

# Public Meeting #2

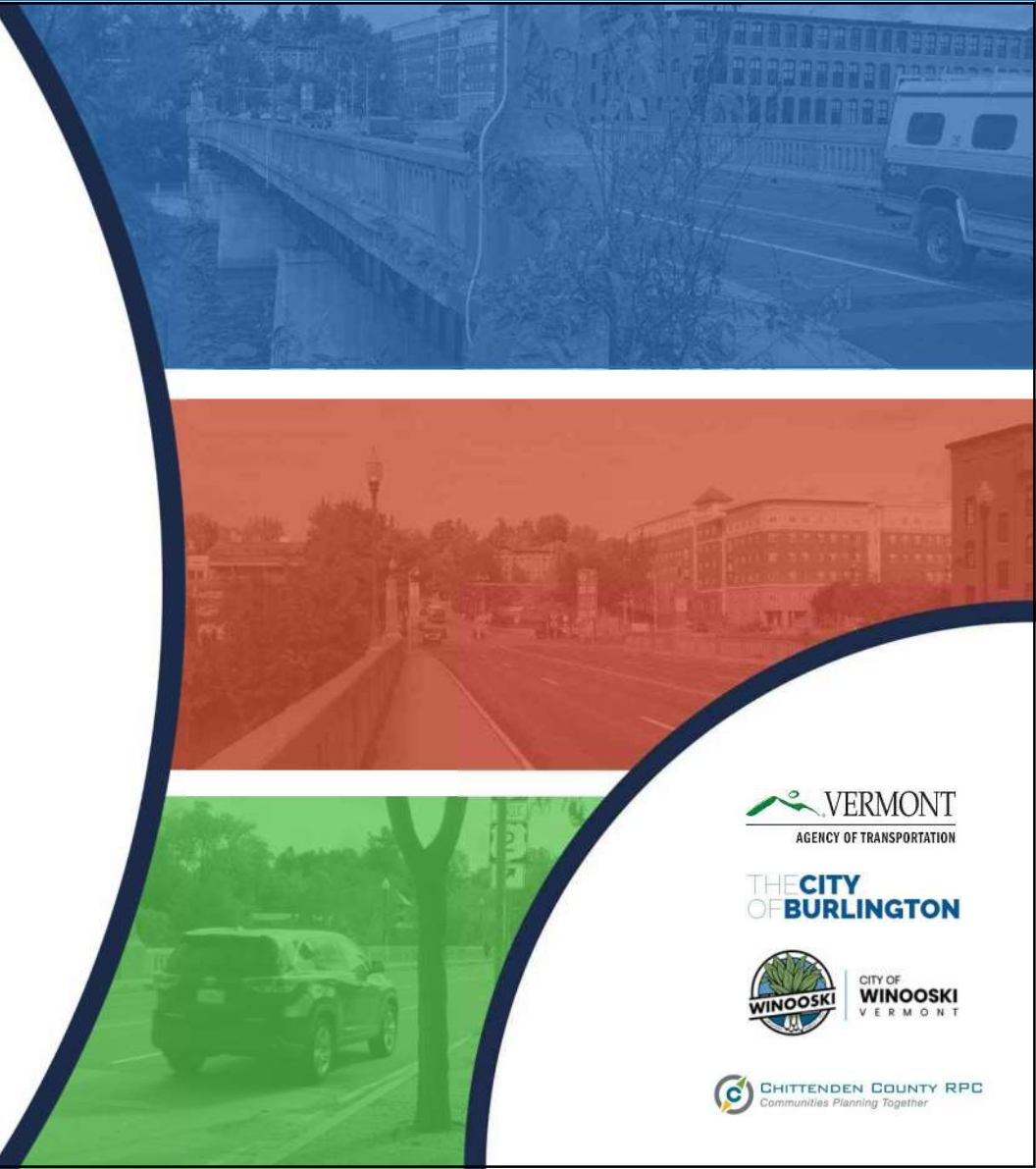
Burlington-Winooski BF RAIZ(2)  
Burlington STP 5000(29)

January 23, 2024

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**BURLINGTON  
WINOOSKI  
BRIDGE**



# Project Team

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## VTrans:

- **Bob Klinefelter** – Structures Project Manager
- **Carolyn Cota** – Structures Program Manager
- **Mike LaCroix** – Traffic Project Manager

## HNTB:

- **Josh Olund** – Structures Project Manager
- **Steve Spear** – Roadway Project Manager
- **Jennifer Zorn** – Public Outreach

## City of Burlington:

- **Laura Wheelock** – Sr. Public Works Engineer
- **Maddy Suender** – Associate Public Works Engineer

## City of Winooski:

- **Jon Rauscher** – Director of Public Works
- **Ryan Lambert** – City Engineer

## Chittenden County RPC:

- **Eleni Churchill** – Transportation Program Manager
- **Jason Charest** – Sr. Transportation Planning Engineer

# Presentation Logistics



Q&A to follow presentation



Make sure your volume is turned up; presenters cannot see or hear you.



Online questions will be shared through the “Virtual Podium”



We will alternate questions from in-person and online attendees

# Agenda

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## Project Recap

- Location
- Schedule
- Selected Alternative
- Maintenance of Traffic During Construction



## Current Efforts

- Outreach
- Alignments
- Intersection
- Bike/Ped Safety

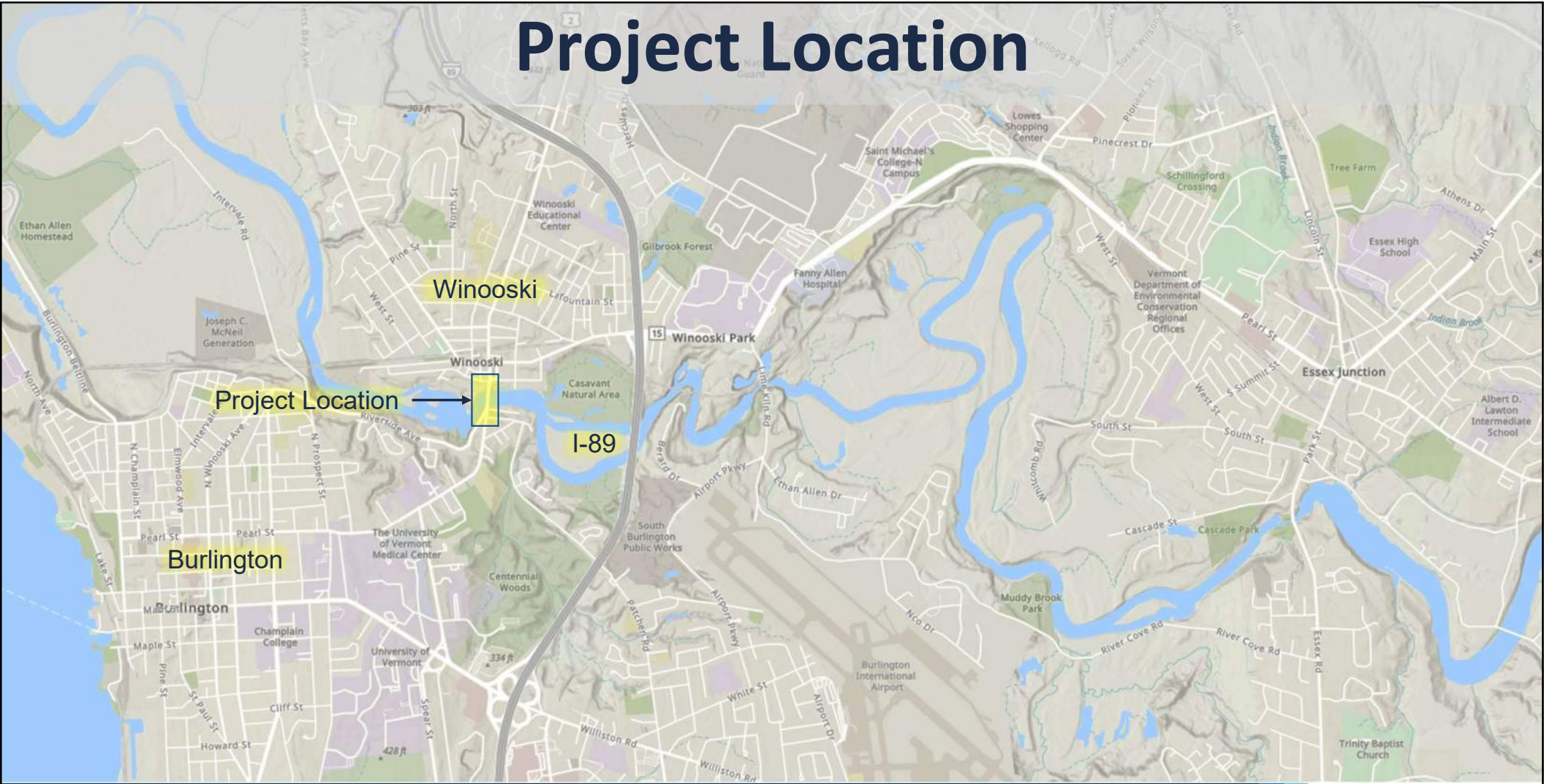


## Next Steps

# Project Recap



# Project Location



# Project Site



# Project Area





# Project Focal Points

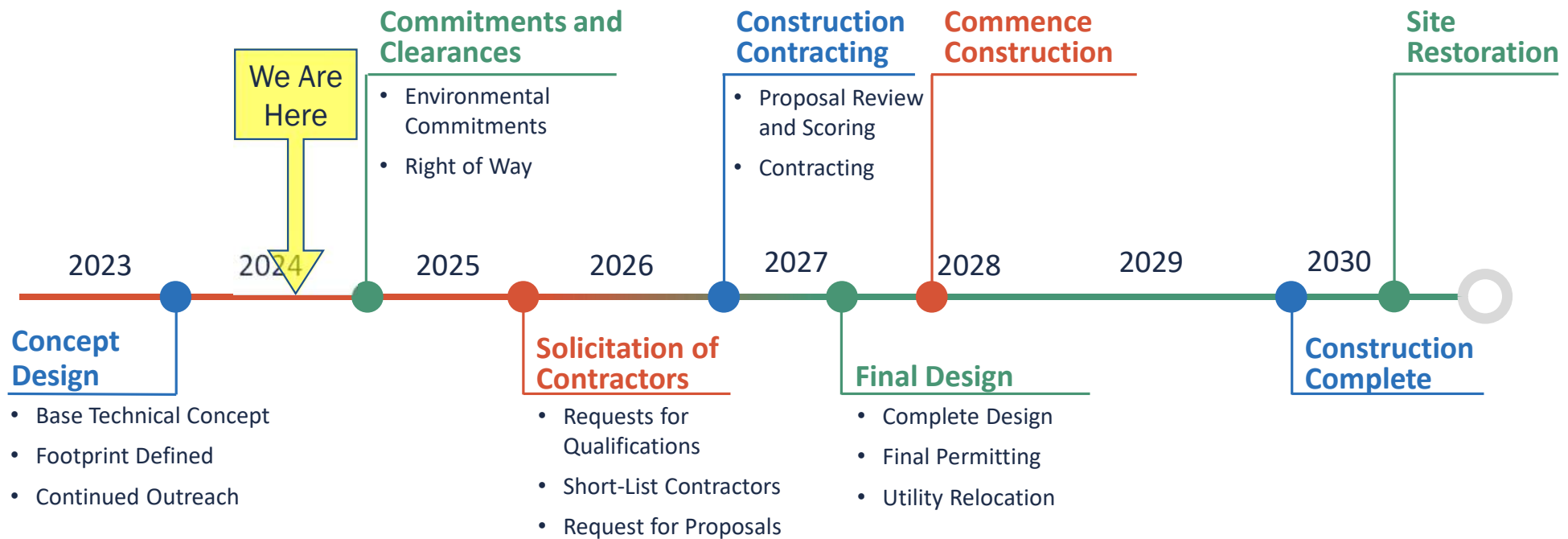
Intersection

Bridge

# Schedule – Past

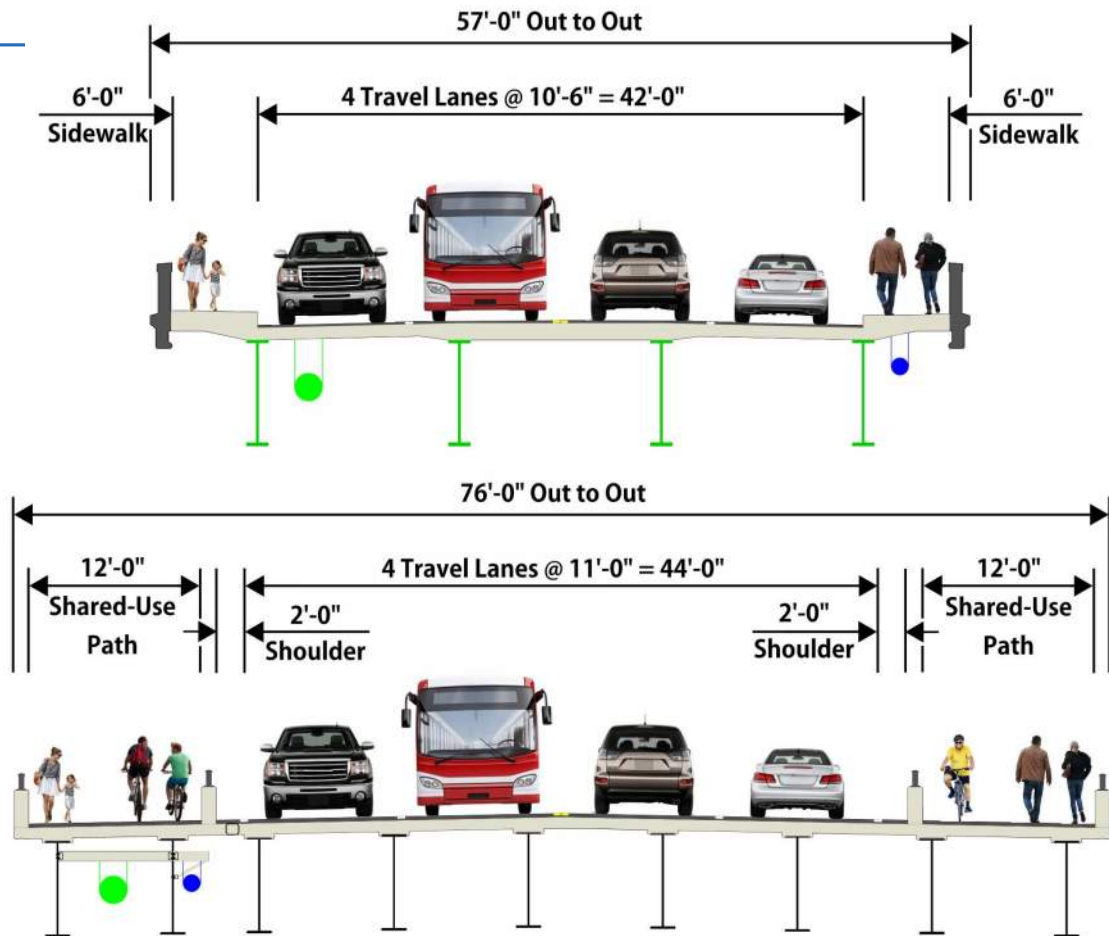


# Schedule – Current and Future



# Bridge Features

- Complete replacement
- Separated multi-use paths
- Maintains four travel lanes and adds shoulders



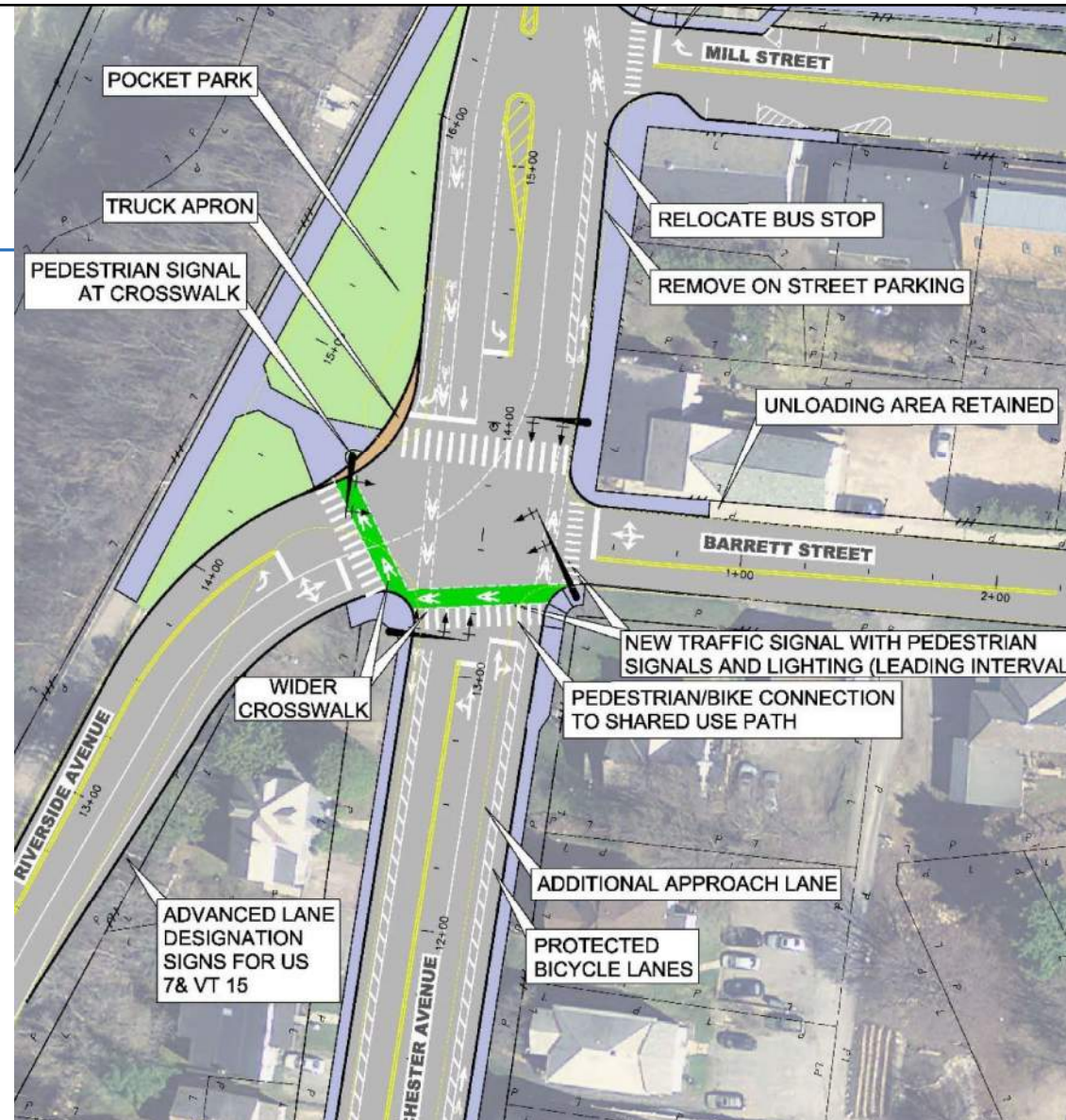
## Bridge Features – Lanes and Shoulders

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- High Traffic Volume
- City-Designated Truck Route
- Emergency Access in Both Directions
- Flexibility for Future Use (Transit Lanes, etc.)
- Future Maintenance Needs (Lane Closures, etc.)
- Acts as Emergency Crossing if I-89 or Lime Kiln is Closed
- Stormwater Drainage and Snow Storage
- 4 Lanes and 48-ft Total Width to Remain

# Intersection Features

- Consolidated intersection  
→ Improved safety and mobility
- Emphasis on Bike/Pedestrian improvements



# Maintenance of Traffic

- 25,000 Vehicles & 300 Bikes/Peds per day
- Need to balance:
  - Minimize impact to traveling public, and
  - Safe, sufficient construction site
- Utilize combination of:
  - Temporary lane closures
  - Temporary bridge closure



# Current Efforts





# Project Refinement

- Continued Outreach
- Alignment Evaluations
- Intersection Arrangement
- Bike/Ped Safety & Mobility



# Continued Outreach

- Public Meetings & Events
- Local Government Meetings
- Stakeholder Engagement
- Website and E-Blasts
- Surveys
- Property Owner Meetings
- Utility Coordination
- Environmental Coordination



Do you travel across the Burlington-Winooski Bridge?  
We want to hear from you!

Please help the Vermont Agency of Transportation better understand how you are using the Burlington-Winooski Bridge. Our Travel Survey will take less than 2 minutes to complete.

The survey can be accessed by clicking [here](#) or by scanning the QR Code.



# What We Have Heard

**Commerce** **Schedule** **Bike/Ped** **Aesthetics**  
**Traffic Calming** **Safety** **Flooding**  
**Adjacent Projects** **Costs** **Mobility** **Turn Movements**  
**Construction Congestion** **Emergency Response** **Parks and Greenspace** **E-Bikes**  
**Business Impacts** **Lighting** **Narrower Lanes** **Contaminated Soils**  
**Wider Lanes** **Historic Significance**

# Alignments



# Alignments

- Different:
  - Construction Methods
  - Traffic Control
  - Mobility

On-Alignment

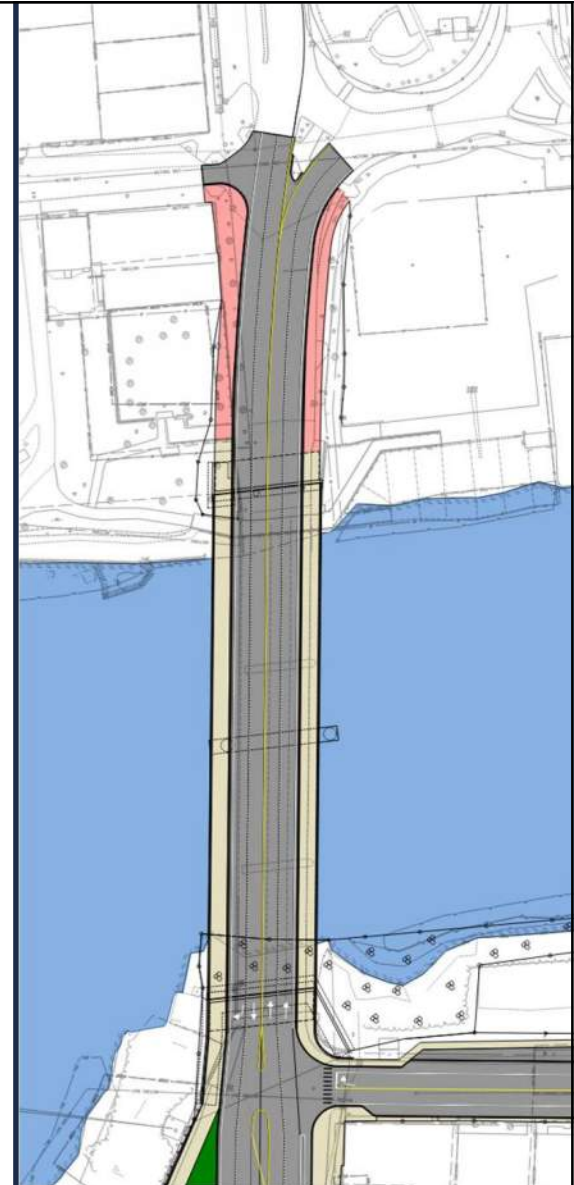
Shifted Alignment



# On-Alignment

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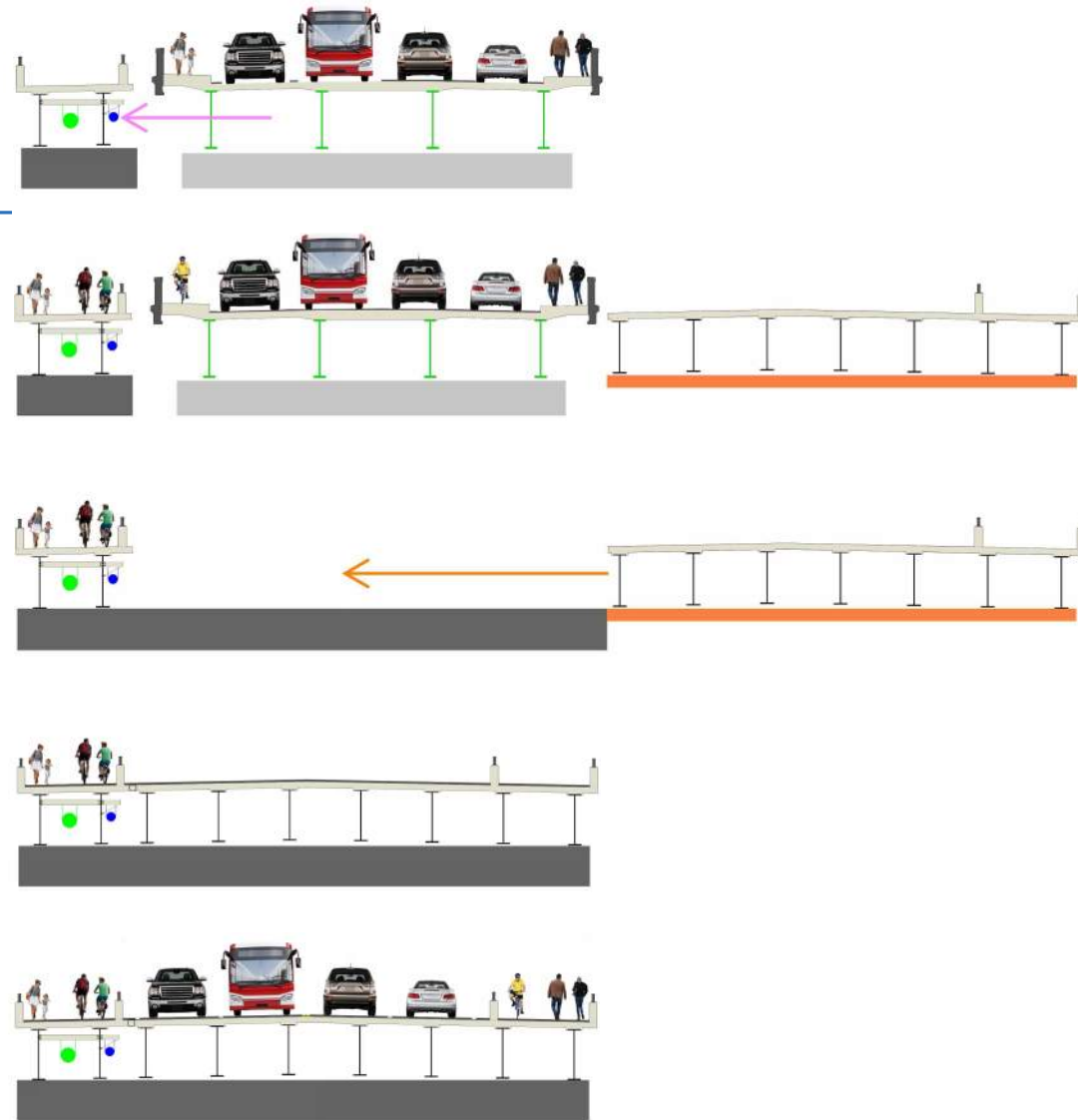
- Tangent (straight) roadway
- Vantage points from Colchester Ave and circulator unchanged
- Majority of widening towards the dam



# Construction Phasing

*(On-Alignment)*

- Build new bridge, next to existing bridge
- Transfer Pedestrians and utilities
- Temporary 4 to 6 week closure for demolition and sliding new bridge together



# Full Closure – Diversion Distribution

**Route 127**  
~14% - 17%  
(3,750 ADT)

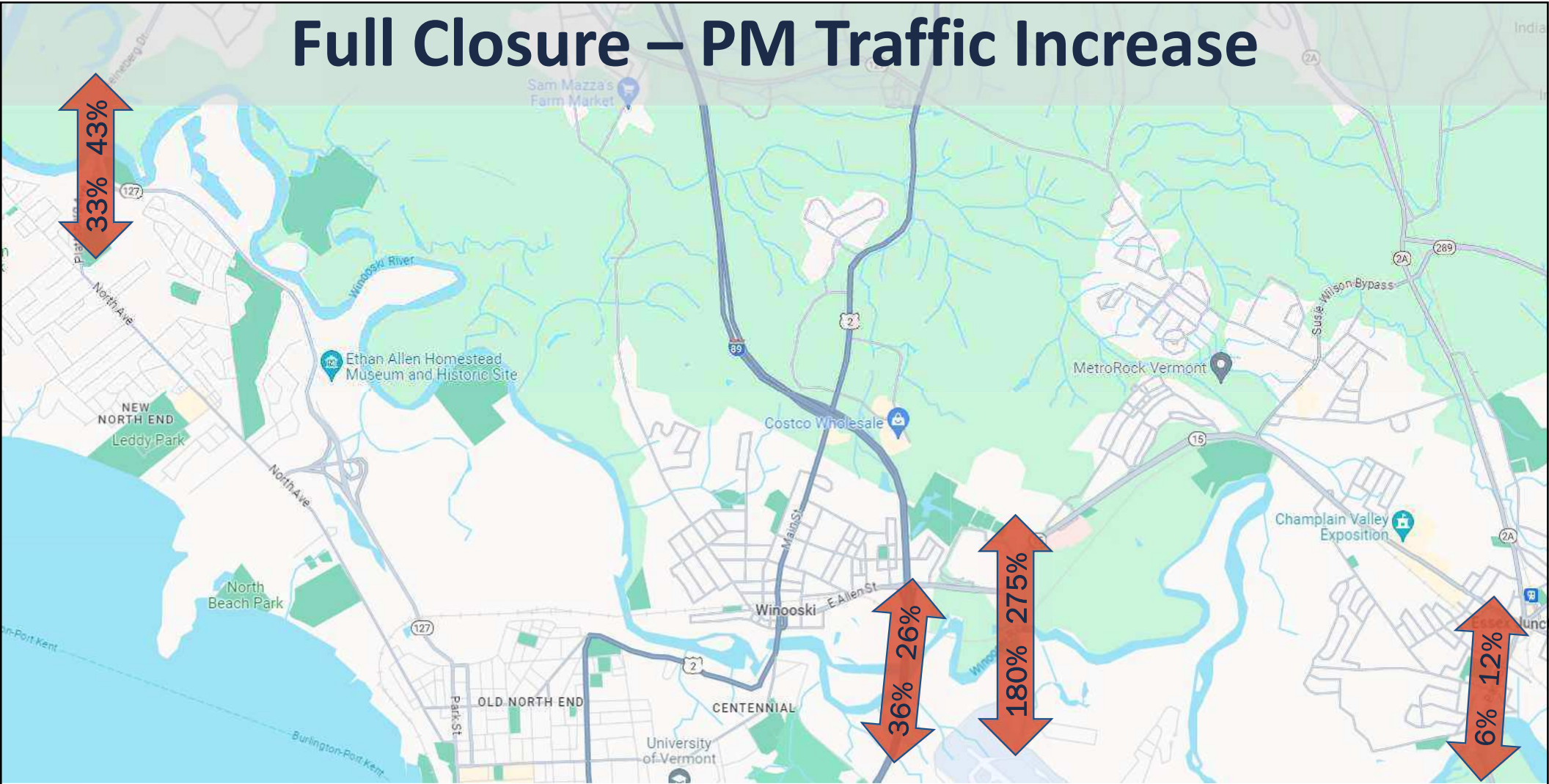
**Lime Kiln**  
~23% - 31%  
(6,750 ADT)

**Route 2A**  
~3% - 8%  
(1,375 ADT)

**I-89**  
~44% - 61%  
(13,500 ADT)







# Full Closure – PM Traffic Increase

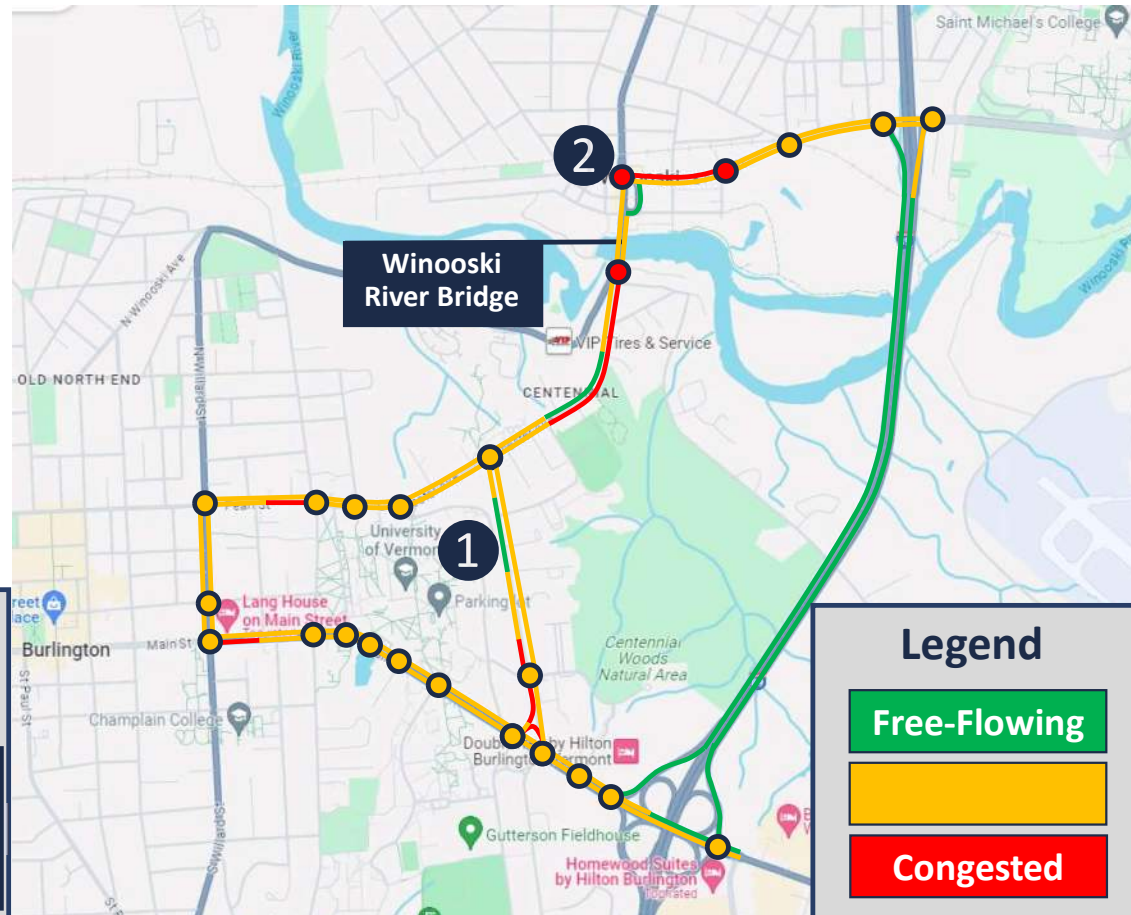
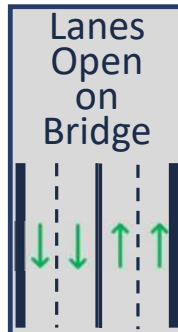


# Existing Conditions (PM)




(On-Alignment)

Summer Travel Time Between ① & ②	
	① → ② (② → ①)
	4 – 7 min. (4 – 7 min.)
  *	6 – 9 min. (5 – 8 min.)
	8 – 10 min. (8 – 10 min.)

\* Trucks may experience additional 1-2 min. of delay







**Legend**

-  Free-Flowing
- 
-  Congested

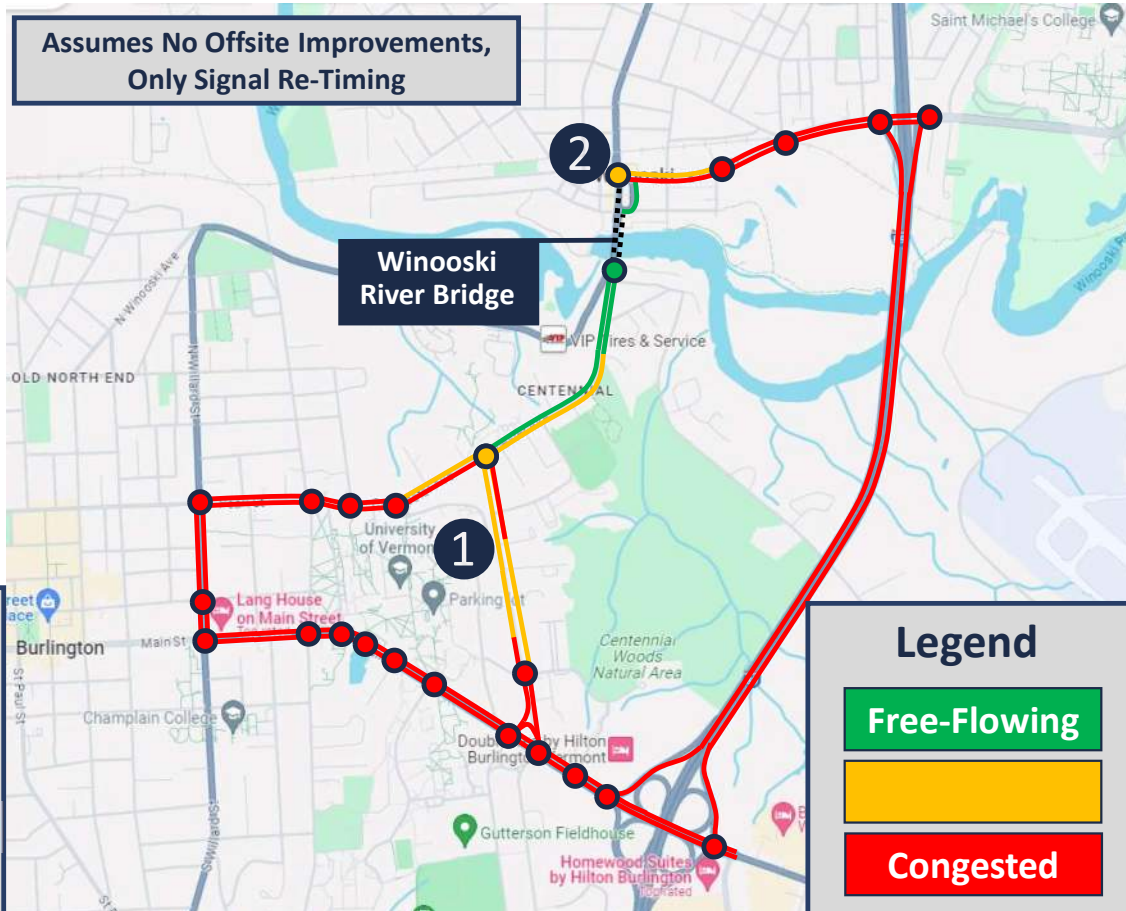


# Full Bridge Closure (PM)

(On-Alignment)

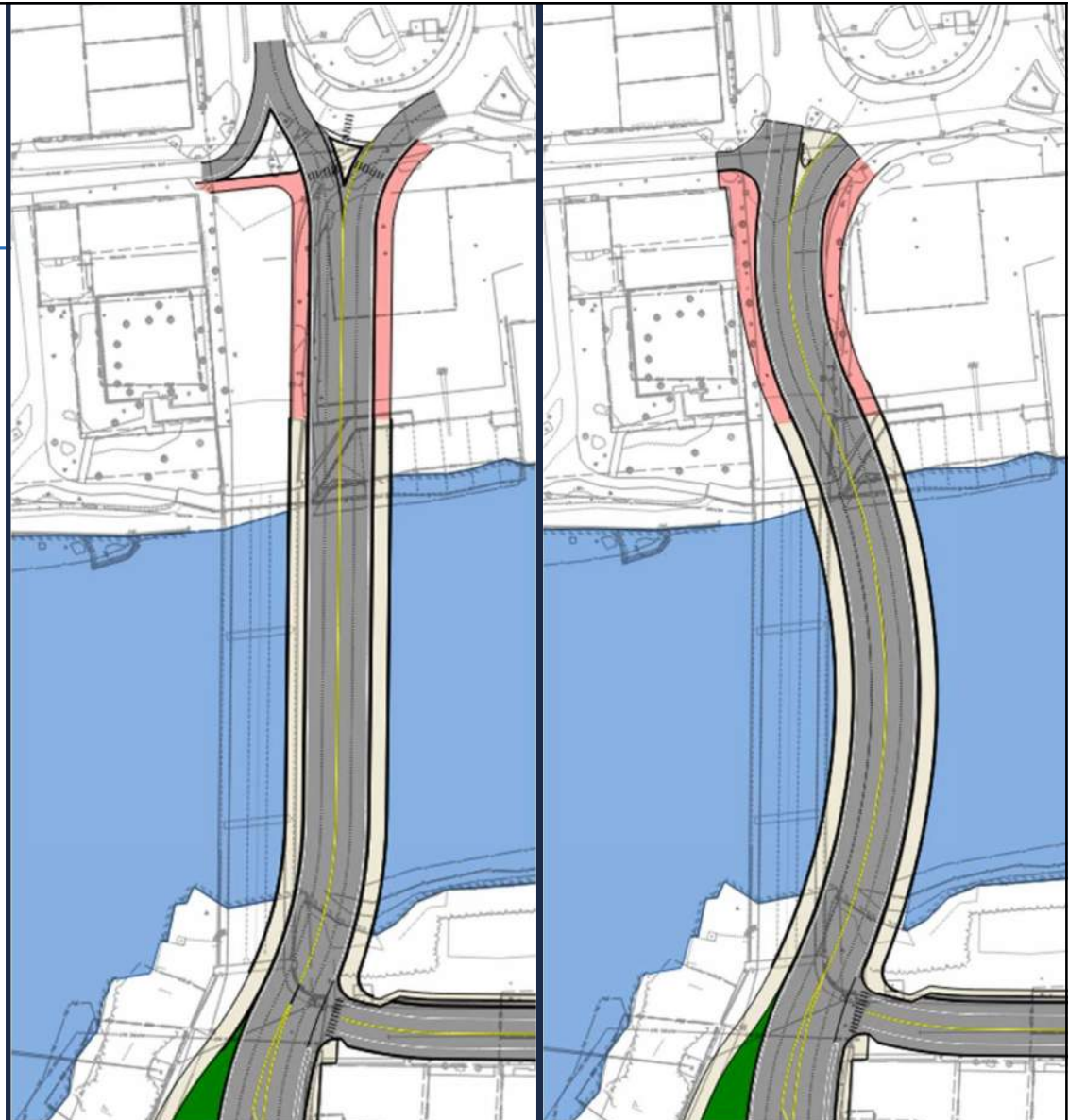
Summer Travel Time Between ① & ②		
① → ② (② → ①)	Existing Conditions	With Full Bridge Closure
	4 – 7 min. (4 – 7 min.)	10 – 15 min. (7 – 12 min.)
  *	6 – 9 min. (5 – 8 min.)	12 – 22 min. (14 – 19 min.)
	8 – 10 min. (8 – 10 min.)	18 – 25 min. (16 – 23 min.)

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## Shifted-Alignment

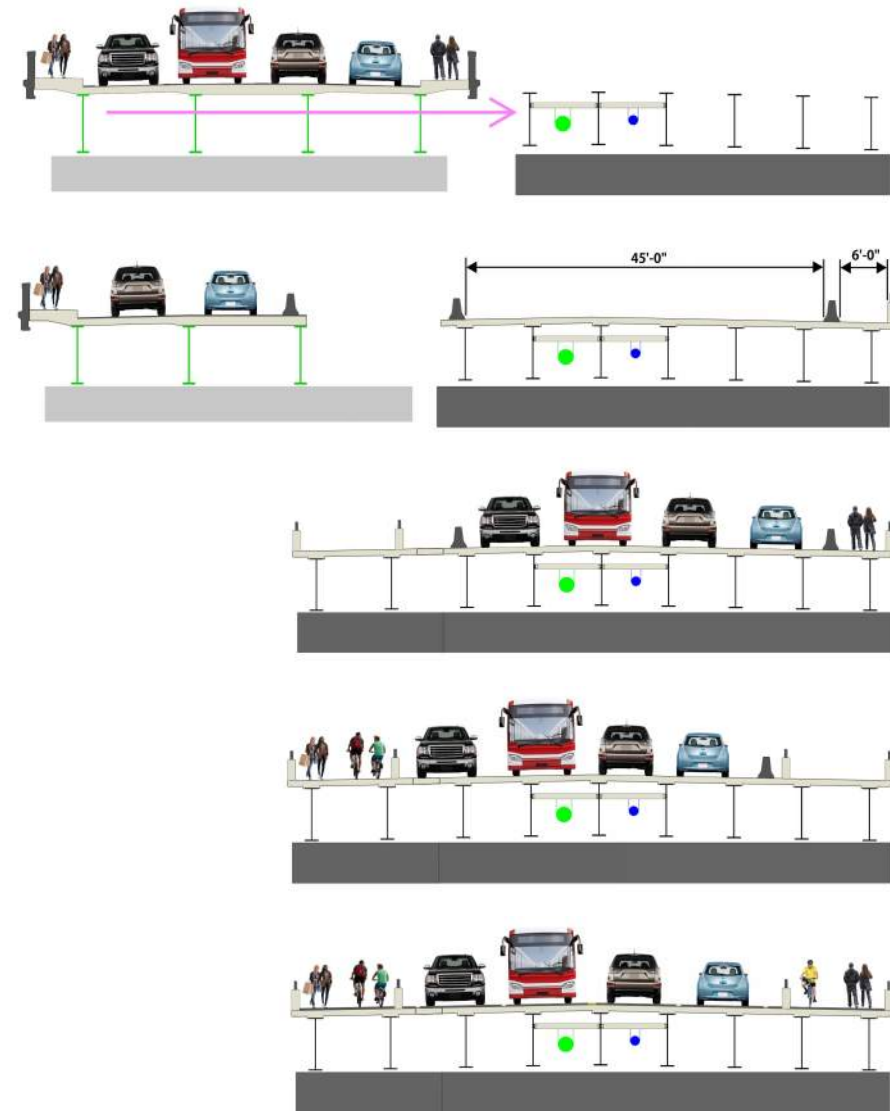
- Tangent (straight) and curved roadway
- Vantage points from Colchester Ave slightly changed
- Majority of widening away from dam
- Traffic Calming



# Construction Phasing

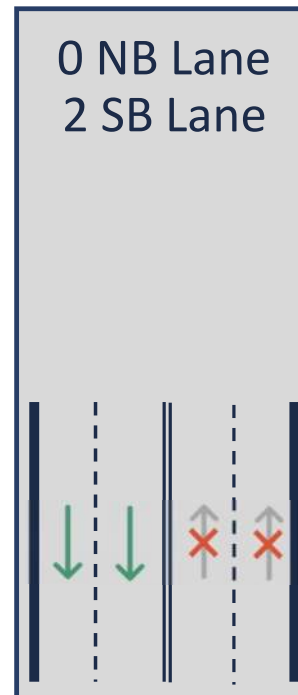
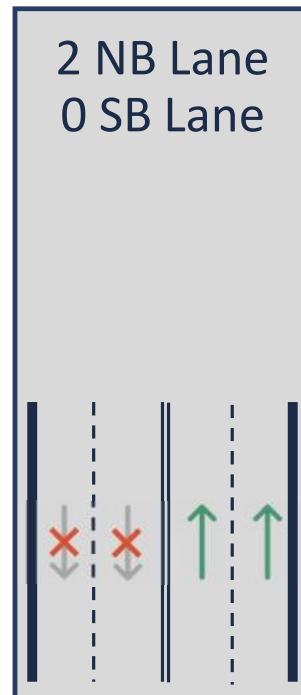
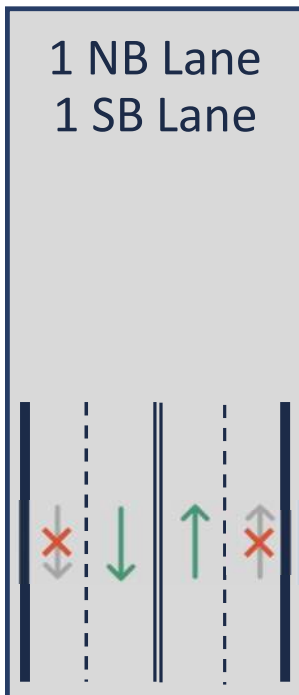
*(Shifted Alignment)*

- Build majority of bridge upstream of existing
- Temporary 16 to 20 week closure of 2 lanes of traffic for demolition and completion of part of new bridge
- Open new bridge to all traffic
- Complete remainder of bridge



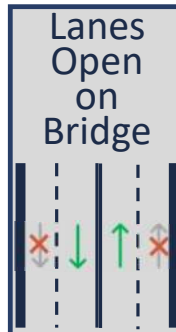
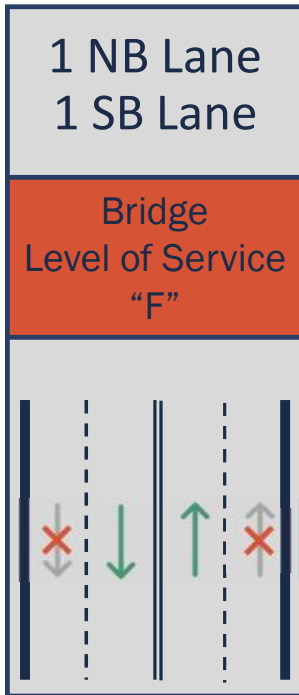
# Traffic Control

*(Shifted Alignment)*



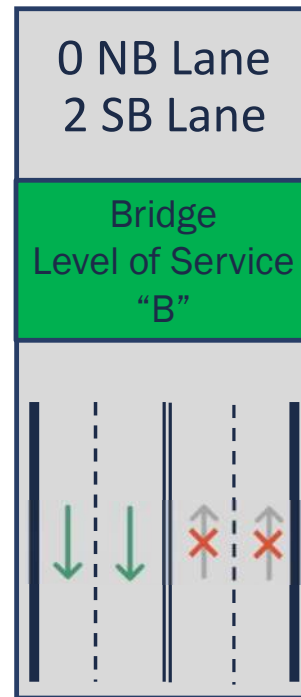
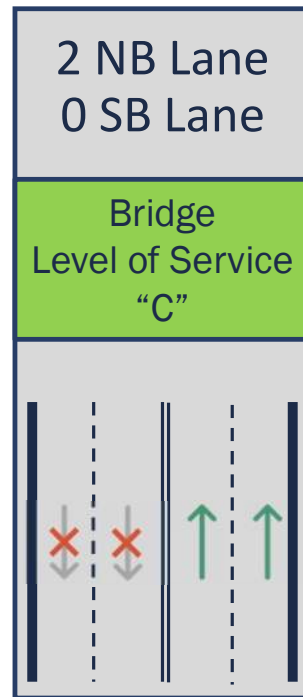
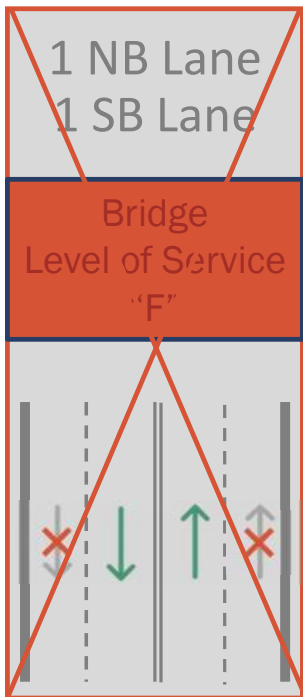
# Traffic Control

*(Shifted Alignment)*



# Traffic Control

*(Shifted Alignment)*



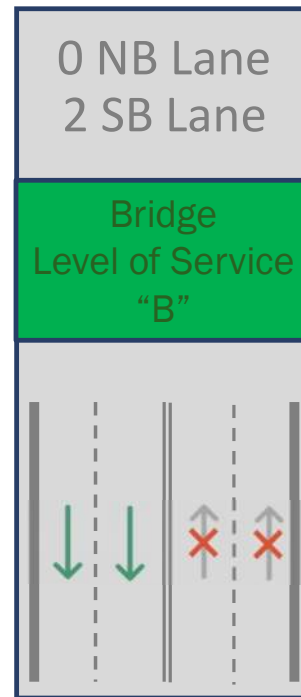
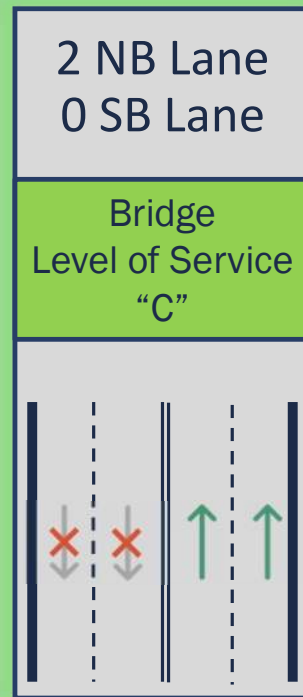
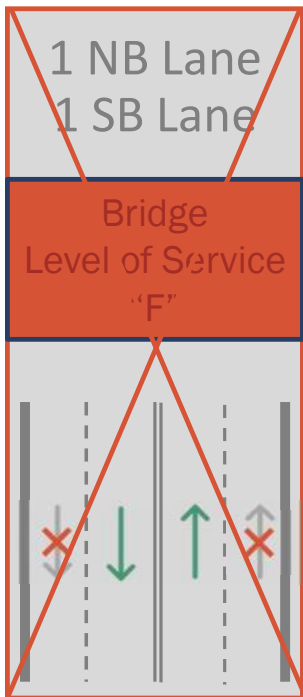
## Peak Period Key Facts:

- Similar diversion rates (opposite directions)
- NB PM Peak is greater volume than SB AM Peak
- High volume of left turns required if NB traffic detours
- Additional mitigation and/or increased delays if NB traffic detours



# Traffic Control

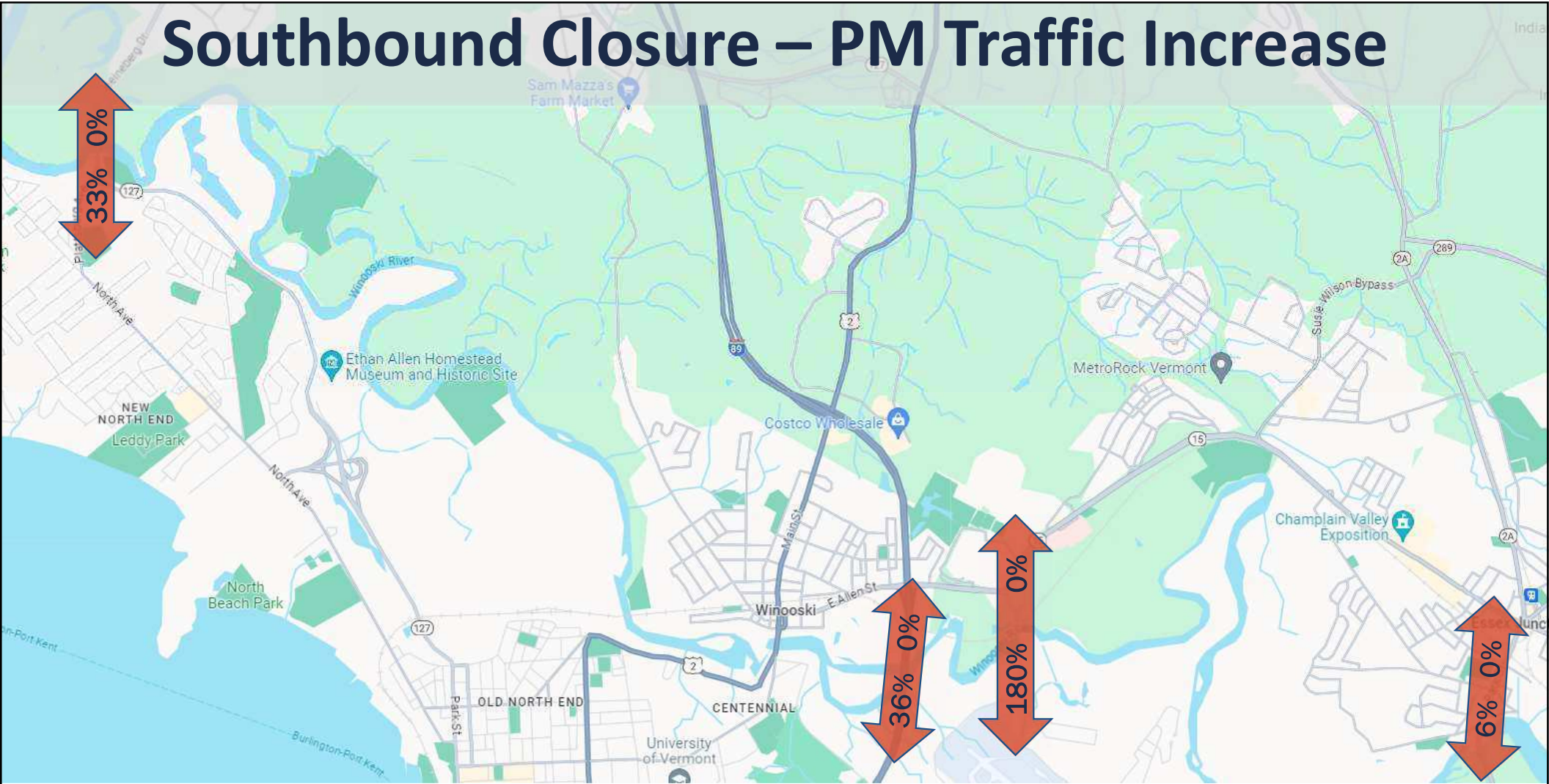
*(Shifted Alignment)*



## Peak Period Key Facts:




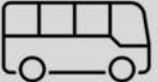
- Similar diversion rates (opposite directions)
- NB PM Peak is greater volume than SB AM Peak
- High volume of left turns required if NB traffic detours
- Additional mitigation and/or increased delays if NB traffic detours

# Southbound Closure – PM Traffic Increase

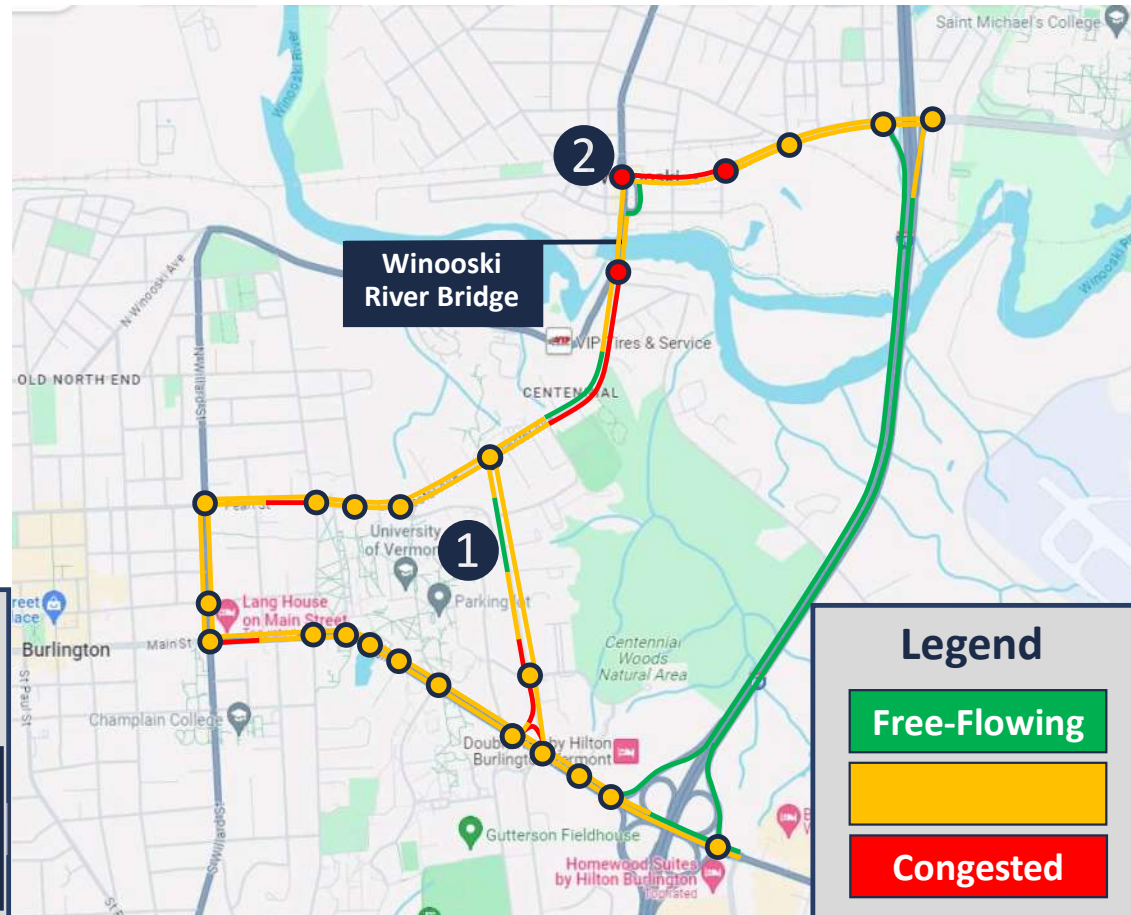
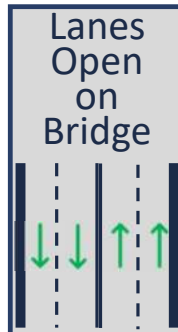


# Existing Conditions (PM)




(On-Alignment)

Summer Travel Time Between ① & ②	
	① → ② (② → ①)
	4 – 7 min. (4 – 7 min.)
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

**Legend**

-  Free-Flowing
- 
-  Congested



# SB Closed – No Improvements (PM)





*(Shifted Alignment)*

Summer Travel Time Between ① & ②		
① → ② (② → ①)	Existing Conditions	With SB Bridge Closure
	4 – 7 min. (4 – 7 min.)	4 – 6 min. (7 – 12 min.)
  *	6 – 9 min. (5 – 8 min.)	4 – 6 min. (12 – 15 min.)
	8 – 10 min. (8 – 10 min.)	6 – 8 min. (14 – 21 min.)

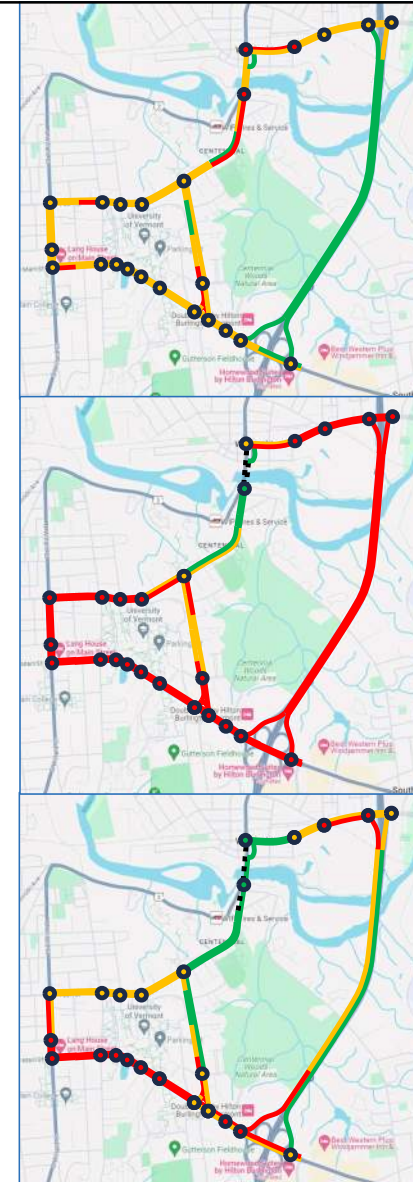
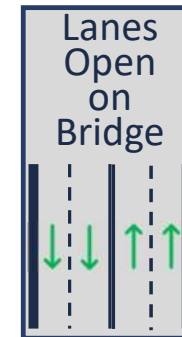
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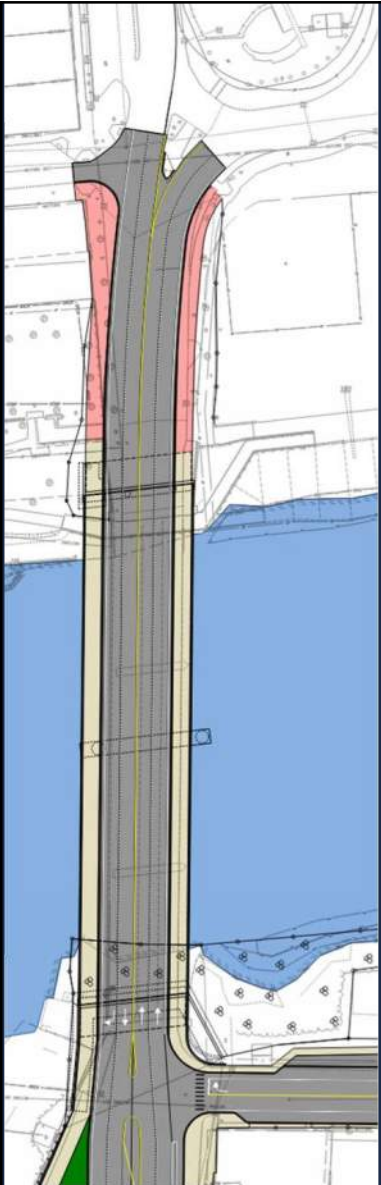
# Traffic Control Comparisons

Summer Travel Time Between ① & ②			
① → ② (② → ①)	Existing Conditions	With Full Bridge Closure	With SB Bridge Closure
	4 – 7 min. (4 – 7 min.)	10 – 15 min. (7 – 12 min.)	4 – 6 min. (7 – 12 min.)
 	6 – 9 min. (5 – 8 min.)	12 – 22 min. (14 – 19 min.)	4 – 6 min. (12 – 15 min.)
	8 – 10 min. (8 – 10 min.)	18 – 25 min. (16 – 23 min.)	6 – 8 min. (14 – 21 min.)

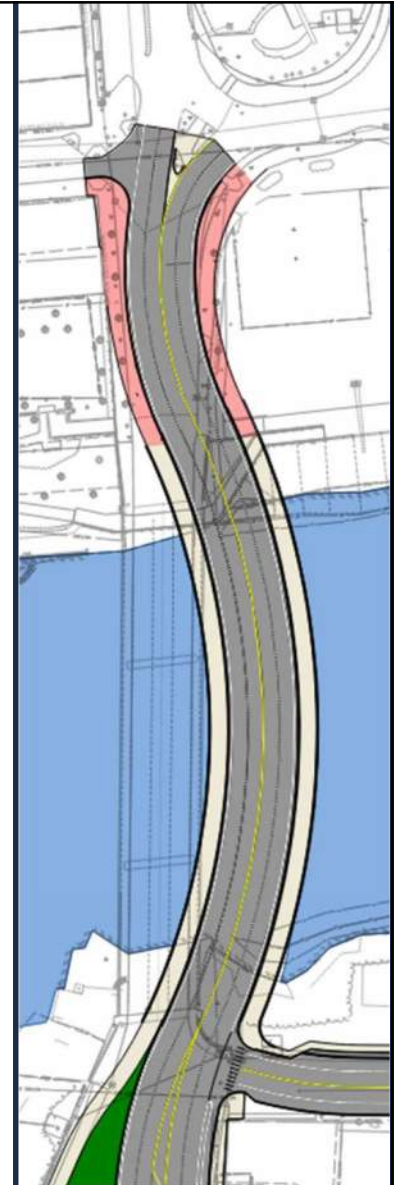
\* Trucks may experience additional 1-2 min. of delay



# Alignment Comparison



On-Alignment	<u>FEATURE</u>	Shifted Alignment
Tangent	Alignment	Curved
4	Lanes Detoured	2
4 - 6	Detour Duration (Weeks)	16 - 20
24 - 30	Construction Duration (Months)	24 - 30
No	Natural Traffic Calming	Yes
No	Potential Under Bridge Path in Burlington	Yes

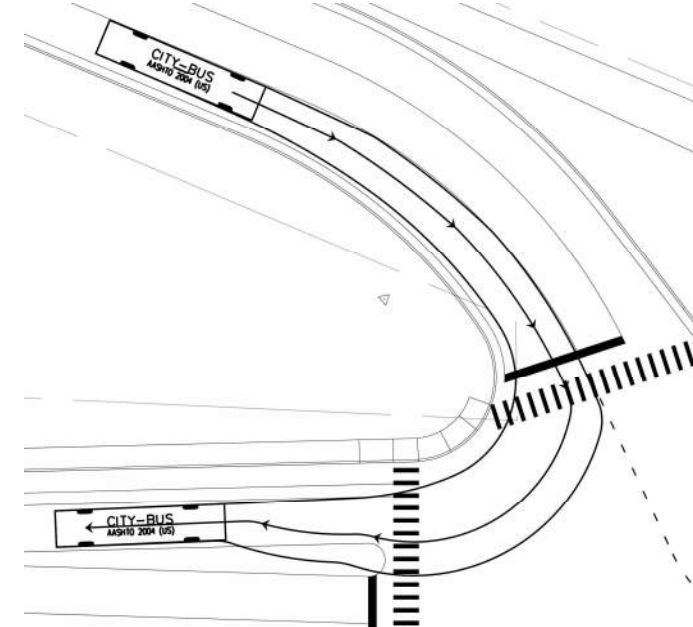
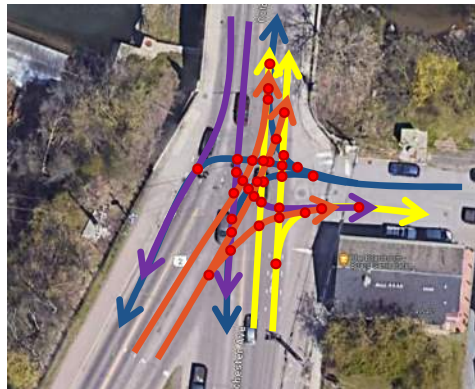


# Burlington Intersection



# Intersection Refinement

- Signal timing and geometric layout
- Bicycle and pedestrian safety
- Turning movements





# Intersection Geometry

- Understanding impact of bridge alignment on intersection
- Safety improvements, reduce conflict points, prioritize primary movements



## Intersection summary

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- Intersection focused public meeting in the spring
- Advancing design, balancing needs of all roadway users to maximize safety and capacity of intersection
- City-defined truck route vs. neighborhood setting in a natural and historic area

# Bike and Pedestrian Safety



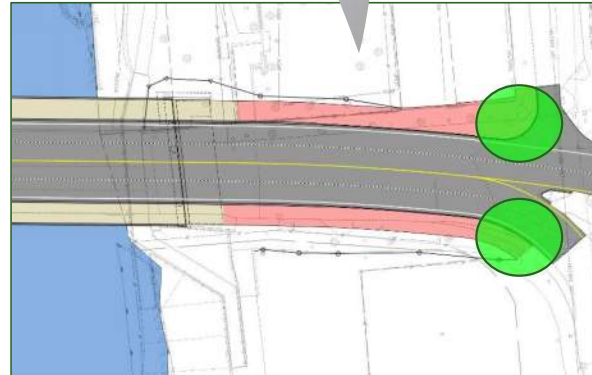
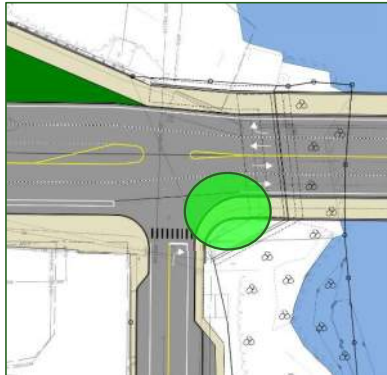
# Bike and Pedestrian Safety/Mobility

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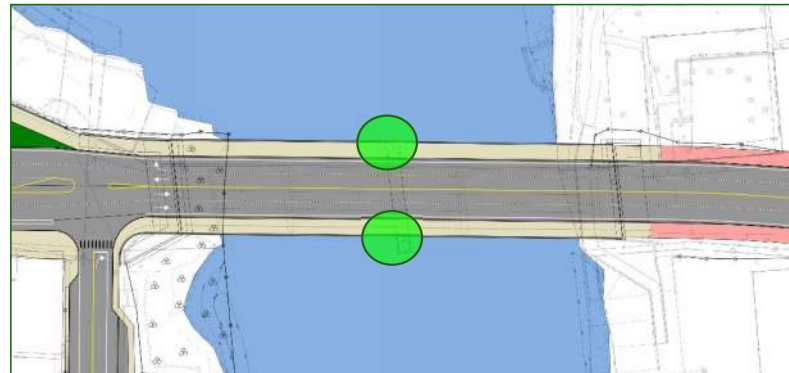
- Provide continuity and safe transitions through intersection and bridge
- Pedestrian phase of signal – exclusive vs. concurrent, leading pedestrian intervals, pedestrian detection, etc.
- Use signing and striping to encourage safe operation through intersection, onto bridge and in shared use path on bridge



# Potential Shared Use Path - Transitions



# Potential Shared Use Path – Refuge/Belvedere



# Potential Shared Use Path – Signing and Striping



# Next Steps





## Next Steps

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- Continued evaluation of constructability, schedule, traffic control
- Heavier focus on intersection
- Utility Coordination
- Right of Way
- Aesthetics and Historics (*Section 106*)
- ***Continued Outreach!!***

# Questions?



**BURLINGTON  
WINOOSKI  
BRIDGE**



<https://burlingtonwinooskibridge.vtransprojects.vermont.gov/>



**THE CITY  
OF BURLINGTON**

