STAMFORD MASTER PLAN 2000

GROWTH MANAGEMENT STUDY

TRAFFIC AND TRANSIT REPORT

SUMMARY REPORT

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Regional Plan Association (NJ NY CT)

Abeles Phillips Preiss & Shapiro, Inc.

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INTRODUCTION

TRAFFIC AND TRANSIT, GROWTH MANAGEMENT AND THE FOUR GOALS OF THE MASTER PLAN

This traffic and transportation study is one of three foundations for the larger Growth Management Study which describes the interaction of three sets of issues:

- Economic growth – how much new employment and population growth there may be over the next twenty years
- Urban design – where should Stamford grow and what should new development look like
- Traffic and transit – how will residents and workers/employees travel to, and around Stamford.

In order to understand the consequences of growth, the Growth Management Study modeled three futures – slow, trend and high growth and for each of these possible futures, policy recommendations are made.

The Growth Management model validated what policymakers suspected initially – that population growth and transportation issues are the biggest constraints on Stamford's prosperity. Quite simply, an ever-widening gap between employment and population translates into the need to bring more workers into Stamford, commuting from distances that are farther and farther away. This is a trend that in the long-term cannot be sustained.

As summarized below, and described in detail elsewhere in this report, the Traffic and Transit study shows that it is possible to manage future traffic problems even if Stamford continues to grow as it has over the past decade, but only by deploying an aggressive mix of strategies that includes cooperation by employers, more transit and, most importantly, strategic land use decisions: Stamford cannot build its way out of its traffic and transit problems by widening roads and reconfiguring intersections without destroying the Quality of Life of the Neighborhoods. New housing and new commercial and industrial developments must be in locations and in configurations that support transit.

It is this last strategy - land use – that links the Traffic and Transit study to the other Goals and Objectives of the Master Plan. The design guidelines in the Urban Design Report, and summarized in the City Beautiful section of the City-wide Policies Report, assure that new development is contextual and reinforces the neighborhoods. The design studies in the Downtown section of the Action Plan demonstrate that the completion of downtown will not only protect the neighborhoods from unwanted intensification, but will put development where it is accessible to transit.

SUMMARY OF KEY FINDINGS

The Growth Management model quantified the dimensions of the growing population-employment gap and established some concrete traffic and Transit benchmarks and goals. Most of the detailed Traffic and Transit recommendations in this report are summarized in the Neighborhood Quality of Life and Downtown sections of the Action Plan. Below is a summary of some of the more important findings.

- ***Future housing must be predominantly in the downtown, proximate to transit and to employment centers, to ameliorate traffic problems related to future growth.***

In the initial modeling, future housing growth was assumed to be distributed throughout the city. This had the desired effect of reducing traffic at key gateways into the city, but the perverse effect of making local neighborhood traffic worse! Only by putting 80% of future housing growth in the "greater downtown" (including Mill River, Bedford/Summer Streets & South End), were the beneficial impacts realized. The balance of the housing growth would be for neighborhood revitalization efforts outside of downtown.

- ***Traffic problems in Stamford will get worse and will need to be addressed even if Stamford grows slowly over the next 20 years.***

In relative terms, the costs to maintain existing levels of service even under a "slow growth" scenario, will almost double. Stamford will also continue to be impacted by worsening conditions on Interstate 95 (I-95) and the Merritt Parkway as a result of the regional growth pattern. I-95 has limited right-of-way for any future capacity improvements. The Merritt Parkway is designated as a scenic parkway, and no capacity improvements are scheduled. It is also true however, that in a low growth scenario, it is possible to mitigate traffic impacts with the least ambitious measures and those that are all within Stamford's local control – "traffic demand management" (TDM – defined later) and some strategic land-use decisions for directing development to downtown.

- ***It is possible to mitigate traffic impacts of even the most ambitious growth scenarios.***

If a combination of measures is employed – TDM, more transit and more housing – it is possible to hold the relative increase in the costs for mitigation to the same level as that for Stamford's most likely future, that of trend levels of growth. In fact, in the most optimistic set of events, it is possible to reduce the growth in traffic entering Stamford from the two major highways to levels lower than existing conditions today! However, this is only possible by deploying the most aggressive mix of mitigation strategies – assuming extraordinary will on the part of policymakers with regards to land-use decisions; almost complete cooperation by

employers on TDM; and the partnership of state and regional entities to address transit issues and regional highway issues. Put simply, there is a direct relationship between levels of growth and the political, economic and technical effort required to mitigate traffic.

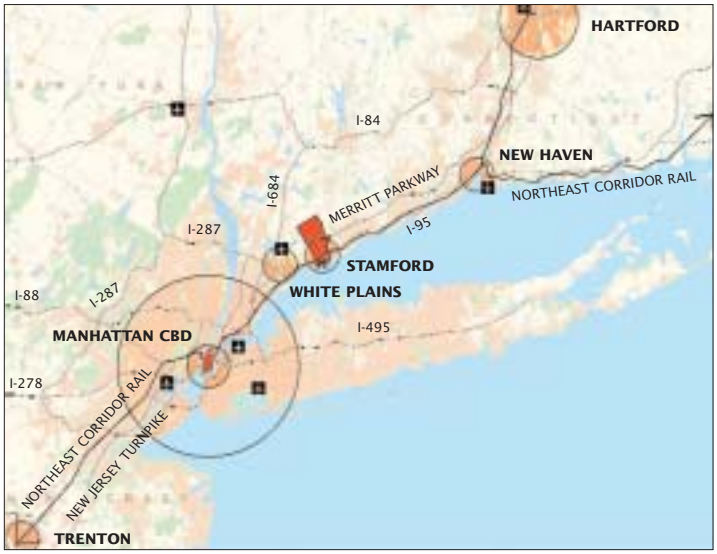
- ***There is no magic bullet.***

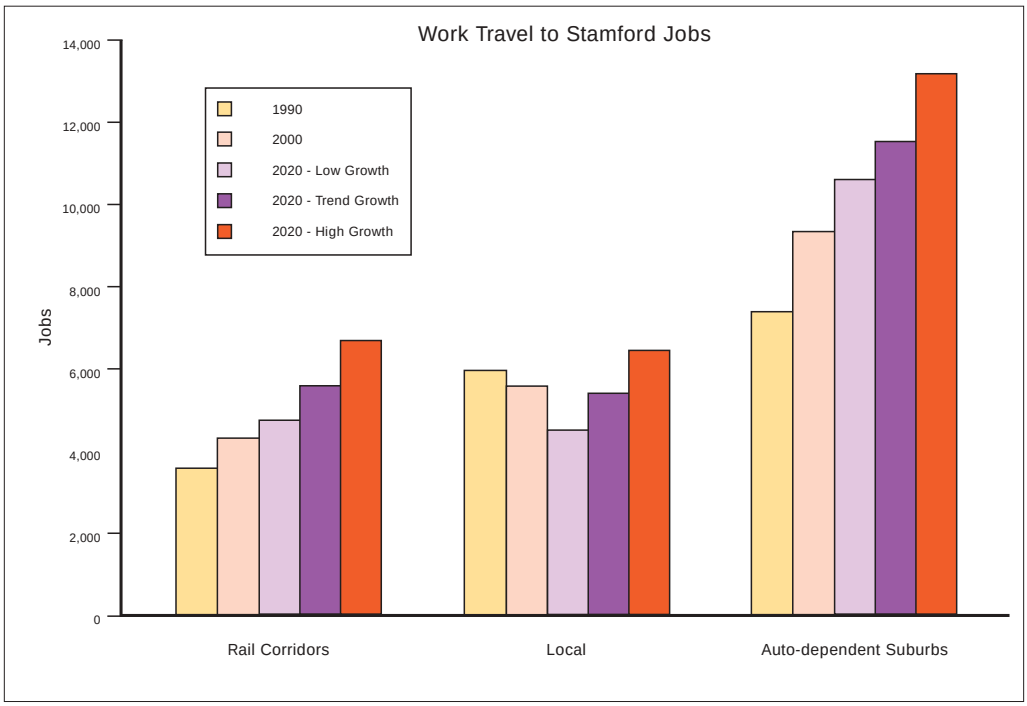
  As the analysis demonstrates (see Figures 2 and 3), the only way to make significant inroads into Stamford's traffic challenges is by combining various measures. No one set of strategies works. From a policy perspective, this both adds to the complexity of the challenge and increases the opportunities for action. Stamford should be prepared to move on all fronts simultaneously – to promote and take advantage of whatever opportunities present themselves in any of the three possible futures described in the Economic Development study – whether it is persuading a major employer to implement flex time or lobbying ConnDOT for more reverse service trains.

LEVERAGING REGIONAL COOPERATION

The future growth of Stamford and the associated traffic and transit issues need to be addressed in a regional context. Stamford's willingness to envision anything more than slow growth must be accompanied by the acknowledgement of Stamford's strategic role in the Fairfield County and regional economies. Stamford must leverage its willingness to undertake the mitigation measures that Stamford controls locally – TDM and land-use related actions – into cooperation by other entities to address issues beyond Stamford's local control – such as regional transit improvements. This is especially true in regards to the regional highway network, where Stamford's local efforts can have a significant impact on the Merritt Parkway and I-95 problems for the rest of the region.

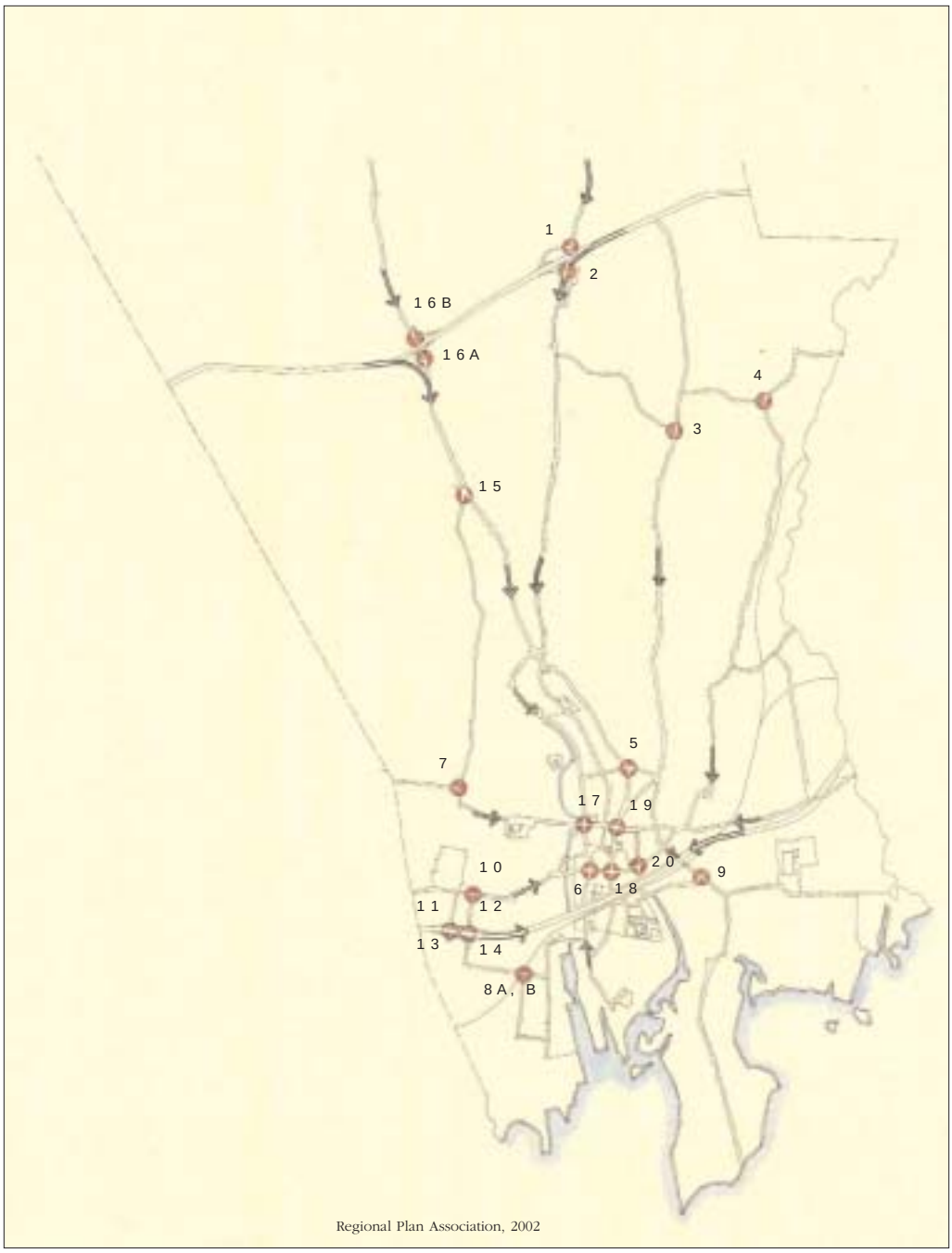
The Policy matrix at the back of this report summarizes the kinds of actions that need to be taken in terms of degrees of difficulty and implementation responsibilities.





METHODOLOGY:

To describe how traffic will be affected by different levels of growth in Stamford, and to describe how these effects can be mitigated, a three step process is used: First, the future traffic volumes created in each employment scenario are estimated at key auto entryways and representative intersections in Stamford. Second, the cost of making intersection improvements to handle the additional traffic volumes is estimated. Finally, the impact of various measures to reduce traffic volumes, and thus to reduce the costs of intersection improvements, is estimated.



Major Auto Entryways to Stamford

Auto Entryways

Representative Critical Intersections

MITIGATION STRATEGIES

Three kinds of mitigation measures are described: transportation demand management, transit improvements and more housing for workers in Stamford.

Once these intersection costs were estimated the exercise was repeated for various packages of mitigation measures designed to reduce the volume of traffic. These measures fall into three categories including transportation demand management (TDM), transit improvements, and housing shifts for Stamford workers.

TDM measures are actions that would induce single-occupant auto travelers to travel in the off-peak, share a ride, or not make the trip at all. TDM measures were further subdivided into measures that are:

a) primarily the province of employers including:

- flextime and other alternative work schedule measures such as four-day work weeks or staggered hours;
- telecommuting;
- guaranteed ride home programs to give those who use transit or carpool an option if they must go home in an emergency or work late;
- carpool and vanpooling matching; and
- commuter choice programs which involve tax-incentive subsidies for using transit.

It is assumed that a reasonable employer participation in these programs could reduce peak hour single-occupant driving by 10 percent.

b) more aggressive measures that require either significant land use changes or other public policies “outside the box“. These include:

- lower maximum or mandated lower parking ratios to discourage single-occupant driving;
- lower parking ratio requirements near train stations and higher floor area ratios near transit stations to encourage transit use where it is most attractive;
- cashing out of free parking to give those who don’t drive a subsidy equivalent to the free parking subsidy for those that do;
- transfer of development rights to lower development away from transit and increase development near transit; and
- location efficient mortgages to encourage households to buy in areas near transit.

For the purpose of the traffic intersection cost analysis, it was assumed that these policies would lower single-occupant driving by 20 percent. Most of these measures can be implemented through changes in zoning or land use ordinances that could be part of the Master Plan.

Transit improvements account for the second strategy that could reduce peak hour traffic. These include both bus and rail actions that would lower fares, increase the frequency of service and expand it to earlier in the morning or later in the evening, adequate parking at the boarding points, more timely connections between train and bus service, easier walking environments on the approaches to stops, and finally, greater amenity at stations and stops, including seating, shelter from the elements, more complete transit information, and better lighting. Specific actions include:

- lower reverse rail fares from New York and for intra-Connecticut travel;
- more peak period service in the peak and in the "shoulders of the peak, especially in the evening after 6 pm;
- added and better timed feeder service to and from the Stamford station;[2] and
- added parking at stations north and east of Stamford.

The impact of more housing in Stamford for Stamford workers was also examined. The logic is simple. If more of Stamford's workers do not have to travel long distances, then they will occupy less road space. And if they can be located in places where they are more likely to use transit or walk to work, then traffic volumes would be lower. To estimate the amount of potential additional housing, build-out of major redevelopment projects such as Mill River, Dock Street, Northeast Utilities, and Yale & Towne were assumed. To that was added the potential housing from proposed housing projects, soft sites and in-fill in and around the downtown, and redevelopment of several large industrial sites outside downtown. Taken together, these yielded a potential for 8,000 dwelling units. Added to this was the approximate level of in-fill growth in the last 13 years of 2,000 units, giving a total of 10,000 possible new units, which is consistent with the projections for the high growth scenario (see Urban Design and Economic Development Reports for "build-out" estimates).

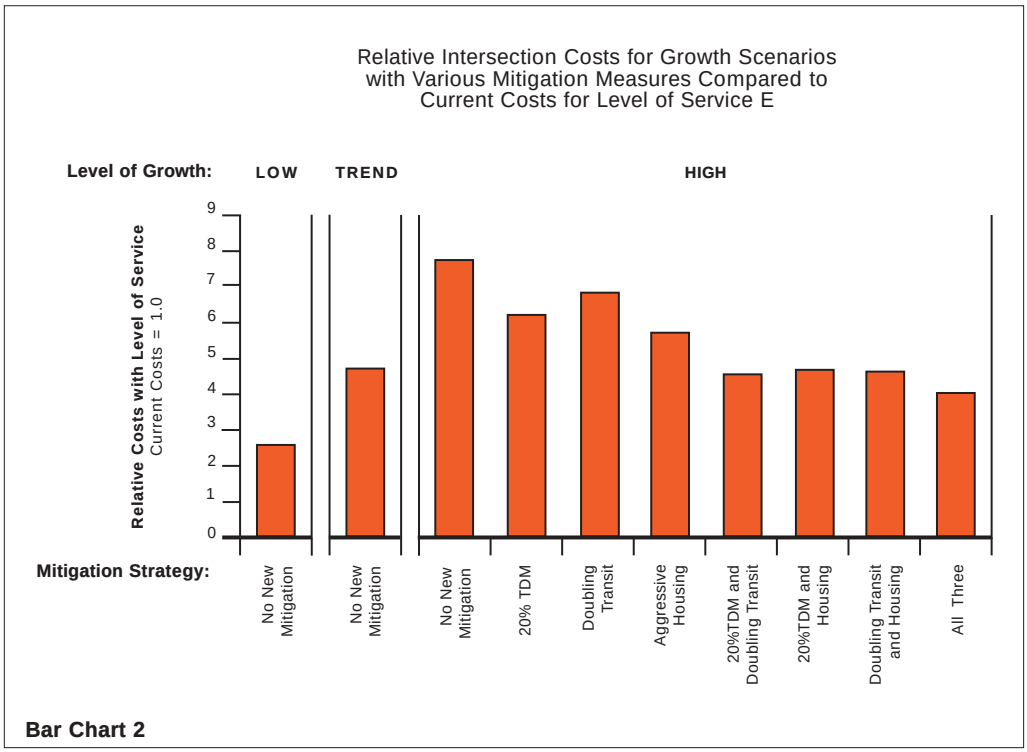
The likely impacts of each of these three mitigation strategies – TDM, transit, and housing – on the cost of intersection improvements for each of the three growth scenarios were made. These impacts were tested acting alone and in concert with one another, since there is no reason to select one category to the exclusion of the other two. The results are described in the Key Findings section.

A fuller explanation of the traffic estimating procedures is presented as Appendix A.

2. An analysis of the bus and rail schedules at the Stamford Transportation Center revealed the majority of the trains did not meet the bus service with reasonable timing, defining that as from two to nine minutes before the train left of after it arrived. Expanded service would be needed, including an additional bus for the service and expanded service earlier and late in the peak period.

FINDINGS

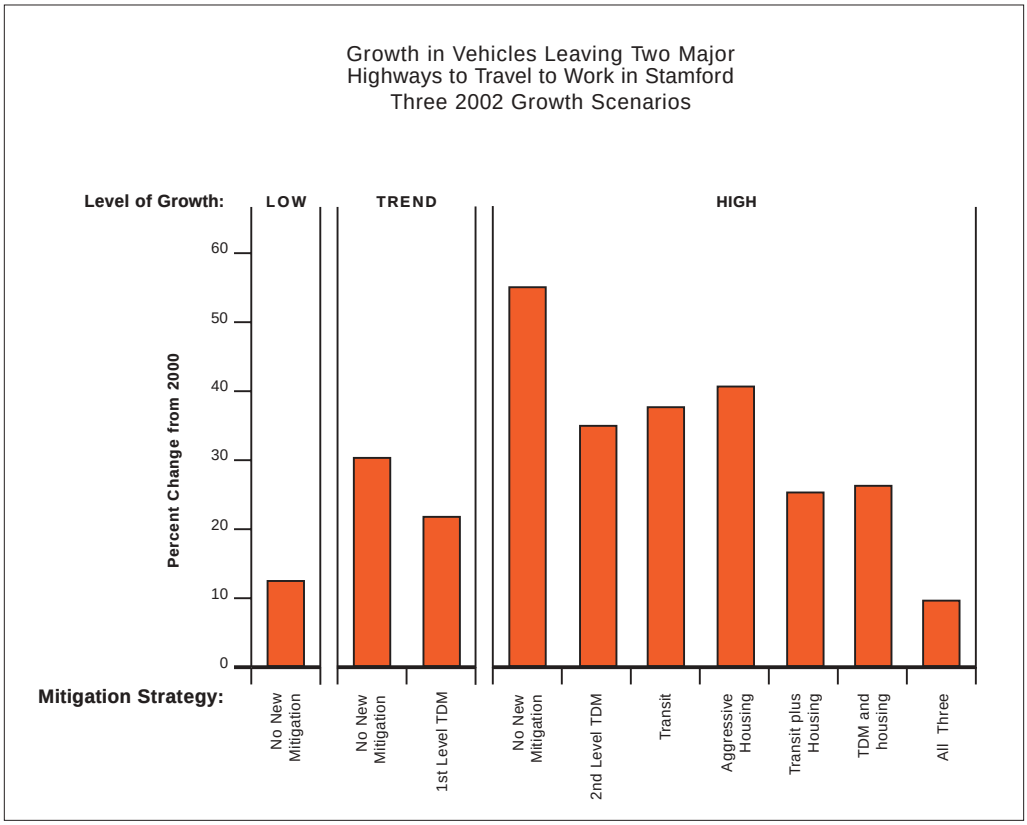
THE RELATIVE COST OF UNCLOGGING STAMFORD'S INTERSECTIONS:
Without measures to reduce traffic volumes, the costs to unclog Stamford's intersections will double even in the low growth scenario. However, the least aggressive TDM measures can reduce traffic costs significantly. Further, if any two of the three categories of mitigation measures are pursued (TDM, more transit, more housing), the cost impact of even the high growth scenario can be lowered to the impact of the low growth scenario.



Bar Chart 2

THE MERRITT AND I-95 TRAFFIC PROBLEM

The low, trend, and high growth scenarios will add respectively 12, 30 and 55 percent to highway traffic entering Stamford. However, more housing in Stamford, combined with aggressive Transit Demand Management measures and more transit can bring the increased traffic from the highways created by high growth down to the levels associated with low growth.



POLICY IMPLICATIONS

In the absence of significant changes in the residential locational decisions by Stamford's workers, the trend toward more distant and exurban locations, will worsen traffic on Stamford's streets and on the Merritt Parkway and Interstate 95.

To lessen these traffic impacts, a combination of strategies would need to be followed, including transportation demand management (TDM), significant transit improvements, and the introduction of substantial new housing in areas close to the downtown.

Even under circumstances of lower growth, the intersections of Stamford will see growing traffic necessitating added costs of construction, which will reduce the walkability in the City and particularly in the downtown. To prevent this, Stamford must actively work with employers to institute employee policies in the areas of flextime, telecommuting, guaranteed rides home and transit supporting commuter choice programs. A close working relationship with Metropool, the organization that promotes these activities and which is headquartered in Stamford, should be charged with accomplishing this.

To reduce the impacts on local traffic while continuing to grow even at a trend level, the City of Stamford must promote an aggressive policy of TDM, which includes changes in zoning that lower parking ratios, differentiate parking ratios and floor-area ratios to favor areas near transit, and enable transfer of development rights. Each of these can be codified within the Master Plan.

A variety of improvements in public transit can eat into the growth of traffic. The City of Stamford should work with ConnDOT, Metro North and Connecticut Transit to aggressively promote transit. Actions to be taken include added parking at stations east of Stamford, lower New Haven line

fares, added bus service to meet trains at the Stamford Transportation Center, and additional train service, particular in the early evening after traditional peak hours.

The expansion of housing in Stamford is a traffic mitigation strategy totally under the control of the City. Housing expansion will not only help control the growth of traffic on City streets, but will lessen the pressures on the state's highway network, including the badly congested Merritt Parkway and Interstate 95.

To sustain economic growth will require accompanying actions to limit traffic growth. To the extent that housing, TDM and transit actions are stymied, traffic in Stamford's streets would need to be accommodated by ill-advised street expansion that would further reduce the attractiveness of Stamford's streets.

OTHER POLICY IMPLICATIONS OF THE MITIGATION MEASURES

The benefits of these three traffic mitigation strategies extend beyond traffic in Stamford. Effective TDM measures would have a positive impact on traffic outside the City to the highways that now deliver vehicles to the City: the Merritt Parkway and Interstate 95. TDM can lower individual costs as carpoolers, telecommuters, and those working fewer days leave their cars in their driveways. And those who shift to the off-peak encounter less stressful driving.

The land use related TDM measures could have major effect on the urban landscape of Stamford. Fewer garage spaces can only mean a better-looking more productive downtown. Transit riders, both existing and newly converted, would have shorter walks to their jobs. And all TDM measures have the potential to increase transit use, thereby adding pressure for more service, which, in turn, would make transit still more attractive.

The strategy package of improved transit would not only have the intrinsic benefits to the new riders – why else would they convert to transit if they did not find it more attractive – but could translate to benefits for current transit riders, including more frequent and wider spanning services and lower costs.

The housing mitigation strategy may have the most wide-ranging advantages. A greater housing supply within Stamford would lower housing costs, lower the cost of commuting, shorten the walk to transit, offer a greater variety of housing choices, and stem the blight of under-used close-in tracts of land.

Taken together, high economic growth coupled with the mitigation strategies can result in a more livable community, with the economic growth fueling prosperity and the mitigation strategies making the prosperity livable from a traffic and pedestrian perspective.

POLICY SUMMARY

SUMMARY MITIGATION and POLICY TABLES

First Level Transportation Demand Management Strategies - Employer-based Strategies

Strategy	*Challenges*	*Advantages*	*Implementing Entity*
Alternative work schedules	Productivity concerns; works against carpooling/transit; requires widespread adoption to be effective	Employee benefits without higher costs; many employee favor; two-worker households more flexible; no public sector costs	Employer
Telecommuting	Fear of loss of control by managers; workers feel out of touch; works against carpooling transit; employer may save on office space; requires widespread adoption to be effective	Employees tend to be more productive; employer equipment costs; no public sector costs	Employer
Guaranteed ride home	Initial concerns about cost; requires widespread adoption to be effective	Strengthens carpooling/transit; no public sector costs	Employer
Commuter Choice program	Administrative burden for employers; requires widespread adoption to be effective	Tax gains for employers/employees; add transit riders; Metropool program in place; no public sector costs	Employer
Carpool matching	Administrative burden for employers; driving alone preferences; requires widespread adoption to be effective	No public sector costs	Employer

Mitigation Findings

- Brings traffic impacts for low growth part way to current levels
- Brings traffic impacts for trend growth part way to low growth levels
- Has only marginal impact on high growth traffic

Performance goals:

- Half of all downtown employers with more than 100 employees to institute two or more of above strategies.

Second Level Master Plan Transportation Demand Management Strategies			
Strategy	*Challenges*	*Advantages*	*Implementing Entity*
Cashing out of free parking	Difficult concept to get across; parking costs paid for and cannot be recovered;	Major impact on reducing single-occupant driving; levels playing field for non-SOVs (single-occupancy vehicles); low public cost	City and employers
Lower maximum or mandate lower parking ratios	Not retroactive; may drive employees away if no place to park	Reduces cost to developers; can shift resources to other amenities; reduces unnecessary building bulk: reduces garage blight; no public costs	City
Lower parking ratios required near transit	Difficult to calibrate; resistance from lending institutions	Encourages carpooling and transit; saves costs to developers	City
Higher floor area ratios near transit	May create unwanted building bulk and height; need to devise bonus system carefully	More passive approach than variable parking ratios; encourages development where transit use is likely to be higher; offers imaginative urban design possibilities	City
Transfer of development rights	Difficult to implement; may be inequitable	Shifts development where transit use likely to be higher	City

Mitigation Findings

- With transit can bring high growth scenario to below trend highway impacts
- With housing and transit can bring high trend impacts below current levels and just above low growth scenario at intersections

Performance goals:

- All new office space in downtown subject of one or more of the Second Level TDM strategies.

Transit Strategies

Strategy	*Challenges*	*Advantages*	*Implementing Entity*
Lower rail fares	May lose revenues for Metro North and State; limited by "hold-down"* problem	Has added riders and revenues in past	State, Metro North
Add peak and evening trains	Costly; may not be able to operationally; requires added rolling stock	Makes transit more convenient	Metro North, State
Better bus connections at rail stations	Costly; limited ridership potential	Makes transit more attractive	Connecticut Transit
Add parking along New Haven line	Resistance by local communities; if at new stations may slow rail service; adds local traffic congestion	Can unblock today's constraints to ridership growth	Towns, Metro North, developers
Increase bus service in denser areas	Higher public subsidies for transit	Increases transit use	

* If the intra-state fare is set too low, riders can "cheat the system" by purchasing one ticket at the intra-state fare plus an additional ticket at the fare from Stamford to New York at a lower total price.

Mitigation Findings

- Brings traffic impacts lower, but not significantly on its own.
- With aggressive TDM can bring high growth scenario to below trend highway impacts
- With housing and TDM can bring high trend impacts below current levels and just above low growth scenario at intersections

Performance goals:

- More than 75% of all bus-rail meets 2 to 9 minutes
- Addition of 20% to parking supply on NH line
- No more than 30 minute gap in evening from Stamford north
- No more than 20-minute gap in peak periods
- No increase in transit fares relative to cost of living

Housing Strategies			
Strategy	*Challenges*	*Advantages*	*Implementing Entity*
Locate all multi-family housing within 1/4 mile of bus route or 1/2 mile of downtown	Making it attractive to all income groups; making design attractive; limiting housing development in places that do not qualify	Increases transit use; saves land in lower density areas; lowers auto use; increases walking and biking; lowers highway traffic volumes	City
Increase bus service in denser areas	Higher public subsidies for transit	Increases transit use	Connecticut Transit, State of Connecticut
Increase housing density to at least 7 dwellings per net residential acre	Designing at these densities to make housing attractive	Increases transit use; saves land in lower density areas; lowers auto use; increases walking and biking; lowers highway traffic volumes	City

Mitigation Findings

- Largest single impact on highway traffic; with either aggressive TDM or transit, can bring traffic to low scenario levels.
- With housing and transit can bring high trend impacts below current levels and just above low growth scenario at intersections

Performance goals:

- Increase bus use by 50%
- 80 percent of new housing in Stamford within walk of downtown or within 1/4 walk of bus route.