



COMMUNITY CONVERSATION: TRANSPORTATION/SMART GROWTH & CLIMATE CHANGE 6/29/23

TCAG and Portsmouth Smart Growth

Community Conversation: Transportation/Smart Growth and Climate Change

PORTSMOUTH
transportation & climate action group

Speakers

- ❖ Welcome: William Lyons (PCA/TCAG), Emily Chadwick (PSG)
- ❖ Overview and Structure of Meeting: William Lyons
- ❖ Update on Portsmouth Climate Action Plan: Peter Britz (City of Portsmouth)
- ❖ Topic 1 Shared Mobility: William Lyons
- ❖ Topic 2 Biking and Walking: Matt Glenn (TCAG/SABR)
- ❖ Electric Vehicles: Tom Morgan (PSG)
- ❖ Land Use/Transportation: Emily Chadwick

Overview

- ❖ First in series of Community Conversations to provide input for Portsmouth Climate Action Plan (CAP)
- ❖ Supports Climate Ambassadors Program
- ❖ Organized by Portsmouth Climate Action, Portsmouth Transportation Climate Action Group, Portsmouth Smart Growth

Purpose & Agenda

- ❖ Develop climate-friendly transportation and smart growth strategies for the Portsmouth Climate Action Plan (CAP)
- ❖ Input to City and CAP consultant
- ❖ Develop “community of practice” to support CAP implementation

Agenda:

- ❖ Topic Overviews
- ❖ Breakout Discussions
- ❖ Groups Report Back
- ❖ Next Steps

Transportation & GHG emissions

- ❖ Transportation sector is a major source (20-30+%) of GHG emissions in Portsmouth, in the U.S. and world-wide
- ❖ Transportation emissions can be reduced by:
 - ❖ reducing trips and vehicle miles by single occupant fossil fuel burning personal vehicles
 - ❖ Shifting to lower carbon modes (walking, biking, shared mobility/public transit)
 - ❖ Eliminating trips - remote work, on-line shopping, demand management (parking charges)
 - ❖ Shift to EVs (cars, trucks, or e-bikes).
 - ❖ Land use/smart growth

Principles: Climate Friendly Transportation

1. Goal: reduce transport sector GHG emissions
2. Sustainability
 - Balance Environment, Economy, Equity (3 Es)
 - Focus on Co-benefits
3. Systems approach
 - Improve multimodal connectivity
 - Focus on performance of the system
4. Public engagement and political will for implementation

Transportation



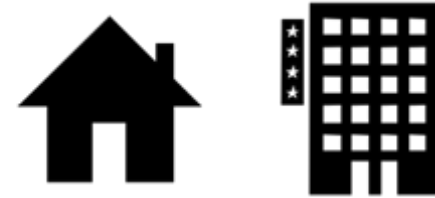
**CAP - GHG
Reductions**

Smart Growth

A BALANCED APPROACH TO TRANSPORTATION GHG REDUCTIONS FOR THE CAP

Community Engagement

Land Use



Reduce travel distance between home and work, shopping, dining, etc.; align low-carbon mobility and development

Electric Vehicles



Replace fossil fuel cars and trucks with battery electric vehicles

Bike & Pedestrian



Safe paths for bikes, e-bikes and pedestrians; promote human powered transport

Shared Mobility



Expand bus routes; promote ride sharing; culture shift

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Shared Mobility/Public Transit

OVERVIEW & CONTEXT

- **Can shared mobility/public transit significantly reduce transport GHG?**
 - How can we increase from current 1.7% public transit mode share?
 - Funding challenges – NH 49th in state support for operations
- **Can innovative Shared Mobility attract riders, reduce car trips, GHG?**
 - Fixed or flexible routes and scheduling (microtransit)
 - Public-private partnership (developers, tourist industry, operators)
 - Single platform: seamless app for routing, scheduling, fare payment
- **How to improve connectivity?**
 - Bus, first mile/last mile, bike/pedestrian, micromobility, shared mobility?
 - Connecting COAST, UNH Wildcat, C&J?

SHARED MOBILITY

BEST PRACTICES - SAVANNAH GEORGIA "DOT"



fare free
VISITOR TRANSPORTATION
DOWNTOWN SAVANNAH

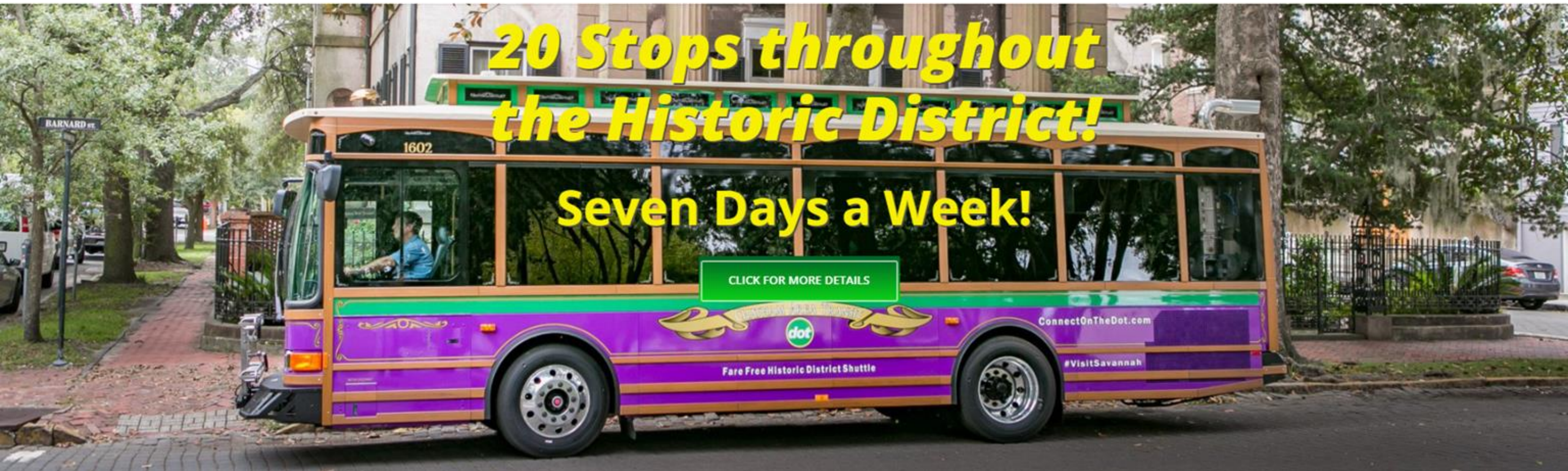
HOME

ROUTES & SCHEDULES

RIDER TOOLS

PLAN YOUR VISIT

ABOUT US



Source: Savannah Mobility Management, Inc. connectonthedot.com

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Evolving Approaches: Mobility as a Service (MaaS)



MyRide by GMT

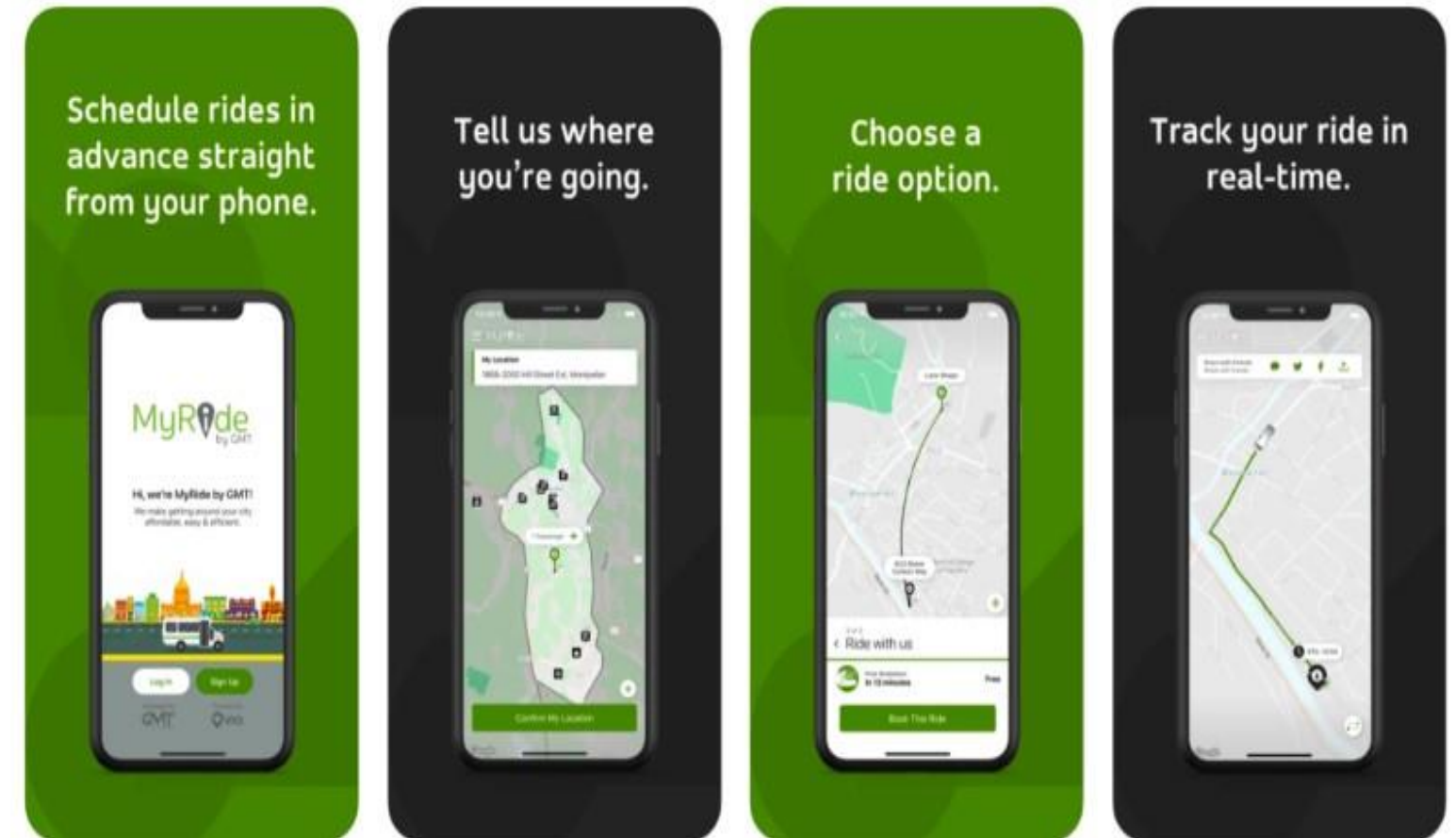


Introducing *MyRide by GMT*

MyRide by GMT is a new flexible-schedule, flexible-route service in Montpelier. Operated by GMT, *MyRide* features technology-enabled vehicles that provide curb-to-curb service, taking you when and where you need to go.

Montpelier, VT

<https://ridegmt.com/myride/>



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SHARED MOBILITY: Evolution for Portsmouth?

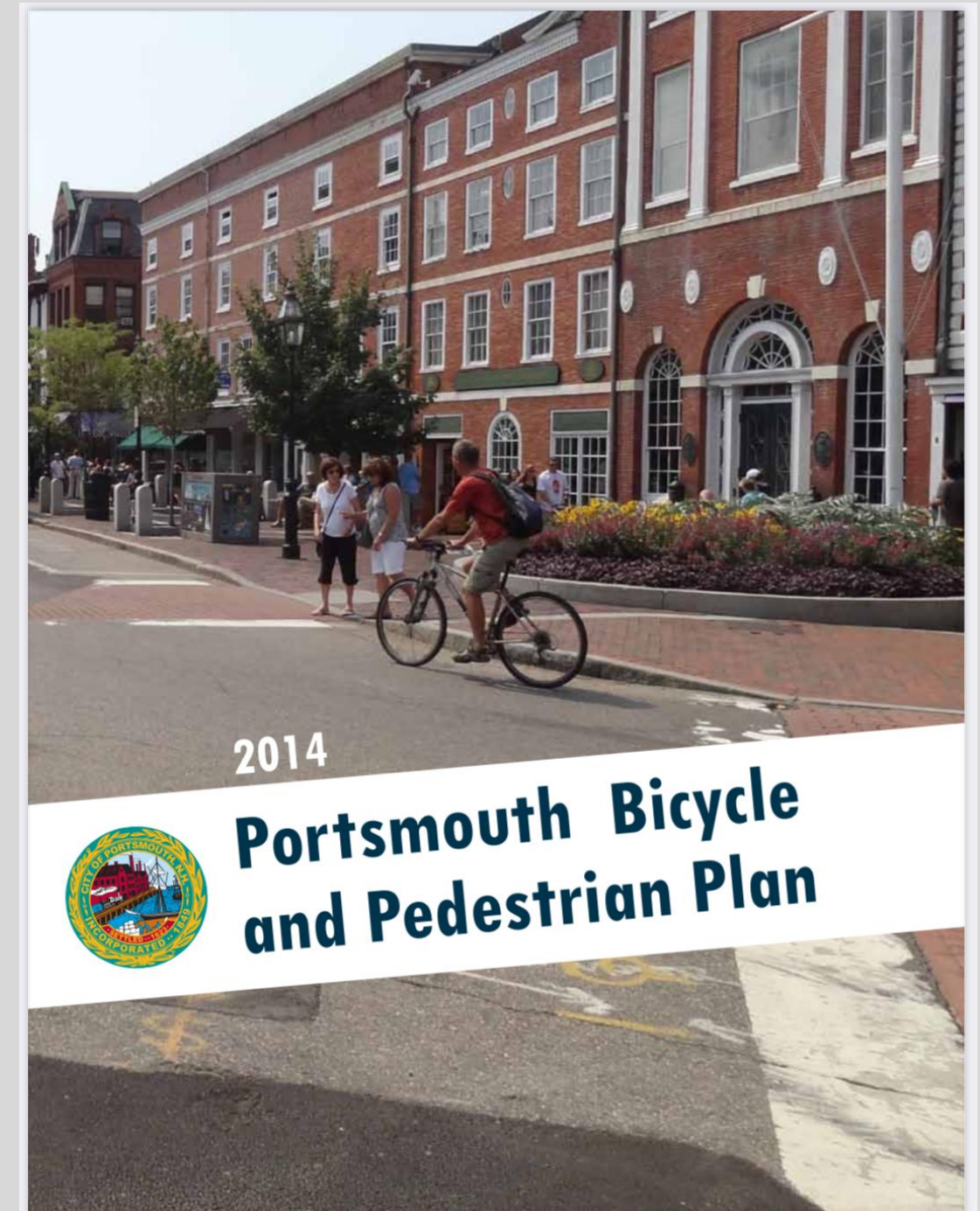
- **Climate focus: how to build support for attractive options to reduce car trips, VMT, GHG?**
- **Explore partnerships for low carbon transportation:**
 - Bus operators (COAST, UNH Wildcat, C&J)
 - Private partners: developers, schools, tourist industry, other employers
 - Align with improved first mile-last mile connectivity
 - Focus on priority corridors, future development, affordable housing
- **Downtown Mobility Hub:** connecting all modes, seamless connectivity
- **Sustainable Mobility Plan:** multimodal vision -- align with regional plans (RPC)
- **Possible expanded circular loop?**
 - Fixed or flexible scheduling and routing - complement existing bus service
 - Direct links: historic district, tourism, parking, jobs, housing, parking
 - **"Proof of concept" pilot** – access new federal programs (including climate focus)

Bicycle and Pedestrian

- Portsmouth is a relatively compact city in which many people live within easy walking or biking distance to jobs, shopping, and recreation- in fact, Portsmouth has been named “most walkable in the state”
- According to the 2014 Bicycle and Pedestrian Plan, 5.7% of commutes were on foot and 2.4% were by bicycle, motorcycle or taxi- well above the national average but with much room for growth
- A [nationwide survey](#) from the National Institute for Transportation and Communities found that a whopping two-thirds of U.S. residents would be more likely to bike if they were separated from cars by a physical barrier

Existing policies and plans that can be leveraged include:

- Walk Friendly Community Policy, Bike Friendly Community Policy (2013)
- [Bicycle and Pedestrian Plan](#) (2014) and Update (2018)
- [Blue Ribbon Committee on Transportation Policy Report to the City Council](#) (2013)
- [Complete Streets Policy](#) (2013)
- [Portsmouth 2025 Master Plan](#)



Bicycle Improvements



SPOT IMPROVEMENTS		PROPOSED FACILITIES		EXISTING FACILITIES	
Keep Gate Open and Clear for Ped and Bike Access	Intersection Geometry Improvement	Shared-Use	Bike Lane	Shared-Street	Shared-Use
Crossing Improvements	Signal Improvements	Sidepath, 1-Side	Four Foot Bike Lane	Bike-Ped Only Street	Bike Lane
		Sidepath, 2-Sides	Climbing Lane	Bike	Shared-Lane Marking
		Cycle Track	Contraflow Bike Lane	Signed Route	
		Buffered Bike Lane			# Project ID

Pedestrian Improvements



SPOT IMPROVEMENTS		PROPOSED FACILITIES		EXISTING FACILITIES	
Keep Gate Open and Clear for Ped and Bike Access	Curb Extensions	Shared-Use Path	Widen Sidewalk	Shared-Use Path	Shared-Use Path
Add Crosswalks & Curb Ramps	Intersection Geometry Improvement	Sidepath, 1-Side	Shared Street	Walks	
Bus Stop Improvements	Signal Improvements	Sidepath, 2-Sides	Ped/Bike-Only Street		
Crossing Improvements	Trailhead	Add Sidewalk 2-Sides	Add Ped Scale Lighting		
		Add Sidewalk 1-Side	Access Management		
		Reconstruct Sidewalk			# Project ID

Prioritization Criteria

Safety

Connectivity

Equity

Feasibility

Capital Improvement Plan

Lifecycle Cost

From 2018 Update to the Bicycle and Pedestrian Plan

Non-Infrastructure Recommendations

- The 5 Es
 - Engineering
 - Education
 - Encouragement
 - Enforcement
 - Evaluation

Safe Routes to School
Bike Friendly Business Program
Volunteer Snow Clearance
Speed Feedback Signs
Mode Share Goals
Law Enforcement Education
Walk to Work Days

More Portsmouth Context:

- The 2014 Bicycle and Pedestrian Plan was updated only once in 2018, despite recommending annual reporting
- Projects are not ranked by ability to reduce greenhouse gas emissions by enabling a mode shift
- We have a Parking and Traffic Safety committee, but no pedestrian and bicycle advisory committee like many other cities
- Traffic calming, bike lanes, parking reductions, and any change from the “status quo” will generate controversy
- Much enthusiasm exists, as seen at the recent kids Bike Rodeo and Mayor’s Ride, and by soaring sales of e-bikes, e-scooters, and other forms of non-motorized mobility

Besides GHG reductions, co-benefits of Biking and Walking include:

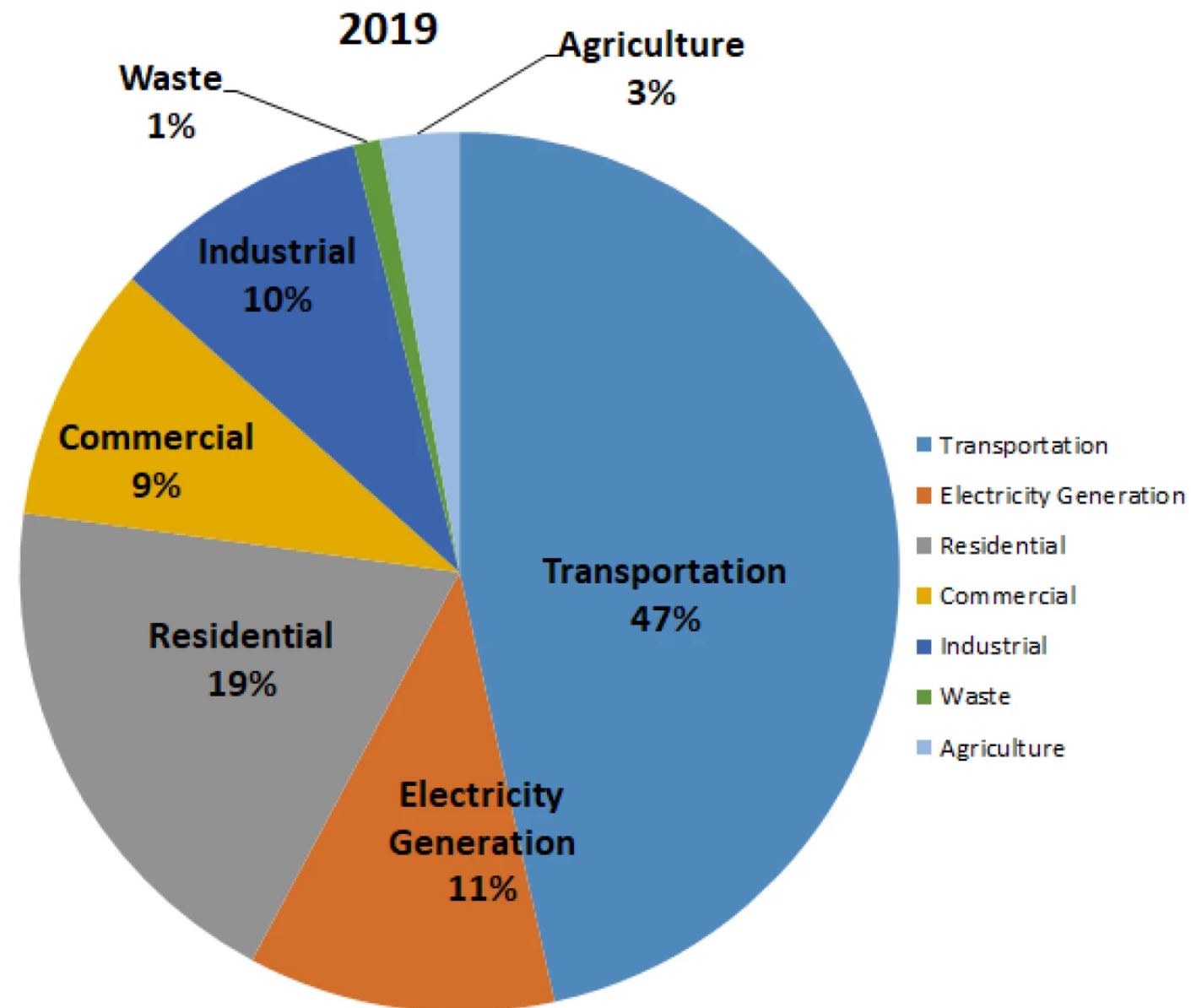
- Affordability
- Healthier lifestyles
- Provides options for those unable to drive
- Increased safety for all road users
- Reduced Traffic congestion
- Supports economic development



Electric Vehicle Fast Chargers



NH Greenhouse Gas Emissions By Sector




Data Source: NH Department of Environmental Services

The transportation sector is responsible for 47% of GHG.

E.P.A. Is Said to Propose Rules Meant to Drive Up Electric Car Sales Tenfold

In what would be the nation's most ambitious climate regulation, the proposal is designed to ensure that electric cars make up the majority of new U.S. auto sales by 2032.

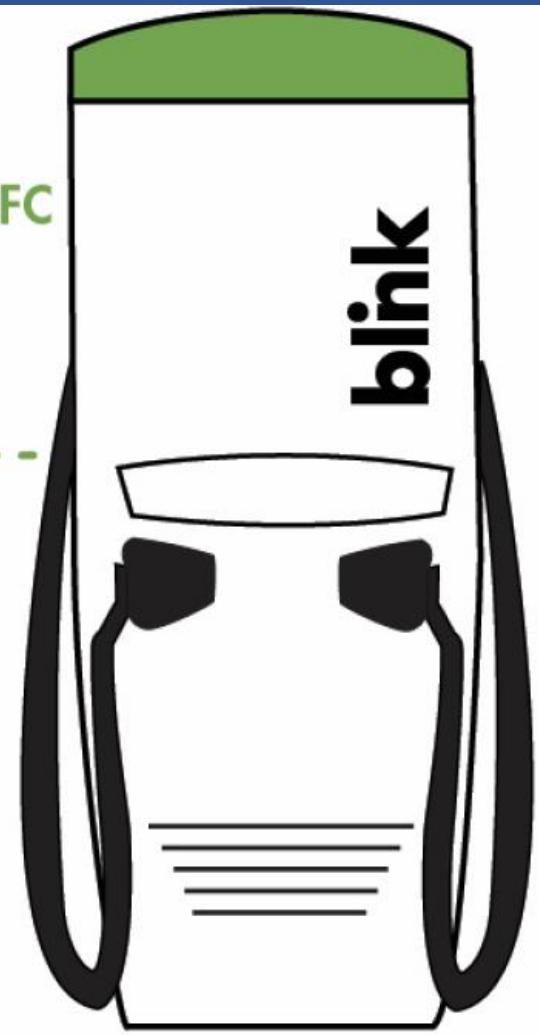
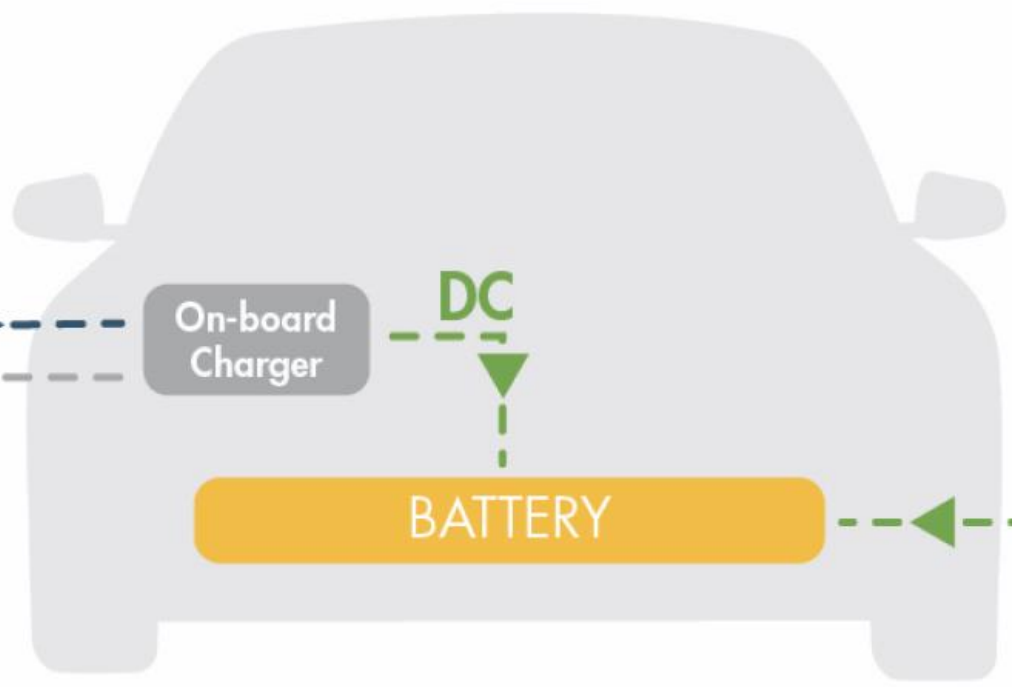
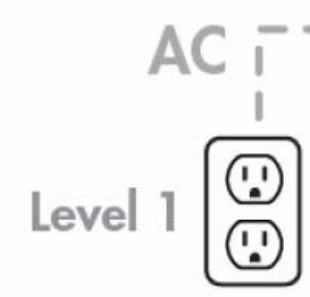
 Give this article



 1.6K



President Biden delivered a speech at a General Motors electric vehicle assembly plant in Detroit in 2021. The new rules would exceed his earlier goal that half the cars sold in the United States be all-electric by 2030. Doug Mills/The New York Times



AC Up to 19.2kW

Up to 350kW **DC**

Level 2
AC

Level 1
AC

On-board
Charger

DC

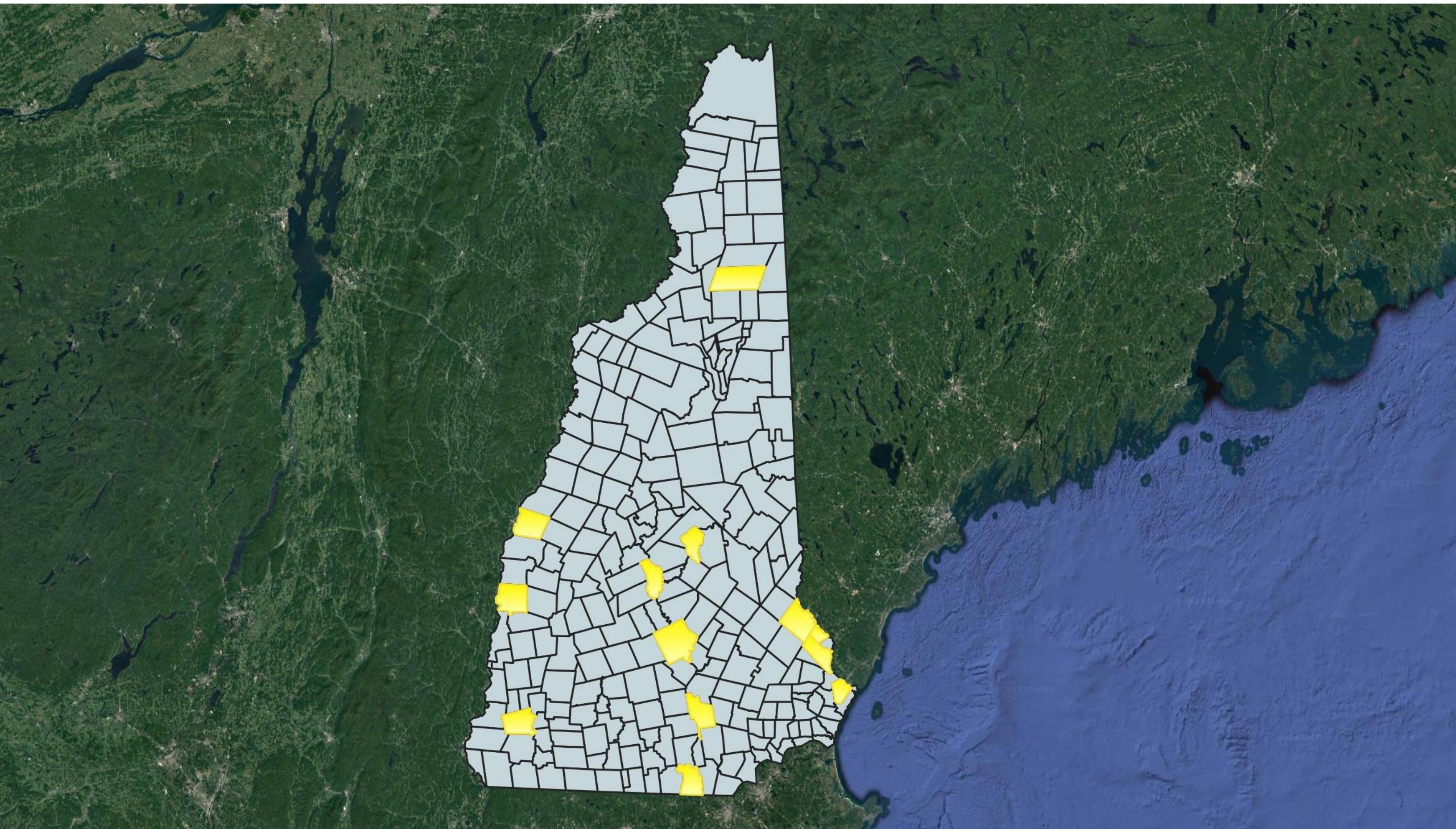
BATTERY

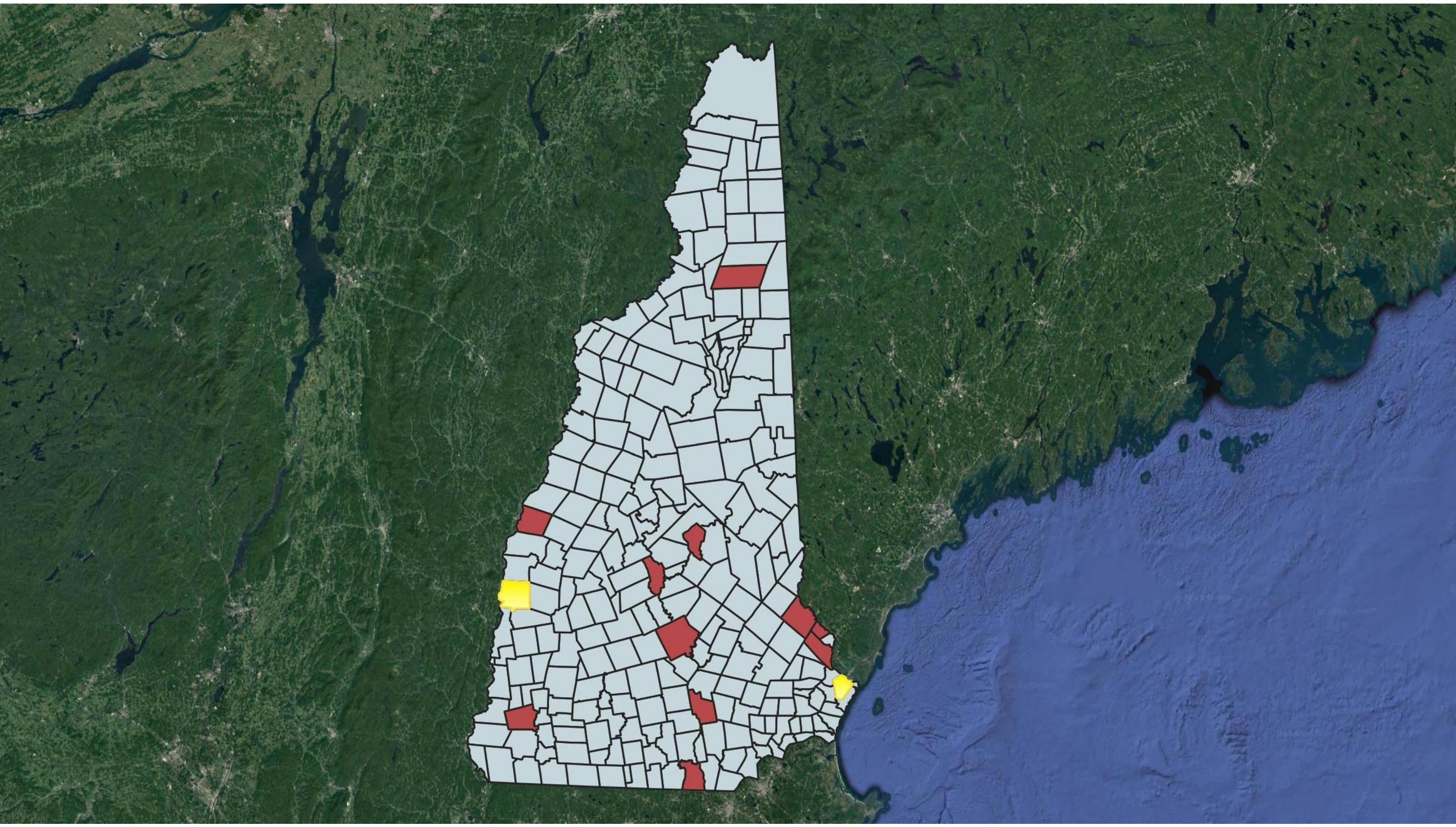
DC

DCFC

blink







Motor Vehicle Service Station

An establishment that sells fuel (including but not limited to gasoline, diesel, natural gas, electricity or hydrogen) to individual vehicles.





190,444 sf
1 space for every 300 sf
635 parking spaces
27% occupied



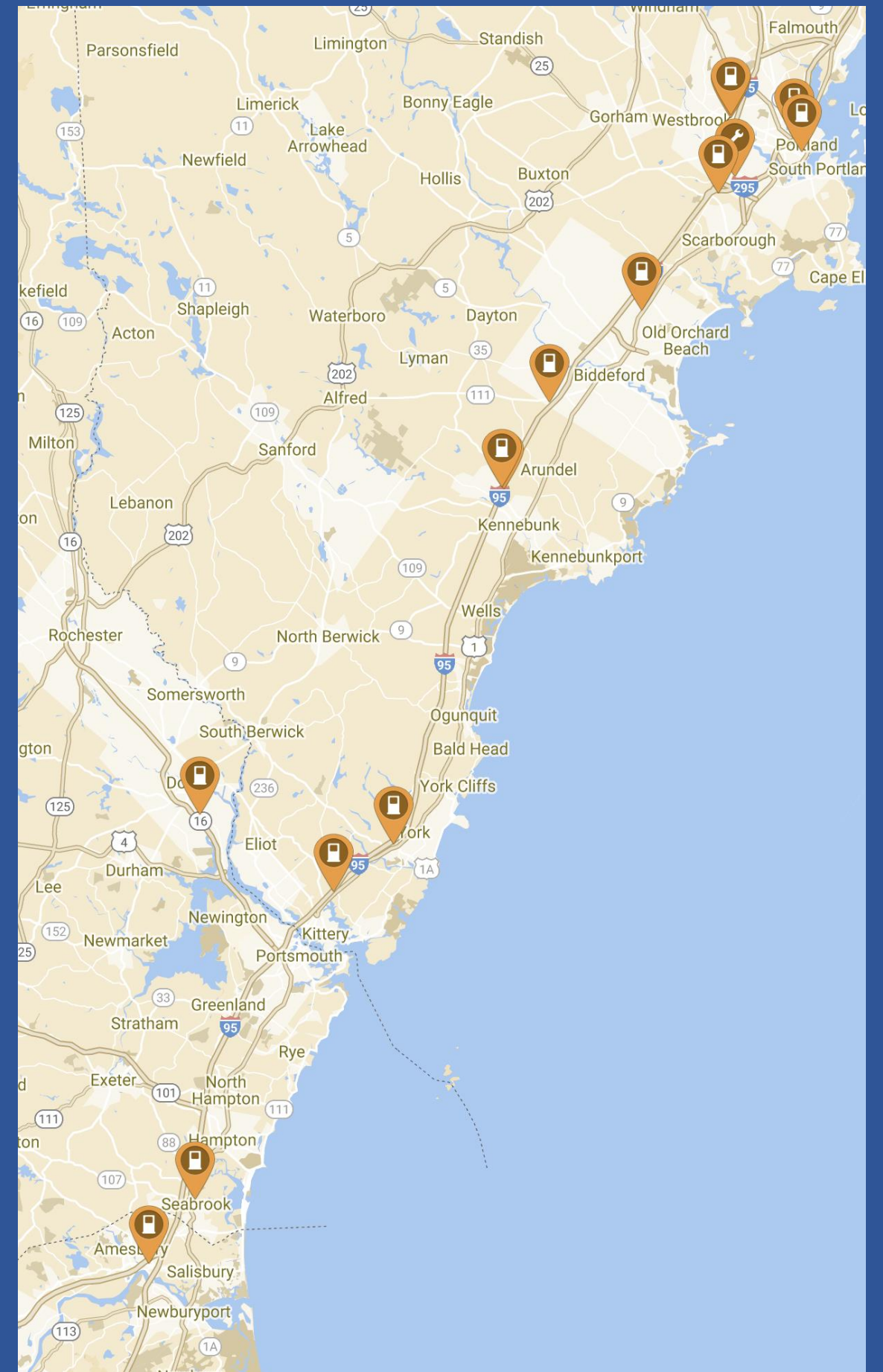
By Degrees: Covering Climate Change

Over 2 million more electric vehicles estimated in New England over next decade

New Hampshire Public Radio | By Sarah Gibson
Published February 28, 2023 at 3:54 PM EST



Dan Tuohy / NHPR



Challenges

- 1) In order to enable a timely transition to electric vehicles, chargers must be ubiquitous.
- 2) EV Equity: 46% of Portsmouth residents rent their homes. Landlords have little incentive to install Level 2 chargers.
- 3) City Hall's regulatory obstacles place our tourist sector at a competitive disadvantage vs. other tourist destinations.

What do you think?



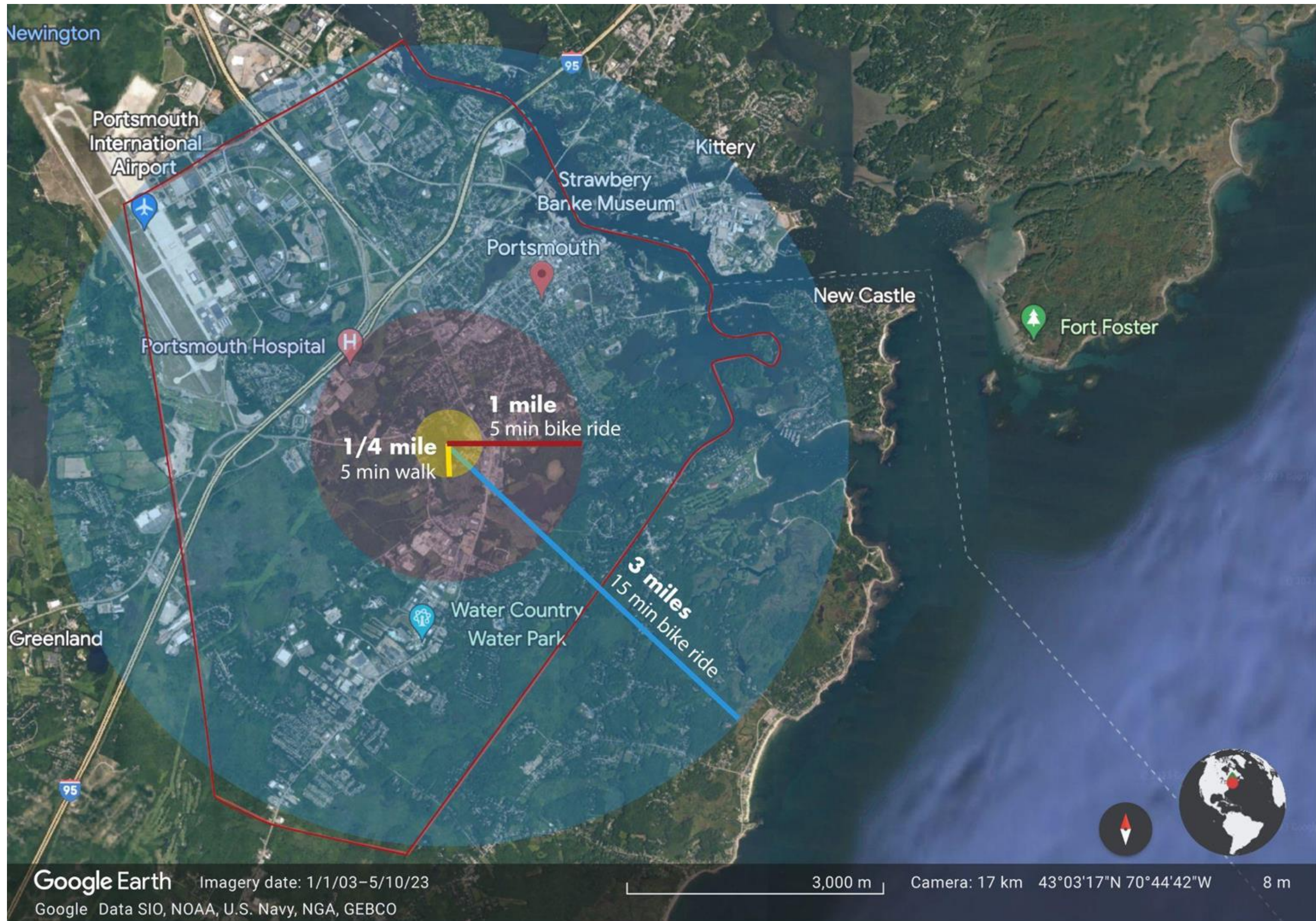
Land Use

The Human Scale City



The Human Scale City

- services and amenities
 - accessibility
 - housing variety
 - mixed use
- lively street presence
 - flexible and temporary uses
 - parking requirements
 - promotion

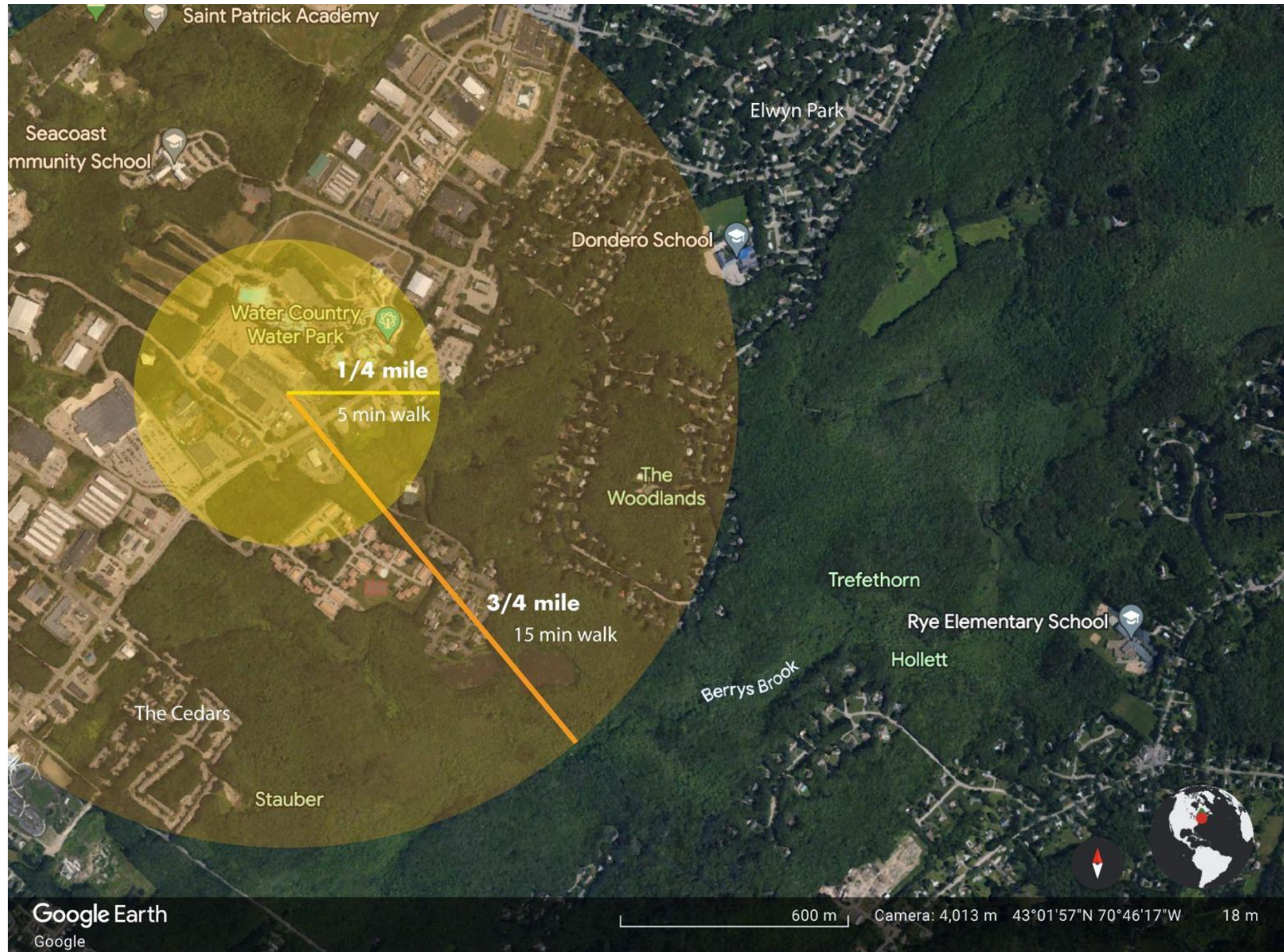




Google Earth

600 m Camera: 4,067 m 43°05'13"N 70°47'06"W 26 m





Saint Patrick Academy

Seacoast Community School

Elwyn Park

Dondero School

Water Country Water Park

1/4 mile

5 min walk

The Woodlands

3/4 mile

15 min walk

Trefethorn

Rye Elementary School

Hollett

Berrys Brook

The Cedars

Stauber

Google Earth
Google

600 m

Camera: 4,013 m 43°01'57"N 70°46'17"W

18 m

DISCUSSION & NEXT STEPS

- Have we identified promising Topics and Strategies? How about:
 - Regional trips originating/ending outside of Portsmouth?
 - Other modes: air, rail, maritime?
- Next steps?
 - Input to BrightAction platform
 - Ongoing support for CAP community engagement
 - Continue to share ideas and build support for CAP going forward
 - Expand involvement of stakeholders and partners
 - Identify funding sources for strategies
 - **Implementation!**
 - How to stay going forward? Follow-ups?
 - A Community of Practice?