



**COLORADO**

Department of Transportation

# Clean Transit Enterprise Board

May 13, 2022



# SB 21-260 Electrification Investments



**\$733 million of new fee revenue supports 3 new electrification and charging infrastructure Enterprises:**

## Charging Infrastructure & Electric Vehicle Equity

- ◆ New **‘Community Access’ Enterprise** in Colorado Energy Office (CEO).
- ◆ Build charging infrastructure in communities across the State, and support electric vehicle and eBike adoption in low and moderate income communities.
- ◆ **\$310 million** investment
- ◆ Paired with existing CO EV Infrastructure Fund - \$115 million and potential federal funding

## Fleet Electrification Incentives

- ◆ New **‘Clean Fleet’ Enterprise** in CO Department of Public Health and Environment (CDPHE)
- ◆ Support fleet replacement (delivery trucks, TNCs, school buses, and other light/medium/heavy duty vehicles) with incentives to meet climate and air quality goals
- ◆ Support CDPHE’s Mobile Source Program to complement vehicle investment.
- ◆ **\$289 million** investment

## Public Transit Electrification

- ◆ New **“Clean Transit” Enterprise** in Colorado Department of Transportation (CDOT).
- ◆ Support electrification of public transit through electrification planning efforts, facility upgrades, fleet vehicle replacements and associated charging infrastructure.
- ◆ **\$134 million** investment



# Expected Revenues

- Department of Revenue begins collecting fees on July 1, 2022
- Clean Transit Retail Delivery Fee is an ongoing revenue stream for Clean Transit Enterprise activities
- Expected revenues reflect first 10 years of revenue projections

## Clean Transit Retail Delivery Order Fee FY 2022-23 to FY 2031-32

Fiscal Year	Clean Transit Retail Delivery Order Fee - Rate Per Trip	Total
FY 2021-22	\$0.0000	\$0
FY 2022-23	\$0.0300	\$8,280,329
FY 2023-24	\$0.0308	\$9,132,872
FY 2024-25	\$0.0308	\$9,834,347
FY 2025-26	\$0.0323	\$11,134,125
FY 2026-27	\$0.0331	\$12,308,104
FY 2027-28	\$0.0339	\$13,617,560
FY 2028-29	\$0.0339	\$14,712,367
FY 2029-30	\$0.0357	\$16,716,268
FY 2030-31	\$0.0366	\$18,549,225
FY 2031-32	\$0.0375	\$20,606,029
<b>10-Year Total</b>		<b>\$134,891,225</b>



# Members of the CTE Board

## For terms expiring 9/28/2024

**Matt Frommer** (Denver): **CHAIR** Member with an expertise in zero-emissions transportation, motor vehicle fleets or utilities

**Bonnie Trowbridge** (Berthoud): Member representing a public advocacy group that has transit or comprehensive transit expertise

**Dawn Block** (La Junta): Member representing a transportation-focused organization that services an environmental justice community

## For terms expiring 9/28/2025

**Mark Garcia** (Pagosa Springs): Member of the Transportation Commission and have statewide transportation expertise

**Cris Jones** (Boulder): Member representing an urban area, having transit expertise

**David Averill** (Telluride): **VICE-CHAIR** Member representing a rural area having transit expertise

## Agency Appointments

**Theresa Takushi**: Colorado Department of Transportation designee

**Kelly Blynn**: Colorado Energy Office designee

**Richard Coffin**: Colorado Department of Public Health & Environment designee



# Business Purpose

The Clean Transit Enterprise is created to serve the primary business purpose of reducing and mitigating the adverse environmental and health impacts of air pollution and greenhouse gas emissions produced by retail deliveries by:

- Supporting the replacement of existing gasoline and diesel public transit vehicles with electric motor vehicles,
- Providing the associated recharging infrastructure for electric transit fleet motor vehicles,
- Supporting facility modifications that allow for the safe operation and maintenance of electric transit motor vehicles,
- Funding planning studies that enable transit agencies to plan for transit vehicle electrification



# Powers, Duties, and Reporting

- Promulgate rules to impose a “Clean Transit Retail Delivery Fee” and govern the process for awarding and overseeing grants. **COMPLETED 4/12/22**
  - ◆ Notify the Department of Revenue by March 15 each year of the amount of the fee that would begin July 1.
- By June 1, 2022 publish a 10-Year Plan that “details how the enterprise will execute its business purpose and estimate the funding available for ten years.
- Issue Grants, Loans and Rebates; Issue Revenue Bonds.
- Create, maintain and regularly update on its website a “public accountability dashboard” that includes the funding status and progress toward completion of each project.”
- Prepare an annual report that details activities of the enterprise and present the report to the Transportation Commission and House and Senate Transportation Committees.



# Clean Transit Enterprise 10-Year Plan

## Requirements

(10)(a) TO ENSURE TRANSPARENCY AND ACCOUNTABILITY, THE ENTERPRISE SHALL:

(I) NO LATER THAN JUNE 1, 2022, PUBLISH AND POST ON ITS WEBSITE A TEN-YEAR PLAN THAT DETAILS HOW THE ENTERPRISE WILL EXECUTE ITS BUSINESS PURPOSE DURING STATE FISCAL YEARS 2022-23 THROUGH 2031-32 AND ESTIMATES THE AMOUNT OF FUNDING NEEDED TO IMPLEMENT THE PLAN. NO LATER THAN JANUARY 1, 2032, THE ENTERPRISE SHALL PUBLISH AND POST ON ITS WEBSITE A NEW TEN-YEAR PLAN FOR STATE FISCAL YEARS 2032-33 THROUGH 2041-42;

(II) CREATE, MAINTAIN, AND REGULARLY UPDATE ON ITS WEBSITE A PUBLIC ACCOUNTABILITY DASHBOARD THAT PROVIDES, AT A MINIMUM, ACCESSIBLE AND TRANSPARENT SUMMARY INFORMATION REGARDING THE IMPLEMENTATION OF ITS TEN-YEAR PLAN, THE FUNDING STATUS AND PROGRESS TOWARD COMPLETION OF EACH PROJECT THAT IT WHOLLY OR PARTLY FUNDS, AND ITS PER PROJECT AND TOTAL FUNDING AND EXPENDITURES;

(III) ENGAGE REGULARLY REGARDING ITS PROJECTS AND ACTIVITIES WITH THE PUBLIC, SPECIFICALLY REACHING OUT TO AND SEEKING INPUT FROM COMMUNITIES, INCLUDING BUT NOT LIMITED TO DISPROPORTIONATELY IMPACTED COMMUNITIES, AND INTEREST GROUPS THAT ARE LIKELY TO BE INTERESTED IN THE PROJECTS AND ACTIVITIES; AND

(IV) PREPARE AN ANNUAL REPORT REGARDING ITS ACTIVITIES AND FUNDING AND PRESENT THE REPORT TO THE TRANSPORTATION COMMISSION CREATED IN SECTION 42-1-106 (1) AND TO THE TRANSPORTATION AND LOCAL GOVERNMENT AND ENERGY AND ENVIRONMENT COMMITTEES OF THE HOUSE OF REPRESENTATIVES AND THE TRANSPORTATION AND ENERGY COMMITTEE OF THE SENATE, OR ANY SUCCESSOR COMMITTEES. THE ENTERPRISE SHALL ALSO POST THE ANNUAL REPORT ON ITS WEBSITE. NOTWITHSTANDING THE REQUIREMENT IN SECTION 24-1-136 (11)(a)(I), THE REQUIREMENT TO SUBMIT THE REPORT REQUIRED IN THIS SUBSECTION (10)(a)(IV) TO THE SPECIFIED LEGISLATIVE COMMITTEES CONTINUES INDEFINITELY.



# Clean Transit Enterprise 10-Year Plan

## Draft Outline

1. Introduction
  - a. SB21-260 Language
  - b. State of Colorado ZEV Goals
2. Anticipated Fee Revenues for FY23-FY32
  - a. Fee Levels
  - b. Anticipated Revenues by Year
  - c. Potential Matching Funds
3. Transit Electrification Barriers & Opportunities
  - a. Current State Transit Fleet Inventory
  - b. Technology Availability
  - c. Barriers to Implementation
  - d. Anticipated Costs & Timelines
  - e. Supporting Policies & Actions
4. Clean Transit Enterprise Funding Strategy
  - a. Funding Mechanisms
  - b. Funding Category Prioritization
  - c. Project Prioritization
  - d. Match Levels
  - e. Scrapping Requirements
  - f. Replacement Ratios
  - g. Other Policy Decisions
5. Implementation & Tracking
6. Conclusions

**Legislation and 2020 Colorado EV Plan**

**CDOT Division of Accounting & Finance (CDOT DAF) and Colorado Department of Revenue (DOR)**

**Colorado Transit Zero Emission Vehicle Roadmap**

***Focus of Clean Transit Enterprise Board & Stakeholder Conversations***





# Funding Mechanisms

**The Enterprise is authorized to make “grants, loans, and rebates” in support of its business purpose**

- Grants have historically been the primary means of CDOT and the FTA supporting transit agencies in their activities, including the transition to zero-emission vehicles
  - It is anticipated that the Board and agency stakeholders would like this to continue
- Loans have not been commonly used by CDOT in the past, but could be a beneficial tool for transit agencies in some cases.
- Rebates are more typically employed for high-volume, lower dollar, and generally standardized equipment purchases that can be vetted in advance rather than through a more labor intensive application review process



# Funding Mechanisms

## Key Questions

- Should the 10-Year Plan exclude any of these 3 mechanisms, prioritize them, or leave this question to future guidance documents and/or 10-Year Plan updates?
- Are there specific transit needs (in line with the business purpose of the CTE) that loans are well-suited to address?
- Are there specific transit needs (in line with the business purpose of the CTE) that rebates are well-suited to address?

## Stakeholder Feedback Summary

- Include all 3 funding mechanisms, with an emphasis on grants in early years but with the option to explore and incorporate loans and rebates in the future as appropriate.



# Funding Categories

The primary business purpose of the Enterprise is “reduce and mitigate the adverse environmental and health impacts of air pollution and greenhouse gas emissions produced by motor vehicles used to make retail deliveries by”:

- Replacing gasoline and diesel transit vehicles with “electric motor vehicles” (including conversions)
- Providing associated charging infrastructure
- Supporting facility modifications that allow for the safe operation and maintenance
- Funding planning studies that enable transit agencies to plan for electrification



# Funding Categories

## Key Questions

- Should there be a prioritization of the 4 eligible funding categories over the course of the 10-Year Plan, or in individual subsections of that time period?
- Should there be funding percentage caps for any or all of the 4 categories over the course of the 10-Year Plan, or in individual subsections of that time period?

## Stakeholder Feedback Summary

- Don't establish specific funding caps by category, but some prioritization of Planning and Facility Modifications in the early years is appropriate to bring more agencies up to the implementation phase. Then Charging Infrastructure and Vehicle Replacements would like be the greater emphasis.



# Project Prioritization

Among the 4 eligible project types, individual applications may need to be prioritized in the context of limited funding. There are multiple factors which might be considered in prioritizing individual projects, including:

- Geographic location (urban, rural, etc.)
- Proximity/service to disproportionately impacted communities
  - How to measure this in the context of transit vehicle routes?
- Anticipated emissions reduction
- Vehicle type (bus, cutaway, van, etc.)
- Vehicle age
- Applicant match level
- Existing services vs. new services
- Other agency characteristics



# Project Prioritization

## Key Questions

- Which factors should be considered in project prioritization?
- Should these factors be weighted in a specific manner?
- Would project prioritization be similar across each of the 4 eligible categories, or differ for each?
  - For instance, vehicle type vs. charger type

## Stakeholder Feedback Summary

- Use a weighted multifactor formula to score projects with an emphasis on Estimated Emissions Reduction, Service to Disproportionately Impacted Communities, and Agency Readiness. Also factor in Match Level, Frequency of Service, and Geographic Diversity.



# Applicant Planning Requirements

**SB21-260 does not speak directly to any requirement for applicant transit agencies to develop fleet electrification plans, however it is considered a best practice to ensure that grantee agencies are positioned for successful implementation before funding vehicles or infrastructure.**

**FTA recently expanded its planning requirements for 5339(b) and 5339(c) grants that involve zero-emission transit vehicles. They include:**

- A long-term fleet management plan
- Analysis of current and future financial resources
- Relevant policy and regulation impacting adoption
- Existing facility analysis
- Utility and/or fuel provider coordination
- Impacts on agency workforce



# Applicant Planning Requirements

## Key Questions

- Which level of existing planning should be expected from applicants (of non-planning projects)?
- What is the right balance between planning requirements supporting successful implementation vs. presenting a barrier to entry?
- How closely should potential planning requirements be aligned with those of the FTA?

## Stakeholder Feedback Summary

- Require documentation of planning by applicant agencies, but in a way that does not present a barrier to entry to those beginning the process. Develop CTE planning requirements that are at least as stringent as FTA's to ensure that applicant agencies are eligible for both funding sources.





## Match Levels

**Many state and federal grant programs require a minimum 20% match by grantees. However, the text of SB21-260 does not specify whether applicant match is required, or at what level.**

- In the past, some programs have used a more generous match (i.e. 10%) to make a program more attractive or accessible
- Other programs have offered a less generous match (i.e. 50%) to spread limited grant dollars further and ensure greater applicant commitment
- There is also an option to established tiered match levels based on applicant need or some other factor



# Match Levels

## Key Questions

- Should the 10-Year Plan establish specific match levels or defer to staff in the program design stage of the process?
- If match relief or tiered match levels are included, what factors should be used to define them? Should match levels be lower for some project types (i.e. planning) than others?
- Should applicants be encouraged to use CTE funding as match for other state/federal grant programs, or would state/federal grant programs be acceptable as match for CTE funding?

## Stakeholder Feedback Summary

- Applicant match should either be tiered by grantee need or include a built-in match relief option to be assessed on a case-by-case basis by review committees. There may also be match tiering by project category. Agencies should be allowed and encouraged to leverage CTE funding as match for other federal and state grant opportunities, where allowable.



# Scrapping Requirements

**In the past, some zero-emission vehicle grant programs (including those funded by the Volkswagen Settlement) have required grantees to scrap vehicles in exchange for new vehicle funding**

- This provides an emissions benefit by ensuring that an existing gasoline or diesel vehicle comes off the road permanently, rather than continuing to operate in another fleet
- It can also represent a barrier for agencies seeking to expand their fleets at the same time that they transition fuels
- Scrapping may also encourage waste by forcing agencies to destroy an otherwise usable vehicle before the end of its useful service life
- There are program models in other states that require scrapping but allow for newer vehicles to be “handed down” to other agencies as a compromise



# Scrapping Requirements

## Key Questions

- Should CTE-funded grant programs require or encourage scrapping of existing gasoline or diesel vehicles?
- Should there be a “hand-me-down” option that still results in a scrapped vehicle but avoids the destruction of a still usable diesel or gasoline vehicle by a different agency?
- Should greater flexibility in scrapping requirements be given to transit agencies to allow for fleet expansion during the transition process?

## Stakeholder Feedback Summary

- Do not require scrapping of existing vehicles, but consider creation of a hand-me-down system that would allow agencies in need of cleaner used vehicles to receive them from agencies receiving CTE-funded new vehicles.



# Replacement Ratios

Other state and federal grant programs often require a 1:1 ratio between new vehicles being funded and old vehicles being replaced.

However, early-adopter transit agencies in Colorado have sometimes found that, given range limitations, a single battery electric bus cannot always effectively replace an existing diesel or gasoline vehicle for its entire duty cycle.

- This issue could be mitigated by allowing transit agencies to replace each diesel/gasoline vehicle with one or more zero emission vehicles in a 1.5:1, 2:1, or other higher ratio
- This could result in a smoother transition from an operational standpoint, but might also increase the costs of individual grant projects
- A higher vehicle replacement ratio could also potentially create other unintended side effects related to parking, charging, staffing, etc.



# Replacement Ratios

## Key Questions

- Should CTE-funded programs require a 1:1 vehicle replacement ratio or allow flexibility?
- What factors should be considered in deciding whether a higher replacement ratio is justified for a given project proposal?
- In terms of charging infrastructure, should a 1:1 charger-to-vehicle ratio be assumed or would a higher or lower ratio be an option?

## Stakeholder Feedback Summary

- Provide maximum flexibility to transit agencies to make the determination of the right vehicle replacement and vehicle-to-charger ratio for their operations, but avoid funding for chargers far in advance of bus procurement given variable standards. Encourage future-proofing of facilities to scale up charging over time as needed, and reassess appropriate replacement ratios moving forward as vehicle ranges improve.



# Data Reporting Requirements

**SB21-260 requires the CTE to establish a Public Accountability Dashboard to track projects funded through its programs. It does not explicitly define what data points must be collected and shared via the Dashboard beyond overall expenditures, funding status, and project completion updates.**

**CDOT's Division of Transit & Rail also requires transit agencies to report monthly usage data for vehicles funded with state or federal grants.**

- More recently, CDOT staff have worked with early-adopter transit agencies to voluntarily collect more detailed zero-emission data related to total mileage, average charging costs, kWh per mile performance, and other relevant details
- CDOT staff are currently developing a Transit Emissions Dashboard that combines mileage, ridership, vehicle fuel type, and other factors to estimate statewide transit emissions reduction benefits and track ZEV transition impacts over time



# Data Reporting Requirements

## Key Questions

- Should CTE-funded projects be required to report more detailed usage data for the state to compile, analyze, and share with other transit agencies and stakeholders?
- If so, what data points should be included (or excluded) from the requirements?

## Stakeholder Feedback Summary

- Work with agencies to align existing NTD reporting with any CTE data reporting requirements to ensure it is not burdensome. Collect data that will be used to inform program design, and establish a linkage between this data and the CDOT Transit Emissions Dashboard to consistently quantify GHG reductions and other air quality benefits. Explore how to quantify equity implications and benefits for disproportionately impacted communities through the CTE and its funding programs.





# Upcoming Engagement Opportunities

## Stakeholder Engagement

- ~~April 7, 2022 Transit Monthly Meeting~~
- ~~April 12, 2022 Clean Transit Enterprise Board Meeting~~
- ~~April 20, 2022 CEVC Transit Subgroup Meeting~~
- ~~May 5, 2022 Transit Monthly Meeting~~
- ~~May 11, 2022 Clean Transit Enterprise 10 Year Plan Work Session~~
- May 13, 2022 - Transit & Rail Advisory Committee (TRAC) Meeting
- May 18, 2022 - CEVC Transit Subgroup Meeting
- May 23-27, 2022 - CASTA Spring Conference
- May 25, 2022 - Clean Transit Enterprise Board Meeting
- June 1, 2022 - 10-Year Plan Completion Deadline



# More Information

<https://www.codot.gov/programs/innovativemobility/cte>

Home Travel Center News Safety Performance Business Center **Programs** Projects About CDOT Library Search... Search A-Z -

**COLORADO**  
Department of Transportation

## Programs


Home | Programs | **Innovative Mobility** | Clean Transit Enterprise

### Resources

- Mobility Technology
- Mobility Services
- Electrification
- Transit and Rail
- Electric Vehicle Ride & Drive Event
- Clean Transit Enterprise

## Clean Transit Enterprise

To support Colorado's transit electrification through planning efforts, transit site upgrades, procurement of electric transit buses, and deployment of associated charging infrastructure.



### About the Clean Transit Enterprise

This enterprise is created within the Colorado Department of Transportation (CDOT) to support public transit electrification planning efforts, facility upgrades, fleet motor vehicle replacement, as well as construction and development of electric motor vehicle charging and fueling infrastructure. The bill allows the enterprise to impose a clean transit retail delivery fee to fund its operations, and to issue grants, loans or rebates to support electrification of public transit.

### Clean Transit Enterprise Governing Board

The Clean Transit Enterprise Board includes six members appointed by the governor, and executive directors or their designees from CDOT, Colorado Department of Public Health and Environment (CDPHE) and the Colorado Energy Office. Appointed board members will serve terms of three or four years.

### Contact Us

[cdot\\_cleantransitenterprise@state.co.us](mailto:cdot_cleantransitenterprise@state.co.us)

### Resources

- Board Appointments
- Enterprise Funds
- Board Powers & Duties
- [2021 Transit Zero Emission Vehicle \(ZEV\) Roadmap](#)

### Upcoming Meetings

Board Meeting
March 29, 2022 at 2:00 p.m. MT
Proposed Permanent Rulemaking Hearing
April 12, 2022 at 1:30 p.m. MT
<a href="#">Meeting Registration</a>
<a href="#">Proposed Permanent Rule</a>

### Prior Meetings

January 31st, 2022
<a href="#">Video Recording</a>
<a href="#">Meeting Minutes</a>
<a href="#">Slide Presentation</a>
<a href="#">Agenda Packet</a>
February 22, 2022
<a href="#">Video Recording</a>
<a href="#">Meeting Minutes</a>
<a href="#">Slide Presentation</a>
<a href="#">Agenda Packet</a>

## Subscribe for CTE Updates

\* indicates required

Email Address \*

First Name

Last Name

Organization/Affiliation

Subscribe



# Questions & Discussion

