

9. Transportation and Circulation



Master Plan

Relevant plans and policy documents:

- **Corridor Study: University Drive, State Route 9 to Amity Street** ["University Drive Corridor Study"] [December 2003]
- **Lincoln & Sunset Traffic Study** [Nov. 2006]

A. Goal

A balanced, inclusive, accessible, safe, environmentally responsible transportation and circulation system that serves users of public transit, pedestrians, bicyclists, and drivers, and that is connected within and among different modes both in Amherst and the region.

B. Overview

Improved safety, accessibility, connectivity, and environmental awareness are important transportation priorities. This plan seeks to expand public transit service in a manner that is more efficient, user-friendly, and environmentally sound. The plan aims to develop policies that would reduce dependency on the private automobile, better organize parking in the downtown and village centers, improve traffic flow on major streets, and promote traffic calming in residential areas. Finally, the plan encourages more walking and biking by improving the pedestrian and bicycling infrastructure in Amherst. The objectives and strategies outlined in Part D address each of these transportation issues.

C. Existing Conditions

This section summarizes some key points related to current transportation and mobility in Amherst.

- **Commuting patterns:** Approximately 32 percent of working residents travel outside of Amherst for employment purposes. Average commute time is 18 minutes, which is the shortest average commute in the region. A relatively large percentage of workers travel by bicycle or foot (26.1 percent), but this figure has decreased from 1990 (31.4 percent). However, the number of residents carpooling and working from home increased during the 1990s.
- **Roadways:** There are a total of approximately 144 miles of roadway in Amherst of which 7 percent are State owned and maintained, 68 percent are Town owned and maintained, 11.5 percent are owned by local institutions, and 18 percent are unaccepted roadways. The vast majority of Amherst's roads (86 percent) are functionally classified as local roads.
- **Transit and ridesharing:** The Amherst region has an extensive transit service, as well as a ridesharing program known as MassRide. The Pioneer Valley Transit Authority provides the primary fixed route bus and para-transit services for Hampshire and Hampden Counties. Amherst is also served by private bus lines and Amtrak. The future of the latter is in doubt.

- **School transportation:** The Amherst-Pelham Regional Schools provide pupil transportation to and from the elementary and regional middle and high schools in Amherst and out-of-district special education programs and sites, as well as for other school activities. The regional school system has its own fleet of buses and vans driven by its own employees whose duties include other, school facilities-related tasks, and also contracts out some of its transportation responsibilities to private local bus companies.
- **Alternative transportation network:** Amherst has an extensive network of sidewalks, bicycle lanes and pathways, and nature trails. Walking, hiking and biking are an integral part of community life and an increasingly viable alternative transportation choice.
- **Parking:** An April 2008 Pioneer Valley Planning Commission (PVPC) parking study indicates that downtown Amherst's total supply of widely-distributed private and public parking is adequate to meet its current needs, but that significant management adjustments are needed to ensure public access to that parking.
- **Recent policy amendments:** Transportation regulations and policies in the zoning and subdivision regulations have been recently amended, and generally provide for new transportation infrastructure design and construction that is consistent with the community's scale and character. In other words, new transportation infrastructure such as roads and sidewalks are better designed to fit the specific context they are serving, whether it's the Town center, village centers, or rural areas.
- **Future transportation issues:** Some key future mobility issues for the community are ensuring and improving continued rail service, emergency response times, projected increases in traffic volumes, and circulation changes related to potential future development in rural areas of Amherst and in abutting communities for whom Amherst serves as a regional center for employment and services.

The Objectives and Strategies discussed in the remainder of this chapter provide a coherent framework for meeting Amherst's future transportation and circulation needs with a focus on improving connectivity, enhancing alternative and public transportation options, and reducing congestion on Amherst's roadways.

D. Objectives and Strategies

This section describes the objectives and strategies that will support the Transportation goal for the Town of Amherst. For further details regarding implementation, please see Chapter 10.

OBJECTIVE T.1 Plan for an integrated town-wide transportation system.

The Town should create a coordinated plan for current and future transportation in Amherst, to organize transportation activities and allow the community to respond with least disruption to a transition away from petroleum-based transportation technologies.

STRATEGIES

T.1.A Create a Transportation Plan.

Develop a coordinated plan for transportation in Amherst, integrating provisions for the maintenance, improvement and, where appropriate, selective expansion of the current roadway system, public transit alternatives including connections to passenger rail service, bicycle paths/lanes/facilities, sidewalks and other pedestrian paths, conservation trails, and other connections. See also Objective LU.10 and associated strategies.

OBJECTIVE T.2 Actively promote alternative modes of transportation.

Promoting alternatives to automobiles will encourage healthy lifestyles and help alleviate congestion within Amherst while cutting down on air pollution. The following strategies indicate how Amherst should expand and enhance alternative transportation infrastructure so that more residents can travel to and from destinations in Amherst conveniently and safely without the use of a private car.

STRATEGIES

T.2.A Establish community-oriented transit using appropriately sized buses and vans to complement existing services.

The UMass Transit system offers student-operated bus and transportation options with a focus on routes that serve the educational communities. Amherst should examine ways to provide broader community-oriented transit throughout the town and throughout the year.

T.2.B Designate and maintain bicycle lanes of at least four feet in width on all major arterial and commuter roadways.

- Stripe and mark lanes at least annually.
- Incorporate new bicycle lanes in the repaving design of roads that currently lack sufficient width for bicycle lanes.
- Install "Share the Road" signage where bicycle lanes cannot be designated.
- Remove, repair, or replace impediments such as grates, rough pavement and potholes, overhanging mailboxes and brush, etc.

- Regularly sweep away sand and broken glass from bicycle lanes and intersections.
- Ensure that crosswalks, railroad crossings, stormwater/sewer covers, and other roadway features are bicycle-safe.

T.2.C Under the Transportation Plan, create an integrated town-wide system of new and expanded sidewalks and bicycle routes linking together the community’s existing transportation system and providing access throughout Amherst.

- Require new developments to link to existing pedestrian connections.
- Develop and integrate a town-wide network of sidewalks, connector footpaths, bicycle paths and multi-use trails.
- Design and implement streetscape improvements for downtown and village centers.
- Ensure that all bus stops are safely accessible to pedestrians.
- Expand and improve the following specific sections of the pedestrian sidewalk network:
 - South East Street (Colonial Village to College Street)
 - East Pleasant Street (Village Park to Eastman Lane)
 - East Hadley Road (South Pleasant Street to Columbia Drive)
 - Pomeroy Village (West Street, Pomeroy and West Pomeroy Lanes)
 - Old Farm Road (Cross Brook to Pine Grove).

See LU.10, E.1.C, E.3.C, O.1.C, S.4.A and S.6.F.

T.2.D Improve the safety and comfort of pedestrian spaces and paths.

- Maintain smooth walking surfaces and prioritize sidewalks in need of repair of cracks, potholes, and tree root upheavals.
- Maintain clearly marked crosswalks at intersections of high pedestrian traffic that do not have pedestrian signals.
- Provide adequate street lighting in downtown, village centers, and neighborhoods.
- Switch current pedestrian signals to “countdown”-style signals, allowing adequate time for the elderly and handicapped to cross.
- Enforce timely snow removal in downtown, village centers, and neighborhoods.

T.2.E Make village centers bicycle friendly and pedestrian friendly.

- Site motor vehicle parking in the rear of commercial buildings.
- Incorporate bike lanes, sidewalks, and/or multi-use paths into existing public ways.

- Minimize driveway openings.
- Create and maintain well-marked pedestrian crossings and pedestrian-activated traffic signals.
- Provide ample bicycle parking, adequate street lighting, and benches.

T.2.F Make infrastructure improvements to support alternatives to the use of the private automobile.

- Provide shelters, benches, and bicycle racks at all major bus stops in Amherst to encourage more widespread use of the bus system.
- Build well-lit, sheltered, and easily visible parking/storage facilities for bicycles at destination sites such as downtown, village centers, shopping areas, bus stops, and possible new park-n-ride lots.

T.2.G Pursue retention and improvement of Amherst's existing passenger and freight rail service.

Work with other communities, institutions of higher learning, and regional and state entities to:

- Retain and improve Amherst's existing Amtrak passenger rail service.
- Improve the New England Central rail lines providing access to Amherst from the south and the north.
- Support development of the town of Palmer as the site for a major railroad hub providing passenger and freight rail service and connections between Amherst and Boston, Springfield, Albany, and points south along the New England Central, including UConn Storrs and New London.
- To enhance passenger use of rail travel in Amherst, support and plan for redevelopment/improvement of the area around the Amherst Depot as a mixed-use center.

T.2.H Utilize maps, guides, and instructional materials to promote alternative transportation modes.

- Produce and distribute maps of pedestrian routes, trails, and footpaths.
- Create multimodal access guides showing intersections of pedestrian, bicycle, and bus routes.
- Create guides identifying major destination points within Amherst and in the nearby area, with instructions on how to reach them by foot, bicycle, or bus, and noting whether they are handicapped accessible.
- Produce instructional videos to air on ACTV on how to use alternative transportation in Amherst and how to get to major destination points.

T.2.I Create "smart" transit stops.

- Pursue the introduction of “smart” transit stops, which use GPS technology to track the location of transit vehicles and display accurate wait times to riders waiting at transit stops.
- Use smart stops to provide directions and information about businesses, attractions, and events in the immediate vicinity, and throughout Amherst.

T.2.J Experiment with other ways to encourage non-motorized transportation.

- On a trial basis, close one or two blocks of the downtown area for special Town events such as a Street Fair, Arts and Craft Fair, Harvest Festival, “Walk About Town Day.”
- Organize a guaranteed ride home program to ensure that public transit riders can get home in an emergency.
- Adopt a “Safe Routes to School” program:
[www.http://safety.fhwa.dot.gov/saferoutes/](http://safety.fhwa.dot.gov/saferoutes/) .
- Promote bicycling and walking to school, possibly as an alternative to physical education requirements.
- Consider using locations with excess parking such as schools, churches, etc., for off-hours shared parking, or park-n-ride services for special events.
- Lobby the Massachusetts legislature to change the excise tax to a mileage-based system that would encourage drivers to consider transportation alternatives.

OBJECTIVE T.3 Increase the frequency, connectivity, and utility of public transit services to meet the needs of residents throughout the community.

Greater frequency of service and routes that extend throughout the community are essential to ensuring the widespread use of public transportation.

STRATEGIES

T.3.A Establish a north-south bus route that offers daily service year round and connects to routes serving other neighborhoods and village centers.

An important long-term transportation goal should be the provision of year-round, daily, express bus service along a north-south spine. It would link downtown and other points on the route with other village centers and outlying neighborhoods by connecting to east-west local service shuttle loops or flex routes at nodes along the spine.

T.3.B Pursue local and regional improvements to transit service connectivity.

- Revise Amherst bus schedules as necessary to facilitate transfers between routes.
- Coordinate schedules, stops, and frequency of service of Amherst-based transit system with other bus and rail transit systems in the region.
- Work with PVTA and other regional provider to develop dedicated, regular bus service between Amherst and the planned new north-south rail stop in Northampton.
- Advocate for expanded and more direct bus service from Amherst to other major employment centers in the region.

T.3.C Provide seasonal bus service to major off-road hiking and biking trailheads.

To promote public access to natural areas and encourage the use of recreational amenities in the Amherst area, seasonal bus services should be scheduled along major off-road hiking and biking trailheads.

T.3.D Extend Rack And Roll systems (bike racks) to all buses in the system.

Providing convenient storage for bikes on buses can encourage inter-modal transit options for commuting and accommodate alternative transportation to and from trailheads for recreational bikers.

OBJECTIVE T.4 Observe transportation demand management principles in local planning and regulation.

“Transportation demand management” (TDM) is a traffic management approach that seeks to influence drivers’ choices by reducing or redistributing the number of vehicles on the road and increasing mobility options. Planning policies and land use regulations are essential components of TDM. In order for public and alternative transportation to be viable and help reduce automobile traffic, regulations influencing land use and development patterns must allow for higher densities and a mix of uses, as in village centers, and roadway design that supports a variety of users. Amherst should revise its zoning and subdivision regulations to promote infill and direct new development toward appropriate locations and to allow densities sufficient to support viable public transit.

STRATEGIES

T.4.A Use zoning bylaws, subdivision regulations, and permitting board project review to advance transportation goals.

- Adopt zoning provisions, subdivision regulations, and other policies that require large-scale retail and housing developments to be accessible by public transit (and discourage development in areas without transit access).
- Encourage dense, mixed-use residential or commercial development in village centers, with appropriately-designed streets, sidewalks, limited parking, etc., to maximize access to public transit and encourage transit ridership.
- Require the provision of facilities for alternative means of transportation and efficient provision of parking in subdivisions, and site plan review and special permit projects.
- Expand the mandated development review requirements for traffic impact studies to include transportation impact and access studies.
- Require transportation demand management programs as part of mitigation for large development projects.

T.4.B Adjust existing regulations to help reduce the number of cars in the downtown area.

- Expand the Municipal Parking District (within which selected uses are exempt from parking requirements) to other areas of the downtown and village centers.
- Remove or reduce parking requirements in the Zoning Bylaw for most residential and commercial development in the downtown area in order to increase density, maximize the area available for residential and commercial development, and create a vital pedestrian atmosphere.
- Increase shared parking and off-site parking for residential and commercial development where applicable, by expanding on existing zoning regulations and pursuing public/private agreements.

T.4.C Create a “traffic-shed” computer model that can evaluate short- and long-term impacts of new development on existing roadways.

Consider working with UMass to establish an on-going transportation modeling program for the community.

OBJECTIVE T.5 Within the context of community transportation demand management planning, provide adequate public parking to support existing and desired new development in the downtown and elsewhere.

Amherst is a regional center for numerous outlying communities only some of which are served by public transit. Both during and after the transition away from an oil-based economy, parking for personal vehicles will continue to be a necessary form of infrastructure for the downtown, village centers, and commercial areas.

STRATEGIES

T.5.A Make changes in parking policies to organize the public parking supply more efficiently.

- Inventory existing downtown parking to assess current parking patterns, demand, and availability.
- Encourage employers to offer parking permits to employees.
- Restructure metered parking into zones with a tiered fee structure such that the most convenient parking is the most short-term and more expensive than areas further away from downtown.
- Consider applying a progressive price structure to meters with three-hour limits or more.
- Set meter rates so that a minimum percentage (15%?) of parking spaces remains open during peak periods.
- Increase parking revenue by adding meters on Town streets near University of Massachusetts.

T.5.B Evaluate existing downtown public and private parking areas for reorganization, management, enhancement, or potential redevelopment as multi-modal facilities, preferably in concert with private mixed-used redevelopment of adjacent streetfront areas.

Areas to include in this evaluation include, but are not limited to, the Boltwood Walk parking garage, CVS lot, Amity Street lot, parking sites at the north end of downtown, in the interior of the East Pleasant/Triangle/Pray Street block, and the Amherst College alumni parking lot south of Spring Street.

T.5.C Plan for meeting current and future transportation demand through off-street multi-modal facilities providing a range of services.

Where appropriate, multi-modal facilities should include such amenities as:

- Automobile parking.
- Public transit/shuttle stops.
- Full service public transit terminals.

- Access to rail transit.
- Pedestrian facilities and directional information.
- Bicycle parking, secure storage, and changing rooms/showers.
- Rentals of bicycles, Zip cars or the like.
- Recharging stations for hybrid/electric vehicles.

OBJECTIVE T.6 Improve the flow of traffic on major roadways and residential streets to reduce congestion and improve safety.

Amherst should make an effort to better coordinate traffic signals and invest in intersection improvements, in order to facilitate traffic flow.

STRATEGIES**T.6.A Install, relocate, utilize, and evaluate effectiveness of available traffic control systems.**

The street and traffic signs in Amherst need better visibility, clearer displays, and greater overall consistency. Traffic control settings should be adjusted to take into account traffic volume, time of day, type of pavement, needs of elderly and handicapped pedestrians, needs of bicyclists, etc., and should be periodically monitored for efficiency and effectiveness.

T.6.B Adjust traffic circulation patterns.

A variety of methods should be considered for adjusting the traffic circulation patterns in Amherst. These should include, where appropriate:

- Converting streets to one-way traffic flow
- Limiting left (or right) turns
- Clearly marking tow-away zones with NO PARKING/STANDING signs and pavement markings
- Four-way stops
- Installing traffic-calming measures, especially in congested areas.

T.6.C Develop, publicize, and apply traffic calming guidelines for residential neighborhoods and commercial districts.

There are many traffic-calming methods and devices that can be used by the Town to reduce vehicle speed, improve safety and balance the use of public right-of-ways between motorized vehicles and other modes of transportation. Roundabouts, semi-diverters, neck-downs, corner radii treatments, and diagonal diverters are some common examples, among others, that should be encouraged in local land use regulations, public infrastructure standards and projects, and design guidelines for new development.

T.6.D Improve roadway signs.

- Place signs so that they are readily visible and do not block visibility of other signs.
- Use fewer signs, or install multiple signs on a single pole wherever possible.
- Install clearly visible and readable signs, such as eight-inch, reflective street name signs at entrances to streets.
- Expand and improve way-finding signs at major intersections and destination points.
- Clearly display speed limit signs.

T.6.E Adopt a Town policy of “Complete Streets” for all reconstruction or new construction of streets.

www.completestreets.org

Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and bus riders of all ages and abilities are able to safely move along and across a complete street. Amherst should adopt a Town policy of incorporating the elements of complete streets into any new construction or reconstruction of roadways.

OBJECTIVE T.7 Engage in traffic management initiatives with businesses and employers.

The following strategies recommend initiatives to educate the public about traffic management, with a particular focus on working with the business community, employers, and transportation stakeholders to reduce single-occupant vehicle trips and provide incentives for using public and alternative transportation.

STRATEGIES

T.7.A Re-establish a Transportation Management Association to educate employers and the public about commuting options and incentives.

Transportation management programs in rural areas are typically difficult to organize and sustain. However, Amherst has a unique opportunity with the five colleges and other major employers in the region. The Town should initiate the process of reestablishing the TMA by organizing a committee with representatives from each of the colleges, surrounding communities, PVTA and possibly the Area Chamber of Commerce. The MassRides program should also be involved in providing ride-matching and informational assistance to students, employees, commuters, and other travelers as they have done for other TMAs such as the South Shore and Logan Airport.

T.7.B Distribute information on the benefits of an active and all-inclusive program of traffic management throughout the Town.

Consult with organizations involved in transportation management such as PVPC, MassRides, DHCD, DOT, Urban Land Institute, American Planning Association, Congress of New Urbanism, and others regarding literature and other materials that can be used as models for Amherst.

T.7.C Encourage transportation options to reduce single-occupancy vehicle trips.

- Encourage UMass and the Town of Amherst to organize car-sharing options, such as Zipcar, for employee use during the workday.
- Install a car-sharing station, such as Zipcar, downtown. Promote this option by offering free parking for these vehicles.
- Create park-n-ride lots in outlying areas that would serve commuters as well as visitors traveling to downtown and UMass. Ensure that these lots are adequately served by public bus routes or shuttles.
- Pursue the introduction of Independent Transportation Network for elders (www.itnportland.org).
- Provide zoning or tax incentives for installation of shower facilities and bicycle parking for bicycle or pedestrian commuters to downtown or village center employment.

OBJECTIVE T.8 Aggressively pursue funding strategies for achieving transportation goals.

Amherst should undertake a variety of initiatives to enhance its access to transportation funding. These may include applying for additional federal and state funds, engaging in lobbying activities, and instituting local policy changes in order to generate additional transportation revenues for the Town.

STRATEGIES

T.8.A Lobby the State Legislature for additional funding for regional transit services.

Organize a lobbying committee to inform local and regional state legislatures of the need for additional transit services and to determine and pursue the best approaches with the state in seeking additional funds.

T.8.B Apply for federal and state grants through PVPC as a source of financial support for public transportation enhancements.

In addition to seeking additional operational funds to expand the regional transportation system above, the Transportation Management committee should work with the Pioneer Valley Planning Commission to

seek funding for public transportation enhancements such as attractive bus shelters, improved signage and route mapping boards, bicycle facilities, and other capital projects that encourage more ridership and improve public transportation.

T.8.C Enact residential- and business-unit permit fees for village center and downtown development projects to support public transportation.

The purpose of this fee would be to provide for expanded public transportation and enhancements to the system on established routes. Since development is generally encouraged in designated growth centers such as the villages and downtown area, this fee could be coupled with other incentives to reduce private vehicle use such as a reduction of on-site parking, shared parking agreements, and permitting for peripheral public parking spaces for downtown and village residents.

T.8.D Explore the potential for parking overlay districts in the downtown and village centers with payment-in-lieu-of-parking provision.

Allowing developers to pay a fee or other consideration in lieu of providing new parking spaces can reduce the amount of on-site and isolated parking lots in downtown and village centers, while still providing adequate parking for commercial and residential uses. The fee could be used to expand or enhance public parking facilities available to all user groups and improve public transportation facilities and services. The fee structure should be based on the estimated cost of constructing a new parking space. Funds collected should be directed to the Transportation Enterprise Fund, which funds the maintenance, expansion and enhancement of public parking and transportation.

T.8.E Lobby for amendments in state regulations governing property assessment and taxation to allow land devoted to parking to be taxed at the same rate as land used for other development.

Taxing parking lots at a lower rate than developed land discourages useful redevelopment of those properties, encourages the development of excessive parking, and supports the continued use of private vehicles. The basis for setting assessments of property value is established under state law, so state action will be needed to accomplish this end.