Regional Transportation Electrification Plan

TAQC/Board Meeting

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Atlanta Regional Commission

ONE great REGION

Planning for Transportation Electrification in the Metro Atlanta Region

- The transportation sector continues to be one of the largest contributors to greenhouse gas (GHG) emissions.

- Currently experiencing a transformational moment in transportation.
  - Historic growth in private ownership of EVs.
  - Planning and investments are beginning to occur in medium- and heavy-duty vehicles including transit, public sector fleets, and freight.

- Historic federal legislation and funding thru IIJA and IRA.

- Significant investments in automative manufacturing (Hyundai, Kia, Blue Bird, and SK Battery).

ARC can play a pivotal role in supporting transportation electrification through its **convening**, **coordinating**, **planning**, and **funding**.

Hyundai Metaplant, Bryan County, GA
($7.6 billion investment in EV Plant)

Plan Purpose

Strengthen the Regional EV Ecosystem

Lead the southeast in the electrification of our transportation sector by creating a robust and widespread regional EV ecosystem. This approach will accelerate the equitable adoption of EVs and inform regional EV infrastructure investments to guide the region and meet the needs of the future.

PROJECT STRUCTURE

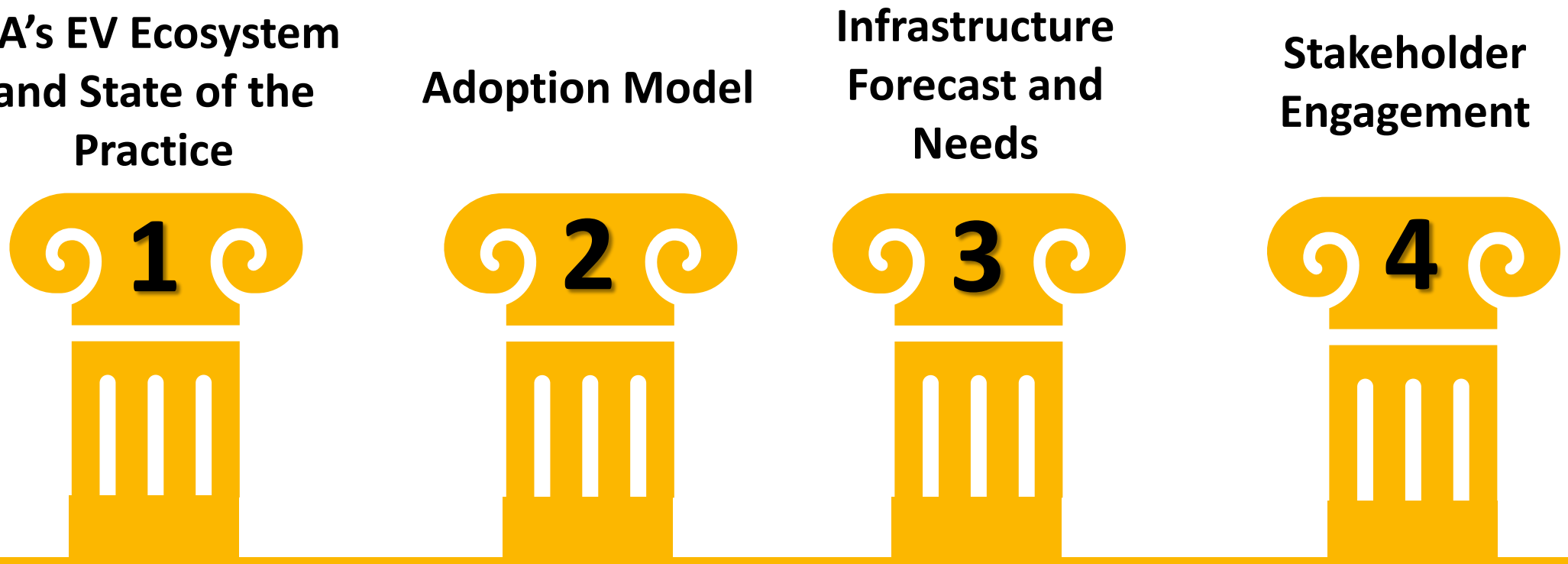
- **Task Development:**
  - Task 1: Project Management and Stakeholder Engagement Plan
  - Task 2: Stakeholder Engagement
  - Task 3: Needs Assessment
  - Task 4: Regional Transportation Electrification Vision
  - Task 5: Regional Transportation Implementation Strategy
  - Task 6: Regional Transportation Plan

Plan Goals

The purpose of this plan is to develop a policy strategy and approach for ARC to advance transportation electrification in the Atlanta region that will:

1. Expand and Coordinate **EV Charging Infrastructure**
2. Accelerate **EV Adoption** in the Region
3. Boost **Workforce Development and Economic Competitiveness**
4. Align the RTEP with Regional Climate Planning Efforts to **Support GHG Reductions**

Pillars of the Plan

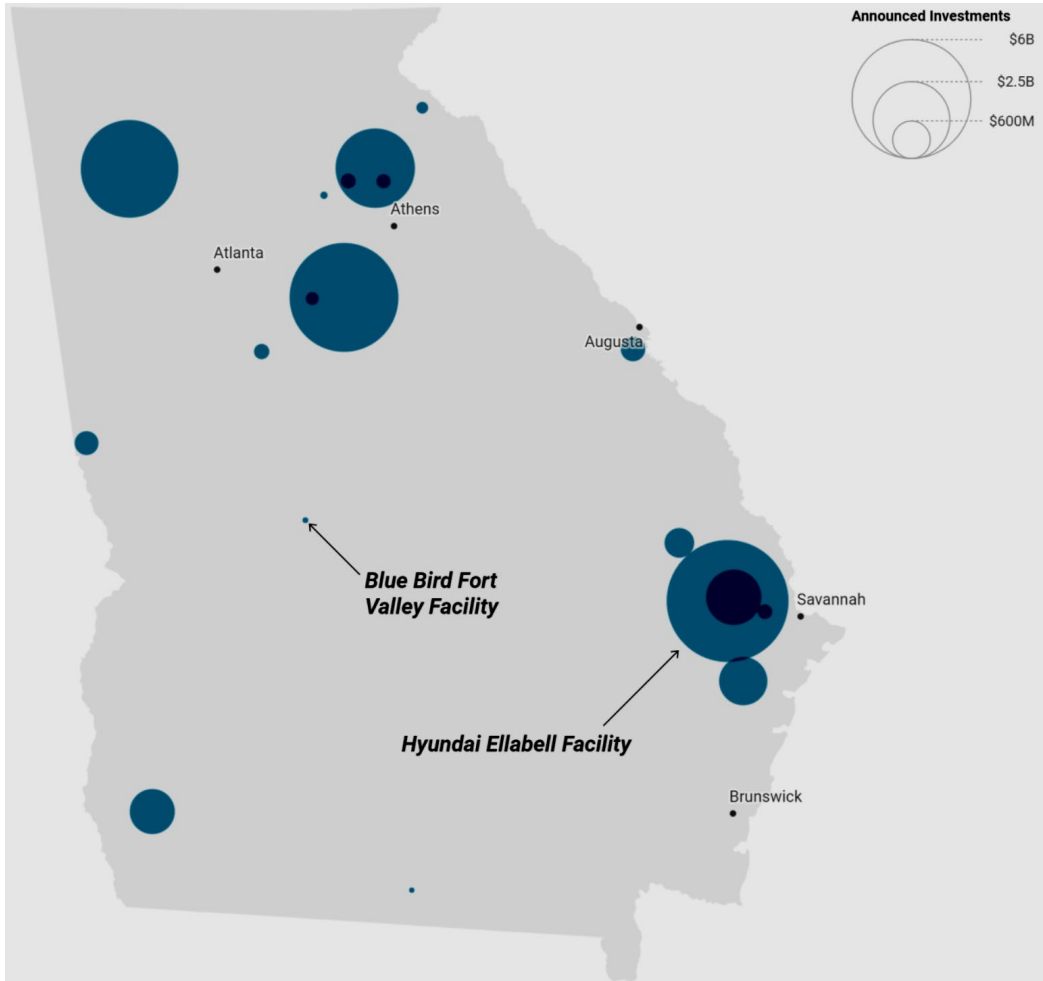


Policy Recommendations

Pillar 1: GA's EV Ecosystem and State of the Practice

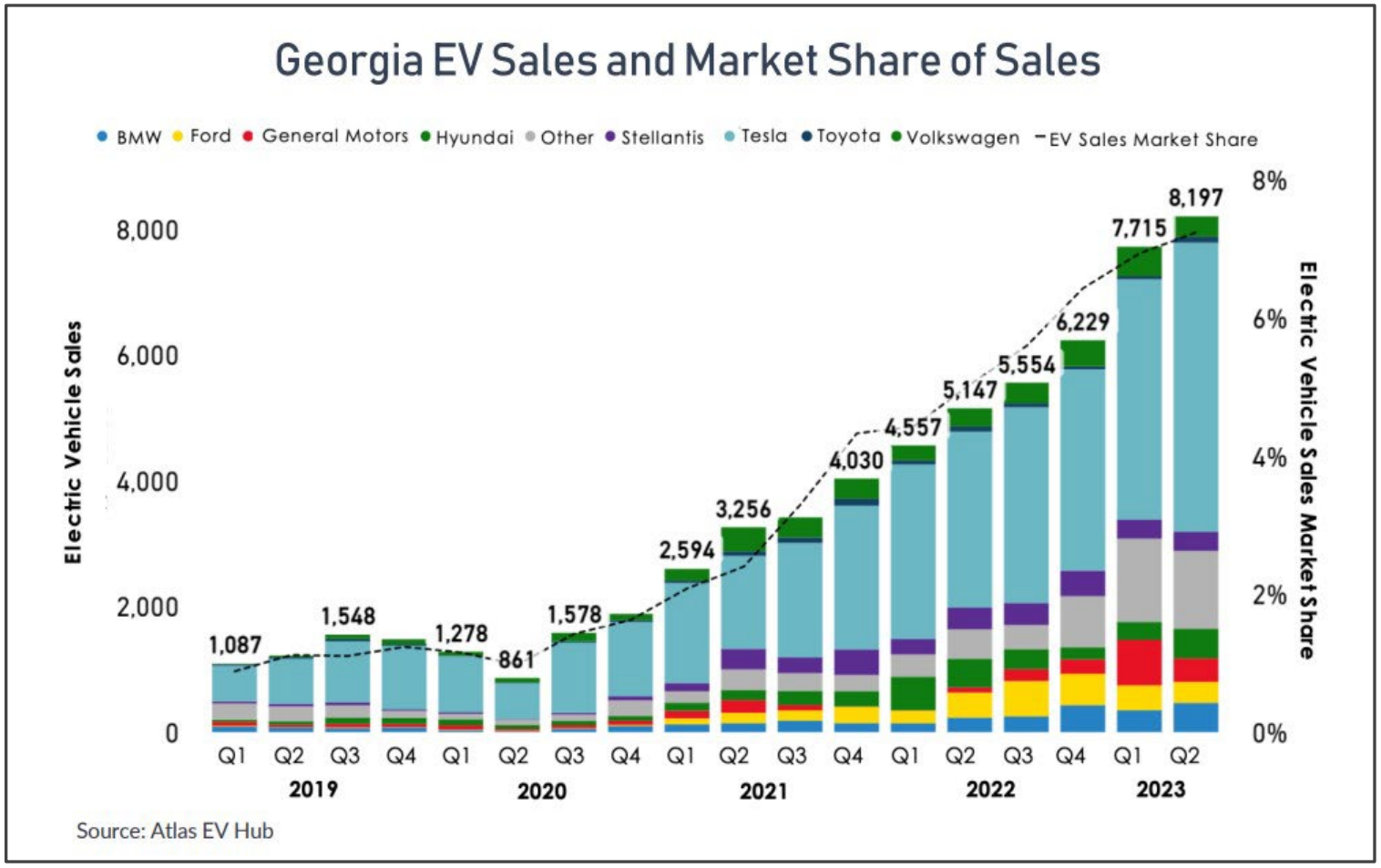
- **Key manufacturing and battery investments**
  - E.g., Hyundai, LG Solutions, Kia, Bluebird, SK Battery
- **Technical schools working with employers, curriculum development**
  - Goodwill Clean Tech Accelerator
- **Investments in transportation**
  - UGA and GSU bus fleet, MARTA, and ATL Xpress
- **Utility Investments**
  - Georgia Power was approved for a combined three-year budget of $58.5 million (2022) by Georgia Public Service Commission (Make Ready funding and charging stations for rural and income qualified areas)
- **IIJA Funding awards for Georgia**
  - CFI Grants (ARC, Hartsfield Jackson Airport, Middle Georgia Regional Commission)

Georgia is poised to become a hub for EV manufacturing as it leads the nation in announced **private investment ($24.8 billion)** and **permanent jobs (27,477)**.



Current State of EVs in Georgia and the ARC region

Key Vehicle Data for Metro Atlanta GA	
Total # of Registered Vehicles in Metro Atlanta (10/24)	4,980,643
Total # of Registered EVs in Metro Atlanta (10/24)	85,113
Total projected # of EVs in Metro Atlanta fleet by 2030 (Based on 50% annual sales rate in 2030)	515,000



Pillar 3: Infrastructure Forecast and Needs

Charger Quantity as of September 2023

Charger Level	Ports
Level 2	2,865
Direct Current Fast Charger (DCFC)	576
ARC Region Total	3,441

2030 Estimate of Charging Infrastructure Ports by 50% Market Share Scenario

		Needed to Support 515,000 EVs		
Charging Category	**Existing Ports 2023**	**Ports Needed to**	**Additional Ports**	**Ports Needed Per Year**
Level 2 (shared private and publicly accessible)	2,900	50,000	47,100	6,300
DCFC	600	2,400	1,800	260

Estimates shown are rounded figures

Pillar 4: Stakeholder Engagement

- **Key Feedback**
- **Equity and Access:** Ensure fair access to EV infrastructure, prioritizing underserved communities.
- **Infrastructure Coordination:** Coordinate investments and clarify roles for effective infrastructure development.
- **Workforce Development:** Establish structured training programs aligned with EV job needs.
- **Grid Stability and Renewables:** Manage grid stability and integrate renewables to support EV growth.
- **Public Awareness and Education:** Educate about EV benefits and incentives to drive adoption.
- **Policy and Regulation:** Address regulatory barriers to streamline EV deployment.
- **Collaborative Partnerships:** Foster partnerships to leverage resources and drive collective action.

Policy Recommendations

Goal 1: Expand and Coordinate EV Charging Infrastructure

- Support Training and Resources for Effective EV Implementation
- Evaluate and Assess Local Policies for EV Readiness
- Ensure Equitable EV Charging Infrastructure
- Engage and Coordinate with Utilities

Goal 2: Accelerate EV Adoption in the Region

- Cultivate Inclusive and Diverse Public Engagement around e-mobility
- Support local governments' efforts in fleet transition planning
- Conduct a Regional Medium and Heavy-Duty Zero Emissions Vehicle Plan

Policy Recommendations

Goal 3:Boost Workforce Development and Economic Competitiveness

- Strengthen Partnerships and Expand Training Initiatives
- Align Training Programs with Industry Needs
- Champion Industry and Business Growth Related to Transportation Electrification
- Identify Opportunities to Support the Regional Electric Vehicle Supply Equipment Industry

Goal 4: Align RTEP with Local and Regional Climate Planning Efforts to Support GHG Reductions

- Define Strategies to Reduce GHG Emissions by Transportation Subsector
- Develop Strategies to Enhance EV Charging Infrastructure Resilience and Energy Efficiency
- Identify Strategic and Innovative Partnerships to Support the Acceleration of GHG Reductions in the Transportation Sector

Implications for Local Government

Public Fleet Transition- Fleet conversion to support reduced fuel and maintenance costs (Cobb County, DeKalb County, and City of Brookhaven as well as MARTA, and ATL Xpress).

Public Charging- Boost economic development, e.g. retail, restaurants, and downtown areas as well as address range anxiety (City of Peachtree Corners). Address equity considerations, particularly for multi-family housing.

Codes- Review codes like zoning, building, permitting to support safe and seamless charging infrastructure (City of Atlanta).

Partners and Coordination- Work with new partners including utilities, commercial property owners, business owners, and charging service providers (Georgia Power, EMCs).

Technical Knowledge- Increase understanding of how transportation electrification crosses multiple government departments.

Funding- Explore opportunities to facilitate accelerated deployment (CFI, EPA Clean Bus Program).

Implications for Local Government – Public Fleet Transition

MARTA

ATL Xpress

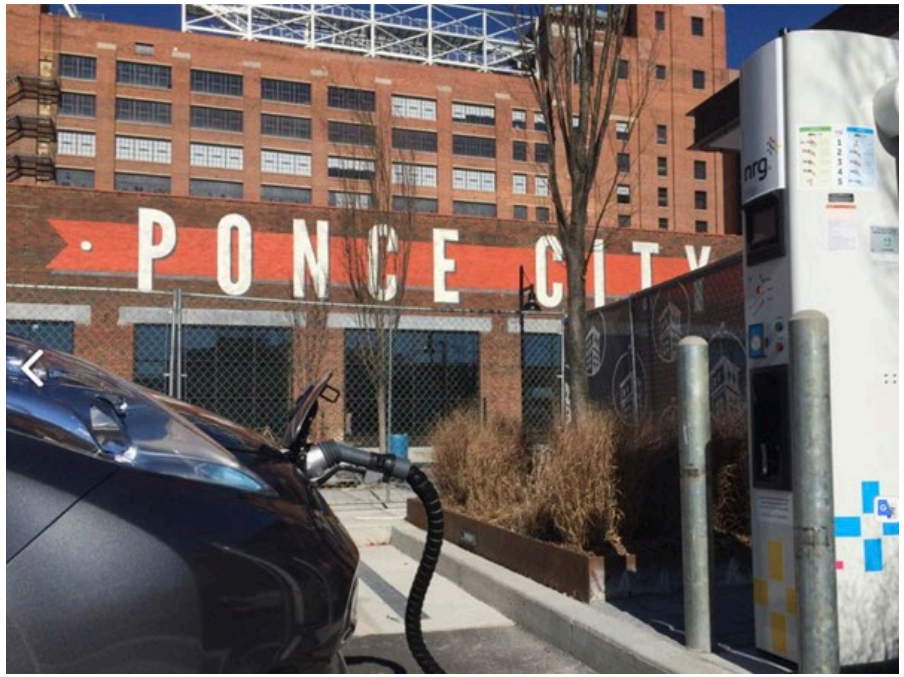
Brookhaven PD

Cobb Fleet Services

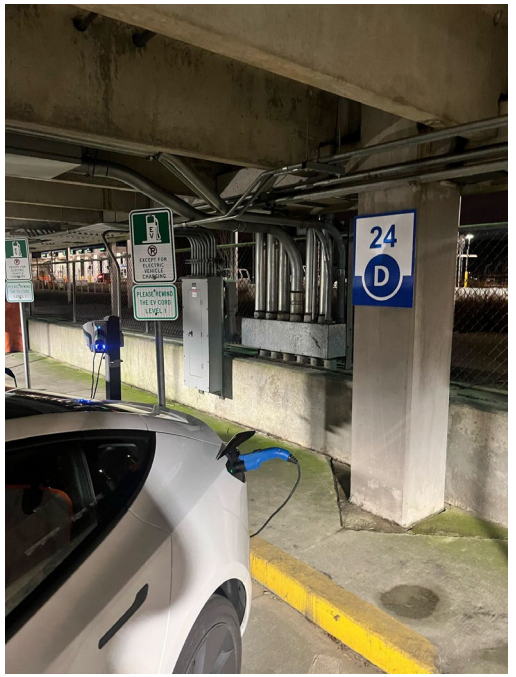
DeKalb Fleet Services

Implications for Local Government – Public Charging

Peachtree Corners Town Center



City of Atlanta – Ponce City Market



City of Atlanta – HJAIA

Implications for Local Government – Codes

clean energy atlanta

City of Atlanta "EV Ready" Ordinance

Gwinnett

Gwinnett County Community Electric Vehicle Ready Policy

SANDY SPRINGS
GEORGIA

"EV Charging Facility" Zoning Ordinance

Implications for Local Government – Partners & Coordination

Georgia Power

Georgia Public Service Commission

Snapping Shoals EMC
Electric Membership Corporation

East Point Power

Metro Atlanta Chamber

Jackson EMC

Cobb EMC

GreyStone Power Corporation
Making Life Better

Walton EMC
Customer-Owned Electric Power

Implications for Local Government – Technical Knowledge

cleanenergy.org Southern Alliance for Clean Energy

Local Government Toolkit

EVNOIRE

Equitable Accessibility to Charging

SEEA SOUTHEAST ENERGY EFFICIENCY ALLIANCE

Transportation Resilience Policy

UNIVERSITY OF GEORGIA Carl Vinson Institute of Government

Installation Checklist for EV Charging Stations Across Georgia

Implications for Local Government – Funding

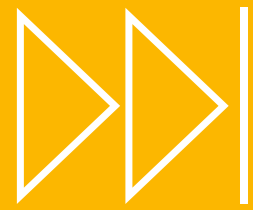
CLEAN CITIES GEORGIA
PARTNERSHIP FOR CLEAN TRANSPORTATION

Joint Office of Energy and Transportation

Charging and Fueling Infrastructure (CFI) Program

Next Steps

- Plan Adoption
  - TCC Plan Adoption (January 2025)
  - TAQC/Board Plan Adoption (January 2025)
- Develop Scope of Work for Medium- and Heavy-Duty Alternative Fuels Plan.
- Work closely to align strategies and actions from RTEP with Metro Atlanta Climate Action Plan and Transportation Carbon Reduction Plan.
- Revisit with stakeholders and identify opportunities for continued coordination and convening.
- Participation and engagement with regional and national partners (i.e., UGA E-Mobility Summit; Clean Energy Roadshow; AASHTO, NASEO, and Joint Office EV Charging Infrastructure Conference).



Questions?

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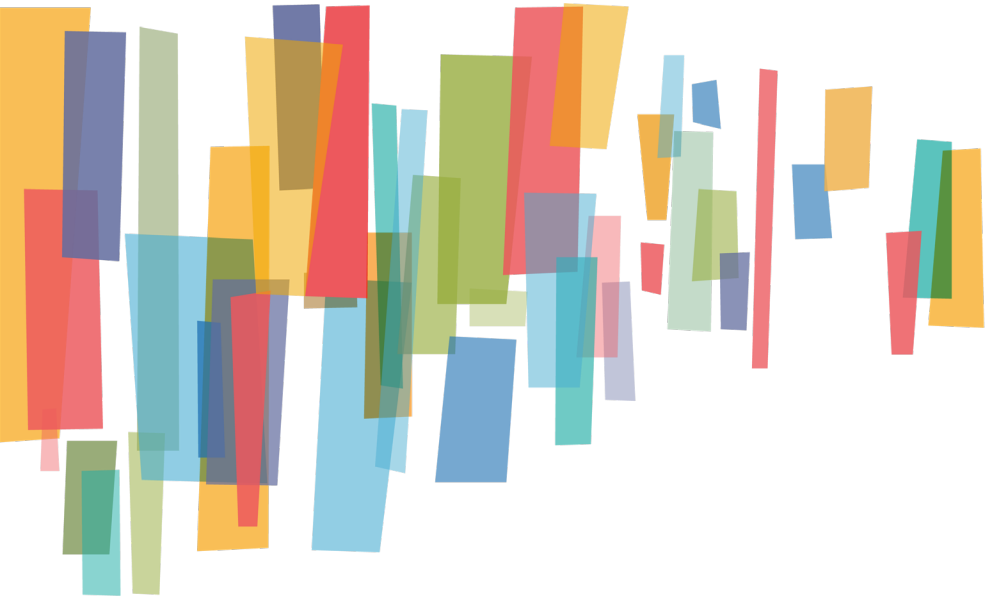

Thank You