

Town of Vienna, Virginia

Maple Avenue Corridor Multimodal Transportation and Land Use Study

KIMLEY-HORN SCOPE OUTLINE

Task 1: Project Management

This task involves elements related to managing the project including technical direction, coordinating meetings, and managing scope, schedule, invoices, and progress reports.

Kimley-Horn will attend a kick-off meeting within one week (or later as requested by Town staff) of notice-to-proceed (NTP) to review and refine the project schedule, to establish roles and responsibilities for the Kimley-Horn and Client teams, to confirm the scope of work, to discuss background materials, and to identify any additional issues and project needs.

Kimley-Horn will also participate in monthly progress conference calls with Town staff (as needed). Kimley-Horn assumes an up to eight (8) month schedule for budgeting purposes and to accommodate community engagement touchpoints. This scope assumes NTP in December 2018 or January 2019.

Deliverables:

Progress reports (monthly), invoices (monthly), up to 7 progress calls and meeting summaries, and project schedule (developed at project initiation, updated up to 2 times during the course of the project to reflect refinements to community engagement and milestone delivery).

Task 2: Community Engagement

Kimley-Horn will attend a walking tour of the Maple Avenue corridor with key project stakeholders (staff, Council, etc.) to observe field conditions and discuss known challenges along the corridor. It is anticipated that this tour will be coordinated with the scheduled kick-off meeting.

Kimley-Horn will partner with Town staff to conduct a collaborative community engagement effort throughout the course of this study.

Kimley-Horn will prepare project material for inclusion on the Town's website or other online sites related to the project.

Kimley-Horn will present transportation study findings and recommendations for the community's review and comments in a series of three public meetings. Kimley-Horn will also develop an online/in-person survey and public comment form for each meeting. Prior to each meeting, Kimley-Horn will collaborate with Town staff to develop appropriate survey questions.

Kimley-Horn will attend:

- Three community meetings/workshops
 - Existing Conditions/Issues Review Meeting (late winter 2019)
 - Future Conditions/Transportation Needs Assessment Meeting (late spring 2019)
 - Recommended Transportation Improvements Meeting (Fall 2019)

- Up to three meetings with Town groups which may include Council, Planning Commission, or Transportation Safety Commission meetings. It is assumed that public meeting materials will be used for these meetings. It is also noted that the community meetings may be combined with Town group meetings.

Deliverables:

In-person/online survey/comment forms (one per meeting via Google Forms). Kimley-Horn will summarize responses in final report.

Public meeting materials (PowerPoint presentation slides and up to 3 Boards per meeting) and content for project webpage and/or social media (Figures and Technical Memoranda), meeting summaries. Additional meeting materials will be the responsibility of Town staff or prepared on an as-requested basis for an additional service.

Public meeting and website materials are assumed to be adapted from study materials and mapping. For each meeting, Kimley-Horn assumes the preparation of a draft version of materials with response to 1 round of consolidated reconciled comments prior to preparing final versions.

Task 3: Review of Background Materials

This task includes a review of existing local and regional planning and transportation studies, emphasizing information that is relevant to the study area (shown in Appendix A) and to the scope of the project. Kimley-Horn will work with the Town to identify up to 8 plans or studies for review.

Background material may include:

- zoning studies and documents,
- transportation studies from current and proposed development projects
- approved countywide or regional plans such as the Fairfax County Comprehensive Plan, the Fairfax County Transit Development Plan, the Tysons Comprehensive Plan
- regional transportation studies or projects such as Transform66
- the Town's Capital Improvement Program (CIP)
- the Town's Comprehensive Plan
- Any existing conditions and preliminary transportation analysis completed by the Town staff.

Deliverables:

Request for information

Task 4: Existing Conditions Inventory and Assessment/Analysis

This task includes the inventory, assessment, and analysis of the transportation network elements and operations within the study area.

Task 4.1: Existing Vehicular Conditions Inventory and Analysis

Kimley-Horn will document the existing vehicular transportation network including lane configurations, speed limits, intersection control, commercial entrance locations, and designated curb uses along Maple Avenue. This will be based on the reviewed background material and field reconnaissance.

Kimley-Horn will document existing peak hour traffic volumes at study area intersections based on previously conducted traffic counts (no more than 2 years old) and based on traffic counts conducted as part of this study. For budgeting purposes, Kimley-Horn assumes that there will be up to 25 study intersections, including signalized and unsignalized intersections along or near the Maple Avenue Corridor

between James Madison Drive and Follin Lane.

Kimley-Horn will conduct 24-hour traffic counts at up to 4 locations within the study area. Kimley-Horn also will collect and summarize travel times along Maple Avenue and Church Street.

Kimley-Horn will review, document, and map crash occurrence along Maple Avenue and/or within the influence area of study area intersections using the most recently available 3-year VDOT crash information.

Kimley-Horn will conduct queuing observations at up to 10 signalized intersections during the AM and PM peak periods.

Kimley-Horn will perform AM and PM peak hour intersection capacity analyses (to include level of service and average delay) for study area intersections and arterial level of service analyses for Maple Avenue using Synchro software. Kimley-Horn will also conduct AM and PM queuing analyses for study area intersections using SimTraffic, with default simulation parameters. It is assumed that the Town will provide any existing synchro networks and timing files for use in this analysis.

Task 4.2: Existing Pedestrian Conditions Inventory and Assessment

Kimley-Horn will document the existing pedestrian transportation network including pedestrian signal infrastructure, marked crosswalks, trail connections, curb ramps at intersections, gaps in the sidewalk network, and other network and operational elements. This will be based on the background material and field reconnaissance. As part of the traffic counts conducted at study area intersections, Kimley-Horn will also document the number of pedestrian crossings at study area intersections during the peak periods.

Kimley-Horn will map the pedestrian network using ArcGIS and identify issues and gaps.

Task 4.3: Existing Bicycle Conditions Inventory and Assessment

Kimley-Horn will document the existing bicycle transportation network including marked and signed bike routes, trail connections, and bicycle intersection control. This will be based on the background material and field reconnaissance. As part of the traffic counts conducted at study area intersections, Kimley-Horn will also document the number of on-street bicyclists at study area intersections during the peak periods and assess the existing level of traffic stress (LTS). Kimley-Horn will map the bicycle network elements and volumes using ArcGIS and identify issues and gaps.

Task 4.4: Existing Transit Conditions Inventory and Assessment

Kimley-Horn will document the existing transit network including bus routes and headways along study area streets and bus stop location and amenities (i.e. benches, shelters, and traveler information). This will be based on the background material and field reconnaissance. Kimley-Horn will map the transit network using ArcGIS and identify issues and gaps.

Deliverables:

Existing Conditions technical memorandum summarizing the vehicular, pedestrian, bicycle, and transit inventory, analysis, and assessment in PDF format, including a network/issues/gap map for each mode of travel.

Kimley-Horn assumes preparation of a draft and final version of the technical memorandum and will respond to 1 round of consolidated comments from Town staff.

Task 5: Comparing Future Land Use Scenario Trip Generation

Kimley-Horn will collaborate with the Town's Planning and Zoning staff to develop one (1) future development scenario. Kimley-Horn assumes that this scenario will consider the redevelopment of properties along Maple Avenue (either by-right or under Maple Avenue Commercial [MAC] zoning).

Once the future land use scenario has been developed, vetted, and approved in coordination with Town staff, Kimley-Horn will develop vehicular and person trip generation based on the agreed upon future land use scenario. Trip generation will be based on the ITE Trip Generation Manual, the ITE Trip Generation Handbook, and based upon any internal capture, mode split information, or mode split targets developed in coordination with Town staff.

Deliverables:

Technical memorandum summarizing future land use scenario with trip generation by parcel and figures showing the resulting future traffic volumes in PDF format.

Kimley-Horn assumes preparation of a draft and final version of the technical memorandum and will respond to 1 round of consolidated comments from Town staff.

Task 6: Future Conditions Assessment/Analysis

Task 6.1: Future Vehicular Conditions Analysis

The analysis of future vehicular conditions will be based on the future land use scenario, a background growth percentage to account for changes in regional traffic, the traffic volumes associated with the land use scenario, and any planned and programmed improvements to the local area multimodal transportation network.

Kimley-Horn will assign the vehicular trips generated under the future land use scenario to the transportation network based on existing traffic patterns from the traffic counts at study area intersections.

Kimley-Horn will perform AM and PM peak hour intersection capacity analyses (to include level of service and average delay) for study area intersections under the future land use scenario and arterial level of service analyses for Maple Avenue using Synchro software. Kimley-Horn will also conduct AM and PM queuing analyses for study area intersections using SimTraffic, with default simulation parameters

Task 6.2: Future Pedestrian Conditions Assessment

Kimley-Horn will document the programmed pedestrian transportation network changes. This will be based on the background material. Kimley-Horn will identify future challenges to pedestrian mobility resulting from changes in land use.

Task 6.3: Future Bicycle Conditions Assessment

Kimley-Horn will document the planned bicycle transportation network changes. This will be based on the background material. Kimley-Horn will identify challenges to bicycle mobility and calculate future conditions LTS resulting from changes in land use.

Task 6.4: Future Transit Conditions Assessment

Kimley-Horn will document the planned transit network changes. This will be based on the background material. Kimley-Horn will identify challenges to transit mobility resulting from changes in land use.

Deliverables:

Future Conditions technical memorandum summarizing the vehicular, pedestrian, bicycle, and transit analysis, and assessment in PDF format to include an updated issues/gap map for each network.

Kimley-Horn assumes preparation of a draft and final version of the technical memorandum and will respond to 1 round of consolidated comments from Town staff.

Task 7: Transportation Network Improvements

Based on the future land use scenario results, Kimley-Horn will prepare a draft list of potential multimodal transportation improvements for discussion with Town staff in a workshop format.

The draft list will be organized into two tiers:

- **Near-Term Implementation Projects:** projects that address immediate access and mobility needs of corridor and could be initiated either by the Town. These projects would not specifically require redevelopment or any additional right of way. It is envisioned that these projects could be constructed/implemented leveraging Town resources or funds.
- **Mid-Term Implementation Projects:** projects that address immediate and mid-term access and mobility needs of the corridor. These projects would likely be implemented with redevelopment along the corridor and could require minimal easements or right of way. It is envisioned that these projects could be constructed/implement leveraging developer resources or funds.

Long-Term Implementation Projects will not be specifically developed as part of this scope. These projects would likely be larger in scale, would require redevelopment along the corridor, coordination with the Town, the development community, and/or VDOT or other agencies. The effectiveness and programming of these projects would need to be amazed as part of a separate, but related, long-term visioning study. General long-range strategies, as a lead in to such a vision study, will be broadly discussed in the final report.

Based on feedback from Town staff during the workshop, Kimley-Horn will revise the list of improvements. Opinions of probable costs, implementation timelines, and conceptual level sketches will be provided for each near- and mid-term project (as appropriate). For budgeting purposes, Kimley-Horn assumes the final list to include no more than 15 transportation improvements.

Kimley-Horn will model the impact of the applicable near- and mid-term improvements in Synchro and SimTraffic. Kimley-Horn will perform AM and PM peak hour intersection capacity analyses (to include level of service and average delay) for study area intersections and arterial level of service analyses under the future land use scenario with improvements using Synchro software. Kimley-Horn will also conduct AM and PM queuing analyses for study area intersections using SimTraffic, with default simulation parameters.

Deliverables:

Draft and final list of potential transportation network improvements. Technical memorandum summarizing the purpose, cost, timeline, and expected outcome of each improvement in PDF. Kimley-Horn assumes preparation of a draft and final version to respond to 1 round of consolidated, resolved comments.

Task 8: Final Transportation Study Report

Kimley-Horn will summarize the above tasks in a final transportation study for corridor.

A draft report will be provided to staff for review. After staff review, Kimley-Horn will meet with staff to discuss comments. A final report will be provided to staff addressing all outstanding comments within 30 days of meeting with staff to discuss the draft report.

Deliverables:

Draft and Final Report in electronic PDF format. Kimley-Horn assumes preparation of a draft and final version to respond to 1 round of consolidated, resolved comments.

Optional Analyses

Kimley-Horn has identified the following related optional analyses that may provide value to the Town in understanding the challenges and opportunities of the Maple Avenue corridor. Kimley-Horn envisions that any of these tasks could be initiated as an amendment to this project or as a separate follow-up project.

Parking Analysis

As an additional service, Kimley-Horn will conduct an analysis of parking supply and demand along the Maple Avenue corridor. Kimley-Horn will conduct a survey of on-street and off-street parking facilities to determine the inventory, restrictions, and typical occupancies of each, identifying areas where parking is under-utilized, and areas where additional parking management is needed to accommodate existing demand.

Kimley-Horn will also review the zoning requirement to estimate the parking requirements of the MAC zoning land use scenario. Based on the data, Kimley-Horn will provide additional parking management recommendations to accommodate the future development and demand.

The fee range to provide a parking study is approximately \$15,000-\$30,000. A full scope and fee for this task will be provided, should the task be authorized.

Microsimulation Analysis

Based on the outcome of the Synchro analysis, Kimley-Horn will prepare a more refined analysis using VISSIM microsimulation software as an additional service. It is noted that additional queue observations may be needed to calibrate the VISSIM model. This task would add supplemental analyses to Tasks 4, 6, and 7. A full scope and fee for this task will be provided should, the task be authorized.

Transportation Network Forecasting based on Regional (MWCOG) Model

Kimley-Horn will update future travel patterns based on the MWCOG Travel Demand model as an additional service. This task would update the future traffic projections used in Task 6 and Task 7 analyses. A full scope and fee for this task will be provided should, the task be authorized.

ADA Compliance Screening

Screening-level evaluation of pedestrian infrastructure within the study area to verify compliance with latest ADA accessibility standards. This task would include ADA screening and recommendations to task 4 and Task 7.

Long-Range Vision Study

Kimley-Horn will expand upon the analysis conducted as part of this scope, with an analysis of the long-term needs, opportunities, and vision of Maple Avenue. Such a study looks at a broader time horizon (20 years+), establishes a vision for what Maple Avenue is to become, and identifies the transformative

changes to the corridor with respect to land use, transportation, mobility, policy, and planning necessary to achieve the Town’s Vision. A full scope and fee for this task will be provided should, the task be authorized.

Other Services

Any service not specifically described in this scope can be provided based on the approved rate schedule. At the Town’s request for any service not specifically identified in this scope, Kimley-Horn will prepare a full scope and fee for the Town’s consideration.

Cost

Kimley-Horn can provide the scope outlined herein for the costs shown below.

Maple Avenue Corridor Transportation and Land Use Study:	\$79,994.06
Optional Parking Analysis:	\$15,000 to \$30,000
Other Optional Analyses (to be scoped at the Town’s request)	\$TBD

The fee range is based on the latest approved rates of the Fairfax County Contract (4400003237, RFP2000000131) – Consulting Services for Transportation and Urban Planning, Design & Engineering Services, under which the Town of Vienna has executed a contract rider to engage Kimley-Horn and Associates for transportation and parking consulting support.