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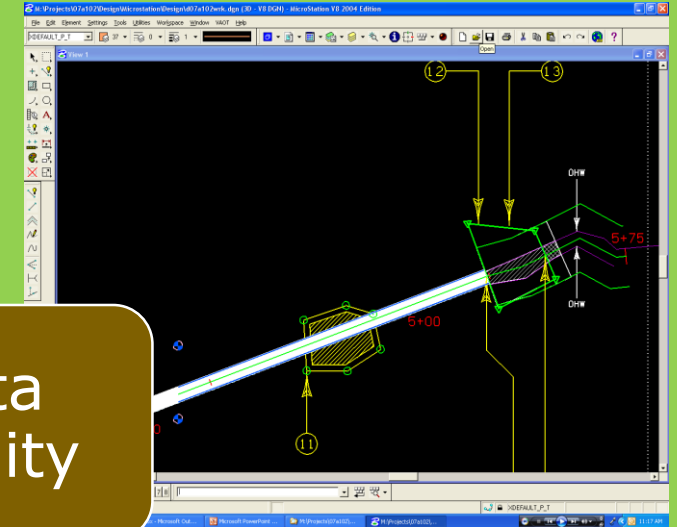
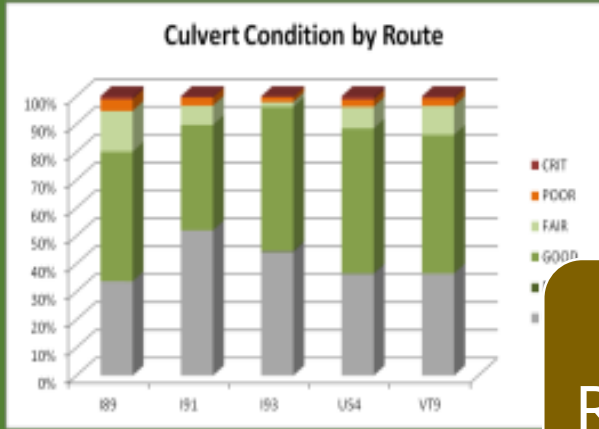


VTTrans Spotlight

Jonathan Griffin, P.E.
Civil Engineer - Asset Management

Planning & Programming

Design



Data Inventory

Data Reporting

Data Quality

Asset Lifecycle

Data Systems

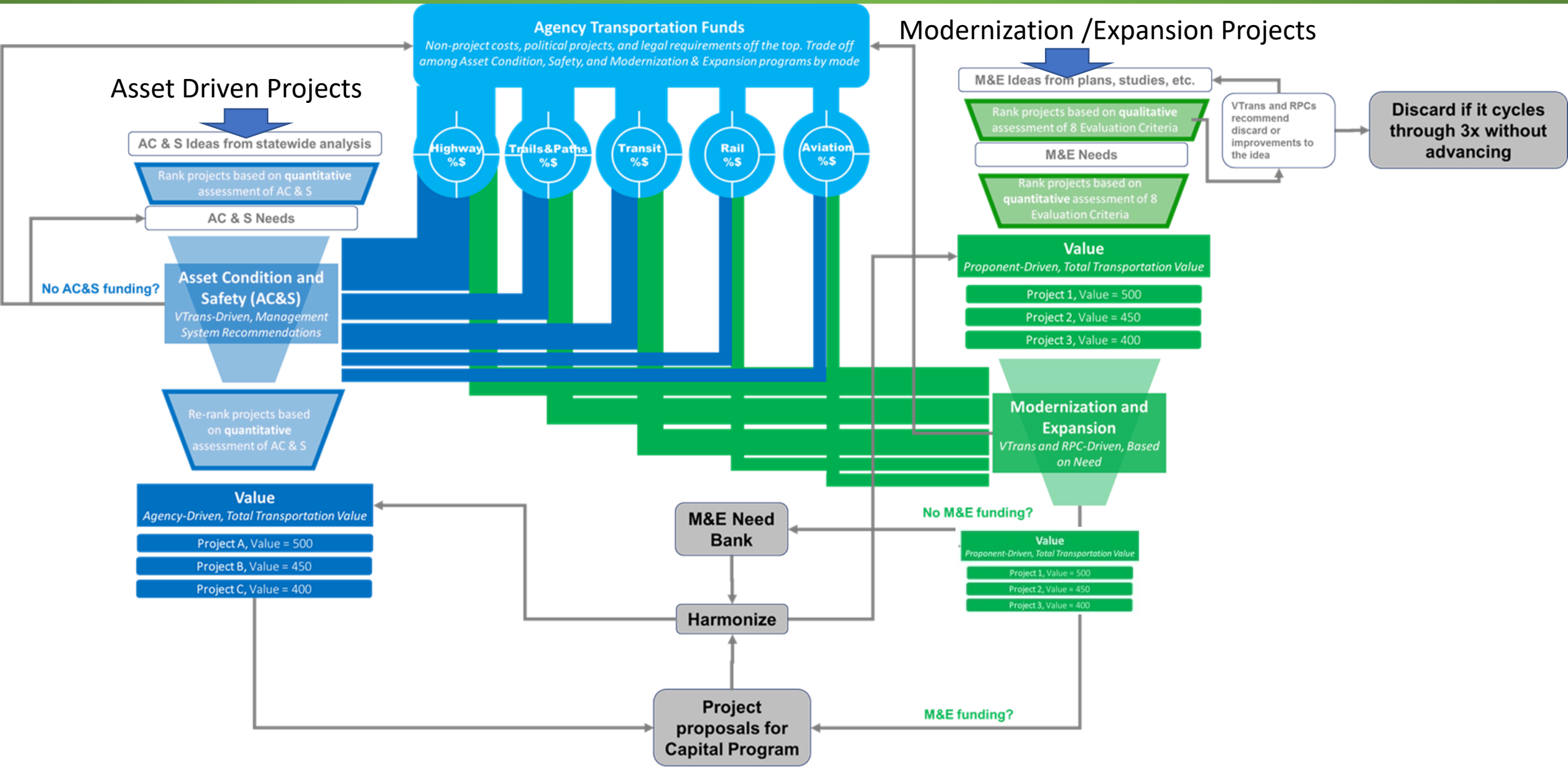
Data Efficiency



Maintenance

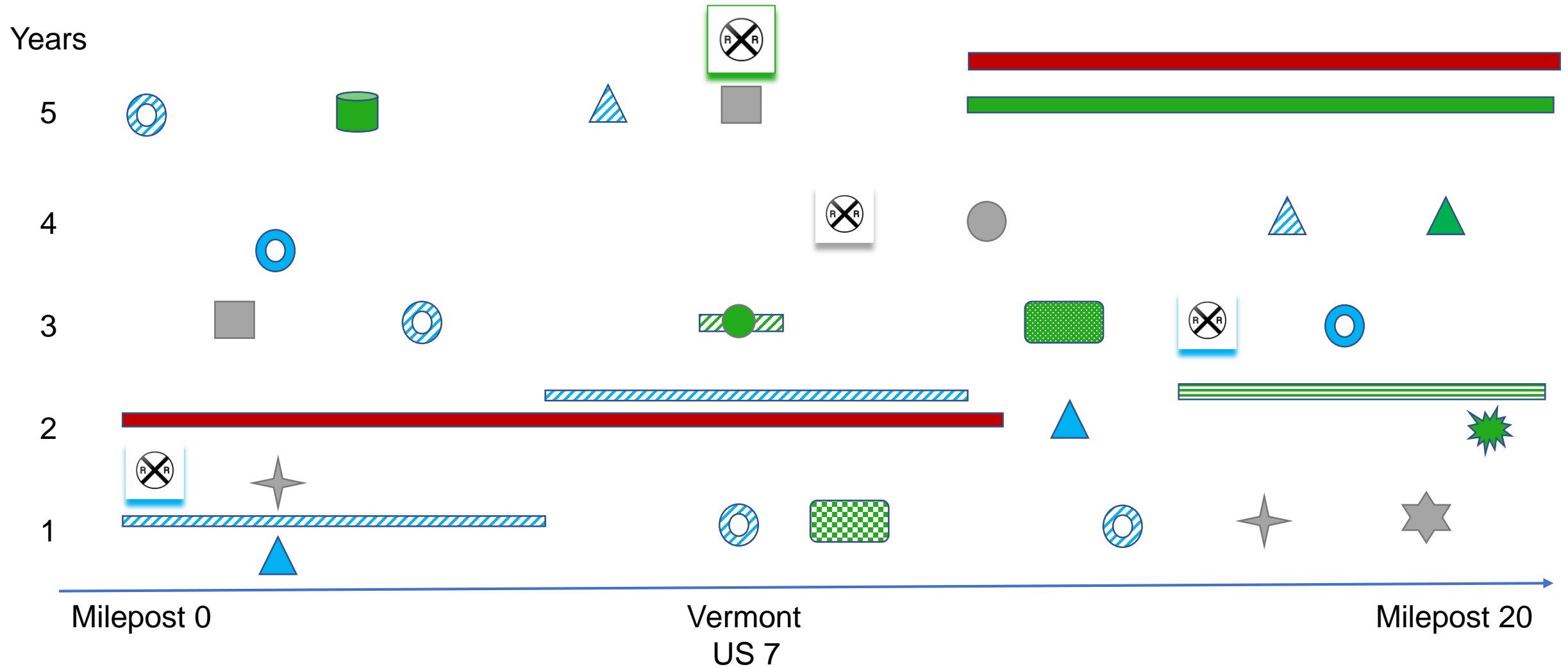
Construction

Planning and Programing



Harmonizing Process

Before Harmony



Harmonizing Process

After Harmony

Years

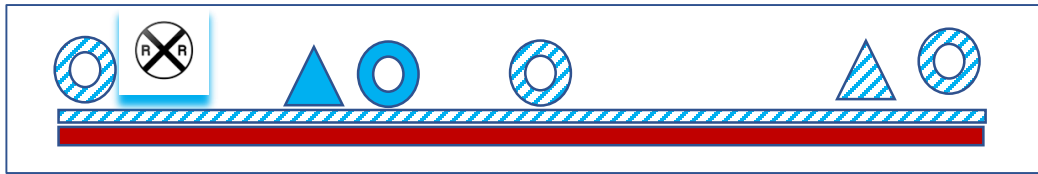
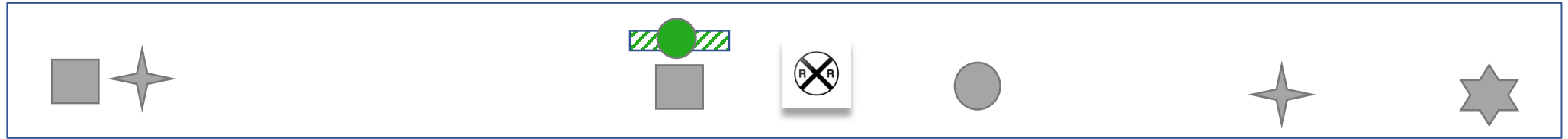
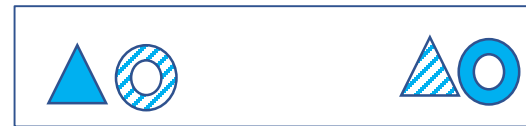
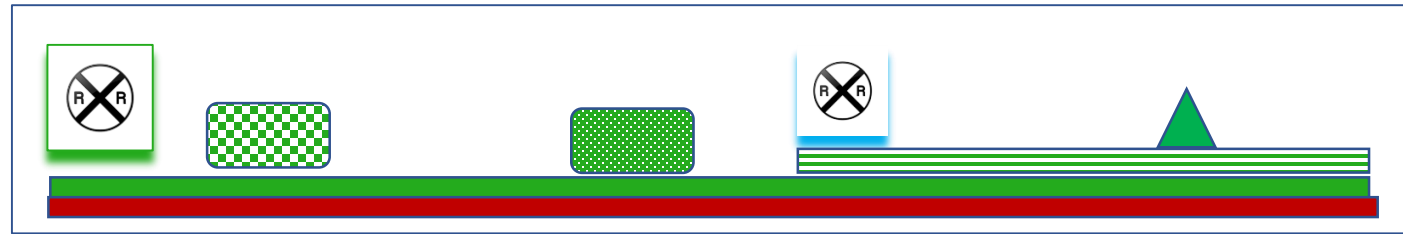
5

4

3

2

1



Milepost 0

Vermont
US 7

Milepost 20





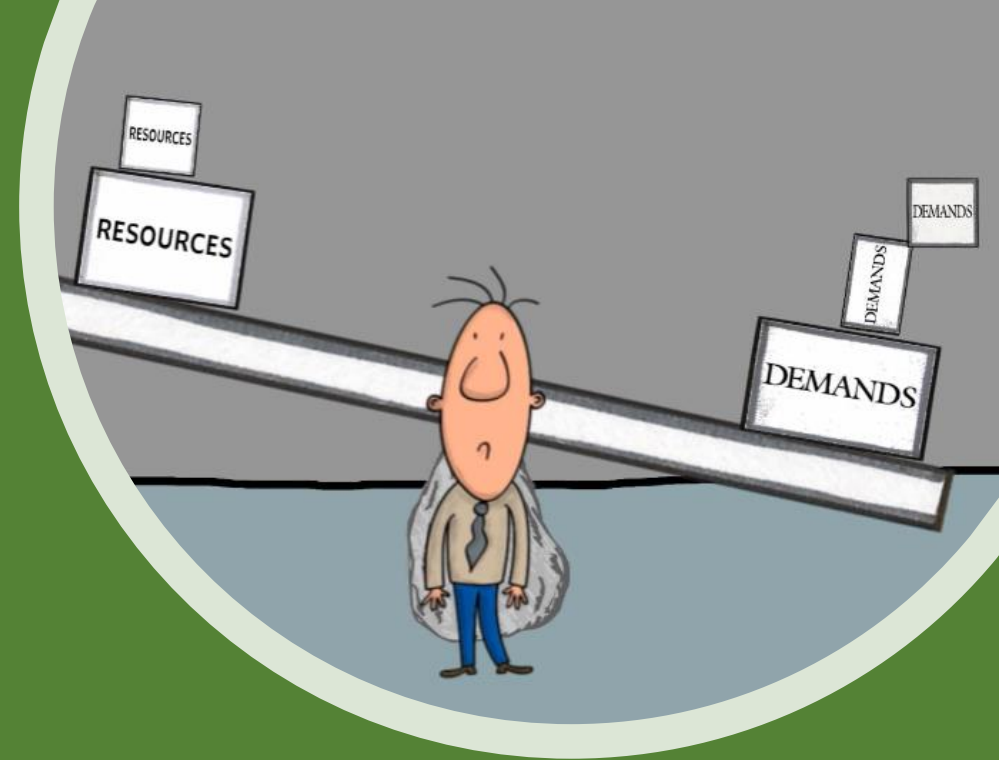
Background

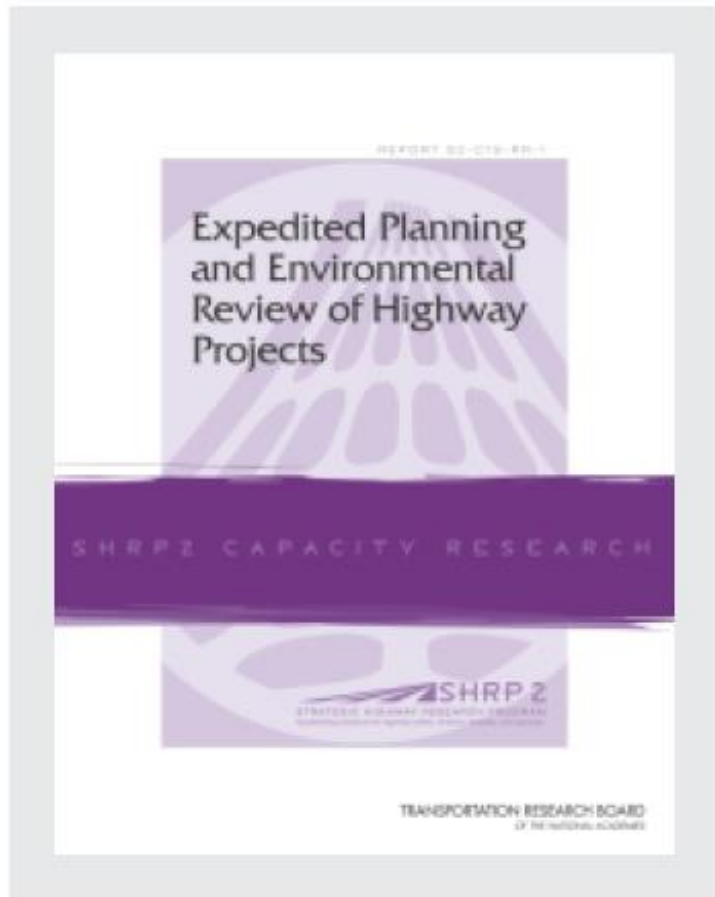
- **2012:** SHRP2 published a report entitled, *“Expedited Planning and Environmental Review of Highway Projects.”*
 - 16 constraints
 - 24 strategies
- **October 2013:** VTrans was selected as a recipient of the SHRP2 C19 grant.
- Funds were used to develop an action plan



C19 Desired Outcome

- Evaluate risks to timely project delivery
- Identify opportunities to expedite projects
- Identify resource demands
- Analyze organizational structure for efficiencies
- Identify potential process improvements
- **Build partnerships**





5 Key Strategies for Expediting Project Delivery

- **Strategy 3:** Context Sensitive Design/Solutions
- **Strategy 8:** Expediting Internal Review and Decision-Making
- ***Strategy 10:** Highly Responsive Public Engagement*
- **Strategy 21:** Strategic Oversight and Readiness Assessment
- **Strategy 22:** Team Co-Location

Public Outreach

- Public Involvement Plan
- Website Development
- Early Coordination with Stakeholders
- Outreach Products
- Tools to Engage the Public



Meaningful Public Engagement

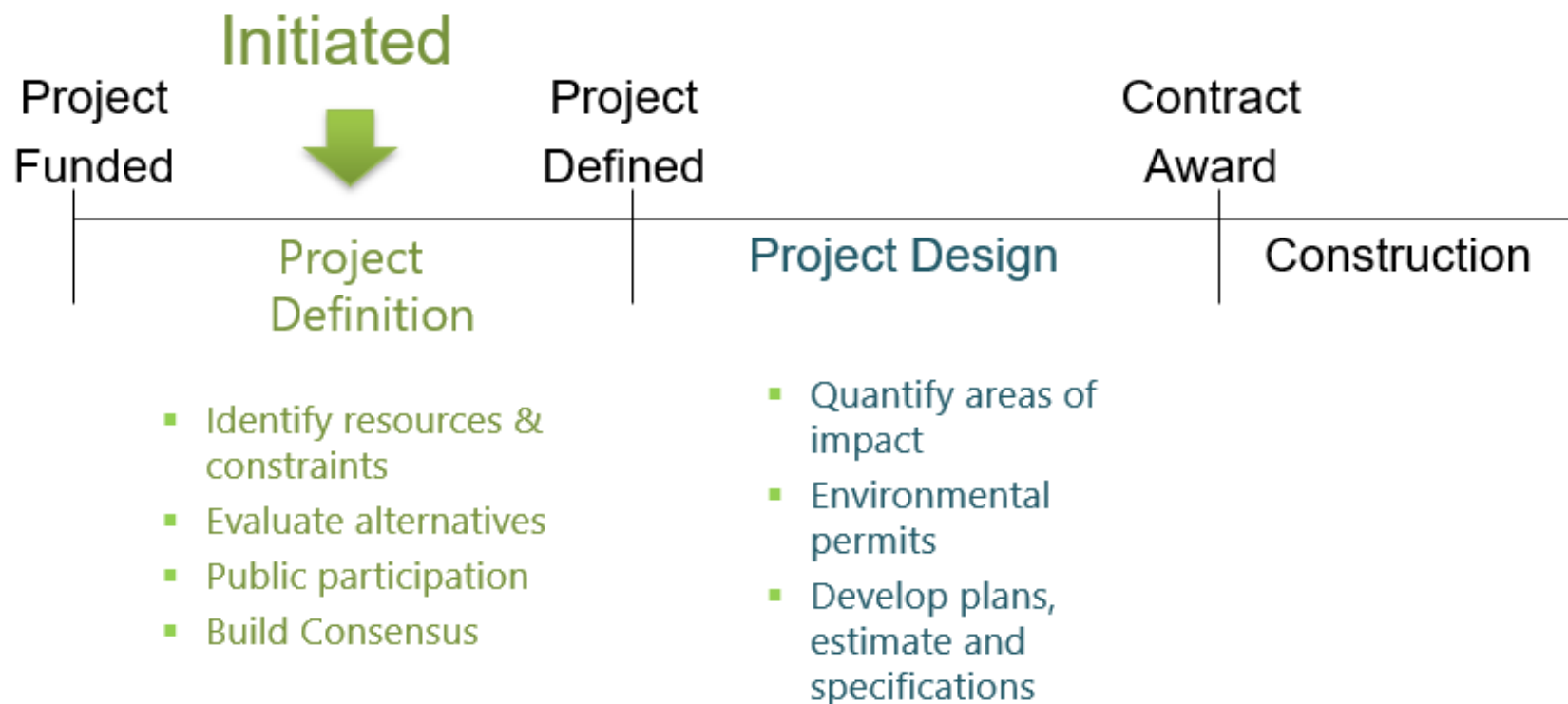
Forming community partnerships to garner support, expedite project delivery and increase public satisfaction



C19 - Successful strategies for effective and meaningful public engagement

- Use a standardized but customizable approach for all communities (harmonization)
- Identify key stakeholders and customers
- Seek valuable input early during the project development process
- Use tools to engage the public during meetings
- Create and maintain community partnerships
- Outreach regularly during construction
- Seek feedback

VTrans Project Development Process



**Accelerated
Bridge
Program**
VTRANS

Design – Project Definition – The “PIIT”

- PIIT (Project Initiation and Innovation Team) consists of a Team leader, two engineers and one technician
- The team leader get the distinguished title of “PIIT Boss”
- Team coordinates all resources including

- Purpose and Need
- Safety
- Traffic
- ROW
- Environmental Review
- Survey
- Geotechnical
- Hydraulics
- Utilities
- Operations
- Community/Regional Considerations



PIIT

- Send out community questionnaire (start with template and modify)
- Send out operations questionnaire
- Reach out to the RPC
- Start generating a list of potential stakeholders
- Make a site visit

Local Input

Community Considerations from the Town of Bolton, Amy Grover, Town Clerk 10/15/2103 Possible Impact on the Notch Road Tunnel Under I89 Bridge 51-3

1. Are there any scheduled public events in the community that will generate increased traffic (e.g. vehicular, bicycles and/or pedestrians), or may be difficult to stage if the bridge is closed during construction? Examples include: a bike race, festivals, cultural events, farmers market, concerts, etc. that could be impacted? If yes, please provide date, location and event organizers' contact info.
 - Community events would include July celebrations at Wheeler Field in West Bolton for all of the Bolton community.
2. Is there a "slow season" or period of time from May through October where traffic is less?
 - LESS TRAFFIC: There would be no school/school bus traffic during school summer vacation time (the end of June through the end of August).
 - MORE TRAFFIC: May – October is probably a very busy season for the Beckman's Gravel Pit business located near 499 Notch Road, with customers' trucks almost exclusively using the Notch Road tunnel for access to their business.
3. Please describe the location of emergency responders (fire, police, ambulance) and emergency response routes.
 - The Bolton Notch Road tunnel provides the most expedient emergency access to all of Notch Road, Mill Brook Road, Cemetery Road, Black Fly Hill Road, Mountain View Drive, Fern Hollow Road, Bear Mountain Road and parts of Stage Road. Tunnel delays/closures would require access to these areas via RT 2 west to Jonesville, 3 miles, then onto Stage Road to access all the afore mentioned roads. Please contact the Bolton Highway Foreman if you would like precise mileages.
 - Emergency Responders:
 - Fire Department: Bolton VFD responds from the RT 2 station in Bolton.
 - Ambulance: Richmond Rescue responds from Richmond or Waterbury Ambulance responds from Waterbury
 - Police: VT State Police responds from the Williston barracks or on the road.

Where are the schools in your community and what are their schedules?

Schools: prek – 4th grade attend Smilie School at 2712 Theodore Rossevelt Highway (RT 2) in Bolton.

Elementary School – CHMS in Richmond

High School – MMU in Jericho.

Please refer to the CESU school calendar available on the CESU VT website.

If the bridge is closed, is there a land use pattern, existing generators of pedestrian and/or bicycle traffic, or

development that is likely to lead to significant levels of walking and bicycling?

Example: The GMC's confirmed re route of the Long Trail in Bolton will utilize the tunnel for all

(including agricultural operations) that would be adversely impacted either

There may be other home based

V. Cost Matrix³

Bolton IM 089-2(45)		Alt 1 Rehabilitation	Alt 2 Rehabilitation With designated PED Access	Alt 3 Full Bridge Replacement	Bolton IM 089-2(45)	Alt 4 Replacement with Two Separate Steel Beam
COST	Bridge Cost	\$72,377	\$109,571	\$110,000	INTERSTATE 89, BRIDGE 51-3 OVER TOWN HIGHWAY 4	
	Removal of Structure	\$0	\$0	\$0	June 12, 2018	
	Roadway	\$132,692	\$134,837	\$134,837		
	Maintenance of Traffic	\$75,490	\$90,588	\$90,588		
	Construction Costs	\$280,559	\$334,996	\$334,996		
	Construction Engineering	\$84,200	101,000	101,000		
	Contingencies	\$56,241	\$67,004	\$67,004		
	Preliminary Engineering ⁴	\$110,000	\$110,000	\$110,000		
	Right of Way	\$0	\$0	\$0		
	Total Project Costs	\$531,000	\$613,000	\$613,000		
SCHEDULING	Annualized Costs	\$26,550	\$30,650	\$30,650		
	Construction Duration	1 year	1 year	1 year		
	Closure Duration (If Applicable)	2 days	2 days	2 days		
ENGINEERING	Typical Section - I-89 Roadway (feet)	38'	38'	38'		
	Typical Section - TH 4 Roadway (feet)	22' (20' in culvert)	2'-11'-2' (SW)	2'-11'-2' (SW)		
	Typical Section - Bridge (feet)	4'-12'-12'-10' (38')	4'-12'-12'-10'	4'-12'-12'-10'		
	Geometric Design Criteria	Substandard vertical curve on TH 4	Substandard vertical curve on TH 4	Substandard vertical curve on TH 4		
	Traffic Safety	No Change	Improved	Improved		
	Alignment Change	No	No	No		
	Bicycle Access	No Change	No Change	No Change		
	Vertical Clearance	Substandard	Substandard	Substandard		
	Pedestrian Access	No Change	Improved	Improved		
	Utility	No Change	No Change	No Change		
OTHER	ROW Acquisition	No	No	No		
	Road Closure	No	No	No		
	Design Life	20+ years	20+ years	20+ years		

Develop Alternatives



Management Approval of Scope

July 12, 2016

Next Steps

- Internal Scoping Review
- OLSR – Agency
- Scope Collaboration Meeting Resource Groups
- Interim MAOS
- Public Presentation
- Revised Scope
- Final MAOS

Project: **BOLTON, 1-89, Bridge 51-3 OVER TH 4**

Project Manager: Jennifer Fitch

Attendees: Wayne Symonds, Todd Sumner, Kristin Higgins, Carolyn Carlson, Ja
macroix, Jennifer Fitch, Gary Sweeny, Daniel Beard, Jonathan Griffin

Project Briefing: After evaluation of multiple alternatives, and performing a geote
investigation to evaluate overall structural stability the recommended scope is to
structural repair to the culvert with soil stabilization. In addition to the structural
the method of ASR mitigation will also be proposed.

Maintenance of Traffic: Traffic will be maintained by phasing with the exception of
weekend closure for maintenance along the center of the box.

Structures Management approves the project scope.

Structures Management will require more information before making a decision.

Structures Management recommends getting higher level approval for the proposed scope.

Structures Management does not recommend the project scope.

Structures Management approves the project scope with modifications.

FRP to make the structural repair.

7/14/16

Public Involvement

- Scoping Report
- Factsheet
- Project Website
- [VTransparency](#)
- E-mail
- [Local Community Forums](#)
- Local Elected Officials
- Make phone calls

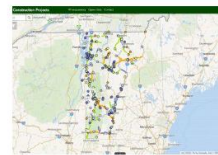


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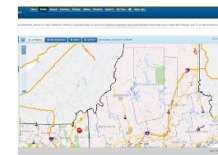
type a keyword to filter cards

Projects Map



What projects are underway or planned? View a map of

Road Conditions - 511



What are the road conditions like? View a map of current

Plow Finder



Want to know when a plow coming your way? Track

LOCAL CONCERNS MEETING



FOR IMMEDIATE RELEASE September 30, 2016

Bolton, VT – A Local Concerns Meeting for the project listed below will be held on Tuesday, October 25th, 2016 beginning at 6:30 PM at the Smilie School, located at 2712 Theodore Roosevelt Highway. The meeting will be held by the Vermont Agency of Transportation (VTrans) and the Town of Bolton.

Rehabilitation project:

- Bolton IM 089-2(45) – I89, Bridge #51-3 over Town Highway 4 (Notch Road)

The preferred alternative includes repairing the culvert with traffic maintained on an offsite detour during a short term weekend road closure.

The intent of the meeting is to provide an overview of this bridge project to Town Officials, local residents and businesses, emergency services and other interested parties. There will be a review of the existing site conditions, proposed work, detour, and overall schedule followed by a question and answer period. Representatives from both VTrans and the Town of Bolton will be available at the meeting to address public concerns about the projects.

A copy of the Scoping Report for this project may be seen at the office of the Town Clerk in Bolton, or at the Structures Section of the Agency of Transportation's office in Montpelier, Vermont. An electronic copy is also available online at:
<https://outside.vermont.gov/agency/vtrans/external/Projects/Structures/13a090>



Bolton TH 4 Bridge 51-3

Looking west

Bolton IM 089-2(45)

Project Location: Town of Bolton in Chittenden County on TH 4 below Interstate 89. The bridge is located approximately 4.5 miles south of the intersection of US Route 2 and Bridge 51 in the Richmond Village.

PROJECT MILESTONES

Permitting
Not Applicable
Final Design Complete
Winter 2017
Right-of-Way Complete
Not Applicable
Bid Advertisement
Fall 2019
Contract Award
Winter 2019
Target Construction Schedule
Summer 2020

The Bolton IM 089-2(45) Bridge 51-3 project will rehabilitate the existing bridge. The existing bridge structure is a four sided concrete box constructed in 1964. It is approximately 150-feet in length and 20-feet wide. The culvert is in fair condition however two large cracks have caused some concern.

VTrans evaluated alternatives for rehabilitation or replacement of Bridge 51-3 in an engineering study completed in July 2016 and revised in December 2016 after gathering additional information from a public meeting. The study assessed the proposed design criteria for the bridge and roadway alignment, right-of-way impacts, and environmental and cultural resources. Several alternatives were examined combined with several traffic maintenance options including a short term bridge closure, phased construction and a temporary bridge. The revised Scoping Report recommends rehabilitating the entire bridge structure, installing a sidewalk for pedestrians, and reducing the culvert to alternating one lane traffic in each direction. During construction traffic would be maintained using phased construction with a weekend road closure. Given the width of this structure traffic could not be maintained while work occurred along the center of the culvert.

Scoping Report

FOR

Bolton IM 089-2(45)

INTERSTATE 89, BRIDGE 51-3 OVER TOWN HIGHWAY 4

January 13, 2017



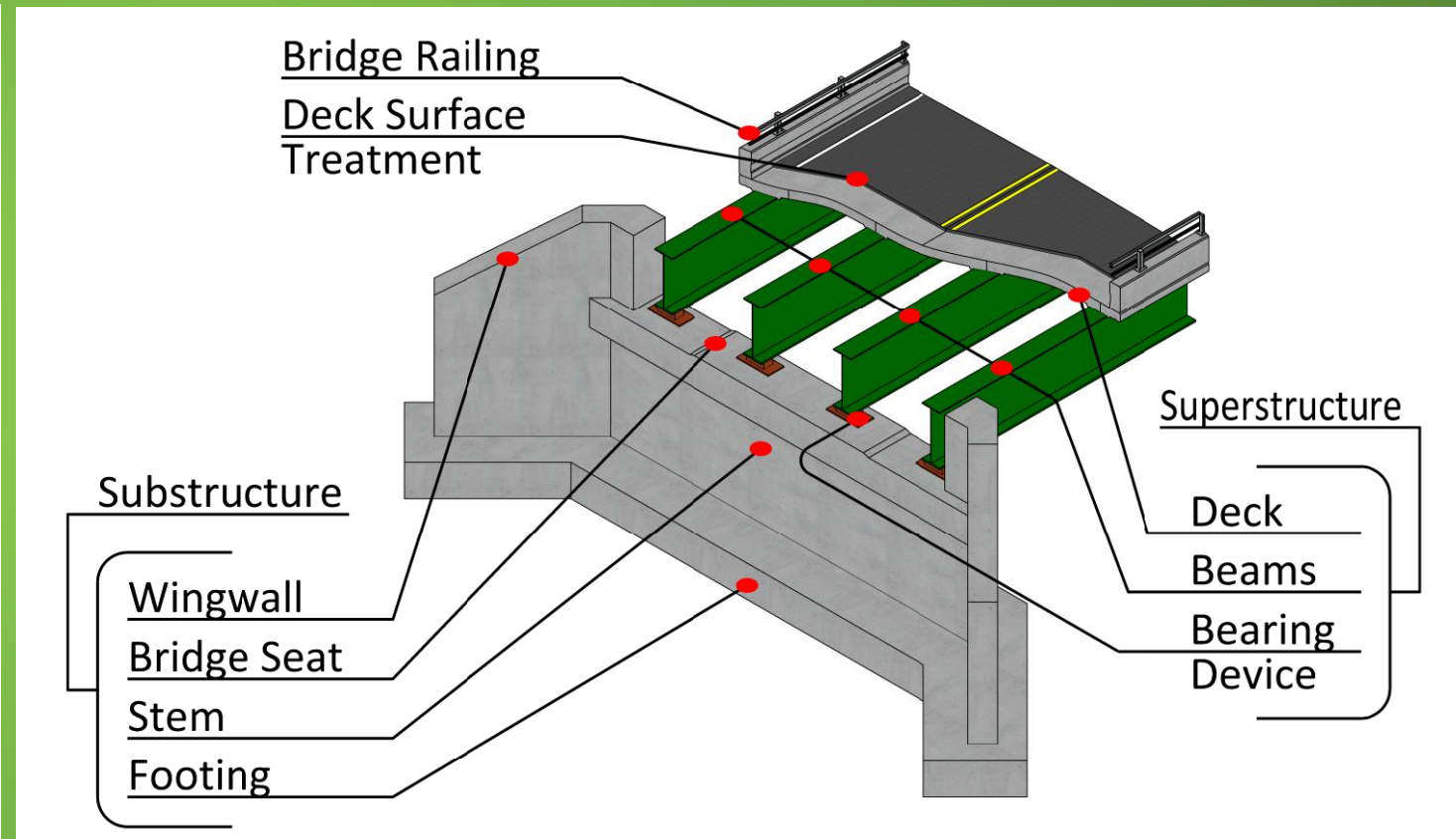
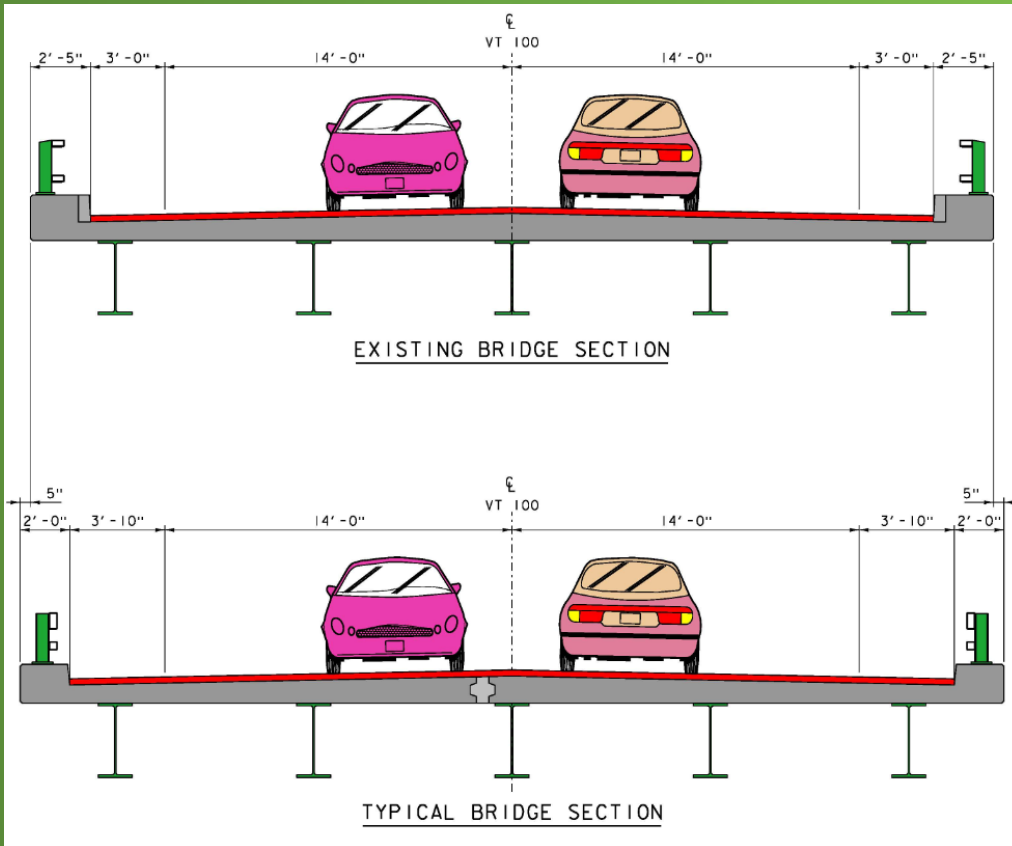


Public Informational Meeting

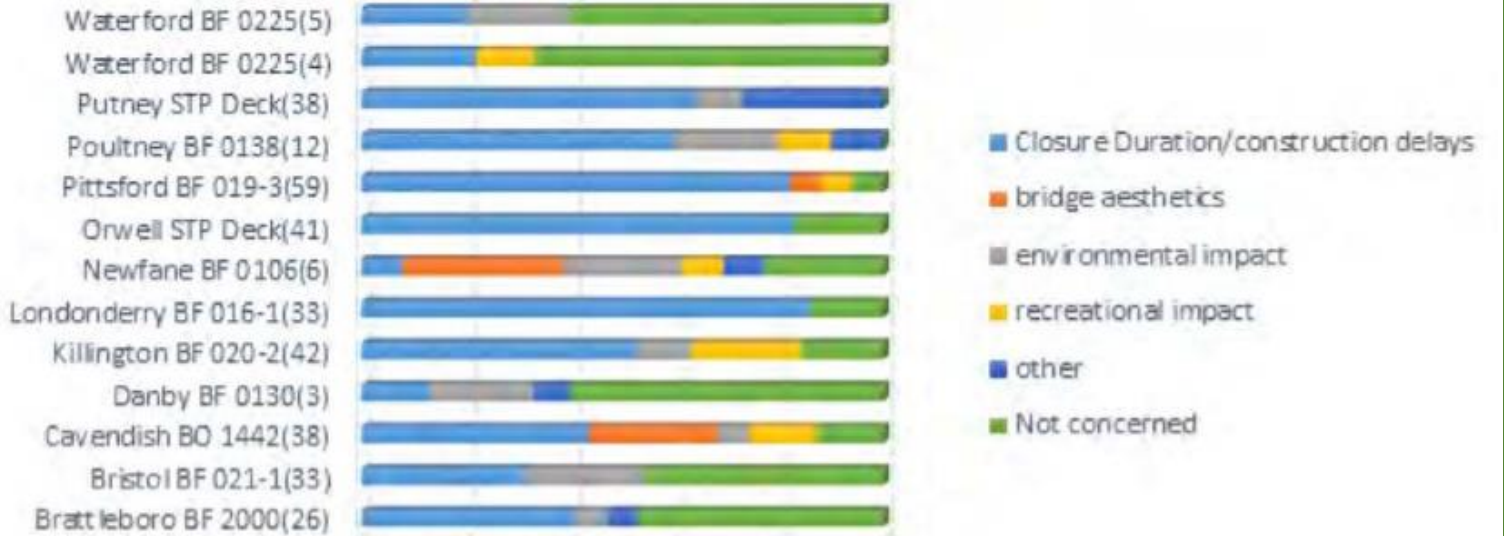
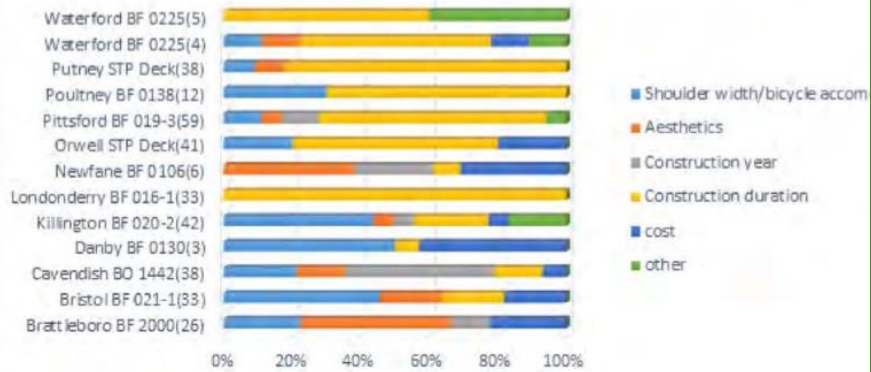
Meeting Kick off Questions

- Who are you representing? (Local official, business, resident, independent organization, emergency services, or other.)
- How frequently do you use this segment of infrastructure? (Daily, weekly, monthly, rarely, or never.)
- How often do you walk over this segment of infrastructure?
- How often do you bike over this segment of infrastructure?
- Why are you attending this meeting? I have a specific concern, general interest, I live in close proximity, or other.

Educate About the Project



What Design Aspect is the Most Important to You?



Information that Matters

Public Engagement

- Helps identify key issues early so they can be mitigated
- Helps develop projects that fit the community's needs
- Helps us to better serve our customers
- Lets effectively communicate what our customers can expect from us.
- It's a work in progress
 - Engaging the Public Guidebook created in 2017
 - Project Definition Process Guidebook created in 2017

Engaging the Public

OUTREACH GUIDELINES FOR PROJECTS, PLANS, AND OTHER AGENCY ACTIVITIES



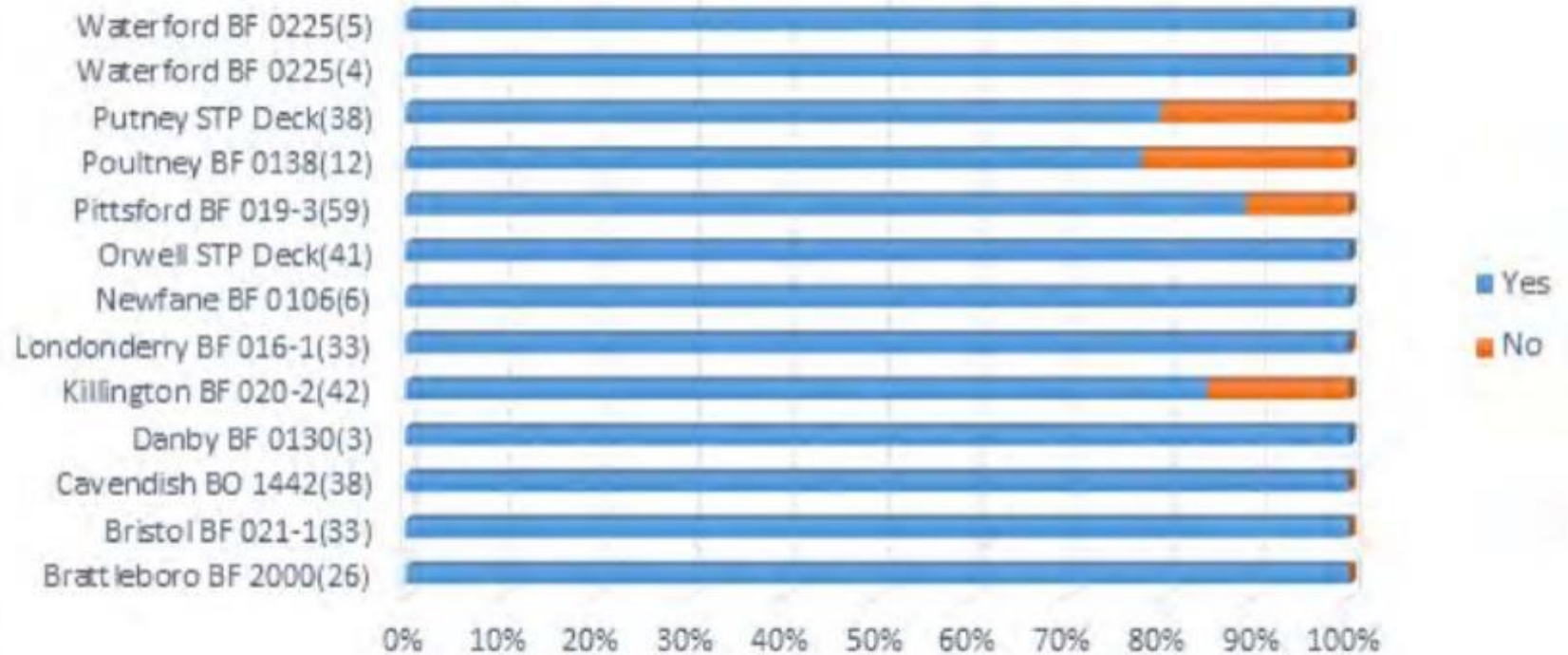
Project Definition Process Guidebook for Highway Division Projects

Vermont Agency of Transportation – Highway Division
April 2017



Does it work?

Are You Satisfied With the Proposed Scope of Work





06.13.2013



06.13.2013

So what makes us different?

Have you heard of Simon Sinek?
Its not what we communicate its how we
communicate.



<http://vtrans.vermont.gov/vtransparency>