

VI. Traffic and Circulation

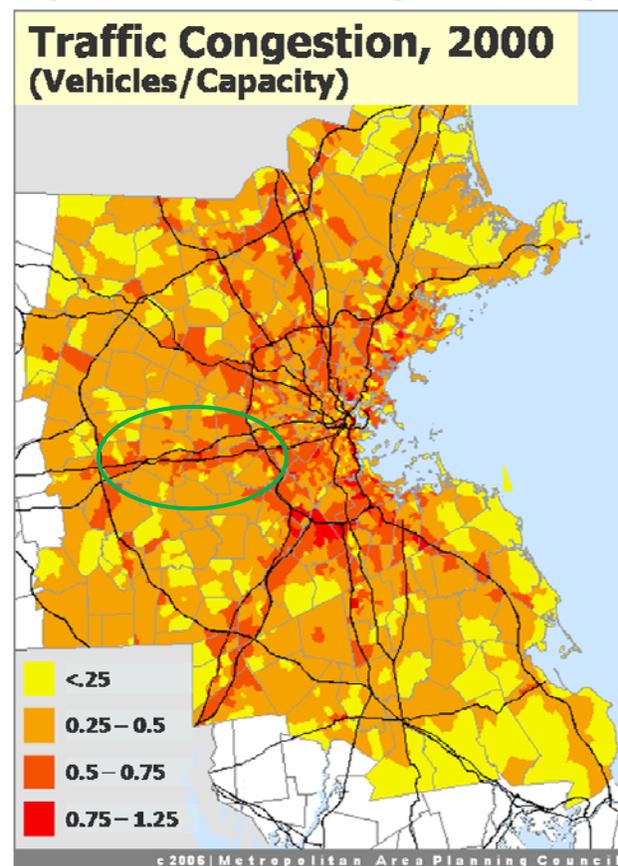
MetroWest is served by 4 east/west corridors, Routes #9, #20, #135, and the MassPike as well as 5 north/south corridors, Routes #495, #85, #126, #27, and #95. All experience extremely heavy traffic during peak commuting hours. This is exacerbated by extensive commercial/industrial development along Route 9 in Framingham/Natick and similar development adjacent to interchanges with the Turnpike and I-495, which continue to expand as foci of employment in the MetroWest. The core of MetroWest is centered on Route #9, sometimes referred to as “Main Street, MetroWest.” The density of commercial development on Route #9 throughout the region and particularly in the “golden triangle” has caused traffic congestion, which has also affected the north/south corridors running through the area.

MetroWest is a melting pot with a very diverse population that is not usually found in such concentrations in a suburban location. There are 67 languages spoken at Framingham High School, which substantiates the fact that MetroWest is a unique, diverse, suburban region. In addition to ethnicity, MetroWest’s population includes 19,555 low-income residents, an elderly population of 28,752 and 28,639 residents are persons with disabilities.

Although the MetroWest region will continue to advocate for expanded alternatives to single occupancy vehicle commuting, residents and local officials alike know that the suburbs are and will continue to be automobile dependent. Interstate 495, the Mass Turnpike and Route 128 carry the bulk of the traffic moving to and through the greater Boston metropolitan region. Interchange failure is a problem along the entire length of I-495. Route 9 is at grid-lock during the AM and PM peak periods. The Exit 12 and 13 Interchanges on the Mass. Turnpike are featured daily in the AM and PM traffic reports. Route 30 in the vicinity of the “Golden Triangle” is becoming built-out, and the recent redevelopment has resulted in more retail stores.

Traffic congestion on the major east/west routes through the region (Routes 9, 20, and 30) has significantly increased leading to longer commutes and deteriorating air quality. There is an increasing desire to reduce reliance on single occupancy vehicles and increase the use of alternative modes of transportation.

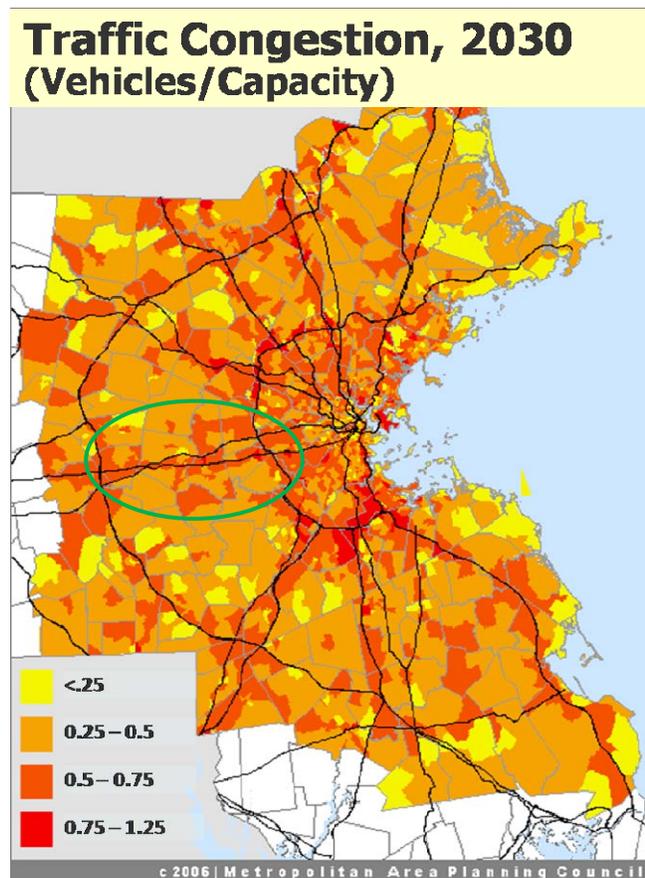
There is no question that Route 9 and the MetroWest region are at a point in time where major infrastructure decisions must be made, and solutions implemented. The economic health and quality of life of MetroWest are reliant on the functionality of Route 9, but we are perilously close to over-permitting the corridor without investing in its ability to



accommodate this growth. State agencies have reviewed many of the development projects permitted along Route 9 with a myopic eye toward transportation, and often assign mitigation requirements to individual projects without looking at the region or the corridor holistically. Any decision one community or one state agency makes with respects to development along Route 9 will inevitably affect another community, and not just the directly adjacent community.

In 2030, traffic congestion will be worse, and many cities and towns will experience moderate to high levels of congestion on their local roads.

There will be very few areas that have low levels of traffic congestion (notice that the yellow almost disappears). One the key findings of MAPC’s MetroFuture regional plan is that “we can’t pave our way out of congestion”. If we only add capacity to the road network, without changing travel patterns or providing people with non-auto alternatives, the demand will simply expand to meet the new capacity of the roadways, and traffic will be just as bad as before.”



Traffic and pedestrian and bicycle circulation was the second highest issue identified by the participants. Participants expressed concern about:

- the volume of traffic;
- the pedestrian/vehicle conflicts;
- a couple of key locations with high accident frequency;
- the lack of pedestrian safety measures;
- concerns about school children crossing Route 9 to get to school, and
- the disconnected trail system.

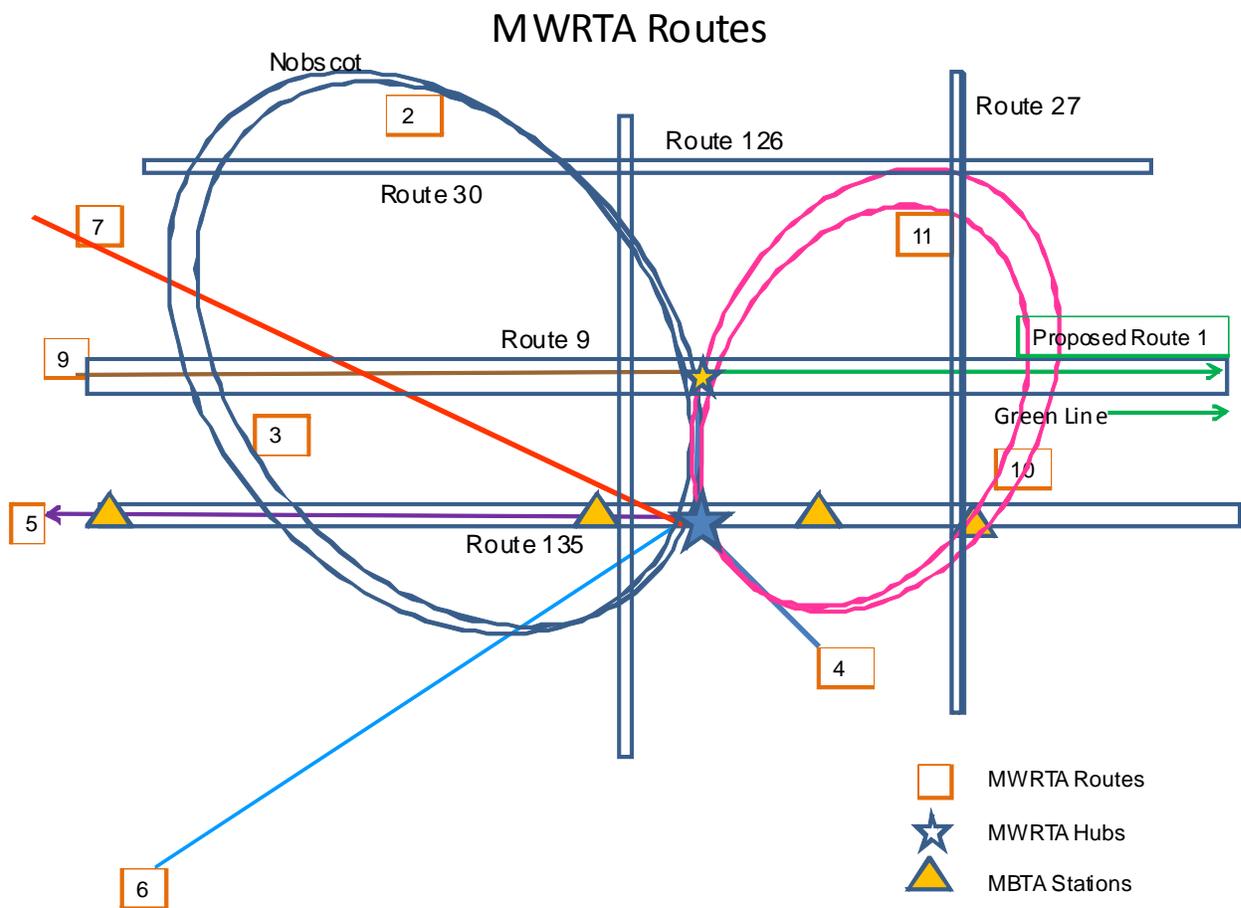
Public Transportation

In 2006, the MWRTA was formed. It is a new regional transit authority serving the MetroWest region. During the first year of its existence, the MetroWest RTA has provided a state-of –the-art fixed route bus service and para-transit services that feature real-time tracking of both fixed route buses and para-transit services, with a web-site specifically designed for individuals with visual impairments.

The MWRTA has developed a strong partnership with the MWGMC. In 2008, the MetroWest Growth Management Committee assisted the MWRTA with two applications to the Boston Metropolitan Planning Organization (MPO) for a Green Line project. The Green Line project is designed to expand existing fixed route and demand responsive services provided by the MetroWest Regional Transit Authority, specifically those that would serve the needs of individuals with disabilities attempting to access fixed route or para-transit services, and would improve access to employment related activities for people with low incomes. An added benefit provided by the expanded services would be improvement of access to reverse-commute employment.

The first application was for funding under the Boston MPO's Suburban Mobility Program for a new route, Route 1, to provide service from MetroWest to the Woodland Station of the MBTA's green line.

The second application that MWGMC wrote for the MWRTA was under the Jobs Access Reverse Commute (JARC) federal program for five new buses. The goal of the JARC program is to transport residents of urbanized areas and nonurbanized areas to suburban employment opportunities, and to improve access to transportation services that provide transportation to



employment and employment-related activities for welfare recipients and eligible low-income individuals.

The additional buses will provide a new connection to the MBTA Green Line. At present, the population of MetroWest has access to the MWRTA, the MBTA commuter rail service, and Logan Express. The addition of the new route can be realized in large part by the new buses, and will provide a heretofore unavailable connection to the Green Line. The two applications resulted in almost \$750,000 for the MWRTA, when they were awarded by the Boston Metropolitan Planning Organization in August 2008.

The Green Line project will improve access to reverse-commute employment from urban areas to MetroWest. Both MWGMC and the MWRTA regularly communicate with the CEO's of the largest public employers in the Commonwealth, and they express their frustration about the fact that they have a tough time attracting recent college graduates to work in MetroWest. The majority of the jobs that need to be filled in MetroWest are in engineering, computer and research & development. These employees work unusual hours, and need more public transit options than are currently offered to get from their homes in Worcester and Boston/Cambridge to the jobs available in MetroWest. In addition, the low income workers in both MetroWest and the urban areas east of MetroWest are needed to fill the multitude of retail and service jobs located in Golden Triangle of MetroWest.

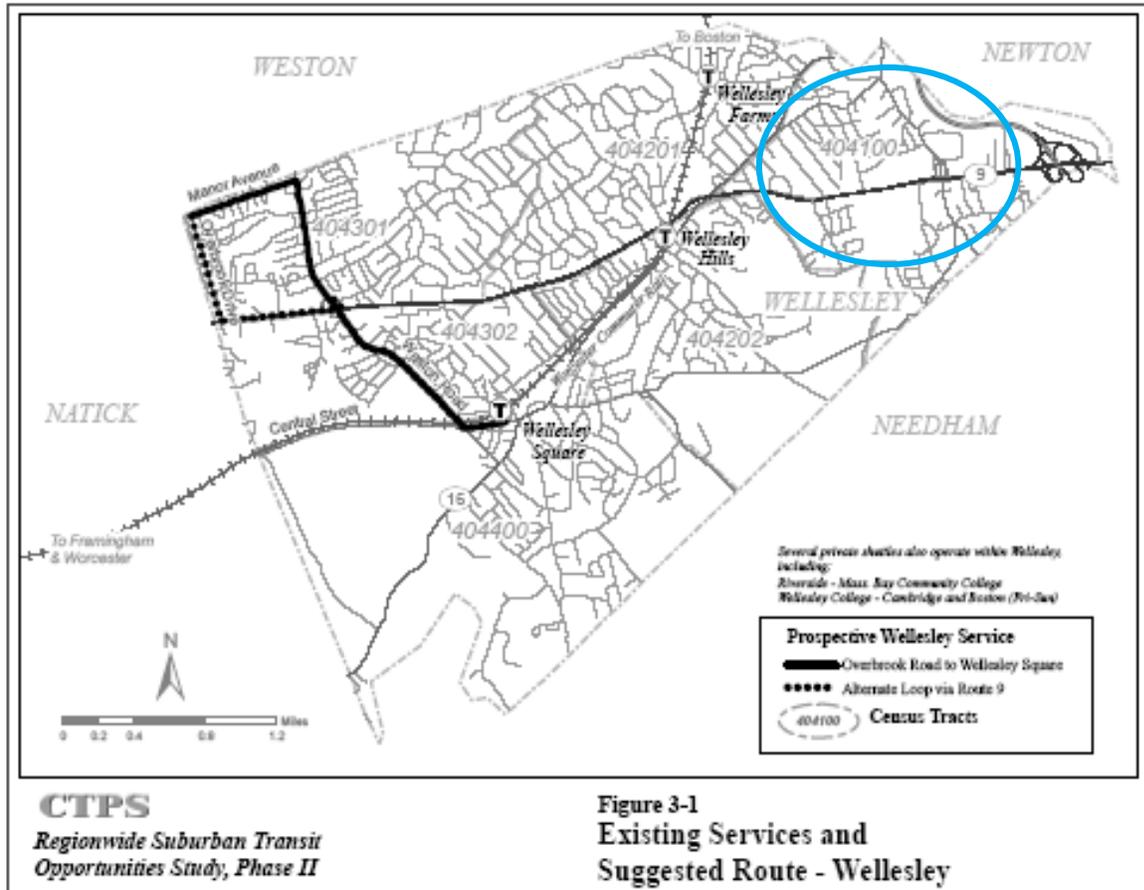
One of the over-arching goals of the MWRTA is to provide a seamless transportation network with connections to all other transportation modes. At present, Routes #2, #3, #4, #5 (Hopkinton & Ashland) #9, #10, #11 and the Natick Commuter shuttle serve the golden triangle area at Flutie Pass. Routes #6 (Ashland & Holliston) and #7 (Southborough & Marlborough) also provide connections to the Central Hub and other transportation services through our transfer system. The MWRTA uses its GPS and communication system to coordinate transfers. In the early stages of the Green Line project, which is expected to begin by January 2009, it will also provide an auxiliary shuttle to back-up late arrivals.

The Executive Office of Transportation includes the Central Transportation Planning Staff (CTPS), the planning support for the Boston MPO. The CTPS Regionwide Suburban Transit Opportunities Study, Phase II, completed in December 2005 includes a map of two suggested routes in Wellesley (see below). The Green Line project proposes a stop at the Natick/Wellesley town line in both eastbound and westbound directions to meet the Route 9 loop suggested in the study. According to the 2000 census Journey-to-Work figures, tract 404100 in Wellesley employed 693 reverse commuters from Boston to Wellesley. Another 114 workers came to this tract from Cambridge, and 432 from Newton. As the service grows, the MWRTA may consider a stop in this census tract.

The Green Line project will provide new service to the Newton-Wellesley Hospital, which is currently un-served by buses, and would provide bus service to the new apartment complex adjacent to the Woodland station. It intends to provide the opportunity for an additional stop in Wellesley in the vicinity of I-95 in the future.

The purchase of 5 new buses will enhance the existing hub-and-spoke system by providing mobility for the elderly, disabled and low income residents of the MetroWest region, while contributing to reverse commute options. In addition, the purchase of 5 new buses will allow the

MWRTA to serve the identified area with enough runs to reduce the length of the headways on such routes. The buses will allow the MWRTA to augment services provided by Council on Aging, Department of Transitional Assistance, Human-Services, Disability Commissions and Welfare Departments that are confined by political boundaries.



Furthermore, the buses will afford riders cost effective, timely and dependable service to the MBTA Green Line at Woodland Station from all communities served by the MWRTA, as well as Newton/Wellesley Hospital. These additional buses will improve quality of life by providing a broader menu of choices.

In the four years researched by MAPC, there was one pedestrian fatality in Wellesley, and an average of 23 injuries per 100 crashes community-wide.

There were 333 total crashes in 4 years within the study area (versus 3930 total in Wellesley). There were no collisions with bicyclists or

	2002	2003	2004	2005
Total crashes – Wellesley	993	916	947	1074
Total Injuries - Wellesley	232	214	244	230
Total Fatalities	0	2	0	0
Collision with cyclist	2	5	9	3
Collision with pedestrian	18	13	17	5
Total crashes – study area	93	73	79	88
Total injuries – study area	33	13	19	24

pedestrians reported in the study area, and the injuries reported resulted in 27 injuries per 100 crashes within the study area, which is slightly higher than the town-wide average. Specific crash information is provided for each of the locations discussed below.

Considerations for compliance with the recommendations contained in the Mass Highway Route 9 Corridor Plan



Weston Road Interchange - Photo T 1

Overbrook and Oak Street -

CTPS recommend interconnecting the Overbrook and Oak Street

signals. MAPC's transportation planner, Jim Gallagher, agrees with this recommendation, and finds that it is one of the opportunities to improve circulation in the corridor.

There were 63 crashes at or near Overbrook Drive. There were 14 persons injured (22 per 100 crashes). Of the 63 crashes, 33 were rear-end collisions involving westbound vehicles only; another 14 rear-end collisions involved 2 or more eastbound vehicles. Not more than 5 appear to involve vehicles exiting Overlook. Seven of the 33 westbound crashes involved wet pavement, but only 4 of the 14 eastbound crashes involved wet pavement. Eleven westbound crashes took place in the AM, but only 10 of the eastbound ones took place at that time. All of this data seems to indicate that driver inattention during congestion is the cause of most of these accidents

Weston Road - CTPS also recommends a standard diamond interchange to replace the current substandard design at Weston Rd. There are safety problems on Route 9 caused by the insufficient length of the acceleration and deceleration lanes. The diamond design would likely remove this problem, but at a cost of land takings, including some of the town reservation. There would also be new signals on either end of the ramps on Weston Rd.

MAPC finds that this design is overbuilt and inappropriate for this location. Jim Gallagher's recommendation would be single ramps eastbound and westbound on Route 9, without any new signals on Weston Rd. The eastbound ramp on/off Route 9 would remain approximately where it

is. The westbound ramp would be the existing ramp on the east side of Weston Road, with the ramp on the west side closed. This would also simplify operations at that location on Weston Rd, which is the only place with any significant numbers of crashes in the area on Weston Rd.

The bridge on Route 9 over Weston Road would need to be widened to allow the acceleration and deceleration lanes to be lengthened. Some of the right-of-way from the closed ramp might need to be traded for some of the parking spaces of the commercial area on the west side to allow this to happen. There should also be warning signs (Slowed Traffic Ahead) on both sides of Route 9 approaching this interchange.

There should be similar warning signs approaching the Dunkin Donuts location for westbound traffic and for both directions on Route 9 at Overbrook. All this in total should improve traffic circulation.

Weston Road Crash Details

There were 57 crashes in 4 years reported on Weston Road within a ¼ mile of Route 9. Only 7 injuries were reported. Seventeen of the crashes were angle collisions with one vehicle trying to exit a side street colliding with one on Weston. Pilgrim Road was the most frequent site of these crashes, with 6 crashes in 4 years. No injuries were reported for any of these crashes.



Dunkin Donuts entrance onto Route 9 – Photo T1

There were 25 rear collisions (resulting in all 7 injuries) as well, possibly reflecting congestion on Weston Rd. Ten of the 25 collisions took place during the peak driving hours of 7-9 AM and 4-6 PM. The pavement was listed as wet in 13 collisions; snow/ice was listed 8 times. Only 10 crashes occurred after dark.

Based on the crash information available, the intersection of the Route 9 ramps with Weston Road does not appear to have a severe safety problem. There were 18 collisions in the vicinity of the Weston Rd/Cleveland Rd intersection north of Route 9, none listed on the south side. Six of these were collisions with objects (fences, curbs, walls) or parked vehicles, a relatively high number that may reflect speeding or outdated geometrics.

Finally, there were 128 crashes on Route 9 in the area around the Weston Road interchange. Of these 128 crashes, there were 31 persons injured (24 per 100 crashes).

Crashes on Route 9

There were 273 crashes were associated with Route 9, with 81 injuries reported (30 injuries per 100 crashes). Of the 273 crashes, there were 19 single vehicle crashes, 10 westbound and 7

eastbound. Two hundred and one crashes were rear end collisions, 131 involve west bound vehicles, with 52 injuries. Fifty six involve eastbound vehicles with 8 injuries.

There were 44 crashes adjacent to and just east of Dunkin Donuts, including 969, 965, 951 Worcester Street and Ottaway Circle, all involving westbound vehicles on Route 9. This is a high number for an area without any cross streets or much entering traffic except for those using the business driveways. Almost all of these are rear-end collisions, 11 involved 3 or more vehicles, with 22 persons injured (50 injuries per 100 crashes, a high rate of injuries). Virtually all took place between 8 AM and 8 PM, almost all during daylight. There were 16 crashes with wet pavement conditions, a relatively high number indicating problems stopping suddenly. Queues from the Overlook Drive signal also may extend this far and factor into the number of crashes.

Saint James Church - There were 31 crashes in the area around Lexington Rd and across at St James Church. Almost all of these (24 of 31) were rear-end collisions involving 2 or more vehicles traveling westbound. All but 2 of the westbound crashes took place between 12 PM and 6:30 PM, and only 3

St. James the Great Church - Photo T 2

involved wet pavement, indicating most of the crashes were congestion-related. There were 14 persons injured (45 per 100 crashes). None of the descriptions suggest that vehicles leaving Lexington Street or St James were involved in the collisions.

