GDOT Carbon Reduction Strategy (CRS)

September 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

Outreach Summary

Stakeholder & Public Engagement

Advisory Committee

3 meetings – all completed

Strategy Development & Technical Analysis

MPO Coordination

2 meetings with each MPO
2 GAMPO meetings (1 completed)

MPO Needs & Priority Discussion

Regional Commissions

Public Resources

Input on regional coordination and rural perspective

General Public

Public Resources

Via the Website

Engagement and Available Materials

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

Content includes:

- "One-pager" factsheets in English and Spanish
- CRS Webinar
- CRS Podcast – *to be released in September on GDOT's Ahead of the Curve Podcast*
- Contact Email – *gdotcrp@dot.ga.gov*

Document Overview

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**

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

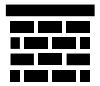
November 2023

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.

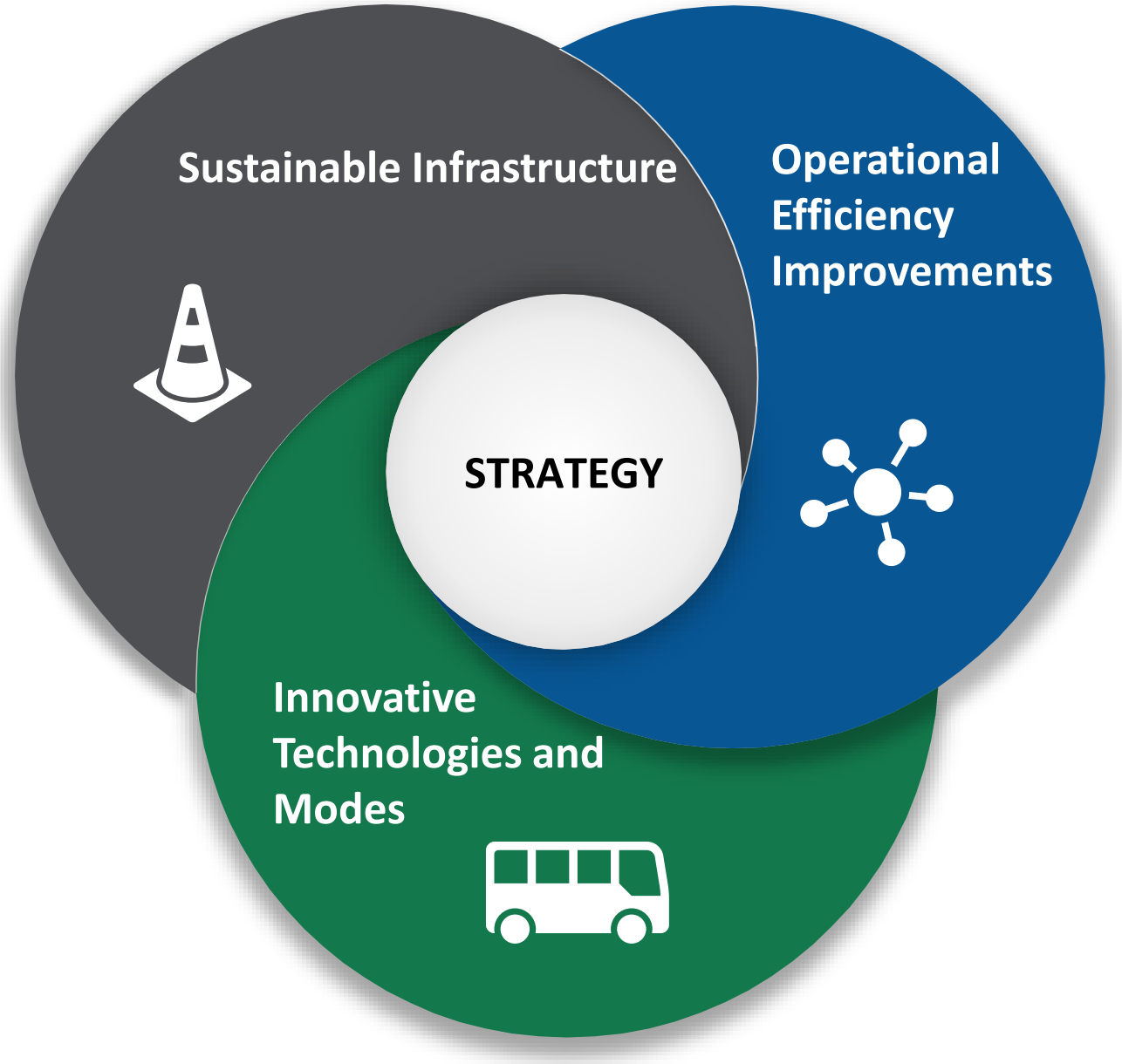
Symbol	Meaning
—	No, Negative, or Not Applicable
	Low or Uncertain
	Medium
	High

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.

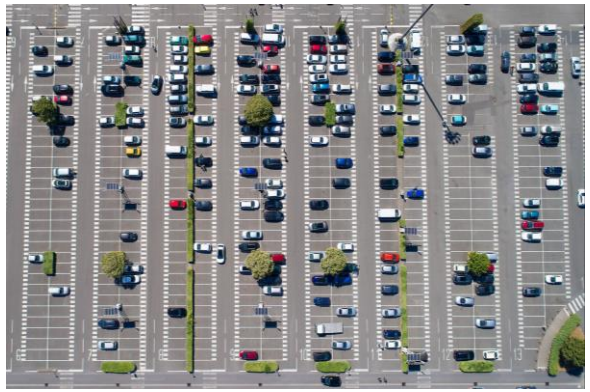
- Alternative Fuel Vehicles for Public Sector Fleets
- Freight-related Emissions Reduction
- Port Electrification and Facilities Improvements
- ZEV Fueling Infrastructure (E, H2)
- Bicycle, Pedestrian and Nonmotorized Transportation Facilities Improvements
- Transit Infrastructure Improvements
- Transit Service Improvements
- Transit Access Improvements
- Land Use and Community Design

GEORGIACOMMUTEOPTIONS

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

Criterion	Safety	Equity	Mobility	Resilience	Air Quality	Readiness	C. Emissions	Savings	Develop-ment	Eligibility	Context
Rating	—	—	—	🍃	🍃🍃🍃	🍃🍃	🍃🍃🍃	🍃	🍃🍃	🍃🍃🍃	All

Review and Feedback

Schedule & Next Steps

Major Milestones:

- Completed a **working draft document** – Now going through 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:

- Public Review:
  - Complete document will be posted publicly for review and feedback by **October 16**
  - **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 *(October 2nd)*
- Document submission to FHWA on **November 15**

We Need Your Feedback

Carbon Reduction Program - Georgia DOT (ga.gov)

- Email gdotcrp@dot.ga.gov