





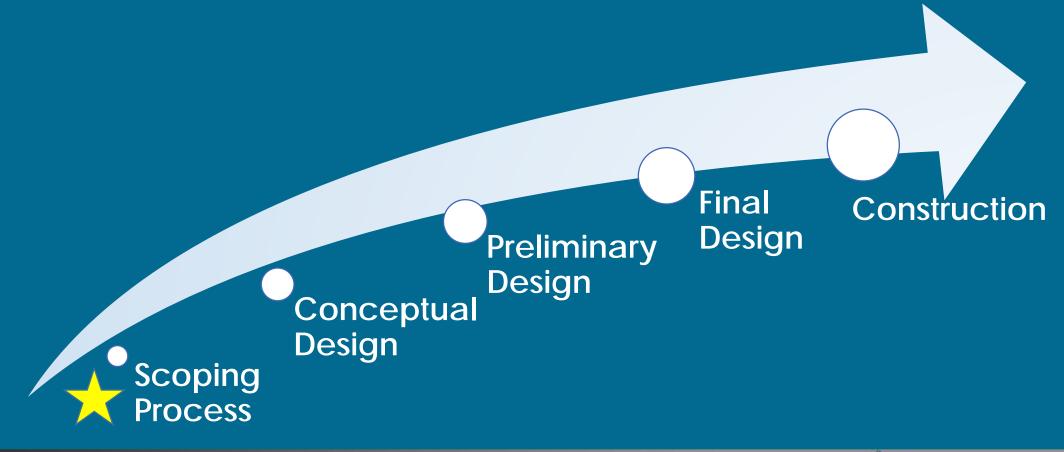
Agenda:

- 1. Welcome/Introductions
- 2. Elements of Scoping Process
- 3. Background Study Area, Purpose & Need & Previous Studies
- 4. Advisory Committee Members & Roles
- 5. Existing Conditions Bridge Condition & Resource Impacts
- 6. Bridge Alternatives
- 7. Public Comments
- 8. What's Next?
- 9. Final Questions, Comments

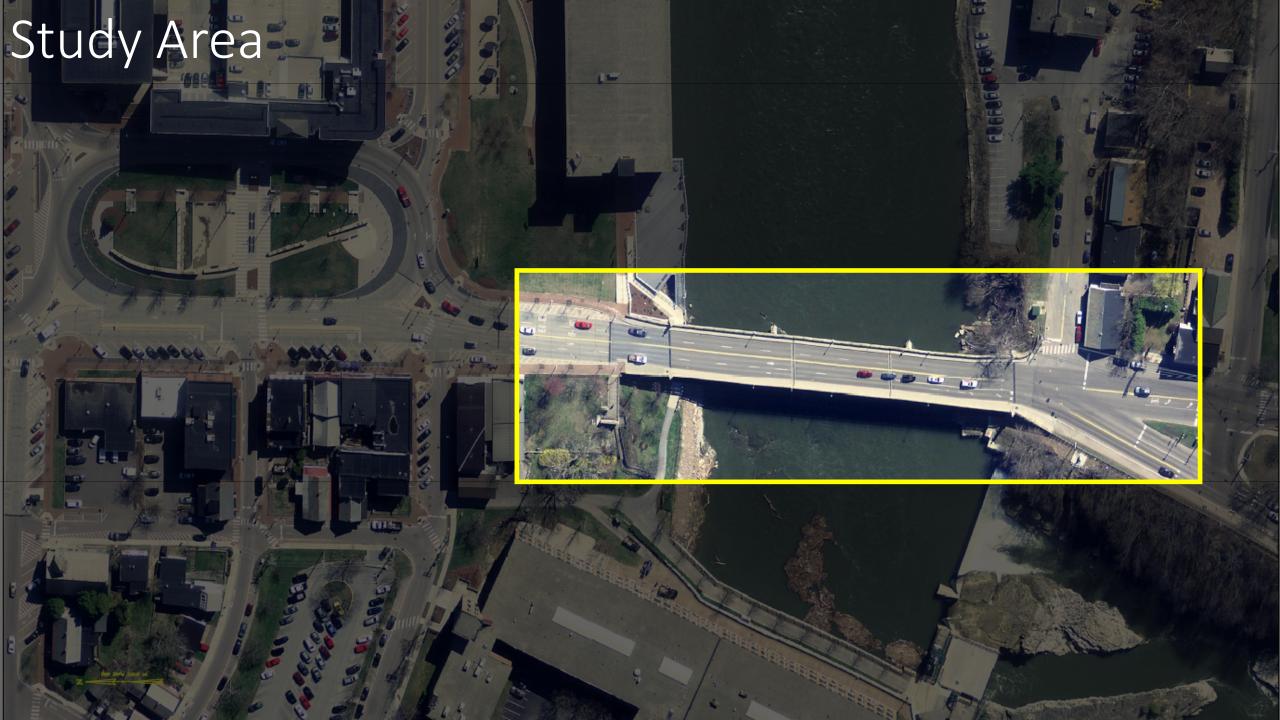




Bridge Replacement Development Phases









Purpose & Need Statement

Purpose

DefineObjective of Evaluation

Need

DefineGuidelines forEvaluation

Evaluation Guidelines

Develop
 Preferred
 Alternative



Purpose:

Improve Safety

Maintain/Improve Structural Integrity

Address Bridge Deficiencies

Improve Bike/Ped Travel

Maintain/Improve Resource Impacts



Need:

Provide Designated Lanes for Bicyclists

Maintain 2 Lanes of Traffic in Each Direction

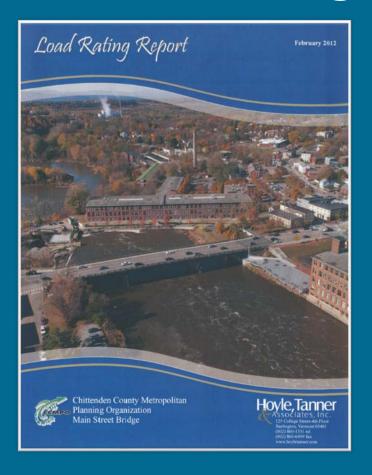
Improve Pedestrian Safety

Address Conditional Deficiencies of Bridge





Bridge Alternatives Development





Final Corridor Study

June 2014







Winooski River Bicycle & Pedestrian Bridge Initial Feasibility Study









April 2017

Prepared for:



Chittenden County Regional Planning Commission

Prepared

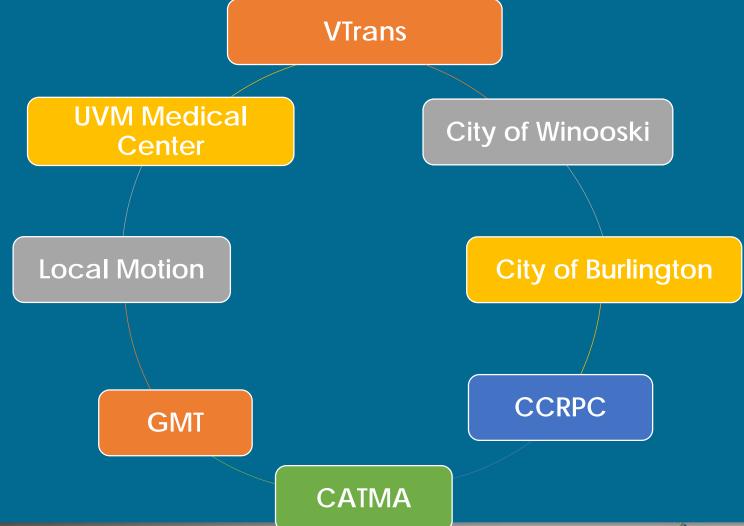


28 North Main Street Randolph, Vermont 05060 (802) 728-3376





Advisory Committee







Scoping Report and Draft Decision Matrix

US Routes 2	& 7 Over Winooski River	No Build	Alt. 1 – Bridge Rehabilitation	Alt 2 – Superstructure Replacement	Alt 3 – Superstructure Replacement w/ Substructure Widening	Alt 4 – Full Bridge Replacement/ABC
COST	Bridge Cost					
	Removal of Structure					
	Roadway					
	Maintenance of Traffic					
	Construction Costs					
	Construction Engineering + Contingencies					
	Total Construction Costs w/ CEC					
	Preliminary Engineering					
	Right of Way					
	Total Project Costs					
SCHEDULING	Project Development Duration					
	Construction Duration					
	Closure Duration (If Applicable)					
ENGINEERING	Typical Section - Roadway (feet)					
	Typical Section - Bridge (feet)					
	Geometric Design Criteria					
	Traffic Safety					
	Alignment Change					
	Bicycle Access					
	Hydraulic Performance					
	Pedestrian Access					
	Utility					
OTHER	ROW Acquisition					
	Road Closure					
	Design Life					
	Life-Cycle Cost					
PERMITS	Environmental Impacts					
LEKMI12	Permits Required	•				





Decision Matrix



Traffic

 Widen Existing Lane Widths to Meet Current Design Guidelines?



Temporary Traffic Impacts

- Phased Construction Required?
- Duration of Lane Reduction?



Good



- Improvement to Current Widths?
- Safety Enhancement?



- Resource Impacts

 Impacts to Riverbed?
 Impacts to Adjacent I
 - Impacts to Adjacent Parcels?



Long Term Structure
Durability

- Increase Structure Life?
- Improvements Needed in Future?



Cost

What is Total Estimated Cost?



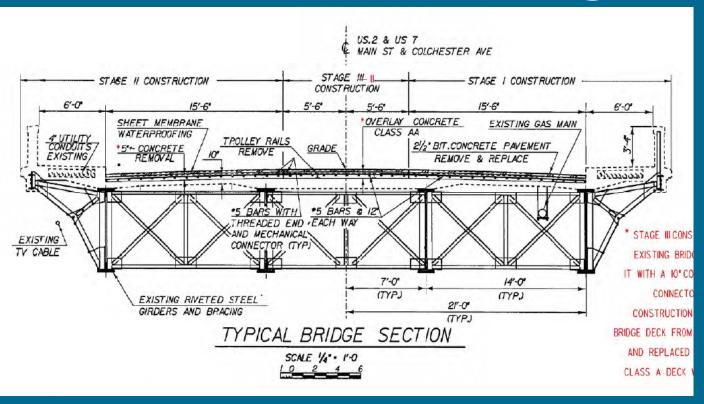
Poor

Fair





Existing Bridge





- Originally Constructed in 1928
- Rehabilitations Performed in 1961, 1975 & 1997





Resource Summary – Existing Bridge

		Impacts	
Consideration	Small	Moderate	Large
Wetlands and Surface Waters			
• Floodplains			
 Hazardous Materials 			
 Habitat Connectivity 			
• Threatened/Endangered Species			
 Conservation/Rec Lands 			
Historical/Archaeological Sites			

McFarland Johnson



Existing Conditions - Decision Matrix:

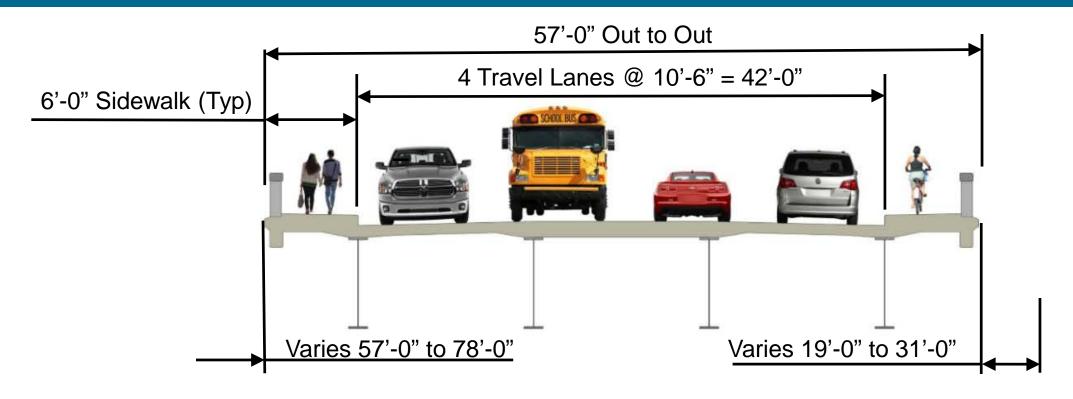
	Consideration	Good	Fair	Poor
	Traffic Layout			
4	Temporary Traffic Impacts		Not Applicable	
	Pedestrian/Bike Access			
*	Resource Impacts			
X	Long Term Structure Durability			
•••	Cost		Not Applicable	



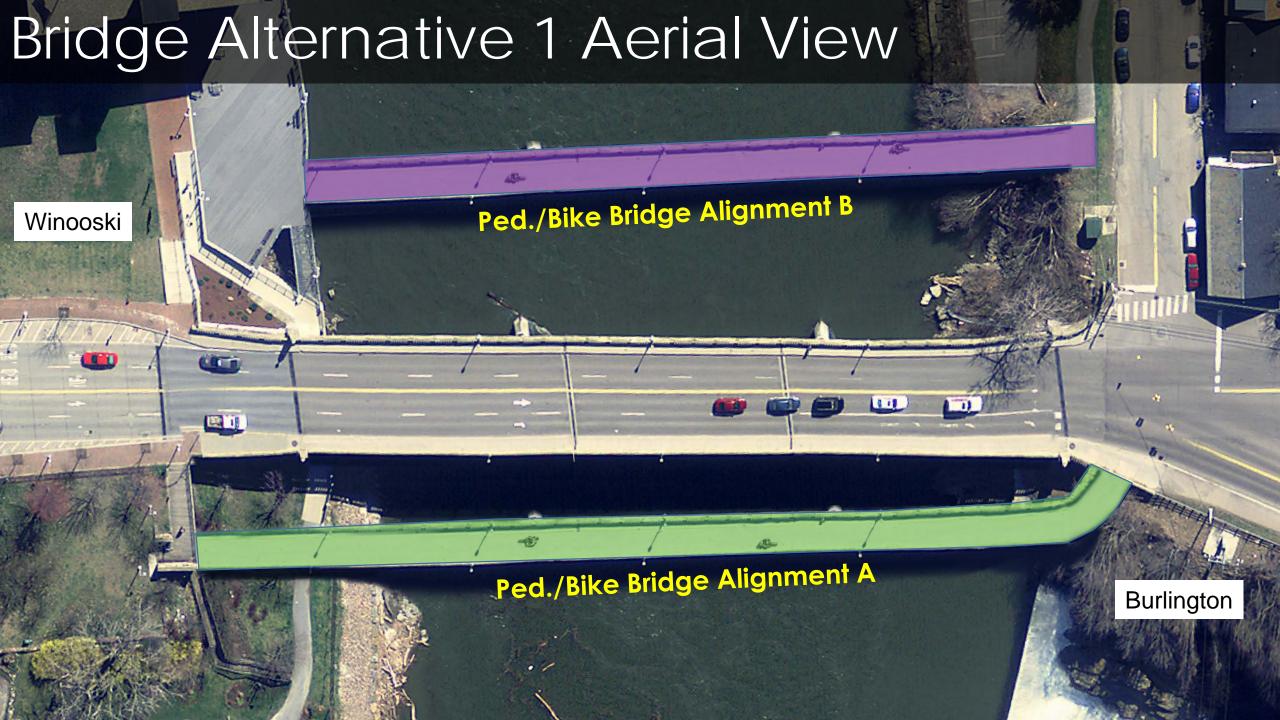


Bridge Alternative 1

Superstructure Rehabilitation w/ Ped./Bike Bridge

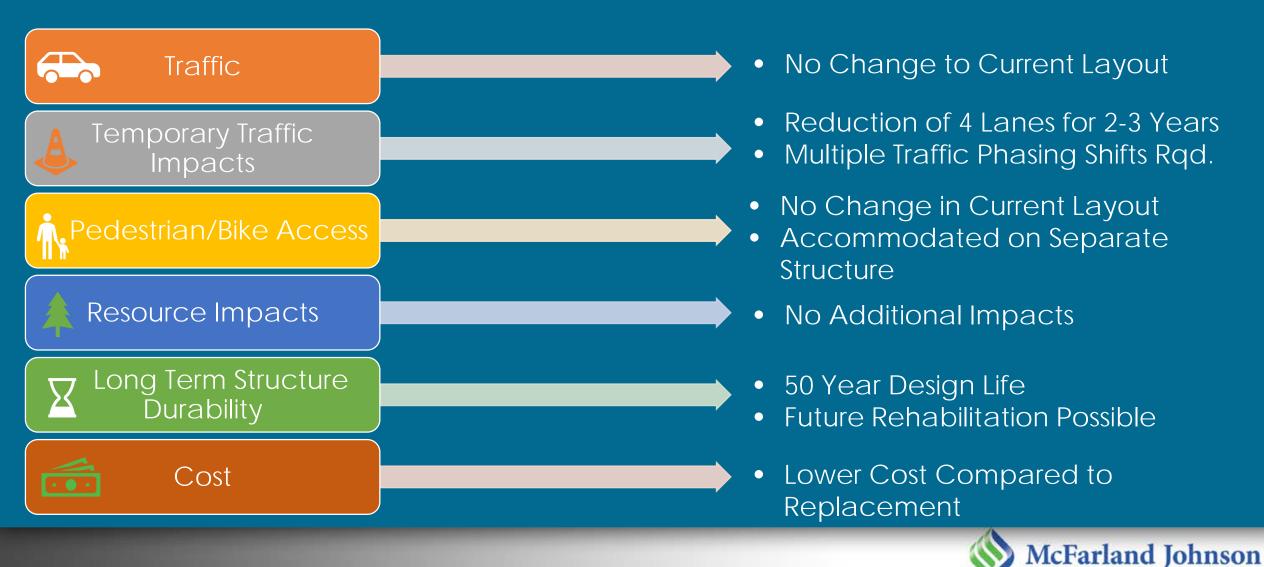








Alternative 1 - Decision Matrix





Alternative 1 – Decision Matrix:

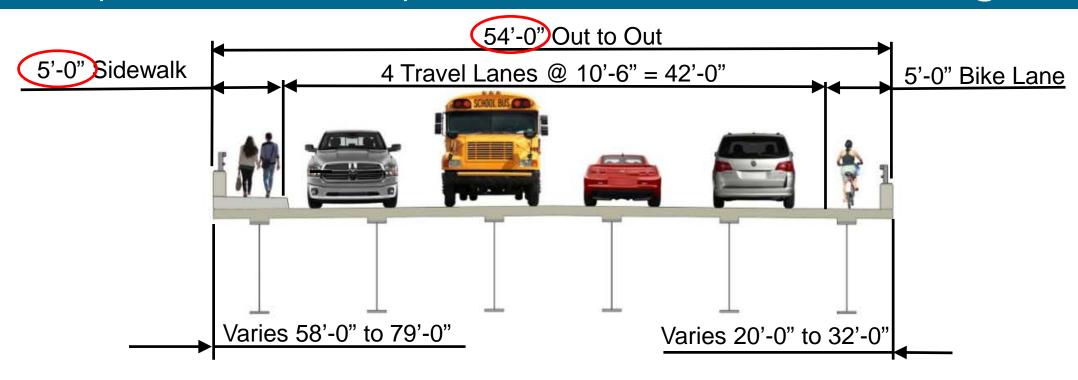
	Consideration	Good	Fair	Poor
	Final Traffic Layout			
A	Temporary Traffic Impacts			
1	Pedestrian/Bike Access			
*	Resource Impacts			
X	Long Term Structure Durability			
•••	Cost			



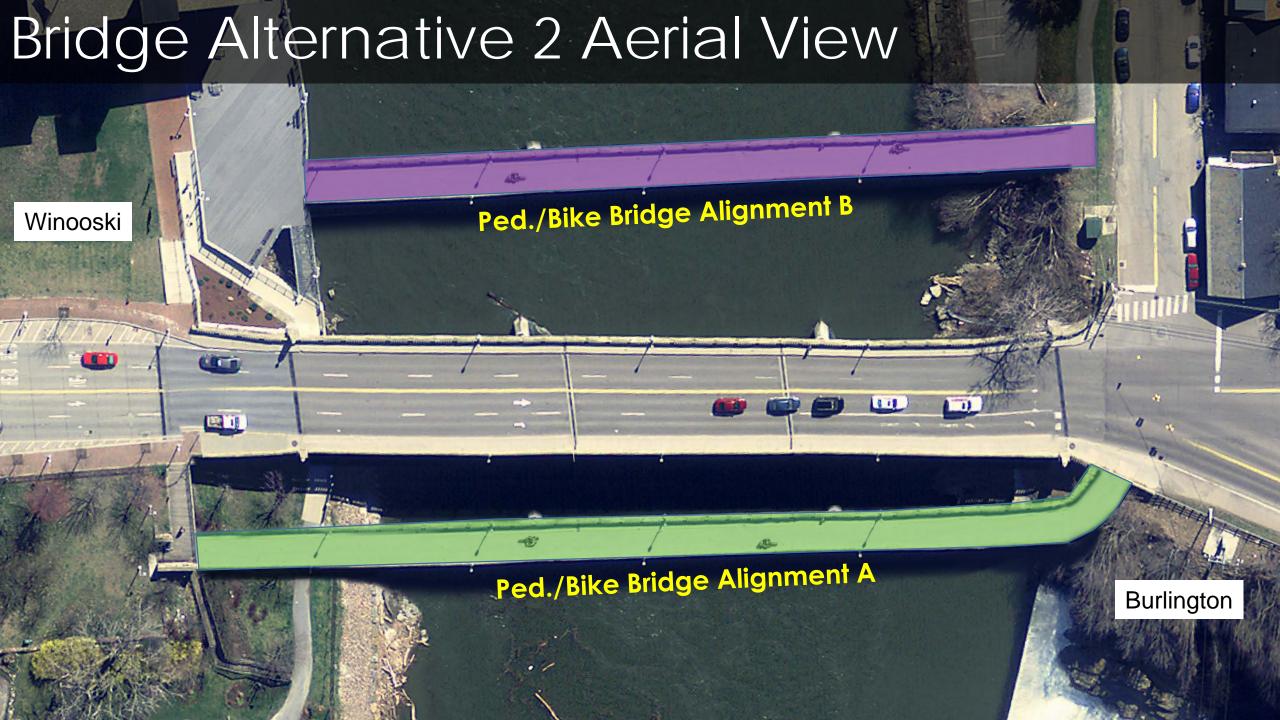


Bridge Alternative 2

Superstructure Replacement w/ Ped./Bike Bridge

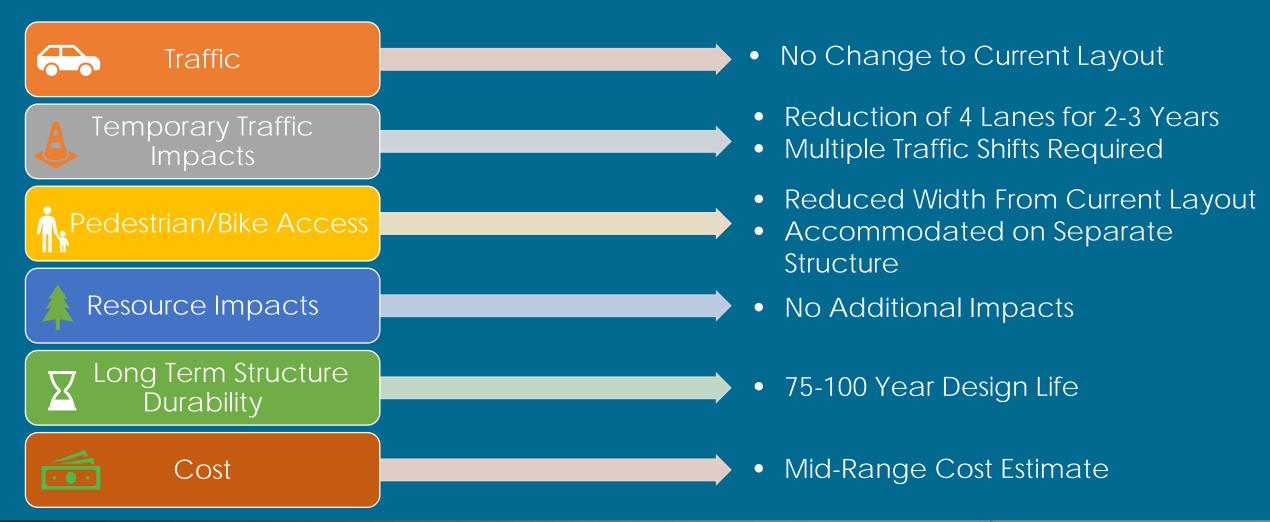








Alternative 2 - Decision Matrix







Alternative 2 - Decision Matrix:

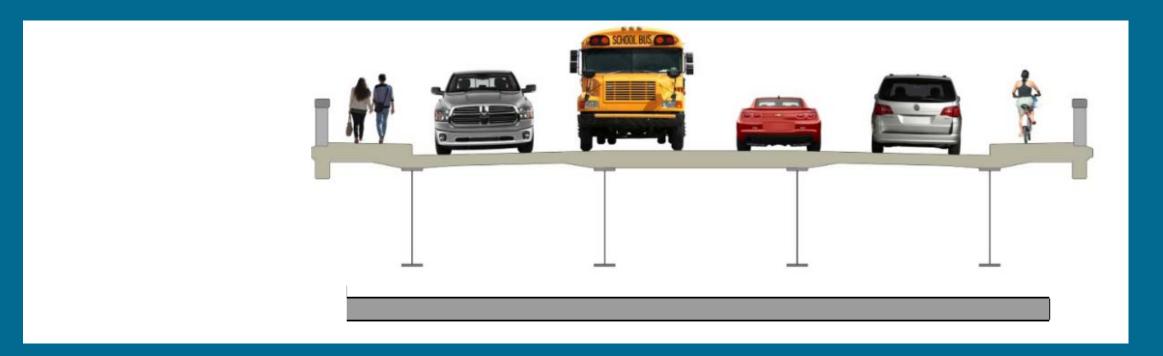
Consideration	Good	Fair	Poor
Final Traffic Layout			
Temporary Traffic Impacts			
n Pedestrian/Bike Access		_	
Resource Impacts			
Z Long Term Structure Durability	/		
Cost			





Bridge Alternative 3: Phase 1

- Widen Pier and construct Ped./Bike Bridge on UPSTREAM Side of Bridge.
- Existing traffic conditions Maintained During Bike/Ped Bridge Construction.
- Move Utilities to Ped./Bike Bridge PRIOR to Full Bridge Replacement.

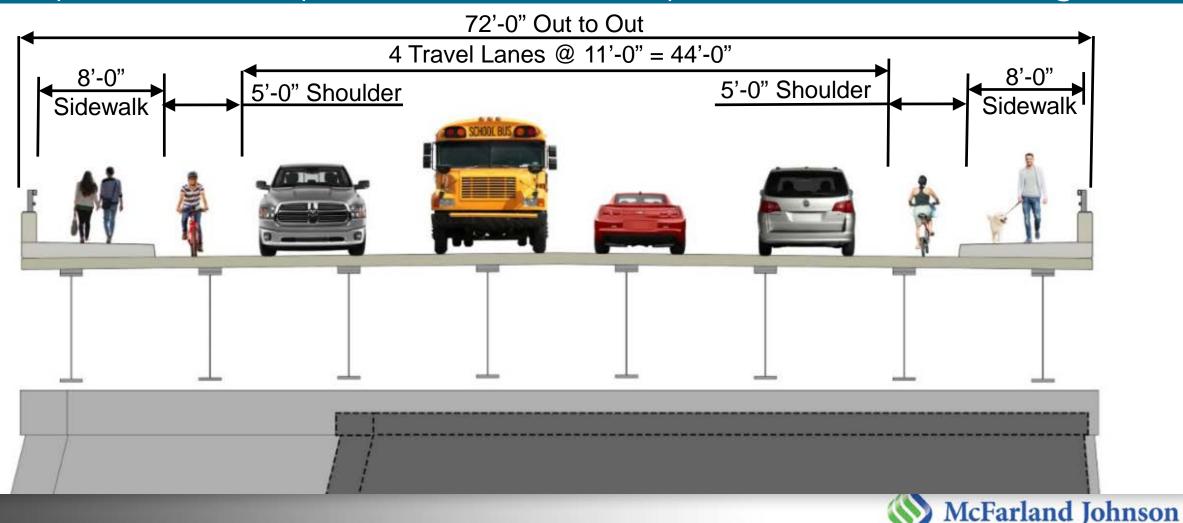


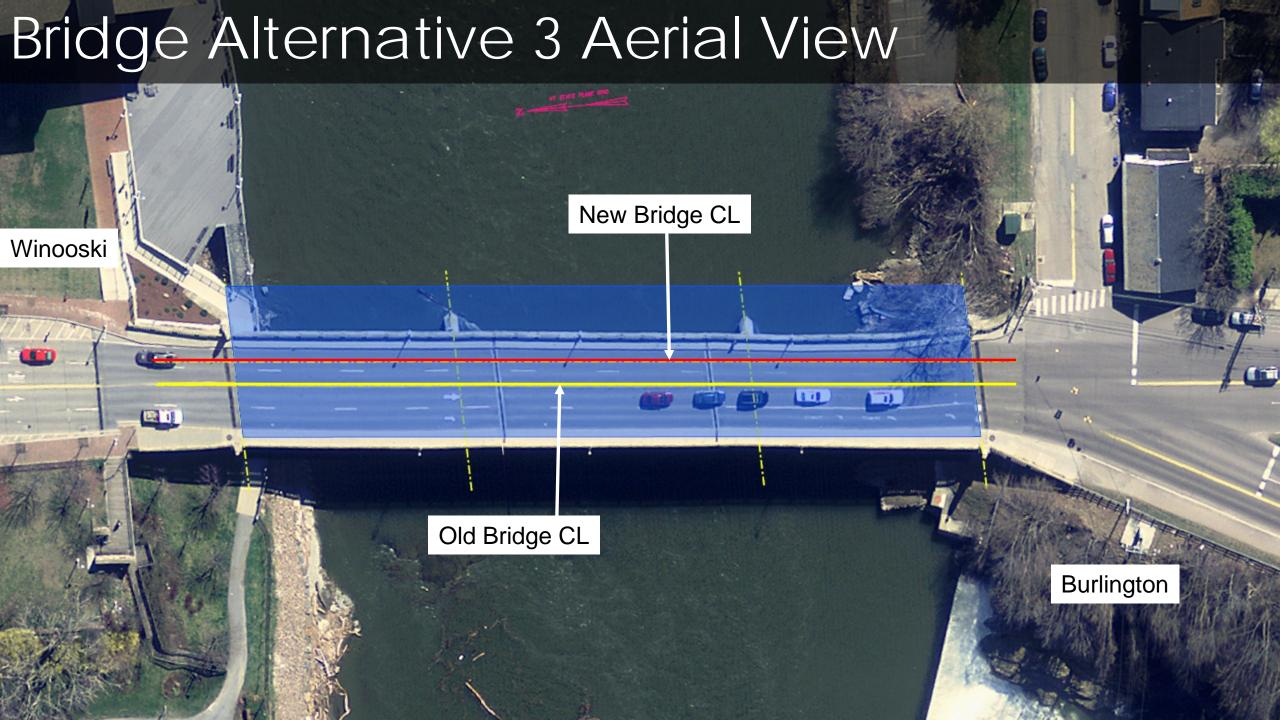


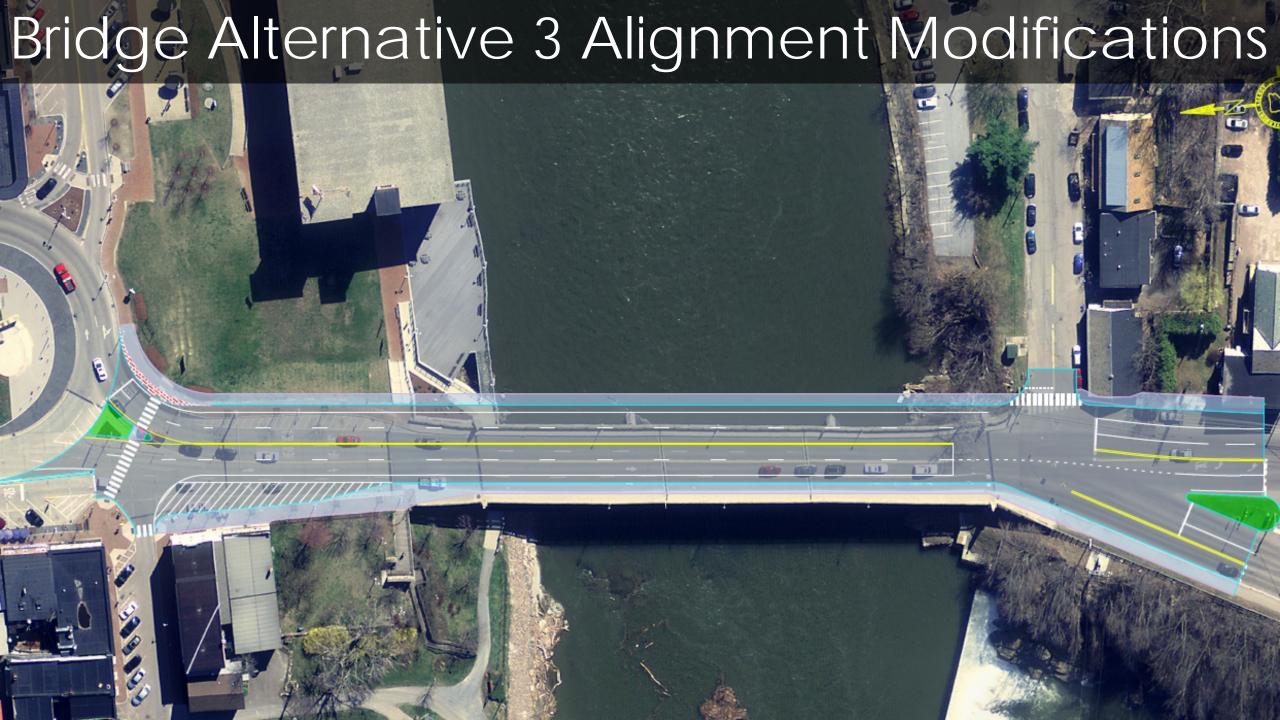


Bridge Alternative 3 - Phase 2

Superstructure Replacement w/ all Transportation Modes on Bridge

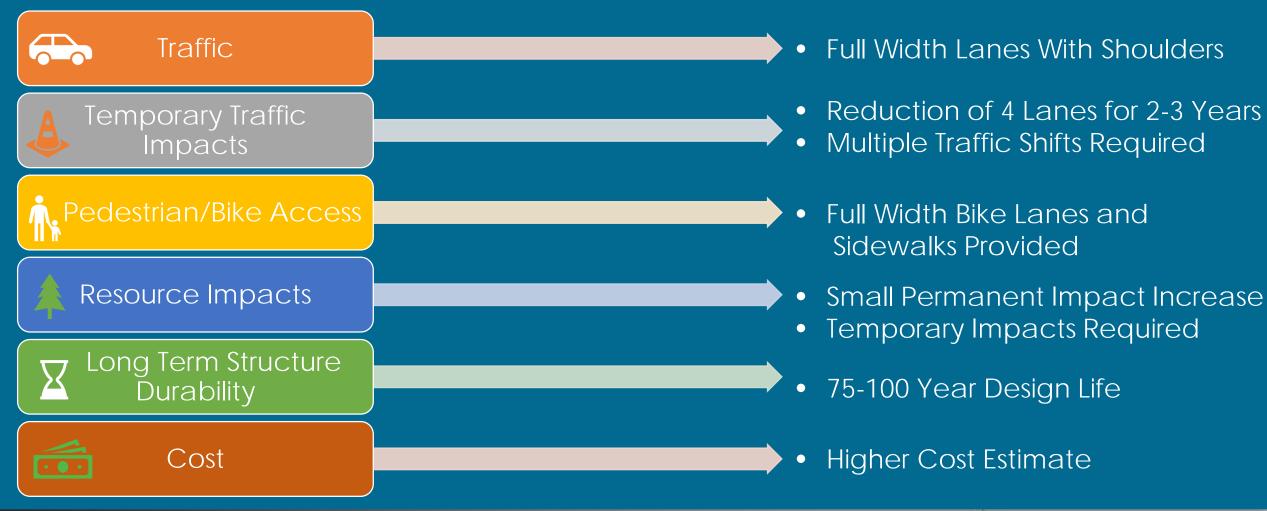








Alternative 3 - Decision Matrix







Alternative 3 - Decision Matrix:

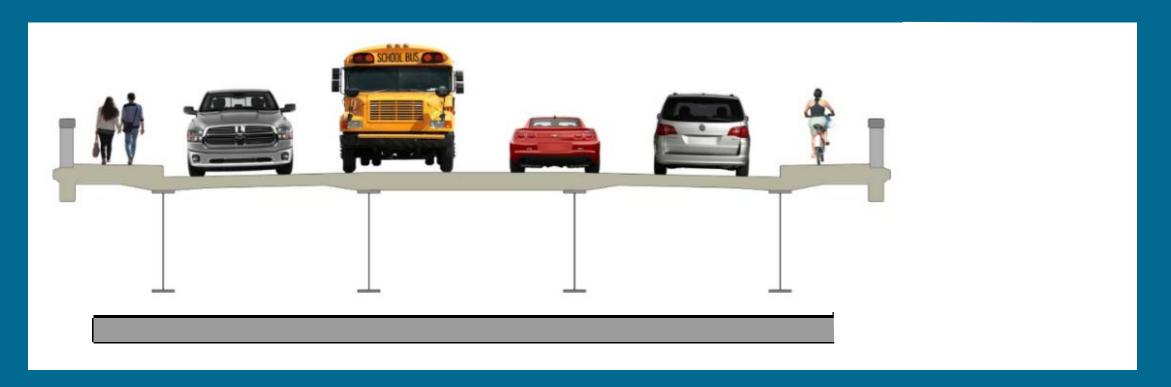
Consideration	Good	Fair	Poor
Final Traffic Layout			
Temporary Traffic Impacts			
Pedestrian/Bike Access			
Resource Impacts			
Z Long Term Structure Durability			
Cost			





Bridge Alternative 4: Phase 1

- Widen Pier and construct Ped./Bike Bridge on DOWNSTREAM side of Bridge.
- Existing traffic conditions Maintained During Bike/Ped Bridge Construction.
- Move Utilities to Ped./Bike Bridge PRIOR to Full Bridge Replacement.

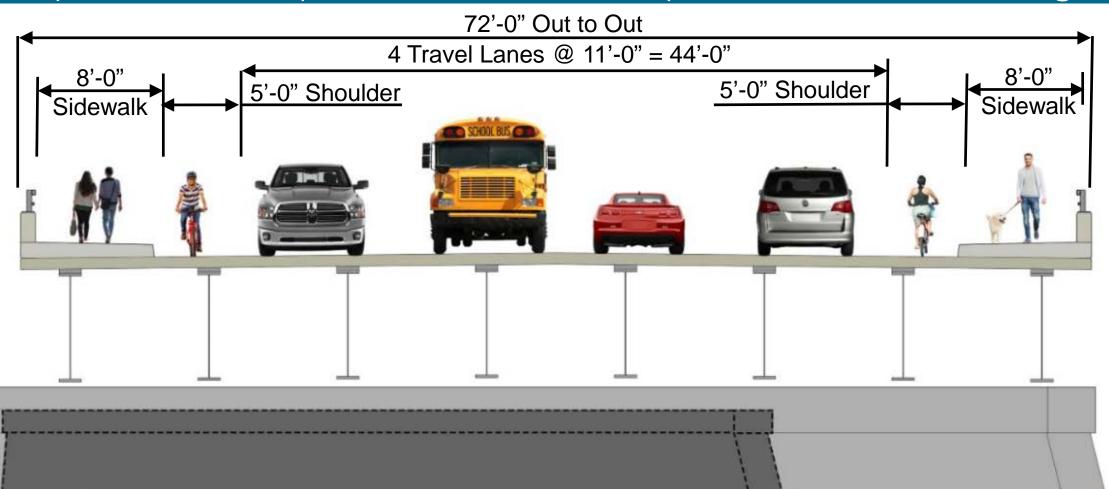






Bridge Alternative 4 – Phase 2

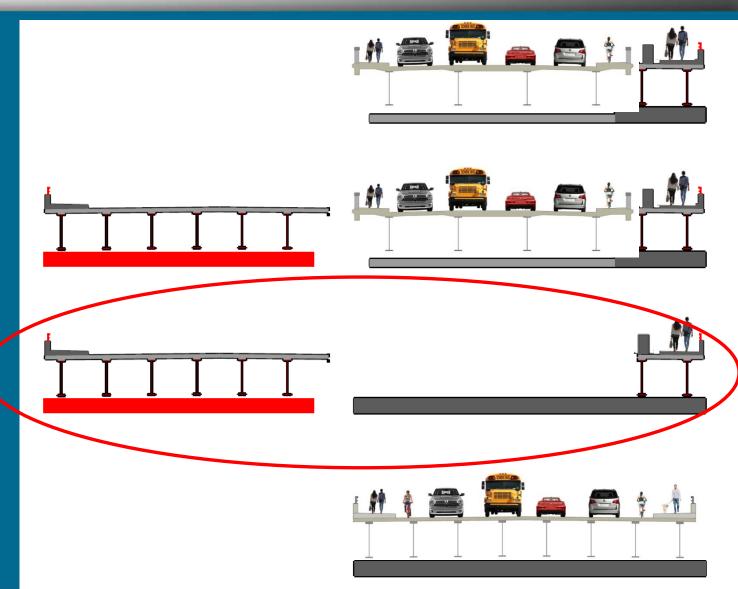
Superstructure Replacement w/ all Transportation Modes on Bridge





Bridge Construction Phasing: Accelerated Bridge Construction

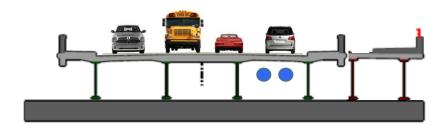
Bridge Closure Time Can Be Reduced to Weeks

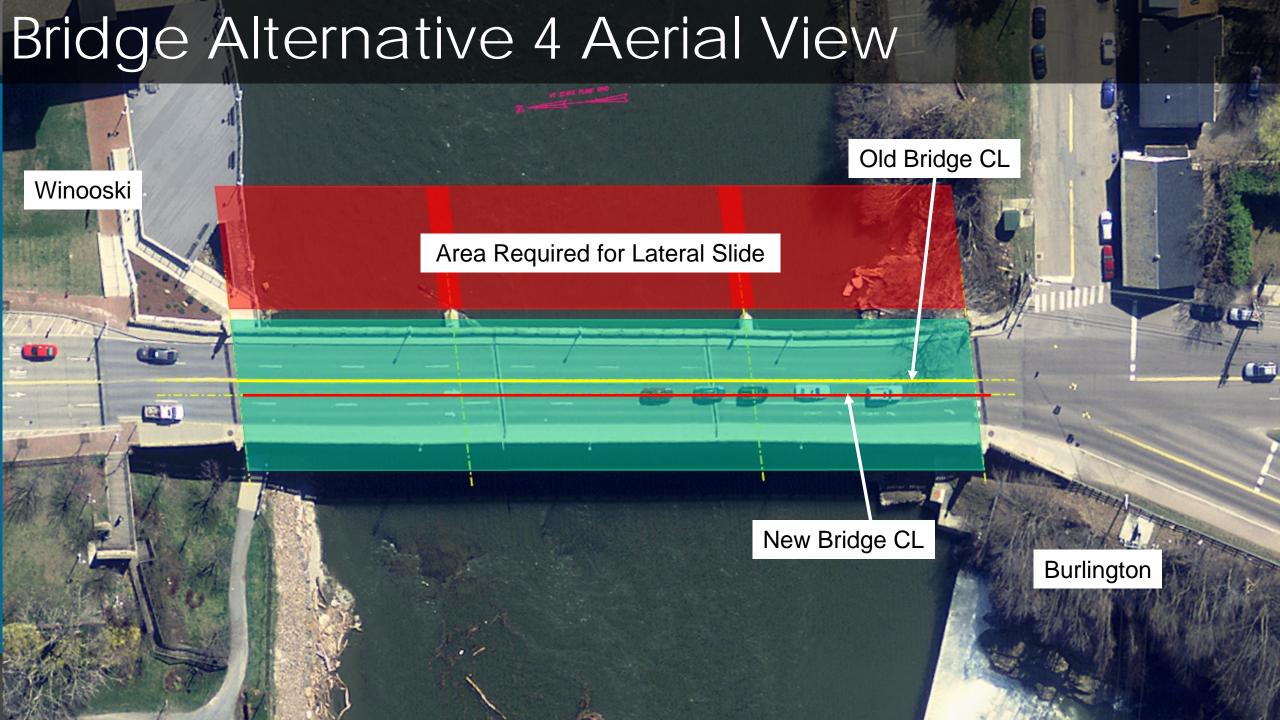






Bridge Construction Phasing: Accelerated Bridge Construction





Bridge Alternative 4 Alignment Modifications





Alternative 4 - Decision Matrix







Alternative 4 - Decision Matrix:

Consideration	Good	Fair	Poor
Final Traffic Layout			
Temporary Traffic Impacts			
Pedestrian/Bike Access			
Resource Impacts			
Z Long Term Structure Durability	y		
Cost			





Decision Matrix Summary:

	Consideration	Alt 1	Alt 2	Alt 3	Alt 4
	Final Traffic Layout				
4	Temporary Traffic Impacts				•
1	Pedestrian/Bike Access	•	•		
*	Resource Impacts			•	•
X	Long Term Structure Durability	•			
	Cost				



What's Next?

- Winooski City Council Meeting: June, 2018
- Burlington City Council Meeting: June, 2018
- Draft Scoping Report: July, 2018
- Final Scoping Report: August, 2018



Questions?



