at an annual average rate of 1.7 percent. The rate of growth projected by five-year periods indicated that an average of approximately 20,000 households would enter the metro area between 2010 and 2020, and increase to nearly 27,000 per year between 2020 and 2035. The original DRCOG forecast projected employment to grow between 2010 and 2035 at an annual average rate of 2.0 percent.

For both employment and households, EPS applied a similar methodology using independent data sources as benchmarks. EPS recognizes that a tapering of growth rates over time reflects a more natural relationship between the number of households added per year and the size of the base. EPS made two sets of adjustments to the household projections. The overall growth rate was adjusted for each five-year increment growth rate for the DRCOG dataset, and growth rates at the county level were adjusted to account for historical rates of capture. As a result, each five-year period tapers in the rate of growth, while keeping the average number of households and employment added per year relatively constant.

### C. TAZ Adjustments

Major transit and non-transit projects were evaluated to make adjustments at the TAZ level. The area evaluated around the US 36 Corridor from north to south includes the entire Corridor from Foothills Parkway south of Boulder to east of Downtown Denver. On the east edge, the area generally bisects the area between Interstate 25 North and US 36. On the west edge, the area generally bisects US 36 and Interstate 70 West.

The major development projects EPS evaluated were selected because of their close proximity to the US 36 Corridor or inclusion within the boundaries of the influence area, and include:

- ARISTA
- Clear Creek
- Mid Town at Clear Creek
- Original Broomfield
- Highway 42 Revitalization Area
- Boulder Transit Village
- Westminster Center Reinvestment Area
- Superior Town Center
- ConocoPhillips Campus
- Candelas
- Northwest Business Park
- Business Park at Mandalay
- North Wadsworth Business Center
- Hyland Village
- Adams County Housing Authority
- Great Western Park
- Interlocken
- Broomfield Business Center
- Vantage Point Residential

EPS made 11 upward adjustments to households and five reductions and no change to two development plans. EPS made four increases to employment, eight reductions, and did not change four of the employment levels.

## Summary of Differences

The following section identifies the differences between DRCOG's original forecasts and EPS' adjusted forecasts. A summary of the various adjustments is provided, along with illustrative comparisons of the original DRCOG forecasts, the independent forecasts of CBEF and DOLA, and EPS' adjusted forecasts. Maps showing the adjustments geographically are also presented in this section.

### Households and Population

The original DRCOG forecast projected total households to reach 1,734,596 by 2035. After EPS' adjustments, the projected total households in 2035 is 1,584,231, as shown in **Table 1**. In total, this is a reduction of 8.7 percent to the 2035 household total. In the US 36 Influence Area, the overall reduction was 8.5 percent, and in the remaining portion of the nine-county DRCOG planning area the reduction was 8.7 percent.

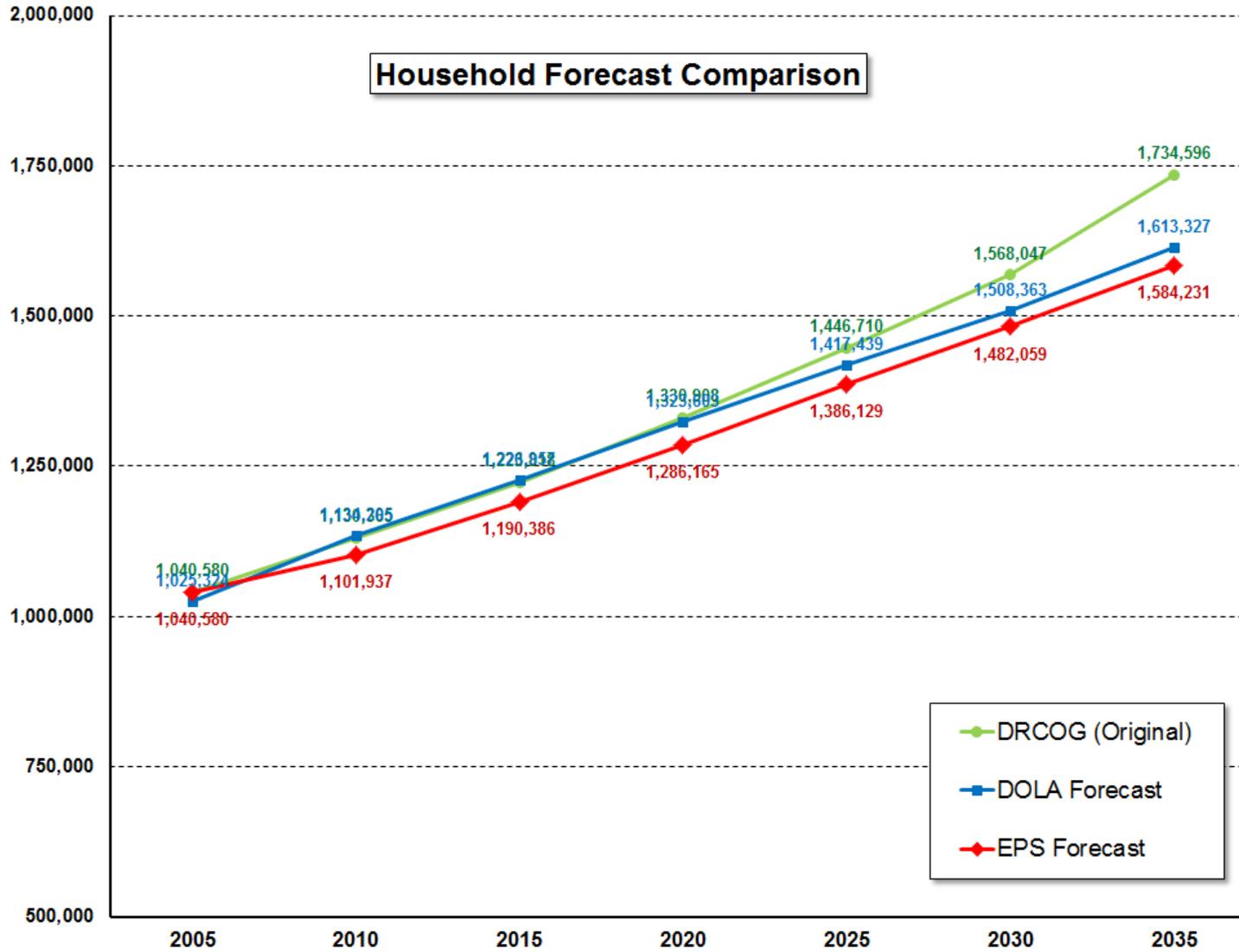
The first adjustment EPS made relates to the 2010 base forecast year and subsequent years. As shown in **Table 1**, this adjustment accounts for 1.6 percent of the total 8.7 percent reduction to the 2035 forecast. This adjustment can also be seen in **Figure 3**. As described previously, this adjustment was made to reflect the number of building permits issued from 2005 to 2009. Subsequent years were also adjusted by the same number to reflect an adjusted base.

The largest portion of the adjustments came from the second adjustment. EPS calibrated growth rates to reflect the tapering of growth over time that occurs with an increasing base. These adjustments were made at the county level and by time period. Overall, this accounts for 6.9 percent of the total 8.7 percent reduction in total households in 2035.

The third adjustment accounts for 0.1 percent of the total 8.7 percent reduction. While small, these adjustments were made in the US 36 Influence Area and play an important role in the generation of travel demand. As shown in **Figures 3 and 4**, adjustments were both positive and negative. Applying the factors described previously, many positive adjustments to total households were concentrated in areas surrounding transportation corridors. Negative adjustments, on the other hand, often occurred in more remote locations farther from transportation corridors.

Also as mentioned previously, changes in the population forecasts are related to the adjustments in households by the average household size factor. The adjusted 2035 population forecast is 8.8 percent lower than the original DRCOG forecast. Population is projected to grow at an average rate of 1.3 percent per year to 2035, down from the original DRCOG forecast of 1.6 percent per year.

ES Figure 3  
Household Forecast Comparison  
US 36 HOT Lanes Analysis



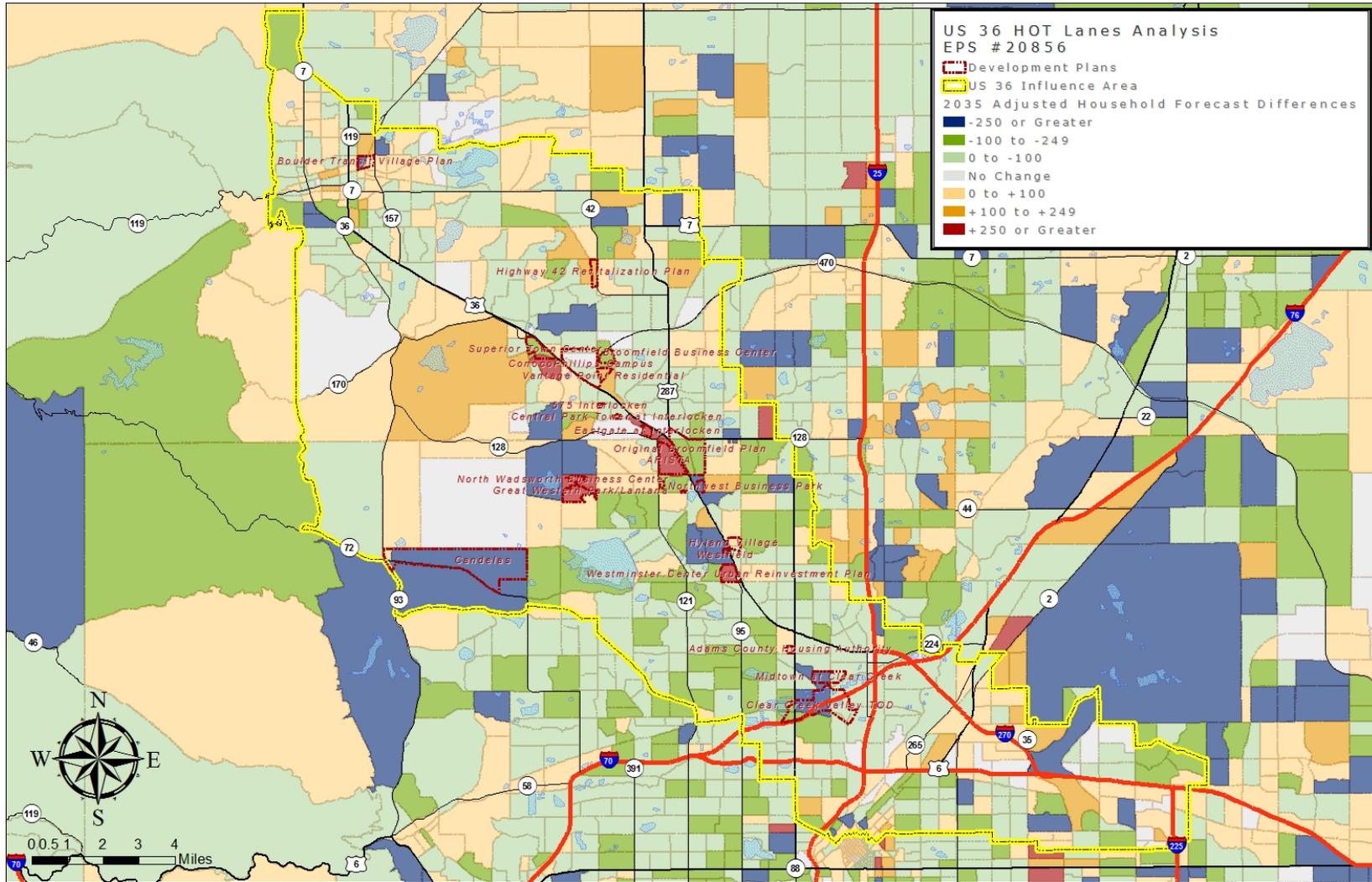
**ES Table 1**  
**Summary of Household Forecast Differences**  
**US 36 HOT Lanes Analysis**

	2005	2010	2015	2020	2025	2030	2035	2010-2035			2010-2020			2020-2035		
								Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Original DRCOG Forecast</b>																
US 36 Corridor	196,048	210,703	224,017	239,286	255,796	273,074	296,801	86,098	3,444	1.4%	28,583	2,858	1.3%	57,515	3,834	1.4%
Remainder	844,532	919,662	999,801	1,091,622	1,190,914	1,294,973	1,437,795	518,133	20,725	1.8%	171,960	17,196	1.7%	346,173	23,078	1.9%
<b>Total</b>	<b>1,040,580</b>	<b>1,130,365</b>	<b>1,223,818</b>	<b>1,330,908</b>	<b>1,446,710</b>	<b>1,568,047</b>	<b>1,734,596</b>	<b>604,231</b>	<b>24,169</b>	<b>1.7%</b>	<b>200,543</b>	<b>20,054</b>	<b>1.6%</b>	<b>403,688</b>	<b>26,913</b>	<b>1.8%</b>
<b>Adjustments to Total</b>																
Adjustment 1: 2010 & Subsequent Years	0	-28,428	-28,428	-28,428	-28,428	-28,428	-28,428	---	---	---	---	---	---	---	---	---
Adjustment 2: County Growth Rates	0	0	-1,866	-11,794	-28,317	-55,573	-119,704	---	---	---	---	---	---	---	---	---
Adjustment 3: TAZ (Site-Specific)	0	0	-3,138	-4,521	-3,836	-1,987	-2,233	---	---	---	---	---	---	---	---	---
<b>Total</b>	<b>0</b>	<b>-28,428</b>	<b>-33,432</b>	<b>-44,743</b>	<b>-60,581</b>	<b>-85,988</b>	<b>-150,365</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>as %</b>																
Adjustment 1: 2010 & Subsequent Years	0.0%	-2.5%	-2.3%	-2.1%	-2.0%	-1.8%	-1.6%	---	---	---	---	---	---	---	---	---
Adjustment 2: County Growth Rates	0.0%	0.0%	-0.2%	-0.9%	-2.0%	-3.5%	-6.9%	---	---	---	---	---	---	---	---	---
Adjustment 3: TAZ (Site-Specific)	0.0%	0.0%	-0.3%	-0.3%	-0.3%	-0.1%	-0.1%	---	---	---	---	---	---	---	---	---
<b>Total</b>	<b>0.0%</b>	<b>-2.5%</b>	<b>-2.7%</b>	<b>-3.4%</b>	<b>-4.2%</b>	<b>-5.5%</b>	<b>-8.7%</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>EPS Adjusted Forecast</b>																
US 36 Corridor	196,048	205,230	215,036	227,441	242,081	257,329	271,507	66,277	2,651	1.1%	22,211	2,221	1.0%	44,066	2,938	1.2%
Remainder	844,532	896,707	975,350	1,058,724	1,144,048	1,224,730	1,312,724	416,017	16,641	1.5%	162,017	16,202	1.7%	254,000	16,933	1.4%
<b>Total</b>	<b>1,040,580</b>	<b>1,101,937</b>	<b>1,190,386</b>	<b>1,286,165</b>	<b>1,386,129</b>	<b>1,482,059</b>	<b>1,584,231</b>	<b>482,294</b>	<b>19,292</b>	<b>1.5%</b>	<b>184,228</b>	<b>18,423</b>	<b>1.6%</b>	<b>298,066</b>	<b>19,871</b>	<b>1.4%</b>
<b>Differences</b>																
US 36 Corridor	0	-5,473	-8,981	-11,845	-13,715	-15,745	-25,294	---	---	---	---	---	---	---	---	---
Remainder	0	-22,955	-24,451	-32,898	-46,866	-70,243	-125,071	---	---	---	---	---	---	---	---	---
<b>Total</b>	<b>0</b>	<b>-28,428</b>	<b>-33,432</b>	<b>-44,743</b>	<b>-60,581</b>	<b>-85,988</b>	<b>-150,365</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>as %</b>																
US 36 Corridor	0.0%	-2.6%	-4.0%	-5.0%	-5.4%	-5.8%	-8.5%	---	---	---	---	---	---	---	---	---
Remainder	0.0%	-2.5%	-2.4%	-3.0%	-3.9%	-5.4%	-8.7%	---	---	---	---	---	---	---	---	---
<b>Total</b>	<b>0.0%</b>	<b>-2.5%</b>	<b>-2.7%</b>	<b>-3.4%</b>	<b>-4.2%</b>	<b>-5.5%</b>	<b>-8.7%</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>

Source: DRCOG; Economic & Planning Systems

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ES Figure 4  
2035 Adjusted Household Forecast Differences, Northern Portion  
US 36 HOT Lanes Analysis



## Employment

The original DRCOG forecast projected total employment to reach 2,183,066 by 2035. After EPS' adjustments, the projected total employment in 2035 is 1,844,703 as shown in **Table 2**. In total, this is a reduction of 15.5 percent to the 2035 control total. In the US 36 Influence Area, the overall reduction was 13.7 percent, and in the remaining portion of the nine-county DRCOG planning area the reduction was 16.0 percent.

The first adjustment EPS made relates to the 2010 base forecast year and subsequent years. As shown in **Table 2**, this adjustment accounts for 1.6 percent of the total 15.5 reduction to employment in 2035. These adjustments are also illustrated by **Figure 5**. As described previously, this adjustment was made to reflect the change in wage and salary jobs reported from 2005 to 2010. Subsequent years were also adjusted by the same number to reflect an adjusted base.

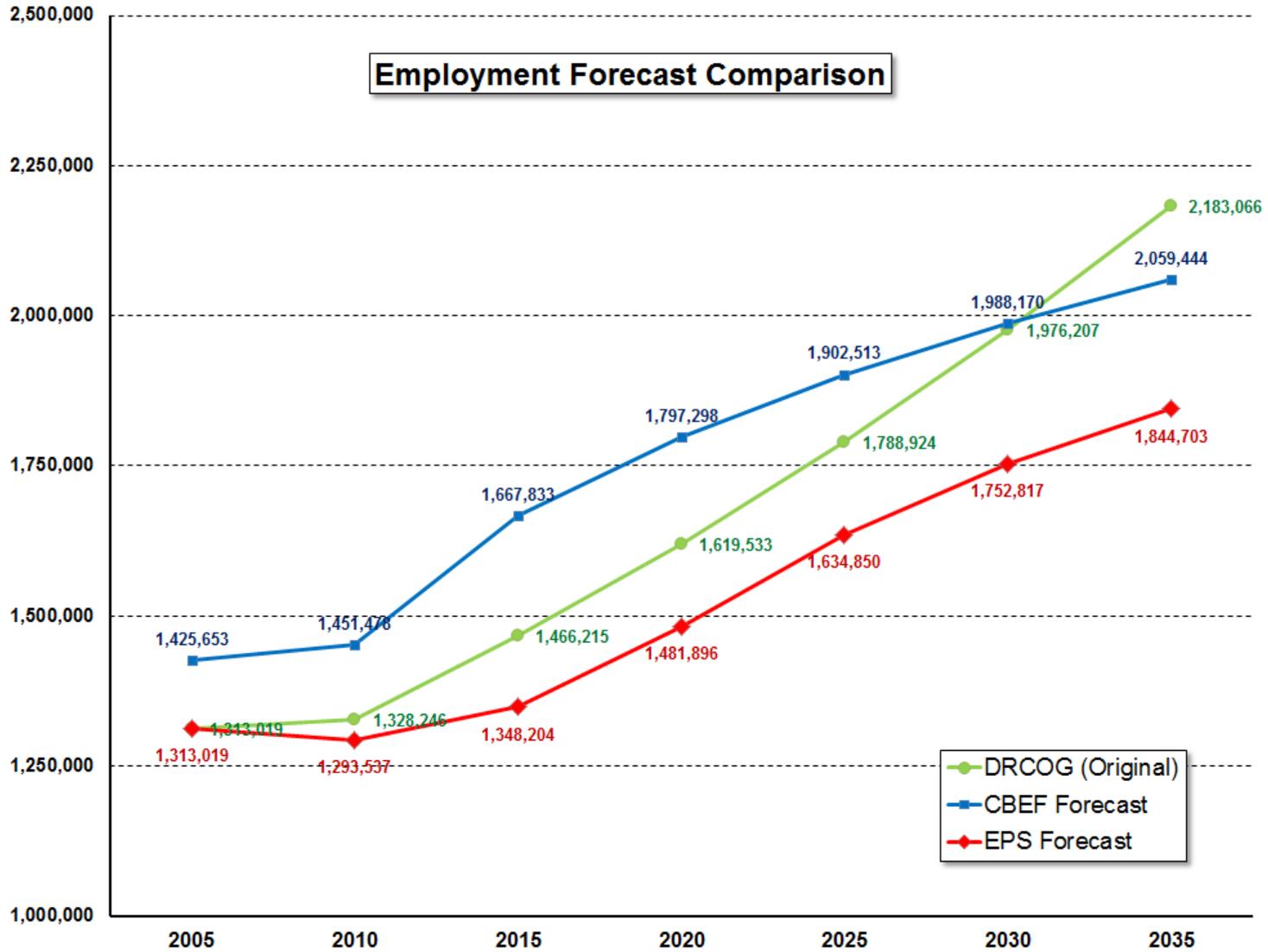
The largest portion of the adjustments came from the second adjustment. EPS calibrated growth rates to reflect the tapering of growth over time that occurs with an increasing base. Similar to the second household adjustment, these adjustments were made by county and by time period. Overall, these adjustments accounted for 13.6 percent of the total 15.5 percent reduction in 2035 employment.

The third adjustment made at TAZ levels accounted for 0.3 percent of the total 15.5 percent reduction. Adjustments to TAZs in the Influence Area were positive and negative. As mentioned previously, consideration was given to the timing of development and the impacts of the recession. This factor was among the major contributing factors to reductions in employment projections, as shown in Figures 5 and 6. A majority of the reductions in employment projections at the TAZ level for 2035 relate to development being pushed back, not necessarily eliminated.

## Summary

The original DRCOG forecasts and EPS' adjusted forecasts are illustrated in **Figure 7**. The adjusted projections of employment, households, and population are shown in contrast to the original DRCOG forecasts to illustrate the order of magnitude differences for each. The adjustments, as described in this report, reflect extensive data and market analysis, research, and understanding of the original DRCOG model and forecasts.

ES Figure 5  
Employment Forecast Comparison  
US 36 HOT Lanes Analysis



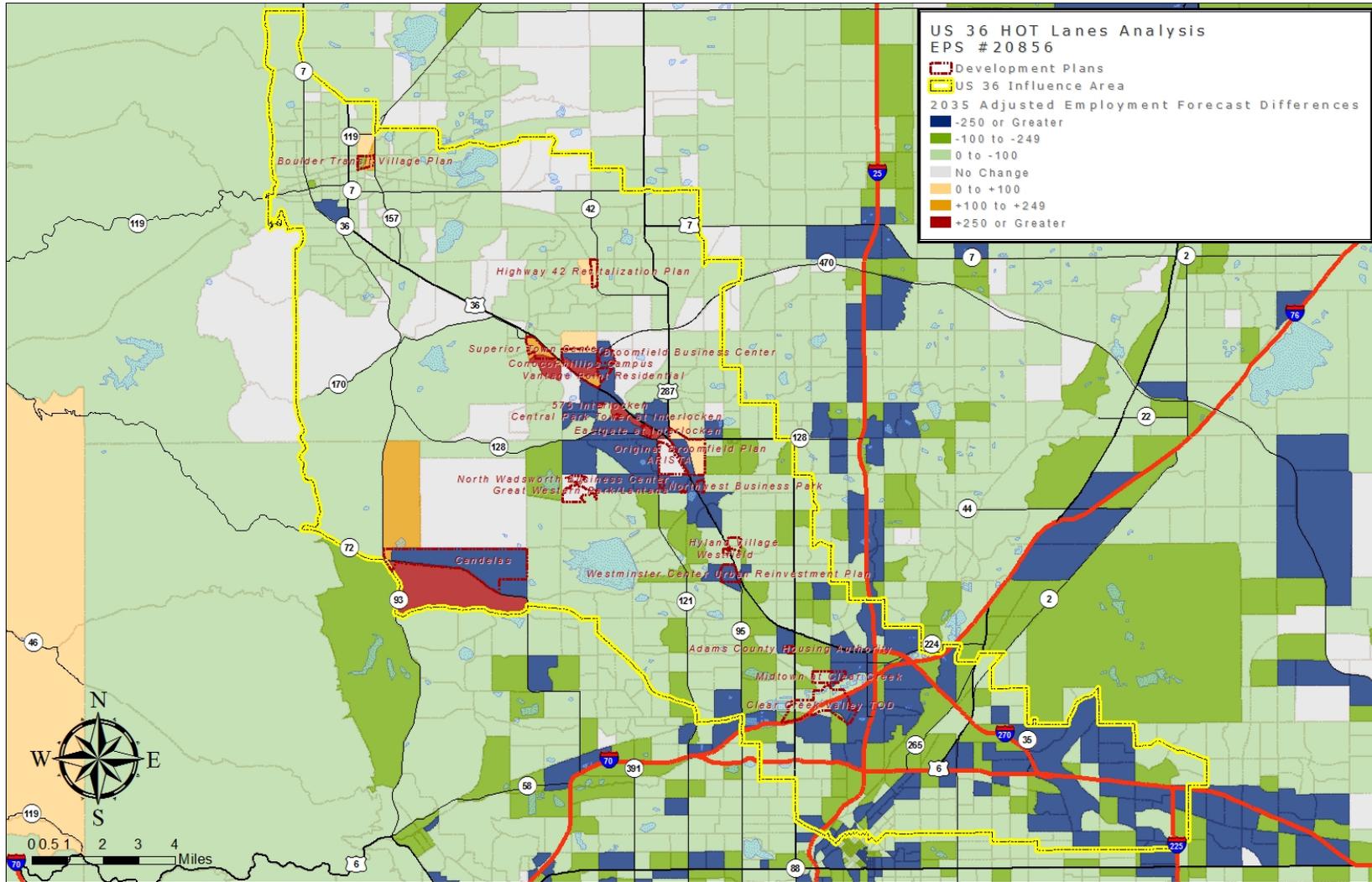
**ES Table 2**  
**Summary of Employment Forecast Differences**  
**US 36 HOT Lanes Analysis**

	2005	2010	2015	2020	2025	2030	2035	2010-2035			2010-2020			2020-2035		
								Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Original DRCOG Forecast</b>																
US 36 Corridor	303,845	301,124	332,952	368,274	407,308	450,485	498,150	197,026	7,881	2.0%	67,150	6,715	2.0%	129,876	8,658	2.0%
Remainder	1,009,174	1,027,122	1,133,263	1,251,259	1,381,616	1,525,722	1,684,916	657,794	26,312	2.0%	224,137	22,414	2.0%	433,657	28,910	2.0%
<b>Total</b>	<b>1,313,019</b>	<b>1,328,246</b>	<b>1,466,215</b>	<b>1,619,533</b>	<b>1,788,924</b>	<b>1,976,207</b>	<b>2,183,066</b>	<b>854,820</b>	<b>34,193</b>	<b>2.0%</b>	<b>291,287</b>	<b>29,129</b>	<b>2.0%</b>	<b>563,533</b>	<b>37,569</b>	<b>2.0%</b>
<b>Adjustments to Total</b>																
Adjustment 1: 2010 & Subsequent Years	0	-34,709	-34,709	-34,709	-34,709	-34,709	-34,709	--	--	--	--	--	--	--	--	--
Adjustment 2: County Growth Rates	0	0	-80,020	-100,206	-116,716	-184,491	-296,677	--	--	--	--	--	--	--	--	--
Adjustment 3: TAZ (Site-Specific)	0	0	-3,282	-2,722	-2,649	-4,190	-6,977	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>0</b>	<b>-34,709</b>	<b>-118,011</b>	<b>-137,637</b>	<b>-154,074</b>	<b>-223,390</b>	<b>-338,363</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>as %</b>																
Adjustment 1: 2010 & Subsequent Years	0.0%	-2.6%	-2.4%	-2.1%	-1.9%	-1.8%	-1.6%	--	--	--	--	--	--	--	--	--
Adjustment 2: County Growth Rates	0.0%	0.0%	-5.5%	-6.2%	-6.5%	-9.3%	-13.6%	--	--	--	--	--	--	--	--	--
Adjustment 3: TAZ (Site-Specific)	0.0%	0.0%	-0.2%	-0.2%	-0.1%	-0.2%	-0.3%	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>0.0%</b>	<b>-2.6%</b>	<b>-8.0%</b>	<b>-8.5%</b>	<b>-8.6%</b>	<b>-11.3%</b>	<b>-15.5%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>EPS Adjusted Forecast</b>																
US 36 Corridor	303,845	292,716	307,504	338,689	375,099	404,478	429,983	137,267	5,491	1.6%	45,973	4,597	1.5%	91,294	6,086	1.6%
Remainder	1,009,174	1,000,821	1,040,700	1,143,207	1,259,751	1,348,339	1,414,720	413,899	16,556	1.4%	142,386	14,239	1.3%	271,513	18,101	1.4%
<b>Total</b>	<b>1,313,019</b>	<b>1,293,537</b>	<b>1,348,204</b>	<b>1,481,896</b>	<b>1,634,850</b>	<b>1,752,817</b>	<b>1,844,703</b>	<b>551,166</b>	<b>22,047</b>	<b>1.4%</b>	<b>188,359</b>	<b>18,836</b>	<b>1.4%</b>	<b>362,807</b>	<b>24,187</b>	<b>1.5%</b>
<b>Differences</b>																
US 36 Corridor	0	-8,408	-25,448	-29,585	-32,209	-46,007	-68,167	--	--	--	--	--	--	--	--	--
Remainder	0	-26,301	-92,563	-108,052	-121,865	-177,383	-270,196	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>0</b>	<b>-34,709</b>	<b>-118,011</b>	<b>-137,637</b>	<b>-154,074</b>	<b>-223,390</b>	<b>-338,363</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>as %</b>																
US 36 Corridor	0.0%	-2.8%	-7.6%	-8.0%	-7.9%	-10.2%	-13.7%	--	--	--	--	--	--	--	--	--
Remainder	0.0%	-2.6%	-8.2%	-8.6%	-8.8%	-11.6%	-16.0%	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>0.0%</b>	<b>-2.6%</b>	<b>-8.0%</b>	<b>-8.5%</b>	<b>-8.6%</b>	<b>-11.3%</b>	<b>-15.5%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

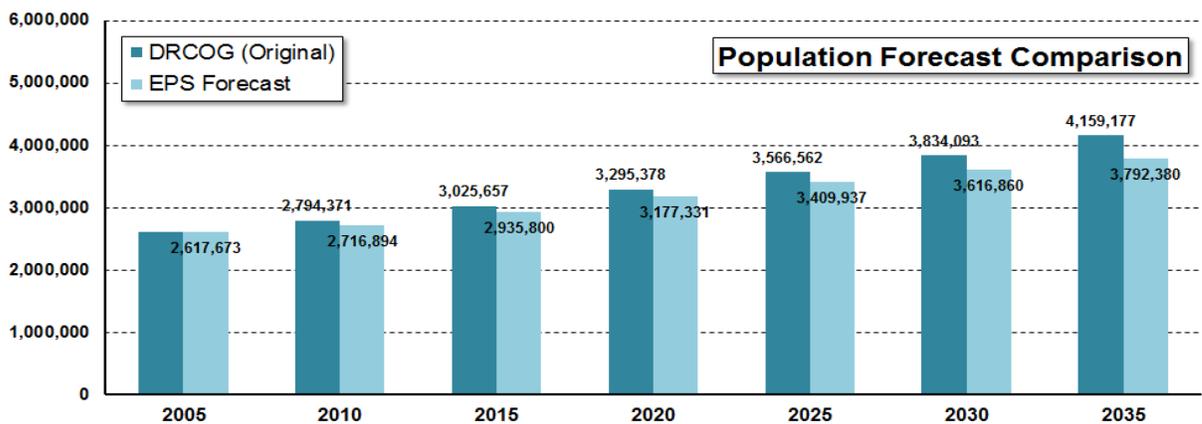
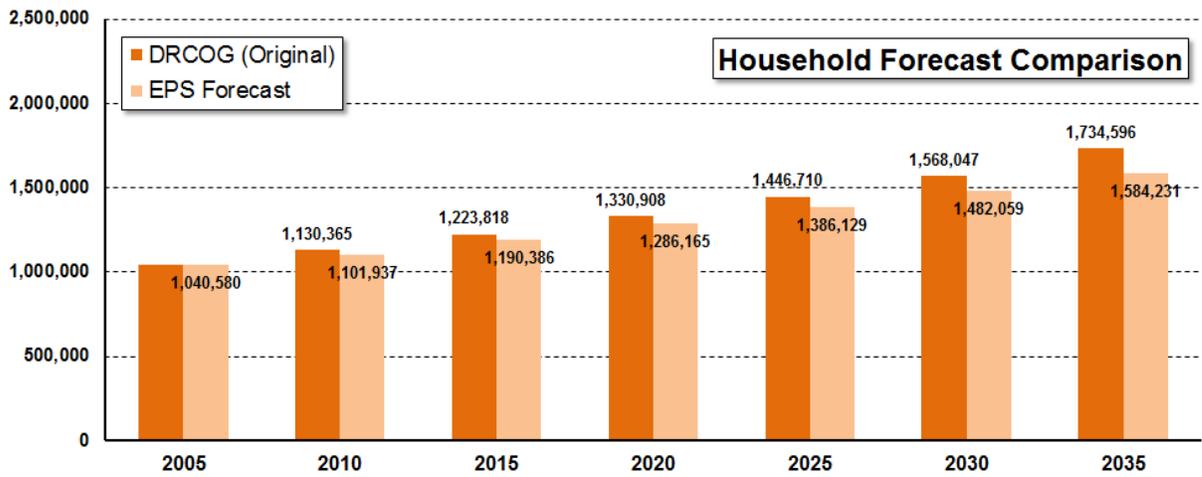
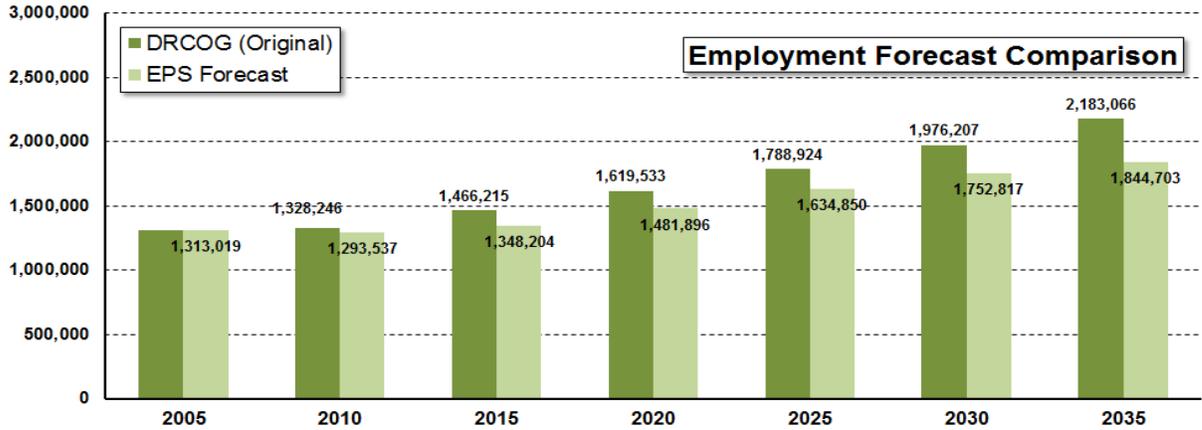
Source: DRCOG; Economic & Planning Systems

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ES Figure 6  
 2035 Adjusted Employment Forecast Differences  
 US 36 HOT Lanes Analysis



ES Figure 7  
 Forecast Comparisons  
 US 36 HOT Lanes Analysis



# 1. INTRODUCTION

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## Purpose

The purpose of this report is to provide an overview of the work Economic & Planning Systems (EPS) has completed in making adjustments to the Denver Regional Council of Governments (DRCOG) 2035 projections for the Denver Metropolitan Area. EPS conducted its analysis as a part of a study team with Wilbur Smith Associates and Felsburg, Holt, & Ullevig.

This study provides an independent evaluation of economic conditions and establishes growth projections that account for the recent economic contraction and its effect on long-term growth potentials for the Denver region. Because economic conditions have fluctuated significantly in the recent past, an independent assessment of previously issued DRCOG forecasts is warranted. The resulting adjusted forecast accounts for a full range of factors and grounds the larger study with a comprehensive analysis of market and economic data.

These adjusted forecasts are being incorporated into the travel demand model that is being used to generate revised estimates of traffic demand and revenue potential for the US 36 Corridor. Because the travel demand model being used requires data specific to each of the Traffic Analysis Zones (TAZ) in the DRCOG planning area, EPS made adjustments to the household, population, and employment projections at the TAZ level.

This report presents the analysis of economic, demographic, residential, and commercial market trends and conditions that form the basis to EPS' adjustments. The report also presents a summary of each major planned or approved development plan in the vicinity of the US 36 Corridor. A separate chapter at the end of this report summarizes how the analyses of these conditions have informed the adjustment to the 2010 base, as well as the 2015 to 2035 projections.

## Report Organization

The report is organized to provide a context to the adjustment EPS made to the DRCOG projections.

- **Chapter 2:** Regional Framework. This chapter outlines the regional economic and demographic trends of the metro area. To provide context to the DRCOG forecasts, it also provides an overview of independent forecasts, as well as short-term outlooks.
- **Chapter 3:** Market Trends. This chapter presents an overview of the commercial and residential market trends and conditions of the Metro Area.
- **Chapter 4:** Major Development Plans. This chapter describes the major transit and non-transit oriented development within the US 36 Influence Area. These plans are identified for the purpose of making adjustments at a TAZ (site-specific) level.
- **Chapter 5:** Summary of Adjustments. This chapter describes in detail EPS' approach to making adjustments to DRCOG's forecasts. The adjusted forecasts of households and employment are presented with comparisons and summary of the differences between the adjusted and original forecasts.

## 2. REGIONAL FRAMEWORK

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This chapter presents economic and demographic trends and conditions of the Denver Metro Area that inform the analysis and adjustment of the 2035 forecasts. Trends and conditions are summarized for employment and wages, population, and households.

In EPS' analysis, the larger DRCOG planning area and the smaller US 36 Corridor subarea are evaluated at different degrees of detail. For the analysis of overall trends and conditions, the DRCOG planning area, as shown in **Figure 1**, is used. The DRCOG planning area is defined as nine counties in the larger metro area: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties.

### Economic Framework

This section details the DRCOG planning area's employment trends and conditions. Information presented here includes employment and wage trends from the Bureau of Labor Statistics (BLS).

#### Job Trends

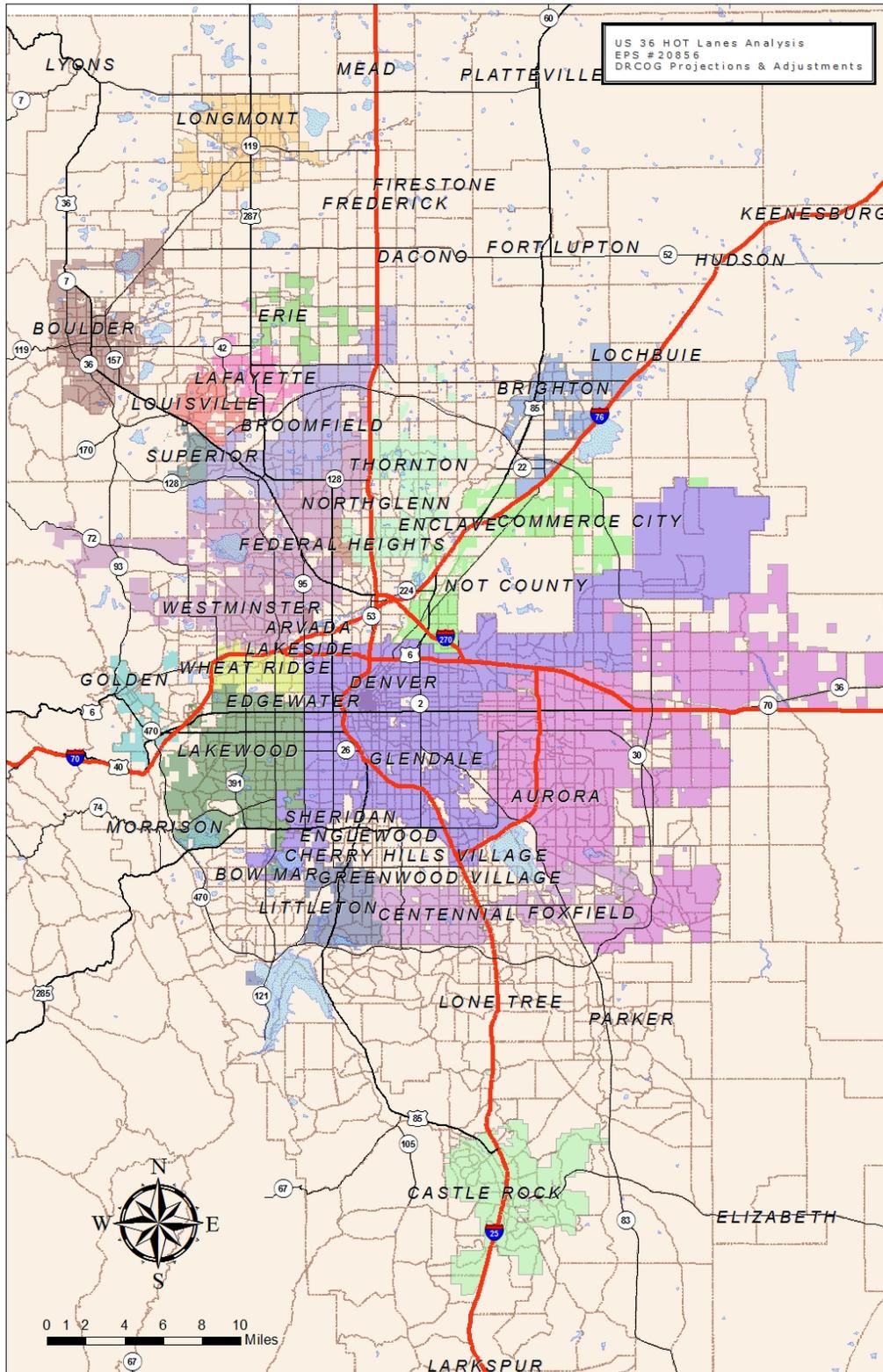
By many accounts, the past decade has been called the "lost decade" as gains in the early and mid-part of the decade, which were substantial, were generally eliminated during the recession from 2007 to 2009. Employment trends from the past two decades in the nine counties of the Denver Metro Area are shown in **Table 1**.

From 1990 to 2000, the metro area experienced a high rate of growth. Total employment grew at 3.7 percent annually, adding nearly 40,000 jobs per year. A few counties in particular benefited from this activity. Jobs in Arapahoe County increased from 172,000 to nearly 284,000 over the ten years, averaging a rate of 5.1 percent growth annually. Denver County added the second largest number of jobs, increasing its base from approximately 386,000 to nearly 467,000 jobs. Douglas County, which began the decade with approximately 13,000 jobs, expanded at the highest rate, 15.6 percent per year, and ended with nearly 57,000 jobs in 2000.

Between 2000 and 2010, however, the level of employment remained nearly the same notwithstanding significant growth or contraction on an annual basis. Overall, the nine counties grew at an average of 0.1 percent. Arapahoe County, where significant growth had occurred in the previous decade, lost nearly 20,000 jobs from its 2000 base. Similarly, the City and County of Denver lost more than 57,000 from its 2000 base. Douglas County, on the other hand, continued to grow at the highest rate, 4.4 percent per year. Broomfield, which was incorporated as a city and county in late 2001, also grew at an average of 1.6 percent per year.

Averaged over 20 years, the nine counties grew at 1.8 percent per year, or an average increase of approximately 20,000 jobs per year. From a base of approximately 890,000 jobs in 1990 to a base of approximately 1.3 million jobs in 2010, the nine-county metro area added more than 404,000 jobs.

Figure 1  
Denver Metro Area  
US 36 Express Toll Lanes Analysis



**Table 1**  
**Metro Job Summary**  
**US 36 Express Toll Lanes Analysis**

	1990	2000	Est. [1] 2010	1990-2000			2000-2010			1990-2010		
				Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Primary Metro Area</b>												
Adams County	93,536	144,502	144,453	50,966	5,097	4.4%	-49	-5	0.0%	50,917	2,546	2.2%
Arapahoe County	172,188	283,927	265,279	111,739	11,174	5.1%	-18,648	-1,865	-0.7%	93,091	4,655	2.2%
Denver County	385,754	468,995	411,661	83,241	8,324	2.0%	-57,334	-5,733	-1.3%	25,907	1,295	0.3%
Douglas County	13,249	56,656	87,220	43,407	4,341	15.6%	30,564	3,056	4.4%	73,971	3,699	9.9%
Jefferson County	<u>162,704</u>	<u>210,315</u>	<u>198,978</u>	<u>47,611</u>	<u>4,761</u>	<u>2.6%</u>	<u>-11,337</u>	<u>-1,134</u>	<u>-0.6%</u>	<u>36,274</u>	<u>1,814</u>	<u>1.0%</u>
<b>Subtotal</b>	<b>770,255</b>	<b>1,096,930</b>	<b>1,107,591</b>	<b>326,675</b>	<b>32,668</b>	<b>3.6%</b>	<b>10,661</b>	<b>1,066</b>	<b>0.1%</b>	<b>337,336</b>	<b>16,867</b>	<b>1.8%</b>
<b>Other Counties</b>												
Boulder County [2]	117,964	179,599	149,635	61,635	6,164	4.3%	-6,711	-839	-0.5%	31,671	1,584	1.2%
Broomfield County [2]	---	---	28,852	---	---	---	3,372	422	1.6%	---	---	---
Clear Creek County	2,365	2,902	3,299	537	54	2.1%	397	40	1.3%	934	47	1.7%
Gilpin County [3]	N/A	5,457	5,433	2,080	260	6.2%	-24	-2	0.0%	2,056	114	2.7%
<b>All Areas</b>	<b>890,584</b>	<b>1,284,888</b>	<b>1,294,810</b>	<b>394,304</b>	<b>39,430</b>	<b>3.7%</b>	<b>9,922</b>	<b>992</b>	<b>0.1%</b>	<b>404,226</b>	<b>20,211</b>	<b>1.9%</b>

[1] Estimated by extrapolating from 1st quarter 2010 numbers from BLS.

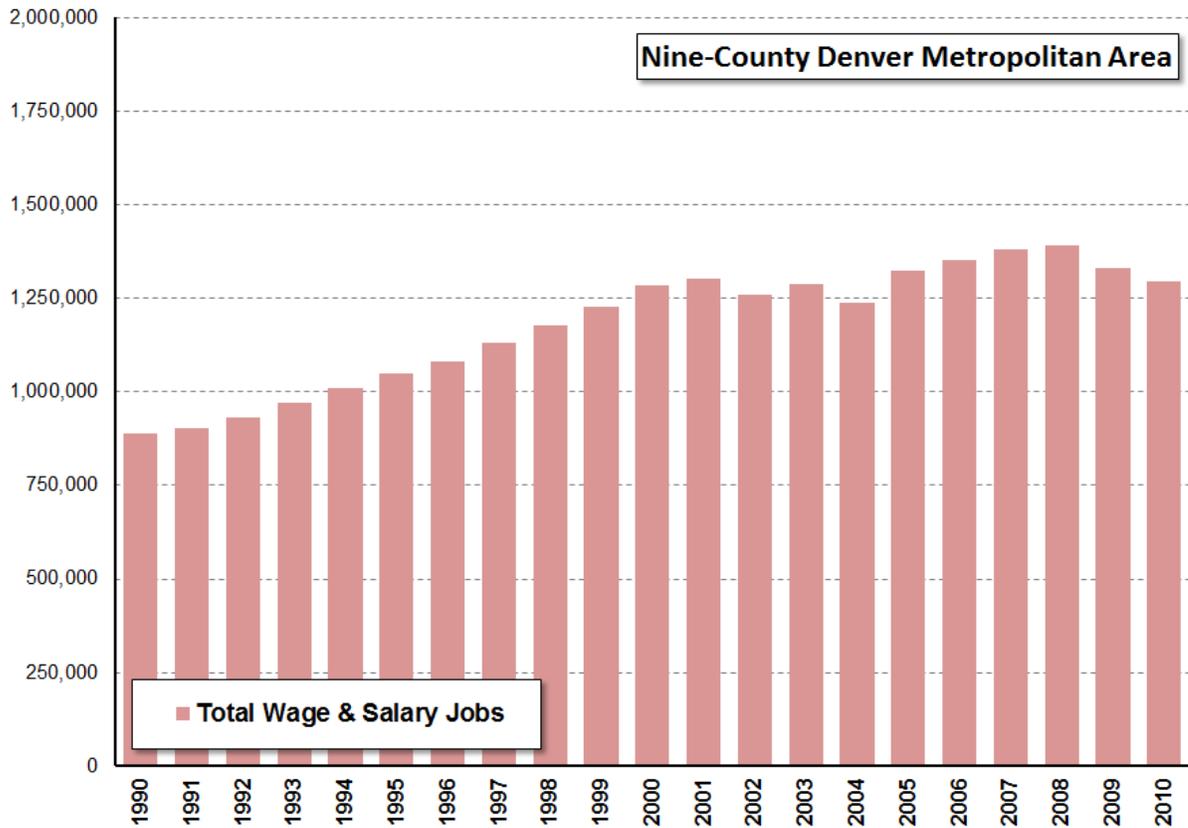
[2] Broomfield was incorporated as a City and County in late 2001 from portions of three different counties.

[3] Records are not available for Gilpin County in 1990 or 1991.

Source: BLS; Economic & Planning Systems

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**Figure 2**  
**Metro Area Jobs**  
**US 36 Express Toll Lanes Analysis**



### Wage Trends

Average annual wages for wage and salary employment reported by BLS for the nine counties are shown in **Table 2**. The wages shown are real wages, adjusted for inflation by the Denver-Boulder-Greeley Consumer Price Index.

From 1990 to 2000, average real wages increased at 1.3 percent per year for the five-county metro area. Wages increased significantly in Boulder, Gilpin, and Arapahoe counties, but did not increase over inflation in Clear Creek County.

Between 2000 and 2010, however, average real wages increased over inflation by 0.6 percent per year. Wages in Adams and Arapahoe counties declined slightly, while wages in Denver, Douglas, and Jefferson counties increased. Among the other counties, wages in Broomfield (measured from 2002 to 2010) increased annually at 2.0 percent above inflation. Wages in Clear Creek County also increased, but decreased in Boulder and Gilpin counties.

Over the 20-year period, average real wages in the five-county metro area increased at 0.9 percent per year. In Douglas County, wages increased at 1.8 percent, the highest in the metro area, followed by Denver and Arapahoe counties at 1.3 and 1.2 percent, respectively.

**Table 2**  
**Metro Wage Summary**  
**US 36 Express Toll Lanes Analysis**

	1990	2000	Est. [1]	1990-2000			2000-2010			1990-2010		
				Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Inflation-Adjusted Wages</b>												
Adams County	\$39,323	\$41,575	\$40,068	\$2,251	\$225	0.6%	-\$1,506	-\$151	-0.4%	\$745	\$37	0.1%
Arapahoe County	\$44,473	\$57,439	\$56,553	\$12,966	\$1,297	2.6%	-\$885	-\$89	-0.2%	\$12,080	\$604	1.2%
Denver County	\$46,860	\$55,083	\$60,197	\$8,224	\$822	1.6%	\$5,113	\$511	0.9%	\$13,337	\$667	1.3%
Douglas County	\$36,200	\$40,627	\$52,154	\$4,426	\$443	1.2%	\$11,527	\$1,153	2.5%	\$15,953	\$798	1.8%
Jefferson County	<u>\$44,637</u>	<u>\$45,000</u>	<u>\$46,764</u>	<u>\$363</u>	<u>\$36</u>	<u>0.1%</u>	<u>\$1,764</u>	<u>\$176</u>	<u>0.4%</u>	<u>\$2,127</u>	<u>\$106</u>	<u>0.2%</u>
<b>Subtotal</b>	<b>\$48,237</b>	<b>\$54,621</b>	<b>\$58,225</b>	<b>\$6,385</b>	<b>\$638</b>	<b>1.3%</b>	<b>\$3,604</b>	<b>\$360</b>	<b>0.6%</b>	<b>\$9,989</b>	<b>\$499</b>	<b>0.9%</b>
<b>Other Counties</b>												
Boulder County	\$40,626	\$56,611	\$52,547	\$15,985	\$1,599	3.4%	-\$4,064	-\$406	-0.7%	\$11,921	\$596	1.3%
Broomfield County [2]	---	---	\$65,805	---	---	---	\$9,493	\$1,187	2.0%	---	---	---
Clear Creek County	\$35,838	\$35,882	\$37,508	\$44	\$4	0.0%	\$1,626	\$163	0.4%	\$1,670	\$84	0.2%
Gilpin County	\$24,010	\$35,304	\$34,812	\$11,293	\$1,129	3.9%	-\$492	-\$49	-0.1%	\$10,801	\$540	1.9%

[1] Estimated by extrapolating from 1st quarter 2010 numbers from BLS.

[2] Broomfield was incorporated as a City and County in 2001.

Source: BLS; Economic & Planning Systems

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## Demographics

This section details the demographic trends and conditions of the DRCOG planning area. Information is presented on population and household growth and change.

### Population

Population trends from the past two decades are shown in **Table 3**. From 1990 to 2000, the nine counties grew at 2.5 percent annually, adding more than 20,000 persons per year. Douglas County added the largest number of persons during the time. From a base of approximately 21,000 persons in 1990, more than 40,000 moved to the county by 2000, reflecting a growth rate of 11.3 percent. Jefferson and Arapahoe counties also added large numbers to their populations. Jefferson County added nearly 40,000, and Arapahoe County added more than 36,000.

While the level of employment ended the past decade at its 2000 level, population continued to increase through the next decade. Between 2000 and 2009, population grew by an average of 1.8 percent. The fastest growing counties in the region were Douglas County, followed by Broomfield and Adams County. Accounting for more than 25 percent of population growth, Douglas County added the most persons to the metro area of all. More than 115,000 people moved to the County during the decade. Adams, Arapahoe, and Denver counties added a combined 227,000, accounting for more than half of all the metro area's population growth.

Over the 20-year period, the nine counties grew at 2.1 percent per year, or an average of approximately 19,000 persons. From a base of approximately 740,000 in 1990 to a base of approximately 1.1 million in 2009, the area population grew by nearly 364,000 persons.

**Table 3**  
**Metro Population Trends, 2000-2009**  
**US 36 Express Toll Lanes Analysis**

	1990	2000	2009	1990-2000			2000-2009			1990-2009		
				Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Primary Metro Area</b>												
Adams County	96,353	128,156	155,546	31,803	3,180	2.9%	27,390	3,043	2.2%	59,193	3,115	2.6%
Arapahoe County	154,710	190,909	223,595	36,199	3,620	2.1%	32,686	3,632	1.8%	68,885	3,626	2.0%
Denver County	210,952	239,235	267,321	28,283	2,828	1.3%	28,086	3,121	1.2%	56,369	2,967	1.3%
Douglas County	20,844	60,924	101,055	40,080	4,008	11.3%	40,131	4,459	5.8%	80,211	4,222	8.7%
Jefferson County	166,545	206,067	213,073	39,522	3,952	2.2%	7,006	778	0.4%	46,528	2,449	1.3%
<b>Subtotal</b>	<b>649,404</b>	<b>825,291</b>	<b>960,590</b>	<b>175,887</b>	<b>17,589</b>	<b>2.4%</b>	<b>135,299</b>	<b>15,033</b>	<b>1.7%</b>	<b>311,186</b>	<b>16,378</b>	<b>2.1%</b>
<b>Other Counties</b>												
Broomfield County	---	---	20,186	---	---	---	5,213	652	3.8%	---	---	---
Boulder County	88,402	114,680	118,912	26,278	2,628	2.6%	4,232	470	0.4%	30,510	1,606	1.6%
Clear Creek County	3,153	4,019	3,948	866	87	2.5%	-71	-8	-0.2%	795	42	1.2%
Gilpin County	1,308	2,043	2,406	735	74	4.6%	363	40	1.8%	1,098	58	3.3%
<b>Total</b>	<b>742,267</b>	<b>946,033</b>	<b>1,106,042</b>	<b>203,766</b>	<b>20,377</b>	<b>2.5%</b>	<b>160,009</b>	<b>17,779</b>	<b>1.8%</b>	<b>363,775</b>	<b>19,146</b>	<b>2.1%</b>

[1] Calculated as 2001-2009 change; Broomfield was incorporated in 2001.

Source: DOLA; Economic & Planning Systems

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## Households

Household growth rates, as shown in **Table 4**, are nearly identical to the population growth rates shown previously. Douglas County added the largest number of households over the decade, followed by Arapahoe, Denver, and Adams counties. Lower rates of growth occurred in Jefferson and Boulder counties, although their bases are not considerably lower.

**Table 4**  
**Metro Household Trends, 2000-2009**  
**US 36 Express Toll Lanes Analysis**

	2000	2005	2009	2005-2009			2000-2009		
				Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Primary Metro Area Counties</b>									
Adams County	128,156	140,254	155,546	15,292	3,823	2.6%	27,390	3,043	2.2%
Arapahoe County	190,909	207,649	223,595	15,946	3,987	1.9%	32,686	3,632	1.8%
Denver County	239,235	246,551	267,321	20,770	5,193	2.0%	28,086	3,121	1.2%
Douglas County	60,924	86,359	101,055	14,696	3,674	4.0%	40,131	4,459	5.8%
Jefferson County	<u>206,067</u>	<u>207,223</u>	<u>213,073</u>	<u>5,850</u>	<u>1,463</u>	<u>0.7%</u>	<u>7,006</u>	<u>778</u>	<u>0.4%</u>
<b>Subtotal</b>	<b>825,291</b>	<b>888,036</b>	<b>960,590</b>	<b>72,554</b>	<b>18,139</b>	<b>2.0%</b>	<b>135,299</b>	<b>15,033</b>	<b>1.7%</b>
<b>Other Counties</b>									
Broomfield County	--	17,522	20,186	2,664	666	3.6%	5,213	652	3.8%
Boulder County	114,680	113,557	118,912	5,355	1,339	1.2%	4,232	470	0.4%
Clear Creek County	4,019	4,077	3,948	-129	-32	-0.8%	-71	-8	-0.2%
Gilpin County	2,043	2,132	2,406	274	69	3.1%	363	40	1.8%
<b>Total</b>	<b>946,033</b>	<b>1,025,324</b>	<b>1,106,042</b>	<b>80,718</b>	<b>20,180</b>	<b>1.9%</b>	<b>160,009</b>	<b>17,779</b>	<b>1.8%</b>

[1] Calculated as 2001-2009 change; Broomfield was incorporated in 2001.

Source: DOLA; Economic & Planning Systems

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## Economic and Demographic Forecasts

This section provides an overview of forecasts completed by entities independent of DRCOG. EPS has evaluated these forecasts to inform the adjustments made to the DRCOG household, population, and employment projections.

An employment forecast for the DRCOG planning area (including the nine counties identified previously) is prepared regularly by the Center for Business and Economic Forecasting (CBEF). CBEF is a private research firm that prepares long-term and short-term regional economic and demographic forecasts. As shown in **Table 5**, this forecast indicates that wage and salary jobs will increase at an average rate of 1.4 percent per year through 2035.

Important to the evaluation of DRCOG's forecasts and EPS' adjustments, the CBEF forecast shows a tapering of the growth rate further into the forecast horizon. As shown, the CBEF projects growth to occur at an average of approximately 2.2 percent from 2010 to 2020, but decreases from 2020 to 2035 to approximately 0.9 percent. The forecast assumes that as the base grows in size, the rate of growth diminished. There is also the assumption that growth in jobs will be stronger in the near term than over the long term. From 2010 to 2020, the economy is projected to add more than 34,000 jobs per year, but decreases to approximately 17,000 jobs per year after 2020.

**Table 5**  
**CBEF Employment Forecast, 2010-2035**  
**US 36 Express Toll Lanes Analysis**

	2005	2010	2015	2020	2025	2030	2035	2010-2035			2010-2020			2020-2035		
								Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>CBEF</b>																
Clear Creek	3,295	3,054	3,648	3,937	4,066	4,096	4,068	1,014	41	1.15%	883	88	2.57%	131	9	0.22%
Gilpin	5,787	6,229	6,813	7,109	7,301	7,422	7,498	1,269	51	0.74%	880	88	1.33%	389	26	0.36%
Denver-Metro Area	<u>1,416,571</u>	<u>1,442,195</u>	<u>1,657,372</u>	<u>1,786,252</u>	<u>1,891,146</u>	<u>1,976,652</u>	<u>2,047,878</u>	<u>605,683</u>	<u>24,227</u>	<u>1.41%</u>	<u>344,057</u>	<u>34,406</u>	<u>2.16%</u>	<u>261,626</u>	<u>17,442</u>	<u>0.92%</u>
<b>Est. Geography of DRCOG Data</b>	<b>1,425,653</b>	<b>1,451,478</b>	<b>1,667,833</b>	<b>1,797,298</b>	<b>1,902,513</b>	<b>1,988,170</b>	<b>2,059,444</b>	<b>607,966</b>	<b>24,319</b>	<b>1.41%</b>	<b>345,820</b>	<b>34,582</b>	<b>2.16%</b>	<b>262,146</b>	<b>17,476</b>	<b>0.91%</b>

Source: DOLA (CBEF); BLS; Economic & Planning Systems

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The demographic forecast used as a benchmark in this analysis is completed by the Department of Local Affairs (DOLA). As shown in **Table 6**, DOLA projects population through 2035. The projections are converted to households based on the projected average household size forecast by DRCOG. In general, DRCOG's forecast indicates a slight decrease in the average household size between 2010 and 2035.

The household forecast indicates that the DRCOG planning area will grow at an average rate of 1.3 percent per year through 2035. Similar to the employment forecast of the CBEF, DOLA's projection also indicates a tapering of the growth rate after 2020. This forecast, however, does not call for a significant increase or decrease in the actual number of households per year. Between 2010 and 2020, the planning area is projected to grow at a rate of 1.4 percent per year or by approximately 19,600 households. After 2020, the rate of growth is projected to be approximately 1.2 percent per year or approximately 20,000 households. For the same period, the population forecast projects that the planning area will grow by fewer persons, an indication of the lower average household size.

**Table 6**  
**DOLA Population Forecast, 2010-2035**  
**US 36 Express Toll Lanes Analysis**

	2010	2015	2020	2025	2030	2035	2010-2035			2010-2020			2020-2035		
							Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Population (DOLA)</b>															
Adams	451,458	498,644	548,891	601,161	648,531	695,189	243,731	9,749	1.74%	97,433	9,743	1.97%	146,298	9,753	1.59%
Arapahoe	579,837	627,380	678,079	727,222	772,997	815,004	235,167	9,407	1.37%	98,242	9,824	1.58%	136,925	9,128	1.23%
Boulder	304,546	323,525	343,171	361,906	376,007	387,055	82,509	3,300	0.96%	38,625	3,863	1.20%	43,884	2,926	0.81%
Broomfield	56,650	65,281	73,327	79,728	83,745	86,034	29,384	1,175	1.69%	16,677	1,668	2.61%	12,707	847	1.07%
Clear Creek	9,213	10,147	11,311	12,489	13,616	14,729	5,516	221	1.89%	2,098	210	2.07%	3,418	228	1.78%
Denver	628,096	670,429	695,637	715,574	736,366	761,745	133,649	5,346	0.77%	67,541	6,754	1.03%	66,108	4,407	0.61%
Douglas	297,377	336,251	390,598	433,255	465,659	493,608	196,231	7,849	2.05%	93,221	9,322	2.76%	103,010	6,867	1.57%
Gilpin	5,690	6,197	6,784	7,373	7,931	8,493	2,803	112	1.62%	1,094	109	1.77%	1,709	114	1.51%
Jefferson	550,448	572,765	606,608	640,167	667,854	686,648	136,200	5,448	0.89%	56,160	5,616	0.98%	80,040	5,336	0.83%
<b>DRCOG Metro Area</b>	<b>2,883,315</b>	<b>3,110,619</b>	<b>3,354,406</b>	<b>3,578,875</b>	<b>3,772,706</b>	<b>3,948,505</b>	<b>1,065,190</b>	<b>42,608</b>	<b>1.27%</b>	<b>471,091</b>	<b>47,109</b>	<b>1.52%</b>	<b>594,099</b>	<b>39,607</b>	<b>1.09%</b>
<b>Estimated Households [1]</b>															
Adams	180,367	198,619	217,858	238,512	258,857	282,561	102,194	4,088	1.81%	37,491	3,749	1.91%	64,703	4,314	1.75%
Arapahoe	274,082	295,271	317,885	341,159	364,717	391,041	116,959	4,678	1.43%	43,803	4,380	1.49%	73,157	4,877	1.39%
Boulder	132,914	140,780	148,767	157,226	164,335	172,070	39,156	1,566	1.04%	15,853	1,585	1.13%	23,303	1,554	0.97%
Broomfield	26,595	29,884	33,251	36,253	38,317	40,083	13,488	540	1.65%	6,655	666	2.26%	6,832	455	1.25%
Clear Creek	4,098	4,502	4,996	5,525	6,062	6,673	2,575	103	1.97%	898	90	2.00%	1,677	112	1.95%
Denver	333,467	355,030	366,947	376,380	389,441	410,064	76,597	3,064	0.83%	33,480	3,348	0.96%	43,118	2,875	0.74%
Douglas	115,544	130,252	150,737	167,455	181,075	195,309	79,765	3,191	2.12%	35,193	3,519	2.69%	44,572	2,971	1.74%
Gilpin	2,574	2,750	2,988	3,221	3,525	3,863	1,290	52	1.64%	414	41	1.50%	875	58	1.73%
Jefferson	235,847	244,441	257,817	272,392	285,784	299,106	63,259	2,530	0.95%	21,970	2,197	0.89%	41,289	2,753	1.00%
<b>DRCOG Metro Area</b>	<b>1,305,489</b>	<b>1,401,529</b>	<b>1,501,245</b>	<b>1,598,122</b>	<b>1,692,113</b>	<b>1,800,771</b>	<b>495,282</b>	<b>19,811</b>	<b>1.29%</b>	<b>195,756</b>	<b>19,576</b>	<b>1.41%</b>	<b>299,526</b>	<b>19,968</b>	<b>1.22%</b>

[1] Estimated using DRCOG average household sizes.

Source: DOLA; Economic & Planning Systems

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## **Short-Term Economic Outlook**

This section provides a summary of the short-term (one- to two-year) economic outlooks for the Denver Metro Area. EPS has identified these short-term outlooks to inform the adjustment of projections for the near-term (between 2010 and 2015).

### **Center for Business and Economic Forecasting (CBEF)**

As noted previously, CBEF is a private research firm that prepares long-term and short-term regional economic and demographic forecasts. Its long-term forecasts typically have a 25-year time frame, and its short-term forecasts typically anticipate economic and demographic conditions over two to three years. DRCOG relies on the projected total employment from the CBEF as control totals for the 2035 planning horizon.

The forecast prepared by CBEF, as shown previously, is independent of the short-term economic outlook summarized here. The forecasts were prepared in 2009 and had taken into account a portion of the recession, which had begun in 2007 but were not acknowledged until 2008. The national economic events that triggered major job losses across most industries throughout the nation had not fully taken hold. DRCOG planning area counties collectively experienced a net loss of more than 98,000 jobs between 2008 and 2010. Even after employment gains between 2005 and 2008, the large losses of 2008, 2009, and 2010 put the employment level of the nine counties back to its 2000 level. According to a presentation at the 2011 Colorado Business Economic Outlook, the CBEF anticipates job growth to increase at a slow, steady pace, adding approximately 10,100 jobs in 2011. It also anticipates that State level unemployment will increase from the rate of 8.2 percent at the end of 2010 to 8.8 percent in 2011 as modest job creation incents unemployed persons to seek employment, increasing the size of the pool defined as unemployed.

### **Metro Denver Economic Development Corporation (Metro Denver EDC)**

The Metro Denver EDC is an affiliate of the Denver Metro Chamber of Commerce and represents the interests of its 70 cities, counties, and economic development organizations in the seven-county Metro Denver and two-county Northern Colorado region.

The Metro Denver EDC's outlook for 2010 projected a 1.1 percent job loss for the metro area, higher than its projected loss of 0.4 percent for 2009. As evidenced by the steep rise in foreclosures between 2008 and 2010, the Metro Denver EDC also forecasted a decline in residential foreclosures for 2011.

### **Colorado Legislative Council**

Colorado Legislative Council staff serves as the nonpartisan research arm of the Colorado General Assembly. The Legislative Council Staff's role is to provide staff support to legislative committees, respond to requests for research and constituent services, prepare fiscal notes, provide revenue projections, and perform other centralized legislative support services.

According to the Legislative Council, the State and the metro area in particular are currently experiencing a gradual recovery. Private sector employment and consumer spending are

increasing and jobless claims are decreasing. However, the Legislative Council asserts that tight credit, high unemployment and debt levels, and a generally weak housing market will hinder recovery. The job market in the Denver metro area has stabilized, but growth is slower than initially projected. The Council also claims that the high unemployment rate in the metro area is due, in part, to an increased number of people reentering the job market because of improved employment opportunities. Similarly, single and multi-family construction permits have increased, pointing to an improvement in the housing market.

### **National Association of Realtors (NAR)**

The National Association of Realtors is an organization that provides information relevant to the real estate industry. The NAR tracks measures of market performance regularly and provides updates and short-term outlooks on the conditions relevant to the industry.

In 2010, the Chief economist of the NAR stated that the Denver market is stronger than most areas of the nation and it is likely to rebound faster. He also suggested that a housing shortage is possible as soon as 2011 due to population growth and the 40-year low rate of new home construction. Contrary to conditions in other national housing markets, the Denver Metro Area did not overbuild during the real estate bubble to the extent that some cities did, such as Phoenix and Las Vegas.

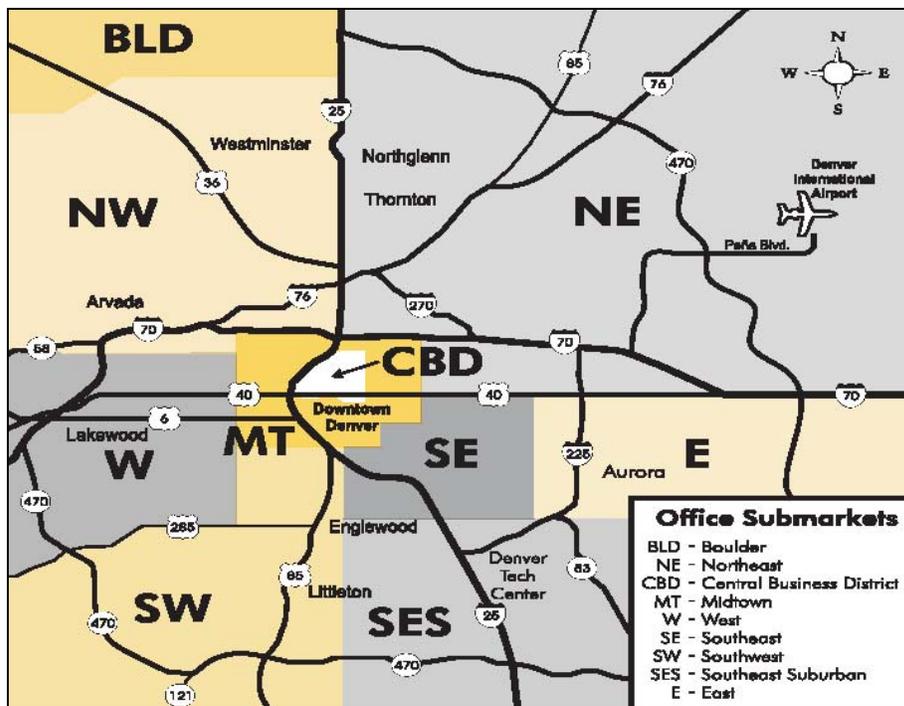
### 3. MARKET TRENDS

This section summarizes the recent trends and conditions in the non-residential markets of the Denver Metro Area. Information on the size, vacancy, and rates of absorption are included under each section about the office, industrial, and retail markets. Along with the residential market information presented in the following chapter, this provides additional insight into the adjustments made to development potentials and timing of the major development projects evaluated in the US 36 Corridor.

#### Office

The Denver Metro Area office submarkets, defined by Grubb & Ellis, are illustrated in **Figure 3**. The Boulder and northwest submarkets are most relevant to the project. The trends for these are highlighted in the section that follows.

**Figure 3**  
**Office Submarket Map**  
**US 36 Express Toll Lanes Analysis**



The Denver Metro Area currently has nearly 104 million square feet of office space, as shown in **Table 7**. Growth of the inventory has averaged 1.9 percent per year since 2000. The Central Business District (CBD), which includes Lower Downtown (LoDo), increased at an average of 1.0 percent per year, and the suburban markets, including Denver Tech Center (DTC), increased at an average of 2.2 percent. Splitting the decade, growth occurred at a slightly faster rate from 2005 to 2010 than between 2000 and 2005. The economic growth that had begun before 2005 spurred a significant amount of development that came out of the ground after 2005.

By submarket, the CBD and DTC are the two largest by size, but are not the fastest growing. Denver's CBD grew at 0.5 percent per year from 2000, but has the second largest inventory. DTC, which has the largest inventory but more available and developable land, grew at 2.7 percent per year for the decade. The inventory of the US 36 Corridor, however, grew at 3.4 percent annually. From its 2000 base of 5.2 million square feet, the Corridor added more than 2.0 million square feet, a 40 percent increase, at over 200,000 square-feet per year.

The inventories of LoDo and the northeast have increased at the fastest pace since 2000. Boulder's inventory, at approximately 4.7 million square feet, grew by a total of approximately 850,000 square feet over the decade or roughly 85,000 square feet per year. The northwest market, which includes Westminster, Broomfield, Superior, and Louisville along the US 36 Corridor, had approximately 8.1 million square feet of inventory in 2010. From 2000 to 2005 it grew at more than twice the rate of 2005 to 2010.

**Table 7**  
**Metro Area Office Inventory, 2000-2010**  
**US 36 Express Toll Lanes Analysis**

	2000	2005	2010	2005-2010			2000-2010 [1]		
				Total	Ann.	Ann. %	Total	Ann.	Ann. %
<b>Central Business District</b>									
CBD	21,091,127	21,091,127	22,164,237	1,073,110	214,622	1.0%	1,073,110	107,311	0.5%
Lower Downtown	<u>2,809,873</u>	<u>2,809,873</u>	<u>4,217,192</u>	<u>1,407,319</u>	<u>281,464</u>	<u>8.5%</u>	<u>1,407,319</u>	<u>140,732</u>	<u>4.1%</u>
<b>Subtotal</b>	<b>23,901,000</b>	<b>23,901,000</b>	<b>26,381,429</b>	<b>2,480,429</b>	<b>496,086</b>	<b>2.0%</b>	<b>2,480,429</b>	<b>248,043</b>	<b>1.0%</b>
<b>Suburban Markets</b>									
Boulder	3,852,450	4,439,420	4,699,922	260,502	52,100	1.1%	847,472	84,747	2.0%
East	5,325,000	5,325,000	5,644,743	319,743	63,949	1.2%	319,743	31,974	0.6%
Midtown	3,856,170	3,856,170	4,563,099	706,929	141,386	3.4%	706,929	70,693	1.7%
Northeast	1,352,290	1,597,000	2,579,361	982,361	196,472	10.1%	1,227,071	122,707	6.7%
Northwest	6,402,272	7,846,000	8,124,581	278,581	55,716	0.7%	1,722,309	172,231	2.4%
Southeast	8,720,374	9,217,581	9,685,798	468,217	93,643	1.0%	965,424	96,542	1.1%
Southeast Suburban	23,254,672	26,654,000	30,215,116	3,561,116	712,223	2.5%	6,960,444	696,044	2.7%
Southwest	2,838,095	3,870,000	4,472,177	602,177	120,435	2.9%	1,634,082	163,408	4.7%
West	<u>6,859,227</u>	<u>6,919,000</u>	<u>7,460,874</u>	<u>541,874</u>	<u>108,375</u>	<u>1.5%</u>	<u>601,647</u>	<u>60,165</u>	<u>0.8%</u>
<b>Subtotal</b>	<b>62,460,550</b>	<b>69,724,171</b>	<b>77,445,671</b>	<b>7,721,500</b>	<b>1,544,300</b>	<b>2.1%</b>	<b>14,985,121</b>	<b>1,498,512</b>	<b>2.2%</b>
<b>Metro Total</b>	<b>86,361,550</b>	<b>93,625,171</b>	<b>103,827,100</b>	<b>10,201,929</b>	<b>2,040,386</b>	<b>2.1%</b>	<b>17,465,550</b>	<b>1,746,555</b>	<b>1.9%</b>
<b>US 36 Corridor [2]</b>	<b>5,204,740</b>	<b>6,036,420</b>	<b>7,279,283</b>	<b>1,242,863</b>	<b>248,573</b>	<b>3.8%</b>	<b>2,074,543</b>	<b>207,454</b>	<b>3.4%</b>
as % of Metro Area	6%	6%	7%	---	---	---	---	---	---

[1] Through 3rd quarter.

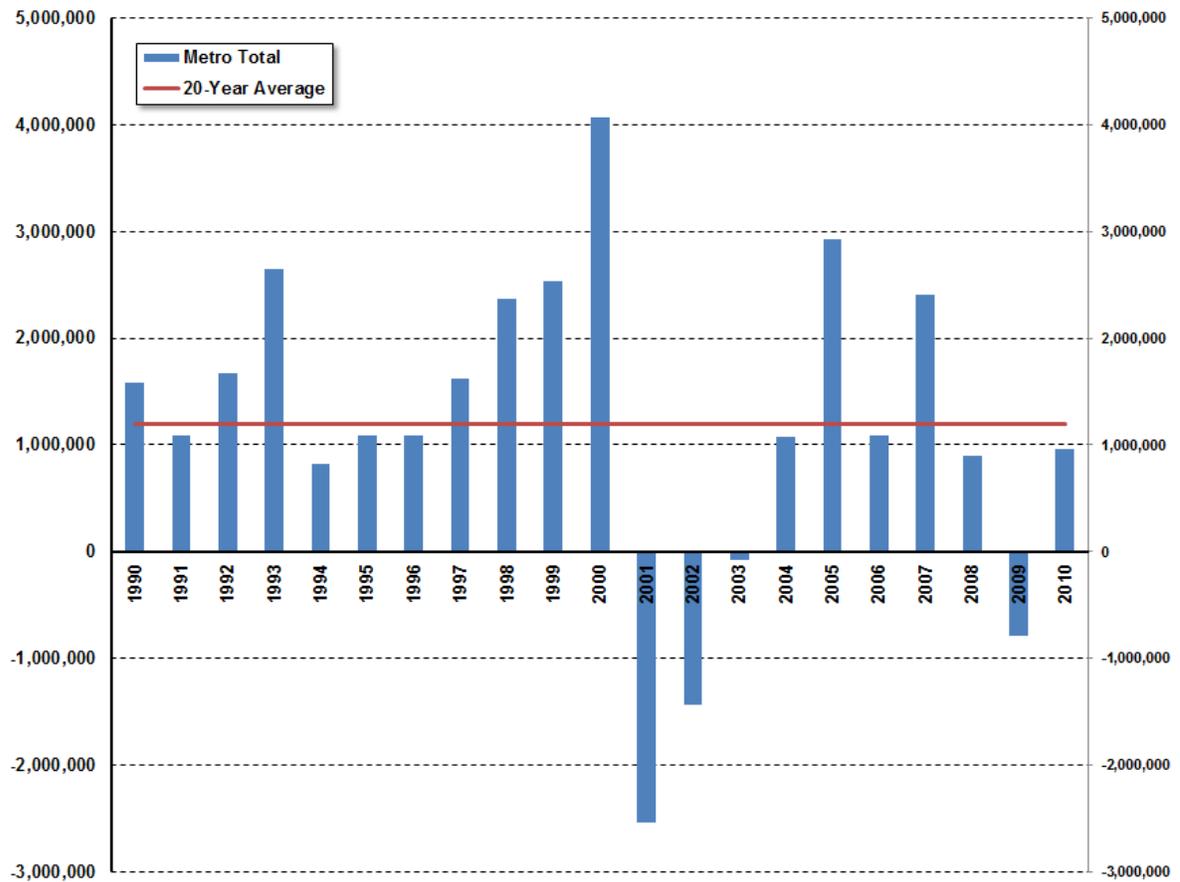
[2] Includes Boulder and Northeast.

Source: Grubb & Ellis; Economic & Planning Systems

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In spite of the recession and slow economic recovery, office absorption rates have remained positive through the past few years. As shown in **Figure 4**, the average rate of absorption over the past 20 years has been a little over one million square feet of space per year. From 2001 to 2003, the office market was weak and absorption was negative for three years. When the economy recovered from the brief recession of 2001, non-residential development activity picked up. As indicated in the previous table, the metro area's economy expanded, adding floor area and jobs to the market. In 2009, however, many jobs were lost and space vacated. Notwithstanding the impact of the recent recession, the rate of absorption for 2010 is near the metro area 20-year average.

**Figure 4**  
**Metro Area Office Absorption**  
**US 36 Express Toll Lanes Analysis**



Vacancy rates, on the other hand, indicate that the market that has been overbuilt for the short-term, particularly in some submarkets. For the metro area as a whole, vacancy rates have actually declined from 2005 to 2010, as shown in **Table 8**. In 2000, vacancy rates in the metro area were at 9.2 percent, peaked in 2003 at 21.5 percent, and are now at 17.9 percent. The Boulder market has one of the lowest vacancy rates at 9.0 percent for 2010.

The US 36 Corridor stands currently at a vacancy rate of 14.1 percent, below nearly all other submarkets. Vacancies increased also to 2003 and peaked at 20.1 percent. The Corridor responded similarly to the recession with increased vacancies through 2008 and 2009. The decrease in the vacancy rate from 2009 to 2010 of more than two percent exceeded the Metro Area's performance and that of nearly all of the submarkets.

**Table 8**  
**Metro Area Office Vacancy, 2000-2010**  
**US 36 Express Toll Lanes Analysis**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Vacancy as % of Inventory</b>											
<b>Central Business District</b>											
CBD	6.3%	12.4%	17.5%	19.4%	18.6%	16.1%	12.0%	12.9%	12.6%	15.0%	14.6%
Lower Downtown	4.1%	11.9%	14.3%	11.4%	8.5%	6.4%	5.8%	7.4%	15.5%	23.1%	20.5%
<b>Subtotal</b>	<b>6.0%</b>	<b>12.3%</b>	<b>17.1%</b>	<b>18.5%</b>	<b>17.4%</b>	<b>15.0%</b>	<b>11.3%</b>	<b>12.2%</b>	<b>13.0%</b>	<b>16.3%</b>	<b>15.6%</b>
<b>Suburban Markets</b>											
Boulder	7.6%	15.0%	18.1%	20.8%	21.7%	17.8%	11.2%	9.1%	9.9%	9.9%	9.0%
East	16.0%	19.1%	15.3%	20.0%	23.6%	18.1%	16.7%	18.8%	25.7%	25.5%	23.5%
Midtown	6.6%	9.0%	12.1%	13.1%	13.3%	12.2%	12.3%	10.5%	6.1%	10.4%	8.8%
Northeast	14.7%	13.4%	14.0%	18.0%	14.5%	14.6%	10.4%	11.2%	28.4%	28.3%	23.4%
Northwest	8.5%	32.3%	34.1%	30.4%	29.2%	22.7%	14.2%	11.6%	15.1%	18.2%	19.1%
Southeast	7.9%	11.7%	16.3%	20.1%	22.4%	21.3%	20.0%	19.3%	17.0%	20.6%	20.2%
Southeast Suburban	11.1%	22.0%	23.9%	25.3%	23.1%	19.3%	16.4%	16.3%	19.0%	20.1%	20.2%
Southwest	12.0%	22.7%	18.6%	18.7%	18.1%	20.5%	14.7%	13.7%	10.6%	11.2%	12.0%
West	11.9%	15.2%	18.0%	17.0%	18.5%	18.6%	16.4%	14.1%	18.9%	20.0%	21.6%
<b>Subtotal</b>	<b>10.5%</b>	<b>19.5%</b>	<b>21.4%</b>	<b>22.7%</b>	<b>22.3%</b>	<b>17.4%</b>	<b>15.9%</b>	<b>15.1%</b>	<b>17.3%</b>	<b>19.0%</b>	<b>18.7%</b>
<b>Metro Total</b>	<b>9.2%</b>	<b>17.5%</b>	<b>20.2%</b>	<b>21.5%</b>	<b>21.0%</b>	<b>18.2%</b>	<b>15.0%</b>	<b>14.4%</b>	<b>16.2%</b>	<b>18.3%</b>	<b>17.9%</b>
<b>US 36 Corridor [1]</b>	<b>9.4%</b>	<b>14.6%</b>	<b>17.0%</b>	<b>20.1%</b>	<b>19.8%</b>	<b>17.0%</b>	<b>11.0%</b>	<b>9.7%</b>	<b>16.7%</b>	<b>16.7%</b>	<b>14.1%</b>

[1] Includes Boulder and Northeast.

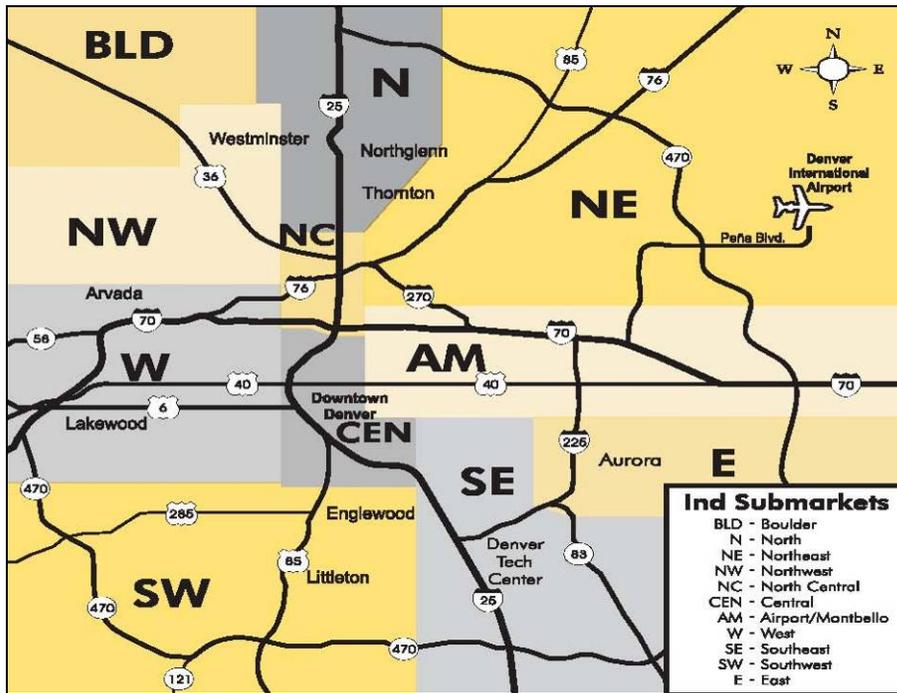
Source: Grubb and Ellis

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## Industrial

The Denver Metro Area industrial submarkets, defined by Grubb & Ellis, are illustrated in **Figure 5**. The Boulder and northwest submarkets are most relevant to the project. The trends for these are highlighted in the section that follows.

Figure 5  
Industrial Submarket Map  
US 36 Express Toll Lanes Analysis



The metro area's industrial inventory has currently more than 216 million square feet, as shown in **Table 9**. The Boulder, Northwest, North, and North Central areas comprise the general area of the US 36 Corridor. In total, this area contains more than 50 million square feet of industrial space and nearly one quarter of the metro area's inventory. Although this area combined has grown at an average rate of 0.9 percent over the decade, it is a faster pace than the metro area's average 0.6 percent per year. Over the 10 years, this area has also added more than 4.1 million square feet of space, approximately 34 percent of the metro area's inventory gain.

**Table 9**  
**Metro Area Industrial Inventory, 2000-2010**  
**US 36 Express Toll Lanes Analysis**

	2000	2005	2010	2005-2010			2000-2010		
				Total	Ann.	Ann. %	Total	Ann.	Ann. %
<b>Market</b>									
Airport/ Montbello	61,317,700	61,747,400	70,876,245	9,128,845	1,825,769	2.8%	9,558,545	955,855	1.5%
Boulder	17,984,400	18,013,700	17,911,011	-102,689	-20,538	-0.1%	-73,389	-7,339	0.0%
Central	32,912,800	32,912,800	29,431,093	-3,481,707	-696,341	-2.2%	-3,481,707	-348,171	-1.1%
East	3,184,000	3,184,000	2,498,163	-685,837	-137,167	-4.7%	-685,837	-68,584	-2.4%
North	2,145,600	4,721,600	4,831,897	110,297	22,059	0.5%	2,686,297	268,630	8.5%
North Central	13,909,900	14,025,300	15,792,890	1,767,590	353,518	2.4%	1,882,990	188,299	1.3%
Northeast	9,835,700	9,841,300	10,514,026	672,726	134,545	1.3%	678,326	67,833	0.7%
Northwest	12,129,200	12,521,600	11,800,375	-721,225	-144,245	-1.2%	-328,825	-32,883	-0.3%
Southeast	14,369,400	15,756,200	16,512,425	756,225	151,245	0.9%	2,143,025	214,303	1.4%
Southwest	19,980,500	20,151,400	18,936,072	-1,215,328	-243,066	-1.2%	-1,044,428	-104,443	-0.5%
West	<u>15,928,000</u>	<u>15,928,000</u>	<u>16,915,283</u>	<u>987,283</u>	<u>197,457</u>	<u>1.2%</u>	<u>987,283</u>	<u>98,728</u>	<u>0.6%</u>
<b>Total</b>	<b>203,697,200</b>	<b>208,803,300</b>	<b>216,019,480</b>	<b>7,216,180</b>	<b>1,443,236</b>	<b>0.7%</b>	<b>12,322,280</b>	<b>1,232,228</b>	<b>0.6%</b>
<b>US 36 Corridor [1]</b>	<b>46,169,100</b>	<b>49,282,200</b>	<b>50,336,173</b>	<b>1,053,973</b>	<b>210,795</b>	<b>0.4%</b>	<b>4,167,073</b>	<b>416,707</b>	<b>0.9%</b>
as % of Metro	23%	24%	23%	15%	---	---	34%	---	---

[1] Defined as Boulder, North, North Central, and Northwest.

Source: Grubb and Ellis; Economic & Planning Systems

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Vacancy rates in the metro area began the decade at 5.9 percent and finished at 8.3 percent, as shown in **Table 10**. The US 36 Corridor area, which as indicated previously holds 23 percent of the metro area's inventory, currently has a 10.8 percent vacancy rate. Overall, vacancy rates peaked in 2005 with a comparable peak again in 2009. More significantly, the current rate of 8.3 percent is 1.5 percent lower than 2009 and among the lowest rates for the past eight years.

**Table 10**  
**Metro Area Industrial Vacancy, 2000-2010**  
**US 36 Express Toll Lanes Analysis**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Market</b>											
Airport/ Montbello	5.3%	6.4%	8.4%	8.4%	8.1%	8.9%	6.0%	8.2%	10.1%	11.7%	8.9%
Boulder	11.2%	12.6%	17.1%	18.2%	17.5%	17.9%	6.5%	14.7%	13.9%	12.4%	11.3%
Central	2.1%	2.3%	3.6%	3.7%	3.5%	4.5%	4.2%	4.3%	4.9%	5.9%	5.4%
East	14.1%	7.7%	19.1%	24.1%	17.4%	10.6%	11.2%	23.7%	11.0%	7.1%	6.6%
North	7.1%	6.3%	4.2%	7.7%	4.4%	22.0%	19.1%	8.6%	6.5%	6.4%	5.4%
North Central	4.8%	10.6%	8.0%	8.7%	9.9%	7.5%	8.6%	7.9%	7.5%	6.7%	8.2%
Northeast	10.8%	4.9%	3.4%	3.2%	5.4%	8.8%	11.6%	12.0%	11.1%	9.8%	5.5%
Northwest	5.1%	12.4%	15.5%	15.6%	16.7%	19.3%	14.8%	11.3%	11.3%	12.8%	15.6%
Southeast	10.3%	15.9%	17.9%	17.5%	15.1%	13.8%	15.3%	11.9%	9.8%	13.9%	11.9%
Southwest	2.8%	2.7%	2.9%	3.8%	4.0%	4.9%	6.4%	6.9%	7.4%	8.2%	4.9%
West	5.1%	12.4%	15.5%	15.6%	16.7%	19.3%	4.9%	4.1%	3.6%	5.4%	5.2%
<b>Total</b>	<b>5.9%</b>	<b>7.4%</b>	<b>8.9%</b>	<b>9.4%</b>	<b>8.9%</b>	<b>9.8%</b>	<b>8.5%</b>	<b>8.6%</b>	<b>8.8%</b>	<b>9.7%</b>	<b>8.3%</b>
<b>US 36 Corridor</b>	<b>7.5%</b>	<b>11.4%</b>	<b>12.9%</b>	<b>13.8%</b>	<b>13.9%</b>	<b>15.7%</b>	<b>10.4%</b>	<b>11.3%</b>	<b>10.7%</b>	<b>10.3%</b>	<b>10.8%</b>

[1] Defined as Boulder, North, North Central, and Northwest.

Source: Grubb & Ellis; Economic & Planning Systems

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## Residential Market Conditions

This section presents information on residential development and market trends for the Denver Metro Area. The trends and conditions identify important factors used in making adjustments to the DRCOG 2010 household base and other forecast years.

### Housing Inventory and Trends

Overall, there were more than 65,000 permits issued in the metro area from 2005 to 2009, as indicated in **Table 11**. On average, this reflects approximately 13,000 housing units per year. By municipality, however, the annual production rates vary significantly. Activity in 2005 and 2006 was substantially higher than the activity after the contraction that began in 2006. Aurora, Broomfield, Castle Rock, Denver, and Thornton issued the highest number of permits during this time, representing nearly 60 percent of the total metro area's activity.

Among the jurisdictions that represent the US 36 Corridor (Boulder, Broomfield, Lafayette, Louisville, and Westminster), approximately 7,500 units were permitted, as shown in **Figure 6**.

At an average of 1,500 units per year, this represented more than 10 percent of the average annual building activity for the metro area. Relevant information on existing home sales in the metro area is shown in **Table 12**.

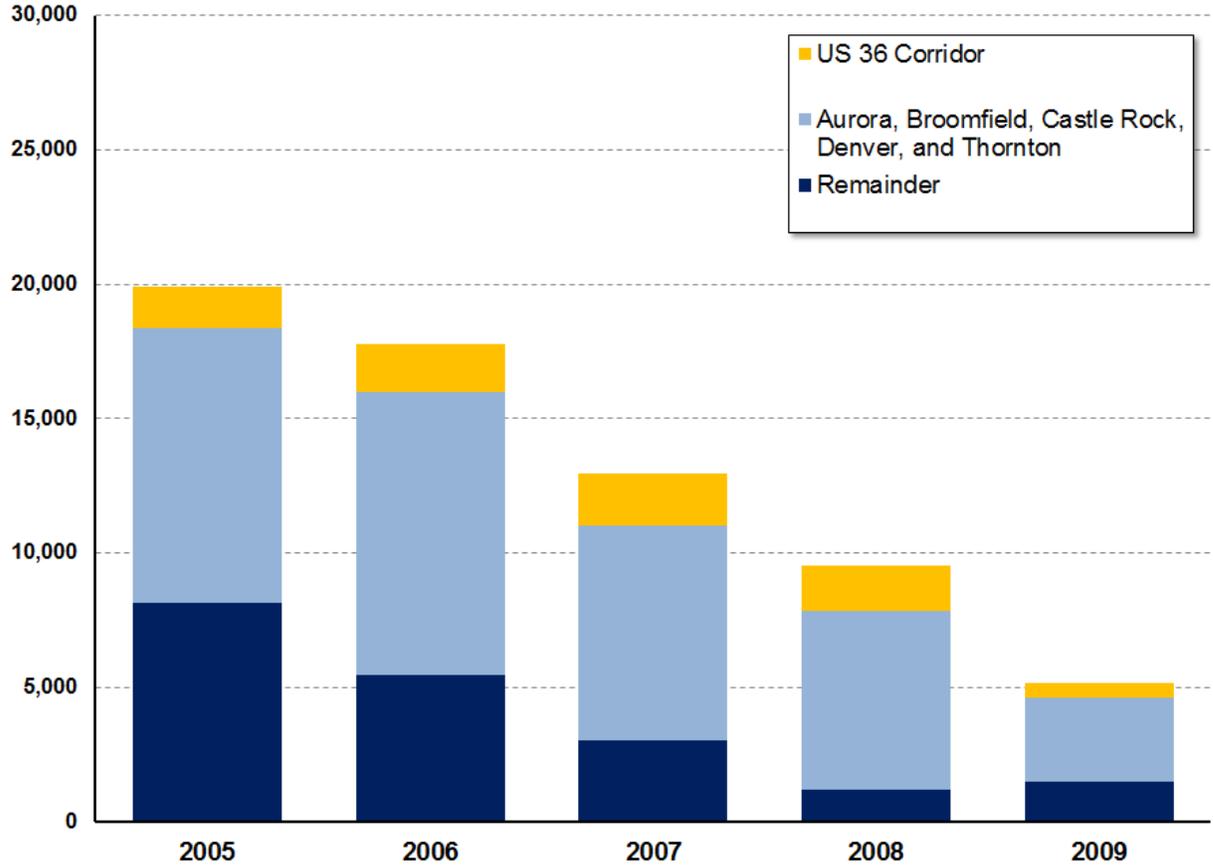
**Table 11**  
**Metro Area Building Permits, 2005-2009**  
**US 36 Express Toll Lanes Analysis**

	2005	2006	2007	2008	2009	2005-2009	
						Total	Avg.
<b>Municipality</b>							
Aurora	3,225	3,584	1,733	1,653	1,559	11,754	2,351
Adams Co. (Unincorporated)	563	331	113	60	36	1,103	221
Arapahoe Co. (Unincorporated)	350	221	385	142	165	1,263	253
Boulder	203	293	442	509	188	1,635	327
Boulder Co. (Unincorporated)	104	127	84	73	38	426	85
Brighton	628	391	200	37	37	1,293	259
Broomfield	771	1,082	1,060	827	160	3,900	780
Castle Rock	1,544	1,186	598	311	261	3,900	780
Centennial	78	134	108	60	13	393	79
Clear Creek Co.	41	37	26	15	8	127	25
Commerce City	1,645	818	480	248	132	3,323	665
Denver	3,311	3,639	3,802	3,515	902	15,169	3,034
Douglas Co. (Unincorporated)	1,353	1,043	695	459	137	3,687	737
Elbert County	258	244	153	57	39	751	150
Erie	733	544	243	164	103	1,787	357
Gilpin Co.	23	26	30	18	7	104	21
Greenwood Village	88	406	355	24	14	887	177
Golden	20	18	42	12	78	170	34
Jefferson Co. (Unincorporated)	975	674	520	255	145	2,569	514
Lafayette	198	94	33	190	109	624	125
Lakewood	499	262	213	64	61	1,099	220
Littleton	11	38	5	7	282	343	69
Lonetree	184	93	43	23	273	616	123
Longmont	234	557	150	185	64	1,190	238
Louisville	68	9	92	36	17	222	44
Parker	1,129	604	232	142	43	2,150	430
Thornton	1,376	1,009	826	344	240	3,795	759
Westminster	315	302	281	132	48	1,078	216
<b>Total</b>	<b>19,927</b>	<b>17,766</b>	<b>12,944</b>	<b>9,562</b>	<b>5,159</b>	<b>65,358</b>	<b>13,072</b>

Source: Municipalities; U.S. Census C-40; Economic & Planning Systems

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Figure 6  
Metro Area Permits  
US 36 Express Toll Analysis



**Table 12**  
**Metro Area Existing Home Sales, 2000-2010**  
**US 36 Express Toll Lanes Analysis**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Est. [1] 2010	2005-2010		2000-2010		
												Total	Avg.	Total	Avg.	
<b>Denver Metro Area</b>																
Adams	6,184	6,752	6,472	6,523	7,313	7,047	6,821	6,960	8,103	6,759	6,215	41,905	6,984	75,149	6,832	
Arapahoe	11,260	11,192	10,818	10,520	11,617	11,393	10,525	10,118	9,969	8,628	8,505	59,138	9,856	114,545	10,413	
Broomfield	896	859	873	998	1,065	1,127	1,046	1,014	901	890	1,023	6,001	1,000	10,692	972	
Boulder	5,266	5,045	5,094	5,345	5,656	5,603	5,242	5,045	4,316	3,683	4,636	28,525	4,754	54,931	4,994	
Denver	11,430	11,064	10,984	10,729	12,577	12,699	12,319	11,807	12,109	10,526	9,559	69,019	11,503	125,803	11,437	
Douglas	5,853	5,895	5,926	6,417	7,063	7,295	6,694	6,474	5,557	4,891	5,047	35,958	5,993	67,112	6,101	
Jefferson	10,280	10,259	9,943	9,742	10,362	10,184	9,094	8,735	7,564	6,886	7,116	49,579	8,263	100,165	9,106	
<b>Total</b>	<b>51,169</b>	<b>51,066</b>	<b>50,110</b>	<b>50,274</b>	<b>55,653</b>	<b>55,348</b>	<b>51,741</b>	<b>50,153</b>	<b>48,519</b>	<b>42,263</b>	<b>42,100</b>	<b>290,124</b>	<b>48,354</b>	<b>548,396</b>	<b>49,854</b>	
Change	---	-103	-956	164	5,379	-305	-3,607	-1,588	-1,634	-6,256	-163	---	---	---	---	
as %	---	-0.2%	-1.9%	0.3%	10.7%	-0.5%	-6.5%	-3.1%	-3.3%	-12.9%	-0.5%	---	---	---	---	

[1] Estimated using from data through 3rd quarter 2010.

Source: The Genesis Group; Economic & Planning Systems

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## 4. MAJOR DEVELOPMENT PLANS

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This chapter describes the major transit and non-transit projects evaluated to make adjustments at the TAZ level. The area around the US 36 Corridor evaluated is illustrated in **Figure 7**. From north to south, the area includes the entire Corridor from Foothills Parkway south of Boulder to east of Downtown Denver. On the east edge, the area generally bisects the area between Interstate 25 North and US 36. On the west edge, the area generally bisects US 36 and Interstate 70 West.

The major development projects EPS has evaluated are illustrated in **Figure 8**. These projects were selected because of their close proximity to the US 36 Corridor or inclusion within the boundaries of the influence area.

Figure 7  
US 36 Influence Area  
US 36 Express Toll Lanes Analysis

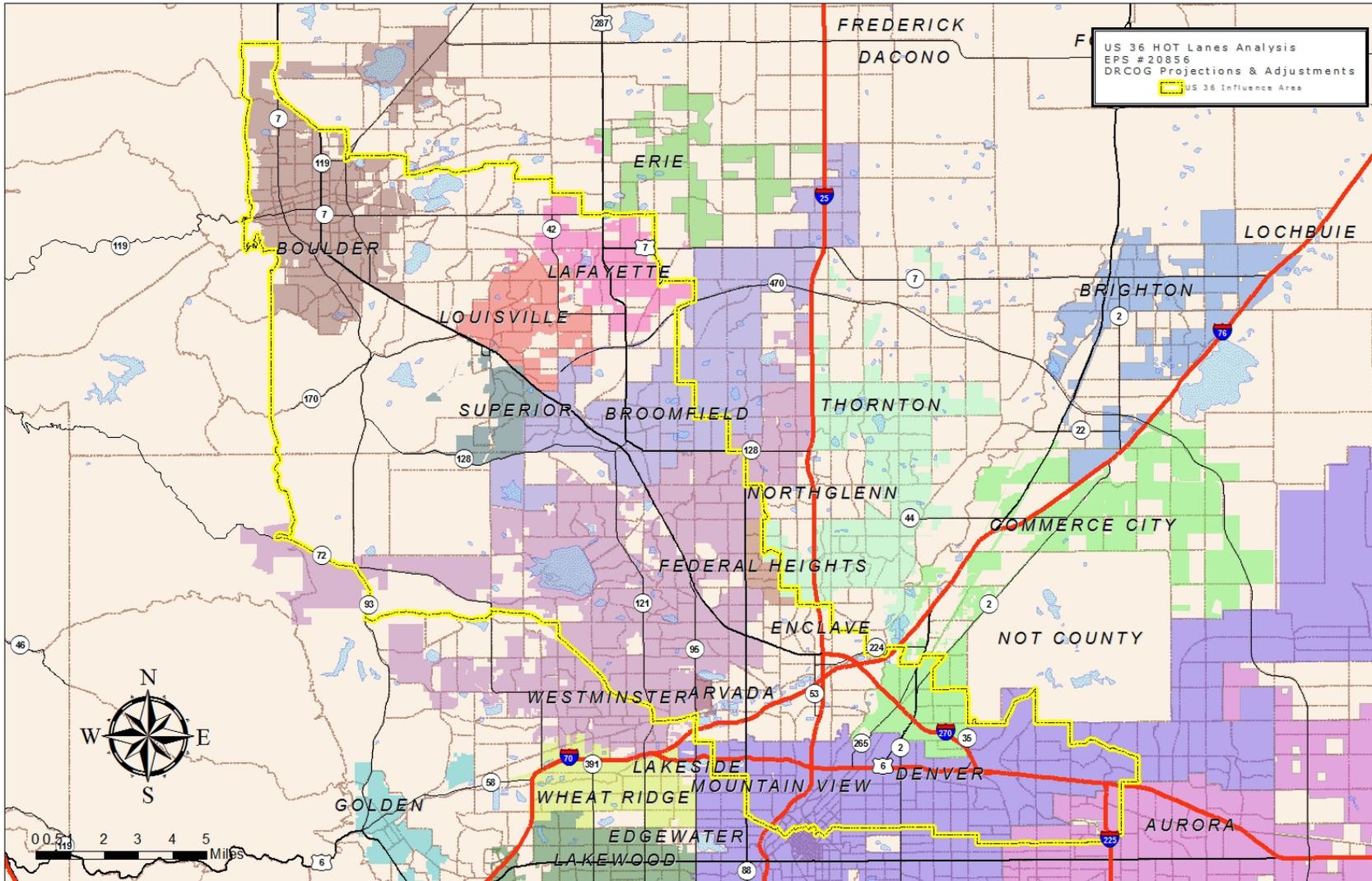
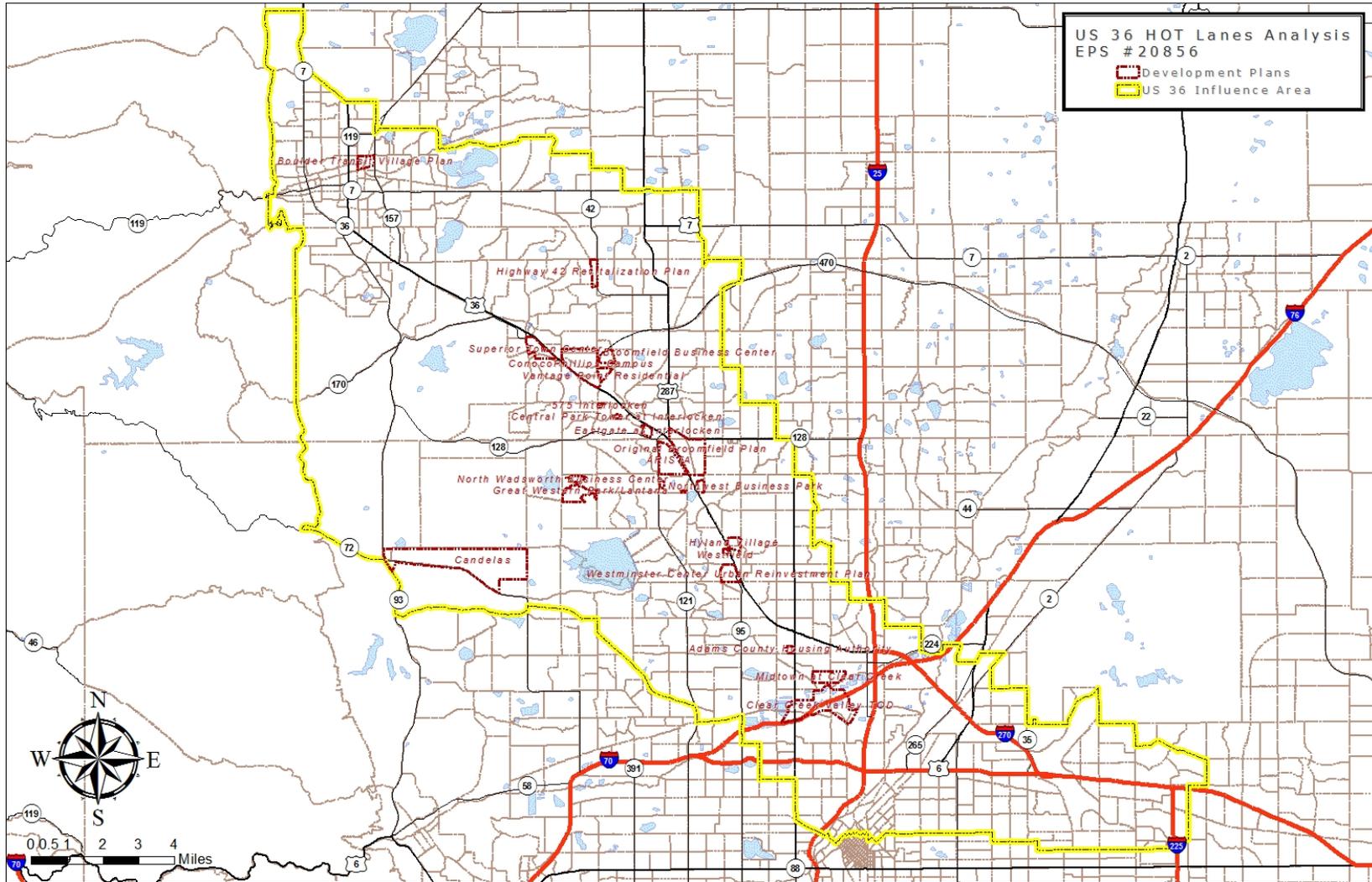


Figure 8  
Major Development Plans  
US 36 Express Toll Lanes Analysis



The following are descriptions of the major development plans evaluated for making TAZ/site-specific adjustments.

- **ARISTA** is Located at the intersection of US 36 and Wadsworth Boulevard and between 120<sup>th</sup> Avenue and Street A. The mixed-use project occupies 135 acres in the City and County of Broomfield. The development program identifies 2,200 residential units by buildout and approximately 439,000 square feet of non-residential uses, including the convention center which has already been completed.
- **Clear Creek Valley TOD** is located along Interstate 76 between the planned Pecos Street (Northwest Rail Corridor) and Federal Boulevard (Gold Line) rail stations. The development program for Clear Creek Valley identifies 1,993 residential units, approximately 513,000 square-feet of retail, approximately 923,000 square feet of office, and approximately 987,000 square feet of industrial space by buildout.
- **Mid Town at Clear Creek** is located between 68<sup>th</sup> Avenue and Pecos Street along the Northwest Rail Corridor. The 180-acre site encompasses a 140-acre brownfield site. The development program for this site includes 1,200 residential units and approximately 10 acres set aside for commercial development potential.
- **Original Broomfield** is located on the east side of the highway across from the ARISTA site. The 347-acre area is bounded by West 112<sup>th</sup> on the south, US 36 on the southwest, US 287 on the east, and 120<sup>th</sup> Avenue on the north. There is no specific development program for the area at this time, and only future land uses are identified. Approximately 20 acres are proposed to be zoned residential. Approximately 68 acres is proposed to be zoned a mix of uses, as well as 10 acres of neighborhood commercial, 46 acres of business commercial, and 32 acres of TOD. In addition, 171 acres are zoned for flex/industrial uses.
- **Highway 42 Revitalization Area** is located along the BNSF alignment to Highway 42 and between South Boulder Street and Pine Street. The 11-acre revitalization area is planned for 261 to 346 residential units, approximately 65,000 to 100,000 square feet of retail space, and approximately 35,000 square-feet of office space.
- **Boulder Transit Village** is located along the BNSF alignment on the northeast corner of Pearl Street and 30<sup>th</sup> Street in Boulder. The 102-acre site is planned for 1,142 residential units, approximately 142,000 square feet of retail space, and approximately 180,000 square feet of office space.
- **Westminster Center Reinvestment Area** is located between US 36 and Harlan Street and between West 88<sup>th</sup> Avenue and West 92<sup>nd</sup> Avenue. The 102-acre site is the location of the former 1,120,000-square foot Westminster Mall.
- **Superior Town Center** is located between US 36 and McCaslin Boulevard along the west side of US 36. The 162-acre site is planned for 2,378 to 2,512 residential units, approximately 289,000 square feet of retail space, approximately 450,000 square feet of office space, as well as a 185-room hotel and 60,000 square foot conference center.
- **ConocoPhillips Campus** is located on the side of US 36 and 96<sup>th</sup> Avenue. The 432-acre site will be home to a 180-acre research and development campus that is planned to include more than 770,000 square feet of office space and more than 1,075,000 square feet of research space.

- **Candelas** is located in unincorporated Jefferson County with Highway 72 on the south and Highway 93 on its west side. Northwest Parkway, when completed, will intersect Candelas on the west side. The 2,000-acre site is planned for 4,641 residential units, approximately 1,000,000 square feet of retail space, approximately 6,000,000 square feet of office space, and approximately 350,000 square feet of industrial uses.
- **Northwest Business Park** is located at the northwest corner of 108<sup>th</sup> Avenue and Westminster. The 16-acre site is planned for 725 residential units and approximately 30,000 square feet of office space.
- **Business Park at Mandalay** is located at 108<sup>th</sup> Avenue and Wadsworth Avenue. The 5-acre site is planned for four buildings totaling 64,000 square feet of office space, 16,000 square feet of which has been completed.
- **North Wadsworth Business Center** is located at the northeast corner of 108<sup>th</sup> Avenue and Dover Street. The 4-acre site is planned for 36,000 square feet of office/flex space.
- **Hyland Village** is located at the northwest corner of 96<sup>th</sup> Avenue and Sheridan Boulevard. The 10-acre site is planned for 570 residential units and approximately 24,000 square feet of office space.
- **Adams County Housing Authority** purchased a 5-acre site at the corner of 71<sup>st</sup> and Federal Boulevard. The site is planned for a mix of uses with predominantly non-residential and multi-family residential.
- **Great Western Park** is located west of Simms Boulevard, south of 112<sup>th</sup> Avenue. The 50-acre site is planned for 861 residential units, approximately 13 acres of neighborhood commercial, and more than 1,660,000 square feet of office space.
- **Interlocken** is located at 128<sup>th</sup> Avenue and west of US 36. The site includes three small but major developments totaling approximately 77 acres. Eastgate at Interlocken, Central Park Tower, and 575 Interlocken comprise these three developments. In total, the development programs identify 650 residential units, approximately 57,000 square feet of retail, approximately 662,000 square feet of office, and more than 240,000 square feet of lodging or additional office.
- **Broomfield Business Center** is located along Northwest Parkway east of the ConocoPhillips campus site. The 74-acre site contains a development program identifying 2,300,000 square feet of mixed-use space, including retail, office, hotel, and residential.
- **Vantage Point Residential** is located along Northwest Parkway north of US 36 and east of the ConocoPhillips campus. The development program for this project identifies more than 250 residential units.

## 5. ADJUSTED FORECASTS

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This chapter presents EPS' analysis and adjustments of DRCOG's 2035 forecasts. The analysis was conducted at the county, city, subarea, and Traffic Analysis Zone (TAZ) level. Adjustments were made to the DRCOG projections of households, population, and employment throughout the DRCOG planning area at the various geographic levels.

The forecasts analyzed and adjusted were released by DRCOG in 2007. Although DRCOG did account for the housing contraction that began in the fourth quarter of 2006, it did not project the effects of a major recession. The purpose of analyzing DRCOG's 2035 forecasts is to apply current information and market knowledge to make adjustments at the county or city and TAZ levels. EPS has made adjustments regarding magnitude and the timing of household, population, and employment change. Following the summary of EPS' approach and the adjustments is a comparison of the original DRCOG forecasts and the adjusted forecasts.

### Approach

EPS approached the task of adjusting DRCOG's forecasts from the following perspectives. Each perspective sheds light on the different parameters EPS used to inform the adjustments.

- **Understanding the DRCOG Model:** EPS met with DRCOG's Regional Modeling Manager and economist who oversee the forecasting process. A meeting was conducted to enable EPS to make informed adjustments to the forecasts after more thoroughly understanding the underlying assumptions and possible limitations of the 2035 projections. DRCOG is not planning a recalibration of the planning area economic forecast until it is scheduled to produce 2040 forecasts. It does, however, acknowledge that the effects of the recession may result in a change to near-term projections, if not the 2035 control totals.
- **Geographic Scope:** EPS' analysis includes the extent of DRCOG's nine-county planning area, with the exception of the portions of Weld and Elbert counties located on its periphery. Some aspects of the analysis focused on trends at the county level, and some aspects of the analysis focused on trends at the municipal or sub-municipal level. Other aspects of the analysis focused on trends and conditions at a TAZ (site-specific or development project) level. For the TAZ level analyses, the refined focus primarily targeted the geography surrounding the US 36 Corridor.
- **Economic and Demographic Trend Research:** The analysis and adjustments of county, municipal, or sub-municipal level trends and forecasts were informed by several secondary data sources, such as those outlined earlier in this report. These regional and sub-regional trends were used to benchmark the DRCOG forecasts with historic capture of economic and demographic growth.
- **Market Research:** EPS conducted research of major transit and conventional development within the US 36 Corridor. The scale of these developments, their land uses, and timing of developments were identified. In addition, information was gathered about residential building activity, as well as office, industrial, and retail market conditions and trends to inform adjustments.

- **Capital Investment:** Additionally, one of the major assumptions used in EPS' analysis relates to the timing of RTD's FasTracks system. EPS assumes that metro area voters are likely to approve a 0.2-percent sales tax extension to fund the project shortfall. RTD estimates that under this level of sales tax increase the entire system would be completed by 2027. The Northwest Rail Corridor would be constructed by approximately 2020 under this assumption. These assumptions are critical to the timing adjustments of development, particularly TOD along the US 36 Corridor.
- **Adjustments:** EPS recognizes that DRCOG uses a robust travel demand model based on a variety of factors, which are calibrated to an independent economic forecast for the entire metro area. While DRCOG uses information at the TAZ level to inform its projections, it is generally understood that analysis of smaller areas within the region produces results with variable degrees of accuracy. As such, EPS has taken the approach of making adjustments to the DRCOG forecast estimates only when market information and research provides a clear basis.

## DRCOG Forecast Analysis

This section contains an overview and analysis of the current DRCOG 2035 forecast. As mentioned previously, EPS met with staff from DRCOG to more thoroughly understand the assumptions, parameters, and possible limitations of the current forecast numbers.

### Background

The 2035 DRCOG forecasts were released in 2007 after the housing market contracted but before the recession began. It is important to note that DRCOG had previously released its first version of the 2035 forecasts in 2006. The revised forecasts completed in 2007 were released because DRCOG recognized that the near-term forecasts (specifically 2010) warranted a reduction. Although DRCOG made adjustments to the 2010 household, population, and employment estimates, the control totals for 2035 were held constant. One of the major aspects of this analysis, however, focuses on the magnitude of growth implied by the 2035 control totals.

### Assumptions

EPS recognizes that DRCOG uses a robust travel demand model. DRCOG calibrates an independently-produced regional economic forecast to interim projection years and to TAZs. Household and employment projections are calibrated at the TAZ level to land use and transportation assumptions, as well as a variety of socio-economic and demographic factors.

The model incorporates information on income, housing, housing values, amenities, and prevalence of parks and outdoor spaces. The model also relies on information about planned and future land use, density, utility consumption and service data, as well as a number of positive and negative parameters. These parameters include information about accessibility, current and historic vacancy rates, capacity (developable land), infrastructure, and transportation linkages.

In evaluating these projections, particularly at the TAZ level, EPS maintained an awareness of this information to make informed adjustments using relevant market information.

## Original Forecast

### **Employment**

DRCOG forecasts that employment through 2035 will grow at an average of 2.0 percent per year, as shown in **Table 13**. Total jobs are projected to grow from a base of 1.3 million in 2005 to nearly 2.2 million by 2035. Between 2010 and 2020, this represents an increase of more than 29,000 jobs per year, and from 2020 to 2035, an increase of more than 37,000 jobs per year. As mentioned previously, while these trends indicate a consistent growth rate, they assume an increasing number of jobs added per year.

### **Households**

The 2035 household forecast, as shown in **Table 14**, indicates that the planning area will grow at an average rate of 1.7 percent per year. In total, the area is projected to add more than 600,000 households at a rate of more than 24,000 per year. From 2010 to 2020, DRCOG projects the rate to be nearly 1.7 percent per year, adding an average of 20,000 households per year. From 2020 to 2035, however, the forecast indicates that the area will grow at nearly 1.8 percent per year, or by nearly 27,000 households each year.

Similar to employment, these trends indicate a relatively consistent rate of growth. Again, these forecasts do not reflect a tapering growth rate over time as the DOLA forecasts of population do. The DRCOG forecast, as with employment, implies an increasing number of households are added each year.

### **Population**

In EPS' analysis, population projections are related to the household projections by the average household size factor. Over time, DRCOG projects the regional average household size to diminish from approximately 2.47 persons per household in 2010 to approximately 2.40 persons per household by 2035. EPS has applied this assumption to the adjusted household forecast estimates for each TAZ to determine the adjusted population forecasts.

The 2035 population forecast indicates that grow will occur at an average rate of 1.6 percent per year. In total, the area is projected to add more than 1,360,000 persons at a rate of more than 54,000 per year. From 2010 to 2020, this represents an increase of approximately 50,000 per year, and from 2020 to 2035, the forecast indicates an increase of nearly 57,000 persons per year.

**Table 13**  
**DRCOG Employment Forecast, 2005-2035**  
**US 36 Express Toll Lanes Analysis**

	2005	2010	2015	2020	2025	2030	2035	2010-2035			2010-2020			2020-2035			
								Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	
<b>Original DRCOG Trends</b>																	
Adams	148,738	147,904	182,840	221,798	264,828	312,411	364,979	217,075	8,683	3.68%	73,894	7,389	4.14%	143,181	9,545	3.38%	
Arapahoe	265,370	271,926	295,522	321,748	350,754	382,789	418,158	146,232	5,849	1.74%	49,822	4,982	1.70%	96,410	6,427	1.76%	
Boulder	149,340	151,607	154,861	158,482	162,478	166,889	171,773	20,166	807	0.50%	6,875	688	0.44%	13,291	886	0.54%	
Broomfield	30,052	30,632	38,627	47,591	57,511	68,472	80,586	49,954	1,998	3.94%	16,959	1,696	4.50%	32,995	2,200	3.57%	
Clear Creek	2,785	2,863	3,100	3,369	3,661	3,990	4,348	1,485	59	1.69%	506	51	1.64%	979	65	1.72%	
Denver	415,051	424,628	457,852	494,568	535,125	579,996	629,553	204,925	8,197	1.59%	69,940	6,994	1.54%	134,985	8,999	1.62%	
Douglas	86,203	85,844	102,037	120,051	139,951	161,948	186,244	100,400	4,016	3.15%	34,207	3,421	3.41%	66,193	4,413	2.97%	
Gilpin	4,879	4,726	4,894	5,079	5,285	5,512	5,763	1,037	41	0.80%	353	35	0.72%	684	46	0.85%	
Jefferson	210,601	208,116	226,482	246,847	269,331	294,200	321,662	113,546	4,542	1.76%	38,731	3,873	1.72%	74,815	4,988	1.78%	
<b>Total</b>	<b>1,313,019</b>	<b>1,328,246</b>	<b>1,466,215</b>	<b>1,619,533</b>	<b>1,788,924</b>	<b>1,976,207</b>	<b>2,183,066</b>	<b>854,820</b>	<b>34,193</b>	<b>2.01%</b>	<b>291,287</b>	<b>29,129</b>	<b>2.00%</b>	<b>563,533</b>	<b>37,569</b>	<b>2.01%</b>	

Source: Economic & Planning Systems

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**Table 14**  
**DRCOG Household Forecast, 2005-2035**  
**US 36 Express Toll Lanes Analysis**

	2005	2010	2015	2020	2025	2030	2035	2010-2035			2010-2020			2020-2035		
								Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Original DRCOG Trends</b>																
Adams	143,439	163,555	185,596	210,856	238,172	266,795	306,078	142,523	5,701	2.54%	47,301	4,730	2.57%	95,222	6,348	2.52%
Arapahoe	209,275	228,677	248,544	271,312	295,933	321,733	357,137	128,460	5,138	1.80%	42,635	4,264	1.72%	85,825	5,722	1.85%
Boulder	116,066	122,972	128,755	135,376	142,543	150,047	160,343	37,371	1,495	1.07%	12,404	1,240	0.97%	24,967	1,664	1.13%
Broomfield	16,837	19,364	22,533	26,164	30,088	34,201	39,843	20,479	819	2.93%	6,800	680	3.06%	13,679	912	2.84%
Clear Creek	4,167	4,535	4,850	5,211	5,600	6,010	6,574	2,039	82	1.50%	676	68	1.40%	1,363	91	1.56%
Denver	250,785	264,941	279,576	296,362	314,501	333,497	359,598	94,657	3,786	1.23%	31,421	3,142	1.13%	63,236	4,216	1.30%
Douglas	85,969	100,476	115,716	133,191	152,075	171,875	199,051	98,575	3,943	2.77%	32,715	3,272	2.86%	65,860	4,391	2.71%
Gilpin	2,220	2,401	2,588	2,803	3,034	3,280	3,613	1,212	48	1.65%	402	40	1.56%	810	54	1.71%
Jefferson	211,822	223,444	235,660	249,633	264,764	280,609	302,359	78,915	3,157	1.22%	26,189	2,619	1.11%	52,726	3,515	1.29%
<b>Total</b>	<b>1,040,580</b>	<b>1,130,365</b>	<b>1,223,818</b>	<b>1,330,908</b>	<b>1,446,710</b>	<b>1,568,047</b>	<b>1,734,596</b>	<b>604,231</b>	<b>24,169</b>	<b>1.73%</b>	<b>200,543</b>	<b>20,054</b>	<b>1.65%</b>	<b>403,688</b>	<b>26,913</b>	<b>1.78%</b>

Source: Economic & Planning Systems

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## Summary of Adjustments

This section outlines EPS' adjustments to the DRCOG forecasts. Adjustments are made to the base forecast year 2010, as well as the subsequent forecast years. EPS made two types of adjustments to the forecast years 2015 and beyond. The first type of adjustment applied to county and municipal levels, and the second was made at the TAZ (site-specific) level.

### Base Year Adjustment (2010)

As mentioned previously, the current DRCOG forecast were released before the recession began. The adjustments made to the 2010 forecasts have been informed by a variety of independent regional data sources for employment and demographics, as described below.

#### Households

DRCOG's 2010 household forecast was adjusted using records of residential building activity, as reported previously. The DRCOG forecast projected households to increase by approximately 90,000 between 2005 and 2010. However, residential building activity trends indicate that approximately 65,300 units have been built during this time. Adjusted for vacancy (5 percent through 2007 and 10 percent through 2009), this indicates an increase of an estimated 61,300 households. Thus, the 2010 baseline figure is more than 30 percent less than the projection.

EPS applied various methodologies to apportion this change to the 2010 household forecast. In most cases, sufficient information was available to apply the adjusted household count by municipality. In other cases, EPS selected sub-geographies within a few municipalities (or counties) to distribute the growth. These adjustments assumed that a predominant portion of growth occurred within urban areas.

**Table 15**  
**Estimated New Households, 2005-2009**  
**US 36 Express Toll Lanes Analysis**

	2005	2006	2007	2008	2009	2005-2009	
						Total	Avg.
<b>Total Metro Area Building Permits</b>	19,927	17,766	12,944	9,562	5,159	65,358	13,072
Adjustment for Vacancy Rate	5%	5%	5%	10%	10%	---	---
<b>Estimated New Households</b>	<b>18,931</b>	<b>16,878</b>	<b>12,297</b>	<b>8,606</b>	<b>4,643</b>	<b>61,354</b>	<b>12,271</b>

Source: Municipalities; U.S. Census C-40; Economic & Planning Systems

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#### Population

As described previously, EPS' adjusted population forecasts have been estimated by applying using DRCOG's average household size factors by TAZ level to the adjusted household projection. DRCOG had projection population to increase by more than 177,000 persons between 2005 and 2010, reaching nearly 2.8 million persons. After adjustments to the household forecast, the adjusted 2010 population base is approximately 2.7 million, a reduction of 2.8 percent to the original DRCOG forecast. At an annualized rate, this adjustment represents a reduction in the growth rate between 2005 and 2010 to 0.8 percent per year from 1.3 percent per year.

Overall, the adjustments reduced the DRCOG 2010 projection from approximately 90,000 new households to approximately 61,300 new households. As shown in **Table 16**, this amounts to approximately 28,000 fewer households than DRCOG projected, or a reduction of approximately 30 percent.

**Table 16**  
**Adjusted Households, 2010**  
**US 36 Express Toll Lanes Analysis**

	2005	2010	2005-2010		
			Total	Ann. #	Ann. %
<b>Original</b>					
Adams	143,439	163,555	20,116	4,023	2.7%
Arapahoe	209,275	228,677	19,402	3,880	1.8%
Boulder	116,066	122,972	6,906	1,381	1.2%
Broomfield	16,837	19,364	2,527	505	2.8%
Clear Creek	4,167	4,535	368	74	1.7%
Denver	250,785	264,941	14,156	2,831	1.1%
Douglas	85,969	100,476	14,507	2,901	3.2%
Gilpin	2,220	2,401	181	36	1.6%
Jefferson	<u>211,822</u>	<u>223,444</u>	<u>11,622</u>	<u>2,324</u>	<u>1.1%</u>
<b>Total</b>	<b>1,040,580</b>	<b>1,130,365</b>	<b>89,785</b>	<b>17,957</b>	<b>1.7%</b>
<b>Adjusted</b>					
Adams	143,439	155,559	12,120	2,424	1.6%
Arapahoe	209,275	223,554	14,279	2,856	1.3%
Boulder	116,066	121,026	4,960	992	0.8%
Broomfield	16,837	18,951	2,114	423	2.4%
Clear Creek	4,167	4,280	113	23	0.5%
Denver	250,785	264,084	13,299	2,660	1.0%
Douglas	85,969	95,249	9,280	1,856	2.1%
Gilpin	2,220	2,313	93	19	0.8%
Jefferson	<u>211,822</u>	<u>216,921</u>	<u>5,099</u>	<u>1,020</u>	<u>0.5%</u>
<b>Total</b>	<b>1,040,580</b>	<b>1,101,937</b>	<b>61,357</b>	<b>12,271</b>	<b>1.2%</b>
<b>Difference</b>					
Adams	---	-7,996	-7,996	-1,599	-1.0%
Arapahoe	---	-5,123	-5,123	-1,025	-0.5%
Boulder	---	-1,946	-1,946	-389	-0.3%
Broomfield	---	-413	-413	-83	-0.4%
Clear Creek	---	-255	-255	-51	-1.2%
Denver	---	-857	-857	-171	-0.1%
Douglas	---	-5,227	-5,227	-1,045	-1.1%
Gilpin	---	-88	-88	-18	-0.8%
Jefferson	---	-6,523	-6,523	-1,305	-0.6%
<b>Total</b>	---	<b>-28,428</b>	<b>-28,428</b>	<b>-5,686</b>	<b>-0.5%</b>
as %		-2.51%			

Source: Economic & Planning Systems

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## Employment

The 2010 DRCOG employment forecasts were adjusted using records of wage and salary jobs from BLS, as shown previously. Job growth occurred at a slower rate than projected, given the recession and associated job losses. In the nine counties of the DRCOG planning area, EPS made adjustments to reflect total employment levels by county. These adjustments were made to reflect the number of jobs gained and lost during that period.

DRCOG had projected employment to increase by more than 15,000 jobs from 2005 to 2010. EPS made adjustments to reflect the net job loss over this five-year period, as shown in **Table 17**. The largest changes occurred in Denver, Jefferson, and Arapahoe counties. BLS records, however, show that the area lost approximately 20,000 jobs during this period.

**Table 17**  
**Adjusted Employment, 2010**  
**US 36 Express Toll Lanes Analysis**

	2005	2010	2005-2010		
			Total	Ann. #	Ann. %
<b>Original</b>					
Adams	148,738	147,904	-834	-167	-0.1%
Arapahoe	265,370	271,926	6,556	1,311	0.5%
Boulder	149,340	151,607	2,267	453	0.3%
Broomfield	30,052	30,632	580	116	0.4%
Clear Creek	2,785	2,863	78	16	0.6%
Denver	415,051	424,628	9,577	1,915	0.5%
Douglas	86,203	85,844	-359	-72	-0.1%
Gilpin	4,879	4,726	-153	-31	-0.6%
Jefferson	<u>210,601</u>	<u>208,116</u>	<u>-2,485</u>	<u>-497</u>	<u>-0.2%</u>
<b>Total</b>	<b>1,313,019</b>	<b>1,328,246</b>	<b>15,227</b>	<b>3,045</b>	<b>0.2%</b>
<b>Adjusted</b>					
Adams	148,738	144,287	-4,451	-890	-0.6%
Arapahoe	265,370	265,053	-317	-63	0.0%
Boulder	149,340	149,503	163	33	0.0%
Broomfield	30,052	28,823	-1,229	-246	-0.8%
Clear Creek	2,785	3,292	507	101	3.4%
Denver	415,051	411,330	-3,721	-744	-0.2%
Douglas	86,203	87,091	888	178	0.2%
Gilpin	4,879	5,429	550	110	2.2%
Jefferson	<u>210,601</u>	<u>198,729</u>	<u>-11,872</u>	<u>-2,374</u>	<u>-1.2%</u>
<b>Total</b>	<b>1,313,019</b>	<b>1,293,537</b>	<b>-19,482</b>	<b>-3,896</b>	<b>-0.3%</b>
<b>Difference</b>					
Adams	---	<b>-3,617</b>	-3,617	-723	-0.5%
Arapahoe	---	<b>-6,873</b>	-6,873	-1,375	-0.5%
Boulder	---	<b>-2,104</b>	-2,104	-421	-0.3%
Broomfield	---	<b>-1,809</b>	-1,809	-362	-1.2%
Clear Creek	---	<b>429</b>	429	86	2.8%
Denver	---	<b>-13,298</b>	-13,298	-2,660	-0.6%
Douglas	---	<b>1,247</b>	1,247	249	0.3%
Gilpin	---	<b>703</b>	703	141	2.8%
Jefferson	---	<b>-9,387</b>	-9,387	-1,877	-0.9%
<b>Total</b>	---	<b>-34,709</b>	<b>-34,709</b>	<b>-6,942</b>	<b>-0.5%</b>
as %		<b>-2.61%</b>			

Source: Economic & Planning Systems

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## Future Year Adjustments by Geography

The first level of adjustments to the forecasts has been made at the highest geographic level, specifically counties and municipalities. A variety of secondary independent data sources are used in the adjustment of these DRCOG growth forecasts, including historic growth trends as presented earlier in this report, as well as independent forecasts of population and households.

### *Households and Population*

Municipal level adjustments made to the household forecasts incorporated information from the Department of Local Affairs' (DOLA) forecast of population growth for the metro area and other counties.

As shown previously, the original DRCOG forecast projected employment to grow between 2010 and 2035 at an annual average rate of 1.7 percent. The assessment of trends in the five-year increments showed that there was little distinction in DRCOG growth rates between 2010 and 2030. During this period, the average annual rate of growth fluctuated between 1.6 and 1.7 percent. During the period 2030 to 2035, however, the DRCOG forecast shows an increase in growth rate to 2.0 percent per year. The rate of growth projected indicates that an average of approximately 20,000 households would enter the metro area between 2010 and 2020, and increase to nearly 27,000 per year between 2020 and 2035.

DOLA projects households to grow, as shown previously, at an average annual rate of 1.3 percent. As shown in **Table 18**, the growth rates are tapered with higher growth rates in the near term and lower rates for periods further into the future. The exception to this is the period 2030 to 2035, which is driven by the assumption that household size decreases from 2.23 to 2.19 persons per household.

EPS recognizes that the tapering of growth rates over time reflects a more natural relationship between the number of households added per year and the size of the base. As projected, the DOLA forecast indicates an average increase of approximately 19,800 households per year from 2010 to 2035. The average number of jobs added remains constant, but the growth rate decreases because of the expanding base. (The DRCOG forecast, which holds the growth rate constant, implies that an ever-increasing number of households are added to the expanding base.)

EPS made two sets of adjustments to the household projections:

- **Overall Growth Rate:** This adjustment was made to each five-year increment growth rate for the DRCOG dataset. Each five-year period tapers in the rate of growth, while keeping the average number of households added per year relatively constant.
- **County Growth Rates:** These adjustments were made to bring projected rates of growth by county more in line with historical rates of growth (shown previously) by county and calibrated to the overall growth rate indicated by the trends in DOLA's forecast.

As described previously, EPS' adjusted population forecasts have been estimated by applying using DRCOG's average household size factors by TAZ level to the adjusted household projection.

**Table 18**  
**DOLA Population Forecast, 2010-2035**  
**US 36 Express Toll Lanes Analysis**

	2010	2015	2020	2025	2030	2035	Ann. %				
							10-15	15-20	20-25	25-30	30-35
<b>Population (DOLA)</b>											
Adams	451,458	498,644	548,891	601,161	648,531	695,189	2.01%	1.94%	1.84%	1.53%	1.40%
Arapahoe	579,837	627,380	678,079	727,222	772,997	815,004	1.59%	1.57%	1.41%	1.23%	1.06%
Boulder	304,546	323,525	343,171	361,906	376,007	387,055	1.22%	1.19%	1.07%	0.77%	0.58%
Broomfield	56,650	65,281	73,327	79,728	83,745	86,034	2.88%	2.35%	1.69%	0.99%	0.54%
Clear Creek	9,213	10,147	11,311	12,489	13,616	14,729	1.95%	2.20%	2.00%	1.74%	1.58%
Denver	628,096	670,429	695,637	715,574	736,366	761,745	1.31%	0.74%	0.57%	0.57%	0.68%
Douglas	297,377	336,251	390,598	433,255	465,659	493,608	2.49%	3.04%	2.09%	1.45%	1.17%
Gilpin	5,690	6,197	6,784	7,373	7,931	8,493	1.72%	1.83%	1.68%	1.47%	1.38%
Jefferson	550,448	572,765	606,608	640,167	667,854	686,648	0.80%	1.15%	1.08%	0.85%	0.56%
<b>DRCOG Metro Area</b>	<b>2,883,315</b>	<b>3,110,619</b>	<b>3,354,406</b>	<b>3,578,875</b>	<b>3,772,706</b>	<b>3,948,505</b>	<b>1.53%</b>	<b>1.52%</b>	<b>1.30%</b>	<b>1.06%</b>	<b>0.92%</b>
<b>Estimated Households [1]</b>											
Adams	180,367	198,619	217,858	238,512	258,857	282,561	1.95%	1.87%	1.83%	1.65%	1.77%
Arapahoe	274,082	295,271	317,885	341,159	364,717	391,041	1.50%	1.49%	1.42%	1.34%	1.40%
Boulder	132,914	140,780	148,767	157,226	164,335	172,070	1.16%	1.11%	1.11%	0.89%	0.92%
Broomfield	26,595	29,884	33,251	36,253	38,317	40,083	2.36%	2.16%	1.74%	1.11%	0.91%
Clear Creek	4,098	4,502	4,996	5,525	6,062	6,673	1.90%	2.10%	2.03%	1.87%	1.94%
Denver	333,467	355,030	366,947	376,380	389,441	410,064	1.26%	0.66%	0.51%	0.68%	1.04%
Douglas	115,544	130,252	150,737	167,455	181,075	195,309	2.43%	2.96%	2.13%	1.58%	1.52%
Gilpin	2,574	2,750	2,988	3,221	3,525	3,863	1.33%	1.67%	1.51%	1.82%	1.85%
Jefferson	235,847	244,441	257,817	272,392	285,784	299,106	0.72%	1.07%	1.11%	0.96%	0.92%
<b>DRCOG Metro Area</b>	<b>1,305,489</b>	<b>1,401,529</b>	<b>1,501,245</b>	<b>1,598,122</b>	<b>1,692,113</b>	<b>1,800,771</b>	<b>1.43%</b>	<b>1.38%</b>	<b>1.26%</b>	<b>1.15%</b>	<b>1.25%</b>

[1] Estimated using DRCOG average household sizes.

Source: DOLA; Economic & Planning Systems

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## **Employment**

Adjustments made to the employment forecasts incorporated information from two independent sources: the Bureau of Labor Statistics (BLS) records on wage and salary jobs, and the Center for Business and Economic Forecasting (CBEF) forecast of employment growth for the metro area and other counties.

As shown previously, the original DRCOG forecast projected employment to grow between 2010 and 2035 at an annual average rate of 2.0 percent. The assessment of trends identified that there was little distinction in growth rates between the five-year increments of the forecast timeline. Growth rates were projected to remain at a constant 2.0 percent between each of the five-year increments through 2035.

CBEF projections, also shown previously, assumed an average annual rate of approximately 1.4 percent. But as shown in **Table 19**, the growth rates are tapered with higher growth rates in the near term and lower rates for periods further into the future.

EPS recognizes that the tapering of growth rates over time reflects a more natural relationship between the number of jobs added per year and the size of the base. As projected, the CBEF forecast indicates an average increase of approximately 24,700 jobs per year from 2010 to 2035. The average number of jobs added remains constant, but the growth rate decreases because of the expanding base. (The DRCOG forecast, which holds the growth rate constant, implies that an ever-increasing number of jobs are added to the expanding base.)

EPS made two sets of adjustments to the employment projections:

- **Overall Growth Rate:** This adjustment was made to each five-year increment growth rate of the DRCOG dataset. Based on the adjustments, each five-year period tapers in the rate of growth, while keeping the average number of jobs added per year relatively constant.
- **County Growth Rates:** These adjustments were made to bring projected rates of growth by county in line with historical rates of growth and calibrated to the overall growth rate indicated by the trends in CBEF's forecast. **Table 20** shows the benchmark rates of growth for each county, represented by the period 2003 to 2007.

**Table 19**  
**Employment Growth Trends, 2000-2010**  
**US 36 Express Toll Lanes Analysis**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Est. [1] 2010	2003-2007		
												Total	Ann. #	Ann. %
<b>Primary Metro Area Counties</b>														
Adams County	144,502	146,043	144,052	139,987	141,343	147,701	152,770	154,247	155,115	150,164	144,453	14,260	3,565	2.5%
Arapahoe County	283,927	285,963	276,543	270,461	268,290	271,199	276,078	281,621	282,655	271,597	265,279	11,160	2,790	1.0%
Denver County	468,995	461,996	438,864	425,693	423,470	424,662	432,436	442,784	449,271	423,297	411,661	17,091	4,273	1.0%
Douglas County	56,656	63,263	63,590	65,000	74,564	82,928	87,424	91,015	93,701	90,055	87,220	26,015	6,504	8.8%
Jefferson County	<u>210,315</u>	<u>210,375</u>	<u>205,972</u>	<u>203,154</u>	<u>203,605</u>	<u>206,000</u>	<u>207,155</u>	<u>211,098</u>	<u>211,513</u>	<u>203,843</u>	<u>198,978</u>	<u>7,944</u>	<u>1,986</u>	<u>1.0%</u>
<b>Subtotal</b>	<b>1,096,930</b>	<b>1,109,562</b>	<b>1,068,861</b>	<b>1,104,295</b>	<b>1,050,655</b>	<b>1,132,490</b>	<b>1,155,863</b>	<b>1,180,765</b>	<b>1,192,255</b>	<b>1,138,956</b>	<b>1,107,591</b>	<b>76,470</b>	<b>19,118</b>	<b>1.7%</b>
<b>Other Counties</b>														
Boulder County	179,599	184,755	156,346	150,579	151,833	154,379	156,905	159,982	162,236	152,905	149,635	9,403	2,351	1.5%
Broomfield County [2]	—	—	25,480	25,852	27,737	28,741	29,703	30,511	30,411	29,863	28,852	4,659	1,165	4.2%
Clear Creek County	2,902	2,854	2,990	3,068	3,059	3,092	3,209	3,319	3,413	3,181	3,299	251	63	2.0%
Gilpin County	5,457	5,459	5,774	5,314	5,262	5,434	5,329	4,929	4,759	5,074	5,433	-385	-96	-1.9%
<b>All Areas</b>	<b>1,284,888</b>	<b>1,302,630</b>	<b>1,259,451</b>	<b>1,289,108</b>	<b>1,238,546</b>	<b>1,324,136</b>	<b>1,351,009</b>	<b>1,379,506</b>	<b>1,393,074</b>	<b>1,329,979</b>	<b>1,294,810</b>	<b>90,398</b>	<b>22,600</b>	<b>1.7%</b>

[1] Estimated by extrapolating from 1st quarter 2010 numbers from BLS.

[2] Broomfield was incorporated as a City and County in 2002.

Source: BLS; Economic & Planning Systems

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**Table 20**  
**CBEF Employment Forecast, 2010-2035**  
**US 36 Express Toll Lanes Analysis**

	2010	2015	2020	2025	2030	2035	Ann. %				
							10-15	15-20	20-25	25-30	30-35
<b>Geography</b>											
Clear Creek	3,054	3,648	3,937	4,066	4,096	4,068	3.62%	1.54%	0.65%	0.15%	-0.14%
Gilpin	6,229	6,813	7,109	7,301	7,422	7,498	1.81%	0.85%	0.53%	0.33%	0.20%
Denver-Metro Area	<u>1,442,195</u>	<u>1,657,372</u>	<u>1,786,252</u>	<u>1,891,146</u>	<u>1,976,652</u>	<u>2,047,878</u>	<u>2.82%</u>	<u>1.51%</u>	<u>1.15%</u>	<u>0.89%</u>	<u>0.71%</u>
<b>Est. Geography of DRCOG Data</b>	<b>1,451,478</b>	<b>1,667,833</b>	<b>1,797,298</b>	<b>1,902,513</b>	<b>1,988,170</b>	<b>2,059,444</b>	<b>2.82%</b>	<b>1.51%</b>	<b>1.14%</b>	<b>0.88%</b>	<b>0.71%</b>

Source: CBEF; BLS; Economic & Planning Systems

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## Future Year Adjustments by TAZ

EPS made adjustments to the employment and household projections at TAZ (site-specific) levels. The TAZs were selected that represented the location of major transit and non-transit development plans in the US 36 Influence Area, as illustrated by **Figure 9** and **Figure 10**. The adjustments summarized below were made based on knowledge of market trends and conditions surrounding those projects using a variety of factors.

### **Factors**

As mentioned previously, it is generally understood that an analysis of projections at a subarea or TAZ level produces results with degrees of accuracy. As such, EPS takes the approach of making adjustments to subareas or TAZ projections only when market information and research provides a clear basis. The following factors concerning market information and research were used to make these decisions with a clear basis.

- **Development Plans:** EPS gathered development plans for each of the major developments identified in **Figures 8 and 9**. To the extent available, EPS identified the residential and non-residential development programs, size of commercial spaces planned, number of dwelling units planned, and planned levels of density.
- **Entitlement Process:** EPS identified information regarding in which phase of the entitlement process each development stands. In many cases, the timing of developments has been postponed as a result of the recession. In the analysis, EPS also identified when the timing of the entitlement process was subject to other market forces, such as market pressure or timing of major transportation or capital improvements.
- **TAZ Attributes:** EPS considered the geographic parameters of the TAZs where the major plans are located. The development context, strength of the immediate market, the existing land uses, and topography were considered.
- **Market Studies:** For many of the major plans at a certain point in the entitlement process, EPS reviewed completed market studies. This identified the quantity of development that could be supported in the market and its timing.
- **Market Pressure:** EPS identified areas where supply and demand conditions are likely to generate development pressure. Given land constraints and the limited locations where development can occur, EPS identified areas within the US 36 Corridor that are particularly suited to capture future growth.
- **Proximity to Transportation:** As with the DRCOG transportation model, EPS considered access to transportation nodes as an attribute and catalyst to development.
- **Capital Improvements:** Particularly within the US 36 Corridor, there are multiple capital improvements that will generate future development pressure. EPS considered the timing of the Northwest Rail Corridor, the Gold Line, and the completion of Northwest Parkway.
- **Ownership Patterns:** EPS also considered ownership patterns in subareas without specific plans, but with subarea plans for redevelopment or revitalization. This analysis contributed to estimating the likelihood for property aggregation, and therefore, redevelopment potential and timing.

Figure 9  
Northern Portion of US 36 Influence Area  
US 36 Express Toll Lanes Analysis

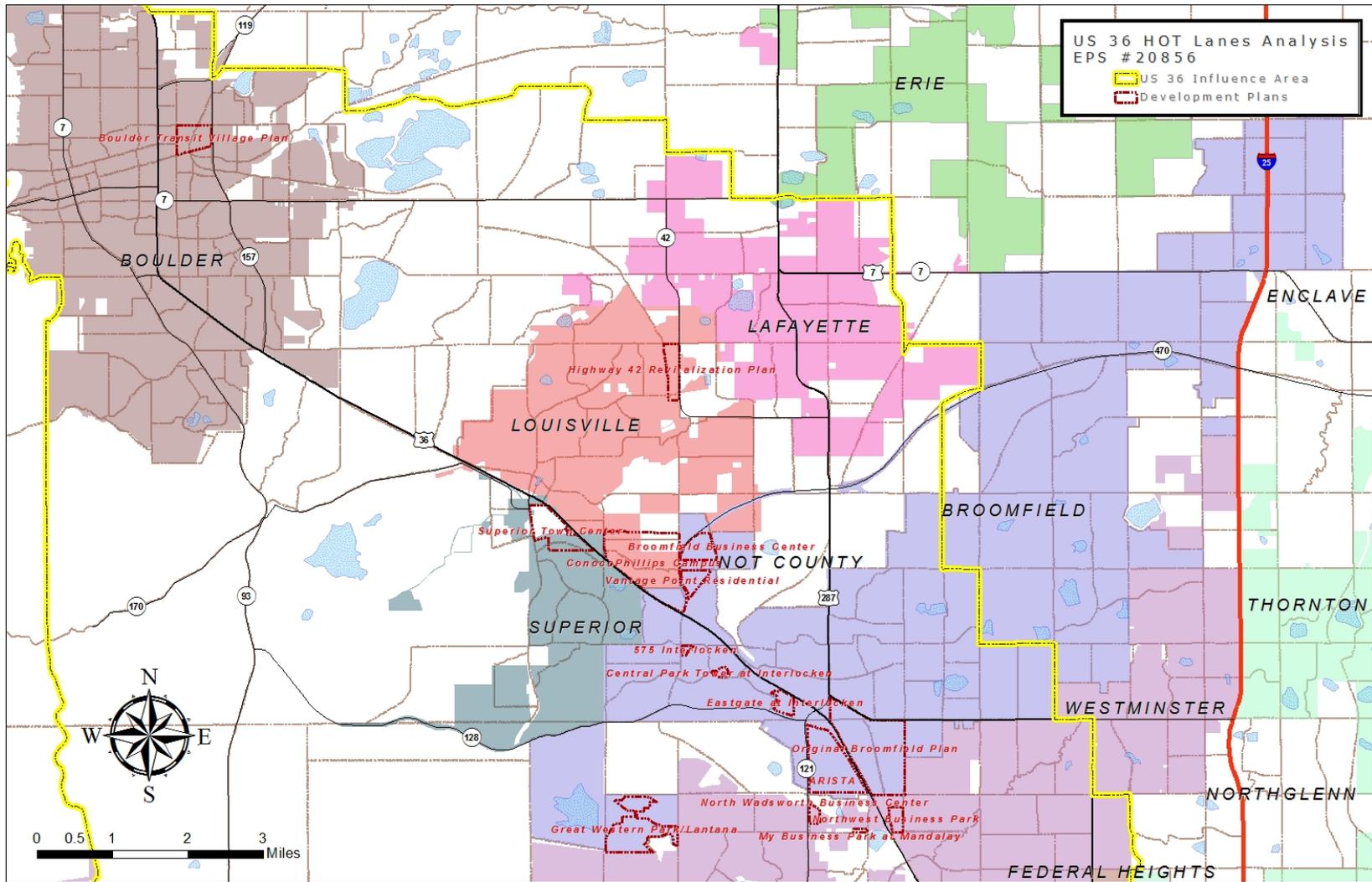
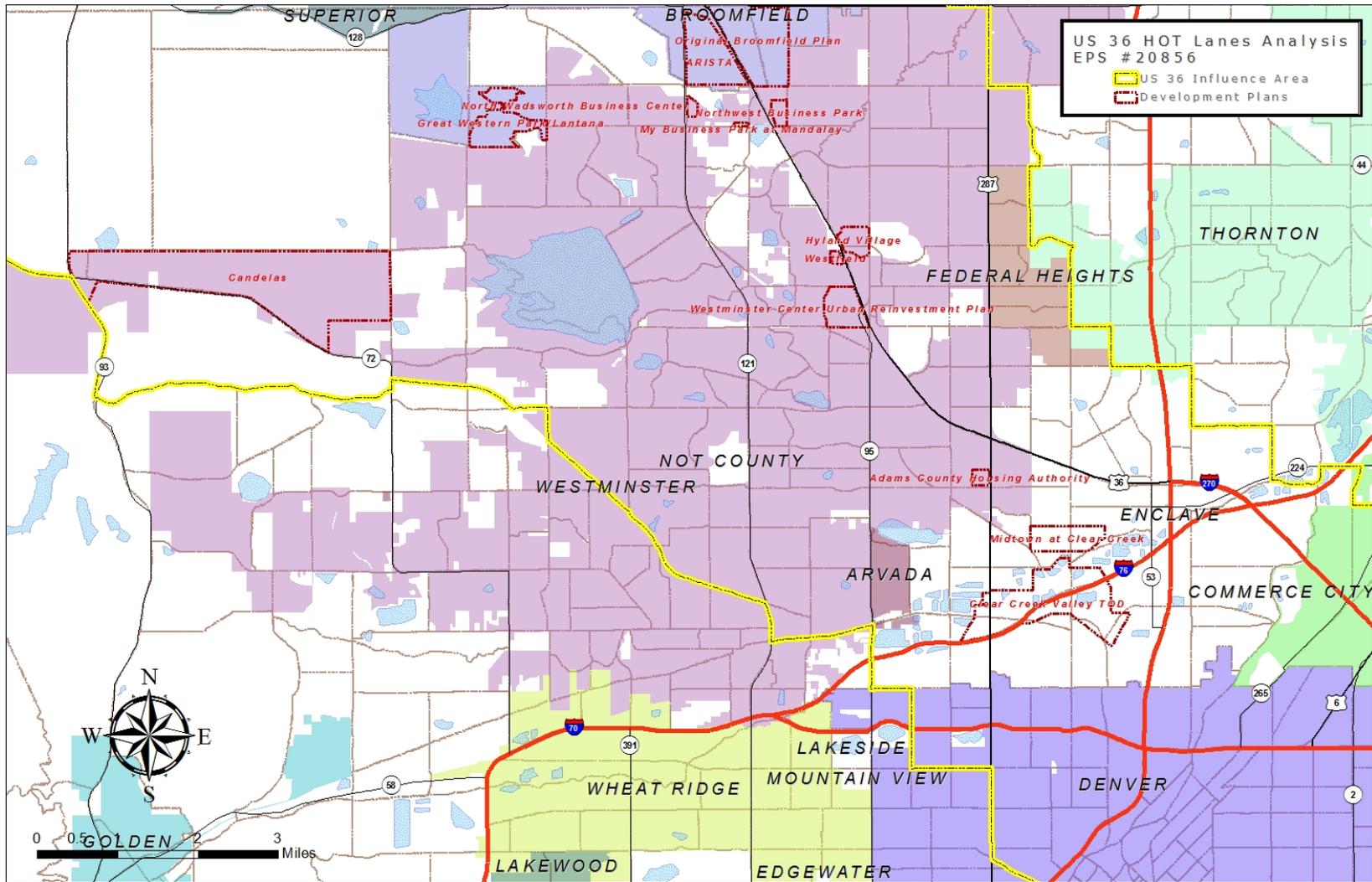


Figure 10  
Southern Portion of US 36 Influence Area  
US 36 Express Toll Lanes Analysis



### **Households and Population**

The following are descriptions of the major development plans evaluated for making TAZ/site-specific adjustments.

- **ARISTA:** DRCOG projected an increase of approximately 1,400 households for this area. EPS adjusted the magnitude and timing of this increase to approximately 2,500 households.
- **Clear Creek Valley TOD:** DRCOG projected households to increase by more than 3,800 in this vicinity. EPS reduced this to approximately 2,800 new households and made adjustments to the timing of these increases.
- **Mid Town at Clear Creek:** DRCOG projected households to increase by approximately 1,600. EPS adjusted this projection to approximately 1,800 new households and made adjustments to the timing.
- **Original Broomfield:** DRCOG projected an increase of nearly 400 households in this area. Given the nature of the area and its redevelopment potential, EPS eliminated future household growth in this area.
- **Highway 42 Revitalization Area:** DRCOG projected an increase of approximately 100 households in the area. EPS increased this forecast to 300 new households.
- **Boulder Transit Village:** DRCOG projected an increase of approximately 2,300 new households. EPS increased this forecast to 2,700 new households.
- **Westminster Center Reinvestment Area:** DRCOG projected an increase of approximately 1,900 new households. EPS increased this forecast to 2,500 new households.
- **Superior Town Center:** DRCOG projected an increase of approximately 1,000 new households. EPS increased this forecast to 1,700 new households.
- **ConocoPhillips Campus:** DRCOG projected an increase of approximately 160 new households. EPS made no adjustments to the increase of new households.
- **Candelas:** DRCOG projected an increase of approximately 5,000 new households. EPS reduced the forecast to 4,800 new households mainly by adjusting the timing of this development.
- **Northwest Business Park:** DRCOG projected an increase of approximately 1,000 new households. EPS reduced the forecast to 750 new households mainly by adjusting the timing of this development.
- **Business Park at Mandalay/North Wadsworth Business Center:** DRCOG projected an increase of approximately 400 new households. EPS made no adjustments to the increase of new households.
- **Hyland Village:** DRCOG projected an increase of approximately 500 new households. EPS adjusted the magnitude and timing of this forecast to approximately 600 new households.
- **Adams County Housing Authority:** DRCOG projected an increase of approximately 80 new households. EPS made no adjustments to the increase of new households.

- **Great Western Park:** DRCOG projected an increase of approximately 100 new households. EPS increased this forecast to 900 new households.
- **Interlocken:** DRCOG projected an increase of approximately 200 new households. EPS increased this forecast to 650 new households.
- **Broomfield Business Center:** DRCOG projected an increase of approximately 300 new households. EPS made no adjustments to the increase of new households.
- **Vantage Point Residential:** DRCOG projected an increase of approximately 500 new households. EPS increased this forecast to 700 new households.

### **Employment**

The following are the site-specific adjustments made to individual TAZs based on the analysis of market trends and conditions.

- **ARISTA:** This development is anticipated to generate a significant number of jobs. DRCOG projected an increase of more than 4,500 jobs for this major development. EPS made no changes to this projection.
- **Clear Creek Valley TOD:** Given setbacks to funding of RTD's FasTracks system, EPS made adjustments to the timing of employment growth at this site. EPS reduced DRCOG's projection of 3,800 new jobs from 2010 to 2035 to approximately 3,000.
- **Mid Town at Clear Creek:** Similar to Clear Creek Valley TOD, EPS reduced the number of projected jobs at this site. The projected number of jobs was reduced from approximately 1,900 to 1,600 new jobs from 2010 to 2035.
- **Original Broomfield:** The independent ownership of parcels in this geography are a major hurdle to redevelopment. EPS reduced the forecast of jobs in this area from more than 1,100 new jobs to 840 new jobs from 2010 to 2035.
- **Highway 42 Revitalization Area:** DRCOG had not anticipated the revitalization of this subarea in its 2007 revision to the 2035 forecasts. EPS increased the number of projected jobs for this location. Total employment at this location is projected to increase from 70 new jobs to 160 new jobs between 2010 and 2035.
- **Boulder Transit Village:** EPS made changes to the magnitude and timing of new jobs at the Boulder Transit Village location. EPS projects this area to grow by nearly 500 new jobs between 2010 and 2035, up from a forecast of 300 new jobs.
- **Westminster Center Reinvestment Area:** DRCOG projected this area to grow by more than 6,000 jobs. EPS reduced this projection to 5,000 new jobs.
- **Superior Town Center:** DRCOG projected employment at this location to increase by approximately 1,000 jobs. EPS adjusted this forecast up by approximately 800 jobs, reflecting the magnitude of the development potential and pressure on this location.

- **ConocoPhillips Campus:** DRCOG projected employment to grow by more than 5,000 jobs. Given recent market information and development plans for this site, EPS adjusted this forecast down to 2,400 new jobs.
- **Candelas Northwest Business Park:** DRCOG projected employment to increase by more than 3,600 jobs. EPS adjusted primarily the timing, not the magnitude of this forecast. EPS adjusted this forecast to reflect an increase of approximately 3,300 jobs.
- **Business Park at Mandalay/North Wadsworth Business Center:** DRCOG projected employment surrounding these developments to increase by more than 2,100 jobs. EPS adjusted this forecast to an increase of 800 jobs.
- **Hyland Village:** DRCOG projected employment to grow by 2,500 jobs at and around this location. EPS made no changes to this forecast.
- **Adams County Housing Authority:** DRCOG projected employment to grow by approximately 600 jobs at and around this location. EPS made no changes to this forecast.
- **Great Western Park:** DRCOG projected employment to grow by approximately 300 jobs at and around this location. EPS made no changes to this forecast.
- **Interlocken:** DRCOG projected employment to grow by approximately 1,400 jobs in this area. EPS increased this forecast to approximately 3,250 new jobs.
- **Broomfield Business Center:** DRCOG projected employment at this location to increase by nearly 2,300 jobs. EPS reduced this forecast to 1,550 jobs and changed the timing of the increase in jobs.
- **Vantage Point Residential:** DRCOG projected employment at this location to increase by more than 2,500 jobs. EPS reduced this forecast to 1,600 jobs and changed the timing of this increase in jobs as well.

## Summary of Differences

The following section identifies the differences between DRCOG's original forecasts and EPS' adjusted forecasts. A summary of the various adjustments is provided to identify the respective changes that occurred with each type of adjustment. This section also provides illustrative comparisons of the original DRCOG forecasts, the independent forecasts of CBEF and DOLA, and EPS' adjusted forecasts. Maps showing the adjustments geographically are also presented in this section.

### Households and Population

The original DRCOG forecast projected total households to reach 1,734,596 by 2035. After EPS' adjustments, the projected total households in 2035 is 1,584,231, as shown in **Table 21**. In total, this is a reduction of 8.7 percent to the 2035 control total. In the US 36 Influence Area, the overall reduction was 8.5 percent, and in the remaining portion of the nine-county DRCOG planning area, the reduction was 8.7 percent.

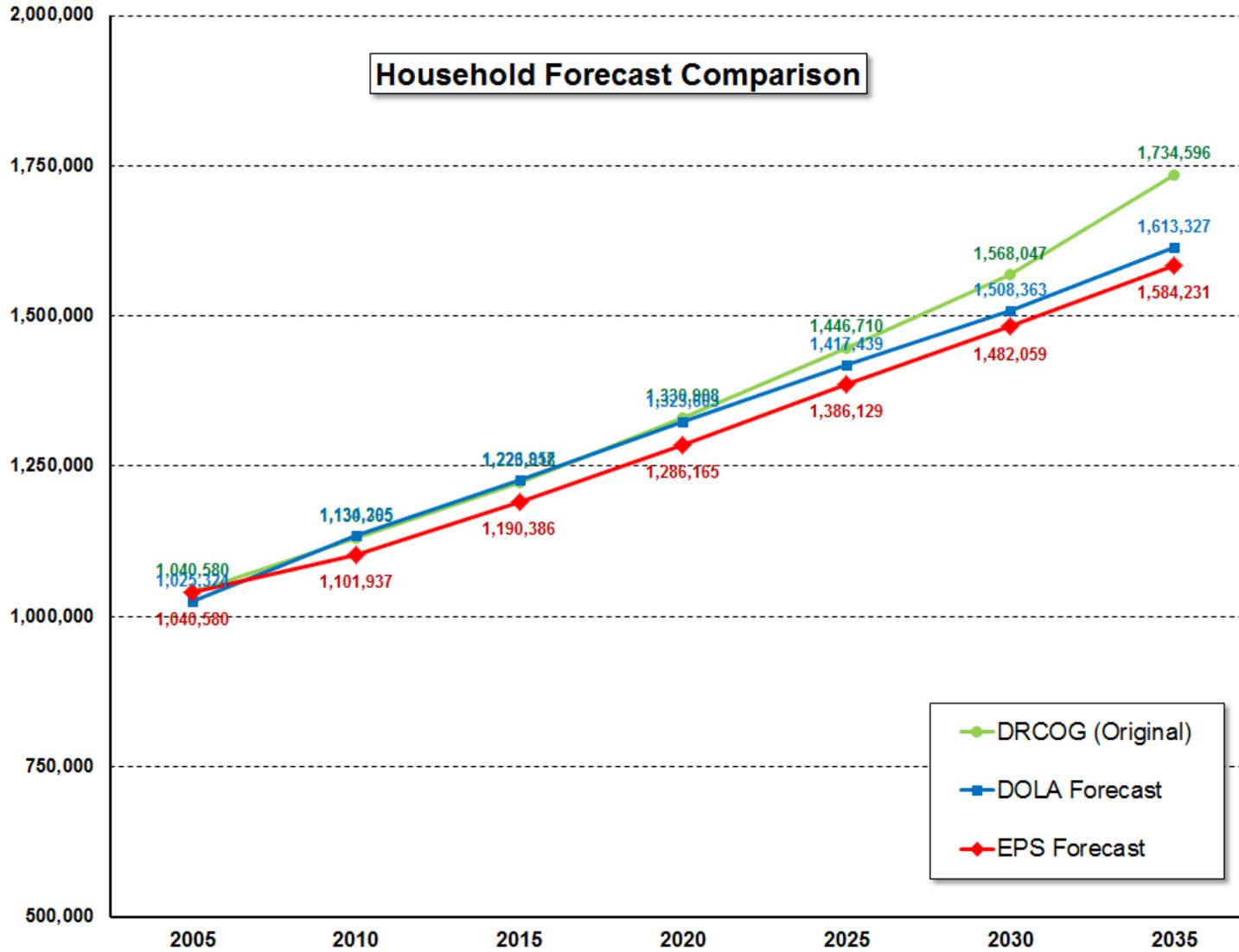
The first adjustment EPS made relates to the 2010 base forecast year and the subsequent years. As shown in **Table 21**, this adjustment accounts for 1.6 percent of the total 8.7 percent reduction to the 2035 forecast. This adjustment can also be seen in **Figure 11**. As described previously, this adjustment was made to reflect the number of building permits issued from 2005 to 2009. Subsequent years were also adjusted by the same number to reflect an adjusted base.

The largest portion of the adjustments came from the second adjustment. EPS calibrated growth rates to reflect the tapering of growth over time that occurs with an increasing base. These adjustments were made at the county level and by time period. Overall, this accounts for 6.9 percent of the total 8.7 percent reduction in total households in 2035.

The third adjustment accounts for 0.1 percent of the total 8.7 percent reduction. While small, these adjustments were made in the US 36 Influence Area and play an important role in the generation of travel demand. As shown in **Figure 12** and **Figure 13**, adjustments were both positive and negative. Applying the factors described previously, many positive adjustments to total households were concentrated in areas surrounding transportation corridors. Negative adjustments, on the other hand, often occurred in more remote locations farther from transportation corridors.

Also as mentioned previously, changes in the population forecasts are related to the adjustments in households by the average household size factor. The adjusted 2035 population forecast is 8.8 percent lower than the original DRCOG forecast. Population is projected to grow at an average rate of 1.3 percent per year to 2035, down from the original DRCOG forecast of 1.6 percent per year.

Figure 11  
Household Forecast Comparison  
US 36 Express Toll Lanes Analysis



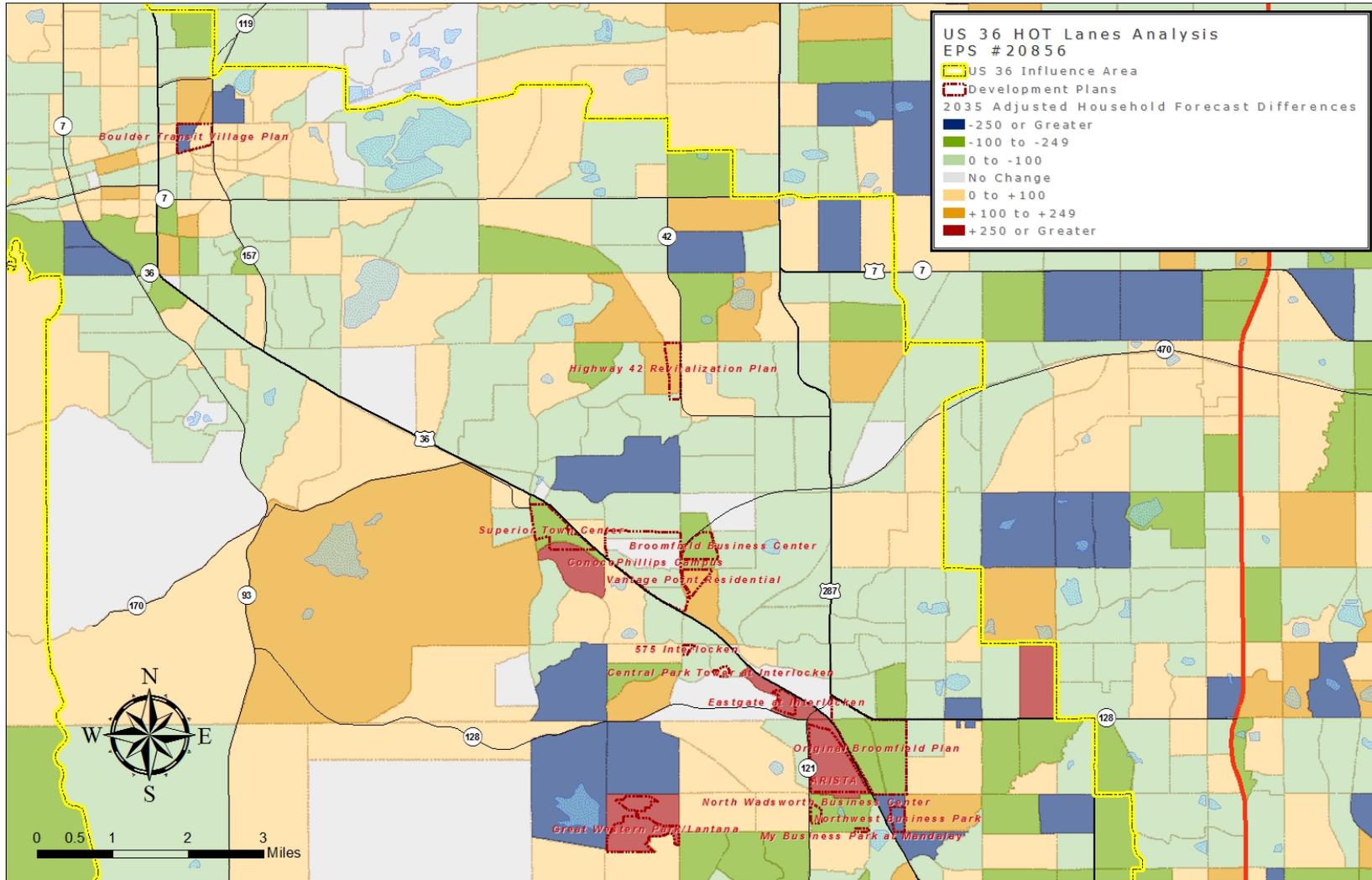
**Table 21**  
**Summary of Household Forecast Differences**  
**US 36 Express Toll Lanes Analysis**

	2005	2010	2015	2020	2025	2030	2035	2010-2035			2010-2020			2020-2035		
								Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Original DRCOG Forecast</b>																
US 36 Corridor	196,048	210,703	224,017	239,286	255,796	273,074	296,801	86,098	3,444	1.4%	28,583	2,858	1.3%	57,515	3,834	1.4%
Remainder	844,532	919,662	999,801	1,091,622	1,190,914	1,294,973	1,437,795	518,133	20,725	1.8%	171,960	17,196	1.7%	346,173	23,078	1.9%
<b>Total</b>	<b>1,040,580</b>	<b>1,130,365</b>	<b>1,223,818</b>	<b>1,330,908</b>	<b>1,446,710</b>	<b>1,568,047</b>	<b>1,734,596</b>	<b>604,231</b>	<b>24,169</b>	<b>1.7%</b>	<b>200,543</b>	<b>20,054</b>	<b>1.6%</b>	<b>403,688</b>	<b>26,913</b>	<b>1.8%</b>
<b>Adjustments to Total</b>																
Adjustment 1: 2010 & Subsequent Years	0	-28,428	-28,428	-28,428	-28,428	-28,428	-28,428	---	---	---	---	---	---	---	---	---
Adjustment 2: County Growth Rates	0	0	-1,866	-11,794	-28,317	-55,573	-119,704	---	---	---	---	---	---	---	---	---
Adjustment 3: TAZ (Site-Specific)	0	0	-3,138	-4,521	-3,836	-1,987	-2,233	---	---	---	---	---	---	---	---	---
<b>Total</b>	<b>0</b>	<b>-28,428</b>	<b>-33,432</b>	<b>-44,743</b>	<b>-60,581</b>	<b>-85,988</b>	<b>-150,365</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>as %</b>																
Adjustment 1: 2010 & Subsequent Years	0.0%	-2.5%	-2.3%	-2.1%	-2.0%	-1.8%	-1.6%	---	---	---	---	---	---	---	---	---
Adjustment 2: County Growth Rates	0.0%	0.0%	-0.2%	-0.9%	-2.0%	-3.5%	-6.9%	---	---	---	---	---	---	---	---	---
Adjustment 3: TAZ (Site-Specific)	0.0%	0.0%	-0.3%	-0.3%	-0.3%	-0.1%	-0.1%	---	---	---	---	---	---	---	---	---
<b>Total</b>	<b>0.0%</b>	<b>-2.5%</b>	<b>-2.7%</b>	<b>-3.4%</b>	<b>-4.2%</b>	<b>-5.5%</b>	<b>-8.7%</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>EPS Adjusted Forecast</b>																
US 36 Corridor	196,048	205,230	215,036	227,441	242,081	257,329	271,507	66,277	2,651	1.1%	22,211	2,221	1.0%	44,066	2,938	1.2%
Remainder	844,532	896,707	975,350	1,058,724	1,144,048	1,224,730	1,312,724	416,017	16,641	1.5%	162,017	16,202	1.7%	254,000	16,933	1.4%
<b>Total</b>	<b>1,040,580</b>	<b>1,101,937</b>	<b>1,190,386</b>	<b>1,286,165</b>	<b>1,386,129</b>	<b>1,482,059</b>	<b>1,584,231</b>	<b>482,294</b>	<b>19,292</b>	<b>1.5%</b>	<b>184,228</b>	<b>18,423</b>	<b>1.6%</b>	<b>298,066</b>	<b>19,871</b>	<b>1.4%</b>
<b>Differences</b>																
US 36 Corridor	0	-5,473	-8,981	-11,845	-13,715	-15,745	-25,294	---	---	---	---	---	---	---	---	---
Remainder	0	-22,955	-24,451	-32,898	-46,866	-70,243	-125,071	---	---	---	---	---	---	---	---	---
<b>Total</b>	<b>0</b>	<b>-28,428</b>	<b>-33,432</b>	<b>-44,743</b>	<b>-60,581</b>	<b>-85,988</b>	<b>-150,365</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>as %</b>																
US 36 Corridor	0.0%	-2.6%	-4.0%	-5.0%	-5.4%	-5.8%	-8.5%	---	---	---	---	---	---	---	---	---
Remainder	0.0%	-2.5%	-2.4%	-3.0%	-3.9%	-5.4%	-8.7%	---	---	---	---	---	---	---	---	---
<b>Total</b>	<b>0.0%</b>	<b>-2.5%</b>	<b>-2.7%</b>	<b>-3.4%</b>	<b>-4.2%</b>	<b>-5.5%</b>	<b>-8.7%</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>

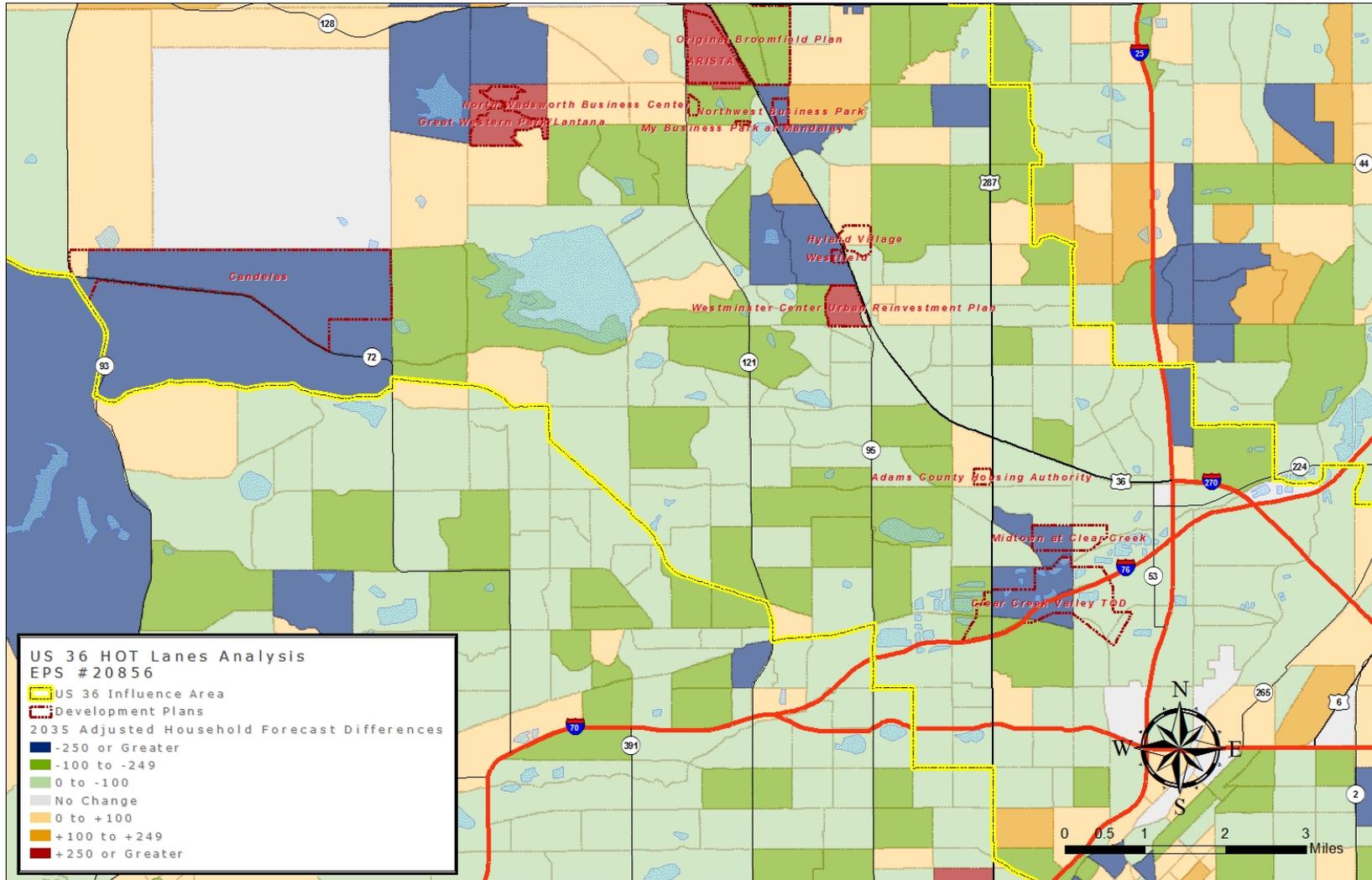
Source: DRCOG; Economic & Planning Systems

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**Figure 12**  
**2035 Adjusted Household Forecast Differences, Northern Portion**  
**US 36 Express Toll Lanes Analysis**



**Figure 13**  
**2035 Adjusted Household Forecast Differences, Southern Portion**  
**US 36 Express Toll Lanes Analysis**



## Employment

The original DRCOG forecast projected total employment to reach 2,183,066 by 2035. After EPS' adjustments, the projected total employment in 2035 is 1,844,703, as shown in **Table 22**. In total, this is a reduction of 15.5 percent to the 2035 control total. In the US 36 Influence Area, the overall reduction was 13.7 percent, and in the remaining portion of the nine-county DRCOG planning area the reduction was 16.0 percent.

The first adjustment EPS made relates to the 2010 base forecast year and the subsequent years. As shown in **Table 22**, this adjustment accounts for 1.6 percent of the total 15.5 reduction to employment in 2035. These adjustments are also illustrated by **Figure 14**. As described previously, this adjustment was made to reflect the change in wage and salary jobs reported from 2005 to 2010. Subsequent years were also adjusted by the same number to reflect an adjusted base.

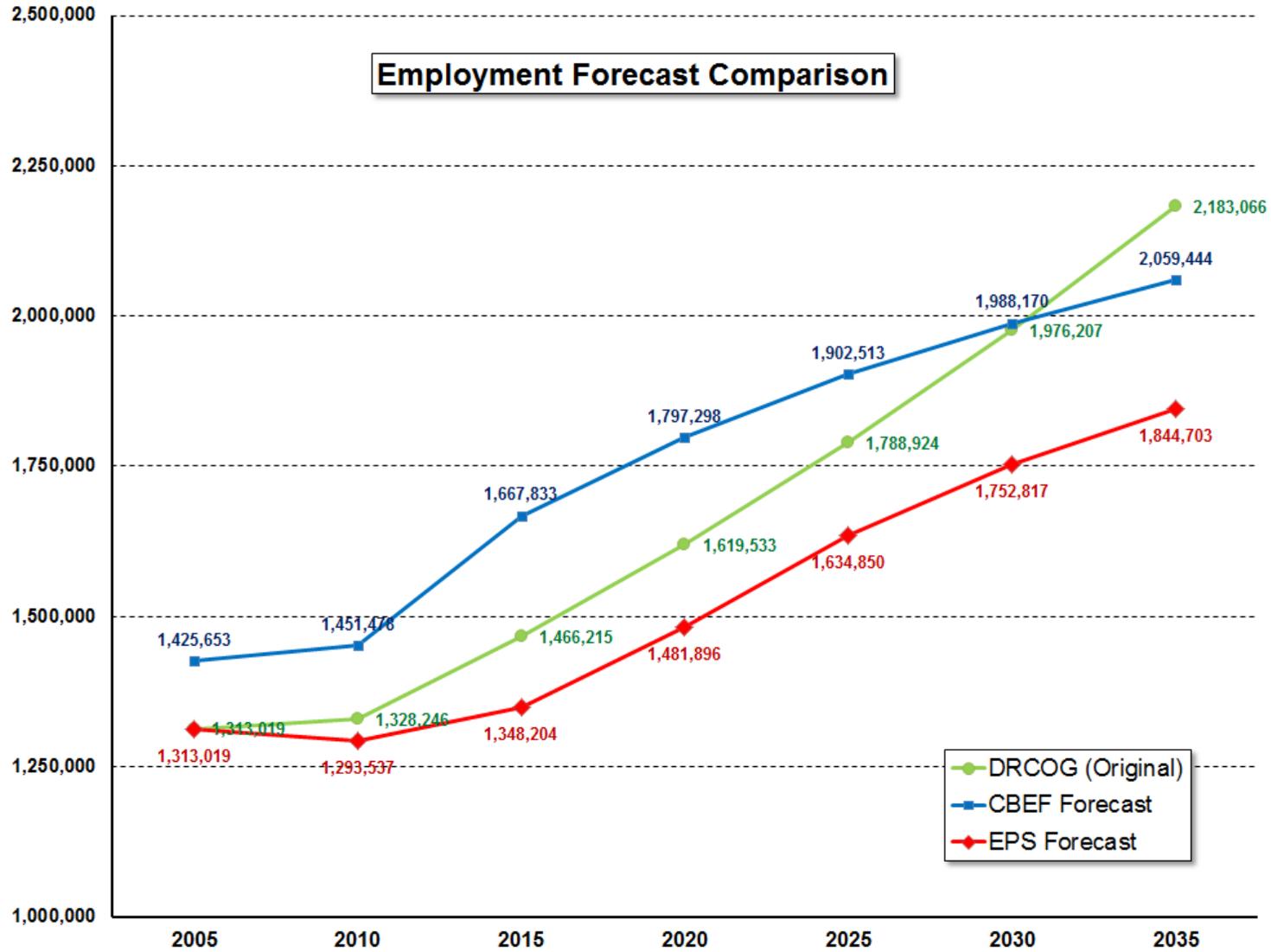
The largest portion of the adjustments came from the second adjustment. EPS calibrated growth rates to reflect the tapering of growth over time that occurs with an increasing base. Similar to the second household adjustment, these adjustments were made by county and by time period. Overall, these adjustments accounted for 13.6 percent of the total 15.5 percent reduction in 2035 employment.

The third adjustment made at TAZ levels accounted for 0.3 percent of the total 15.5 percent reduction. Adjustments to TAZs in the Influence Area were positive and negative. As mentioned previously, consideration was given to the timing of development given the impacts of the recession. This factor was among the major contributing factors to reductions in employment projections, as shown in **Figure 15** and **Figure 16**. A majority of the reductions in employment projections at the TAZ level for 2035 relate to development being pushed back, not necessarily eliminated.

## Summary

A comparison of the original DRCOG forecasts and EPS' adjusted forecasts are shown in **Figure 17**. The adjusted projections of employment, households, and population are shown in contrast to the original DRCOG forecasts illustrating order of magnitude differences. The adjustments, as described in this report, reflect extensive data and market analysis, research, and understanding of the original DRCOG model and forecasts.

Figure 14  
Employment Forecast Comparison  
US 36 Express Toll Lanes Analysis



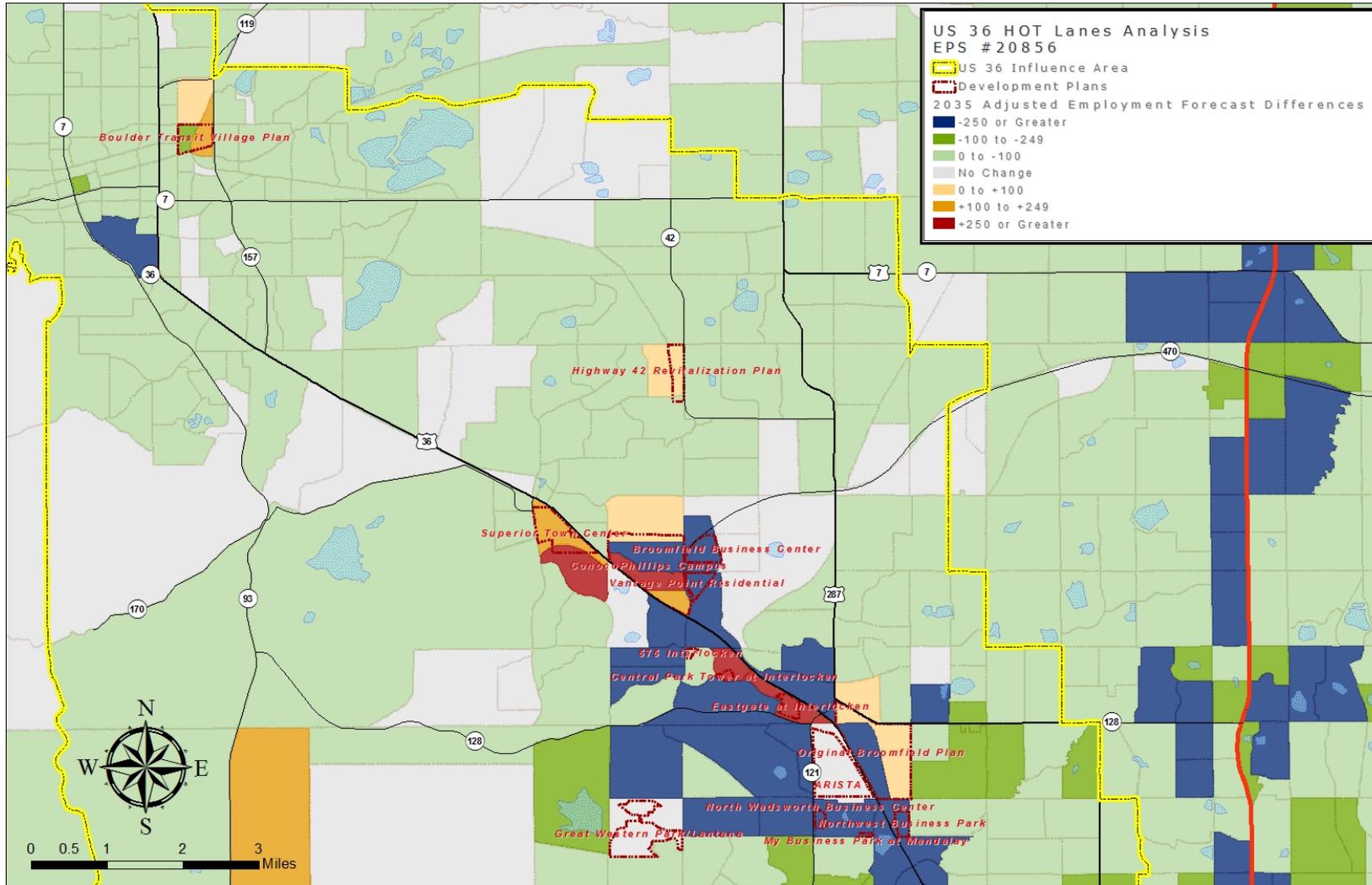
**Table 22**  
**Summary of Employment Forecast Differences**  
**US 36 Express Toll Lanes Analysis**

	2005	2010	2015	2020	2025	2030	2035	2010-2035			2010-2020			2020-2035		
								Total	Ann. #	Ann. %	Total	Ann. #	Ann. %	Total	Ann. #	Ann. %
<b>Original DRCOG Forecast</b>																
US 36 Corridor	303,845	301,124	332,952	368,274	407,308	450,485	498,150	197,026	7,881	2.0%	67,150	6,715	2.0%	129,876	8,658	2.0%
Remainder	1,009,174	1,027,122	1,133,263	1,251,259	1,381,616	1,525,722	1,684,916	657,794	26,312	2.0%	224,137	22,414	2.0%	433,657	28,910	2.0%
<b>Total</b>	<b>1,313,019</b>	<b>1,328,246</b>	<b>1,466,215</b>	<b>1,619,533</b>	<b>1,788,924</b>	<b>1,976,207</b>	<b>2,183,066</b>	<b>854,820</b>	<b>34,193</b>	<b>2.0%</b>	<b>291,287</b>	<b>29,129</b>	<b>2.0%</b>	<b>563,533</b>	<b>37,569</b>	<b>2.0%</b>
<b>Adjustments to Total</b>																
Adjustment 1: 2010 & Subsequent Years	0	-34,709	-34,709	-34,709	-34,709	-34,709	-34,709	--	--	--	--	--	--	--	--	--
Adjustment 2: County Growth Rates	0	0	-80,020	-100,206	-116,716	-184,491	-296,677	--	--	--	--	--	--	--	--	--
Adjustment 3: TAZ (Site-Specific)	0	0	-3,282	-2,722	-2,649	-4,190	-6,977	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>0</b>	<b>-34,709</b>	<b>-118,011</b>	<b>-137,637</b>	<b>-154,074</b>	<b>-223,390</b>	<b>-338,363</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>as %</b>																
Adjustment 1: 2010 & Subsequent Years	0.0%	-2.6%	-2.4%	-2.1%	-1.9%	-1.8%	-1.6%	--	--	--	--	--	--	--	--	--
Adjustment 2: County Growth Rates	0.0%	0.0%	-5.5%	-6.2%	-6.5%	-9.3%	-13.6%	--	--	--	--	--	--	--	--	--
Adjustment 3: TAZ (Site-Specific)	0.0%	0.0%	-0.2%	-0.2%	-0.1%	-0.2%	-0.3%	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>0.0%</b>	<b>-2.6%</b>	<b>-8.0%</b>	<b>-8.5%</b>	<b>-8.6%</b>	<b>-11.3%</b>	<b>-15.5%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>EPS Adjusted Forecast</b>																
US 36 Corridor	303,845	292,716	307,504	338,689	375,099	404,478	429,983	137,267	5,491	1.6%	45,973	4,597	1.5%	91,294	6,086	1.6%
Remainder	1,009,174	1,000,821	1,040,700	1,143,207	1,259,751	1,348,339	1,414,720	413,899	16,556	1.4%	142,386	14,239	1.3%	271,513	18,101	1.4%
<b>Total</b>	<b>1,313,019</b>	<b>1,293,537</b>	<b>1,348,204</b>	<b>1,481,896</b>	<b>1,634,850</b>	<b>1,752,817</b>	<b>1,844,703</b>	<b>551,166</b>	<b>22,047</b>	<b>1.4%</b>	<b>188,359</b>	<b>18,836</b>	<b>1.4%</b>	<b>362,807</b>	<b>24,187</b>	<b>1.5%</b>
<b>Differences</b>																
US 36 Corridor	0	-8,408	-25,448	-29,585	-32,209	-46,007	-68,167	--	--	--	--	--	--	--	--	--
Remainder	0	-26,301	-92,563	-108,052	-121,865	-177,383	-270,196	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>0</b>	<b>-34,709</b>	<b>-118,011</b>	<b>-137,637</b>	<b>-154,074</b>	<b>-223,390</b>	<b>-338,363</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>as %</b>																
US 36 Corridor	0.0%	-2.8%	-7.6%	-8.0%	-7.9%	-10.2%	-13.7%	--	--	--	--	--	--	--	--	--
Remainder	0.0%	-2.6%	-8.2%	-8.6%	-8.8%	-11.6%	-16.0%	--	--	--	--	--	--	--	--	--
<b>Total</b>	<b>0.0%</b>	<b>-2.6%</b>	<b>-8.0%</b>	<b>-8.5%</b>	<b>-8.6%</b>	<b>-11.3%</b>	<b>-15.5%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>

Source: DRCOG; Economic & Planning Systems

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**Figure 15**  
**2035 Adjusted Employment Forecast Differences, Northern Portion**  
**US 36 Express Toll Lanes Analysis**



**Figure 16**  
**2035 Adjusted Employment Forecast Differences, Southern Portion**  
**US 36 Express Toll Lanes Analysis**

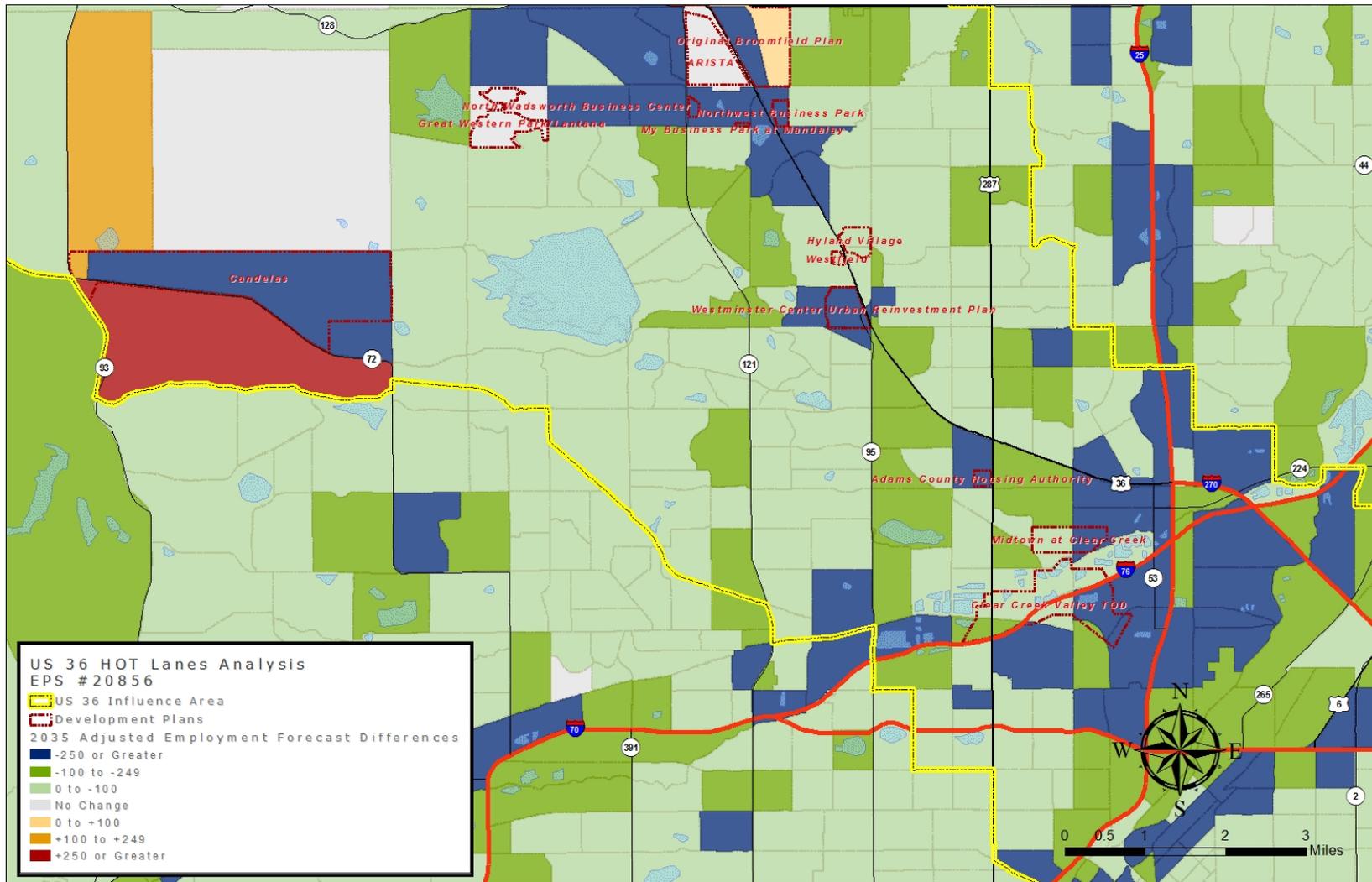


Figure 17  
Forecast Comparisons  
US 36 Express Toll Lanes Analysis

