

GDOT Carbon Reduction Strategy (CRS)

October 2023

with support from consultants







Agenda:

- 1. Outreach: Summary to Date
 - Stakeholder and Public Engagement
 - Available Outreach Materials
- 2. CRS Document Overview
 - Purpose & How to Use
 - Summary of Content
 - Strategies and Evaluation Metrics
- 3. Review and Feedback
 - Schedule and Next Steps
 - How to Provide Feedback





Advisory Committee

3 meetings – all completed

Strategy
Development &
Technical Analysis



MPO Needs & Priority Discussion

Input on regional coordination and rural perspective



MPO Coordination

2 meetings with each MPO2 GAMPO meetings (1 completed)

Regional Commissions

Public Resources

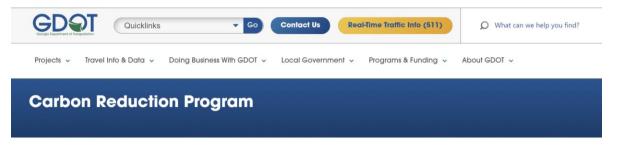
General Public

Public Resources



Engagement and Available Materials

Public-facing website: <u>Carbon Reduction Program - Georgia DOT</u> (https://www.dot.ga.gov/GDOT/Pages/CarbonReduction.aspx)



What is the Carbon Reduction Program?

The Carbon Reduction Program (CRP) is a component of the 2021 Infrastructure Investment and Jobs Act, which provides funding to states for projects that result in transportation emission reductions. The CRP also mandates that each state develop a Carbon Reduction Strategy (CRS) that is focused on transportation-source emissions and dictates how CRP funding can be leveraged to advance reduction strategies in Georgia

A statewide Advisory Committee (AC), which consists of subject matter experts from federal, state, local, and academia that convene regularly was created to assist in the development of the CRS. The state Carbon Reduction Strategy is expected to be completed by mid-November 2023 and will be updated at least once every four years.



Content includes:

- "One-pager" factsheets in English and Spanish
- **CRS** Webinar
- CRS Podcast published in September on GDOT's Ahead of the Curve Podcast
- **CRS** Draft
- Contact Email <u>gdotcrp@dot.ga.gov</u> 5



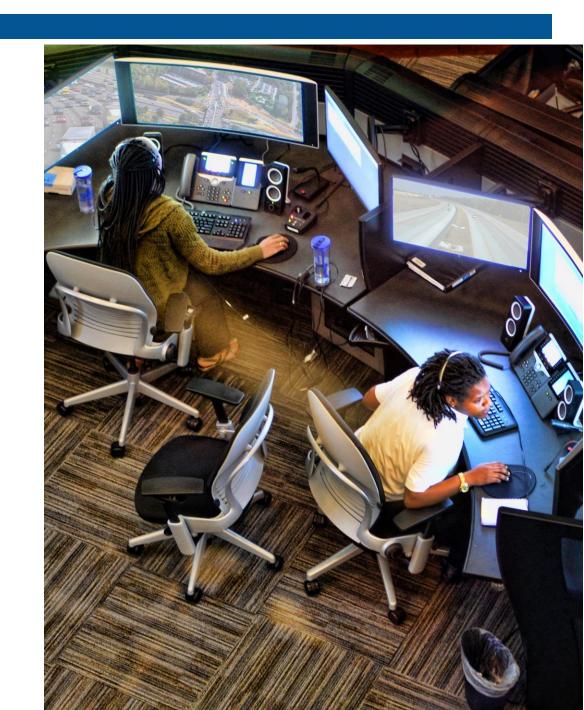




Purpose & How to Use GDOT's CRS

Objective: The main objective of the CRS is to **highlight** available funding and provide information on the **types of** strategies that can be included in your projects that are consistent with both the CRP's and Georgia's goals.

How to Use this Document: The organizing principal is a **menu of strategies** and metrics to help choose strategies that can be incorporated into plans and projects to advance the overlapping priorities of the State and the purposes of the federal Carbon Reduction Program.





Georgia's Approach





CRS is intended to illustrate where CRP funding can support alignment with the Statewide Strategic Transportation Plan and other documents

- Highlights catalytic and innovation investments
- Strategies to enhance GDOT's planning process regarding carbon emission reduction and other CRP priorities



Mission

Deliver a transportation system focused on innovation, safety, sustainability, and mobility

Vision

Boost Georgia's competitiveness via leadership in transportation



Contents of the CRS - Outline

Executive Summary

- 1. Introduction and Overview
- 2. Existing Conditions
 - Alignment of Georgia's initiatives with federal goals
- 3. Outreach & Coordination
 - Stakeholder engagement/coordination process
- 4. Strategy Organization & Review
 - Evaluation metrics
- **5. Carbon Reduction Strategies**
 - 88 evaluated strategies
- 6. Next Steps
- 7. Appendices





CARBON REDUCTION STRATEGY

November 2023



Chapter 4: Evaluation Metrics for Strategy Evaluation



Safety – Approximation of expected impact on user safety.



Equity – the extent to which the strategy may serve or impact traditionally underserved populations.



Mobility – improved access to destinations, such as by reducing travel times, increasing transportation options available to travelers, or enhancing the reliability of travel options.



Resilience – of the impact of strategy in supporting a more resilient transportation system.



Potential to Reduce Carbon Emissions – decrease the amount of carbon dioxide released into the atmosphere.



Air Quality Co-benefits - provide neutral or positive air quality benefits.



Chapter 4: Evaluation Metrics (continued)



Implementation Factors – what is the time needed to implement the strategy.



Consumer Savings – reduction in transportation costs



Economic Development/Workforce Development – attracts employment and economic growth opportunities



Considerations in evaluating strategies:

Meets eligibility for Carbon Reduction Program funds? – Included in the CRP eligible project? Or could it demonstrate carbon reduction?

• For projects that are "potentially" eligible, elements that should be considered when presenting for approval.



Geographical Context – effective performance in specific geographical context?

- Urban or Rural?
- Are there specific characteristics of an area or contexts that would make the strategy more effective?



Chapter 4: Evaluation Scale

Strategies are generally defined against a 3-tiered system for evaluation.

- Evaluation is qualitative and somewhat subjective.
- Note also that strategies are evaluated here, while results will certainly vary according to project specifics.

Symbol	Meaning						
_	No, Negative, or Not Applicable						
	Low or Uncertain						
22	Medium						
222	High						

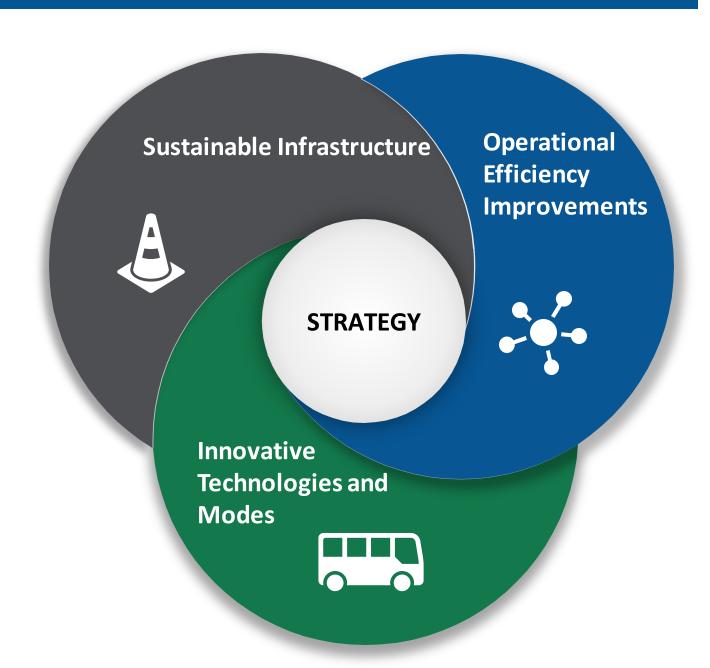


What types of Strategies

Strategies included in the CRS are organized into three high-level categories

88 Strategies overall

- Innovative Technologies and Modes 28
- Operational Efficiency Improvements 52
- Sustainable Infrastructure 8





Chapter 5: Strategies – Innovative Technologies and Modes

Innovative Technologies
and Modes
Strategies addressing
consumer choice,
including choices related
to vehicle purchases and
travel choices.



Alternative Fuel Vehicles for Public Sector Fleets

Freight-related Emissions Reduction

Port Electrification and Facilities
Improvements

ZEV Fueling Infrastructure (E, H2)

Bicycle, Pedestrian and Nonmotorized Transportation Facilities Improvements

Transit Infrastructure Improvements

Transit Service Improvements

Transit Access Improvements

Land Use and Community Design











Chapter 5: Strategies – Operational Efficiency

Improvements

Operational Efficiency
Improvements
Efforts to manage
transportation operations,
optimize system
performance, reduce delay,
and smooth traffic flow to
reduce vehicle exhaust.

Traffic Incident Management

Arterial Management

Freeway Management (e.g., Managed Lanes)

Public Transportation Operational Improvements

Active Transportation

Parking Management

Real-time Traveler Information Improvements

Transportation Demand Management

Congestion Pricing

Freight Management









Chapter 5: Strategies – Sustainable Infrastructure

Sustainable Infrastructure

This set of strategies addresses infrastructure-based reductions, such as sustainable pavements, alternative construction, and maintenance practices.



Environmentally Sustainable Construction Practices

Renewable Energy Development

Reduction in Operation and Maintenance Energy Consumption









Chapter 5: Strategy Example – Clean Vehicle Technologies

Strategy 1. Electric or Alternative Fuel Purchases for Public Sector Fleet Vehicle Replacements (Transit Buses, School Buses, Public Fleets)

This strategy describes the acquisition of electric and alternative fuel vehicles to replace fossil fuel burning vehicles owned by public agencies such as state and local agencies, transit providers, and school districts. The use of alternative fuel vehicles has been demonstrated to result in substantial reductions in carbon emission for public sector fleets. Many public sector fleets, such as transit agencies, are implementing this strategy to curb transportation-source emissions. According to FHWA CRP guidance, projects supporting the deployment of alternative vehicles, including electric vehicles, are eligible under Section (G)(3)(J).

Learn more: FTA promotes the Transportation Research Board's (TRB) Guidebook for Deploying Zero-Emission Transit Buses:

https://nap.nationalacademies.org/catalog/25842/guidebook-for-deploying-zero-emission-transit-buses

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Criterion	Safety	Equity	Mobility	Resilience	Air Quality	Readiness	C. Emissions	Savings	Develop- ment	Eligibility	Context
Rating	_	_	_	7	222	22	222	7	22	222	All







Schedule & Next Steps

Major Milestones:

- Completed a working draft document that has gone through an internal GDOT review
- Completed first round MPO outreach. Now holding the second round.
- Completed all 3 Advisory Committee meetings
- Presented at 1 GAMPO Meeting. Second is during public review period.

Next Steps:



Tublic Review:

- Complete document is now available online for public review and feedback
- Public engagement will be via the GDOT website
 - 2-week period for receipt of comments (by October 30)
 - Document will be available for a 30-day period on the website (through November 15)
 - It is important to hear your feedback in this time
 - Please share with your constituents -
- Continue **stakeholder outreach** with MPOs and GAMPO (November)
- Document submission to FHWA on November 15



We Need Your Feedback

<u>Carbon Reduction Program - Georgia DOT (ga.gov)</u>

Email gdotcrp@dot.ga.gov

Public Involvement

GDOT engaged the public and stakeholders in the state throughout the project. This included individual meetings with all the MPOs in the State, regular coordination with the selected AC, this public webpage, a publicly available webcast recording of summary presentation, and a podcast discussing the CRS. All will be hosted on this webpage.

Contact Information

Have questions or want more information about the Carbon Reduction Program? Please send us an email by clicking the button below.