



**COLORADO**

**Department of Transportation**

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Danny:

Thank you for notifying the Colorado Department of Transportation (CDOT) last night of today's [report](#) about road capacity and induced demand. We were quite surprised to be hearing of this analytical undertaking the night before the press conference and would have hoped that, in the spirit of advancing high quality analysis on this key topic, we would have first had opportunity to engage in a substantive conversation about data inputs and outputs.

As I believe you are aware, CDOT has made significant changes over the past two years to our environmental modeling such that our analysis on major projects now consistently considers both induced demand as well as Greenhouse Gas (GHG) impacts and impacts to other air pollutants such as fine particulate matter. We believe that it is our responsibility to conduct thorough and rigorous analysis of these factors as part of our overall stewardship of a vast state system that serves diverse needs, and to be proactive in identifying mitigation measures that both offset direct impacts of projects and provide consumers with more, multimodal choices along the state's arterial routes within our jurisdiction. We view these changes as essential from the perspective of fighting climate change, reducing local pollution and improving equity for communities who live in close proximity to highways, and believe that we have an opportunity to establish best practices in our professional discipline, working together with a wide range of partners.

These changes in modeling conventions within the Department parallel a redoubled focus on incorporating multimodal features and a focus on emissions reduction within governance of the state roadway systems. This includes integrating intercity transit into key corridors like I-25 and I-70, expanding our Bustang out-ride system to rural areas that are underserved by transit, supporting main streets throughout the state through a first of its kind effort to support active transportation and outdoor commerce on state and local roads that anchor communities, and establishing an Office of Innovative Mobility that takes a leadership role in the state's efforts as part of the Greenhouse Gas Roadmap to expand vehicle electrification and incorporate charging infrastructure into the state system. We are excited to be part of seismic change in the transportation sector – and to integrate these priorities into our governance of Colorado's roadway system as the state grows.

As such, it concerns us that today's report, which appears to be based on a generic calculator tool developed in California, did not cross check against the specifics of CDOT's projects or the modeling analysis we are developing in support of project review documents. The report appears to look only at a simple calculation of lane mileage, omitting a broad range of other factors pertinent to traffic modeling that affect vehicle miles traveled, mitigations, and the geographic nuances of individual projects. Taking any single variable out of context tends to lead to misleading conclusions that fail to reflect the full costs and benefits of a more comprehensive project.



Indeed, for each of CDOT's projects, modeling must factor a wide range of nuances to projects that a generic model like the one utilized in this report would not capture. To use the case study of Floyd Hill -- which was referenced in today's press conference and which if judged by one line in the plan could be viewed as just a simple widening project -- listed below are just a few examples of the types of issues that require nuance to accurately analyze:

**1) Streamlining a choke point is not the same as across the board capacity expansion:** As drivers across the front range know from frustrating weekend drives, I-70 narrows from three lanes to two as travelers approach the mountains, and then reverts to three lanes further westbound. The road already functions as a three-lane highway, albeit with the inefficiencies of this "hour glass" configuration that narrows at a choke point on a steep curve. This results in significant delays as well as crashes due to drivers merging abruptly. Streamlining this configuration performs differently than an across-the-board capacity expansion. Rigorous traffic modeling would account for this type of consideration;

**2) Managed lanes perform differently than general purpose lanes:** managed lane configurations such as are being utilized on I-70 projects have a meaningful impact on congestion and traffic -- resulting in less traffic across all lanes as well as behavior changes due to the pricing of the managed lane itself. I would hope that the new model employs rigorous review of managed lane scenarios given that emphasis on the I-70 corridor including the peak period shoulder lanes. Notably, the peak period shoulder lane is an innovation that CDOT developed with corridor stakeholders to provide weekend capacity on the shoulders, while minimizing the larger environmental impacts that would occur with a full-time lane. With respect to Floyd Hill, the only build alternatives that CDOT is considering include addition of a managed lane;

**3) Models should factor mitigation and addition of transit:** as recently presented to the transportation commission, CDOT is working on a new microtransit service (as well as mobility hubs in key places like Idaho Springs) to ensure that use of the new lane is truly multimodal. This concept has received strong endorsement from local stakeholders like Clear Creek County. Given CDOT's focus on this innovative project, it would be very concerning if a model did not include this significant assumption of incorporating transit into the corridor;

**4) Induced demand is not a one-size-fits-all and the actual use patterns along the corridor must be considered:** The reality is that the peak I-70 traffic -- so closely connected with our state's ecotourism economy -- is not simply reduced by the inefficiency of Floyd Hill in its current configuration. Our traffic models, as well as lived experience, show that Coloradans spend hours sitting in traffic on I-70 as they travel to and from the mountains, especially on weekends. To the extent that traffic is a deterrent to tourists and others, it is likely they are choosing to recreate elsewhere because of the frustrations caused by I-70. For example, we watched in real-time during COVID as travelers eager to explore the vast great outdoors visited parks in record numbers, which meant traffic across the state including in some places that were previously "off the beaten path". We do not view this project as one that is likely to shift development patterns or daily commutes, so much as address a specific choke point where traffic and accidents currently proliferate given the heavy use of this road to access the mountain corridor and all it has to offer;

**5) Models that include induced demand should also factor pollution from sitting in traffic to have accurate pros/cons:** as noted above, we fully agree that induced demand needs to be modeled on capacity projects and, again, CDOT is taking the lead on building out these models (an area in which we are well ahead of many of our counterpart agencies). However, it is also true that sitting in traffic creates pollution. Both need to be included to accurately assess net impact. For us to assess the accuracy of the new model, we would need to fully understand how it incorporates sensitivities that are key to accurate traffic modeling.



While Floyd Hill is just one illustrative example, there is similarly nuanced dialogue that is needed regarding other projects in the 10 year plan -- which includes targeted capacity projects, a broad commitment to advancing state of good repair through a "fix it first" approach that includes the largest investment in fixing rural roads in modern Colorado history, as well as a focused effort on ensuring that our main streets are safe, vibrant, and multimodal.

For instance, current investments in I-25 vastly expand the network of managed lanes across the front range and also include a comprehensive network of "mobility hubs" to integrate rapid bus service into the corridor to ensure that those managed lanes are multimodal, much like the successful US 36 corridor.

I-270, to highlight another, is amongst the busiest freight corridors in the state -- vital for the livelihood of working Coloradans in the freight sector as well as to critical aspects of the supply chain like grocery store distribution. The industrial nature of this region has been a significant part of this area since the late 19th century, and the business in and through the corridor comprises significant employment for residents in the area. Unfortunately, multimodal options are not an option for commercial applications such as the trucking sector, and having an efficient and functional freight corridor actually helps to keep truck traffic out of other roads including neighborhood streets. Conversely, the ongoing decay of this roadway would result in diversions of truck traffic to other routes. That creates a challenge and opportunity to develop this project in a manner that considers both the freight and through-traffic needs as well as ways to support and connect communities in the Commerce City area.

This project, a longstanding regional priority supported by both Adams County and City, will also include significant pollution mitigation components as well as major investments in the local street network as part of the overall project -- components that are being incorporated with extensive local feedback. CDOT is also working to enhance and fund transit connections to the new RTD station within Commerce City, and a managed lane will be available to RTD should they choose to route buses like the Flatiron Flyer through a managed lane in the future. CDOT modeling shows emissions reductions as a result of the project -- inclusive of mitigation elements -- and is deeply committed to ensuring that remains the case throughout ongoing project development.

These types of factors appear to be among the many omitted from the analysis released today. We will continue to review and hope that you will consider engaging in a substantive dialogue around this important issue before finalizing conclusions about this study. Thank you for considering our concerns.

Best,



Shoshana Lew  
Executive Director

