Summer Street
Weston, Massachusetts

Prepared For:
TOWN OF WESTON, MASSACHUSETTS
11 Town House Road
Weston, Massachusetts

Prepared By:
MDM TRANSPORTATION CONSULTANTS, INC.
28 Lord Road, Suite 280
Marlborough, Massachusetts

December 2013
Basis for Study


- Documented Summer Street Impacts – Biogen Idec

- Traffic Influences from External Growth Factors (Route 128 Corridor)
Biogen Idec Trip Activity (Sept. 2013)

**Biogen Idec Trips**
- Enter: 367
- Exit: 23
- Total: 390

**Weekday Morning Peak Hour**

- Biogen Idec
- 20
- 2
- 21
- 114 (31%)
- Boston Post Road
- 20
- 253
- (69%)

**Weekday Evening Peak Hour**

- Biogen Idec
- 20
- 5
- 251
- 54 (18%)
- Boston Post Road
- 20
- 22
- (81%)

**Biogen Idec Trips**
- Enter: 27
- Exit: 305
- Total: 332
Summer Street to 133 Boston Post Road “Cut-Through” (Peak Periods)

4 PM - 6 PM

<table>
<thead>
<tr>
<th>Year</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>11</td>
</tr>
<tr>
<td>2012</td>
<td>5</td>
</tr>
<tr>
<td>2011</td>
<td>7</td>
</tr>
</tbody>
</table>

7 AM - 9 AM:

<table>
<thead>
<tr>
<th>Year</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>11</td>
</tr>
<tr>
<td>2012</td>
<td>20</td>
</tr>
<tr>
<td>2013</td>
<td>30</td>
</tr>
</tbody>
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KEY:

# = Vehicles
Regional Context

• I-95/128 Corridor Congestion

• 13 Million SF Planned Corridor Growth

• Peak Traffic Spreading to Adjacent Roadway System

• Localized Impact of Route 20 Corridor Development
Regional Context: Traffic
Regional Context: Development
Regional Context: Congestion
Regional Context: Congestion

![Diagram showing existing and projected peak hour traffic volumes compared to capacity. The diagram includes labels for existing peak hour traffic, projected peak hour traffic, variability in peak hour traffic, and peak hour capacity.]
Summer Street Corridor
Summer Street Corridor
Summer Street Hourly Traffic

![Bar chart showing summer street hourly traffic volume (vph) with peak and average traffic for different times of the day. The chart indicates varying traffic volumes throughout the day, with peak times highlighted.]
Summer Street Travel Speeds
Future AM Peak Hour Traffic
Future PM Peak Hour Traffic
Key Issues

- Route 20 “Gateway” Collisions and Congestion

- Substantial Traffic Volume Fluctuations; (Increased Frequency Over Time)

- High Travel Speeds

- Substandard Roadway Geometry/Roadside Obstructions (Route 20 to Greystone Lane)

- Wider segments with straight alignment (River Road to Autumn Road & Cedar Road)
Mitigation Actions

I. Route 20/Summer Street “Gateway” Improvements

II. Summer Street Traffic Calming Measures

III. Traffic Monitoring/Enforcement Considerations

IV. Heavy Commercial Vehicle Exclusion
I. Summer Street/Route 20
RT 20/Summer Street Mitigation
II. Traffic Calming Measures
TDM: Speed Advisory Radar

A  B  C

SPEED LIMIT 20
YOUR SPEED 20

SPEED LIMIT 25
YOUR SPEED 25

SPEED LIMIT 30
YOUR SPEED 30

SPEED LIMIT 35

YOUR SPEED 31
TDM: Speed Humps/
Center Narrowing Island
TDM: Speed Hump Example
TDM: Speed Hump Example

Source: columbiaeqservice.com
TDM: Speed Hump/Cushion Examples

Source: tapco.net
TDM: “Road Diet” Design
TDM: “Road Diet” Example
III. Traffic Speed Monitoring & Enforcement
IV. Heavy Commercial Vehicle Exclusion
## Order-of-Magnitude Estimates

<table>
<thead>
<tr>
<th>Commitment</th>
<th>Cost</th>
<th>Estimated Number of Locations (Total Cost)</th>
</tr>
</thead>
</table>
| A: Route 20 at Summer Street intersection improvements including roadway widening, westbound lane extension, improved signage, improved lane drop transition tapers, updated pavement markings, pavement mill and overlay and associated MassDOT design/permit plans and permitting costs. | $250,000  
$45,000 Design/Permit | 1 location  
($295,000) |
| B: Speed Advisory Radar with Driver Feedback Sign | $7,500 per Location  
$2,500 Design/Permit | 6 locations  
($60,000) |
| C: Speed Humps with Central Island Narrowing feature | $15,000 per Location  
$5,000 Design/Permit | 2 locations  
($40,000) |
| D: Roadway pavement markings along Summer Street to enhance positive driver guidance. | $20,000 Construction  
$5,000 Design/Permit | 1 location  
($25,000) |
| E: Heavy Commercial Vehicle Exclusion. | $7,500 Permitting | 1 location  
($7,500) |
| F: Traffic Speed Monitoring & Enforcement; Cost associated with purchase of a speed radar recorder device. | $7,500 | 1 unit  
($7,500) |
| **Subtotal** | **$352,500 Construction**  
**$82,500 Design/Permit** | **$435,000 Total** |