

Destination 2040: PACTS' Long-Range Transportation Plan

Chapter 4: Plan Vision, Goals, Objectives, and Strategies

The success of the *Destination 2040* Plan depends on the establishment of goals and objectives as the foundation for realizing the Plan's Vision and Purposes of the Plan. Performance-based planning and programming does not change the goals and objectives of long range plans. The 2003 and 2006 Plans had policies and goals, as well as objectives and strategies; the 2010 Plan simplified to goals and strategies. It does introduce a fundamental principle that actions taken by transportation agencies should be based on strategic direction, and that performance should be measured based on progress towards desired outcomes. The performance measures in Chapter 5 articulate desired outcomes.

This Plan's goals and objectives are structured recognizing that transportation is literally and figuratively intertwined with many other areas. The PACTS long range transportation plans have incorporated many factors that impact transportation system performance, namely the economy, energy, natural resources and the environment, housing, land use, and regionalism. Realizing desired outcomes is therefore dependent on not only PACTS and its partners, but also other entities and potential partners.

A VISION for the Region in 2040:

The Destination 2040 vision for the PACTS regional transportation system is to provide a safe, fully developed, and well maintained multi-modal 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. These are the policies and values of the PACTS communities and members.

Since 2003, the development of PACTS' long range plans have all followed a performance-based transportation planning process, which includes involving broad public input, PACTS member direction and regular updates and verification, confirmation and further direction as the Plan develops, scenario planning, and the development of goals, objectives and strategies to realize the Plan's intended end state.

Destination 2040 followed the new FHWA performance-based planning and programming guidance format. PACTS had already gone through an extensive scenario planning process in 2003 and 2006, and the "Best Of" theme was reaffirmed as the overall strategy for the transportation system. Many of the previous Objectives and Strategies are carried forward for this Plan through 2040.

[See appendix G for background on the Alternatives Analysis developed through scenario planning in 2003/6.]

Destination 2040: PACTS' Long-Range Transportation Plan

Developing Goals: Focus on Outcomes

The FHWA Performance-Based Planning and Programming process emphasizes goals that are ideally developed with a focus on outcomes, that are the end result of the planning and projects that are actually implemented. A useful definition of goals is:

A goal is a broad statement that describes an end state.

In the transportation planning process, goals stem from the values inherent in the PACTS communities' vision for the future. These outcome-oriented goals set the strategic direction for the planning process, answering the questions:

“What do we want our area to look like?”

“What do we want to achieve?”

Goals should reflect agreed-upon, system-wide priorities and should relate to outcomes that matter to the public, not just to the agency internally.

From the FHWA Performance-Based Planning and Programming Guidebook (2014)

The six goals, 15 objectives, their associated 40+ strategies and the seven Key Components of the Transportation System follow. The long range transportation planning process also requires developing strategies for addressing objectives and goals. The matrix below illustrates how the eight Federal planning factors relate to the six *Destination 2040* Goals:

Table 4-1 FHWA Required Planning Factors and *Destination 2040* Goals

Eight required Metropolitan transportation planning factors		PACTS Destination 2040
1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency		Goal 1. Regional Focus: PACTS will plan for, fund, and maintain a transportation system that reflects a regional approach to transportation and land use planning, project prioritization, and decision-making founded
2. Increase the safety of the transportation system for all motorized and non-motorized users;		Goal 2. Economic Development: PACTS will plan for, fund, and maintain a transportation system that enhances regional prosperity through support for the economic vitality of existing businesses in centers and for economic development opportunities encouraged by local and regional plans.
3. Increase the security of the transportation system for motorized and non-motorized users:		Goal 3. Mobility, Safety & Accessibility: PACTS will plan for, fund, and maintain a transportation system that improves the mobility, safety and accessibility of people and goods throughout the region.
4. Increase accessibility and mobility of people and freight;		Goal 4. Energy Conservation: PACTS will plan for, fund, and maintain a transportation system that conserves and efficiently uses energy resources.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;		Goal 5. Land Use: PACTS will plan for, fund, and maintain a transportation system that supports land use plans and development that furthers the Urban to Rural land use pattern, that promote livable places that support walkability, bikeability and transit-oriented development in Centers of Opportunity and other areas emphasizing all modes.
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;		Goal 6. Environmental Quality: PACTS will plan for, fund, and maintain a transportation system that protects and improves the human and natural environments and quality of life.
7. Promote efficient system management and operation;		
8. Emphasize the preservation of the existing transportation system.		

Destination 2040: PACTS' Long-Range Transportation Plan

The Six Goals of *Destination 2040*: Vision to Reality

Developing a safe, fully developed, and well maintained multi-modal means of travel as stated in the adopted Vision Statement can best be attained with Goals for guidance. The following Six Goals were developed with the FHWA Eight Planning Factors, the USDOT-HUD-EPA Livability Principles and through public engagement as a basis. Additional regional and local factors were further incorporate regional scenario planning of the last decade, and finally current regional needs as gathered through an extensive outreach effort to citizens, members and other stakeholders. Members experience and expertise were all drawn upon in developing the Plan's strategies over the last 15 years. Many of the strategies associated with reaching these Goals are carried forward and are seen as successful and still necessary in fulfilling the Vision and Policies for this update and the coming 25-year period.

Goal 1. Maintain a Regional Focus:

PACTS will plan for, fund, and maintain a transportation system that reflects 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.

Goal 2. Enable Economic Development:

PACTS will plan for, fund, and maintain a transportation system that enhances regional prosperity through support for the economic vitality of existing businesses in centers and for economic development opportunities encouraged by local and regional plans.

Goal 3. Maintain and Improve Mobility, Safety & Accessibility:

PACTS will plan for, fund, and maintain a multimodal transportation system that improves the mobility, safety and accessibility of people and goods throughout the region.

Goal 4. Integrate Energy Conservation:

PACTS will plan for, fund, and maintain a transportation system that conserves and efficiently uses energy resources.

Goal 5. Strengthen the Land Use and Transportation Connection:

PACTS will plan for, fund, and maintain a transportation system that supports land use plans and development that furthers the Urban to Rural land use pattern, that promote livable places that support walkability, bikeability and transit-oriented development in Centers of Opportunity and other areas emphasizing all modes.

Goal 6. Protect Environmental Quality:

PACTS will plan for, fund, and maintain a transportation system that protects and improves the human and natural environments and quality of life.

Destination 2040: PACTS' Long-Range Transportation Plan

Seven Key Components of the Transportation System

The Vision Statement of *Destination 2040* states, in part, that the transportation system will “provide access to the entire PACTS region through a fully developed and well maintained multi-modal transportation system”. Following the direction of the Vision Statement, seven key components of the transportation system were considered in detail in the development of the Plan’s goals, objectives and strategies. Each of the seven components is discussed below.

Interstate System

Maintaining the safety and efficiency of the Maine Turnpike, Interstate 295 and Interstate 195 is essential to the region’s economy and the mobility of its users. The Turnpike also serves as the region’s primary connection to southern New England and the northern part of Maine. *Destination 2040* recognizes that I-295 and the Maine Turnpike currently serve and should continue to serve both inter-regional and intra-regional functions within the PACTS region. Specifically, the Maine Turnpike is ultimately an inter-regional facility, but serves many travelers going between points within the PACTS region. Conversely, I-295 currently serves a primarily intra-regional travel function within the PACTS region, but also serves a significant inter-regional travel function.

Destination 2040 Plan includes a number of recommendations targeted to balance these roles, and to maintain and enhance the economic interdependency of the Biddeford-Saco and Portland-South Portland areas. The recommendations for the I-295 corridor are substantially in agreement with the MaineDOT I-295 Corridor Study that examined safety, mobility and capacity and developed a set of recommendations designed to provide safe and efficient transportation service through the Year 2040.

Arterial Roadway System

Providing access and goods for everyone living or visiting the PACTS region, the region’s arterials – roads such as Route 25, Route 1, Route 302 and Route 111 – carry the majority of intra-regional travel, and connect the region’s cities, towns, villages, employment and commercial centers, and residential areas. The arterials are the workhorses of the region’s roads even though I-295 and the Maine Turnpike carry the heaviest traffic volumes. Arterials serve two main travel functions. They provide mobility throughout the region, and they provide accessibility to destinations. Maintaining the balance between these two functions is an ongoing challenge because when an emphasis is placed on one function, e.g., improving mobility, there is often a detrimental effect on the other function, i.e., access to locations.

Collector Roadway System

A collector road or distributor road is a low-to-moderate-capacity road which serves to move traffic from local streets to arterial roads. Unlike arterials, collector roads are designed to provide access to residential properties. MaineDOT differentiate major and minor collector roads, the former being generally wider and busier. Collector roads can originate in several different ways. Most often, they are planned within a suburban layout and built expressly for that purpose; occasionally, they fill gaps in a grid system between arterial roads.

Destination 2040: PACTS' Long-Range Transportation Plan

The PACTS region has 226 miles of collector roads in varying conditions in the PACTS Capital Management Area. The ever-increasing cost of rehabilitation and reconstruction has resulted in a desire among these communities to create a comprehensive system to determine the condition of area roadways, prioritize infrastructure improvements and develop a capital management program. When a roadway does not meet current MaineDOT design standards the result can be a decrease in mobility, access limitations, or an increase in safety deficiencies. A ranking system was developed to help prioritize the roadway improvement needs and provide a predictable progression of how and when collector roadways are improved.

Public Transportation and Transit Systems (Bus, Passenger Rail and Ferry)

As the PACTS region grows, so does the need for greater attention and investments in increased public transportation services. Most importantly, *Destination 2040* recommends developing a regional transit plan and studies to reexamine regional commuter bus and rail feasibility opportunities. Other strategies for the public transportation and transit systems include maintaining and expanding existing transit services frequency and facilities, and strategically extending and expanding services and facilities where appropriate and feasible.

Bicycle and Pedestrian Systems

Strategies related to these two modes will recommend the continued improvement of safety and access of bicycling and walking for transportation purposes. Strategies will also promote accessibility to and increased use of these modes of travel emphasizing the links between land use and transit-oriented development. Providing safe access for bicyclists and pedestrians should be considered, where appropriate, for all transportation improvements.

Freight System

Freight system strategies will continue to make improvements to freight facilities including improving access. Additional rest stops on interstate highways should also be considered. Combining these strategies will improve the efficiency and reliability of the freight system while respecting the needs of adjacent residential neighborhoods.

Travel Demand Management and Intelligent Transportation Systems

Travel Demand Management measures (TDM) seek to reduce the demand for travel, typically during the peak morning and afternoon periods by such actions as employee flex-time, staggered work hours, and incentives to use alternative modes of travel and high-occupant vehicles. Intelligent Transportation System measures (ITS) apply technology to make the transportation system more efficient and to provide traveler information to transportation system users.

Destination 2040: PACTS' Long-Range Transportation Plan

Destination 2040's Goals, Strategies and Recommendations

The Goals and Strategies flow from the Plan's Vision Statement. The objectives of each goal are followed by strategies. While this plan identifies specific strategies associated with specific goals, in some cases the strategies also assist in realizing other objectives. The recommendations in the Summary of this plan (Chapter 1) are made as the most effective and efficient direction for realizing many of the desired outcomes of the Plan.

Goal Area	# of Strategies	Page
1. Regional Focus	8	4-7
2. Economic Development	13	4-10
3. Mobility, Safety & Accessibility	19	4-13
4. Energy Conservation	7	4-18
5. Land Use and Transportation Connection	6	4-20
6. Environmental Quality	7	4-23
	60	

The goals, objectives and strategies flow from the Plan's Vision Statement. (See page 4-1.) Each of the following six sections is based on one of the Plan's six goals. The objectives of each goal are followed by strategies. Each strategy includes a list of the organizations responsible to implement it; the first organization listed is often expected to take the lead.

The strategies span many areas that impact the transportation system including: investment priorities, funding, integrated land use and transportation corridor planning, regional collaboration and decision-making, and integration of the Transportation Improvement Program with *Destination Tomorrow*. The majority of the strategies recommend policies or courses of action based on a current understanding of the opportunities and challenges facing the region. The overall level of investment recommended recognizes reasonably anticipated revenue sources, as required by federal law. In addition, a small number of the Plan's strategies recommend specific high-priority project proposals that were developed from a needs assessment that considered current and forecasted transportation deficiencies.

Destination 2040: PACTS' Long-Range Transportation Plan

Objectives and Strategies that Implement the Goals of *Destination 2040*

The following strategies were developed in accordance with each of the Six Goals stemming from the Plan's Vision Statement.

Goal 1: Maintain a Regional Focus:

PACTS will plan for, fund, and maintain a transportation system that reflects 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.

As documented in the Plan and over the last 50 years, the region around Portland and its satellite urban centers are growing. People and businesses are moving into regional urban areas –and into downtowns and urban cores. This is logical because, economic development and growth requires a lot of infrastructure which is expensive to build and maintain. For transportation to be truly efficient, it needs to serve as many people, businesses, and visitors in the places they frequent.

Destination 2040 acknowledges that its members and users of the transportation system are traveling and living regionally. Therefore decisions about transportation infrastructure improvements must be made strategically and coordinated across agencies and other partners. The most efficient use of limited funds will require investments in existing infrastructure, in existing and emerging centers throughout the expanding PACTS region.

Objective 1: To establish implementation priorities for transportation improvements which are tied to regional transportation need and funding availability.

Strategy 1.1: Implement the *Destination 2040* Implementation Plan

The top priority recommendations and strategies are to be implemented over the next five years utilizing the PACTS Committees, and as described in Chapter 7 of this planning document.

Responsibility: All participants in the PACTS process and other partners

Strategy 1.2: Priority Corridors and Centers

Prioritize multimodal investments in Priority Centers and connecting Priority Corridors in accordance with the Urban to Rural land use and transportation form to manage congestion and enable high-value, transit-supportive development by increasing trips to, from, and within Centers that are supported by walking and biking.

Responsibility: Municipalities, PACTS, MaineDOT, GPCOG, and SMPDC

Destination 2040: PACTS' Long-Range Transportation Plan

Strategy 1.3: New Funding Mechanisms

Provide more innovative options for funding transportation projects in the PACTS region through the development of new programs, such as the MaineDOT's Municipal Partnership Initiative (MPI), Business Partnership Initiative (BPI), other Public-Private Partnership opportunities and Transportation TIFs.

Responsibility: MaineDOT, PACTS, and Municipalities

Strategy 1.4: The Plan-TIP Connection

Further tighten the relationship between available funds and the investment priorities of the *Destination 2040* Plan.

Responsibility: MaineDOT, PACTS, and Municipalities

Strategy 1.5: Prioritize Projects with Multiple Stakeholder Buy-In

Provide incentives for collaboration among municipalities by prioritizing projects that coordinate planning across jurisdictions, include regional multi-modal transportation planning, and demonstrate commitment and buy-in from a multiple of PACTS member stakeholders

Responsibility: PACTS, MaineDOT, and Municipalities

Objective 2: To monitor transportation system performance and plan implementation on a region-wide basis.

Strategy 1.6: Outcome-oriented Performance Measures¹

Identify and implement an ongoing process for selecting and refining performance measures related to specific goals and targets, and using such measures in decision-making to achieve desired system performance outcomes, and reporting the results at established intervals.

Responsibility: PACTS, MaineDOT, and Municipalities

Strategy 1.7: Data Collection

In order to inform investment decisions, and prioritization, provide continuous transportation data collection for all modes. Data must be relevant to Performance Measures and targeted improvements for the transportation system and adequate to develop reports on system performance at regular intervals.

Responsibility: PACTS, MaineDOT, and Municipalities

¹ As of this report's writing, the Federal Highway Administration and Federal Transit Administration had not finalized or issued to the States and MPOs guidance on performance measures, goals, targets and other related guidance related to these topics. They are expected in 2016.

Destination 2040: PACTS' Long-Range Transportation Plan

Objective 3: To keep citizen involvement in regional transportation planning as a high priority at PACTS.

Strategy 1.8: Public Engagement

Invite and involve the general public as much as possible in the development of plans, capital projects, and other PACTS activities at regular intervals. Methods should include but not be limited to:

- Presentations
- Policy Briefings
- Town and City Council presentations and workshops
- Other Outreach activities by PACTS

Responsibility: PACTS, MaineDOT, and Municipalities

Goal 2: Enable Economic Development

PACTS will plan for, fund, and maintain a transportation system that enhances regional prosperity through support for the economic vitality of existing businesses in centers and for economic development opportunities encouraged by local and regional plans.

The PACTS region's economy and economic development are dependent in part on an efficient transportation system. Freight movement is an increasingly critical component of the Maine's economic growth strategy, as it is for the PACTS region. Attracting and retaining businesses requires access to efficient transportation infrastructure, like interstates, airports, and intermodal facilities and ports. Likewise, attracting and retaining the labor force for the 21st Century requires maintaining a high-level quality of life, pleasant commutes providing easy access to employment, and integrated recreational opportunities in places most frequented.

The objectives and strategies of *Destination 2040* for Economic Development listed below provide the PACTS communities approach to maintain and grow the region's economic development through transportation while providing a high quality of living.

Objective 1: To connect and enable a network of mixed-use economic centers ("Priority Centers") that include retail, office, manufacturing, residential and recreational uses, linked by multimodal connecting corridors ("Priority Corridors") that generate economic growth.

Strategy 2.1: Arterial Program – Priority Corridors connecting Priority Centers

Implement this Plan's proposed multimodal Priority Corridors and Centers investment focus on economically significant arterials in order to align resources that grow local and the overall regional economy.

Responsibility: PACTS, MaineDOT, and Municipalities

Destination 2040: PACTS' Long-Range Transportation Plan

Strategy 2.2: Regional Transit Plan for Building a Transit Region

Develop a long-term plan for regional transit that links employment centers, housing opportunities, and nearby recreational areas.

Responsibility: PACTS, MaineDOT, and Municipalities

Strategy 2.3: Transit Oriented Development

A transit-oriented development (TOD) is a mixed-use residential and commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership.

Responsibility: Municipalities, PACTS, MaineDOT, and the Private Sector

Objective 2: To provide gateway connectivity into the Portland region through highways, airports, seaports, rail, public transportation, sidewalks and bicycle and pedestrian accommodations.

Strategy 2.4: Gateway connectivity and linkages

Incorporate landside and transport linkages with modal alternatives for access between air, sea, and rail stations and centers of employment, businesses, and retail centers as well as other traffic generators into the Portland region accounting for all passengers, freight, goods movement and other demands.

Responsibility: MaineDOT, Municipalities, PACTS, GPCOG, and SMPDC

Strategy 2.5: Trails and Eco-Tourism

Support implementation of regional off-road mixed-use path planning efforts including but certainly not limited to the Mountain Division, Eastern Trail and East Coast Greenway to promote regional links and eco-tourism.

Responsibility: MaineDOT, Municipalities, PACTS, GPCOG, and SMPDC

Objective 2: To provide landside access to air, sea, and rail nodes accounting for the needs of passengers, expedited freight and goods movement, and other demand.

Strategy 2.6: MaineDOT Truck Network

Prioritize the proposed improvements to the region's heavy haul truck network. Review and appropriately implement the MaineDOT Heavy Haul Truck network within municipal and regional plans to coordinate land use and roadway improvements in order to maintain access to important transportation centers. Priority should be given to protecting city, town and village centers from the negative impacts of large trucks traveling through these centers en route to other cities and towns.

Responsibility: MaineDOT, Municipalities, PACTS, GPCOG, and SMPDC

Destination 2040: PACTS' Long-Range Transportation Plan

Strategy 2.7: Freight Capacity and Network

Develop a long-term plan, and short-term implementation plan for regional freight, that includes regional freight shippers and receivers, rail and air freight, truck companies, and public sector officials.

Responsibility: GPCOG, PACTS, Maine Port Authority, MaineDOT, Jetport, Chamber of Commerce(s), and the Private Sector

Strategy 2.8: Seamless Transfers

Create and maintain inter-terminal transportation linkages to promote seamless passenger transfers between transportation hubs and stations to enhance transportation efficiency for commuters, tourists, and other users of transit.

Responsibility: Transit Operators, PACTS, GPCOG, SMPDC, MaineDOT, and Municipalities

Objective 3: To preserve accessibility and mobility and provide transport linkages for all modes in corridors that feed regionally significant centers of employment, business, activity and other traffic generators.

Strategy 2.9: Multimodal Priority Corridors and Centers

Implement this Plan's Priority Corridors and Centers that focuses and leverage PACTS investments in existing and growing Centers where employment, commercial activity, and housing are in close proximity and can be efficiently linked along major arterial and other connecting roadways.

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, and MaineDOT

Strategy 2.10: Access Management

Develop urban access management guidelines and implement them on the non-interstate federal aid highway system.

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, MaineDOT

Objective 4: To provide transport linkages and modal alternatives to centers of employment, business and retail activity, and other traffic generators.

Strategy 2.11: Intercity Bus and Rail Services

Improve the frequency, travel time, convenience and amenities of bus and rail services. Continue support for extending bus, passenger and/or intercity rail services to and from Portland.

Responsibility: NNEPRA, Amtrak, MaineDOT, Transit Agencies, Private Bus companies and Municipalities

Destination 2040: PACTS' Long-Range Transportation Plan

Strategy 2.12 Freight Movement

Promote the efficiency and reliability of mainline freight movements, and the greater use of rail to move freight within and through the region, while respecting the needs of residential neighborhoods near rail lines.

Responsibility: PACTS, GPCOG, SMPDC, Private sector, and MaineDOT

Strategy 2.13 Increase Mode Choices and Options

Increase the importance of regional accessibility by non-automobile modes within studies and their implementation programs.

Responsibility: PACTS, GPCOG, SMPDC, and MaineDOT

Goal 3: Improve Mobility, Safety, and Accessibility

PACTS will plan for, fund, and maintain a transportation system that improves the mobility, safety and accessibility of people and goods throughout the region

Improving mobility, safety and accessibility are crucial to an efficient transportation system, to future growth and prosperity, and to our quality of life. The *Destination 2040* Plan contains five objectives and 19 strategies that address these inter-related topics. Each topic is addressed from the perspective of automobile and truck traffic, from the perspective of bicycle and pedestrian traffic, and from the perspective of individuals who use one of the many inter-connected parts of the passenger transportation system.

Objective 1. To reduce congestion and delay, and improve safety on the main travel arteries throughout the region.

Strategy 3.1: Congestion Management Plan

Use the 2013 CMP plan (and subsequent updates) to reduce congestion by increasing mode share of non-single-occupancy vehicle trips, through transit, bicycling, walking and car/van pool and shared vehicles. Focus on intersections as the major emphasis area for congestion and safety management.

Responsibility: PACTS, MaineDOT, Maine Turnpike Authority, and Municipalities

Strategy 3.2: Regional Arterial and Collector Assessments and Preservation

Through a biennial assessment, identify and prioritize the most regionally significant arterial roads for multimodal investments for preservation and accommodating all modes. Key components to identify should at least include safety and compatibility of all modes, bottlenecks, roadway and pavement preservation, accommodating all modes safely. Identify opportunities for improving context sensitive issues with input from member communities for potential design exceptions.

Responsibility: MaineDOT, Municipalities, PACTS, GPCOG, and SMPDC

Destination 2040: PACTS' Long-Range Transportation Plan

Strategy 3.3: Multimodal Intersections

Establish a policy to focus on intersections as the major emphasis for congestion and safety management.

Responsibility: PACTS, MaineDOT, Maine Turnpike Authority, and Municipalities

Strategy 3.4: Signal Coordination

Utilizing the ongoing Regional Traffic Management System (RTMS), optimize and maintain traffic signal coordination that manages traffic flow-including for bicycles and pedestrians- enables dynamic signal programs that respond to traffic volumes, and provides emergency preemption, and transit priority capabilities.

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, and MaineDOT

Strategy 3.5: Road Connections

Plan for and implement future collector and sub-collectors as residential and commercial development occurs to improve road network connectivity, and to better distribute traffic. Develop and distribute education materials to municipal officials and the public that describe the long-term cost savings and public safety benefits of a more connected network of streets, particularly in areas of concentrated residences, businesses and stores.

Responsibility: Municipalities, Private Sector, PACTS, GPCOG, SMPDC

Strategy 3.6: Travel Demand Management (TDM)

Plan for and implement TDM strategies in conjunction with all significant corridor capacity improvements in order to reduce demand and preserve corridor capacity.

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, and MaineDOT

Strategy 3.7: Intelligent Transportation Systems (ITS)

Plan and implement appropriate ITS technology on interstate and non-interstate highways and transit systems, and in incident management programs on interstate highways.

Responsibility: MaineDOT, Maine Turnpike Authority, Transit Agencies, PACTS, GPCOG, and SMPDC

Strategy 3.8: Modernization of I-295 and the Maine Turnpike

Recommend that the MaineDOT and the Maine Turnpike Authority implement where appropriate, the following 11 recommendations that collectively will provide safe and efficient transportation service to the region's two primary interstate highways. Further, MaineDOT should limit the widening of I-295 to Items 1, 2, 3 and 4 below, if at all possible, in order to balance the need to provide regional mobility and access with the need to minimize potential negative impacts on the fabric of nearby neighborhoods, on pedestrian connectivity, and on local streets., specifically:

Destination 2040: PACTS' Long-Range Transportation Plan

1. Collaborate with MaineDOT, the Maine Turnpike Authority, and the Federal Highway Administration on addressing safety, and operational issues ramp additions and removals, accommodations for bicyclist and pedestrians at interchanges, toll strategies and park and ride facilities.
2. Continue to work with MaineDOT to balance the need for regional mobility and access on I-95 and I-295 at the interface between on/off ramp systems and the fabric of their nearby neighborhoods, on pedestrian connectivity, and on local streets.
3. 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. [This topic is in the Interstate section because of the possibility of a Gorham turnpike spur project. Note that a PACTS-funded consulting team is currently providing land use planning technical assistance to Gorham and Scarborough, and four other municipalities. The goal of that assistance was to help the municipalities plan for compact land use development in that area.]

4. 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 Scarborough/Saco area, in West Cumberland and in Biddeford.

Objective 2: To improve safety for all users in Right of Ways by reducing the number and severity of crashes.

Strategy 3.9: High Crash Locations

Monitor MaineDOT designated high-crash locations (HCLs) on an annual basis, identify causal factors, develop responsive improvements, and create a prioritized list of locations for implementation.

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, and MaineDOT

Strategy 3.10: Roadway Users Safety and Education

Promote safety in design for motorized and non-motorized users, i.e. by conducting regular trainings and other educational forums on the conflicts and solutions for the safe shared use of roadways and other rights of ways.

Responsibility: Municipal Law Enforcement, PACTS, GPCOG, SMPDC, and MaineDOT

Destination 2040: PACTS' Long-Range Transportation Plan

Objective 3: To expand accessibility in the region by non-automobile users.

Strategy 3.11: Increase Transit Service

Increase the availability of bus and rail transit, throughout the PACTS region by developing a regional transit plan and prioritizing transit services to be expanded, or extended, as appropriate, to major centers. Emphasis should be placed on increasing the frequency and effectiveness of existing services and improving connectivity within the system before increasing or creating new areas of service, except when establishing a transit oriented development.

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, and MaineDOT

Strategy 3.12: Express Bus Transit Service

Provide Express Bus Transit Service on key arterials (or other logical routes) that connects higher concentrations of employees with employment centers.

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, and MaineDOT

Strategy 3.13: Sidewalks, Pathways, and Pedestrian Environment Areas

Target funds for high quality pedestrian connections using sidewalks and/or paths that connect the Pedestrian Activity Area

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, and MaineDOT

Strategy 3.14: Bicycle Plans

Continue implementation of the 2009 and subsequent PACTS Regional Bicycle and Pedestrian Plan Update(s) in order to increase bicycle mode share throughout the region (with emphasis on well-designed bicycle and pedestrian facilities on upgraded roadway segments and intersections for safety purposes).

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, MaineDOT

Objective 4: To provide convenient, safe, and affordable seamless connections between modes.

Strategy 3.15: Hub Links

Plan, implement and maintain inter-terminal shuttles and trunk-line transit providing linkages to major intermodal transportation hubs, hotels and transfer points.

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, and MaineDOT

Strategy 3.16: Traveler Information

Implement appropriate ITS technology to provide real-time traveler information services to regional travelers.

Responsibility: PACTS, GPCOG, SMPDC, MaineDOT

Destination 2040: PACTS' Long-Range Transportation Plan

Strategy 3.17: Transit Coordination

Continue the efforts of the PACTS Transit Committee and the Peninsula Transit Operations Group to coordinate transit service, fares and operations in the region. These efforts should include studying the feasibility of regionalizing the seven public transit service providers, potentially into a regional transit authority or other more cost-effective and streamlined structure.

Responsibility: Municipalities, PACTS, GPCOG, MaineDOT, SMPDC and Transit Agencies

Objective 5: To provide transportation choices for everyone and especially the elderly, young, disabled, low-income, and others who choose transportation other than by single occupancy vehicles.

Strategy 3.18: ADA Accessibility

Continue implementation of ADA accessible infrastructure and operations.

Responsibility: Municipalities, PACTS, MaineDOT, SMPDC and Transit Agencies

Strategy 3.19: Capacity Expansion for an Aging and Special Needs Population

Improve and expand regional transportation options, including safe, wide sidewalks, and increased transit service, among other means to accommodate the increasing portion of the population that are over 65, and/or have specialized transportation needs. Continue to support and fund paratransit providers who complement regional fixed-route bus systems and support opportunities for ADA and other access innovations.

Responsibility: Municipalities, PACTS, MaineDOT, SMPDC and Transit Agencies

Destination 2040: PACTS' Long-Range Transportation Plan

Goal 4: Integrate Energy Conservation:

PACTS will plan for, fund, and maintain a transportation system that conserves and efficiently uses energy resources.

The transportation of people and goods accounts for the largest share of petroleum use in the United States and is a major contributor to poor air quality. Congestion and the number of vehicle miles of travel (VMT) have both increased dramatically over the past twenty years and are expected to continue to grow. Increasing VMT and congestion adds to the amount of energy (oil) needed to move people and goods and to decreased air quality.

Destination 2040 contains several strategies to reduce energy consumption, reduce the number of vehicle miles traveled (VMT), increase the use of alternative fuels, and improve air quality. These strategies add to PACTS support of the actions and efforts of the Maine Clean Communities Program.

The U.S. Department of Energy's Clean Cities Program focuses on fostering energy independence through the use of alternative fuels in public and private fleets. The goal of the program is to provide an alternative fueling infrastructure and create an adequate demand for alternative fuel in a coordinated, economically viable sequence. Maine Clean Communities (MC²), the local Clean Cities Coalition, works with public and private fleet operators to create partnerships to achieve this goal.

Objective 1: To facilitate the availability and use of alternative fuels and alternative fuel vehicles, in general, and in public and private fleets in particular.

Strategy 4.1: Establish a Network of Electric Vehicle Charging Stations

Help communities and employers locate a network of Level II Electric Vehicle Service Equipment (EVSE) augmented with a small number of strategically located DC Fast Chargers that will allow people to travel within and through the PACTS region with electric vehicles.

Responsibility: GPCOG, PACTS, SMPDC, Municipalities and MaineDOT

Strategy 4.2: Maine Clean Communities Program

Continue to support the efforts of the Maine Clean Communities Program to help develop alternative fuel infrastructure and promote the use of alternative fuel vehicles.

Responsibility: GPCOG, SMPDC, MaineDOT, PACTS and Municipalities

Strategy 4.3: Fleet Assistance

Provide outreach technical assistance to municipalities for utilizing incentives, funding and potential mandates that encourage public and private fleets to utilize alternative fuels.

Responsibility: PACTS, GPCOG (Maine Clean Communities), and MaineDOT

Destination 2040: PACTS' Long-Range Transportation Plan

Strategy 4.4: Transit Fuel Conversion

Through non-traditional and STP funds, continue funding for the use of alternative fuel by transit providers in vehicles and buses, including METRO, RTP and other transit, and in their development of infrastructure.

Responsibility: PACTS, GPCOG, MaineDOT, and SMPDC

Strategy 4.5: Renewable Fuels

Support the use of renewable fuels such as ethanol, biodiesel and hydrogen made from wind, solar, and other renewable energy sources, especially those that may be produced in Maine in the future.

Responsibility: PACTS, GPCOG (Maine Clean Communities), MaineDOT, and DECD

Strategy 4.6: Anti-idling

Provide model ordinances for (and otherwise encourage) municipalities to develop and enforce anti-idling rules in highly concentrated population areas, such as school areas, and other fleets.

Responsibility: PACTS, MaineDOT, GPCOG, SMPDC, and Municipalities

Objective 2: To reduce the number of trips by single occupant vehicles and reduce overall energy consumption from transportation of goods and people.

Strategy 4.7: Transportation Demand Management (TDM) Strategies

Implement travel demand strategies such as increasing the attractiveness of transit, limiting and charging flexible demand rates for parking, and off-setting shifts at employer in areas.

Responsibility: PACTS, MaineDOT, GPCOG, SMPDC, and Municipalities

Destination 2040: PACTS' Long-Range Transportation Plan

Goal 5. Strengthen the Land Use and Transportation Connection:

PACTS will plan for, fund, and maintain a transportation system that supports land use plans and development that furthers the Urban to Rural land use pattern, promoting livable places that support walkability, bikeability and transit-oriented development in Centers of Opportunity and other areas emphasizing all modes.

The subject of land use development in a transportation plan is critical and complex. Travel in a region is very much a function of where people live, work, shop and conduct other activities. Conversely, our region's transportation system – the highway and street network, the price and availability of public transportation, and other attributes – contributes to where we choose to work and live. Many other factors that shape our transportation system and influence our choices and travel behavior – including fuel prices, federal housing policies, and our collective individual's decisions – are beyond the influence of state and local officials.

In *Destination 2040*, the members of PACTS strive to better coordinate land use and transportation decisions made by PACTS, MaineDOT and municipalities. In recognition of the complexities of this subject, the members of PACTS considered the following regulatory and policy realities during the development of the land use objectives and strategies.

1. In addition to our federally mandated authority, PACTS has a responsibility to provide leadership for transportation investments in our region through the allocation of federal funds.
2. MaineDOT seeks to strengthen the economic vitality of municipalities through its transportation investments.
3. MaineDOT and the Legislature have established access management on major highways as a high priority.
4. Land use regulation authority resides primarily with cities and towns.
5. The pattern and form of land use development plays an important role in how effectively transportation facilities work, and on the demand placed on them.
6. *Destination 2040* supports the following Smart Growth Principles:
 - To maintain our historic settlement pattern of compact villages and urban centers separated by rural countryside, and to sustain a unique sense of place in every community by respecting local cultural and natural features.
 - To target economic and residential growth to compact, mixed use centers in areas with existing or planned infrastructure and services at a scale appropriate for the community and region.
 - To preserve and create mixed use, pedestrian-friendly neighborhoods that incorporate open areas, landscaping and other amenities that enhance livability.

Destination 2040: PACTS' Long-Range Transportation Plan

- To establish and maintain coalitions with stakeholders and engage the public in the pursuit of smart growth solutions.
- To provide choice in the mode of transportation and to ensure that transportation options are integrated and consistent with land use objectives.

Objective 1: To encourage the creation of, and conformance to, regional, corridor and local land use plans that recommend regional connectivity and mobility in support of the Urban and Rural land development pattern.

Strategy 5.1: Regional Corridor Studies

Continue to perform multi-municipal corridor planning studies that plan for and integrate compact development, and mixes of land uses. The plans should connect existing and emerging centers with multi-modal transportation options.

Responsibility: PACTS, GPCOG, SMPDC, and MaineDOT

Strategy 5.2: Street Connectivity

In planned or emerging centers, like the one identified as Centers of Opportunity* plan for and implement future collector and sub-collectors as residential and commercial development occurs to improve road network connectivity, and to better distribute traffic. Develop and distribute education materials to municipal officials and the public that describe the long-term cost savings and public safety benefits of a more connected network of streets, particularly in areas of concentrated residences, businesses and stores.

Responsibility: Municipalities, Private Sector, PACTS, GPCOG, and SMPDC.

Objective 2: To formulate a planning and project design process that effectively coordinates land use and transportation decisions and spans jurisdictional boundaries.

Strategy 5.3: Interchange Master Plans

Develop master plans for areas around proposed new highway interchanges, and existing ones that are going to be changed significantly.

Responsibility: Municipalities, MaineDOT/MTA, PACTS

Strategy 5.4: Station/Hub Area Planning and Development

Define “station areas” and “hub areas” around appropriate transit nodes that are prime development areas for transit-oriented developments (TODs). These areas must have a mix of uses including affordable residential, and have diluted concentrations of structured parking, and plan for maximum connectivity to adjacent sites. Value capture mechanisms like Tax Increment Financing (TIFs) and other financing mechanisms are essential to their development.

Responsibility: Municipalities, PACTS, GPCOG, SMPDC, and MaineDOT

Destination 2040: PACTS' Long-Range Transportation Plan

Objective 3: To foster compact development patterns that promote efficient transportation services and systems that reduce sprawl.

Strategy 5.5: Priority Centers

Prioritize transportation investments in existing and emerging mixed use “Priority centers” that enable or support transit, bicycling, and walking.

Responsibility: Municipalities, MaineDOT, and PACTS

Strategy 5.6: Flexible Level of Service Standards in Centers

Establish flexible MaineDOT and municipal thresholds for acceptable automotive level-of-service (LOS) and multi-modal LOS (MMLOS) in public right-of-ways and for the off-site traffic impacts in PACTS Priority Centers and Corridors. (It is understood that these would be used only with the consent of the affected municipality).

Responsibility: PACTS, Municipalities, and MaineDOT

Destination 2040: PACTS' Long-Range Transportation Plan

Goal 6. Protect Environmental Quality:

PACTS will plan for, fund, and maintain a transportation system that protects and improves the human and natural environments and quality of life

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 outstripped by the rise in vehicle miles traveled and vehicle hours traveled (VMT and VHT).

Another, less obvious impact on the environment, particularly to surface and ground water, is greater non-point source pollution as a result of increased impervious surfaces which channel storm water runoff, which carries pollutants from cars along with it 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 event like storm surge, and changes in regional temperature require new planning elements for projects. *Destination 2040* recommends a regional transportation vulnerability assessment, to identify priority infrastructure for strategic adaptation planning in response to anticipated impacts.

The impacts of climate change and adaptation requires new planning elements, for the first time included in the PACT long range plan. Transportation infrastructure

To help address these environmental issues related to transportation, *Destination 2040* aims to reduce the growth of VMT and VHT and overall automotive use through a series of travel demand management (TDM) and mode shift measures that:

- encourage the greater use of transit;
- promote increased bicycle and walking trips;
- support existing programs designed to minimize travel and emissions, and
- reduces demand for impervious surface areas

Objective 1: To minimize impact on environmental resources including wetlands, wildlife, habitat and air and water quality.

Strategy 6.1: Environmental Impacts and Climate Adaptation in Studies

Continue to place high importance in transportation planning studies on identification and minimization of potential environmental, climate change related and social equity impacts of transportation infrastructure and services.

Responsibility: PACTS, GPCOG, SMPDC, MaineDOT

Destination 2040: PACTS' Long-Range Transportation Plan

Strategy 6.2: Stormwater Systems

Transportation and associated infrastructure will be engineered to minimize the aggregation of stormwater, and use natural systems as much as practicable. This can best be achieved by minimizing a sites impact, maintaining its topology, and allowing low lying areas to retain and seep in their natural way, and using infiltration devices and permeable surfaces. These methods can also result in cost-savings.

Responsibility: Municipalities, PACTS, MaineDOT, Maine Turnpike Authority

Objective 2: To reduce auto-related emissions by managing the overall growth in vehicle miles traveled (VMT) and through reduced traffic delay at congested locations.

Strategy 6.3: Travel Demand Management [TDM] Strategies

Implement travel demand strategies such as increasing the attractiveness of transit, limiting/charging for parking, and alternating shift changes at places with high concentration of employment.

Responsibility: Municipalities, PACTS, transit operators, private sector

Objective 3: To construct visually attractive transportation infrastructure that complements surrounding land uses and is contextually appropriate.

Strategy 6.5: Infrastructure integration and buffering

Minimize impacts of transportation infrastructure projects by sufficiently funding projects to include high quality design and materials (even exemplary when appropriate). Transportation projects should be integrated as much as practicable to blend into the natural environment, and buffered using natural features like trees, shrubbery, and stone walls when integration is inadequate.

Responsibility: PACTS, MaineDOT, and Municipalities

Objective 4: To increase accessibility to recreation and natural areas through alternative modes of transportation.

Strategy 6.6 Linkages to Natural Areas

Increase implementation of adequate, ADA compliant bicycle and pedestrian linkages to recreation and natural areas in order to increase mobility, to use paths for transportation, to promote healthy activities, to reduce reliance on automobiles and to decrease parking requirements in these areas.

Responsibility: Municipalities, PACTS, and MaineDOT

Destination 2040: PACTS' Long-Range Transportation Plan

Strategy 6.7: Regional Scale Off-road Transportation Facilities

Expand the region's inventory of off-road, bicycle and pedestrian linkages to recreation and natural areas in order to increase mobility, to promote healthy activities, to reduce reliance on automobiles and to decrease parking requirements in these areas. Examples include the Eastern Trail, the Mountain Division Trail, and the Gorham Rail/Trail.

Responsibility: Trail organizations, PACTS, MaineDOT, and Municipalities