



American Planning Association
Transportation Planning Division

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**I-70 East Reconstruction – Denver, Colorado
Transportation Planning Division
Peer Review & White Paper**

October 15, 2014

I. Introduction

Representatives of the American Planning Association’s Transportation Planning Division (“TPD team”) were invited to Denver, CO to conduct a peer review of the I-70 East Reconstruction project (“I-70 East”). The peer review occurred September 22-23, 2014. During that time, the TPD team conducted a site visit along the I-70 corridor, met with representatives of the Colorado Department of Transportation (“CDOT”), the Denver Regional Council of Governments (“DRCOG”), the City and County of Denver, including the Office of the City Auditor and members of the City Council, representatives of the Colorado Chapter of the American Planning Association and members of the community at large. The TPD team wishes to thank and acknowledge their hard work and passionate commitment to Denver’s well-being.

APA, as the nation’s leading association of planning professionals, strives to understand the interrelatedness and long term consequences of decisions, balancing socioeconomic, infrastructure and environmental considerations that play into major civic initiatives. APA’s Transportation Planning Division likewise exists to facilitate technical information sharing among member professionals who deal with ways transportation effectively and efficiently moves people and goods, shapes urban form, affects economic vitality and impacts quality of life. The Division promotes professional communication among its own members, with other APA divisions and with other professional groups. We assess policies, programs and projects, so as to derive the full public benefits of comprehensive and community-based planning that promote personal mobility and travel choices.

The I-70 East project is one of the most significant public infrastructure investments planned for metropolitan Denver and all of APA’s policy considerations are vitally important to project success. It should be noted as well that, as a peer review panel, the TPD team offers its insights and guidance for



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the benefit of all stakeholders involved in the local-decision making process. We are not submitting this report to CDOT as a formal comment on the Draft Environmental Impact Statement for the I-70 East Project. Instead we are offering our insights to the City and County of Denver for your consideration as you move forward with next steps in relation to this project. We do not offer recommendations, but rather considerations that advance project planning in a meaningful way. Likewise, our findings will be shared with transportation professionals across the nation, many of whom are involved with similar projects as so many similar-era highway viaducts reach the end of their useful life. We would also like to emphasize that we were invited to offer an outside perspective on this project. We do not presume to portray that after two days of meetings with numerous groups and after reviewing written documents, we know as much about this project as the many people we met with, nor do we know what is “right” for the community, but do offer a fresh pair of eyes at a key point in the planning process. And we do believe that it is critical for CDOT, DRCOG and Denver to “get it right.”

II. Planning Themes & Policy Guidance

Interstate 70 runs east-west from Maryland to Utah and serves local, regional and national transportation functions. As with many such facilities across the country, sections of I-70 were built within a settled urban environment. These areas are often characterized by intense urban redevelopment, a history of highway-related takings and urban mixed use development patterns. The Denver section in the Globeville, Elyria and Swansea neighborhoods exhibits many of these qualities and is therefore a focus of this peer review.

According to CDOT, the purpose of this project is to “replace the bridge between Brighton Boulevard and Colorado Boulevard, because it is 50 years old and nearing the end of its useful life. Also, our goal is to resolve congestion, make the interstate safer, and make it easier to get on and off the highway.” (Source: “I-70 East Project Snapshot,” September 2014, p. 4.)

Currently, I-70 is a six-lane freeway on a viaduct. The CDOT would prefer to construct a 10-lane freeway section in a trench meeting full AASHTO design criteria (i.e., 12-foot lanes, 12-foot shoulders, etc). The new 10-lane freeway will be comprised of six mainline lanes and four managed lanes. CDOT also



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proposes to modify and maintain the interchange at Vasquez Boulevard, which is located approximately ½-mile west of the Colorado Boulevard interchange.

At this point in the process, CDOT has released its supplemental draft environment impact statement (DEIS) for public comment. The preferred alternative of CDOT and the Federal Highway Administration (FHWA) is known as the Partial Covered Lowered Alternative. While this document will not restate the design features and project scope, it is important to note that I-70 East is being undertaken pursuant to MAP-21, which includes new and progressive approaches to transportation system management. MAP-21 places a renewed emphasis on system preservation/improvement, economic growth, safety and innovative approaches to project financing. CDOT reflects many of these qualities in its purpose and need statement for the I-70 East project. The observations and considerations below are provided to inform and further align project elements with national and state project objectives.

The federal project development and EIS process is very time consuming and that makes it difficult to hold a plan, let alone a constituency for the plan, together over a decade of analysis, revision and supplemental information. This is not unique to I-70 East, hence Congressional intent in MAP-21 to streamline the project development and construction process. That is difficult to do while maintaining a transparent and meaningful dialogue, but there are some good models, including Florida's Efficient Transportation Decision Making (ETDM) process (<http://www.dot.state.fl.us/emo/ETDM.shtm>), which includes environmental and socio-cultural effects screening of projects as part of the MPO Long Range Transportation Plan. The TPD team can make available other resources as the project moves forward.

III. Observations

This section covers the eight key observations of the TPD team. Each of the observations includes some insight from the peer review and research, together with paths forward for consideration by CDOT and other stakeholders. As a prevailing theme, it is noted that CDOT is proposing to spend \$1.2 billion on this project. This is a significant public investment in infrastructure that will benefit the entire state of Colorado, the City and County of Denver and the above-mentioned neighborhoods. However, it is the adjoining neighborhoods that will bear significant impacts from this project. CDOT, DRCOG, the City and County of Denver all offered thoughts on neighborhood revitalization, but likewise recognized that



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resources must be brought to the table in order to correct historic injustices, modernize facilities and restore the integrity and stability of these neighborhoods.

Understandably, the traveling public will not be interested in the finer details as to which public agency has responsibility for planning, designing, constructing and operating public roads; rather they want an integrated system and expect the various jurisdictions to cooperate in all phases of the decision-making process. These observations, therefore, are intended to guide public agencies through the complexities of the project to distill a progressive “way forward”.

#1 - Transportation System Planning:

As a general note, the TPD team observed that there was not a common understanding among transportation agencies, other public agencies, and neighborhood groups regarding the transportation system as a whole and the specific role of I-70 within that system. To the point made earlier about the lengthy planning stage for this project, there appears to be a lack of a system planning approach that could have been updated together with the supplemental DEIS. The influence of I-70 in the Denver metro region is significant, and its long-term role relative to the parallel and connecting roadway network, existing and emerging transit network, and non-auto transportation modes needs to be examined in a comprehensive, integrated manner. In addition, the transportation network must be evaluated in relation to existing land uses, and how those uses are expected to evolve over the next 30-50 years. The importance of coordinated transportation system and land use planning manifests itself in myriad ways that could help to resolve conflicts and broker compromise solutions that achieve positive outcomes for all parties.

Likewise, there appears to be a legitimate question about whether the recommended design alternative is fully consistent with the DRCOG's Regional Transportation Plan. That reflects some ambiguity on the part of the Transportation Plan, or lack of attention on the part of CDOT to affirm consistency by requesting amendment of the Transportation Plan as project concepts evolved. Re-connecting these efforts going forward is both required and informative for the system as a whole.



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Further, a system planning approach should result in broad agreement over the range of multimodal strategies necessary to address future travel demand while minimizing adverse impacts on existing communities, public health, the environment and fiscal efficiency. There appears to be little accomplished in the I-70 corridor planning process to develop and support a carefully thought-out multimodal strategy.

It is unclear if there is a regional freight/goods movement plan with sufficient detail to guide route planning and operational strategies, which are critical in the I-70 corridor. This should be closely linked to evolving land use patterns guiding the location of industrial, warehouse/distribution and intermodal facilities. Signage, wayfinding and operational parameters should all be part of the consideration. We offer an example from the Florida Department of Transportation (<http://tampabayfreight.com/>) that strategically addresses regional freight mobility and accessibility within context-sensitive solutions that reflect economic development, changing land uses and community redevelopment efforts.

There appear to be no vehicle miles traveled (“VMT”) targets set for the corridor that would account for anticipated growth/change in development over time and the application of complementary strategies designed to reduce VMT. It was difficult to determine if VMT and other system planning measures (travel time, vehicle hours of delay, person hours of delay, etc.) comparisons were made for initial and refined alternatives. This is important in part because there is extensive research that indicates that VMT is strongly correlated with the production of CO₂ in the atmosphere, which in turn is leading to climate change at a global scale (see for example, TPD peer review panelist, Reid Ewing et al, [Growing Cooler: The Evidence on Urban Development and Climate Change](#)).

The role of arterial and local streets, and non-auto networks, in the corridor remains relatively vague in the context of CDOT’s preferred alternative for I-70 East. There is indeed a lack of connectivity in the I-70 corridor section, and while the plan attempts to resolve those issues, there appears to be little agreement on role and function of using the non-interstate network part of the corridor to address connectivity and mitigate travel demand, thus enabling a narrower interstate footprint.

Transit is virtually missing from the conversation in part because transit investments are not directly tied to the I-70 East project proposal. This is unfortunate because the Denver community is truly embracing transit. If there were agreed-upon system-wide and corridor-level VMT and mode share goals, then transit and the role of Transportation Demand Management programs, park-and-ride, shuttle circulators,



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and parking management strategies in major activity centers served by I-70 and I-25 would be a bigger part of the corridor plan.

A stronger focus on how the corridor functions as part of the system, with roles and responsibilities defined, will make it easier for CDOT, local government, partner agencies and local neighborhoods to agree upon strategies for the corridor that balance competing interests and achieve key shared objectives.

#2 - Travel Demand Modeling:

DRCOG is responsible for maintaining the regional travel demand model used as a basis for analysis of travel demand in the I-70 corridor, development, screening and evaluation of alternatives. Yet, there appears to be a general lack of confidence that the model provided reasonably accurate forecasts, with CDOT and others citing it as "using what we have available" or "what was provided to us."

During our on-site interviews, the panel was told that CDOT, and its lead consultant on the I-70 project, Atkins North American, established the need for a 10-lane cross section on I-70 using the DRCOG old travel demand model and the DRCOG old future land use forecast for 2035. We were told they did not test a full range of highway project alternatives. CDOT referred us to DRCOG, and DRCOG referred us to CDOT. A follow-up conference call with key personnel at CDOT and Atkins confirmed what we were told previously. Submitting to an interview was an exceptionally collegial gesture on the part of CDOT, as they are in the comment period for the Supplemental EIS and ordinarily would not provide additional information. While CDOT specifically asked that any conclusions we reach as a panel be submitted as formal comments, the TPD team will not do so directly. However, interested stakeholders may draw from the questions we presented to DRCOG:

- Was an 8-lane cross section (3 general purpose lanes and one managed lane in each direction) ever tested using the DRCOG travel demand model? Was an alternative that did not involve frontage roads on both sides ever tested? With the 10-lane section and frontage roads, the preferred alternative cross section is wider than a football field is long. It would maximize rather than minimize impact on the abutting Environmental Justice neighborhoods. Our on-site



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interviews suggested that an 8-lane cross section was screened out initially and not actually run as a network alternative using the model. This was confirmed in the conference call. It would be important to determine if an 8-lane section would have sufficient capacity in the horizon year before moving to a 10-lane section, given the severe impacts on neighborhoods along the alignment. The fact that the project runs through minority neighborhoods makes it all the more important that the cross section adopted have the absolute minimum width that would meet the purpose and need requirements of the project. Given the desire to minimize impacts on minority neighborhoods, the panel recommends that an 8-lane section, with and without frontage roads, be tested by CDOT and Atkins as lower impact alternatives to a 10-lane widening with frontage roads. Was the 10-lane section tested using DRCOG's new Focus travel demand model? From our conference call, the answer is no. Focus, which became operational in 2010, is an activity-based model that generates trip tours (linked trips such as stopping on the way home from work to do shopping) rather than individual trips. It is state-of-the-art. It accounts for peak spreading, the tendency of travelers to change their time of departure when faced with congestion. Instead, the old travel demand modeling software, Compass, was used by Atkins. Compass is a trip-based model that treats trips as though they are independent of one another rather than linked into tours; it does not account for peak spreading. Atkins is not one of the consulting firms that has worked with Focus. This was confirmed in our conference call. The rationale for the decision to use Compass rather than Focus was the instability of tour generation with Focus, whereas trip generation with Compass is stable from model iteration to iteration. It was also suggested during the conference call that FTA and FHWA have a problem with Focus because tour generation may differ across alternatives in an alternatives analysis, creating an "apples and oranges" comparison. We don't find these rationales compelling and recommend that Focus be used to test the 8- and 10-lane sectional alternatives. (DynusT, the traffic simulation program used by Atkins/CDOT, does account for peak spreading. It is unclear to the panel whether this fully corrects for the failure of Compass to account for peak spreading in the initial phase of travel modeling.)

- Was traffic induced by the 10-lane section accounted for by CDOT and Atkins? The answer is no. It is now widely accepted that major highway projects like the proposed I-70 widening create new travel demands both in the short run, by generating additional trips, and in the long run, by



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altering development patterns. The old Compass model, used in this case, accounts for rerouted trips but not newly generated trips because (in this four-step model) trip generation is assumed to be a simple function of socioeconomic and not affected by roadway levels of service. The new Focus model does account for newly generated trips, but was not used by Atkins (see above). Again, the panel recommends that Focus be used to test the 8- and 10-lane sectional alternatives, with and without frontage roads.

- Was highway induced development accounted for by CDOT and Atkins? The answer is no. DRCOG's old spreadsheet based land use allocation model was the basis for the 2035 land use inputs used by Atkins. It does not account for the development inducing effects of a major highway project like I-70. Future land use patterns assumed as the major inputs to DRCOG's Compass model were the same for build and no-build alternatives. This violates best modeling practices and leaves the project open to technical criticism. DRCOG's new UrbanSim model includes much more realistic treatment of development decisions, and can account for highway induced development. It was not used by Atkins in its modeling work because it was not available until recently, but it is operational now. The panel recommends that UrbanSim be used to test the 8- and 10-lane sections.
- What are operational characteristics (LOS) for different sections of I-70 in the horizon year? Common sense suggests that there will be a serious bottleneck for westbound traffic created by having the 10-lane section of I-70 transition down to 6 lanes to the west of the project. The panel finds it hard to believe that the transition will be a smooth one and that westbound traffic will not back up terribly. An 8-lane cross section would produce a smoother transition to the 6-lane section, and that consideration is among the reasons why it should be tested.

The TPD team emphasizes that the size and scale of a transportation facility is fundamentally based on the forecast demand model. Understanding the assumptions and findings is critical to making an informed decision on the number of lanes, regular and/or managed. The basic problem, as the panel sees it, is that planning for I-70 improvements began more than 10 years ago, and the practice of modeling by CDOT and Atkins has not kept pace with best modeling practices. The methodology memo



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hammered out between CDOT and FHWA at the beginning of the process no longer serves the project partners well.

#3 - Managed Lanes:

The preferred alternative identified by CDOT and analyzed in the DEIS includes a “managed lanes” option. In the DEIS, CDOT discusses the “managed lanes” option as follows:

General-purpose lanes are traffic lanes that do not apply any restrictions to the vehicles using them. Managed lanes implement operational strategies that will be adjusted based on real-time traffic demand on the highway facility. This is accomplished by providing a specially managed travel lane for vehicles to avoid congestion and travel at a higher speed than the general-purpose lanes. The purpose is to provide a reliable, congestion-free option along the highway and provide a way to manage congestion over the long term to reduce the need for future expansion. The Build Alternatives Managed Lanes Option only manages the added capacity. Existing capacity remains as general-purpose lanes. (DEIS, p. 3-18.)

The DEIS also indicates that “the pricing and policies for the managed lanes will be determined through a separate study.” (DEIS, p. 3-19).

While it is encouraging to see that CDOT is considering a “managed lanes” option for the project, it is our observation that the use of managed lanes in this corridor could have a significant influence on the overall functionality of this corridor that is not necessarily being taken into account in the planning for this particular project. The Federal Highway Administration (FHWA) has observed that transportation agencies across the country are developing “managed lanes” systems, particularly in urban centers, and that these managed lanes systems can be designed to meet a variety of specific operational goals.

FHWA provides an overview of the managed lanes concept on its agency website

http://ops.fhwa.dot.gov/publications/managelanes_primer/ FHWA defines “Managed lanes” “as highway facilities or a set of lanes where operational strategies are proactively implemented and managed in response to changing conditions.” Exhibit 1 is a diagram that captures the potential lane management



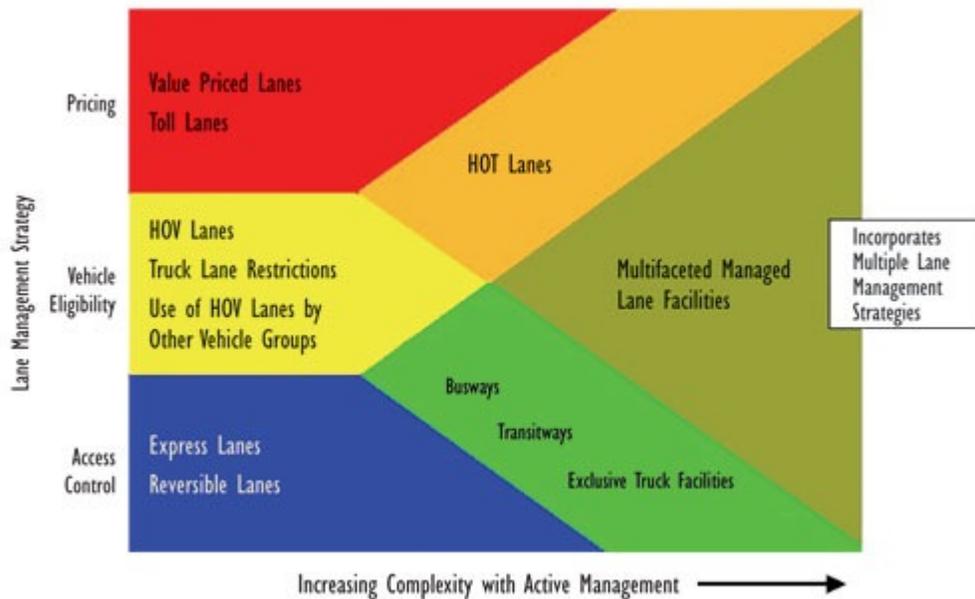
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applications that fall into this broad definition of "managed lanes." On the left of the diagram are the applications of a single operational strategy—pricing, vehicle eligibility, or access control:

- Pricing — Includes both traditional toll lanes and toll lanes that use congestion pricing, where price is varied during certain time periods in order to manage demand (e.g., peak-period surcharge or off-peak discount).
- Vehicle eligibility — The lanes are managed by allowing certain vehicles or restricting others; minimum occupancy is an example of an eligibility restriction.
- Access control — An example would be express lanes where all vehicles are allowed but access is limited during long stretches of the facility, minimizing turbulence in the flow of vehicles.

Exhibit 1: Managed Lane Applications (source: Federal Highway Administration)



As you move to the right on the diagram, you get into the more complicated managed lane facilities that blend more than one of these strategies:



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- Combined pricing and eligibility — HOT lanes where higher occupancy vehicles such as buses, vanpools and carpools are given free or discounted passage and all other vehicles are tolled.
- Combined vehicle eligibility and access control — Examples include exclusive busways, transitways or truck facilities serving a specific type of vehicle, with barrier separation and limited access points
- Multifaceted managed lanes — Integrates all strategies for an actively managed facility that incorporates a high degree of operational flexibility

On its website, FHWA also provides examples of a variety of different operational goals that can be met through the proper design and operation of a managed lanes system. It should also be noted that there is a growing body of research on managed lanes systems that is available at this time, some of which is referenced on the FHWA website.

From our collective experience, we believe that a well-designed managed lane system concept for the I-70 corridor, which is integrated into a larger managed lane system plan for the Metropolitan Denver highway system, and is also connected to the regional and local transit system, would lead better future performance for the entire system, and would also allow for better-informed decisions regarding the specific lane configurations and access points for the I-70 East segment.

We also believe that it will be very important for CDOT and the other transportation agencies that are involved in this planning process to do a better job in explaining the “managed lane” concepts that are under consideration. It was our impression from the meetings we attended with community stakeholders and elected officials that many of them do not have a good understanding of “managed lanes” applications, and that there may be unnecessary fears regarding how the use of these applications would affect public access to the highway system and the cost of using the system.



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#4 - Community and Economic Development:

Considerable efforts are being made to develop cohesive community and economic development plans in tandem with the I-70 East project. The recently-launched North Denver Cornerstone Collaborative together with Council activities are at the heart of this effort and it is very important to move forward ahead of a record of decision. Planning documents, adopted and approved, will provide a framework that will inform the final preferred I-70 East design alternative, articulate desired mitigation efforts and lay the foundation for implementation of land use, economic and community development efforts before, during and post-construction. The City's commitment is well-timed and vital to building a trusting partnership with the community over the next decade.

We heard several times the need to establish (or re-establish) "connectivity" in the adjoining neighborhoods. The actual solutions ranged considerably - from new crossings over the rail tracks, to new street connections, frontage roads and so on. An immediate and iterative process to settle on a set of recommendations to improve connectivity and accessibility should be a priority and efforts to achieve consensus are well worth the effort. Since the cost of such improvements is at the heart of discussions between the City and CDOT, the record of decision (or parallel city/state memorandum of understanding) should lay out the responsibilities of each party. Once construction begins, it will be much more difficult to "go back" and revisit these decisions.

In addition, the panel understood from its conversation with CDOT staff that there will be significant investments to improve storm water drainage and these investments will also benefit the adjacent neighborhoods, which have historically had drainage problems. The TPD commends CDOT for working with the City and County of Denver and the neighborhood to solve this problem across jurisdictional boundaries. However, we did not get the impression from our meeting with community leaders that they were aware of the potential benefits to the neighborhood storm water drainage systems from this project; we believe this issue needs to be addressed more directly by CDOT and the City in their future discussions with the community leaders.

Regardless of the selected alternative, deconstruction of the actual viaduct (let alone other construction work) will be lengthy and disruptive. We do not believe, however, that the true impacts of construction



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activities are commonly understood. Since a preferred alternative has not been selected and more detailed design work will not accelerate for some time, it is important to maintain close contact as design moves forward in order to fully understand these impacts.

During this interim period, we do believe it is important for the City as well to plan for the construction period in part by reaching agreement regarding CDOT's responsibilities during construction. For example, the City may wish to further its efforts to improve the business/resident relationship. One example (of many good ones) would be a good-neighbor compact with local businesses and trucking companies to clamp down on "cutting through" residential streets. The same, of course, goes for CDOT's contractors who will likely be subject to noise and air quality monitoring, but could benefit as well from commonly-agreed to times of construction, haul routes, etc.

Likewise, the implementation of advance projects to facilitate connectivity and alternate routes is well-advised. That work is underway and should continue. It was unclear as to whether added capacity along the northerly alternate route, I-270, would be implemented prior to I-70 East construction work but that is an important early decision.

#5 - Constructability & Construction Impacts:

It is clear that whatever alternative is pursued, other than the "do-nothing" alternative, that the neighborhoods adjacent to I-70 will be significantly impacted during construction. These impacts will include impacts from construction activities, including: dust, noise and vibration, and other impacts resulting from the project including: disruption of circulation on local streets, possible diversion of trucks through the neighborhood from the adjacent industrial areas. However, these impacts will be limited in time to the duration of the project. Other impacts will be much longer in term, including the taking of homes and the major adjustments to the playground for the Swansea Elementary School.

#6 - Vasquez Interchange Design Consideration:

The TPD team also reviewed an option studied by the City and believes that consideration should be given to closing the interchange at Vasquez. This would result in a significant area that could be



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redeveloped for the benefit of the neighborhood to accommodate mixed income housing and neighborhood-serving retail and community or civic uses. The neighborhood is interested in a grocery store, for example. The land may also provide a good alternative for a relocated elementary school. The TPD team understands that Commerce City officials believe this interchange is necessary for truck traffic from their community; hence the importance of an integrated context-sensitive freight system plan.

#7 - Mobility During Construction:

The TPD team recognized that CDOT and the City and County of Denver and the City of Commerce City are all mindful of the significant construction-related impacts. However, it was not apparent to the TPD team that the stakeholders have resolved the “advance package” of mobility-related projects. Clearly, adding lanes to I-270 before the I-70 project begins will help alleviate construction traffic concerns. Similarly, addressing neighborhood circulation issues through multimodal accessibility and connectivity enhancements before construction of I-70 begins will minimize the disruption to local circulation during construction. The timing of projects matters and the advance work should be well into design in order to ensure project delivery prior to the start of intensive I-70 East construction.

#8 - Community Engagement Process:

During our meeting with community leaders, we heard a significant amount of criticism about the community engagement process conducted by CDOT, in collaboration with the City and County of Denver. We were told that the “open house” community meetings conducted by CDOT did not provide opportunities for the community leaders to engage in group discussions with CDOT and the City representatives to help build community consensus regarding issues of concern to them, and that there was not a clear understanding of how CDOT and the City would be taking specific comments received from the public and responding to them directly. We believe that in the future CDOT and the City of Denver staff should work collaboratively to develop a more robust community engagement process, with participation from other interested public agencies such as DRCOG, the regional transit agency, and neighboring cities, along with community and neighborhood residents, business owners and other stakeholders. While one-on-one exploration of maps and design plans with CDOT representatives is an important component of increasing understanding, such a tactic – absent community forums in which



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everyone can hear questions and responses – falls short of achieving meaningful participation that is important to building community consensus.

One “success story” in this realm that should be considered is the I-15 / 40th Street Freeway Project in San Diego. In the early 1990s, the California Department of Transportation (Caltrans) was evaluating options for extending I-15 through some disadvantaged neighborhoods in the Mid-city area south of I-8. Through its planning process, Caltrans became aware of significant community concerns regarding the possible impacts of the highway project on their neighborhoods. This ultimately led to a collaborative planning and community engagement process that included the City of San Diego, Metropolitan Transit District Board, and many other stakeholder groups and community representatives. The result was that Caltrans selected a preferred alternative for this 2.2-mile corridor that was designed to minimize community impacts while at the same time improving the functionality of regional transportation system. In addition, Caltrans and the City entered into a formal Memorandum of Understanding that laid out the specific community improvements that were agreed to (including covers over the freeway at key locations), and identified the responsible parties for each of these improvements. The MOU also laid out mutual understandings regarding highway operation issues and specifically addressed future linkages of a planned regional transit line in the I-15 corridor to existing and planned transit routes serving the community, through elevators to be installed on the intersecting boulevards that would connect to center-median transit stations on I-15 (see attached article and exhibits). Caltrans received an Honorable Mention for this project in the 2002 FHWA Transportation Planning Excellence Award Program.

The APA Transportation Planning Division would be willing to provide more detailed information on this project and its community engagement process for consideration by CDOT and the City and County of Denver, and would also be willing to provide additional assistance to CDOT and the City in designing a similar community outreach and collaboration process for the I-70 East Project as it moves into its next phases of planning and project development.

IV. Organization, Roles and Responsibilities

The TPD team met with numerous stakeholders over the course of the two-day peer review exercise. It is worth noting that these meetings were illuminating from the perspective of partnership and



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coordination. In part because the I-70 East project is now in a critically-important public review phase, stakeholders are both framing their positions on the preferred alternative and planning for the short- and long-term impacts of the project moving forward. At some point in the near future, a project will move forward and it is vitally important for all stakeholders to recognize and embrace their roles. Project success will not be determined solely by the actions of the CDOT as the primary sponsor. Rather Denver, DRCOG, the local neighborhoods and business communities and adjoining municipalities will all need to come to the table in meaningful ways.

The clearest early manifestation is the above-referenced North Denver Cornerstone Collaborative. It was not apparent during our short visit that the Collaborative has truly “launched” with stakeholder buy-in and engagement. This is a key first step which will lead to concrete short- and long-term steps to improve the most-impacted communities. Likewise, it is incumbent on DRCOG to embrace a more meaningful role in system-wide planning and travel demand forecasting. As planners, we are responsible for not only the regulatory aspects of plan development, but also their relevance as a decision-making tool. Finally, as the project sponsor, CDOT is understandably pushing hard to move a project forward.

There will be a point in the process – during preliminary design at the latest – when all stakeholders need to be brought back to the table in a coordinating fashion in order for all parties to stay aligned on construction staging, contractor specifications as they relate to mitigation activities, design features, communications, detours, alternatives routes, the “leave-behind” condition for local roads, surplus land and the non-access line and so on. This process would ideally lead to an I-70 East coordinating committee led jointly by the City and County together with CDOT.

V. National Applicability

As noted in the introduction to this report, many state transportation agencies, regional transportation planning agencies and local governments are now wrestling with the same difficult issues regarding replacement of aging viaducts as is CDOT and the City and County of Denver. A recent report by the Congress of New Urbanism <http://www.cnu.org/highways/freewayswithoutfutures> identifies a significant number of viaducts that are in need of replacement, and provides some additional examples regarding the options being considered for these projects. APA Transportation Planning Division will be sharing our



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observations regarding the I-70 East Project, and lessons learned that could be applied to other projects involving replacement of existing viaducts, with our members and colleagues.

VI. Closing

The TPD team again wishes to thank all of the stakeholders who assisted with the peer review and took the time to meet with us, both in Denver and in follow up conversations. Our hosts were extremely gracious and welcoming during a sensitive phase of the project. We were able to have honest and thoughtful discussions which, when taken as a whole, offered a unique perspective on the project. The findings and insights contained herein reflect both a situation analysis and pathway forward. To that end, the Transportation Planning Division and members of the TPD team are available to you to assist and provide further details on any of the matters discussed herein.



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