

DURHAM-CHAPEL HILL-CARRBORO METROPOLITAN PLANNING ORGANIZATION BOARD**14 June 2017****MINUTES OF MEETING**

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization Board met on June 6, 2017 at 9:00 a.m. in the City Council Committee Room, located on the second floor of Durham City Hall. The following people were in attendance:

Steve Schewel (MPO Board Chair)	City of Durham
Damon Seils (MPO Board Vice Chair)	Town of Carrboro
Karen Howard (Member)	Chatham County
Don Moffitt (Member)	City of Durham
Ellen Reckhow (Member)	Durham County
Ed Harrison (Member)	GoTriangle
Barry Jacobs (Member)	Orange County
Brian Lowen (Member)	Town of Hillsborough
Pam Hemminger (Member, excused absence)	Town of Chapel Hill
Lydia Lavelle (Alternate)	Town of Carrboro
Michael Parker (Alternate)	Town of Chapel Hill
Nina Szlosberg-Landis (Member)	NC Board of Transportation
David Keilson	NCDOT, Division 5
Richard Hancock	NCDOT, Division 5
Ed Lewis	NCDOT, Division 7
Brian Kluchar	NCDOT, Division 8
Theo Letman	Orange County Transit
Bergen Watterson	Town of Chapel Hill
Kayla Seibel	Town of Chapel Hill
Tina Moon	Town of Carrboro
Patrick McDonough	GoTriangle
Terry Bellamy	City of Durham Transportation
Bill Judge	City of Durham Transportation
Ellen Beckmann	City of Durham Transportation
Tasha Johnson	City of Durham Public Works
Scott Whiteman	Durham County
Eddie Dancausse	Federal Highway Administration
Felix Nwoko	DCHC MPO
Meg Scully	DCHC MPO
Aaron Cain	DCHC MPO
Brian Rhodes	DCHC MPO
Anne Phillips	DCHC MPO
Will Letchworth	WSP
Mike Surasky	WSP
Tim Schwarzauser	Town of Chapel Hill
Jessica Kemp	City of Durham General Services

47 Quorum Count: 10 of 10 Voting Members

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49 Chair Steve Schewel called the meeting to order at 9:01 a.m. A roll call was performed. The
50 voting members and alternate voting members of the DCHC MPO Board were identified and are
51 indicated above. Chair Steve Schewel reminded everyone to sign-in using the sign-in sheet that was
52 being circulated.

53 Vice Chair Damon Seils made a motion to grant Pam Hemminger an excused absence from the
54 meeting. Michael Parker seconded the motion. The motion passed unanimously.

55 **PRELIMINARIES:**

56 **2. Ethics Reminder**

57 Chair Steve Schewel read the Ethics Reminder and asked if there were any known conflicts of
58 interest with respect to matters coming before the MPO Board, and requested that if there were any
59 identified during the meeting for them to be announced. There were no known conflicts identified by
60 MPO Board members.

61 **3. Adjustments to the Agenda**

62 Chair Steve Schewel asked if there were any adjustments to the agenda. There were no
63 adjustments to the agenda.

64 **4. Public Comments**

65 Chair Steve Schewel asked if there were any members of the public signed up to speak. There
66 were no members of the public signed up to speak during the meeting.

67 **5. Directives to Staff**

68 The Directives to Staff were included in the agenda packet for review.

69 **CONSENT AGENDA:**

70 **6. Approval of April 28, 2017, MPO Board Meeting Minutes**

71 **7. Approval of May 10, 2017, MPO Board Meeting Minutes**

Michael Parker made a motion to approve the April 28, 2017, and the May 10, 2017, MPO Board meeting minutes. Vice Chair Damon Seils seconded the motion. The motion passed unanimously.

ACTION ITEMS:

8. Managed Motorways Presentation

Will Letchworth, WSP

Will Letchworth, a traffic engineer and transportation planner at WSP, defined managed motorways. He also discussed advances in technology for ramp metering, add-ons available for ramp metering systems, and how managed motorways function as an automated system with relatively little human intervention. Chair Steve Schewel asked for and received a definition of ramp meters. Will Letchworth provided examples of areas in North Carolina where ramp meters are currently being implemented. Ed Harrison and Will Letchworth discussed whether there were sufficient opportunities for ramp metering in the area. Will Letchworth described the role that freeway and surface street sensors play in facilitating a managed motorway system and how algorithms can be used to adjust for interchanges with reduced storage capacity.

Michael Parker and Will Letchworth discussed whether a minimum or maximum distance between interchanges is required for managed motorways to be effective. Lydia Lavelle and Will Letchworth discussed whether there is a protocol as to whether a left or right lane ends when merging onto a freeway.

In response to a question from Barry Jacobs, Will Letchworth discussed steps that can be taken to prevent the accumulation of traffic at intersections that are adjacent to ramp junctions. Will Letchworth defined terms and concepts associated with traffic flow theory, such as the relationship between flow and density. Will Letchworth shared data collected from the M-1 in Australia to show how managed motorways optimize the flow of traffic on freeways.

Michael Parker and Will Letchworth discussed whether managed motorways keep cars off of highways in favor of keeping them on surface streets, and the effect that driverless cars will have on

managed motorway systems. Will Letchworth explained that while managed motorways momentarily shift traffic away from freeways, they end up moving more traffic when cars enter the freeway.

Don Moffitt asked whether managed motorways encourage more people to drive on freeways due to improved traffic flow and reduced travel times. Will Letchworth promised to look into this issue and get back to Don Moffitt. Vice Chair Damon Seils commented that while this system may be great for freeway facilities, they may not encourage people to change their transportation mode choices. Ellen Reckhow remarked on the possibility of using Transportation Demand Management (TDM) strategies in combination with managed motorway systems. Karen Howard and Will Letchworth discussed how developers can consider managed motorway systems as part of their design process. Vice Chair Damon Seils and Will Letchworth discussed how managed lanes and toll roads can work together.

Will Letchworth discussed the role that data plays in managed motorway systems and the technology needed to provide data in real time. Will Letchworth stated that truck bypass lanes are often necessary in managed motorway systems.

Will Letchworth offered to put together a meeting so that MPO Board members could observe how the M-1 in Australia functions in real time. Will Letchworth provided examples of areas in the United States where managed motorways are either being considered or implemented. Will Letchworth discussed three North Carolina roads that may be suitable candidates for managed motorway systems: I-40 from Wade Avenue to NC 54, I-77 south of Charlotte, and I-85 northeast of Charlotte. He also provided an estimate of what it would cost to implement a managed motorways system on the relevant portion of I-40. Will Letchworth concluded his presentation by reiterating the benefits of managed motorway systems. Will Letchworth promised to share a copy of his presentation with MPO Board members and provide a link to a video about managed motorways in Australia.

Barry Jacobs and Will Letchworth discussed the necessary timeframe for fully implementing a managed lane system and whether the system is effective on four-lane roads. Ellen Beckmann and Will

Letchworth discussed whether managed motorway systems are feasible on older freeways with shorter ramps, such as I-85.

Ellen Reckhow reflected on past efforts to implement TDM planning in the Triangle.

Nina Szlosberg-Landis and Barry Jacobs commented on the anticipated impact of autonomous vehicles and the importance of preemptively thinking about using technology to address transportation problems.

Ellen Beckmann asked MPO Board members to consider whether a managed motorway approach might be better suited for I-40 than the managed lane project that is currently being submitted through the Strategic Planning Office of Transportation (SPOT) prioritization process.

This item was informational and no further action was required by the MPO Board.

9. 2045 Metropolitan Transportation Plan (MTP) -- Deficiency Analysis

Felix Nwoko, LPA Manager

The Deficiency Analysis is the next step in the 2045 MTP development process. It uses regional, corridor, and roadway level analysis to identify future transportation deficiencies. Felix Nwoko discussed the relationship between the MTP and the Comprehensive Transportation Plan (CTP), and the Deficiency Analysis methodology. Felix Nwoko also discussed performance measures, such as travel time, mode choice, vehicle miles traveled (VMT), and vehicle hours traveled (VHT), which will be used to determine how the transportation system is performing in 2045. He also defined the term Existing plus Committed (E+C). Chair Steve Schewel inquired whether managed motorways can influence VHT, and Felix Nwoko confirmed that they could.

Michael Parker commented on the value of integrating transportation and land use planning to make the area more efficient by reducing the need for travel. Ellen Reckhow described the results of a study done by students at Duke's Sanford School of Public Policy that showed that Durham is a net importer of labor. Ellen Reckhow stated that cross-commuting places a lot of pressure on roads. Karen Howard commented that while there is an influx of residents to Chatham County, they continue to work

elsewhere. Barry Jacobs reflected on how the automobile and changes in elected officials have affected the development of metropolitan areas.

Chair Steve Schewel confirmed that the model does not assume the Durham-Orange Light Rail Transit (D-O LRT).

Felix Nwoko provided examples of other performance indicators, such as travel time isochrones. There was discussion of how morning and afternoon peaks affect local travel times. Felix Nwoko stated that while the presentation focuses on Chapel Hill travel times, other centers are available on the MPO's website. Felix Nwoko discussed congestions maps, how the Volume over Capacity (V/C) ratio is reflected on maps, and conditions associated with various Level of Service (LOS) categories.

In response to a question from Ed Harrison, Felix Nwoko confirmed that the Triangle Regional Model (TRM) was the source of the information in the presentation. Felix Nwoko described the work being carried out on travel choices. Felix Nwoko defined the term Traffic Analysis Zone (TAZ) in response to an inquiry from Chair Steve Schewel.

Felix Nwoko reviewed the schedule for the development of the MTP. Felix Nwoko discussed the plan lapse, a consequence of missing the December 2017 deadline for approving the MTP, in response to a question from Chair Steve Schewel. There was discussion of past plan lapses.

There was discussion of the light rail and how an integrated multi-modal transportation system will alleviate future congestion.

Vice Chair Damon Seils made a motion to release the Deficiency Analysis for public comment. Ellen Reckhow seconded the motion. The motion passed unanimously.

10. Performance Measures and Targets for Transit Assets

Felix Nwoko, LPA Manager

Felix Nwoko discussed legislative reasons for developing transit performance measures and targets, and the schedule for complying with and updating these measures. Felix Nwoko stated that the MPO has developed targets for transit assets for the categories of equipment, rolling stock, and

facilities. He added that there is no rail transit in the MPO region, and therefore, the MPO is not required to develop performance measures for infrastructure. Felix Nwoko shared some of the measures that the MPO has developed for equipment, rolling stock, and facilities based on Federal Transit Administration (FTA) benchmarks. Felix Nwoko stated that initial targets will be updated as part of the 2045 MTP coordination with the Capital Area Metropolitan Planning Organization (CAMPO). He added that the MPO is working with transit operators to gather data on their assets and the condition of these assets in order to update baseline data for the performance measures. He also described the methodology that was used to develop the targets for the current year.

There was discussion of how these federal regulations will affect Chapel Hill Transit's plan for the acquisition of new buses. Felix Nwoko stated that the MPO has met with transit operators and taken the different conditions of transit operators' assets into consideration as part of developing performance measures and targets to ensure that no one agency is severely affected by these measures and targets. There was discussion of the age of Chapel Hill Transit's buses and the estimated useful life of new purchases.

Michael Parker, Felix Nwoko, and Chair Steve Schewel discussed the next steps in this process and the anticipated impact of these new federal regulations on future planning.

Michael Parker made a motion to approve the state of good repair (SGR) performance targets. Ellen Reckhow seconded the motion. The motion passed unanimously.

11. Approval of Amendment #10 to the FY2016-25 Transportation Improvement Plan

Aaron Cain, LPA Staff

Amendment #10 for the FY2016-25 Transportation Improvement Plan (TIP) includes one request from the City of Durham to program \$383,670 of FY17 Surface Transportation Block Grant Direct Attribution (STBGDA) funds (\$380,081 from the City of Durham, \$3,589 from Durham County) to the West Ellerbe Creek Trail project (C-5572). Aaron Cain stated that the request is being made so that funds can be accessed more readily for a project that is ready for construction.

Chair Steve Schewel commented on the high cost of constructing trails.

Don Moffitt made a motion approve Amendment #10 to the FY2016-25 TIP. Ellen Reckhow

seconded the motion. The motion passed unanimously.

12. FY2018-27 TIP Update

Aaron Cain, LPA Staff

Aaron Cain discussed the projects that are included in the TIP and sources of funding for TIP projects. Aaron Cain stated that the MPO would learn whether its list of Congestion Mitigation/Air Quality (CMAQ) projects was approved by the end of June 2017. Aaron Cain described how the MPO distributes its annual allocation of STBGDA funds to local jurisdictions, and provided examples of how jurisdictions have used STBGDA funds for projects and staff positions.

Chair Steve Schewel and Aaron Cain discussed how Amendment #10 to the FY2016-25 TIP would affect the ongoing West Ellerbe Creek Trail project.

Ed Harrison and Aaron Cain discussed the U-4726 omnibus project and funding for the Duke Belt Line project. Nina Szlosberg-Landis commended the MPO for dedicating STBGDA funds for non-highway modes.

Aaron Cain asked members of the MPO Board to let him know if they had concerns about any of the TIP projects. Aaron Cain reviewed the schedule for developing the TIP.

This item was informational and no further action was required by the MPO Board.

13. SPOT 5.0 Update

Aaron Cain, LPA Staff

DCHC MPO staff, working with local government agencies, will submit projects for the SPOT 5.0 process this summer. Aaron Cain defined the two types of projects that will be submitted for the SPOT process, Carryover and New. Aaron Cain also described sibling projects or the unfunded part of a funded project that is rescored until it receives funding or is withdrawn from the SPOT process. Aaron Cain asked the MPO Board to consider whether any of carryover projects, which are automatically rescored,

221 and any of the holding tank projects, which need to actively be resubmitted, should be modified or
222 removed. Aaron Cain stated that the DCHC MPO is allowed to submit 23 projects per mode of both
223 holding tank and more recent projects, and that a subcommittee would be meeting later in June 2017 to
224 help narrow down the list of projects. Aaron Can reviewed the schedule for narrowing down the list of
225 SPOT projects and bringing them back before the MPO board. He also reviewed the number of projects
226 by mode and jurisdiction.

227 Brian Kluchar clarified that the portion of Chatham County that falls within the DCHC MPO
228 would be submitting highway projects, possibly on US 15-501, for consideration in the SPOT 5.0 process.

229 Aaron Cain stated that jurisdictions submitting non-highway projects would be responsible for
230 the local match and project management, and that this should be taken into consideration when
231 submitting projects for SPOT prioritization. There was discussion of whether the ability to provide a local
232 match and project management has been a problem for Durham. Vice Chair Damon Seils commented
233 that project management was more often an issue than providing a local match. Chair Steve Schewel
234 and Ellen Beckmann discussed whether any current Durham projects were being delayed due to a lack
235 of a local match or local management. Ellen Beckmann clarified that this was most often an issue for the
236 county as the county does not traditionally fund or manage transportation projects. Aaron Cain
237 confirmed that Orange County may have to provide a local match for the installation of the pedestrian
238 bridge over I-40 on Orange Grove Road in response to an inquiry from Barry Jacobs.

239 There was discussion of the number of submitted rail projects, and whether Durham would
240 support a project to increase parking at the downtown Amtrak Station in the SPOT process.

241 Aaron Cain reiterated his request that MPO Board members review the list of projects, and
242 asked that they consider the managed lanes project on I-40 between the Durham Freeway and Wade
243 Avenue in particular. Aaron Cain stated that North Carolina Department of Transportation (NCDOT)

Divisions and other MPOs, such as CAMPO, may have to agree with the DCHC MPO's decision to modify or remove projects.

In response to an inquiry from Ed Harrison, Aaron Cain addressed how the corridor cap would prevent the DCHC MPO from receiving funding for improvements on NC 54 leading to Chapel Hill because a managed lane project from NC 54 to the Durham Freeway received funding and is in the developmental stage. Aaron Cain recommended continuing the discussion of the managed lane project in light of the fact that staff considers the NC 54 project to be a priority. There was discussion of Division 5's posture on the managed lanes project and whether CAMPO has received a presentation on managed motorways. There was continued discussion of whether the managed lane project on I-40 from NC 147 to Wade Avenue should be removed from SPOT consideration. Aaron Cain stated that this issue could be discussed further at the August 2017 MPO Board meeting. There was discussion of deleting the managed lane project in light of an ongoing toll study. Aaron Cain pointed out that the DCHC MPO would receive an additional submission of a new project if a carryover project is deleted. Chair Steve Schewel asked that the managed lanes project be brought before the MPO Board at its August 2017 meeting. Aaron Cain asked the MPO Board to review the list of new project and let him know if there were questions or concerns.

Vice Chair Damon Seils asked that the Division-needs project submitted by Orange County, which calls for a roundabout on Columbia Street, receive more discussion before it is approved. Aaron Cain, Ed Harrison, and Bergen Watterson discussed the US 15-501 update.

There was discussion of whether the DCHC MPO is part of the working group to improve the SPOT process. Aaron Cain clarified that the DCHC MPO was not part of the working group, but that a representative from CAMPO is a part of the group. There was discussion of how the DCHC MPO could provide suggestions for improving the SPOT process.

Chair Steve Schewel commended Aaron Cain for his work on submitting projects through the SPOT 5.0 process.

This item was informational and no further action was required by the MPO Board.

REPORTS:

14. Report from the DCHC MPO Board Chair

Steve Schewel, DCHC MPO Board Chair

Chair Steve Schewel stated that the Triangle J Council of Governments (TJCOG) recently facilitated a meeting between the managers, chairs, and vice chairs of the DCHC MPO and CAMPO to discuss future cooperation and ensuring that the MPOs were cooperating and not competing for regional funding. Chair Steve Schewel stated that the chairs and vice chairs would be meeting a couple of times a year and there would be a joint meeting between CAMPO and the DCHC MPO on the fifth Wednesday of November 2017.

15. Report from the DCHC MPO Technical Committee Chair

Ellen Beckmann, DCHC MPO TC Chair

Ellen Beckmann stated that there would be a design meeting for the US 15-501 project and that staff was planning to attend an external scoping meeting for project U-5774, the NC 54 widening from US 15-501 to NC 55.

Ellen Beckmann discussed the segmentation of the US 15-501 project and stated that there would be a presentation to the MPO Board about this project at some point. Ellen Beckmann stated that staff has received a start of study letter on the Garrett Road/US 15-501 interchange in Durham and that the US 70 upgrade was also an ongoing project.

16. Reports from LPA Staff

Felix Nwoko, LPA Staff

There was no report from the LPA Staff.

17. NCDOT Reports:

Richard Hancock, NCDOT Division 5, provided updates on the East End Connector and the Barbee/Herndon Road roundabout project.

Ed Lewis, NCDOT Division 7, stated that the Division has received funding to put up fencing along the pedestrian bridge over I-40 on Orange Grove Road.

Ed Lewis and Ed Harrison discussed signage for road surfacing occurring in Orange County.

Vice Chair Damon Seils commented on two projects, the closure of South Greensboro Street in Carrboro for the installation of a drainage system, and the multi-use path on Homestead Road near Chapel Hill High School.

A report from NCDOT Division 8 was included in the agenda packet. There were no questions about the report.

There was no report from NCDOT Transportation Planning Branch.

There was no report from NCDOT Traffic Operations.

INFORMATIONAL ITEMS:

18. Recent News, Articles, and Updates

Felix Nwoko reminded MPO Board members that the MPO Board does not meet in July.

ADJOURNMENT:

There being no further business before the DCHC MPO Board, the meeting was adjourned at 11:20 a.m.