APPENDIX C: PROGRAMS, POLICIES, REGULATIONS, AND PRACTICES

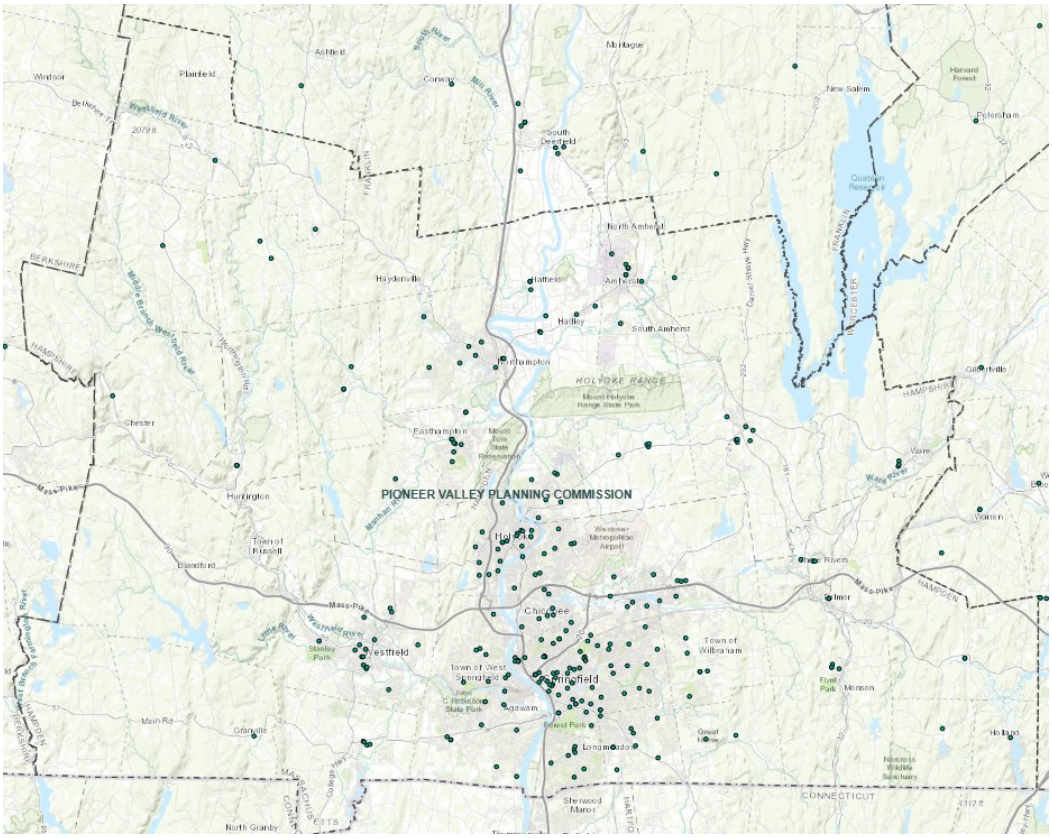
Programs, Policies, Regulations, and Practices in Support of Bicycle and Pedestrians Modes of Travel

Community interest and unprecedented support for walking and bicycling are reshaping many of our communities. New federal and statewide initiatives including Safe Streets and Spaces, Complete Streets, Lines and Signs, Safe Streets and Roads for All, and the Safe Routes to School Infrastructure programs expand the focus on the critical roles of bicycling and walking.

Safe Routes to School Program:

The Massachusetts Safe Routes to School program promotes healthy alternatives for children and parents in their travel to and from school. A total of 152 schools in the Pioneer Valley region actively participate in the program. Benefits include education on the value of walking and bicycling and funding for sidewalks, crosswalks, and traffic calming measures.

Participating Schools in the Safe Routes to School Program within the Pioneer Valley



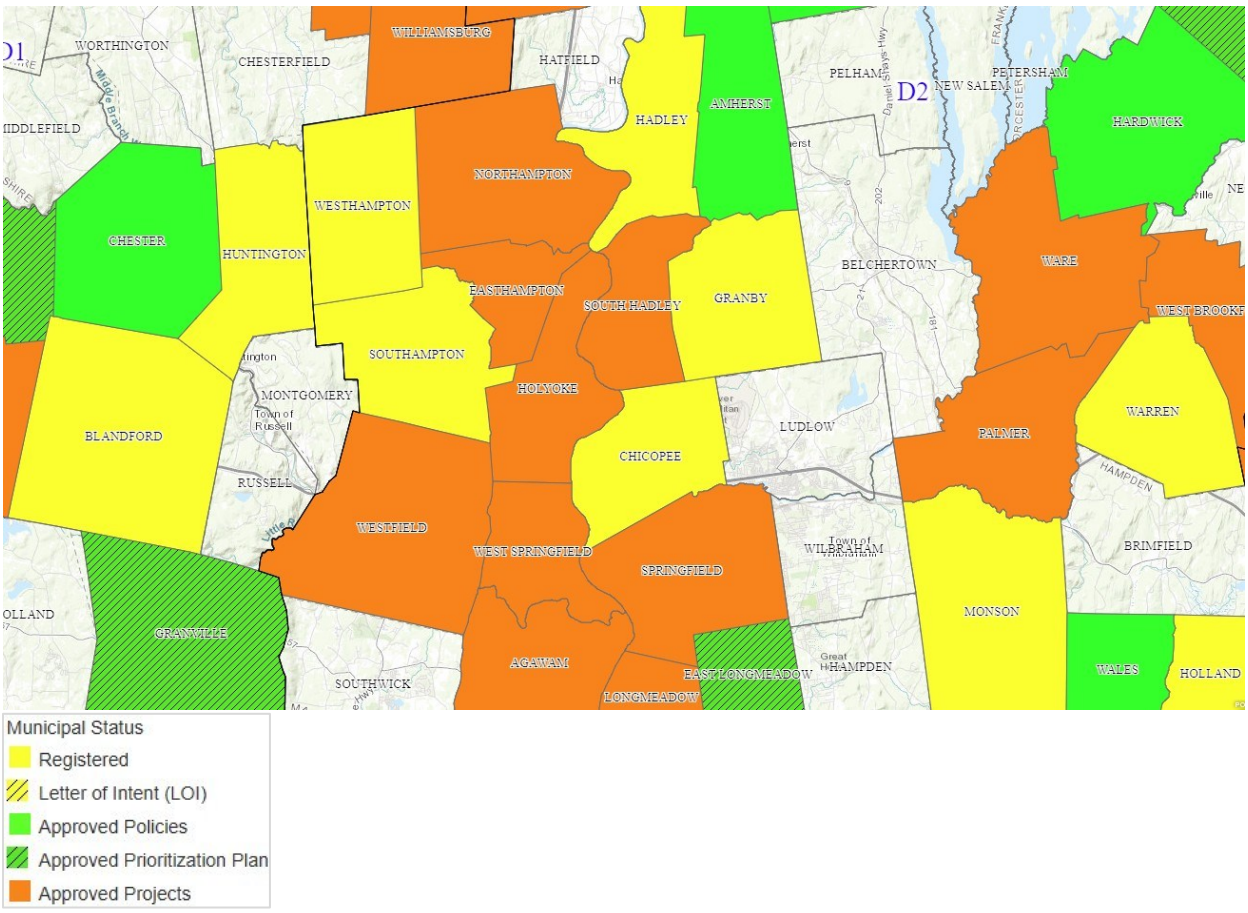
The original map above can be viewed online at this website link: https://pvpc.maps.arcgis.com/apps/Viewer/index.html?appid=a7895f8f5fae432182ebf3778b55b230

The most significant challenge for advancing regional goals for bicycling and walking is funding. While new funding opportunities exist in a revised Safe Routes to School infrastructure program, the MassTrails Program and Complete Streets Program, many communities struggle to find the resources to plan, design, implement and maintain shared-use paths, sidewalks, and bike lanes. The Massachusetts Healthy Design Directive and other state guidelines support bicycles and walking, and federal programs are recognizing the importance of "context-sensitive design" in transportation; infrastructure needs are growing while funding options leave communities struggling to keep up. Many of our communities have serious transportation funding gaps for their sidewalk network, are unable to make the necessary improvements to bridges, or struggle with local roads that have fallen into disrepair due to gaps in funding for maintenance. This infrastructure need is extremely challenging with inflationary cost pressures. Bicycling and walking are inherently dependent on short local trips and directly impacted by the lack of maintenance.

Complete Streets Program:

In 2016 MassDOT launched the Complete Street Funding Program to incentivize municipal best practice in Complete Streets policy and implementation. As of 2024, twenty-eight communities have participated in MassDOT sponsored Complete Streets training and 12 communities have funded projects in the Complete Streets Program. These projects and adopted policies have made local streets safer, while improving the health of Pioneer Valley residents through improved opportunities to stay active, reducing chronic disease. As of 2024, 18 communities: Goshen, Williamsburg, Amherst, South Hadley, Holyoke, Ware, Palmer, Wales, Northampton, Easthampton, Chester, Westfield, West Springfield, Agawam, Springfield, Longmeadow, East Longmeadow and Granville have adopted Complete Streets Policies. Locally, many Pioneer Valley communities have followed MassDOT's lead by incorporating "Complete Streets" concepts into the planning and design of local road projects.

Complete Streets in the Pioneer Valley by Municipal Status



Complete the Streets Program Overview:

The streets of our cities and towns ought to be for everyone, whether young or old, motorist or bicyclist, walker or wheelchair user, bus rider or shopkeeper. But too many of our streets are designed only for speeding cars, or worse, creeping traffic jams. They're unsafe for people on foot or bike – and unpleasant for everybody. Now, in communities across the country, a movement is growing to *complete the streets*. States, cities and towns are asking their planners, engineers and designers to build road networks that welcome all citizens.

> *"The complete streets concept focuses not just on individual roads but on changing the decision-making and design process so that all users are routinely considered during the planning, designing, building and operating of all roadways. It is about policy and institutional change."*

> *"Complete streets focus on road users and is about making multimodal accommodation routine so that multimodal roads do not require extra funds or extra time to achieve. The intent is to change the everyday practice of transportation agencies so that every mode should be part of every stage of the design process in*

just about every road project—whether a minor traffic signal rehabilitation or a major road widening. The aim is to create a complete and safe transportation network for all modes."

Text reprinted from Complete Streets Website and "We can get there from here" Lapante, John etc. ITE Journal, May 2008.

Benefits of designing and implementing complete streets include:

Complete streets improve safety. A Federal Highways Administration safety review found that designing the street with pedestrians in mind – sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for disabled travelers – all improve pedestrian safety. One study found that designing for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian risk by 28%.

Complete streets encourage walking and bicycling for health. The National Institutes of Medicine recommends fighting childhood obesity by changing ordinances to encourage construction of sidewalks, bikeways, and other places for physical activity. A report of the National Conference of State Legislators found that the most effective policy avenue for encouraging bicycling and walking is complete streets. One study found that 43% of people with safe places to walk within 10 minutes of home met recommended activity levels, while just 27% of those without safe places to walk were active enough.

Complete streets help ease transportation woes. About one-third of Americans do not drive. Complete streets help provide safe access for people who use wheelchairs, have vision impairments, and for older people and children. More than one quarter of all trips are one mile or less – and almost half are under five miles. Most of those trips are now made by car. Streets that provide travel choices give people the option to avoid traffic jams and increase the overall capacity of the transportation network.

Complete streets make fiscal sense. Integrating sidewalks, bike lanes, transit amenities, and safe crossings into the initial design of a project spares the expense of retrofits later.

Elements of complete streets policies:

1. The principle:
   - Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street.
   - Creating complete streets means changing the policies and practices of transportation agencies.
   - A complete streets policy ensures that the entire right of way is routinely designed and operated to enable safe access for all users.

- Transportation agencies must ensure that all road projects result in a complete street appropriate to local context and needs.

2. Elements of a Good Complete Streets Policy:
   - Specifies that 'all users' includes pedestrians, bicyclists, transit vehicles and users, and motorists, of all ages and abilities.
   - Aims to create a comprehensive, integrated, connected network.
   - Recognizes the need for flexibility: that all streets are different and user needs will be balanced.
   - Is adoptable by all agencies to cover all roads.
   - Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
   - Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
   - Directs the use of the latest and best design standards.
   - Directs that complete streets solutions fit in with context of the community.
   - Establishes performance standards with measurable outcomes.

3. Implementation of an effective complete streets policy should prompt transportation agencies to:
   - Restructure their procedures to accommodate all users on every project.
   - Re-write their design manuals to encompass the safety of all users.
   - Re-train planners and engineers in balancing the needs of different types of users.
   - Create new data collection procedures to track how well the streets are serving all users.

In 2015, MassDOT adopted the "Separated Bike Lane Planning & Design Guide" and more recently began work on a Shared Use Path Design Guide. The Commonwealth instituted a comprehensive shift in policy. The "2016 Design Guide' has become a national model for developing better road and bridge projects through a "Complete Streets" approach that balances the need for access and mobility through context sensitive design solutions. The manual "ensures that the safety and mobility of all users of the transportation system (pedestrians, bicyclists and drivers) are considered equally through all phases of a project so that even the most vulnerable (e.g., children and the elderly) can feel and be safe within the public right of way."

In 2023 An Act to Reduce Traffic Fatalities was signed into law. This critical traffic safety bill supports the safety of "vulnerable road users." The law defines "vulnerable road users" to include people walking and biking; roadside workers; people using wheelchairs, scooters, skateboards, roller skates, construction workers on their job sites, tow truck drivers and first responders stopped on the side of the road. The "vulnerable road user" definition is crucial to future roadway safety efforts.

The law requires "safe passing distance" to be 4 feet, bringing Massachusetts in-line with most other states in terms of roadway safety. The law also clarifies the process for municipalities to alter speed limits in thickly settled areas from 30 mph to 25 mph both on state-controlled roads and on the roads they control. This is an update on the previously implemented Chapter 90, Section 18. Slower speeds save lives, and this change will align with MassDOT's new safe speeds philosophy. Under the law, state-contracted trucks must be equipped with safety side-guards, mirrors, and backup cameras to reduce fatalities of people walking and biking. The legislation improves data collection surrounding vulnerable road user crashes and standardizing analysis used to report crashes and incidents involving a person biking or walking. As part of this legislation, bicyclists are required to have both a front light and rear red light when riding at night.

Streets are a vital part of livable, attractive communities. Regardless of age, ability, income, race, or ethnicity, everyone is served by safe, comfortable, and convenient access to community destinations and public places–whether walking, driving, bicycling, or taking public transportation. Complete Streets integrates people and place in the planning, design, construction, operation, and maintenance of our transportation networks.

Federal Policies, Regulations, and Practices

Federally funded transportation projects (including bicycle and pedestrian projects) are prioritized in the region through the Transportation Improvement Program (TIP). This annually updated document matches available federal funds with local projects. The Region's Joint Transportation Committee (JTC), developed by the Pioneer Valley Metropolitan Planning Organization, prioritizes projects for the TIP. Over the years, the JTC has programmed funds for many bicycle and pedestrian projects. This is in addition to the sidewalks, roadway shoulders, crosswalks and transit shelters constructed as part of regular roadway and transit improvement projects.

Safe Routes to School:

SAFETEA-LU created the Safe Routes to School Program (SRTS), which has the potential to improve the range of opportunities for bicyclists and pedestrians by making bicycling and walking more appealing by increasing the safety of transportation facilities connecting neighborhoods to schools. Cities need to form a partnership with diverse stakeholders from the community to help create and implement the program. These stakeholders include parents and children, school staff and PTA's, road authorities, law enforcement, health professionals, local officials, local businesses, and non-profits organizations. The Safe Routes to School National Partnership is a fast-growing network of hundreds of organizations, government agencies and professional groups working to advance the movement nationwide by setting goals, sharing best practices, securing funds, and providing educational materials to agencies that implement Safe Routes to School programs.

Funds can be used for traffic calming, off-street bicycle and pedestrian facilities, bike parking, on-street bicycle facilities, sidewalk improvements and traffic diversion projects within a two-mile radius of a school. Additionally, states can spend no less than ten percent but as much as thirty percent on awareness campaigns, education and media presence.

Shared Streets and Spaces Program:

https://madothway.my.site.com/GrantCentral/s/shared-streets-public-overview

Commonwealth of Massachusetts Policies, Regulations and Practices

The Commonwealth of Massachusetts has undertaken major initiatives to encourage bicycling and walking. The Department of Public Health, Governor's Highway Safety Bureau, and the Massachusetts Department of Economic Development/ Office of Travel and Tourism actively promote safe travel for bicyclists and pedestrians in the Commonwealth.

The 2006 Project Development and Design Guidebook (Guide) was in the process of being revised in 2025. This document that promotes design considerations from the outside – in considering pedestrians, bikes, *then* cars and trucks. The Guide treats non-motorized transportation modes as equal users of the roadway network. Both pedestrian and bicycle design requirements within a shared right of way are integrated throughout the Guide's various design chapters. There is a separate chapter specifically for Shared Use Paths and Greenways which provides much clearer guidance for developing user friendly designs. The Guide intends to dramatically improve bicycling and walking conditions by transforming the way all new projects are designed. Through a comprehensive approach to roadway design, the Guide mandates the development of "complete streets." The concept of complete streets refers to roadways that are designed to accommodate all users, including pedestrians and bicyclists.

The primary purpose of the Guide is to ensure that transportation investments encourage projects that are sensitive to the local context while meeting the needs of all system users. The following guiding principles articulate this purpose:

- Multimodal Consideration. All users should be safely accommodated by the roadway system—pedestrians, bicyclists, and drivers and passengers of motor vehicles.
- Context Sensitive Design. Projects intended to improve the roadway network should be implemented in such a way that the character of the project area, community values, and needs of all users are fully considered.

- Clear Project Development Process. There will be a clear and consistently administered project development process that can be easily understood by project proponents and constituents.

Chapter 90:

Chapter 90 funds consist of state revenues appropriated through the Massachusetts Legislature as part of the Transportation Bond Bill and through supplemental budget agreements. The vast majority of local road projects are funded using money available through the Chapter 90 program. This locally administered funding source is used for maintenance, resurfacing, sidewalk repair, traffic signal improvements and many local improvements. A table of the Chapter 90 apportionment for Pioneer Valley Municipalities is included in the Appendix.

Massachusetts Scenic Roads Law:

(Mass. Gen. Laws Ann. Ch. 40, § 15C (West Supp. 1994)) Citizens can urge their conservation commission, planning board, or historical commission to recommend to the town or city that any road, other than a state highway, be designated as scenic. If one of these bodies makes such a recommendation, the town or city can make the designation. A numbered route, however, can be designated as scenic only if it is entirely located within the town or city and no part of it is owned or maintained by the state.

Once a road has been designated as scenic, trees or stone walls along it can be destroyed only after a public hearing and the approval of the planning board. Municipalities can use state funds to repair scenic roads, and they may pass an ordinance or bylaw to fine persons who violate the scenic roads law.

Massachusetts Environmental Policy Act:

This law requires the Secretary of Environmental Affairs to review projects, including road projects, above a certain size that are funded by state agencies, require a state permit, or involve acquiring rights to state property. This review can be used as an important tool to require the consideration of less environmentally damaging alternatives to a road project and to commit to measures that will mitigate the project's environmental impact. Review under MEPA begins with the filing of an Environmental Notification Form (ENF). For example, MassDOT must file an ENF with the MEPA Unit of the Executive Office of Environmental Affairs if it is funding a road project and the project will:

- Increase the total pavement width of a road by four feet or more for an aggregate of 1000 feet or more;
- Alter the bank or terrain (other than alteration of bank or terrain required for the installation of equipment or structures) at 10 feet or more from the existing pavement;

- Require the cutting of five or more living trees, 14 inches or more in diameter at breast height; or
- Eliminate 300 feet or more of stone wall

Historic Preservation:

This law requires state agencies to notify the Massachusetts Historical Commission ("MHC") about projects they are planning to undertake, license or fund "as early as possible." Notice must be given on a Project Notification Form or on an Environmental Notification Form. Once MHC has received a complete form, it has 30 days to determine whether the project will have "adverse effects" on a district, site, building, or structure included in the State Register of Historic Places. The state register, by definition, includes all properties included in the National Register of Historic Places. Citizens may submit comments to the MHC during the 30-day period. If you believe that a road project will have a significant impact on a state historic district or place, you should describe the impact and request the Commission to make a "determination of adverse effect." If the Commission makes such a determination, it must begin a formal consultation process to consider project alternatives that would minimize the adverse effects. That process must involve the public and the local historic commission.

Shade Trees Act:

Under this law, all trees within a public way are considered public shade trees. With certain exceptions, these trees may be cut, trimmed, or removed only by a municipality's tree warden or by obtaining a written permit from the tree warden. Before any public shade tree is cut down, a public hearing must be held. Notice must be given seven days prior to the hearing in a newspaper of general circulation and posted on the tree itself. If any person objects to the removal of a public shade tree before or at the hearing, the tree may not be cut down without the approval of the Select Board or the Mayor. The law, however, does allow the removal of "any tree if so ordered by the proper officers for the purpose of widening the highway."

Regional Policies, Regulations, and Practices

There are no regional policies governing pedestrian and bicycle use and infrastructure development in the Pioneer Valley. Federal and state policies and regulations stipulate technical standards and guidance and provide the funding for the implementation of many bicycle and pedestrian projects, but it is the local unit of government that oversees, and in some cases designs and builds transportation infrastructure—bikeways, trails, sidewalks, intersections, bridges, etc.

Federal programs provide funding for transportation and transportation enhancement projects that include many bicycle and pedestrian projects. State regulations, design guides, and policies affect highway projects and some local roadway projects through the provision of Chapter 90 funding that communities can choose to use for implementing bicycle and pedestrian projects. The next section provides a brief overview of the state and federal policies and regulations that can impact bicycle and

pedestrian projects in all the communities of the Pioneer Valley.

Local Policies, Regulations, and Practices

The Commonwealth is committed to being a leading state in sustainable transportation and development. Walking and biking contribute to this objective by improving air quality, reducing congestion, conserving fuel, improving mobility and health. Supporting these alternative modes of transportation is also consistent with the Governor's Sustainable Development Principles. With state and federal support in policy, programs, and implementation there is a great opportunity for the Pioneer Valley to provide a sustainable transportation network with pedestrians and bicyclists in mind.

There are a variety of policies, regulations and practices that can be implemented at the local level to create environments that encourage walking and bicycling. These include:

- Adopting a Complete Streets Policy and Implementing a Complete Streets Prioritization Plan
- Having a dedicated staff person or person working on pedestrian and bicycle issues.
- Developing a community bicycle/pedestrian plan.
- Creating a Pedestrian/Bicycle Advisory and/or Review Committee composed of municipal staff, citizens or a combination of the two:
    - Municipal staff (planning, public works, traffic, engineers, housing, etc.)—to assure consideration of pedestrians' and bicyclists' needs in all developments.
    - Citizen representatives—to assure community involvement and understanding.
- Implementing pedestrian and bicycle-friendly regulations and ordinances, such as requiring bicycle parking and sidewalks in all new developments, using bicycle-friendly drainage grates (as specified in the MassHighway Project Development & Design Guidebook), installing pedestrian controls at traffic signals, and installing bicycle-activated traffic signals.
- Signing and striping bike lanes.
- Slowing traffic on neighborhood streets though traffic calming measures including the use of traffic circles or a community speed watch program.
- Developing and disseminating a community bicycle plan.
- Sponsoring pedestrian and bicycle safety programs and campaigns.

- Dedicating law enforcement officers to enforce traffic laws and citing motorists, as well as pedestrians and bicyclists, who violate the law.
- Encouraging municipal employees to commute to work by bicycle.
- Participating in the ValleyBike Bikeshare program.
- Providing safe pedestrian access to bus stops
- Providing bicycles parking spaces at business districts, at local schools, libraries and post offices. (A bicycle/pedestrian friendly checklist for municipalities is included in the Appendix)

Land Use and Zoning–general patterns of land use

Given that the goal of this regional bicycle and pedestrian plan is to make the Pioneer Valley a safer and more pleasant place to walk and ride a bicycle, it is important to address the connection between land use and transportation planning. As we have seen in previous sections of this plan, there are two land use approaches to promoting bicycling and walking.

- Adapting existing land use to include accommodation for pedestrians and bicyclists and change the environment so that people feel comfortable walking and bicycling, for example stripe lanes and build facilities for bicyclists and pedestrians on and off roads, build sidewalks, and educate pedestrians, bicyclists, and motorists on how to share the road.
- Use land differently, so that people do not have to travel such long distances to get to the places they need to go, thereby making it more sensible to walk or ride a bicycle than it is to drive.

In the Pioneer Valley, we can take advantage of both approaches described above, to make it easier to walk and bicycle here. Chapter IV, Strategies and Actions, details ways that both regional and local bicycle and pedestrian advocates can build and adapt existing transportation facilities and political environments to accommodate pedestrians and bicyclists. Local zoning ordinances and subdivision regulations can help communities use land in such a way that bicycling and walking are sensible transportation options.

Research on people's transportation behavior suggests that most people will not travel more than two miles by bicycle. Similarly, research indicates that when walking, most people are unwilling to walk more than half a mile to reach most destinations. Thus, it is important that places of employment, recreation, and commerce be no further than two miles from places where people live. Providing housing close to places of employment, schools, educational institutions, and commercial developments is called compact development or smart growth.

Compact development not only fosters better walking and biking; it creates a more

efficient transit system with buses quickly connecting clustered areas of activity. Building more accessible pedestrian and bicycle connections between transit stops and neighborhoods, schools, commercial areas, and places of employment is a key factor in making transit more popular in the region. Providing bicycle racks and lockers at transit stops and bicycle racks on buses will also increase the number of people that can use transit conveniently. By increasing the use of transit, traffic congestion can be decreased, and neighborhoods will become more attractive for walking and biking.

Tools to facilitate compact growth include community master plans, mixed use zoning, transit-oriented development (TOD), traditional neighborhood development, village center zoning, creative/open space/cluster development, commercial infill in neighborhoods, brownfields development incentives, farmland protection zoning, commercial strip development controls, downtown development incentives, Planned Unit Development (PUD), business villages with on-site housing, accessory apartment bylaws, green belt open space acquisition programs, inclusionary zoning, environmental protection provisions, and limits imposed on infrastructure expansion. For more guidance see the NACTO Street Design Guide.

Traffic Calming in Residential Neighborhoods

Recently, there has been a greater interest in the study and implementation of traffic calming measures in the Pioneer Valley. Several communities, including Easthampton, Springfield, and Northampton, have implemented education and enforcement efforts that include enhanced police enforcement and speed displays. Several communities are also reviewing changes to roadway design that slow vehicles. In 2024, Springfield implemented a "safe speed" initiative on Parker Streets, a primary arterial in the Sixteen Acres neighborhood. The project reduced travel lanes and added bike lanes. Amherst moved the painted edge lines of several roads to reduce travel lane width. Other design alternatives include chicanes, traffic circles, speed humps, and raised crosswalks.

For many communities, traffic calming represents a change in the way transportation systems are evaluated. Planners and engineers must balance traditional performance measures of speed, capacity and traffic safety with the need to reduce noise, reduce truck traffic, and provide a safer environment for pedestrians and children.

As previously described in the plan report, complete Street policies improve safety, encourage more walking and bicycling, and increase the overall capacity of the transportation network. Creating complete streets means transportation agencies must change their orientation toward building primarily for cars. Instituting a complete streets policy ensures that transportation agencies routinely design and operate the entire right of way to enable safe access for all users. Streets without safe places to walk and bike put people at risk.