

## *7.0 TRANSPORTATION*



*MIDDLETOWN PLAN OF DEVELOPMENT*

## 7.0 TRANSPORTATION

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### 7.1 Introduction

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A well functioning transportation system is critical to the economic vitality of Middletown and central to the quality of life enjoyed by its residents. A city's transportation network, comprising highways, streets, public transit, bicycle paths and sidewalks, provides for movement within the city and connections to points beyond. Ideally the components of this transportation system complement one another, however, as in many other cities throughout the country, the private automobile dominates Middletown's transportation network. The transportation component of this Plan for Development strives to alleviate traffic congestion in Middletown's problem areas but also maintain and improve conditions for transit users, bicyclists and pedestrians. This chapter summarizes current transportation conditions for all modes, highlights key transportation issues and makes the following goals:

- *Improve pedestrian environment along Main Street*
- *Upgrade vehicular connections to the riverfront area.*
- *Eliminate congestion and traffic hazards.*
- *Encourage the use of alternative transportation such as bicycles, buses, and carpooling.*
- *Provide additional bicycle trails throughout the city and tie them into regional trails where appropriate.*

### 7.2 Current Demand

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The 1990 Census provides information regarding work commute patterns to and from Middletown for all workers over the age of 16. This information provides a general indication of the more heavily traveled routes. Table 7.1 shows how work trips are distributed within the Midstate Planning Region. Of the employed residents who lived in Middletown in 1990, the greatest share

**Table 7.1 Regional Journey to Work Patterns**

Place of Work	Place of Residence									Total
	Cromwell	Durham	East Haddam	East Hampton	Haddam	Middlefield	Middletown	Portland	Out of Region	
Cromwell	1,187	43	40	180	49	33	887	126	2,036	<b>4,581</b>
Durham	18	434	20	22	34	114	213	55	485	<b>1,395</b>
East Haddam	26	0	811	54	78	0	72	11	625	<b>1,677</b>
East Hampton	0	12	96	1,090	12	8	122	38	498	<b>1,876</b>
Haddam	10	17	186	55	541	14	147	87	691	<b>1,748</b>
Middlefield	50	148	32	17	35	284	276	21	426	<b>1,289</b>
Middletown	1,308	681	569	1,000	1,183	691	10,909	1,169	13,076	<b>30,586</b>
Portland	78	29	41	211	72	42	543	995	830	<b>2,841</b>
Regional Subtotal	2,677	1,364	1,795	2,629	2,004	1,186	13,169	2,502	18,667	<b>45,993</b>
Out of Region	3,865	1,576	1,793	3,101	1,790	951	9,734	1,802		
<b>Total</b>	<b>6,542</b>	<b>2,940</b>	<b>3,588</b>	<b>5,730</b>	<b>3,794</b>	<b>2,137</b>	<b>22,903</b>	<b>4,304</b>		

Source: 1990 Census, Journey to Work, as prepared by the Midstate Regional Planning Agency for the Regional Transportation Plan, FY 1998 Update.

also worked there. Slightly less than half of the workers living in Middletown worked outside the region. About 19,700 workers living outside Middletown commuted into the city to work. These patterns indicate a need not only for good circulation within Middletown, but also for good connections between Middletown and other points in the region. The fact that there are about 11,000 persons living and working in Middletown also shows that there are opportunities for increased walking and bicycling.

### **7.3 Functional Classification of the Roadway System**

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The functional classification of the roadway system places roadways in hierarchical categories based on their intended use. Roadways in the highest category are designed for through movement and for large traffic volumes and high speeds, while those in the lowest category are designed for access to adjacent uses and for access to adjacent uses and for low traffic volumes and low speeds. Figure 7.1 shows the 1992 Connecticut Department of Transportation classifications for roadways in the City of Middletown. Roadways in Middletown fall into the following categories: Principal Arterial-Expressway, Principal Arterial-Other, Urban Main Arterial, Urban Minor Arterial and Urban Collector. Roadways that are not designated one of the above classifications are considered local roads.

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#### Principal Arterial – Expressway

Expressways are controlled-access principal arterials that carry large volumes of through traffic. They provide for access *to* a city or major activity center but limited or no access to abutting properties. In Middletown, Interstate 91 and State Route 9 are the only principal arterial expressways. Interstate 91 passes through the northwestern portion of the City of Middletown linking Middletown with Hartford, the state capital, to the north and New Haven, the coastline, and I-95 to the south. State Route 9 parallels the Connecticut River in Middletown providing connections with northbound and southbound I-91, with the state's major east-west interstate - I-84, and with Old Saybrook, the Connecticut coastline, and I-95 to the south.

#### Principal Arterial – Other

The City of Middletown has four principal arterials that are not expressways. These roads, like expressways, provide access to the major activity centers, carry high volumes and provide routes for through traffic, however, unlike expressways, they do not have any significant access control. The following roads constitute the principal arterials in Middletown:

1. State Route 17 (South Main Street)
2. Main Street
3. deKoven Dr. / East Main Street (north of Saybrook Road)
4. State Route 66 (Washington Street)

#### Urban Main Arterial

Urban main arterials supplement the system of principal arterials. They generally carry lighter traffic volumes at lower speeds and provide more land access than principal arterials. The urban main arterials in Middletown are:

1. State Route 155 (Randolph Road)
2. State Route 157
3. State Route 217 (East Street, Ballfall Road)
4. State Route 3 (Newfield Street)

### Urban Minor Arterial

Urban minor arterials serve a similar function as main arterials, however they provide a lower level of travel mobility, carry lighter traffic volumes and provide more local access. The urban minor arterials in Middletown are:

1. Westfield Street
2. Country Club Road
3. Ridgewood Road
4. East Main Street (south of Saybrook Road)
5. Saybrook Road (north of 155)
6. Ridge Road
7. Russell Street

### Urban Collectors

Collector streets bring traffic from local streets to the network of arterial streets. The system of collector streets also provides access to and limited circulation within residential neighborhoods, commercial areas and industrial areas. The Urban Collector system in Middletown comprises the following streets:

1. Higby Road
2. Middle Street
3. Industrial Park Road
4. Smith Street
5. Miner Street
6. Mile Lane
7. Camp Street
8. Old Mill Road
9. Liberty / Prospect Street
10. Liberty Street
11. High Street
12. North Main Street
13. Vine Street
14. Church Street
15. Wadsworth Street
16. Pine Street
17. Bretton Street
18. Pleasant Street
19. Union Street
20. Millbrook Road
21. Saybrook Road
22. Aircraft Road

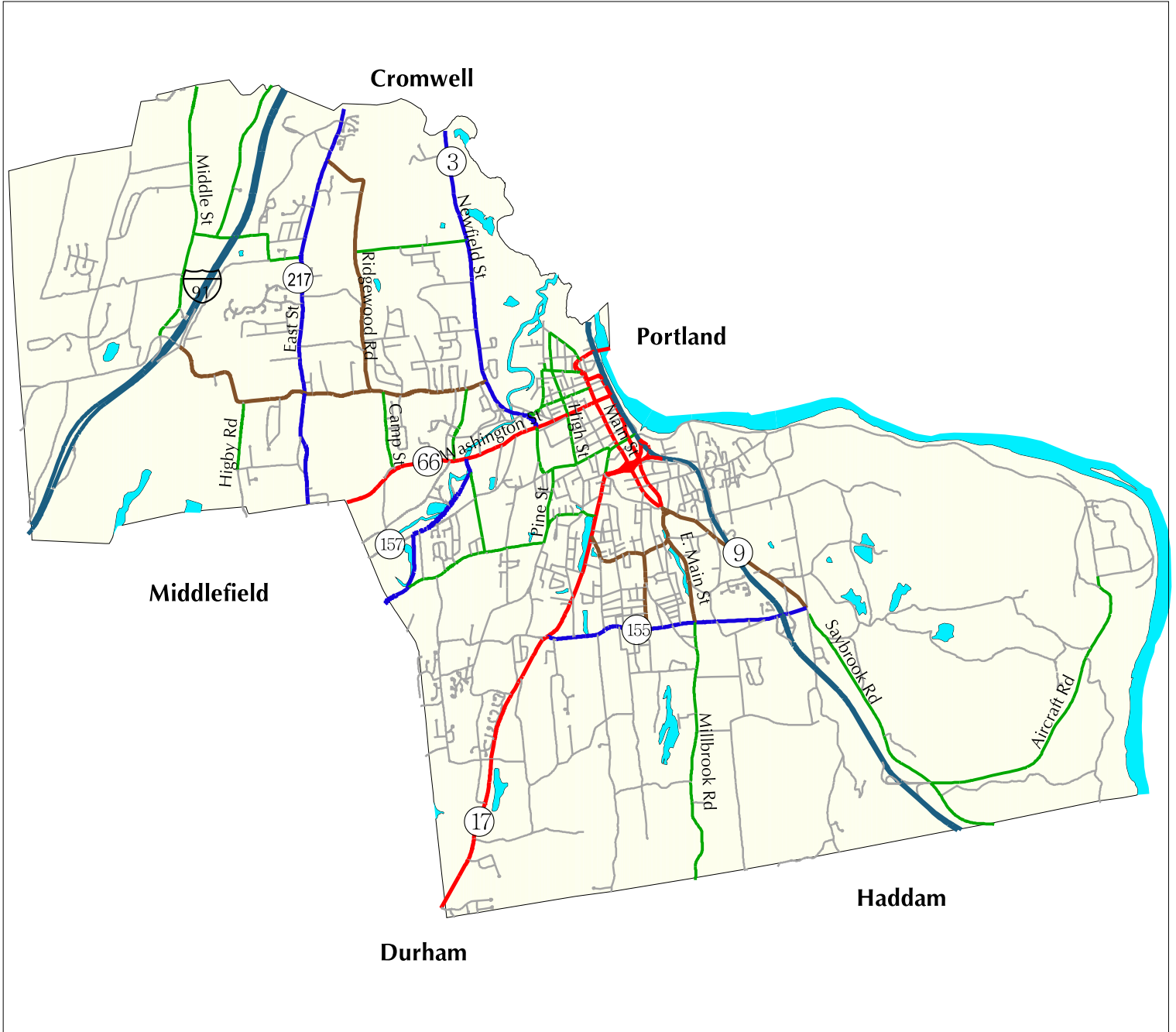
### Local Streets

Local streets are designed to carry the lowest volumes of traffic at the slowest speeds. They provide direct access to the land uses that abut them and connections to the higher order roads such as collectors. As their name implies, local streets should serve local traffic not through traffic. All the roadways that do not belong to the higher order categories in the City of Middletown are local streets.

## **7.4 Traffic Volumes and Roadway Capacity**

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Capacity refers to the maximum amount of traffic that a roadway can carry. As traffic volumes approach capacity (i.e. high volume to capacity, V/C ratios), the level of service generally decreases resulting in congestion and delays. Figure 7.2 shows the roadways in Middletown that were approaching capacity or over capacity in 1995 and those roads that are projected to reach such level by 2015 according to a 1997 ConnDOT Arterial Study. The figure shows that Route 66 (Washington Street) had the greatest number of segments approaching or exceeding capacity. This roadway is planned to be widened to four lanes. Other congested roadway segments include East Street immediately south of the Cromwell-Middletown town line (in 2015), Route 17 in the southern portion of the city, Route 155 (in 2015) and the portion of Main Street / Route 66 between Washington Street and the Arrigoni Bridge.



**MIDDLETOWN PLAN OF DEVELOPMENT  
Middletown, CT**

**Figure 7.1  
Roadway Functional Classification**

- Roads
- Principal Arterial - Expressway
  - Principal Arterial - Other
  - Urban Collector
  - Urban Main Arterial
  - Urban Minor Arterial
  - Local Roads



**BFJ** Buckhurst Fish & Jacquemart, Inc.

Source: 1992 ConnDOT Classification as depicted in the Midstate Regional Transportation Plan FY 1998 Update

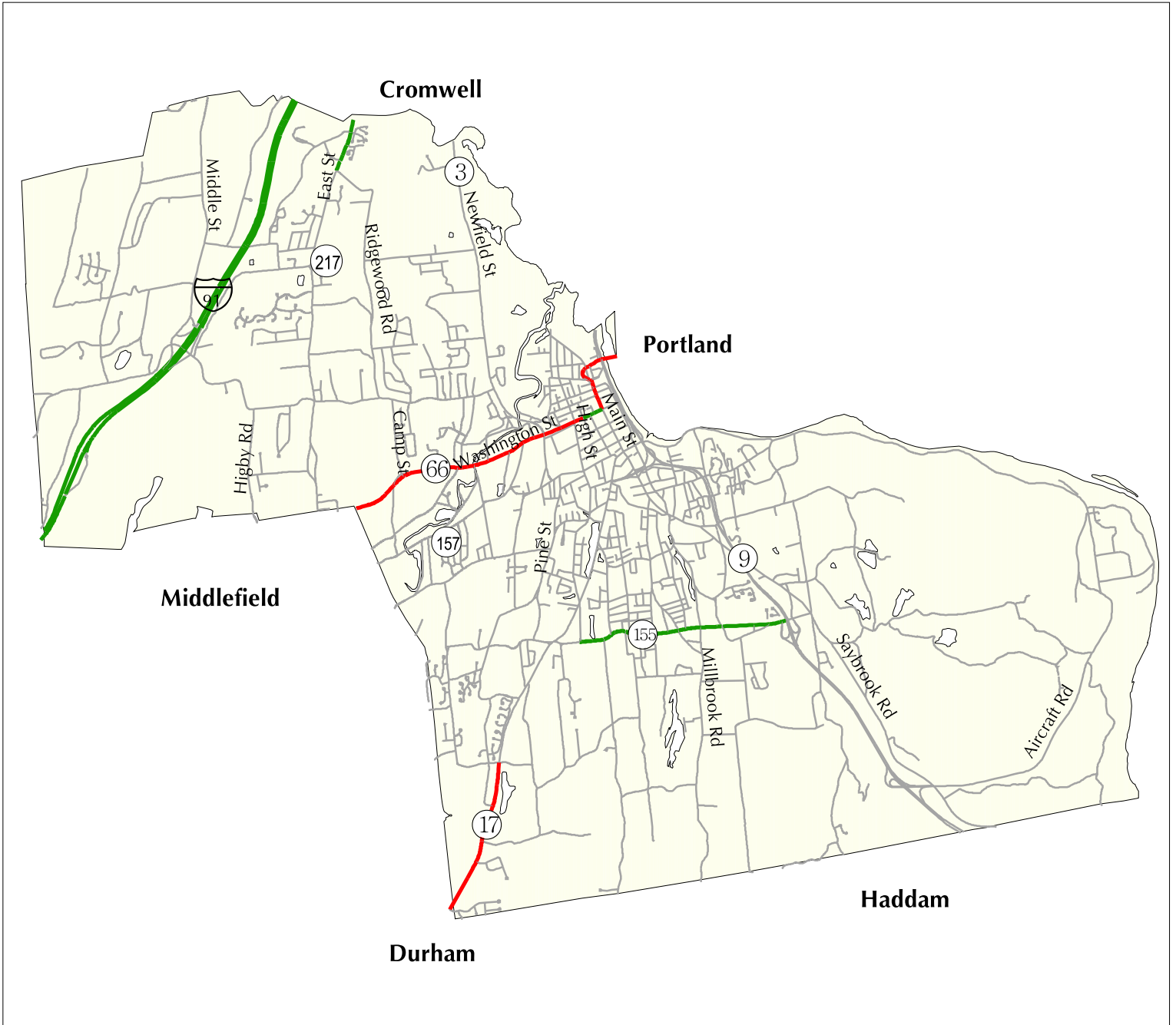
## 7.5 Vehicle Crash Data

The Connecticut Department of Transportation compiles crash data for state and federal roadways in the City of Middletown in its Traffic Accident Surveillance Report. Figure 7.3 indicates the locations where a high number of crashes occurred during the three-year period between 1995 and 1997. Intersections where 10 or more crashes occurred are identified in red. Stretches of roadway where more than 10 crashes occurred are identified in green. Table 7.2 indicates the number of crashes at each map location. These areas, particularly on Route 9, 17, and 66 should be the focus of further study and improvement.

**Table 7.2  
Crash Data**

<b>Crash Location</b>	<b>Number of Crashes</b>
<b><i>Intersections</i></b>	
Route 17 at Main St Ext & Route 9 Interchange	188
I-91 at Country Club Rd Interchange	123
Route 9 at Exit 10 Interchange	51
Route 9 at Route 17 Interchange	45
Route 9 at Route 155 Interchange	41
Route 9 at deKoven & Harbor Dr Interchange	39
Route 9 at Route 17 (Hartford Ave)	25
Route 66 at Boston Rd & Old Mill Rd	23
Route 9 at Silver St Interchange	22
Route 9 at Bow Ln Interchange	21
Route 66 at High St	18
Route 9 at SR 545 ( Washington St) & Con	16
Route 66 at Route 3 (Newfield Rd) & Vine St	13
Route 17 at Route 17 Hartford & No Main St	12
Route 66 at Ent Walbaums & Washington Pl	11
Route 17 at Highland Avenue	10
<b>Crash Location</b>	<b>Number of Crashes</b>
<b><i>Stretches of Roadway</i></b>	
I-91 between Baldwin & Country Club Interchange	134
I-91 between Country Club & Route 372 Interchange	87
Route 9 between Bow Ln & Silver St Interchanges	24
Route 3 between Mile La & Tuttle Rd	15
Route 9 between Exit 10 Interchange & Exit 11 Interchange	14

Source: ConnDOT Traffic Accident Surveillance Report 1995 - 1997



**MIDDLETOWN PLAN OF DEVELOPMENT  
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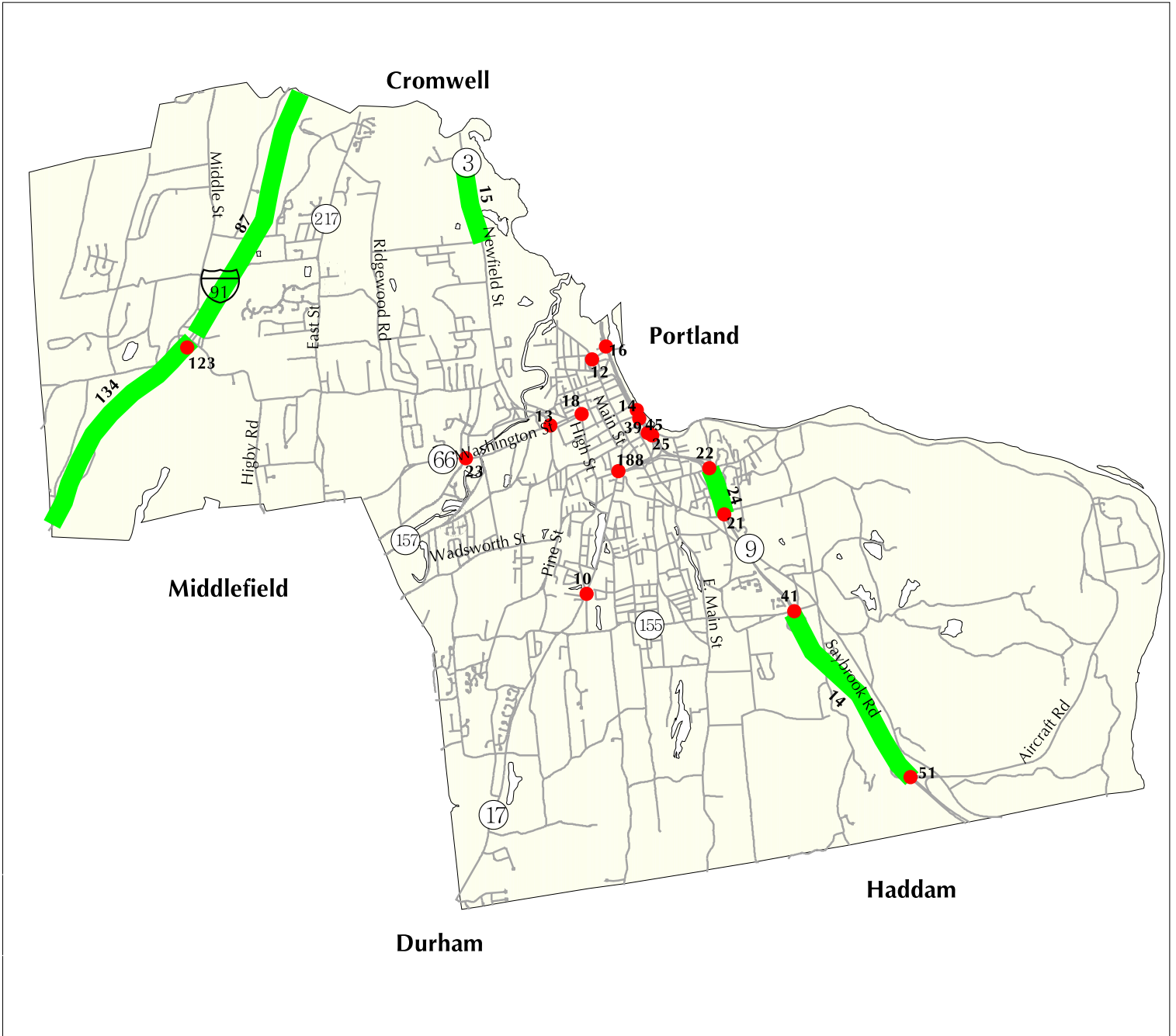
**Figure 7.2 Roadway Capacity**

At or Approaching Capacity  
— 1995  
— 2015



**BFJ** Buckhurst Fish & Jacquemart, Inc.

Source:  
1992 ConnDOT 1997 Arterial Study Update



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**Figure 7.3 High Crash Locations 1995 - 1997**

- Critical Intersections
- Critical Sections of Road
- # = Number of Crashes



0 1 2 3 Miles

**BFJ** Buckhurst Fish & Jacquemart, Inc.

Source: ConnDOT Traffic Accident Surveillance Report 1995 - 1997



## **7.6 Public Transportation**

### Fixed-Route and Rural Route Bus Service

Middletown Area Transit (MAT) provides fixed-route bus service and rural route service to the City of Middletown and surrounding towns. During the day, MAT provides flag-stop service along five fixed routes between approximately 6 AM and 6:30 PM. At night, MAT operates service along two condensed routes between the hours of 7 PM and 11 PM. Figure 6.4 shows this fixed-route service. MAT's rural service links Middletown with the nearby towns of Portland, East Hampton and Durham as indicated in the same figure. The regular one-way fare is \$1 with discounts for children, the elderly, and people with disabilities. Transfers between MAT and Connecticut Transit with service to Hartford are free at the downtown MAT terminal. Planned service improvements include introducing service between Middletown and Meriden and the extension of service to the Pratt and Whitney plant in the southern section of the city.

### Paratransit

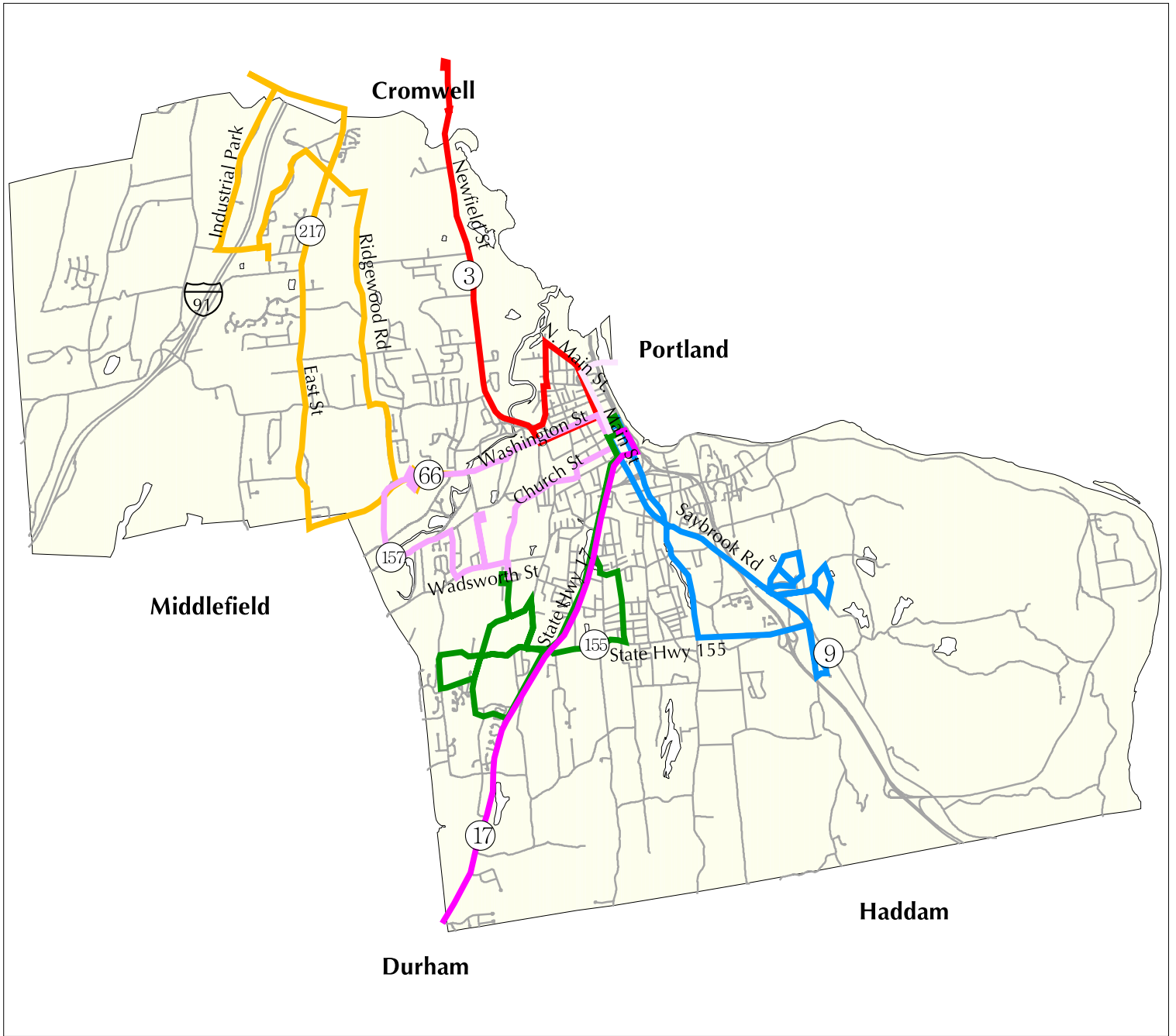
In conjunction with MAT's services, the Middlesex County Chapter of the American Red Cross provides free paratransit service within Middletown, Cromwell, Durham, East Hampton, Middlefield and Portland to the elderly and persons with disabilities. This service is available Monday through Friday between 8 AM and 6 PM.

### Regional Bus Service

Connecticut Transit and Peter Pan Bus Lines, Inc. provide intercity bus service between Middletown and other northeastern cities. Connecticut Transit operates hourly bus service between Middletown and Hartford between 9 AM and 3 PM on weekdays with more frequent service during peak hours. Peter Pan operates service to Hartford, New Haven, Boston, Worcester, and New York City with connections to other destinations across the country.

### Rail

Currently there is no passenger rail service in the City of Middletown. The Midstate Regional Planning Agency calls for support of passenger and freight rail service in its Regional Transportation Plan FY 1998 Update. As a long-term solution to increased automobile congestion, ConnDOT is studying the feasibility of implementing light rail service between Old Saybrook, Middletown and Hartford with stops at the smaller towns in between.



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**Figure 7.4 Middletown Area Transit  
Local Bus Service (Day)**

**MAT Bus Routes**

- Route A: Saybrook Road
- Route B: Wesleyan Hills
- Route C: Washington Street
- Route D: Newfield Street
- Route E: Westlake
- Rural Route G: Durham
- Rural Route F: Portland



0 1 2 3 Miles

**BFJ** Buckhurst Fish & Jacquemart, Inc.

Source:  
Middletown Area Transit Map and Services Information 1999

## 7.7 Bike and Pedestrian Circulation

Bicycle and pedestrian facilities such as bike routes, multi-use paths and sidewalks are an important part of the city's transportation network. They provide an alternative to driving and facilitate the use of public transit by providing links between the bus stop and the origin/destination of the traveler.

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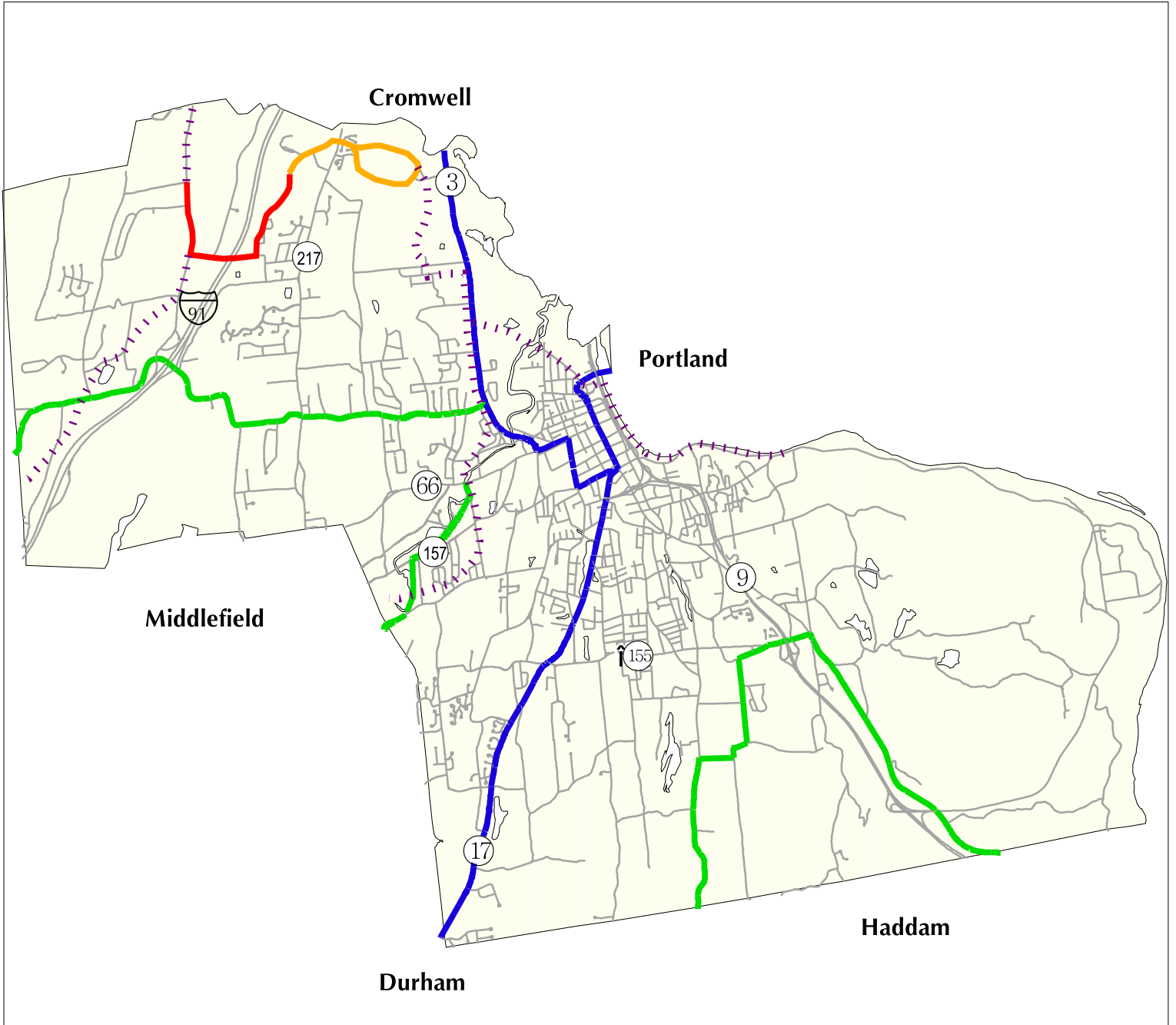
Three critical areas for pedestrians are 1) the Downtown / Main Street area, 2) the area around Wesleyan University, and 3) Route 3 (Newfield Street) between Washington Street and Cromwell. The Downtown / Main Street area and Wesleyan University both have sidewalks on some but not all streets, but pedestrians face other barriers in these areas such as high speed traffic. Route 3 (Newfield Street) has no sidewalks but is used by pedestrians who walk on the shoulder or the side of the road to reach commercial areas located immediately north of Middletown in Cromwell. Recommended improvements to these conditions are summarized in Section 7.9.

The existing bike facilities in Middletown are limited. There are currently no designated bike lanes, however River Road is partially closed to motorists on Sundays to allow for recreational use. The only facility designated specifically for bicycling and walking in Middletown is the Westlake-Aetna Bicycle and Pedestrian Way shown in Figure 7.5. This path links the Westlake planned residential development with Aetna, an employer of approximately 6,000 people, and other major employers along Industrial Park Road. The state has recently provided funding for the Mattabasset Trolley Trail. This trail will extend the Westlake Aetna Path from the Westlake Planned Residential Area, across Route 217 to the high-density housing development, the Meadows at Riverbend and then on to a planned golf course at the Tuttle Place Industrial Park. The path will then loop back to Westlake.

While no designated bike lanes exist, ConnDOT publishes a bicycle map that indicates roads that are appropriate for bicyclists. As shown in Figure 7.5, the map designates Routes 17 and 3 as Cross State Routes in Middletown and Routes 3, 157, Millbrook Road, Old Saybrook Road and Westfield / Country Club Road as Recommended Routes.

The ConnDOT map recognizes that Connecticut Roads were not designed for bike touring and inclusion on the map does not certify the safety of the roadway for bicycling. Most of the roads indicated on the map in Middletown seem safe for cycling with the exception of Route 3 (Newfield Street). As described above, this road is heavily traveled, has numerous curb cuts, a narrow shoulder and a high number of accidents. Only experienced bicyclists should use this route unless improvements are made. In the alternative, the city should investigate alternate bike routes around the Route 3 corridor, such as Route 99 in Cromwell along the Waterfront to Harbor Park and the downtown. The City of Middletown should work with the ConnDOT to create designated bike lanes where shoulders are wide enough and to sign routes included on the state bicycle map with "Share the Road" signs or "Bicycle Route" signs to help increase motorists awareness of bicyclists.

One area where bicycling should be encouraged but is currently discouraged is the Downtown / Main Street area. A city ordinance prohibits bicycles on Main Street sidewalks and the street lacks any bicycle facilities such as bike racks. In addition, the high speeds on Main Street combined with on-street parking and heavy pedestrian activity result in challenging bicycling conditions on-street as well. A bicycle lane would provide for increased bicycle safety and could be part of a comprehensive Main Street improvement plan that would narrow the street width, slow speeds and provide greater pedestrian and bicycling amenities.



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**Figure 7.5 Bike Routes**

- ConnDOT Cross State Route
- ConnDOT Recommended Route
- Westlake - Aetna Path
- Mattabassett Trolley Trail
- - - Proposed Bike Paths



**BFJ** Buckhurst Fish & Jacquemart, Inc.

Sources: ConnDOT Bicycle Map 1996 and Midstate Regional Transportation Plan FY 1998 Update and Middletown Planning Department

## **7.8 Freight Opportunities**

The Providence and Worcester Railroad (P & W) currently operates freight service that originates in Middletown. Its main line runs southwest from Middletown to New Haven through Middlefield, Durham, and North Haven. Inactive tracks run between Middletown and Hartford. Several opportunities exist for expanding freight service in Middletown to make the city more attractive to industry. Planned upgrades to the tracks would allow for larger freight volumes to move through the region. In addition, P & W has begun to reactivate the line between Middletown and Hartford, which will allow for an important freight by-pass between New Haven and Hartford. Amtrak passenger service between New Haven and Hartford currently limits freight movement on this route.

## **7.9 Summary**

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In general, the City of Middletown has an adequate transportation network. The city is well connected by roadways and public transit. Several opportunities exist to build on the City's strengths and to create a transportation network that provides a broader range of transportation choices to the Middletown community.

### **Major Assets**

The major assets to Middletown's transportation network include the following:

- Links to other parts of Connecticut and the Northeast provided by State Route 9; State Route 66, State Route 17 and Interstate 91, which connects with I-691, I-84, the Merritt Parkway and I-95.
- Fixed-Route, Paratransit and Regional Bus Service that provides connections to adjacent towns as well as Hartford, New York, New Haven, Boston and Worcester.
- Active and Inactive Rail Infrastructure.

### **Issues and Opportunities**

As Middletown continues to build on the above assets, the following key issues and opportunities should be considered to ensure a balanced transportation system:

- Inherent conflict between the commercial use of Main Street with its need for pedestrian amenities and slower speeds and the arterial designation of Main Street which implies heavy traffic volumes and high speeds.
- Need for improved pedestrian accommodations and connections in areas such as Main Street, Route 66, Route 3 (Newfield Street) and the Riverfront/Route 9.
- Need for improved vehicular connections to the riverfront.
- Opportunities for bicycling facilities.
- Safety improvements for a number of dangerous intersections as identified in Map 7.3.
- Programs to improve use of public transit, carpooling and other alternatives to driving.
- Potential of existing rail infrastructure.=