

Public Workshop – Level of Service and the County’s Travel Demand Model

October 10, 2016 6:30 – 8:00 PM

Response to Public Comments and Questions

On October 10, 2016, County staff hosted a public workshop on Level of Service (LOS) and the County’s Travel Demand Model (TDM). County staff encouraged members of the public to submit questions or comments on this topic by October 14, 2016. This document contains the public comments and staff’s responses, listed in the order they were received:

- Section 1 – Public Comments Not Answered at the Workshop
- Section 2 – David Goldenberg
- Section 3 – John Raslear
- Section 4 – Mary Lou Giles
- Section 5 – Rusty Everett
- Section 6 – Ellen Van Dyke
- Section 7 – Don Van Dyke

Section 1: Public Comments Not Answered at the Workshop

The following contains responses to the public comments and questions that were not answered at the public workshop. The public workshop transcript contains the questions and answers that were answered at the public workshop.

Comment 1.1: Sue Taylor: So you mentioned 55 projects, are those funded? Are those fully funded? Those all have funding to move forward this year?

Response 1.1: Yes, these projects are in the 2016 Interim CIP Book, adopted on June 7, 2016. The work on these projects scheduled for Fiscal Year (FY) 2016/17 is fully funded through the Community Development Agency’s (CDA) annual budget. However, this does not include full funding for all phases of each project. The County’s Interim Capital Improvement Program (CIP) includes projected revenue sources for each project.

Comment 1.2: Sue Taylor: Will they improve LOS F? You mention them in relation to accounting for those issues, but will they actually prevent LOS F?

Response 1.2: Tables 1-1 and 1-2 of the County’s Interim CIP identify the 55 projects that are currently in the Construction, Planning, Design, or Right of Way phases in FY

2016/17. The following projects are projected to improve future traffic operations to prevent LOS F:

Projects in Construction or Scheduled to Begin Construction:

- Diamond Springs Parkway Phase 1A (CIP # 72375)
- Silva Valley Parkway/Serrano Parkway Traffic Circulation Improvement (CIP # 72141)
- US 50/Silva Valley Parkway Interchange Phase 1 (CIP # 71328)

Projects in Planning, Design, or Right of Way Phases:

- Diamond Springs Parkway Phase 1B (CIP # 72334)
- Silver Springs Parkway to Bass Lake Road (South Segment) (CIP # 76108)
- Cameron Park Drive Interchange Improvements (CIP # 72361)
- US 50/Ponderosa Road/So. Shingle Rd Interchange Improvements (CIP # 71333)
- Apache Avenue/US 50 Intersection Signalization (CIP # 73120)

The work on these projects scheduled for FY 2016/17 is fully funded through the CDA's annual budget. However, this does not include full funding for all phases of each project. The County's 2016 Interim CIP includes projected revenue sources for each project.

Comment 1.3: Bill Center: One of the things that the graphs pretty clearly showed was that as speed dropped, volume dropped. And so one of the concerns is that the County continues to insist on using primarily if not exclusively the volume data. And as I said before the Board a couple weeks ago, using volume data, albeit taking it to the extreme, if speed is zero and volume is zero, therefore LOS is A, which makes no sense. And so, when the PEMS data is showing that the speed is dropping, on a consistent basis. And the County is using, as far as we can tell from their communication with us, pretty much exclusively volume as a determination of whether there is an LOS F threshold; i.e. 4,000 vehicle trips per hour. So that's a concern – that there is a robust data set but it does have holes in it. But one of the things we haven't seen on any of the data you've presented, was traffic data from the Tues to Thurs period in the fall in recent years.

But one of the things we haven't seen on any of the data you've presented, was traffic data from the Tues to Thurs period in the fall in recent years. And consistently in your presentation you started to refer to average, typical, non-accident caused, as a measurement, or as a criteria for measuring LOS F. And that, to my knowledge, does not appear in the General Plan as the criteria for LOS F. It is an average. We all know accidents occur, more frequently when traffic is intense, when density increases. So, one of the things that happens is that you get this kind of perverse reaction where there is less volume and lower speeds, and therefore what you're ignoring is that the HCM, which is as you said the nationally recognized standard, based on observed data. But what you didn't say is that you need to use not just volume, but speed and density in determining LOS. You've also said that you've made 2 or 3 basic assumptions over the next 5 years:

You won't see as much traffic increase in the next 5 years as in the last five years, because you don't see the unemployment rate going down.

Expanding parallel capacity and expanding and adding auxiliary lanes to HWY 50 is going to occur. The implication was that this was going to occur in the next 5 years. I do not believe that this is slated for completion in the next 5 years on the CIP. And I do not believe that it is fully funded. I may be mistaken, but I haven't seen any data that the design has been approved by Caltrans.

So I guess my question is that at what point and with what data will the County acknowledge that HWY 50 has reached LOS F? And can they say that up front so that people can be clear about it, in the Community Region of EDH. And, as importantly, at what point and with what data, particularly on modeling point, will HWY 50 reach LOS E in the rural region, between Cambridge and Bass Lake, because that is the General Plan standard? So you can put that as a part of... if somebody wants to provide an answer, that's great, but if not, I'd just like it to be part of the records.

Response 1.3: The first paragraph of this comment was addressed by John Long, Mike Schmitt, and Mike Aronson at the public workshop and was therefore excluded from this response. The County has repeatedly stated that the methodology used to calculate LOS, as required by our General Plan Policy TC-Xd, must be as defined in the latest edition of the Highway Capacity Manual (HCM), and shall be calculated using the methodologies contained in that manual. For basic freeway segments, LOS is based on density. Traffic volumes are one of the inputs into the

technical calculations. Traffic speed is not a direct input into the LOS calculation; however it is used to verify the accuracy of the LOS results. In this case, the speeds observed on Highway 50 at the County Line concur with the HCM description of LOS E:

“LOS E describes operation at capacity. Operations on the freeway at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption to the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown and substantial queuing. The physical and psychological comfort afforded to drivers is poor.”

It is standard practice to evaluate LOS for General Plans and TIM fee programs using “average weekday” conditions. It is standard practice to define average weekday conditions as a typical midweek (Tuesday, Wednesday or Thursday) when schools are in session and away from holidays. We are not aware of any jurisdiction in the greater Sacramento region that does not follow that practice.

We are not aware of any jurisdiction or agency that has ever attempted to design a roadway to provide an acceptable LOS for unpredictable traffic situations, including crashes and road hazards (e.g., debris in the roadway) that temporarily affect LOS. The location, frequency and level of impact of these situations are impossible to predict. The County and Caltrans do carefully follow best practices when designing roadways to minimize crashes.

The presentation included a graph of unemployment rates from the US Bureau of Labor Statistics. The graph shows that unemployment rates dropped from about 12% in 2010 to 6% in 2015, which contributed to growth in traffic during that same period. County staff speculates that the unemployment rate is unlikely to drop significantly, as it did between 2010 and 2015. The County’s average unemployment rate between 1990 and 2016 is 6.7%. The County’s historical unemployment rate is shown in Figure 1 below.

**Figure 1: El Dorado County Unemployment Rate
1990 - 2016**



Source: US Bureau of Labor Statistics

The County is not planning to add auxiliary lanes to Highway 50 in the next five years. This was not stated by agency staff or the consultants during the public workshop. The commenter is incorrect.

The County has conducted a future deficiency analysis as part of the Major CIP and TIM Fee Program Update. This analysis uses HCM methodology to determine if roadways on the County's West Slope will reach LOS F in the Community Regions or LOS E in the Rural Regions within the current planning horizon (2015 – 2035). This process was described during the public workshop and in Technical Memorandum 2-3 from the Major CIP & TIM Fee Program Update (see Legistar Item 14-0245, Attachment 16H).

Comment 1.4: John Raslear: You've mentioned two planned projects, or two projects that would improve the LOS. One of them is the Silva Valley Interchange, and anyone who has traveled on White Rock Road, close to the Silva Valley Interchange at 4:30 or 5:00 realizes that that road is so heavily travelled now that it backs up from Valley View, going to Target, to Post Street. And this is before Folsom, not Folsom, but you'll have that interchange highway coming down White Rock Road, which will impact this area tremendously. It will be astronomical, the amount of traffic that will come through. So I don't see how you're claiming that the Silva Valley Interchange has done anything to improve our local traffic.

Response 1.4: The Silva Valley Parkway Interchange has significantly improved traffic operations at many intersections and on Highway 50 in El Dorado Hills. Preliminary traffic data and field observations show that the interchange has caused some traffic to shift from the El Dorado Hills Boulevard Interchange to the Silva Valley Parkway Interchange. This change in traffic patterns may result in more traffic at some intersections, such as the White Rock Road/Valley View Parkway intersection, as mentioned by the commenter. The County is monitoring the roadways around the new interchange closely. Improvements will be made if deficiencies are identified and prioritized by the Board of Supervisors.

Comment 1.5: Sue Taylor: Most of us feel like this is very staged, and that we've brought up the letters several times and you take out one sentence out of a letter that was 3 pages. And there's more information in those letters than the quotes that you present. So this doesn't feel like a good public process. I just want that ...
[Unintelligible]

Response 1.5: Comment noted. County and Caltrans staff have worked together for the past several years to address differences in LOS determinations. The public workshop was an opportunity for Caltrans staff to join County staff to present the results of that effort. County staff felt it would be helpful for members of the public to hear directly from Caltrans; therefore they were included as co-presenters at the public workshop.

All of the letters that the County has quoted have been provided to the public in their entirety. The quotes pulled from the letters are intended to represent the key message in each letter.

Section 2: David Goldenberg

Comment 2.1: I am an EDH resident near the intersection of Green Valley and Silva Valley. I used the Silva Valley Interchange to access Highway 50 before school started. Now that school is in session I have to pass thru 4 schools. Because of the school traffic it takes too much time to work my way thru traffic so I have reverted to go back to El Dorado Hills Blvd. How can the County alleviate a work around to access the Silva Valley Interchange and to get around the traffic from the 4 schools?

Response 2.1: The County recently made improvements to intersections along Silva Valley Parkway, including Silva Valley Parkway/ Oak Meadow Elementary School driveway, Silva Valley Parkway/Entrada Drive, and Silva Valley Parkway/Serrano Parkway. These improvements were intended to improve traffic circulation near the school after the opening of the interchange.

Additionally, the Transportation Division' grant application was recently approved for improvements to the Silva Valley Parkway/Harvard Way intersection. The federal grant funds come from the Congestion Management and Air Quality (CMAQ) Improvement Program and the Surface Transportation Block Grant Program and matched with County TIM Fee dollars. Once the funds are authorized, the Transportation Division will begin the design phase of the project. Construction will follow shortly after.

Comment 2.2: What happens to LOS and traffic speeds if you remove the car pool lane from the calculation? It appears to me traffic is much slower than the calculation because not everyone is fortunate enough to use the car pool lane and take advantage of the increased speeds.

Response 2.2: The car pool lanes are not included in the LOS calculations or the traffic speeds. The data presented at the public workshop on October 10, 2016, in slides 33 – 37 only includes the general purpose lanes (i.e. mixed-flow lanes). This is noted in the lower right corner of the slides, which are available on the County's website. The HOV lanes are not included in the data presented on the slides or the methodology used to calculate LOS.

Section 3: John Raslear

Comment 3.1: Monday evening (10/10/16) I attended a Transportation Workshop held in the El Dorado Hills Fire Station. At that meeting which was hosted by the El Dorado Department of Transportation and consisted of a panel of Dept engineers, DOT Chief Engineering Planner, private engineering contactors and engineers from CALTRANS. At this well attended meeting, the audience was told that present and future projects by DOT would alleviate the traffic congestion that we experience in EL Dorado Hills , which many feel is at level F.

I made a public comment that their projects did not in fact alleviate traffic congestion: Existing project: Silva Valley Interchange has caused a huge backup of traffic from the traffic light on White Rock Road at the Target entrance to Town Center to Post Street. I also pointed out the Connector Highway using White Rock Road will add significant traffic to the already congestion going to this interchange. Future project: Saratoga Road extension from El Dorado Hills Blvd to Iron Point Road in Folsom. The extension is planned to be a two lane road, despite the recommendations of the El Dorado Hill Area Advisory Planning Committee. DOT refused the recommendations of the El Dorado Hills Area Natalie (last name) responded to me and the residents that I was wrong that our Supervisor have approved a 4 lane extension. This is contrary to what I was informed. Earlier today I was informed that Natalie misinformed the public about this extension. It has been approved as a two lane extension, which will not alleviate traffic as per the recommendations of APAC.

How will DOT inform the public that this statement (repeated twice) by a member of DOT was incorrect and why didn't any of the panel of experts correct her statement?

Response 3.1: At the September 13, 2016 Board hearing, the Board modified staff's recommendation for the Saratoga Estates development project to include the addition of a finding to construct Saratoga Way with 4 lanes (instead of 2) from the County Line (Iron Point) to Wilson Boulevard, and with 2 lanes from Wilson Boulevard to the existing terminus of Saratoga Way.

A link to the Board of Supervisors hearing video is provided below. The motion can be heard at the 6:29 (6 hour-29 minute) mark.

http://eldorado.granicus.com/MediaPlayer.php?view_id=2&clip_id=854

The information provided by staff at the public workshop regarding Saratoga Way was correct.

Section 4: Mary Lou Giles

Comment 4.1: In the early 2000's oil and gas companies, coal mining interests, and others with a financial stake in maintaining the status quo worked hard to convince the public that climate change is not occurring, and that even if it were to occur it would not be caused by human activity. This largely discredited effort has been referred to as "climate change denial". On Oct. 10 the County treated attendees at the above referenced meeting to "gridlock denial". I am consciously using the term "gridlock" rather than LOS F. It is more descriptive, and less fuzzy, now that the County has started attempting to parse the meaning of LOS F. as well as to deny its existence.

The County lined up a panel of staffers and paid consultants to make a presentation maintaining that a) gridlock / LOS F conditions do not presently exist on Highway 50, and b) on the far off day when gridlock is a real threat, the County will have provided infrastructure to mitigate its effects. This like telling the people abandoning their homes on low lying Pacific islands due to sea level rise that the sea levels are not...actually rising. A bit of a hard sell.

My husband and I commuted on Highway 50 from Cameron Park to Sac up until quite recently (2013). Along with hundreds of other working citizens of the county, we can attest to the fact that gridlock does exist. It is not a sometime thing caused by a breakdown, an accident, or construction. It is not just a bad memory of an occasional jam up. It is a regularly occurring phenomenon, which I experienced at least once or twice a week. Given that even the County admits that traffic levels have gone from Level C in 2010 to Level E in 2015, I imagine gridlock occurs even more frequently now, in 2016. All the planned metered ramps, auxiliary lanes, and parallel connectors will not solve the problem of too many people trying to get to the same place at the same time on a road that is far over capacity. And no, Mr. Sweeney, employers in Sac. are not very likely to change their hours of operation to help solve El Dorado County's traffic problems.

Response 4.1: All of the data collected by County staff and our consultants has indicated that US Highway 50 westbound currently operates at LOS E or better during the typical AM peak hour at the County Line. There is no data to suggest otherwise.

See Attachment 5B for a detailed discussion. Further, LOS is not based on any individual's opinion. It is based on the latest version of the Highway Capacity Manual (HCM). The HCM is a nationally and internationally recognized industry standard for calculating LOS that is based on decades of research of traffic flows. It gives an objective result of LOS based on observed data. The County's General Plan states that LOS calculations shall be based on the latest version of the HCM, not public opinion.

Comment 4.2: We cannot assume, as a staffer suggested, that the unemployment rate won't drop much further. We can, however, assume that developers will continue their demands to approve large high density subdivisions. And we can assume that the County, unless stopped by lawsuit or initiative, will gladly take their money. Thus gridlock is likely to continue and quite possibly to worsen.

Noah Briel's comment that the congestion originates in Folsom, that there is nothing El Dorado County can do about it, and that the section of Highway 50 from the county line east to Bass Lake or thereabouts should be exempted from General Plan traffic flow requirements demonstrates the cavalier attitude of the development community toward the residents of the county. He's quite willing to waste hours of citizens' time and subject them to daily stress in his pursuit of profit. Unfortunately, we have seen time after time, that the County seems to share this cavalier attitude toward ordinary working folks.

I'd like to see the County implement Measure E as written without further ado. There is a clear mandate, and no excuse for delay tactics. I'd like to see the County focus on attracting living wage jobs, rather than the construction of an endless sprawl of subdivisions. I'd like to see truly democratic, truly collaborative, truly transparent policy making, and a vision for the County's future that respects all stakeholders. And, I'd like to win the lottery. Sadly, I think I have a better chance of winning the lottery than any of the above.

Response 4.2: The presentation included a graph of unemployment rates from the US Bureau of Labor Statistics. The graph shows that unemployment rates dropped from about 12% in 2010 to 6% in 2015, which contributed to growth in traffic during that same period. County staff speculates that the unemployment rate is unlikely to drop significantly, as it did between 2010 and 2015. The County's average unemployment rate between 1990 and 2016 is 6.7%.

Any discussion of LOS as it relates to Measure E will be discussed by the Board of Supervisors and not by staff during a public workshop.

Section 5: Rusty Everett

Comment 5.1: Preserve EDH incorporates by reference its letter of July 5, 2016, which attempted to explain public belief that County's Kimley-Horn analysis to justify the conclusion that traffic was traveling at a less constricted level than LOS F, and therefore County could lawfully approve new projects, accepting TIM fee contributions as acceptable mitigation for increased traffic occasioned by the proposed development, was wrong. After reviewing County staff's presentation October 10, 2016, we remain convinced that the public adoption of Measure E requires a significant restructuring of the implementation for essential traffic mitigation.

Response 5.1: County staff has responded to the referenced letter of July 5, 2016 and the responses are included in the Final EIR for the *Western Slope Roadway Capital Improvement Program and Traffic Impact Mitigation Fee Program for El Dorado County*, September 2016. The document can be found on the County's website in two locations:

<http://www.edcgov.us/Government/LongRangePlanning/Transportation/TrafficImpactMitigationFeeProgram.aspx> or

<http://www.edcgov.us/Government/LongRangePlanning/Transportation/CapitalImprovementProgram.aspx> or

On the project website at: <http://www.edcwesternslopeupdate.com/>

Additionally, the County's consultant for the Major Update for the CIP and the TIM Fee Program is Kittelson & Associates, not Kimley-Horn.

It is the opinion of Preserve EDH that the County's analysis is incorrect. However, no factual correctly collected data is presented to dispute the analysis.

The County requires the payment of TIM fees for projects to pay their fair share of the cost, in accordance with Government Code 66000 et.seq. Additionally, project proponents are often required to construct improvements to mitigate their impacts as well as pay their TIM fees. Examples include the widening of Green Valley Road to four lanes from Sophia Parkway to Francisco Drive and the Silva Valley Parkway Interchange. The conditions of approval for proposed developments are written to comply with the County's General Plan. The County's General Plan as of July 2016 includes both the original Measure Y and Measure E.

Comment 5.2: The proponents of Measure E explicitly challenged the County's prior General Plan assumptions that contribution to the Traffic Impact Mitigation (TIM) fund was properly allowed by the County General Plan.

Response 5.2: The TIM Fee program is not a voluntary contribution; implementation of Measure Y made TIM Fees mandatory for development. The use of TIM Fees can be an appropriate mitigation measure as long as the program is established in accordance with the Mitigation Fee Act (AB 16000 and Government Code 66000 et.seq). Each development fee must be deposited in a separate capital facilities account and may be expended only for the purposes for which it was collected. The County is required to prepare a TIM Fee Program, as stated in General Plan Policy TC-Xb.

Comment 5.3: Preserve EDH identified the summary of Roadway Deficiencies and Table 6 in its July 5, 2016 letter, and requested re-tabulation to reflect the actual on-the-ground impacts of all development which has occurred to date. The October 10 presentation admits to calculations based on 2015, without the admitted anticipated increases for 2016 and beyond. The CIP/TIM Fee Program, Table 6, identified multiple street connections which will exceed acceptable levels in 2035. As a result of Measure E, these connections must be improved by developers now, not allowed to be further deferred through the artifice of contributions to the TIM Fee fund.

Response 5.3: This is a restatement of comment 4.4 for the *Western Slope Roadway Capital Improvement Program and Traffic Impact Mitigation Fee Program for El Dorado County*. Please see response 4.4 in the Final EIR (links to the document are provided in Response 5.1 above).

Additionally, the calculations presented were based on 2013 data from Caltrans. This is the latest verifiable data from Caltrans that was available at the start of the Major CIP and TIM Fee Program Update in 2014. Once again, the TIM Fee is not a voluntary contribution; it is a requirement of development in El Dorado County in compliance with our General Plan. Measure E did not remove the necessity of a TIM Fee program.

Prior to approval, each individual development project that has potential impacts to the County's roadway system is required to prepare a traffic impact study, or TIS. The TIS identifies the roadway segments, freeway facilities, and intersections that would be impacted by the project, should the project be approved. The results of the traffic study are used to write conditions of

approval for each project. This process is consistent with current General Plan Policy.

Comment 5.4: The structure of County's October 10 presentation appears to be to attempt to mollify the affected public members, and assure them that County and its consultants know better than the public how bad current traffic congestion is, and the manner by which it should be measures. Speaking only for Preserve EDH, we do not argue that County's adoption of a traffic demand model [TDM] is invalid, per se, or improper as an aid to anticipate traffic increases and plan for future mitigation. We emphasize, however, that the people of El Dorado County, as a sovereign, adopted first Measure Y and now Measure E, in repeated attempts to require that its General Plan mandate that necessary traffic improvements actually be constructed as part of new development.

Response 5.4: The purpose of the workshop was to discuss the underlying traffic and circulation issues underlying Measure E. The purpose of the workshop was not to reach a conclusion. It was an information session only. Any discussion of LOS as it relates to Measure E will be discussed by the Board of Supervisors and not by staff during a public workshop.

Comment 5.5: We do not accept the conclusion justifying analysis contained in County's presentation that finds that based on 2015 traffic modeling by County, westbound US 50 traffic remains in E instead of F, or that manner of developing such analysis. We also object to the manipulation of the Caltrans letter of September 22, 2014 to El Dorado County, citing to one sentence instead of the totality of the letter, which makes clear that County's use of TDM as a whole is acceptable, but future validation required application to specific traffic studies, and that some areas of the model may exceed validation standards. County should not be an advocate – it should be a fact finder. Preserve EDH believes that what all this means in English, is that the modeling can be clearly used as a basis for planning, but by itself does not establish final calculations for a given segment. Our intent in this letter is not to argue segment by segment. We intend to point out that the LOS E designation presented for 2015 amounts to "happy talk," and that avoidance of immediate construction of improvements for US 50, especially from Bass Lake to the County line, and the interchanges leading on and off US 50, is what Measure E is intended to prevent.

Response 5.5: As stated at the August 30, 2016 Board hearing on Measure E, it is standard practice to check the model's validation statistics of the study area prior to using

the model. This is consistent with Caltrans' recommendation in the September 22, 2014 letter. It is also standard practice to post-process the output from the TDM prior to calculating LOS, as suggested in the comment.

As stated above, any discussion of LOS as it relates to Measure E will be discussed by the Board of Supervisors and not by staff during a public workshop.

Comment 5.6: Even with careful manipulation of the data, and adopting 2015 traffic calculations, County can only get US 50 in these segments to "E" designations. County also admits that a combination of reduced unemployment coupled with increased residential construction, almost all of which is occurring in El Dorado Hills, means that the demand modeling for 2016 and beyond will show increased traffic travelling on US 50 between El Dorado Hills Blvd. and the county line; and the next step up is "F" – gridlock. [Slides 43 and 44 of 48].

The inaccuracy of County's assurance of traffic improvement using the TIM Fee structure is highlighted in its Future Projects list [Slide 45 of 48]. Not one of the Future projects identified to reduce and/or ameliorate traffic congestion is slated from completion until 2033-2034. See for example, County DOT §8.1 Individual Project Summaries. The US 50 Mainline improvements [westbound auxiliary lane] for example, initiated in 2006, show all design and construction completing in 2034-35, as do the Saratoga Way extension, and the White Rock Road widening. The Bass Lake to El Dorado Hills Blvd. segment of US 50 shows completion in 2034-35. But all these proposed projects are a chimera, anyway, because each year the cost of construction, including materials, labor, fees, etc. increases, meaning that funds collected from the development community increasingly become inadequate to its ends, thus further postponing construction beyond 2035, until yet more development projects are completed and mitigation fees collected.

This is why the public insists that heavily impacted segments must be mitigated at the time of increased development, not at a future time.

Response 5.6: On September 20, 2016 the Board of Supervisors provided tentative approval of the proposed 2016 CIP Book as part of the Major CIP & TIM Fee Program Update. The 2016 CIP proposes the following timelines for construction of projects near the County Line:

- Saratoga Way Phase 1 – FY 21/22 – 25/26
- Saratoga Way Phase 2 – FY 26/27 – 35/36

- US 50 Westbound Auxiliary Lane (El Dorado Hills Blvd to Sacramento County Line) – FY 26/27 – 35/36
- US 50 Westbound Auxiliary Lane (Bass Lake Road to Silva Valley Parkway) – FY 21/22 – 25/26
- White Rock Road Widening (Manchester Drive to County Line) – FY 21/22 – 25/26

The CDA is seeking final approval of the 2016 CIP from the Board before the end of the year. The schedule of construction of CIP improvements (TIM Fee funded and non-TIM Fee funded) are prioritized based on several factors of which the Board of Supervisors prioritizes. See the September 20, 2016 Major CIP and TIM Fee Update Board item for details (Legistar No. 14-0245).

Additionally, the TIM Fee Program is reviewed annually. The cost estimates for the proposed projects are reviewed and adjusted to reflect the latest work on the projects. The project costs and thus the fees are adjusted for inflation based on either the nationally published Engineering News Record (ENR) or Caltrans project cost index.

Section 6: Ellen Van Dyke

Comment 6.1: I appreciate the effort that went into preparation for the October 10th meeting and presentation, but the misinformation shared with the public that evening is a problem. With about 50 people(?) and 3 sitting Supervisors in attendance, an itemized list of corrections should be issued and posted wherever the presentation is posted, whether on the LRP page or in Legistar.

Response 6.1: This document serves as a response to comments submitted by members of the public. It has been made available through the Legistar system.

Comment 6.2: Katie Jackson said that the 55 CIP projects listed on slide 46 are all fully funded. That is simply not true. Here's one I happen to be familiar with because of Dixon Ranch-CIP Project GP178 is projected to cost over \$6M. But the revenue funded shows \$0 through the year 2025, at which point it just jumps to \$1.8M. Note that even in 2025 it is still \$4.2M short of being fully funded.

Response 6.2: The comment references CIP Project GP178, Green Valley Road Widening – Francisco to Silva Valley Parkway. This project is not included in 55 projects that are scheduled to be under construction, or in the planning, design, or right of way phases in FY 2016/17. Those 55 projects are defined in the Executive Summary of the 2016 Interim CIP Book (see Tables 1-1 and 1-2).

The work on these projects scheduled for FY 2016/17 is fully funded through the CDA's annual budget. However, this does not include full funding for all phases of each project. The County's Interim CIP includes projected revenue sources for each project.

Comment 6.3: When Saratoga Estates was brought up, staff adamantly claimed there would be 4 lanes (2 in each direction) installed from Wilson to the County line prior to the start of the project. This is simply not true, as Roger acknowledged afterward, saying he did not debunk it because he was out of the room when it was said. Saratoga's conditions of approval allow off site improvements to be completed after the 100th permit is drawn, and only 1 lane in each direction is being required west of Wilson.

Also, while Saratoga is being called 'parallel capacity', this workshop would have been an excellent time to explain to what extent the capacity of Saratoga should be considered, given the number of stoplights (six or seven?) it will have within the short run between EDH Blvd and Bidwell.

Response 6.3: At the September 13, 2016 Board of Supervisors hearing for the proposed Saratoga Estates development project, the Board modified staff's recommendation to include the addition of a finding to construct Saratoga Way to 4 lanes (instead of 2) from County Line (Iron Point) to Wilson Way, and a 2 lane Saratoga Way from Wilson Way east. The Board of Supervisor motion stated that the improvement is to be built or bonded at the beginning of the project and not after the 101st unit as the condition initially read. The final decision by the Board can be heard at the 6:29 (6 hour – 29 minute) mark located on the following County Legistar link:

http://eldorado.granicus.com/MediaPlayer.php?view_id=2&clip_id=854

There are currently two traffic signals on Iron Point Road east of East Bidwell Street. The two signals are within a half mile of the East Bidwell Intersection with Iron Point Road. There is one signal currently anticipated by the Saratoga Estates project, at the proposed intersection of Wilson Boulevard, just east of the County Line. It is unclear where the other four signals are that are referenced in the comment would be located. The El Dorado Hills Area Plan Advisory Committee (APAC) has made it clear they anticipate significant amounts of traffic will use the Saratoga Way extension. The increase in traffic on Saratoga Way was the main reason given by APAC in their demand for a four lane Saratoga Way extension instead of a phased approach to the widening proposed by County staff. Additionally, the traffic analysis performed for the Major CIP & TIM Fee Program Update indicates that Saratoga Way, when combined with other parallel capacity projects in the El Dorado Hills area, would remove over 2,100 peak hour trips from US 50 by 2035.

Comment 6.4: Slide 25 does not indicate LOS F for the segment of Hwy 50 at EDH Blvd, and slides 28 & 29 indicate we won't have a problem until sometime after 2025. This is just plain wrong. Anyone who drives Hwy 50 for their am/pm commute KNOWS this is wrong. Caltrans pointed it out 3 years ago. Every one of the professionals in attendance who put their credentials on this is risking their good name, and possibly more.

Response 6.4: All of the data collected by County staff and our consultants has indicated that Highway 50 westbound currently operates at LOS E or better during the typical AM peak hour at the County Line. There is no data to suggest otherwise. See Attachment 5B for a detailed discussion. Further, LOS is not based on any individual's opinion. It is based on the latest version of the HCM. The HCM is a nationally and internationally recognized industry standard for calculating LOS that is based on decades of research of traffic flows. It gives an objective result of LOS based on observed data. The County's General Plan states that LOS calculations shall be based on the latest version of the HCM, and rely solely on the methodologies contained in that manual (Policy TC-Xd).

There are reputations at stake for the professionals in attendance - they are not willing to compromise the integrity of their credentials and licenses to support invalid conclusions. Not a single credentialed professional from the transportation industry has disagreed with the County's data and LOS conclusions presented in the public workshop.

There have been several letters provided by Caltrans discussing the TDM and the County's future forecast data. Staff has had several follow-up meetings with Caltrans to discuss differences of LOS calculations, specifically at the county line. After several meetings and discussions with Caltrans, information was finally presented by Caltrans staff which demonstrated how the LOS F was calculated. Attachment 5B explains how Caltrans came to a LOS F determination and it was agreed by both Caltrans and County staff that the volume Caltrans used in their Highway 50 Traffic Concept Report and Corridor Management System Plan (TCR/CSMP) was not applicable for the County because it is 3-year average number which takes into account parameters not allowed in the County General Plan (i.e., weekend data). In addition, the Caltrans data has not been updated in over 7 years. See Attachment 5B for a more detailed discussion. This information was presented on September 2, 2015, November 10, 2015, December 15, 2015, August 9, 2016 and on August 30, 2016.

The latest two letters from Caltrans provides their concurrence with El Dorado County's LOS determination along Highway 50, including at the County Line. See

Attachment 6C for the October 11, 2016 letter. Refer to the Final EIR for the *Western Slope Roadway Capital Improvement Program and Traffic Impact Mitigation Fee Program for El Dorado County*, September 2016 for the July 5, 2016 letter. The document can be found on the County's website in two locations:

<http://www.edcgov.us/Government/LongRangePlanning/Transportation/TrafficImpactMitigationFeeProgram.aspx> or

<http://www.edcgov.us/Government/LongRangePlanning/Transportation/CapitalImprovementProgram.aspx> or

On the project website at: <http://www.edcwesternslopeupdate.com/>

Comment 6.5: Calculation of LOS is done with multiple factors, but when the density of cars is unknown, the speed can be used as an indicator, and in the presentation they repeatedly used the speed of 35 mph rather than the HCM standard of 53 mph; slides 33-37, and their summary slide 38, need to be corrected to reflect this fact, as well as to use a no-greater-than-15-minute interval when calculating the averages.

Response 6.5: The density is not unknown, as stated by the commenter. County staff and Caltrans staff have calculated the density of vehicles on Highway 50 and presented that data repeatedly. Furthermore, the HCM clearly states that the LOS criterion for a basic freeway segment is density:

“Although travel speed is a major concern of drivers that relates to service quality, freedom to maneuver within the traffic stream and proximity to other vehicles are equally noticeable concerns. These qualities are related to the *density* of the traffic stream. Unlike speed, density increases as flow increases up to capacity, resulting in a service measure that is both perceivable by motorists and is sensitive to a broad range of flows. Density is used as the service measure for freeway facilities, basic freeway segments, ramp junctions, weaving segments, and multi-lane highways.”

As stated during the public workshop, there is no specific speed at which traffic operations degrade from LOS E to LOS F, it can occur at a range of speeds. Although previous versions of the HCM (HCM 2000) have stated that 53 mph is the minimum speed for LOS E operations, the latest version (HCM 2010) does not make this statement. No corrections are required. Public comment and descriptions about traffic conditions on US 50 at the County Line are generally consistent with the written description of LOS E conditions from the HCM:

“LOS E describes operation at capacity. Operations on the freeway at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. **Any disruption to the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown and substantial queuing.** The physical and psychological comfort afforded to drivers is poor.”

As described above, motorists in LOS E conditions can experience slowing on the freeway due to a number of different factors.

Additionally, the HCM 2010 methodology calls for the hourly demand volumes to be used in the analysis of LOS. Therefore, all volume averages are presented for the peak hour. The methodology uses a factor, which is used to calculate the peak 15 minute flow rate based on the hourly volumes. The LOS calculated for the peak hour is based on the peak 15 minutes within the peak hour. No corrections are required.

Comment 6.6: Also on slides 33-37, the speeds seemed high. John Long (DKS) said in his presentation that the HOV lanes were indeed factored in. This would raise the average speed for sure. Later during questions, Mr. Long said that ‘no’, the HOV lanes were not factored in. This inconsistency leaves the layman (me) with no sense of trust.

Response 6.6: John Long did not state, either during or after the presentation that HOV lanes are factored into the average speed data. The commenter is incorrect. However, John Long did state that HOV lanes were constructed on Highway 50 at the County line and as a result of that improvement, the average speed in the general purpose (or mixed-flow) lanes increased. HOV lanes are not included in the calculations for average speed.

The speed averages presented in the public workshop are based only on the general purpose lanes, not the HOV lanes. This is stated on slides 33 – 37 in the lower right-hand corner of the slide.

Comment 6.7: Additionally, there was no discussion of how any of this presentation relates to Measure E. Wasn’t that the point of the workshop (slide 2)? If the takeaway was supposed to be “*there is no LOS F, so there is no Measure E problem*” then I can understand why no one wanted to say that. That is just not a credible

position regardless of the four slides dedicated to listing professional credentials, and an entire segment dedicated to the 'public perception' of traffic congestion.

There were 6 members of staff and 4 hired consultants present at this meeting. The credibility of each of those professionals has been brought into question, and the public trust is already on thin ice. A good start to regaining that trust would be to correct the errors. Another good step would be to delay the Oct 28th meeting, and arrange for an actual dialogue with Measure E committee members rather than confine their questions into one-way comments in 3-minute increments at the next "workshop".

Thank you for the opportunity to provide feedback. I apologize for any perceived 'harshness' in these comments, because I truly do appreciate the effort it takes to communicate with the public, but I can see that boxes are getting checked and the communication is not happening.

Response 6.7: As a result of the August 30, 2016 Measure E discussion at the Board, a workshop was established to have a dialogue with the public on the development of the TDM and LOS. The purpose of the workshop was not to reach a conclusion. It was an information session only. Any discussion of LOS as it relates to Measure E will be discussed by the Board of Supervisors and not by staff during a public workshop.

Section 7: Don Van Dyke

Comment 7.1: The Measure E committee has repeatedly asked for "a dialogue" with the County DOT, not another presentation. The Monday night meeting did not constitute a dialogue and was not useful in resolving the ongoing dispute over County "calculated LOS" vs. citizen "experienced LOS". We request once again a meaningful dialog with County DOT.

Response 7.1: The purpose of the public workshop on October 10, 2016 was to follow the Board of Supervisors direction to "conduct Board workshops to address the traffic and circulation issues underlying Measure E." This purpose was clearly stated in the opening remarks and the PowerPoint presentation. Although the Board's direction did not include dialogue, all members of the public were encouraged to attend, ask questions, and submit comments. County staff has responded to all questions and comments that were submitted.

Additionally, there have been many opportunities for the public to engage staff during the development of the future forecast of the TDM and the development of the required roadway improvements during the Major CIP and TIM Fee Update. See Attachment 6B.

Comment 7.2: After the presentation, John Long, DKS associates verified the Measure E committee claim that the volume numbers from Caltrans are being used improperly by the County in calculating LOS. He agreed that volume numbers cannot be used blindly and one must know that the freeway is being utilized below capacity for these LOS calculations to be meaningful. He disavowed any participation in the use of those numbers. These numbers were used by staff to present to the Board that Highway 50 traffic is less than LOS F, legistar file number 14-1054, attachment 5b, "TDM and LOS"

County's Response 7.2: The commenter is misrepresenting comments made by John Long. John Long never stated the volume numbers are being used improperly by the County in calculating LOS. He did acknowledge that hypothetically if traffic is moving very slowly and at a high density (i.e. LOS F conditions), the Caltrans count station would register lower volumes. However, he further explained that the speed data from Caltrans PeMS system clearly demonstrates that the roadway is not at LOS F and that situation does not apply to current traffic levels on Highway 50. The commenter is misrepresenting Mr. Long's statements. Refer to the explanation from John Long below.

John Long's Response 7.2: During the discussion after the meeting, Don asked me about the problem of using count data when one did not know the conditions on the freeway. If the freeway was operating at LOS F, the volume would likely be lower than at LOS D or E. Don said that if an HCM calculation was made based on that lower volume, it may indicate that the freeway was operation at a good LOS when it was actually operating at LOS F.

I said that he had a good point and that you should know that the freeway was not operating at LOS F conditions when the count was made before using the count data in analysis. However, I did say that the speed data at the County Line when the counts were taken (45 to 55 MPH) clearly demonstrated that the section of US 50 at the County Line (AM peak hour in the westbound direction) was not at LOS F.

Don has misrepresented what I said. I never said anything about the volumes numbers being used improperly. To the contrary, Caltrans' speed data and Caltrans' LOS calculations at the County Line are completely consistent with the LOS E conditions estimated for 2015.

Don then talked about the data he had pulled from Caltrans' online PeMS data. This was the first time that Andrew Brandt and I saw that data and we did not know what it represented. Andrew Brandt eventually determined that the data was not from the Caltrans count station near the County Line. It appeared that Don's data came from a count station further east – in the westbound direction

but before the merge area for the El Dorado Hills Boulevard westbound on-ramp. Andrew indicated that his group would need to review data coming from this other count station before he could comment on it.

Don did start to ask about the HCM calculations in the TIM Fee Program and I said that I was not involved in those calculations and he would need to ask the other consultants or County staff. **Don's statement that I "disavowed any participation in the use of the numbers" misrepresents my role.** I have been asked by the County to provide an independent review of various technical methods used in the development of the County's TDM and the TIM Fee Program and to help the County explain how they follow best practices.

Comment 7.3: Also after the presentation, John Long, DKS Associates and Andrew Bryant from Caltrans acknowledged that LOS is calculated in a rolling 15 minute interval, not an hourly average as the County presented on Monday.

Response 7.3: LOS can be calculated for any 15 minute interval throughout the day. As defined in the HCM, the peak hour level of service is based on the LOS for the peak 15-minute period within the peak hour. This means the freeway segment (or other facility type) operates at a better LOS during the other 45 minutes of the peak hour.

At the public workshop, County staff stated that the peak hour LOS is averaged across the entire peak hour, not just for a single point in time. This statement should be clarified to say that LOS is averaged across the peak 15 minute interval within the peak hour, not just for a single point in time.

Comment 7.4: At the comment portion of the meeting we presented Caltrans PEMS data for August and September 2016 showing that in those two months, Highway 50 mainline at Latrobe Road reached LOS F on 20 days in the weekday AM peak hours. This data is attached and dated. This also supports the claim of citizens that complain of LOS F traffic when County DOT claims it does not happen with any frequency. Representatives of the County and consultants were not aware of this data at the time. Open dialogue with the County would help resolve these sorts of issues.

Response 7.4: The data submitted by the commenter has been reviewed by County staff and the assertions made by the commenter are false for several reasons.

First, the HCM 2010 defines LOS on density for basic freeway segments. The document states:

“Although travel speed is a major concern of drivers that relates to service quality, freedom to maneuver within the traffic stream and proximity to other vehicles are equally noticeable concerns. These qualities are related to the *density* of the traffic stream. Unlike speed, density increases as flow increases up to capacity, resulting in a service measure that is both perceivable by motorists and is sensitive to a broad range of flows. Density is used as the service measure for freeway facilities, basic freeway segments, ramp junctions, weaving segments, and multi-lane highways.”

Therefore the speed data submitted by the commenter is not sufficient to conclude that US 50 is operating at LOS F.

Second, the PeMS data presented by the commenter has flaws. Caltrans and the County have concurred that traffic volumes used for analysis should be based on the average of the Spring (March, April, and May) and/or Fall (September and October) months. The data should be for Tuesdays, Wednesdays, and Thursdays with high Percent Observed values. Days with traffic collisions, special events, or any other infrequent event that could affect the data should be excluded from the analysis.

Of the data presented, PeMS data for nine out of 20 days was taken in August, which is outside of the typical analysis period. August is not typically used in analysis, because it is heavily influenced by summer vacations and the start of local/regional schools. Four of the 20 days were Mondays. Five of the 20 days had slowing due to traffic collisions outside of the County’s jurisdiction. Furthermore, days with higher speeds were excluded from the PeMS data provided by the commenter. When all appropriate days are averaged, the average speed for Spring 2016 was 63 miles per hour (mph) and the average speed for Fall 2016 (through 10/20/16) was 51 mph. See Figures 2 and 3 below.

When all of the speed data is considered, consistent with the County’s and Caltrans’ methodology, the 2016 speed data is largely consistent with the data presented at the public workshop for 2010 and 2015. As stated in the presentation there are fluctuations in traffic speed and volumes. The data in Figure 3 shows a drop in speeds for the week of Labor Day (9/6/2016), this is an example of a seasonal fluctuation. All other recorded speeds were about 45 mph or higher.

Finally, the location of this PeMS detector contributes to lower speeds than a basic freeway segment. The detector is located east of the El Dorado Hills Boulevard on-ramp. As motorists pass this detector, they see the large number of vehicles on the on-ramp and decelerate in order to accommodate those

merging vehicles. Note that this is not a factor affecting speeds at the County Line, as all merging has already occurred by that point.

It is important to note that the volume recorded at this PeMS detector (selected by the commenter) cannot be used for analysis of LOS at the County Line. The detector is located east of the El Dorado Hills Boulevard on-ramp and does not include the on-ramp traffic. Therefore, the LOS was not calculated based on this information.

County staff has presented volume and speed data for 150 days (Spring and Fall data from 2010, 2015, and 2016) that meet the appropriate criteria. Of the days, only 3%, or 4 days, had an average peak hour speed of less than 35 mph. The speed on many of these days was affected by a traffic collision or seasonal fluctuations.

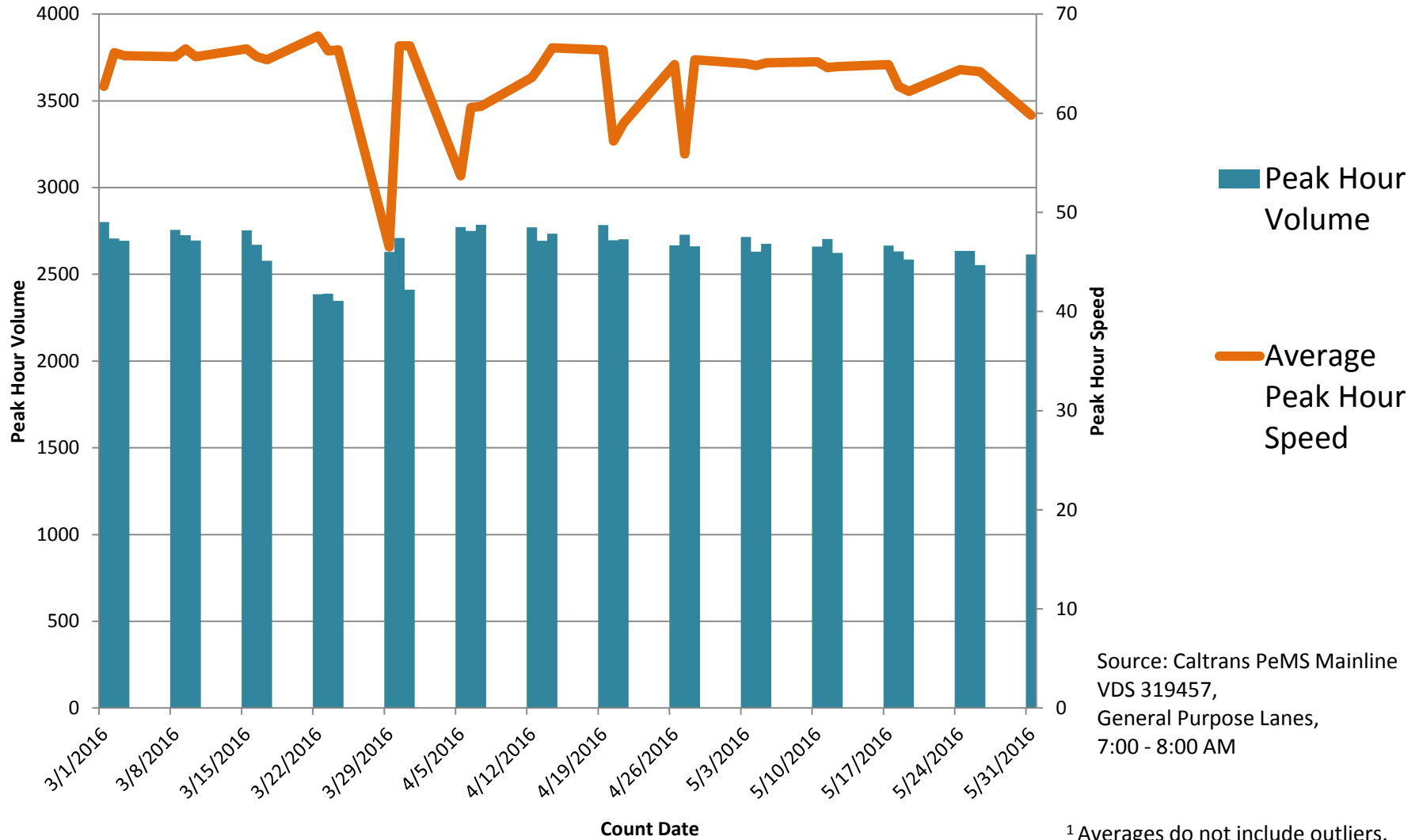
Furthermore, it is not unusual to experience slower speeds in LOS E conditions. The HCM describes LOS E as follows:

“LOS E describes operation at capacity. Operations on the freeway at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. **Any disruption to the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown and substantial queuing.** The physical and psychological comfort afforded to drivers is poor.”

The description of LOS E conditions matches well with the speed data presented in Figures 2 and 3. Occasionally, there is an incident or volume fluctuation that causes a reduction in speed during the peak hour.

Figure 2: Caltrans PeMS Volume & Speed Data
 US 50 - Westbound AM Peak Hour
 Between EDH Blvd Off-ramp and On-ramp
 Spring 2016

Average Volume: 2,688 vph¹
Average Speed: 63 mph¹

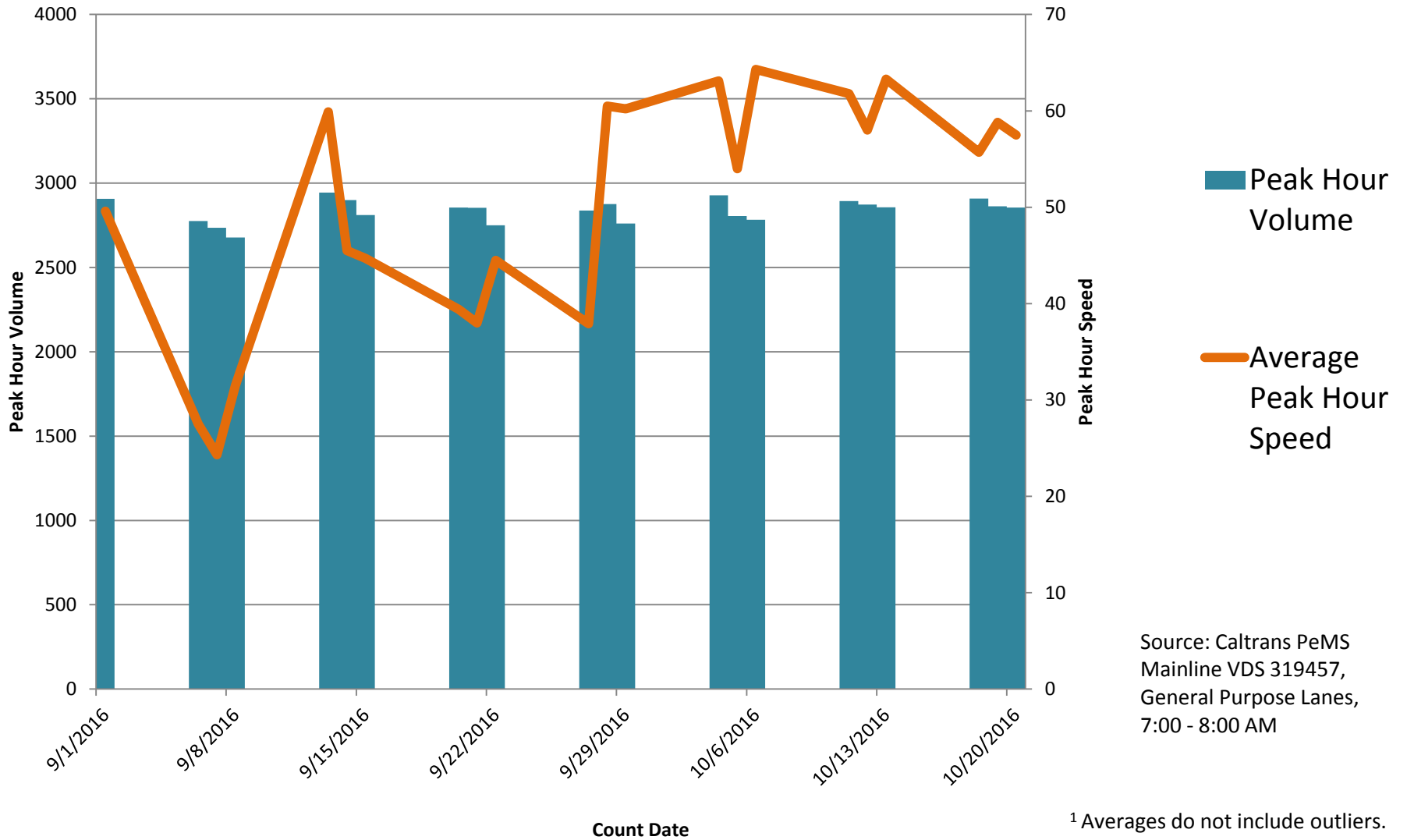


Source: Caltrans PeMS Mainline
 VDS 319457,
 General Purpose Lanes,
 7:00 - 8:00 AM

¹ Averages do not include outliers.

Figure 3: Caltrans PeMS Volume & Speed Data
US 50 - Westbound AM Peak Hour
Between EDH Blvd Off-ramp and On-ramp
Fall 2016

Average Volume: 2,855 vph¹
Average Speed: 53 mph¹



¹ Averages do not include outliers.