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COLORADO  
Department of  
Transportation

Colorado General Assembly

Colorado State Capitol

200 East Colfax

Denver CO 80203

January 15, 2016

**Dear Members of Colorado's General Assembly and all Coloradans:**

This report describes the activities and accomplishments of the High Performance Transportation Enterprise in 2015, a busy year for the HPTE team as we address some of Colorado's most pressing transportation challenges.

The HPTE's centerpiece accomplishment this past year was the opening of US 36 Express Lanes project in one of the state's fastest-growing corridors. Phase I (between I-25 and 88th/Interlocken) opened July, 22, 2015 and Phase II to Table Mesa will open early in 2016. With our finance and operations partner, Plenary Roads Denver, this multi-modal addition to the metro area's transportation system met an ambitious schedule and budget goals. This innovative public-private partnership, a first for CDOT, accelerated the project's financial feasibility and delivered improvements years sooner than would have otherwise been possible using traditional funding methods.

This Annual Report provides status updates on other HPTE projects in the I-70 East, I-70 Mountain and I-25 North corridors. HPTE arranged financing for the I-70 Mountain Express Lane that began operations in late 2015, offering new mobility options to travelers between Colorado's mountain communities and the Front Range. And HPTE continues to work with dozens of stakeholders on the highly competitive process to select a developer for the I-70 East project. In these and all HPTE-related projects, we focus on answering a series of core questions: Can we accelerate the transportation improvements? Can we save on costs and maximize the value of limited taxpayer resources? And can we increase the scope of the project with enhanced mobility and choice for travelers? Embedded in this process is our commitment to public participation and transparency, and a high level of engagement with the General Assembly, local governments and agencies, media, local communities, business sectors and employers, transportation users and the general public.

Colorado is under increasing pressure to maintain the transportation system we have, and we need creative solutions to expand our infrastructure and increase efficiencies to meet the needs presented by our state's projected 46 percent population growth in the next 30 years. Innovative solutions are critical to address these 21st century realities. The partnership on the US 36 Express Lanes project and I-70 Mountain Express Lanes demonstrates that new approaches to infrastructure investment are delivering results.

We want to hear from you. We invite you to contact us with your comments, questions and ideas by emailing us at [dot\\_hpte@state.co.us](mailto:dot_hpte@state.co.us), or calling directly to 303-757-9249.

Sincerely,

David Spector, HPTE Director



Kathy Gilliland, HPTE Board Chair



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## 1.0 OVERVIEW

The Funding Advancement for Surface Transportation and Economic Recovery Act (Part 8 of Article 4, Title 43, Colorado Revised Statutes), otherwise known as FASTER, created the High Performance Transportation Enterprise (HPTE) in 2009 as a government-owned business within the Colorado Department of Transportation (CDOT).

The HPTE has the responsibility to seek out opportunities for innovative and efficient means of financing and delivering important surface transportation infrastructure projects in the State. It has the statutory power, among others, to impose tolls and other user fees, to issue revenue bonds secured by those fees, and to enter into contracts with public and private entities to facilitate public-private partnerships (P3). The law also introduced a new governance structure, creating an HPTE Board of Directors which includes a mix of State Transportation Commissioners and external stakeholders appointed by the Governor to provide expertise and guidance in analyzing PPP and other creative financing mechanisms. The HPTE is an “enterprise” for purposes of section 20 of Article X of the State Constitution, so long as it retains the authority to issue revenue bonds and receives less than 10 percent of its total revenues in grants from the State and local governments.

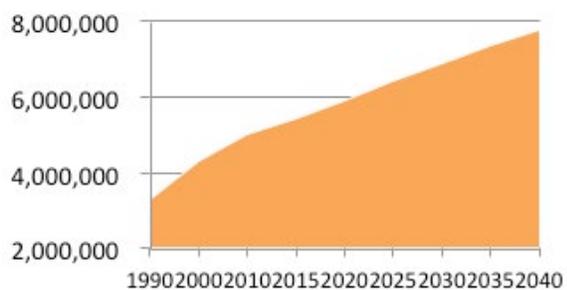
FASTER requires that the HPTE issue a report of its activities for the previous year to the Legislature by February 15, 2015, with the report posted to the HPTE website no later than January 15, 2015. This report fulfills that requirement and can be found at [www.coloradohpte.com](http://www.coloradohpte.com).

### HPTE: Exploring Options to Meet Colorado’s 21st Century Mobility Needs

Colorado’s transportation system is challenged in large part by two forces: 1) rapid population growth that puts pressure on our aging system; and 2) budget realities, which significantly impact our ability to maintain and expand it. Finding solutions to these challenges is critical—our interstate and other highway infrastructure are severely congested in many areas, more than 50 years old and in need of repairs and maintenance, and the rapid growth of our state’s population points to even greater congestion in the decades ahead unless we find ways to accelerate key projects.

**Colorado's Population  
1990 - 2040 (projected)**

source: CO State Demographer



## HPTE's Value to CDOT and Taxpayers

After CDOT identifies major project needs and available funding resources, HPTE explores creative financing and delivery alternatives, always on a case-by-case basis. With the approval of its Board of Directors, and in consultation with CDOT's Executive Director and Transportation Commission, HPTE then implements the preferred alternative. HPTE's analysis of delivery alternatives includes a comparison of the costs, risks and availability of traditional public financing against the potential value of private investment. Important considerations in deciding whether to seek private investment are:

- **Accelerated Timing:** Will it allow the project to start earlier, get built faster and completed sooner?
- **Reduced Upfront Costs:** Will it significantly reduce the upfront capital required from the state?
- **Expanded Scope:** Will it deliver more of the project's planned improvements and maximize value to Colorado taxpayers?
- **Innovation:** Will the project provide unique opportunities for design, construction and operational innovation?
- **Risk Transfer:** Will it permit us to shift significant project risks, such as cost overruns and revenue shortfall, to the private partner?
- **Reliability:** Will the state benefit from guaranteed performance on long-term operations and maintenance?



## 2.0 HPTE ORGANIZATION

### 2.1 HPTE Board

The HPTE Board consists of three members of the Transportation Commission and four external members who are appointed by the Governor from each of the following geographic areas:

- The Denver Metropolitan area
- The North Front Range Metropolitan Planning Organization (MPO) area
- The Pikes Peak Council of Governments MPO area
- The I-70 Mountain Corridor area

HPTE BOARD Members		
Name	Area Representing	Term Expires
Gary Reiff	Transportation Commissioner District 1	At pleasure of the TC
Kathy Gilliland, Chair	Transportation Commissioner District 4	At pleasure of the TC
Shannon Gifford	Transportation Commissioner District 7	At pleasure of the TC
Trey Rogers	Denver Metropolitan Area	10-01-17
Don Marostica, Vice Chair	North Front Range MPO Area	10-11-19
Thad Noll	I-70 Mountain Corridor Area	10-11-19
Vacant	Pikes Peak MPO Area	10-01-17

The HPTE Board of Directors meets at noon on the third Wednesday of every month at the CDOT Headquarters located at 4201 E. Arkansas Ave., Denver. These meetings are open to the public. In 2015, the HPTE Board of Directors met eleven times in regular session, and four times in special session.

HPTE Board Meeting agendas, minutes and documents are accessible on the HPTE website at: [www.coloradoHPTE.com](http://www.coloradoHPTE.com).

## 2.0 ORGANIZATION [CONT.]

### 2.2 Staff

David Spector was selected as Director of HPTE by the Board, with the consent of CDOT Executive Director Shailen Bhatt, in October 2015 after a competitive selection process. HPTE has three full-time staff members who provide administrative services, contract and project management, express lane performance reporting, tolling and public-private partnership relationships, and HPTE external procurement services.

CDOT staff assigned part-time to the HPTE include an accountant, budget analyst and communications manager. Project and policy development support is provided by the Office of Major Project Development and other CDOT employees, with time billed to the HPTE cost center, and by outside consultants as necessary. All operating expenditures are tracked independently of CDOT to maintain a clear separation of the two organizations.

### 2.3 Summary of Key Activities

At its inception in 2009, the HPTE was established to develop new thoughts and practices in the delivery of critical transportation corridor projects. Today, several key projects are in place or under construction. The HPTE continues to evolve beyond its think-tank beginnings into essential mission-driven expertise and services including the establishment of complex interagency legal agreements, contract management and project oversight, and policy development. The key non-project specific activities of the HPTE in 2015 include the following:

**Transparency in Public Information, Outreach and Participation:** In compliance with Executive Order D 2014-010, the HPTE Board adopted the “Colorado High Performance Transportation Enterprise Transparency Policy Relating to Public-Private Partnerships” in July 2014. The policy incorporates the disclosure, oversight and public input provisions of SB14-197, and significantly increases the opportunities for public comment during a public-private partnership (P3) procurement process.

A guiding principle of the HPTE’s work is a commitment to public participation and transparency. Our success depends on an open dialogue with the General Assembly, local governments and agencies, the business sector and employers, and transportation consumers. In 2015, the HPTE held a number of outreach events as it explores private investment options for projects in a number of corridors . For a summary of the public-private partnership activities, please see [Appendix 1](#) of this report titled “Summary of 2015 Public Outreach Events.”

## 2.0 ORGANIZATION [CONT.]

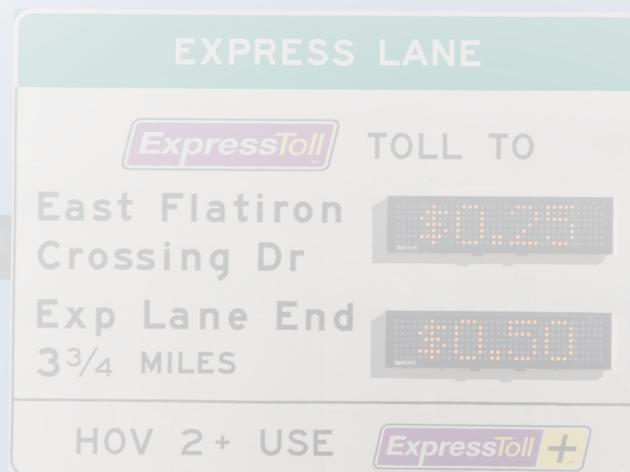
**Legislative Audit Committee Review:** In 2014 and 2015, the Legislative Audit Committee and the Office of the State Auditor (OSA) conducted a performance audit of HPTE and the US 36 P3 Project. The OSA report in March 2015 made 29 recommendations related to P3 procurement, including planning for a P3, communications, monitoring and project management practices. The key findings of the report found that the HPTE should increase focus on the following activities:

- Begin planning for key elements of P3 projects during project development and improve the information and details on these elements provided to prospective bidders during procurement phases;
- Build comprehensive and detailed schedules for P3 projects and include achievable due dates;
- Develop a comprehensive communications plan for informing and soliciting input from stakeholders, and an open records and transparency plan for ensuring compliance with the Colorado Open Records Act;
- Develop a systematic project management framework and guidance for managing large P3 projects, and identify strategies for obtaining adequate resources and providing ongoing training.

On December 7, 2015, the HPTE reported back to the Legislative Audit Committee having implemented 26 of the 29 the recommendations of the OSA report. For details, please see [Appendix 2](#) of this report titled “Summary of Office of State Auditor Recommendations and Outcomes.”

**Express Lanes Education/Communications:** To meet HPTE’s commitment to transparency and public participation, HPTE has increased communications resources both internally and externally. Working with CDOT’s Office of Communications, HPTE has a dedicated communications manager and has also engaged strategic communications consultants. As a result, the HPTE is building greater capacity to provide timely information, gather public input, and respond to issues raised by the public, media, elected officials and stakeholders.

Additionally, HPTE established a process for proposed toll schedule rate action: 1) HPTE Board is notified of the proposed toll rate schedule and public outreach schedule and plans; 2) HPTE, CDOT and partners and stakeholders conduct public meeting(s) to gather public input on the corridor’s proposed toll rate schedule, and to educate on how express lanes work and to get a pass; and 3) HPTE presents the public outreach input, comments and summary to the HPTE Board for their action.



## 2.0 ORGANIZATION [CONT.]

**Tolling Services Agreements:** With several new Express Lanes facilities opening in 2015 and 2016, HPTE negotiated a Master Tolling Services Agreement (TSA) with E-470. Public Highway Authority E-470 has agreed to provide installation services for tolling equipment on the new lanes, and its subsidiary ExpressToll will provide toll collection and adjudication services, perform customer services (such as answering inbound customer calls about Express Lanes) and administrative services (including account establishment and management). The term of this TSA is five years, with termination by HPTE on 24 months' notice, and is intended to accommodate the requirements of all CDOT-operated Express Lanes.

Also, as part of the Concession Agreement with Plenary Roads Denver (PRD), HPTE negotiated a similar long-term three-party agreement to manage toll equipment installation, customer service and adjudication and toll collection services between HPTE, PRD and E-470 for US 36 and I-25 Central.

**Switchable Transponders:** The new Express Lanes accommodate a variety of traffic types (for example, buses, HOV's, and toll-paying traffic) within a single lane, necessitating that the vehicles in the lane be able to declare whether they are toll-paying or driving for free. In the past on the I-25 Central Express Lanes, high occupancy vehicles (HOV) were able to "self-declare" their toll-free status by getting in the lane reserved for such traffic. Now, because the Express Lanes accommodates all types of traffic, the lane recognizes the toll/non-toll status of vehicles by the signal that their transponder sends to the toll equipment (vehicles without a transponder will be automatically billed a license plate toll, or LPT).

The Express Lanes require a new type of transponder that can accommodate a vehicle's HOV status as well as its toll-paying status as the situation presents itself. The new "switchable transponder" allows the driver to toggle between HOV-free and toll-pay status depending on how many people there are in the car at the time.

To date, 67,000 switchable transponders have been purchased and distributed (the \$15 price tag covers the cost of manufacturing and shipping the device) with an average of 1,500 being distributed per week since they were offered in spring 2015. The new transponders support the HOV-free/toll paying choices of many regular commuters. Drivers who choose to not drive as an HOV can still use the free sticker transponder that does not feature the toggle function.

**Temporary License Plate Legislation:** SB 15-90 was passed by the Legislature to update Colorado's temporary license plate program. The bill allows for more durable, readable temporary plates to be affixed to the rear license plate holder, rather than inside the rear window. The new placement of the temporary tags will help eliminate a significant source of toll revenue leakage, eventually making license plate tolling more efficient and less costly.

**P3 Open Records and Amended Transparency Policy:** In August, 2015, the HPTE Board adopted an open records policy relating to P3's and also amended the existing P3 Transparency Policy to reflect the addition of specific open records provisions. This attempts to balance the need for a competitive process with HPTE's interest in conducting open and transparent procurements. The Transparency Policy was updated regarding the timing of town hall meetings for P3 procurements to better coincide with the voluntary public record disclosure schedule set forth in the Colorado Open Records Act (CORA) Policy. Please see the "First Amended Transparency Policy Relating to Public-Private Partnerships" in Appendix 3 of this report.

**Pending Litigation:** On March 22, 2014, the Drive Sunshine Institute, a clean energy advocacy group, filed suit against the HPTE and other related defendants to enjoin the HPTE from moving forward with the US 36 Express Lanes Phase 2 project. The case was dismissed with prejudice on February 19, 2015.

## 3.0 FINANCIAL STATUS

### 3.1 Revenues and Expenditures

Revenues and expenses of the HPTE are accounted for on a fiscal year basis. For FY 2015 (which ended on June 30, 2015), total unaudited HPTE revenues were \$8,865,008. Total unaudited HPTE expenditures in FY 2015 were \$7,906,016. The decrease in revenue and expenses from FY 2014 reflects the turnover of I-25 operations and revenue collection to a third party operator. Also in 2015, HPTE completed its billing for local entity contributions toward US 36 and fully incurred most of the construction expenses as well. A current unaudited budget-to-actual through November 30, 2015 is attached as [Appendix 4](#) to this report, and provides a snapshot of HPTE's budget.

### 3.2 Audited Financials

The HPTE's finances are audited each year as part of the State audit. The audited financial report will be posted when released by the Legislative Audit Committee to HPTE's website, [www.coloradoHPTE.com](http://www.coloradoHPTE.com).

### 3.3 Sustainable Business Planning

In January 2015, a final analysis on the value of services that HPTE provides to CDOT was completed. In recognition of the specialized nature of the expertise and services HPTE provides to CDOT, a fee for service model was determined to be the most appropriate option available for HPTE to deliver the fair market value of the services it provides to CDOT. Further, the fee-for-service model substantiates the business relationship between HPTE and CDOT and allows HPTE to repay all CDOT operating loans extended under the statute.

To execute this new arrangement, a Fee-for-Service Intra-Agency Agreement between HPTE and CDOT was approved at the end of Fiscal Year 2015, along with an HPTE scope of work for upcoming Fiscal Year 2016.

## 4.0 STATUS OF TRANSP. INFRASTRUCTURE PROJECTS

### 4.1 Projects Completed or Under Construction

**I-25 Downtown Express Lanes:** Tolled Express Lanes in the barrier-separated I-25 HOV/bus reversible corridor opened in June 2006, marking the first time solo drivers could legally access existing HOV lanes by paying a toll. The I-25 Express Lanes, also known as high occupancy toll (HOT) lanes, extend along a roughly seven-mile section of I-25 between downtown Denver and US 36. Carpools, RTD express and regional buses, hybrid vehicles with permits and motorcycles continue to use the lanes toll-free. On March 7, 2014, Plenary Roads Denver (PRD) began operation and maintenance responsibilities on these lanes under the US 36 Concession Agreement.

The I-25 HOV/Express Lanes continue to operate as anticipated. PRD's FY 2015 revenues demonstrate stability, expected seasonal fluctuations and moderate overall increases as traffic volumes grow with population. In late July 2015, the requirement that HOVs and motorcycles also declare their toll-free use via transponder was implemented. The data outcome has been an expected spike in license plate tolling numbers, as the Express Lanes HOV users adjust to the new lane configuration and begin to use the new switchable transponder. HPTE anticipates in early 2016 the distribution of traffic types will begin to normalize to around 25% ExpressToll, 10% license plate toll, and 65% ExpressToll+ (the new HOV switchable transponder traffic type).

Monthly and Quarterly performance updates for I-25 Express Lanes can be found on [www.coloradoHPTE.com](http://www.coloradoHPTE.com).

**US 36 Bus Rapid Transit (BRT)/Express Lanes Concession Agreement:** Plenary Roads Denver (PRD) was selected in a competitive process that started in 2012. The Concession Agreement was signed in February 2013, and became effective for all purposes at the end of February 2014 after an open and coordinated effort by HPTE, CDOT, and PRD working together and with local, county, state governments and stakeholders.

The US 36 Concession Agreement requires PRD to finish construction of the US 36 toll lanes and the reconstruction of the general purpose lanes, to finance almost one-third of the total project cost (over \$500 million), and to operate and maintain the entire corridor (I-25 Express Lanes and US36) over a 50-year period. The contract requires PRD to return the project to CDOT in reconstructed condition at the end of the concession term. PRD has the right, subject to certain contractual limitations, to collect tolls from the Express Lanes until its investment is paid off and they have reached an agreed upon rate of return. After that point, HPTE and the corridor stakeholders, including local governments, will share in those revenues throughout the contract term.

The Concession Agreement is posted at [www.coloradoHPTE.com](http://www.coloradoHPTE.com).



## 4.0 STATUS OF PROJECTS [CONT.]

**Phase 1 and Phase 2 US 36 BRT/Express Lanes:** The US 36 Express Lanes Project is a multi-modal project with a tolled express lane in each direction on US 36, in addition to the two free general purpose lanes. The Express Lanes accommodate HOV, BRT and tolled vehicles. In addition, the project has replaced several bridges, built a commuter bikeway, added BRT improvements, and installed Intelligent Transportation Systems (ITS) for tolling, transit and traveler information and incident management. Included as part of the US 36 Project system are the reversible HOV/Express Lanes on I-25.

Phase 1, a CDOT design-build project, extends from Federal Boulevard to 88th Street in Louisville/Superior, and opened for tolling on July 22, 2015, after a month of toll-free toll equipment testing in the new lanes. Tolling began on July 22, 2015, on Phase 1, and commuters have adapted quickly to the new Express Lanes options on US 36 and I-25. Bus speeds on US 36 are maintaining the 45 mph minimum travel speeds, getting riders where they need to go more efficiently; cyclists are actively using Phase 1's 11-mile bikeway between Louisville and Westminster; and more than 67,000 switchable HOV transponders have been sold to date.

Phase 2 from 88th Street to Table Mesa Drive in Boulder will open for tolling in early 2016. Phase 2 is CDOT's first P3, an innovative partnership where the public and private sectors team together to provide transportation improvements and services to the traveling public. CDOT and HPTE entered into a 50-year agreement with Plenary Roads Denver, and about two-thirds of the Phase 2 Project costs are funded through PRD equity and non-recourse debt. The project delivers much-needed capacity, while shifting operations and maintenance and replacement obligations to the private sector for the next 50 years. This P3 arrangement enabled the project to be completed 20 years sooner than if CDOT had relied on traditional financing approaches.



## 4.0 STATUS OF PROJECTS [CONT.]

Quarterly operations reports for US 36 and I-25 Express Lanes are provided by PRD. The FY 2016 First Quarter Operations Report for US 36 (for the months of July through September, 2015 which also includes reporting for I-25 Central) can be found at [www.coloradoHPTE.com](http://www.coloradoHPTE.com). Some highlights from the first months of operation for US 36 Phase 1 are:

- Traffic is following seasonal norms, as anticipated by the historical traffic counts from I-25 Central.
- There are expected significant increases in ExpressToll (transponder) and License Plate Toll (LPT) traffic counts, with a commensurate drop in HOV counts. This is due to customers learning how to use the new lanes, including purchasing the switchable transponder for HOV use. It is expected that the distribution of traffic types will begin to normalize to around 25 percent ExpressToll, 10 percent license plate toll, and 65 percent ExpressToll+ (the new HOV switchable transponder traffic type) in the coming months.
- ExpressToll, HPTE's backoffice partner on tolling and customer service is meeting customer service goals.
- There have been more than 67,000 switchable transponders sold this year, with a weekly average of 1,500 being distributed.
- The Project (I-25 Express Lanes and US 36 Phase 1) revenues for the first FY16 quarter were as expected, with \$1.2 million and \$330,000 collected respectively.

The HPTE Board took action to approve proposed toll rate schedules in May for Phase 1, and in October for Phase 2 and Special Events from PRD.

For an overview of the US 36 Express Lanes Phase 1 Proposed Toll Rate Schedule, visit: [www.coloradoHPTE.com](http://www.coloradoHPTE.com)

For an overview of the US 36 Express Lanes Phase 2 and Special Events Proposed Toll Rate Schedule, visit: [www.coloradoHPTE.com](http://www.coloradoHPTE.com)

For more information on this corridor, visit [www.codot.gov/programs/expresslanes](http://www.codot.gov/programs/expresslanes), [www.codot.gov/projects/US36ExpressLanes](http://www.codot.gov/projects/US36ExpressLanes)

More information about US 36 Express Lanes public outreach can be found in [Appendix 1](#), "Summary of 2015 HPTE Public Outreach Events."

## 4.0 STATUS OF PROJECTS [CONT.]

**I-70 Mountain Corridor Express Lane:** In 2015, HPTE worked with CDOT to finance the \$78 million eastbound Mountain Express Lane project, which opened in December 2015 to provide critical congestion relief in this heavily travelled recreational corridor. The project is funded in part with a \$24.6 million bank loan (2.79% interest rate during the initial seven-year term) procured by HPTE and secured by projected toll revenues. HPTE will issue bonds to refinance the loan if it is not repaid by toll revenue during the initial term.

The project, part of CDOT's comprehensive plan to improve travel in the I-70 Mountain Corridor, upgrades 13-miles of eastbound I-70 within CDOT's existing right-of-way. The improvements feature a wide shoulder that will operate as a third travel lane only during peak travel periods, such as weekends and holidays. Tolls on the Express Lane are priced to keep traffic moving, which means toll prices will decrease to encourage drivers to use the lane, and increase as the lane reaches capacity. The morning opening ExpressToll rate will be \$3, rising to a cap of \$30 if congestion levels necessitate. Given the high-occupancy nature of the traffic in the I-70 mountain corridor, there will not be an HOV-free option. CDOT and HPTE opened this express lane, which is the first in the country to serve recreational, not commuter traffic, in the mountains, and only during peak periods. The toll prices are set as a range in order to provide a reliable travel time based upon these unique characteristics. The eastbound I-70 Mountain Express Lane opened on December 13, 2015, and is operated and maintained by CDOT and HPTE.

The benefits of the I-70 Mountain Express Lane include:

- Provide drivers with the choice of paying a toll for access to a new travel lane with a reliable travel time, in addition to the two free existing lanes, which will increase overall capacity to the corridor
- Reduce travel time by up to 30 minutes
- Enhance recent improvements to the mountain corridor, including the Twin Tunnels (Veterans Memorial Tunnels)

The I-70 Mountain Express Lane project adheres to the I-70 Mountain Corridor Context Sensitive Solutions (CSS) process, which includes a Project Leadership Team and a Technical Team. These groups (including local elected officials, businesses and other stakeholders) develop guiding core values that are vital in creating viable solutions for the congested corridor, ultimately resulting in the Mountain Express Lane project among others. Both groups are regularly consulted on the status of the project.

The HPTE Board took action to approve proposed toll rate schedules in October. For more information about I-70 Mountain Express Lane public outreach, visit: [www.coloradoHPTE.com](http://www.coloradoHPTE.com)

Please see a summary of the 2015 I-70 Mountain Express Lane public outreach in [Appendix 1](#).

## 4.0 STATUS OF PROJECTS [CONT.]



### **I-25 North Metro Express Lanes:**

In October 2013, construction began on the extension of Express Lanes on I-25 north from US 36 to 120th Avenue. This six-mile segment maximizes the use of the existing highway infrastructure to expand the capacity of I-25 by using the inside shoulder of the road, creating one new Express Lane in each direction. The project includes reconstruction of the connection with the existing I-25 Downtown Express Lanes. In addition, the project accomplishes resurfacing of the existing general purpose lanes, adding and improving sound barriers, and installing an Active Traffic Management (ATM) System that alerts drivers of downstream backups or incidents. When completed, RTD buses, permitted hybrids, HOV and motorcycles will use the Express Lanes for free, and other drivers can opt to pay a toll for a trip in the Express Lanes. The \$72 million project cost includes a \$15 million TIGER grant, with the balance funded by the state and local governments.

The I-25 North Express Lanes are projected to open in spring 2016, and will be operated and maintained by HPTE and CDOT. To provide a reliable travel time, toll prices on the Express Lanes will decrease and increase to manage capacity in the lanes.

On December 17, 2015, the Transportation Commission approved credit support to HPTE for commercial loan financing for Segment 3 of I-25 North, which extends from 120th St. to E-470 on the north. This step was critical as it allows the project construction to go to advertisement on schedule. HPTE and OMPD will continue to work with the project team to identify the ideal timing for the future loan, which could close as early as January 2016 or in the spring.

### **I-70 East:**

Fifty years ago, when Colorado's population was only one-third of today's 5.2 million, I-70 through north Denver (from I-25 to Tower Road) opened. In the decades since then, I-70 has grown into the state's most important east-west transportation corridor. Today, it ties together Denver International Airport, the city's central business district, communities throughout the Denver metro region, mountain resorts and communities in the Eastern Plains and Western Slope. The deteriorating viaduct that carries approximately 140,000 vehicles a day through Denver's Elyria, Swansea and Globeville neighborhoods is reaching the end of its useful life.

I-70 East is one of the most heavily traveled and congested highway corridors in the Denver region and the State. For the last decade, CDOT has been studying a series of improvements to this corridor to make the interstate safer, relieve congestion, and address aging infrastructure.

After working closely with stakeholders during the Environmental Impact Study (EIS) process, CDOT is identifying a preferred option for the future of I-70 East. This alternative, known as the Partial Cover Lowered Alternative, proposes to remove the 50-year-old viaduct between Brighton Boulevard and Colorado Boulevard, lower the highway along this section, and construct a 4-acre landscaped cover over the interstate. New capacity and mobility would be provided through one additional managed lane in each direction. The full Supplemental Environmental Impact Statement (SDEIS) was released for public comment on August 29, 2014. The Final Environmental Impact Statement (FEIS) will be issued in January 2016 and a Record of Decision is expected in summer 2016.

## 4.0 STATUS OF PROJECTS [CONT.]

### 4.2 2016 Focus Projects

On September 15, 2015, CDOT and HPTE released the first section of the Request for Proposals (RFP) for the I-70 East Project. While not precluding the outcome of the FEIS, this public release is another step in CDOT and HPTE's ongoing commitment to increased transparency, efficiency and public participation. This release was preceded by three rounds of public meetings, which have been held prior to each stage of the procurement process and are described in Appendix 1. The RFP lays out CDOT's expectations in the project's technical scope, contractual requirements and performance standards. Four developer teams were selected in July 2015 to respond to the RFP with highly detailed information about how they propose to design, build, finance, operate and maintain the I-70 East Project. In addition, teams must provide detailed financial information and outline how they will ensure transparency and meet the goals of the state, the general public and impacted communities. The four shortlisted teams are:

- **5280 Connectors** - [Executive Summary](#) - [Statement of Qualifications](#)
- **Front Range Mobility Group** - [Executive Summary](#) - [Statement of Qualifications](#)
- **I-70 Mile High Partners** - [Executive Summary](#) - [Statement of Qualifications](#)
- **Kiewit / Meridiam Partners** - [Executive Summary](#) - [Statement of Qualifications](#)

Selection of the winning team will be made in late 2016.

In August, HPTE and CDOT hosted four public meetings, as part of transparency and public outreach efforts required from the HPTE's Transparency Policy on P3s. These four meetings were held following selection of short-listed proposers and prior to issuance of a Request for Proposals. For more information about public participation on I-70 East, please visit [www.coloradoHPTE.com](http://www.coloradoHPTE.com).

A summary of this outreach can also be found in [Appendix 1](#) of this report.

## 4.0 STATUS OF PROJECTS [CONT.]

### **C-470 Express Lanes:**

C-470 is the southwestern portion of the Denver Metro's beltway. It runs along the densely populated Highlands Ranch and connects travelers from I-70 West to I-25 South. This critical economic metro corridor carries upwards of 100,000 vehicles every day in its busiest sections, and by 2025 it is expected that the population in the corridor will grow by nearly 35 percent.

In 2012, the C-470 Coalition, consisting of elected and appointed officials along the corridor, identified a technical interim solution for congestion on the segment of C-470 from I-25 to Wadsworth. The solution features additional tolled Express Lanes and auxiliary lanes to accommodate safe merging and exiting. The proposed solution also includes reconstruction and rehabilitation of the existing general purpose lanes.

HPTE and CDOT evaluated various private delivery models for the project, including a revenue-transfer public-private partnership structure. Based on the Preliminary Value for Money Analysis, the project scope, available public funding and extensive public input, the HPTE staff concluded the State does not appear to receive any additional value in delivering the C-470 project using a public-private partnership model.

In November 2014, the HPTE Board adopted a resolution recommending a traditionally financed design-build project delivery to the Transportation Commission. The project cost estimate ranges from \$329 million (contingent on financing support from TIFIA) to \$357 million should the project require 100 percent financing from the private sector. CDOT and local partners are contributing \$112 million in public funding to the project with the remaining \$212 million to be secured through debt financing.

The Level II Traffic and Revenue study (underwritten by Douglas County) was proceeding in its analysis under the premise that all vehicles would be tolled. CDOT conducted an analysis of whether this project should be designated as an HOV Facility. In July 2013, the C-470 Corridor Coalition delivered correspondence to CDOT stating their preference that the C-470 Project not be designated as an HOV Facility, in light of inherent conflicts that HOV Facility operations have with projects that rely on toll revenues to pay debt financing.

The C-470 Express Lanes Project is approximately one-third financed through CDOT money, and the remaining two-thirds through debt financing. Within the C-470 project, approximately one-third of the project cost is for roadway reconstruction, and the remaining two-thirds for adding new capacity. CDOT's review of the financial impact of an HOV Facility on C-470 determined there would be an immediate reduction of \$40 million in loan proceeds available to construct the project, and an on-going reduction in annual toll revenues, reducing the available construction funding for the ultimate (2035) build out by \$100 million Net Present Value (NPV). With this projected impact to the construction price and no other funding sources available to close the gap, CDOT staff determined that C-470 is not a viable project with a HOV3+ exemption. CDOT's "HOV3+ Exemption Analysis" is included in this annual report in Appendix 5.

Based on this financial analysis, in October 2015, the HPTE Board recommended to the Transportation Commission that the C-470 Express Lanes Project not include toll-free HOV3+ travel at this time. The Transportation Commission agreed, with the provision that should revenues exceed the cost to repay the bonds, that this decision should be reconsidered.

The final Request for Proposals (RFP) was released November 30, 2015. Construction of the project is expected to start in 2016 with a completion date scheduled for 2018. The C-470 Express Lanes will be operated and maintained by HPTE and CDOT.

## 4.0 STATUS OF PROJECTS [CONT.]

### **I-25 North to Wyoming:**

Interstate 25 plays a significant role in the quality of life and economic vitality of a growing northern Colorado, from US 36 in the Denver metro area to SH 1 in Wellington. According to the State Demography Office, the population of Larimer County, currently 316,000, is expected to increase 52 percent by 2040. Similarly, Weld County's population of 268,400 is expected to increase 111 percent by 2040. The Colorado Department of Transportation (CDOT) forecasts that this population growth will increase the number of vehicles making daily trips along the I-25 corridor by 60 percent in 2040.

In December 2013, HPTE and the Office of Major Project Development invited key public-private partnership industry representatives to suggest ways to advance the North I-25 project. After reviewing the projected toll and other revenues available for the project, HPTE determined that the project is not, at this time, a likely fit for private investment.

To provide the same, or better, quality of life and economic vitality for the future, improvements are needed on I-25. The North I-25 project has a strategy to provide modern and effective multi-modal transportation solutions for residents, employees, freight, and visitors traveling between Denver and Wyoming. To provide funding flexibility, CDOT is designing the corridor in segments and phases according to the Final Environmental Impact Statement (FEIS).

Initial Improvements include:

- Two general-purpose lanes and one tolled express lane in each direction—US 36 to SH 7 and SH 66 to SH 14
- Reconstructed interchanges and bridges
- Express bus service
- Incorporation of intelligent transportation systems
- New carpool and transit facilities

Based on existing revenues, the ultimate build-out of the project is expected by 2075. It is anticipated that continuous improvements will be made in accordance with the FEIS phasing plan from now until 2075. Ultimate build out improvements will include three general purpose lanes and one tolled express lane in each direction on the entire corridor, and additional carpool and transit facilities

The key benefits of this corridor project are greater traffic safety, replacement of aging and functionally obsolete infrastructure, providing a choice of a new reliable travel lane, and increasing public transit options.

HPTE and OMPD will continue to evaluate ways of financing transportation improvements along the North I-25 corridor between Denver and Fort Collins. A Level 2 Traffic and Revenue analysis (which assumes an HOV 3+ policy) has been completed and is being used to determine how much toll revenue could be generated by the I-25 North Metro Express Lanes to support the additional capacity improvements in the corridor. Public outreach and communications will remain a high priority for HPTE and CDOT as the evaluation of options continues.

## 5.0 RECOMMENDED STATUTORY CHANGES

The HPTE coordinates its legislative activity through CDOT. There are no legislative matters anticipated by the HPTE for the 2016 session.



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## 6.0 APPENDIX 1

### APPENDIX 1: Summary of 2015 HPTE Public Outreach Events

**US 36 Phase 2:** On October 1, 2015 CDOT, HPTE and Plenary Roads Denver hosted a Telephone Town Hall (TTH) to provide information on the proposed toll rates for special events and the second phase of the US 36 Express Lanes, from 88th Street in Louisville/Superior to Table Mesa/Foothills Parkway, which will open in early 2016.

Representatives from HPTE, CDOT, Plenary Roads Denver and Town of Superior Mayor Clint Folsom gathered input, provided information and answered questions on the proposed toll rates for special events and the second phase of the US 36 Express Lanes, as well as discuss how to use the US 36 and I-25 Express Lanes. Prior to the meetings, HPTE noticed the meetings through press releases, and social media. Additionally, there was extensive print and TV media coverage of the public meeting TTH and on the US 36 Phase 2 and Special Events activities.

About the Oct. 1 Telephone Town Hall (TTH):

- The TTH hosted 4,965 callers, including 35 who called in
- Outbound calls were made to communities and counties along the US 36 Express Lanes corridor, from Boulder to Denver
- 25 questions were answered live and 18 voicemails were received with questions or comments following the live call

The TTH audio file, Telephone Town Hall Q&A document and US 36 Phase 2 and Special Events Tolling Fact Sheet can be seen online at [www.codot.gov/projects/US36ExpressLanes/88th-to-table-mesa](http://www.codot.gov/projects/US36ExpressLanes/88th-to-table-mesa).

**I-70 Mountain Express Lane:** CDOT and HPTE hosted two public meetings on the I-70 Mountain Express Lane proposed toll rates and operations in September 2015. The meetings included a telephone town hall (TTH) on Sept. 21, and a public meeting held in Idaho Springs on Sept. 29. At both meetings, representatives from HPTE, CDOT and Clear Creek County were available to discuss, take and answer questions, and gather public input on the proposed toll rates and discuss how to use the I-70 Mountain Express Lane.

Prior to the meetings, HPTE noticed the meetings through press releases, social media, advertising in local newspapers and flyering in the communities along the I-70 Mountain Express Lane. Additionally, there was extensive print and TV media coverage of the public meetings and on the I-70 Mountain Express Lane.

About the Sept. 21 Telephone Town Hall (TTH):

- The TTH hosted 10,120 inbound callers, including 70 who called in
- Outbound calls were made to Front Range communities and counties along the I-70 Mountain Corridor
- 31 questions were answered live and 22 voicemails were received with questions or comments following the live call At the Sept. 29 public meeting in Idaho Springs, there were 77 registering attendees.

About the Sept. 29 Public Meeting:

- There were 77 registering attendees
- Materials provided included meeting boards, the I-70 Mountain Express Lane Tolling Fact Sheet, and the TTH audio file
- The meeting mostly consisted of dialogue and questions and answers about the project.

For more information on the project visit [www.I70ppsl.com](http://www.I70ppsl.com).

## 6.0 APPENDIX 1 [CONTINUED]

**I-70 East Project:** CDOT and HPTE hosted four public meetings on the I-70 East Project in August 2015 to give important updates on the plans to reconstruct I-70 between Brighton Boulevard and I-225, as well as the next steps in the process to select a private partner to design, build, finance, operate and maintain the highway in northeast Denver. The series of meetings included a telephone town hall (8/18) focusing on how a P3 is being explored for this project and the developer selection process. Also, public meetings were held in Commerce City (8/17), Aurora (8/19) and Denver (8/20) to discuss both the proposed improvements to the interstate and a possible P3 to bring these improvements to Colorado. At the meetings, the public had the opportunity to provide input on this P3 process.

About the Aug. 18 Telephone Town Hall (TTH):

- The telephone town hall hosted 3,302 inbound callers
- 19 questions were answered live and six voicemails were received with questions or comments following the live call

At the Aug. 17, 19, and 20 public meetings, boards were staffed by CDOT and HPTE to answer questions and gather input, as well as to provide information. Attendance for each public meeting is outlined below:

- Aug. 17, Commerce City Civic Center: 14 attendees
- Aug. 19, Aurora Strong Resilience Center: 31 attendees
- Aug. 20, Denver, Swansea Recreation Center: 95 attendees

For more information, visit [www.coloradohpte.com](http://www.coloradohpte.com) and [www.codot.gov/projects/i70east](http://www.codot.gov/projects/i70east) and for more information on the environmental study, visit [www.I-70east.com](http://www.I-70east.com).

## 6.0 APPENDIX 2

### APPENDIX 2: Summary of Office of State Auditor Recommendations and Outcomes

Rec. Number	Description	Description of Work	Implementation Status
1	The High Performance Transportation Enterprise (HPTE) should work with the Colorado Department of Transportation's Office of Major Project Development (OMPD) and its toll services expert advisor to evaluate how toll services will be procured and managed for future projects involving toll facilities. The evaluation should result in:		
1a	Developing a comprehensive set of technical specifications and options for toll services which are identified and included at the RFQ stage in future P3 procurements.	On May 7, 2015 the State Controller executed the HPTE/E470 Tolling Services Agreement that sets forth a comprehensive set of technical specifications and options for toll collection and administration services to be provided by E470.	Implemented
1b	Providing detailed cost and technical specifications for any preferred or required toll services providers as part of the initial draft RFP documents and finalizing the technical specifications and costs for toll services as part of the final RFP, when the P3 project involves transferring toll services or toll revenue risk to the concessionaire.	On the Central 70 Project, HPTE is not transferring toll services or toll revenue risk to the concessionaire, therefore, detailed cost and technical specifications required by E470 are not being provided in the RFP. Nevertheless, on future toll revenue risk concession projects, HPTE is committed to providing this information to proposers.	Implemented
1c	Reviewing tolling authorities' operations and contracts in other states and jurisdictions to gain lessons learned for how to best manage toll services in the future.	HPTE is actively engaged in reviewing tolling authorities' operations and contracts in other states and jurisdictions to gain lessons learned for how best to manage toll services in the future. For example, HPTE and OMPD participated this spring in FHWA-sponsored meetings with tolling providers in both Washington state and Florida	Implemented
2	The High Performance Transportation Enterprise (HPTE) should work with the E-470 Authority and the concessionaire to facilitate execution of the toll services agreement for the US-36 P3 Project as soon as possible to ensure a clear understanding of and accountability for toll services well in advance of the commencement of toll operations.	Both the P3 TSA (Plenary Roads Denver/HPTE/E470) and the HPTE/E470 TSA were signed by the State Controller on May 7, 2015.	
3	The High Performance Transportation Enterprise (HPTE) should improve the planning process for future P3 projects by partnering with its expert legal and financial advisors and approaching the Transportation Infrastructure Finance and Innovation Act Joint Project Office (TIFIA JPO) to examine TIFIA loan options prior to the procurement phase. If HPTE provides a Letter of Interest to the TIFIA JPO related to a possible TIFIA loan for a P3 project procurement, or if in the future HPTE has a TIFIA loan that will be assumed as part of the P3 project, HPTE should:		

## 6.0 APPENDIX 2 [CONTINUED]

3a	Work with its legal and financial advisors and coordinate with TIFIA JPO to prepare a detailed term sheet for inclusion in the draft RFP.	HPTE will work with its legal and financial advisors to coordinate with TIFIA JPO to prepare a term sheet which is as detailed as the TIFIA JPO is prepared to agree for inclusion in any draft RFP for future P3 projects involving TIFIA loans.	Implemented
3b	Update the term sheet during the procurement phase in response to questions from prospective bidders and upon further interactions with TIFIA JPO.	HPTE has developed a format for analyzing actual cost data to be used as a basis for cost estimates and to further refine performance standards for operations and maintenance elements.	Implemented
3c	Ensure adequate detail on the project scope of services is defined and included in the RFQ and initial RFP.	<p>HPTE agrees to work with OMPD and CDOT to develop standardized reporting formats for analyzing actual cost data to be used as a basis for cost estimates and to further refine performance standards for operations and maintenance elements.</p> <p>HPTE's experience with the US-36 P3 Project and the observations of this audit report will inform this work, much of which is already being done for the I-70E project.</p>	Implemented
4	The High Performance Transportation Enterprise (HPTE) should:		
4a	Formalize practices for completing a thorough review of all major project components during the project development phase so that adequate information is available to identify the best value option and to provide adequate detail to prospective bidders in the procurement phase.	HPTE and OMPD, working under an MOU which establishes roles and responsibilities between the two, continue to formalize practices for making sure we are doing a thorough review of all major components during the project development phase so that adequate information is available to identify the best value option and to provide adequate detail to prospective bidders in the procurement phase.	Implemented
4b	Work with the Colorado Department of Transportation (CDOT) to develop standardized reporting formats for analyzing actual cost data to be used as a basis for cost estimates and to further refine performance standards for operations and maintenance elements.	HPTE has developed a format for analyzing actual cost data to be used as a basis for cost estimates and to further refine performance standards for operations and maintenance elements.	Implemented
4c	Ensure adequate detail on the project scope of services is defined and included in the RFQ and initial RFP.	<p>HPTE agrees to work with OMPD and CDOT to develop standardized reporting formats for analyzing actual cost data to be used as a basis for cost estimates and to further refine performance standards for operations and maintenance elements.</p> <p>HPTE's experience with the US-36 P3 Project and the observations of this audit report will inform this work, much of which is already being done for the I-70E project.</p>	Implemented

## 6.0 APPENDIX 2 [CONTINUED]

5	The High Performance Transportation Enterprise (HPTE) should use the experience gained from the US-36 P3 Project and build comprehensive project schedules for future activities on the US-36 P3 Project as well as for future P3 projects. Specifically, project schedules should:		
5a	Identify all key tasks and include well-defined, appropriately-linked project activities.	The May 29th Addendum to the I-70 East Request for Qualifications (RFQ), which was released by the HPTE along with the Bridge Enterprise, contained a comprehensive schedule to prospective proposers and the industry.	Implemented
5b	Assign resources and project costs to tasks and project activities.	HPTE and BE worked closely with advisors on the I-70 East Project and developed a comprehensive internal schedule that assigned resources and projects costs and tasks to specific project activities.	Implemented
5c	Specify realistic, achievable timeframes and due dates for when the work needs to be completed.	HPTE, working with OMPD, will ensure that adequate detail on the project scope of services with clear definition, and an appropriate level of detail, will be included in future RFQs and initial RFPs. For example, the May 29th Addendum to the I-70 East Request for Qualifications (RFQ) and the September 15 RFP, HPTE, along with the Bridge Enterprise, included a comprehensive schedule to prospective proposers and the industry.	Implemented
5d	Include adequate detail on how the work will be accomplished to enable responsible parties to accomplish project activities in accordance with the project schedule.	On the I-70 East Project, HPTE worked closely with CDOT, the BE and our consultants to develop a comprehensive project schedule that assigns resources and project costs to each task. The schedule is updated on an as needed basis to reflect changes in Project conditions.	Implemented
6	The High Performance Transportation Enterprise (HPTE) should ensure the HPTE Board has adequate information to support decision-making by developing policies outlining the key points in the P3 decision-making and procurement processes where the Project Value Analysis and updates must be performed. Policies should specifically require performance of Project Value Analyses prior to (1) the decision to pursue the project as a P3, (2) selection of the preferred bidder and negotiations, and (3) financial close.	Transportation Commission decided to move forward with the I-70 East Project as a P3 project. This policy will be added to the P3 Management Manual (see Recommendation 13).	Partially Implemented
7	The High Performance Transportation Enterprise (HPTE) should expand upon its Transparency Policy, the Governor's Executive Order D 2014-010, and the Transparency Outreach Public Engagement Plan and develop a comprehensive communications plan for informing and soliciting input from stakeholders, policy makers, and the general public for future P3 projects. Additionally, HPTE should maintain adequate and complete records of meetings and outreach efforts to follow up on outstanding issues and to assist with evaluating the effectiveness of its comprehensive communications plan.	The HPTE completed a Communications Plan that meets the goals of Gov. John Hickenlooper's Executive Order D 2014-010 and HPTE Board's Transparency Policy and produces a desired future state whereby increased communication enables broad understanding among key stakeholders and members of the general public of HPTE's mission, its policies and procedures.	Implemented

## 6.0 APPENDIX 2 [CONTINUED]

8	<p>The High Performance Transportation Enterprise (HPTE) should continue to work with the Office of the Attorney General to develop a comprehensive open records and transparency plan for its P3 program that ensures compliance with the Colorado Open Records Act and with best practices. HPTE's plan should identify the key documents developed prior and during procurement, as well as during the construction and operation phases, that will become public records and determine milestones for when such documents will be released. HPTE should list these documents and their release dates in communications to prospective bidders as appropriate and make the open records and transparency plan and public records available to the public on its internet site.</p>	<p>The HPTE Board of Directors approved the First Amended Transparency Policy Relating to Public-Private Partnerships at their August 19, 2015 meeting. The policy balances the needs for transparency with confidentiality in a competitive bidding process. The policy will help the public understand the timing of documents that will be released during a P3 procurement.</p>	Implemented
9	<p>The High Performance Transportation Enterprise (HPTE) should work with the Colorado Department of Transportation's (CDOT's) Official Records Custodian to assess its records retention needs and develop processes and systems for records retention as outlined by statute, the Records Management Manual, and CDOT policies, procedures, and schedules. Specifically, HPTE should:</p>		
9a	<p>Inventory HPTE records and document the storage methods and retention requirements for both public and protected documents that statutes or procedures require be retained.</p>	<p>To create the HPTE Unique Records Schedule with the CDOT Records Custodian HPTE first had to document its storage methods and retention requirements for its public and protected documents. A memorandum from staff to the HPTE Director outlines this process.</p>	Implemented
9b	<p>Review existing CDOT records retention schedules, identify areas where the schedules are not adequate to meet HPTE's document management and retention requirements for long-term P3 projects, develop HPTE-specific records retention schedules, and submit the schedules to appropriate authorities for approval.</p>	<p>HPTE worked with the CDOT Records Custodian to create a records retention schedule in April of this year.</p>	Implemented
10	<p>The High Performance Transportation Enterprise (HPTE) should assess and evaluate resources for procuring a comprehensive document management system suitable for efficiently managing, maintaining, and accessing the documents associated with long-term P3 projects.</p>	<p>HPTE entered into a contract with Aconex in June of this year. Aconex, is a sophisticated cloud based document management software program that will allow HPTE to efficiently manage, maintain, and accessing the documents associated with long-term P3 projects</p>	Implemented

## 6.0 APPENDIX 2 [CONTINUED]

11	The High Performance Transportation Enterprise (HPTE) should review processes and establish an adequate system of internal control for monitoring the performance and budget for contracted expert advisors to ensure the work remains within the budgeted amount and the services delivered are of sufficient quality and delivered in accordance with the requirements set forth in the contract. Additionally, HPTE should consider implementing the contract monitoring best practices outlined in statute and State Fiscal Rule 3-1.	Currently HPTE has tasked its Procurement liaison to track all of HPTE and OMPD's open contracts and task orders. Staff receives a weekly update on current work, what work is in the pipeline and what contract or task orders will soon expire. HPTE worked with CDOT to ensure it is now complying with Fiscal Rule 3-1. HPTE also continues to have weekly meetings with its Budget Analyst to review the budget and future obligations. Discussed are current and future needs, budget expended to date, projected budget expenditures, and remaining funds on each contract.	Implemented
12	The High Performance Transportation Enterprise (HPTE) should work with the Colorado Department of Transportation (CDOT) to develop a comprehensive monitoring framework and systematic mechanisms for managing and monitoring the concessionaire during the 50-year operations phase of the concession agreement. Specifically, HPTE should work with CDOT to:		
12a	Execute a project-specific agreement for the US-36 P3 Project specifying in detail HPTE's, CDOT's, and their contractors' respective roles and responsibilities for operations and maintenance monitoring.	The HPTE Board approved the Second Amendment to the HPTE US 36 Concession Agreement Intra-Agency Agreement on October 14 and the Transportation Commission approved it on October 15. The IAA spells out both HPTE's and CDOT's roles and responsibilities regarding oversight of the Plenary Roads Denver US 36 Concession Agreement and assigns OMPD as the oversight division.	Implemented
12b	Review and revise, as appropriate, the contract with the engineering firm responsible for monitoring the concessionaire's technical requirements to ensure adequate controls are in place to prevent the engineering firm from monitoring its own work.	The contracted engineering firm that is providing OMPD with technical monitoring support has engaged a subcontractor to independently monitor its engineering design work on the US 36 P3 project; and HPTE and OMPD/CDOT will ensure that the subcontractor's work comes to them directly and that there are appropriate firewalls and other contractual controls in place to ensure that the engineering firm is not monitoring its own work.	Implemented
12c	Provide training through "scenario workshops" to educate and obtain input from CDOT operations and maintenance personnel on the performance standards and related requirements outlined in the concession agreement.	On July 30, HPTE and CDOT conducted a scenario workshop with Operations, Maintenance and Traffic staff. The workshop identified a number of points of clarification about the concession agreement that have since been worked out with Plenary Roads Denver.	Implemented
12d	Use the information developed through the "scenario workshops" to develop detailed monitoring management plans that ensure adequate technical review, provide for managing incidents and emergencies, establish protocols for addressing noncompliance, and incorporate processes for change and claims management for the operations phase.	HPTE's Concession Agreement oversight consultant completed the Monitoring Management Plan in mid-September that incorporates the information received from the scenario workshop.	Implemented

## 6.0 APPENDIX 2 [CONTINUED]

12e	Further refine the monitoring framework by researching and incorporating leading practices and lessons learned from other U.S. P3 projects that are in the operations phase.	HPTE had a call with the Florida Department of Transportation on October 20 to learn from how they oversee their concession agreements. HPTE's consultant will be incorporating lessons learned into the Monitoring Management Plan.	Implemented
13	The High Performance Transportation Enterprise (HPTE) should build upon the best practices and lessons learned from the US-36 P3 Project and strengthen its P3 program for the future by:		
13a	Developing a project management framework and detailed guidance for managing large and complex P3 initiatives. The framework should identify the key elements, decision points, information, and processes required for developing, procuring, and operating P3 projects in Colorado.	HPTE has engaged a consultant who is drafting a P3 Management Manual. As of November 6, HPTE and OMPD have reviewed and commented on two drafts. It is expected that the manual will be complete by the end of the 2015 calendar year.	Partially Implemented
13b	Working with the Colorado Department of Transportation (CDOT) and the HPTE Board to develop strategies for acquiring adequate resources and project management expertise for managing, developing, and overseeing its P3 program.	In June of this year, HPTE and CDOT agreed to a Fee for Service Agreement, which acknowledges that HPTE possesses expertise and legal powers unavailable to CDOT, which enable it to accelerate the development and delivery of critical surface transportation infrastructure projects. For its services to CDOT, HPTE is paid \$2 million a year. HPTE is also in discussions with CDOT regarding additional staff to assist as its project workload grows.	Partially Implemented
13c	Identifying staff training needs and ensuring adequate resources are allocated to provide ongoing training, including project management training and specific training on HPTE's project management guidelines, to HPTE personnel and staff from CDOT, the Office of the State Controller, and the Office of the Attorney General working on P3 projects.	In the spring, HPTE and OMPD staff visited Washington and Florida DOT tolling divisions to learn more about their policies and procedures. Over the summer, HPTE, CDOT, and Attorney General Staff participated in the World Bank's P3 training program and have identified training opportunities over the next fiscal year.	Implemented

### APPENDIX 3: P3 Open Records and Amended Transparency Policy

## COLORADO HIGH PERFORMANCE TRANSPORTATION ENTERPRISE FIRST AMENDED TRANSPARENCY POLICY RELATING TO PUBLIC-PRIVATE PARTNERSHIPS

### SECTION I. PURPOSE

The purpose of this Policy is to provide transparency and accountability for, and public participation in, any Public-Private Partnership or “P3” entered into by the High Performance Transportation Enterprise.

### SECTION II. AUTHORITY

High Performance Transportation Enterprise, § 43-4-806(6), C.R.S.

### SECTION III. APPLICABILITY

This Policy applies to any Surface Transportation Infrastructure Project that involves or is reasonably expected to involve a Public-Private Partnership.

### SECTION IV. DEFINITIONS

“General Assembly” means the body created by art. V, § 1 of the Colorado Constitution.

“High Performance Transportation Enterprise” and “HPTE” mean the High Performance Transportation Enterprise created pursuant to § 43-4-806(2)(a)(I), C.R.S.

“HOV Lane” means a high-occupancy vehicle lane requiring a designated number of persons in a vehicle to receive free access and which is part of a Surface Transportation Infrastructure Project subject to a Public-Private Partnership.

“HPTE Board” means the High Performance Transportation Enterprise Board created pursuant to § 43-4-806(2)(a)(I), C.R.S.

“Public-Private Partnership” or “P3” means an agreement between the HPTE and one or more private entities by which the HPTE transfers responsibility to a private entity to design, build, finance, operate and maintain a Surface Transportation Infrastructure Project, or by which the HPTE transfers responsibility to a private entity to design, build, operate and maintain a Surface Transportation Infrastructure Project, in return (in either case) for the right to receive all or a portion of the User Fees generated by the Surface Transportation Infrastructure Project and/or other public monies. The use of the word “partnership” to describe such an arrangement does not confer on the relationship formed any of the attributes or incidents of a partnership under § 7-60-106, C.R.S. of the Colorado Revised Statutes or the common law. See § 43-1-1204(4), C.R.S.

“Surface Transportation Infrastructure Project” has the meaning set forth in § 43-4-803(23), C.R.S.

“Transportation Commission” means the Transportation Commission created pursuant to § 43-1-106, C.R.S.

“User Fee” has the meaning set forth in § 43-4-803(27), C.R.S.

### SECTION V. POLICY

As a general statement of policy, the HPTE will continue to prioritize transparency and accountability in the development and implementation of Public-Private Partnerships for Surface Transportation Projects.

**1. Town Hall Meetings.** With the objective of providing a meaningful opportunity to the public to have input on a proposed Public-Private Partnership: the HPTE, in coordination with interested local governments, shall hold a minimum of three public town hall meetings on any Public-Private Partnership under consideration. The meetings shall:

(i) Provide the public and stakeholders with sufficient detail to understand the proposed Public-Private Partnership as then contemplated and the proposed long-term obligations of the financing arrangement;

(ii) At least one town hall meeting must be held during each of the following periods of the P3 procurement process:

- a. during Phase One (Visioning, including Project Identification and Screening);
- b. following Phase Two (Project Development), after completion of a Traffic and Revenue Study, prior to issuance of the Request for Qualifications;
- c. during Phase Three, Stage Two (Project Procurement), following selection of short-listed proposers, prior to issuance of a Request for Proposals

(iii) be held either at a physical location in proximity to the primary communities expected to be affected by the Public-Private Partnership and such other forum as the HPTE Board may deem appropriate to provide access to the public;

(iv) allow for comment, input, and questions from the public and responses from HPTE Board members and/or HPTE staff; and

(v) provide information regarding the transportation needs the Transportation Commission seeks to address by the proposed Public-Private Partnership, the perceived advantages and disadvantages of the proposed Public-Private Partnership, potential alternative funding options (including options that rely exclusively on public funding), and the essential terms being considered at any meeting required by Section 1(A)(i)(a) and at subsequent meetings when necessary to update the public on additional developments.

A. The HPTE shall consider the suggestions and ideas expressed by the public at the town hall meetings required by Section 1(A).

## 6.0 APPENDIX 3 [CONTINUED]

- B. Any town hall meetings pursuant to Section 1(A) shall be preceded by full and timely notice, including:
- (i) providing notice to each member of the General Assembly whose district includes any geographical area located within the expected boundaries of the proposed Surface Transportation Infrastructure Project;
  - (ii) providing notice to the governing body of each county and municipality whose geographical limits are located within the expected boundaries of the proposed Surface Transportation Infrastructure Project;
  - (iii) posting on the HPTE website, at least one (1) week in advance, the location, date, and time of any town hall meeting as well as other relevant information relating to the meeting that will assist the public in making meaningful public comment regarding the proposed Public-Private Partnership, including in the case of the meeting required by Section 1(A)(i)(c), posting on its website a copy of, or an internet link to, the final request for proposal for a Public-Private Partnership; and
  - (iv) providing informational releases to appropriate media sources.
- C. If at any point prior to the final town hall meeting the HPTE determines that the proposed Surface Transportation Infrastructure Project will not require a Public-Private Partnership, the HPTE is not required to hold any additional meetings pursuant to Section 1(A).
- D. Once the HPTE enters into a Public-Private Partnership, the HPTE shall post on its website, or provide on its website an internet link to, a summary of the essential terms of the agreement and when any such agreement becomes fully effective, the HPTE shall post on its website, or provide on its website an internet link to, the full agreement, subject to reasonable safeguards to protect information which would not be subject to compulsory disclosure under the Colorado Open Records Act.
- E. In order to evaluate the effectiveness of Public-Private Partnership education and outreach efforts, HPTE shall maintain records of public and stakeholder engagement activities, including all meeting dates, the names of meeting attendees, lists of those notified of meetings, copies of handouts or presentations, and follow up action items, consistent with public relations best practices and established Federal Highway Administration and CDOT practices for public engagement during environmental reviews.
- 1. Status of High-Occupancy Vehicle Lanes.** If a Surface Transportation Infrastructure Project subject to a Public-Private Partnership contains one or more HOV Lanes and the status of the HOV Lanes may be impacted by the terms of the Public-Private Partnership, the HPTE shall provide notice to the public of any such change or of any change in the qualifications required to access such a lane for free use as an HOV Lane by both posting on the HPTE website and with written notice to adjacent local governments, at least thirty (30) days in advance of the effective date of the change.
- 2. General Assembly.** In addition to the requirements set forth at § 43-4-806(10), C.R.S., upon request by any member of the General Assembly, the HPTE shall provide additional reports and/or presentations to the General Assembly regarding any Surface Transportation Infrastructure Project that involves or is reasonably expected to involve a Public-Private Partnership. Any such reports or presentations shall be in accordance with the Colorado Open Records Act and shall be prepared with reasonable safeguards in place protecting proprietary information and the negotiating process.

### 3. Multi-Modal Consideration.

- A. In coordination with the Transportation Commission, the HPTE shall consider opportunities, and to the extent reasonable under the circumstances, include multi-modal alternatives (including transit) when analyzing any proposed Surface Transportation Infrastructure Project that is expected to include any HOV Lanes, high-occupancy toll lanes or managed lanes. As part of this evaluation, the HPTE shall evaluate the suitability of managed lanes for express bus service or bus rapid transit service, and shall consider whether it is appropriate to use User Fee revenues to support the capital and operating costs of such service.
- B. If any excess User Fee revenues are shared with the HPTE pursuant to the terms of any Public-Private Partnership, the HPTE shall consider whether it is appropriate under the circumstances to recommend to the Transportation Commission to apply a portion of such shared revenues to support multi-modal transportation (including transit) in the corridor that contains the Surface Transportation Infrastructure Project subject to the Public-Private Partnership. In exercising this consideration, the HPTE shall consult with the officials of the local communities located in any such corridor.

### SECTION VI. EFFECTIVE DATE

This Policy shall be effective as of August 19, 2015, shall replace and supersede the Transparency Policy Relating to Public-Private Partnerships approved by the HPTE Board on July 16, 2014, and shall remain in effect until amended or superseded by subsequent resolution of the HPTE Board.

# 6.0 APPENDIX 4

## APPENDIX 4: Current Budget-to-Actual, through November 30, 2015

HPTE Budget To Actual  
As of November 30, 2015  
Preliminary

Statewide Transportation Enterprise Special Revenue Fund (C.R.S. 43-4-806(3)(a)) 536											
ITEM	Estimated Revenues	Estimated Expenditures	July 2015	August 2015	September 2015	October 2015	November 2015	Encumbrances	Year-To-Date Rev/Exp	Year-To-Date % of Budgeted Rev/Exp	Remaining
<b>Estimated Carry Forward Balance from Prior Years</b>	\$ 280,278										
<b>Funds Received</b>											
Transponder sales	\$ 450,000	\$ (1,482)	\$ 294,150	\$ 155,238	\$ 108,200	\$ 98,267	\$ 654,373	145%	\$ (204,373)		
Advertising reimbursement from Plenary	\$ 70,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	\$ 70,000		
Interest earnings	\$ 200,000	\$ (3,629)	\$ 65,097	\$ 63,939	\$ 65,632	\$ 38,295	\$ 229,334	115%	\$ (29,334)		
Concessionaire management fee	\$ 401,413	\$ 401,413	\$ -	\$ -	\$ -	\$ -	\$ 401,413	100%	\$ -		
Operations and maintenance reserve reimbursement	\$ 630,000	\$ 628,789	\$ -	\$ 15,299	\$ 3,546	\$ -	\$ 647,635	103%	\$ (17,635)		
<b>Total funds received</b>	<b>\$ 1,751,413</b>	<b>\$ 1,025,091</b>	<b>\$ 359,247</b>	<b>\$ 234,476</b>	<b>\$ 177,378</b>	<b>\$ 136,562</b>	<b>\$ 1,932,754</b>	<b>110%</b>	<b>\$ (181,341)</b>		
<b>Total Available Funds</b>	<b>\$ 2,031,691</b>										
<b>U.S. 36 Expenditures</b>											
CDOT staff	\$ 15,000	\$ -	\$ 1,822	\$ 1,764	\$ 1,550	\$ 290	\$ 5,426	36%	\$ 9,574		
Legal services	\$ 158,650	\$ (28,082)	\$ 20,695	\$ -	\$ -	\$ -	\$ 158,650	95%	\$ (151,263)		
Project oversight	\$ 401,413	\$ (531)	\$ 509	\$ 18,774	\$ 37,494	\$ 91,193	\$ 76,751	56%	\$ 100,471		
Miscellaneous fees	\$ 31,500	\$ 9,077	\$ -	\$ -	\$ -	\$ 50	\$ 75,000	267%	\$ (127,627)		
Annual audit	\$ 5,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	\$ 5,100		
Attorney General fees	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	\$ 30,000		
Transponder processing	\$ 15,000	\$ (28,200)	\$ -	\$ -	\$ -	\$ -	\$ 2,991	-168%	\$ 37,217		
TIFIA Fees	\$ 12,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	\$ 12,500		
TIFIA US36 phase I payment	\$ 762,384	\$ (1,113,149)	\$ -	\$ -	\$ -	\$ -	\$ (1,113,149)	-146%	\$ 1,875,533		
Tolling services agreement-general reimbursable costs	\$ 50,000	\$ -	\$ -	\$ -	\$ 43,612	\$ -	\$ 28,200	144%	\$ (50,012)		
Transfer of debt service reserve to Plenary	\$ -	\$ 1,595,000	\$ -	\$ -	\$ -	\$ -	\$ 1,595,000	N/A	\$ (1,595,000)		
I-70 T&R study	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 572,000	N/A	\$ (1,144,000)		
Advertising	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 546,809	N/A	\$ (1,093,618)		
<b>Total Operating Expenditures</b>	<b>\$ 1,481,547</b>	<b>\$ 434,115</b>	<b>\$ 23,026</b>	<b>\$ 20,538</b>	<b>\$ 82,656</b>	<b>\$ 91,533</b>	<b>\$ 1,460,402</b>	<b>2,112,270</b>	<b>143%</b>	<b>\$ (2,091,124)</b>	
<b>I-70 Mountain Express Lanes Expenditures</b>											
I-70 Mountain Express loan interest payment	\$ 689,750	\$ (368,758)	\$ -	\$ -	\$ -	\$ -	\$ (368,758)	-53%	\$ 1,058,508		
Tolling software and equipment	\$ -	\$ (156,365)	\$ 10,890	\$ 153,842	\$ 263,749	\$ 43,431	\$ 826,700	1,142,246	N/A	\$ (1,968,946)	
Registrar Fees	\$ -	\$ -	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ 1,000	N/A	\$ (1,000)	
<b>Total I-70 Mountain Express Lane Expenditures</b>	<b>\$ 689,750</b>	<b>\$ (525,124)</b>	<b>\$ 11,890</b>	<b>\$ 153,842</b>	<b>\$ 263,749</b>	<b>\$ 43,431</b>	<b>\$ 826,700</b>	<b>\$ 774,488</b>	<b>112%</b>	<b>\$ (911,438)</b>	
<b>Excess Revenue over Operating Expenditures</b>	<b>\$ 269,866</b>										
<b>Project Expenses</b>											
US36 Phase I	\$ 174,000,000	\$ (44,763,536)	\$ -	\$ -	\$ 54,000,000	\$ -	\$ 9,236,464	5%	\$ 164,763,536		
US36 Phase II	\$ 5,746,354	\$ (2,999)	\$ 75,398	\$ 108,842	\$ 114,173	\$ 2,996,375	\$ 4,743,425	\$ 8,035,214	140%	\$ (7,032,285)	
I-70 Mountain Express Lanes	\$ 19,500,000	\$ -	\$ 232,904	\$ 1,554,751	\$ 5,463,649	\$ 3,801,738	\$ 11,053,041	57%	\$ 8,446,959		
<b>Actual Cash On Hand</b>	<b>\$ 9,953,045</b>										

# 6.0 APPENDIX 4 [CONTINUED]

As of November 30, 2015  
Preliminary

Statewide Transportation Enterprise Operating Fund (C.R.S. 43-4-806(4)) 537											
ITEM	Estimated Revenues	Estimated Expenditures	July 2015	August 2015	September 2015	October 2015	November 2015	Encumbrances	Year-To-Date Rev/Exp	Year-To-Date % of Budgeted Rev/Exp	Remaining
<b>Estimated Carry Forward Balance from Prior Years</b>	\$ 786,804										
<b><u>HPTE Administration</u></b>											
<b>Funds Received</b>											
Interest earnings	\$ 8,800	\$ -	\$ -	\$ 875	\$ 694	\$ 640	\$ 2,282	\$ -	\$ 4,491	51%	\$ 4,309
Consulting services fee	\$ 2,000,000	\$ -	\$ -	\$ -	\$ 2,000,000	\$ -	\$ -	\$ -	\$ 2,000,000	100%	\$ -
<b>Total Funds Received</b>	<b>\$ 2,008,800</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 875</b>	<b>\$ 2,000,694</b>	<b>\$ 640</b>	<b>\$ 2,282</b>	<b>\$ -</b>	<b>\$ 2,004,491</b>	<b>100%</b>	<b>\$ 4,309</b>
<b>Total Available Funds</b>	<b>\$ 2,795,604</b>										
<b>Operating Expenditures</b>											
HPTE staff	\$ 400,000	\$ 39,654	\$ 39,524	\$ 39,782	\$ 48,511	\$ 50,179	\$ -	\$ 217,651	54%	\$ 182,349	
CDOT staff	\$ 100,000	\$ -	\$ 6,092	\$ 6,926	\$ 5,873	\$ 6,274	\$ 2,600	\$ 27,765	28%	\$ 69,635	
P3 advisor	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	\$ 250,000	
Legal services	\$ 158,650	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 258,650	163%	\$ (358,650)	
Transparency, outreach and communications support	\$ 120,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 120,000	100%	\$ (120,000)	
Community and public affairs support	\$ 60,000	\$ (1,623)	\$ 6,623	\$ 5,000	\$ -	\$ -	\$ -	\$ 63,631	123%	\$ (77,263)	
Program management	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 109,318	\$ 90,662	100%	\$ (90,642)	
Attorney General fees	\$ 75,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	\$ 75,000	
Annual audit	\$ 5,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	\$ 5,100	
Board expenses	\$ 5,000	\$ (58)	\$ 16	\$ 1,044	\$ 988	\$ 3	\$ 106	\$ 2,101	42%	\$ 2,793	
Conferences, memberships and subscriptions	\$ 8,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 140	\$ -	2%	\$ 8,660	
Administrative expenses	\$ 10,500	\$ 778	\$ 549	\$ 1,483	\$ 991	\$ 1,769	\$ 302	\$ 5,871	56%	\$ 4,327	
Transportation Commission loan payment	\$ 750,852	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0%	\$ 750,852	
Aconex document management system	\$ 225,000	\$ 119,198	\$ -	\$ -	\$ -	\$ 104,803	\$ -	\$ 224,000	100%	\$ 1,000	
Accounting services	\$ 50,000	\$ -	\$ -	\$ 765	\$ -	\$ -	\$ -	\$ 23,249	48%	\$ 2,738	
TIFIA Loan processing fees	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	100%	\$ (100,000)	
Credit rating services	\$ 255,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 255,000	100%	\$ (255,000)	
Travel	\$ 20,300	\$ 538	\$ 22	\$ 171	\$ 15	\$ 2,360	\$ -	\$ 3,107	N/A	\$ 17,193	
Miscellaneous	\$ 500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 29,500	N/A	\$ (58,500)	
Tolling services agreement	\$ -	\$ (9,695)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000	N/A	\$ (50,305)	
Back office study	\$ -	\$ (10,164)	\$ 4,238	\$ -	\$ -	\$ -	\$ (4,238)	\$ 57,881	N/A	\$ (105,599)	
<b>Total Operating Expenditures</b>	<b>\$ 2,794,702</b>	<b>\$ 138,628</b>	<b>\$ 57,064</b>	<b>\$ 55,172</b>	<b>\$ 161,180</b>	<b>\$ 165,806</b>	<b>\$ 1,031,581</b>	<b>\$ 1,609,432</b>	<b>58%</b>	<b>\$ 153,689</b>	
<b>Total All Funds Available</b>	<b>\$ 2,795,604</b>										
<b>Total All Budgeted Expenditures</b>		<b>\$ 2,794,702</b>									
<b>Total Unbudgeted Funds</b>		<b>\$ 902</b>									
<b>Actual Cash On Hand</b>		<b>\$ 5,105,645</b>									
<b>Transportation Commission Transfer Balance</b>		<b>\$ 6,060,892</b>									



**COLORADO**  
Department of  
Transportation

## C-470 Express Toll Lanes Project HOV3+ Exemption Analysis

September 30, 2015

### 1. Summary

To support the ongoing development of the C-470 Express Lanes Project (the Project) and related toll policy discussions, the Colorado Department of Transportation (CDOT)—in partnership with the High Performance Transportation Enterprise (HPTE)—undertook an analysis to determine the potential impacts associated with a carpool exemption policy for high occupancy vehicles with three or more passengers (HOV3+).

Current and prior planning has assumed that all vehicles, regardless of occupancy, would be subject to tolls in the Express Lanes; however, a final policy recommendation regarding HOV exemptions has not yet been formulated. To support that decision, this analysis evaluates the potential traffic, revenue and financing implication associated with an HOV3+ exemption policy.

It is currently estimated that the implementation of an HOV3+ exemption policy in the Express Lanes would generate limited long-term growth in the share of HOV3+ carpools relative to other classes, and negatively impact CDOT/HPTE's project financials. Fully funding the project would necessitate a more leveraged and risky financial structure that would require, for example, additional draws on and/or a longer repayment period for the CDOT O&M loan. Depending on the type of debt and market terms and conditions at the time of financing, a financing sufficient to fund the project as designed may not be executable.

Lower net cash flows—particularly in the early years of operation when revenues are disproportionately impacted by HOV3+ exemptions—would reduce net construction proceeds by as much as \$40 million. Furthermore, excess toll revenues accruing to HPTE would be reduced by approximately \$100 million<sup>1</sup> in net present value, impacting the ability to fund future phases of the C-470 Express Lanes Project.

### 2. Project Background

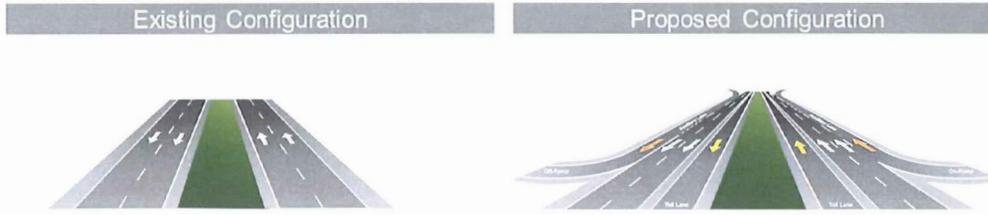
C-470 has a history of severe congestion, and for well over a decade has operated at failing levels of service. As a solution to this issue, CDOT and its partners began evaluating alternatives to improve mobility and reduce congestion along the corridor, culminating in the proposed C-470 Express Lanes Project. As analyzed in the Revised Environmental Assessment (EA), the Project will be delivered in two phases. The first phase (Interim Project) will provide managed express lanes as follows:

- Westbound: two express lanes from I-25 to approximately Colorado Boulevard, and one lane from Colorado Boulevard to Wadsworth Boulevard
- Eastbound: one express lane from Platte Canyon Road to I-25

Currently, available funding has limited construction scope the Interim project; however, future construction of the Ultimate configuration would extend and add lanes to achieve two express lanes in each direction between I-25 and Kipling Parkway. Exhibit 1 illustrates the existing and proposed corridor configurations associated with the Interim Project.

<sup>1</sup>Net revenues available after debt service, operations and maintenance costs and repayment of any O&M loan balances (as needed) discounted at 5%.

Exhibit 1: C-470 Lane Configurations



### 3. Cost and Revenue Impact

One of the key considerations in evaluating a toll exemption policy is the potential impact on the Project's cash flows, both in terms of reduced revenue collection resulting from both the exemption itself and toll evasion / occupancy violations, as well as increased operations and maintenance costs (O&M). The following sections describe each of these items and their estimated impact on project cash flows, and ultimately its financial feasibility.

#### a. Traffic and Revenue

As an initial step toward understanding the impact of an HOV3+ exemption policy, the Project's investment grade T&R consultant, Louis Berger Group (LBG), prepared an estimate of the potential share of HOV3+ vehicles that would use the Express Lanes and the extent to which that usage would impact gross toll revenue. This preliminary effort, which was conducted using a traffic simulation model, indicated that HOV3+ users would account for approximately **32%** of Express Lane trips in 2018 and approximately **20%** by 2035. Gross revenue is anticipated to be 15% and 7% lower in 2018 and 2035, respectively, when compared to revenues forecasted without an HOV3+ exemption policy ("Base Case"). A table detailing the approximate HOV3+ trip shares and revenue impacts by model year is provided below.

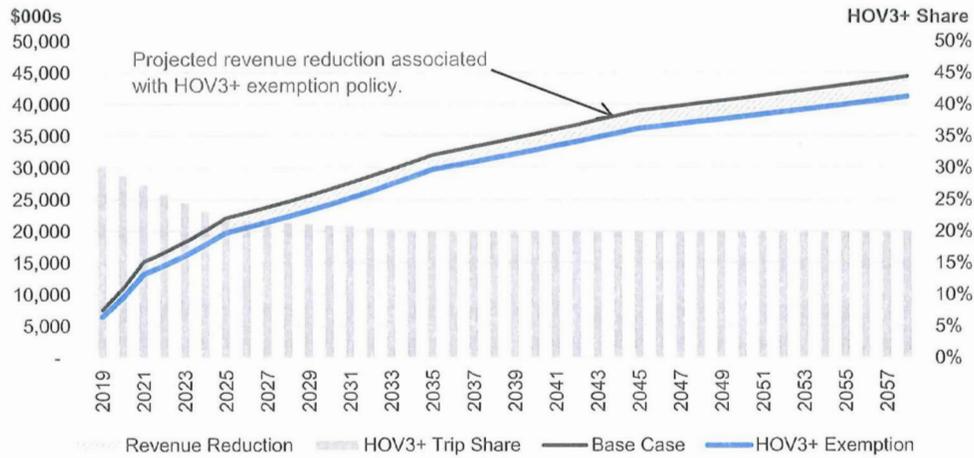
Exhibit 2: Estimated HOV3+ Trip Shares and Gross Revenue (2015 \$000s)

Model Year	HOV3+ Trip Share (%)	Gross Revenue (HOV3+ Exempt)	Gross Revenue (Base Case)	Gross Revenue Delta (%)
2018	32%	\$9,789	\$11,460	-15%
2025	22%	\$19,806	\$22,114	-10%
2035	20%	\$29,736	\$32,021	-7%

Note: Values shown in the above exhibit are expressed in 2015 dollars; gross revenues do not include ramp-up, toll collection costs, leakage, or other adjustments associated with an investment grade financing analysis.

# 6.0 APPENDIX 5 [CONTINUED]

Exhibit 3: Comparison of Gross Base Case and HOV3+ Exemption Revenue (2015 \$)



Note: Values shown in the above exhibit are expressed in 2015 dollars. However, the impacts cited in the following discussion are expressed in nominal terms.

While the overall share of Express Lane toll-exempt trips is anticipated to decline over the forecast horizon, LBG also indicated that HOV3+ trips (by volume) are projected to grow by approximately 1% per year between 2018 and 2035 – well below the rate of growth in toll trips, which is anticipated to be 5% per year over the same period.

**2035 Nominal Cash Flow Impact: -\$3.2mm -7%**

### b. Revenue Leakage

Based on a survey of all-electronic toll facilities across the U.S., a baseline revenue leakage assumption of 10% per year was established for the Base Case (i.e., where HOVs do not receive a toll exemption in the Express Lanes) cash flows. This amount reflects a variety of factors that may result in revenue leakage, including toll equipment errors, non-payment by customers, weather-related events, etc.

As noted in the prior section, the introduction of HOV3+ exemptions would create additional opportunity for leakage resulting from occupancy violations. Data for existing CDOT HOV facilities suggests that occupancy violation rates can reach as high as 25% without routine enforcement (this is reduced to 15% with enforcement).

For the purpose of this analysis, it is assumed that an HOV3+ exemption policy would increase the 10% Base Case leakage rate to 15% per year.

**2035 Nominal Cash Flow Impact: -\$2.2mm -5%**



## 6.0 APPENDIX 5 [CONTINUED]

In the case of unintentional user error, a vehicle may travel as an HOV3+ in one direction, then re-enter the corridor as a single occupant vehicle (SOV) without changing the transponder setting. As a result, the toll is waved and revenue is not collected for that transaction.

To counteract these situations, visual enforcement at select locations throughout the corridor would be provided by Colorado State Patrol (CSP), the cost which would be paid out of toll revenues. While the annual cost of CSP enforcement will vary according to violation trends, it is assumed that C-470 would allocate approximately \$250,000 (2015 dollars) for targeted and routine enforcement activities within the corridor.

Although violators will be ticketed and fined for occupancy violations, it is not assumed that any violation revenue will flow back to the Project. Enforcement would be provided with the sole purpose of reducing losses (revenue leakage) attributed to occupancy violations.

<b>2035 Nominal Cash Flow Impact:</b>	<b>-\$0.2mm</b>	<b>&lt;1%</b>
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### d. Capital Costs

Beyond increased operating costs and financing adjustments, HOV3+ exemptions would also necessitate additional upfront capital to cover:

- Additional engineering/design/construction to accommodate “toll enforcement zones”
- Additional in-lane toll equipment to support visual enforcement efforts

The total combined cost of these items is estimated to be approximately \$1 million (about 0.4% of the Project's base capital costs), requiring additional upfront financing and associated debt service.

<b>2035 Nominal Cash Flow Impact:</b>	<b>-\$0.1mm</b>	<b>&lt;1%</b>
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## 4. Financing & Credit Impact

### a. Credit Rating Implications

Toll exemption policies are generally viewed as a credit negative due to the direct impact those vehicles have on lane performance, travel reliability, and available capacity for toll paying vehicles. In a November 2013 report titled *U.S. Managed Lanes: Empirical Data Steers Credit Analysis*, Fitch Ratings notes that the “nature of the HOV and transit policies can significantly impact revenues” and that “a key rating driver going forward will be the HOV policy and other policies governing access to [managed lanes].” The report further explains that exemption policies for HOV2+ vehicles are inherently more risky than facilities with HOV3+ policies; however, despite lower upfront revenue risk, it should be noted that as demand for the corridor increases with population and employment, an increasing number of toll-free HOV3+ vehicles will absorb Express Lane capacity, thus decreasing capacity available for toll-paying vehicles.

A similar outlook report by Moody's Investor Service in May 2013 suggests that “a small diversion of traffic onto tolled lanes frees up capacity on non-tolled alternative, hence decreasing the incentive for additional users to move to the tolled lane.” In the context of C-470, providing toll exemptions may cause a portion of those vehicles to shift to the Express Lanes, which would reduce capacity for toll paying vehicles and open capacity in the general purpose (GP) lanes. The increased capacity in the GP lanes could induce vehicles that would have otherwise paid to enter the Express Lanes.

## 6.0 APPENDIX 5 [CONTINUED]

To compensate for the increased revenue variability associated with the implementation of a toll exemption policy (e.g. the risk of additional HOV 3+ traffic above projected levels using the lanes, potential unforeseen impacts on overall corridor congestion and mobility), rating agencies and investors would be expected to take a slightly more conservative view on the credit (manifested through increased coverage ratios, additional liquidity measures, and/or an additional haircut to revenues). The total impact of these considerations has been assumed to be equivalent to a 5% additional reduction in toll revenues. This would result in a cash flow reduction of \$2.2 million in 2035 for debt sizing purposes.

<b>2035 Nominal Cash Flow Impact:</b>	<b>-\$2.2mm</b>	<b>-5%</b>
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### 5. Summary of Impacts

#### a. Project Cash Flows

The table below summarizes all impacts to project cash flows in 2035.

*Exhibit 4: Revenue Impact Summary*

<b>2035 Nominal Impacts</b>	<b>Amount (\$mm)</b>
Gross Revenue	-\$3.2
Rev. Adjustments: Leakage	-\$2.2
O&M: Transaction Processing	+\$0.1
O&M: Enforcement	-\$0.2
Additional Debt Service: Increase Capital Cost	-\$0.1
Credit: T&R Risk Adjustment	-\$2.2
Total of Individual Impacts	-\$7.8
<b>Total Combined Impacts*</b>	<b>-\$7.3</b>

\*Nominal impacts noted above are not additive, given the interrelated nature of gross revenues, leakage, and the T&R risk adjustment factor. As such, the "total combined impacts" row provides a bottom line summary of all impacts in the HOV3+ exemption scenario.

#### b. Funding Impact

Design and construction funding for the C-470 Express Lanes Project will be provided in the form of public monies (RAMP, FASTER, HSIP, and other public contributions) as well debt backed by toll revenues. The extent to which debt can be raised for the project is primarily a function of the near- and mid-term cash flow available for interest and principal payments on project debt. Based on the anticipated Project cash flow under an HOV3+ exemption policy, it is estimated that debt capacity could be reduced by as much as **\$40 million**, requiring a substantial amount of additional funding to be identified to fully fund the Project (which is also based on an estimated capital cost of \$269 million).

In addition, the HOV3+ financial structures would place added risks on CDOT in case of revenue shortfalls or cost overruns as the CDOT O&M loan amount increases and/or is repaid over a longer period of time.

Finally, In addition to the reduction of net proceeds available to fund project construction, the present value of excess toll revenues accruing to HPTE would diminish significantly – by as much as \$100 million (assuming a 5% discount rate) – under an HOV3+ toll exemption policy. Excess cash flow, or surplus revenue after debt service and operating costs, is a key indicator of potential funding that could be contributed to future projects, including the second phase of the C-470 Express Lanes or other corridor improvements.