

January 6, 2016

Middlebury Bridges Project

The rest of the story ...

As this project now wends its way through the bowels of politics I think it is necessary and important to refresh memories about the historical context and need for this project.

- There are two highway bridges in downtown Middlebury carrying town roads across the tracks of Vermont Rail Systems (VRS), one on Merchants Row and the other on Main Street
- The bridges are owned by the State of Vermont having been acquired as part of the state's purchase of the assets of the defunct Rutland Railroad in 1964
- There are poor or no records of the bridges' construction and no structural or engineering plans on record. Therefore the bridges condition and structural sufficiency is difficult or impossible to be rated using normal standards.
- The bridge decks appear to be built primarily of used rail road rail encased in concrete.
- The bridge conditions have been rated poor and in need of replacement for many decades.
- The bridges are now in a state of rapid deterioration with concrete chunks falling on the tracks on a regular basis and gaping holes appear regularly in the sidewalks, large enough to cause severe injury or worse to pedestrians and vehicles. These holes are patched by VTrans District 5 personnel using metal plates, plywood and other materials that may be at hand.
- In the early part of this century c.2002, VTrans brought a proposal to the Town for replacement of the two bridges.
- The plan assumed that increased clearance for the railway was necessary and would the design would provide for it. At that time VTrans assumed that the tracks could not be lowered so the design called for a 3+ foot elevation change in both streets that would have had a major adverse aesthetic and accessibility impact on downtown, primarily affecting the Battell Block and the National Bank of Middlebury.
- The Select Board was unanimously opposed to the VTrans plan for both its short and long range impacts.

- c.2008 the Select Board began new consideration of a new bridge to cross Otter Creek, the bridges over the railroad were put on the back burner by VTrans and the town
- As Cross Street bridge was under construction, the Town asked VHB (engineers for the bridge) to look at options for replacing the Main street and Merchants Row bridges, in particular assessing the possibility of lowering the track. VHB's analysis showed that lowering the track was indeed feasible and, in a meeting with VTrans the concept of replacing the bridges with a tunnel structure, reuniting Triangle Park with the town green was broached.
- The town's resounding success with the Cross Street Bridge project i.e. completing the bridge without state or federal assistance in a short 18 months was quietly noted by VTrans especially since having a new creek crossing would facilitate replacement of the state's rapidly deteriorating bridges.
- In spring 2012 VTrans planners summoned us to Montpelier to discuss an "innovative" approach to replace the bridges as quickly as possible within VTrans' federal and state funding constraints while allowing significant input from the Town of Middlebury. This was an acknowledgement that major construction in a fragile downtown economy has to be carefully and cooperatively managed.
- VTrans suggested that the bridges project could be executed by applying the Local Transportation Facilities (LTF) program model to make the town the titular manager of a project that would improve infrastructure not town owned.
- The Town and VTrans entered an agreement whereby the Town would collaborate with VTrans to design and build new bridges or potentially a tunnel to replace the bridges. The town, governed by federal procurement regulations would hire a qualified engineer to plan and design the project. The Town hired a local project manager (LPM) to provide a continuing Town presence in the process.
- At the same time VTrans would apply a relatively new approach to the project called Construction Management - General Contractor (CMGC). In this model a qualified contractor is chosen early on in the process so engineering, planning and design are tempered by CMGC's experience in construction and assessment of constructability.

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- By any measure, this project which initially seemed like a relatively simple installation of precast concrete components, is far more complex not only in terms of actual construction but in terms of maintaining public access to downtown, satisfying public transit demands, keeping public events and performances alive and well and maintaining an acceptable quality of life for those who live and work in close proximity.
- The decision to make the project a tunnel rather than just two bridges was prompted by the Town to improve aesthetics and to facilitate prompt National Environmental Policy Act (NEPA) approval. NEPA covers the gamut of possible environmental impacts, including historic preservation. Restoration of the Town Green and preservation of most stone abutments was key to approval.
- Initial cost estimates for the tunnel were around \$12-18 million. Covering a 300-foot section to make the tunnel was estimated to add approximately \$1.5 M. the state agreed to pay \$1M additional for the tunnel if the town would agree to pay \$500,000. The Town voted for the tunnel concept and its share of the funds needed to pay for it.
- New cost estimates produced by the engineer, contractor and independent cost estimator (ICE) came in between \$42 M and \$55M. Subsequent revisions of the clearance requirement from 23' to 21' have resulted in revised estimates of around \$35 M.
- The extraordinary cost coupled with a construction period estimated to be between 3 and 4 years has become the focus of alarm and contention in the community.
- The Town has formed a committee called the Local Project Management Team (LPMT) which has supplanted the LPM.
- The project has now entered a period of political uncertainty.
- Approximately \$2.8 million has been spent on engineering and design
- The bridges are much closer to collapse than ever before.

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