

Accepted by TPC: November 11, 2008
Date for Discussion: July 21, 2009
Collected by: L. Hanson

The Department of Public Works (DPW), working in coordination with other City Departments (e.g. Police, Fire, Parking, etc.), has compiled the following data in this standardized report form for the traffic calming request:

1. Physical Description

Riverside Drive (from Elm Street to Ladd Avenue)

- a. Length = 3,772 feet
- b. Width = 27 feet/ City Layout = 49.5 feet
- c. Grade and Alignment = straight (1,300')/ hill at Federal St (500') straight (1,900')/ making a 90 degree curve after Ladd Ave proceeding north
- d. Number of lanes = 2
- e. Pavement condition index (PCI) = 100
- f. School Zone = Feiker School

Riverside Drive (from Ladd Avenue to Maple Street)

- a. Length = 4,320 feet
- b. Width = 23 feet/ City Layout = 49.5 feet
- c. Grade and Alignment = gentle curves/sharp 90 degree turn onto Maple Street
- d. Number of lanes = 2
- e. Pavement condition index (PCI) = 93

2. Street classification

Collector - Zoned as a Residential Thru street
District = 5B, City Councilor is David Murphy

3. Regulatory Signage

- a. Posted speed limits: Riverside Drive – all signs are in place
According to the Special Speed Regulation #7384 dated 10/9/1986
Riverside Drive – WESTBOUND
Beginning at Elm Street
Thence westerly on Riverside Drive
0.65 miles at 30 MPH
0.18 miles at 20 MPH
0.41 miles at 35 MPH
0.32 miles at 30 MPH
- b. Traffic Control Signal = none
- c. Regulatory signage: Stop Signs (Elm St intersection, Federal Intersection-both sides, Ladd Avenue, Clement St (at Ladd Ave not Burts Pit Rd)

- c. Regulatory Signage (continued)
No Parking Zones (several areas – some have faded signs)

- d. Pavement markings:

- Riverside Drive

- Double yellow center line- Elm St to Ladd Ave
 - Single yellow center line – Ladd Ave to Maple St
 - No shoulder lines – signal white lines

- All other side roads – no markings

- Ormond Dr, Federal St, Hinckley St, Norwood Ave, Liberty St, Ladd Ave, and Clement Street

4. Status of roadway as a designated route for:

- a. Walking access to a public school = near Northampton High School
Walking access to a private school = Feiker School/Nonotuck Comm. School
- b. Emergency vehicles = Secondary route for police and fire vehicles (see map)
- c. Transit buses = (PVTA) R42 goes on Elm St toward Williamsburg
- d. Commercial trucks = allowed over Clement St bridge (17 ton, 19 ton, 29 ton)
- e. Proximity to community facilities: Maines Field on Riverside Drive.
- f. Businesses:
 - Rick's Auto Repair at 442 Elm Street
 - Village General Store or "Smitty's" on Riverside Drive-delivery trucks
 - Cultery Building, 320 Riverside Drive (several businesses)-delivery trucks
 - Yankee Hill Machine Company, end of Ladd Avenue-trucks
 - Marney Electrical Company
 - Chemiplastica Inc.

5. Pedestrian/Bicycle Access

- a. sidewalks = SE side until Federal St, then it crosses to NW side (see map)
 - East side of Hinckley St (Riverside Dr to Warner St)
 - East side of Milton St (Elm St to Federal St)
 - North side of Federal St (Riverside Dr to Vernon St)
 - None on Ladd Ave, Clement St or Riverside Dr (Ladd Ave to Maple St)
- b. crosswalks = across Riverside Dr/ Milton St at Elm St intersection
 - across Riverside Dr (west side) at Federal St intersection
 - across Federal St (north side) at Riverside Dr intersection
 - across Riverside Dr at Ladd Ave intersection
 - across Ladd Ave at Riverside Dr intersection
 - none = Ormond Dr, Hinckley St, Norwood Ave, Liberty St, Lexington Ave or Clement St
- c. handicapped accessible ramps = none
- d. bike lanes = none
- e. Bicycle access = Manhan Rail Trail connection (possible future proposal)
Elm St to Federal St (1,816') and from Federal St to West St (6,600').

6. Traffic Volume
RIVERSIDE DRIVE

- a. Data was collected for two weeks including:
 School Vacation (4/20/09 – 4/24/09) and During School (4/26/09-4/30/09)
- b. Two traffic counters collected data in both directions and were placed at the:
 Legion = Riverside Drive (pole #10, near American Legion)
 Ladd = Riverside Drive (pole #32, between Ladd Ave & Federal St)

Volume of Vehicles

	Sat	Sun	Mon	Tues	Wed	Thurs	Fri	ADT
No School	4-18-09	4-19-09	4-20-09	4-21-09	4-22-09	4-23-09	4-24-09	
Legion	2187	2021	2663	3027	3080	3032	3108	2982
Ladd	2094	1972	2632	2890	2964	3025	3088	2920
School	4-25-09	4-26-09	4-27-09	4-28-09	4-29-09	4-30-09	5-1-09	
Legion	2492	2070	3189	3209	3273	3386	3301	3272
Ladd	2326	2022	3324	3389	3453	3439	-----	3401

- c. All Collected Data from 4/17/09-5/1/09
 Riverside Drive (pole #10, near American Legion)
 Volume - Overall Average Daily Traffic (ADT) = **2,826**
 Riverside Drive (pole #32, between Ladd Ave & Federal St)
 Volume - Overall Average Daily Traffic (ADT) = 2,817
- d. Increase in vehicle traffic for a school week vs. a vacation week: app. **200 veh.**
 Volumes at Legion (ADT from Mon to Fri) – 2982 to 3272 = 290 vehicles
 Volumes at Ladd (ADT from Mon to Fri) – 2920 to 3401 = 481 vehicles

CLEMENT STREET

Data was collected for one week from May 4, 2009 through May 11, 2009.
 Placed on Clement St = pole #12, between Burts Pit Road and Bridge

Volume of Vehicles - All Collected Data from 5/5/09-5/10/09

	Tues	Wed	Thurs	Fri	Sat	Sun	ADT
	5-05-09	5-06-09	5-07-09	5-08-09	5-09-09	5-10-09	
Clement	2521	2670	2634	2736	1958	1661	2363

7. Traffic Speed - The 85th percentile speed is defined as the speed at which 85 (%) percent of all traffic is traveling at or below; and has a similar definition for the 95th percentile.

RIVERSIDE DRIVE (posted as 30 MPH)

Legion traffic counter - Both Directions showed 85th = 38 MPH/ 95th = 40 MPH

Ladd/Federal traffic counter – showed higher speeds than Legion counter

Toward Ladd Ave. (85th=39 MPH) / (95th= 43 MPH)

Toward Elm St. (85th= 42 MPH) / (95th= 45 MPH)

CLEMENT STREET (posted as 25 MPH)

TC #2 (between Burts Pit Rd & Clement St Bridge) - Both Directions showed 85th= 35 MPH

8. Traffic-Axle Classification - See handout on page 7 entitled, "Limiting Truck Traffic"

Trucks are classified as vehicles over 2.5 tons (bold numbers=3 axles and heavier)

RIVERSIDE DRIVE

Direction 1 (top row) = toward Elm St = (68/19,426=0.35%),

Direction 2 (bottom row) = toward Ladd Ave = (59/20,633=0.29%)

Overall has 0.64% truck traffic (Mass Highway minimum limit for truck exclusion 5% to 8%)

Street	Bikes	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	5 Axle Double	% Trucks	Total (one week)
Toward Elm St	248	14399	3609	30	731	34	0	34	0.35%	19,426
Toward Ladd Ave.	171	16141	3534	36	420	26	1	33	0.29%	20,633

CLEMENT STREET –

Direction 1 (top row) = toward bridge (northbound) = (9/7,865=0.11%)

Direction 2 (bottom row) = toward Burts Pit Rd (southbound) = 12/8,323 = 0.14 %

Overall has 0.25% truck traffic (Mass Highway minimum limit for truck exclusion 5% to 8%)

Street	Bikes	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	5 Axle Double	% Trucks	Total (one week)
Toward Bridge	36	6363	1344	5	108	4	0	5	0.11%	7,865
Toward Burts Pit	44	6438	1521	3	176	2	0	10	0.14%	8,323

9. Crash and Traffic Enforcement Data (5 year)

See attached two sheets summarizing data from the Northampton Police Department for 2004-2009 accidents reported by a police officer (greater than \$1,000 damage).

10. Alternative route: Yes - Noticeable during Clement St bridge construction

11. Discussion

- a. Elm St/Milton St/Riverside Dr intersection
- b. Speed Reduction
- c. Federal St intersection (DPW Site Distance study on 8/19/2004, and Trans. Plan (April 2005) perceived as hazardous for pedestrians)
- d. Trucks on Clement St
- e. Ladd Ave intersection

12. Other

- a. Letter to Highway Research Safety Center, NC dated 5/22/2009
- b. Cracksealing scheduled on Riverside Drive (Elm to Ladd) and Clement St in 2009
- c. PVPC Study-warrant analysis in 2000-2001 at Elm/Milton/Riverside intersection

Traffic Calming Request #1 - Bay State Village Association
 Prepared July 1, 2009, Northampton DPW, LGHanson

STREET	INTERSECTION	DATE OF ACCIDENT	TIME OF ACCIDENT	# OF MV'S INVOLVED	PERSONAL INJURY?	CAUSE OF ACCIDENT
--------	--------------	------------------	------------------	--------------------	------------------	-------------------

RIVERSIDE DRIVE & ELM STREET & MILTON STREET INTERSECTION 2004-2009)

TOTAL: 2009=1, 2008=0, 2007=1, 2006=1, 2005=0, 2004=3

ELM	RIVERSIDE	1/20/2009	1415	2	0	FAILURE TO USE CARE IN TURNING
RIVERSIDE	ELM	3/1/2007	0848	2	0	FAILURE TO USE CARE IN STOPPING
RIVERSIDE	ELM/MILTON	1/4/2006	1605	2	0	FAILURE TO YIELD TO THE RIGHT OF WAY
ELM	RIVERSIDE	9/28/2004	1422	2	0	FAILURE TO USE CARE IN STARTING
RIVERSIDE	ELM	5/26/2004	1538	2	0	FAILURE TO USE CARE IN STARTING
ELM	RIVERSIDE	2/1/2004	1030	2	0	FAILURE TO USE CARE IN STOPPING

RIVERSIDE DRIVE & FEDERAL SREET INTERSECTION 2004-2009)

TOTAL: 2009=1, 2008=1, 2007=1, 2006=0, 2005=1, 2004=4

FEDERAL	RIVERSIDE	1/28/2009	0831	2	YES-1	FAILURE TO USE CARE IN STARTING
FEDERAL	RIVERSIDE	4/27/2008	2044	3	YES-1	FAILURE TO USE CARE IN STARTING
ELM	FEDERAL	12/14/2007	1432	1	0	FAILURE TO USE CARE IN TURNING
RIVERSIDE	FEDERAL	10/1/2005	1450	2	0	FAILURE TO USE CARE IN STARTING
RIVERSIDE	FEDERAL	12/6/2004	1451	2	0	FAILURE TO USE CARE IN STARTING
RIVERSIDE	FEDERAL	11/3/2004	1422	2	0	FAILURE TO USE CARE IN STARTING
FEDERAL	RIVERSIDE	1/13/2004	1805	2	YES-1	FAILURE TO USE CARE IN STOPPING
RIVERSIDE	FEDERAL	1/10/2004	2224	1	YES-1	FAILURE TO USE CARE IN STOPPING

Traffic Calming Request #1 - Bay State Village Association
 Prepared July 1, 2009, Northampton DPW, LGHanson

STREET	INTERSECTION	DATE OF ACCIDENT	TIME OF ACCIDENT	# OF MV'S INVOLVED	PERSONAL INJURY?	CAUSE OF ACCIDENT
<u>RIVERSIDE DRIVE & LADD AVE (2004-2009)</u>						
TOTAL: 2009=0, 2008=0, 2007=0, 2006=1, 2005=0, 2004=2						
320 RIVERSIDE	LADD	12/05/2006	0736	2	0	VISION OBSTRUCTED BY LARGER VEHICLE
320 RIVERSIDE	LADD	07/29/2004	1208	2	0	FAILURE TO YIELD TO THE RIGHT OF WAY
LADD	RIVERSIDE	01/06/2004	1609	2	0	FAILURE TO USE CARE IN STARTING
<u>RIVERSIDE DRIVE (2004-2009)</u>						
TOTAL: 2009=0, 2008=1, 2007=0, 2006=0, 2005=2, 2004=1						
83 RIVERSIDE		06/14/2008	1813	2	0	BACKED INTO TRAVELLING VEHICLE
183 RIVERSIDE		05/06/2005	1536	2	0	COLLISION WITH PARKED VEHICLE
288 RIVERSIDE		02/25/2005	1109	2	0	FAILURE TO USE CARE IN TURNING
253 RIVERSIDE		04/02/2004	2352	2	0	COLLISION WITH PARKED VEHICLE
<u>CLEMENT STREET (2004-2009)</u>						
TOTAL: 2009=0, 2008=0, 2007=0, 2006=1, 2005=3, 2004=0						
64 CLEMENT		3/20/2006	1610	1	0	PULLING OUT OF DRIVEWAY
CLEMENT		01/22/2005	1432	2	0	FAILURE TO USE CARE IN STOPPING
21 CLEMENT		01/23/2005	1153	2	0	PLOWING DRIVEWAY
25 CLEMENT		2/10/2005	2119	2	0	SLIPPING ON ICE

LIMITING TRUCK TRAFFIC

According to the Mass Highway, Manual on Uniform Traffic Control Devices (MUTCD), October 2006 edition, the following information pertains to limiting local truck traffic:

Section 11A-9 Heavy Commercial Vehicle Exclusion (pages 11 & 12)

A truck exclusion from a municipal way may be authorized provided a suitable alternate route is available. The alternate route shall have an effective width and pavement structure which can safely accommodate the additional truck traffic. In addition, the alternate route must meet one of the following conditions:

- a) lie wholly within the community making the application,
- b) lie partially in an adjacent community but only on State Highway, or
- c) lie partially in an adjacent community but have the adjacent community's written approval.

An engineering study, as outlined in the Data requested below, must be made. In addition, one or more of the following warrants may be sufficient justification for truck exclusion:

Warrants

- A. A volume of heavy commercial vehicles, which usually is in the range of five to eight percent, reduces the utilization of the facility and is cause for a substantial reduction in capacity or safety.
- B. The condition of pavement structure of the route to be excluded indicates that further repeated heavy wheel loads will result in severe deterioration of the roadway.
- C. Notwithstanding the foregoing, in certain instances where land use is primarily residential in nature and a municipality has requested exclusion only during hours of darkness, a specific night exclusion may be granted.

Data

Before the Department can consider an exclusion proposal, the following data must be submitted by the municipality:

- a. A 24-hour consecutive count of all vehicles using the subject street. The count shall be broken into one-half intervals showing both commercial vehicles with a carrying capacity over two and one-half tons and other vehicles.
- b. Map of the area, with excluded street marked in red and the alternate route in green.
- c. Physical characteristics of excluded and alternate streets in question (ie. Length, width, type and condition of surface of sidewalk.
- d. Types of buildings or property abutting street (Residential, business, school, playground etc.).
- e. Zoning of Street (Residential, Industrial etc.)
- f. Proximity of probable alternate route to the proposed excluded route and the additional distance to be traveled using the alternate route.
- g. Types of traffic control existing on street.
- h. Hours during which exclusion is to be in effect.
- i. A written statement from the municipality as to the need for the exclusion.



BAY STATE
VILLAGE
T-1