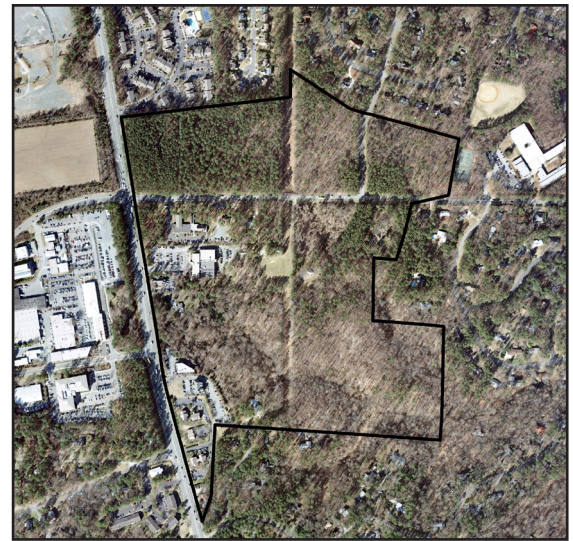
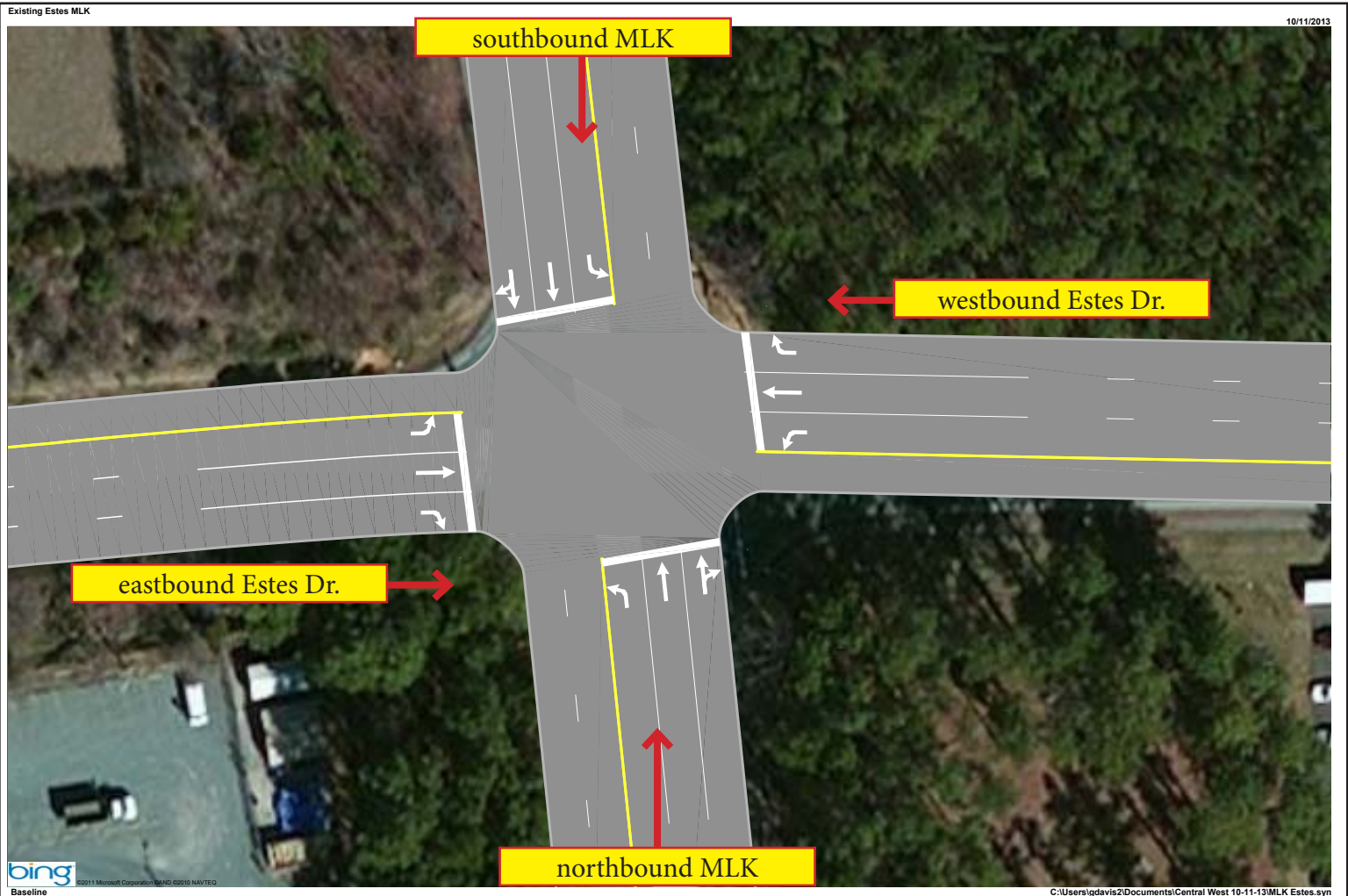


Existing Conditions

Illustration	Mitigation Description	Existing (2013)
	Existing Geometrics	✓
	NB Right-turn lane on MLK	
	SB right-turn lane on MLK	
	3rd NB through lane on MLK, requiring a 3rd receiving lane on MLK north of Estes	
	2nd SB left-turn lane on MLK, requiring a 2nd receiving lane on Estes east of MLK	
	2nd EB and WB through lanes on Estes, requiring 2nd receiving lanes on Estes both east and west of MLK	
	2nd WB left-turn lane on Estes	
	2nd EB left-turn lane on Estes	



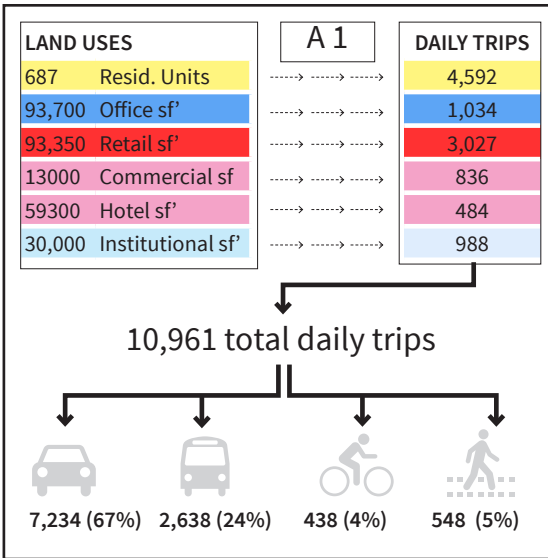
Level of Service	Description
A	Minimal Delays, avg. delay is less than 10 seconds
B	Low levels of Delay and Queuing; avg. delay is between 10 and 20 seconds
C	Intermittently vehicles wait through more than one signal cycle, occasionally back ups may occur but traffic flow is stable; avg. delay is between 20 and 35 seconds.
D	Delays at intersections may become extensive, but enough cycles with lower demand occur to permit periodic clearance, preventing excessive backups; avg. delay is between 35 and 55 seconds
E	Traffic fills intersection capacity and long queues and delays are to be expected and many vehicles will wait for more than one signal cycle; avg. delay is between 55 and 80 seconds
F	Traffic demand exceeds capacity of intersection resulting in very long queues and delays for most vehicles. Most vehicles at the intersection will need to wait through more than one signal cycle; avg delay exceeds 80 seconds



Option A 1

Illustration	Mitigation Description
	Existing Geometrics
	NB Right-turn lane on MLK
	SB right-turn lane on MLK
	3rd NB through lane on MLK, requiring a 3rd receiving lane on MLK north of Estes
	2nd SB left-turn lane on MLK, requiring a 2nd receiving lane on Estes east of MLK
	2nd EB and WB through lanes on Estes, requiring 2nd receiving lanes on Estes both east and west of MLK
	2nd WB left-turn lane on Estes
	2nd EB left-turn lane on Estes

Option A1
✓
✓ ★
✓ ★
✓
✓



- ★ Mitigation Measure Identified in Carolina North TIA
- ★ Improvement required to mitigate background growth and CN traffic.

WITHOUT mitigation

		Build (2023) A1			
		AM		PM	
Control	Approach	LOS	Delay	LOS	Delay
Signalized	Total	E	67.4	F	92.9
	Eastbound	F	82.5	F	131.4
	Westbound	E	66.9	F	105.2
	Northbound	D	46.7	F	84.5
	Southbound	E	68.6	E	75.6

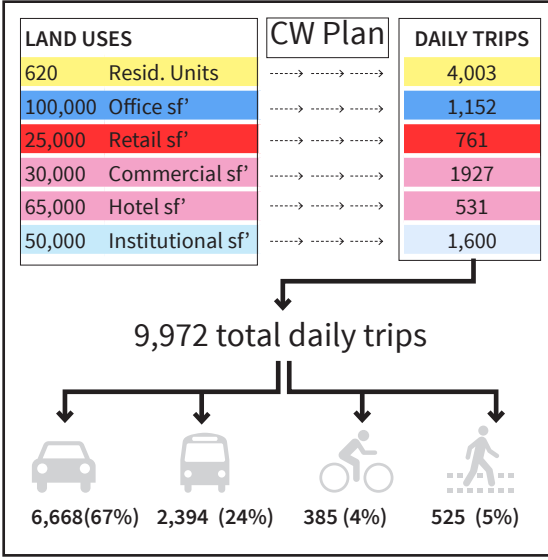
WITH mitigation

		Build (2023) A1			
		AM		PM	
Control	Approach	LOS	Delay	LOS	Delay
Signalized	Total	D	46.2	D	50.9
	Eastbound	E	66.4	E	61.1
	Westbound	E	58.5	E	59.7
	Northbound	C	30.3	D	48.0
	Southbound	D	36.9	D	42.9



Central West Plan

Illustration	Mitigation Description	Existing	Final Alternative
	Existing Geometrics		✓
	NB Right-turn lane on MLK	★	✓
	SB right-turn lane on MLK	★	✓
	3rd NB through lane on MLK, requiring a 3rd receiving lane on MLK north of Estes	★	✓
	2nd SB left-turn lane on MLK, requiring a 2nd receiving lane on Estes east of MLK		✓
	2nd EB and WB through lanes on Estes, requiring 2nd receiving lanes on Estes both east and west of MLK		
	2nd WB left-turn lane on Estes		
	2nd EB left-turn lane on Estes		



- ★ Mitigation Measure Identified in Carolina North TIA
- ★ Improvement required to mitigate background growth and CN traffic.

WITHOUT mitigation

Estes Drive & M.L.K. Jr.		Central West Plan			
		AM		PM	
Control	Approach	LOS	Delay	LOS	Delay
Signalized	Total	E	58.3	F	91.5
	Eastbound	F	81.2	F	126.6
	Westbound	E	68.5	F	103.5
	Northbound	D	40.1	F	84.3
	Southbound				

WITH mitigation

Estes Drive & M.L.K. Jr.		Central West Plan			
		AM		PM	
Control	Approach	LOS	Delay	LOS	Delay
Signalized	Total	D	46.6	D	49.9
	Eastbound	E	67.0	E	65.0
	Westbound	E	55.4	D	53.8
	Northbound	C	28.5	D	45.8
	Southbound				

