

# ADDRESS VEHICULAR CIRCULATION

## Overview

This “briefing booklet” has been prepared as part of the process of preparing an update to the 2008 Plan of Conservation and Development (POCD) for Branford. This booklet is intended to familiarize the members of the POCD Update Committee and others existing and potential future strategies related to vehicular circulation.

### What Is “Vehicular Circulation”?

For the purposes of the POCD, “vehicular circulation” will address the major elements of the roadway system and related issues.

Since vehicles are the predominant form of transportation in Branford, the roadway system is something that many residents have familiarity (and frustration) with. In a public meeting held early in the planning process, “traffic / circulation” issues were a major category of things that participants were “sorry about” in Branford.

The roadway system will continue to be the predominant transportation mode in the foreseeable future and so this is an important consideration in the POCD.

Traffic



Traffic



## Five-Year Update

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The Town continues to meet with CT DOT to promote the Exit 53 interchange plan.

The Amtrak Bridge and Route 1 underpass project was completed.

# Background

## Inventory

The roadway system in Branford consists of State-maintained highways and Town-maintained local roads. The map on the facing page categorizes these roads by the type of function they provide in the overall circulation system:

- Limited access highways – intended and used for regional and interstate travel with no access to individual properties
- Arterial roads (State highways) – intended for regional and local travel but also used to provide access to abutting properties
- Collector roads – roads intended to “collect” traffic from local roads and distribute it to highways and also provide access to abutting properties
- Local roads - primarily intended and used for access to properties.

This categorization scheme is a reflection of the functions that roads in Branford currently serve. It may provide some guidance for maintenance / improvement priorities and for land use decisions.

## Assessment

Traffic congestion is considered to be an issue by many Branford residents. Traffic routes are influenced by Branford’s coastal location (bays, inlets, and marshes) and much traffic naturally flows to just a few main roads. This is exacerbated by the position of interchanges on I-95 and the location of commercial uses which result in some easily identifiable “hot spots” for congestion and accidents.

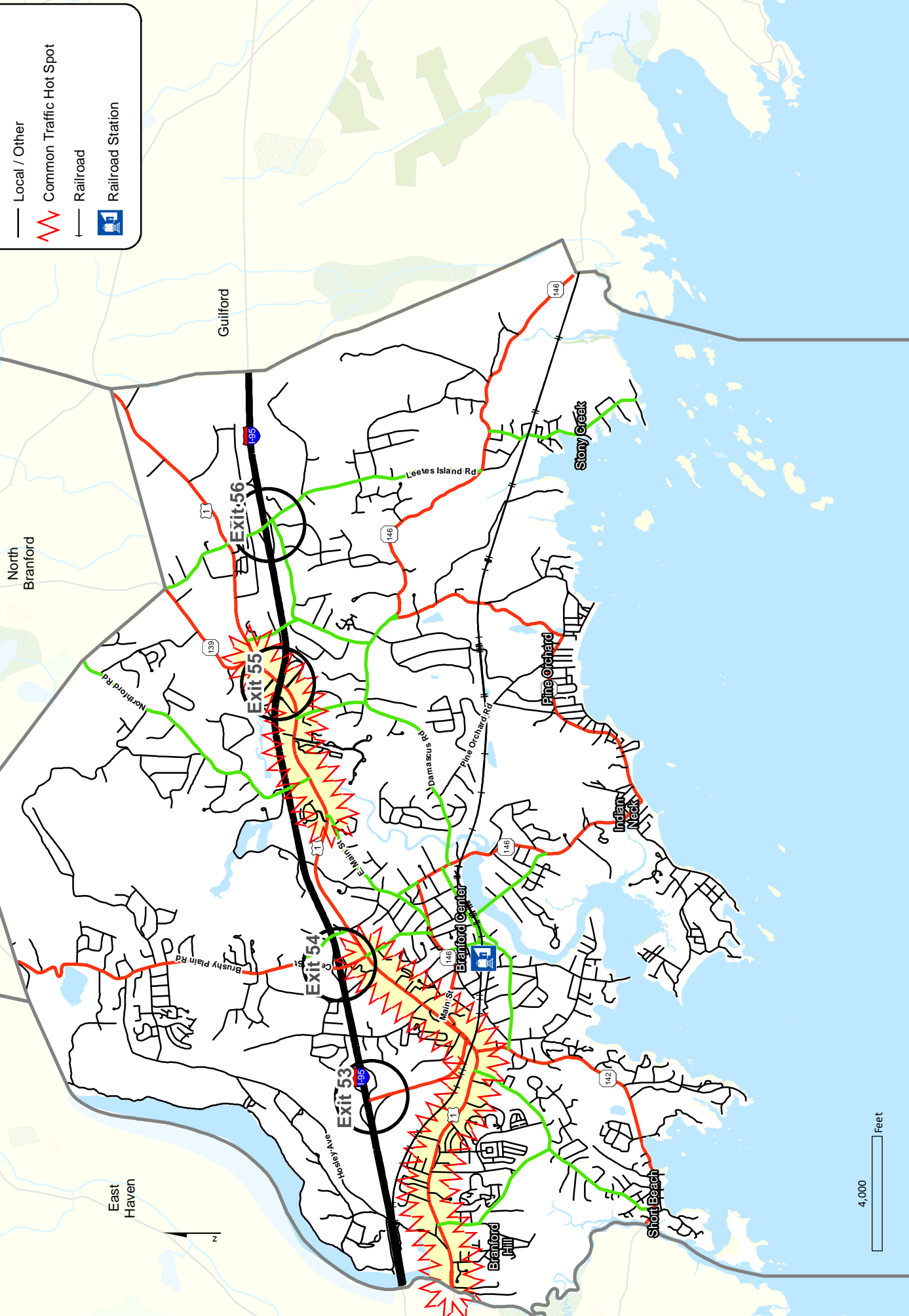
Some key recommendations moving forward might include:

1. Improve Exit 53 to a full interchange to help distribute traffic flows among the I-95 interchanges in Branford.
2. Continue to make roadway improvements to address safety and/or capacity issues that become apparent.
3. Continue to implement the access management provisions in Section 5.3 of the Zoning Regulations along Route 1.
4. Continue to use a “pavement management” approach to reduce long-term operational costs.
5. Consider implementing traffic calming provisions on local roads being used for cut-through traffic or where speeding is apparent.
6. Evaluate roadway implications of sea level rise.

# Vehicular Transportation

Branford, CT

- Limited Access Highway
- Arterial Road - State Highway
- Collector Road
- Local / Other
- Common Traffic Hot Spot
- Railroad
- Railroad Station



4,000 Feet

### Five-Year Update

The Planning and Zoning Commission adopted Zoning Regulations to promote access management (Section 5.3 Access Management District).

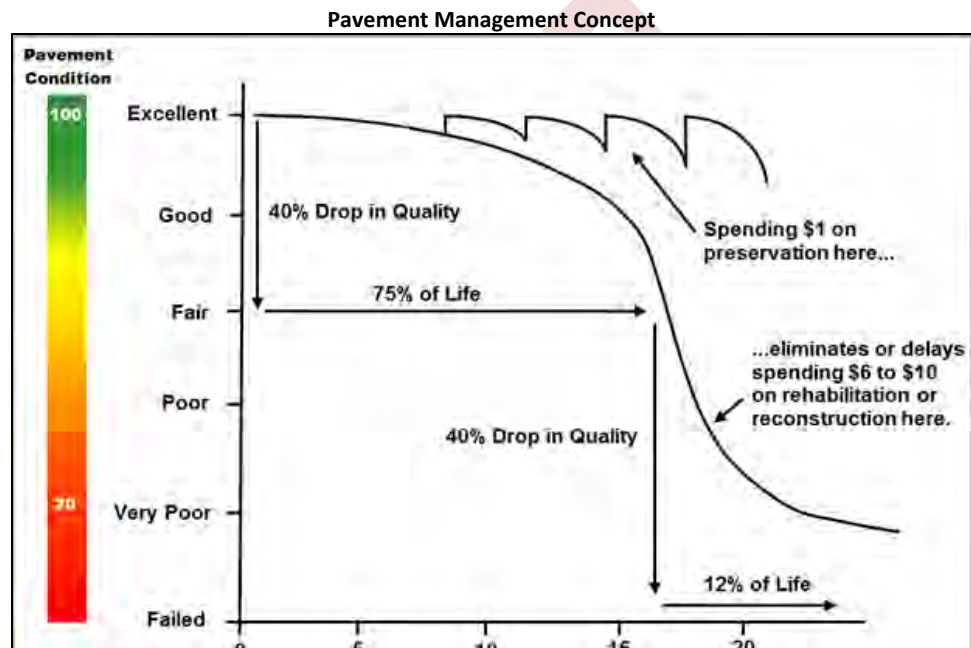
### Pavement Management

Pavement management is an approach to maintaining a roadway system (pavement quality) as efficiently and economically as possible.

A comprehensive pavement evaluation is undertaken and then the overall quality of the roadway system can be monitored over time. Since the life cycle of pavement has been studied extensively, the most cost-effective strategies to maintain the roadway can be determined. Maintenance and repair can be scheduled at the most appropriate times to reduce the life-cycle cost of maintaining the roadway system.

Access Management – The concept of “access management” is to reduce the number of driveways and curb cuts along major roadways since such interruptions decrease the capacity of the roadway and introduce safety issues due to turning movements. Sharing of driveways and interconnections between properties makes more efficient use of the limited capacity that is available. Branford currently does this along Route 12 and this should continue.

Pavement Quality / Pavement Management – Many communities use a “pavement management” system to monitor the pavement condition of the overall roadway system. Studies over the years have shown that roadway pavement deteriorates in an “S-shaped” fashion and that minor expenditures up front can avoid major expenditures later. Branford should strive to implement ***and fund*** a long-term pavement management program.



Traffic Calming - According to the Institute of Transportation Engineers, traffic calming is the “combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. This can include:

- reducing or eliminating cut-through traffic,
- reducing or eliminating speeding,
- reducing accident incidence, and/or
- creating a safer environment for pedestrians and bicyclists.

## Sample Of Possible Traffic Calming Techniques



**Awareness** - A neighborhood meeting can raise awareness of the issue and involve residents in identifying possible approaches.



**Signage** – Signage informs motorists of acceptable speeds and/or behavior. Roads can be marked for “no trucks.” Unreasonably low speed limits are not recommended.



**Speed Enforcement** – Enforcement of speed limits and other traffic laws in neighborhoods can help slow traffic and help police learn when and where to focus their traffic calming efforts.



**Narrowing Travel Lanes** - Narrowing travel lane width can calm traffic. A constriction (choker, chicane, etc.) can also be effective although it hampers snow plows and emergency response.



**Mini-Roundabouts** - A mini-roundabout is a street intersection feature which requires vehicles to slow down and navigate around the island in an intersection and yield to vehicles already in the roundabout.



**Speed Bump / Hump** – Temporary or permanent raised sections of roadway which can deter speeding and cut-through traffic. However, this can also create issues for snow plowing and emergency response.

## “Complete Streets”

“Complete streets” can also be a traffic calming measure.

As stated by the National Complete Streets Coalition, “complete streets” are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.

For many years, roadways have been treated as the exclusive area for vehicles. This single-purpose approach is now changing and communities around the country are seeking to establish “complete streets” which provide for a wider range of transportation modes including walking, cycling, transit, and other modes.

Complete streets in Branford are discussed more fully in Briefing Booklet #6C.

## 2008 POCD

**GOAL** Provide a diverse, safe and efficient transportation network that meets the needs of the community.

**STRATEGIES** Provide Traffic Calming  
 Promote Access Management  
 Improve Parking in the Town Center  
 Support Exit 53 Interchange Improvement  
 Monitor Fuel Costs

## Possible Strategies For 2018 POCD

SECONDARY  
STRATEGY

### Improve Exit 53

A. Improve Exit 53	Comments
1. Improve Exit 53 to a full interchange to help distribute traffic among the I-95 interchanges in Branford.	

NEW  
STRATEGY

### Address Safety / Capacity Issues On Major Roadways

A. Effectively Manage Major Roadways	Comments
1. Continue to identify and evaluate traffic issues along main transportation corridors.	
2. Continue to make roadway improvements to address <i>safety issues</i> that become apparent.	
3. Continue to make roadway improvements to address <i>capacity issues</i> that become apparent, especially on arterial and collector roads.	
4. Continue to implement the access management provisions in Section 5.3 of the Zoning Regulations along Route 1 in order to maintain the capacity of the roadway and improve safety.	

Shared and Unshared Driveways



# Address Issues On Town Roadways

NEW STRATEGY

A. Implement Pavement Management	Comments
<ol style="list-style-type: none"> <li>Continue to implement pavement management techniques on Town roads to reduce long-term maintenance costs.</li> </ol>	

B. Implement Traffic Calming	Comments
<ol style="list-style-type: none"> <li>Investigate traffic calming as a solution to traffic problems in residential neighborhoods and other areas where it may be appropriate.</li> </ol>	
<ol style="list-style-type: none"> <li>Consider implementing traffic calming provisions on local roads being used for cut-through traffic or where speeding is apparent.</li> </ol>	

C. Evaluate Implications Of Sea Level Rise	Comments
<ol style="list-style-type: none"> <li>Evaluate roadway implications of sea level rise on the overall roadway circulation needs within Branford and how to address this in a cost-effective manner.</li> </ol>	

Traffic Accident



Pavement Maintenance



**Are there any other policies or action steps you believe should be included in Branford's vehicular circulation strategies?**

**If so, please make notes below.**

### **Reference Materials**

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1. Branford Plan of Conservation and Development (2008)
2. Town-wide Transportation Study (2006)
3. SCRCOG Congestion Management Process (2010)
4. Route 1 Access Management Plan (2008)
5. Branford Connector / Route 1 Improvement Project (2014)

### **Notes & Comments**

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**Planimetrics**

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