

TRANSPORTATION EMISSIONS STRATEGIES

Helping communities optimize funding opportunities by planning, designing, and delivering transportation projects that move people and goods and reduce emissions.

As states and cities set ambitious air quality goals and the transportation sector reshapes its impact to the environment, FHU is focused on helping agencies and communities deliver integrated multimodal projects that power a resilient mobility future by:

- INTEGRATING** greenhouse gas (GHG) and criteria pollutant emissions reduction rules, policies and evaluation;
- IDENTIFYING** best practices and funding opportunities for programs; and
- DELIVERING** projects that move people and goods and support GHG reductions.

Recent funding programs and new state priorities are providing opportunities for communities to build toward a cleaner transportation system. FHU's team can support agencies where they are, whether urban or rural, with early thinking, strategy planning and implementation. FHU's portfolio includes a holistic approach built on industry-leading experience.

Together, we can deliver mobility solutions that rise to the challenge of building a sustainable transportation system for the next generation.

TRANSPORTATION EMISSIONS STRATEGIES PORTFOLIO

FHU SERVICES CLIENT DELIVERABLES

PROGRAM GUIDANCE

Environmental guidance, policy and training on GHG reduction and mitigation strategies for municipalities and agencies

Audits and program review, policy and plan development, implementation and training tools

PLANNING MODELING AND MITIGATION

Initial analysis for planning, modeling for GHG emissions (CO₂e) and additional air quality metrics and development of emissions mitigation strategies including transit, active transportation (bicycling and walking), TDM

Strategic project, program and policy recommendations to mitigate transportation emissions and optimize funding opportunities

PROJECT MONITORING, MODELING AND MITIGATION

Baseline and model criteria pollutants using modeling tools such as MOVES or AERMOD for individual projects and mitigation planning

Support developing projects that address community mobility needs while reducing emissions and optimizing funding potential

CONSTRUCTION MITIGATION

Baseline construction emissions evaluation and development of proposed construction emission mitigation strategies

Strategic project, program and policy recommendations to mitigate transportation emissions and optimize funding opportunities

RELEVANT PROJECTS

ZEV Financial Modeling

Financial modeling was conducted to estimate the level of annual investment that could support achieving the milestone goal of 1,000 transit ZEVs by 2030 and 100 percent ZEV by 2050.

Based on the financial analysis, it is technically possible to acquire both the 1,000 transit ZEVs by 2030 and 100 percent transit ZEVs by 2050, provided sufficient funding resources, policies, and vehicle model availability.

Transit ZEVs are projected to cost \$280 to \$285 million more than the 1,000 transit ZEVs by 2030 and 100 percent transit ZEVs by 2050, provided sufficient funding resources, policies, and vehicle model availability.

Initial capital investment in EV chargers represents most of the incremental ZEV costs (\$242 million to \$250 million).

The incremental cost difference for vehicles including associated charger costs is \$45 to \$50 million, reflecting a \$5 to \$10 per mile premium for the vehicle costs of replacing the existing non-ZEV fleet.

The near-term path to 1,000 ZEVs will cost an additional \$5 to \$10 million in transit ZEV replacement costs to meet the 2030 goal.

Colorado Department of Transportation Transit Zero Emissions Vehicle Roadmap

FHU led the development of the Transit Zero Emissions Vehicle (ZEV) Roadmap, which included data collection, assessment of the national landscape and trends, the roles of utilities in ZEV adoption, policy and programmatic recommendations, as well as financial modeling to support Colorado’s GHG emissions reduction and transit electrification goals. The work included an extensive stakeholder outreach effort to engage all transit agencies – urban, rural, and resort communities - in Colorado. The Transit ZEV Roadmap serves as the foundation for the Clean Transit Enterprise’s 10-Year Plan to guide funding from the 2021 Senate Bill 260 to transition Colorado’s transit fleet to ZEVs.

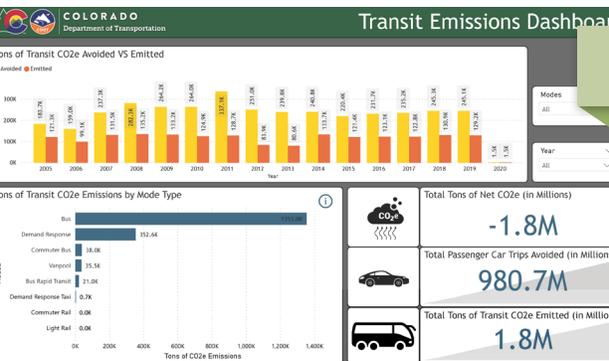


Colorado Department of Transportation 10-Year Project Plan & Greenhouse Gas Emissions Update

Following FHU’s development of Colorado’s Statewide Transportation Plan, FHU is assisting CDOT with developing a process to amend the 10-Year Strategic Project Pipeline (“10-Year Pipeline”). Modifications to the established amendment process focus on methods to incorporate new GHG pollutant data into the evaluation of projects planned for Years 5-10, building on requirements from the 2021 Senate Bill 260, “Sustainability of the Transportation System.” Tasks include conducting and standardizing methods for MOVES modeling.

Statewide Transportation Plan

Adopted August 20, 2020



Colorado Department of Transportation Transit GHG Emissions Dashboard

FHU developed a robust transit GHG emissions dashboard to track emissions associated with transit use in Colorado and to track progress toward Colorado’s GHG emissions reduction goals. Tasks included developing the methodology for calculating historic GHG emissions and reconciling a range of data sources.



Construction GHG Emissions Dashboard

FHU is working with a large contractor to create a dashboard to baseline GHG emissions and assess the environmental impacts of construction activities. The dashboard will include statistics and evaluation of construction vehicle fleet composition and vehicle fleet GHG emissions based on type of construction activities, type of construction vehicles, and hours of vehicle use or fuel consumption. Project work also includes the evaluation, recommendations and analytics of GHG emissions reduction strategies for construction activities.