

September 21, 2024

To: Board of Selectmen, Board of Estimation and Taxation Members

From: Richard Doyle, International Institute of Transportation Engineers Elected Fellow, Member of American Institute of Certified Planners, Licensed Professional Engineer (FL) and Licensed Real Estate Broker (FL)

President of RTD Engineering, Planning and Real Estate

Re: North Street Bridge Project Traffic Delay

In addition to the above I have more than 5 decades of planning and engineering experience for hundreds of detours.

I was asked by to review the North Street Bridge Presentation of September 12, 2024, and a memo to the Board of Estimation and Taxation Members written by Maya Tichio.

Although I am confident that the Department of Public Works is a very fine professional agency, the decision not to use a transportation planning and engineering consultant to prepare a Traffic Management Study, however, was based on a technicality. More specifically, the DPW answer to a FAQ is: "A traffic study is only conducted when there is a change in use, for example a parcel conversion from residential to commercial." In other words, my strong professional opinion is that DPW was in error and should have exercised their judgment to have the study done.

To ensure independence, DPW should use a consultant who has not worked in the Town nor expects to work here in the future. Such consultants can be found in Hartford, Boston or other states.

A simple consultant selection process is,

1. Ask for qualifications,
2. Rank the best 3,
3. Negotiate a scope of services and price with Number 1, then Number 2, if necessary, etc.

Within reason, the scope of services for the traffic consultant should address all questions in the above 2 documents. Therefore, I will not address all the largely excellent questions in the 2 documents. It would be somewhat repetitive.

One point I need to make relative to the construction schedule and my experience. Large two -year projects inevitably take up to 3 years. Such delays can cause problems in the ability to sell properties at their otherwise marketable value. Consider hiring a real estate broker or appraiser to address this issue.

Because of new construction materials, the new bridge will last 50 years or more in good condition. The traffic consultant should predict the future traffic volumes for the life of the bridge and of the roadways on both sides of the bridge. Similarly, this study should address the need for bike lanes and sidewalks on the bridge and both sides of the bridge.

An alternative to DPW plan would be to build one or two new lanes and then demolish one or two lanes of the existing bridge. The goal would be to always have two through lanes open and keep

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traffic moving as it is today. A possible disadvantage will be that the alignment will be offset and not be the same as today.

The above alternative can also be accomplished using one or more Bailey bridges. These are portable prefabricated truss bridges.

Although I am not an expert in construction contracting, I have been on the verge of these issues and how contracts can be written to minimize traffic delays. Typically, a contractor is supposed to finish in a set time. Unless he finishes on time and unless delayed by a factor such as weather, there is a financial penalty. Sometimes there is a bonus if a contractor finishes early. Sometimes a contractor estimates what are typical delays and signs a No Excuse contract with various financial bonuses or penalties.

If detours of different routes are assumed, it is important that DPW be in control and sets the detours with signs. If drivers use Waze or Google, they will be randomly going through local streets and causing issues.

The direct cost of the preceding alternates will likely be more expensive than the traffic signal plans. There will be other disadvantages. In addition to a traffic planner and engineer, the real estate broker or appraiser could help with possible cost of acquisition. I have been the project manager on a similar bridge project where we acquired one parcel that was made available to the contractor for mobilization of equipment.

Again, while the direct costs may well be more expensive than alternating traffic signals, the significant benefits to the North Bridge users cannot be underestimated. Oftentimes these benefits are estimated at \$10 per person per hour and higher. Invariably the benefits exceed the costs.

I trust that this memo is helpful. If you have any questions, kindly advise.

Richard Doyle, International ITE Elected Fellow, AICP, PE (FL) and Real Estate Broker (FL)