DESTINATION









A Long-Range Transportation Plan for the Greater Portland, Maine Region



Contributors

The Destination 2040 Long Range Transportation Plan was prepared by the Portland Area Comprehensive Transportation System (PACTS) and the Metropolitan Planning Organization (MPO) for the urbanized area of Portland, Maine and adopted by the PACTS Policy Committee in 2016. Funding was provided by the Federal Highway Administration (FHWA).

DESTINATION 2040 LONG RANGE TRANSPORTATION PLANNING COMMITTEE

Tex Haeuser, Chair, South Portland Planning Director
Vanessa Farr, Former Yarmouth Planning Director
Art Handman, South Portland Bus Service Director
Bruce Hyman, Portland Transportation Program Manager
Greg Jordan, METRO General Manager
Chris Mann, MaineDOT Planning Bureau
David Marshall, Former Portland City Councilor
Peter Morelli, Former Saco Economic Development Director
Maureen O'Meara, Cape Elizabeth Town Planner
Ann Peoples, Former Westbrook State Representative
Jim Wendel, Former Scarborough Town Engineer
Sara Zografos, Maine Turnpike Authority Planner/Agency
Liaison

PACTS STAFF

Carl Eppich, AICP, Senior Transportation Planner John Duncan, Director Paul Niehoff, Senior Transportation Planner

PHOTOGRAPHY

Corey Templeton Photography

Corey is Portland's unofficial urban photographer and curator of the Portland Daily Photo blog. He has captured hundreds of iconic shots of Maine's largest city. Corey also does architecture, restaurant, portrait, and wedding photography.

Dave Cleaveland, Maine Imaging

With over 13,000 aerial images of Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut, Mainelmaging.com has the largest collection of New England aerial photographs, including night time imagery, mega panoramics, and gyro stabilized aerial video.

DOCUMENT PRODUCTION

Kara Wilbur, Principle www.principle.us

Graphic DesignJamar Bromley

Jamai Bronno

Artwork Michael Crom

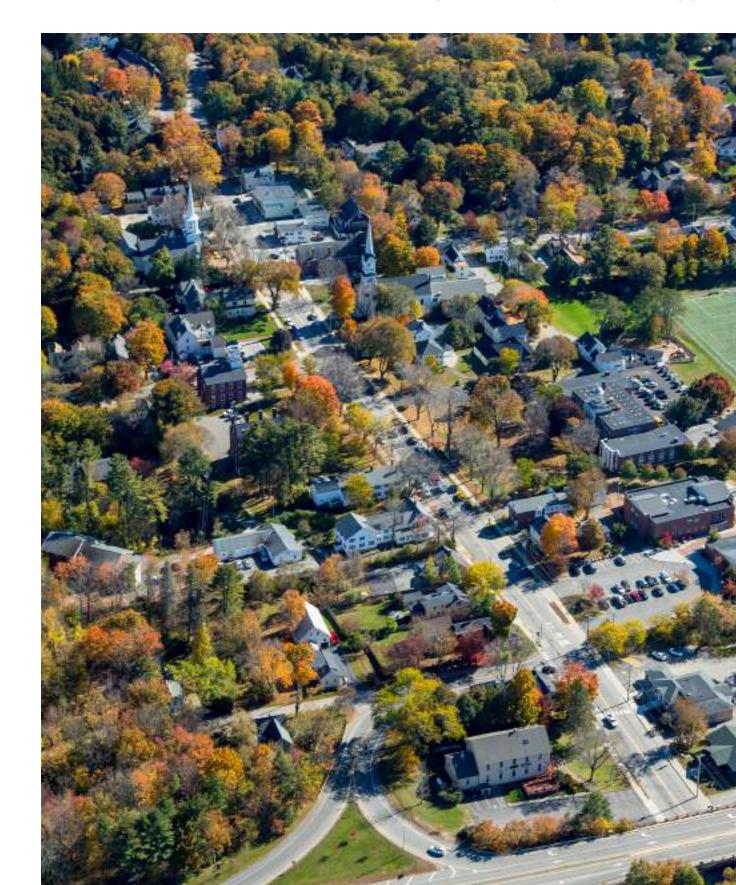
Michael Crampton

Infographics

Sara Sremac

Maps

Ben Meader, Rhumb Line Maps





Old Port, Portland

Photo by Corey Templeton



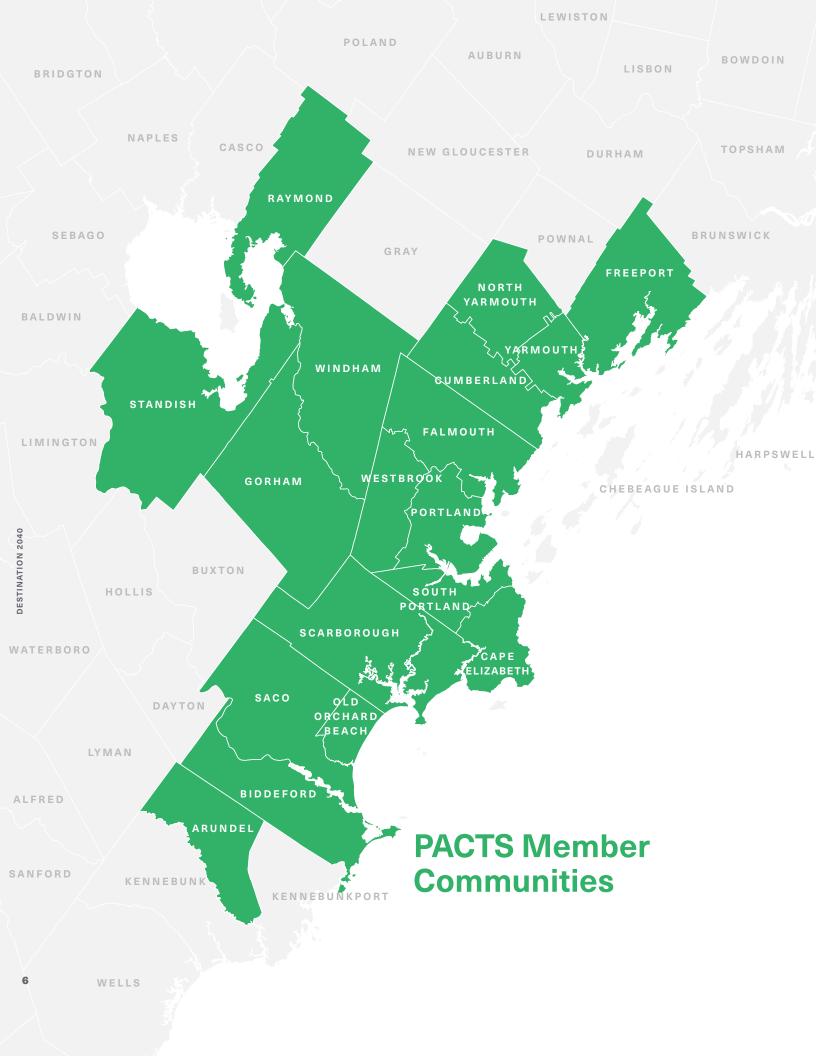
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Destination 2040 Major Regional Transportation Projects

Destination 2040 is the regional transportation plan for the Greater Portland Maine region, and is the responsibility of the Portland Area Comprehensive Transportation System (PACTS), the congressionally designated metropolitan planning organization for the region. This plan update provides a vision for preserving and transforming our transportation systems through the year 2040.



What is PACTS?

PACTS Communities:

Arundel

Biddeford

Cape Elizabeth

Cumberland

Falmouth

Freeport

Gorham

North Yarmouth

Old Orchard Beach

Portland

Raymond

Saco

Scarborough

South Portland

Standish

Westbrook

Windham

Yarmouth

Transit Providers:

Biddeford Saco Old Orchard Beach Transit Committee (Shuttlebus)

Casco Bay Island Transit District (CBITD)

Greater Portland Transit District (METRO)

Northern New England Passenger Rail Authority (NNEPRA)

South Portland Bus Service

Regional Transportation Program (RTP)

York County Community Action Corporation (YCCAC)

Partners:

Greater Portland Council of Governments (GPCOG)
Maine Department of Transportation (MaineDOT)
Maine Turnpike Authority (MTA)

Southern Maine Planning and Development Commission (SMPDC)

Cooperating Organizations:

Portland Trails

Bike Coalition of Maine (BCM)

Opportunity Alliance

Portland Regional Chamber of Commerce

Maine Department of Environmental Protection

York and Cumberland Counties

The Portland Area Comprehensive Transportation System (PACTS) was designated in 1975 as the federally-mandated metropolitan planning organization or MPO for the Portland region.

The federal government established these entities in all urbanized areas of the country in order to improve the coordination of transportation planning and investment decisions by state, municipalities, and public transportation organizations.

The PACTS Area includes portions or all of 18 communities, 7 public transportation providers, public and private transportation organizations, and interested citizens.

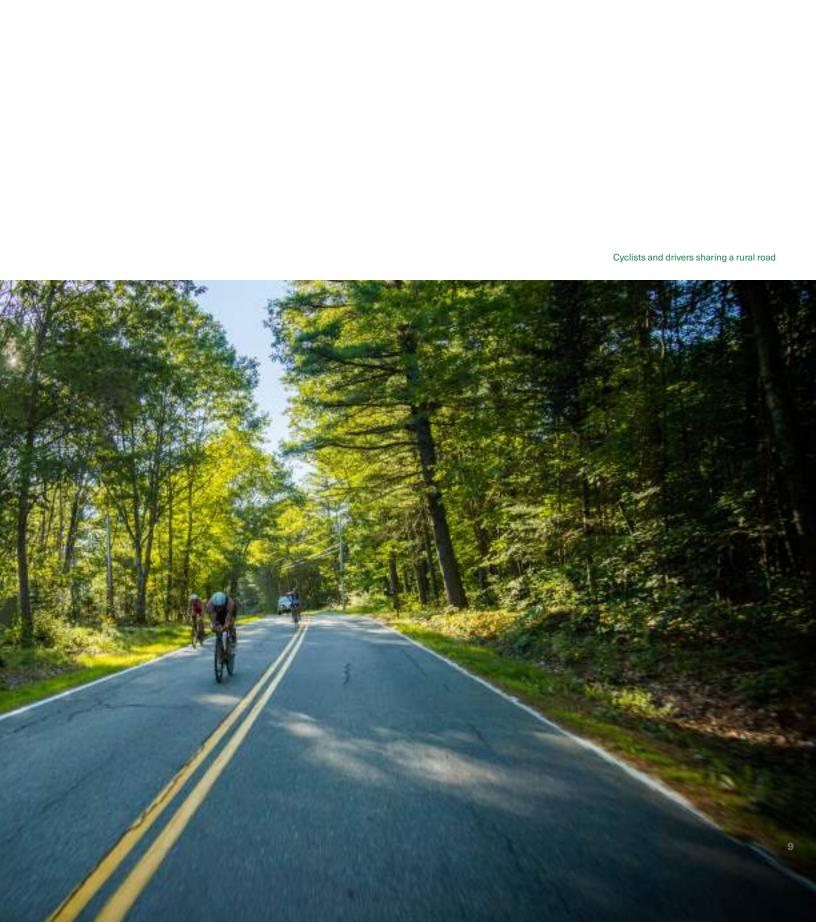
PACTS provides a continuing, coordinated, and comprehensive planning process for the Greater Portland urbanized area, and a forum for collaborative decision-making among members. PACTS approves the use of Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funds for transportation investments in the PACTS area.

Destination 2040's Vision

The Destination 2040 vision for the PACTS regional transportation system is to provide a safe, fully developed, and well maintained multimodal means of travel for all people and goods as efficiently and cost effectively as possible.

The transportation system will be coordinated with land-use decisions promoting compact livable development that preserves community character while retaining open and natural spaces, which enhance the natural and human environments.





Why a Regional Long Range Transportation Plan?



Transportation Investments

Transportation investments need a regional focus and must be made with an eye to long-term needs and preservation.

Modal Balance

Without a balance among motor vehicle, transit, bicycle, and pedestrian modes, travel growth over the next 25 years could potentially result in more safety and congestion problems.

Population Changes

The region's population is growing and simultaneously aging. Attracting younger skilled workers requires high-quality transportation choices.

Transportation Funding

Transportation funding levels will most likely continue to be insufficient to preserve the system we have today, and are projected to fall increasingly short as the need for transportation investment grows.

Land Use

Land use and transportation decisions are closely related and affect the availability and quality of transportation choices. Decisions must be made together.

TRAN•SIT (n)

A passenger transportation service available for use by the general public and shared by strangers without private arrangement, as distinct from modes such as taxicab, carpooling, or hired buses. Syn: Public transportation, public transit, mass transit.

A Changing World

Like many regions in the US and worldwide at the beginning of the 21st Century, the way in which we live and move around Greater Portland is changing. While innovations in information technology are driving much of it, in reality the change is compounded by shifting demographics. Portland and the surrounding communities are growing while much of the rest of the state's population is declining. The metro Portland area is simultaneously getting older, while another large, younger population comes of age and begins to settle down. As the majority of our population ages and the preferences of our younger citizens diverge from those of their parents and grandparents, different demands are being placed on the transportation system.

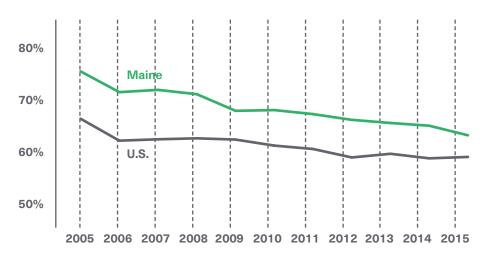
Fewer People Driving and Owning Cars

More than 1 in 20 employed Mainers work from home, 25% more than the national average.

Source: Portland Press Herald

Percentage of Eligible Drivers that are Licensed, ages 15 – 24

Source: Federal Highway Administration & American Community Survey

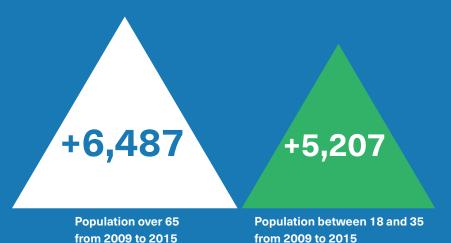


-17%

National Automobile Registrations in the US and Maine, 2008 – 2014

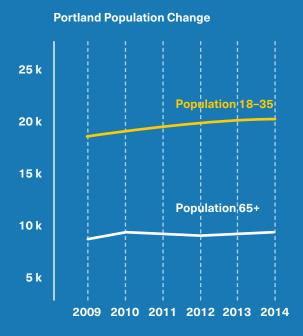
During the recent 6-year period, car ownership has dropped significantly.

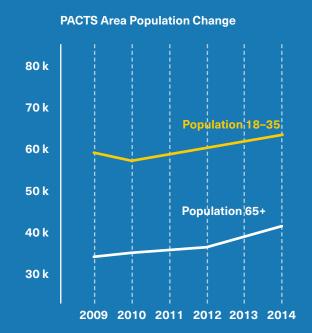
Changing Demands on the PACTS System



The metro Portland area is simultaneously getting older, while another large, younger population comes of age and begins to settle down.

Source: American Community Survey (ACS)





Change in population density 2010 - 2015

Much of the state is losing population, but those losses are being offset by growth in a relatively small cluster of cities and towns in Greater Portland.

Source: Portland Press Herald, US Census Bureau Change in population density (ppl/sqmi) 0 -40 40 Raymond Cumberland Standish Yarmouth South Portland Westbrook Old Orchard Biddeford Arundel



Bicycle and pedestrian modes of transportation

Photo by Corey Templeton

Key Findings

Several key findings emerged from an in depth analysis of present transportation and land uses conditions, taking into account national and regional trends. Together, these findings have significant potential implications for the future of the PACTS regional transportation system.

- Pockets of significant traffic congestion and safety problems currently exist, including incompatible and insufficient infrastructure to accommodate all modes (transit, bicyclist, pedestrian, motor vehicle).
 Congestion and modal conflicts will worsen if current development patterns, practices, and investment trends continue.
- Transportation issues are regional in nature and require a concerted and coordinated multi-jurisdictional response to resolve.
- The gap between transportation needs and available funding resources is large and will continue to widen if current funding levels are maintained.

- There is significant support for expanded transit service throughout the region, and especially among younger and older residents according to the 2008 and 2014 PACTS Transportation Surveys. Ridership is increasing on local fixed-route bus, inter-city bus and rail, demand-response bus, and air transportation services. Transit still accounts for a relatively small percentage of all trips in the region, but is increasing. While bus routes have recently expanded north and up the coast, many areas in PACTS are not accessible by transit. Increasing jobs and residential options in population centers is key to transit expansion.
- The Gorham East-West Corridor Feasibility Study suggests that through the coordinated planning of land use, transit, and roadway improvements, economic growth can be managed while providing improved mobility and increased transportation choice for all modes, while also protecting neighborhoods and the attractiveness of our communities. Find the Gorham East-West Corridor Study report at: bit.ly/2mbXV4a.

The Funding Challenge

Plan Framework

An assessment of the region's transportation funding needs over the next 20 years was conducted through a collaborative effort of PACTS, MaineDOT, and the Maine Turnpike Authority.

The assessment targeted the following three areas:

- Preserve the existing transportation system;
- Taking appropriate steps to modernize the existing system; and
- Strategically expand the existing system with complete multimodal infrastructure to help relieve existing automotive congestion, improve safety, and accommodate increasing transportation demand.

Securing the funds needed to meet the region's identified transportation needs may be the biggest challenge facing local, regional, state, and federal decision-makers as Destination 2040 is implemented.

PACTS will direct the financial resources under its control toward a future transportation system that is safe, efficient, and better able to meet the demands of tomorrow, while still maintaining the current system. The strategies and financial assessment acknowledge today's fiscal, political, and social realities while incrementally moving beyond the status quo to better integrate the disciplines of transportation planning and land use planning through regional collaboration.

In the current climate of limited funding and escalating roadway construction costs, implementation of the Destination 2040 Plan will require an increased level of regional coordination and collaboration by PACTS member communities, MaineDOT, the Maine Turnpike Authority, and other funding partners. In each community, the city or town council, planning board, planning and engineering staff, local businesses, and residents will need to be active participants in this process.

In response to a changing world, new funding realities, demographic shifts, and other key findings, PACTS has looked at its work through a new lens. The following principles respond to these new conditions and are fundamental to the Destination 2040 Plan:

- PACTS communities can best address regional transportation problems collaboratively.
- Transit's role in addressing current and future mobility problems is growing and requires an increased investment.
- Solutions that address existing problems and projected future needs require priority investments.
- PACTS funds are most efficiently used by coupling transportation investments with appropriate adjacent land uses to leverage those investments.
- Short-term and long-term approaches to managing or reducing congestion while avoiding sprawl require the coordination of PACTS members and transportation funding partners.
- Implementing performance measures for monitoring progress and adjusting strategies is critical for achieving the goals of this Plan.



Priority Centers & Priority Corridors

A New Strategic Direction

Working regionally through PACTS, member communities have the ability to leverage local resources to secure state and federal resources. By strategically focusing resources into growing the most productive existing and emerging centers and corridors, PACTS can maximize returns on transportation investments and deliver positive results for the entire metropolitan region.

Through an extensive multi-year process that led to the adoption of Destination 2040, PACTS has developed a comprehensive approach that coordinates transportation and land use planning, focusing funding resources on the most promising centers and corridors. This will be done by setting new criteria for how to prioritize projects and embedding the goals and priorities of the Destination 2040 Plan into the policies and project decision-making at PACTS.

PACTS has set a new strategic direction for how to move the region forward and better meet the needs of the changing world. Together we will:

- Prioritize a regional approach to project selection and bold projects that balance public transportation, placemaking, and funding.
- Blend long-range planning with how the region's future federal and state funds are programmed.
- Engage the public earlier in the process and in more meaningful ways.

PACTS Priority Centers

1	Arundel Village	24	East End
2	University of New England	25	Libbytown
3	Biddeford Crossing	26	USM/Bedford St.
4	Southern ME Medical Center	27	Woodfords Corner
5	Downtown Biddeford	28	Rosemont
6	Downtown Saco	29	Westbrook Crossing
7	Route 5 East	30	Downtown Westbrook
8	Pine Park	31	Mosher Corner
9	Ballpark	32	Main St./Libby Ave.
10	Old Orchard Beach	33	Gorham Village
11	Flag Pond Rd / Cascade Rd	34	North Scarborough
12	Dunstan Corner	35	South Gorham
13	Oak Hill	36	Little Falls
14	Sunset Park	37	South Windham
15	Thornton Heights	38	Morrill's Corner
16	Eight Corners	39	North Deering
17	Maine Mall	40	Pride's Corner
18	Redbank	41	West Falmouth Crossing
19	Cape Elizabeth Center	42	Gray Rd. at Mountain Rd.
20	Knightville / Mill Creek	43	Falmouth Route 1 South
21	Bug Light / SMCC	44	Falmouth Route 1 South
22	West End	45	Yarmouth Route 1
23	Downtown Portland	46	Yarmouth Downtown

47	Yarmouth Route 1
48	Freeport Route 1 South
49	Freeport Downtown
50	Bow Street
51	Cumberland Center
52	Walnut Hill / N. Yarmouth
53	West Cumberland
54	North Windham Center
55	North Windham Center
56	Seacoast Fun Park
57	Raymond Rt. 302
58	Raymond Village
59	Standish Corner

Preparing for Tomorrow

There is a close synergistic relationship between transportation, land use, and economic development. Continued efforts are needed to reduce capital costs for preserving existing infrastructure. Adapting streets for all modes, technological improvements, and safety enhancements will be the biggest opportunity in the coming decades.

The Destination 2040 Plan serves as a policy guide for maintaining the best of the existing transportation system, providing focus in areas where the system needs modernization, and taking transformative steps to develop a sustainable transportation system for tomorrow. By balancing the preservation and strategic expansion of the current system, this Plan lays out broad, long-range, and fiscally constrained strategies for fulfilling the region's transportation needs and preserving and enhancing the places unique to the Portland metropolitan area.

Over the coming decade, we will continue to improve the region's infrastructure for bicyclists, pedestrians, and transit-riders, while acknowledging that the automobile will still be the dominate mode of transportation in the decades to come. The holistic approach of Destination 2040 provides a road map for creating the transportation system of tomorrow and a foundation for enhancing the region's economic prosperity, character, quality of life, livability, and environmental health.

The following pages describe the policies, plans, and projects to begin in the coming six years that will lead to the long-term vision for the transportation system.

PACTS will plan, fund, and maintain a transportation system that will —

Maintain a Regional Focus

We will take a regional approach to transportation and land use planning, project prioritization, and decision-making founded on effective communication, data analysis, and management of regional resources.

Incorporate Energy Conservation

We will conserve and efficiently use energy resources.

Support Economic Development

We will enhance regional prosperity by supporting the economic vitality of existing businesses located within centers and economic development opportunities encouraged by local and regional plans.

Integrate Land Use

We will support land use plans and development that furthers a rural to urban pattern, promotes livable places inherently designed for walkability and bikeability, and advances transit-oriented development in priority centers or other areas that emphasize all modes.

Prioritize Mobility, Safety & Accessibility

We will improve the mobility, safety, and accessibility of people and goods throughout the region.

Protect Environmental Quality

We will protect and improve the human and natural environment and enhance quality of life.

Maintain a Regional Focus

A region-wide transformation has already begun and will require understanding each PACTS community's characteristics and desired future form. By using a regional approach, communities can design and program appropriate transportation infrastructure that integrates and connects them with adjacent communities and the region. The success of a regional approach will only be possible with careful and consistent planning, communication, cooperation, and partnerships on projects that cross municipal boundaries. Regional decision making focused on the future users of the transportation system is the essential function of PACTS in conjunction with its partners, MaineDOT, the Maine Turnpike Authority, and the general public.

Develop regional approaches to transportation funding

Funding for the nation's transportation systems has been stagnant for many years at the federal, state, and local levels. This has been particularly true in the Northeast. Maine also has significantly more transportation infrastructure due to its size relative to its neighbors.

Transportation advocates have been working for years to educate the public and elected leaders about the need for increased funding. While many are convinced that the days of sufficient federal funding are over, the MaineDOT has articulated statewide needs and has become more efficient and cost conscious. As a result, the Legislature and Governor are better prepared to increase Maine transportation funding.

This MaineDOT initiative has set a foundation for success, but there is much more public education and discourse needed before substantial increases in transportation funding will happen.

Maine voters traditionally support state transportation bond proposals. However, the Legislature is not currently prepared to increase the Maine gas tax, which provides an interest-free funding solution, as compared with paying off bonds. During the past ten years, municipalities in our region have made major local contributions to transportation projects that once were paid for with federal and state funds. However, municipal leaders are united in agreement that this extra local effort is unsustainable.

While the funding problem extends beyond the PACTS region, we recognize that as the largest metropolitan area in the state, we play an important role in developing innovations, educating the public, and leading new approaches for funding transportation.

Recommended Actions

- Continue to raise local and regional public awareness around the need for additional transportation funding, and encourage our area Legislators to raise awareness in the halls of Augusta.
- Allocate more of PACTS' scarce federal, state, and local resources in priority corridors and centers proposed in Destination 2040. This will require a shift in who pays to maintain and improve parts of our regional system currently addressed with PACTS funding.
- Continue to seek assistance from the Maine Turnpike
 Authority and from federal discretionary funds to maintain
 and improve our region's transportation system. Look for
 Maine Turnpike resources to help address congestion in
 the western Gorham East-West Corridor and in other areas
 within the "greater turnpike corridor". Develop regional
 applications for federal programs, such as the current
 TIGER program.
- Dig deeper into our collective local pockets to maximize existing funding opportunities and try new funding strategies. Continue to capitalize on MaineDOT's Municipal Partnership Initiative, and encourage MaineDOT to increase the statewide budget for this successful program. Continue to implement the PACTS Municipal Partnership Initiative program.



Build a stronger connection between the Plan & the selection of capital projects

In 2015 a special PACTS committee developed recommendations designed to implement the strategic direction charge for the Destination 2040 Plan to specify how PACTS should program PACTS MPO Allocation capital funds and federal transit funds. The following recommendations were adopted by the PACTS Policy Committee in 2016:

- Create a transportation project application scoring system that gives high priority to projects designed for all modes and users – the "complete streets" approach.
- Create a project application scoring formula that simplifies the PACTS scoring system by replacing five PACTS scoring formulas with just one scoring formula.
- Create a scoring system that rewards applications submitted as subregional priorities by multiple neighboring municipalities and/or transit providers.

Coordinate transportation & land use planning with municipal & transit partners

Throughout the region, establish linked growth areas with a mix of uses and development densities that promote travel by transit, bicycling, or walking and upgrade or extend supportive infrastructure within these areas. Recent examples of this level of coordination include the Tricommunity Transportation Study, which included the municipalities of Biddeford, Saco, and Old Orchard Beach; the 2012 Gorham East West Corridor Feasibility Study, which involved many municipalities with a core of Scarborough, South Portland, Gorham, and Westbrook; and the 2011 Portland North Alternative Modes Feasibility Study which included the PACTS municipalities of Portland, Falmouth, Cumberland, Yarmouth, North Yarmouth, and Freeport.

Recommended Actions

Use criteria and scoring that favors municipal planning and capital project proposals that demonstrate coordinated land-use and transportation decisions. PACTS will focus the majority of PACTS' investments in roadway or right-ofway projects in priority centers and corridors, to support the urban to rural land use pattern.

Recommended Actions

- Develop regional guidance and policy for Transit
 Supportive and Oriented Development. Major investments
 in transit already exist in the region with fixed-route buses,
 ferries, and intercity/interstate rail (the Amtrak
 Downeaster). Working with transit providers,
 municipalities, housing agencies, developers, and other
 stakeholders, PACTS will identify and integrate routes for
 walkable, mixed-use development in priority corridors and
 centers.
- Prioritize multimodal investments in priority centers and corridors that support an urban to rural development pattern as a way to fundamentally address congestion, enable high-value, transit-supportive development, and increase walking and biking trips to, from, and within centers. PACTS will refine its existing scoring and ranking processes to focus investments in infrastructure and services that provide safe multimodal choices for transportation in these centers and corridors.





The exchange of goods and services is predicated on the availability of an efficient and sustainable transportation system. When business owners from the largest Fortune 500 to the smallest start-up are making business decisions, a location's relative accessibility to goods, capital, and affordable skilled labor are all considerations.

A variety of options are required for the ease of movement of both people and goods between businesses and services, home and work, warehouse and market. Although close proximity is usually most efficient, the global nature of the modern world requires an extensive transportation system to support our region's economy.

Key components of the transportation system necessary to facilitate this variety of movement include interstate highways, rail, roadways, the port, intermodal facilities associated with freight, transit, air travel, and an extensive biking and pedestrian network to support a healthy and happy workforce.



Strengthen Connectivity to Visitor & Tourism Assets

The Greater Portland area is a growing tourism destination, from Old Orchard Beach, to downtown Portland, to the gateway to the Lakes Region in Gorham and Windham, to Freeport, and the Midcoast beyond. With expanding intercity bus service and the Amtrak Downeaster train tying Boston to Brunswick, the region is already accessible without a car. Development and supportive infrastructure centered around rail and transit in general — known as transit-oriented development or TOD — presents a costsavings development option for the entire region, while providing amenities for visitors and residents. Connections to and from trails, such as the Eastern Trail and the Sebago to the Sea Trail, will continue to support tourism activities. Additionally the growing importance of the Ocean Gateway facility in Portland near the Old Port represents a significant economic development investment for Portland and the Region. Built in close proximity to the Casco Bay Ferry terminal, it accommodates two cruise ships simultaneously and supports the international ferry service to Nova Scotia, providing for shared tourism between the Maritime Provinces of Canada and Maine, New England, and the eastern United States.



Night life in Old Orchard Beach

Photo by Peter Dutton

Prioritize Corridors & Centers

Comprised mostly of arterials that connect centers, a key part of this Plan is to focus PACTS' and other resources into priority corridors for multimodal upgrades that improve safety, accessibility, and community context. These corridors enable economic development within and between centers, and aggregate benefits to the overall region. They also carry the majority of the PACTS region's non-interstate commuter traffic, and road-based freight, and facilitate the movement of many bus-transit routes. Arterials also require accommodations for bicyclist, pedestrian safety improvements, and context-sensitivity treatments within the built-up areas in communities. Developing a regional transit plan that connects as many centers as possible is a top recommendation of this Plan.

Maintain Preservation Paving

For ten years PACTS has programmed more than half of the available biennial PACTS capital resources to preservation pave collector roads. PACTS has acknowledged that its focus on preservation paving of collector roads results in insufficient funding for regional rehabilitation and reconstruction roadway projects.

Flexibility in funding is intended to bring more roads in these non-preservation categories into eligibility for collector road preservation paving. Inadequate funding is still the main barrier to keeping all roads in good condition.

The recent significant investments in these roads by PACTS municipalities, MaineDOT, and PACTS, coupled with some important design standard changes enacted by MaineDOT, have produced good results.

The entire PACTS capital allocation is about \$7 million a year – not enough to maintain all the Collector Roads and the other assets in need across the region.

Recommended Actions

 Prioritize multimodal investments in priority centers and corridors that support an urban to rural development pattern as a way to fundamentally address congestion, enable high-value, transit-supportive development, and increase walking and biking trips to, from, and within centers. PACTS will refine its existing scoring and ranking processes to focus investments in infrastructure and services that provide safe multimodal choices for transportation in these centers and corridors.

Recommended Actions

- Develop flexibility in PACTS funding for the preservation, modernization, and expansion of the roadway network to efficiently accommodate all modes safely.
- Prioritize planning and capital funds for collector road preservation within priority centers and along priority corridors.
- Identify and implement cost-effective approaches, financing opportunities, and cost-savings methods to leverage local, state, and federal funding for preservation, modernization, and efficiency of the collector road system.
- Currently the majority of PACTS projects collector preservation paving projects do not include Complete Streets considerations to provide safety and infrastructure for all modes. Develop a PACTS Complete Streets policy that will be used in the application process to evaluate multimodal needs of projects proposals. Include a Multimodal Level of Service (MMLOS) evaluation criterion for use in all PACTS planning studies when Roadway LOS criteria are necessary. This policy will be consistent with the MaineDOT Complete Streets policy, and the City of Portland's, and other municipal Complete Streets policies.

Re-Prioritize Arterials

There are 143 miles of non-interstate arterials in the PACTS federal urbanized area. MaineDOT is responsible for "preservation paving" arterials which are in good enough structural condition to accept a new layer of pavement. MaineDOT relies on PACTS to program federal funds for rehabilitation or reconstruction improvements on the 143 miles of non-interstate arterials in the region.

During the past ten years it has been PACTS' policy to invest more on collectors than on arterials, even though arterials carry more traffic, are more regionally significant, and are more expensive to rebuild.

Recommended Actions

- Prioritize planning and capital funds for arterials along priority corridors.
- Do more thorough arterial assessments, including acquiring or developing better data on the conditions of arterials in priority corridors, and include a more comprehensive Complete Streets type assessment (including the context of places through which the arterials pass).

Urban to rural development pattern in Biddeford & Saco

Photo by Dave Cleaveland, Maine Imaging





Working waterfront

Photo by Corey Templeton

The Portland International Marine Terminal or "IMT" on Portland's western waterfront is the ocean port for the PACTS region. Recent investments by the City and State have led to major expansion to accommodate the growing shipping needs of a growing container service. The expansion brought back ship to rail and truck to rail capacities in Portland. Reducing truck traffic is a potential benefit of the expanded IMT given that the vast majority of freight in Maine travels by truck. The region is also served by a series of rail lines that provide freight service.



Support Freight-Based Businesses & Opportunities

PACTS supports the development of a seamless multimodal freight network to facilitate the movement of goods by road, air, rail, and sea. During the past decade, MaineDOT, and the City of Portland have upgraded the efficiency and expanded the intermodal capacity of the International Marine Terminal (IMT) and its container port. The recent initiatives by the Eimskip shipping company have also been an important component of the recent growth at the Port of Portland. The IMT was historically a rail freight yard, but was disconnected from the head of rail by only a hundred yards for several decades. A major 2015 MaineDOT/Port Authority project has led to the expansion of the IMT, improvements to the West Commercial Street access, and a new re-connection between the IMT and the rail network that enables containers to be loaded and unloaded directly to rail cars. This has created a major new economic opportunity for Greater Portland and the entire state.

Recommended Actions

- Create a PACTS Freight Committee whose purpose is to work with freight stakeholders to identify, prioritize, and advocate for investments in the region's primary trade corridors, including the Southern Gateway, Rail to Port Triangle, and the region's Interstate corridors.
- Work with the Maine Port Authority to expand ship visits to the Port of Portland from biweekly to weekly service.
- Support the Maine Port Authority's goals and efforts to improve the International Marine Terminal.
- Support the Maine Port Authority's efforts to integrate America's Marine Highway with the Surface Transportation System of the United States as well as the development of a tug barge system to serve the route between Portland and New York/New Jersey.
- Partner with freight stakeholders in launching a regional dialogue on the Port of Portland's function and future as one of the Northeast's most critical energy ports.
- Work with freight stakeholders to increase opportunities for intermodal freight traffic by further integrating components of the multimodal freight network, improved highway-rail and water-rail investments.
- Coordinate with freight stakeholders and operators to develop and utilize state and federal data resources to identify and evaluate opportunities for modal diversion from highway to ship, air, and rail.



Prioritize Mobility, Safety & Accessibility

The maintenance and transformation of the existing transportation system is the region's' highest priority. By transforming the system to more safely accommodate walking, bicycling, and transit, we simultaneously reduce wear associated with driving on our roadways. All modes, including the airport, rail, buses, cars, and ferries, utilize roads, and connect us to our urban, suburban, and rural homes. This is reflected through PACTS' investments in collector roads preservation, traffic signal coordination, sidewalk and bicycle plans, and programming. The Destination 2040 Plan calls for the PACTS members to reassess the allocation of these funds to ensure that they are being used in the most cost-effective and efficient manner.

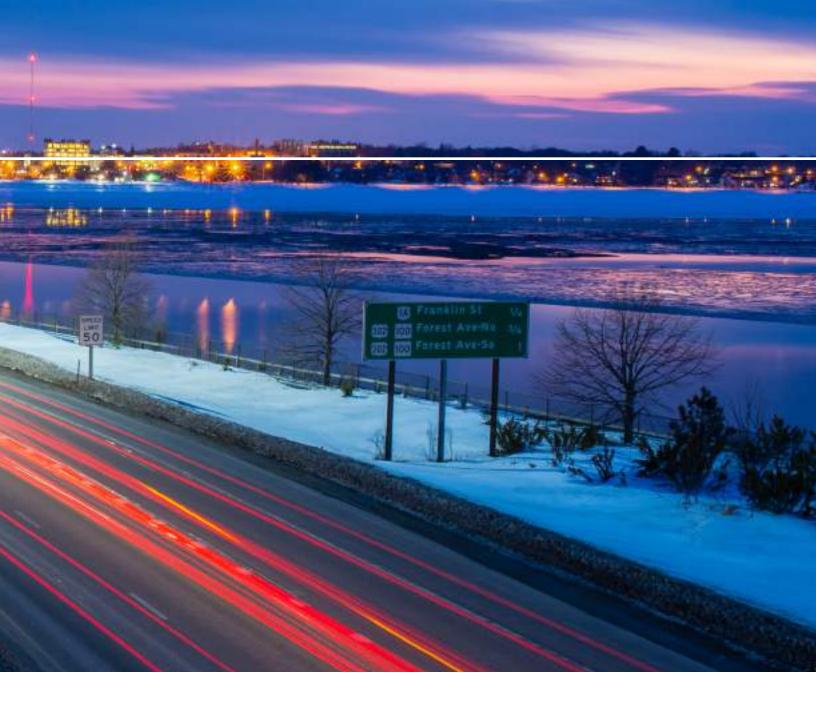
The capital needs assessment calls for more than 90% of the nearly \$1.3 billion needed over the Plan's 20-year timeframe to maintain the existing transportation system. The effort to meet the needs of preserving and improving the existing transportation systems will present the region with an ongoing challenge of maintaining the best of what we have, while making transformative investments necessary for the future.



The I-295 corridor

Photo by Corey Templeton

The Maine Turnpike (I-95) and I-295, managed by the MaineDOT in the PACTS region, are the two most important highways in the region and have been the subject of extensive study and analysis. Destination 2040 maintains previous recommendations to enhance and reinforce the Turnpike as the preferred interstate for traffic traveling through the region and around Portland, and I-295 as the preferred interstate for intra-regional traffic. Destination 2040 recommends additional strategies to address safety, capacity, and operational issues. Some of these recommendations are also in MaineDOT's 2010 I-295 Corridor Study.



Recommended Actions

- · Collaborate with MaineDOT, the Maine Turnpike Authority, and the Federal Highway Administration on efforts to address safety and operational issues, ramp additions and removals, accommodations for bicyclists and pedestrians at interchanges, toll strategies, and park and ride facilities.
- Continue to work with MaineDOT to: balance the need for regional mobility and access on I-95 and I-295; the interface between on/off ramp systems and the fabric of their nearby neighborhoods; and the impacts on pedestrian connectivity and on local streets.
- Support further study of the significant highway capacity issues facing the Route 22/114 "overlap" area in South Gorham and North Scarborough by the Turnpike Authority, MaineDOT, and the affected municipalities. Such further study should include work to refine the "three-legged stool" set of transit, land use, and highway recommendations developed in the 2011 Gorham East-West Corridor Study Phase I.
- Support the Maine Turnpike Authority's 2014 10-year capital plan and 30-year finance plan (2015) and study as articulated in the Turnpike Authority's interchange policy regarding proposed Turnpike interchanges in the 35 Scarborough/Saco area, in West Cumberland, and in Biddeford.

Intersections

Focus on Intersections for Congestion & Safety Management

By focusing on improvements at intersections, vehicular traffic can be better managed, saving time, lowering fuel usage, and reducing emissions. Improved markings, controls, and signage for pedestrians and bicyclists improve the safety of intersections for all modes, making trip choices by those modes more appealing. Safe intersections that also provide smooth traffic flow are an integral part of an efficient transportation system. Many of the region's intersections are currently over capacity during the morning and evening commutes, or will be within a few years. Many intersections are also designated as high crash locations by the MaineDOT, indicating a need to improve design, lower speeds, and better accommodate for the safety of bicyclists and pedestrians. As part of the goal of maintaining and improving the existing transportation system, PACTS expects to fund intersection improvement projects totaling approximately \$10 million over the next six years. The Destination 2040 Plan also recommends additional investments at regionally important intersections by the MaineDOT.







Ferry transit service to the islands

Photo by Corey Templeton

Invest in expanded transit service & infrastructure, with connections to other modes

Transit has a number of benefits including reducing overall vehicular travel demand, reducing personal fuel consumption and the associated emissions with driving, increasing the quality of life for those who do not drive, and helping to foster a sense of community. The success of transit also requires creating an appealing transit experience, careful planning of safe connections between routes, and convenient access to pedestrian, bicycling, and rail infrastructure.

As the PACTS population has grown, additional transit funds have become available, providing an opportunity to develop a more extensive, efficient, and balanced transportation network.

The Destination 2040 Plan contains multiple strategies aimed at increasing the use and viability of transit, transit-oriented development, and supporting transportation modes, such as bicycling and walking. Recent multi-municipal studies have resulted in documented public support for expanded transit as well as transit's role in relieving existing and projected roadway congestion, and preserving our uniqueness of place.

The PACTS urbanized area has expanded from 8 municipalities to 18 over the last 13 years. Further investment in a regional transit system is critical to maintaining minimal levels of congestion, providing transportation options for those who cannot or chose not to drive, for growing the region's workforce, and for providing transportation options for our aging population.

Recommended Actions

- Develop a unified, long-range Regional Transit Plan to guide development of the entire transit network while supporting the centers and corridors concept. The plan will be informed by analysis of existing transit infrastructure and service, growth, and development trends and preferences, an origin and destination study, and significant public engagement.
- Increase the availability and accessibility of transit to better serve all, with an emphasis on increasing the frequency, span of service, reliability, and safety of existing transit services before creating new areas of service (unless expansion connects two or more existing systems).

Use the 2011 Regional Route Study as a starting point along with the recommended new regional transit plan, and identify transit routes that merit improvement in frequency and/or span of service. Coordinate with the Cumberland and York County Emergency Management Agencies to integrate transit services into emergency management planning. Develop a funding plan to implement service improvements. Develop an evaluation methodology to measure performance.

- Increase rider satisfaction and ridership numbers by improving transit system connectivity. Improve userexperience of interagency and intermodal trips by coordinating transit services, fares, operations and public information. Plan for inter-modal hubs, or mini-hubs, where appropriate, that provide convenient transfers in high use locations. Assess opportunities for filling gaps and creating feeder services to better utilize existing resources.
- Where appropriate, extend transit service to new locations to better serve all populations. Promote transit corridor development across municipal boundaries through regional transit planning, the use of transit TIFs, or other strategies.

Implement the PACTS Transit Committee's expansion procedure utilizing Regionally Administered Discretionary (RAD) funds. Encourage adoption of Transit Oriented Development zoning by PACTS municipalities within priority centers. Encourage adoption of Transportation Demand Management plans by PACTS municipalities around centers on priority corridors. Encourage adoption of Transportation Demand Management plan requirements for site plan review for larger developments by PACTS municipalities.

Make all regionally significant destinations accessible by bicycle, and provide infrastructure for all levels of users with emphasis and focused resources in priority centers and corridors

PACTS will plan for and develop a comprehensive integrated Bicycle Network of facilities along PACTS' priority corridors and connecting priority centers for on-road, including shared-use, and off-road separated bicycle facilities.

The Regional Bicycle & Pedestrian Plan from 2009 identifies and recommends a comprehensive bicycle network, connecting regional destinations and tying to feeder local bicycle routes and networks. The 2009 plan also identifies areas of concern and other gaps in the network. This work should be updated and expanded using the PACTS' priority centers and corridors and PACTS Regional Bicycling Wayfinding Plan destinations as a baseline, as well as Portland and other PACTS member municipalities' bicycle planning.

- Emphasize bicycle transportation infrastructure in priority centers and corridors where high-speed motorized traffic is a deterrent to bicycling. Working with the PACTS municipalities, MaineDOT, and other stakeholders, take a comprehensive context sensitive approach to planning.
- Pursue full funding and implement region-wide the PACTS Bicycle Destination Wayfinding Signage program. Partially funded in 2014, full build out of the wayfinding signage system should be provided within the next 3 years. This was the top recommendation of the PACTS Bicycle & Pedestrian Plan (2009).
- Collect adequate bicycle count data three times a year and expand and refine MaineDOT's Bicycle Level of Service
 (BLOS) metric/methodology. The data category collections should cover the PACTS Regional Bicycle Wayfinding network, and greater regional bicycle networks, within and between priority centers and corridors. Utilizing the Strava data and other available data sources, refine and ground-truth a BLOS map/GIS, with priority centers and corridors, and PACTS regional bicycle wayfinding routes and destinations linkages.





Every trip begins and ends as a walking or pedestrian trip.

The pedestrian environment is therefore the foundation for a successful transportation system.

Parking Day

Photo by Corey Templeton





Pedestrian Transportation

Safely accommodate pedestrians within compact centers and adjacent neighborhoods, and along priority corridors

PACTS will emphasize pedestrian transportation infrastructure within priority centers and along priority corridors, especially where high-speed motorized traffic is a deterrent to walkability. Working with the PACTS municipalities, MaineDOT, and other stakeholders, the region will take a comprehensive context-sensitive approach to planning.

- Develop a policy for developing a complete, comprehensive regional network of sidewalks, paths, and trails that connect places at the neighborhood level within priority centers, and along priority corridors. This would be done through the Planning Committee and their municipal perspectives.
- Integrate PACTS' planning and funding into pedestrian programs, such as the Arterial Pedestrian Safety – Access to Transit and Pedestrian Safe Routes to School programs, in order to design and implement street crossing improvements at low to moderate costs. These projects enhance pedestrian safety and improve access to bus stops and schools. Strategies might include curb extensions, pedestrian refuge islands/medians, enhanced crosswalk markings and lighting, tip downs, accessible pedestrian signals, and signage.
- Update the PACTS Regional Bicycle and Pedestrian Facility Design Guidance (2015) document biannually with current best practices.
- Collect adequate pedestrian count data three times a year in pedestrian activity areas throughout the PACTS region.
 This is an existing priority for PACTS, with renewed emphasis on frequency and geography.



Incorporate Energy Conservation

Improving environmental quality with regard to transportation requires reducing the use of damaging carbon emissions from automobiles and trucks. Broadening convenient options and expanding transportation choices to modes other than single-occupancy vehicles — including transit, car/vanpools, bicycling and walking — will reduce energy use and harmful emissions. This effort is critical to curb the impacts of climate change.

Increase Transportation Demand Management TDM

Transportation demand management involves managing and encouraging low- or non-polluting modes. A variety of measures are available for reducing vehicular trips, including ridesharing, van and carpooling, taxis, transit, non-motorized transportation such as bicycling and walking, and Transportation Network Companies (such as Uber). Innovative car sharing solutions, including Zip Car and U-Haul, are both available in the Greater Portland region. Transit access especially to major employers and park-andrides with promotional incentives can be implemented almost immediately. The Amtrak Downeaster train, which travels through the PACTS region between Boston and Brunswick, is a recipient of federal air quality improvement funds. These funds come from the Congestion Management Air Quality (CMAQ) program and are important to the region. PACTS is currently working with GoMaine, the City of Portland, and the MaineDOT to develop region-wide policies and assistance for increased effort in this area. Improving regional bike infrastructure, such as protected bike lanes, is a priority for increasing ridership among a broader cross-section of the population, while also providing an economic appeal for tourism as well.

- Continue to support GoMaine and its long-term mission to promote healthy, economical, and eco-friendly modes of travel. Provide ride matching for commuters; assist employers and employees with commuter options; and work with planning agencies, businesses, advocacy groups, and other partners to reduce the number of single occupancy vehicles on the road in Maine.
- Support member municipalities in promoting alternative commuting options. Provide outreach on commuting options, such as ridesharing, the use of transit, and biking or walking to work. Employ social media tactics to educate the public on alternative commuting options. Collaborate with large employers/organizations to develop TDM strategies to provide incentives for their employees to use alternative options.



Develop Fueling Infrastructure

The broad adoption and use of vehicles that emit less or no carbon depends on the availability of fueling infrastructure other than carbon-based fuels. PACTS supports the regional efforts to reduce emissions and provide a network of fueling stations that provide numerous choices of fuels that do not harm the environment and reduce the impacts on climate change.

Many choices for vehicle fueling have entered the market, and these choices will expand over the lifespan of the Plan. Although refueling stations for non-petroleum options are increasing, there is a need to provide more emphasis on alternative fueling planning than in the past.

- Continue to support Maine Clean Communities (MC2) in its efforts to support the local economy and reduce the use of petroleum in transportation.
- Work with MC2 and municipalities to establish a network of electric vehicle charging stations, adopt municipal standards for permitting and incentivizing alternative fuel infrastructure, convert waste hauler fleets to compressed natural gas and/or blended biodiesel, and promote other fuels and technologies that result in lower emissions.





Integrate Land Use

It is critical to strengthen the connection between land use and transportation. PACTS will plan for, fund, and maintain a transportation system that supports land use plans and development that further a rural to urban pattern, promote livable places inherently designed for walkability and bikeability, and advance transit-oriented development in priority centers or other areas that emphasize all modes.

Align Transportation & Land Use

Transportation investments and land use policies have significant impacts on each other and play a key role in shaping the region. In the 2003 Destination Tomorrow Plan, the PACTS Policy Committee adopted the following policy to work towards greater consideration and management of these impacts.

Any arterial corridor roadway project, that by itself or as part of a program of improvements, will reduce commuter travel times between an urbanized and a non-urbanized area, must be accompanied by a land use plan that preserves the arterial's capacity, protects its mobility function and the public investment, and that minimizes sprawl.

PACTS will prioritize funding of transportation dollars on projects that provide appropriate context-sensitive roadway design, that respond to the adjacent land uses, or that work in concert with land use policy to transform corridors.



Lessons of the 2012 Gorham East-West Corridor Study

In 2014-2015, PACTS funded a Land Use and Transit Technical Assistance study that engaged six communities in developing recommendations to address economic growth, manage vehicular traffic, intensively increase mixed uses, and make transit supportive over the long-term.

A "three-legged-stool" approach was taken for this study area under the rules of the Maine Sensible Transportation Policy Act that demonstrated the benefits of planning for land use, transit, and roadway systems as a unified strategy. This integrated approach preserves place, strengthens downtowns and neighborhood centers, and preserves mobility and transportation mode choices. The recommendations of the study are a priority not just for the core study area municipalities, but a model for the PACTS region in its entirety. PACTS anticipates replicating this study for future priority corridors and priority centers over the life of the Plan.

- Develop regional guidance and policy for Transit
 Supportive and Oriented Development. Major investments
 in transit already exist in the region with fixed-route buses,
 ferries, and intercity/interstate rail (the Amtrak
 Downeaster). Working with the transit providers,
 municipalities, housing agencies, developers, and other
 stakeholders, targeted areas along existing and potential
 routes that are along priority corridors or within priority
 centers will be identified and integrated into the region's
 Transit Plan and targeted for walkable, mixed-use
 development.
- Historically the majority of PACTS projects collector preservation paving projects — do not include Complete Streets considerations to provide safety and infrastructure for all modes. Develop a PACTS Complete Streets policy that will be used in the application process to evaluate multimodal needs of projects. Include Multimodal Level of Service (MMLOS) evaluation criteria for use in all PACTS planning studies when Roadway LOS criteria are necessary. This policy will be consistent with the Maine DOT Complete Streets policy, the City of Portland's, and other municipal Complete Streets policies.





Protect Environmental Quality

PACTS recognizes that transportation impacts the built and natural environments and therefore attempts to manage those impacts. The most notable effects are on air and water quality and the natural landscape, with transportation infrastructure often requiring large cuts and fills. Harmful vehicle emission levels have been reduced, but these reductions have been outstripped by the rise in vehicle miles traveled and vehicle hours traveled (VMT and VHT).

Another less obvious impact to the environment - particularly to surface and ground water - is greater non-point source pollution resulting from increased pavement and other impervious surfaces in urban areas. Stormwater channels runoff carrying pollutants from cars into our streams, rivers, and ultimately Casco Bay. The combination of additional pavement and more non-point source pollution has had a negative impact on overall water quality and habitat. Destination 2040 seeks to identify and minimize these impacts through careful study of proposed projects.

Climate change is expected to have an impact on transportation infrastructure. Issues such as rising sea level, storm triggered events like storm surge, and changes in regional temperature require new planning elements for projects.

Improve Signal Coordination

The flow of traffic, including for motorized, bicycle, and pedestrian forms of travel, can be optimized with coordinated and connected traffic signals and controls, reducing fuel use and emissions associated with motor vehicles. PACTS has invested in a first-phase Regional Traffic Management System. Expanding the interconnection of existing signals is a cost-effective means for optimizing the capacity of the roadway and transit systems already in place.

Recommended Actions

- Increase investment in the region's traffic signals based on the recommendations from PACTS 2009 and 2011 engineering studies and on engineering analysis underway for the RTMS Committee.
- Continue to work to increase inter-municipal collaboration on the maintenance and coordination of traffic signals.
- Develop a 10-year regional traffic signal improvement plan that includes recommended staffing, study, and capital expenditures.

Prepare for Climate Change

Extreme weather events and a changing climate are certain to add to the transportation infrastructure needs in the near future. MaineDOT completed an initial assessment last year, and PACTS will be challenged with difficult decisions about whether, when, and to what extent to incorporate adaptation measures into existing and replacement infrastructure. The need to develop more resiliency into the designs of PACTS and MaineDOT assets for recovery from extreme weather events or other evolving effects of climate change is already here.

However few "ready-to-go" tools and analytic frameworks exist to help fiscally-constrained transportation managers navigate through benefit-cost analyses that could highlight options that will be both resilient (in the face of threats like sea level rise, storm surge, and upland runoff) and cost efficient (in terms of avoided damages).

Recommended Actions

 Complete a region wide transportation infrastructure vulnerability assessment to identify those transportation components in the region most susceptible to damage or failure due to climate related events including, but not limited to, storm surge and sea level rise.



Traffic Signals

Traffic signals are an integral part of our current regional roadway system that work to optimize existing roadway capacity for motor vehicle traffic flows on major streets. Signals also enhance safety for all modes including bus transit, bicycles, and pedestrians. With over 350 signalized intersections in the PACTS region, many of them over 25 years old, the region needs to invest more capital and maintenance resources into the RTMS system to reduce congestion and provide multimodal benefits. Innovations in signal technology are making it possible for signals to sense traffic and adapt to traffic levels. Modern traffic signals have sophisticated detection systems and are run by software and sensors that provide many benefits including optimizing capacity, managing congestion, and gathering data about traffic volumes. This technology is much more effective, less expensive, and less intrusive than widening roadways, or building new ones. By investing in relatively inexpensive upgrades to signals and signal technology, the PACTS region can avoid millions of dollars in expensive roadway expansion projects. This has been the PACTS policy for more than a decade.

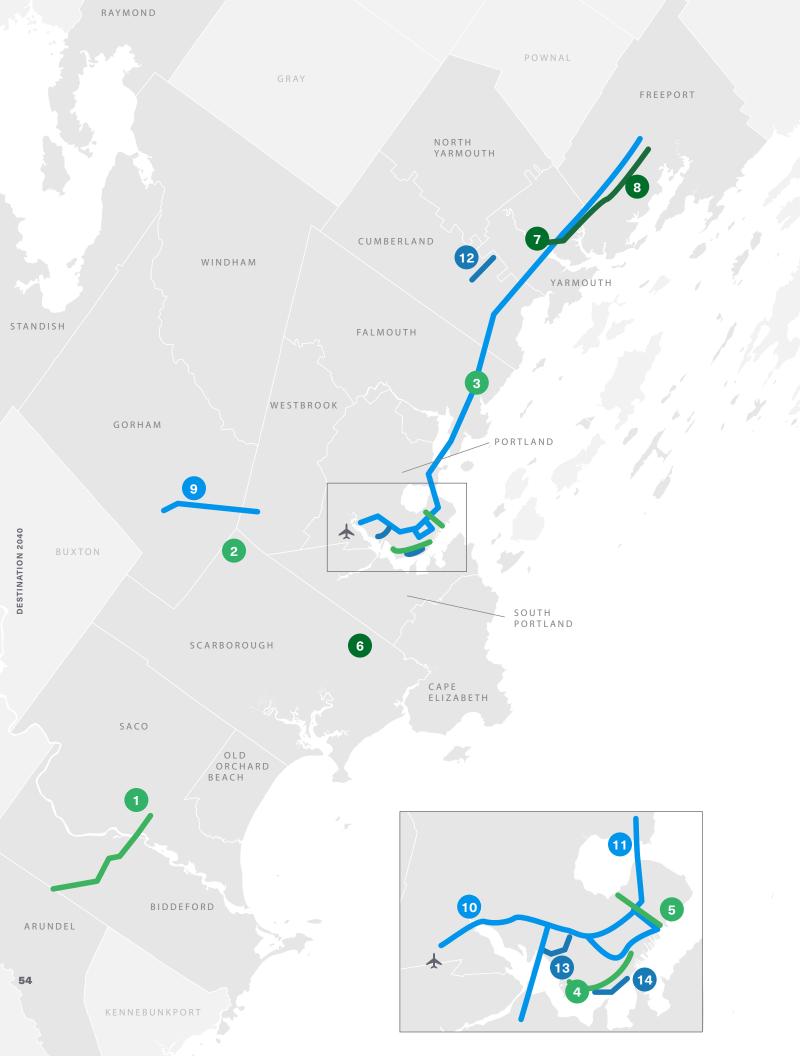


Making It Happen

- Prioritize improvements of priority centers and priority corridors — roadways that benefit the greatest number of modes including transit, bicyclist, and pedestrians.
- Expand the frequency, geographic reach and use of the public transit system, including bus and rail services.
- Focus on intersection improvements that improve the overall efficiency of the system, including improved signalization and integration of bicyclists, pedestrians and transit.
- Foster inter-municipality coordination and cooperation of transportation investments with land uses that preserve those capacity investments.
- Continue development and refinement of multimunicipal land use and transportation planning, through efforts similar to the 2012 Gorham East-West Corridor Feasibility Project, the 2014 Biddeford-Saco Downtowns Traffic Study, and the 2015 PACTS Land Use and Transit Technical Assistance planning process.

- Secure additional transportation funding for the region, working with the MaineDOT, the Maine Turnpike Authority, the Congressional Delegation, the Maine Legislature, public transportation agencies, and municipal officials.
- Continue support of MaineDOT and Maine Turnpike
 Authority efforts to make necessary investments to
 provide safe and efficient transportation service on the
 interstates through the year 2040.
- Continue support of MaineDOT and Maine Turnpike
 Authority efforts to maintain I-295 as the primary route for intra-regional traffic and the Maine Turnpike as the major route for traffic traveling through the region.





Destination 2040 Major Regional Transportation Projects

Several major regional projects are currently being studied, funded, designed, and constructed. Through the Destination 2040 Plan, PACTS supports each of these projects, recognizing that they will bring significant benefits to the region. The map on the facing page shows many of these major regional projects.

Roadway

- 1 Biddeford-Saco Route 1 Signal Coordination
- 2 MTA Toll Road Spur to Gorham
- 3 Falmouth Spur At-Grade Intersection
- 4 West Commercial Street Redesign
- 5 Franklin Street Redesign

Separated Off-Road Facilities

- 6 Eastern Trail: Bridges over Nonesuch River and Pan Am Railroad
- 7 Shared Use Path on Main Street Bridge
- 8 Shared Use Path Yarmouth-Freeport

Transit

- 9 Extension of METRO to Gorham / USM
- 10 Portland HUB Link Bus Circulator
- 11 Portland North Bus Service

Rail

- 12 Downeaster Passing Siding
- 13 Downester Wye Track
- 14 IMT Freight Heavy Haul Road



The Destination 2040 Plan serves as a policy guide for maintaining the best of the existing transportation system, while providing focus in areas where the current system is deficient, and prioritizing transformative steps to develop a sustainable transportation system for the future.

While ambitious in its goals to both maintain and strategically transform the system, the plan lays out broad, long-range, and fiscally constrained strategies for fulfilling the region's transportation needs and preserving the places unique to the Portland metropolitan area.

Over the coming decade, PACTS members will continue to improve the region's infrastructure for bicyclists, pedestrians, and transit-riders, while acknowledging that the automobile will still be the dominant mode of mobility in the decades to come.

PACTS members firmly believe that the holistic approach recommended in Destination 2040 provides a foundation and path forward to create the transportation system of tomorrow and enhance the region's economic prosperity, environmental health, and livability.

The complete Destination 2040 Plan is available with all chapters and appendices at www.pactsplan.org.

DESTINATION2040



PORTLAND AREA COMPREHENSIVE TRANSPORTATION SYSTEM