



Fulton Industrial Clean Energy & Logistics Plan

Creating a blueprint for the infrastructure of tomorrow

Phase 1 Summary

FICID BOARD PRESENTATION

June 6, 2024



Kimley»Horn



Agenda

Project Purpose & Overview

Corridor Characteristics

Market Assessment

Stakeholder Engagement

National Best Practices

Recommendations

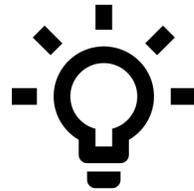
Funding Opportunities

Next Steps

Project Purpose



Understand user
needs along
corridor



Help FIB stand out
as an innovation
district



Prepare for the future
with clean energy and
alternative fueling

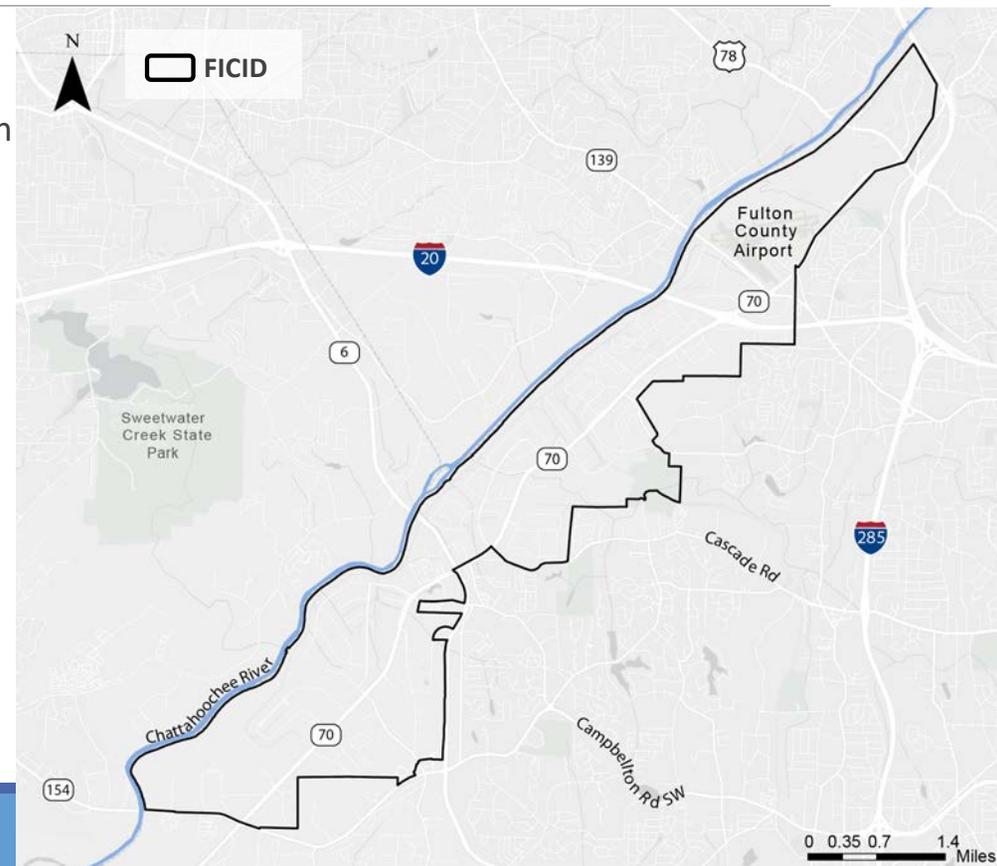
Project Overview

Areas of Focus

- District-Wide Utility Strategy
- Public Access to EV Charging Stations and Freight Clean Fueling
- Renewable Energy Generation
- Truck Parking

Recommendations Process

- Corridor Evaluation
 - Built on Freight Cluster Plan
- Stakeholder Engagement
 - Understand user needs along the corridor
 - Provide direction for study's vision and goals
- Market Research
 - Potential use cases



Corridor Characteristics

CORRIDOR NEEDS

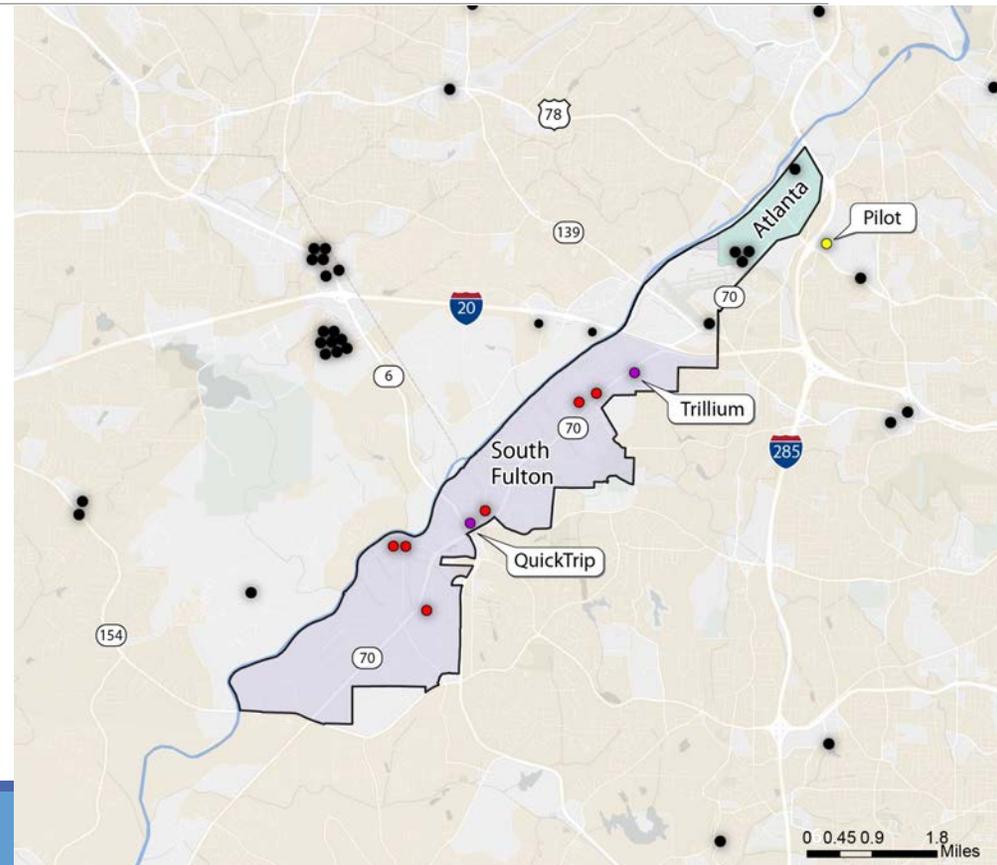
Corridor Assessment

Corridor Stats

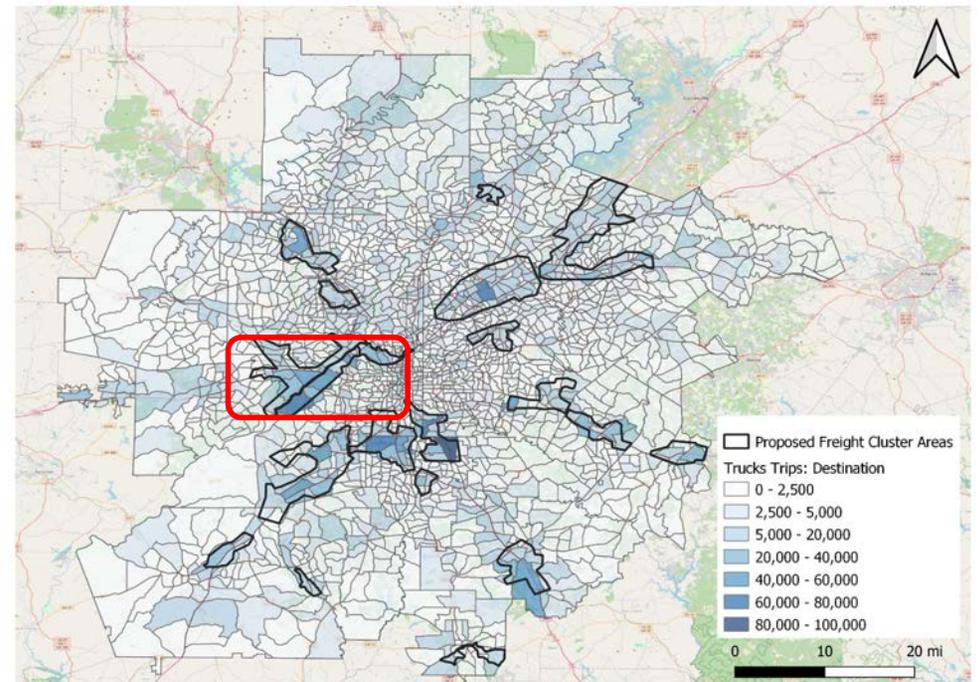
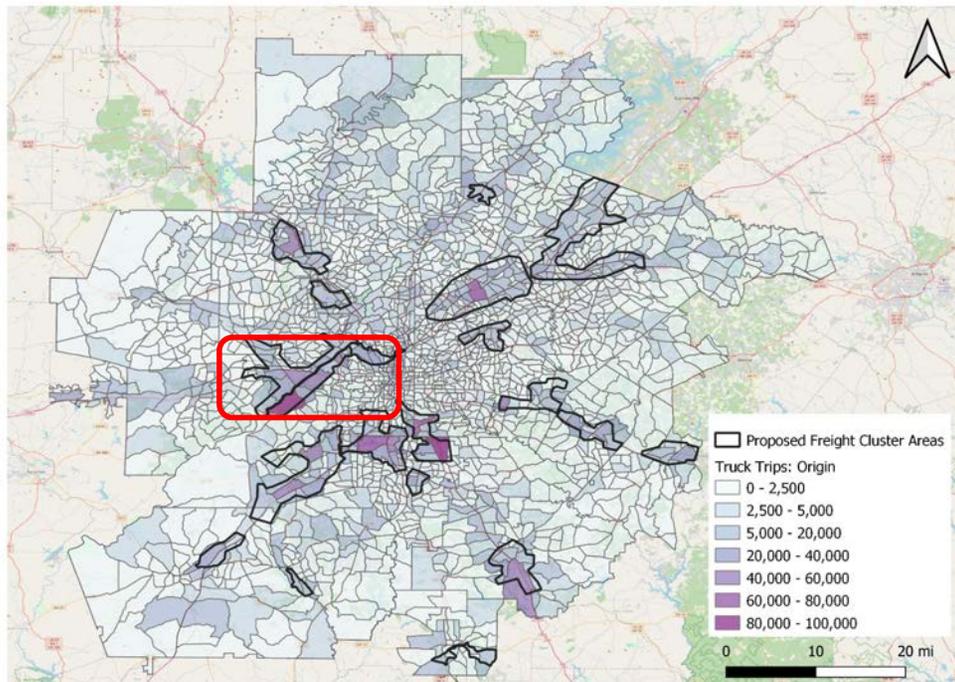
- 11 miles long
- Largest industrial corridor east of the Mississippi
- 4,800 acres of land
- 55 million SF of industrial inventory
- 90% industrial land uses
- 554 industrial buildings

Legend

- | | |
|---|------------------------|
| ● Existing EV Charging | ▭ City of South Fulton |
| ● Existing Rooftop Solar | ▭ City of Atlanta |
| ● Existing Truck Parking | ▭ Residential |
| ● Existing Truck Parking with CNG Fueling | ▭ FICID |



Corridor Transportation Patterns



Data from: Atlanta Regional Freight Mobility Plan Update

Corridor Needs & Opportunities

Sense of Place & Reinvestment

Promotion of Fulton County Executive Airport Business Park / Potential Innovation District

Truck Parking & Staging

Publicly available EV charging

- Passenger vehicles
- Commercial delivery (limited duty cycles)

Tools for on site clean energy production



Market Assessment

Use Cases

Delivery Vans

- Class 2-3
- Class 4-6
- Range ~150 miles



Battery Electric Options:



Mercedes-Benz



Use Cases

Short-Haul Trucks

- Class 6,7
- Range ~200 miles



Battery Electric Options:



Use Cases

Heavy Freight & Drayage

- Class 8
- Range ~200 miles



Battery Electric & Hydrogen Options:



Use Cases

Long-Haul Trucks

- Class 8
- Range ~500 miles

Battery Electric & Hydrogen Options:



Use Cases

eVTOL (Electric Vehicle Take-off and Landing)

- Personal Transport
- Package Delivery



eVTOL Manufacturers:



Stakeholder Engagement Results

CORRIDOR NEEDS

Who we Connected With

TENANTS & INDUSTRY

CKS Packaging

Coca-Cola

BROKERS

Avison Young

Lee & Associates

King Industrial

Selig Enterprises

GOVERNMENT & ORGANIZATIONS

Atlanta Regional Commission

Fulton County Executive Airport

Fulton County Redevelopment Authority

Georgia Department of Transportation

Georgia Motor Trucking Association

American Transportation Research Institute

Councilwoman Rowell - City of South Fulton

FLEET OWNERS & LOGISTICS

Knight Transportation

Averitt Express

EV and Alternative Fueling

Current Interest in Freight Electric Vehicles

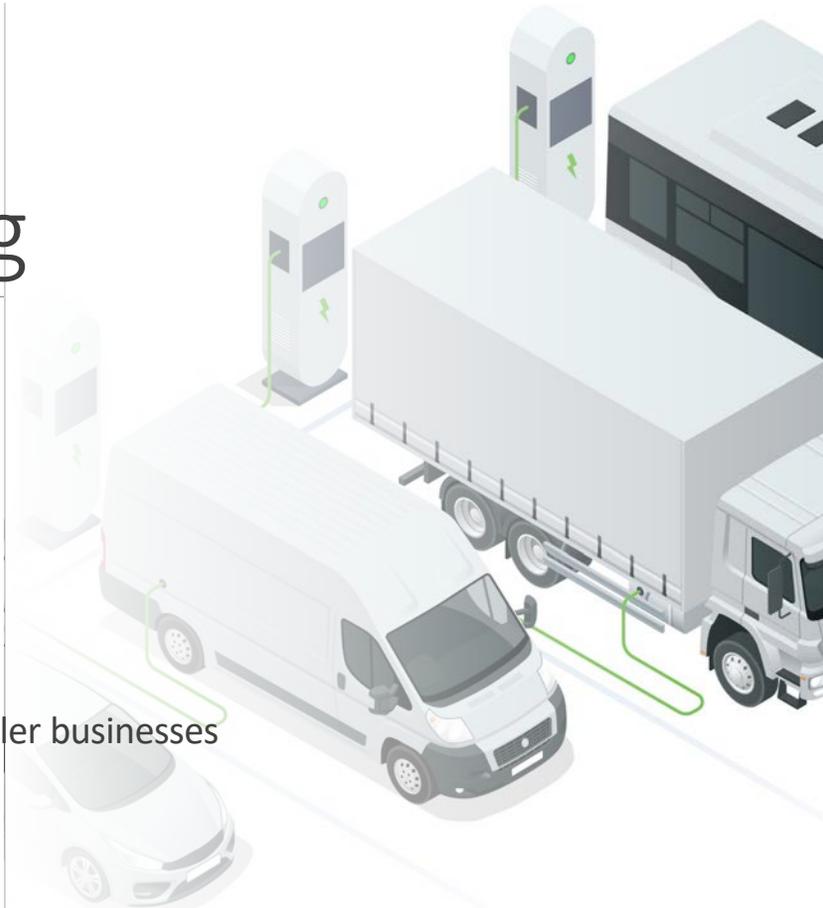
- Long-haul freight: **Low**
- Local trips: **Moderate**

Current Interest in Passenger Vehicle EV Charging

- **High** – Residential to the west, south and east

Opportunities

- Passenger EV charging
- Freight EV charging to allow testing of electric vehicles by smaller businesses
- Bridges gap to full electrification
- Delays capital investment in on-site chargers
- Airport innovation district
- Multi-fuel approach to renewable fueling (e.g. hydrogen, renewable diesel, natural gas, etc.)



Truck Parking and Staging

Fulton Industrial Boulevard lacks supply of all types of truck parking and trucker amenities.

Long-term truck parking

- Storage of vehicles and trailers for multiple days
- Solutions found by individual business owners

Overnight truck parking

- < 24hr stays when driver has timed out
- Served by full-service rest stop

Truck staging

- < 3hr parking for truckers arriving early to a FIB facility
- Biggest problem in the district

Truck-accessible amenities

- Restaurants, service centers



Clean Power Generation

Little interest along corridor

- 6 existing rooftop solar installations

Current market has significant hurdles to implementation

- Affordability of grid power
- Lack of legislative incentive

Considerations in any market include

- Increased roof replacement cost
- Cost of upgrading upstream infrastructure

Interest from City of South Fulton for new installations



National Best Practices

Port Fuel Center

Located at Port of Savannah

- 13 Acres
- Within 1 mile of the port entrance

Fuels

- CNG
- Diesel
- EV Charging – Go Station*



Amenities

- Food Court
- Truck Maintenance
- First Aid
- Laundry

**<https://go-station.com/electric-semi-truck-set-to-debut-and-in-a-historic-move-deliver-the-first-zero-emission-miles-at-the-port-fuel-center/>



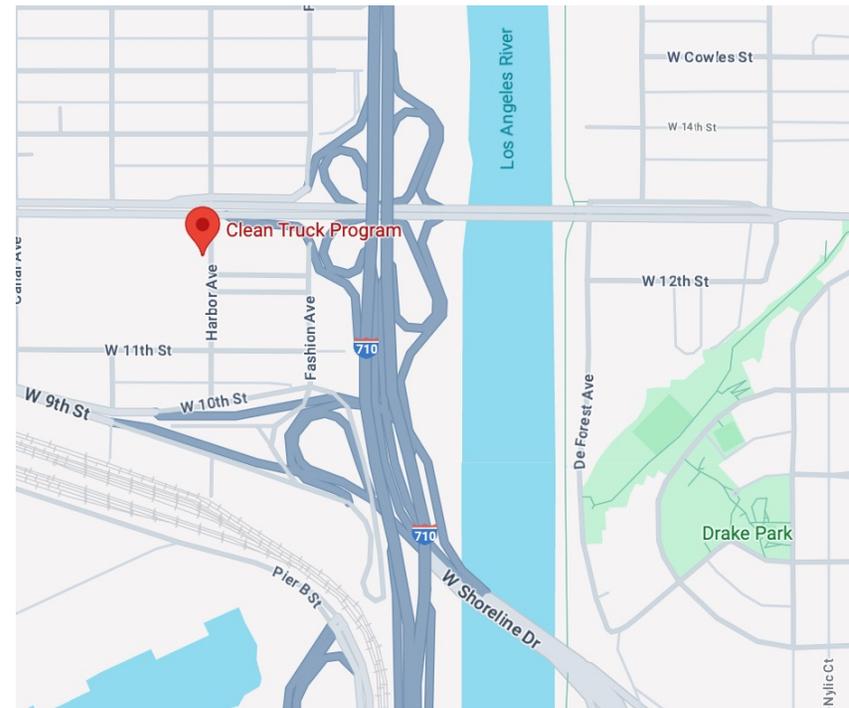


Port of Long Beach – EV Connect

Heavy-duty truck charging station opened November 2022*

- 2 Acres
- 2 charging units
- Clean Truck Program Terminal Access Center, 1265 Harbor Ave, Long Beach, CA

Goal of 100 public stations in area by 2028



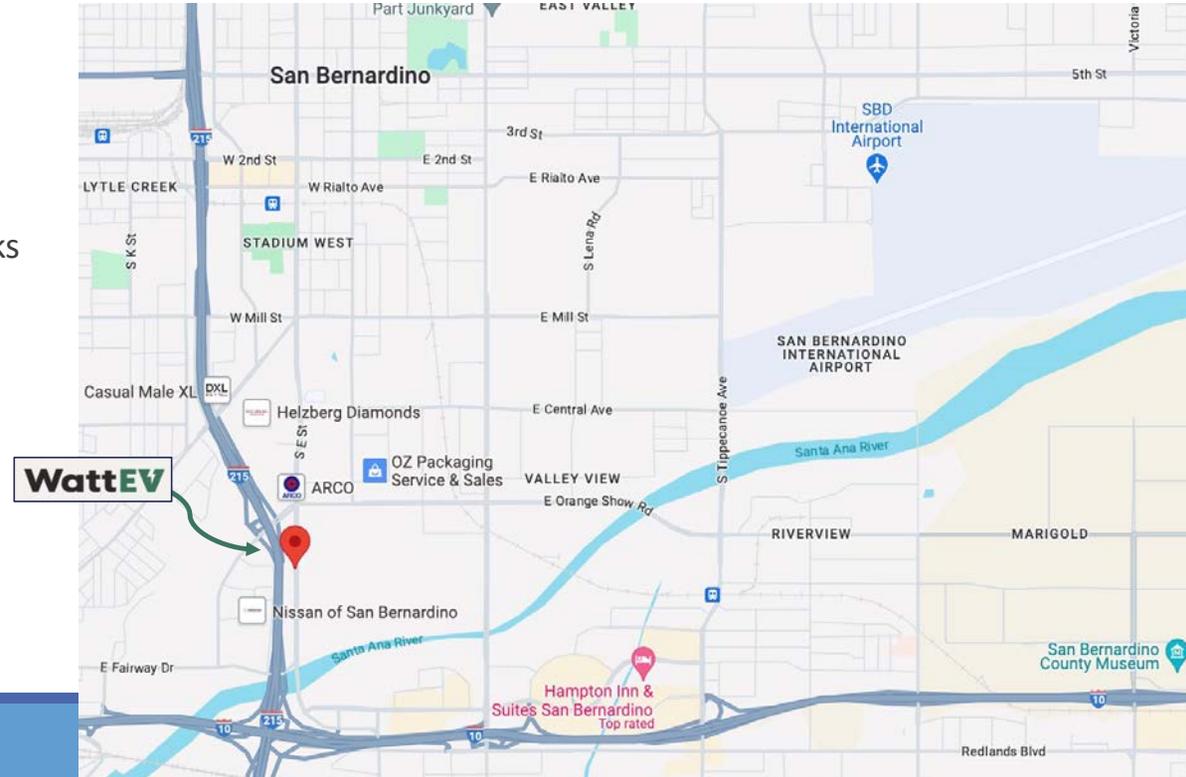
** <https://polb.com/port-info/news-and-press/port-partners-power-ahead-with-truck-charging-stations>

San Bernardino - WattEV



San Bernardino charging depot opened April 15, 2024*

- 4 Acres
- 12 dual-cord 360 kW chargers
- Flexible charging schedule
- Operational 24/7
- On-site attendants
- Fast charging for heavy-duty electric trucks
- Near major distribution centers



** <https://www.wattev.com/san-bernardino-charging-depot>

Prologis

Prologis Mobility customer transitioned 100+ Class 8 Volvo EVs*

- Total acreage varies by site.
 - Designed and installed charging infrastructure
 - Charging-as-a-service solution supporting 38 electric trucks across 2 sites
 - Worked with the local utility for energy upgrade
- **3M+ MILES ELECTRIFIED**
 - **10+ OPERATIONAL EV SITES**
 - **200+ VEHICLES CHARGING**
 - **50% OF EV CHARGING STATIONS LOCATED AT 3RD PARTY SITES**



**<https://www.prologis.com/insights/success-stories/prologis-electrifies-fleet-sustainable-supply-chain-advancement>

Recommendations

Recommendations

1. EV Charging and Green Energy Creative Placemaking Site
2. Clean Energy Travel Plaza
3. Executive Airport Innovation District
4. Network of Truck Staging
5. Clean Power Generation Toolkit

1.

EV Charging and Green Energy Creative Placemaking Site

An inviting space with personal vehicle charging, interactive exhibits, and educational displays on clean energy. This space will serve for:

Workforce Development

- Partnership with local experts, organizations, and universities

Education & Collaboration

- Integrate technology
- Workshops, talks, and demonstrations

Gathering

- A space for the community to utilize for events



2.

Clean Energy Travel Plaza

Amenity hub for truckers and the traveling public with alternative fueling

Truck Parking

- Primarily serving overnight
- Limited staging space on-site

Alternative Fueling

- Public EV chargers
- Other clean fueling

Clean Power Generation

- Solar on-site

Amenities

- Hotel
- Restaurants
- Retail
- Showers





3.

Executive Airport Innovation District

Business Park Opportunities

- eVTOL Opportunity
- Solar and Clean Energy
- R&D support services
- Sustainable Aviation Fuel (SAF)

Signage & Branding



4.

Network of Truck Staging

Staging can be accommodated throughout the district, rather than consolidating in one place.

Unused Right of Way

- Restriping
- Additional Pavement

Amenities

- Increased lighting
- CID helps develop mobile app
 - Check-in for Real-Time Availability
 - Connects to Public Safety
 - “Cell Phone Lot” style



5.

Clean Power Generation Toolkit

Consider hurdles, create map and whitepaper of opportunities.

Area-specific

- Estimated grid capacity
 - Via Georgia Power custom map
- Proposed ideal locations

Configuration-specific

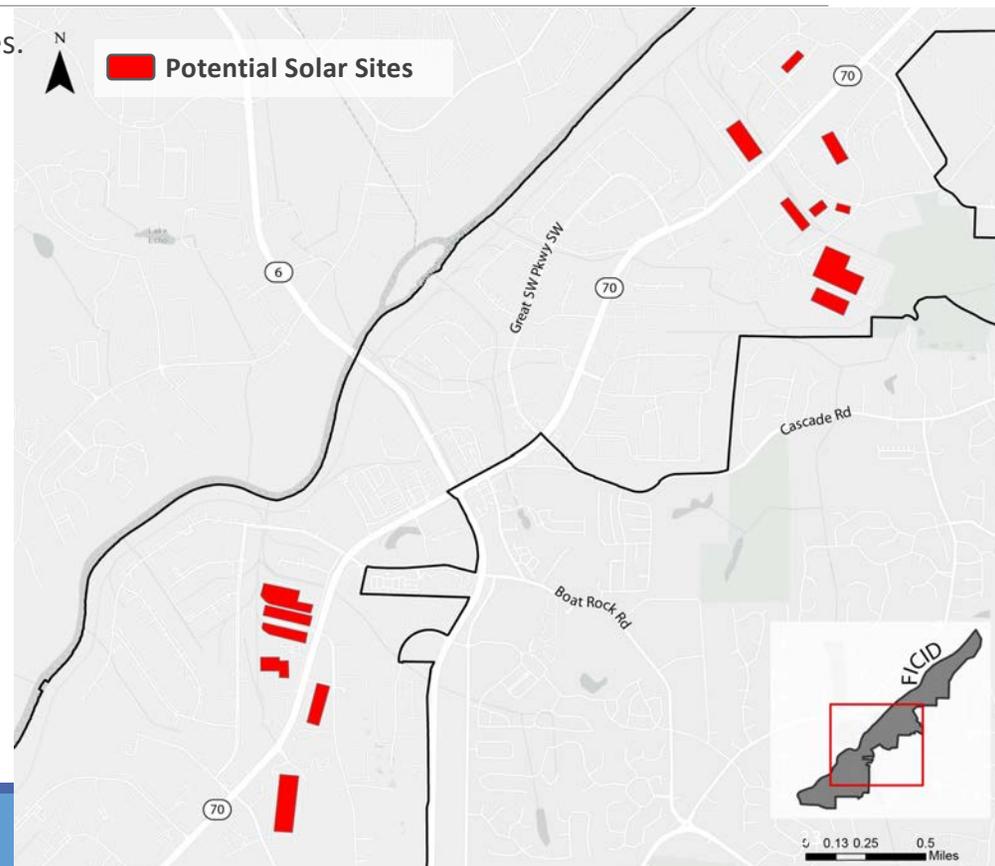
- Large roof, small roof, ground-mounted

Opportunities & Incentives

- Landscape in other states
- Georgia Power solar programs
 - Distributed Generation RFP
 - Qualifying Facility (QF) Program
 - Renewable / Non-Renewable (RNR) Program
 - Customer Connected Solar Program (CCSP)
 - Offset-Only Solar

Resources

- Google's roof solar map
- Georgia Power distribution map



Location Assessment

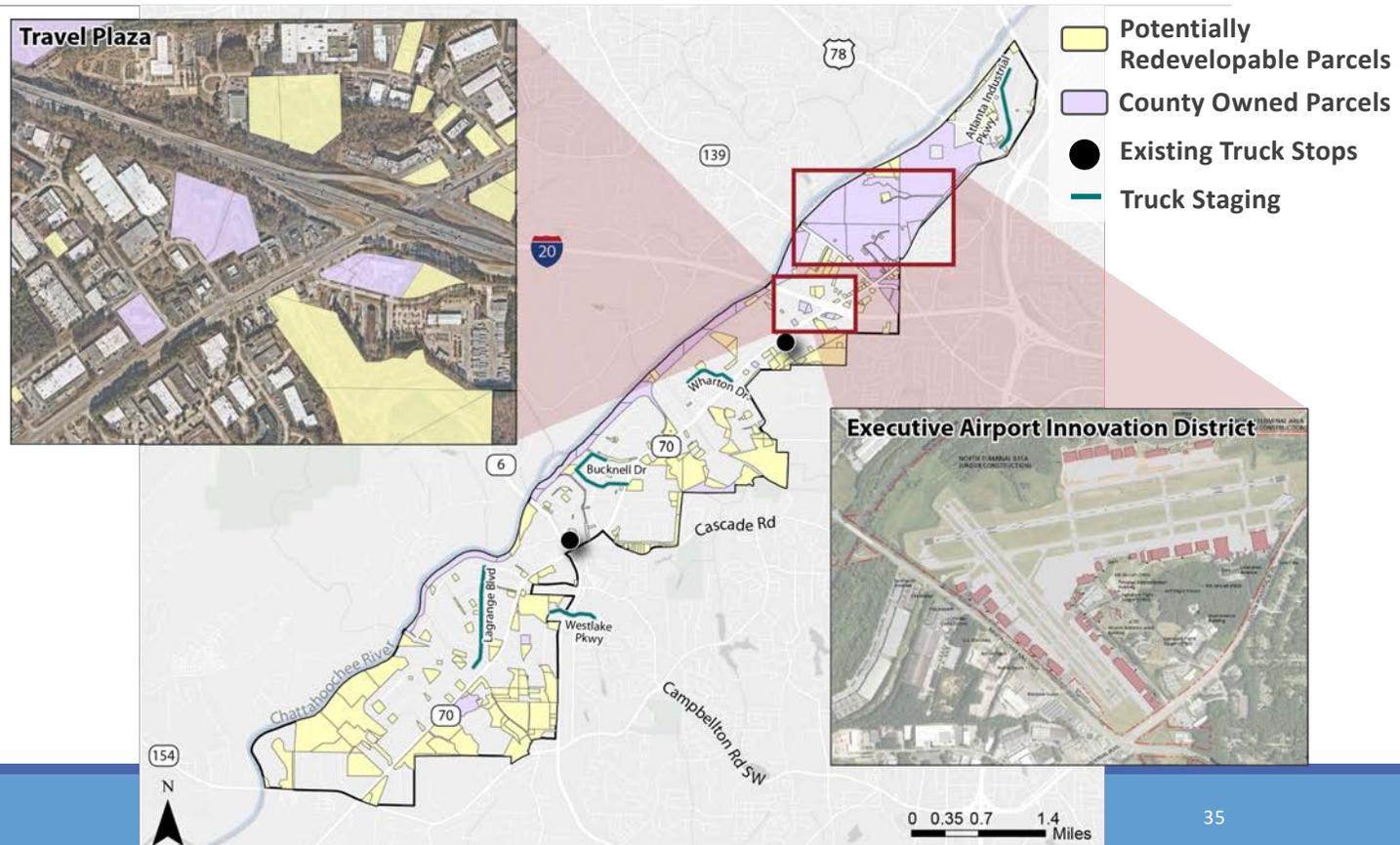
Opportunities Map

Candidate Sites for Travel Plaza

- Sites near I-20
- Interest in partnership from county, city of SF
- GA Power checking capacity of locations

Potential Host Sites for EV Charging and Clean Energy Creative Placemaking Site

- Warehouses on Maple and Oak Lawn Ave
- Future South Fulton City Hall
- Aviation Cultural Center
- Fulton County Animal Services
- Fulton County Police Station



Funding Opportunities

Funding

EV and Alternative Fueling

- Community Grant (\$500K - \$15M)
- Corridor Grant (\$1M+)
- ARC Community Charging Grant
- Zero Emission Freight (ZEF) Program

Truck Parking

- Developers interested in opportunity
 - Subsidized land from county increases developer interest
- Amenities generate tax revenue for the County

Truck Staging

- Collaboration with South Fulton, Atlanta Department of Transportation

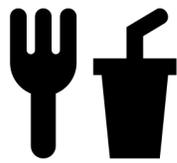
Clean Power Generation

- Inflation Reduction Act Tax Credits
- Savings from energy offset
- Revenue opportunities from selling power to utility
- Power Purchase Agreements
- Renewable Energy Credits (RECs)

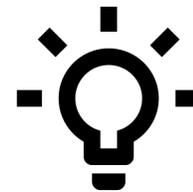
Phase 1 Summary



Respond to stakeholders' hurdles



New "Hub" adds amenities, clean fueling, and solar implementations



Innovation district offers testing site for electric aircraft



Best practices for on-site clean power generation and collaboration with Georgia Power

Plan for Phase 2 – Advance to Concepts

1.

EV Charging and Green Energy Creative Placemaking Site

- Candidate Site Selection
- Concept Design & Renderings
- Grant Application

2.

Clean Energy Travel Plaza

- Concept Design & Renderings
- Property Acquisition Needs
- Socialization with GDOT, City of South Fulton, Private Sector

3.

Executive Airport Innovation District

- Further Discussions with Fulton County

4.

Network of Truck Staging

- Identify locations, concept designs

5.

Clean Power Generation Toolkit

- Coordination with City of South Fulton

With Opinions of Cost for
Each Project and Funding
Recommendations

Discussion
