



PORTSMOUTH, NEW HAMPSHIRE

TRANSPORTATION AND
CLIMATE ACTION GROUP

TOPICS & STRATEGIES:

INPUT FOR CLIMATE ACTION PLAN

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Portsmouth TCAG ([Transportation and Climate Action Group](#)) is a group of residents committed to sustainable transportation in Portsmouth. TCAG is a subcommittee of Seacoast Climate Action Now (Seacoast CAN). Sustainable transportation provides safe and affordable travel options for all while protecting the environment and supporting a prosperous local economy.

TCAG MEMBERS

Fred Calcinari

Kenneth Ferrer

Matt Glenn

Bill Lyons

Annie Poubeau

Jonathan Sandberg



SHARED MOBILITY AND PUBLIC TRANSIT

SUMMARY

Establishing a new shared mobility or alternative public transit service can provide important opportunities for Portsmouth to expand current bus service to reduce current car trips and vehicle miles, resulting in lower GHG emissions. For example, a high frequency circular loop service would directly connect major city locations (downtown, hotels/restaurants, schools, Pease/C&J, hospital, Route 1 and other development corridors, etc.), attracting new riders. The service could be closely integrated with COAST (e.g., Pease Shuttle Route 42) and Wildcat routes, and improved first and last mile access by walking and biking (as suggested in the TCAG strategy), contributing to a more attractive and competitive menu of connected alternatives to personal vehicles.

The service could be by standard or small EV buses or vans, operating on fixed or flexible routes and schedules, with a state-of-the-practice app platform providing real time schedules, fare payments and seamless connectivity for connected trips that complement COAST, Wildcat, and C&J bus service, reducing within city and regional car trips.

Best practice peers demonstrate how innovative public and private partnerships can fund new services that would be part of a new Portsmouth green transportation brand. In support of the CAP, the new service would attract residents, workers, and visitors to substitute convenient shared mobility for car trips. The service could target new development corridors, allowing developers to market an attractive amenity – convenient car-free trip to jobs, services, and entertainment. The tourism industry could market “car free visits to Portsmouth,” supported by easily accessible shared mobility, walking, and bicycling, which employers and developers could provide as an amenity to workers and residents.

PORTSMOUTH CONTEXT

The most recent available data points to Portsmouth’s dependence on personal vehicles over 80% of commute mode share contrasted to only 1.7% by public transit. The Rockingham Planning Commission (RPC) describes the instability of funding for public transit – NH spends \$0.04 per capita for public transit operations compared to \$0.40 in Maine and \$8.35 in Vermont. Overall transit funding in NH is

one hundredth of the national median. Without state funding, COAST relies on member cities to finance fixed route bus service within Portsmouth and connecting to neighboring towns. The most frequent service is hourly and radial, which provides an unattractive option to households with access to personal vehicles; connections are slow between many major locations within the city, often requiring separate fares and transfers resulting in slow trips.

To reduce vehicle miles traveled and GHG emissions it will be necessary to provide attractive new forms of mobility such as those in place in peer communities, which demonstrate innovative approaches to financing competitive and attractive services.

BEST PRACTICES

- **Savannah GA** provides free transportation around the Historic District as an alternative to driving and parking in the city's congested central areas, attracting visitors who arrive without cars, much as tourists visit other compact historic cities in the U.S. and Europe. "Dot" buses connect most of Savannah's principal points of interest with circular loops and free fares, provided by a public/private 501(c) non-profit partnership created to develop and implement Savannah's Visitor Mobility Plan, with the goal of enhancing the Savannah experience for visitors and residents by reducing traffic and parking congestion. The mobility authority is run by an eleven-member board representing hospitality, tourism, and municipal interests. Service is funded by the city-authorized hotel room fee, which provided \$1 million in 2009.
- **Montpelier VT** MyRide by Green Mountain Transit is a flexible-schedule and route service operating technology-enabled vehicles that provide curb-to-curb service, with a 15-minute pickup window, shared rides, and is app based, Rides are free within Montpelier and \$1 to Berlin. MyRide is operated by GMT in partnership with the Sustainable Montpelier Coalition, City of Montpelier, Vermont Department of Transportation, with support from other community partners.

DISCUSSION

There is great potential to expand Portsmouth's small public transit mode share to adapt best practices through new forms of shared mobility, financed with public

private partnerships. Although current transit use is extremely low, it presents important opportunities for growth relative to peer cities. It is a key challenge to fund attractive and affordable public transit that can compete with the convenience of driving. As described, the new service would attract a broad range of users, both that rely on public transit and those who choose it over personal vehicles, reducing car trips and GHG emissions while providing co-benefits: branding Portsmouth as a car-free visitor destination, providing a valuable amenity for employers and developers to provide to employees and residents. The service could provide car-free trips to employment and services to affordable housing residents, meeting critical equity concerns.

New shared mobility would anticipate important trends – younger populations attracted to new mobility instead of personal vehicles and rapid growth in new technologies from EV buses to app platforms for trip planning. A new loop service would be fully integrated with current and future fixed route bus service, and could be operated by COAST, Wildcat, or private operators under contract, and accessed through state-of-the-art apps and convenient first mile/last mile connections, supported by TCAG’s suggested bike/pedestrian strategies and current the Bike and Pedestrian Plan.

STRATEGIES

- **Gauge interest in a circular/loop service** through community engagement, e.g., in historic and business loops, connecting development corridors, affordable housing, overlay with suggested bike corridors (first mile/last mile access), including expanded use of e-bikes and bike and scooter sharing to incentivize connected public transit trips that replace short and long car trips.
- **Develop a circular loop “proof of concept” project** as an initial step toward a strengthened approach to integrated multimodal transportation within the city. Improve connections to public transit by walking and biking to offer attractive alternatives to reduce car trips and GHG emissions. Consider potential partnerships with COAST, Wildcat, C&J, or other interested private providers, and hospitality and other businesses to operate and finance the project based on best practices.
- **Expand coordination** with the Rockingham Planning Commission, COAST, Wildcat, and C&J to reduce regional trips in and out of Portsmouth by offering more competitive service, incorporating new shared mobility within the city.

- **Include a shared mobility focus as part of CAP community engagement** to consider potential innovative strategies to reduce GHG emissions, partnering with COAST, Wildcat, and C&J on how to expand the market for connected public transit.
- **Complete a transit access study** with community engagement focused on the siting and conditions of public transit. Transit stops should be accessible to disabled persons and connect to sidewalks. Stop locations should be audited for crosswalks and warning signage to improve the visibility and safety of pedestrians using the transit stop.
- **Partnerships:** discuss use of federal funds for shared mobility, including through new programs in the Inflation Reduction Act and Bipartisan Infrastructure Law, working with the RPC and COAST, to identify opportunities within the metro area's Transportation Investment Program (TIP), in combination with the city Capital Budget.
- **A Long-Range Vision:** develop a multimodal plan for sustainable transportation in Portsmouth. Conduct a feasibility study of options, update data on public transit users and non-users, origins/destinations, and preferences; potential interest of partners; integration of new with current public transit, best practices, and potential revenue sources (e.g., hotel room tax, voluntary or required business, employer, or developer fees, i.e., payment in lieu of parking). Explore funding the study through the Unified Planning Work Program with the RPC. Expand coordination with the RPC to align a new Portsmouth sustainable transportation plan, with prominent climate goals, metrics, and targets, with the next update of the Seacoast Long Range Transportation Plan.

BICYCLE AND PEDESTRIAN IMPROVEMENTS

SUMMARY

Improving bicycle and pedestrian facilities provides important opportunities for Portsmouth to reduce current car trips, vehicle miles, and GHG emissions. Bikes are one of the lowest carbon-emitting modes of transportation. Private vehicles emit 0.96 pounds of carbon per passenger mile, buses emit 0.64 pounds and bikes only emit 0.03 pounds – considering the emissions from manufacturing the bike and the food required to “fuel” the rider. Recent research shows there is [significant public interest in mode-switching to bikes](#) if cities have safe infrastructure; some 70 percent of people in the 50 largest metro regions in the U.S. say they would like to ride more, but do not because of concerns about safety in traffic. That is not only recreational riding: a recent McKinsey survey found [32 percent of Americans would prefer to commute by bike](#). Commuting and other forms of “utilitarian” trips (to school, health care, etc.) have the greatest potential to reduce GHG emissions by replacing trips by personal motorized vehicles.

Portsmouth is a relatively compact city in which many people live within easy walking or biking distance to where they work, shop, and recreate, but most people drive because of perceived inconvenience and safety concerns. There needs to be a more concerted effort to complete the 2014 Bike/Ped Plan and its update to fill in the many gaps in the network of routes that are comfortable and convenient for would-be cyclists and pedestrians.

PORTSMOUTH CONTEXT

The most recent available data points to Portsmouth’s dependence on personal vehicles -- over 80% of commute mode share. There are more and more cyclists on the roads of Portsmouth: area bike shops, including those selling e-bikes, have seen

record breaking sales in 2022; there are almost always bikes parked at supermarkets and at bike racks around town; at the high school, there is not enough room to park all the bikes and e-bikes at the bike racks. There is clearly a strong desire among Portsmouth residents to replace car trips with bike trips. This has been demonstrated in numerous City policies and plans over the last decade, particularly the Bicycle and Pedestrian Plan, which provides a complete vision for a non-motorized network with prioritized projects, developed with extensive public engagement and an expert consultant. Existing Committees, Initiatives and Plans that can be leveraged include:

- Walk Friendly Community Policy (2013)
- Bike Friendly Community Policy, 2013
- [Bicycle and Pedestrian Plan](#) (2014 and 2018 Update)
- [Blue Ribbon Comm. on Transportation Policy Report to the City Council](#) (2013)
- [Portsmouth 2025 Master Plan](#)
- Complete Streets Policy
- North End Vision Plan, 2015
- West End Vision Plan, 2015

In addition to reducing GHG emissions, improving Bike/Ped facilities and increased walking and bike would produce other important public benefits, including:

- Affordability: cars represent a very large expense for most households and reducing car-dependence saves money.
- Equity: many are unable to drive due to physical, age, or financial limitations.
- Land use: the many acres of parking lots could be used for more useful things such as housing or recreation.
- Public health: walking and biking improve both physical and mental health.
- Safety: reducing injuries to vulnerable road users.

BEST PRACTICES

Provincetown, MA

Commercial Street, Provincetown's main street, is one-way for cars but two-way for bicycles. Almost every other street is small, forcing drivers to go slow, creating naturally low-stress bikeways. It also helps that development is dense in Provincetown and no highways bisect it. In the summer months, Provincetown's population balloons to nearly 60,000 people, and although many people arrive by car, they also bring their bikes. <https://bikeprovincetown.org/>

Traverse City, MI

Nonprofit [TART Trails](https://elgruponorte.wordpress.com/) maintains a network of multi-use trails, 5.4 miles of which are in Traverse City proper, and has been hosting a bike commuter event for 27 years.

Norte, <https://elgruponorte.wordpress.com/> a bike-centric, youth-focused advocacy organization, has been instrumental in achieving a 473% increase in participation in kids actively transporting themselves in the Grand Traverse region. There are also three bike shops in town and regular workshops where residents can learn about things like winter biking.

As an example for Portsmouth, Traverse City's facilities encourage people to ride in winter months, prioritizing plowing the sidewalks. Residents have the gear to bike year-round. In the summer, tourists flock to Traverse City, taking part in Kayak, Bike & Brew tours and using the bike racks on BATA, the local transit system, to pedal trails further outside of town. According to Winter, Traverse City's downtown, as well as most parks and beaches, are so popular that they're actually more accessible by bike due to limited parking. The city's main east-west corridor, 8th Street, was also redesigned to be more walkable and safer, with lowered speed limits and new bicycle tracks ("a great example of how public investment can be a catalyst for additional private investment.")

Portsmouth could also brand itself as a car-free tourist destination based on improved bike-pedestrian facilities and shared mobility improvements as described in the Shared Mobility topic summary.

DISCUSSION

Portsmouth has been named the [most walkable city in the state](#), and that's in large part due to compact development patterns, at least in the downtown core. According to the 2014 Bicycle and Pedestrian Plan, 5.7% of commutes were on foot and 2.4% were by bicycle, motorcycle, or taxi. There is great potential to expand

those numbers, reducing car trips and GHG emission reductions by also providing co-benefits such as branding Portsmouth as a car-free visitor destination, providing a valuable amenity for employers to provide to employees and developers for residents. Better bike/ped facilities, connecting to shared mobility/transit, and aligned with current and future housing development, could provide critical accessibility for affordable housing residents, with car-free trips to employment and services.

These strategies would anticipate important trends, including younger populations attracted to active transportation and rapid growth in new technologies such as electric assist bikes and scooters and recognition of the economic and environmental advantages of reduced reliance on personal motorized vehicles.

STRATEGIES

- Update the 2014 Bicycle and Pedestrian Plan and include a short list of projects that can provide the greatest potential for reduction of greenhouse gas emissions. Prioritize gaps in the downtown network (e.g., Maplewood and Middle Streets) and high traffic routes that access shopping and jobs (e.g., Woodbury, Route 33, and Lafayette). See map below of priority routes identified in the 2014 Bicycle and Pedestrian Plan.
- Focus a Bicycle and Pedestrian Plan update around what can be done in the short term (two years) at low cost and also around what should be prioritized in the six-year timeframe of the CIP.
- Report on measurable progress each year to the city council.
- Establish a standing pedestrian and bicycle advisory committee, as recommended in the Bicycle and Pedestrian Plan. This committee can assist the City in evaluating and sustaining walking and biking policies and programs. Although the Parking and Traffic Safety Committee serves an important purpose, it does not focus on promoting and prioritizing Bike/Ped use as would be essential for a bike/ped mode shift strategy in the CAP.
- Provide regular metrics around bike ridership to the Parking and Traffic Safety Committee.
- Foster an inclusive biking community through workshops, resources, and events (bike to work and bike to school days, e-bike expos, bicycle rodeos, fix-a-bike workshops, riding in traffic workshops, etc.).

- Provide bicycle safety classes for children and adults, through schools and outside organizations such as SABR.
- Expand bike parking and storage, including covered storage on public and private land. Prioritize schools and shopping centers.
- Expand connections to existing and planned projects like the Hampton Branch Rail Trail and Peverly Hill Roadside path to make easy bike connections to the Community Campus, Borthwick Avenue, West End, Pease, C&J terminal, skate park, etc. Focus especially on unsafe intersections so that bike riders of all abilities feel comfortable
- “Complete neighborhoods” such as the West End where housing is close to restaurants, retail, and jobs should get traffic calming or deprioritization and pedestrian and bicycle enhancements.
- Provide bicycle and pedestrian wayfinding to include travel times to popular destinations, including public transit.
- Use real traffic calming tools to manage traffic and reduce vehicle speeds. Although Portsmouth has successfully deployed flashing speed signs and rapid flashing beacons at crosswalks, there are other state-of-the-practice design tools such as speed tables, bump outs, pinch points, bike boulevards, and raised intersections that do more to force vehicles to slow down to more reasonable speeds. This is critical to making streets safer for people outside of cars, particularly for children, seniors, and other vulnerable populations.
- Improve intersections to be more pedestrian friendly. Reduce crossing distances and ensure that stop lights prioritize pedestrian crossing, convenience, and safety.
- Hire a transportation planner with bike/ped expertise to provide a multimodal complement to the parking director and staff charged with managing the city’s parking. Staff expertise and dedicated time are essential to support a CAP with a strong mode shift component.
- Consider a pilot project as a “proof of concept” for expanded walking and biking, targeting a specific neighborhood based on best practices and robust partnerships, including first mile-last mile connectivity to public transit.
- [Leverage the many federal funding opportunities](#) (typically administered by Rockingham Planning Commission or NHDOT) for Bike/Ped improvements.
- Demonstrate how e-bikes help save time, congestion and money via a campaign, for example, led by city staff and counselors who already own e-bikes.

- Encourage local businesses to run deliveries by cargo e-bikes and local businesses and developers to provide battery charging stations for e-bikes and covered, secure bike shelters.
- Educate e-bike owners about battery recycling programs.



“Network Plan Prioritization” from the 2014 Bicycle and Pedestrian Plan

ELECTRIC VEHICLES

SUMMARY

Widespread adoption of electric vehicles (EV) can contribute substantially to the reduction of greenhouse gasses (GHG) produced by the transport sector. Consumer acceptance of EVs is growing, however there are still considerable obstacles to overcome. These obstacles are driven by concerns about vehicle cost and range and about availability of chargers, whether at home, at work or while on long trips. In spite of that perception, EVs have been shown to have a lower lifetime cost of ownership because they are cheaper to refuel and because they require minimal maintenance. In addition, all EVs on the market can easily meet the 40 miles per day that the average person drives. EVs received a big boost from the Federal government through the 2022 Bipartisan Infrastructure Law, which provides funding for 500,000 charging stations. States and cities are encouraged to use this funding to help build out charging infrastructure within their jurisdictions. In addition, the city can further expand charging by adopting building codes that require accommodations for home chargers in new construction of houses, condominiums, apartment buildings and places of business as well as in public parking facilities.

PORTSMOUTH CONTEXT

Portsmouth depicts itself as a sustainable community. This reflects a demonstrated willingness to adopt climate friendly policies. An RFP seeking a partner that can help create and promulgate a Climate Action Plan (CAP) is currently underway.

Current EV adoption and infrastructure is minimal. For example, there are a limited number of charging stations at downtown parking lots, and none of the fast-charging stations that would be sought after by residents, workers, and visitors. The city council recently approved a zoning change to allow installation of fast chargers on private property.

The city recently sponsored an event to help expose the public to electric cars and bicycles.

Most city vehicles are fossil fuel powered. The COAST bus system has a future to explore battery powered buses, but none yet.

One promising example is the Brick Market building on Penhallow Street, which has thirty chargers in its underground parking garage. It is not known whether this was done because of a city policy.

While the city will likely focus on electrifying its own fleet, it should give equal attention to enacting policies that will foster EV ownership by residents and businesses.

BEST PRACTICES

Marin County, Calif., is considerably larger than Portsmouth and has a higher median household income than our city (\$110,000 vs. \$84,000). However, its CAP is exemplary for the aggressive focus on reducing GHG emissions across all modes of transportation. The lion's share of emissions comes from automobiles, so the county has set a target of converting 45% of personal vehicles to EVs by 2030, in addition to expansion of public transit, improved lanes for bicycles and pedestrians, conversion of city fleet to EVs, reduced commuter miles and others. It estimates that one-third of all GHG emissions in the county are from the transport sector. It also estimates that the 45% adoption of EVs will produce 86% of all the transport sector GHG reductions, as shown below.

In addition, the Marin County CAP puts special emphasis on ensuring that low-income residents can also participate in the adoption of EVs and other transport sector improvements (for example, EV charging stations at multi-family housing, bike lanes in low-income neighborhoods).

OTHER EXAMPLES

The Nashua Regional Planning Commission recently organized a working group to explore electric school buses.

The Wolfeboro Police Department, which recently received a Tesla from an anonymous donor, pledged to collect information to compare the vehicle's performance against traditional cruisers.

In Peterborough, N.H., the Peterborough Energy Committee was successful in bringing charging stations to the downtown area using \$35,000 in Greater

Downtown Tax Incremental Finance (TIF) funds for the installation, operation and maintenance of up to four chargers. The chargers were installed in May 2022. Since the charging stations are relatively slow, visitors spend time in town while their EV is

charging and the downtown businesses benefit from this project as well. This also helps EV owners in the area who don't have the ability to install chargers at their home. Peterborough does not have a CAP in place but their Energy Committee could be a good sounding board when researching charging stations and the pitfalls to avoid (example of Derry, NH, where demand charges were not calculated properly and electric bills were higher than expected, causing the municipality to shut down the free stations for now).

Lebanon, N.H. – The city is purchasing EVs for its municipal fleet and has put forward a proposal to require EV chargers in multi-family housing.

Medford, Mass. climate action plan includes:

- Expand access to electric vehicles. Expand charging stations in city-owned lots. Adopt electric vehicle charging requirements for new development. Pilot on-street EV charging, to be scaled city-wide. Encourage EV charger installations in private lots. Expand staff capacity for sustainable transportation efforts.
- Pilot an income-tiered EV car-share program. Advocate for income-tiered EV incentives and financial incentives for e-bikes. Incentivize transportation network companies to use only EVs by 2030.
- Transition municipal fleets to electric and alternative fuel vehicles. Develop municipal fleet capital transition plan. Use performance-based procurement for contracted fleets. https://www.medfordma.org/wp-content/uploads/2020/04/Medford_CAAP_ExecutiveSummary_Oct1.pdf
- Somerville, Mass. – This plan focuses on **EQUITABLE LOW CARBON MOBILITY** and **RAPID TRANSITION TO ELECTRIC VEHICLES**. The City's two-pronged approach to reducing transportation emissions is to first reduce vehicle miles traveled in the community, and to then electrify the remaining vehicular travel modes combined with access to 100% clean electricity. Providing opportunities for charging at home and at work, when cars sit idle for hours at a time, is an important outcome of this strategy. <https://www.somervillema.gov/departments/programs/somerville-climate-forward>

DISCUSSION

While adoption of EVs will not reduce the traffic on Portsmouth's roads (other than cutting down on trips to the gas station), it will improve quality of life by reducing air pollution emissions (some of which are GHG) and noise currently produced by IC vehicles. For numerous reasons, many residents would be hard pressed to abandon cars entirely as a primary means of transportation. A city campaign to encourage adoption of EVs and to help build the infrastructure to support them promises to achieve substantial GHG reductions while allowing the residents who still need to use a car the flexibility to do so. The CAP should outline substantial investment in promoting and supporting broad adoption of EVs by city departments and residents, including those for whom the cost of a large family EV is out of reach, as well as efforts to foster mode shifts to public transportation and cycling or walking.

STRATEGIES

- Ensure that the forthcoming CAP includes a comprehensive plan for EV adoption, including electric cars, trucks and bicycles
- Revise building codes to accommodate EV charging at homes, multi-family dwellings and workplaces.
- Engage residents in campaigns to help them see how an EV could work for them; start with surveys or a Portsmouth Listens session to draw attention to how to overcome current obstacles
- Aggressively pursue all available federal funding for infrastructure and expertise, including through recent Bipartisan Infrastructure Law and Inflation Reduction Act, coordinating with the New Hampshire DOT and the Rockingham Planning Commission
- Set targets for converting the fleet of city vehicles, including school buses and public transportation (collaborating with regional operators), from IC to EV or low-emission vehicles
- Expand incorporation of public fast chargers into city parking garages and lots
- Explore future potential for operators of on-demand ride services using EV fleets (see Somerville, Mass. plan)
- Identify ways to incentivize developers to include charging stations
- Where electric car charging infrastructure is being installed, combined e-car and e-bike charging units should be available.

- Research Curbside EV charging and workplace EV charging; work with local businesses to reduce the carbon footprint of their company and of their employees.

LONG RANGE VISION

Electric vehicles are only as clean as the utility that supplies power to the charging stations. As transportation converts to non-fossil fuel burning vehicles, investments are also needed in renewable electrical generation, for example, wind turbines and solar panels.

This paper has focused on Battery Electric Vehicles (BEV), which have become practical thanks to advances in battery technology. Another type is Fuel Cell Electric Vehicles (FCEV). They carry hydrogen fuel instead of rechargeable batteries, and the hydrogen is turned into electricity using a fuel cell. When hydrogen is consumed to generate power, it emits only water vapor and zero greenhouse gases. Some automakers have conducted small trials of FCEVs, but those trials have not been followed by broader production and distribution. There are a number of reasons. One is that hydrogen refueling stations are very scarce. Another is that there is no large-scale production of clean hydrogen. Hydrogen can be produced using electricity from solar panels, but we are still a few years away from significant output from this method. When all this comes together FCEVs will be superior to BEVs because there would be no GHG emissions in the production or consumption of energy, and they would be quicker to refuel.

As efficient as EVs are, the use of private automobiles as a primary mode of transportation is still energy intensive. The more we can shift our cities and towns to public transportation and to neighborhoods where walking and biking are more practical, the lower our overall energy footprint will be.

LAND USE AND TRANSPORTATION

SUMMARY

There is an inextricable link between land use patterns and how we go about moving through our towns and cities. It impacts how and what we build, and lays bare, for all to see, a community's priorities on a large swath of subjects. Our approach to land use and its effect on transportation choices can have an oversized influence on air and water quality, climate change, and preservation of the natural environment in our communities. Private vehicles are the largest contributor to transport-sector greenhouse gas emissions overall, and they emit far more emissions per passenger mile than buses, light rail, or bikes, even when accounting for infrastructure construction and maintenance. Land use policies centered around private vehicle design have only served to exacerbate this problem.

As a way of addressing these issues, through the process of developing its Climate Action Plan (CAP), Portsmouth must look towards goals that increase multimodal accessibility throughout its existing neighborhoods and promote transit-oriented development so that walkable, bikeable, and safe access to services are viable options for all as they choose how to travel through our city. Although these considerations are complex, Portsmouth is well situated to move forward in this regard with a number of initiatives, plans and policies already in place that can be built upon or brought into increased prominence to achieve these goals, such as the current [2025 Master Plan](#), [Bike and Ped Plan](#), report of the [Mayor's Blue Ribbon Committee on Transportation Policy](#), and Complete Streets pledge .

BEST PRACTICES

EQUITABLE ACCESS (TRANSPORTATION, HEALTH, SAFETY, EDUCATION AND RECREATION)

Equitable access ensures services and facilities are reachable to all persons, regardless of social, economic background.

Peer communities:

- Richmond, California: Development of access and mobility criteria for capital improvement projects and new development to enhance physical access to community facilities, schools, parks, shoreline open spaces, historical destinations, commercial and employment centers, and transit hubs. The

criteria should address access by walking, bicycling and public transit as well as vehicular access. ([APA Health & Equity Toolkit](#))

- Portland, Maine: The Cities of Portland and South Portland support the Community Transportation Leadership Program with the goals of increasing knowledge and tools needed for meaningful participation in transportation planning and decision making. (land tie back) ([CAP Portland ME](#))

COMPLETE NEIGHBORHOODS & PRIORITY CORRIDORS

A “complete neighborhood” is one where access to housing, jobs, education, essential needs, services, and amenities are all organized around the human scale.

Peer communities:

- Minneapolis MN: Through its Climate Action Plan it identified a large number of planning and land use strategies which include but are not limited to identifying walkability and transit gaps, flexibility in zoning regulations, focusing growth on transit corridors, expanding tree canopy, and increasing dedicated transit construction funding streams.
- Portland, Maine: In the Portland CAP, the city dedicates itself to proactively push for complete neighborhood and transit-oriented development initiatives by focusing on new developments that have potential to become compact mixed-use, pedestrian oriented locations, which can connect to the rest of the city through multi-modal transportation.

LAND DEVELOPMENT INCENTIVES

Non-regulatory and regulatory tools that could be used to engage private sector land developers to contribute toward increasing walkability, public transit, transportation mode shift, density, and services in or around their developments.

Peer communities:

- In-lieu of fees - Lake Forest, Ill. Implemented in-lieu of parking fees for development to protect the historical character of its town. Due to the high requirement for min parking in the town’s existing ordinance. ([Columbus Parking Study](#))
- Incentive Zoning/Density Bonus - City of Mountain View, CA: adopted the El Camino Real Precise Plan in 2014 to establish land use and development regulations along the city’s nearly four-mile length of the El Camino Real

corridor. A key piece of the Plan is allowing development density and height bonuses in exchange for community benefits, including affordable housing. ([Grand Boulevard Initiative - Housing Toolkit](#))

- Developer exactions/Impact Fees - Dover, NH: Impact fees may be assessed to new development to compensate the City and the School District for the proportional share of capital facilities generated by new development in the City of Dover. ([Dover NH - Impact Fee Development](#))

WALK, BIKE AND EV-READY REQUIREMENTS FOR CONSTRUCTION

- EV Charging Station Requirements - Portland, Oregon: The Bureau of Planning and Sustainability (BPS) is proposing to amend Portland Zoning Code to require all new multi-dwelling and mixed-use development with five or more units — that include onsite parking — to provide electric vehicle (EV)-ready charging infrastructure at higher rates than required by Oregon State rules. ([Portland OR - Electric Vehicle Ready Code Project](#))
- Parking & Zoning - Somerville, MA: Recommendations are brought by their Climate Forward Plan to eliminate or reduce parking requirements as well as a recommendation for any new parking being built in commercial areas to be fee based public parking with revenue being used for public transit.
- Minneapolis MN: In its Climate Action Plan establishes recommendations for a bicycle parking minimum requirement for public and private developments.

STRATEGIES

TCAG's suggestions for specific actions that might be considered for the CAP:

- Adoption of Complete Neighborhood policies (i.e., incremental zoning, transit-oriented development, removing single-occupancy mandates, reduction or elimination of parking minimums, increasing dedicated funding streams for public transit, bike and ped infrastructure).
- Development of equitable access and mobility criteria for all applicable capital improvement projects to follow.
- Adoption of developer incentives for EV, e-bike, bike parking, public transit access, or transit benefits for residents or workers, as well as In-lieu fees for onsite parking reduction.
- Identifying and incentives Priority Corridors around viable public transit and bike routes for housing and mixed-use development.

- Improve oversight, documentation, review, implementations, monitoring and accountability of existing plans and policies on accessibility and mobility. (ea. Complete Street policy, Bike Ped Plan, and Comprehensive Plan).

Potential Partners & Relevant Departments & Committees

- Land Use Committees
- Citywide Neighborhood Committee
- Economic Development Commission
- Planning and DPW Depts
- Economic Development
- Department of Public Works
- Housing Authority
- Parking and Traffic Safety Committee
- COAST
- Pease Development Authority
- Rockingham County Planning Commission
- Neighborhood Association
- Local businesses and regional employers.

COMMUNITY ENGAGEMENT FOR CAP TRANSPORT STRATEGIES

SUMMARY

Many of the transportation-related challenges facing society today can be addressed by seemingly simple changes in behavior. How can community engagement be used to incentivize travel behavior changes that reduce GHG emissions and produce other important public benefits, from safety to affordability, equity, reduced traffic, and a more livable community?

To ensure that transportation strategies are successfully considered during community engagement for the CAP, it is essential to hear from the overall community, with a priority for traditionally unheard voices to pinpoint inequalities, gaps, and opportunities for transportation as part of overall climate planning. The following suggestions to modify travel behavior focus on encouraging shifts to alternative transportation modes and low carbon fuels as suggested in the package of TCAG strategies: Bike and Pedestrian, Shared Mobility/Public Transit, Land Use and Transportation, and EVs, as part of a comprehensive engagement to reduce transport GHG. These suggestions can be incorporated as part of broader community engagement to develop and implement the CAP.

PORTSMOUTH CONTEXT

Although many people want to do something about climate change, they do not know what actions to take individually and as a community. How can they contribute to the CAP efforts? Non-profit organizations already exist that could help and advice (SABR with over 900 email subscribers, Bike Walk Alliance NH for a wider audience, CommuteSmart for outreach to local businesses, Safe Routes to School, etc.); programs and public transit routes are already in place (“the bus does go from downtown to the mall,” you can do it!); and wayfinding efforts are supported by the City.

In addition, Portsmouth has a number of means in place to reach a broad audience of residents, including the twice weekly city emails, the city’s official Facebook page (with 30,000 followers), various other social media sites, and the Portsmouth Listens program. All of these can be used to engage and inform residents and to foster dialog.

A transportation focus for the CAP can also leverage existing organizations on the Seacoast, including but not limited to those with a direct transportation mission, to reach out to and engage a broad and diverse community audience, and build broad-based support for transportation and other strategies in the CAP.

BEST PRACTICES

1-SIMILAR PLANS TO INVOLVE COMMUNITY INPUT:

Northampton MA “Planning & Sustainability” [Walk-Bike Northampton Plan & Rethinking Main Street \(2017\)](#)

Takeaway: the mix of **Education, Encouragement, Enforcement and Evaluation programs** give residents important tools “to better integrate walking and bicycling into their lives and increase the number of both modes.”

Upper Valley Connecticut River VT & NH: <https://vitalcommunities.org/about/>

Portland, ME’s Community Transportation Leaders Handbook would be a great template for **an inclusive and intersectional approach to community engagement for transportation projects** in Portsmouth. We will have a greater impact on the GHG emissions if we acknowledge all the actors in transportation mode shifts. <https://www.gpcog.org/DocumentCenter/View/2310/Community-Transportation-Leaders-handbook>

2-SUCCESSFUL USE OF SOCIAL MARKETING: THE CTEDD PROGRAMS

<https://ctedd.uta.edu/wp-content/uploads/2022/04/CTEDD-017-06-Case-Study-Summaries-Three-Cities.pdf> Document outlines social marketing strategies that Portsmouth could use for Safe Routes to School and CommuteSmart programs; Portsmouth could use an employee transportation survey to determine current commute modes, commute needs, barriers to change, and benefits from mode shift.

Community-based social marketing (CBSM) uses direct neighbor-to-neighbor communication and influence to promote behavior change. In-person communications are often complemented by electronic social media tools. <https://www.epa.gov/sites/default/files/2017-06/documents/2.pdf>

3-BEST PRACTICES FOR COMMUNITY ENGAGEMENT https://www.ca-ilg.org/sites/main/files/file-attachments/cc_and_public_participation.pdf

Document provides examples of public outreach sessions that Portsmouth could adapt (e.g., for public information and outreach, public consultation, public deliberation) with best practices and lessons learned.

DISCUSSION

How is community engagement an effective way to address our goal of reducing GHG emissions, specifically through travel behavior changes? Since GHG emissions are part of everyday life, everyone can make changes to reduce emissions, regardless of background. The comparatively high level of personal motorized vehicle use, and very low level of public transit, walking, and biking provide important opportunities to reduce Vehicle Miles Traveled and GHG emissions including through the strategies recommended by TCAG. However, this must be supported through community awareness and engagement, including a focus on the importance of the new CAP. Community engagement should: a) focus on Portsmouth's issues as defined by its residents (not an external org); b) empower everyone, beyond elected officials and city staff; c) enable voices to be heard that would normally not be invited to the table; d) involve other institutions such as businesses (Pease, Chamber of Commerce), schools and universities, providing expertise and funding to complement public resources; e) and external organizations which facilitate exchanges between different communities, including ethnic minorities and those of lower income; f) integration with and leveraging other community engagement efforts, including those of the Rockingham Planning Commission (as required by federal law for transportation investments), COAST, Portsmouth Housing Authority to develop and implement the CAP.

Metrics for community engagement, specifically related to transportation GHG reduction strategies, could include numbers of programs, partners, and people reached by these programs, and ultimately, shifts to low carbon transportation alternatives. These would be used to assess the success of our program and to support grant funding efforts. Momentum for adoption: see <https://rare.org/wp-content/uploads/2019/07/Changing-behaviors-to-reduce-U.S.-emissions-digital.pdf>

STRATEGIES

How can we use community engagement to change people's perceptions of "alternative" modes of transportation?

- FOCUS on those who use their car for short trips (1-5 miles) and REACH OUT TO THEM (mail survey? Portsmouth Listens workshops? Offer different forms of communication for all ages and abilities) >>> what is stopping them from walking/riding bikes/riding the bus/buying an EV?
- MAKE IT OFFICIAL: Create a Blue-Ribbon committee for community engagement for green transportation, prioritizing low carbon mode shifts; have the Mayor or a councilperson lead the effort: partner with COAST and Wildcat on a ride the bus once a week, ride to Pease, share pictures of their EVs in social media etc. This campaign can be aligned with CAP roll-out.
- EDUCATE: Portsmouth schools will engage more with the Safe Routes to School programs to ensure safe bike riding for children; driving schools could offer one hour training on how to drive with cycles on the road; Parks & Recs could offer a bike rodeo/safety village; better wayfinding to support alternative modes. All could be supported through available federal programs, including within the Rockingham Planning Commission's transportation improvement program.
- GIVE OWNERSHIP: the community will feel more engaged if it takes ownership of this project.
- COMMUNICATE VIA SOCIAL MEDIA (City Hall FB page; email newsletter); what are other ways to reach out to all neighborhoods? See suggestions from [EPA.gov](https://www.epa.gov); Climate engagement platform for a city-sponsored website (see Portsmouth Climate Solutions); use this website to view how walkable your neighborhood is: <https://www.walkscore.com/>;
- INCENTIVIZE: Commute Smart programs for employers on Pease or in town targeting their Portsmouth employees; adopt a bus stop (kids' project); better cycle storing/locking facilities; Bike valet for events; engage existing businesses (grocery stores); incentive: insurance discounts, tie to morale and productivity. Locally: reach out to Lonza and the Naval Shipyard for good practices. People for Bikes program <https://enterprise.ridespot.org/> promote commuting by bike; incentive, challenges and rewards. Local businesses can provide incentives for people using alternative transportation (see economic development committee, consider tax-support transit benefits for employees?) -free charging stations for EVs.