

APPENDIX



Comprehensive Projects List



TOWN OF CARRBORO

BIKE PLAN



This list was developed by Town staff based on feedback received towards the end of the plan development process to more clearly define the projects that are included in the plan. This list is comprehensive, and thus includes all projects, even those which (as of January 2021) lack a clear route to implementation. This table identifies location, improvement type (long term and incremental), cost estimate, estimate source, facility ownership, resurfacing timeline, and funding/ implementation information. Any improvement proposed for a street that is not maintained by the Town is subject to approval and agreement from the entity which maintains it, whether that is an encroachment agreement from NCDOT or easement from a private entity. Additional information about the attributes shown in the table are described below.

Improvement Types - Linear Facilities

- » Sharrow + Wayfinding Basic non-traffic calming improvements typically incorporated as part of a neighborway, but can be made to create a functional bike route where traffic speeds and volumes are already low.
- » Neighborway In residential neighborhoods, neighborways—also known as bicycle boulevards improve travel for people who bicycle while calming traffic and greening neighborhoods. Neighborways are shared by automobiles and bicycles, but at speeds that make travel more comfortable for people who

- bicycle. Typical treatments along neighborways may include mini traffic circles, chicanes, wayfinding signage, and shared-lane markings.
- » Buffered Bike Lane A bicycle lane with a buffer space between the motor vehicle lane and the bike lane. This is the first step in incrementally installing a protected bike lane.
- » Separated or Protected Bike Lane - This updated Plan defines a separated bike lane as a bicycle facility that is physically separated from motor vehicle traffic within a street corridor. For this Plan, this includes cycle tracks and buffered bike lanes. The on-road physical separation can be achieved through parked cars, curbs, medians, bollards/traffic posts, planters, or marked buffered space between the bike lane and adjacent travel lane.
- » Bike Lane A bike lane is a portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of people who bicycle. Bike lanes are almost always located on both sides of the road (except one way streets), and carry people who bicycle in the same direction as adjacent motor vehicle traffic. In some cases, climbing bicycle lanes (on uphill side) can be paired with shared-lane markings on the downhill section. The minimum width for a bike lane is 4 feet; fiveand six-foot bike lanes are typical for collector and arterial roads.

- » Climbing Lane In an area where there is significant topography, a bicycle lane may be provided only in the uphill direction.
- » Cycletrack Placement of both bike lanes on the same side of the street, usually with a vertical separation between the bike lane and the vehicle lane.
- » Shared Use Path Shared Use Paths are completely separated from motorized vehicular traffic and are constructed in their own corridor, often within an open-space area. Shared Use Paths can be paved and should be a minimum of 10' wide. Pavement widths of 12-, 14-, and even 16-feet are appropriate in high-use urban situations. Greenways and Sidepaths are included in this category.
- » Private Connection (On-street or Shared Use Path) - A private connection includes the development of a public bike facility on a privately owned street or land. The recommendations found here include shared use paths taking advantage of privately owned open space and neighborways on privately owned residential streets. These facilities are often kept short to minimize impacts on private property but are critical components to a well-connected network.

Improvement Types - Intersections

Intersection projects, while indicated separately from linear ones, often don't have independent cost estimates. This is due to the fact that if a linear project

crosses an intersection, it includes the intersection improvements noted.

- » Hi-vis X-walk and Signage A basic, low cost improvement to indicate the crossing location at an intersection for people on bikes and people walking. Signage provides advance warning to drives.
- » Bike Box A dedicated space for people on bike to wait for a green signal. Increases safety during the transition from a section with a bike lane, to one without by allowing people on bikes to get in front of those in car and be more visible. Bike loops (so people on bikes can trip the traffic signal) are often placed here.
- » Conflict Markings Markings designating the area where people on bikes ride through an intersection. This helps people driving understand where to expect people on bikes and reduce the risk of right-hooks and other collisions.
- » Signalized Crossing More intense crossing infrastructure that encompasses a variety of treatments including Rapid Rectangular Flashing Beacons (RRFBs), High-intensity Activated crossWalK (HAWK), Pedestrian Hybrid Beacon (PHB), or a traffic signal. Selected of treatment is dependent on the context of the intersection.
- » Protected Crossing A type of bicycle crossing where the bike lane is pulled behind the curb, adjacent to the sidewalk.
- » Roundabout An intersection traffic control device which

allows traffic to move continually at a lower speed with which people on bikes can easily merge with motor vehicle traffic.

Improvement Types - Other Information

- Existing Pavement (EP) Utilize a road diet or restriping to implement within existing pavement to reduce cost. Additional analysis is required to determine if a road diet would be approved by NCDOT. Furthermore, these estimates operate under the assumption that pavement markings can be added without needing to remove existing markings or mill/ resurface existing pavement; both of these items could add to the cost estimates significantly. and would be determined once more information about individual projects becomes available.
- » New Construction (NC) Build new facility along existing road, often associated with substantial right-ofway and cost requirements, along with stormwater impacts due to increased impervious surface area.

Cost Estimate Source

Best available information for project level cost estimates. While the goal is to be as realistic as possible given available information, estimates are subject to change as a project enters development and more detailed information becomes available. Some estimates combine information from multiple sources.

All cost estimates were developed in November 2020, and are displayed in 2020 Dollars.

- » Updated Bike Plan Estimates take from strategic priority cut sheets in the main plan, developed by Alta Planning and Design.
- » In Development Estimate based on current design work and/or contracted amount for a Town managed project.
- » Staff Tool Internal tool developed by Town staff based on costs from recently developed road diet projects to assist in cost estimates for future road diets.
- » Staff Estimate Simple quantity take offs developed by Town staff based on information confirmed with the Town's Public Works Department.
- » NCDOT SPOT 6.0 Tool Bike-Ped
 Cost Estimate taken from a tool
 developed by NCDOT for use in
 estimating preliminary project
 costs for Prioritization 6.0. This
 tool can be accessed online
 at: https://connect.ncdot.gov/
 projects/planning/Prioritization%20
 Data/Prioritization%206.0/
 NEW%20BikePed%20Cost%20
 Estimation%20Tool
- » Previous Projects Based on cost estimates for past Town projects related to traffic calming. Neighborways in particular primarily incorporate traffic calming measures.

- » Long Term Estimate A general estimate for an intersection project for which no specific improvement has yet been identified.
- » N/A Project for which an estimate has not been developed due to either being under construction or included as a part of another project.

Priority

- » Under Construction Projects which are under construction as of November 2020.
- » In Development Projects which have secured funding and/or have begun the design process as of November 2020.
- » Strategic Priority The top priority projects as identified in the Updated Bike Plan. Those numbered 1 through 5 have a project cutsheet and cost estimate in the main plan. Those numbered 6 do not have a cutsheet or assigned ranking, thus they are assumed to be equal (but below the top 5).
- » Short Term Those projects which aim to be completed within the first 5 years (yrs 0-5).
- » Mid Term Those projects which aim to be completed within the second 5 years (yrs 5-10)
- » Long Term Those projects which aim to be completed more than 10 years later.

Owner

- » Carrboro A street maintained by the Town.
- » NCDOT A street maintained by the State of North Carolina. An encroachment agreement is needed for the Town to make improvements to roads in the state maintained system.
- » Private A privately maintained street, driveway, or other vehicle circulation area, like a parking lot within an apartment complex. A discussion with the property owner is needed to determine how or if project implementation can proceed.
- » Utility A utility corridor. An easement or other agreement may be required for project implementation.
- Railroad Current active rail line, substantial discussion with the railroad company is needed. Implementation is dependant on this process.

Funding/Implementation Information

- be Enroach The Town will need to enter into an encroachment agreement with NCDOT to make improvements on roadways maintained by the state.

 Funding expected through the Town;s Capital Improvement Program and Annual Budget.
- » Traffic Calming Neighborways or other small on-street projects

- can be funded through the Town's traffic calming budget or assessed through a request under the Town's Residential Traffic Management Plan.
- » STIP State Transportation Improvement Program, projects must be submitted to the competitive prioritization process in order to receive funding. Projects funded this way generally take at least 5 years prior to beginning design.
- » Resurfacing Work alongside Town or NCDOT maintenance projects to reduce costs associated with installing improvements.
- Compete Streets (CS) NCDOT's revised Complete Streets policy which funds bike-ped projects in local plans as part of a highway project that is programmed in the STIP. The Town would need to submit a highway project to prioritization and have it successfully programmed in order to have NCDOT fund a local bike-ped project. Complete Streets does not build independent bike-ped projects that are not associated with a highway project.
- » Federal Grants (FED) Federal sources of project funding including CMAQ (Congestion Mitigation and Air Quality), STBGDA (Surface Transportation Block Grant Direct Apportionment), TAP (Transportation Alternatives Program), and HISP (Highway Safety Improvement Program). These are competitive programs for which Town staff must submit

- projects that are then assessed for funding. Submitting a project does not automatically mean funding will be secured.
- » OCTP Orange County Transit Plan (funded by county sales tax).
- » CIP the Town's Capital Improvement Program, updated annually, this covers a five-year period from which local funds can be allocated to capital projects in the annual budget.
- Developer A project which is being built by a developer as part of their construction. The Town can also look for opportunities to require facilities to be built as part of or alongside future development projects.

#	Name	From	То	Miles	Feet	Long Term Improvement	Long Term Estimate	Initial Improvement	Initial Estimate	Estimate Source	Priority	Owner	Resurface Year	Implementation/ Funding
1	N Greensboro St	at Estes Dr				Roundabout				N/A	Under Construction	NCDOT		STIP
2	N Greensboro St	at Williams St				Signalized Crossing				N/A	Under Construction	NCDOT		STIP
3	N Greensboro St	at Oak Ave				Signalized Crossing				N/A	Under Construction	NCDOT		STIP
4	Homestead Road Phase 1	Burgundy Ln	Stratford Dr	0.07	388	10' Shared Use Path	\$ 200,000			Updated Bike Plan	Strategic Priority 1	Private		Work with owner/Encroach
5	Homestead Road Phase 2	Lake Hogan Farms Rd	Stratford Dr	0.16	837	10' Shared Use Path	\$ 400,000			Updated Bike Plan	Strategic Priority 1	NCDOT		STIP, CS, FED
6	Hillsborough Rd	At N Greensboro St				Signalized Crossing	\$ 150,000	Pvmt Marking + Curb Mod	\$ 100,000	Updated Bike Plan	Strategic Priority 2	NCDOT	-	CIP, STIP, FED
7	Shelton St	Hillsborough Rd	Ashe St	0.15	785	Protected Contraflow (Existing Pavement)	\$ 20,000	Contraflow Lane (Existing Pavement)	\$ 30,000	Updated Bike Plan	Strategic Priority 3	Carrboro	I	Resurface, CS, STIP
8	W Main St	At Jones Ferry Rd				Protected Crossing	\$ 100,000	Conflict Markings	\$ 70,000	NCDOT SPOT 6 Tool	Strategic Priority 4	NCDOT	I	Encroach/CIP, CS, STIP
9	W Main St	Laurel Ave	Jones Ferry Rd	0.15	803	Protected Bike Lane (Existing Pavement)	\$ 200,000	Bike Lanes (Existing Pavement)	\$ 150,000	Updated Bike Plan	Strategic Priority 4	NCDOT		Encroach/CIP, CS, STIP
10	Jones Ferry Road	Willow Creek	E of Davie Rd	0.39	2,037	Protected Bike Lane (Existing Pavement)	\$ 180,000	Buffered BL (Existing Pavement)	\$ 165,000	Updated Bike Plan	Strategic Priority 5	NCDOT		Encroach/CIP, CS, STIP
11	Elm St	Shelton St	W Weaver St	0.19	1,026	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 3,000	Previous Projects	Strategic Priority 6	Carrboro		Resurface or TC
12	W Carr St	PTA Bike Path	S Greensboro St	0.14	728	Neighborway	\$ 5,000	Sharrow + Wayfinding	\$ 2,500	Previous Projects	Strategic Priority 6	Carrboro	-	Resurface or TC
13	Parkview Ave	Hillsborough Rd	Pathway Dr	0.09	497	Neighborway	\$ 5,000	Sharrow + Wayfinding	\$ 2,500	Previous Projects	Strategic Priority 6	Carrboro		Resurface or TC
14	Laurel Ave	W Main St	Jones Ferry Rd	0.15	770	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 3,000	Previous Projects	Strategic Priority 6	Carrboro		Resurface or TC
15	Claremont-Cobblestone Connector	Homestead Rd	Rockgarden Rd	0.48	2,515	Neighborway	\$ 20,000	Sharrow + Wayfinding	\$ 5,500	Previous Projects	Strategic Priority 6	Carrboro		Resurface or TC
16	Estes Drive Sidepath	N Greensboro St	Town Limits	0.43	2,277	10' Shared Use Path	\$ 1,600,000			NCDOT SPOT 6 Tool	In Development	NCDOT		STIP, FED, OCTP
17	Downtown RR Crossing	Parker St	Lloyd Street	0.17	876	15' Shared Use Path	\$ 1,100,000			NCDOT SPOT 6 Tool	In Development	Railroad		CMAQ
18	Horne Hollow Ext	Horne Hollow Greenway	Sanderway Subdivision	0.08	442	15' Shared Use Path	\$ 280,000	8' Shared Use Path		NCDOT SPOT 6 Tool	In Development	N/A		Developer
19	Anderson Park Sidepath	James St	Anderson Park	0.78	4,094	15' Shared Use Path	\$ 2,400,000			NCDOT SPOT 6 Tool	In Development	NCDOT		STIP
20	Tally Ho Tr	Rogers Rd	End	1.07	5,667			Sharrow + Wayfinding	\$ 11,000	Previous Projects	In Development	Carrboro		Resurface or TC
21	E Main St	at W Rosemary St				Bike Boxes		Conflict Markings		N/A	In Development	NCDOT		Resurfacing
22	E Main St	at Roberson St						Conflict Markings + BB		N/A	In Development	NCDOT	2021	Resurfacing
23	E Main St	at Brewer Ln						Conflict Markings		N/A	In Development	NCDOT	2021	Resurfacing
24	Smith Level Road	at NC 54 EB Ramps						Crosswalk + Bike Lanes		N/A	In Development	NCDOT	2021	Resurfacing
25	NC Hwy 54	at W Poplar Ave						Add Bike Loops		N/A	In Development	NCDOT		Fed, CIP
26	N Greensboro St	at Bolin Forest Dr						Hi-vis X-walk + signage	\$ 30,000	Staff Estimate	In Development	NCDOT		Encroach/CIP
27		at Lloyd St						Conflict Markings + BB		N/A	In Development	NCDOT		Resurfacing
28	Morgan Creek Greenway Phase 1	Smith Level Road	Berryhill	0.72	3,781			10' Shared Use Path	\$ 1,500,000	In Development	In Development	N/A		FED, CIP
29	Jones Creek Greenway	Lake Hogan Farms Rd	Existing Greenway	0.13	683			10' Shared Use Path	\$ 1,100,000	In Development	In Development	N/A		FED, CIP

#	Name	From	То	Miles	Feet	Long Term Improvement	Long Term Estimate	Initial Improvement	Initial Estimate	Estimate Source	Priority	Owner	Resurface Year	Implementation/ Funding
30	Sanderway	Horne Hollow	Hillsborough Rd	0.17	880	Neighborway	\$ 10,000			Previous Projects	In Development	Developer		Resurface or TC
31	E Main St	Roberson St	Town Limits	0.32	1,669	Protected Bike Lane (Existing Pavement)	\$ 50,000	Bike Lanes (Existing Pavement)	\$ 120,000	In Development	In Development	NCDOT		Resurfacing
32	Smith Level/S Greensboro	Old Pittsboro Rd	Public Works Dr	0.25	1,322	Protected Bike Lane (Existing Pavement)	\$ 50,000	Bike Lanes (Existing Pavement)	\$ 100,000	In Development	In Development	NCDOT	2021	Resurfacing
33	Jones Ferry Rd	at Bim St				Signalized Crossing	\$ 100,000	Hi-vis X-walk + signage	\$ 25,000	Staff Estimate	In Development	NCDOT		Encroach/CIP, CS, STIP
34	NC Hwy 54	at Westbrook Dr						Signalized Crossing	\$ 150,000	In Development	In Development	NCDOT		OCTP, HISP
35	NC Hwy 54	at Abbey Ct						Signalized Crossing	\$ 150,000	In Development	In Development	NCDOT		OCTP, HISP
36	Davie Rd	W Main St	Jones Ferry Rd	0.60	3,171	Neighborway	\$ 25,000	Sharrow + Wayfinding	\$ 7,000	Previous Projects	Short Term	Carrboro		Resurface or TC
37	Rosemary Street	E Main St	Merritt Mill Rd	0.09	468	Protected Bike Lane (Existing Pavement)	\$ 20,000	Bike Lanes (Existing Pavement)	\$ 10,000	Updated Bike Plan	Short Term	Carrboro		TC or Resurfacing
38	S Greensboro St	at Merritt Mill Rd						Crosswalk + Bike Lanes		N/A	Short Term	NCDOT	2021	Resurfacing
39	Homestead Rd	at Lake Hogan Farm Rd				Signalized Crossing	\$ 150,000	Hi-vis X-walk + signage	\$ 25,000	Staff Estimate	Short Term	NCDOT		Encroach/CIP, CS, STIP
40	N Greensboro St	at Pine St				Signalized Crossing	\$ 100,000	Hi-vis X-walk + signage	\$ 25,000	Staff Estimate	Short Term	NCDOT		Encroach/CIP, CS, STIP
41	Berryhill Connector	Smith Level Rd	BPW Club Rd	0.36	1,893	Neighborway	\$ 15,000	Sharrow + Wayfinding	\$ 4,500	NCDOT SPOT 6 Tool	Short Term	Carrboro	2022	Resurface or TC
42	Dairyland Rd	Old NC 86	Union Grove Church Rd	0.61	3,213	Buffered Bike Lane (New Construction)	\$ 8,300,000	BL or Shoulder (New Construction)	\$ 2,100,000	Staff Estimate	Short Term	NCDOT	2024	Resurface, CS, STIP
43	Old Fayetteville Rd	S of NC 54	Farm House Rd	1.24	6,549	Protected Bike Lane (Existing Pavement)	\$ 189,900	Buffered BL (Existing Pavement)	\$ 126,800	Staff Estimate	Short Term	NCDOT	2024	Resurface, CS, STIP
44	Greensboro St ^x	Shelton St	Main St	0.24	1,289	Protected Bike Lane (Existing Pavement)	\$ 140,400	Bike Lanes (Existing Pavement)	\$ 128,000	NCDOT SPOT 6 Tool	Short Term	NCDOT	2024	Resurface, CS, STIP
45	N Greensboro St	Shelton St	Estes Dr	0.34	1,785	Protected Bike Lane (Existing Pavement)	\$ 57,500	Buffered BL (Existing Pavement)	\$ 40,600	Staff Tool	Mid Term	NCDOT	2024	Resurfacing
46	Old NC 86	Farm House Rd	Homestead Rd	0.58	3,046	Buffered Bike Lane (New Construction)	\$ 5,800,000	BL or Shoulder (New Construction)	\$ 1,450,000	NCDOT SPOT 6 Tool	Mid Term	NCDOT		Encroach/CIP, CS, STIP
47	Fidelity St	Davie Rd	W Main St	0.37	1,974	Cycle Track (Existing Pavement)	\$ 65,000	Buffered BL (Existing Pavement)	\$ 44,900	Staff Tool	Mid Term	Carrboro		CIP
48	Morgan Creek to Chapel Hill	Public Works	FPG Elementary	0.06	336	10' Shared Use Path				N/A	Mid Term	N/A		STIP, FED
49	Jones Ferry Rd	at Davie Rd				Conflict Markings	\$ 50,000			NCDOT SPOT 6 Tool	Mid Term	NCDOT		Encroach/CIP, CS, STIP
50	W Main St	at W Weaver St						Bike-Ped Crossing Imp.	\$ 250,000	Staff Estimate	Mid Term	NCDOT		Encroach/CIP, CS, STIP
51	Jones Ferry Rd	at NC 54 EB Ramps						Crossing Markings	\$ 20,000	Staff Estimate	Mid Term	NCDOT		Encroach/CIP, CS, STIP
52	Jones Ferry Rd	at NC 54 WB Ramps						Crossing Markings	\$ 20,000	Staff Estimate	Mid Term	NCDOT		Encroach/CIP, CS, STIP
53	Old NC 86	at Homestead Rd						Bike Box	\$ 90,000	Staff Estimate	Mid Term	NCDOT		HISP
54	203 Project Connector	E Main St	Carr St	0.16	840	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 3,000	Previous Projects	Mid Term	Carrboro		Resurface or TC
55	Cheek-Milton	Hillsborough Rd	N Greensboro St	0.27	1,401	Neighborway	\$ 10,000	Sharrow + Wayfinding		Previous Projects	Mid Term	Carrboro		Resurface or TC
56	Hillsborough Rd	W Main St	start of bike lanes	0.12	622	Protected Bike Lane (Existing Pavement)	\$ 20,000	Bike Lanes (Existing Pavement)	\$ 14,100	Staff Estimate	Mid Term	NCDOT		Resurface, CS, STIP
57	Hillsborough Rd	at High/Westview				Signalized Crossing	\$ 100,000	Hi-vis X-walk + signage	\$ 25,000	Staff Estimate	Mid Term	NCDOT		Encroach/CIP, CS, STIP
58	W Main St	at High St				Signalized Crossing	\$ 100,000	Hi-vis X-walk + signage	\$ 25,000	Staff Estimate	Mid Term	NCDOT		Encroach/CIP, CS, STIP

#	Name	From	То	Miles	Feet	Long Term Improvement	Long Term Estimate	Initial Improvement	Initial Estimate	Estimate Source	Priority	Owner	Resurface Year	Implementation/ Funding
59	Old Fayetteville Rd	at Strowd Ln				Signalized Crossing	\$ 100,000	Hi-vis X-walk + signage	\$ 25,000	Staff Estimate	Mid Term	NCDOT		Encroach/CIP, CS, STIP
60	Homestead Road Phase 3	Stratford Dr	Claremont Dr	0.31	1,641	10' Shared Use Path	\$ 850,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
61	Old Fayetteville Rd	Jones Ferry Rd	NC 54	1.13	5,970	Buffered Bike Lane (New Construction)	\$ 12,400,000	Bike Lane (New Construction)	\$ 1,700,000	NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
62	Old NC 86	Homestead Rd	Town Limits	2.22	11,723	Buffered Bike Lane (New Construction)	\$ 22,300,000	BL or Shoulder (New Construction)	\$ 6,200,000	NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
63	Smith Level Rd	Rock Haven Rd	Town Limits	2.21	11,677	Buffered Bike Lane (New Construction)	\$ 21,100,000	BL or Shoulder (New Construction)	\$ 3,200,000	NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
64	Jones Ferry Road	Old Fayetteville Rd	Town Limits	0.72	3,803	Buffered Bike Lane (New Construction)	\$ 9,400,000	BL or Shoulder (New Construction)	\$ 3,500,000	NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
65	S Greensboro Street	Old Pittsboro Rd	Two Hills Dr	0.35	1,848	Buffered CL (New Construction)	\$ 2,565,000	Climbing Lane (New Construction)	\$ 870,000	NCDOT SPOT 6 Tool + Staff Knowledge	Long Term	NCDOT		STIP, CS, FED
66	Stroud Ln	Anderson Park	Old Fayetteville Rd	0.18	924	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 3,000	Previous Projects	Long Term	Carrboro		Resurface or TC
67	Bolin Forest Dr	N Greensboro St	Bolin Creek Dr	0.30	1,593	Neighborway	\$ 15,000	Sharrow + Wayfinding	\$ 4,000	Previous Projects	Long Term	Carrboro		Resurface or TC
68	Wild Oak-Bolin Creek Dr Connector	Pathway Dr	End	0.55	2,914	Neighborway	\$ 20,000	Sharrow + Wayfinding	\$ 6,500	Previous Projects	Long Term	Carrboro		Resurface or TC
69	Williams St	Wilson Park MUP	N Greensboro St	0.14	752	Neighborway	\$ 5,000	Sharrow + Wayfinding	\$ 3,000	Previous Projects	Long Term	Carrboro		Resurface or TC
70	Pleasant Dr	N Greensboro St	Estes Park Apts	0.23	1,217	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 3,500	Previous Projects	Long Term	Carrboro		Resurface or TC
71	Campus to Campus Connector	Broad St	E Main St	0.48	2,522	Neighborway	\$ 20,000	Sharrow + Wayfinding	\$ 5,500	Previous Projects	Long Term	Carrboro		Resurface or TC
72	Old Pittsboro	S Greensboro St	Two Hills Dr	0.43	2,269	Neighborway	\$ 20,000	Sharrow + Wayfinding	\$ 5,500	Previous Projects	Long Term	Carrboro		Resurface or TC
73	Purple Leaf-Sweet Bay Connector	Robeson Bikeway	Roberson St	0.45	2,385	Neighborway	\$ 20,000	Sharrow + Wayfinding	\$ 5,500	Previous Projects	Long Term	Carrboro		Resurface or TC
74	McDougle Connector	Hillsborough Rd	McDougle SUP	0.23	1,212	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 3,500	Previous Projects	Long Term	Carrboro		Developer
75	E Weaver St	Greensboro St	E Main St	0.13	667	Neighborway	\$ 5,000	Sharrow + Wayfinding	\$ 2,500	Previous Projects	Long Term	Carrboro		Resurface or TC
76	Reynard Rd	Tallyho Tr	Winmore Connector	0.26	1,396	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 4,000	Previous Projects	Long Term	Carrboro		Resurface or TC
77	Brace Ln	Reynard Rd	Turtleback Connector	0.10	553	Neighborway	\$ 5,000	Sharrow + Wayfinding	\$ 2,500	Previous Projects	Long Term	Carrboro		Resurface or TC
78	Tutleback Crossing Dr	Turtleback Connector	Lake Hogan Farm Rd	0.16	830	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 3,000	Previous Projects	Long Term	Carrboro		Resurface or TC
79	Anderson Park Bike Route	NC 54	Stroud Ln	0.44	2,316	Neighborway	\$ 20,000	Sharrow + Wayfinding	\$ 5,500	Previous Projects	Long Term	Carrboro		Resurface or TC
80	James St	W Main St	Hillsborough Rd	0.65	3,412	Neighborway	\$ 25,000	Sharrow + Wayfinding	\$ 7,000	Previous Projects	Long Term	Carrboro		Resurface or TC
81	Barnes-King Connector	Jones Ferry Rd	Lantern Way	0.38	2,026	Neighborway	\$ 15,000	Sharrow + Wayfinding	\$ 5,000	Previous Projects	Long Term	Carrboro		Resurface or TC
82	Hogan Woods Cir	Lake Hogan Farm Rd	Winmore Connector	0.36	1,897	Neighborway	\$ 15,000	Sharrow + Wayfinding	\$ 4,500	Previous Projects	Long Term	Carrboro		Resurface or TC
83	Winmore Ave	Jewell Dr	Andys Ln	0.28	1,475	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 4,000	Previous Projects	Long Term	Carrboro		Resurface or TC
84	High St	W Main St	Hillsborough Rd	0.23	1,220	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 3,500	Previous Projects	Long Term	Carrboro		Resurface or TC
85	Camellia St	Atterbury St	Homestead Rd	0.42	2,201	Neighborway	\$ 15,000	Sharrow + Wayfinding	\$ 5,000	Previous Projects	Long Term	Carrboro		Resurface or TC
86	Hill St	Broad St	RR Crossing	0.08	439	Neighborway	\$ 5,000	Sharrow + Wayfinding	\$ 2,000	Previous Projects	Long Term	Carrboro		Resurface or TC
87	Parker St	N Greensboro St	RR Crossing	0.06	333	Neighborway	\$ 5,000	Sharrow + Wayfinding	\$ 2,000	Previous Projects	Long Term	Carrboro		Resurface or TC

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88	Abbey Ln	NC 54	Morgan Creek	0.13	705	Neighborway	\$ 5,000	Sharrow + Wayfinding	\$ 2,500	Previous Projects	Long Term	Carrboro		Resurface or TC
89	Barrington-Autumn Connector	Hillsborough Rd	Horne Hollow	0.35	1,831	Neighborway	\$ 15,000	Sharrow + Wayfinding	\$ 4,500	Previous Projects	Long Term	Carrboro		Resurfacing
90	Quail Roost Dr	James St	McDougle SUP	0.23	1,229	Neighborway	\$ 10,000	Sharrow + Wayfinding	\$ 3,500	Previous Projects	Long Term	Carrboro		Resurfacing
91	Westview Connection	Westview Dr	Kay St	0.03	150	Private Route (Shared Use Path)	\$ 160,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
92	NC 54 Apts Connector	Collins Crossing	Carolina Apts	0.04	196	Private Route (Shared Use Path)	\$ 185,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
93	Carolina Apts Connector	Collins Crossing	Barnes St	0.27	1,410	Private Route (Shared Use Path)	\$ 810,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
94	Queen St Connector	Carolina Apts	Barnes St	0.21	1,131	Private Route (Shared Use Path)	\$ 630,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
95	Hillcrest Connector	Hillcrest Ave	Estes Park Apts	0.07	378	Private Route (Shared Use Path)	\$ 285,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
96	Thomas Connector	N Greensboro St	Wilson Park MUP	0.08	440	Private Route (Shared Use Path)	\$ 275,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
97	Sunset-Circadian Connector	Sunset Creek Cir	Circadian Way	0.05	259	Private Route (Shared Use Path)	\$ 180,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
98	Oak Ave Connector	Hillcrest Ave	Oak Ave	0.06	310	Private Route (Shared Use Path)	\$ 240,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
99	Prince St Connector	Jones Ferry Rd	Prince St	0.07	391	Private Route (Shared Use Path)	\$ 350,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
100	Robert-Bolin Connector	Robert Hunt Dr	Bolin Forest Dr	0.04	211	Private Route (Shared Use Path)	\$ 195,000			NCDOT SPOT 6 Tool	Long Term	Private		Work with owner
101	Autumn Woods Connector	West End Apts	Willow Creek Greenway	0.31	1,646	Private Route (On-street)	\$ 15,000			Previous Projects	Long Term	Private		Work with owner
102	West End Connector	Autumn Woods Apts	W Poplar Ave	0.21	1,133	Private Route (On-street)	\$ 10,000			Previous Projects	Long Term	Private		Work with owner
103	Rosewalk Connector	Berryhill Dr	Morgan Creek	0.16	838	Private Route (On-street)	\$ 10,000			Previous Projects	Long Term	Private		Work with owner
104	Winmore Private Connection	W Winmore Ave	Winmore Connector	0.07	354	Private Route (On-street)	\$ 5,000			Previous Projects	Long Term	Private		Work with owner
105	Collins Crossings Connector	Jones Ferry Rd	Carolina Apts	0.19	1,003	Private Route (On-street)	\$ 10,000			Previous Projects	Long Term	Private		Work with owner
106	Carolina Apt Spur	NC 54	Carolina Apts	0.08	440	Private Route (On-street)	\$ 5,000			Previous Projects	Long Term	Private		Work with owner
107	Estes Park Connection	Estes Dr	Pleasant Dr	0.40	2,113	Private Route (On-street)	\$ 15,000			Previous Projects	Long Term	Private		Work with owner
108	Weatherhill Connector	Berryhill Dr	Morgan Creek	0.20	1,059	Private Route (On-street)	\$ 10,000			Previous Projects	Long Term	Private		Work with owner
109	Whispering Hills Connector	King St	Old Pittsboro Rd	0.23	1,217	Private Route (On-street)	\$ 10,000			Previous Projects	Long Term	Private		Work with owner
110	Royal Park Connector	NC 54	King St	0.15	801	Private Route (On-street)	\$ 10,000			Previous Projects	Long Term	Private		Work with owner
111	Morris Grove Connector	Morris Grove Entrance	Jones Creek	0.06	311	Private Route (On-street)	\$ 5,000			Previous Projects	Long Term	Private		Work with owner
112	Chapel Hill High School	High School Rd	Parking Lot	0.15	787	Private Route (On-street)	\$ 10,000			Previous Projects	Long Term	Private		Work with owner
113	Hillsborough Rd	N Greensboro St	NW of Shelton St	0.56	2,977	(Existing Pavement)	\$ 95,900	Buffered BL (Existing Pavement)	\$ 67,700	Staff Estimate	Long Term	NCDOT		Resurface, CS, STIP
114	Berryhill Dr	Old Fayetteville Rd	Westbrook Dr	0.47	2,483	Protected Bike Lane (Existing Pavement)	\$ 112,600	Bike Lanes (Existing Pavement)	\$ 65,800	Staff Tool	Long Term	Carrboro		TC or Resurfacing
115	W Main St	Laurel Ave	James St	1.00	5,281	Protected Bike Lane (Existing Pavement)	\$ 170,000	Buffered BL (Existing Pavement)	\$ 120,000	Staff Estimate	Long Term	NCDOT		Resurface, CS, STIP
116	W Poplar Ave	Old Fayetteville Rd	W Main St	0.90	4,738	Protected Bike Lane (Existing Pavement)	\$ 168,000	Buffered BL (Existing Pavement)	\$ 122,400	Staff Tool	Long Term	Carrboro		TC or Resurfacing

#	Name	From	То	Miles	Feet	Long Term Improvement	Long Term Estimate	Initial Improvement	Initial Estimate	Estimate Source	Priority	Owner	Resurface Year	Implementation/ Funding
117	N Greensboro St	Estes Dr	Hillsborough Rd	0.74	3,916	Protected Bike Lane (Existing Pavement)	\$ 126,100	Buffered BL (Existing Pavement)	\$ 89,000	Staff Estimate	Long Term	NCDOT		Resurface, CS, STIP
118	Jones Ferry Road	W Main St	E of Davie Rd	0.44	2,338	Protected Bike Lane (Existing Pavement)	\$ 68,300	Buffered BL (Existing Pavement)	\$ 45,600	Staff Tool	Long Term	NCDOT		TC or Resurfacing
119	Hillsborough Rd	Old NC 86	N Greensboro St	1.22	6,424	Protected Bike Lane (Existing Pavement)	\$ 192,000	Buffered BL (Existing Pavement)	\$ 130,000	Staff Tool	Long Term	NCDOT		Resurface, CS, STIP
120	Jones Ferry Road	Willow Creek	Old Fayetteville Rd	0.17	894	Protected Bike Lane (Existing Pavement)	\$ 102,600	Bike Lanes (Existing Pavement)	\$ 85,800	Staff Tool	Long Term	NCDOT		Resurface, CS, STIP
121	Main St	Club Nova	Roberson St	0.18	965	Protected Bike Lane (Existing Pavement)	\$ 152,900	Bike Lanes (Existing Pavement)	\$ 134,600	Staff Tool	Long Term	NCDOT		Resurface, CS, STIP
122	S Greensboro Street ^x	Main St	Old Pittsboro Rd	0.11	592	Protected Bike Lane (Existing Pavement)	\$ 63,000	Bike Lanes (Existing Pavement)	\$ 50,800	Staff Tool	Long Term	NCDOT		Encroach/CIP, CS, STIP
123	Smith Level Rd	Public Works Dr	Rock Haven Rd	0.66	3,491	Protected Bike Lane (Existing Pavement)	\$ 5,220,000	Buffered BL (New Construction)	\$ 5,220,000	NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
124	Homestead Road Sidepath East	CHHS MUP	High School Rd	0.74	3,896	10' Shared Use Path	\$ 3,300,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
125	Rogers Rd Sidepath	Tallyho Tr	Homestead Rd	0.32	1,702	10' Shared Use Path	\$ 1,200,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
126	Morgan Creek Phase 2	Morgan Creek Phase 1	Weatherhill Pt	0.31	1,648	10' Shared Use Path	\$ 1,000,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
127	Eubanks Rd Sidepath	Old NC 86	Morris Grove Ele	0.30	1,577	10' Shared Use Path	\$ 800,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
128	Morgran Creek Spur	Morgan Creek Phase 4	BPW Club Rd	0.24	1,253	10' Shared Use Path	\$ 740,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
129	TallyHo Connector	Tallyho Tr	Jones Creek	0.21	1,085	10' Shared Use Path	\$ 720,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
130	Turtleback Connector	Brace Ln	Turtleback Crossing	0.15	806	10' Shared Use Path	\$ 570,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
131	Winmore Connector	W Winmore Ave	Tallyho Tr	0.78	4,104	10' Shared Use Path	\$ 2,300,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
132	Willow Creek Connector	Jones Ferry Road	Autumn Woods Apt	0.12	618	10' Shared Use Path	\$ 450,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
133	Barnes St Connector	NC 54	Barnes St	0.11	572	10' Shared Use Path	\$ 400,000			NCDOT SPOT 6 Tool	Long Term	Utility		STIP, FED
134	Brace Ln Connector	Winmore Connector	Brace Ln	0.09	453	10' Shared Use Path	\$ 390,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
135	Baldwin Park Connector	Broad St	Craig St	0.07	394	10' Shared Use Path	\$ 290,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED, OCTP
136	Morgan Creek Bridge	Public Works Dr	Morgan Creek	0.07	392	10' Shared Use Path	\$ 1,330,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, FED
		Phipps St	Rocky Ct	0.04	193	10' Shared Use Path	\$ 220,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED, CIP
138	Old Fayetteville Connector	Autumn Woods Apt	West End Apts	0.02	122	10' Shared Use Path	\$ 190,000			NCDOT SPOT 6 Tool	Long Term	Private		STIP, FED, CIP
139	Knolls Connector	Robeson Bike Path	Knolls St	0.02	95	10' Shared Use Path	\$ 140,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
140	Homestead Road Sidepath West	Old NC 86	Lake Hogan Farm Rd	0.64	3,366	10' Shared Use Path	\$ 2,000,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
	9	Rosewalk	University Lake	0.50	2,634	10' Shared Use Path	\$ 1,500,000			NCDOT SPOT 6 Tool	Long Term	OWASA		STIP, FED
	Seawell School Rd Sidepath	Estes Drive	Smith Middle School	1.38	7,298	10' Shared Use Path	\$ 4,420,000			NCDOT SPOT 6 Tool	Long Term	Railroad		STIP, FED
	LHF Greenway Ext	LHF Greenway	Winmore Greenway	0.48	2,521	10' Shared Use Path	\$ 1,600,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
	Morgan Creek Phase 3/4	Rosewalk	Morgan Creek Phase 2	0.44	2,303	10' Shared Use Path	\$ 1,400,000			NCDOT SPOT 6 Tool	Long Term	N/A		STIP, FED
145	Smith Level Road	Old Pittsboro Rd	Rock Haven Rd	0.94	4,973	10' Shared Use Path	\$ 5,300,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		Complete Streets

#	Name	From	То	Miles	Feet	Long Term Improvement	Long Term Estimate	Initial Improvement	Initial Estimate	Estimate Source	Priority	Owner	Resurface Year	Implementation/ Funding
146	Old Fayetteville Road	NC 54	Farmhouse Rd	1.15	6,072	10' Shared Use Path	\$ 3,600,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		Complete Streets
147	Smith Level Rd	Rock Haven Rd	Town Limits	2.21	11,677	10' Shared Use Path	\$ 6,200,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		Complete Streets
148	Old NC 86	Farmhouse Rd	Town Limits	3.08	16,262	10' Shared Use Path	\$ 8,500,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		Complete Streets
149	Rail with Trail	Downtown Carrboro	Hillsborough	15.90	83,899	15' Shared Use Path	\$ 82,000,000			NCDOT SPOT 6 Tool	Long Term	Railroad		TBD
150	NC 54 Sidepath	W Main St	W Poplar Ave	0.38	2,010	15' Shared Use Path	\$ 1,900,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
151	NC 54 Sidepath	S Greensboro St	Abbey Ln	0.31	1,629	15' Shared Use Path	\$ 1,600,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
152	NC 54 Sidepath	Anderson Park	Town Limits	1.51	7,980	15' Shared Use Path	\$ 6,300,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
153	NC 54 Sidepath	Abbey Ln	Westbrook Dr	0.19	995	15' Shared Use Path	\$ 900,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
154	Jones Ferry Sidepath	Willow Creek	Old Fayetteville Rd	0.17	902	15' Shared Use Path	\$ 1,100,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
155	NC 54 Sidepath	W Poplar Ave	Westbrook Dr	0.89	4,698	15' Shared Use Path	\$ 3,900,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
156	High School Road Sidepath	Homestead Rd	CHHS Entrance	0.10	505	15' Shared Use Path	\$ 550,000			NCDOT SPOT 6 Tool	Long Term	NCDOT		STIP, CS, FED
157	300 E Main Connector	Libba Cotten	E Main St	0.03	178			8' Shared Use Path	\$ 150,000	NCDOT SPOT 6 Tool	Long Term	Developer		Developer
158	Jones Ferry Rd	at Laurel Ave						Hi-vis X-walk + signage	\$ 30,000	Staff Estimate	Long Term	NCDOT		Encroach/CIP, CS, STIP
159	W Main St	at Davie Rd						Hi-vis X-walk + signage	\$ 30,000	Staff Estimate	Long Term	NCDOT		Encroach/CIP, CS, STIP
160	Estes Dr	at Estes Park Apts				Signalized Crossing	\$ 150,000			Long Term Estimate	Long Term	NCDOT		STIP, FED
161	Homestead Rd	at Claremont Dr				Unspecified	\$ 150,000			Long Term Estimate	Long Term	NCDOT		Encroach/CIP, CS, STIP
162	S Greensboro St	at Carr St				Unspecified	\$ 100,000			Long Term Estimate	Long Term	NCDOT		Encroach/CIP, CS, STIP
163	W Main St	at Hillsborough Rd				Unspecified	\$ 150,000			Long Term Estimate	Long Term	NCDOT		Encroach/CIP, CS, STIP
164	Hillsborough Rd	at Parkview Ave				Unspecified	\$ 100,000			Long Term Estimate	Long Term	NCDOT		Encroach/CIP, CS, STIP
165	Hillsborough Rd	at McDougle School				Unspecified	\$ 100,000			Long Term Estimate	Long Term	NCDOT		Encroach/CIP, CS, STIP
166	Hillsborough Rd	at Dove St				Unspecified	\$ 100,000			Long Term Estimate	Long Term	NCDOT		Encroach/CIP, CS, STIP

EP - Existing Pavement by way of Road Diet or Lane Diet

CS - Complete Streets

NC - New Construction

STIP - State Transportation Improvement Program

OS - On Street route, privately owned

FED - Federal Funding Sources

SUP - Shared Use Path

TC - Traffic Calming, the Town's Residential Traffic Management Plan

Unspecified - A long term improvement that lacks a specific recommendation

Encroach - Encroachment agreement with NCDOT for the Town to install improvements (and maintain them) on roadways maintained by the state

Italics indicates a project that would likely ONLY be funded through NCDOT complete streets or another major outside source

OCTP - Orange County Transit Plan

HISP - Highway Safety Improvement Program

x - Construction Costs only, those for road diet analysis/design for project #122 included in project #45

Strategic Priority - Those priorities identified within the bike plan. Priorities numbered 1 to 5 are those projects which have detailed cutsheets, conceptual design, and cost estimates. Those numbered 6 are also strategic priorities but are outside of the top 5 and do not have project cutsheets.

Green indicates an intersection crossing improvement project (non-linear)