

## 11. TRANSPORTATION

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### 11.1 Traffic Safety along Route 117

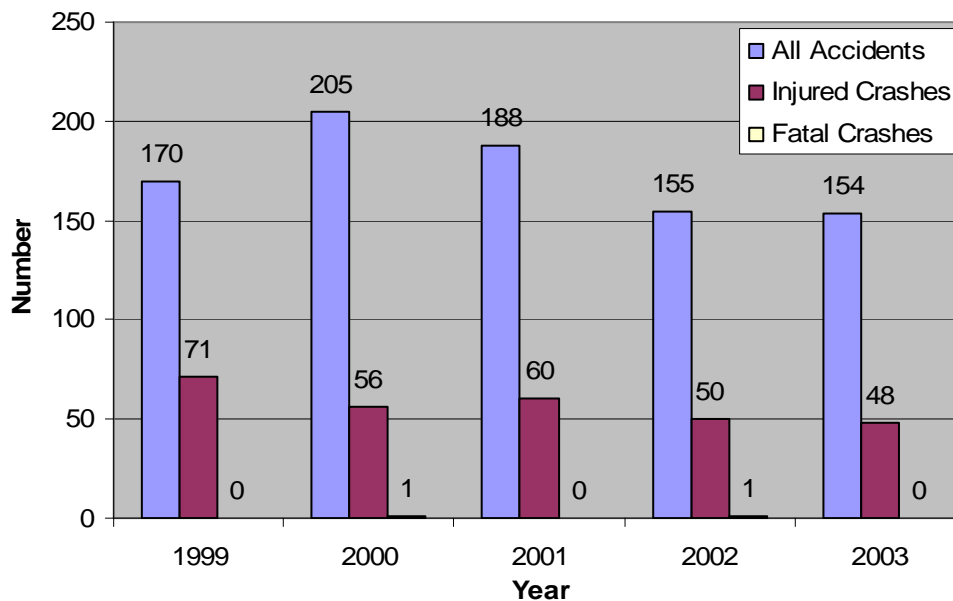
Bolton's location on a major commuting route is a prime reason for the housing growth in town and for the increased traffic that comes with new development. The town is situated directly along Interstate 495, with an exit at Route 117, also known as Main Street, the primary road that travels through town. According to the Massachusetts Highway Department, approximately 94,000 cars travel along I-495 through Bolton and the road has not yet reached capacity. Consequently, this area is appealing to businesses and developers and may be one reason why Bose located its new facility in Stow not far from this exit ramp. At a primary intersection in town, Main Street at Wattaquaddock Hill Road, approximately 23,800 vehicles travel daily along Main Street east of Wattaquaddock Hill Road and 19,100 vehicles travel west of it. The amount of traffic traveling through town leads to backups at the traffic lights located at the ramps to I-495. Traffic flow may be mitigated by adding lights at the intersection of Main Street with Manor Road and Harvard Road and other intersections along Rte. 117.

The increased amount of traffic also poses a safety issue for other drivers and pedestrians, specifically along Main Street. In October 2002, the town's Main Street Safety Task Group published a report of its findings. The results indicated that Bolton has a number of issues with safety that need to be addressed. The main concern was the speed limit along Route 117 through Bolton compared with the allowed speeds in neighboring towns along this state route. The predominant speed on Route 117 in Bolton is 45 mph, whereas in Lancaster it is 35 mph and in Stow it is 40 mph. The only length of the road in Stow or Lancaster that allows drivers to travel 45 mph is the short section before their borders with Bolton. In addition, the only place along the entire route from Leominster to Waltham where drivers are allowed to travel 50 mph is the stretch between Long Hill and Meadow roads in Bolton. In fact, it is rare to find a 50 mph zone anywhere in the region other than on divided highways. For the most part, the speed limits on Route 117 have been determined by speed measurements approved by the state highway department. In theory, the speed limit is the 85 percentile speed in different sections of 117.

The success of the Main Street Safety Task Group led to the formation of a Public Ways Safety Committee that broadened its traffic and safety concerns to all roads in Bolton. The Public Ways group, working with the Police Department and DPW, has made recommendations for all way stop signs and other safety improvements at problem intersections.

Speed leads to the number one safety issue with regard to traffic, which are accidents. According to Mass Highway, Bolton averaged 174 crashes per year between 1999 and 2003. The peak year was 2000, with 205 crashes; in 2003 there were 154 accidents in town (see **Chart 11-1**). While this data does not specify which accidents involved pedestrians, it does indicate how many accidents resulted in injuries or fatalities. While fatalities are rare, with only two occurring in those five years, injuries are more common. About 33% of all crashes in these years resulted in injuries. With safety being a primary concern for all residents and visitors to Bolton, the town should focus on strategies that will slow down and monitor traffic more effectively.

Chart 11-1  
Crash Inventory (1999-2003)  
Bolton



Source: Mass Highway

## 11.2 Improve Pedestrian Safety along Route 117

Along the length of Route 117, where appropriate, pedestrian connections should be strengthened and the pedestrian environment improved with sidewalks, trees, landscaping, and signaled pedestrian crossings. A traffic study with an eye on pedestrian and bicycle safety should be conducted to bolster the town's ideas and policies when they go before MassHighway. Specific intersections that should be studied include Wattaquodock Hill Road and Route 117, Mechanic Street and Route 117, and Green and Forbush Mill roads with Route 117 at the High School.

As part of its development plans and permits in Stow, the Bose Corporation is required to install traffic signals at the northbound ramps of I-495. One of the objectives is to reduce or eliminate the back up onto the I-495 roadway of traffic going onto Route 117. During 2006 the town will be working with Bose to design the traffic signal and related improvements. The effects of traffic on Route 117 need to be part of any development planning, particularly business that occurs near I-495 and other intersections in Bolton. There are no easy solutions to traffic problems, but congestion and safety affect the quality of life in Bolton, even if the majority of the traffic is commuters passing through town.

**Responsible Entity-** The Board of Selectmen, the Public Ways Safety Committee, the Police Department, and the Department of Public Works

### 11.3 Enhance Requirements for Traffic Impact Statements and Mitigation

The town needs to monitor the traffic safety and traffic impacts resulting from new developments. Without these measures in place, the town cannot control and monitor the traffic growth and vehicle delays that may further deteriorate traffic safety, impact remaining (excess) roadway capacity and destroy the rural character of the town.

The town should create a more detailed Traffic Impact Assessment process to be used by Permit Granting Authorities. This process would be used for Site Plan review as well as Subdivision Review. The purpose of the process is to ensure consistency in the review of traffic-related issues generated by development plans submitted to the town.

#### **Box 11-3: Traffic Impact Assessment**

[1] Purpose: To document existing traffic conditions (both vehicular and pedestrian) in the vicinity of the proposed project, to describe the volume and effect of projected traffic generated by the proposed project, and to identify measures proposed to mitigate any adverse impacts on traffic.

[2] Applicability: Projects with one or more of the following characteristics shall prepare a Traffic Impact Assessment: 1) proposing thirty (30) or more parking spaces, 2) proposing a Vehicular Service Establishment, 3) containing frontage and access on a state road. The Board or town staff may request any applicant to prepare a Traffic Impact Assessment even if the project does not meet any of the above criteria.

[3] Qualifications: Author of the Traffic Impact Assessment shall be a certified traffic engineer.

[4] Format and Scope:

(i) Existing traffic conditions: average daily and peak hour volumes, average and peak speeds, sight distances, accident data, and levels of service (LOS) of intersections and streets likely to be affected by the proposed development. Generally, such data shall be presented for all streets and intersections adjacent to or within 1000 feet of the projected boundaries, and shall be no more than six (6) months old at the date of application. Further, information regarding existing pedestrian circulation and ways shall be provided.

(ii) Projected traffic conditions for design year of occupancy: statement of design year of occupancy, background traffic growth on an annual average basis, impacts of proposed developments which have already been approved in part or in whole by the Town.

(iii) Projected impact of proposed development: projected peak hour and daily traffic generated by the development on roads and ways in the vicinity of the development; sight lines at the intersections of the proposed driveways and streets; existing and proposed traffic controls in the vicinity of the proposed development; proposed pedestrian ways and design elements to maximize pedestrian safety and usage; and projected post-development traffic volumes and LOS of intersections and streets likely to be affected by the proposed development.

(iv) Proposed measures to minimize traffic conflict and mitigate any affected intersections or ways. These measures should follow current traffic-calming techniques, and should not rely on road widening or other methods that will detract from the scenic by-ways.

***Responsible Entity-*** The Board of Selectmen, the Planning Board, Public Ways Safety Committee and the DPW

#### **11.4 Bicycle Transportation Improvements**

Given the increase in bicycling as a form of recreation and renewed interest in bicycling as a form of transportation during the recent rise in gasoline prices, the MPC suggests a study be undertaken to investigate the establishment of bicycle routes through Bolton and connections with regional rail trail and other bicycle facilities

***Responsible Entity-*** The Board of Selectmen, the Planning Board, Town Planner and Public Ways Safety Committee