

T H E



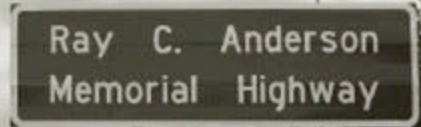
Let's drive the future.



Ray C. Anderson (1934-2011)

Interface, Inc.

- “America’s Green Industrialist”
- Global pioneer of corporate sustainability
- Circular economy now mainstream



LAGRANGE

EXIT 14:
RIGHT-OF-WAY SOLAR

I-85

EXIT 6:
VEGETATIVE LAB
BIOSWALES

THE RAY

SMART
STRIPING

RUBBERIZED
ASPHALT

WEST
POINT



THE RAY
WELCOME CENTER

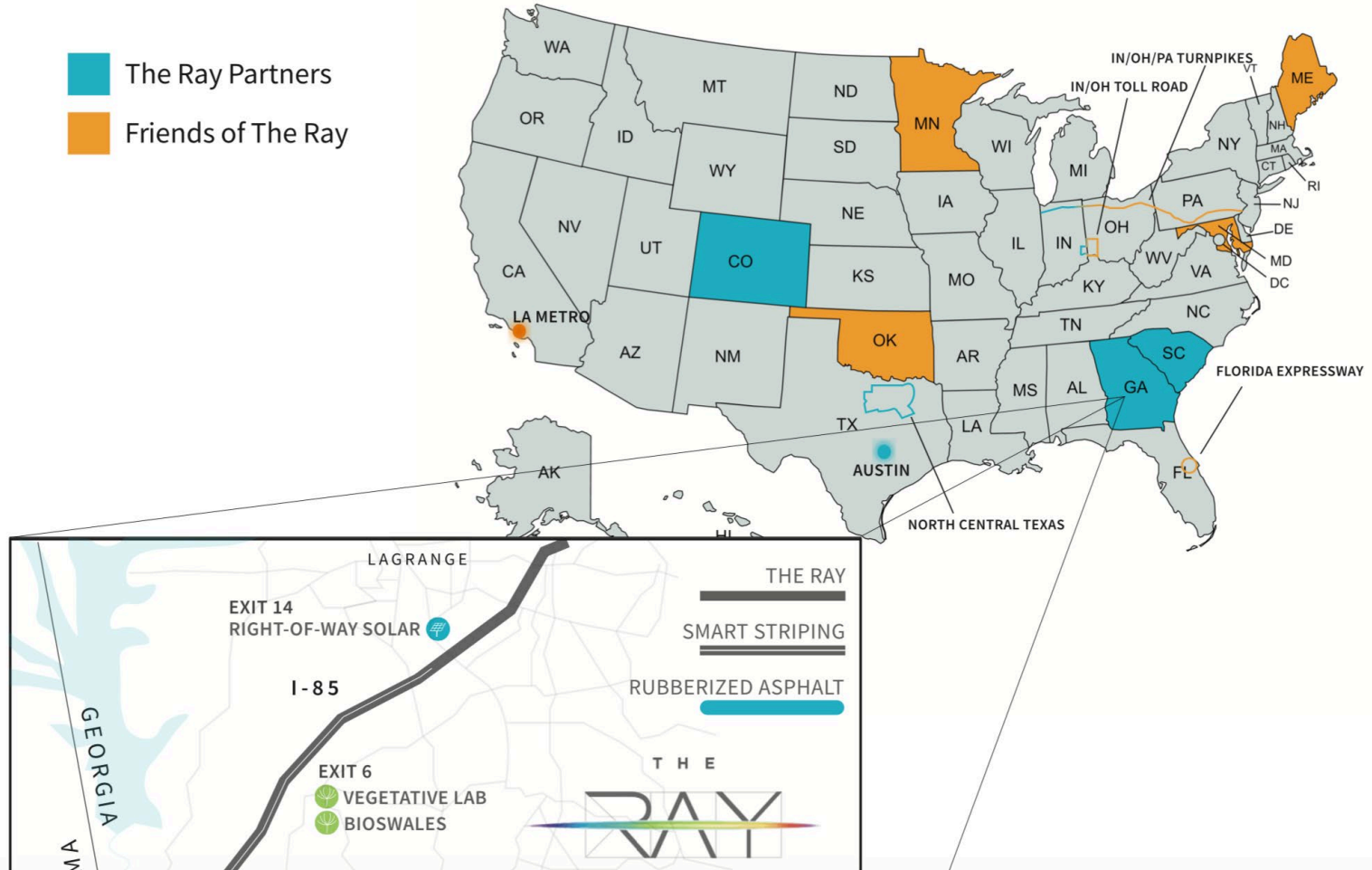
-  TIRE SAFETY CHECK STATION
-  SOLAR-PAVED HIGHWAY
-  SOLAR POWERED VEHICLE CHARGING
-  POLLINATOR MEADOW

GEORGIA

ALABAMA

OUR PARTNERSHIPS

-  The Ray Partners
-  Friends of The Ray





WheelRight tire safety station

- Drive-through system analyzes tread depth, tire pressure & sidewall damage within seconds
- In U.S., under-inflated tires waste 2B gal. fuel/yr. & increase tail pipe emissions
- WheelRight (UK) on The Ray was 1st public tire safety station *in the world*





 WheelRight
tire pressure management





Rubberized Asphalt on The Ray

- I-85 : GA-AL state line → Exit 13 (2019)

4 lane-miles + rest area parking lot

12.5mm OGFC, 12.5mm SMA

Dry process + additive requirement

42,240 pounds of scrap tires

Extended pavement life

Noise reduction

Increased skid resistance



Rubberized Asphalt on The Ray

- Troup County, GA : Tom Hall Pkwy. (2017)

2.5 lane-miles

9.5mm Superpave & 30% RAP

Dry process + additive requirement

PG binder spec equiv. to PG76-22

3,280 tons of mix

39,360 pounds of scrap tires



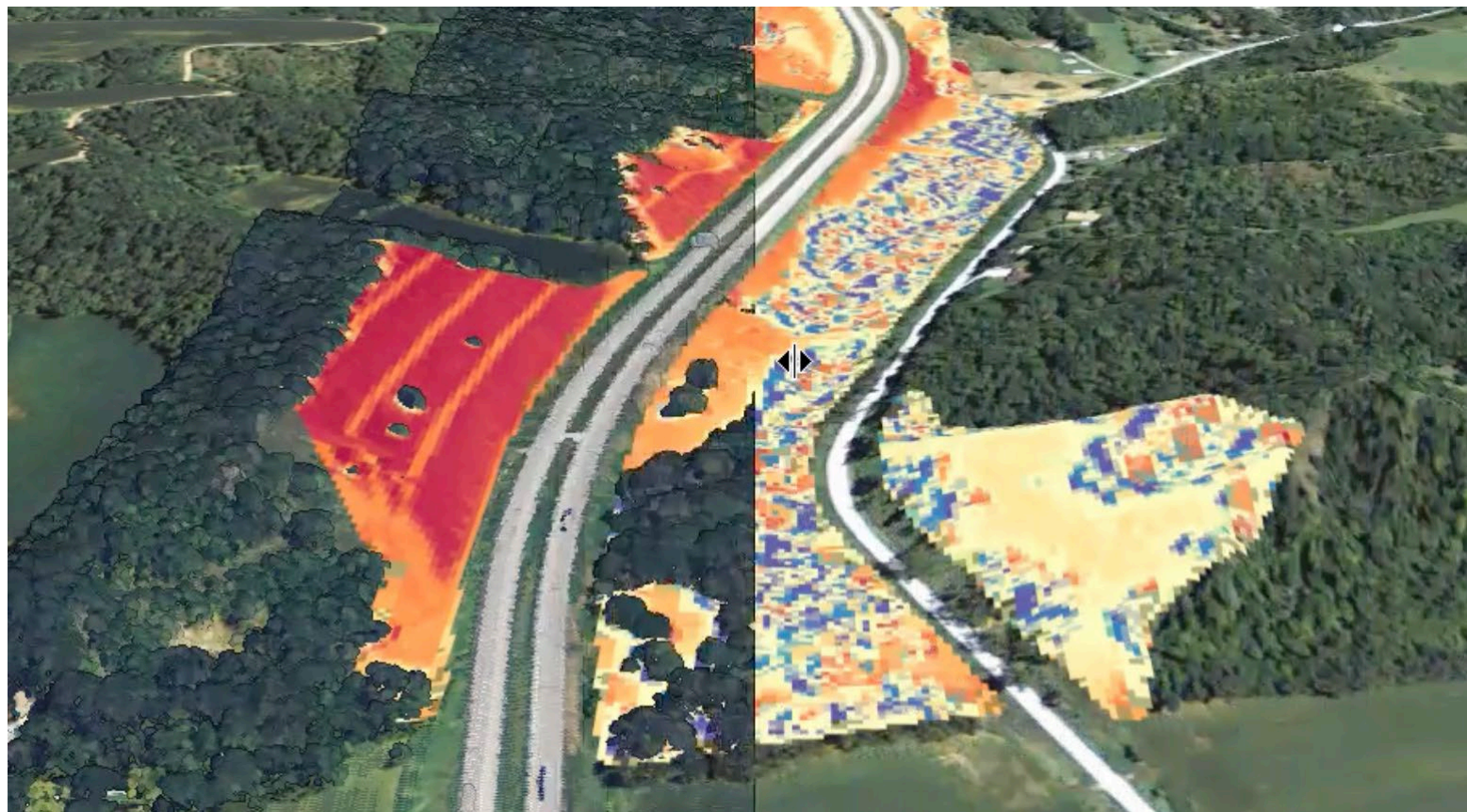


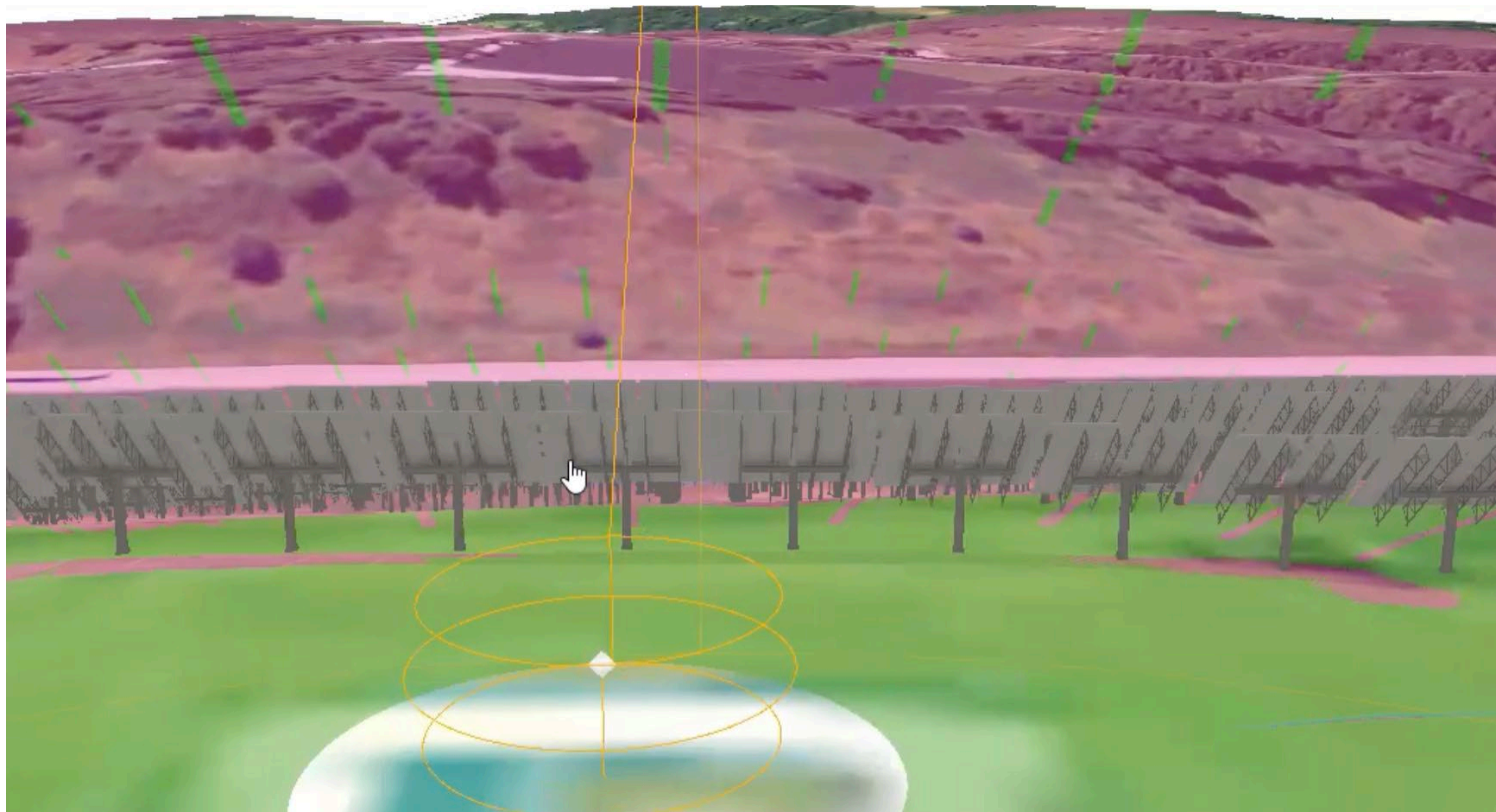
Right-of-Way Solar

- 1 MW DC on 4 acres – 2,600 solar panels
- Online 2/2020 → Georgia Power Southern Company project, power to grid
- 1st pollinator-friendly ROW solar in U.S.
- 2021 Right-of-way solar mapping tool:
The Ray & ESRI













EV Charging



- First public PV4EV in the Southeast U.S.
- 175kW \rightarrow 350kW
- Interstate EV charging gap – connects Atlanta & Montgomery



The Smart Ray – CV & AV Ready

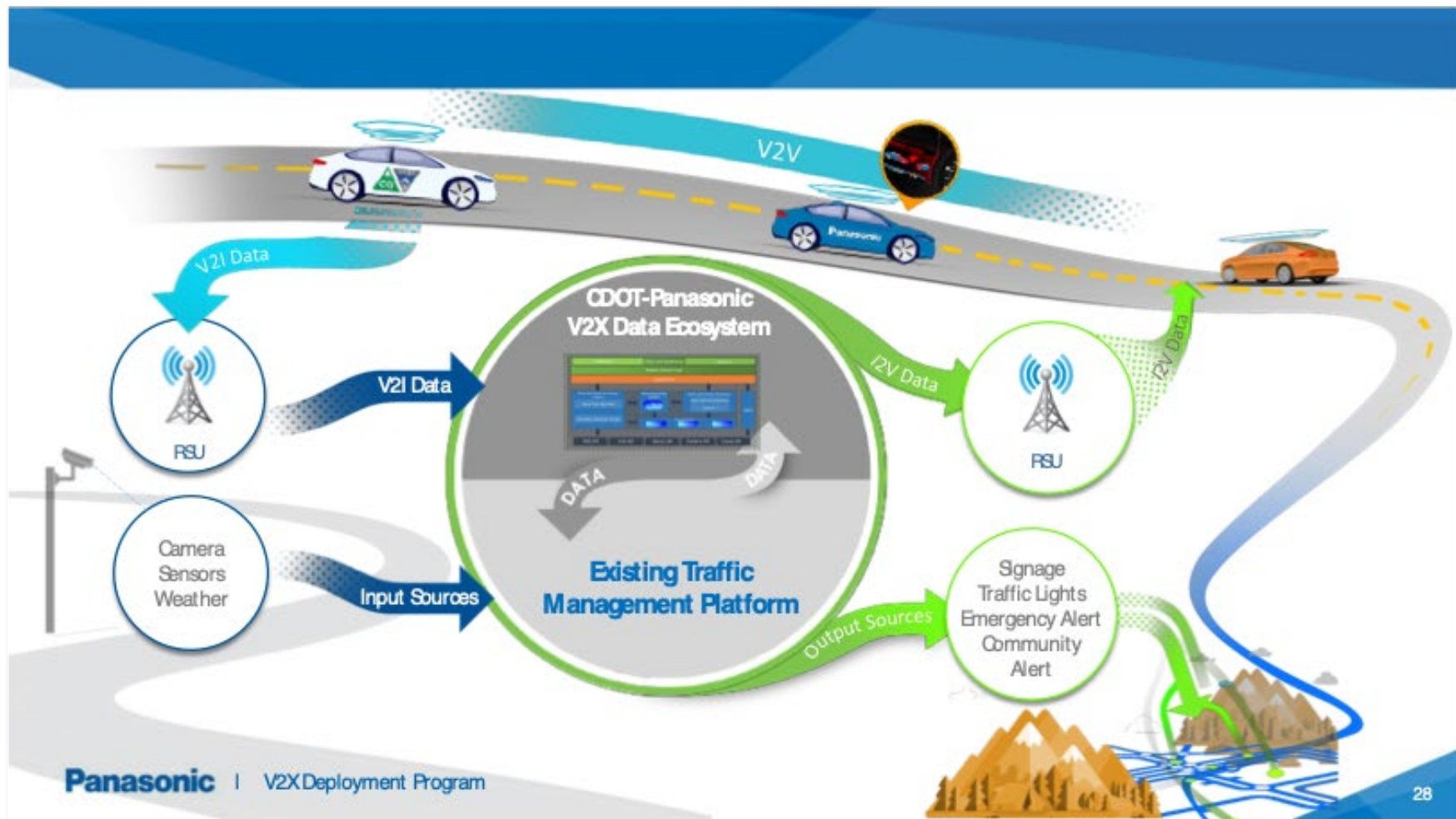
- Autonomous Vehicle project partners:

3M + Georgia DOT + The Ray

- Connected Vehicle project partners:

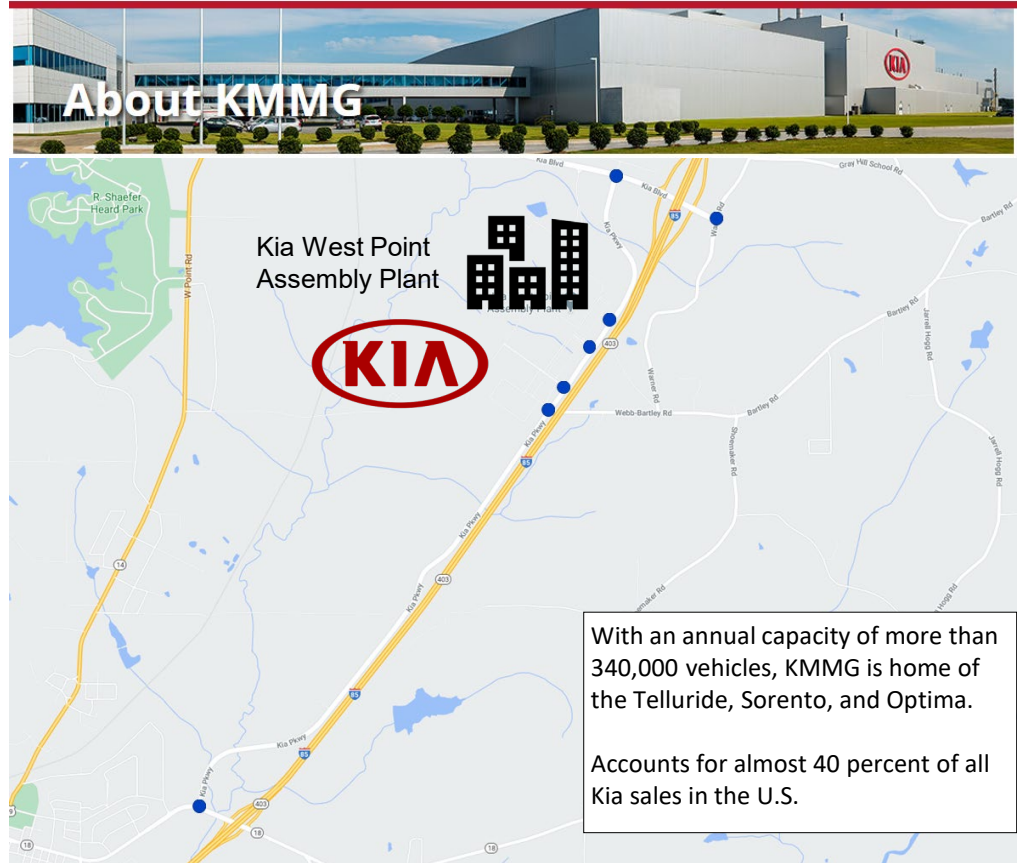
Panasonic + Georgia DOT + freight + The Ray

***Goal: Hardware & software to enable
the future of freight***



New Project Overview & Use Cases

- + **Expand deployment with Connected Intersection capabilities at Exits 2 and 6:**
 - + Freight Signal Priority
- + **Collaborate with HATCI / Kia on equipping vehicles for V2X use cases**
 - + Kia executive fleet
 - + Kia freight partners
 - + Other vehicle types



1

1. Roadside Equipment

Connects to the utility grid and distributes power to the roadway

3. Receiver Unit on Vehicles

Receives power from the roadbed coils to recharge the vehicle battery.

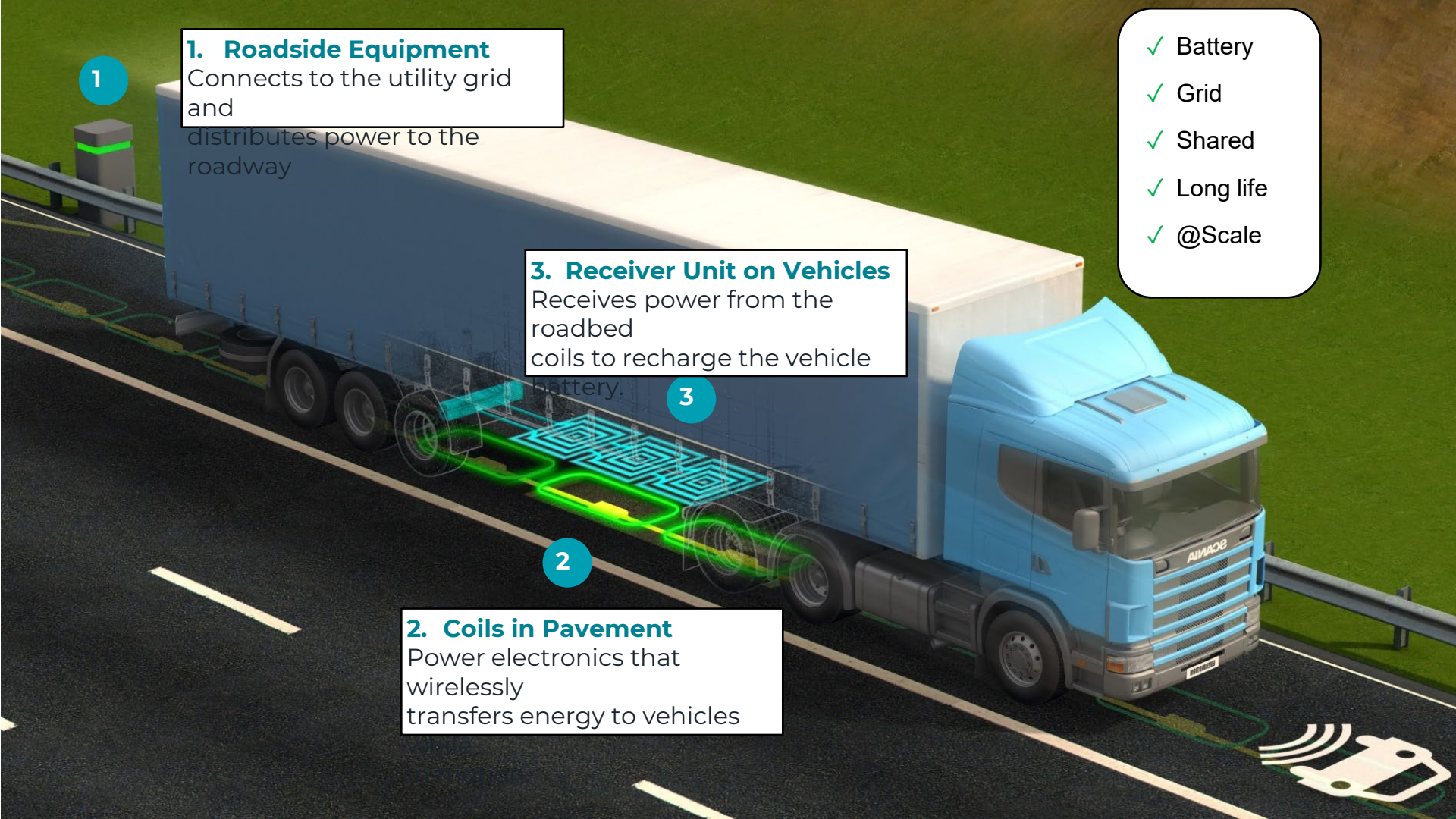
3

2

2. Coils in Pavement

Power electronics that wirelessly transfers energy to vehicles

- ✓ Battery
- ✓ Grid
- ✓ Shared
- ✓ Long life
- ✓ @Scale





Charging So Seamless You Won't Know You're Using It

Zero Transportation Emissions

For all vehicle classes

Autonomous and electric fleets are a reality

Renewable energy
optimized for charging

Long-haul trucking
is a reality

Safe and Reliable

Roadway Electrification and Networked Infrastructure

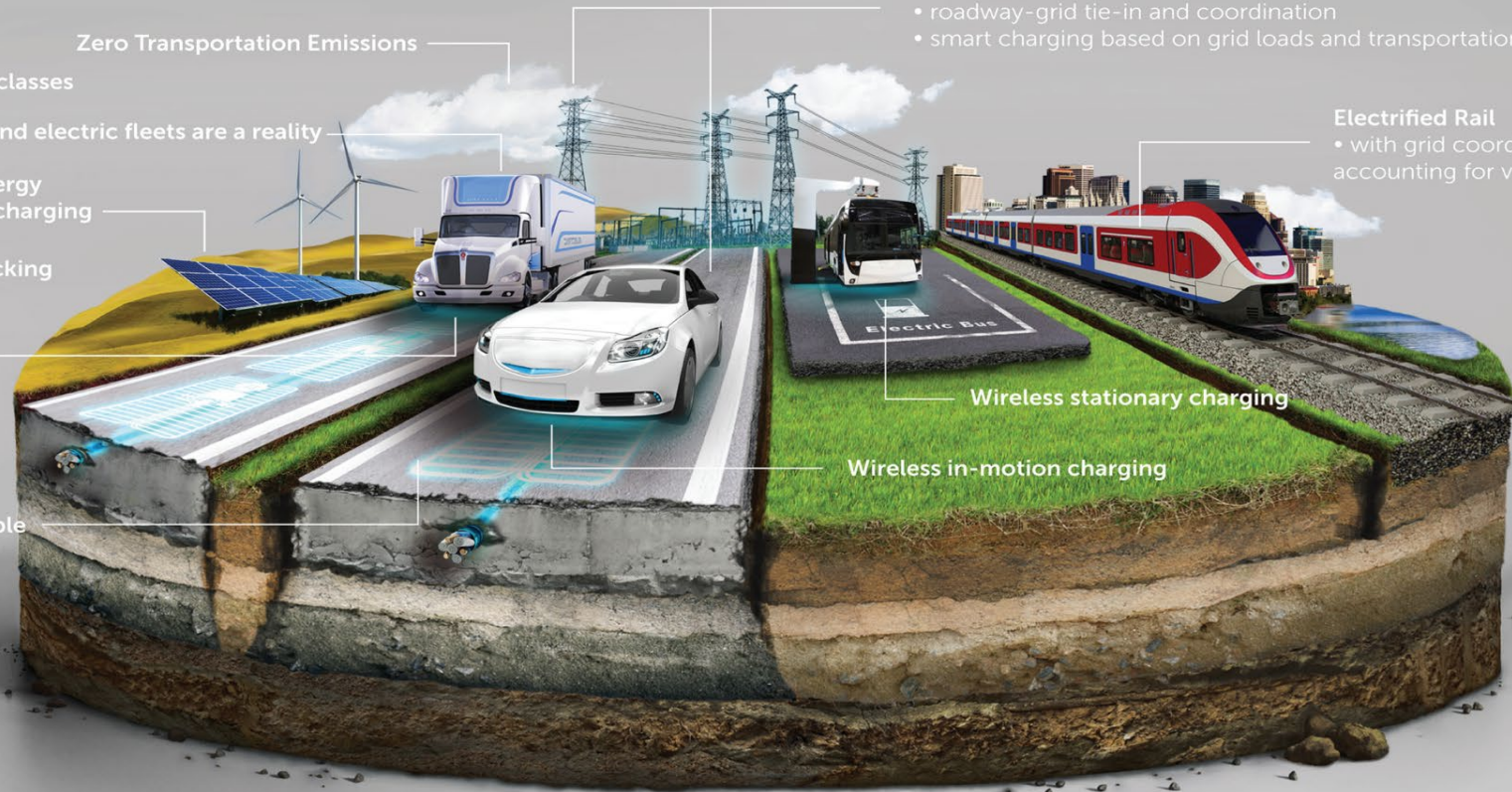
- roadway-grid tie-in and coordination
- smart charging based on grid loads and transportation needs

Electrified Rail

- with grid coordination
accounting for voltage spikes

Wireless stationary charging

Wireless in-motion charging



Projects Leading to Pilots

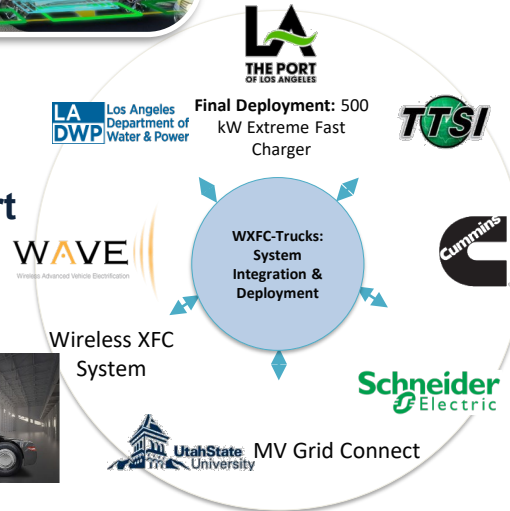
Smart Charging Management in Salt Lake City



Megawatt Wireless Charging in Seattle & Portland

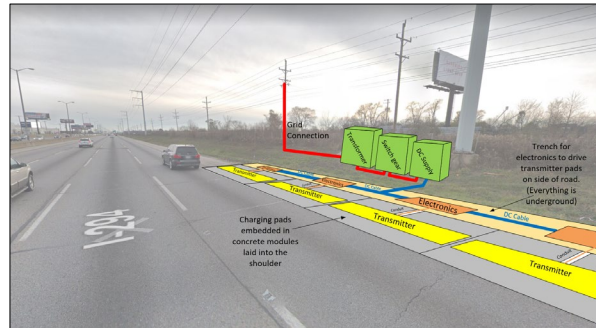
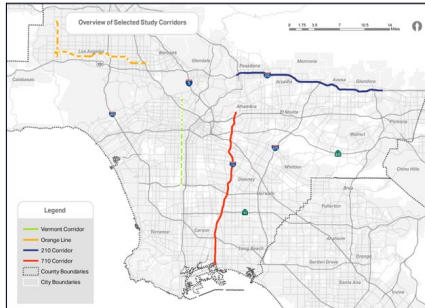
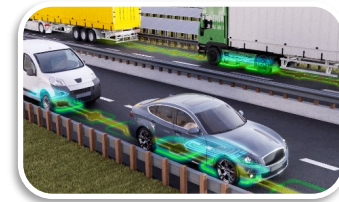


Wireless Extreme Fast Charging at Port of Los Angeles

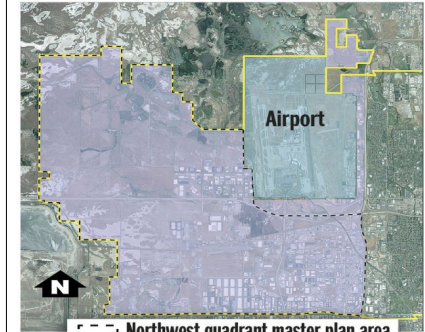


Developing Pilot Projects

- Salt Lake City, UT – Inland Port
- Austin, TX – CapMetro, Hwy 130
- Dallas, TX – DFW, Mobility Innovation Zone
- Indianapolis, IN – IndyGo, I-70
- Orlando, FL – Central Florida Expressway
- Lenexa, KS – Integrated Roadways/Kiewit
- Additional in Los Angeles, Detroit, Atlanta, San Diego, Denver, Chicago, Ohio



Utah Inland Port Authority boundaries



- Northwest quadrant master plan area
22,750 acres, 32% of land within city
- Inland port bill boundary
24,540 acres, 34% of land within city
- Salt Lake City boundary
71,570 acres

SOURCE: Salt Lake City

DESERET NEWS GRAPHIC

Project Partners



Technology Partners



Research Partners



Webber Energy Group

College of Environment + Design
UNIVERSITY OF GEORGIA



RESILIENT
ANALYTICS



Contact:

Allie Kelly, Executive Director
allie@theray.org

Laura Rogers, Deputy Director
laura@theray.org

Facebook / Twitter / Insta / LIn:
@TheRayHighway
#RideTheRay
#DriveTheFuture