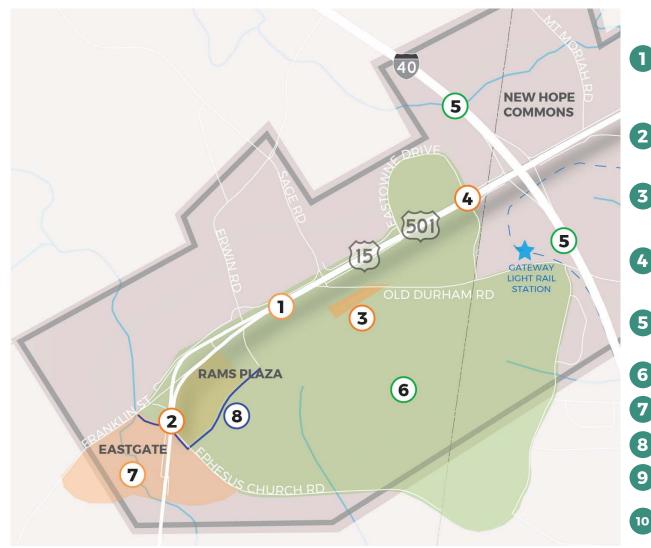
US 15-501 SEGMENT ONE STRATEGIES

Ephesus Church Rd to I-40



OPTION ONE

OPTION TWO

OPTION THREE

D	Widen US 15-501 from a 4-lane median divided to 6-lane median divided superstreet facility (including elimination of service roads and channelization); provide painted pedestrian crosswalks		Widen US 15-501 to an 8-lane median divided facility with traditional intersections; provide painted pedestrian crosswalks
2	Superstreet intersection at Ephesus Church Road and US 15-501	Urban interchange at Ephesus Church Road and US 15-501	No Change from Existing
3	Connect Legion Road and Old Durham Road	No Change from Existing	Connect Legion Road and Old Durham Road
4	Urban interchange with bike/pedestrian facilities at Eastowne Drive and US 15-501		Traditional intersection widening with grade separated pedestrian crossing
5	Connector roads with bike/pedestrian facilities connecting all 4 quadrants of I-40 interchange		Implement bike/pedestrian facilities (see I-40 Segment Boards strategies 2-3)
6	Inoplement hiles/pedectries	facilities far this even as shown	n in Chanal Hill Mahility Dlan

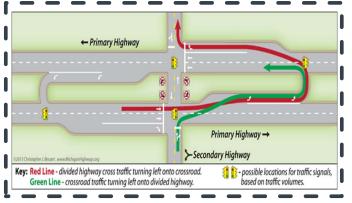
Implement bike/pedestrian facilities for this area as shown in Chapel Hill Mobility Plan

Implement local street network as proposed by Blue Hill District TIA

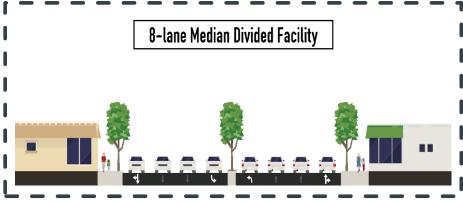
Bus improvements as recommended by Blue Hill District TIA

Bus stop enhancements

Land Use: capitalize on opportunities to create land use patterns that promote multimodal travel, and incorporate urban design and human-scale design



Superstreet Facility Diagram

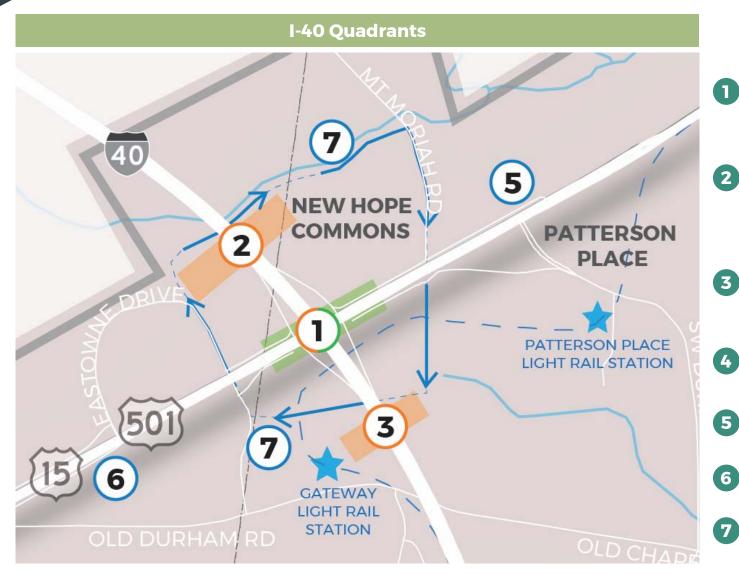


8-Lane Street Section



Grade Separated Pedestrian Crossing

US 15-501 I-40 QUAD STRATEGIES



OPTION ONE OPTION TWO

Redesign I-40/US 15-501 interchange to improve safety and operations

Grade separated 2-lane roadway
with bike/pedestrian facilities across
I-40 connecting New Hope
Commons to Eastowne Drive

Provide bike/pedestrian facilities within the redesigned interchange

Grade separated 2-lane roadway
with bike/pedestrian facilities across
I-40 connecting Patterson Place to
Gateway Station

Provide for bike/pedestrian facilities within the redesigned interchange

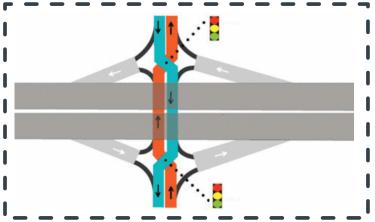
Put Durham and Chapel Hill signals on the same system to improve traffic flow

Extend Chapel Hill transit across I-40 to connect with a transfer point in Durham (near-term CHT to Patterson Place)

Extend GoDurham across I-40 to connect with a transfer point in Chapel Hill (long-term GoDurham to Gateway Station)

Implement connecting bus service to Eastowne Drive and New Hope

Commons



Diverging Diamond Intersection Diagram

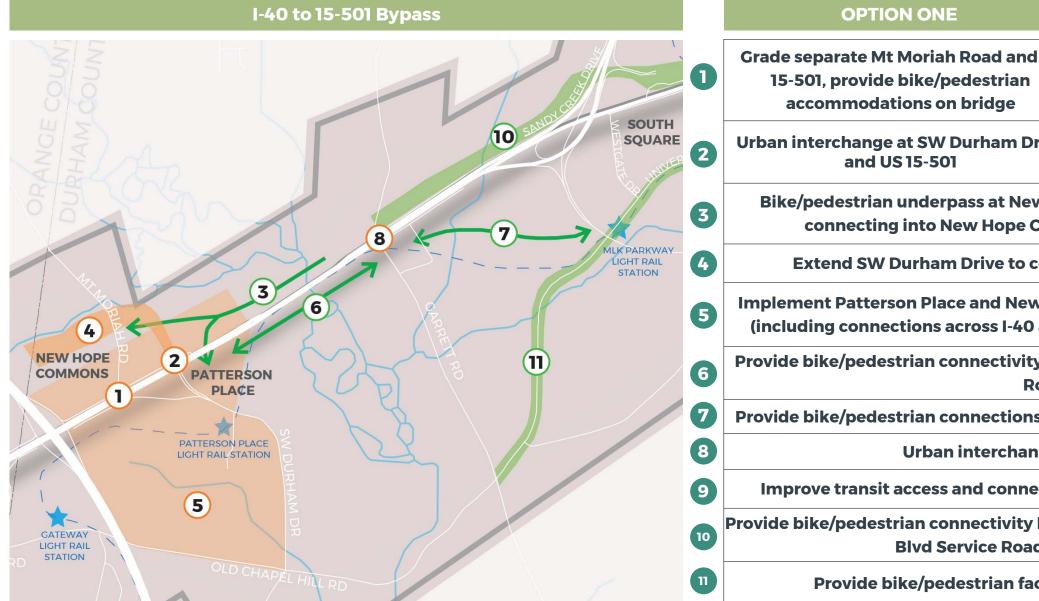


Split Diamond Intersection Diagram

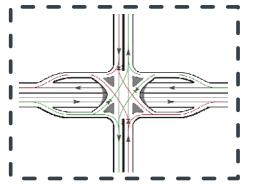
Single Point Diamond Interchange

OPTION TWO

US 15-501 SEGMENT TWO STRATEGIES



	51 H5K 5K2	or non rue		
	Grade separate Mt Moriah Road and US 15-501, provide bike/pedestrian accommodations on bridge	Restrict Mt Moriah Road to right in/right out		
	Urban interchange at SW Durham Drive and US 15-501	Traditional intersection widening at SW Durham Drive and US 15-501		
	Bike/pedestrian underpass at New Hope Creek with off road facilities connecting into New Hope Commons and Patterson Place			
)	Extend SW Durham Drive to connect behind shopping center			
	Implement Patterson Place and New Hope Commons local street network (including connections across I-40 and bike/pedestrian improvements)			
)	Provide bike/pedestrian connectivity between Patterson Place and Garrett Road			
)	Provide bike/pedestrian connections from Garrett Road to University Drive			
)	Urban interchange at Garrett Road			
)	Improve transit access and connectivity to and through the segment			
)	Provide bike/pedestrian connectivity between Sandy Creek Drive, Chapel Hill Blvd Service Road, and Garrett Road			
	Provide bike/pedestrian facilities along University Drive			



Single Point Interchange Diagram



Right In – Right Out



Bike/Pedestrian Under-pass



Multi-use



US 15-501 SEGMENT THREE STRATEGIES

15-501 Bypass to Chapel Hill Road

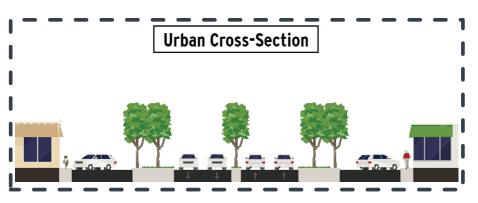


		OPTION ONE	OPTION TWO		
Y	0	Implement 2-lane roundabout to transition into a more urban street cross section	Implement other traffic calming measures to transition into a more urban street cross section		
	2	Implement a fully multimodal 4-lane urban cross-section with landscaped median and roundabouts at key locations	Implement a 4-lane urban cross- section with landscaped median and traditional intersections		
	3	Remove service roads to provide protected bike lanes and sidewalks from Westgate Drive to Chapel Hill Road	Convert service roads to linear park		
	4	Implement high density mixed use development fronting US 15-501 Business	Implement high density mixed use development pattern		
•	5	Implement an urban street grid system to the north and south of US 15-501 Business			
	6	Replace interchange at Academy Road with a 2-lane roundabout to better accommodate urban design and bike/pedestrians	Redesign Academy Road interchange to better reflect urban design		
	7	Replace interchange at Chapel Hill Road with a 1-lane roundabout to better accommodate urban design bike/pedestrians.	Redesign Chapel Hill Road interchange to better reflect urban design		
	8	Continue bike/pedestrian improvements along University Drive	Provide bike/pedestrian facilities outside of the US 15-501 Business corridor, including along University Drive and Pickett Road		











Landscaped median, convert service roads to park, development facing parking lots

US 15-501 SEGMENT FOUR STRATEGIES

3

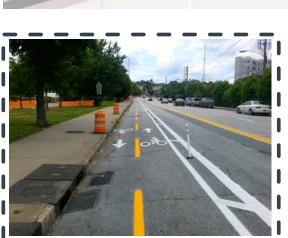
4

5

6

Chapel Hill Road to University Drive









Protected Bike Lane

OPTION ONE

Implement a 2-lane urban cross section with roundabouts at key intersections, landscaped median, and consolidated driveways fronting US 15-501 Business

Redesign University Drive intersection as a roundabout with a bike/pedestrian facilities connecting to the proposed bike/pedestrian facilities on University Drive

OPTION TWO

Implement a 2-lane urban cross section with traditional intersections, landscaped median and consolidated driveways fronting US 15-501 Business

Redesign University Drive intersection to better accommodate bike/pedestrian travel

Improve connectivity between adjoining neighborhoods and US 15-501 Business using sidewalks or greenways for example

	Provide a Cycle Track on the south side of US 15-501 Business and		
)	sidewalks and parking on the north side		

on both sides of US 15-501 Business.

Provide bike lanes and sidewalks

No Change from Existing

Provide parking on north side of US 15-501 business

Improve transit amenities

Pedestrian connection between Chapel Hill Road and US 15-501 Business



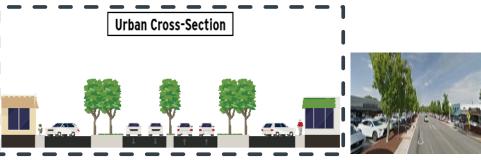
Bike/Pedestrian Facilities in Roundabout

US 15-501 15-501 Example Strategies

URBAN STREE









8-lane Median Divided Facility

Landscaped median, convert service roads to park, development facing parking lots

INTERCHANG



Double Roundabout



Double Compressed Diamond



Single Point Diamond



Diverging Diamond



Two Quadrant Cloverleaf



Single Quadrant Cloverleaf

INTERSECTION



Right In - Right Out





Bike/Pedestrian Overpass

BIKE/PEDESTRIAN





Protected Bike Lane



Bike Lane Intergraded into Roundabout