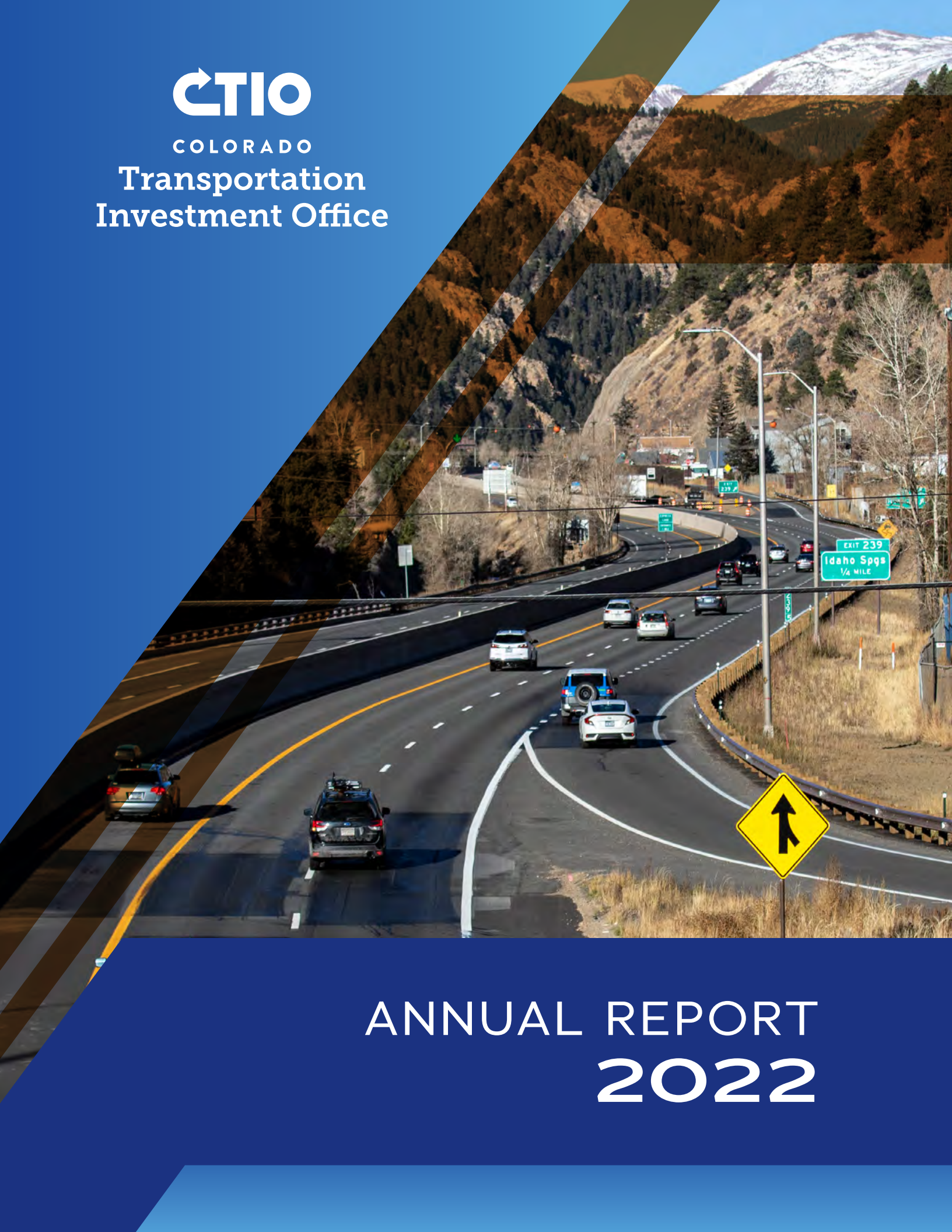




COLORADO

Transportation  
Investment Office



ANNUAL REPORT  
2022

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**Dear Members of Colorado's General Assembly:**

This Annual Report describes the activities and accomplishments of the High-Performance Transportation Enterprise (HPTE), now doing business as the Colorado Transportation Investment Office (CTIO), during 2022, a busy year for the CTIO team as we worked to address some of Colorado's most pressing transportation challenges.

Since its start-up in 2009, CTIO has worked diligently to finance and deliver Colorado's first innovative and accelerated Express Lanes projects on U.S. Highway 36 (US 36), Interstate 25 (I-25), Colorado State Highway 470 (C-470), and Interstate 70 (I-70). In 2022, CTIO continued to build Express Lanes capacity and operations to support critical corridor project development.

Highlights for CTIO in 2022 include:

- **MEXL Westbound Opening:** Construction of the \$80 million I-70 Westbound Mountain Express Lane project, between Veterans Memorial Tunnels and Empire Junction, began in 2019 and opened for tolling in the summer of 2022. Similar to the eastbound lane that opened in 2015, this 12-mile-long managed lane features traffic management systems to improve mobility and provide westbound drivers with a reliable, time-saving option during peak travel periods (weekends and holidays).
- **Floyd Hill Kick-off:** The \$700 million I-70 Floyd Hill Project planning and design kicked off in the spring of 2022. It will improve eight miles of the I-70 Mountain Corridor, from west of Evergreen to eastern Idaho Springs, by adding a third westbound travel lane, as an Express Lane, in this two-lane bottleneck of I-70. The project will address safety concerns, improve traffic flow, and include environmental mitigation to enhance wildlife connectivity, air and water quality, stream conditions, and recreation.
- **Burnham Yard Transportation Planning Study (pre-National Environmental Policy Act):** The Burnham Yard Transportation Planning Study will identify track alignments for the relocated Consolidated Main Line (CML), expanded Regional Transportation District (RTD) light rail, and Front Range Passenger Rail (FRPR) right-of-way through Burnham Yard. This study will develop options for rail lines, including Union Pacific, Burlington Northern Santa Fe, and RTD, and suggest a recommended option. The remaining land will be available for new development ideas, which will be part of subsequent projects. The pre-NEPA work is anticipated to be completed in the Spring of 2023.
- **Commercial Back Office System Procurement:** CTIO began procuring a new commercial tolling back-office system by releasing a Request for Qualifications (RFQ) in late Spring. CTIO received 13 Statements of Qualification (SOQ) submissions from vendors and shortlisted four to move forward to the Request for Proposal phase of the process that will take place in early 2023.
- **Globeville and Elyria Swansea (GES) Tolling Equity Program:** The (GES) Tolling Equity Program was approved by the CTIO Board of Directors in April 2022. After over a year of engagement with stakeholders, Denver council members, and GES residents a preferred program option was identified (transit passes and transponders with \$100 of credit) and a budget of 15 percent of net toll revenue is being dedicated to the program. CTIO staff are working to implement and launch the program in early 2023. Further details of the process can be found in the special projects section of this report.
- **I-25 North (120th Ave to Northwest Parkway/E-470) Bank of America Loan repayment:** In November 2022, the CTIO Board of Directors approved the payoff of the Loan Agreement with Bank of America associated with the capital construction cost of the I-25 North 120th Ave to Northwest Parkway/E-470. CTIO used its existing toll revenue to pay off the loan, a first for a CTIO Express Lane project, in full (\$23.6 Million), and will seek reimbursement from TIFIA when the loan closes in spring 2023.

From 2020 to 2021, Colorado's annual population growth rate was 0.5 percent (+30,500) — the 17th highest in the nation. Growth across Colorado and budget realities impact CDOT's ability to maintain and expand our transportation infrastructure. The need to use innovative financing to deliver critical projects has never been greater. In 2023, CTIO looks forward to continuing to explore innovative finance opportunities and accelerating the delivery of projects.

Sincerely,



Nick Farber, CTIO Director



Margaret Bowes, CTIO Board Chair

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# HIGHLIGHTS FROM 2022

## NEW EXPRESS LANE OPENING



I-70 WESTBOUND MOUNTAIN EXPRESS LANE  
Veterans Memorial Tunnels to Empire Junction

## EXPRESS LANES NETWORK USAGE

**18%**

AVERAGE  
HOV USE

**14.0**

million total vehicles  
USING THE  
EXPRESS LANES

**2.1**

million total  
FREE TRIPS BY  
HOV3+ USERS

## PUBLIC OUTREACH AND COMMUNICATIONS

**65**

PUBLIC  
MEETINGS



**14.1**  
MILLION  
MEDIA  
IMPRESSIONS

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# Overview of CTIO



COLORADO

# Transportation Investment Office

## CTIO's Mission

- **Partner** with CDOT, private industry, and local communities
- **Aggressively pursue innovative financing alternatives** not otherwise available to the state
- **Quickly deliver transportation infrastructure options** that improve mobility and
- **Communicate openly** with all stakeholders.

## GOVERNING LEGISLATION

The Funding Advancement for Surface Transportation and Economic Recovery Act (Part 8 of Article 4, Title 43, Colorado Revised Statutes [CRS]), otherwise known as FASTER, created HPTE in 2009 as an independent, government-owned business within CDOT. HPTE remains the name for the enterprise in all legal and legislative documents, but following the rebrand in 2021, HPTE will be referred to as CTIO in all other documents.

CTIO has the legal responsibility to aggressively seek out opportunities for innovative and efficient means of financing and delivering important surface transportation infrastructure projects in the state. Among other benefits, it has the statutory power to impose tolls and other user fees, issue bonds, and enter into contracts with public and private entities to facilitate Public-Private Partnerships (P3s).

CTIO is an "enterprise" for purposes of Section 20 of Article X of the State Constitution, as long as it retains the authority to issue revenue bonds and receives less than 10 percent of its total revenues in grants from state and local governments. CTIO operates as a government-owned business within CDOT but is overseen by a separate Board of Directors that includes external stakeholders from four geographic regions appointed by the Governor.

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

## IMPORTANT CONSIDERATIONS IN PRIVATE INVESTMENTS AND ALTERNATIVE FINANCING

### Accelerated Timing

Will it allow the project to start earlier, get built faster, and be 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 residents?

### Innovation

Will the project provide unique opportunities for design, construction, and operational innovation?

### Risk Transfer

Will it permit CTIO/CDOT 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?

## RAPID POPULATION GROWTH AND NEED FOR ACTION

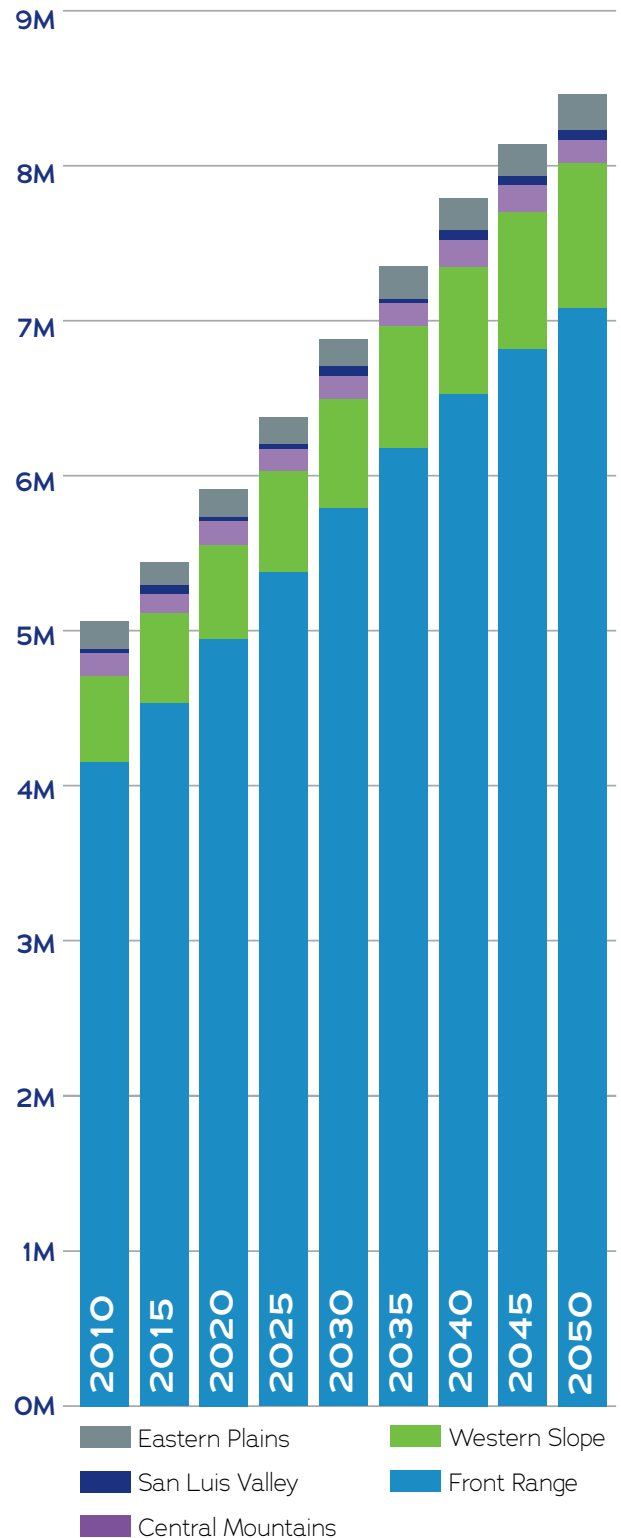
From 2020 to 2021, Colorado’s annual population growth rate was 0.5 percent (+30,500) – the 17th highest in the nation.

Population growth puts enormous pressure on the aging transportation infrastructure.

Population growth, coupled with budget realities, significantly impact the state’s ability to maintain and expand the transportation system. Finding solutions to these challenges is critical.

Colorado’s highway infrastructure is severely congested, and in many areas, it is more than 50 years old and in need of repairs and maintenance. The rapid growth of Colorado’s population points to even greater congestion in the decades ahead unless innovative ways to accelerate key projects are pursued.

COLORADO POPULATION FORECAST BY REGION 2010-2050



Source: Colorado State Demography Office

## CTIO GOVERNANCE:

### BOARD MEMBERS AND MEETINGS

The CTIO Board of Directors consists of three members of the Transportation Commission (TC) and four members appointed by the Governor, one from each of the following geographic areas: (1) the planning area of the Denver Regional Council of Governments (DRCOG), (2) the planning area of the North Front Range Metropolitan Planning Organization (NFRMPO), (3) the planning area of the Pikes Peak Area Council of Governments (PPACG), and (4) the I-70 Mountain Corridor area.

#### CTIO BOARD OF DIRECTORS

Board Members	Region	Term Expires
<b>Chair:</b> <b>Margaret Bowes</b>	I-70 Mountain Corridor	10/2023
<b>Vice-Chair:</b> <b>Karen Stuart</b>	Transportation Commission	At will of Transportation Commission
<b>Travis Easton</b>	PPACG Planning Area	10/2025
<b>Cecil Gutierrez</b>	NFRMPO Planning Area	10/2023
<b>Joel Noble</b>	DRCOG Planning Area	10/2025
<b>Eula Adams</b>	Transportation Commission	At will of Transportation Commission
<b>Don Stanton</b>	Transportation Commission	At will of Transportation Commission

### CTIO BOARD OF DIRECTORS GOVERNANCE DOCUMENTS

- [CDOT and CTIO Memorandum of Understanding](#) (2022)
- [CTIO Unsolicited Proposal Policy](#) (2020)
- [P3 Management Manual](#) (2020)
- [CTIO Tolling Policy](#) (2019)
- [CTIO Excess Revenue Guidelines](#) (2017)
- [CTIO Budget Process and Reporting Guidelines](#) (2016)
- [CTIO First Amended Transparency Policy](#) (2015)
- [Open Records Policy Relating to P3](#) (2014)
- [CTIO Bylaws](#) (2014)

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



# Express Lanes Network

# EXPRESS LANES NETWORK MAP



# EXPRESS LANES IN OPERATION

Express Lanes are tolled lanes that run adjacent to the free general purpose lanes. Express Lanes increase roadway capacity and help manage congestion on Colorado highways by adding lanes that provide a choice to drivers.

Anyone can use Express Lanes. There are simply different ways to use them. Users have a choice: they can ride the bus, carpool with three or more occupants, or ride a motorcycle to use the lanes for free (with the exception of the I-70 Mountain Corridor and C-470). Vehicles that do not meet the HOV requirements can choose to pay a toll to use the lanes.

Colorado’s Express Lanes work for everyone—those who choose not to pay and stay in the non-tolled general purpose lanes and Express Lanes customers. Express Lanes benefits include:

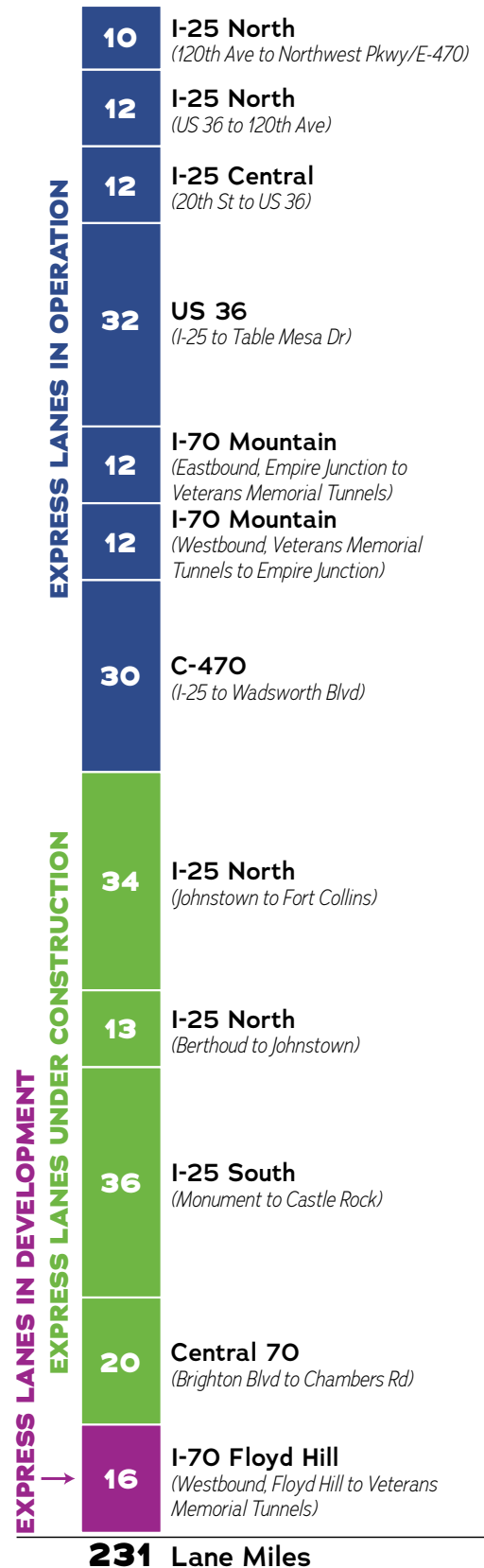
- Reduced delay on the most seriously congested corridors
- Reliable travel times
- Flexible and reliable mobility choices
- Improved travel speeds in the general purpose lanes

Since 2015, CTIO has been building its capacity for Express Lanes operations. CTIO currently has 120 lane miles of Express Lanes in operation and 111 lane miles of Express Lanes under construction or in development. The figure on the right provides the lane miles of operational Express Lanes in Colorado, as well as those currently under construction. For comparison, CDOT maintains 23,000 total lane-miles of highway in Colorado.

As the operator of the Express Lanes Network, CTIO oversees the operation, maintenance, and performance of the entire Express Lanes network. A team of traffic operations managers and technicians, maintenance crews, and data analysts partner with CTIO to improve mobility in congested corridors. Tasks include, but are not limited to, developing traffic and revenue analyses, monitoring Express Lanes traffic, working with ExpressToll to waive or void tolls, and coordinating with CDOT on maintenance issues.

CTIO operates and maintains the I-70 Mountain Express Lanes (eastbound and westbound), C-470 (I-25 to Wadsworth Boulevard), and Express Lanes on I-25 North. Plenary Roads Denver (PRD) operates and maintains the US 36 and I-25 Central Express Lanes and CTIO provides oversight of those activities.

## LANE MILES OF EXPRESS LANES





## US 36 EXPRESS LANES— I-25 TO TABLE MESA DRIVE

*Weekday Commute Times Improved*



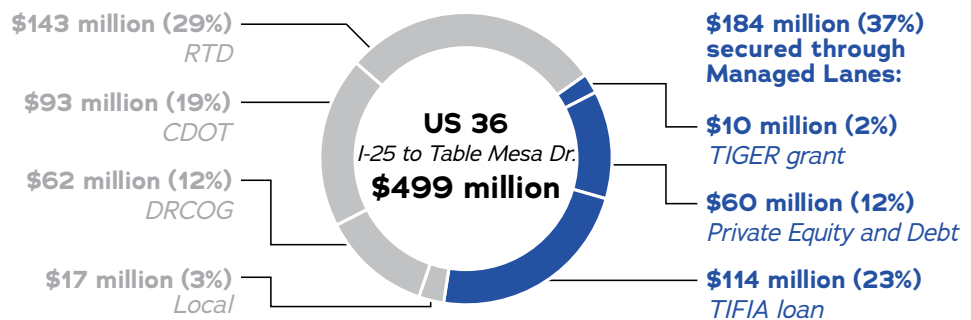
The US 36 Express Lanes project, which spans 32 miles to connect Boulder and Denver, was CTIO's first P3 project. It is a model of regional cooperation for other major corridors. The US 36 Express Lanes opened the first phase (Pecos Street to Interlocken Loop) in 2015, and then the second phase (Interlocken Loop to Table Mesa Drive) in 2016. The \$499 million project was funded by multiple sources and included a Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan (\$114 million) secured through CTIO. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information.

PRD operates, maintains, and collects the tolls on US 36, while CTIO owns the road and provides oversight management of the Concession Agreement with PRD. The Express Lanes are free for motorcycles and for carpoolers with at least three individuals per vehicle. Other drivers can use the lanes if they pay a toll that varies depending on the time of day. Express buses, such as RTD's Flatiron Flyer service, also have access to the Express Lanes free of charge, providing trip reliability that has resulted in increased transit use on the corridor.

**32 lane miles**  
of Express Lanes

Opened for Tolling:  
**2015**

### FINANCING





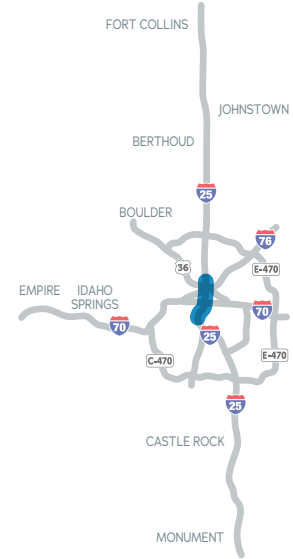
# I-25 CENTRAL EXPRESS LANES— 20TH STREET TO US 36

*Improved Trip Reliability*

The I-25 Central Express Lanes, which opened for tolling in 2006, are a six-mile, two-lane, reversible facility between US 36 and 20th Street in downtown Denver. The \$217 million project included funding from federal (\$127 million), Regional Transportation District (RTD) (\$54 million), CDOT (\$14 million), and the City and County of Denver (\$22 million) sources. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information. PRD began operating, maintaining, and collecting the tolls in 2014. CTIO provides oversight management of the Concession Agreement with PRD.

The Express Lanes are reversible and barrier-separated from the general purpose lanes. Vehicles move with rush hour traffic: southbound in the morning and northbound in the evening. A Traffic Management System—which includes changeable signs, traffic gates, and closed-circuit television—provides a safety feature to the barrier-separated lanes.

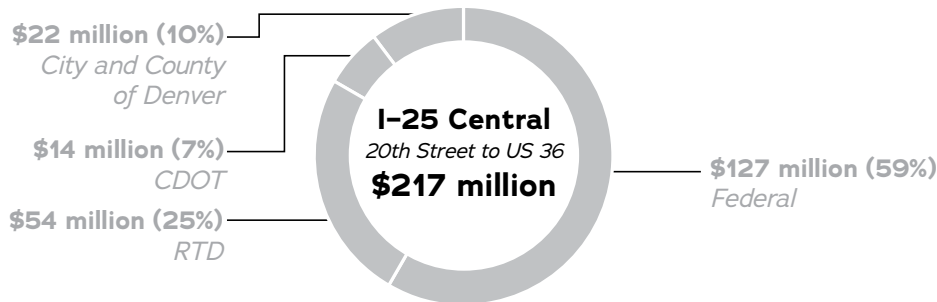
Depending on the time of day, the I-25 Central Express Lanes in downtown Denver can connect to both the I-25 North Express Lanes (US 36 to 120th Avenue) and the US 36 Express Lanes.



**12 lane miles**  
of Express Lanes

Opened for Tolling:  
**2006**

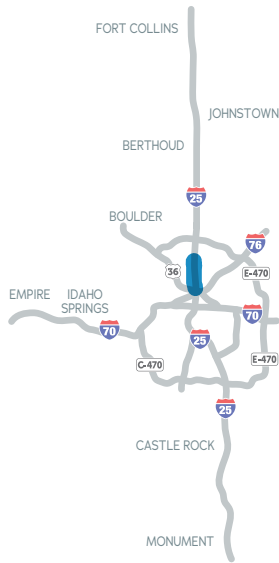
## FINANCING





## I-25 NORTH EXPRESS LANES— US 36 TO 120TH AVENUE

### *Successful Performance on a Congested Commuter Route*



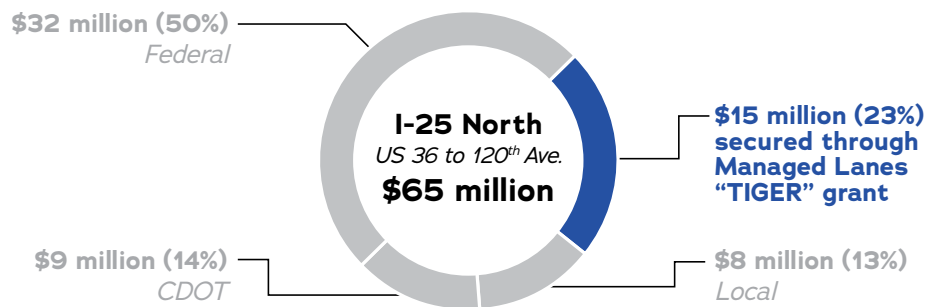
The I-25 North Express Lanes were extended from US 36 to 120th Avenue and opened for tolling on July 12, 2016. The 12 miles of Express Lanes operate 24/7, with one Express Lane in each direction. The respective northbound and southbound Express Lanes were designed to fit within the existing highway footprint. During the morning peak period, the southbound Express Lane provides a direct connection with I-25 Central Express Lanes into downtown Denver. The \$65 million project was funded in part by a \$15 million TIGER II grant and other state, federal, and local sources. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information.

CTIO has developed, in collaboration with the Colorado State Patrol, a program for additional enforcement on the corridor. Officers drive in both the Express Lanes and the general purpose lanes, providing increased visibility and a metering effect to slow down traffic during peak periods. Officers enforce speed limits, Express Lanes violations, and all other applicable traffic laws to improve safety and throughput of traffic on the corridor.

**12 lane miles**  
of Express Lanes

Opened for Tolling:  
**2016**

### FINANCING



# I-70 MOUNTAIN EXPRESS LANE (EASTBOUND)—EMPIRE JUNCTION TO VETERANS MEMORIAL TUNNELS

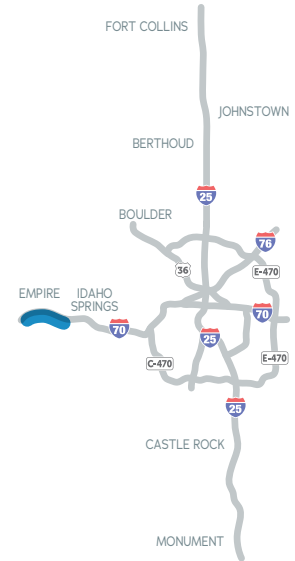
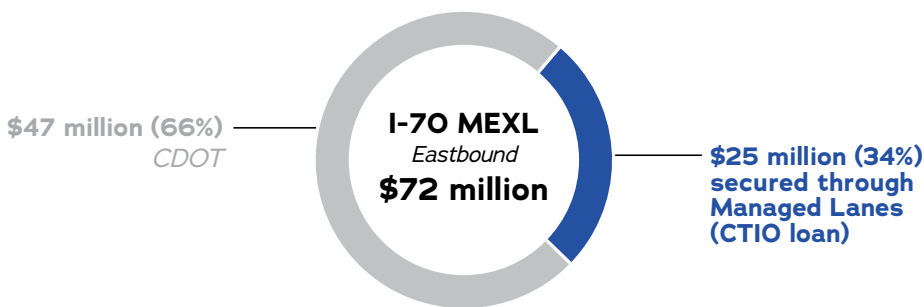
*Reduced Congestion and Improved Speeds for All Lanes*

The I-70 Mountain Express Lane is 12 miles long, running eastbound from Empire Junction through the Veterans Memorial Tunnels. It opened for tolling in December 2015 and is a Hard Shoulder Running concept whereby the inside shoulder lane is used as a single-lane Express Lane to provide additional capacity in the corridor during peak travel periods only. The majority of the \$72 million project was funded by CDOT, with a \$25 million shortfall in project funding filled through a commercial loan procured by CTIO. The loan is repaid through toll revenue. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information.

The Express Lane has delivered trip reliability and improved travel times for travelers returning to the metro area from the mountains. Before the Express Lane, travel on the Clear Creek County frontage road from US 40 to Idaho Springs would experience gridlock, as many vehicles sought alternate routes when the I-70 mainline slowed.

Since opening the Mountain Express Lane, the local quality of life has improved and residents are now able to move more freely about their neighborhoods and business areas.

## FINANCING



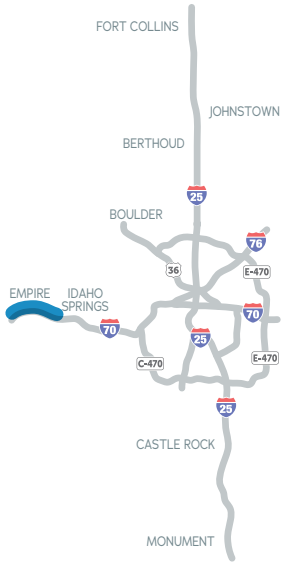
**12 lane miles**  
of Express Lanes

Opened for Tolling:  
**2015**



## I-70 MOUNTAIN EXPRESS LANE (WESTBOUND)—VETERANS MEMORIAL TUNNELS TO EMPIRE JUNCTION

*Increasing Capacity for the Mountain Corridor*



Building on the success of the I-70 Mountain Express Lane (eastbound), the \$80 million I-70 Mountain Express Lane (westbound) project includes a \$25 million Infrastructure for Rebuilding America (INFRA) grant. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information.

The project, which broke ground in July 2019, has added an approximately 12-mile-long tolled Express Lane on westbound I-70, between the Veterans Memorial Tunnels and Empire Junction.

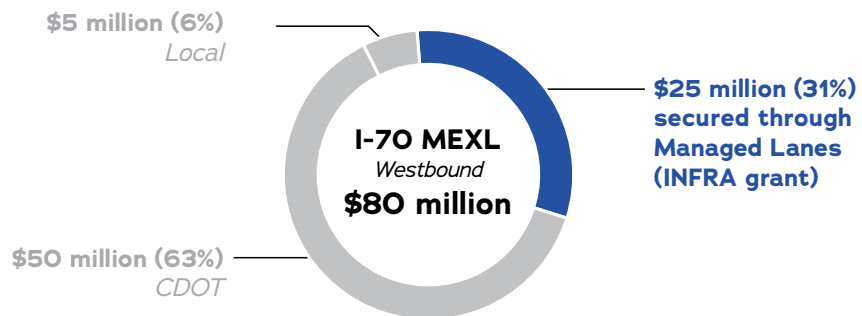
The general purpose lanes and shoulder of westbound I-70 have been resurfaced and widened, in select locations, to accommodate a travel lane on the shoulder during peak travel periods. The westbound Mountain Express Lane maximizes the use of the existing alignment and infrastructure to minimize any new impacts within the project area.

Like the I-70 Mountain Express Lane (eastbound) facility, the 11-foot shoulder lane is open for use only during peak periods and otherwise, will serve as the shoulder of the interstate. Construction began in the summer of 2019, continued through winter 2020, and opened to traffic in 2022.

**12 lane miles**  
of Express Lanes

Opened for Tolling:  
**2022**

### FINANCING



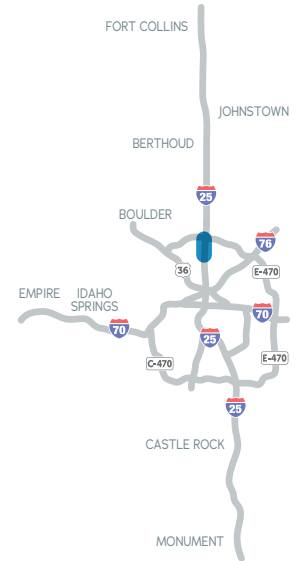
# I-25 NORTH EXPRESS LANES—120TH AVENUE TO NORTHWEST PARKWAY/E-470

*Connections and Choice for North Denver, Thornton and Northglenn*

Continuing the success of I-25 North (US 36 to 120th Avenue), CDOT built five miles of Express Lanes in both directions from 120th Avenue to Northwest Parkway/E-470, for a total of 10 lane miles. The Express Lanes opened in the summer of 2020 to provide increased safety, capacity, and user choice to a rapidly developing region—one of the most congested stretches of highway in the Denver metro area, serving an average traffic volume of 174,000 vehicles per day.

The Final Environmental Impact Statement (FEIS) for this project identified Express Lanes as a preferred alternative for this corridor. Providing reliable travel times for regional bus service is a key objective of the project.

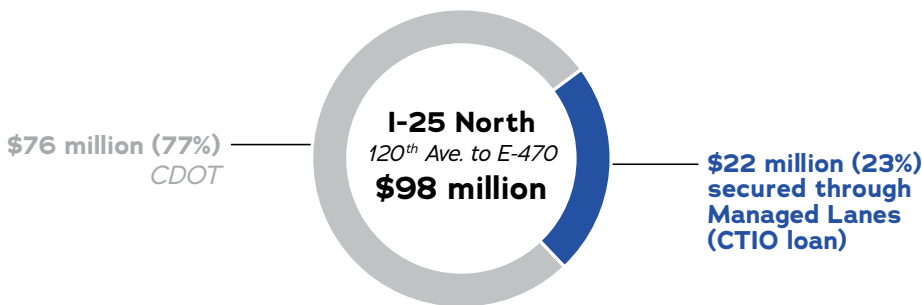
The majority of the \$98 million project cost was funded by CDOT, with a \$22 million shortfall in funding resources provided by a commercial loan secured by CTIO. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information.



**10 lane miles**  
of Express Lanes

Opened for Tolling:  
**2020**

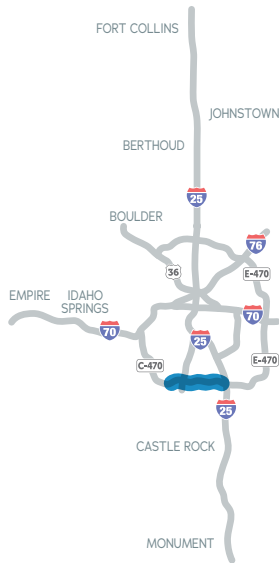
## FINANCING





## C-470 EXPRESS LANES—I-25 TO WADSWORTH BOULEVARD

*Express Lanes Open on Busy Commuter Route to Improve Safety and Traffic Flow*



The C-470 Express Lanes Project, which broke ground in 2016 and began tolling in the summer of 2020, is located between I-25 and Wadsworth Boulevard.

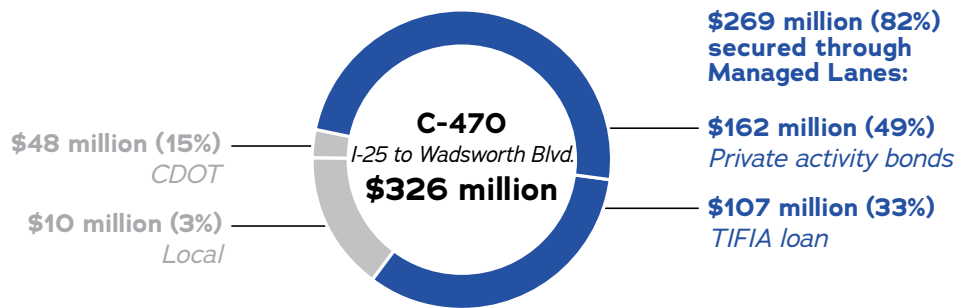
Peak-hour congestion has long been a problem for frequent commuters on C-470. Over 100,000 motorists use this segment of C-470 each day, with volumes projected to increase by 40 percent by 2035. The Express Lanes offer improved traffic flow, trip reliability, and safety to the corridor.

The total project cost was \$326 million, shared between federal, state, and local sources. CTIO provided \$162 million in revenue bonds and secured a \$107 million federal TIFIA loan to support the project. The financing will be repaid from and secured by gross toll revenues generated by the project. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information.

**30 lane miles**  
of Express Lanes

Opened for Tolling:  
**2020**

### FINANCING



# EXPRESS LANES UNDER CONSTRUCTION

There are four Express Lanes projects currently under construction, totaling 103 lane miles. Express Lanes projects under construction are described in the following sections.

## CENTRAL 70 PROJECT—BRIGHTON BOULEVARD TO CHAMBERS ROAD

*Largest Transportation Project in CDOT History*

Following a 14-year environmental review process, the Federal Highway Administration (FHWA) granted its approval of the Central 70 Project, through the issuance of its Record of Decision, on January 19, 2017. CTIO led a rigorous procurement process for a Design-Build-Finance-Operate-Maintain P3 delivery.

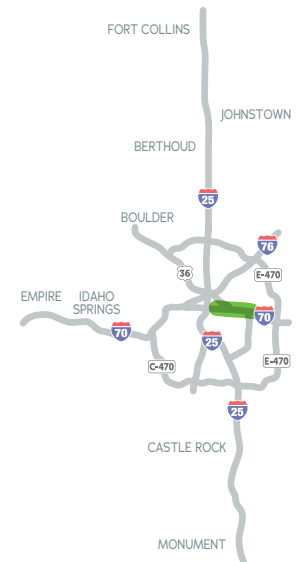
This delivery model transfers risk to a private partner and minimizes cost overruns for CDOT through availability payments (an annual payment to the private partner based on progress). Kiewit Meridiam Partners (KMP) was selected to be the Central 70 Project developer, to undertake the largest transportation infrastructure development project in CDOT history. KMP will operate and maintain the highway for 30 years after the project is complete. Construction began on this \$1.3 billion project in August 2018.

The financing includes a \$416 million TIFIA loan from the U.S. Department of Transportation and \$115 million from Private Activity Bonds. The graphic on the next page shows a breakdown of the various funding sources. See [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information.

Supported by contracts, backed by investment-grade credit ratings, the bonds were sold at a competitively low interest rate that generated savings for CDOT. Construction is nearly complete. In addition to project construction, the KMP team also initiated maintenance of the 10-mile corridor in the fall of 2018.

Ongoing transparency and public outreach are critical to the success of the Central 70 Project. Since 2004, the project team has held hundreds of meetings with project stakeholders. As construction began, the project participated in several initiatives aimed at recruiting and supporting a diverse local workforce.

CTIO, through a partnership with Northeast Transportation Connections (NETC), is helping to mitigate the impact of construction on the surrounding communities by providing Transportation Demand Management (TDM) services for residents, businesses, and commuters to reduce travel demand along the I-70 corridor and encourage other modes of travel. Services being provided include incentivizing transit use, promoting carpools and vanpools through local employers, and free monthly RTD passes for those who qualify. NETC also works with businesses, schools, and organizations along the corridor to help fill transportation gaps and reduce vehicle miles traveled (VMT) by providing shuttles to help transport residents to special events and meetings.



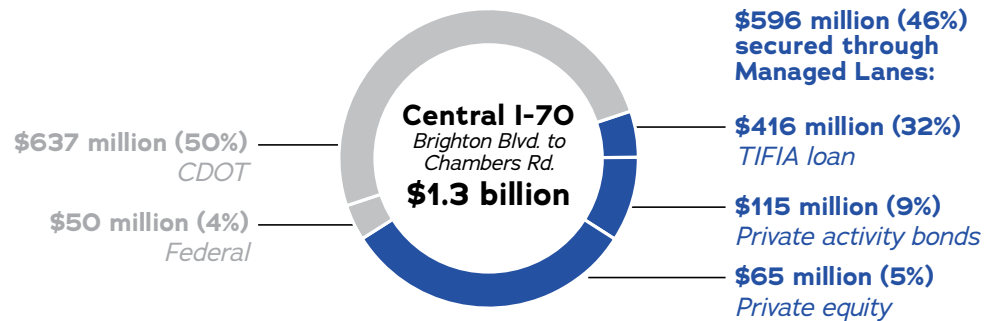
**20 lane miles**  
of Express Lanes

Anticipated completion:  
**2023**

### MAJOR MILESTONES IN 2022

- Switched traffic in both directions into the final alignment for all lanes. Eastbound traffic switched on July 15th and westbound traffic switched on August 26th.
- Received final approvals for the cover from the Denver Fire Department and the eastbound cover was commissioned.
- Opened the Swansea Elementary playground prior to the back-to-school opening day.
- Completed the Stone Matrix Asphalt paving for all lanes and ramps in both directions throughout the project.
- Completed the installation of the tolling equipment in both directions in preparation for Express Lanes commissioning.
- Completed the cover over the interstate in November and held a community celebration to open the garden and park.

### FINANCING





## I-25 NORTH EXPRESS LANES—JOHNSTOWN TO FORT COLLINS

### *Improved Travel Times and Connectivity*

Northern Colorado is one of the fastest growing areas in the state. I-25 North, between Denver and Fort Collins, has experienced a steady degradation of reliable travel times as more traffic squeezes onto an interstate that has not seen significant structural or service improvements since 1965. As regular commuter traffic increases, regional bus service is becoming increasingly important.

The \$600 million project broke ground in September 2018. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information.

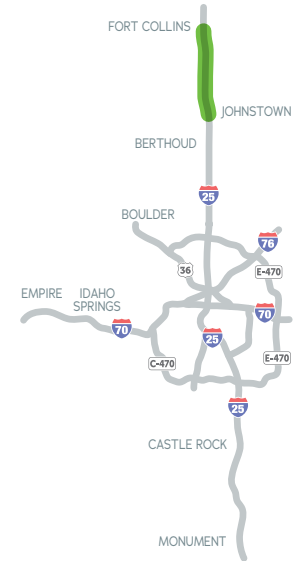
The project will:

- Increase highway capacity by adding an Express Lane in each direction.
- Replace some aging bridges and widen others.
- Include a Bus Rapid Transit (BRT) platform located in the center median of I-25.
- Extend Kendall Parkway under I-25, which will provide vehicle, pedestrian, and bicycle connections to the local roadway system.
- Construct a new Park-n-Ride facility at the Centerra Shopping Complex.
- Connect the Cache la Poudre River Regional Trail under I-25 to a network of 100 miles of trails, which will also serve as a wildlife corridor.

The contractor for the project is Kraemer/Interstate Highway Construction and the project is scheduled to be completed in 2024.

### MAJOR MILESTONES IN 2022

- Completed 16 bridge structures to date, including the US 34 Bridge and Kechter Road bridge.
- Finished the northbound and southbound Ports of Entry, including the new buildings and all infrastructure.
- Completed the pedestrian underpass, ramps, and Park and Ride for the Centerra Mobility Hub.
- Completed 181,000 cubic yards of earthwork.
- Placed 1.6 million square feet of concrete pavement.



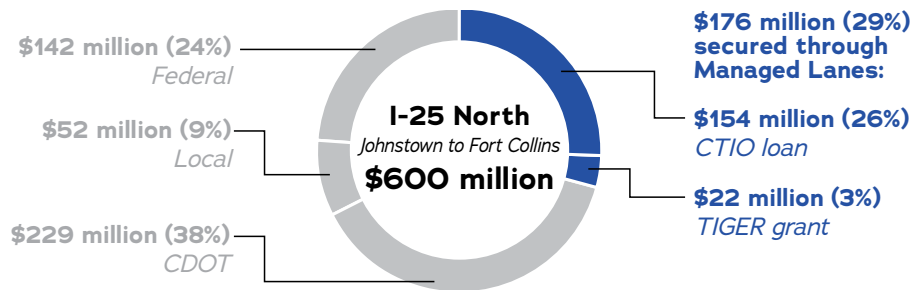
**34 lane miles**  
of Express Lanes

Anticipated completion:

**2024**

- Placed 1.2 million pounds of reinforcing steel.
- Placed 23,000 linear feet of reinforced concrete pipe.
- Removed 60 million pounds of old concrete pavement and recycled it into the concrete pavement and road base.

### FINANCING



## I-25 SOUTH GAP—MONUMENT TO CASTLE ROCK

*Solutions to Improve Trip Reliability in the “Gap”*

The 18-mile stretch of I-25 between Monument and Castle Rock is known as the “Gap” because it narrows to two lanes in each direction, constricting traffic between the southern and northern sections of the highway that have been improved to three lanes in each direction. I-25 South from Denver to Colorado Springs is one of the most critical highway corridors in Colorado’s transportation network.

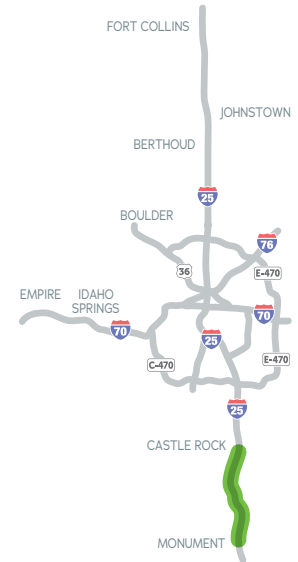
The majority of the \$382 million project cost is funded by CDOT and includes a \$65 million Infrastructure for Rebuilding America (INFRA) grant. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information.

The Gap remained essentially unchanged since its original construction and it has not kept pace with modern travel demands, creating volatile traffic conditions. As a result, this corridor experiences regular congestion and traffic incidents, which often propagate throughout the corridor and led to serious queuing problems. If a crash, weather event, or other emergency force the closure of I-25 mainline lanes, drivers can be stuck for hours, and emergency vehicles and snowplows offered limited space for staging and response.

In December 2021, traffic was moved into final alignment throughout the project, with tolls waived in the Express Lanes during testing.

The Express Lanes are designed to provide drivers with a reliable trip while relieving traffic for all roadway users. Statewide studies show that on CDOT’s Express Lanes corridors, travelers in all lanes (including the general purpose lanes) see time savings of anywhere from 20-50%.

While much of the construction is complete, including the Express Lanes, wider shoulders, five reconstructed bridges, four wildlife crossings, new pavement, and enhanced technology, some work remains to be done. Through the spring and summer of 2022, crews have finished the remaining permanent paving and striping operations near Larkspur, installed tolling infrastructure, and other minor construction activities to reach project completion in 2023.



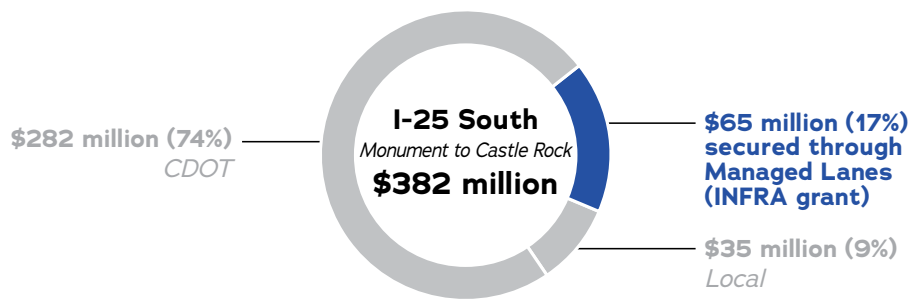
**36 lane miles**  
of Express Lanes

Anticipated completion:  
**2023**

### MAJOR MILESTONES IN 2022

- Completed all paving on the project.
- Installed tolling equipment.
- Substantially completed all work necessary for the project to be operational before Thanksgiving.
- Landscaping and toll lane commissioning are the only remaining items for 2023.

### .FINANCING



# I-25 NORTH EXPRESS LANES—BERTHOUD TO JOHNSTOWN

*Improving Trip Reliability*

The next phase of I-25 North improvements along the Front Range adds 13 lane miles of Express Lanes between Berthoud and Johnstown. In conjunction with improvements already underway between Johnstown and Fort Collins, this project, which broke ground in September 2019 and is anticipated to be completed by 2024, will provide better connections between the Denver area and the Northern Front Range and link drivers to safer, time-saving mobility choices.

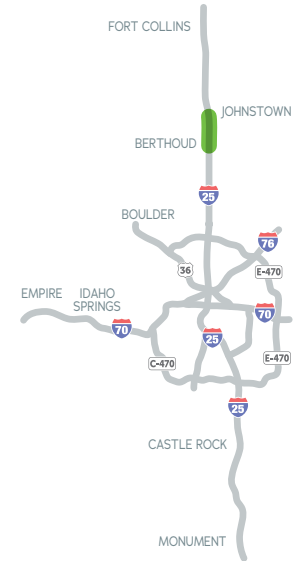
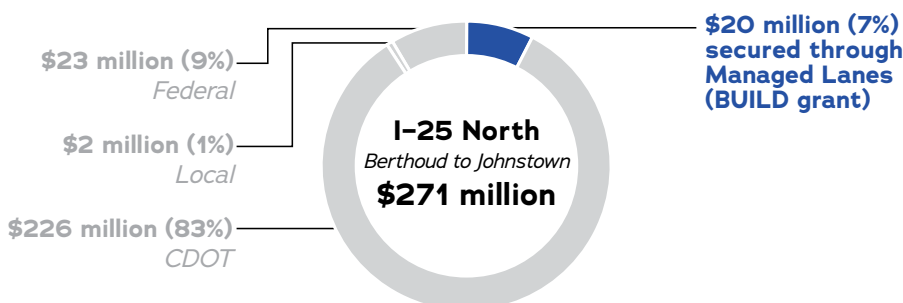
The project will add an Express Lane in each direction of I-25, replace aging bridges, make interchanges safer and more efficient, and improve infrastructure for bus transit along the I-25 corridor. The \$271 million project will also add carpool and transit facilities, create new pedestrian and bicycle accesses, improve drainage systems, and improve the alignment of I-25 for safer travel. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for further project information.

This project illustrates the power of communities working together to secure the necessary funding. The NFRMPO, with support from CDOT, secured a \$20-million grant from the U.S. Department of Transportation in 2018. The Better Utilizing Investments to Leverage Development (BUILD) grant, combined with state funds and money from local jurisdictions, provided the resources needed to proceed with design and construction.

## MAJOR MILESTONES FOR 2022

- Completed the diverging diamond interchange at SH 60 and 70% of the aesthetic improvements.
- Completed the bridge structures at SH 56, Little Thompson River, and the Berthoud Mobility Hub underpass. Began Phase 3 structure work.
- Completed and opened the Park and Ride lot for the Berthoud Mobility Hub parking. The Berthoud Mobility Hub is expected to be open for buses in early 2024.
- Completed Phase Two concrete paving and began preparation work for Phase 3.
- Substantial completion of the project is on track for the end of 2023, with the project finished by Q2 of 2024.

## FINANCING



**13 lane miles**  
of Express Lanes

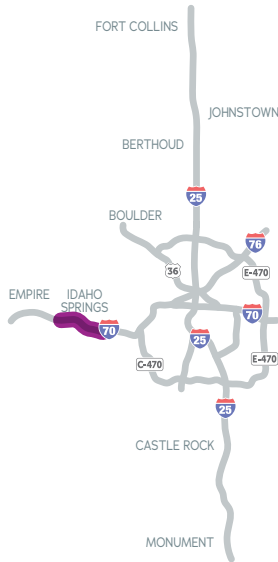
Anticipated completion:  
**2024**

# EXPRESS LANES IN DEVELOPMENT



## I-70 FLOYD HILL

*Increasing Capacity for the Mountain Corridor*



The \$700 million I-70 Floyd Hill Project will improve eight miles of the I-70 Mountain Corridor, from west of Evergreen to eastern Idaho Springs. It includes three main sections of improvements (West Section - approximately Idaho Springs to Hidden Valley, Central Section - approximately Hidden Valley to US 6, East Section - approximately US 6 to County Road 65), as well as early projects developed through the National Environmental Policy Act (NEPA) process.

### PROJECT FEATURES INCLUDE:

- Adding a third westbound travel lane in this two-lane bottleneck of I-70, this new lane will be a tolled Express Lane.
- Constructing a missing two-mile section of the frontage road between Evergreen and Idaho Springs.
- Adding an eastbound auxiliary lane to reduce conflicts with slow-moving freight and other vehicles in the uphill section of Floyd Hill.
- Improving traffic flow and access at interchanges and intersections.
- Improving design speeds and stopping sight distance on horizontal curves.
- Improving the Clear Creek Greenway trail.
- Implementing environmental mitigation to enhance wildlife connectivity, air and water quality, stream conditions, and recreation.

**8 lane miles**  
of Express Lanes

Anticipated completion:

**TBD**

The project is one of several targeted highway improvements to increase travel reliability and safety along the I-70 Mountain Corridor between west Denver and Glenwood Springs.



# Summary of Additional 2022 Activities

## COMMUNICATIONS AND PUBLIC OUTREACH

In 2022, CTIO completed a statewide Express Lanes safety campaign, a tolling campaign for the I-70 Westbound Mountain Express Lane, and a promotional campaign for the C-470 Express Lanes corridor. In addition, the CTIO communications team improved the usability and accessibility of the Express Lanes web pages.

### EXPRESS LANES OPENINGS AND CAMPAIGNS

#### I-70 WESTBOUND MOUNTAIN EXPRESS LANE BETWEEN IDAHO SPRINGS AND EMPIRE

The I-70 Westbound Mountain Express Lane between Idaho Springs and Empire began assessing tolls in July 2022. The CTIO communications team used a multi-channel approach to reach target audiences to ensure they knew the testing period was ending and tolls would be assessed moving forward. The team focused on informing the general public, partners, and elected officials about the timing of the tolling start, the rules of using the lane safely, and the current toll rates. Partners along the I-70 mountain corridor were given a toolkit of materials that included information about the tolling process, the rules of the Express Lanes, and when tolling would begin. This toolkit also included a fact sheet, social posts, and content for partners to share through their websites, newsletters, and other communications channels. To support the materials shared through partners, the CTIO team also launched a paid media campaign that included video, radio, and digital ads targeting individuals who recently traveled along the I-70 mountain corridor or showed interest in skiing and other outdoor activities in the area. The team also placed a billboard on I-70 west, near the C-470 interchange, to remind drivers that tolling had begun in the Express Lanes ahead.

In addition to paid media promotions, the CTIO team developed a series of social media posts for CDOT's channels and updated the Express Lanes website with tolling information to keep Express Lane users well-informed. The week of the tolling start, the team worked closely with the media through a statewide press release and interviews provided by CDOT and CTIO staff.



**Earned media had a reach of nearly 5.77 million.**

**Paid media resulted in more than 2.12 million impressions.**

#### EXPRESS LANES SAFETY CAMPAIGN

In late 2021, the CTIO communications team developed a safety education campaign for the entire Express Lanes network. This outreach was intended to address common safety concerns in Express Lanes and educate roadway users on how to use the lanes safely. Messaging for this effort focused on the three most common safety concerns for Express Lanes: speeding, weaving, and crossing the solid lines. The campaign creative repurposed prior campaign materials to maintain consistency for the Express Lanes brand and allow for increased efficiencies and more funding applied to paid



advertisements throughout the Denver metro area. The creative focused on clever comparisons with a friendly yet direct voice to convey the importance of using the Express Lanes safely in order to enjoy the benefits. The visual components of this campaign showed the Express Lanes road texture, markings, and lines to help viewers connect the message to the lanes. Colorful vehicles showcased the lanes in action and highlighted correct driving behaviors.

The campaign ran in two flights to increase consistency and memorability and used video, digital, Pandora and Spotify ads to reach target audiences throughout the Express Lanes corridor area. The first flight ran for four weeks at the end of 2021, while the second flight capitalized on early summer travel for five weeks in mid-2022.



**Paid media resulted in more than 3.56 million impressions.**

## C-470 PROMOTIONAL CAMPAIGN

The C-470 Express Lanes opened at the height of the COVID-19 pandemic and many commuters did not immediately form a habit of using the lanes. As traffic levels increased, the CTIO communications team developed a promotional campaign to remind roadway users that the Express Lanes on this corridor are open and available when drivers need them most. The team leveraged insights from the 2021 Express Lanes Driver Survey to target key potential Express Lanes users on the corridor. Specifically, most survey respondents said they used the Express Lanes to avoid traffic delays and to make up time when running late. The team used this data to create messaging that focused on more time for drivers to do what they love and less time spent in traffic. Paid media placements included online through programmatic digital ads, Pandora and Spotify. Additional out-of-home placements were selected in areas with high commuter traffic, including elevator screens in active offices in the Denver Tech Center area and an LED screen in the Park Meadows Mall.



**This paid media flight will continue through early 2023 and is anticipated to garner more than 2.64 million impressions.**

## WEBPAGE UPDATES

The Express Lanes webpages provide a consistent, reliable resource for roadway users to access timely information about the Express Lanes network. In 2022, the CTIO communications team focused on updating the landing page and subpages to improve the usability of the webpages on mobile devices and bring the accessibility of all materials up to current state standards. Key improvements included revising PDFs to meet 508 compliance standards, updating headings and images to work well with screen reader technologies, and creating an interactive map that will allow web and mobile users to easily view the status of each Express Lane in the network in one place.

# TOLL ADJUSTMENT PROCESS

The CTIO Board of Directors reviews the need for toll rate adjustments annually for all operational corridors.

## US 36 AND I-25 CENTRAL EXPRESS LANES

PRD operates and maintains the US 36 and I-25 Central Express Lanes, per the terms of the US 36 Concession Agreement, to manage congestion and ensure reliable travel times. PRD adjusted tolls in 2022 and continues to proceed with the transition to dynamic pricing by calibrating the traffic to provide a more indicative baseline for dynamic Express Lanes pricing and implementation.

With dynamic pricing, tolls will be continually adjusted according to traffic conditions to maintain a free-flowing level of traffic in the Express Lanes. Under this system, prices increase when the tolled lane(s) approach their capacity and decrease when the tolled lanes are underutilized.

Each phase of the transition to dynamic pricing includes a public outreach component, including messages on Variable Messaging Signs (VMS) in advance of the adjustment, media and social media outreach, and updates provided to community organizations and elected officials.

## I-25 NORTH EXPRESS LANES (US 36 TO 120TH AVENUE)

In 2022, toll rates were adjusted on the I-25 North (US 36 to 120th Avenue) Express Lanes. Before the adjustment, a three-fold analysis (traffic demand management, costs of operations & maintenance, and inflation) was undertaken to determine the potential need for a toll rate adjustment. Based on this analysis, toll rates increased an average of 9.1 percent for both Automatic Vehicle Identification (AVI) and Licence Plate Tolling (LPT) toll rates due to a combination of inflation, an increase in equipment maintenance costs, and increasing toll transaction processing costs. The AVI toll rate adjustments ranged from 10 cents to 30 cents. The LPT toll rate adjustments ranged from 36 cents to 56 cents (depending on the time of day). The CTIO Board of Directors approved the toll rate adjustments during the June Board meeting and the new toll rates went into effect on July 1st, 2022.

## I-25 NORTH EXPRESS LANES (120TH AVENUE TO NORTHWEST PARKWAY/E-470)

In 2022, toll rates were adjusted on the I-25 North (120th Avenue to Northwest Parkway/E-470) Express Lanes. Before the adjustment, a three-fold analysis (traffic demand management, costs of operations & maintenance, and inflation) was undertaken to determine the potential need for a toll rate adjustment. Based on this analysis, toll rates increased an average of 9.1 percent for both AVI and LPT toll rates due to a combination of inflation, an increase in equipment maintenance costs, and

increasing toll transaction processing costs. The AVI toll rate adjustments ranged from 10 cents to 20 cents. The LPT toll rate adjustments ranged from 30 cents to 49 cents (depending on the time of day). The CTIO Board of Directors approved the toll rate adjustments during the June Board meeting and the new toll rates went into effect on July 1st, 2022.

### I-70 MOUNTAIN EXPRESS LANE (EASTBOUND)

For the 2021-2022 operating year, the eastbound Mountain Express Lane AVI toll rates remained at \$7.00 on Saturdays and \$8.00 on Sundays and Holidays for the Winter ski season, which ran from November 1, 2021 to Apr 17, 2022. For the Summer recreational and Fall leaf peeping seasons, which ran from May 29 to October 31, the AVI toll rates were increased to \$8.00 on Saturdays and \$9.00 on Sundays and Holidays. Toll rates remained within the authorized range of \$3.00 to \$30.00 but were increased to accommodate the combination of inflation, equipment maintenance costs, and toll transaction processing costs.

### C-470 EXPRESS LANES (I-25/E-470 JUNCTION TO WADSWORTH BOULEVARD)

In 2022, toll rates and the toll schedule were adjusted on the C-470 Express Lanes. Before the adjustment, a three-fold analysis (traffic demand management, costs of operations & maintenance, and inflation) was undertaken to determine the potential need for a toll rate adjustment.

The analysis revealed that the original C-470 toll rate schedule was based on the pre-pandemic traffic patterns and that lower traffic volumes were observed when traffic volumes had been predicted to be higher and higher traffic volumes were observed when traffic volumes had been predicted to be lower. The analysis also showed that the COVID-19 pandemic and construction negatively impacted travel patterns along the C-470 Express Lanes since its opening on August 18, 2020.

In response to this analysis, the toll rate schedule was adjusted to match current traffic patterns. For non-peak periods, the AVI toll rate was adjusted to 75 cents. Depending on the toll zone, this resulted in a 35 cent to \$1.60 reduction in AVI toll rates. The corresponding LPT toll rates were reduced by an amount between 36 cents and \$2.20 depending on the toll zone. For peak periods, the AVI toll rate was increased by an amount between 5 cents and \$1.15, depending on the toll zone. The corresponding increase in LPT toll rates ranged between 32 cents and \$2.00. The CTIO Board of Directors approved the toll rate adjustments during the June Board meeting and the new toll rates went into effect on July 28th, 2022.

## EXPRESS LANES OPERATIONS

The Tolling Operations team expanded from a team of two, to a total of six, to align with the growth of the Express Lanes network. While keeping safety as a priority, the Tolling Operations team ensures toll revenue collection by proactively monitoring the tolling equipment and the tolling network to reduce revenue leakage. They log into multiple platforms to perform their daily tasks and send out updates throughout the day regarding the status of the various Express Lanes across the network. The Team actively participates in the testing of use cases when new Express Lanes corridors come online and attend the Go-Live meetings to complete the duties identified as required before the lane is opened.

It has been a busy year for the Express Lanes operations staff who have been focused on procuring a new Commercial Tolling Back-Office System and Customer Service Center Operations and implementing the Safety Enforcement Program (SEP) that will enforce safety violations for the Express Lanes Network. CTIO hosted the Blissway Multi-Agency Pilot (MAP). Key highlights of each of these activities can be found below.

### COMMERCIAL BACK-OFFICE PROCUREMENT (CBOS)

CTIO's current efforts include a project to procure a Commercial Tolling Back-Office System and Customer Service Center Operations. In 2022, the following items were completed:

- Released the RFQ in June 2022
- Received 13 Statements of Qualifications in August 2022
- Selected a shortlist of four vendors in December 2022 to continue the competitive procurement process.

### PILOTING NEW TECHNOLOGIES

A multi-agency pilot was hosted by CTIO and included the participation of six other Tolling/Express Lanes agencies. Between July and October, Blissway, a new, innovative tolling technology company, deployed its license plate-based toll collection system equipment on the Westbound Mountain Express Lanes corridor alongside the existing toll equipment to demonstrate its performance levels and evaluate their Wireless, Autonomous, Lane Enforcement (WAL-E) technology as a stand alone system.

### IMPROVING THE TOLLING EQUIPMENT NETWORK (MAINTENANCE, INSTALLATION AND INTEGRATION)

Electronic Transaction Consultants, LLC (ETC), CTIO's vendor for the Next Generation Lane Toll System (NGLTS) has installed and integrated the first corridor, Westbound Mountain Express Lanes. Tolling operations on the corridor began on July 8, 2022.

CTIO has improved the overall tolling equipment maintenance program by leveraging the contract with ETC to include the maintenance of the pre-existing equipment installed on the rest of the Express Lanes Network.

ETC has a dedicated maintenance facility, located in Denver, for the CTIO Express Lanes Maintenance and Installations.

# IMPROVEMENTS TO ENFORCEMENT AND SAFETY

Express Lanes require enhanced operations and resources to ensure that toll-paying customers, qualifying High Occupancy Vehicles (HOV), and transit vehicles are provided with a consistently reliable trip when compared to adjacent general purpose lanes. Additional resources, monitoring, and incident response training have led to improved safety conditions along existing Express Lanes corridors in both the Express Lanes and general purpose lanes.

Both the US 36 and I-25 Central (20th Street to US 36) corridors include dedicated operations and monitoring staff employed by PRD. They monitor corridor conditions during peak periods to ensure lanes are functioning properly and safely. Dedicated monitoring helps to quickly detect incidents when they occur, facilitates coordination with the Colorado Transportation Management Center (CTMC), and communicates real-time conditions to emergency response teams en route to the scene.

CTIO partners with the Colorado State Patrol to increase the frequency of patrols along the I-25 North Express Lanes Corridor from US 36 to Northwest Parkway/E-470 and along the C-470 Express Lanes Corridor from I-25 to Wadsworth Parkway. The goal of the increased patrols is to improve safety by encouraging responsible driving and efficient throughput of traffic along these corridors. On I-25 North, between November 2021 and October 2022, troopers made 1382 contacts with the traveling public. They issued 763 citations ranging from speeding and HOV lane violations to registration and seatbelt violations. There were 10 arrests. On C-470, January to December 2022, troopers made 774 contacts with the traveling public. They issued 439 citations. There were 16 arrests.

## SAFETY ENFORCEMENT ON THE MOUNTAIN EXPRESS LANES

In 2022, the Colorado legislature passed a new bill (House Bill 22-1074: Traffic Violations on I-70 Shoulder Lanes) to reinforce the rules of using Express Lanes to improve safety and allow the CTIO to enforce these rules using civil penalties. The rules include the following:

- Drivers cannot drive in the Peak Period Shoulder Lane when signage indicates that it is closed in all cases except in an emergency or an authorized emergency vehicle.
- A driver cannot weave in and out of toll lanes and general-purpose lanes over the solid white line. This constitutes a failure to adhere to Express Lane rules and failure to pay a toll.
- If the Peak Period Shoulder Lane (also known as the Mountain Express Lanes) is open, a person cannot drive in it if their vehicle has more than two axles or exceeds 25 feet in length.

CTIO is authorized by law to enforce these rules for violations in accordance with new legislation and establish an administrative toll enforcement process (civil penalty). It is estimated that enforcement will begin in March of 2023, preceded by a robust and extensive communications outreach plan to inform the public.

When enforcement begins, violators will be identified using a sophisticated, first-in-the-nation technology system that includes sensors, cameras, and software. These elements will work together to identify vehicles that are weaving in and out of the lane, using the lane when it is closed, driving an oversized vehicle in the lane, and attempting to conceal their license plates through tampering or reflective materials.

The penalties for these infractions at the time of writing are still being determined but will include incentives and discounts for early payment.

## UNSOLICITED PROPOSALS

CTIO had one unsolicited proposal under consideration in 2022 from ROADIS USA related to I-25 North. In November 2022, CDOT and CTIO made the decision not to move forward with this proposal or seek a competitive solicitation.

In late 2022, the Transportation Commission approved moving forward with the construction of I-25 North Segment 5 (CO 56 to CO 66).

The I-25 North Express Lanes Segment 5 project, which will connect to Express Lanes Segments 6, 7, and 8 (Berthoud to Fort Collins), currently under construction, will deliver interstate upgrades that support the rapidly expanding communities along the corridor by bringing critically important safety and mobility improvements that will benefit the economy, environment, and quality of life of Coloradans. This section of I-25 carries 80,000+ vehicles per day, including over 10% semi-trucks. The added Express Lanes will provide trip reliability and will increase operational efficiency for Bustang service. These Express Lanes will utilize the center-loading mobility hub, actively being constructed at County Road 56 and Centerra.

## BUDGET AND FINANCE

### ANNUAL BUDGET TIMELINE

In September 2022, CTIO started the budget planning process for the upcoming 2023-24 fiscal year, including the development of an annual work plan. CTIO provided the fiscal year (FY) 2023-24 draft budget allocation plan to the CTIO Board for review in December 2022 and will take a final budget allocation plan to the CTIO Board for adoption in March 2023.

### FEE-FOR-SERVICE INTRA-AGENCY AGREEMENT

In recognition of the specialized nature of the expertise and services CTIO provides to CDOT, and because of CTIO's enterprise status, CDOT pays CTIO for these services through an annual Fee-for-Service Intra-Agency Agreement (IAA). In March 2022, CTIO and CDOT entered into a fiscal year (FY) 2022-23 Fee-For-Service IAA. The IAA includes a Scope of Work (SOW) and Fee-for-Service request that covers July 1, 2022, through June 30, 2023.

This IAA documents the terms of the overall business relationship between CDOT and CTIO. It includes the SOW CDOT wishes CTIO to provide the value being compensated for key areas of work and the process by which CTIO charges CDOT for the fair market value of its services. The value of services provided corresponds with the CTIO Fee-for-Service Budget the Transportation Commission approved in March 2021. This annual process ensures CTIO can complete work on behalf of CDOT within its approved budget for the current fiscal year.

### TOLLING OPERATIONS AND MAINTENANCE INTRA-AGENCY AGREEMENT

In recognition of the specialized operations and maintenance (O&M) expertise that CDOT provides to CTIO, CTIO and CDOT determined a new structure that will provide an upfront payment to CDOT to cover Express Lanes O&M costs through a new annual Tolling Operations and Maintenance (TOMs) IAA. This IAA documents the terms of the overall business relationship between CDOT and CTIO. It includes the SOW CTIO wants CDOT to provide in FY 2022-23, the cost calculations, and the process by which CDOT charges CTIO for the fair market value of the services provided. It ensures a proactive approach to determining O&M costs and removes the burden of calculating the total number of vehicles that use the GP and Express Lanes to determine a payment amount, which was the method used in prior fiscal years. As the Express Lanes Network grows, the new structure will help address the challenges this growth creates and will ensure a more equitable approach to paying for O&M costs in the future.

## SPECIAL PROJECTS

### OPPORTUNITIES FOR CREATIVE FINANCING AND REVENUE GENERATION

CTIO has moved into a period of accelerated growth as it manages a growing Express Lanes Network and continues to explore and deliver P3 projects. As part of this phase of growth, CTIO is working on delivering other innovative projects, including:

- **Burnham Yard Redevelopment:** CTIO purchased the 58-acre site from the Union Pacific Rail Road in May 2021 and is partnering with CDOT, the City and County of Denver, and other stakeholders to determine specific mobility needs and the need for other potential projects. CDOT and CTIO anticipate retaining around 17 acres of the site for future transportation use. In October 2022, HPTC kicked off the Burnham Yard Transportation Planning Study that will focus on: 1) Track alignment for the CML, RTD light rail lines and future right of way needed for Front Range Passenger Rail (FRPR), 2) Meeting facilitation with stakeholders and the neighborhood, 3) Noise, vibration and dust analysis for each track alignment option and 4) Leveraging parallel planning efforts occurring with FRPR.
- **Federal Boulevard & Colfax Avenue Cloverleaf Redevelopment:** CTIO is partnering with CDOT, the City and County of Denver, and the West Colfax Business Improvement District to explore possible reconfiguration and development options for the Federal Boulevard and Colfax Avenue cloverleaf interchange. This effort is being driven by the completed Stadium District Master Plan, which was adopted by the Denver City Council in June 2019. The plan specifically highlights retrofitting or replacing the cloverleaf interchange of West Colfax Avenue and Federal Boulevard to create a more well-connected neighborhood with safe access for pedestrians, bicyclists, and vehicles. In 2021, the City and County of Denver completed a Colfax and Federal Interchange Transformation Study which included significant stakeholder input. The public engagement process identified Mobility, Environmental & Stormwater, Land Use & Economics, and Open Space, Public Realm, & Placemaking as the four lenses through which options for redevelopment should be evaluated. The study identified four preferred re-configurations that will now be evaluated by CDOT and CTIO for traffic and safety feasibility as well as the highest value and best use of the land.
- **I-25 North Corridor Financing Strategy:** CTIO is working with the USDOT Build America Bureau to secure a TIFIA loan that will help address funding gaps on the I-25 North (Johnstown to Fort Collins) project and develop an overall funding strategy to address the remaining segments of the corridor in the future.



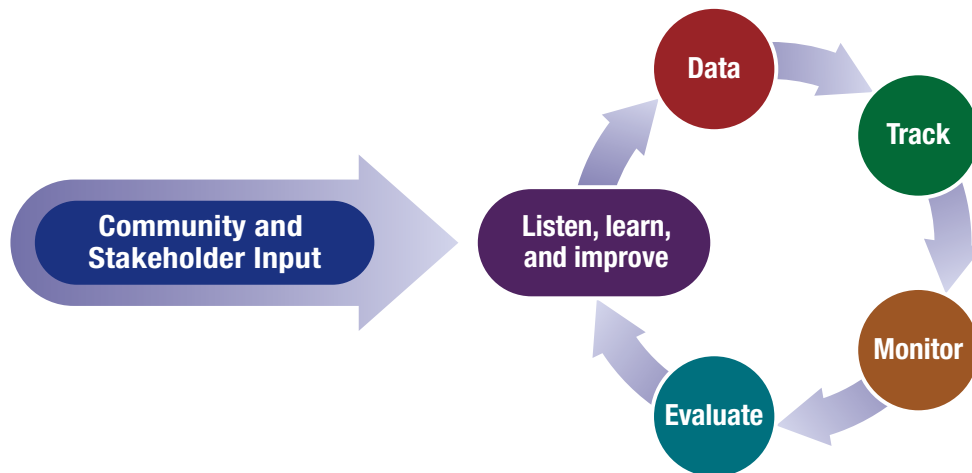
# CENTRAL 70 GES TOLLING EQUITY

## Background and Details:

The 2017 Record of Decision (ROD) for the Central 70 project included a commitment for CTIO to explore ways to provide for some type of discounted access to the Express Lanes for low-income populations in the GES neighborhoods. CTIO embarked on a process in early 2021 to develop a preferred program option based on extensive community engagement and stakeholder input, as outlined in the diagram below.

## Accountability and adjustment process for program development

Over a ten-month period, CTIO conducted a literature review, interviewed with other DOTs across the nation that have or are implementing a low-income toll program, held numerous meetings with key stakeholders, GES residents, and city council members, conducted two public meetings in the GES community and completed a public survey that received almost three hundred responses. Based on all the feedback received as part of this process, and a recommendation from the Steering Committee established to guide program development, CTIO staff presented the following program to the CTIO Board of Directors for consideration:



- Recommended Program:** Eligible participants receive a switchable Express Lanes transponder and one-time promotional toll credit of \$100. Starting in 2024, GES residents decide annually how to split the program budget on either transit passes or replenishing their toll accounts.
- Eligibility:** Residents of GES whose annual household incomes are below 200 percent of the Federal Poverty Level (FPL). Prior residents of GES who were displaced due to eminent domain (167 households based on a list held by CDOT) will also be eligible to apply.
- Budget:** 15 percent of projected net revenue, in addition to the program administration costs and the one-time cost of the transponder and toll credit.

The program was approved by the CTIO Board of Directors in April of 2022. At the time of writing, CTIO staff are working diligently to implement the program ahead of tolling commencement in early 2023.

## INDUSTRY AND TECHNICAL TRAINING

Every year, CTIO invests hundreds of staff hours for industry and technical training, including FHWA peer exchanges, industry conferences, and seminars. The 2015 Legislative Audit of the US 36 project directed CTIO to identify staff training needs and ensure that adequate resources are allocated to provide ongoing training, including project management training.

In 2022, CTIO staff participated in more than 20 industry events, training, and conferences. Highlights include the International Bridge, Tunnel and Turnpike Association (IBTTA) Annual Conference, IBTTA Technology Summit, IBTTA Third Party Tolling Conference, IBTTA Road Usage Charging and Finance Conference, Traffic Control Technician Training, Women in Finance Event, Next Generation Lane Toll System (NGLTS) training, and JP Morgan Investor Conference.



# Transportation Public-Private Partnership Reporting

## OVERVIEW

During the 2020 legislative session, the Colorado Assembly passed the [Transportation Public Private Partnership Reporting Act](#) (Senate Bill 20-017). The Act requires that CTIO include information about its Public-Private Partnerships in its annual report to the legislative committees of the House of Representatives and the Senate that have jurisdiction over transportation. In summary, the Bill requires that CTIO provides the following information:

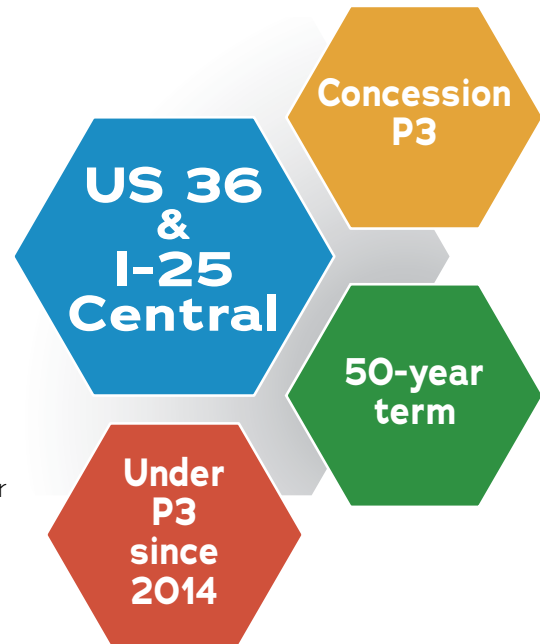
- Process used leading up to, or that CTIO anticipates using to lead up to, a new Public Private Partnership (P3)
- Process for obtaining and responding to public questions, concerns, and comments or input
- Process for keeping state legislators and local elected officials informed and updated
- Process for selecting each partner to a P3
- Financial, performance, and length-of-term provisions
- Anticipated financial, performance, and length-of-term provisions of its proposed P3

As a general statement of policy, CTIO will continue to prioritize transparency and accountability in the development and implementation of Public-Private Partnerships for surface transportation projects and welcomes the opportunity to include this information in a new section of the annual report. The sections below address each of the key points of Senate Bill 20-017.

# US 36 AND I-25 CENTRAL

## OVERVIEW

Federal and state fuel taxes, which have not changed in more than 20 years, will not pay for the amount of aging infrastructure that needs repair in this state. A P3 is an innovative project delivery model that allows us to accelerate construction by accessing financing from the private sector for construction costs. The P3 model also allows the transfer of risks related to construction, toll collection, and ongoing operations and maintenance to the private sector. The US 36 project was the first surface transportation P3 for the state of Colorado and was a new concept for stakeholders. The P3 helped build much-needed improvements on a highway that was opened in 1951, two decades sooner than CDOT otherwise could afford to do so.



PRD collects tolls from the Express Lanes; maintains the Express Lanes and the general purpose lanes, including pothole repairs, snow removal, striping, etc.; and will pay back the federal loans, Private Activity Bonds, and private equity with the toll revenues.

PRD assumes most of the risk in the P3, including risks associated with the level of traffic in the Express Lanes and the sufficiency of toll revenues to support repayment of loans, as well as the long-term operation and maintenance of the highway.

## PROCESS FOR SELECTING A PARTNER

A two-phase competitive bid process was used for selecting the concessionaire. The first phase was based on the qualifications of all interested teams RFQ. The initial submittals were shortlisted to three teams who had the best qualifications for this project. The second phase included evaluation to select the proposal with the best value and financing for the corridor (Request for Proposal [RFP]). Local governments were consulted throughout the process and CTIO reported the concessionaire search to the legislature. PRD was selected as the developer to complete the design and construction of US 36 from Interlocken Loop to Table Mesa Drive (Phase 2) and to operate and maintain the existing facilities of I-25 Central and US 36 from I-25 to Table Mesa Drive (Phase 1 & 2).

## PUBLIC AND ELECTED OFFICIALS ENGAGEMENT

The US 36 project was the result of a very public process that took place over 10+ years. Elected officials and state legislators were key partners from the very beginning. The project began in 2003 with an Environmental Impact Statement (EIS) process that included intense and lengthy participation from local governments and incorporated hundreds of public comments from numerous public meetings.

An audit of the US 36 project and process was conducted by the state auditor in 2015. The audit reaffirmed that the project offered the best value for money for the state but highlighted some key lessons learned around communicating with the public. As a result, CTIO developed and adopted the [CTIO Transparency Policy](#) to clarify the steps that CDOT and CTIO take to engage with the public and elected officials when a project is being explored as a P3.

## PERFORMANCE AND OVERSIGHT

CTIO and CDOT oversee the concessionaire and ensure that it is adhering to all requirements in the contract through regular check-ins and audits of the processes and procedures. The concessionaire is required to pay CTIO a yearly fee to ensure funds are available for comprehensive oversight. See [Appendix B \(CTIO Fiscal Year 2021-22 Final Budget to Actual Statement\)](#) for further information.

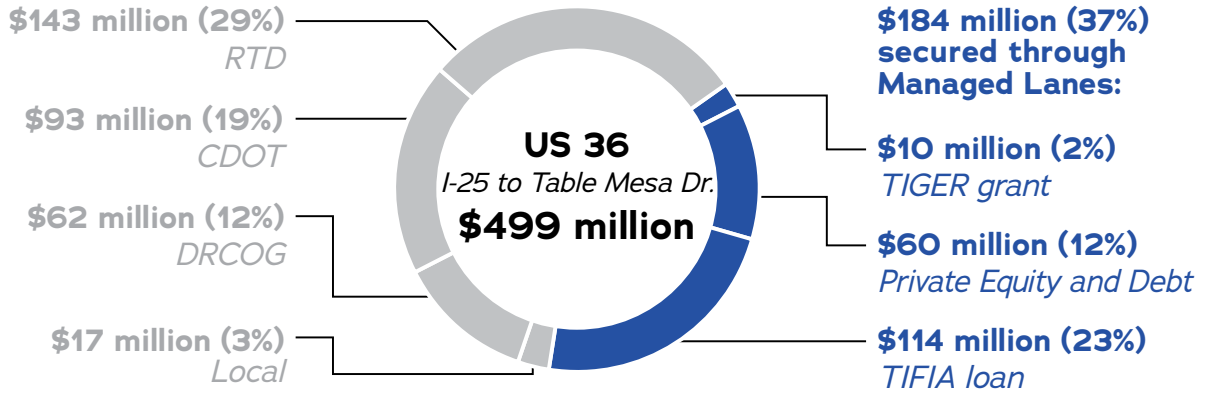
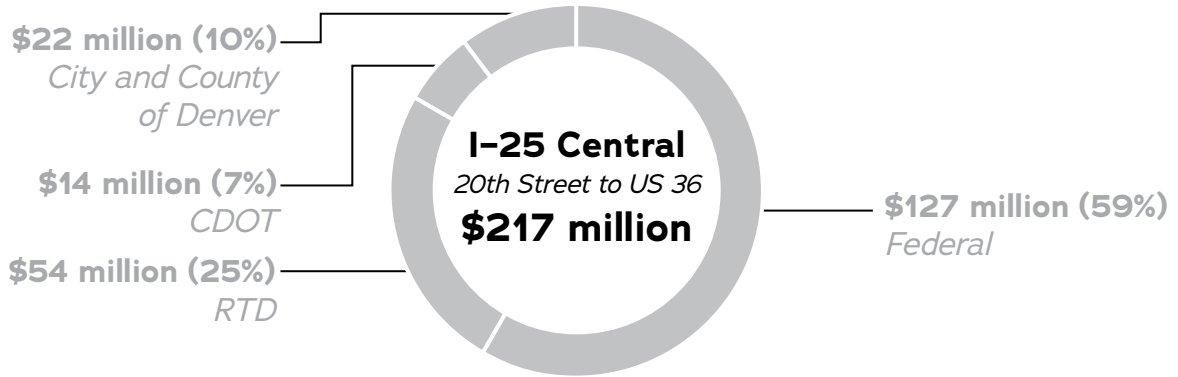
The CTIO Board of Directors approved toll rates and penalty charges in June 2018, up to a capped amount, and continues to monitor PRD through monthly operations reports as PRD proceeds with the transition to fully dynamic toll pricing.

## FINANCIAL AND LENGTH-OF-TERM PROVISIONS

The P3 procurement process was initiated in 2012. CDOT and CTIO selected and entered into a 50-year contractual agreement in 2013 with PRD. PRD was responsible for the design and construction of Phase 2 of the project and operations and maintenance of Phase 1 and Phase 2 of US 36 Express Lanes and the Central I-25 Express Lanes that connect US 36 to downtown Denver.

PRD's obligations include routine and lifecycle maintenance (replacement and rehabilitation) of US 36 Express Lanes and the existing I-25 Central Express Lanes, as well as routine maintenance in the four general purpose lanes and the bus-on-shoulder lanes. Routine maintenance includes minor repairs and snow and ice removal. PRD is also responsible for tolling operations on the US 36 and I-25 Central Express Lanes.

PRD and CTIO employed a sophisticated financial arrangement, consisting of four tranches of debt on two liens, in addition to the Sponsor's Equity. As part of this financing package, PRD assumed CTIO's existing obligations from the project's first phase, a \$54 million TIFIA loan, and issued approximately \$20 million of additional parity Private Activity Bonds. PRD also entered into a new \$60 million TIFIA loan. Finally, PRD issued approximately \$20 million of subordinate debt and is contributing additional equity to the project. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional CTIO project information, or visit the CDOT website for additional documentation related to this project.





## CENTRAL 70

### OVERVIEW

Central 70, between I-25 and Chambers Road, is one of Colorado’s economic backbones. It is home to 1,200 businesses, provides the regional connection to Denver International Airport, and carries upwards of 200,000 vehicles per day.

Following a 14-year environmental review process, the FHWA granted its approval of the Central 70 Project through the issuance of its Record of Decision on January 19, 2017. Construction began on this \$1.3 billion project in August 2018 and is anticipated to be complete in early 2023.

This investment is expected to provide direct benefit to road users, which will exceed \$12 billion over 25 years. Eighty percent of this benefit comes from business and personal time saved

from less congestion on the highway. Most of the remaining benefit comes from better efficiency for businesses that use the corridor.

The Central 70 Project will reconstruct a 10-mile stretch of I-70 between Brighton Boulevard and Chambers Road, add one new Express Lane in each direction, remove the aging 57-year-old viaduct, lower the interstate between Brighton Boulevard and Colorado Boulevard, and place a four-acre park over a portion of the lowered interstate.

CDOT has made a number of commitments to the local community as part of the Central 70 Project. These cover a range of issues, from mitigating the impacts of construction noise and dust to contributing funding to affordable housing and fresh food access.

### PROCESS FOR SELECTING A PARTNER

CTIO led a rigorous procurement process for a Design-Build-Finance-Operate-Maintain P3 delivery, using a two-phase (RFQ and RFP) competitive bid process, as outlined in the [I-70 East Corridor Project Key Procurement Issues](#) (March 2014). Local governments were consulted throughout the process. Kiewit Meridiam Partners (KMP) was selected to be the Central 70 Project developer to undertake the largest transportation infrastructure development project in CDOT history.



## PUBLIC AND ELECTED OFFICIALS ENGAGEMENT

Since 2004, the project team has held hundreds of meetings with project stakeholders. CTIO and CDOT followed the [CTIO Transparency Policy](#) for this project, which outlines all the steps the project took to ensure the public and elected officials had an opportunity to provide feedback at various stages of the process.

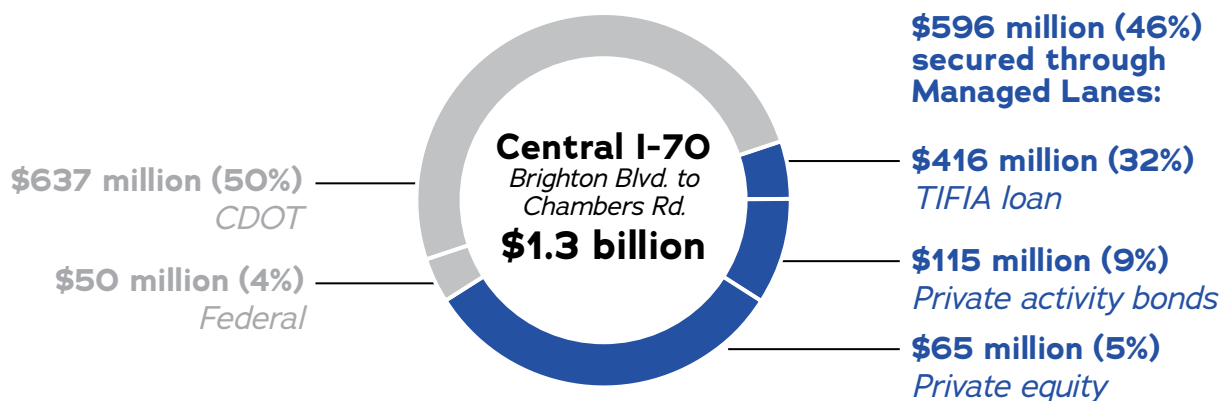
## PERFORMANCE AND OVERSIGHT

CDOT, Colorado Bridge and Tunnel Enterprise, and CTIO currently staff the project office, where they oversee the project construction, public outreach, and operational requirements. Performance requirements are set out in the project agreement and detail the penalties, which include deductions to the availability payment for lane closures and other types of contract noncompliance.

KMP's operations and maintenance subcontractor, Jorgensen, is currently performing snow and ice removal on the project during construction. CDOT and CTIO staff are monitoring them to ensure they are abiding by the specifications set forth in the project agreement.

## FINANCIAL AND LENGTH-OF-TERM PROVISIONS

KMP will operate and maintain the highway for 30 years after the project is complete, using an availability payment P3 structure. This delivery model transfers risk to a private partner and minimizes cost overruns for CDOT. An availability payment is where KMP receives an annual payment based on the availability of the Express Lanes and general purpose lanes at the specified performance level. Performance requirements are set out in the project agreement and detail the penalties, which are double for the Express Lanes. The financing includes a \$416 million TIFIA loan from the U.S. Department of Transportation and \$115 million of Private Activity Bonds. See below for a full financial breakdown and [Appendix A \(Summary of Express Lanes Projects\)](#) for additional project information, or visit the CDOT website for additional documentation related to this project. Supported by contracts, backed by investment-grade credit ratings, the bonds were sold at a competitively low interest rate that generated savings for CDOT.



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# Revenues and Expenses

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Revenues and expenses of CTIO are accounted for on a fiscal year (FY) basis. For this 2022 Annual Report, data from FY 2021-22 (which started on July 1, 2021 and ended on June 30, 2022) are being used.

Law requires that the Transportation Special Revenue Fund 536 is maintained and reported separately from the Operating Fund 537. Therefore, revenue and expense information is reported separately by fund for this report. CTIO's finances are audited each year as part of the state audit. The audited financial statements for FY 2021-22 will be posted on the CTIO website in early 2023.

## SUMMARY OF FUND 536

Fund 536 receives revenues collected from tolls, fees, and other fines on Express Lanes corridors. Fund 536 uses debt and other financing proceeds to pay for eligible project expenses and capitalized interest. Revenue is used primarily for expenses related to tolling operations of an Express Lanes corridor, including staff time, toll processing, routine maintenance, and debt service. See [Appendix B \(CTIO Fiscal Year 2021-22 Final Budget to Actual Statement\)](#) for further information on Fund 536.

## SUMMARY OF FUND 537

Fund 537 receives revenues from fees for services and earned interest. Revenue is used primarily for expenses related to the administration of the program, including staff time, communications, and project development. See [Appendix B \(CTIO Fiscal Year 2021-22 Final Budget to Actual Statement\)](#) for further information on Fund 537.

## RECOMMENDED STATUTORY CHANGES FOR 2023

CTIO is not recommending any statutory changes during the 2023 legislative session.

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# Appendices

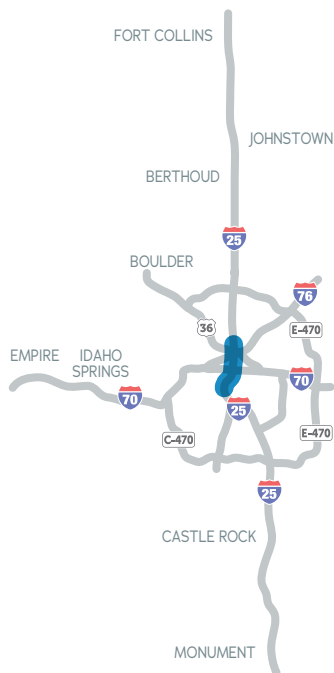
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# APPENDIX A: SUMMARY OF EXPRESS LANES PROJECTS

## EXPRESS LANES IN OPERATION

### I-25 Central Express Lanes (20th Street to US 36)



<b>Description</b>	6 miles from Downtown Denver to US 36; 2-lane reversible, barrier-separated; single toll gantry (12 miles in total)		
<b>Delivery Method</b>	Originally delivered as a Bid-Build project		
<b>Tolling Strategy</b>	Single toll point in each direction (reversible) HOV3+ Travel Free	<b>AVI Low &amp; High Rates</b>	Time-of-day: \$1.05 to \$5.95 Weekends: \$1.05 4-Axle surcharge: \$25
<b>Total Cost</b>	\$217 million (1991 \$\$)		
<b>Funding Sources (million dollars, rounded)</b>	Federal \$127 RTD \$54 CDOT \$14 CCD \$22	2004 \$2.8 million FHWA Value Pricing Program for HOV conversion, conversion cost total around \$9 million.	
<b>Governance</b>	When the Express Lanes opened, operations were governed by IGA with RTD for toll rates and travel times.  Now operations are part of the US 36 P3. The lanes are governed by the terms of the US 36 Concession Agreement (CA).		
<b>Benchmarks and Delivery Date</b>	Opened for tolling June 2006. Became part of the US 36 P3 project in March 2014.		
<b>Notes and History</b>	Opened by RTD and CDOT as a bus lane with HOV in the 1990s. Automated gate system for reversible lane access, closure, and sweep.		

## EXPRESS LANES IN OPERATION

### US 36 Express Lanes (I-25 to Table Mesa Drive)



#### Phase 1

<b>Description</b>	20 miles (both directions) from Pecos Street to Interlocken Loop. Two single lanes, buffer separated, 24/7.		
<b>Delivery Method</b>	Design-Build project delivery		
<b>Tolling Strategy</b>	5 toll points in each direction HOV3+ Travel Free	<b>AVI Low &amp; High Rates</b>	Time-of-day: \$0.40 to \$1.25 per gantry Weekends: \$0.40 per gantry 4-Axle surcharge: \$25
<b>Total Cost</b>	\$318 million		
<b>Funding Sources (million dollars, rounded)</b>	TIGER	\$10	
	TIFIA	\$54	
	CDOT	\$78	
	DRCOG	\$47	
	RTD	\$124	
	Local	\$6	
<b>Benchmarks and Delivery Date</b>	Opened for tolling in July 2015.		

#### Phase 2

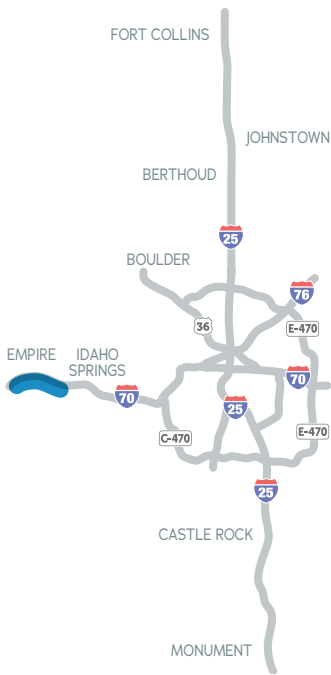
<b>Description</b>	12 miles (both directions) from Interlocken Loop to Table Mesa Drive; two single lanes, buffer separated; 24/7.		
<b>Delivery Method</b>	P3 Design-Build-Finance-Operate-Maintain project delivery.		
<b>Tolling Strategy</b>	2 toll points in each direction HOV3+ Travel Free	<b>AVI Low &amp; High Rates</b>	Time-of-day: \$0.40 to \$1.25 per gantry Weekends: \$0.40 per gantry 4-Axle surcharge: \$25
<b>Total Cost</b>	\$180 million		
<b>Funding Sources (million dollars, rounded)</b>	Private*	\$120	<i>*Includes \$60 million TIFIA loan</i>
	CDOT	\$15	
	DRCOG	\$15	
	RTD	\$19	
	Local	\$11	
<b>Benchmarks and Delivery Date</b>	Opened for tolling in March 2016		

#### Phase 1 and 2 Pecos Street to Interlocken Loop to Table Mesa Drive

<b>Governance</b>	Total Phase 1 and 2 cost is \$497.4 million. 50-year Revenue Risk Concession Agreement between Plenary Roads Denver and CTIO, which began in 2016. CDOT oversaw construction. CA fully executed February 2014. CA caps tolls for Phase 1 and Phase 2 at \$15.76 total in 2018 dollars.
<b>Notes and History</b>	Originally built as a toll road (Boulder-Denver Turnpike) in 1951. EIS began in 2003 and was completed in 2009. Toll system upgrades and policy development create need for switchable transponder on all Express Lanes. Regional commuter bike trail is a significant design feature. American Association of State Highway and Transportation Officials (AASHTO) Grand Prize: Use of Technology and Innovation.

## EXPRESS LANES IN OPERATION

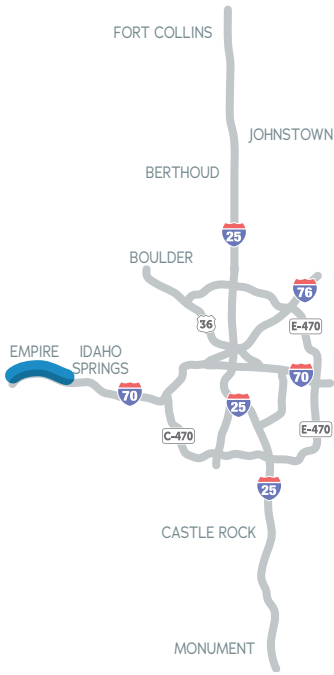
### I-70 Mountain Express Lane (Eastbound)-Empire Junction through Veterans Memorial Tunnels



<b>Description</b>	12 miles from Empire Junction through Veterans Memorial Tunnels; one single lane; peak travel times only.		
<b>Delivery Method</b>	Construction Manager/General Contracting (CM/GC) project delivery.		
<b>Tolling Strategy</b>	3 toll points Segmented tolling	<b>AVI Low &amp; High Rates</b>	Authorized Toll Range: \$3.00 to \$30.00 Weekends: \$8.00 to \$9.00
<b>Total Cost</b>	\$72 million		
<b>Funding Sources</b> (million dollars, rounded)	CTIO* \$24.6 CDOT \$47.4	<i>*Includes financing costs.</i>	
<b>Governance</b>	Intra-Agency Agreement with CDOT. Loan Agreement with Bank of America.		
<b>Benchmarks and Delivery Date</b>	Opened for tolling in December 2015.		
<b>Notes and History</b>	<p>Shoulder lane open during peak travel times, for a maximum of 100 days per year.</p> <p>No HOV; vehicles more than 25 feet or more than two axles not allowed.</p> <p>Governor's Elevation Award for Superior Customer Service.</p> <p>Women's Transportation Seminar (WTS), Colorado Innovative Transportation Solution of the Year.</p>		

## EXPRESS LANES IN OPERATION

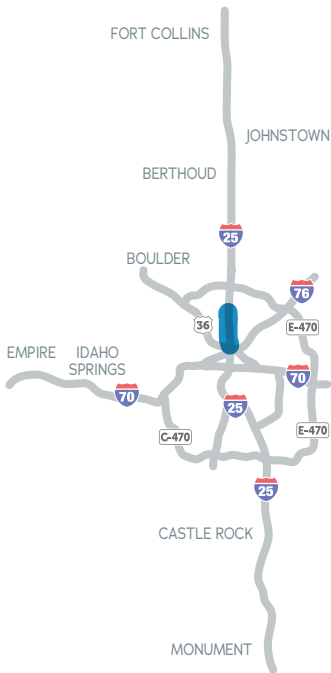
### I-70 Mountain Express Lane (Westbound)—Veterans Memorial Tunnels to Empire Junction



<b>Description</b>	The westbound I-70 Mountain Express Lane project added an approximately 12-mile-long tolled peak period shoulder lane on westbound I-70 between the Veterans Memorial Tunnels (just west of MP 243) and Empire Junction (MP 232).						
<b>Delivery Method</b>	Design-Bid-Build delivery						
<b>Tolling Strategy</b>	3 toll points Dynamic pricing strategy (TBD in 2023) Segmented tolling	<b>AVI Low &amp; High Rates</b>	<table border="1"> <tr> <td>Authorized Toll Range:</td> <td>\$7.00 - \$30.00</td> </tr> <tr> <td>Weekends:</td> <td>\$8.00 to \$9.00</td> </tr> </table>	Authorized Toll Range:	\$7.00 - \$30.00	Weekends:	\$8.00 to \$9.00
Authorized Toll Range:	\$7.00 - \$30.00						
Weekends:	\$8.00 to \$9.00						
<b>Total Cost</b>	\$80 million						
<b>Funding Sources (million dollars, rounded)</b>	CDOT	\$50					
	Local	\$5					
	INFRA	\$25					
<b>Governance</b>	Transportation Commission/FHWA						
<b>Benchmarks and Delivery Date</b>	The I-70 Mountain Express Lane (westbound) opened for tolling in July 2022.						
<b>Notes and History</b>	Operational improvement similar to the eastbound I-70 Mountain Express Lane project, intended to ease congestion and improve travel time reliability until an ultimate solution can be implemented.						

## EXPRESS LANES IN OPERATION

### I-25 North Express Lanes (US 36 to 120th Avenue)

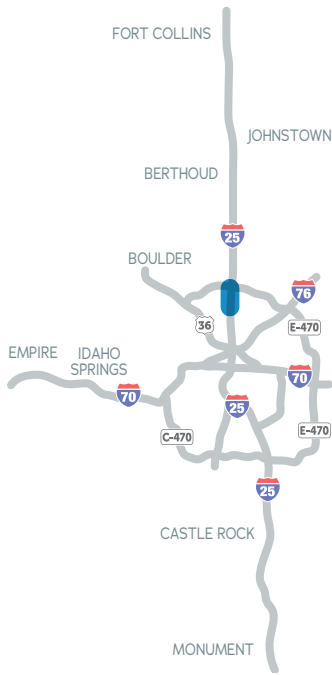


<b>Description</b>	12 miles (6 miles in each direction) from US 36 to 120th Avenue; single lanes northbound and southbound; buffer separated; 24/7; focus on the extension of I-25 Central Express Lanes and regional express bus.								
<b>Delivery Method</b>	Design-Build project delivery								
<b>Tolling Strategy</b>	3 toll points in each direction Segmented tolling HOV3+ Travel Free	<b>AVI Low &amp; High Rates</b>	<table border="1"> <tr> <td>Time-of-day:</td> <td>\$1.30 to \$365</td> </tr> <tr> <td>Weekends:</td> <td>\$1.60</td> </tr> <tr> <td>4-Axle surcharge:</td> <td>\$25</td> </tr> </table>	Time-of-day:	\$1.30 to \$365	Weekends:	\$1.60	4-Axle surcharge:	\$25
Time-of-day:	\$1.30 to \$365								
Weekends:	\$1.60								
4-Axle surcharge:	\$25								
<b>Total Cost</b>	\$65 million								
<b>Funding Sources (million dollars, rounded)</b>	TIGER Grant	\$15							
	Federal	\$32							
	State	\$9							
	Local	\$8							
<b>Governance</b>	Intra-Agency Agreement with CDOT								
<b>Benchmarks and Delivery Date</b>	Opened for tolling in July 2016								

**Notes and History** Express Lanes designed to fit within the existing road footprint; direct connect with I-25 Central (southbound only during AM peak).  
Sound barrier and Active Traffic Management are significant design features.

## EXPRESS LANES IN OPERATION

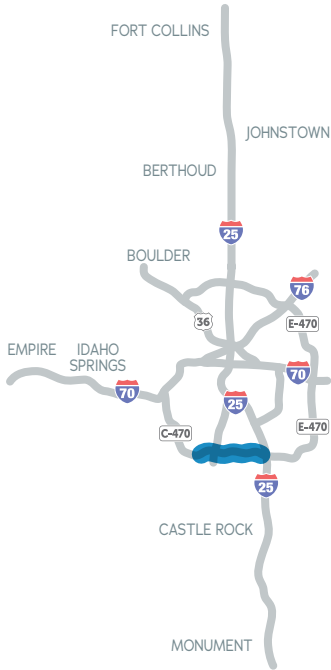
### I-25 North Express Lanes (120th Avenue to Northwest Parkway/E-470)



<b>Description</b>	10 miles (5 miles in each direction) from 120th Avenue to Northwest Parkway/E-470. Single lanes northbound and southbound; buffer separated; 24/7; extension of I-25 Express Lanes and regional express bus.		
<b>Delivery Method</b>	Design-Bid-Build project delivery		
<b>Tolling Strategy</b>	2 toll points in each direction Segmented tolling HOV3+ Travel Free	<b>AVI Low &amp; High Rates</b>	Time-of-day: \$1.25 to \$2.60 Weekends: \$1.25 4-Axle surcharge: \$25
<b>Total Cost</b>	\$98 million		
<b>Funding Sources (million dollars, rounded)</b>	CDOT \$76 CTIO* \$22	<i>*Includes financing costs</i>	
<b>Governance</b>	Intra-Agency Agreement with CDOT Loan Agreement with Bank of America		
<b>Benchmarks and Delivery Date</b>	Opened for tolling in the summer of 2020.		
<b>Notes and History</b>	Project widened approximately 16 feet to 18 feet to the outside of the road to accommodate the additional new lane in each direction.  Sound barrier, median lighting, median barrier, and water quality treatment are significant project features.		

**EXPRESS LANES IN OPERATION**

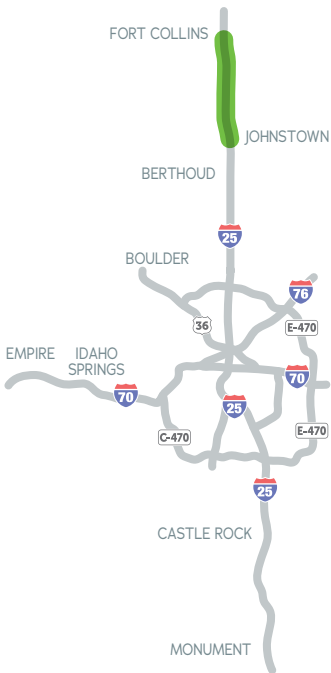
**C-470 Express Lanes (I-25 to Wadsworth Boulevard)**



<b>Description</b>	30 miles (both directions) from I-25 to Wadsworth Boulevard; generally, two single lanes with a westbound dual Express Lanes from Quebec Street to Lucent Boulevard, buffer separated; 24/7.										
<b>Delivery Method</b>	Design-Build project delivery										
<b>Tolling Strategy</b>	3 toll points eastbound and 4 toll points westbound  Zone based tolling	<b>AVI Low &amp; High Rates</b>	<table border="1"> <tr> <td>Time-of-day:</td> <td>\$0.75 to \$360</td> </tr> <tr> <td>Weekends:</td> <td>\$0.75</td> </tr> <tr> <td>4-Axle surcharge:</td> <td>\$25</td> </tr> </table>	Time-of-day:	\$0.75 to \$360	Weekends:	\$0.75	4-Axle surcharge:	\$25		
Time-of-day:	\$0.75 to \$360										
Weekends:	\$0.75										
4-Axle surcharge:	\$25										
<b>Total Cost</b>	\$326 million										
<b>Funding Sources (million dollars, rounded)</b>	<table border="1"> <tr> <td>CDOT</td> <td>\$48</td> </tr> <tr> <td>Local</td> <td>\$10</td> </tr> <tr> <td>CTIO*</td> <td>\$162</td> </tr> <tr> <td>TIFIA</td> <td>\$107</td> </tr> </table>	CDOT	\$48	Local	\$10	CTIO*	\$162	TIFIA	\$107	<i>*Includes financing costs.</i>	
CDOT	\$48										
Local	\$10										
CTIO*	\$162										
TIFIA	\$107										
<b>Governance</b>	Intra-Agency Agreement with CDOT  Loan Agreement and Master Trust Indenture with TIFIA										
<b>Benchmarks and Delivery Date</b>	Opened for tolling in the summer of 2020.										
<b>Notes and History</b>	Project included full reconstruction of existing pavement, new auxiliary lanes, and reconfigured road geometry.  No HOV option offered.										

## EXPRESS LANES UNDER CONSTRUCTION

### I-25 North Express Lanes (Johnstown to Fort Collins)

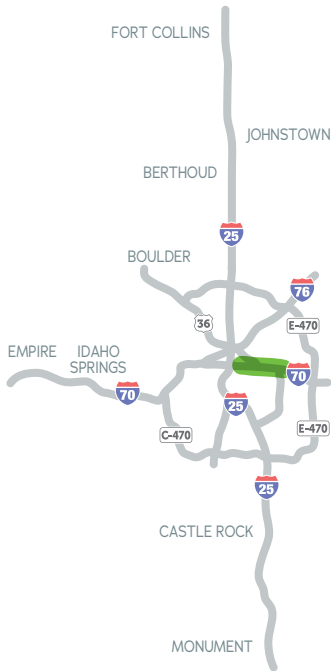


<b>Description</b>	34 miles (17 miles in each direction) from SH 402 to SH 14; two single lanes, buffer separated; 24/7; extension of I-25 Express Lanes and regional express bus located in the median of I-25 near Kendall Parkway, which provides direct pedestrian connection to a new Park n Ride facility.		
<b>Delivery Method</b>	Design-Build project delivery		
<b>Tolling Strategy</b>	3 toll points in each direction Segmented tolling HOV3+ Travel Free	<b>AVI Low &amp; High Rates</b>	Toll rates and toll schedule to be determined closer to Express Lanes opening.
<b>Total Cost</b>	\$600 million		
<b>Funding Sources (million dollars, rounded)</b>	CDOT	\$229	<i>*May also include financing costs.</i>
	Local	\$52	
	CTIO*	\$154	
	Federal	\$142	
	TIGER	\$22	
<b>Governance</b>	Intra-Agency Agreement with CDOT Potential loan agreement		
<b>Benchmarks and Delivery Date</b>	The Project began construction in September 2018 and will open for tolling in 2024.		
<b>Notes and History</b>	Environmental Impact Statement completed in 2011. Entire northern corridor, Denver to Ft. Collins, costs about \$2.2 billion; a phased approach to corridor improvements is being implemented.		



## EXPRESS LANES UNDER CONSTRUCTION

### Central 70 Express Lanes (Brighton Boulevard to Chambers Road)

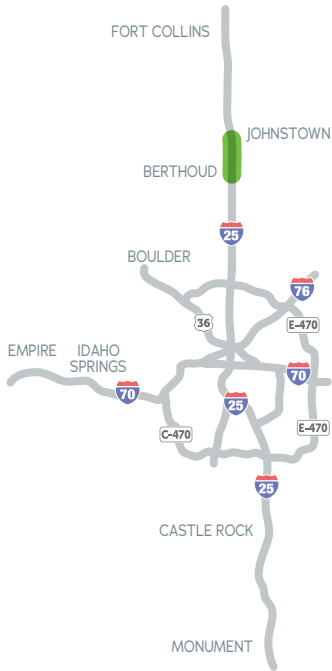


<b>Description</b>	20 miles (10 miles in each direction) from Brighton Boulevard to Chambers Road.		
<b>Delivery Method</b>	P3 Design-Build-Finance-Operate-Maintain delivery with Project Agreement		
<b>Tolling Strategy</b>	2 toll points eastbound and 3 toll points westbound  Segmented tolling HOV3+ Travel Free	<b>AVI Low &amp; High Rates</b>	Toll rates and toll schedule to be determined closer to Express Lanes opening
<b>Total Cost</b>	\$1.3 billion (projected)		
<b>Funding Sources (million dollars, rounded)</b>	Bridge and Tunnel Enterprise	\$457	
	CDOT	\$180	
	PABs	\$115	
	TIFIA	\$416	
	Private Equity	\$65	
	Federal	\$50	
<b>Governance</b>	Project Agreement sets project scope of work and operational requirements.  This delivery model transfers risk to a private partner and minimizes cost overruns for CDOT through availability payments (an annual payment to the private partner based on progress).		
<b>Benchmarks and Delivery Date</b>	The project began construction in August 2018 and will open for tolling in 2023.		
<b>Notes and History</b>	Record of Decision (ROD) was approved in January 2017. Financial close was completed in December 2017, and construction began August 2018.		



## EXPRESS LANES UNDER CONSTRUCTION

### I-25 North Express Lanes (Berthoud to Johnstown)



**Description** One Express Lane in each direction, totaling 13 miles between Berthoud and Johnstown. The project includes interchange reconstruction at SH 56, SH 60, LCR 16, and several bridge replacements.

**Delivery Method** CMWGC project delivery

**Tolling Strategy** Two northbound and two southbound tolling points are anticipated.

**Total Cost** \$271 million

<b>Funding Sources</b> (million dollars, rounded)	CDOT	\$226
	Local	\$2
	Federal	\$23
	BUILD Grant	\$20

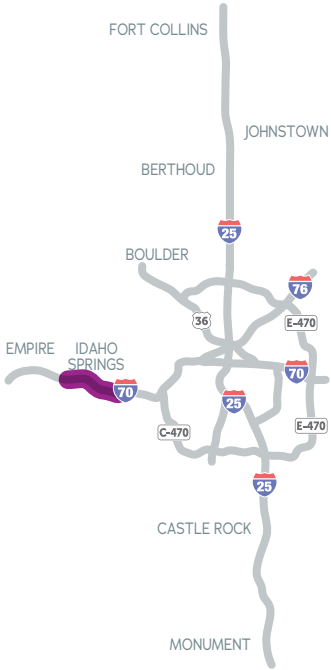
**Governance** IAA with CDOT

**Benchmarks and Delivery Date** The Project began in September 2019 and will open for tolling in 2024.

**Notes and History** This project will connect to the Johnstown to Ft. Collins project and is part of major improvement efforts on I-25 between Denver and Ft. Collins. The I-25 North Corridor Environmental Impact Statement was approved in 2011 and implementation is occurring as funds become available.

**EXPRESS LANES IN DEVELOPMENT**

**I-70 Floyd Hill to Veterans Memorial Tunnels**



Description	Adding a westbound Express Lane, totaling 8 miles from west of Evergreen to eastern Idaho Springs.	
Delivery Method	CM/GC project delivery	
Tolling Strategy	To be determined.	
Total Cost	\$700 million	
Funding Sources (million dollars, rounded)	Bridge and Tunnel Enterprise*	\$260
	Strategic funds**	\$340
	INFRA Grant	\$100
	<p><i>*Subject to change, pending project element eligibility review and final approval from the BTE board.</i></p> <p><i>**This indicates how much has been approved, or is proposed, or planned for funding from state strategic funding (SB-1, SB-267, and SB-260) and federal strategic funding sources (federal stimulus and IIJA).</i></p>	
Governance	IAA with CDOT	
Benchmarks and Delivery Date	Construction to commence in Summer 2023, anticipated completion in 2028.	

# APPENDIX B: CTIO FISCAL YEAR 2021-2022 BUDGET TO ACTUAL

Revenues and expenses of CTIO are accounted for on a fiscal year (FY) basis. For this 2022 Annual Report, data from FY 2021-22 (which started on July 1, 2021 and ended on June 30, 2022) are being used.

## Appendix B: Fiscal Year 2021-22 Budget to Actual for Fund 537 Statewide Transportation Enterprise Operating Fund (C.R.S. 43-4-806(4)) 537

Line Item		Total FY 2021-22 Approved Budget	Total FY 2021-22 Revenue/Expenses	Remaining Funds
1	Fiscal Year Revenues			
2	Fee for Service Payment		\$ 4,000,000	
3	Interest Earnings		66,970	
4	Miscellaneous Revenue		219,000	
5	Reimbursement for staff time		4,400	
6	FY 2021-22 Roll Forward Budget		\$ —	
7	<b>Total FY 2021-22- Revenue</b>		<b>\$ 4,290,370</b>	
8	Fiscal Year Allocations			
9	<b>Overall Program Operations</b>			
10	HPTE Staff Compensation	\$ 750,000	\$ 868,798	\$ (118,798)
11	CDOT Staff	100,000	72,955	27,045
12	Board Expenses	10,000	\$ —	10,000
13	Staff Training and Certifications	10,000	253	9,747
14	Administrative and Office Needs	5,000	7,404	(2,404)
15	Conferences and Industry Memberships	10,000	33,410	(23,410)
16	In and Out of State Travel	\$ —	10,648	(10,648)
17	<b>Total Overall Program Operations</b>	<b>\$ 885,000</b>	<b>\$ 993,467</b>	<b>\$ (108,467)</b>
18	<b>Technical Services</b>			
19	Express Lanes Communications and Public Affairs Support	\$ 462,150	\$ 307,878	\$ 154,272
20	Toll Operations Advisor	1,050,000	580,472	469,528
21	Traffic & Revenue Advisor	1,033,341	800,651	232,690
22	Aconex Document Management System	715,202	476,747	238,455
23	<b>Total Technical Services</b>	<b>\$ 3,260,693</b>	<b>\$ 2,165,748</b>	<b>\$ 1,094,945</b>
24	<b>Financial Services</b>			
25	Accounting Advisors and Annual Audit	\$ 45,000	\$ 10,885	34,115
26	Surveillance and Ratings Fees	100,000	5,500	94,500
27	General Financial Advisor	169,658	45,503	124,155
28	<b>Total Financial Services</b>	<b>\$ 314,658</b>	<b>\$ 61,888</b>	<b>\$ 252,770</b>

APPENDIX B: CTIO FISCAL YEAR 2021-2022 BUDGET TO ACTUAL

29	<b>Legal Services</b>			
30	Outside Legal Services	\$ 564,878	\$ 189,403	\$ 375,475
31	Attorney General Fees	150,000	147,305	2,695
32	<b>Total Legal Services</b>	<b>\$ 714,878</b>	<b>\$ 336,708</b>	<b>\$ 378,170</b>
33	<b>Strategic Project Development</b>			
34	Transportation Infrastructure and P3 Advisor	\$ 775,000	\$ 217,683	\$ 557,317
35	Strategic Partnerships and CDOT Project Support	1,500,000	1,254,662	245,338
36	Central 70 Traffic Demand Management & Tolling Equity Program	700,000	581,883	118,117
37	Miscellaneous	359,133	6,250	352,883
38	<b>Strategic Project Development</b>	<b>\$ 3,334,133</b>	<b>\$ 2,060,478</b>	<b>\$ 1,273,655</b>
39	<b>Total FY 2021-22 Budget</b>			
40	<b>Total FY 2021-22 Allocations</b>			
<b>Cash Balance as of June 30, 2022</b>		<b>\$ 3,207,309</b>		

**Attachment B: Fiscal Year 2021-22 Budget to Actual for Fund 536  
Statewide Transportation Enterprise Special Revenue Fund (C.R.S. 43-4-806(3)(a)) 536**

Line Item		Total FY 2021-22 Approved Budget	Total FY 2021-22 Revenue/Expenses	Remaining Budget
1	<b>US 36 Express Lanes (Cost Center T8620-536)</b>			
2	<b>Fiscal Year Revenues</b>			
3	Interest Earnings	\$ 242,000	\$ 8,802	
4	Annual Concessionaire Management Fee	400,000	459,414	
5	<b>Total US 36 FY 2021-22 Available Revenue</b>	<b>\$ 642,000</b>	<b>\$ 468,216</b>	
6	FY 2021-22 Roll Forward Budget			
7	<b>Total Available FY 2021-22 Budget</b>			
8	<b>Fiscal Year Allocations</b>			
9	CDOT Staff Consulting	\$ 15,000	\$ 28,015	\$ (13,015)
10	Project Oversight	1,071,000	305,578	765,422
11	Annual Audit	7,000	1,227	5,773
12	Attorney General Fees	20,000	\$ —	20,000
13	Miscellaneous Corridor Studies	\$ —	3,478	(3,478)
14	<b>Total US 36 FY 2021-22 Allocations</b>	<b>\$ 1,113,000</b>	<b>\$ 338,298</b>	<b>\$ 774,702</b>
15	<b>I-25 Express Lanes</b>			
16	US36 to 120th (Segment 2) (Cost Center T8630-536)			
17	<b>Fiscal Year Revenues</b>			
18	Tolling Revenue	\$ 8,186,642	\$ 10,468,933	
19	Transponder Revenue	250,000	462,538	
20	Interest Earnings	1,500	211,705	
21	<b>Total Segment 2 FY 2021-22 Available Revenue &amp; Funds</b>	<b>\$ 8,438,142</b>	<b>\$ 11,143,175</b>	
22	FY 2021-22 Roll Forward Budget			
23	<b>Total Available FY 2021-22 Budget</b>			
24	<b>Fiscal Year Allocations</b>			
25	HPTE and CDOT Staff Time	\$ 160,000	\$ 78,349	\$ 81,651
26	Attorney General Fees	40,000	154,926	(114,926)
27	General Reimbursable Expenses and Toll Processing Costs	2,205,240	2,470,444	(265,204)
28	Sales Tax and Sales Tax Processing Costs	191,475	90,103	101,372
29	Routine Maintenance	109,972	116,702	(6,730)
30	Operations	468,000	272,306	195,694
31	Capital Replacement-Tolling Equipment	\$ —	746	(746)
32	Miscellaneous Corridor Studies	330,000	312,745	17,255
33	Tolling System and Software Development	170,000	289,127	(119,127)
34	<b>Total Segment 2 FY 2021-22 Allocations</b>	<b>\$ 3,674,687</b>	<b>\$ 3,785,447</b>	<b>\$ (110,760)</b>
35	<b>120th to E470 (Segment 3) (Cost Center T8633-536)</b>			
36	<b>Fiscal Year Revenues &amp; Funds</b>			
37	Tolling Revenue	\$ 4,200,000	\$ 4,544,660	
38	Transponder Revenue	250,000	462,537	
39	Interest Earnings	1,500	96,668	

**Attachment B: Fiscal Year 2021-22 Budget to Actual for Fund 536  
Statewide Transportation Enterprise Special Revenue Fund (C.R.S. 43-4-806(3)(a)) 536**

Line Item	Total FY 2021-22 Approved Budget	Total FY 2021-22 Revenue/Expenses	Remaining Budget
40	<b>Total Segment 3 FY 2021-22 Available Revenue &amp; Funds</b>	<b>\$ 4,451,500</b>	<b>\$ 5,103,866</b>
41	FY 2021-22 Roll Forward Budget		
42	<b>Total Available FY 2021-22 Budget</b>		
43	<b>Fiscal Year Allocations</b>		
44	I-25 North Loan Payment	\$ 470,237	\$ 470,237
45	Margin Rate Payment	\$ —	\$ —
46	HPTE and CDOT Staff Time	160,000	59,423
47	Attorney General Fees	10,000	1,058
48	General Reimbursable Expenses and Toll Processing Costs	1,000,000	1,109,843
49	Sales Tax and Sales Tax Processing Costs	105,825	90,214
50	Routine Maintenance	98,885	124,867
51	Operations	260,000	191,797
52	Capital Replacement-Tolling Equipment	\$ —	746
53	Loan Expenses (Note Registrar, Refinancing)	\$ —	495
54	Tolling System and Software Development	150,000	219,474
55	Miscellaneous Corridor Studies	300,000	168,433
56	<b>Total Segment 3 FY 2021-22 Allocations</b>	<b>\$ 2,554,947</b>	<b>\$ 2,436,588</b>
58	<b>Burnham Yard (Cost Center T8600-536)</b>		
59	<b>Fiscal Year Revenues &amp; Funds</b>		
60	CDOT Payment for Project Expenses per IAA	\$ 5,000,000	\$ 378,000
61	Proceeds for Debt Service (Capitalized Interest)	5,489,502	5,489,529
62	Interest Earnings	\$ —	1,689
63	<b>Total Burnham Yard FY 2021-22 Available Revenue &amp; Funds</b>	<b>\$ 10,489,502</b>	<b>\$ 5,869,218</b>
64	FY 2021-22 Roll Forward Budget		
65	<b>Total Available FY 2021-22 Budget</b>		
66	<b>Fiscal Year Allocations</b>		
67	Eligible Property Expenditures for Planning Activities	\$ 5,000,000	\$ 402,546
68	FY2021-22 Debt Service	1,110,065	1,041,562
69	<b>Total Burnham Yard FY 2021-22 Allocations</b>	<b>\$ 6,110,065</b>	<b>\$ 1,444,108</b>
71	<b>Johnstown to Fort Collins (Segment 7&amp;8) (Cost Center T8635-536)</b>		
72	<b>Fiscal Year Revenues &amp; Funds</b>		
73			
74	<b>Total Segment 7&amp;8 FY 2021-22 Available Revenue &amp; Funds</b>		
75	FY 2021-22 Roll Forward Budget	\$ 6,876	
76	<b>Total Available FY 2021-22 Budget</b>	<b>\$ 6,876</b>	
77	<b>Fiscal Year Allocations</b>		
78	<b>Total Segment 7&amp;8 FY 2021-22 Allocations</b>		



Attachment B: Fiscal Year 2021-22 Budget to Actual for Fund 536  
 Statewide Transportation Enterprise Special Revenue Fund (C.R.S. 43-4-806(3)(a)) 536

Line Item		Total FY 2021-22 Approved Budget	Total FY 2021-22 Revenue/Expenses	Remaining Budget
79	<b>Monument to Castle Rock (the GAP) (Cost Center T8655-536)</b>			
80	<b>Fiscal Year Revenues &amp; Funds</b>			
81				
82	<b>Total GAP FY 2021-22 Available Revenue &amp; Funds</b>			
83	FY 2021-22 Roll Forward Budget	\$ 6,876		
84	<b>Total Available FY 2021-22 Budget</b>	<b>\$ 6,876</b>		
85	Fiscal Year Allocations			
86				
87	<b>Total GAP FY 2021-22 Allocations</b>			
89	<b>I-70 West Mountain Express Lanes (MEXL)</b>			
90	MEXL Eastbound (Cost Center T8640-536)			
91	Fiscal Year Revenues & Funds			
92	Tolling Revenue	\$ 2,316,593	\$ 2,822,178	
93	Interest Earnings	1,500	54,483	
94	<b>Total MEXL Eastbound FY 2021-22 Available Revenue &amp; Funds</b>	<b>\$ 2,318,093</b>	<b>\$ 2,876,661</b>	
95	FY 2021-22 Roll Forward Budget			
96	<b>Total Available FY 2021-22 Budget</b>			
97	<b>Fiscal Year Allocations</b>			
98	MEXL Loan Payment	\$ 168,145	\$ 238,841	\$ (70,696)
99	Margin Rate Payment	\$ —	\$ —	\$ —
100	HPTE and CDOT Staff Time	160,000	52,073	107,927
101	Attorney General Fees	5,000	1,729	3,271
102	General Reimbursable Expenses and Toll Processing Costs	400,000	224,644	175,356
103	Routine Maintenance	225,190	223,745	1,445
104	Operations	267,000	147,094	119,906
105	Capital Replacement-Tolling Equipment Reserve	\$ —	59,502	(59,502)
106	Loan Expenses (Note Registrar, Refinancing)	\$ —	937	(937)
107	Tolling System and Software Development	250,000	219,474	30,526
108	<b>Total MEXL Eastbound FY 2021-22 Allocations</b>	<b>\$ 1,475,336</b>	<b>\$ 1,168,040</b>	<b>\$ 307,296</b>
110	<b>MEXL Westbound (Cost Center T8645-536)</b>			
111	<b>Fiscal Year Funds and Revenue</b>			
112				
113	<b>Total MEXL Westbound FY 2021-22 Available Revenue &amp; Funds</b>			
114	FY 2021-22 Roll Forward Budget	\$ 8,657		\$ \$ —
115	<b>Total Available FY 2021-22 Budget</b>	<b>\$ 8,657</b>		
116	<b>Fiscal Year Allocations</b>			
117				

**Attachment B: Fiscal Year 2021-22 Budget to Actual for Fund 536  
Statewide Transportation Enterprise Special Revenue Fund (C.R.S. 43-4-806(3)(a)) 536**

Line Item		Total FY 2021-22 Approved Budget	Total FY 2021-22 Revenue/Expenses	Remaining Budget
118	<b>Total MEXL Westbound FY 2021-22 Allocations</b>			
119	C-470 Express Lanes (Cost Center T8650-536)			
120	<b>Fiscal Year Funds and Revenue</b>			
121	Tolling Revenue	\$ 8,100,000	\$ 8,698,982	
122	Draws on Project Reserve & Surplus Accounts	5,645,855	\$ —	
123	Interest Earnings	1,500	172,497	
124	<b>Total C-470 FY 2021-22 Available Funds</b>	<b>\$ 13,747,355</b>	<b>\$ 8,871,479</b>	
125	FY 2021-22 Roll Forward Budget			
126	<b>Total Available FY 2021-22 Budget</b>			
127	<b>Fiscal Year Allocations</b>			
128	Bond Debt Service	\$ 8,089,750	\$ 7,973,993	\$ 115,757
129	General Reimbursable Expenses and Toll Processing Costs	1,600,000	1,550,642	49,358
130	Routine Maintenance	527,105	484,919	42,186
131	Operations	770,000	772,494	(2,494)
132	HPTE and CDOT Staff Time	160,000	52,108	107,892
133	Attorney General Fees	10,000	9,007	993
134	Tolling System and Software Development	170,000	352,615	(182,615)
135	<b>Total C-470 FY 2021-22 Allocations</b>	<b>\$ 11,326,855</b>	<b>\$ 11,195,778</b>	<b>\$ 131,077</b>
136	<b>Central 70 (Cost Center T8660-536)</b>			
137	<b>Fiscal Year Funds and Revenue</b>			
138	CDOT Payment for Project Administration per IAA	\$ 1,000,000		
139	<b>Total Central 70 FY 2021-22 Available Revenue &amp; Funds</b>	<b>\$ 1,000,000</b>		
140	FY 2021-22 Roll Forward Budget	\$ 6,876		
141	<b>Total Available FY 2021-22 Budget</b>	<b>\$ 6,876</b>		
142	<b>Fiscal Year Allocations</b>			
143	Eligible Program Expenditures for Start-Up and Administration Activities	\$ 8,500		
144	<b>Total Central 70 FY 2021-22 Allocations</b>			
	Total Cash Balance as of June 30, 2022	\$ 54,214,387		

# APPENDIX C: PROJECT FINANCING SECURED THROUGH MANAGED LANES

Express Lanes increase roadway capacity and help manage congestion on Colorado highways by adding lanes that provide a choice to drivers.

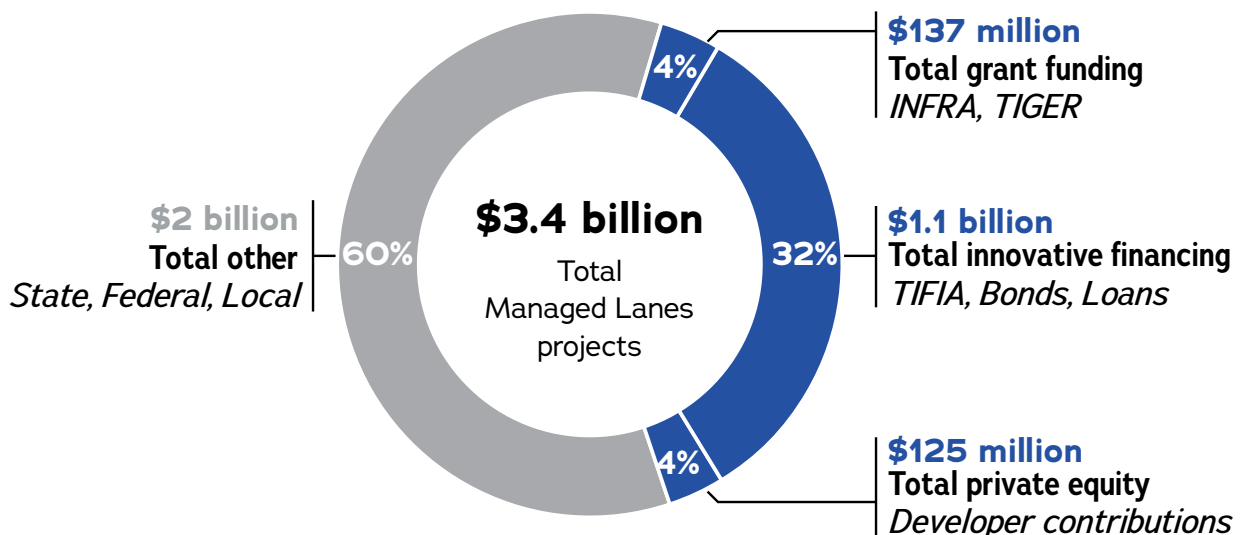
Colorado's Express Lanes work for everyone—those who choose not to pay and stay in the non-tolled general purpose lanes and Express Lanes customers. Express Lanes benefits include:

- Reduced delay on the most seriously congested corridors
- Reliable travel times
- Flexible and reliable mobility choices
- Improved travel speeds in the general purpose lanes

## EXPRESS LANES FINANCING

Express Lanes have led to the accelerated delivery of over \$3 billion in highway projects throughout Colorado. If not for the tolling component of Express Lanes, these projects would have been either significantly delayed, delivered with a significantly reduced scope, or advanced at the expense of other CDOT projects throughout Colorado.

**\$1.38 billion (40%)** secured through use of Managed Lanes:





COLORADO  
**Transportation  
Investment Office**

**2022 Annual Report**  
January 15, 2023

