



243 High Street Room 026
Morgantown, WV 26505
(304) 291-9571
www.plantgether.org

Agenda

Citizens Advisory Committee
243 High Street Room 026 and by WEBEX
Morgantown WV
June 8, 2023

6:00 PM

1. Call To Order
2. Approval of Minutes
3. Transportation Improvement Program Amendments and Adjustments
4. Downtown Microsimulation Study Scope of Work
5. Other Business
6. Meeting Adjournment



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Memorandum

Date: June 2, 2023

To: CAC Members

From: Bill Austin, AICP

Subject: June 8, 2023 CAC Meeting Agenda Items

This memorandum is to inform you of the items under consideration in the May 2023 TTAC Agenda.

-TIP Amendments and Adjustments-Please find enclosed with the agenda a memorandum identifying the proposed TIP Amendments and administrative changes to the MPO's TIP under the MPO's recently adopted policy. The proposed TIP Amendment is to program the Right of Way acquisition and construction of the Smithtown Road/US 119 intersection. Please provide MPO staff with any comments you may have on the projects included in this Adjustment. It is respectfully requested that the CAC recommend approval of the TIP Amendments to the Policy Board.

-Downtown Microsimulation Study Scope of Work-Please find attached to the agenda packet the scope of work for the Downtown Microsimulation Study. A draft of the Scope has been reviewed by the Study Steering Committee members. Kimley Horn has modified the Scope per those comments. It is respectfully requested that the CAC recommend approval of the Scope of Work to the Policy Board.



CITIZENS ADVISORY MEETING

March 9, 2023

This meeting was held virtually at
<https://morgantownmonongaliampo.my.webex.com/meet/baustin>

Members Present:

Christiaan Abildso (Chair), Chip Wamsley, Tom Zeni, Kelli LaNeve, Matt Cross

Others Present: Bill Austin, Jackie Peate, Jing Zhang

1. Call to Order

The CAC meeting was held virtually and in person. The phone number and web address to access the teleconference were publicized.

With a quorum present, Mr. Abildso called the meeting to order at 6:00 PM.

The committee members introduced themselves and welcomed the MPO's new employee, Jackie Peate.

2. Approval of Minutes

Mr. Austin noted that the minutes of the last meeting were included in the agenda package. Mr. Cross moved to approve the meeting minutes; seconded by Mr. Zeni. With no discussion, the motion passed unanimously.

3. On-Call Consultant Selection

Mr. Austin noted that the MPO received 6 proposals for the RFP for general transportation planning service. The 6 proposals were from AECOM, Stantec, Michael Baker, Kimley, Horn, GPI, and WBCM. The proposals were reviewed by a selection committee consisted of members from TTAC and CAC. It was the consensus of the selection committee that two firms would be selected for a contract: Kimley Horn and Associates and AECOM. Mr. Austin noted that the two firms have complimentary skill sets and advantages.

Mr. Zeni asked if having the two on-call consulting firms will slow down projects' development process. Mr. Austin noted that it will be easier to have one consulting firm, but having two on-call firms will give the MPO more options when it comes to implement specific projects as the two firms have slightly different strength for projects at different scales.

Mr. Zeni moved to recommend approval of the on-call consultant selection to the MPO's Policy Board; seconded by Mr. Wamsley. With no further discussion, the motion passed unanimously.

4. FY 2023-2024 Unified Planning Work Program

Mr. Austin noted that the final draft of the MPO's 2023 Unified Planning Work Program (UPWP) is included in the agenda package. Work in the draft UPWP includes oversight of the Downtown Traffic Study, oversight of the Greenbag Road Design Study, initial implementation of the pedestrian/cyclist data collection initiative, and normal MPO operations including enhanced outreach. MPO Staff also intends to perform an areawide charging station study.

Mrs. LaNeve made a motion to recommend approval of the UPWP to the MPO's Policy Board; seconded by Mr. Wamsley. With no further discussion, the motion passed unanimously.

5. Revised Title VI Policy

Mr. Austin noted that as a part of federal requirements, the MPO needs to have a policy in place to address the use of Federal funds that may impact underserved communities. This includes outreach to those communities. The attached draft Title VI Policy is an updated version of the MPO's existing policy. The primary change to the Policy is that the socio-economic data utilized in the Policy has been updated.

Mr. Zeni noted that since the Title VI Policy covers disability, the MPO can collect local data for the population with disabilities as a part of future data collection efforts. Mr. Austin agreed.

Mr. Zeni moved to recommend the adoption of the revised Title VI Policy to the Policy Board; seconded by Mr. Wamsley. With no discussion, the motion passed unanimously.

6. TIP Adjustments

Mr. Austin noted that WV DOH requested administrative adjustments to the MPO's TIP under the MPO's recently adopted groupable project policy. These proposed changes are primarily District 4 wide projects, including bridge inspection, bridge replacement/renovation, and highway maintenance.

Mr. Austin pointed out two projects of community interest. WV DOH have proposed to move the Brookhaven Road intersection project from FY 2024 to 2026. Mr. Austin noted that a group of WVU engineering students is conducting a capstone project to identify potential alternatives for the intersection. The MPO will pass the findings on to WV DOH. WV DOH also seeks to increase the funding of the Walnut Street Streetscape project.

WV DOH has requested the removal of the following projects from the MPO's TIP because the funds have been obligated. Those projects include Dunkard Ave Sidewalk Phase V, Greenbag Rd (GO BOND 4), Morris Builders' Bridge + 1, I-79 Bridge Rehabilitations, Patteson Dr RRFB, FY 23 SF Bridge Inspect, and Morgantown Municipal Airport Streetscape.

Mr. Cross noted that some properties have been bought to build Brookhaven Elementary School. This may have an impact to the intersection operation in the future. Mr. Austin noted that WV DOH is aware of that situation.

Mr. Austin noted that MPO has been working with the DOH on the contract for the Greenbag Rd project. For the Downtown Traffic study, a large portion of the matching funds have been received. The study is expected to start data collection in August.

This is an informational item and requires no action from the committee.

7. Other Business

Mr. Cross noted that the City of Morgantown will install a crosswalk with RFB on Yoke St near Falling Run Rd. He suggested that Mountain Line Transit consider installing a bus shelter at that location.

Mr. Cross expressed his appreciation for the repair of the pedestrian signal on Mon Blvd near the Creative Art Center Dr.

Mr. Cross asked about the status of Pleasant St Project and Walnut St Project. Mr. Austin noted that the Pleasant St Project has been delayed. The DOH has increased funding for the Walnut St Project. The project will be constructed soon.

Mr. Cross noted that the traffic light for left-turn traffic at Mountaineer station on Van Voorhis Rd is out of sync. He suggested adjusting the left-turn signal interval and activation to improve the intersection's efficiency.

Mr. Cross asked about the status of Beechurst Spot Improvement project. Mr. Austin noted that the project will take approximately two years, including utility relocation and the earth work for the intersection relocation at Campus Dr.

Mr. Abildso noted that the DOH recently repaved DuPont Rd. DuPont Rd is well connected to the Mountain Line Transit station, multiple townhouse units, the Westover city park, and mountain bike trails. The DOH's project did not provide any dedicated facilities improvement for bicyclists or pedestrians. Mr. Abildso noted that since the project received state funds, it falls under the State's Complete Street Policy, which requires DOH consider pedestrian and bicycle facility improvements for projects receiving state or federal funds unless there is no need for such improvement.

Mr. Abildso suggested sending a request to WV DOH for any document on the design process that demonstrates no need for pedestrian and bicycle facility improvements for this project. Mr. Austin noted that the WV DOH took the project as a truck route improvement. He will reach out the DOH for any comments.

Mr. Cross expressed his appreciation to Mr. Abildso for his contribution to the pedestrian and bicycle related legislation in the State.

8. Meeting Adjournment

The Meeting adjourned at 6:45 PM



Memorandum

Date: May 23, 2023

To: TTAC, CAC, and Policy Board

From: MMMPO Staff

Subject: June 2023 TIP Administrative Adjustment and Amendment

This memorandum is to document the amendments and administrative adjustments in the MPO's Transportation Improvement Program (TIP) for June, 2023.

WV DOH requested one TIP amendment, a new project for FY2024 - Don Knotts Blvd/US119 and Smithtown Rd/CR73 Intersection Traffic Signal improvements. The amendment includes the right of way phase and the construction phase.

WV DOH also requested TIP adjustments for the obligation dates for three non-groupable projects. They are Van Voorhis Rd (Go Bond 4) – postpone 3 months. Brookhaven Rd Improvement – postpone 2 months. West Run Rd (Go Bond 4) – postpone 17 months.

The WV DOH requested TIP adjustments by adding 20 new groupable projects. Most of the project are bridge repair/rehabilitation and maintenance projects, except the I-79 lighting project and the construction phase of University Ave +2 for designing and building APA ramps. The WV DOH also requested modification of 13 groupable projects.

Amendment and Adjustment Details

TIP Amendments

Smithtown Rd Traffic Signal

- Federal ID: HSIP0119501D. Right of Way Phase. FY2024. Federal Funds: \$90,000; total funds: \$100,000. Obligation Date: 4/28/2024
- Federal ID: HSIP0119502D. Construction Phase. FY2024. Federal Funds: \$ \$1,080,000; total funds: \$1,200,000. Obligation Date: 6/28/2024

TIP Administrative Adjustments for Non-Groupable Projects

Van Voorhis Rd (Go Bond 4). Construction phase. Obligation Date moves from 2/28/2023 to 5/28/2023.

Brookhaven Rd Improvement. Right of way phase. Obligation Date moves from 7/28/2023 to 9/28/2023.

West Run Rd (Go Bond 4). Construction phase. Obligation Date moves from 9/28/2022 to 2/28/2024.

TIP Administrative Adjustments for Groupable Projects

New groupable projects FY2023-2026

M&J ARCH. Construction phase. Bridge repair. Federal funds \$84,000, total funds: \$105,000. Obligation Date 6/28/2023.

PLEASANT HILL BRIDGE EB +1.

- Right of way phase. Bridge repair. Federal funds \$4,500; total funds: \$5,000. Obligation Date 6/28/2023.
- Construction. Bridge repair. Federal funds \$733,500; total funds: \$815,000. Obligation Date 10/28/2023.

JOSEPH C BARTOLO MEMORIAL BRIDGE.

- Engineering. Bridge repair. Federal funds \$200,000; total funds \$250,000. Obligation Date 9/28/2023.
- Right of way. Bridge repair. Federal funds \$80,000; total funds \$100,000. Obligation Date 12/28/2023.

I-79 LIGHTING.

- Engineering. Lighting. Federal funds \$450,000; total funds \$500,000. Obligation Date 4/28/2023.
- Construction. Lighting. Federal funds \$6,750,000; total funds \$7,500,000. Obligation Date 8/28/2024.

INTERSTATE 68 OVERPASS.

- Right of way. Bridge renovation. Federal funds \$40,000; total funds \$50,000. Obligation Date 3/28/2024.
- Construction. Bridge renovation. Federal funds \$3,600,000; total funds \$4,500,000. Obligation Date 12/28/2024.

UNIVERSITY AVE +2. Construction. Design/build ADA ramps. Federal funds \$1,274,400; total funds \$1,593,000. Obligation Date 1/28/2025.

UNIVERSITY AVE BRIDGE.

- Engineering. Bridge repair. Federal funds \$40,000; total funds \$50,000. Obligation Date 3/28/2024.
- Right of way. Bridge repair. Federal funds \$8,000; total funds \$10,000. Obligation Date 6/28/2024.

- Construction. Bridge repair. Federal funds \$400,000; total funds \$500,000. Obligation Date 3/28/2025.

OLD KINGWOOD PIKE BR.

- Engineering. Bridge Repair. Federal funds \$480,000; total funds \$600,000. Obligation Date 12/28/2023.
- Right of way. Bridge repair. Federal funds \$80,000; total funds \$100,000. Obligation Date 10/28/2024.
- Construction. Bridge repair. Federal funds \$3,200,000; total funds \$4,000,000. Obligation Date 7/28/2025.

DUG HILL BRIDGE +1. Engineering. Design Study – Replacement. Federal funds \$360,000; total funds \$450,000. Obligation Date 8/28/2025.

WALNUT STREET BRIDGE.

- Engineering. Bridge repair. Federal funds \$240,000; total funds \$300,000. Obligation Date 9/28/2024.
- Right of Way. Bridge repair. Federal funds \$8,000; total funds \$10,000. Obligation Date 11/28/2024.
- Construction. Bridge repair. Federal funds \$1,200,000; total funds \$1,500,000. Obligation Date 9/28/2025.

JERE SLAB.

- Engineering phase. Design study – replacement. Federal funds \$200,000; total funds \$250,000. Obligation Date 11/28/2023.
- Engineering phase. Bridge replacement. Federal funds \$320,000; total funds \$400,000. Obligation Date 2/28/2026.

DELLSLOW ARCH.

- Engineering phase. Design Study-replacement. Federal funds \$440,000; total funds \$550,000. Obligation Date 12/28/2024.
- Engineering phase. Bridge repair. Federal funds \$480,000; total funds \$600,000. Obligation Date 2/28/2026.
- Right of way phase. Bridge replacement. Federal funds \$80,000; total funds \$100,000. Obligation Date 8/28/2026.

SOUTH FORK CULVERT.

- Engineering phase. Bridge repair. Federal funds \$16,000; total funds \$20,000. Obligation Date 6/28/2025.
- Right of way phase. Bridge repair. Federal funds \$4,000; total funds \$5,000. Obligation Date 3/28/2026.

US ARMY SPC JOHN R TENNANT MEMORIAL BRIDGE.

- Engineering phase. Bridge repair. Federal funds \$40,000; total funds \$50,000. Obligation Date 6/28/2025.

- Right of way phase. Bridge repair. Federal funds \$8,000; total funds \$10,000. Obligation Date 9/28/2025.
- Construction Phase. Bridge repair. Federal funds \$720,000; total funds \$900,000. Obligation Date 3/28/2026.

RUBBLE RUN I-BEAM.

- Engineering Phase. Design Study-replacement. Federal funds \$96,000; total funds \$120,000. Obligation Date 10/28/2024.
- Engineering Phase. Bridge rehabilitation. Federal funds \$320,000; total funds \$400,000. Obligation Date 4/28/2026.

MIRACLE RUN CULVERT.

- Engineering Phase. Bridge rehabilitation. Federal funds \$20,000; total funds \$25,000. Obligation Date 3/28/2026.
- Right of way phase. Bridge rehabilitation. Federal funds \$40,000; total funds \$50,000. Obligation Date 4/28/2026.
- Construction phase. Bridge Rehabilitation. Federal funds \$40,000; total funds \$50,000. Obligation Date 9/28/2026.

JACK FLEMING MEMORIAL BRIDGE WB & EB.

- Right of way phase. Bridge replacement. Federal funds \$8,000; total funds \$10,000. Obligation Date 6/28/2026.
- Engineering phase. Bridge Repair. Federal funds \$360,000; total funds \$400,000. Obligation Date 12/28/2026.

US MARINE SERGEANT DAVID PAUL MCCORD MEM BR.

- Engineering Phase. Design study-replacement. Federal funds \$400,000; total funds \$450,000. Obligation Date 6/28/2024.
- Engineering Phase. Bridge replacement. Federal funds \$480,000; total funds \$600,000. Obligation Date 6/28/2026.

BULA SLAB. Engineering Phase. Design Study Replacement. Federal funds \$440,000; total funds \$550,000. Obligation Date 6/28/2026.

OSGOOD SLAB

- Engeneering phase. Bridge replacement. Federal funds \$96,000; total funds \$120,000. Obligation Date 5/28/2025.
- Construction phase. Bridge replacement. Federal funds \$320,000; total funds \$400,000. Obligation Date 9/28/2026.

Project modification (FY2023-2026)

CAPERTRON TRAIL DRAINAGE construction phase moves from FFY 2022 to FFY 2023

EVERETTVILLE BR construction phase. Obligation date moves from December 2022 to August 2023. Cost increase from \$ 1,100,000 to \$1,490,100

WILLEY ST construction phase. Obligation date moves from October 2022 to April 2023. Total cost increase from \$ 625,000 to \$2,464,000

RIVER ROAD SLIDES right of way phase moves from FFY 2022 to FFY2023

CAPERTRON TRAIL LIGHTING construction phase cost increases from \$125,000 to \$299,100

EXIT 152 NB & SB RAMPS construction phase. Obligation date moves from December 2022 to July 2023. Total cost increases from \$ 750,000 to \$980,000

BURROUGH ST construction phase. Obligation date moves from October 2022 to August 2023. Total cost increase from \$264,000 to \$600,000

WALNUT ST STREETSCAPE 2012 construction phase. Obligation date moves from October 2022 to April 2023. Total cost increase to from \$967,011 to \$1,267,011

US 119 MORGANTOWN LIGHTING construction phase. Obligation date moves March 2023 to December 2023

WEST RUN ROAD (GO BOND 4) construction phase. Obligation moves from September 2022 to February 2024

LAUREL POINT BRIDGE (GO BOND 2/3) construction phase moves from April 2023 to March 2024

BROCKWAY AVE construction phase. Obligation date moves from December 2022 to March 2024

WEST RUN RD construction phase. Obligation moves from August 2025 to December 2025



June 2, 2023

WVDOH Planning Division Prequalification Proposed Work Order – Morgantown Downtown Traffic Study

Kimley-Horn and Associates, Inc. (“Kimley-Horn”) is pleased to present the Morgantown Monongalia Metropolitan Planning Organization (MMMPO) with this Scope of Services for planning and traffic engineering services for the Morgantown Downtown Traffic Study. This scope is being submitted to the MMMPO and West Virginia Division of Highways (“WVDOH”) Planning Division as part of our Planning Prequalification with the WVDOH .

Assumptions & Understanding

The purpose of the ‘Downtown Traffic Study’ in Morgantown, West Virginia is to recommend potential future reconfigurations of the downtown Morgantown transportation network based on a data driven process with additional input from the community and stakeholders. These solutions will be mainly targeted at improving vehicle traffic flow and safety and improving access to downtown business and anticipated development areas. Additional areas of concern will include pedestrian, bicycle, transit, and freight facilities. Based on the MMMPO grant funding (\$400,000 in Federal funds, and \$100,000 local match from the City of Morgantown, the Monongalia County Commission, West Virginia University, and the Morgantown Area Partnership) to complete this study, it is Kimley-Horn’s recommendation that this study focus on a robust transportation data collection, and microsimulation approach, supplemented by consideration of safety, multimodal access and mobility, freight, transit, and future development plans in Morgantown as informed by existing MMMPO, City of Morgantown, Monongalia County, WVDOH, and other relevant plans. This approach is intended to leverage past studies while maximizing the benefit of the microsimulation components of the analysis.

To recommend proper solutions for future project development, we recommend the project take a systematic phased approach consisting of Data Collection, Existing and No-Build Volume Forecasting, Existing and No-Build Microsimulation, Problem and Needs Identification, Alternatives Analysis and Forecasting, and Recommendations and Reporting, as shown in **Figure 1**.

The Kimley-Horn team includes two subconsultants and one vendor to provide data collection services and TDM/microsimulation third party review and quality control.

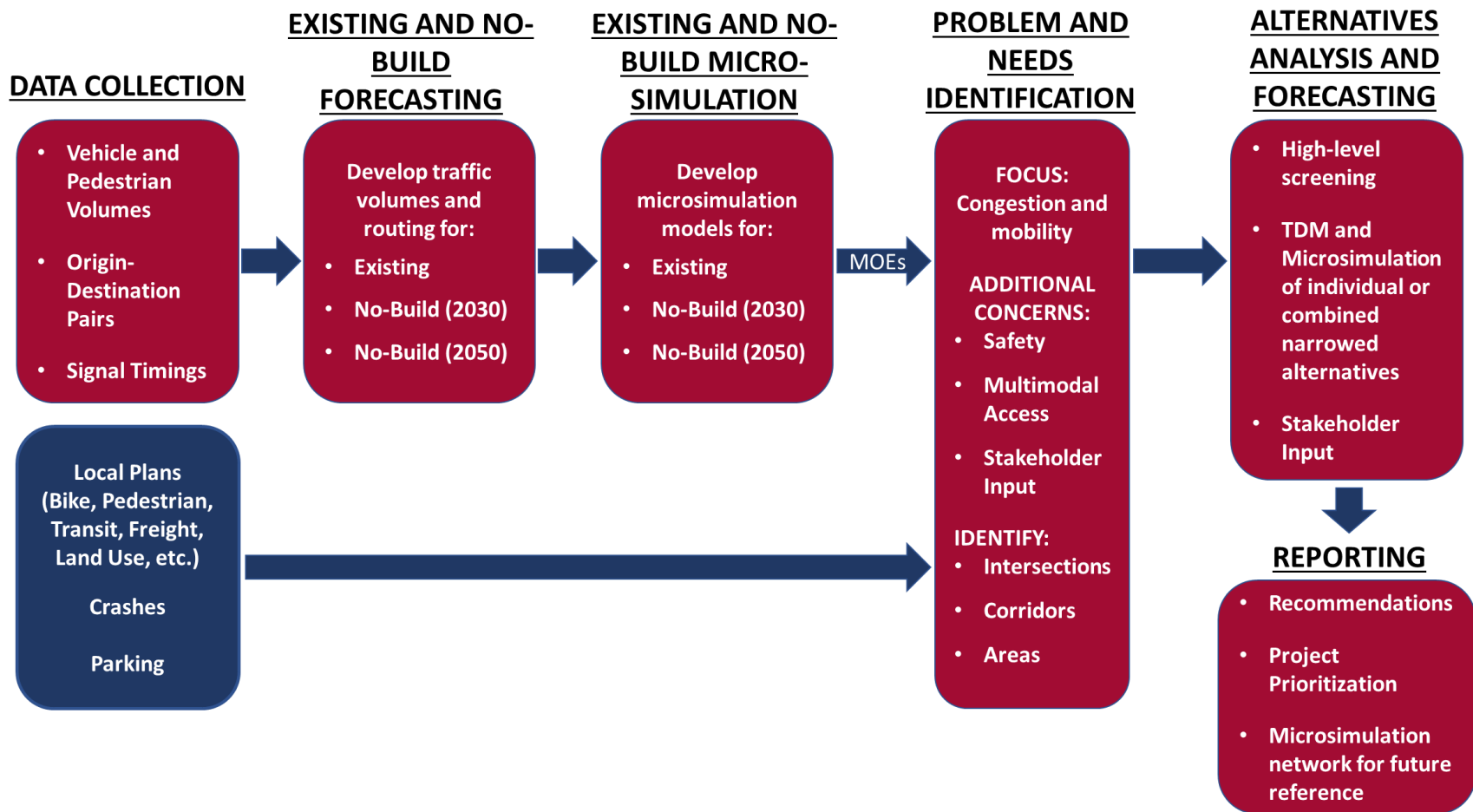


Figure 1: Proposed Downtown Traffic Study Approach

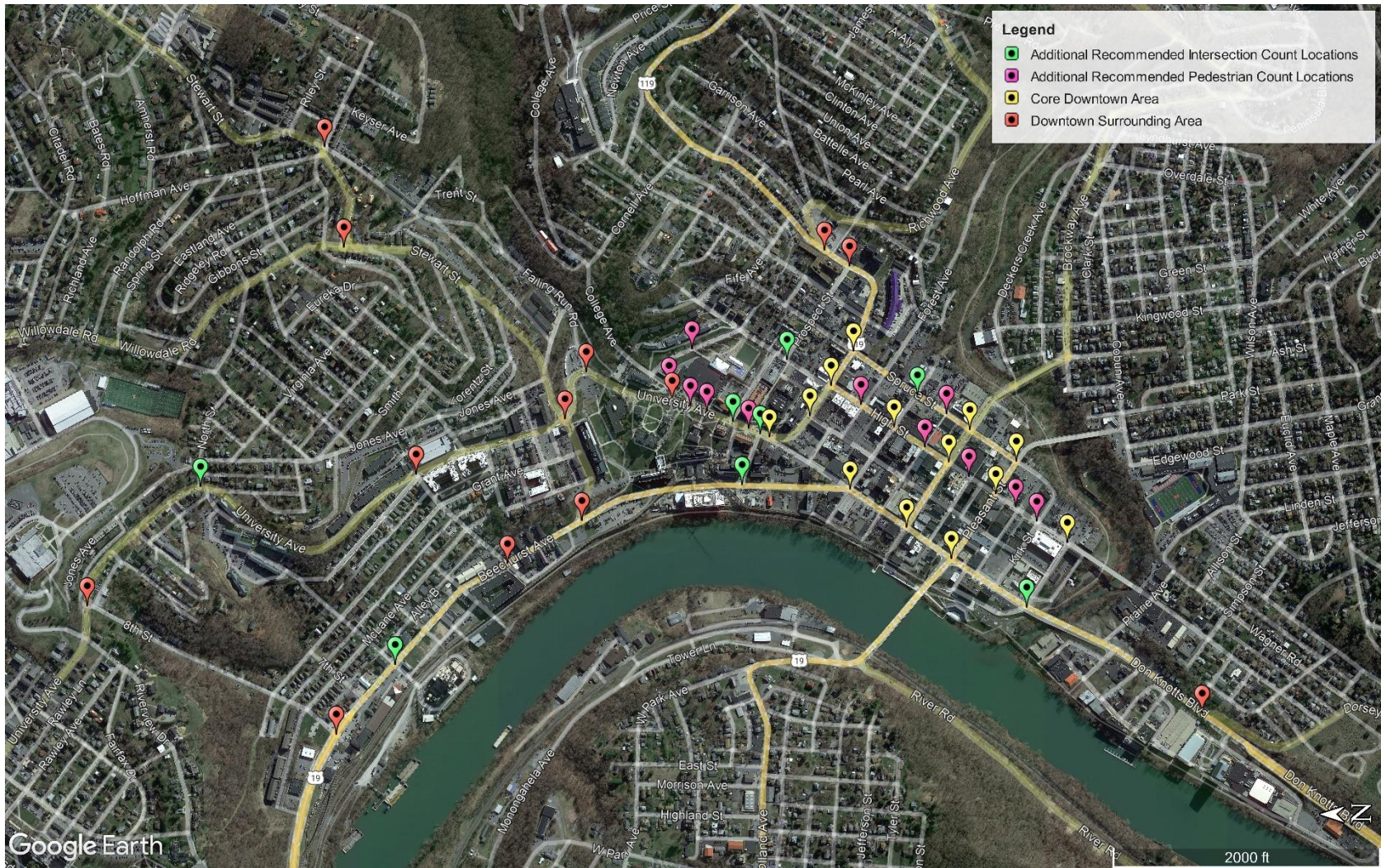


Figure 2: Proposed Downtown Traffic Study Turning Movement Count and Pedestrian Count Locations

Recommended Tasks

TASK 1. DATA COLLECTION

1. The subconsultant will collect TMCs for intersections identified in **Figure 2** and as detailed below.

Field data collection will be conducted by a subconsultant to collect 14-hour turning movement counts (TMCs) at the study intersections and pedestrian crossing locations shown in **Figure 2** on a single weekday (Tuesday-Thursday) during normal West Virginia University and local public K-12 schools' operations, and in the absence of any major events such as a WVU home football game. Additional counts will be collected on a second day, immediately prior to or following the original counts, at up to 5 locations to be selected in coordination with the MMMPO and stakeholders upon initiation of the study.

Field observations will be made during weekday peak periods. Peak hours will be calculated based upon collected TMC data. TMCs will include classification of users on 15-minute intervals.

During the data collection period, there will be ongoing construction on Beechurst Avenue. Kimley-Horn will use information from the Beechurst Traffic Analysis Study conducted by Stantec in 2019 to help inform conditions in this area.

The data collection will occur at the intersections and pedestrian count locations listed below:

Core Downtown Area

- High Street and Foundry Street
- High Street and Pleasant Street
- High Street and Walnut Street
- High Street and Fayette Street
- Spruce Street and Pleasant Street
- Spruce Street and Walnut Street
- University Avenue and Walnut Street
- University Avenue and Pleasant Street
- University Avenue and Willey Street
- University Avenue and Beechurst Avenue/Fayette Street
- Willey Street and Chestnut Street
- Willey Street and High Street
- Willey Street and Spruce Street

Downtown Surrounding Area

- 8th Street and Beechurst Avenue
- 8th Street and University Avenue
- 3rd Street and Beechurst Avenue
- Willey Street and Richwood Avenue
- Willey Street and Prospect Street

- 3rd Street and University Avenue
- Campus Drive and Beechurst Avenue
- University Avenue and Falling Run Road
- University Avenue and College Avenue
- Stewart Street and Willowdale Road
- Stewart Street and Protzman Street
- Don Knotts Boulevard and Dorsey Avenue
- Campus Drive/Stewart Street and University Avenue

Additional Recommended Intersection Count Locations

- Beechurst Avenue and 6th Street
- Beechurst Avenue and Hough Street
- Fayette Street and Spruce Street
- N High Street and Prospect Street
- University Avenue and North Street
- University Avenue and Foundry Street
- University Avenue and Prospect Street
- University Avenue and Hough Street

Additional Recommended Pedestrian Count Locations

- Grumbein's Island Crossing
- Oglebay Hall to Book Store Crosswalk
- E. Moore Hall to Stewart Hall Crosswalk
- Colson Hall to Clark Hall Crosswalk
- Mountainlair to Stalnaker Hall Crosswalk
- High Street at Forest Avenue Crosswalk
- High Street at Wall Street Crosswalk
- High Street at Chancery Row Crosswalk
- High Street at Moreland Street Crosswalk
- High Street at Kirk Street Crosswalk
- Spruce Street at Wall Street crosswalk

2. The Consultant will collect historic AADTs for main arterials within the network where available and pertinent
 - a. The Consultant will pull historic traffic data from the last 5 years from MMMPO and DOH records
 - b. The Consultant will pull historic data from Streetlight as needed
3. Vehicular Origin-Destination (O-D) data
 - a. The Consultant will obtain O-D data from Streetlight for up to 25 Traffic Analysis Zones.
 - b. Due to a recent modification in Streetlight's data collection methodology, the data collection date ranges have not been selected. Kimley-Horn will discuss the proper data collection date range and our recommendations with the MMMPO prior to collecting the Streetlight data.
4. Pedestrian and bicycle traffic data

- a. Pedestrian and bicycle traffic data will be collected with TMC data (see **Task 1.1**)
 - b. The Consultant will collect mid-block/unsignalized intersection pedestrian volumes at location shown in **Figure 2**
- 5. The Consultant will analyze crash data from the last 6 years
 - a. Crash data will be acquired from WVDOH, and the Consultant will work with the MMMPO to clean the data to the extent feasible and reasonable within the context of the study
 - b. The Consultant will utilize the last 6 years of crash data and exclude 2020
 - c. The Consultant will identify hot-spots and trends within the study area which will be summarized with Excel generated graphics and maps
 - d. The Consultant will not include individual intersection or crash occurrence analyses
- 6. Parking data
 - a. The Consultant will acquire readily available on-street, off-street, and private property occupancy data from the City of Morgantown
 - b. The Consultant will utilize existing data to identify potential consequences of network adjustments made during alternative selection
- 7. Review of existing datasets and plans
 - a. The Consultant will reference and utilize existing data sets from the City of Morgantown, the MMMPO, and WVDOH. The Consultant will rely on data from ongoing pavement assessment and pedestrian plans for the City of Morgantown, recently completed transportation plans by the MMMPO or WVDOH, and studies completed by WVDOH including the recently completed Morgantown Pedestrian Safety Study.
 - b. The Consultant will reference the Morgantown Comprehensive Plan throughout the volume development and microsimulation effort as needed
 - c. The Consultant will incorporate projects within and nearby the study area into the analysis as needed and will make note of identified issues and recommendations regarding bike, pedestrian, transit, and freight facilities.

TASK 2. EXISTING AND NO-BUILD VOLUME FORECASTING

- 1. The Consultant will utilize the MMMPO's Existing TransCAD Model to inform forecasting for No-Build intersection TMCs
 - a. The Consultant will forecast No-Build interim year (to be determined) and horizon year (2050) following National Cooperative Highway Research Program (NCHRP) 765 industry-standard practices
 - b. The Consultant will perform one round of revisions to the forecasts based on compiled and reconciled comments from the MMMPO and stakeholders
- 2. The Consultant will develop origin-destination matrices to be used in existing and No-Build TransModeler models

TASK 3. EXISTING AND NO-BUILD MICROSIMULATION

- 1. The Consultant will develop and qualitatively validate the Existing Condition TransModeler model. A visual validation field visit will be performed for the weekday condition to determine if the animated vehicle behavior for the Existing model is realistic. Travel Time data will be collected and volume data from traffic counts will be used to validate that the simulated volumes acceptably represent existing traffic volumes in the field

- a. The limits of the microsimulation model will include all of the intersection TMC locations included in **Figure 2** and the roadway links entering those intersections.
- b. The Consultant will perform one round of revisions to the Existing Condition model based on compiled and reconciled comments from the MMMPO and stakeholders
- c. Once the Existing Condition model is validated, the Consultant will develop a No-Build TransModeler model based on the Existing Condition model.
- d. The Consultant will evaluate Measures of Effectiveness (MOE) for existing and no-build scenarios for the following attributes:
 - i. Volumes
 - ii. Delay (LOS)
 - iii. Network Travel Time Segments
 - iv. Queue lengths (95th percentile and max)

TASK 4. PROBLEM AND NEEDS IDENTIFICATION

1. The Consultant will review and summarize Existing and No-Build microsimulation MOEs
2. The Consultant will create a geospatial database of data collection parameters
3. The Consultant will identify intersections, corridors, and areas of notable need with a primary focus on congestion and mobility. Safety, multimodal facilities, and access needs will also be considered, based on information collected in **Task 1**.
4. The Consultant will attend one (1) virtual meeting with stakeholders to discuss results of data collection and identified areas of need. The purpose of this meeting is to gain concurrence from stakeholders on locations to be carried forward for alternatives analysis. The Consultant will prepare a meeting summary to be distributed to attendees.

TASK 5. ALTERNATIVES ANALYSIS AND FORECASTING

1. The Consultant will develop a list of potential alternatives and conduct a high-level feasibility screening. The Consultant will coordinate with the MMMPO and stakeholders to develop a list of alternatives and scenarios to carry forward for detailed study. Scenarios may include:
 - a. Addressing issues created by Grumbein's Island crossing
 - b. Reconfiguration of Willey Street
 - c. Individual intersection improvements
 - d. Reconfiguration of one-way streets
 - e. Signalized intersection improvements
2. The Consultant will code and run the MMMPO TransCAD TDM for up to four scenarios which are anticipated to have a notable effect on travel patterns due to roadway reconfigurations or closures to check consistency of link volumes on affected roadways.
3. The Consultant will develop interim year (to be determined) or horizon year (2050) TransModeler models (up to eight [8]) for identified alternatives and optimize signal timing.
4. The Consultant will evaluate the following outputs from future build alternatives and compare to Existing and No-Build outputs
 - a. Volumes
 - b. Delay (LOS)
 - c. Network Travel Time (Vehicle Hours Traveled)
 - d. Queue lengths (95th percentile and max)

5. The Consultant will attend up to two (2) virtual meetings with stakeholders as part of this task. The Consultant will prepare a meeting summary after each meeting to be distributed to attendees.
6. The Consultant will prepare a summary

TASK 6. RECOMMENDATIONS AND REPORTING

1. The Consultant will discuss outcomes of the Alternatives Analysis task with the Stakeholders during a virtual meeting to be held following completion of **Task 5**. The Consultant will prepare a presentation summarizing the findings for use during this meeting. The Consultant will prepare and distribute a meeting summary to attendees following the meeting.
2. The Consultant will develop recommendations based on a combination of conclusions drawn from microsimulation model output comparisons, crash data, and local plans such as pedestrian and transit studies.
3. The Consultant will modify and refine the recommendations based on stakeholder and public input
4. The Consultant will prepare a report to document the methodology of the study, summarize the data collected, document the identification of problem areas within the network, screening of alternatives, results of the modeling tasks, and recommendations of the study. The Consultant will make up to two rounds of revisions to the report based on compiled and reconciled comments from the MMMPO and stakeholders.

TASK 7. STUDY ADMINISTRATION

1. The Consultant will provide management of the MMMPO Kickoff and Coordination Meetings (up to 5) including:
 - a. Coordination with stakeholders
 - b. Preparation of meeting summaries
2. The Consultant will make two (2) MPO Policy Board Presentations
 - a. One (1) presentation of key findings from problem identification and selection of detailed study locations
 - b. One (1) presentation to review recommendations
3. The Consultant will attend up to two (2) public engagement meetings
 - a. One (1) meeting presenting key findings from data
 - b. One (1) meeting presenting recommendations and collecting feedback
4. The Consultant will prepare and submit monthly progress reports
5. The Consultant will schedule and attend Bi-weekly meetings with MMMPO Director Bill Austin to provide project updates. These meetings will be held via conference call. The Consultant will prepare and distribute a meeting summary following each meeting.

Schedule

Kimley-Horn will provide the above services as expeditiously as practicable with an anticipated completion date within eighteen months of receiving formal notice-to-proceed pending prompt MMMPO and stakeholder reviews.

Fee Breakdown

Kimley-Horn will perform the services in Tasks 1 – 7 for the total lump sum fee below . Individual task amounts are for informational purposes only. All permitting, application, and similar project fees will be paid directly by the Client.

- \$400,000: Kimley-Horn effort to complete tasks 1 through 7
- \$50,000: subconsultant effort for QC and volume development assistance
- \$50,000: data collection (Streetlight and TMCs)
- **Total: \$500,000**

Lump sum fees will be invoiced monthly based upon the overall percentage of services performed. Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number. Fees and times stated in this Agreement are valid for sixty (60) days after the date of this letter.

Closure

It is our pleasure to work with the MMMPO and support your goals and visions for the future of infrastructure in the City of Morgantown. We appreciate the opportunity to provide these services to you. Please contact me at tim.padgett@kimley-horn.com or 919-653-2991 if you have any questions.

Sincerely,

Tim Padgett, P.E.
Project Manager

Acceptance:

**MORGANTOWN MONONGALIA
METROPOLITAN PLANNING ORGANIZATION**

KIMLEY-HORN AND ASSOCIATES, INC.

BY: _____

BY: _____

TITLE: Executive Director

TITLE: _____

DATE: _____

DATE: _____