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

Agenda

Transportation Technical Advisory Committee
243 High Street Room 026 and by WEBEX
Morgantown WV
June 6, 2023

1:00 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: TTAC Members

From: Bill Austin, AICP

Subject: June 6, 2023 TTAC 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 TTAC 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 TTAC recommend approval of the Scope of Work to the Policy Board.

TRANSPORTATION TECHNICAL ADVISORY MEETING

May 9, 2023

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

Members Present:

Bill Austin (Chair), Michael Dougherty, Andrew Gast-Bray, Brian Carr, Jeremy Evans, Maria Smith, Rickie Yeager, Jason Stinespring, Damien Davis

Others Present: Jacqueline Peate, Jing Zhang

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1. Call to Order

The TTAC meeting was held virtually and in person. The phone number and web address to access the teleconference were publicized. With a quorum present, Mr. Austin called the meeting of the TTAC to order at 1:00 PM.

2. Approval of Minutes

Mr. Austin noted that the minutes of the last meeting were included in the agenda package. Mr. Gast-Bray moved to approve the meeting minutes as presented; seconded by Mr. Dougherty; with no discussion, the motion passed unanimously.

3. Project Selection Process for Suballocated Funds and TIP Application

Mr. Austin noted that he has been working with the West Virginia MPO Association and the WV DOH on federal funding suballocation, project selection, and programming for the MPO area.

Mr. Austin noted that the IIJA Bill provides that each MPO's with populations under 200,000 are suballocated funds from the Carbon Reduction Program (CRP). Our MPO's allocation under this program is approximately $352,000 a year for 5 years. The bill also identifies that a portion of the State's Surface Transportation Block Grant funding is to be equitably distributed to the State's MPO's with populations of less than 50,000. WVDOH worked with WVAMPO to determine an equitable formula for distributing these funds. Our MPO's portion of these funds is approximately $570,000 a year for five years. The MPO can also request use of STBG funds for projects above our suballocation in a competitive process.

Considering previously allocations, the MPO needs to select projects for the remaining CRP and STBG funds. The MMMPO has approximately $500,000 of CRP funds to program for Fiscal Years 2022 and 2023. The MMMPO also has approximately $700,000 in STBG funds from FY's 22 and 23 to program. A draft process description of the selection of projects for the MPO's suballocation funding is included in the agenda package.

Mr. Austin noted that the MPO is working with WV DOH to establish a process in which the MPO can submit State Transportation Improvement Program (STIP) project recommendations to WV DOH, based on the status of MPO's TIP and community priorities.

Mr. Austin noted that the MPO is also working with WV DOH to set up a process in which the MPO can make recommendations on paving projects to the local DOH district.

Mr. Davis asked about the deadline for applying the federal suballocation funds. Mr. Austin noted that the MPO will coordinate with the WV DOH to determine the deadline details. It is expected that there will be one or two deadlines for each year.

Mr. Gast-Bray moved to recommend recommendation of the Project Selection Process to the MPO's Policy Board; seconded by Mr. Yeager. With no further discussion, the motion passed unanimously.

4. Pavement Condition and System Reliability Performance Measures

Mr. Austin noted that included in the agenda package are the updated 2023-2025 pavement and bridge maintenance performance measures that WV DOT has requested the MPO to adopt. The performance measures include targets for the interstate system, non-interstate national highway systems (NHS) and NHS bridge deck area. The measures include system reliability and pavement conditions. The State is required by federal regulations to update the performance measures and adopt them every year.

Mr. Yeager moved to recommend approval of the performance measures to the MPO's policy board; seconded by Mr. Gast-Bray. Mr. Dougherty asked about comparing with last year's performance measures. Mr. Austin noted that WV DOT reported a fast deterioration rate of the roads and bridges last year and some performance measures were getting worse. The proposed repairment and rehabilitation of the interstate bridges will have significant impact on the pavement condition performance in the MPO area. With no further discussion, the motion passed unanimously.

5. Other Business
Mr. Davis noted that WV DOH's Transportation Alternative Program (TAP) grant is now open for applications. The City of Morgantown has submitted three streetscape projects in the downtown areas.

8. Meeting Adjournment
The Meeting adjourned at 1:28 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

<u>New groupable projects FY2023-2026</u>

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 phrase. 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 phrase. 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.

<u>Project modification (FY2023-2026)</u>

CAPERTON 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

CAPERTON 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.

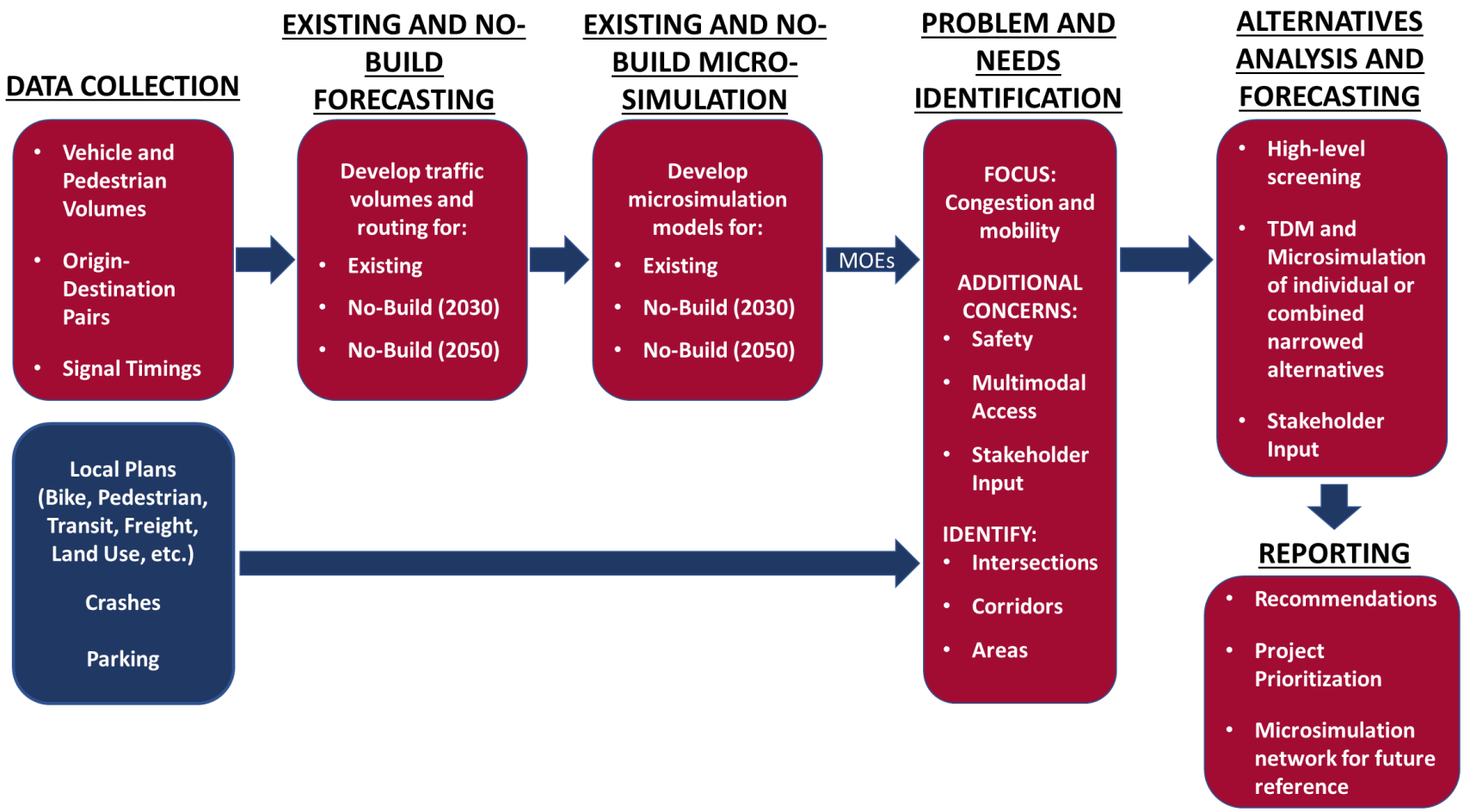

Figure 1: Proposed Downtown Traffic Study Approach

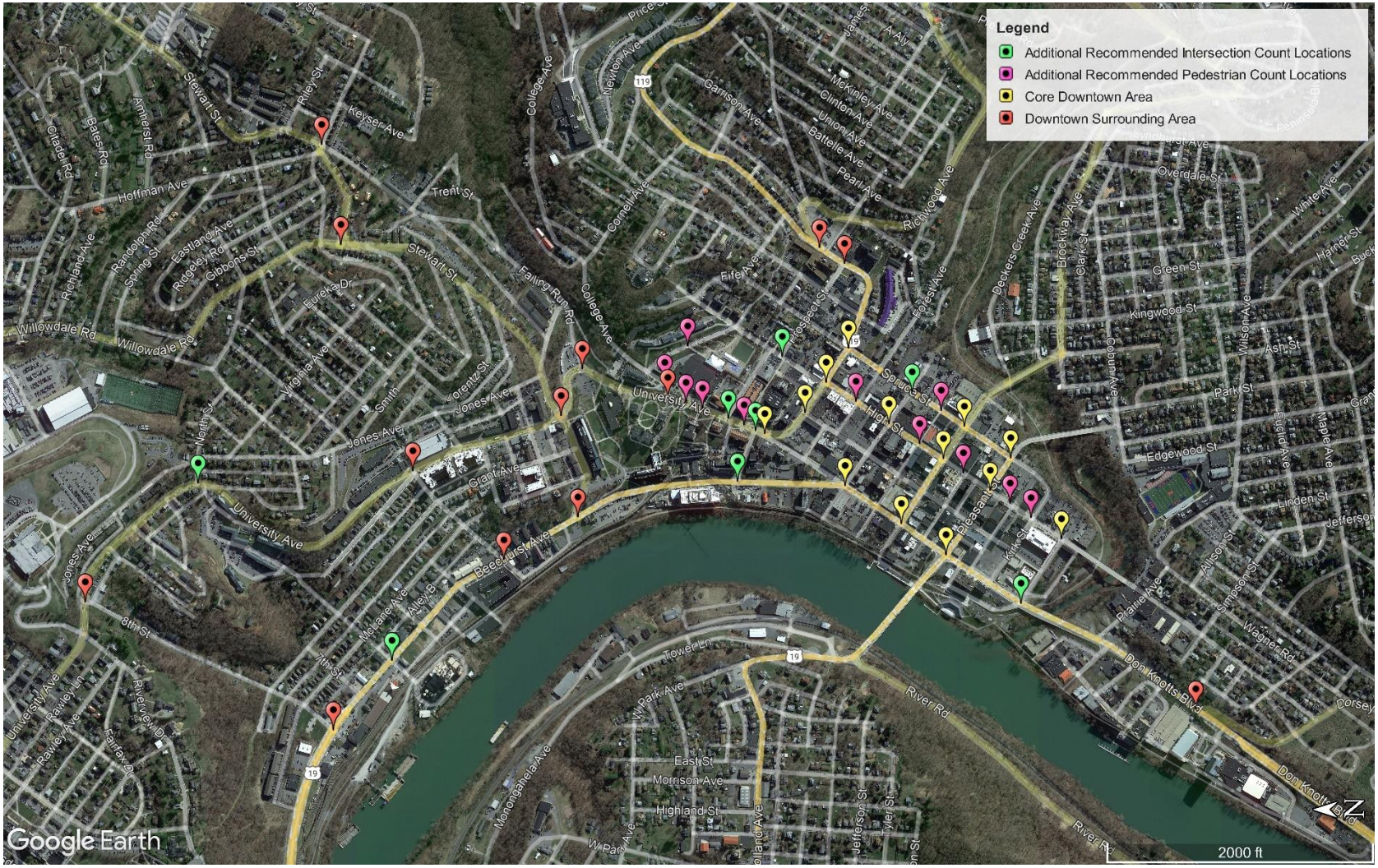

Figure 2: Proposed Downtown Traffic Study Turning Movement Count and Pedestrian Count Locations

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

BY:_____

TITLE: Executive Director

DATE:_____

KIMLEY-HORN AND ASSOCIATES, INC.

BY:_____

TITLE:_____

DATE:_____