



STAKEHOLDER STEERING COMMITTEE WORKSHOP

X2540; ARC No.AR-038-2020

Cobb Parkway at Windy Hill Scoping Study

February 2, 2022

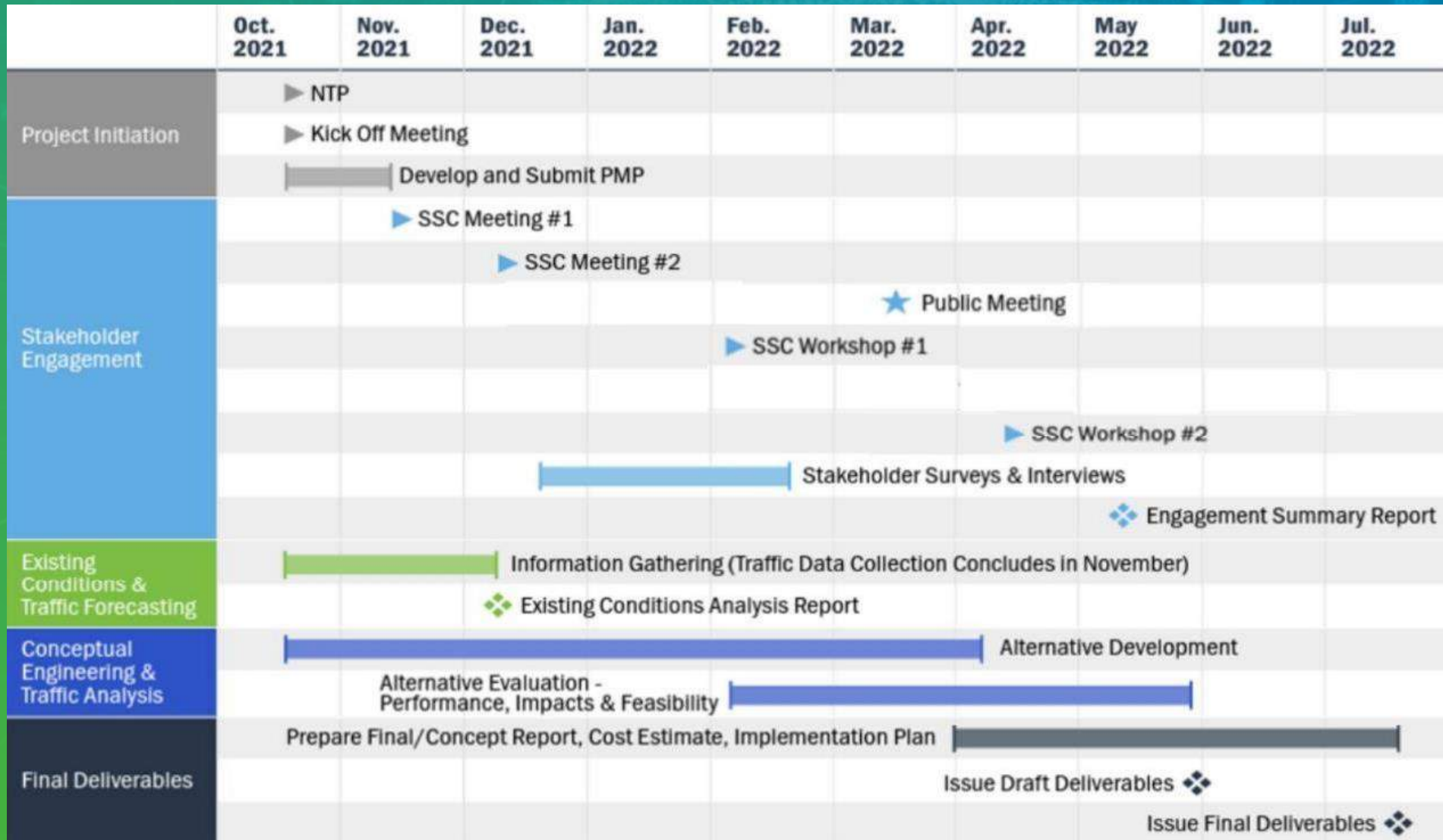
Hello, we're glad you're here!



AGENDA

- WELCOME
- PROJECT STATUS
- PUBLIC SURVEY RESULTS
- ALTERNATIVES – GEOMETRICS & TRAFFIC IMPACTS
- EVALUATION METRICS
- NEXT STEPS

PROJECT STATUS



PUBLIC SURVEY RESULTS

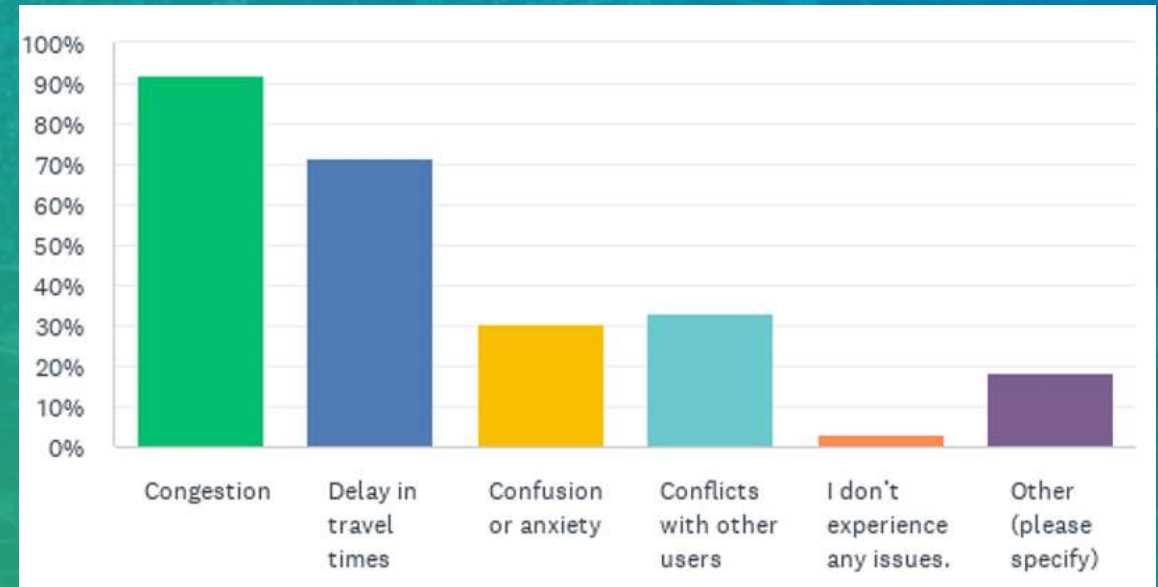


Most Beneficial Improvements to the Intersection

Improvement	Ranking
Congestion relief for vehicles	1
Increased capacity for vehicles	2
Reduced number of vehicle crashes	3
Safer pedestrian facilities	4
Safer bicycle facilities	5

Biggest Safety Issues

Safety Issue	Ranking
Signal timing	1
Driver behavior – speeding, aggression, illegal movements	2
Left turns	3
Pedestrian Crossings	4
Business or residence entrances and driveways	5
Placement of transit stops	6
Bicycle facilities	7



Most Common Issues Experienced at the Intersection



ALTERNATIVES PRESENTATION



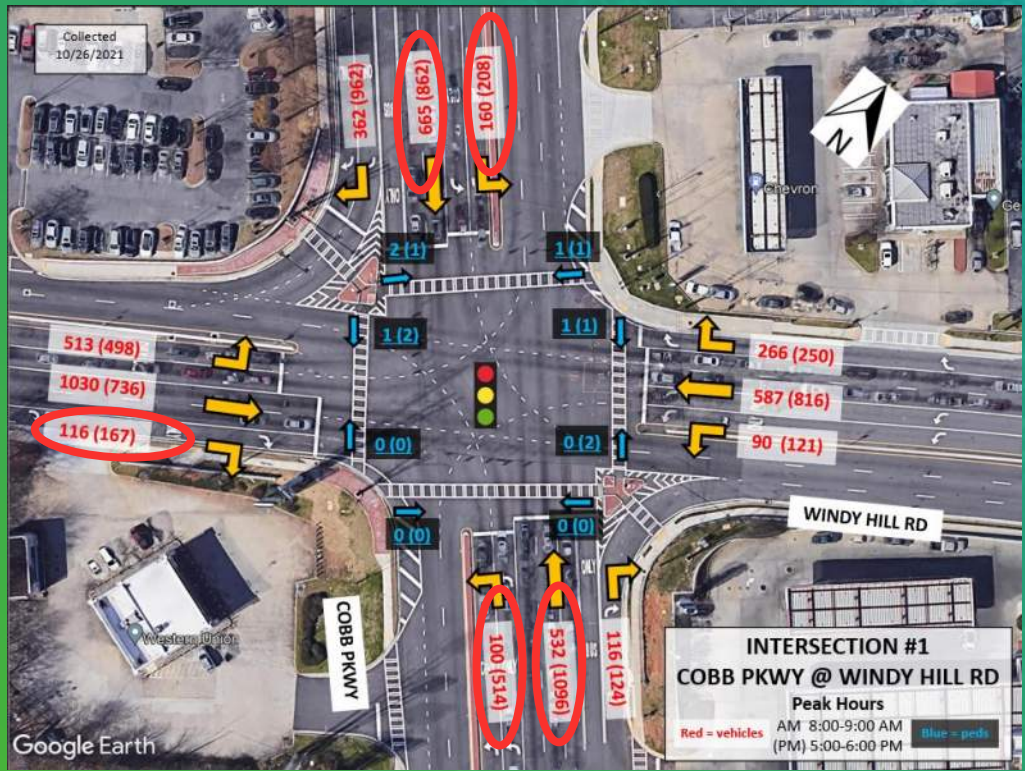
ALTERNATIVE #1 – SPUI (SINGLE-POINT URBAN INTERCHANGE)

- A single traffic signal at the center of the interchange typically controls all left turns. Where through movement is required to maintain local access, separate signals at each approach would be required
- Allows concurrent left turns from two directions
- Can be constructed where there would not be room for a standard interchange-- ideal for urban areas
- Can allow more vehicles to make a turn and clear the interchange in a single traffic signal cycle
- See SR 400 at Lenox Rd
- Jimmy Carter Blvd @ SR 141



TRAFFIC VOLUMES

EXISTING PROPOSED

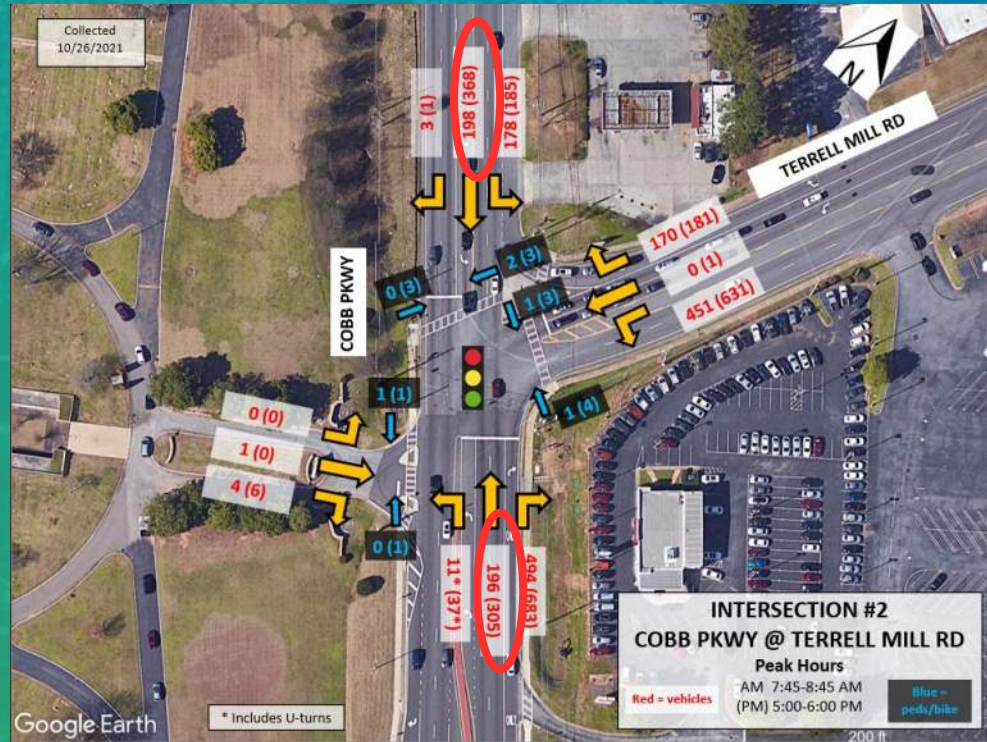
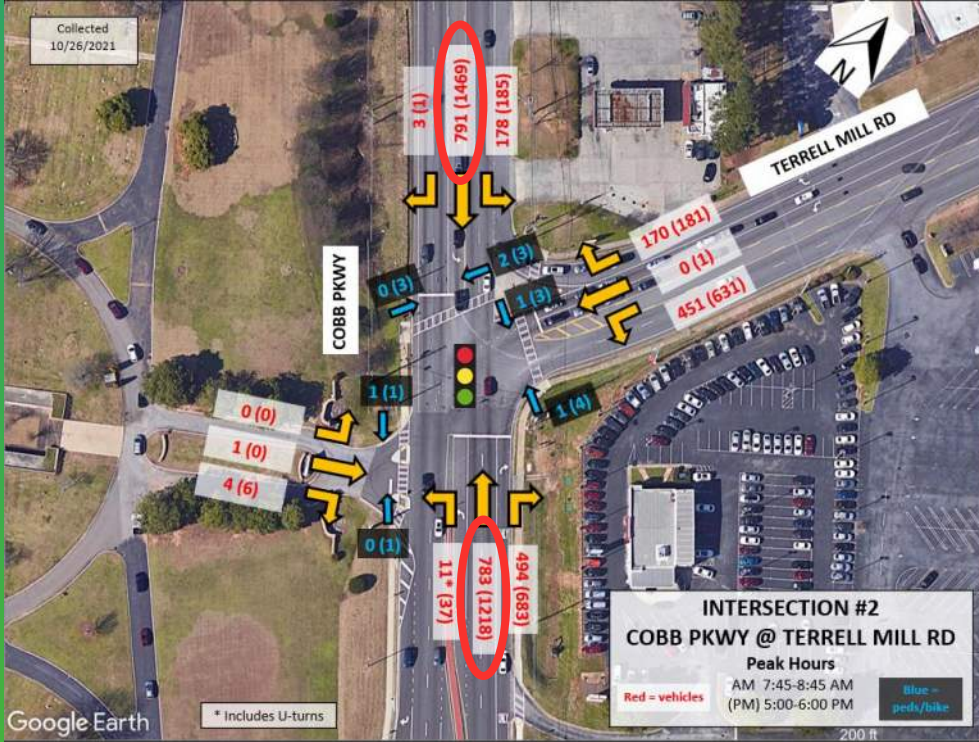


COBB PKWY @ WINDY HILL



TRAFFIC VOLUMES

EXISTING PROPOSED



COBB PKWY @ TERRELL MILL RD

QUEUE LENGTHS – COBB PKWY @ WINDY HILL RD



Alternative	Movement	Existing 95 th % Queue Length (ft)		Projected 95 th % Queue Length (ft)		Existing Storage (ft)
		AM	PM	AM	PM	
SPUI	EBL (dual)	364	360	377	368	600
	EBR	78	92	65	75	300
	WBL (dual)	86	110	90	109	410
	WBR	110	165	85	87	-
	NBL (dual)	98	663	112	449	500
	NBR	43	49	0	23	550
	SBL (dual)	139	193	146	201	500
	SBR (dual)	41	237	234	#951	600



QUEUE LENGTHS – COBB PKWY @ TERRELL MILL RD

Alternative	Movement	Existing 95 th % Queue Length (ft)		Projected 95 th % Queue Length (ft)		Existing Storage (ft)
		AM	PM	AM	PM	
SPUI	WBL (dual)	231	326	90	109	-
	WBR	18	54	85	87	325
	NBR	68	66	0	23	-
	SBL	206	126	146	201	140

DELAY AND LEVEL OF SERVICE



Alternative No.	2021 AM (PM) Peak Hour									
	Existing 2021 Conditions					SPUI				
	Delay (sec/veh)	LOS	Approach	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Approach	Delay (sec/veh)	LOS
1	48.3 (111.5)	D (F)	EB	51.2 (46.6)	D (D)	59.9 (96.8)	E (F)	EB	63.6 (70.9)	E (E)
			WB	58.1 (84.9)	E (F)			WB	63.6 (110.8)	E (F)
			NB	43.6 (275.4)	D (F)			NB	44.7 (72.5)	D (E)
			SB	39.5 (40.0)	D (D)			SB	53.4 (126.5)	D (F)



ALTERNATIVE #2 – PARTIAL CFI (CONTINUOUS FLOW INTERSECTION)

- AKA Displaced Left Turn
- Allows simultaneous left turns and through movements of one or both approaches
- Service roads would be constructed adjacent to the left-turn lanes to maintain access to the adjacent commercial properties.
- See SR 400 @ SR 53
- 4 currently under construction in Georgia



QUEUE LENGTHS

Alternative	Movement	Existing 95 th % Queue Length (ft)		Projected 95 th % Queue Length (ft)		Existing Storage (ft)
		AM	PM	AM	PM	
Partial CFI	EBL (dual)	364	360	235	226	600
	EBR	78	92	0	0	300
	WBL (dual)	86	110	81	81	410
	WBR	110	165	0	0	-
	NBL (dual)	98	663	56	56	500
	NBR	43	49	41	41	550
	SBL (dual)	139	193	89	90	500
	SBR (dual)	41	237	34	34	600

DELAY AND LEVEL OF SERVICE



Alternative No.	2021 AM (PM) Peak Hour									
	Existing 2021 Conditions					Partial CFI				
	Delay (sec/veh)	LOS	Approach	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Approach	Delay (sec/veh)	LOS
2	48.3 (111.5)	D (F)	EB	51.2 (46.6)	D (D)	61.9 (61.4)	E (E)	EB	79.9 (79.1)	E (E)
			WB	58.1 (84.9)	E (F)			WB	116.5 (115.4)	F (F)
			NB	43.6 (275.4)	D (F)			NB	26 (25.8)	C (C)
			SB	39.5 (40.0)	D (D)			SB	21.5 (21.4)	C (C)



ALTERNATIVE #3 – AT-GRADE IMPROVEMENTS

- Additional through lane in each direction on Windy Hill west of Cobb Parkway up to the Village Parkway intersection.



QUEUE LENGTHS

Alternative	Movement	Existing 95 th % Queue Length (ft)		Projected 95 th % Queue Length (ft)		Existing Storage (ft)
		AM	PM	AM	PM	
Addition of EBT & WBT Lanes	EBL (dual)	364	360	377	368	600
	EBR	78	92	58	81	300
	WBL (dual)	86	110	87	104	410
	WBR	110	165	86	181	-
	NBL (dual)	98	663	101	449	500
	NBR	43	49	0	23	550
	SBL (dual)	139	193	146	201	500
	SBR (dual)	41	237	234	#951	600

DELAY AND LEVEL OF SERVICE



Alternative No.	2021 AM (PM) Peak Hour									
	Existing 2021 Conditions					Addition of EBT & WBT Lanes				
	Delay (sec/veh)	LOS	Approach	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Approach	Delay (sec/veh)	LOS
3	48.3 (111.5)	D (F)	EB	51.2 (46.6)	D (D)	55.8 (78.8)	E (E)	EB	65.5 (71.0)	E (E)
			WB	58.1 (84.9)	E (F)			WB	58.7 (67.7)	E (E)
			NB	43.6 (275.4)	D (F)			NB	37.5 (55.7)	D (E)
			SB	39.5 (40.0)	D (D)			SB	51.1 (110.1)	D (F)



ALTERNATIVE #4 – FLYOVER RAMP

- Flyover ramp would allow continuous, uninterrupted movement from EB Windy Hill Road to EB Terrell Mill Road and the reciprocal movement from WB Terrell Mill Road to WB Windy Hill Road.
- Along Cobb Parkway, the flyover is aligned east of Cobb Parkway. The bents of the flyover would be positioned to avoid obstructing driveways to adjacent commercial properties.
- Existing Traffic Volumes for this particular movement are very high.
- Additionally, multiple comments received from the public indicate that this is a problematic movement for many drivers.



TRAFFIC VOLUMES

EXISTING PROPOSED



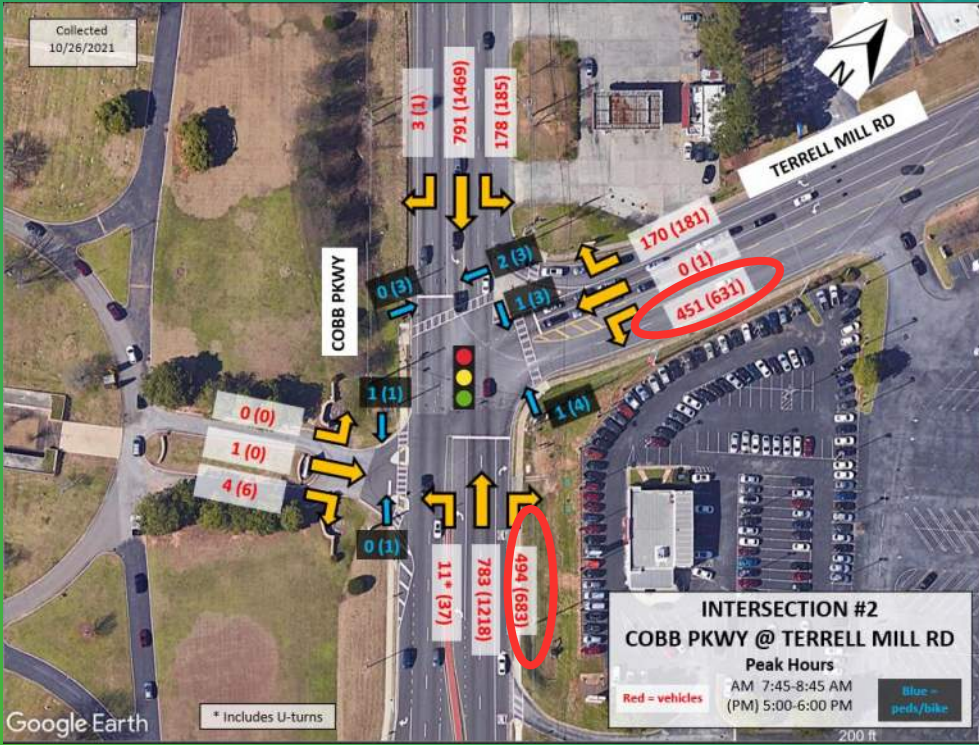
COBB PKWY @ WINDY HILL



TRAFFIC VOLUMES

EXISTING

PROPOSED



COBB PKWY @ TERRELL MILL RD

QUEUE LENGTHS – COBB PKWY @ WINDY HILL RD



Alternative	Movement	Existing 95 th % Queue Length (ft)		Projected 95 th % Queue Length (ft)		Existing Storage (ft)
		AM	PM	AM	PM	
Flyover Bridge	EBL (dual)	364	360	294	256	600
	EBR	78	92	65	75	300
	WBL (dual)	86	110	90	109	410
	WBR	110	165	55	207	-
	NBL (dual)	98	663	112	449	500
	NBR	43	49	17	23	550
	SBL (dual)	139	193	146	201	500
	SBR (dual)	41	237	38	390	600



QUEUE LENGTHS – COBB PKWY @ TERRELL MILL RD

Alternative	Movement	Existing 95 th % Queue Length (ft)		Projected 95 th % Queue Length (ft)		Existing Storage (ft)
		AM	PM	AM	PM	
Flyover Bridge	WBL (dual)	231	326	90	109	-
	WBR	18	54	55	207	325
	NBR	68	66	17	23	-
	SBL	206	126	146	201	140

DELAY AND LEVEL OF SERVICE



Alternative No.	2021 AM (PM) Peak Hour									
	Existing 2021 Conditions					Flyover S-Shaped Bridge				
	Delay (sec/veh)	LOS	Approach	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Approach	Delay (sec/veh)	LOS
4	48.3 (1111.5)	D (F)	EB	51.2 (46.6)	D (D)	48.9 (66.1)	D (E)	EB	60.3 (67.5)	E (E)
			WB	58.1 (84.9)	E (F)			WB	32.6 (66.1)	C (E)
			NB	43.6 (275.4)	D (F)			NB	42.7 (61.4)	D (E)
			SB	39.5 (40.0)	D (D)			SB	54.1 (70.3)	D (E)

PROPOSED EVALUATION METRICS



Traffic and Network Performance

Impact to CobbLinc Transit

Access to Nearby Land Parcels

Safety Improvement

Pedestrian Connectivity and Safety

ROW Requirements

Construction Cost Effectiveness

Ease of Construction (Constructability)

Impact on Existing Utilities and Services

Landscape and Visual Impacts



NEXT STEPS

Public Meeting – March 16, 2022 – 5PM

- Windy Hill Community Center
- Goal: Introduce some options to the public and get feedback



NEXT STEPS

SSC Workshop #2 – April 13, 2022 – 10AM-12PM

- Brawner Hall
- Discuss refined alternatives, present preferred alternative



Q & A / OPEN DISCUSSION