



Department of Transportation
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March 14, 2024

Shawn J. Brown, Administrator
Town of Middletown
350 East Main Road
Middletown, RI 02842

Dear Mr. Brown,

In accordance with recent news articles, there appears to be a misunderstanding regarding the Rhode Island Department of Transportation's involvement with any road diet proposal on East Main Road. Just for clarification, we provided at the request from the Town, a memorandum from VHB dated July 28, 2023 that included pros and cons to consider regarding a road diet on East Main Road, north of Wyatt Road, in the Town of Middletown. At no point in the memorandum or through discussions with the Town was the road diet recommended by VHB or RIDOT. We have subsequently requested that VHB update their memo to include a Conclusion and Recommendations section. Both the updated and original memorandums are attached to this letter. RIDOT has concerns about implementing a road diet on East Main Road based on the information provided in the memorandums.

As we move forward with our East Main Road resurfacing project, we will need to know within the next month whether the Town wants us to proceed with implementing a three-lane road diet as part of this project set to begin construction this summer. Our current construction plans developed in conjunction with and approval from the Town Manager and Town DPW have a four-lane configuration. RIDOT had previously advised the Town in the July 28, 2023 memo from VHB that there could be adverse impacts to implementing a road diet here, including the following:

- Added delay and congestion especially during the summer peak season (Average 20 MPH speeds along the corridor and 10 MPH at lane reduction points).
- Very difficult to pull out of unsignalized side streets and driveways due to significantly less gaps in traffic.
- The vehicle queue is expected to spill back into the Mitchell's Lane intersection in the southbound direction and to Wyatt Road in the northbound direction during the summer peak season.

We need confirmation from the Town and Town Council to modify our current construction plans to accommodate a road diet, so our current project is not delayed. The Resurfacing of this section of East Main Road is currently advertised, and if we do not hear from the Town, we will proceed as designed with the four-lane configuration. Please provide us with a decision by April 19, 2024. We further recommend the Town consider public comments within its road diet deliberations.

Sincerely,

Robert Rocchio
Chief Engineer
Rhode Island Department of Transportation

cc: Middletown Town Council
Cotter, Davis, DeSimone, Fisette, McCarthy, Pristawa, Raymond, Soderlund; Director's Office file; Town file (all w/ attachments)



To: Sean Raymond, P.E.
Managing Engineer
Office of Safety
Rhode Island Department of
Transportation

Date: March 13, 2024

Memorandum

Project #: 72700.05

From: VHB

Re: Road Diet: East Main Road from Mitchell's Lane to Wyatt Drive
Middletown, RI

VHB has completed a feasibility evaluation of a road diet along East Main Road in Middletown, RI. The road diet consists of converting the existing narrowed four lanes roadway between Mitchell's Lane and Wyatt Drive to three lanes roadway with one through lane in each direction and a two way left turn lane (TWLTL). The evaluation assumptions and results are provided below.

- Based on available traffic counts, the Summer months traffic volumes are historically 20% higher than the Spring months. Analysis included both the Spring and Summer conditions.
- The daily traffic volumes along East Main Road are approximately 17,500 vehicles per day during the Spring and approximately 21,500 vehicles per day during the Summer.
- FHWA advises that roadways with average daily traffic volumes of 20,000 vehicles or less may be good candidates for road diet.
- The peak hour traffic volumes in the southbound direction are approximately 1350 vehicles in the Spring and 1600 vehicles in the Summer. In the northbound direction, the peak hour traffic volumes are 1250 vehicles in the Spring and 1500 vehicles in the Summer.
- FHWA advises the feasibility of a road diet is less likely above 875 vehicles per direction during the peak hour and expect reduced arterial LOS during the peak period. In cases in Rhode Island where the peak hour directional volume has exceeded this recommended threshold, detailed VISSIM analysis was performed to view the delays and travel times associated with the road diet.
- Today, it takes about 2-3 minutes to travel to/from Mitchell's Lane to Wyatt Road and takes about 2-3 minutes to travel to/from Oliphant Lane and Turner Road.
- With the proposed road diet, it is expected that additional delay would be added. Please see the speed maps and travel times summary graphics below.
 - Spring Conditions: The travel time from Mitchell's Lane to Wyatt Road is expected to increase from 2-3 minutes to 4-5 minutes during the AM peak hour. The travel time from Turner Road to Oliphant Lane is also expected to increase from 2-3 minutes to 5-6 minutes.
 - Summer Conditions: The travel time from Mitchell's Lane to Wyatt Road is expected to increase from 2-3 minutes to 5-6 minutes during the AM peak hour. The travel time from Turner Road to Oliphant Lane is also expected to increase from 2-3 minutes to 6-10 minutes. The Travel time from Wyatt Road to Mitchell's Lane is expected to increase from 2-3 minutes to 4-5 minutes.
- With the increased in traffic volumes in the Summer, the road diet (reducing the number of through lanes from two to one in each direction) would create vehicle queue to spill back to Mitchell's Lane in the southbound direction and queue spill back to Wyatt Road in the northbound direction during the peak hour periods. With the steady flow on traffic in the northbound traffic in one lane at the intersection with Turner Road, the vehicles turning in and out of Turner Road will have difficulty finding gap in the traffic and expected to create long queue on Turner Road.

In addition to the above traffic operations, here are some of the pros and cons to consider.

Pros:

- With the reduced number of lanes from four to three and the reduced speed, bicyclists and pedestrians would be more comfortable and feel safer to cross and travel along East Main Road.
- The addition of a TWLTL will improve operations for through vehicles by removing turning vehicle from the through lane and reducing the uncertainty it causes.

Cons:

- Added delay and congestion especially during the Summer peak season.
- The vehicle queue is expected to spill back into Mitchell's Lane intersection in the southbound direction and to Wyatt Road in the northbound direction during the Summer peak season.
- With the increased in delay with the road diet, motorists may shift to an already congested West Main Road, especially due the Summer.

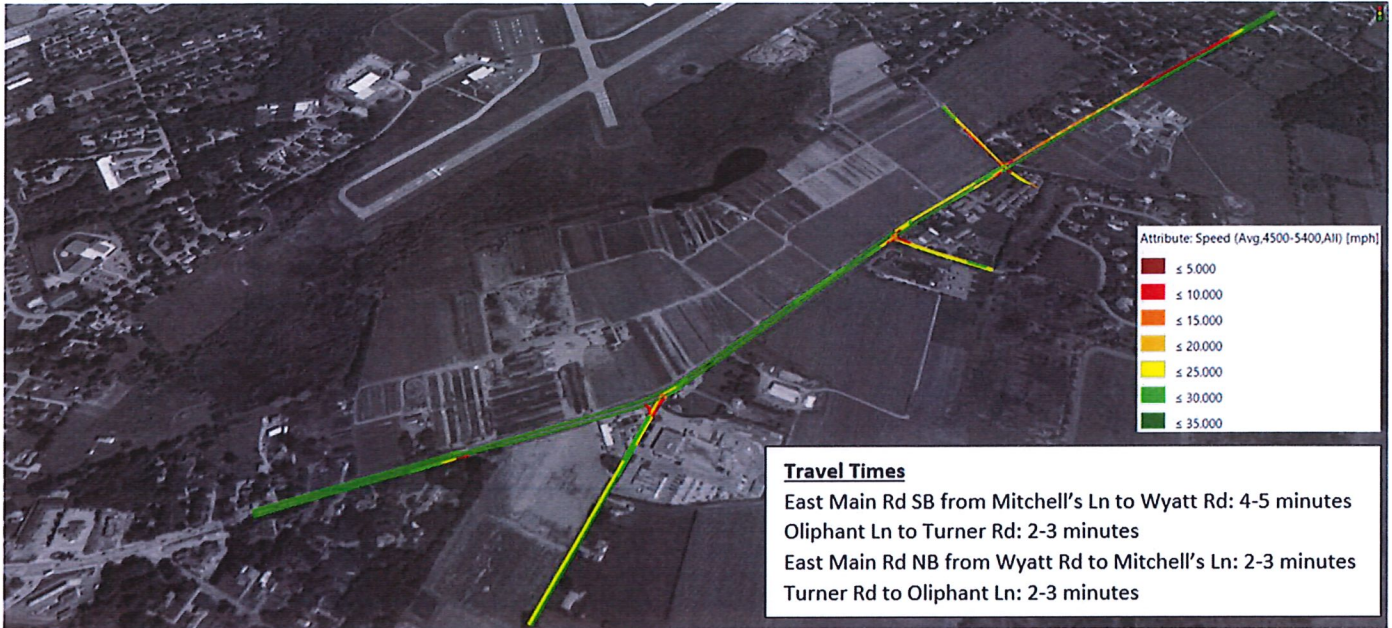
Conclusion and Recommendations

Based on the above assumptions and analysis, there would be trade-offs between adding traffic delay to the corridor in exchange for slower/safer speed for all modes of traffic with the implementation of the road diet. Because of the seasonal increase in traffic during the Summer, the average daily traffic volumes along East Main Road are approximately 21,500 vehicles, slightly above the recommended volume threshold of 20,000 vehicles from FHWA. The directional peak hours volumes ranging between 1,250 and 1,600 vehicles also exceed the recommended volume threshold of 875 vehicles from FHWA.

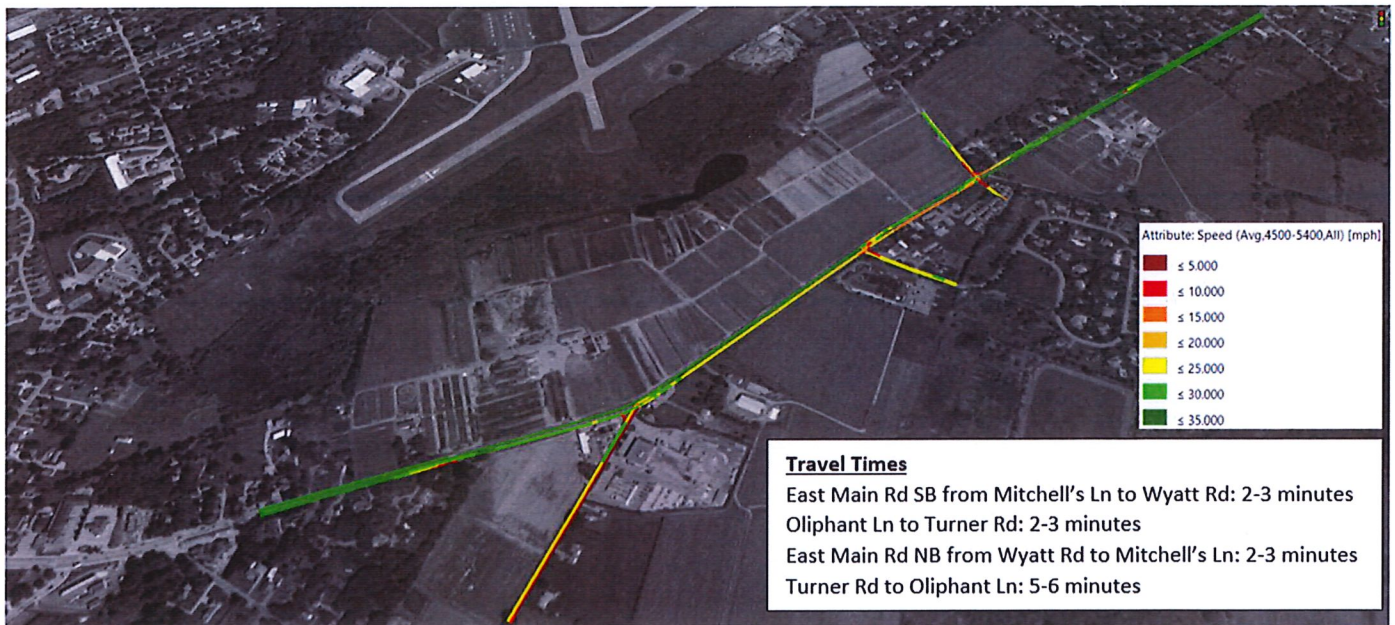
The travel time from Mitchell's Lane to Wyatt Road is expected to increase from 2-3 minutes to 5-6 minutes during the AM peak hour. The travel time from Turner Road to Oliphant Lane is also expected to increase from 2-3 minutes to 6-10 minutes. The Travel time from Wyatt Road to Mitchell's Lane is expected to increase from 2-3 minutes to 4-5 minutes. It is very likely that motorists will shift to West Main Road which is also congested.

Based on previous road diets projects implemented in Rhode Island, this candidate segment along East Main Road in Middletown is on the high end of the direction peak hour volume threshold and would recommend not be pursued by RIDOT as part of the Road Diet Program. If the Town of Middletown would want to pursue the road diet, it is recommended that additional traffic (both vehicular and pedestrian), safety analysis, and public outreach be conducted and expanded to include the impacts along East Main Road and West Main Road.

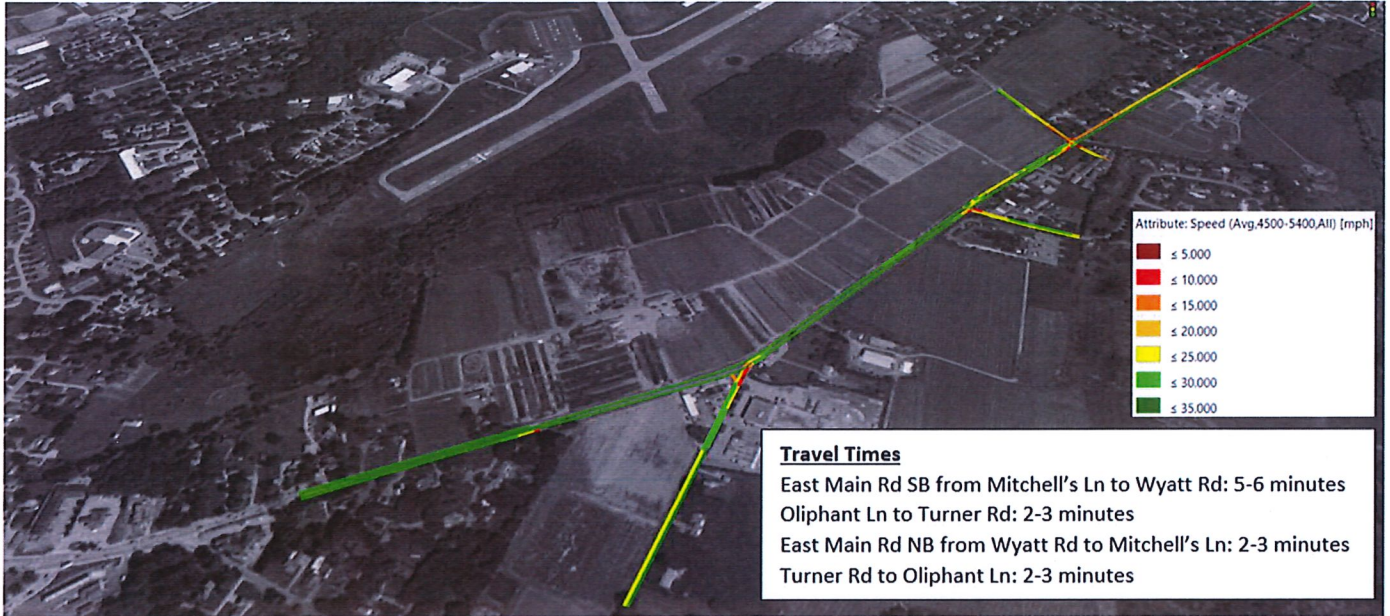
Projected AM Peak Hour Speed during the Spring



Projected PM Peak Hour Speed during the Spring



Projected AM Peak Hour Speed during the Summer



Projected PM Peak Hour Speed during the Summer

