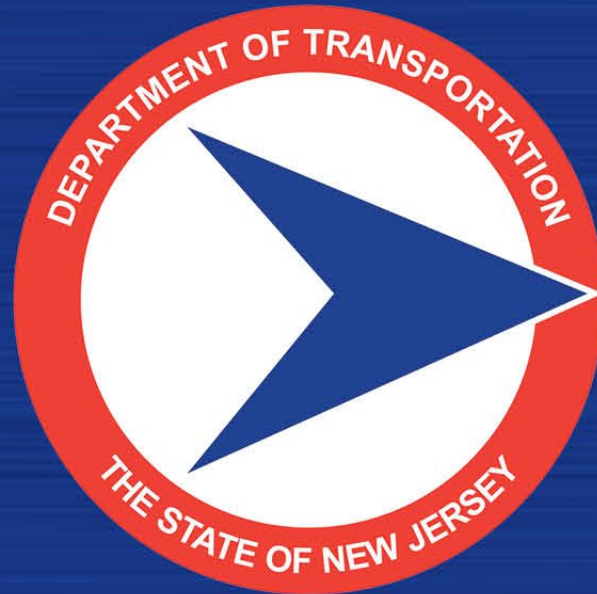
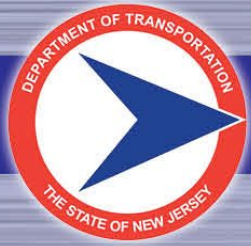


# CIA Team Updates: Planning & Environment



Presented by Sushant Darji & Simon Nwachukwu  
August 06, 2025

**NEW JERSEY DEPARTMENT OF TRANSPORTATION**



# Integrated Strategic Overviews

Overview: Congestion Mitigation Air Quality (CMAQ)  
Carbon Reduction Program(CRP)  
Core Innovative Area

## Introduction

- **Purpose:** Present a unified overview of NJDOT's strategic initiatives in transportation, focusing on CMAQ, CRP, and Core Innovation Areas in Planning & Environment.
- **Objectives:** Align with state and federal climate action goals to drive transformational change, enhance climate resilience, and promote sustainability in New Jersey's transportation infrastructure.



# Strategic Programs – CMAQ & CRP

- **CMAQ Program:**

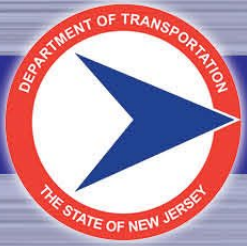
- **Objective:** Fund projects to mitigate congestion, reduce emissions, and improve air quality in non-attainment areas.
- **Target Development:** Set quantifiable targets for NO<sub>x</sub>, PM<sub>2.5</sub>, VOC, and CO emissions, guiding project selection and funding.
- **Project Types:** ITS, intersection modernization, public transit expansion, and low-emission vehicle incentives.
- **Expected Outcomes:** Significant reductions in air pollutants and greenhouse gases



# Strategic Programs – CMAQ & CRP

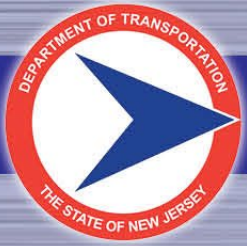
- **CRP Program:**
  - **Objective:** Systematically reduce carbon emissions in transportation through sustainable technologies.
  - **Implementation Status:** Transitioned from planning to full-scale implementation.
  - **Strategic Advancements:** Battery-electric buses, complete streets initiatives, green fleet transitions.
  - **Impact Assessment:** Achieving CO reductions through electrification and mode shifts





# Performance Metrics & Stakeholder Collaborations

- **Quantifying Success:** Use data-driven approaches for emission reduction tracking, congestion relief metrics, and GHG benchmarks.
- **Key Performance Indicators (KPIs):** NO<sub>x</sub>, PM<sub>2.5</sub>, VOC, CO, CO<sub>2</sub> reductions; increased transit ridership; improved air quality.
- **Geospatial Analysis:** Assess spatial effectiveness to direct investments where needed most.
- **Stakeholder Engagement:** Collaborate with MPOs, local municipalities, transit agencies, and private sector partners for coordinated delivery.
- **Scalable Funding Mechanisms:** Leverage diverse funding streams for scalability and sustainability



# Next Steps & Strategic Vision

- **Scaling Initiatives:**
  - **CMAQ Projects:** Expand ITS, transit services, and promote low-emission vehicles.
  - **CRP-Backed Initiatives:** Accelerate expansion of electric public transit options.
  - **Technology Integration:** Implement AI-based traffic management systems.
- **Policy Alignment & Support:**
  - **Align Policies:** Ensure state transportation policies meet federal goals.
  - **Legislative Action:** Secure sustained funding emphasizing long-term benefits.
- **Call to Action:** Foster collaboration among public agencies, industry leaders, and research institutions to drive transformative changes.



# Core Innovation Areas Planning & Environment

- **Introduction to Core Innovation Areas:**
  - **Purpose:** Overview of ongoing and planned initiatives in Planning & Environment.
  - **Stakeholders:** MPOs, FHWA, NJ Transit, Port Authority of NY/NJ.
- **Key Innovation Areas:**
  - **Electrification & Zero-Emission Vehicles:** Support state fleet and charging infrastructure expansion.
  - **Mass Transit & Active Transportation:** Promote public transport and active modes to reduce SOV use.
  - **Smart Traffic Management:** Optimize flow and reduce emissions.
  - **Sustainable Construction:** Use recycled materials and low-emission equipment



# Example: Program and Outcome

The "It Pay\$ to Plug In" grant program, initiated in New Jersey in 2024.

The program is part of the CMAQ initiatives, focusing on EV charging stations rather than replacing diesel equipment, which is more effective in cutting vehicle emissions.

## Benefits of the Program:

- Reduces Vehicle Emissions:

- Promotes electric vehicles over gasoline-powered ones.

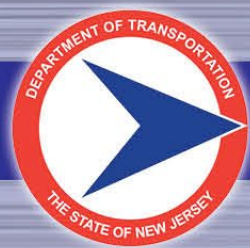
- Reduces greenhouse gases and pollutants.

## Encourages EV Adoption:

- Aligns with New Jersey's efforts to lower emissions

- Increases the accessibility and convenience of electric vehicles for residents, businesses, and government entities.





# Example: Program and Outcome

## Environmental Impacts

### Reduction in Greenhouse Gas Emissions:

- Supports cleaner transportation options.

### Air Quality Improvement:

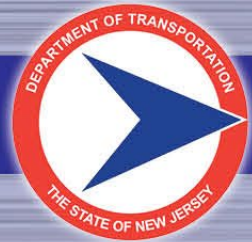
- Zero tailpipe emissions lead to better air quality.

### Encouragement of Renewable Energy Use:

- Potential for increased integration with renewable sources.

### Support for State Emission Goals:

- Aligns with New Jersey's efforts to lower emissions.



# Conclusion

**Recap:** Review strategic initiatives and innovation areas.

**Importance of Collaboration:** Highlight ongoing collaboration and transparency to achieve decarbonization goals.

**Next Steps:** Encourage stakeholder engagement and active participation in future projects.



# Contact

For any inquiries, feel free to reach out to us via the email addresses below. We are here to assist with all your questions:

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