

# **Final Report**

## **Route one Traffic and Safety**

### **Study Committee**

#### **Committee Background:**

Article 45 of the 2000 Annual town meeting warrant, was passed to create the study committee to be appointed by the Town Manager. The purpose of which was to examine safety and congestion issues for U.S. Route.1 ( Broadway) and adjacent roadways within the Town of Saugus.

Originally, the study mandate was confined to Broadway and connecting roadways. An amendment to the article expanded the scope of the committee to study "mobility options town-wide". This gave the Committee the necessary latitude to examine the whole picture of local access, mobility, and how it relates to the larger quality of life issues, in order to make recommendations in a final report.

There were few volunteers, resulting in a delay to the start of the activities, finally convening at the end of December 2000. The committee was originally comprised of 3 permanent members. This core committee met with various specialists during the year 2001 on a rotating basis. Including a member of the Board of Selectmen; Police Department (Traffic Safety Officer), Public Works Director, Community Development Director and interested local residents.

In addition, the Chairman conducted further meetings with the Mass. Highway Department, the state Central Transportation Planning staff, the Regional Transportation Advisory Council, representatives of the Metropolitan Planning Organization and Dr. Romin Koebel former planner for the town during the era the last master plan was drawn.

Furthermore, the Chairman attended several workshops and seminars on transportation and land use issues; most prominent of those being the "How We Live" series sponsored by the Boston Society of Architects. The Chairman also visited for study purposes, several US metropolitan centers including: New York, Northern New Jersey, Metro-Philadelphia, Baltimore, Washington D.C., Atlanta, New Orleans, Chicago, Cleveland and Pittsburgh. All done at the Chairman's own expense at no cost to the taxpayers.

The Committee realized through an evolving process, that the conventional method of incremental improvements to a single arterial roadway and its feeders may not be in the best interest of the town and the region. In the absence of any initiative on the community's part, highway projects to the North and South of Saugus would shape our destiny by default. Based on our research and deliberations, the Committee hereby presents its' findings.

Fred R Moore  
Chairman  
March 15, 2004

The original Newburyport Turnpike was first laid out through Saugus around 1805 as a privately financed and operated toll road. At that time, Saugus was just so much empty space full of swamps and woodland to get through, as the road laid out in nearly a straight line, bypassed any of the local settlements. Although several stagecoach runs regularly plied the turnpike in this era, much of the Boston to the namesake city traffic preferred to use the coastal route where the majority of the population resided. With the construction of the railroads in 1840's, the toll road ceased to be economically viable; the private operators abandoned the venture, and the sparsely used path fell under the public domain. Saugus inhabitants at that time, were ambivalent to this turn of events as by 1853, train service connecting the town to Lynn, Malden, Everett and Boston was far superior. As just another profit making venture that became a public expense of questionable merit, even into the age that ushered in the automobile, the state level authorities assumed little potential for this commercial venture turned public path. A 1907 Massachusetts highway department report recommended against making it a state highway. Photographs taken in 1919 show the turnpike in Saugus as little more than a dirt road lined with utility poles out in the woods. In an amazing 15 year process of transformation, "The Turnpike" went from this seldom used out of the way path to a six lane divided highway. One of the very first "superhighways of the future" touted as a facility that would conduct the motoring public in the greatest safety and forever free from traffic congestion, was substantially completed as it is configured today in 1937. The postwar building boom positioned the town just about perfectly to take advantage of a nation on wheels, and a drive in culture, as far as revenue producing commercial development goes. Over the last fifty years this model has served the town well, despite the love hate relationship collectively shared with this river of motorized metal, it has been the golden goose that has kept the town's taxes low, and provided principle access to the rest of the world, as one of the first tier of postwar automobile suburbs on this main line transportation artery.

Designated as "Broadway" through Saugus, the roadway currently serves three principle functions:

- An interstate highway
- A commuter expressway
- A commercial boulevard

For better or worse, the Interstate highway system that was to create an express bypass has its missing link in the North Shore, as a result of the highway revolt of 1972, leaving the Route One as the primary way motor traffic will get from here to there, no matter how route designations are configured. Attempts to address the ever increasing volumes of traffic during the next 20 years, ranged from constructing a parallel I95 through the town, to widening the existing roadway and constructing interchanges of a more modern design consuming vast amounts of acreage, that have barring some minor grade separation projects, have yet to substantially change the 1930's era design of this roadway. We need to recognize that transportation policies and actions more than a half century ago, determined the land use destiny. Most recently, the Lower North Shore Transportation Improvement study, illustrates an intent to remove just about every vehicular traffic bottleneck between Boston and the Saugus town line. Decisions made today will determine our destiny for generations to come. From observing the trends as the roadway system began to reach saturation, more roadways constructed out into the hinterlands, also have been reaching capacity as this practice accelerated the effects of suburban sprawl. What should be also noted here is that with low density patterns and single use zoning, local collector roadway systems saturate even before build out is reached. So how does the town lie in the scheme of things? First thing needed, is to face up to the reality that Saugus is not a rural town, or a backwater subdivision bedroom community suburb. In the professional circles that deal with metropolitan planning issues, Saugus would be considered an edge city of highway oriented development, overlaid upon the transit oriented development that preceded it.

Several forums and Workshops on development, land use and quality of life themes in the recent past, corroborate the observation that as the wave of suburban sprawl has moved outward from the central city, communities great and small have been attempting to come to terms with similar situations.

The first communities to bear the impacts and burdens of the highway oriented development practices, will be the first tier suburbs such as Saugus, mostly in the form of political pressure to increase capacity on existing highways with little regard to the consequences to the host municipality. As this is not a unique situation, with scant variation, residents tend to adopt a siege mentality, and go about the standard gamut of sandbagging tactics against the rising river of urbanization, by using whatever regulations are at hand to make development and redevelopment more expensive and difficult. Also to be noted, is that the town is rapidly approaching "build out"; that is 100% developed under the current land use regulations and practices in force. Customary land use policies of the rapidly growing communities, and the auto dependency they spawn, generally leads to the reactive "raise the bridge" roadway capacity upgrades as the sole method to address the situation. The State Highway Department practice is invariably to engineer a stretch of roadway for higher vehicular capacity and speeds, and promote it as "safety improvements".

Proposals promoted in the recent Lower North Shore Transportation Study, is indicative others are already making decisions that will impact the town. Most significant being Route One improvements and widening between Copeland Circle and the junction with Route 99, which may relieve congestion on that stretch of roadway, but will concentrate the congestion on the stretch through Saugus to The Lynnfield underpass. Given this trend extended, the next logical progression would be to, expand the roadway footprint through the town. Unlike building new highways through empty land, such capacity expanding schemes have serious consequences. The tradeoffs warrant careful consideration. First being the erosion of the tax base. Second would be the reinforcement of a physical barrier bisecting the town, and actually increasing automobile dependence. Then, there is the effect that when capacity is expanded on the main highway, the roads that feed into it become further congested, a situation that is aggravated when there is a local street layout, that has a lack of through streets and excessive dead ends. Now this puts the town on a vicious cycle of having to improve the primary roadways all over town, which will need to be engineered in a way that will lead to pedestrian and bicycle unfriendly streetscapes, and faster speeds during the times the roads are not near capacity. The flip side of the tradeoff, is that congestion on local roadways may actually lead to safer roads due to lower speeds.

If it would be possible to think beyond the constraints of highway engineer solutions for a moment, "lower the river" options, may produce more desirable results. First, improve the street layout so more streets connect through, and more fairly distribute the traffic burden through the town. Often, walking and cycling options are not considered, given the circuitous nature of travel when few streets interconnect. Concurrently the time may have come to reconsider the local zoning and land use policies, as the segregation of uses in single use zones, results in a local government policy that makes driving all but compulsory. Economist and ecologist alike cite diversity as the best way to sustain the health of a system. Therefore, to put into practice the amendment that town meeting so thoughtfully approved, to study "mobility options townwide", allows more flexibility to explore options such as making the local streets more pedestrian friendly, through adding sidewalks, greenways, connector paths, and non motorized public ways. This option would mesh with a program to improve our mass transit services so it would be an attractive choice, by adding coordinated bus and rail routes. Parking policies need to be reconsidered, as more off street parking has never, ever relieved auto congestion, and takes up space that could otherwise be used for more value added development. Many more progressive municipalities, often put maximum "caps" on off street parking because the less land allocated for automobile storage, the more compact, pedestrian friendly, value added development results. Congestion and density are not

universally interchangeable terms. Low density, large lot "mall and sprawl" invariably has greater congestion at build out.

As change is inevitable, an opportunity to be proactive should be utilized, and control the change. We must think of this issue in the long term, for transportation and land use are inextricably linked.

The four options available are:

- Freeze all development (maintain status quo).
- Allow local congestion to ultimately constrain traffic volumes at increased travel times.
- Widen the roads again.
- Find ways for people to conduct their affairs without having to drive so much.

Given the explosive growth in the northern suburbs, any superficial, piecemeal, politically timid, neighborhood placating actions will be quickly obsolete. Design an urban Saugus, or it will become the default design that has been replicated thousands of times all over the nation: A "Los-Angeleized" dystopia of parking lots, mean streets, generic strip malls, misanthropic cul-de-sac subdivisions, reactive downzoning, and compulsory automobile use that current public policy has created for us, with the resultant social problems. Even now the conventional policy of piecemeal roadway capacity expansion is in a major construction phase, evidenced by the current rebuilding of the Walnut Street overpass, and changes to the interchange geometry. Whereas incremental public works will never be the magic bullet that will solve the congestion and safety problems on the Broadway corridor, what needs to be done is to take a multifaceted approach. Therefore, it may well be futile for the Committee to make any further recommendations on incremental improvements to Route One proper, until such time the construction works in progress are completed, and the relative performance or success can be evaluated. After which the corridor issues may be revisited.

Mobility alternatives will not be for everyone, but they are never intended to be. Diversity is important, for the future will hold that we are going to have urban congestion and an alternative; or no alternative.

Recommendations are grouped into three basic modules

1. Short term fine tuning to the street system, and immediately implementable mobility alternatives.
2. Policy and practice recommendations to promote non vehicular (alternative) mobility.
3. A long term vision as to how the Broadway corridor should evolve to climax development, and development of local policies, practices, and political action to achieve this end.

### **Module 1 recommendations:**

- Right turn lane and constant green arrow with pedestrian signal override.
  1. Apply to Main and Forest St.
  2. Apply to Walnut and Central Streets
  3. Apply to Walnut and Elm Streets
  4. Apply to Main and Vine Streets
  5. Reconfiguring the circulation pattern and signalization of the intersection of Vine and Essex

Streets.

- Retiming Main Street and Lynn Fells Parkway signals to favor outbound traffic with a longer green light cycle.
- Preservation of paper street and rights of way from being blocked and abandoned and re-opening of streets that have been done so.
- Identification of possible cross connection throughways to relieve congestion on existing roadways.
- More sidewalk construction by diversion of chapter 90 funds.
- Cross connection of local streets with non vehicular public ways.
- Improved local bus service with realigned stops and shelters.
- Development of MBTA owned Saugus Branch line as a dual mode "transit Greenway" trail with rail, and introduction of a mass transit service along this route.
- Construct pedestrian/bicycle greenway on North South axis Saugus center to Breakheart Reservation.
- Pedestrian/bicycle greenway on I95 fill in Rumney Marsh, Ballard Street to Northgate center.

## **Module 2**

Public policy:

- Avoid excessive restrictions on 24 hour 7 day operation of businesses in Broadway corridor, in order to better distribute roadway loads over longer time frame.
- Aggressive enforcement of subdivision regulations requiring that dead end streets be avoided.
- Scrapping provisions of the current sign by-laws that create safety hazards, by restricting signs to be overly small, and positioned in such a manner that motorists must turn their head or other wise drive in an unsafe manner in order to read them, creating an unnecessary safety hazard.
- More regional view and unity in transportation and land use development plans by greater participation in the regional planning agency activities.
- Endorsement by the town of "alternative three" of the North Shore Major Investment Study (MIS) to bring the MBTA Blue rapid transit line to Lynn, and to further actively promote locating a station in Saugus along this alignment.
- Revitalization of Lynn as a commercial center through mass transit development. (Blue line)
- Overhaul of the town's zoning and land use policies to develop a more walkable, pedestrian friendly environment by allowing mixed uses and higher densities where appropriate.
- Land use policy changes promoting commercial uses, and mixed uses close to residential areas that would benefit from pedestrian traffic.
- Establish a "village district" zoning overlay, that would allow business operators to pool parking in order to relieve them of the burdensome minimum spaces per square foot requirements, and use land more efficiently.
- Revision of town by-laws to allow a greater variety of non-motorized personal mobility devices on

public sidewalks, provided adequate safeguards for pedestrians are maintained (yielding right of way to pedestrians, and "blackout" zones in areas of high pedestrian traffic).

- Establishment of a permanent body at the administrative level to guide comprehensive local mobility and land use policies in coordination with regional initiatives. (A Multimodal Unified Local Transportation Initiative)

### **Module 3**

Engineering the Broadway corridor:

This is the "where do we go from here?" Do we have a long range plan to deal with an assumed demand for more vehicle capacity? Historically, the local political culture has been and remains to this day in denial as to what the roadway is developing into, given that this is one of the few missing links in the entire East coast interstate limited access highway system.

As suburban sprawl accelerates in the areas north of the town, Saugus will be compelled to deal with this one way or another, and simply refusing to confront the issue will not make it go away. As the pressures to expand capacity mount, local opposition will be overwhelmed.

In lieu of a plan, the decision will be made by others who will not be working for the town's interests.

Options are:

- Widen the Highway
- Construct frontage and service roads that segregate local traffic from express traffic
- Stack an express road over the local road
- Stack local road over express road
- Build an express bypass road and lower capacity and design speeds of the existing Broadway such as been done with the parallel I95 in Danvers.

Each option has its own pros and cons, and all of them will be controversial. But barring a sudden shift from the auto centric culture, these are the engineering options. A common theme behind most of these options is to separate the local traffic using the roadway as a commercial boulevard from the express traffic that uses the highway as an interstate and commuter expressway. The Committee recommends a combination of the above stated engineering methods to separate the local from the express traffic, as different stretches of the roadway have different characteristics.

The grand plan:

The big backfill!

In Atlanta Georgia, what used to be the second floor is now the ground floor on buildings abutting several blocks, where the streets were raised to address traffic and safety issues in the early part of the 20th century. The downtown was suffering from terrible congestion and safety problems due to the large amount of rail traffic crossing the streets at grade. The solution was elegant in its simplicity. Raise the local road over the railways. Thus was born "Underground Atlanta", that stacks the local streets over the express transportation, without the expense and surprises of digging into the earth. Looking back into history, this is a practice that has been done from ancient times, as any archeologist will attest. Phase one, would construct a viaduct to connect replacement overpasses at Main and Essex Street, and remove

the access and egress to the existing roadway at these points. Access from the express highway would be at either end of the upper deck via slip ramps, and the intersections with Main and Essex streets would be signalized. The land freed up from the removal of the cloverleaf ramps, can now be used for revenue producing value added commercial development. Over time as the land is filled in to establish the new grade, this upper deck would transform into an urban boulevard with the through traffic out of sight beneath it.

As the land abutting the corridor increases in value, it will become cost effective to extend this upper deck to Lynn Fells Parkway, and then Walnut Street and beyond. Increasing safety, carrying capacity, usefulness, without increasing the total roadway footprint, rendering a more attractive streetscape complete with landscaping, wide sidewalks, street furniture, bikeways, busways, curb cuts, and angle parking on the local traffic upper deck, with a bonus in that a higher density of tax revenue producing value added development can happen without the roadway subject to premature saturation.

Adoption of the Committee recommendations will lay the foundation for a new age master plan that is far more visionary, progressive, attuned to the concept of sustainable "smart growth" development, and more environmentally sound than the conventional master plan, produced for the town some years ago at great expense, which would have resulted in progression of Saugus into the kinds of places that adorn the circumferential beltways everywhere; with the same predictable consequences. Therefore, the Committee concludes its work, and therefore its obligation in submitting these recommendations to the Town Administration, and requests the recommendations be endorsed by said Administration, act of Town Meeting, and, or relevant interested parties for implementation.

Respectfully submitted,

Fred R Moore  
Chairman:  
Route One Traffic and safety Study Committee