



MANCHESTER-BY-THE-SEA

BOARD OF SELECTMEN • TOWN HALL
Manchester-by-the-Sea, Massachusetts 01944-1399

Telephone (978) 526-2000

Fax (978) 526-2001

ESTABLISHING A SAFE AND ACCESSIBLE STREETS POLICY

VISION AND PURPOSE:

The Town of Manchester-by-the-Sea is served by a transportation network that includes historic streets that connect compact neighborhoods, help define our town center, bring residents and visitors to our open spaces, beaches and harbor, and connect Manchester to its' neighbors, Beverly, Gloucester, Essex, Hamilton and Wenham. It also includes numerous cul de sacs, and private roads, along with a limited access highway connecting Cape Ann with I-95, and a commuter rail line that provides convenient access to Boston. While elements of this network support safety, accessibility and a variety of transportation choices, there are many opportunities to improve conditions and expand transportation safety, accessibility and convenience.

The Town of Manchester-by-the-Sea recognizes the safety, health, economic, environmental and social benefits that can be achieved through application of "Complete Streets" principles. Complete Streets is the planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the safety and accessibility needs of users of roads, trails and transit systems of all ages and abilities. Complete Streets considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings in a manner that is sensitive to the local context and recognizes that the needs vary in urban, suburban, and rural settings. Complete Streets encourage active living by making walking and biking convenient travel options as part of daily activities, support a healthy environment by reducing vehicle and fossil fuel use, help create vital town centers by increasing opportunities for social interactions, and meet the transportation and circulation needs of all.

The purpose of the Town of Manchester-by-the-Sea's Safe and Accessible Streets Policy is to guide decision makers in consistently planning, designing, constructing and maintaining streets to reasonably accommodate all anticipated users and modes of travel in way that is supportive of the local community, recognizing that all streets are different and that the needs of various users will need to be balanced in a flexible manner.

STATEMENT OF POLICY

The Board of Selectmen, in recognition of the success of past improvements and to express the Town's continued commitment to safe and accessible streets, establish hereby that it shall be the official policy of the Town of Manchester-by-the-Sea to continue to develop and maintain a safe, efficient, environmentally sound and equitable transportation network for people of all ages and abilities, and plan and implement transportation and development projects that follow Complete Streets principles that seek to expand and enhance balanced, multi-modal transportation choices including but not limited to: pedestrians, cyclists, motorists, transit, emergency, freight and commercial vehicles; and

Furthermore, this Safe and Accessible Streets Policy seeks to enable safe and convenient travel as part of daily activities, and improve the public welfare by addressing health, social and environmental challenges.

This Policy will inform and support the Town's transportation programs, projects, initiatives, goals and objectives by routinely incorporating Complete Street principles into Town practices and reporting annually on the implementation of this Policy.

Safe and Accessible Streets Policy

1 AUTHORIZATION TO FILE APPLICATION FOR COMPLETE STREET FUNDS

The Department of Public Works is hereby authorized to submit applications on the Town's behalf to the Massachusetts Department of Transportation Complete Streets grant program to seek funding to implement this Policy and the Safe and Accessible Streets Plan.

2 BASELINE INVENTORY OF PEDESTRIAN AND BICYCLE ACCOMMODATIONS

The Town, with funding from the Complete Streets Program will develop a Complete Streets Prioritization Plan that will document information on pedestrian and bicycle accommodations in geographic information systems and maps such as the location and condition of sidewalks, crosswalks, bicycle lanes and bicycle racks, crash data and user counts. The Prioritization Plan will include a needs assessment, network gap analysis and/or safety audit to identify priority areas for improvements and a targeted investment strategy for Complete Streets infrastructure.

3 PROCEDURE FOR CREATING MORE SAFE AND ACCESSIBLE STREETS

All Town departments and personnel responsible for the planning, design, construction, repair and maintenance of streets shall incorporate Complete Streets practices and philosophies into the everyday operations of the Town and shall integrate context appropriate pedestrian and bicycle facilities in-line with the Complete Streets Model into public and private transportation and development projects and programs.

The Public Works Director shall collaborate and share information with departments, residents, developers and other organizations on annual street maintenance plans and major reconstruction projects by soliciting questions and concerns to ensure safety and accessibility for all users with a context sensitive approach.

All departments and personnel responsible for the planning, design, construction, repair and maintenance of streets shall work in coordination with the Public Works Director and other departments, agencies, and jurisdictions to encourage the application of Complete Streets principles. Transportation infrastructure may be excluded, upon approval of the Board of Selectmen, where documentation and data indicate that any of the following apply.

1. Facilities where specific users are prohibited by law, such as limited access highways or pedestrian malls. An effort will be made, in these cases for accommodations elsewhere.
2. Where cost or impacts of accommodation is excessively disproportionate to the need or probable use or probable future use.

The Public Works Department with the assistance of the Town Planner will develop a Safe and Accessible Streets Plan every five (5) years by reviewing safety data, accessibility information, maintenance needs and soliciting community concerns to identify areas that most warrant Complete Streets improvements.

Complete Streets design recommendations shall be incorporated into all publicly and privately funded projects, as appropriate to the context. All transportation infrastructure and street design projects requiring funding or approval by the Town as well as projects funded by the state and federal government, such as the Chapter 90 funds, City improvement grants, Transportation Improvement Program (TIP), the MassWorks Infrastructure Program, Capital Funding and other state and federal funds for street and infrastructure design shall comply with this Policy.

All departments and personnel responsible for the design and construction of streets shall refer to the most current federal, state and privately funded documents providing the best practice approaches to implementation of Complete Street practices. At the date of this Policy, the latest editions of the following documents shall be consulted when designing Safe and Accessible Streets in Manchester:

- MassDOT's Massachusetts Project Development and Design Guidebook,

Safe and Accessible Streets Policy

- the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highway and Streets and the Guide for the Development of Bicycle Facilities,
- the United States Department of Transportation Federal Highway Administration's Manual on Uniform Traffic Design Controls, and
- the Architectural Access Board (AAB) 521 CMR Rules and Regulations.

Staff of the Department of Public Works and all other personnel responsible for the planning, design and construction of the transportation network shall be trained on a regular basis to understand and comply with current best practices of Complete Streets and annually review the success of implementing the Safe and Accessible Streets Policy and Plan.

4. REVIEW OF PRIVATE DEVELOPMENT

Complete Streets principles will be incorporated into Town review processes, specifically as a component of Site Plan Review.

To the greatest extent possible, private developments and related street design components or corresponding street related components shall be recommended and highly encouraged to adhere to the Complete Streets principles. These principles will be incorporated in the form of a checklist or other type of review process into the Planning Board's Site Plan Review processes to ensure the integration of Complete Streets in all relevant development projects.

5. ANNUAL PROGRESS REPORTS

Annually the Public Works Director shall review progress towards funding and implementing Safe and Accessible Street projects, including planning, new construction and installation projects, and then report to the Board of Selectmen on policy implementation.

6. EFFECTIVE DATE

The effective date of this Safe and Accessible Streets Policy is August 15, 2016.

Policy Appendix

OVERVIEW

The Town’s transportation network began with trails and cart paths and was transformed by the opening of the road to Gloucester in 1684, stagecoach service between Salem and Gloucester in 1796 starting with service three times each week becoming daily in 1806 and twice a day in 1843, railroad service to Boston beginning in 1847 on a single track with a second track added in 1882, and the opening of Route 128 in 1951.

Today’s transportation network relies on four principal elements:

- **Railroad** - Manchester’s Rockport Line commuter rail train station provides convenient access to Boston with frequent daily service relied upon by commuters and reverse-commuters as well as weekend visitors to the Town’s public beaches who patronize local businesses.
- **Route 128** – This four-lane limited access road is Boston’s circumferential highway connecting Cape Ann with I-95 and has two interchanges in Town that provide access to neighboring towns of Essex and Magnolia as well.
- **Route 127** – A portion of the 90 mile state designated Essex Coastal Scenic Byway, this scenic two-lane coastal highway extending from Salem to Rockport is our everyday access to our workplaces, schools, neighborhood shopping, and recreation and is a regional favorite route for weekend bicyclists, motorcyclists, and tour buses as well.
- **Arterials & Connectors** – The Town’s arterial and connector roads form the essential street network that joins the rail station and the state highways with our homes, businesses, schools, hiking trails, and recreational areas.

Arterial roads
(State Highway 127,
Pine & School Streets)

8 miles

Connector Roads
(Lincoln, Arbella, Pleasant,
Beach & Harbor Streets)

2-1/2 miles

The Town’s population of 5,775 (2013 Town Census) includes 2,498 workers 16 years and older who rely on this network.

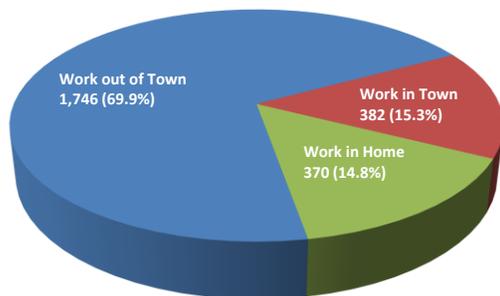


Figure 1 - Workplace: 70% travel to a workplace out of Town.
Data Source: US Census 2013 estimate

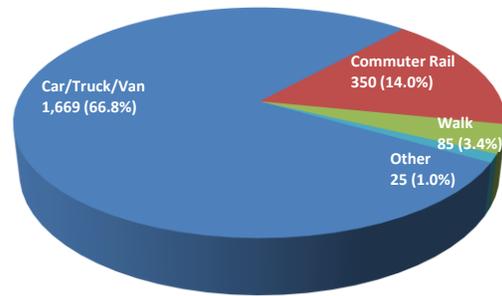


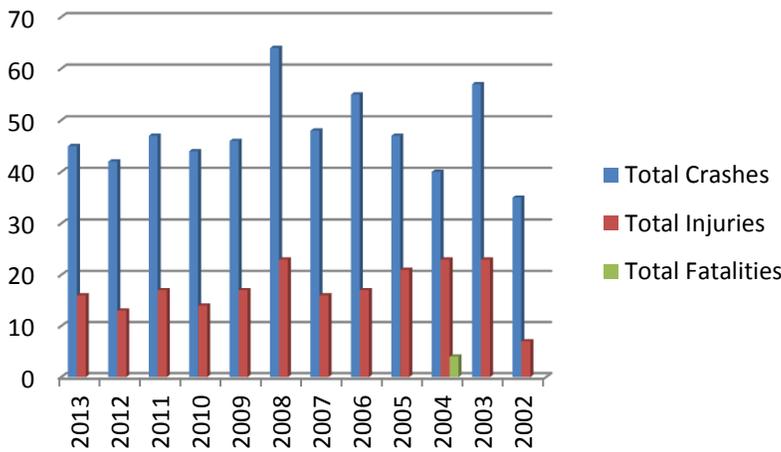
Figure 2 - Preferred Transportation: 2/3 of us drive to work.

Also today, we can appreciate the benefit of an antique road network in its eccentricities that add charm and make cars slow down wherever the road narrows or bends, but the Town is attractive and its attractiveness creates friction between motorists and pedestrians.

TRANSPORTATION VULNERABILITIES & OPPORTUNITIES

Our livelihoods depend on a reliable transportation network whether our work is in Town or elsewhere. The Town’s businesses depend on an accessible, attractive town center frequented by town residents as well as car-driving visitors, train-board beach-goers, and bicycle-riding tourers. Many of our senior citizens depend on good sidewalks, safe crosswalks, and Town-supported van service for access to local services. Our children depend on good sidewalks, safe crosswalks, and protected school bus stops.

- **SAFETY** – Massachusetts Department of Transportation’s published records covering Manchester’s roads indicate an average of 48 traffic accidents per year, approximately one third of which result in personal injury.



While approximately 40% of those total crashes, and 60% of total injuries, occur on the portion of limited access highway Route 128 within the Town’s lines, an average of 28 crashes, resulting in 7 injuries, occur annually on the Town’s roads.

The Town’s four railroad grade crossings are equipped with two quadrant automatic gates, active signals, and up-to-date signage and road markings. Their locations are not redundant and are not suited to replacement with over-passes. Ironically, the only place in Town where the railroad passes over a road on a trestle presents a significant safety threat because its clear opening width at road level is too narrow to permit the sidewalks that end at each side to pass through.

Complete Streets and Safe Routes to Schools– Expanding the traffic management measures implemented in the downtown shopping district in 2005 to a border-to-border solution that considers pedestrians, bicyclists, transit and along with motorists will improve safety and can reduce the volume of car trips. The Town’s Safe Routes to Schools program that improved crosswalks close to the Memorial School with innovative pavement markings will be extended townwide to increase student safety.

- **FLOODING** – The Town’s storm drainage relies on the 2.7 mile long Sawmill Brook/Cat Brook which crosses Route 128 twice and loops through Town in narrow channels passing under major arterial and connector roads in undersized culverts before discharging into the inner harbor through a tide gate and collects the storm drainage from a 3,075 acre watershed, 23% of which is covered by impervious surfaces. The existing dam and tide gate were last rebuilt in 1970 and are in poor condition. The Town’s 2012 FEMA Hazard Mitigation Plan lists addressing central storm drainage as the Town’s top priority. The FEMA plan states:

“Flooding, in terms of frequency and severity, ranges from frequent street closings and minor property damage in small storms to catastrophic property damage and roadways filled with up to 6 feet of water in severe storm events. Flooding generally occurs in the roadways and properties along Lincoln Street, School Street, Norwood Avenue, Putnam Court, Brook Street, Union Street, and Knight Road.

About every 10 years a major storm causes severe to catastrophic damages in this system; the most recent being the Mothers’ Day Storm of 2006 with the following results:

- the bridge on School Street was washed out;
- there was up to 6 feet of water on parts of Brook Street, School Street, Norwood Avenue and Putnam Court; and
- approximately 150 single family houses were damaged.

Since the 2012 FEMA Plan, the FEMA Flood Insurance Rate Maps have been revised raising the 100 year base flood level from elevation 9 to elevation 11 which has placed sections of the Town’s arterial roads, portions of the Town Center including the railroad station, and critical Town infrastructure such as the wastewater treatment plant within the 100 year flood zone.

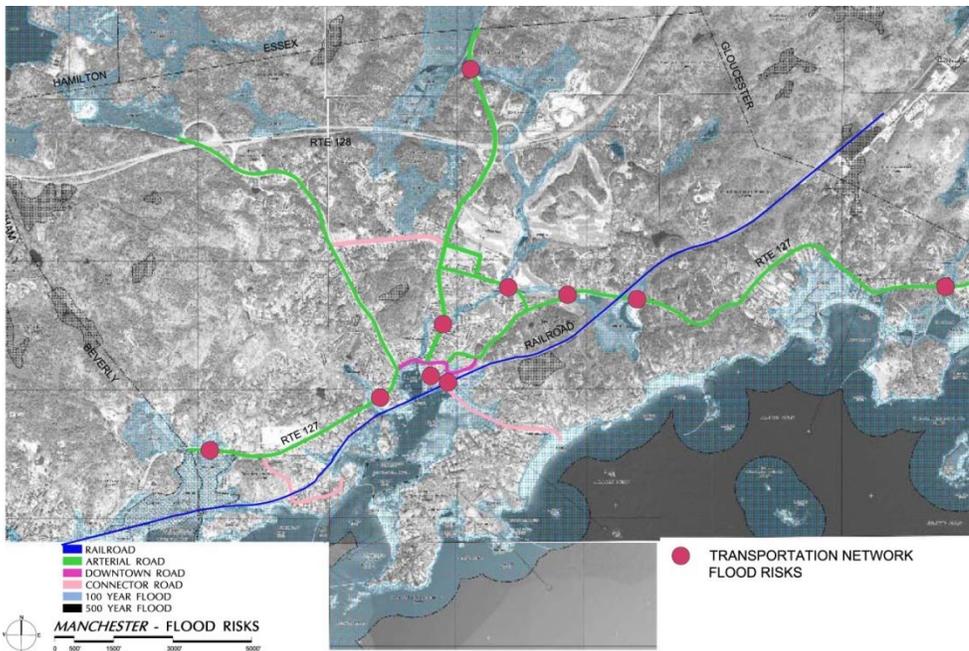


Figure 3 – 2014 FEMA Flood Insurance Rate Maps mosaic

Resiliency Planning – Recent experience with the impacts of 100-year storms every ten years and other extreme weather highlights the Town’s vulnerability to flooding now and indicates the need to prepare for the impact of sea-level rise in the future. Improvement of the Central Drainage System is a high priority for the Town, with improvements to the lower portions of the system as the necessary first step because mitigation measures conducted upstream first would increase downstream flooding. Resiliency Planning is a critical preliminary step to create a sustainable transportation network.

- **OBsolescence & Deterioration** – Development over the past sixty-five years has overwhelmed the capacities of the Town’s facilities and infrastructure, while daily wear and weather constantly erode the Town’s aging roadways and bridges.. Our public safety, schools, water, and sewer improvements come first, but this relegates maintenance, let alone improvement, of our roads, bridges, and stormwater drainage to a crisis-driven patchwork under emergency conditions.

State of Good Repair – The Town’s initiatives to improve its infrastructure to correct deterioration and obsolescence are essential to recover from decades of deferred maintenance.

COLLATERAL OPPORTUNITIES

A number of opportunities exist for improving the environmental, economic and social health of the community in tandem with improving the infrastructure of our transportation network.

Water Quality - Both Manchester Harbor (MA93-19) and Sawmill Brook/Cat Brook (MA93-29) are included in the Department of Environmental Protection’s list of Impaired Water Bodies. There are immediate problems in the quality of stormwater runoff entering Sawmill Brook/Cat Brook which degrades both the brook and the harbor, which is evidenced by testing identifying Fecal Coliform, Low pH, and Pathogens. “Green technologies” and Low Impact Development practices, such as porous paving, rain gardens, infiltration buffers, and bio-retention swales, not only reduce run-off but can remove pollutants and help to ensure healthier waters.

Place Making – Context sensitive awareness of the importance of celebrating gateway and community nodes with site specific place-making amenities.

Health Initiatives – The Town’s partnership with the Department of Public Health’s Mass in Motion can improve the health status of the community in promoting walking and cycling for exercise and social interaction.

Dark Skies -The Town is installing LED post-top streetlight lanterns with asymmetric light distribution and dark-sky design and plans to use this prototype for all new streetlights in the downtown. Subsequent townwide replacement of streetlights with LED luminaires and lighting controls allowing dimming in low traffic hours can reduce energy consumption and night sky light pollution.

Energy Efficiency - Charging stations for electric vehicles can promote alternative energy transportation and reduce fossil fuel consumption and toxic emissions.