



**BURLINGTON-GRAHAM METROPOLITAN PLANNING ORGANIZATION
TECHNICAL COORDINATING COMMITTEE MEETING**

TUESDAY OCTOBER 18, 2021 9AM

The meeting will be held remotely via Microsoft Teams

Any member of the general public who wishes to make public comment should send an email to wmallette@burlingtonnc.gov or (336) 513-5418 by Friday, October 15, 2021, 3:00 p.m. to receive the meeting login information or to have their comments read during the public comment portion of the meeting.

AGENDA

1) Call to Order & Determination of Quorum Chairman

- Welcome and Introductions
- Changes to Agenda / Add On Items
- Speakers from the Floor – 3 minutes per speaker
- Approval of August 17, 2021 TCC meeting minutes

2) FY 2020-2025 TIP Amendments Blake Cashmore

INFORMATION: The BGMPO Transportation Improvement Program (TIP) consists of projects included in the NCDOT 2020 – 2029 State Transportation Improvement Program (STIP). The BGMPO TIP needs amendment to align with the September and October STIP amendments. The TIP Amendments includes regional CMAQ new project funding and project schedule/funding changes for AV-5851 (Burlington Alamance Regional Airport), U-5844 (NC 62) and U-6011 (US 70). Because the U-6011 project cost increase exceed \$2 million and NCDOT's 25% thresholds, the amended draft TIP was released for a 10-day public comment period in accordance with BGMPO's Public Involvement Policy.

RECOMMENDATION/ACTION: 1) Receive information and discuss; 2) Recommend TAC approval of the September and October 2021 TIP amendments by resolution pending public comments.

3) STIP Amendment – Link Transit John Andoh/Mike Nunn

INFORMATION: Link Transit is a recipient of NCDOT – Public Transportation Division Section 5307 funds to support operating, capital, and planning activities. Link Transit is requesting a STIP and corresponding TIP amendment for Capital, Operating and Administrative Assistance.

RECOMMENDATION/ACTION: 1) Receive information and discuss; 2) Recommend TAC approval of Link Transit's STIP and TIP amendments.

4) Transportation Demand Management Initiatives Blake Cashmore and Mark Kirstner

INFORMATION: Transportation Demand Management (TDM) programs promote alternative transportation options to the single occupant vehicle. Program examples include carpooling, vanpooling, telecommuting, transit, bicycle, flexible work hours, compressed workweeks, and parking policies/pricing structures. The

Piedmont Authority for Regional Transportation (PART) is a past recipient of NCDOT Integrated Mobility Division (IMD) TDM program grant funds. The IMD generally funds one organization per region. To expand interagency TDM collaborations and integration of programs, services, and activities (where applicable), PART, in cooperation with area MPOs, has taken the lead to develop a Triad TDM Initiative. The BGMPO TDM program is a component of the larger initiative.

RECOMMENDATION/ACTION: 1) Receive information and discuss; 2) Recommend TAC endorsement of BGMPO and Triad TDM Initiatives by resolution.

5) 2024 – 2033 STIP Development Update Stephen Robinson, NCDOT

INFORMATION: NCDOT recently announced the delay of releasing the P6.0 project quantitative scores to November and postponement of the next STIP due to escalating project construction costs. As a result, NCDOT will have to adjust the STIP programming schedule and/or eliminate projects until such time funding becomes available. The P6.0 Workgroup is considering two options to balance the 2024 – 2033 STIP.

RECOMMENDATION/ACTION: 1) Receive information and discuss.

6) FHWA Update Suzette Morales

7) NCDOT TPD Update Daryl Vreeland

8) NCDOT Division Engineer Report Stephen Robinson

9) Other Business Wannetta Mallette

- MPO staff reports and updates
- Reports and questions from TCC Members
- **Next Meeting Scheduled January 18, 2021**

ACCESS TO INFORMATION: ALL MPO DOCUMENTS AND DATA CAN BE PROVIDED IN ALTERNATIVE FORMAT UPON REQUEST

PLEASE CONTACT THE MPO OFFICE FOR ADDITIONAL ASSISTANCE AND INFORMATION 336-513-5418

ACCESO A INFORMACION: TODOS LOS DOCUMENTOS Y DATOS DE MPO SE PUEDEN PROPORCIONAR EN FORMATOS ALTERNOS A PETICION

POR FAVOR COMUNIQUESE CON LA OFICINA DE MPO PARA INFORMACION E ASISTENCIA ADICIONAL 336-513-5418

It is the policy of the Burlington Graham Metropolitan Planning Organization to ensure that no person shall, on the ground of race, color, sex, age, national origin, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity as provided by Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and any other related non-discrimination Civil Rights laws and authorities.

**BURLINGTON-GRAHAM URBAN AREA
TECHNICAL COORDINATING COMMITTEE
TUESDAY, AUGUST 17, 2021
VIA MICROSOFT TEAMS
9 AM**

MEETING MINUTES

MEMBERS PRESENT

Nishith Trivedi, Orange County (Chair)
Mike Nunn, Burlington (Vice Chair)
Dan Danieleley, Airport Authority
Sean Tencer, Haw River
Nolan Kirkman, Burlington
Peter Murphy, ACTA
Brandon Parker, Gibsonville
Ben York, Alamance
Tonya Caddle, Alamance County
Cy Stober, Mebane
Mark Kirstner, PART
Preston Mitchell, Mebane
Pamela DeSoto, Elon
Bonnie Guo, GoTriangle

BGMPO STAFF PRESENT

Wannetta Mallette
Blake Cashmore

NCDOT STAFF

Jason Schronce, NCDOT-SPOT
Stephen Robinson, NCDOT Division 7
Andy Bailey, NCDOT-TPD
Natasha Earle-Young, NCDOT-TPD
Kusondra King, NCDOT-TPD

FHWA STAFF

Suzette Morales

PUBLIC

Eric Keravuori, Summit Design &
Engineering

Call to Order

Chair Nishith Trivedi called the August 17, 2021 TCC meeting to order at 9:02 a.m. and welcomed all members and guests. Ms. Wannetta Mallette conducted the membership roll call and established a quorum. Chair Trivedi asked if there were any changes to the agenda. Ms. Mallette proposed two changes to the agenda: Mr. Andy Bailey presenting the CTP Update on behalf of Daryl Vreeland and a request to move Item #5 (TIP Amendments) to Item #2. Chair Trivedi requested a motion to approve the revised agenda. Ms. Tonya Caddle made the motion to approve the agenda, seconded by Mr. Mike Nunn. The motion carried by unanimous voice vote. Chair Trivedi then requested a motion to approve the May 18 and June 15, 2021 meeting minutes. Mr. Cy Stober made the motion to approve, seconded by Ms. Caddle and the motion was approved by unanimous voice vote.

2020 – 2025 TIP Amendments

Mr. Blake Cashmore presented the STIP amendments adopted by the NCDOT Board of Transportation during their July and August 2021 meetings. Nine BGMPO TIP projects were amended: EB-5879 and U-6014. Mr. Cashmore explained EB-5879 is a sidewalk construction project that extends along US 70 from Graham Hopedale Road to Sellars Mill Road. The proposed change is to delay ROW acquisition to 2022. U-6014 is a Graham Hopedale Road highway project from West Hanover Road to Morningside Drive. The proposed changes included delaying ROW acquisition to 2023 and revising the construction costs. Mr. Cashmore also presented seven additional statewide transit and CMAQ projects that were modifications or additions to the TIP. The TCC raised no comments or questions regarding the TIP amendments. Chair Trivedi asked for a motion to approve the July and August TIP amendments. Mr. Nunn made a motion to approve, seconded by Mr. Dan Danieleley. The motion passed by unanimous voice vote.

SPOT 6.0 Schedule Delay

Mr. Jason Schronce, PE SPOT Office Manager, provided an update on the delay of the SPOT 6.0 prioritization process. Mr. Schronce stated that NCDOT conducted a sample cost estimate of STIP projects and discovered that the projects were grossly underestimated. Major contributing factors included: unreliable data, inaccurate project design assumptions, and increased ROW and construction costs. Revised cost estimates, coupled with reduced revenues and cash flow issues, triggered a 2020 STIP reprogramming to maintain fiscal constraint and a cost review of all projects. Through this process, over 450 projects were identified, quantities updated, scope accuracies verified, and as a result over 1,000 cost estimates updated. NCDOT discovered that all committed and non-committed projects across statewide, regional and division sectors were underfunded. Based the findings, NCDOT BOT thought it prudent to delay the development of the 2024 – 2033 STIP and halt the SPOT 6.0 process. Mr. Schronce stated NCDOT is federally required to update the STIP and the STI Workgroup is developing options for how to proceed that will include extensive coordination with the MPOs and RPOs.

Mr. Stober asked if local jurisdictions would need to assign local input points. Mr. Schronce responded that would not be necessary since SPOT 6.0 is on hold and no new projects will be added to the STIP. Mr. Stober then asked what recourse local jurisdictions have for funding projects submitted through the SPOT 6.0. Mr. Schronce said local jurisdictions should communicate their needs to their respective Division staff and consider other funding sources. Ms. Pam DeSoto asked about the selection process and purpose of express design. Mr. Schronce responded that the express design process replaced feasibility studies and offers a more streamlined approach to project development. Chair Trivedi asked Mr. Schronce to clarify the process of removing projects from the STIP, particularly developmental projects, as a measure to maintain its

fiscally constrained status. Mr. Schronce responded the removal of projects, if any, would be determined through the STI Prioritization Workgroup discussions and expressed doubt that non-committed projects would be retained. Mr. Stober asked if the BOT discussed the federal infrastructure bill and whether those funds would help fill the SPOT 6.0 funding gap. Mr. Schronce stated NCDOT would receive additional funds if the bill were to pass, however the funding would not resolve the funding gap entirely. There being no further discussion, Ms. Mallette thanked Mr. Schronce for the update and committed to keeping the TCC and TAC updated.

NC Moves 2050 Resiliency Element

Ms. Natasha Earle-Young stated that in 2018, as part of State Executive Order 80, NCDOT was tasked with developing an Annual Resiliency Strategy Report and the NC General Assembly authorized funding for resiliency programming. One of the programs developed through these funds is the Flood Inundation Mapping and Alert Network (FIMAN-T). FIMAN-T is a state-wide system that allows local emergency response agencies to monitor and respond to active flood threats in real-time. As part of the NC Moves 2050 Plan, NCDOT will support community-based resiliency approaches. Secondary goals and objectives for these action steps were also developed that prioritizes enhanced coordination with MPOs. Ms. Earle-Young stated that 17 strategies were developed that will be enacted over the next 12 months as part of the resiliency program. One of these strategies is a vulnerability assessment of US 70 that will evaluate threats and recommend mitigation measures. Another strategy will be the requirement to incorporate resiliency considerations in MTP updates. Ms. Earle-Young shared a dashboard developed by NCDOT that displays the flood risk for primary roads across North Carolina. She also shared a flood simulator that can visualize flood scenarios caused by storm surges on the coast. These two databases are not available to the public. NCDOT has another data source, called Geotech Asset Management Database, that is available to the public. It highlights areas prone to landslide and rockfalls. The data in these dashboards can be incorporated into the MTP and CTP project selection and prioritization process. Ms. Earle-Young mentioned NCDOT is developing a flood inundation study of rail corridors across North Carolina. The resiliency data is found on the NCDOT Making Transportation Resilient webpage. Ms. Earle-Young concluded her presentation by outlining next steps, which include finalizing resiliency policy, conducting benefit-cost analyses of resilience projects, and continuing internal and external collaborative opportunities for resiliency planning. Mr. Cy Stober thanked Ms. Earle-Young for her presentation and asked if the data from USGS is updated to reflect the current and changing flood risk. Ms. Earle-Young stated NCDOT has a rain-on-grid model that can pull in this other data and help predict future flood risk. Chair Trivedi thanked Ms. Earle-Young on behalf of the TCC for her informative presentation.

NCDOT Draft CTP Update

Mr. Any Bailey stated that NCDOT circulated the draft CTP to local governments in the BGMPO planning area for comments and incorporated their input into the draft CTP maps and recommendation lists. Mr. Bailey stated the CTP adoption schedule is delayed to January 2022. Chair Trivedi asked if there was additional time for other jurisdictions to submit comments or additional projects. Mr. Bailey restated that project submittals are required to have an identified purpose and need. Ms. Mallette asked if there would be additional opportunity to add or revise projects during the public comment period. Mr. Bailey confirmed that project revisions, including the deletion of projects, is still an option during the public comment period.

Agency Reports and Updates

FHWA: Ms. Suzette Morales stated there was a proposal to change the definition for urban areas in the most recent census. The US Census Office received substantial input on this issue. The Census Office plans to finish reviewing comments, January 2022. After the official definition is adopted, FHWA will make their determinations for the MPOs and RPOs by Fall 2022. Ms. Morales also gave an update on the *RAISE* program, which replaced the previous TIGER and BUILD grant programs. FHWA is currently reviewing grant applications and the results will be posted on the FHWA website. Mr. Stober asked if FHWA will follow the regular application cycle in the future, which Ms. Morales confirmed. Mr. Stober also asked about the distribution of federal infrastructure funding. Ms. Morales could not confirm how those funds would be distributed.

NCDOT-TPD: Mr. Andy Bailey stated that after each census, NCDOT reviews the functional classification for urban and rural roads with each MPO. These reviews will take place next year.

NCDOT-Division 7: Mr. Stephen Robinson presented the Division Engineer report and highlighted a few of the updates: a new Greensboro/Chapel Hill Road @ Snow Camp all-way stop and new crosswalks at S. Church @ Edgewood and St. Mark Church @ Boone Station.

BGMPO: Ms. Mallette said the MPO and NCDOT approved the Highway Safety Plan (HSP) Scope of Services and awarded the contract to VHB, Inc. one of NCDOT's on-call consultants. The HSP project team met with the consultant to review the scope, answer questions, and approve a tentative project schedule. At the conclusion of the procurement process in September a project kick-off meeting will be scheduled in October.

Ms. Mallette thanked the jurisdictions participating in the CommunityViz workshops. BGMPO staff is working with member jurisdictions and Alamance County GIS staff to

update the parcel layer, scheduled for completion at the end of August. The next step will be to develop growth scenarios as input to the CommunityViz model.

Adjournment

There being no further business, Chair Trivedi adjourned the meeting at 10:20 a.m. The next meeting was scheduled on **October 19, 2021**.



**RESOLUTION ADOPTING THE AMENDED 2020 – 2025 METROPOLITAN
TRANSPORTATION IMPROVEMENT PROGRAM AND AMENDED 2045
METROPOLITAN TRANSPORTATION PLAN FOR THE BURLINGTON - GRAHAM
METROPOLITAN PLANNING ORGANIZATION**

A motion was made by TAC member _____ and seconded by _____ for adoption of the resolution below, and upon being put to a vote was duly adopted on this _____ day of _____, 2021.

WHEREAS the provisions of 23 CFR Part 450 requires Metropolitan Planning Organizations (MPOs) to develop a multimodal, financially constrained Metropolitan Transportation Plan (MTP) with at least a twenty-year planning horizon and,

WHEREAS the Transportation Advisory Committee (TAC) of the Burlington - Graham Metropolitan Planning Organization (BGMP) is the MPO for the Burlington - Graham metropolitan planning area; and,

WHEREAS through the conduct of a continuing, comprehensive, and coordinated transportation planning process in conformance with applicable federal and state requirements, the BGMP developed the latest MTP with a 2045 horizon year; and,

WHEREAS the BGMP, in cooperation with the North Carolina Department of Transportation and with operators of publicly owned transit services, rail operators, the aviation authority and the bicycle and pedestrian community, adhered to the metropolitan transportation planning process in the development of the BGMP 2045 MTP; and,

WHEREAS the 2045 MTP was developed through a strategic, proactive, comprehensive public outreach and involvement program and local, regional, and federal interagency coordination and involvement; and,

WHEREAS the 2045 MTP contains an integrated set of strategies and investments to maintain, manage and improve the transportation system in the planning region through the year 2045 and calls for development of an integrated intermodal transportation system that facilitates the based reasonable available funding provisions; and,

WHEREAS the 2045 MTP integrates a Congestion Management Process identifying the most serious congestion problems and evaluating and incorporating, as appropriate, all reasonably available actions to reduce congestion, such as travel demand management and operational management strategies for all corridors with any proposed capacity increase; and,

WHEREAS the 2045 MTP meets federal air quality standards and is in attainment status for these standards; and,

WHEREAS the 2045 MTP includes, to the maximum extent practicable, a discussion of the performance measures and targets used in assessing the performance of the transportation system (Ref: 23 CFR 450.324) (f) (3)); and subsequent updates evaluating the condition and performance of

the transportation system with respect to the performance targets described in 23 CFR §450.306(d); and,

WHEREAS the 2045 MTP includes a financial plan that demonstrates how the adopted transportation plan can be implemented; and,

WHEREAS the BGMPO shall review and update the 2045 MTP at least every 5 years in attainment areas to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period to at least a 20-year planning horizon; and,

WHEREAS the projects listed in the FY 2020 – 2025 MTIP as amended are included in the State Transportation Improvement Program and balanced against anticipated revenues; and

WHEREAS the BGMPO 2020 – 2025 MTIP as amended is a direct subset of the 2045 MTP; and,

WHEREAS the public has had the opportunity to review and comment on the Amended 2020 – 2025 MTIP through public meetings and document sharing; and

NOW, THEREFORE, BE IT RESOLVED, that the Burlington - Graham Metropolitan Planning Organization Transportation Advisory Board hereby approves the amended 2020 – 2025 Metropolitan Transportation Improvement Program and 2045 Metropolitan Transportation Plan.

CERTIFICATE: The undersigned certifies that the foregoing is a true and correct copy of a resolution adopted by the voting members of the TAC on _____, 2021.

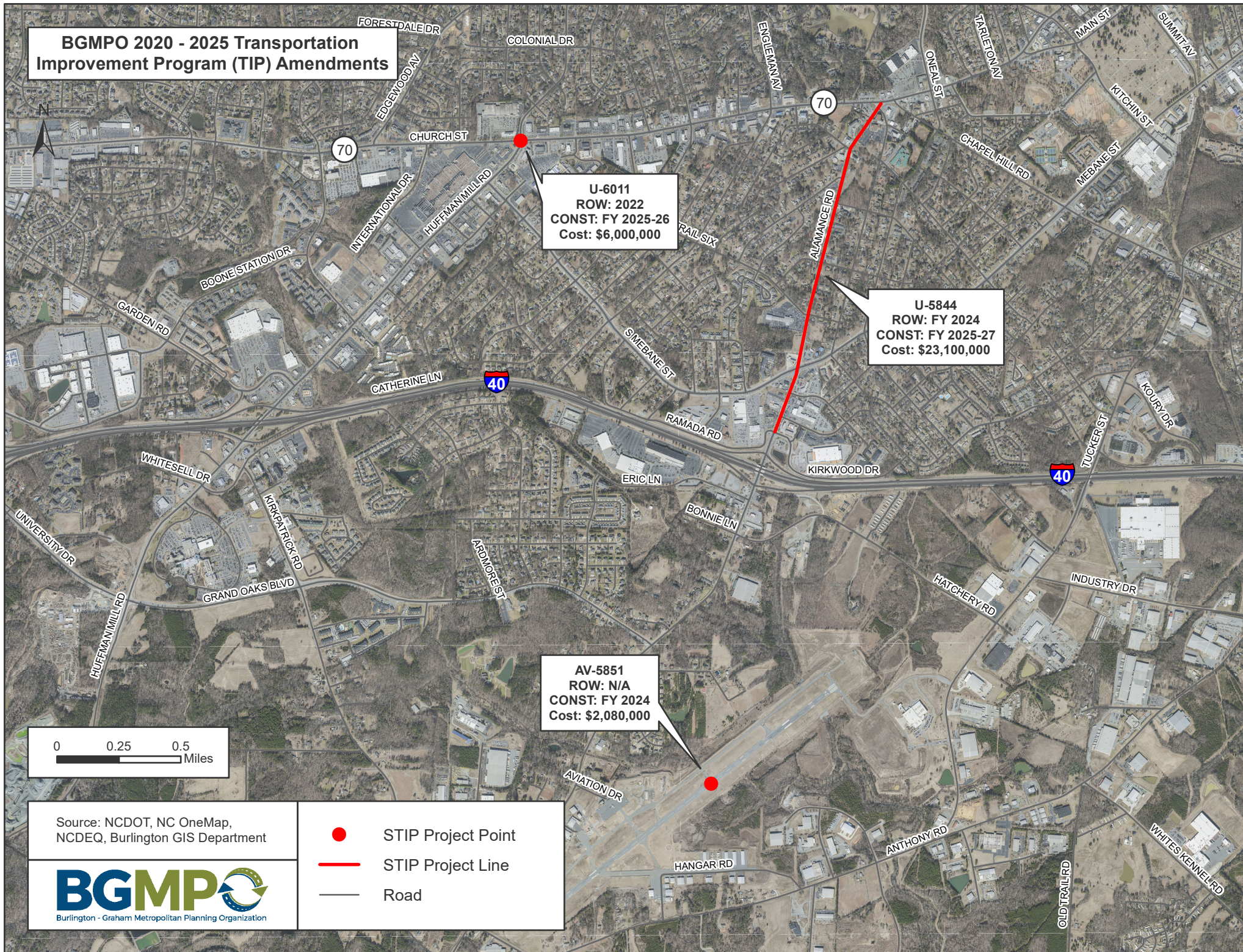
Leonard Williams, Chair
Transportation Advisory Committee

STATE of: North Carolina
COUNTY of Alamance

I, _____, Notary Public of _____ County, North Carolina do hereby certify that Leonard Williams personally appeared before me on the ____ day of _____ 2021 to affix his signature to the foregoing document.

Notary Public
My Commission expires: _____

BGMPO 2020 - 2025 Transportation Improvement Program (TIP) Amendments



**PROPOSED AMENDMENTS AND MODIFICATIONS
TO TRANSPORTATION PROJECTS IN THE
BURLINGTON - GRAHAM MPO (BGMPO) TRANSPORTATION IMPROVEMENT PROGRAM (TIP)
19-Oct-21**

(COST AND SCHEDULES ARE PRELIMINARY AND SUBJECT TO SIGNIFICANT CHANGE AS MORE INFORMATION BECOMES AVAILABLE)

ID Number	Facility	City/County	Location	Project Description	STIP As Amended October 7, 2021				
					Committed (FY 2020-2025)		Developmental (FY 2026-2029)		Cost/Funding
					PE/ROW/Utilities	Construction	PE/ROW	Construction	
INTERSTATE									
I-5954	I-40/85	Alamance/Orange	East of N 54 In Graham to West of Buckhorn Road	Pavement Rehabilitation	Under Construction				\$ 11,179,000
I-5836	I-40/85	Graham	NC 49 to NC 54	Pavement Rehabilitation	Under Construction				\$ 100,000
I-5956	I-40/85	Alamance/Guilford	East of Rock Creek Dairy Road to West of University Drive	Pavement Rehabilitation	Under Construction				\$ 4,702,000
I-6009	I-40/85	Burlington	Huffman Mill Road	Construct left turn lane and improve Garden Road Operations			FY 2028	FY 2029	\$ 1,587,000
I-5711	I-40/85	Mebane	Mebane Oaks Road	Interchange Improvements	FY 2021/2023				\$ 14,443,000
I-5309	I-40/85	Alamance	Guilford County Line to East of NC 49	Pavement Rehabilitation	Under Construction				\$ 14,411,000
I-6059	I-40/85	Mebane	Trollingwood-Hawfields Road	Interchange Improvements			FY 2028	Post STIP	\$ 12,400,000
I-5958	I-40/85	Mebane	Buckhorn Road to Orange Grove Road	Pavement Rehabilitation			FY 2027	FY 2028	\$ 8,840,000
HIGHWAY									
R-5787	Various	Division 7	Division wide	ADA Intersection Upgrades	In Progress				\$ 6,189,000
U-3110 A/B	New Route	Elon	US 70 to Westbrook	Construct Multilane Facility Part on New Location	Complete				\$ 30,477,000
U-6011	US 70	Burlington	Huffman Mill Road	Intersection Improvements	FY 2022	FY 2025		FY 2026	\$ 6,000,000
U-5752	US 70	Burlington	St. Marks Church Road	Intersection Improvements	Under Construction				\$ 4,278,000
U-6009	US 70	Burlington	Tarleton Avenue to Fifth Street	Widen and Construct Center Turn Lane			FY 2027	Post STIP	\$ 11,319,000
U-6183	NC 49	Haw River	Wilkins Road and Bason Road	Intersection Improvements			FY 2027	Post STIP	\$ 2,700,000
U-6115A	NC 54	Graham	Riverbend Road and Johnson Street	Intersection Improvements			FY 2028	Post STIP	\$ 2,700,000
U-6115B	NC 54	Graham	I-40/85 Interchange	Upgrade Ramp Intersections			FY 2028	Post STIP	\$ 6,300,000
U-6115C	NC 54	Graham	Woody Drive	Intersection Improvements			FY 2028	Post STIP	\$ 2,900,000
U-6115D	NC 54	Graham	Woody Drive and Whittemore Road	Upgrade Pipe Culverts			FY 2028	Post STIP	\$ 1,900,000
U-6184	NC 54	Burlington	South O'Neal Street	Intersection Improvements			FY 2027	Post STIP	\$ 14,600,000
U-6010	US 70	Burlington	University Drive	Intersection Improvements and Widening of US 70		FY 2022			\$ 8,400,000
U-5844	NC 62	Burlington	Ramada Road to Church Street	Widen to Multilanes	FY 2024	FY 2025		FY 2027	\$ 23,100,000
U-6182	NC 87	Burlington	Flora Avenue	New Traffic Signal/Turn Lanes			FY 2027	Post STIP	\$ 1,300,000
U-3109A	NC 119	Mebane	I-85 to North to Mrs. White Road	Relocation	Under Construction				\$ 18,195,000
U-3109B	NC 119	Mebane	North of Mebane Rogers Rd to S. of Mrs. White Road	Relocation	Under Construction				\$ 6,435,000
U-6013	NC 119	Mebane	Trollingwood-Hawfields Road to Lowes Boulevard	Widen to Multilanes	FY 2022	FY 2024		FY 2025	\$ 8,700,000
U-6214	E. Haggard	Elon	W. Webb at University Drive	Improve Intersection			FY 2027	Post STIP	\$ 13,000,000
U-5538	New Route	Mebane	Trollingwood-Hawfields Road to Industrial Site	Construct Two-Lane Road	Under Construction				\$ 3,740,000
U-6114	NC 62	Burlington	Hatchery Road at Bonnie Lane	New Traffic Signal/Turn Lanes	FY 2025			FY 2027	\$ 15,210,000
U-6014	Graham-Hopedale Road	Burlington	W. Hanover Road to Morningside Drive	Widen to Multilanes with Bike/Ped Lanes	FY 2023	FY 2024		FY 2026	\$ 19,100,000
U-6132	N. Main Street	Graham	W. Parker Street	Intersection Improvements			FY 2028	Post STIP	\$ 3,000,000
U-6131	NC 54	Burlington	Maple Avenue	Intersection Improvements	FY 2025			FY 2026	\$ 1,610,000
U-6017	NC 54	Graham	East Elm Street	Intersection Improvements	FY 2022	FY 2023			\$ 2,780,000
U-5843	US 70	Burlington	Graham-Hopedale Road	Intersection Improvements	Under Construction				\$ 7,160,000
R-5966	Various	Statewide		FTTP Road and Bridge Improvements		FY 2020-24			\$ 18,990,000
SIGNAL SYSTEM									
U-6015	Burlington	Burlington/Graham	Upgrade	Upgrade Signal System	Under Construction				\$ 9,266,000
BRIDGE REPLACEMENT									
B-4960	Judge Adams Road	Guilford	Little Alamance Creek	Bridge Replacement	Under Construction				\$ 3,514,000
B-6052	Trollingwood Road	Alamance	NCRR/Norfolk Southern Railroad	Bridge Replacement	FY 2024			FY 2026	\$ 3,000,000
B-5347	Pond Road	Alamance	Alamance Creek	Bridge Replacement	Under Construction				\$ 1,560,000
HB-9999	Statewide			Bridge Inspection Program	FY 2020-29				\$ 234,000,000
ID Number	Facility	City/County	Location	Project Description	TIP As Amended October 1, 2021				
					Committed (FY 2020-2025)		Developmental STIP (FY 2026-2029)		Cost/Funding
					PE/ROW	Construction	PE/ROW	Construction	
SAFETY									
HS-2007C	Various	Division 7	Division wide	Safety Improvements at various locations in Division 7	FY 2021				\$3,455,000
W-5207	Various	Division 7	Division wide	Safety Improvements at various locations in Division 7	Under Construction				\$ 5,636,000
W-5707	Various	Division 7	Division wide	Safety Improvements at various locations in Division 7	In Progress				\$ 4,757,000
W-5807B	Bonne Station Drive	Burlington	St. Marks Church Road/Java	Install Ped Signals and Curb Ramps		FY 2021			\$ 75,000
R-5787	Various	Division 7	Division wide	Intersection Upgrades for ADA Compliance		FY 21 and FY 22			\$ 2,500,000
CONGESTION MANAGEMENT									
C-5600	Various	CMAQ		Air Quality and Congestion Improvements	FY20,21,22	FY20,21,22			\$ 30,633,000
C-5601	Various	CMAQ		Air Quality and Congestion Improvements	FY20,21,22	FY20,21,22			\$ 4,404,000
C-5602	Various	CMAQ		Air Quality and Congestion Improvements	FY20 and 22	FY20 and 22			\$ 171,000
C-5702D	Statewide	CMAQ		Air Quality and Congestion Improvements		FY 2022			\$ 1,513,000
C-5702E	Statewide	CMAQ		Air Quality and Congestion Improvements		FY 2022			\$ 1,528,000
HO-0009	Statewide			Air Quality Awareness Outreach Program		FY 2022			\$ 860,000

MITIGATION PROJECTS								
EE-4907	Various	Division 7	Division wide	Project Mitigation	In Progress			\$ 18,169,000
HS-2007C	Various	Division 7	Division wide	Long-Life Pavement Markings	FY 2021			\$ 3,455,000
AVIATION								
AV-5851	Burlington/Alamance Airport	Burlington	Runway	Construct Paved Overrun/Safety Improvements	FY 2024			\$ 2,080,000
AV-5737	Burlington/Alamance Airport	Burlington	Runway 24 Approach Improvements	Easements and Construction Clearance	FY 2022			\$ 1,200,000
BICYCLE AND PEDESTRIAN								
EB-5879	US 70	Burlington	Graham-Hopedale Road to Sellars Mill Road	Construct Sidewalk	FY 2022	FY 2022		\$ 94,000
EB-5885	US 70	Burlington	Beaumont Avenue to Graham-Hopedale Road	Construct Sidewalk		FY 2021		\$ 120,000
EB-5887	NC 49/ NC 54	Graham	W. Pine Street to N. Marshall Street	Construct Sidewalk	FY 2021	FY 2022		\$ 175,000
EB-5988	Lee Avenue	Elon	W. Lebanon Avenue to W. Haggard Avenue	Construct Sidewalk	FY 2024/25		FY 2026	\$ 307,000
TRANSIT								
TU-0008	Statewide			NCDOT/ITRE Technical Assistance		FY 2022		\$ 588,000
TU-0009	Statewide			NCDOT/ITRE ADA Training		FY 2022		\$ 765,000
TU-0005	Statewide			Administrative		FY 2022		\$ 3,309,000
TU-0003	Statewide			HOPE Grant		FY 2021		\$ 122,000
TO-0003	Statewide			Human Trafficking Awareness Grant		FY 2021		\$ 150,000
TO-0004	Statewide			System Safety Oversight Grant		FY 2021		\$ 440,000
TI-6109	Statewide			Intercity Bus Funds		FY 2021		\$ 2,608,000
TM-0024	Statewide			FTA Grant		FY 2021		\$ 313,000
TG-6187	Statewide			Formula Funding		FY 2020/22		\$ 3,751,000
TC-0005	Statewide			5339 Facility Construction Grant		FY 2021		\$ 2,085,000
TC-0006	Statewide			5339 Facility Construction Grant		FY 2021		\$ 419,000
TC-0007	Statewide			5339 Facility Construction Grant		FY 2021		\$ 1,486,000
TC-0008	Statewide			5339 Facility Construction Grant		FY 2021		\$ 5,000,000
TC-0010	Statewide			5339 Facility Construction Grant		FY 2021		\$ 1,419,000
TC-0011	Statewide			5339 Facility Construction Grant		FY 2021		\$ 2,989,000
TC-0012	Statewide			5339 Facility Construction Grant		FY 2021		\$ 1,117,000
TC-0013	Statewide			5339 Facility Construction Grant		FY 2021		\$ 420,000
TC-0018	Statewide			5310 Funds for Rural Non Transit Projects		FY 2022		\$ 980,000
TC-0019	Statewide			5311 Capital Funds for FTA Grants		FY 2022		\$ 17,147,000
TC-0020	Statewide			5339 Small Urban Grants		FY 2022		\$ 2,185,000
TC-0021	Statewide			5339 Statewide Rural Grants		FY 2022		\$ 5,670,000
TC-0022	Statewide			5311 ADTAP Capital Fund for FTA Grants		FY 2022		\$ 1,880,000
TG-0002	Statewide			5307 Bus Capital		FY 2021		\$ 21,000
TG-0004	Statewide			5307 Bus Capital		FY 2021		\$ 168,000
TG-0005	Statewide			5307 Bus Capital		FY 2021		\$ 168,000
TM-0010	Statewide			5307 Operating Funds		FY 2021		\$ 142,000
TM-0012	Statewide			5307 Operating Funds		FY 2021		\$ 129,000
TM-0014	Statewide			5307 Operating Funds		FY 2021		\$ 75,000
TM-0015	Statewide			5307 Operating Funds		FY 2021		\$ 145,000
TM-0020	Statewide			5307 Operating Funds		FY 2021		\$ 45,000
TM-0022	Statewide			5307 Operating Funds		FY 2021		\$ 18,000
TM-0025	Statewide			5310 Operating Funds		FY 2022		\$ 4,212,000
TM-0027	Statewide			5311 Funds for FTA Grants		FY 2022		\$ 22,908,000
TM-0028	Statewide			5311 Funds for FTA Grants		FY 2022		\$ 1,634,000
TM-0029	Statewide			5311 Funds for FTA Grants		FY 2022		\$ 3,361,000
TM-0030	Statewide			5311 Funds for FTA Grants		FY 2022		\$ 177,000
TM-0031	Statewide			RTAP Funds for FTA Grants		FY 2022		\$ 280,000
TM-0032	Statewide			5311 Intercity Bus Funds for FTA Grants		FY 2022		\$ 4,227,000
TM-0033	Statewide			5311 Intercity Bus Funds		FY 2022		\$ 2,698,000
TM-0036	Statewide			5310 Administrative Funds		FY 2022		\$ 567,000
TG-6811B	ACTA	Alamance		Funding for Preventive Maintenance		FY 2020		\$ 46,000
TA-6733	LinkTransit	Alamance		Capital Assistance		FY 2020		\$ 1,235,000
TD-6322	LinkTransit	Alamance		Capital Assistance		FY2020		\$ 60,000
TG-6812A	LinkTransit	Alamance		ADA Services		FY 2020		\$ 211,000
TO-6170	LinkTransit	Alamance		Operating Assistance		FY 2020		\$ 3,394,000
TP-5162	LinkTransit	Alamance		Planning for Facility Feasibility Study		FY 2020		\$ 95,000
TP-5161	LinkTransit	Alamance		Planning for Fixed Route Service Expansion		FY 2020		\$ 5,000
TO-5220	BGMPO	Orange		Operating Assistance		FY 2020		\$ 282,000
TO-6151	LinkTransit	Guilford		Operating Assistance		FY 2020/21		\$ 4,032,000
TO-6142	Statewide	Statewide		Formula Funding		FY 2020/22		\$ 18,778,000
TO-5214	ACTA	Alamance		Operating Assistance		FY 2020/27		\$ 10,060,000
TK-6103	ACTA	Alamance		Administration		FY 2020/23		\$ 4,882,000
TG-6137B	PART	Alamance		Capital		FY 2020/25		\$ 1,000,000
TO-5136	PART	Alamance/Guilford		Operating Assistance		FY 2020/23		\$ 11,817,000
TO-5134	PART	Alamance		Operating Assistance		FY 2020/25		\$ 3,806,000
MISCELLANEOUS								
M-0414	Statewide			Municipal Bridge Inspection Program		FY 2020-29		\$ 10,000,000
PASSENGER RAIL								
P-4405	Various	Division 7		Private Crossings Safety	In Progress			\$ 10,291,000
RC-2007	Various	Division 7		Traffic Separation Study	To Be Requested			
RX-2007	Various	Division 7		Highway-Rail Grade Crossing Safety Improvements	To Be Requested			
RX-2100	Statewide			Passenger Rail Crossing Safety	FY 2021-25			\$ 2,500,000
R-5753	Statewide			FLTP and ERFO Funds	FY 2020-23			\$ 81,955,000
Y-5807	Various	Division 7		Traffic Separation Study	To Be Requested			

Z-5807	Various	Division 7		Highway-Rail Grade Crossing Safety Improvements	To Be Requested	
P-5719	Piedmont Corridor	Division 7		Purchase and Refurbish Rail Cars	FY 2022, 24 and 25	\$ 212,528,000
P-5205	Piedmont Corridor	Alamance	Graham to Haw River	Siding and Curve Realignment	Under Construction	\$ 11,605,000
P-2918	Piedmont Corridor	Division 7	Piedmont Corridor Train 74/75, Operations added FY21	Equipment and Capital Yard Maintenance	In Progress	\$ 8,211,000

RESURFACING

2021

WBS	Plan Year	Route Name	County	From Description	To Description	Length
N/A	2021.00	NC 62	001-Alamance	GCL	I-40	7.05
N/A	2021.00	Mt. Willen Rd.	001-Alamance	SR 2135	SR 2147	4.60
N/A	2021.00	Anthony Rd.	001-Alamance	NC 62	SR 1148	0.29
N/A	2021.00	Anthony Rd.	001-Alamance	NC 49	SR 1147	3.05
N/A	2021.00	Graham Hopedale Rd.	001-Alamance	PVMT JOINT	NC 54	2.84
N/A	2021.00	Parker St.	001-Alamance	NC 49	SR 1716	1.00
N/A	2021.00	Lindley Mill Rd.	001-Alamance	CCL	SR 1005	4.31
N/A	2021.00	Timber Ridge Lake Rd.	001-Alamance	NC 49	GCL	2.50
N/A	2021.00	Flora Ave.	001-Alamance	NC 87	SR 1530	1.07
N/A	2021.00	Danieley Water Wheel Rd.	001-Alamance	SR 1594	SR 1593	1.27
N/A	2021.00	Hanover Rd.	001-Alamance	SR 1801	SR 1716	1.78
N/A	2021.00	Stone St.	001-Alamance	NC 49	SR 1936	0.48
N/A	2021.00	Stone St. Extension	001-Alamance	SR 1935	SR 1940	2.26
N/A	2021.00	Center St.	001-Alamance	NC 119	OCL	0.37
N/A	2021.00	Holt St.	001-Alamance	US 70	SR 1962	1.63
N/A	2021.00	Eighth St.	001-Alamance	Sr 1961	SR 1007	0.60
N/A	2021.00	Bakatsias Lane	001-Alamance	SR 1928	END MAINT	0.52
N/A	2021.00	Porter Ave.	001-Alamance	SR 2185	END MAINT.	0.08
N/A	2021.00	Silk Hope Liberty Rd.	001-Alamance	RCL	CCL	0.30
N/A	2021.00	Old Switchboard Rd.	001-Alamance	SR 1003	CCL	2.33
N/A	2021.00	Holman Mill Rd.	001-Alamance	SR 1004	SR 1005	0.77
N/A	2021.00	Longpine Rd.	001-Alamance	SR 1146	END MAINT.	0.40
N/A	2021.00	South Mebane St.	001-Alamance	End of Divided	NC 87	1.36
N/A	2021.00	Haggard Ave.	001-Alamance	SR 1301	NC 100	0.73
N/A	2021.00	Haggard Ave.	001-Alamance	NC 87	SR 1323	1.30

REVISIONS TO THE 2020-2029 STIP
HIGHWAY PROGRAM

BURLINGTON-GRAHAM URBAN AREA METROPOLITAN PLANNING ORGANIZATION

STIP ADDITIONS

* HO-0009	- BURLINGTON-GRAHAM URBAN AREA	NORTH CAROLINA DEPARTMENT OF ENVIRONMENT	IMPLEMENTATION FY 2022 -	\$578,000	(CMAQ)
CABARRUS	METROPOLITAN PLANNING ORGANIZATION	AND NATURAL RESOURCES, NORTH CAROLINA AIR	FY 2022 -	\$282,000	(S)
CATAWBA	- ROCKY MOUNT METROPOLITAN	AWARENESS OUTREACH PROGRAM TO PROVIDE		\$860,000	
CHATHAM	PLANNING ORGANIZATION	EDUCATION AND PRODUCE DAILY AIR QUALITY			
DAVIDSON	- GREATER HICKORY METROPOLITAN	FORECAST.			
DAVIE	PLANNING ORGANIZATION	<u>PROJECT ADDED AT THE REQUEST OF THE</u>			
DURHAM	- HIGH POINT URBAN AREA METROPOLITAN	<u>TRANSPORTATION PLANNING BRANCH.</u>			
EDGEcombe	PLANNING ORGANIZATION				
FORSYTH	- GREENSBORO URBAN AREA				
FRANKLIN	METROPOLITAN PLANNING ORGANIZATION				
GASTON	- GASTON CLEVELAND LINCOLN URBAN				
GRANVILLE	AREA METROPOLITAN PLANNING				
GUILFORD	ORGANIZATION				
HAYWOOD	- WINSTON-SALEM URBAN AREA				
IREDELL	METROPOLITAN PLANNING ORGANIZATION				
JOHNSTON	- CABARRUS-ROWAN URBAN AREA				
LINCOLN	METROPOLITAN PLANNING ORGANIZATION				
MECKLENBURG	- DURHAM-CHAPEL HILL-CARRBORO				
NASH	METROPOLITAN PLANNING ORGANIZATION				
ORANGE	- CAPITAL AREA METROPOLITAN PLANNING				
PERSON	ORGANIZATION				
ROWAN	- CHARLOTTE REGIONAL TRANSPORTATION				
SWAIN	PLANNING ORGANIZATION				
UNION	- LAND OF SKY RURAL PLANNING				
WAKE	ORGANIZATION				
PROJ.CATEGORY	- NORTHWEST PIEDMONT RURAL				
EXEMPT	PLANNING ORGANIZATION				
	- SOUTHWESTERN RURAL PLANNING				
	ORGANIZATION				
	- UPPER COASTAL PLAIN RURAL PLANNING				
	ORGANIZATION				
	- TRIANGLE AREA RURAL PLANNING				
	ORGANIZATION				

* INDICATES FEDERAL AMENDMENT

Thursday, September 2, 2021

**REVISIONS TO THE 2020-2029 STIP
HIGHWAY PROGRAM**

BURLINGTON-GRAHAM URBAN AREA METROPOLITAN PLANNING ORGANIZATION

STIP ADDITIONS

- ROCKY RIVER RURAL PLANNING
ORGANIZATION
- KERR TAR RURAL PLANNING
ORGANIZATION

REVISIONS TO THE 2020-2029 STIP
HIGHWAY PROGRAM

BURLINGTON-GRAHAM URBAN AREA METROPOLITAN PLANNING ORGANIZATION

STIP MODIFICATIONS

AV-5851 ALAMANCE PROJ.CATEGORY DIVISION	- BURLINGTON-GRAHAM URBAN AREA METROPOLITAN PLANNING ORGANIZATION	BURLINGTON- ALAMANCE REGIONAL AIRPORT (BUY), CONSTRUCT 100 FT PAVED OVERRUN AND MAKE SAFETY ENHANCEMENTS. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY CONSTRUCTION FROM FY 21 TO FY 24.</u>	CONSTRUCTION	FY 2024 - \$2,080,000 (T) \$2,080,000
U-5844 ALAMANCE PROJ.CATEGORY DIVISION	- BURLINGTON-GRAHAM URBAN AREA METROPOLITAN PLANNING ORGANIZATION	NC 62, SR 1430 (RAMADA ROAD) TO US 70 (CHURCH STREET) IN BURLINGTON. WIDEN TO MULTILANES. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY RIGHT-OF-WAY FROM FY 23 TO FY 24 AND CONSTRUCTION FROM FY 24 TO FY 25.</u>	RIGHT-OF-WAY UTILITIES CONSTRUCTION	FY 2024 - \$9,700,000 (T) FY 2024 - \$3,400,000 (T) FY 2025 - \$5,447,000 (T) FY 2026 - \$1,698,000 (T) FY 2027 - \$2,855,000 (T) \$23,100,000
U-6011 ALAMANCE PROJ.CATEGORY REGIONAL	- BURLINGTON-GRAHAM URBAN AREA METROPOLITAN PLANNING ORGANIZATION	US 70 (SOUTH CHURCH STREET), SR 1158 (HUFFMAN MILL ROAD) IN BURLINGTON. INTERSECTION IMPROVEMENTS. <u>COST INCREASE EXCEEDING \$2 MILLION AND 25% THRESHOLDS. ACCELERATE RIGHT-OF-WAY FROM FY 23 TO FY 22 AT THE REQUEST OF THE DIVISION.</u>	RIGHT-OF-WAY UTILITIES CONSTRUCTION	FY 2022 - \$3,000,000 (T) FY 2022 - \$600,000 (T) FY 2025 - \$1,579,000 (T) FY 2026 - \$821,000 (T) \$6,000,000

* INDICATES FEDERAL AMENDMENT

Thursday, October 7, 2021



**A RESOLUTION
ENDORING THE PIEDMONT AUTHORITY FOR REGIONAL TRANSPORTATION AND
BURLINGTON – GRAHAM METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION DEMAND MANAGEMENT INITIATIVES**

A motion was made by TAC member _____ and seconded by _____ for adoption of the resolution below, and upon being put to a vote was duly adopted on this _____ day of _____, 2021.

WHEREAS, Transportation Demand Management (TDM) is a method by which alternative transportation to work (biking, walking, public transit, or telework) can be encouraged in order to manage the impacts on the transportation network, reduce environmental impacts of driving, and limit stress associated with commuting to work during the peak periods; and

WHEREAS, the North Carolina Department of Transportation Integrated Mobility Division has provided funding to the Piedmont Authority for Regional Transportation (PART) to support TDM activities in the region; and

WHEREAS, the Burlington – Graham Metropolitan Planning Organization (BGMPO) has developed a TDM plan and partnered with PART to implement TDM program activities throughout the Triad; and

WHEREAS, the BGMPO proposes to be a sub-recipient of PART's TDM grant funding.

NOW, THEREFORE, BE IT RESOLVED by the Burlington – Graham Metropolitan Planning Organization that the Transportation Advisory Committee endorses the Piedmont Authority for Regional Transportation Triad Transportation Demand Management application for grant funding and implementation of the Burlington – Graham Metropolitan Planning Organization and Piedmont Authority for Regional Transportation related Transportation Demand Management activities.

CERTIFICATE: The undersigned certifies that the foregoing is a true and correct copy of a resolution adopted by the voting members of the TAC on _____, 2021.

Leonard Williams, Chair
Transportation Advisory Committee

STATE of: North Carolina
COUNTY of Alamance

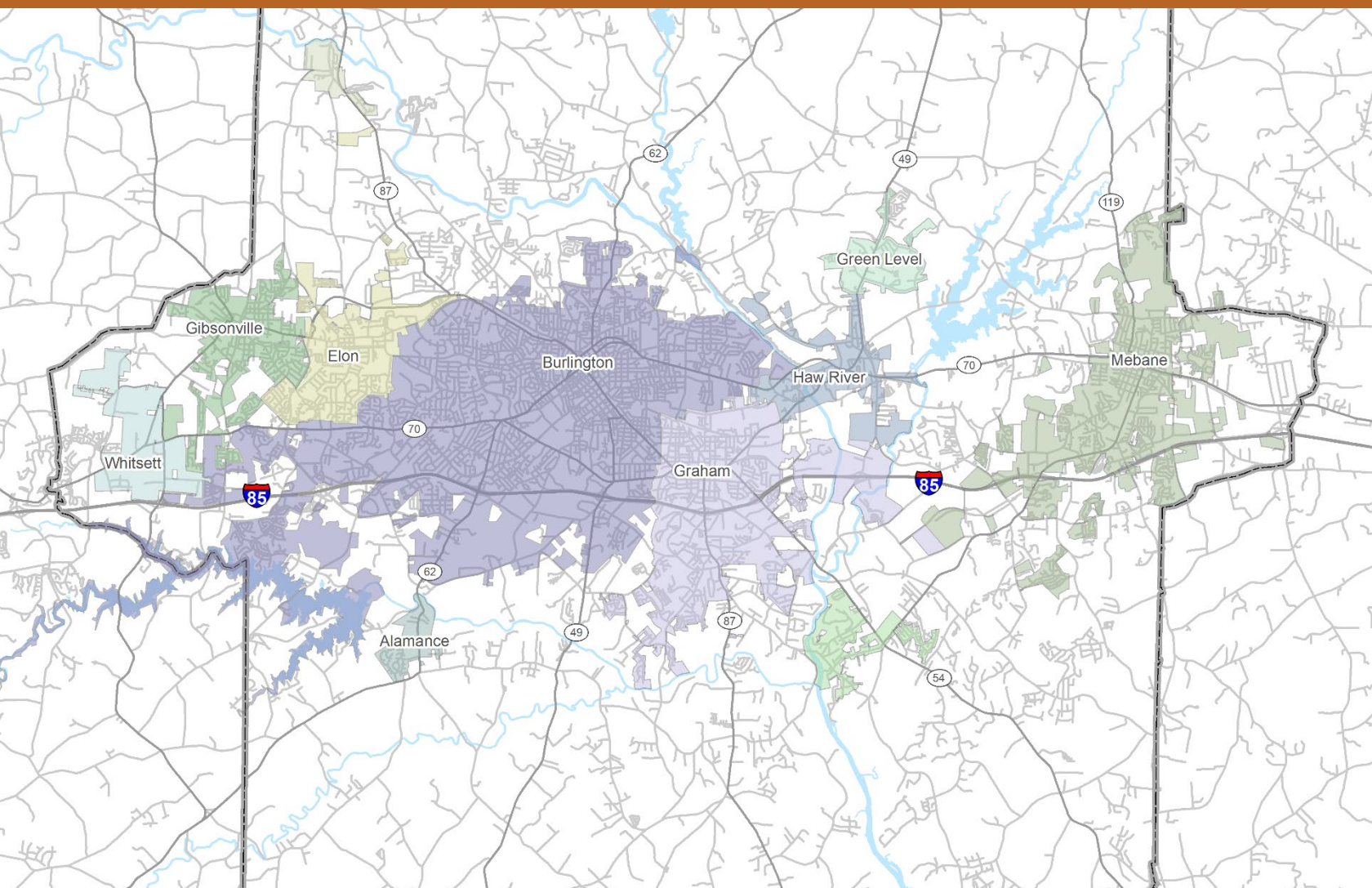
I, _____, Notary Public of _____ County, North Carolina do hereby certify that Leonard Williams personally appeared before me on the ____ day of _____ 2021 to affix his signature to the foregoing document.

Notary Public

My Commission expires: _____

Burlington - Graham Metropolitan Planning Organization Transportation Demand Management (TDM) Program

October 2021



Burlington - Graham Metropolitan Planning Organization (BGMPO)

234 E. Summit Avenue

Burlington, NC 27215

(336) 513-5418

Burlington – Graham Metropolitan Planning Organization Transportation Demand Management Program

OVERVIEW

This document provides an outline of the Burlington – Graham Metropolitan Planning Organization (BGMPO) Transportation Demand Management (TDM) program and initial strategies BGMPO will implement over the next five years.

WHAT IS TDM?

Transportation networks are designed to provide a certain level of capacity. The amount of capacity filled by users is the demand placed on the network. Severe traffic congestion occurs when the demand exceeds the capacity of a given corridor or network. In such cases, the traditional transportation management approach across the United States has been to increase network capacity (i.e. build new roads, widen existing roads). This is typically only a temporary solution.¹ In most cases, the additional lanes or new roads are quickly filled through land use decisions triggered by the increased capacity.



Transportation Demand Management (TDM) is an approach that focuses on reducing or reallocating transportation demand either in space or time.² This is accomplished through the integrated application of programs, policies and strategies that can reduce the number of single-occupancy vehicle (SOV) trips. Such initiatives may include prioritizing other transportation modes (public transit, carpooling, vanpooling, active transportation), implementing systemic land use or parking policy enhancements, encouraging changes to the schedule and location of employment (telework or alternative work schedules), and promoting incentives for employers and employees.³

WHY NOW?

MPOs are federally mandated public organizations responsible for conducting transportation planning activities in urbanized areas (UZAs) with populations over 50,000. The BGMPO (see *Figure 1* on p. 7) is in central North Carolina, approximately 60 miles west of Raleigh and 25 miles east of Greensboro and consists of the following jurisdictions:

- Cities of Burlington, Graham and Mebane
- Towns of Elon, Gibsonville, Haw River, Whitsett, Green Level

Burlington – Graham Metropolitan Planning Organization

Transportation Demand Management Program

- Village of Alamance
- Counties of Alamance, Guilford and Orange

The major transportation facilities within the study area are I-85/40 and US 70.

The population within the BGMPPO is growing rapidly. From 2010 – 2020, the total population in Alamance County increased by 13.4 percent.⁴ This growth has been distributed unevenly throughout the region. Some towns and cities, such as Mebane and Gibsonville, grew at much faster rates (Table 1).

The population growth has led to increased demand on roads and major corridors in the region. The average annual daily traffic (AADT) along I-40 passing through Burlington increased from approximately 112,000 vehicles in 2010 to 130,000 in 2020, an increase of approximately 16 percent.⁵ Other major corridors and routes have experienced increased usage rates, particularly on the urban periphery surrounding the core cities of Burlington, Graham, Mebane, Elon and Gibsonville (see Table 1). This increased road usage is projected to continue over the next 20 years, straining the capacity of the existing transportation network. The demand is expected to exceed the road capacity for numerous corridors across the region. This problem is compounded by recent budgetary pressure at the state level reducing the funding available for costly roadway projects that expand functional capacity.

Table 1. 2010 – 2020 Population Change in BGMPPO Jurisdictions

County/City/Town	2010 Population	2020 Population	Percent Change
Alamance County	151,131	171,415	13.4%
Orange County	133,986	148,696	11.2%
Guilford County	489,589	541,299	10.8%
Village of Alamance	951	988	3.9 %
Burlington	50,042	57,303	14.7 %
Elon	9,419	11,336	20.4 %
Gibsonville	6,410	8,920	39.2 %
Graham	14,153	17,157	21.2 %
Green Level	2,100	3,152	50.1 %
Haw River	2,298	2,252	-2.0 %
Mebane	11,393	17,797	56.2 %
Whitsett	590	584	-1.0 %

As an alternative to increasing capacity on the regional roadway network, a TDM approach seeks to reallocate the demand (usage) of the road network through innovative programs and policies. This document outlines TDM strategies the BGMPPO may implement over the next five years.

Burlington – Graham Metropolitan Planning Organization

Transportation Demand Management Program

Table 1: Average Annual Daily Trips (AADT) along Major Corridors in BGMPO from 2009 – 2019

Route	Trip Recording Location (Between Road A & B)	2009 AADT	2019 AADT	% Increase
University Dr	US 70 and Rural Retreat Rd	16000	22500	40.6 %
University Dr	Manning Ave & N Williamson Ave	7500	10500	40.0 %
NC 119	I-40 & Trollingwood Hawfields Rd	9100*	22000	141.8 %
Trollingwood Hawfields Rd	I-40 & NC 119	5400	10000	85.2 %
NC 54	I-40 & Woody Dr	16000	19500	21.8 %
US 70	University Dr & Springwood Church Rd	11000	14000	27.3 %
Huffman Mill Rd	I-40 & University Dr	18000	22500	25.0 %
Maple Ave	Anthony Rd & Hanford Rd	12000	16000	33.3 %
Mebane Oaks Rd	I-40 & Cameron Ln	21000	30500	45.2 %

*2009 AADT unavailable. Data collected from 2007.

PRO TRANSIT REGION

Transit (also known as public transportation, mass transit and urban transit) includes various transportation services such as vanpools, buses, commuter rail, etc. Transit fills an important role throughout the BGMPO region by providing efficient, affordable, and equitable transportation and basic mobility for non-drivers and can be a catalyst for efficient land use development. The BGMPO region currently served by six public and private transit agencies:

- **ACTA** – The Alamance County Transportation Authority provides transportation for general purpose trips, medical trips and almost any non-emergency trip destination by reservation to Alamance County residents.
- **Elon Express** – Elon University provides free shuttle service to all Elon students, faculty, staff and community members.
- **GoTriangle** – GoTriangle operates regional bus and shuttle service, paratransit services, ride matching and vanpools; provides commuter resources and an emergency ride home program; and serves the BGMPO region through its Orange-Durham Express route.
- **Link Transit** – The City of Burlington provides paratransit and free fare fixed route bus system serving Burlington, Gibsonville and Alamance Community College.
- **Orange County Public Transportation** – Orange County provides transit and micro-transit service to the BGMPO region via its Orange - Alamance Connector service to Mebane (western Orange County).
- **PART** – The Piedmont Authority for Regional Transportation services Winston-Salem, Greensboro, Chapel Hill and a number of other towns in the Piedmont Triad region with

Burlington – Graham Metropolitan Planning Organization Transportation Demand Management Program

express and fixed route service. In cooperation with Link Transit, Orange County Public Transportation and other transit partners, PART is working to develop a Real-time Bus Passenger Information System procurement that covers numerous technologies including technology for micro-transit.

Despite recent expansions in service and free or reduced fares, transit trips make up a small percentage of the total number of trips made in the BGMPO region. However, due to an aging population, rising fuel prices, increasing roadway improvement costs, and rapid growth and development, increased interest in walkability, municipal leaders can make a commitment to become a “Pro Transit Region”—a region that prioritizes investments in transit and active mobility.

ALIGNMENT WITH REGIONAL AND STATE PROGRAMS

The North Carolina Department of Transportation (NCDOT) operates a state-wide TDM program that provides funding for TDM programs and strategies. Five agencies in North Carolina are authorized to receive and distribute this funding to local TDM partners and initiatives. PART is the state-authorized distributor of TDM funding for the Piedmont Triad region that includes the BGMPO planning area. These funds were previously dedicated primarily to the regional vanpool program operated by PART. In 2021, PART invited local partners and stakeholders, including BGMPO, to identify local TDM strategies that could be incorporated into a Triad TDM Plan. A more robust TDM program with prescribed strategies and performance measures will help increase the pool of TDM funding available for local partners. The BGMPO TDM Initiative outlines the local TDM strategies and implementation opportunities that can be integrated into the Triad TDM Plan.

BGMPO TDM INITIATIVES

This section highlights a comprehensive list of TDM strategies developed that can be easily achieved with the BGMPO region. Please reference *Strategy Prioritization* on p. 7 for a prioritized subset of TDM strategies recommended for development over the 5-year time horizon of this document.

Train Station Connectivity Study

The BGMPO adopted a Train Station Connectivity Plan in 2017 that assessed multimodal connectivity to the Amtrak Burlington Station. The TDM recommendations include exploring the possibility of a rail service app, creating dedicated parking for transportation network companies (e.g., Uber/Lyft, taxi), and partnering with Elon University to market rail services to students. The BGMPO can work with the City of Burlington to discuss and help support the implementation of plan recommendations.

Burlington – Graham Metropolitan Planning Organization

Transportation Demand Management Program



Figure 2. Amtrak Burlington Station

Regional Intermodal Transit Center

Link Transit plans to develop a regional transit center that would serve the regional transit providers. Funding has been allocated to develop a feasibility study that would assess site requirements. The BGMPO will support the study and anticipated development of the intermodal transit center through dedicated staff time and stakeholder feedback.

Park & Ride Lot Expansion

The BGMPO region has two Park & Ride lots in Alamance County with transit service connections to Guilford and Orange counties. The Park & Ride lots are located at Alamance Regional Medical Center in Burlington and the Cone Health Urgent Care in Mebane. BGMPO is currently funding the Mebane Park & Ride relocation study. Relocation of existing lot is needed due to parking constraints.

Micro-Transit

Micro-transit is a technology-enabled transit service that typically uses shuttles or vans to provide on-demand or fixed-route service for short trips. Micro-transit is particularly useful for helping transit users complete the first-or-last mile of their journey, helping make door-to-door transit service a reality. Orange County Public Transportation is currently experimenting with a micro-transit pilot program that will serve Hillsborough and portions of Mebane and Chapel Hill. Expanding micro-transit service in the BGMPO should be a consideration as the region continues to grow and densify.

Highway Safety Program

The BGMPO formed its Highway Safety Program (HSP) in October 2020 to spread awareness of traffic safety and change public attitudes and behaviors to reduce crash rates in the region. The first project of the HSP is development a Highway Safety Plan which will identify contributing factors to crashes and propose regional strategies to improve traffic safety, working toward the goal of zero traffic fatalities by 2050.

Targeted Marketing Campaigns

Securing the proactive support of large employers and their communication chains is integral to a successful TDM program. The BGMPO will work with large employers in the region to spread awareness of commuting alternatives. Virtual engagement opportunities, such as employer-hosted webinars, may also be used to engage with employees throughout the region.

Employer Recognition Programs

Two programs, Best Workplaces for Commuters (BWC) and Commute Friendly NC, recognize employers for supporting and implementing TDM strategies. Some of the strategies include subsidizing transit/vanpool passes, funding an employee shuttle, or expanding telework policies. The Best Workplace for Commuters (BWC) is a national membership program that is better suited for large employers. Some of the large employers in the BGMPO—LabCorp, Elon University, ACC, Honda, and the City of Burlington—may be well positioned to obtain BWC designation. Beyond national recognition, member employers also receive technical assistance, training, and opportunities for information exchange. Commute Friendly NC is another program that recognizes businesses across the state of North Carolina for TDM efforts. It has less stringent requirements than BWC and may be more attainable for some employers. Whether BWC or Commute Friendly NC, BGMPO will work with employers to receive recognition for expanding their portfolio of commuter benefits.



Circulator Routes

Circulator bus service is a short-distance mode of transit that moves along a one-directional route around a high-density area of development, such as a downtown or shopping centers. They are often used to connect into high-attraction tourist sites or historic neighborhoods. The cities of Graham and Mebane have plans to develop transit circulator routes serving their local downtowns. BGMPO will support transit agencies and partner cities to develop circulator routes in the region.

Land Use Policies

A successful TDM program should also consider land use policies that can incentivize alternative commute patterns and behavior. TDM-friendly land use policies generally fall under a few specific areas: Parking (parking maximum requirements, parking pay-outs for employees); zoning (TOD overlay districts; higher density allowances); and development regulations (transportation impact fee waivers). When developing its Metropolitan Transportation Plan (MTP), the BGMPO established a Land Use Subcommittee. The purpose of the subcommittee is to identify future transportation

Burlington – Graham Metropolitan Planning Organization

Transportation Demand Management Program

deficiencies and impacts as a result of growth and recommend development strategies such as TDM policies.

TDM FUNDING RESOURCES

PART is the state-designated agency through whom TDM funding is distributed across the Triad region. However, there are other funding revenue streams that the BGMPO can identify and facilitate access for local communities across the region. These funds may be generated through membership dues, public or private grants, or fee-for-service systems. Developing an MPO TDM program that more clearly identifies strategies can make the MPO more competitive in the TDM project funding identification and selection process.

Transportation Management Association (TMA) Development

A Transportation Management Association (TMA) is “an organized group applying carefully selected approaches to facilitating the movement of people and goods within an area.”⁶ They were originally formed with the intent to alleviate localized traffic congestion through the marketing of alternative transportation options. TMAs are exclusively targeted toward a limited geographical area, such as a downtown district, major shopping center, or a business park, that experiences or induces considerable traffic. TMAs can be formed and managed by a variety of organizations, including MPOs, educational institutions, or employer districts. Potential TMA hotspots could include downtown Burlington, Elon University, or the NC Commerce Park area. BGMPO will help identify traffic congestion hot spots and potential partners that can represent the individual TMAs.

STRATEGY PRIORITIZATION

The BGMPO and its regional partners do not have the resources to undertake all the TDM strategies identified above. The BGMPO will work with its Land Use Subcommittee to prioritize strategies, identify performance measures and an implementation scheduling based on funding.

The BGMPO staff has identified a few TDM strategies that have a higher probability of implementation over the next five years (see Table 3). Some strategies, such as the Mebane Park & Ride lot relocation or development of a targeted marketing campaign, in partnership with PART, could be implemented more quickly. This list is a starting point for further discussion and refinement of the prioritization schedule.

Table 3. Strategy Prioritization 2021-2025

Strategy	Performance Metric	Target
2021 - 2022		
Train Connectivity Study	Implement two recommendations from the Burlington Train Station Connectivity Study	Met/Not Met

Burlington – Graham Metropolitan Planning Organization Transportation Demand Management Program

Highway Safety Program	Development of Highway Safety Plan	Met/Not Met
	Cross-promote national safety calendar events	One marketing activity per quarter
Park & Ride Lot Expansion	Completion of Mebane Park & Ride Lot Relocation Study	Met/Not Met
2023 - 2025		
Transportation Management Association	Identify and help establish two TMAs across the region	Met/Not Met
Micro-Transit	Evaluate performance of Orange County pilot program	Met/Not Met
Workplace Recognitions/Designations	Develop outline of BWC or Commute Friendly NC designation	Met/Not Met
Commuter Surveys	Conduct a commuter survey of large employers in BGMPO	Met/Not Met
Telework Policies	Compile listing of businesses with telework policies	Met/Not Met

PUBLIC ENGAGEMENT

The BGMPO will actively market the Triad TDM programming and policies throughout the region to increase awareness and public participation. Opportunities for engagement will include BGMPO TCC and TAC meetings, website, employer sponsored events, and online interactive events..

IMPLEMENTATION

Program Team and Stakeholders

One of the first steps in building the BGMPO TDM Program is to identify strategic partners and stakeholders and collectively define their role in the program. The BGMPO TCC and TAC will provide executive feedback and guidance in developing the TDM program. Other standing subcommittees, such as the transit and land use subcommittees, will also be a valuable source for detailed discussion, vision-framing and program prioritization. The BGMPO will look to PART to take the lead and for advocacy and funding. The involvement of community stakeholders and partners will be critical to successful implementation.

TDM Funding

The North Carolina DOT is the primary source of funding for TDM programming. PART is the authorized distributor of TDM funds for the Piedmont Triad region, which covers the BGMPO. TDM funds can be used to cover a variety of program costs, including salaries, fringe benefits, office supplies, marketing and other program related items. BGMPO will determine how these funds can

Burlington – Graham Metropolitan Planning Organization

Transportation Demand Management Program

best be allocated, either directly or by regional partners (such as TMAs) to support TDM strategies and policies in the BGMPO region. The BGMPO will also evaluate other funding opportunities, including public, private and non-profit, to augment state TDM funding.

Future Planning

This document is a subset of the Regional TDM Plan that outlines some general TDM strategies and preliminary steps BGMPO can take to build a robust TDM Program tailored to the specific needs and interests of the BGMPO region. Depending on the degree of buy-in and enthusiasm by regional partners for the TDM Program, the BGMPO may consider developing a comprehensive TDM Plan that can provide a more detailed analysis and recommendations.

Evaluation

BGMPO will evaluate on an annual basis the implementation of TDM measures across the region. The findings of this evaluation will be reported to the TCC, TAC, and any corresponding subcommittees. This performance review will coincide with the annual performance report to PART, the authorized distributor of state TDM funds for the Triad region. The BGMPO may decide to make changes to its selected strategies, performance measures, and prioritization schedule based on the evaluation results.

SOURCES

¹ Federal Highway Administration. “Transportation Demand Management.”
https://ops.fhwa.dot.gov/plan4ops/trans_demand.htm

² Colorado Department of Transportation. “How to Create a TDM Plan.”
https://www.codot.gov/programs/innovativemobility/assets/copy_of_cdod-how-to-create-a-tdm-plan.pdf

³ Mobility Lab. <https://mobilitylab.org/2018/07/27/what-is-transportation-demand-management-actually/>

⁴ United States Census County Summary Tables. 2020.

⁵ North Carolina Department of Transportation. “NCDOT Annual Average Daily Traffic (AADT) Mapping Application.” <https://www.arcgis.com/apps/webappviewer/index.html?id=5f6fe58c1d90482ab9107ccc03026208>

⁶ Mobility Lab. <https://mobility.tamu.edu/mip/strategies-pdfs/travel-options/technical-summary/Transportation-Management-Associations-4-Pg.pdf>



Strengthening Mobility in Our Communities

A Transportation Demand Management Initiative for the Piedmont Triad

FY 22 1st Quarter Accomplishments



The MPO has developed a local TDM program that is designed to support the regional initiative. The program is scheduled to be endorsed by the TCC and adopted by the TAC in October.



Greensboro Department of Transportation was awarded the Safe Routes to School grant through NCDOT. The grant is for a 3-year period (2020-2022) and is to support the promotion, encouragement, and benefits of walking and biking to school. GDOT is currently soliciting Greensboro public and private elementary/ middle schools to become a member of our SRTS program. Schools can also sign up to become a partner committing to hosting a walk or bike to school event. GDOT is partnering with four schools to host a walk to school event during the month of October.

The City of Greensboro staff developed a new Bike Parking Ordinance expanding requirements for providing parking for bicycles. The revisions were a joint effort between the Planning Department, Transportation Department, and Bicycling in Greensboro, a local bicycle advocacy group. The ordinance is still in draft form and will require final approval before implementation.



High Point Transit had the soft launch of UMO - allowing for expanded fare payments options and integrating fare collection to a regional fare system.

The City of High Point also adopted their High Point Greenway Master Plan – an equitable and community-supported plan that provides a framework to preserve and expand High Point's greenway network.



Facilitated quarterly meeting with regional partners.

Gained support for regional initiative from PART Board of Trustees and City Transportation Directors.

Identified locations City partner websites where a link to TDM information can be placed or information posted to make information visible to residents.

Coordinated with High Point Transit during their UMP implementation. Regional call center has access to HPT UMO administrative functions to support customers inquiries and manage customer issues.

Coordinated with regional partners to launch a social media campaign promoting bicycling in the Triad. The campaign will run in October.

Developed a vanpool subsidy that provides a tiered discount over the first three months of the vanpool's operation.

Updated the fare structure to address decreases in fuel cost, to be implemented in Q2.



With a Safe Routes to School grant through NCDOT the MPO has hired Alta Planning + Design to create and implement a Safe Routes to School effort tailored to the individual needs and abilities of each school in the district. The project will include outreach to all elementary and middle schools in the district and implementation of tailored programs to support their biking and walking goals.

The National Cycling Center's FLOWBIKES program relaunched recently with 100 bikes and 22 stations spread throughout the community. For \$20 per year, members have access to unlimited rides in the system that includes stations throughout downtown and at key trails and bike routes. The program is run through the non-profit National Cycling Center with support from numerous sponsors, including Flow Automotive, Novant Health, and many more.

The City of Winston-Salem is currently evaluating electric scooter permit applications for the 2021-2022 permit season and anticipates improved programs that make it easy and convenient for all residents and visitors to take advantage of scooters as a transportation option. This year there has been over 38,000 electric scooter trips through the city's shared micromobility program, which includes Blue Duck and Spin electric scooters. Most of those trips have been in the downtown area, reducing the share of automobile trips where scooter, transit, biking, and walking trips are convenient options.

THE PARTiculars

Piedmont Authority for Regional Transportation

PART

OCTOBER 2021

Saturday Route Changes - Easy as 1,2,3

PART is continuously reviewing and analyzing our transportation system. Our goal is to provide the safest, most effective, and efficient service possible. We are excited to announce, PART modified and expanded Saturday service hours on Route 1 – Winston-Salem Express, Route 2 – Greensboro Express, and Route 3 – High Point Express!

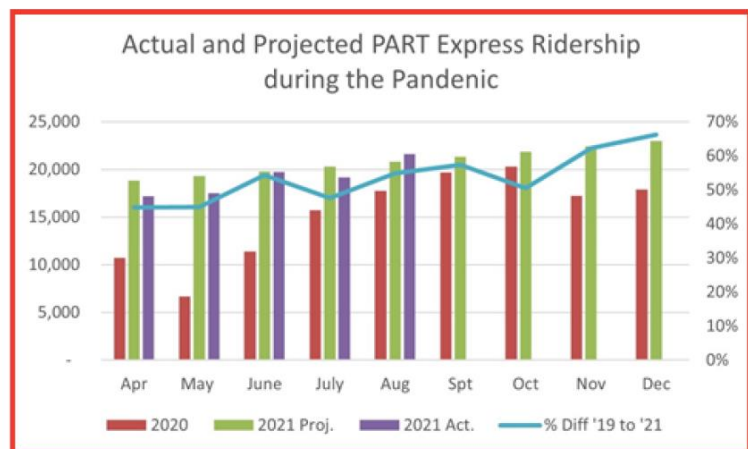
On October 9, 2021, these routes were changed to run from 6:45am – 9:45pm. The Saturday North-South service was also changed to 7:15am - 7:15pm to match up with the Route 1, 2, & 3 schedule changes. For more on these routes and schedules, please visit: <https://www.partnc.org/routes>.



The Rise of Transit Ridership

Since April of this year, transit ridership across the Triad has increased by 30,000 trips. Some of the seasonal differences we saw in the past are now less obvious. For example, ridership during the winter and summer were better than the spring, which is usually the second highest season.

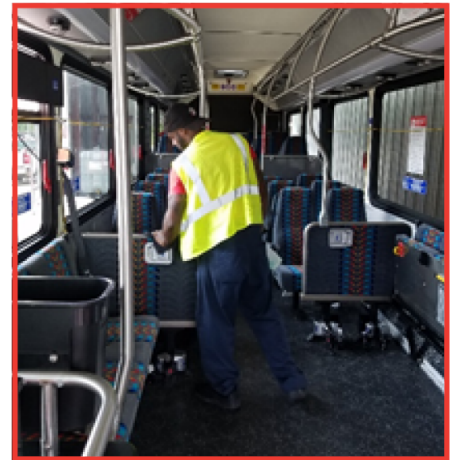
At the beginning of 2021 we hoped PART Express ridership would have bounced back to 65% of what it was in 2019. That would have meant we were growing at a modest 2.5% each month. Although we haven't met our mark, we are excited to see we've reached 55%. With September and October usually being our highest ridership months, we look forward to more growth!



Doing our PART

In these unprecedented times, we have all implemented a new rule of thumb into our daily routines like adding a face mask to our daily wardrobe or sanitizing our hands after personal interactions. Part is no exception to this rule. We are doing all that we can to keep our buses clean!

Our maintenance team hand cleans our buses between each shift and fumigates them daily. We will continue doing our PART to ensure the health and safety of our riders. For more information on our response to COVID-19, visit www.partnc.org/COVID19.



WALKtober



WALKtober is an annual health promotion event that aims to encourage people to start walking more during the month of October. Walktober encourages spending more time outdoors as a pedestrian, increasing overall health through physical activity, social interaction, and valuable time in the fresh air of fall. There are walking events for the entire family!

Google WALKtober to find out about local, state, and national events.

Piedmont Transit Resources Call Center

The Piedmont Transit Resources Call Center is a one-stop-shop where you can get your transit questions answered.

The Call Center answers questions for PART, High Point Transit System (HPTS), and Davidson County Transportation System (DCTS). One of our Customer Service Agents can help you plan your trip, tell you when your next is scheduled to arrive, and provide schedule and fare information.



**PIEDMONT
TRANSIT
RESOURCES**
336.883.7278

Since July 2021, we've answered 13,951 calls!

Placing Freight and Logistics Front and Center

Each day on Triad streets, we can count on seeing a FedEx, UPS, or an Amazon truck making deliveries. Everything we buy and consume requires transportation. An effective and efficient freight infrastructure consists of multiple modes: trucks, rail, marine and air cargo. For several years, PART and its four regional MPO partners, have focused on freight planning in the Piedmont Triad. The region has conducted an inventory of freight facilities and developed a tour-based freight model. The freight model will allow transportation planners in the region to ensure our highways, interstate ramps and intersections are designed and improved to improve freight movements.

In late 2019 and early 2020, transportation planners collected data on actual freight movement in the Triad. Normally, this data is hard to collect but the pandemic made it even more challenging, putting the whole project on hold. Now that things have started to normalize, data collection efforts are back on track.

PART and the MPOs are asking freight and logistic companies to participate in a three-day driver survey to evaluate all types of trips, vehicles, and supplies carried. Any truck driver or freight carrier interested in participating should contact Mark R. Kirstner, Director of Planning with PART at: markk@partnc.org.

FREIGHT INTENSIVE INDUSTRIES CRITICAL TO NORTH CAROLINA'S ECONOMY

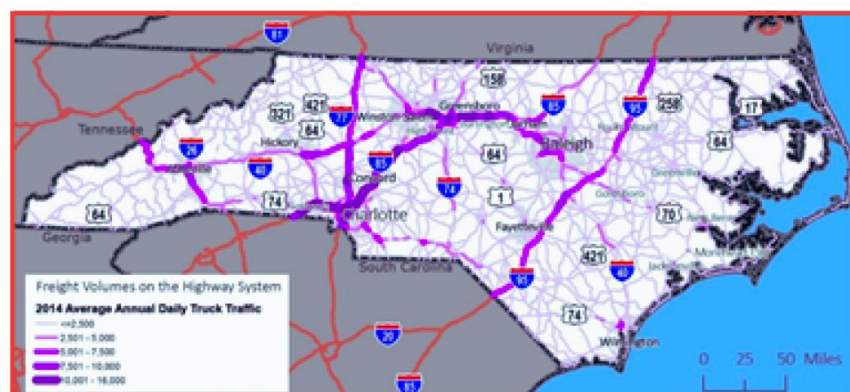
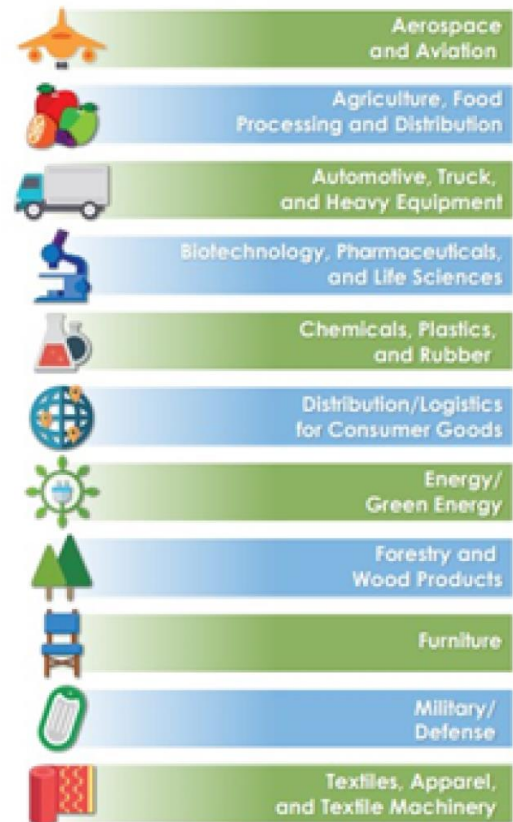


Image source NC Statewide Multimodal Freight Plan Nov. 2017, Amended May 2021.



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