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METROPOLITAN PLANNING ORGANIZATION

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March 8, 2023

TO: DCHC MPO Board
 FROM : DCHC MPO Staff
 SUBJECT: FY2024-2033 Draft STIP Swap

Executive Summary

On April 25, 2022, NCDOT released its Draft FY2024-2033 STIP (Draft STIP). Due to fiscal constraints in the state's transportation budget, the Draft STIP did not include any new projects from the Prioritization 6 (SPOT 6) process that concluded in July 2021. Instead, the Draft STIP programmed existing projects in a manner that met with NCDOT's current fiscal situation. This resulted in the removal of many projects from the ten-year Draft STIP.

Following the protocol established by the SPOT Workgroup in winter 2022, MPOs could request to "swap" STIP projects. This would allow projects to either be moved up within the STIP, or for projects that were not included in the ten-year STIP to be moved into the STIP, provided that other projects were therefore removed. Swaps must also meet certain criteria:

- The combined budget of projects being moved into the STIP must be less than 110% of the cost of projects being moved out;
- Projects being swapped must be funded at the same tier; and
- The Division Engineer must concur with the swap.

DCHC MPO staff recommend the following swaps:

Projects to Swap In:

Division Tier Statewide Tier

STIP #	Project	From	To	Description	Funding Amount
U-6118	NC 55	Meridian	I-40	Construct Auxiliary Lane	\$5,299,000
U-6120	NC 98	Junction	Lynn	Safety Improvements, Bike/Ped Facilities, Transit Accommodations	\$18,199,000
P-5734	Trinity RR	Trinity Rd		Grade separation	\$36,865,000
P-5736	Beryl RR	Beryl	Royal	Grade separation	\$3,196,000
U-5304F	US 15-501	SR 1742	I-40	Corridor capacity improvements	\$52,700,000
U-5774F	NC 54	Little Creek	I-40	Corridor upgrade and interchange improvements	\$173,412,000
TOTAL					\$289,671,000

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Projects to Swap Out:

Regional Tier
 Division Tier
 Statewide Tier

STIP #	Project	From	To	Description	Funding Amount
U-6021	Fayetteville	Barbee	Woodcroft	Widen to four lanes w/ bike/ped	\$26,000,000
U-5720B	US 70	Miami	Page Extn	Freeway conversion	\$223,419,000
U-5774B	NC 54	Fordham	Barbee Chapel	Upgrades to corridor and intersection	\$66,374,000
TOTAL					\$315,793,000

David Kielson, the Division 5 Engineer, and Stephen Robinson, the Division 7 Engineer, have indicated their support for this proposed swap. This swap is also within 110% of the original cost.

Project Details, Recommended Changes, and Rationales

P-5734

- **Project details:** This project will construct a grade separation on Trinity Road. While the project is located in Wake County, it is an essential connection between Wake and Durham counties.
- **Recommended change:** Shift from the 2nd half of the STIP to the 1st half of the STIP which makes it a committed project.
- **Rationale:** This project will improve rail commute times between Raleigh and Durham, and having its funding committed provides grant opportunities for S-Line construction which benefits rail from the Triangle to Washington, DC.

P-5736

- **Project details:** This project will construct a grade separation and extend Beryl Road to Royal Avenue. While the project is located in Wake County, it is an essential connection between Wake and Durham counties.
- **Recommended change:** Shift from the 2nd half of the STIP to the 1st half of the STIP which makes it a committed project.
- **Rationale:** This project will improve rail commute times between Raleigh and Durham, and having its funding committed provides grant opportunities for S-Line construction which benefits rail from the Triangle to Washington, DC.

U-5304F

- **Project details:** This project includes corridor capacity improvements from Ephesus Church Road (SR 1742) to I-40 to upgrade US 15/501 in Orange County. There are also ongoing discussions about cost updates to the project.
- **Recommended change:** Swap this project in and swap out U-5774B.
- **Rationale:** There are several proposals for very large-scale developments in the area around US 15-501 between Ephesus Church Rd. and I-40. The expected traffic impacts based on the Traffic Impact Analysis are extensive and the area would benefit from having this project committed earlier so as to mitigate upcoming development.

U-5720B

- **Project details:** This project will upgrade the controlled-access facility and convert at-grade intersection with SR 1811/ SR 1959 to interchange.
- **Recommended change:** Shift from committed to the 2nd half of the STIP; it will then be funded for PE only and need to re-compete in STI.
- **Rationale:** U-5720A is only funded for PE and separating the two segments is not feasible. Shifting U-5720B to the 2nd half of the STIP allows funding for other projects, and also provides more time for the corridor study's recommendations to be considered.

U-5774B

- **Project details:** This project calls for improvements to NC 54 from US 15/501 (Fordham Boulevard) in Orange County to SR 1110 (Barbee Chapel Road) in Durham County. It includes upgrading the roadway corridor and converting the at-grade intersection at Barbee Chapel Road to an interchange.
- **Recommended change:** Swap this project out of STIP and swap in U-5304F.
- **Rationale:** While this project is important to overall transportation needs, U-5304F has a more critical timeline as development in the area is more extensive in the near future.

U-5774F

- **Project details:** This project includes interchange improvements at I-40/NC 54, such as grade separations at Falconbridge and Farrington roads.
- **Recommended change:** Shift from the 2nd half of the STIP to the 1st half of the STIP which makes it a committed project.
- **Rationale:** The project will improve traffic operations along this section of NC 54 and at the I-40 interchange, and it has been a past priority for DCHC.

U-6021

- **Project details:** This project would widen Fayetteville Street from two to four lanes, with bike/ped accommodations, from Barbee Road to Woodcroft Parkway. While this project would connect the two four-lane sections of Fayetteville Street, it is considered a lower priority than U-6120.
- **Recommended change:** Shift schedule from the committed window to the 2nd half of the STIP; it becomes funded for PE only and has to re-compete for funding in P7.0.
- **Rationale:** While there are safety benefits embedded in this project, this is foremost a vehicular capacity project. Though there would be bike/ped accommodations in the project, the American Tobacco Trail parallels this section of Fayetteville Street and provides a safe alternative for those users.

U-6118

- **Project details:** This project was submitted by Division 5 in SPOT 5. This project would construct an auxiliary lane on southbound NC 55 from Meridian Parkway to I-40, allowing for easier freeway access and less weaving providing safety benefits. This is a short segment of less than a ¼ mile. This project would also include access management and safety measures for vehicular traffic, as well as transit accommodations, such as pullouts and bus stop improvements. There is potential for this project to be funded at the regional tier in the future.
- **Recommended change:** Shift from unfunded to the 1st half of the STIP which makes it a committed project.
- **Rationale:** The project will improve traffic operations and provide multimodal accommodations. U-6021, which is shifting out, is a higher cost project than U-6120 which is proposed to shift in. This is the only project of a suitable cost to take advantage of this funding opportunity.

U-6120

- **Project details:** This project was funded in SPOT 5, and is primarily a safety project. This project would add bike/ped/transit facilities to a residential area in East Durham.
- **Recommended change:** Shift schedule from the 2nd half of the STIP to the 1st half which makes it a committed project.
- **Rationale:** The DCHC MPO Board, in the 2050 Metropolitan Transportation Plan (MTP), adopted goals and objectives that prioritize safety over increased capacity on the roadway network. This project is primarily a safety project and is vitally needed in an area experiencing increased traffic volumes.

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Alternatives

Alternatives to U-5774F at Statewide funding tier:

I-6006

- **Project details:** This project will convert facility to a managed freeway with ramp metering and other Active Traffic Management/ITS components from NC 54 exit 273 to Wade Ave/I-440). Cost: \$85,699,000
- **STIP change:** Shift from 2nd half of the STIP to the 1st half of the STIP which makes it a committed project.
- **Rationale:** The project uses technology to improve safety and reduce delay along I-40 and Wade Avenue, 19 miles total. It is consistent with the DCHC/CAMPO transportation policy priority “Strengthen Support for Demand Management & Technology.”

I-6010

- **Project details:** This project will add lanes on I-85/US 15 from east of Midland Terrace to Red Mill Road. Cost: \$67,492,000
- **STIP change:** Shift from unfunded to the 1st half of the STIP which makes it a committed project.
- **Rationale:** This section has significant safety issues with short on-ramps and some ramps with two-way traffic. Improvements will also be needed to accommodate future traffic demand.

Recommendation and Next Steps

The current deadline for swaps in the Draft STIP is March 17, 2023. Board Chair Weaver has directed that any potential swaps be released to the public for a minimum 21-day public comment period. Therefore, in order to approve the swaps at its March 8 meeting, the Board needs to release the swap for public comment at its February 8 meeting.

Staff recommends releasing the proposed swap for public comment, and requests that the TC recommend the same.