



Route 9 at Kingsbury St.

2016 ANNUAL TOWN MEETING

ARTICLE 26

APRIL 11, 2016



Background

- Ongoing dialogue between Town & MassDOT officials
- Safety at Route 9/Kingsbury intersection a recurring concern
 - Significant crash history
- Past 30 years – at least 3 Route 9 corridor studies
 - Have generally recommended signalization
- Town, MAPC, residents and MassDOT working on updated study
 - Scope of work and timing not yet clear



Recent discussions

- MassDOT Pavement Management Plan calls for “curb-to-curb” resurfacing of Route 9
 - \$7 million project
 - Federal funds for project contingent on project being advertised by end of June
- Recognizing Town’s longstanding interest in addressing safety issues, MassDOT has offered to reconfigure intersection
 - As part of their resurfacing project
 - Town required to fund intersection work



Working group

- Deb Carpenter, Planning Board
- Terry Cunningham, Police Chief
- Ellen Gibbs, Board of Selectmen
- Dave Hickey, Town Engineer
- Hans Larsen, Executive Director
- Mike Pakstis, DPW Director
- Jack Pilecki, Deputy Police Chief
- Mike Regan, VHB Consulting Traffic Engineer
- Michael Zehner, Planning Director



Remainder of presentation

- Chief Cunningham
 - Public safety concern
- Mike Regan, VHB
 - Existing conditions
 - Options considered
- Hans Larsen
 - Vetting process
 - This request



Wellesley Police Department Safety concerns

- Crash Data
 - 2011-2015: Total of 102 crashes
 - 48% Rear end crashes
 - 52% Non-rear end crashes
- Existing median a critical safe harbor for pedestrians



Safety – Crash Rates

- MassDOT D6 Crash Rates: 0.70 signalized
0.53 unsignalized
- Route 9 @ Kingsbury St: 0.98 crash rate

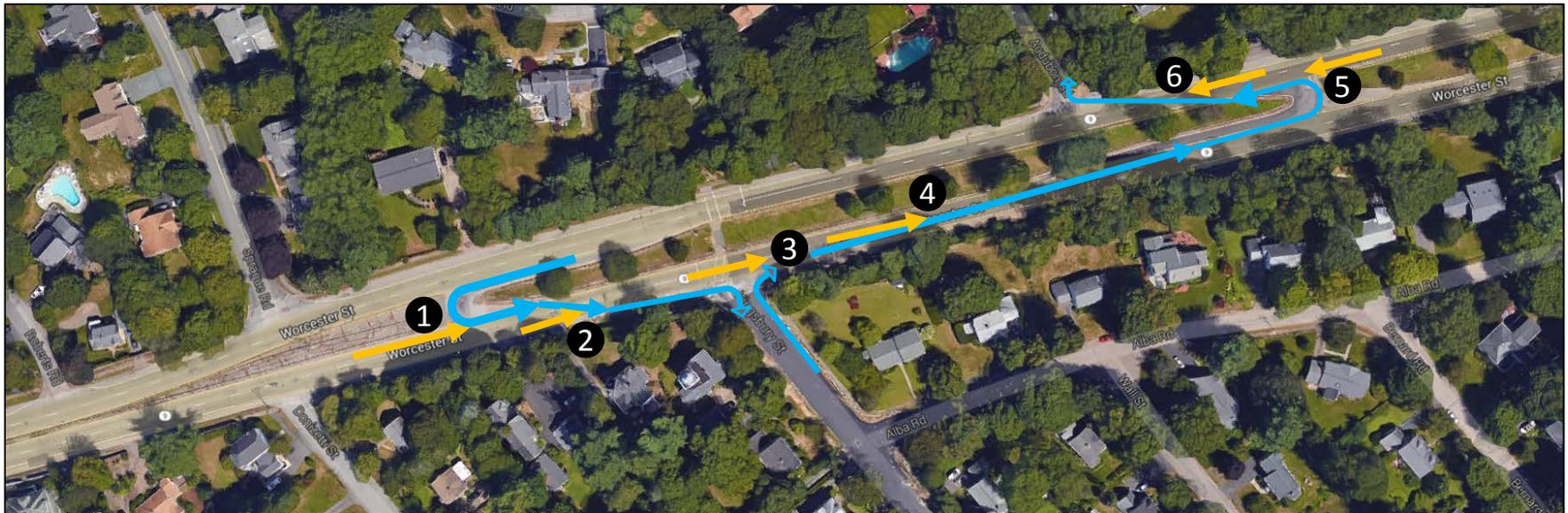
	Route 9 at		
	Kingsbury Street	Overbrook Drive	Washington Street
	2011-2015	2011-2015	2011-2015
No. of Crashes	102	42	96
Average	20.4	14.0	19.2
Crash Rate	0.98	0.64	0.95

Source: 2011 – 2015 Crash Data from Wellesley Police Department



Safety - Minimize conflict points

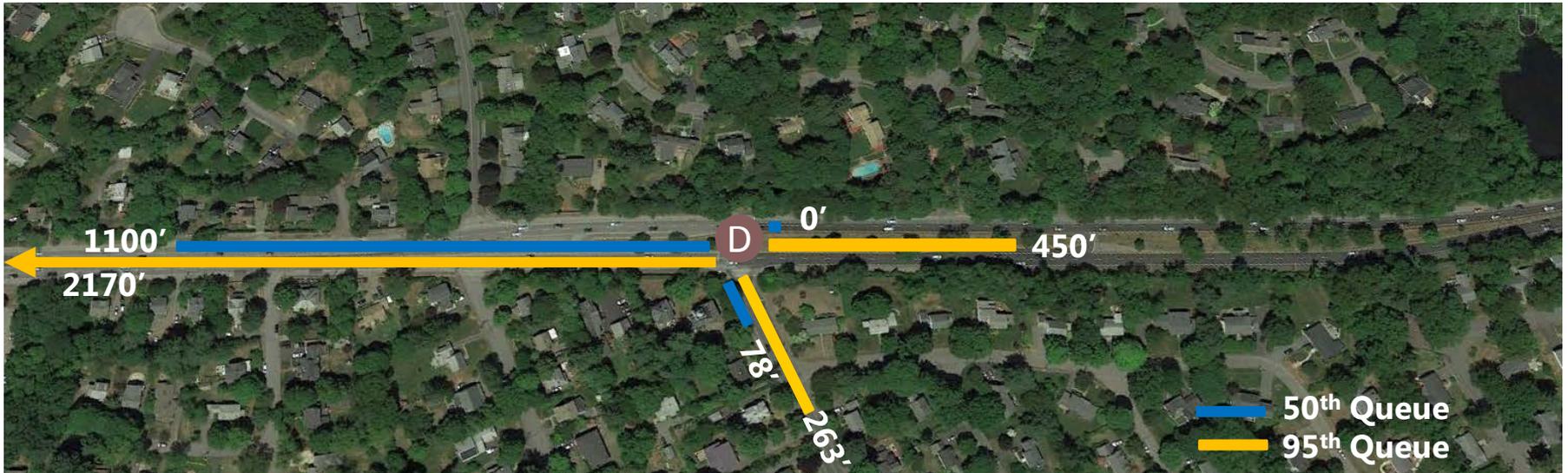
- Minimize conflict points
- Standard Unsignalized to Signalized: $CMF = 0.68$
 - Signalization could reduce injury crashes by up to 30%, compared to existing conditions





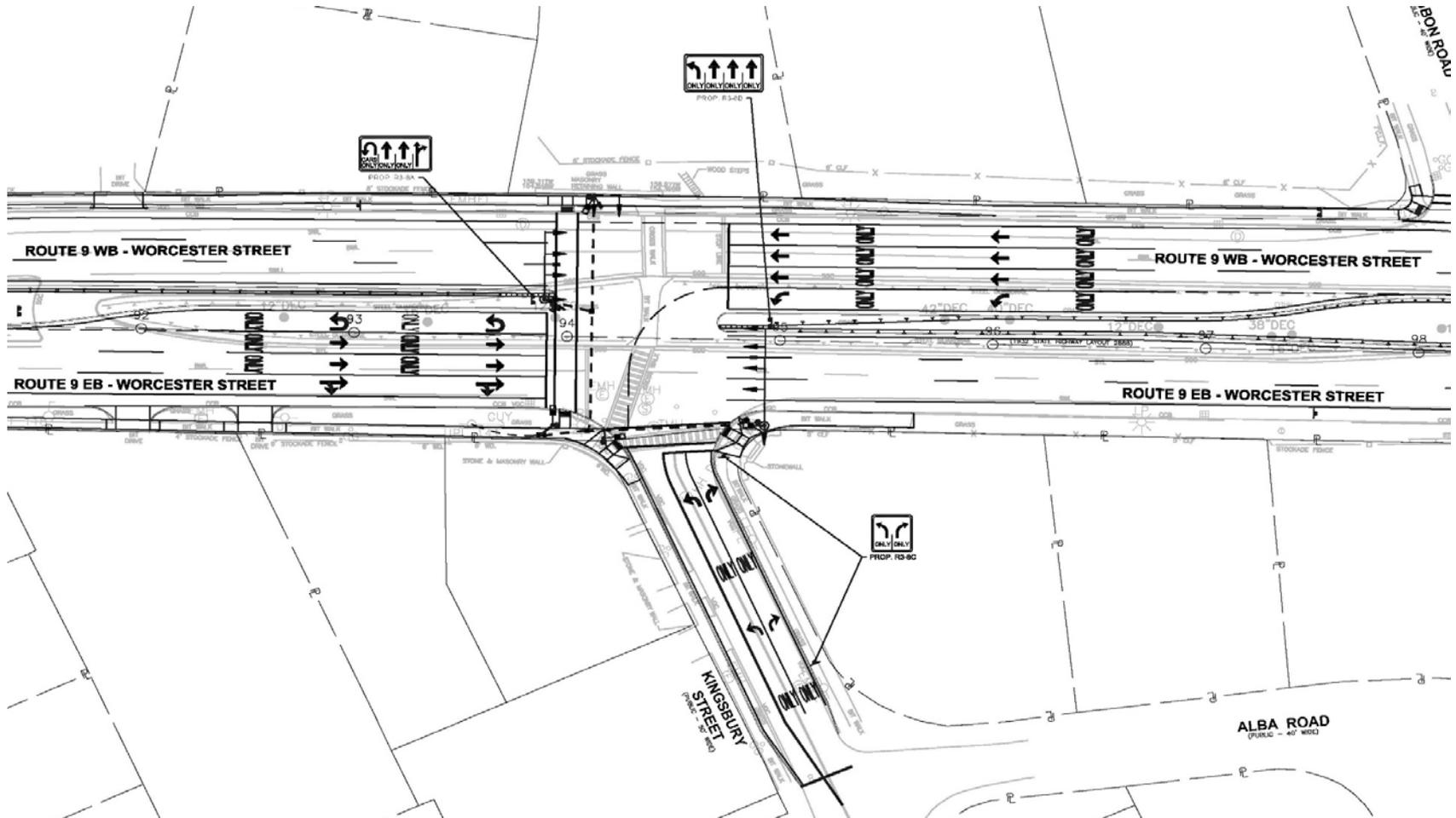
Existing conditions Morning Peak Hour queues

Morning Peak Hour Queues





MassDOT Option 1





Issues with Option 1

- 3 through lanes + a turning lane on each side = 8 lanes
- Elimination of existing median
 - Aesthetic impact
 - No pedestrian refuge
- Adverse operational impacts
 - Longer queues and deteriorated Level of Service (LOS)
- Inability of eastbound Rte 9 and Kingsbury traffic to access Audubon

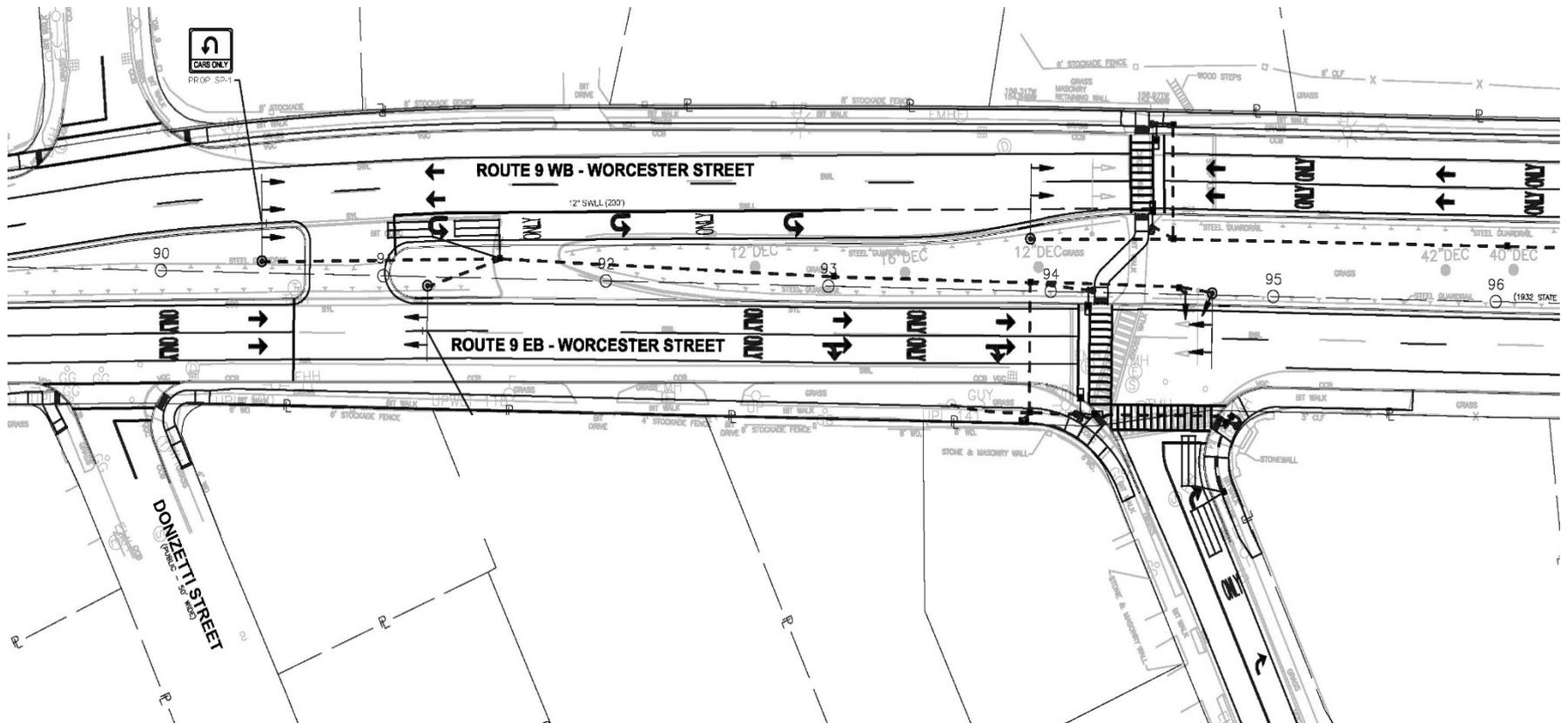


MassDOT Option 2





MassDOT Option 2 (west end)





Traffic simulation



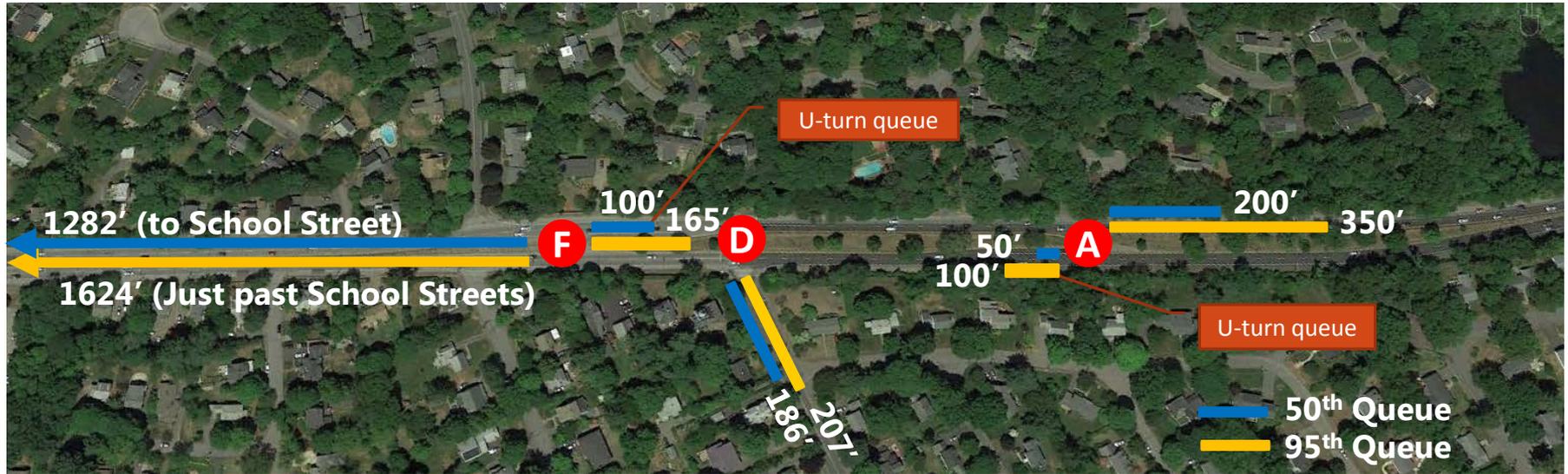
MassDOT Option 2

- Improves safety by providing traffic control at existing U-turn locations
- Increases delay and queuing on Route 9 WB
- Maintains existing two-stage pedestrian crossing of Route 9
- Maintains mobility for access to local streets



MassDOT Option 2

Morning Peak Hour Queues





Vetting process

- VHB asked to review proposed reconfiguration
- Review of initial proposal (Option 1) by Working Group & Selectmen raised a number of concerns
- Led to formulation of Option 2
- Two public forums with neighbors (March 22nd, 31st)
- Working Group & Selectmen concluded Option 2 was preferable
- Planning Board and School Committee have expressed support



Feedback from public forums

- Consensus in favor of Option 2
- Comments expressed by neighbors
 - Reconfiguration may exacerbate traffic volume and speed on Donizetti
 - Concern with existing conditions on Audubon
 - Lack of complete sidewalk network in the area
 - Adverse impacts of additional traffic signals



Potential mitigation options

- Reconstruction/addition of sidewalks on Donizetti & Audubon
- One way travel restriction on Donizetti
- Restrictions on right turn from Rte 9 onto Donizetti during specific times (MassDOT role)
- Additional parking restrictions on Calvin and Donizetti
- Additional signage
 - e.g., speed limit signs, prohibition against travel in breakdown lane on Rte 9 eastbound, etc.
- Refinements in Middle School dropoff/pickup pattern



Next steps

- Work with MassDOT to finalize design of Route 9 changes
- Continue to study neighborhood impacts and develop plan for mitigation
 - Have already gathered new baseline data for Donizetti
 - Now doing the same on Kingsbury
 - Neighborhood liaisons identified
 - Will hold multiple public hearings
 - Aiming to finalize recommendations by end of school year



This request

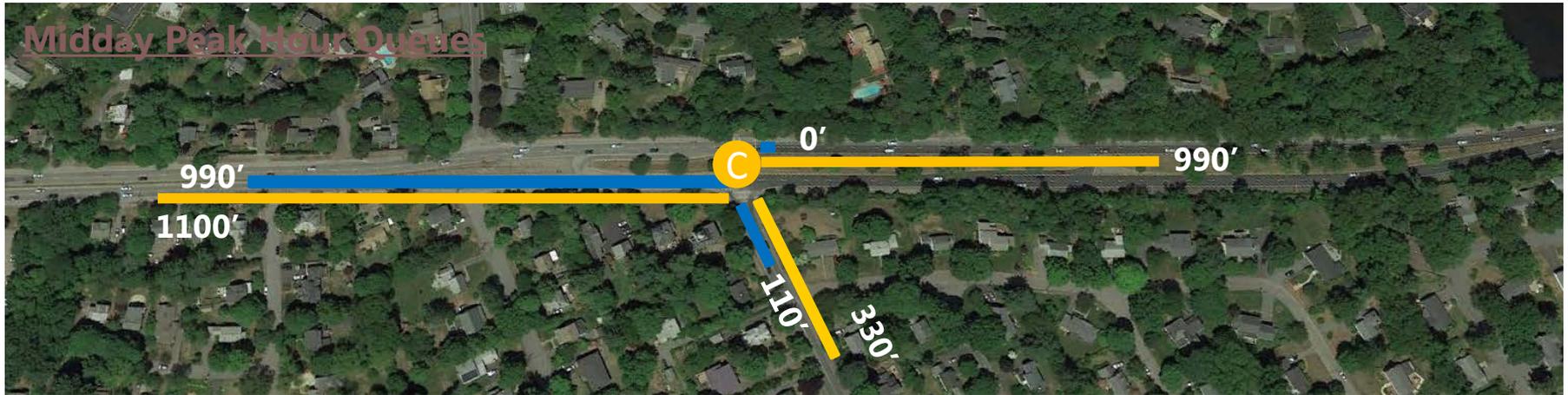
- Authorize Selectmen to enter into Non-Participating Agreement with MassDOT to proceed with Option 2
- Appropriate \$600,000 (Town's share of cost)
- Affirm Town's intentions to study/mitigate impacts on neighboring streets



Questions and Comments

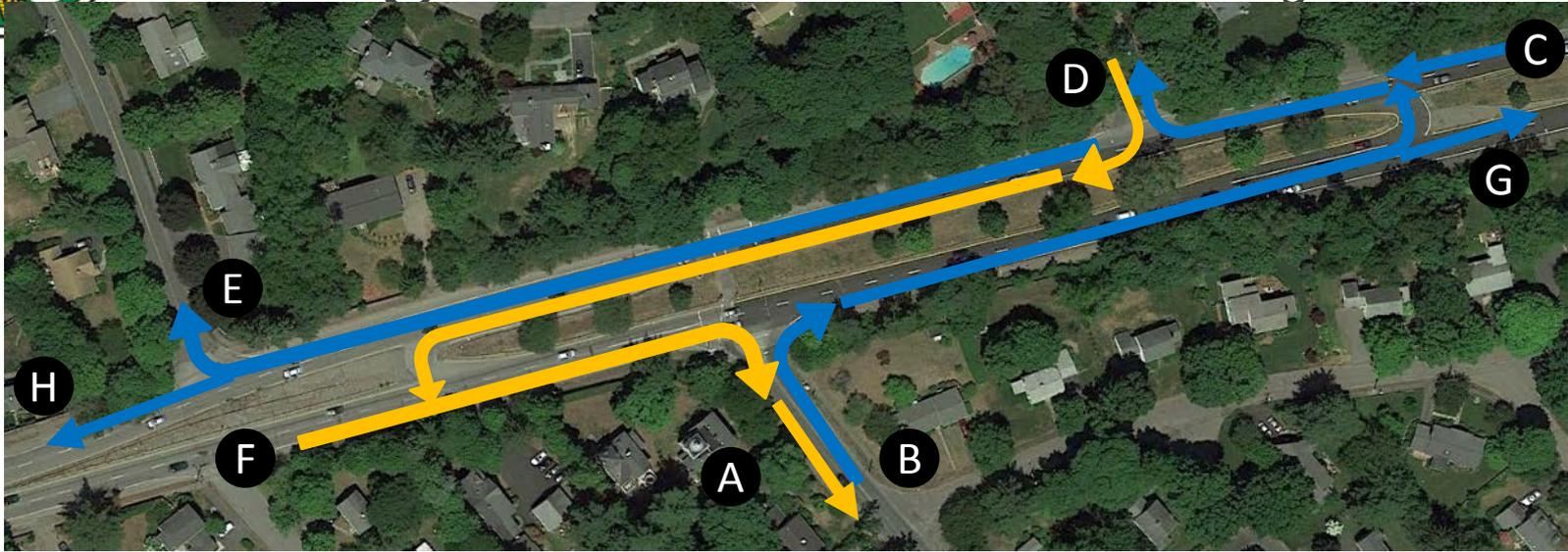


Existing conditions





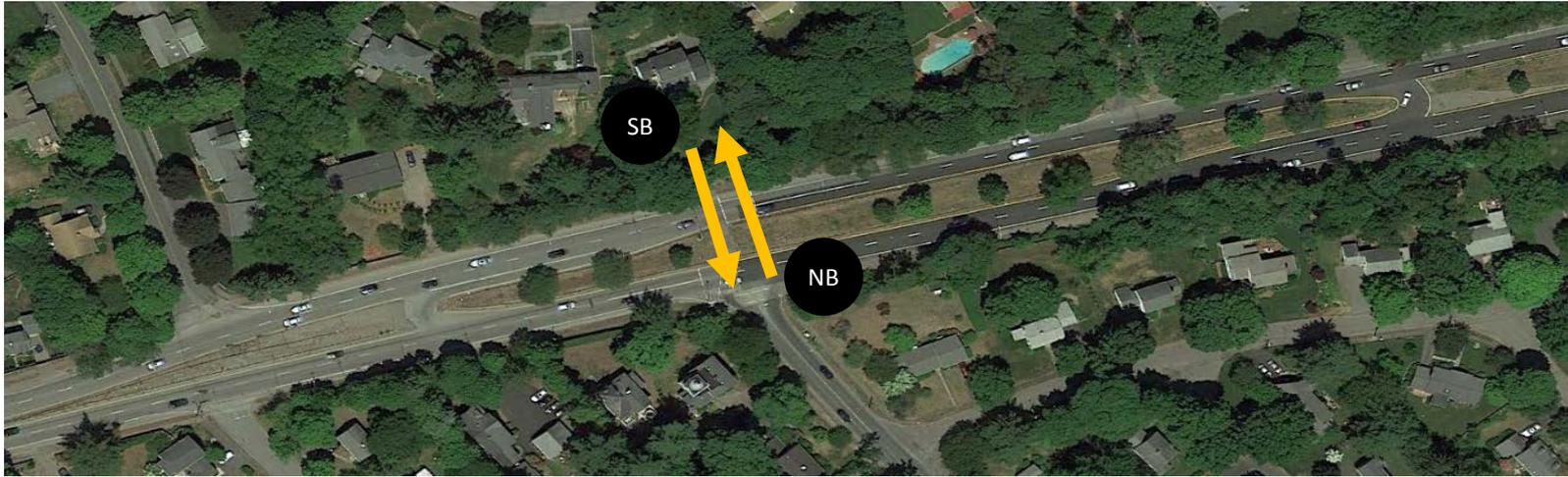
Origin-Destination Study



From	To	Morning (7:00 – 8:00 AM)	Midday (2:15 – 3:15 PM)	Evening (4:15 – 5:15 PM)
B – Kingsbury Street	D – Audubon Road	18	25	15
	E – Sprague Road	6	7	7
	G – Route 9 EB	141	144	124
	H - Route 9 WB	60	81	52
C – Route 9 WB	A – Kingsbury Street	74	102	73
D – Audubon Rd		31	18	18
F – Route 9 EB		179	203	193



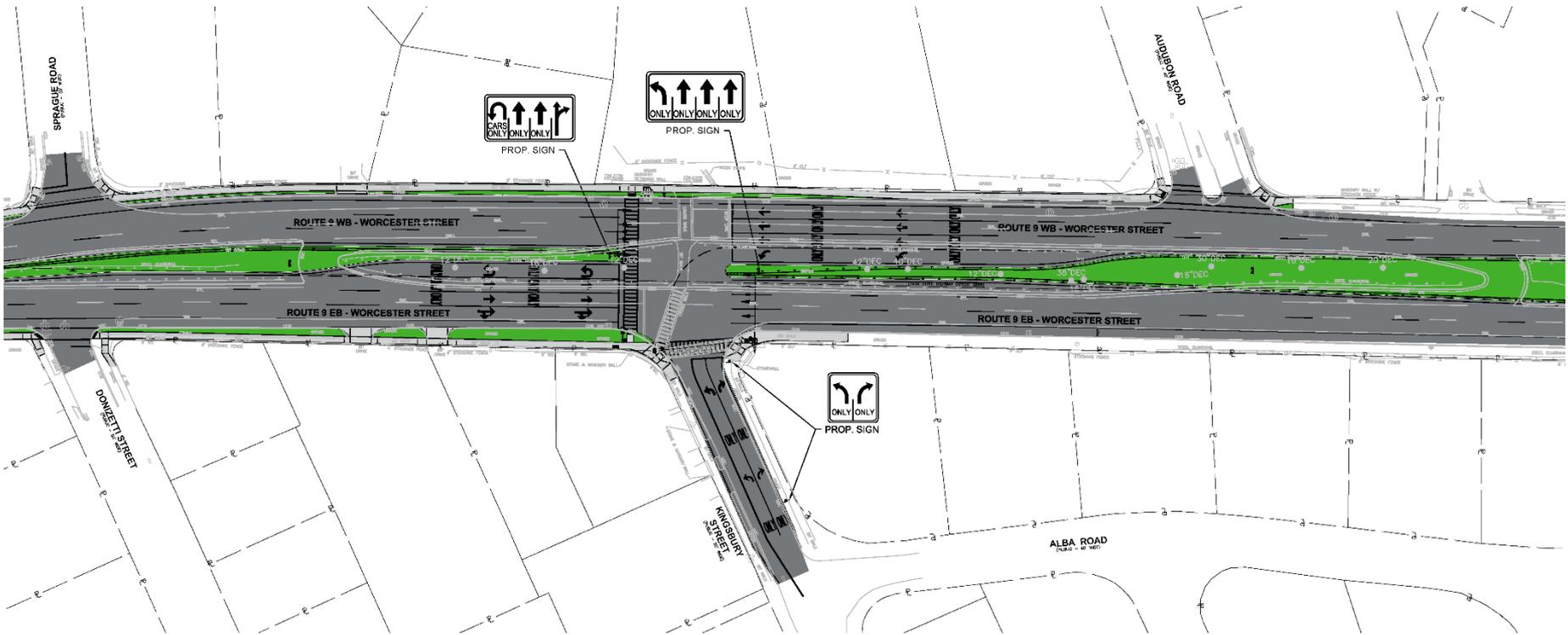
Pedestrian/Bicyclist Activity



Peak Hour	Northbound (NB)		Southbound (SB)		Total		Grand Total
	Peds	Bicyclists	Peds	Bicyclists	Peds	Bicyclists	
Morning (7:00 - 8:00 AM)	0	0	16	1	16	1	17
Midday (2:15 - 3:15 PM)	30	1	0	1	30	2	32
Evening (4:15 - 5:15 PM)	3	2	1	0	4	2	6



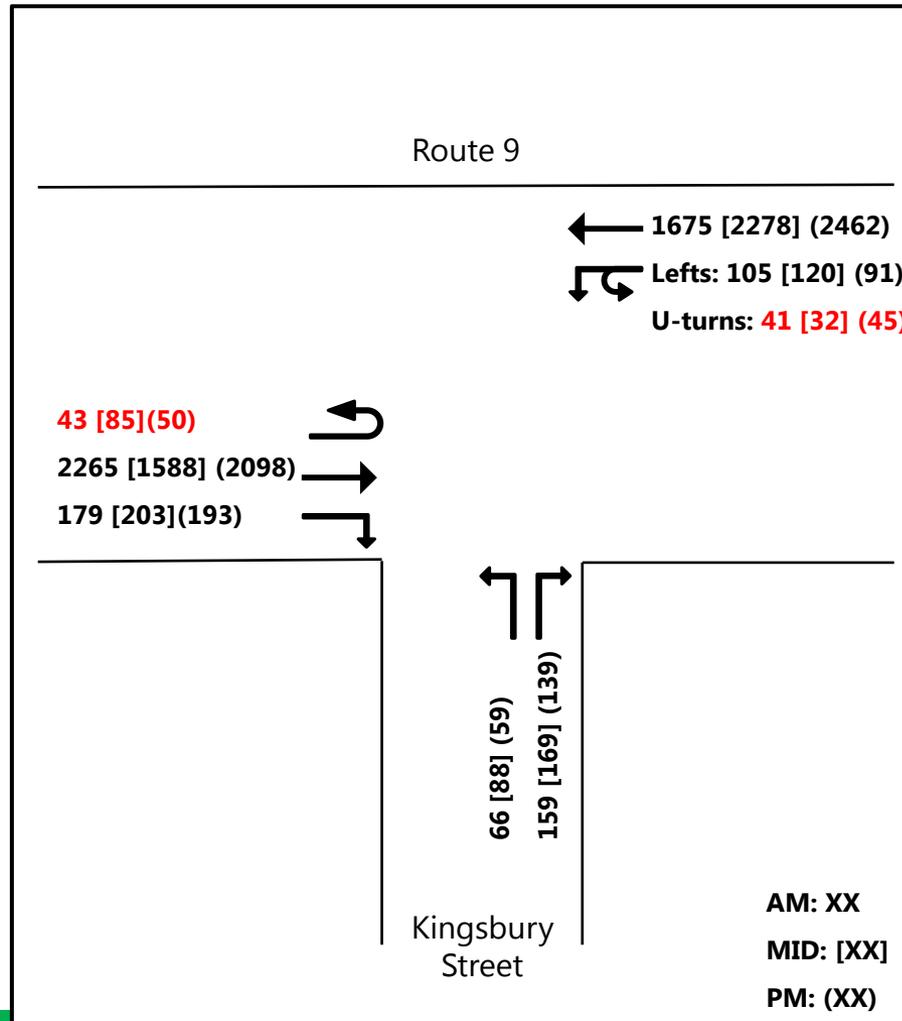
MassDOT Option 1





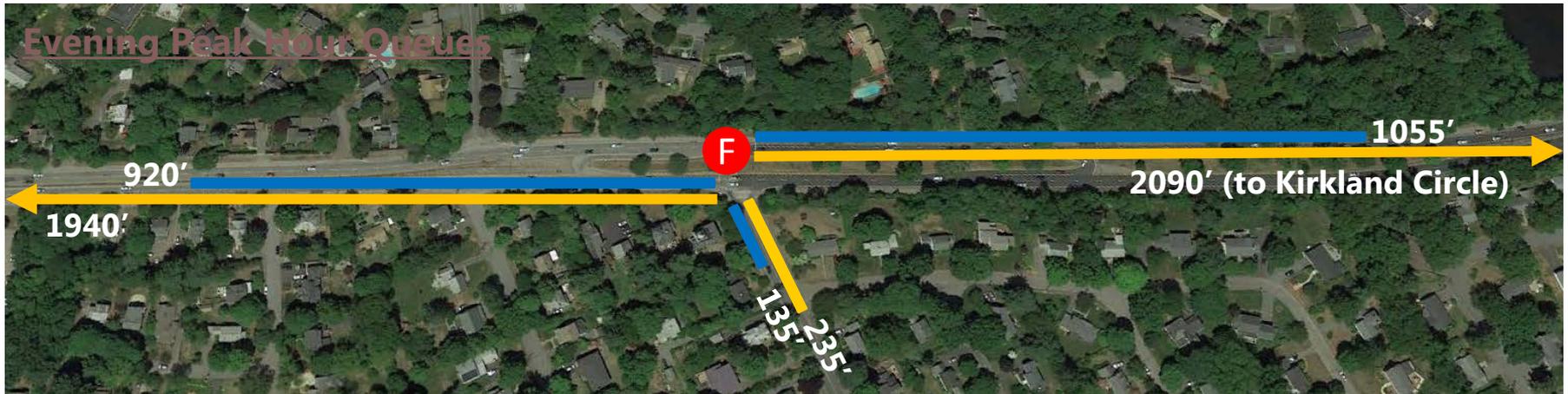
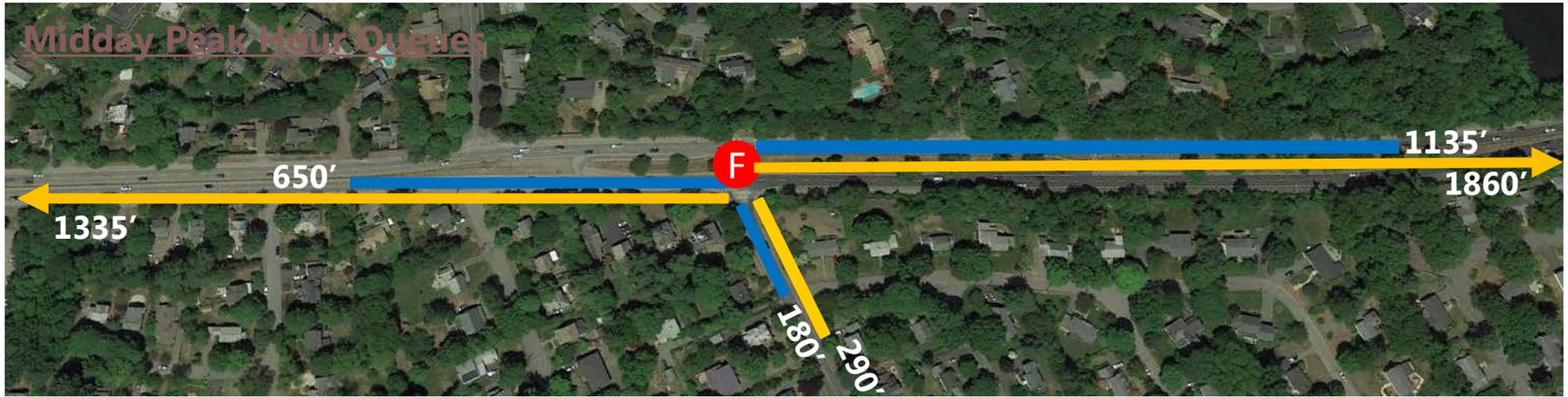
Volume Summary

2016 Volumes





MassDOT Option 1





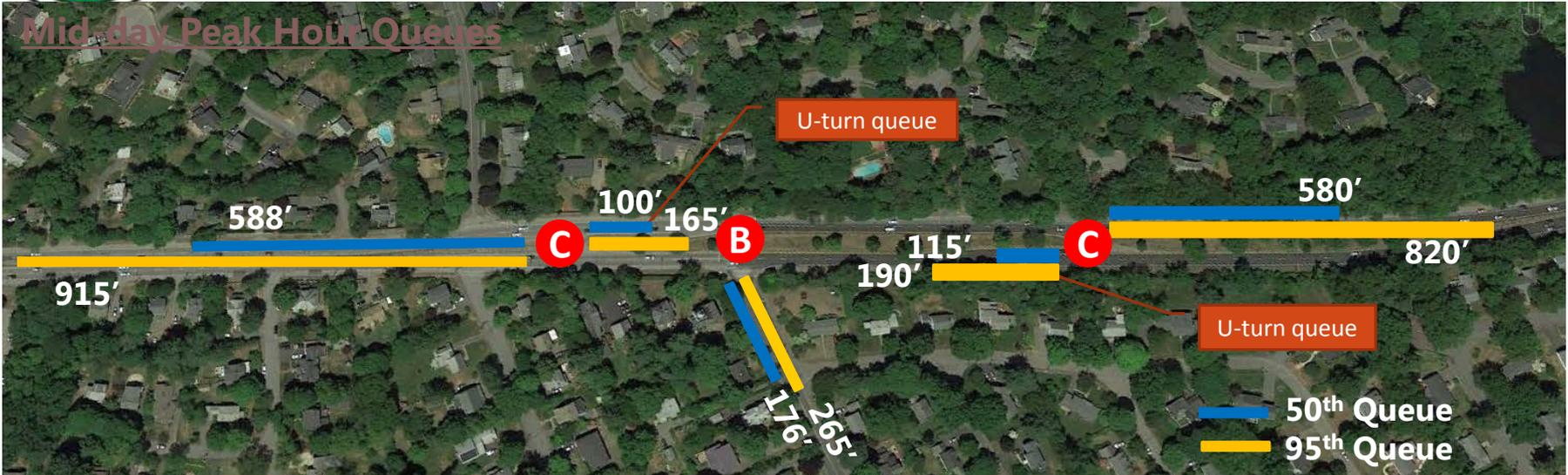
MassDOT Option 1

- Option improves mobility and safety by providing direct left-turns to and from Kingsbury Street
- Option increases delay and queuing on all approaches
- Option provides single-stage, exclusive pedestrian crossing of Route 9





MassDOT Option 2





Operational Comparison

Option	AM Peak Hour		Mid-day Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS
Existing Conditions	41	D	24	C	25	C
Option A	137	F	107	F	111	F
Option B (Route 9 WB U-turn)	92	F	23	C	28	C
Option B (Route 9 @ Kingsbury)	55	D	11	B	23	C
Option B (Route 9 EB U-turn)	10	A	33	C	52	D