

Brunswick Maine Street Bridge Feasibility Study Preliminary Alternative Evaluation

September 12, 2019





Introductions

□ Town of Brunswick

- John Eldridge – Town Manager
- Ryan Leighton – Assistant Town Manager
- Ryan Barnes, PE – Town Engineer

□ MaineDOT

- Nate Howard – Bureau of Planning

□ T.Y. Lin International

- Tom Errico, PE



Study Objective

- ❑ Deck Replacement Currently Programmed
- ❑ Preliminary evaluation of transportation improvement alternatives on or adjacent to the Maine Street bridge over Route 1 in downtown Brunswick
- ❑ Each alternative was evaluated based on:
 - Mobility
 - Access to surrounding businesses
 - Regional accessibility
 - Safety
 - Compatibility with the future Riverwalk extension from the Swinging Bridge to the Frank J. Wood Bridge
 - Cost (without right-of-way)



Alternatives Investigated/Evaluated

- ☐ A1: No-Build
- ☐ A2a: Partial Single Point Urban Interchange (SPUI)
- ☐ A2b: Full Single Point Urban Interchange (SPUI)
- ☐ A3: Roundabout at the Maine Street/Cabot Street intersection
- ☐ A4: Diamond Interchange (Adding a Route 1 Northbound Ramp opposite Mill Street)
- ☐ A5: Combining the Route 1 Southbound On-Ramp with Cabot
- ☐ A6: Combining the Route 1 Southbound On-Ramp with Cabot and Adding a Signal at Mason Street



A1: No-Build

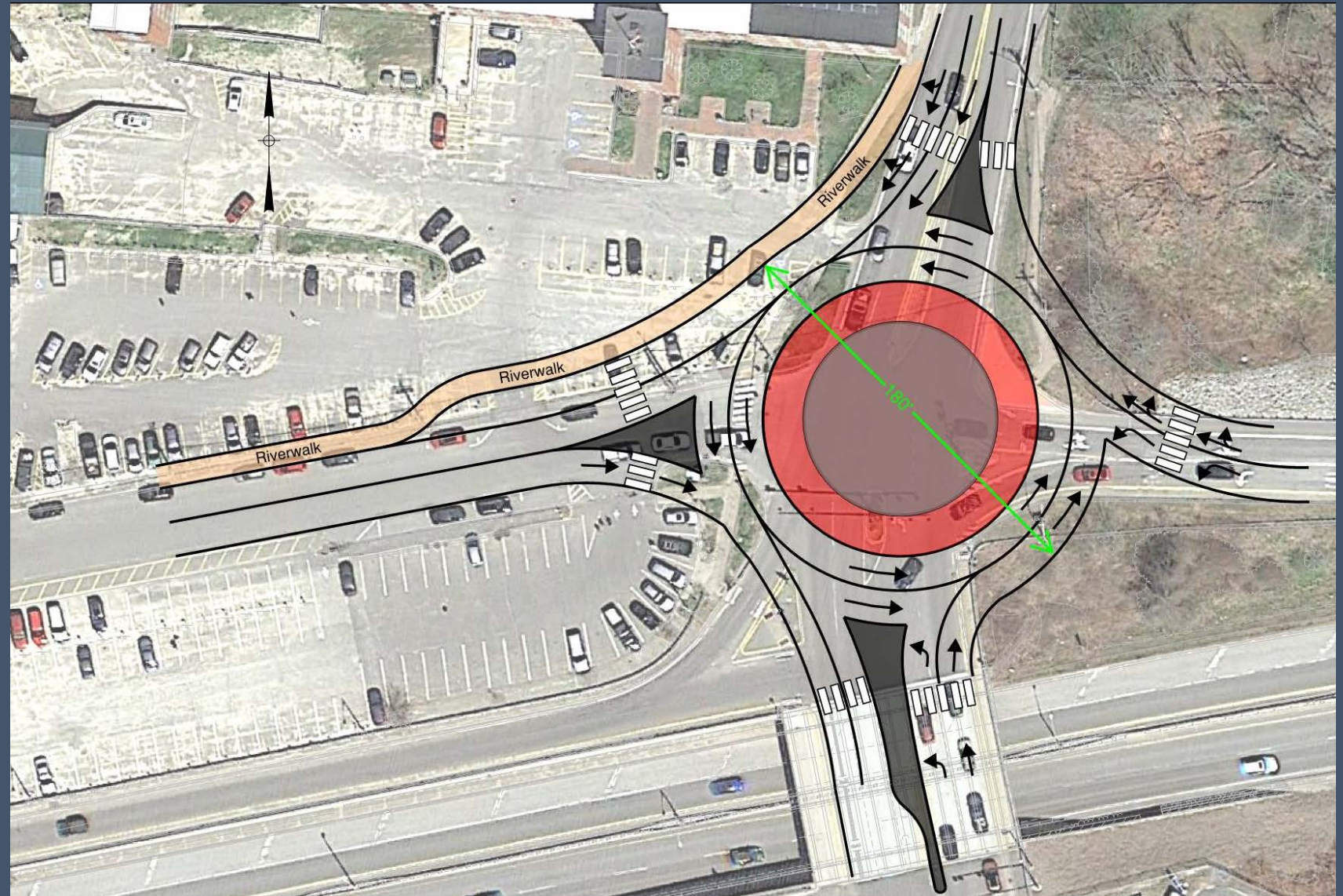
- ❑ **Deck Replacement (A1, A3, A5, A6).** For these alternatives, it is anticipated that changes to the proposed traffic pattern would fit within the limits for the existing structure. The existing beams and substructure units are repaired as needed and reused, while the existing concrete deck is removed and replaced in the same footprint as the existing structure. It is assumed that for a deck replacement the structure would need to remain in service and that all work would need to be completed using phased construction.

A2a: Partial Single Point Urban Interchange (SPUI)



A3: Roundabout at the Maine Street/Cabot

Street intersection



A6: Combining the Rt. 1 SB On-Ramp with Cabot Street




	A1 No-Build	A2a Partial SPUI	A2b Full SPUI	A3 Roundabout	A4 Diamond Interchange	A5 Simplify Cabot/On- Ramp	A6 Simplify Cabot/On- Ramp and Signal at Mason
LOS at Maine Street/Mason Street	F	A	B	B	E	A	A
LOS at Maine Street/Mill Street	F	C	B	A	C	A	A
LOS at Maine Street/Cabot Street	F	B	C	B	E	D	C
Right-of-Way Acquisition	None	None	None	5300 sq. ft.	None	None	None
Left-Turns from Mill Street Permitted	No	Yes	Yes	No	Yes	No	No
Full Access to Fort Andross	Yes	No Left Out	No Left Out	Yes	Yes	Yes	Yes
Riverwalk Connectivity	Good	Poor	Poor	Difficult Crossing	Good	Good	Good
Parking Impact	None	None	None	Loss of 9 spaces	None	None	None
Environmental Impact	Provided by DOT	Provided by DOT	Provided by DOT	Provided by DOT	Provided by DOT	Provided by DOT	Provided by DOT
Safety	\$0	\$425,000	\$433,000	\$370,000	\$284,000	\$258,000	\$382,000
Cost	\$2.5M	\$7.8M	\$12.2M	\$10.6M	\$9.0M	\$5.6M	\$5.9M



Schedule / Next Steps / Funding

 *Town Decision – Fall 2019*

 *Design – 2020/2021*

 *Construction – 2022+*

 *MaineDOT to contribute up to \$5.9M*