



INTRODUCTION + AGENDA



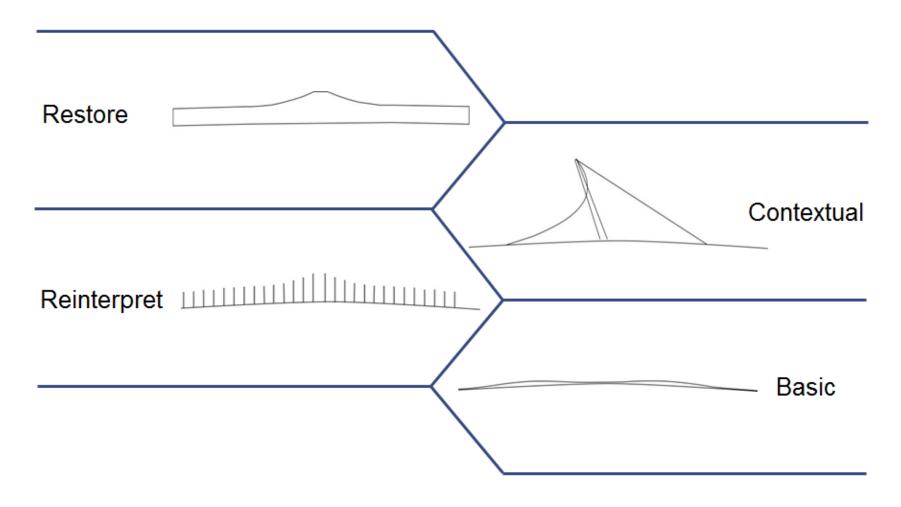
- Welcome and Approval of Meeting Minutes, April 25, 2019
- Options Presented in April
- Additional Options
- Schedule and Next Steps
- Discussion and Questions



PREVIOUSLY PRESENTED OPTIONS STYLES



Four Styles presented in April

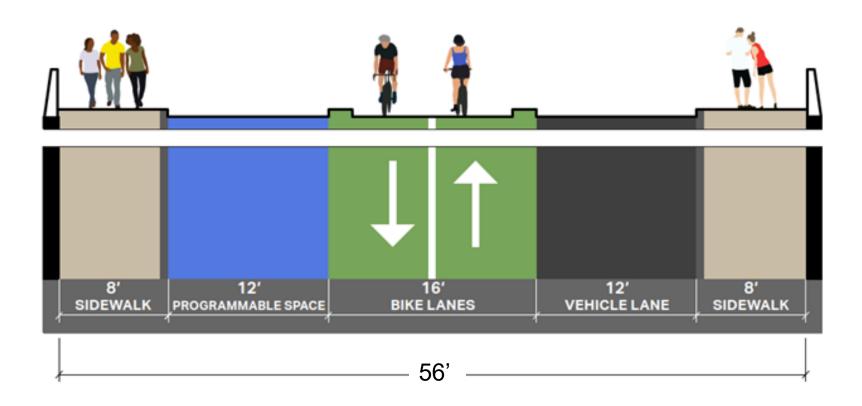




PREVIOUSLY PRESENTED OPTIONS SIZE



56 FT WIDE

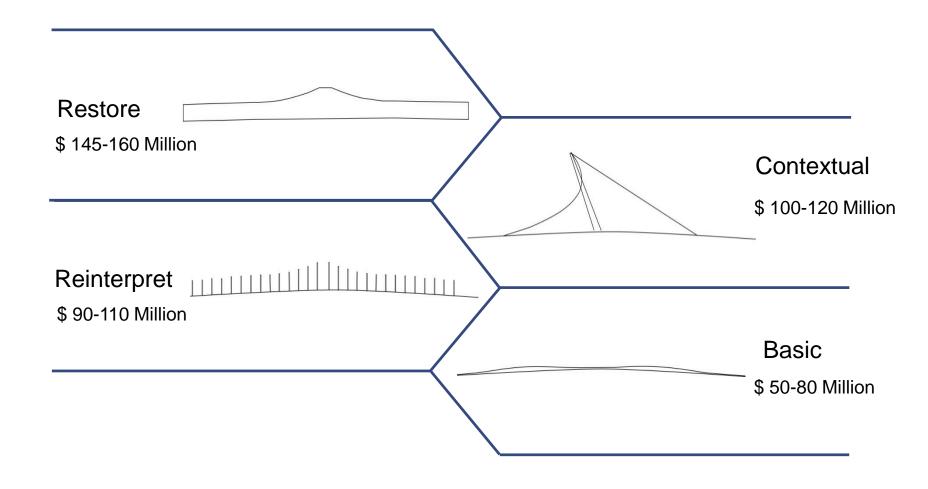




PREVIOUSLY PRESENTED OPTIONS COST



Costs for the 4 Options were presented







COSTS

Min Clear Width: 56 Feet
Out to Out Width: 65 Feet
Approximate SF: 44,200

	Basic	Reinterpret	Contextual
"Sunk" Costs			
Removal	\$ 20 M	\$ 20 M	\$ 20 M
Foundation Reuse	\$ 10 M	\$ 20 M	\$ 25 M
Approaches	\$ 15 M	\$ 15 M	\$ 15 M
Sub-Total	\$ 45 M	\$ 55 M	\$ 60 M
Bridge Superstructure	\$ 20 M	\$ 45 M	\$ 50 M
Total	\$ 65 M	\$ 100 M	\$ 110 M



56 FT WIDE OPPORTUNITIES & CHALLENGES



56 FT WIDE			
OPPORTUNITIES	CHALLENGES		
Dedicated bicycle and pedestrian usage (suitable for projected volumes)	Reduced bicycle/pedestrian experience due to possible motorized vehicles		
Adequate width for emergency vehicles			
Allows for vehicular lane and programming space			
Most flexible for future temporary or permanent needs			



ADDITIONAL OPTIONS



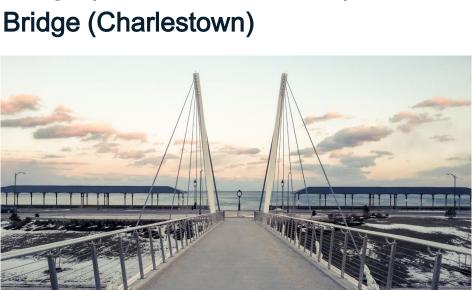
- Bicycle and Pedestrian Accommodation
- Emergency Vehicle Access



12 FT WIDE OPTIONS



- Shared use paths can accommodate low volumes of pedestrians and bicycles with widths as small as 12 feet
- Some Local examples include the Markey Bridge (Wonderland- Revere), North Bank Bridge (Charlestown)





SHARED USE





12 FT WIDE OPPORTUNITIES & CHALLENGES



12 FT WIDE		
OPPORTUNITIES	CHALLENGES	
Bicycle/pedestrian only experience (i.e. no motorized vehicles)	Too narrow for pedestrian and bicycle volumes (i.e. lack of dedicated lanes)	
	Too narrow for emergency vehicles	
	No vehicle or programming dedicated lanes	
	Provides no flexibility for future temporary needs	





COSTS

Min Clear Width: 12 Feet
Out to Out Width: 16 Feet
Approximate SF: 10,900

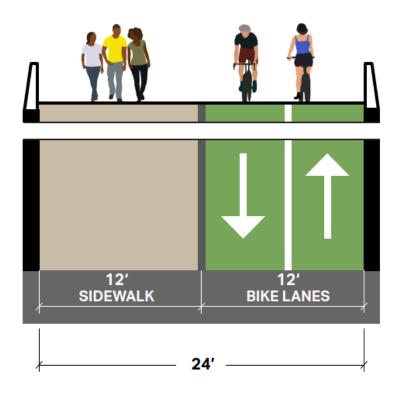
	Basic	Reinterpret	Contextual
"Sunk" Costs			
Removal	\$ 20 M	\$ 20 M	\$ 20 M
Foundation Reuse	\$ 7 M	\$ 10 M	\$ 18 M
Approaches	\$ 7 M	\$ 7 M	\$ 7 M
Subtotal	\$ 34 M	\$ 37 M	\$ 45 M
Bridge Superstructure	\$ 6 M	\$ 20 M	\$ 28 M
Total	\$ 40 M	\$ 57 M	\$ 73 M



24 FT WIDE OPTIONS



- Allows dedicated bicycle and pedestrian lanes to support the high projected volumes
- Configuration of pedestrians and bikes could be re-arranged





24 FT WIDE OPPORTUNITIES & CHALLENGES



24 FT WIDE			
OPPORTUNITIES	CHALLENGES		
Bicycle/pedestrian only experience (i.e. no motorized vehicles)	No dedicated vehicle lane		
Dedicated bicycle and pedestrian usage (suitable for projected volumes)	No dedicated programming space		
Improved width for emergency vehicles			
Limited flexibility for future temporary needs			





COSTS

Min Clear Width: 24 Feet Out to Out Width: 28 Feet Approximate SF: 19,040

	Basic	Reinterpret	Contextual
"Sunk" Costs			
Removal	\$ 20 M	\$ 20 M	\$ 20 M
Foundation Reuse	\$ 8 M	\$ 12 M	\$ 20 M
Approaches	\$ 8 M	\$ 8 M	\$ 8 M
Subtotal	\$ 36 M	\$ 40 M	\$ 48 M
Bridge Superstructure	\$ 10 M	\$ 28 M	\$ 35 M
Total	\$ 46 M	\$ 68 M	\$ 83 M

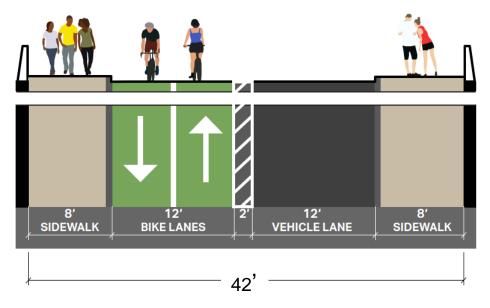


42 FT WIDE OPTIONS



Width needed to accommodate one traffic or programming lane now or in the future

- Minimum Width to provide additional flexibility
- Provides separation between bikes and vehicles
- Configuration of space could be re-arranged to suit the architecture and could remain flexible



42 FT WIDE OPPORTUNITIES & CHALLENGES



42 FT WIDE		
OPPORTUNITIES	CHALLENGES	
Dedicated bicycle and pedestrian usage (suitable for projected volumes)	Reduced bicycle/pedestrian experience due to possible motorized vehicles	
Adequate width for emergency vehicles	Too narrow for both programming and vehicle use simultaneously	
Provides improved flexibility for future and temporary needs		





COSTS

Min Clear Width: 42 Feet Out to Out Width: 46 Feet Approximate SF: 31,300

	Basic	Reinterpret	Contextual
"Sunk" Costs			
Removal	\$ 20 M	\$ 20 M	\$ 20 M
Foundation Reuse	\$ 10 M	\$ 18 M	\$ 22 M
Approaches	\$ 10 M	\$ 10 M	\$ 10 M
Subtotal	\$ 40 M	\$ 48 M	\$ 52 M
Bridge Superstructure	\$ 16 M	\$ 38 M	\$ 48 M
Total	\$ 56 M	\$ 86 M	\$ 100 M



BRIDGE OPTIONS OPPORTUNITIES & CHALLENGES



SUMMARY

BRIDGE USES	WIDTH			
BRIDGE 03E3	12 FT	24 FT	42 FT	56 FT
Shared Use Bike & Ped	~			
Dedicated Bike & Ped		✓	•	V
Emergency Vehicles		V	•	~
Expanded Ped, Bike, Vehicle OR Program			•	~
Expanded Bike, Ped, Vehicle & Program				•



BRIDGE OPTIONS - COSTS



SUMMARY

	STYLE			
SIZE	Basic	Reinterpret	Contextual	Restore
64 FT	-	-	-	\$150
56 FT	\$ 65	\$ 100	\$ 110	-
42 FT	\$ 56	\$ 86	\$ 100	-
24 FT	\$ 46	\$ 68	\$ 83	-
12 FT	\$ 40	\$ 57	\$ 73	-

Costs in \$ Millions

BRIDGE DESIGN SCHEDULE



Milestone	Duration Date
Community Meeting	June 3, 2019
June MATF Meeting	June 27, 2019
Design & Permitting	18 Months December, 2020
Construction Contract Award	2021



CONTACT INFORMATION



- For more information about the project and to sign up to receive emails about meetings and updates, please visit the website at https://www.boston.gov/northern-ave
- To submit comment or questions, please write the project team at <u>Team@NorthernAveBridgeBos.com</u>