Submitted to:
Southwest Michigan Planning Commission
376 W. Main Street, Suite 130
Benton Harbor, Michigan 49022

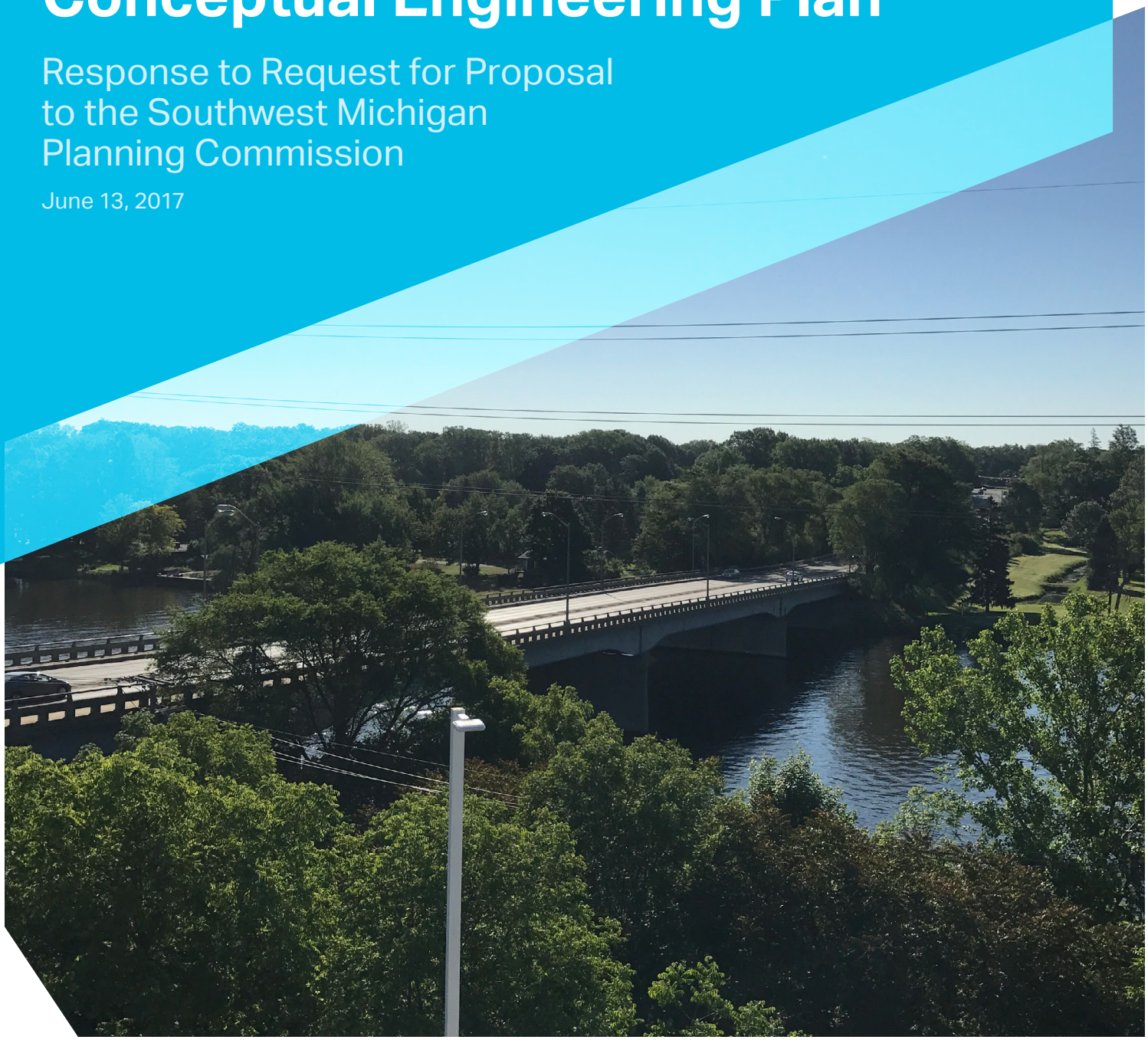
Submitted by:
AECOM
Mike DeVries
mike.devries@aecom.com

AECOM

Napier Corridor Pedestrian and Bicycle Feasibility and Conceptual Engineering Plan

Response to Request for Proposal to the Southwest Michigan Planning Commission

June 13, 2017



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June 13, 2017

Ryan D. Fellows
Associate Planner
Southwest Michigan Planning Commission
376 W. Main Street, Suite 130
Benton Harbor, Michigan 49022

RE: Response to RFP for the Napier Corridor Pedestrian and Bicycle Feasibility and Conceptual Engineering Plan Project

We are pleased to submit the AECOM proposal for work on a Pedestrian and Bicycle Feasibility and Conceptual Engineering Plan for the Southwest Michigan Planning Commission (SWMPC), and we are excited about the opportunity to continue our work on improving multi-modal infrastructure in Michigan. Because we expect that this project will require a detail-oriented and inclusive approach to stakeholder and public engagement, for this effort we are teaming with the Grand Rapids-based planners of Williams & Works, who have recent experience leading planning projects in and around the Southwest Michigan area. Our firms have successfully teamed on other transportation planning efforts, including the Laker Line Bus Rapid Transit planning work in the Grand Rapids region, and most recently on a Pedestrian, Greenway, & Transit Plan (KATSMoves.org) for the Kalamazoo Area Transportation Study.

Based on our review of the RFP and knowledge of the region, we have developed a project approach that will help SWMPC develop and present an attractive plan for improving walking, biking and transit in the Napier Avenue corridor. As reinforced by the proposal that follows, we believe there are three key factors that present our unique qualifications and our ability to successfully lead this project, including:

Experienced Project Leadership – Our proposed project manager, Jeromie Winsor, AICP, leads the transportation planning practice for the firm's Michigan offices. Jeromie has recently led multiple successful transportation planning efforts for clients that include regional agencies, transit agencies, cities and universities. He will be assisted in project management by Josh Bocks, MBA, a certified project manager with experience in multimodal system planning in multiple settings both locally and nationally. In addition, Jennifer Byle, PE will leverage her roadway design experience to lead the development of conceptual engineering plans, and Lynee Wells, AICP from William & Works, will provide her experience leading planning projects at a regional and community scale. Together, this leadership team will interact with SWMPC throughout the project and ensure that this project is delivered successfully.

Inclusive Public and Stakeholder Engagement – Public meetings are a necessary and useful element of transportation planning. Previous experience has shown engagement has moved beyond standard open houses with maps. We are prepared to provide project materials that will effectively communicate the planning process in a way that will build excitement around the preferred outcomes, and clearly identify how public input will be (and has been) reviewed and incorporated into the planning process. Based on the proposed scope of work, we plan to hold three rounds of public meetings to gather and assess stakeholder concerns and answer questions. The AECOM Team has integrated these principles into our project approach for this SWMPC project, and will measure success of the plan in part based on the success of the public engagement process.

An Energetic and Excited Team – Our team of Michigan-based planners and engineers are committed to the potential of Michigan's cities and towns. We are excited about planning transportation investments that support broader goals for safety, public health, environmental justice, and economic revitalization. Our proposed team has successfully worked together on many recent and similar projects. This experience offers a team camaraderie with the expertise required to provide planning services efficiently and effectively; we would love to bring that same level of commitment to this project.

AECOM

AECOM acknowledges and has reviewed Addendum 1: Answer to Questions, dated May 30, 2017. A signed copy of the Addendum form is included in the Required Forms section of this proposal. In addition, AECOM's response to SWMPC's RFP will remain valid 120 days from date of submission, June 13, 2017.

The AECOM team is very interested in supporting SWMPC on this project. On behalf on all of the team members, we thank you for the opportunity to submit this proposal. If you have any questions or require further information, please contact Mike De Vries or Jeromie Winsor at the telephone or email listed below.

Sincerely,

AECOM Great Lakes

Michael De Vries, PE
Vice President, Operations Manager, Transportation
mike.devries@aecom.com
T 616.574.8591

Jeromie Winsor, AICP
Senior Planner, Transportation
jeromie.winsor@aecom.com
T 313.348.7122

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AECOM

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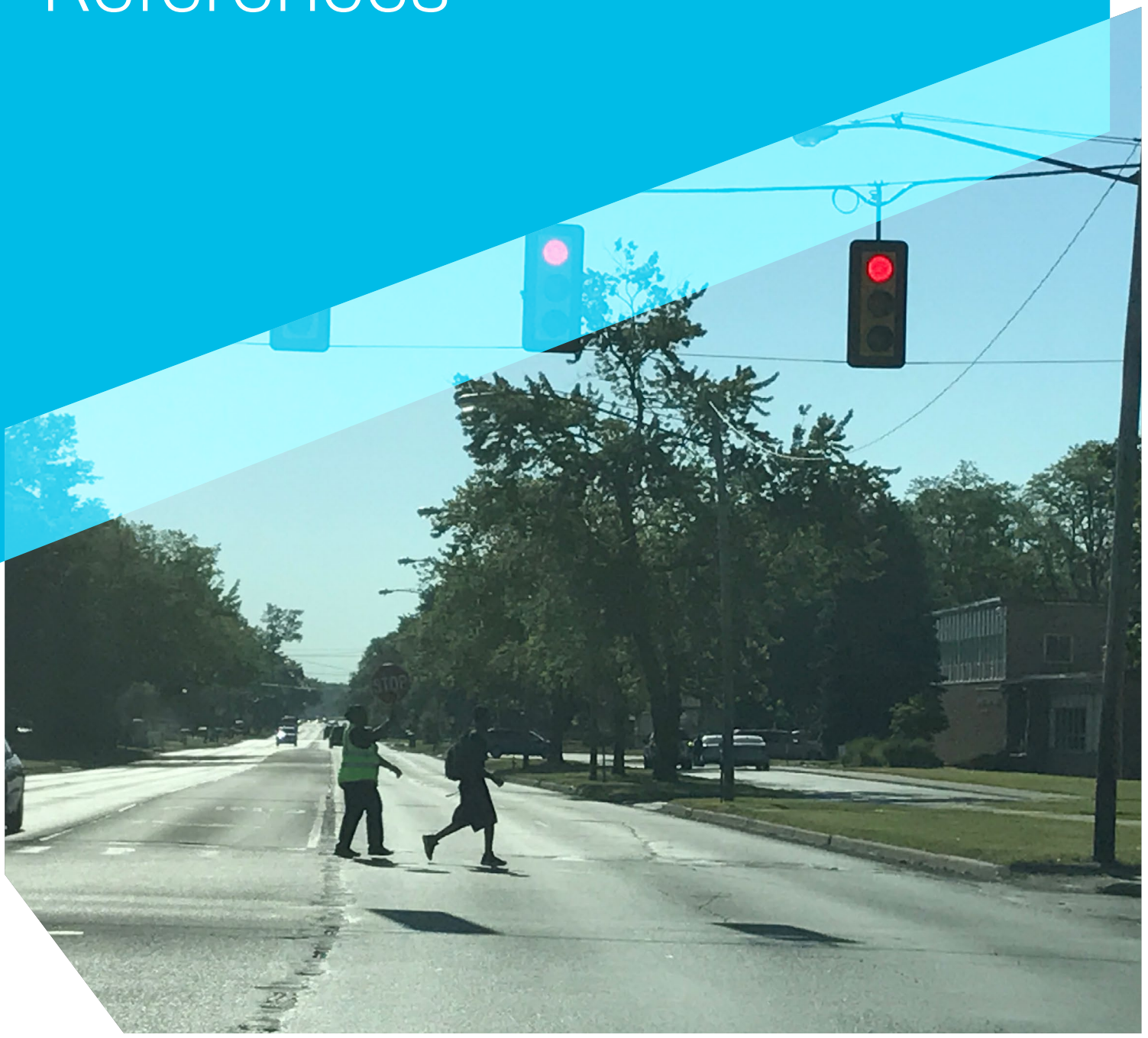
Qualifications & References



01. Qualifications & References

AECOM

Firm Introduction

In October 2014, URS Corporation joined the AECOM Technology Corporation family of companies. As a leader in transportation planning, design and construction services, AECOM offers ***decades of directly relevant experience*** in transportation planning, corridor studies, stakeholder engagement, travel demand modeling, feasibility studies, and multi-modal design services. Our planners and engineers understand that effective project planning is critical to the success of every transportation project.

Our firm is composed of award-winning professionals. When you work with our ***dedicated, local staff***, you also have access to our network of knowledge and resources. We are committed to helping our clients find cost-effective solutions to their transportation needs.

AECOM and its legacy companies, located in Michigan for over 105 years, have helped clients in numerous infrastructure and facility projects across the state. With over 300 professionals located in Michigan, we appreciate the opportunity to continue to invest in Michigan. As the largest transportation engineering firm in the state, we are pre-qualified by the Michigan Department of Transportation to provide virtually all engineering and environmental services necessary to implement projects.

With offices in Detroit, Southfield, Grand Rapids, and Traverse City, AECOM talent includes a Surface Transportation department with over 100 employees, including engineers, planners, and technicians who are skilled in transportation planning, design, construction, and operations. Additionally, our staff in Chicago includes hundreds more talented AECOM team members.

One of AECOM's key strengths lies in our specialized transportation expertise. These unique capabilities play a vital part in augmenting our role as a full-service, transportation design, engineering, consulting service provider.

AECOM Michigan office locations

Key Capabilities include:

- Corridor Planning
- Public and Stakeholder Outreach
- Roadway and Traffic Analysis
- Non-Motorized Planning and Analysis
- Transit Planning and Analysis
- GIS and Mapping

Subconsultant References

The AECOM team will consist of two subconsultants, including: William & Works and Aerocon. References for both firms are included below.

williams&works
engineers | surveyors | planners

Williams & Works is an employee-owned company dedicated to providing the highest level of service to our clients. We are a multi-generation consulting firm of planners, engineers, surveyors, and several other professionals. Many of our clients have been with us for decades, and have come to rely on the professional, honest and thorough level of service we provide. At Williams & Works, we build relationships with our clients and work with them, not for them. We bring a team approach to our assignments and constantly strive to be more efficient and economical in our business practices. Last year, we celebrated 20 years in our current location in Grand Rapids, Michigan.

References

Mr. Tim Kelly, AICP, Vice President
Grand Rapids Downtown Development Authority
29 Pearl Street NW
Grand Rapids, MI 49503
T (616) 719.4610
E tkelly@downtowngr.org

Nick Monoyios, Long Range Planner
The Rapid
250 Grandville Ave.
Grand Rapids, MI 49503
T (616) 456.7514
E nmonoyios@ridetherapid.org

Since 1967, Aerocon Photogrammetric Services has been providing clients nationwide with aerial photography and digital mapping products. We have long-standing relationships with members of both the public and private sectors who rely on us because of our high standards and firm commitment to customer service.

The firm was incorporated with the mission of becoming one of the premier providers of advanced photogrammetric services. We achieved this goal by paying attention to technical quality, hand-picking personnel with high academic and professional credentials, and investing heavily in new technology.

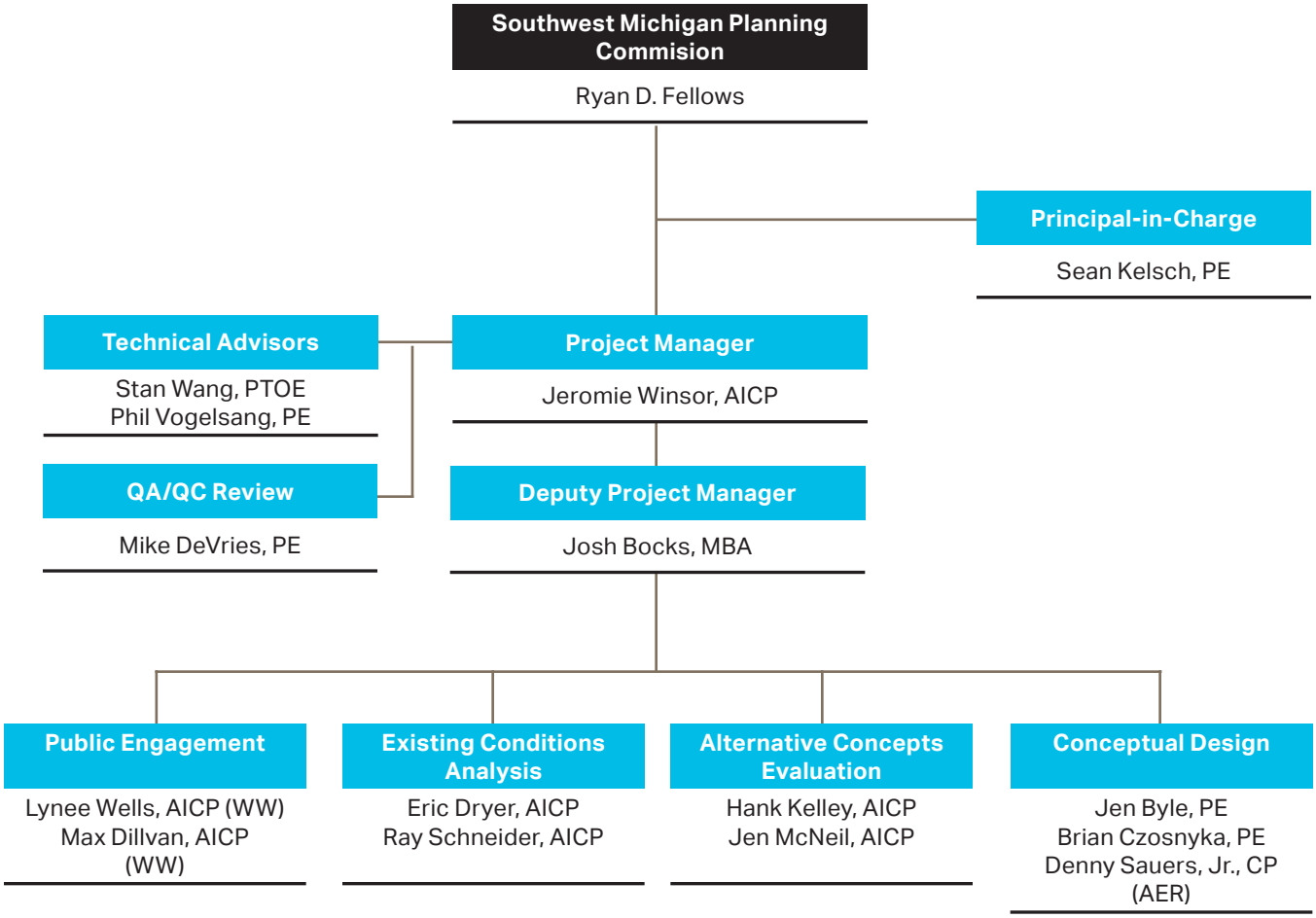
References

Tom Byle
Kent County Road Commission
1500 Scribner Avenue NW
Grand Rapids, MI 49504
T (616) 242-6948

Organization Chart

We have assembled a Michigan-based project team of planners and engineers to develop a feasible and responsive design plan for the Napier Avenue Corridor. The proposed organization of our team is shown in the organization chart below, with detailed resumes on the following pages.

The team will be led by Jeromie Winsor, AICP, who heads AECOM's transportation planning practice in Michigan, and brings 10+ years of experience in multi-modal transportation planning projects throughout the Midwest. He will be supported by a set of technical advisors and task leads who bring deep experience in developing and implementing non-motorized transportation improvements.



Key

WW William & Works
AER Aerocon

Jeromie Winsor, AICP

Project Manager

Education
MS/Urban Planning & Policy/University of Illinois-Chicago/2004

BA/Journalism/Michigan State University/1999

Registration/Certification
American Institute of Certified Planners

Years of Experience
With AECOM: 10
With Other Firms: 2

Professional Associations
American Planning Association

Mr. Winsor's professional background is in strategic and capital transportation planning, with a particular focus on the relationship between transit, land use, economic development, and community planning.

KATS Pedestrian, Greenway & Transit Plan, Kalamazoo, Michigan. Project Manager to develop recommendations to connect nonmotorized infrastructure to existing transit routes and encourage commuting. The team identified potential new greenways, trails, and other non-motorized facilities that will connect with each other, to major activity centers, and to high ridership transit routes.

Huron Street / I-94 Bridge Crossing Study – Ypsilanti, Michigan. Project Manager for a study of options for improving nonmotorized transportation at the existing Huron Street Bridge over I-94. The study developed five alternatives, including elements such as shared use paths, pedestrian and bike lanes, and pedestrian-controlled traffic signals.

The Rapid Laker Line BRT Alternatives Analysis, Grand Rapids, Michigan. Served as Deputy Project Manager for this analysis of Bus Rapid Transit alternatives along the 12-mile corridor connecting the Allendale campus of Grand Valley State University (GVSU) with downtown Grand Rapids. The recommended project is now advancing through design, and included a BRT station linking to a regional trail in Standale.

Connector Alternatives Analysis, Ann Arbor, Michigan. Created land use, planning, and socioeconomic studies to inform development of Purpose & Need. Developed and executed stakeholder and community involvement activities. Coordinated with project committee in development and evaluation of alternatives.

RTA Michigan Avenue Corridor Study, Detroit, Michigan. Project Manager for a rapid transit corridor study evaluating options for transit investment and service in the 40-mile corridor linking Detroit, Ann Arbor, and Metro Airport. This ongoing study is scheduled to be completed in 2016.

CATA Michigan/Grand River Ave. Transportation Study, Lansing, Michigan. Developed "project management plan" and "purpose and need" documents for this Alternatives Analysis of a seven-mile corridor through Lansing and East Lansing, Michigan. Led analysis of economic and land use impacts of transit alternatives.

University Region Non-Motorized Plan. AECOM Project Manager for this multi-county study of existing and needed bicycle and non-motorized transportation, with specific roles in developing a GIS database and mapping needed improvements. AECOM was a subconsultant to Living Lab.

Harlem Avenue Corridor Plan, suburban Chicago, Illinois Led analysis of market opportunities in industrial, retail, office, residential and entertainment sectors for a 13-mile transportation corridor study, whose goal is to plan transportation improvements in all modes to support economic vitality in ten diverse communities.

Mount Elliott Reinvestment Strategy, Detroit, Michigan. Leading transportation and infrastructure planning work for this strategic plan to redevelop the most active industrial corridor in the City of Detroit. The resulting plan will identify a comprehensive strategy for investments in freight and passenger transportation to support job growth and access in the district.

University of Notre Dame Transportation Systems Planning Study, South Bend, Indiana. Project Manager for this ongoing analysis of potential improvements to the on-campus parking, shuttle and transportation network at the University of Notre Dame. The project recommendations are expected to include the construction of concentrated parking in a garage to open up additional campus space for future development, supported by an expanded shuttle network and complementary programs and investments to encourage greater uses of alternative modes to access campus.

Sean N. Kelsch, PE

Principal in Charge

Education
BSE/Civil Engineering/Purdue University/1995

Registration/Certification
Professional Engineer/MI

Years of Experience
With AECOM: 15
With Other Firms: 7

Mr. Kelsch has 22 years of professional experience in highway planning and design, urban street improvements, land development, drainage, sanitary sewer and water supply systems, construction permits, and intelligent transportation systems.

I-94 / Pipestone Interchange PEL Study, Berrien County, Michigan. Project Manager for the study of potential improvements to the I-94/Pipestone Road interchange. As part of the improvements, existing bridges carrying I-94 over Pipestone Road were functionally obsolete and required rehabilitation. The formal bridge scoping study resulted in a recommendation that the bridges be replaced. AECOM examined and considered whether other interchange improvements should be considered as part of a future project to replace bridges. Several stakeholder meetings were held and several potential solutions were brainstormed. Six alternatives were developed and presented to the public, concerns brought by the public resulted in the elimination of three alternatives.

M-6 Non-Motorized Trail, Kent County, Michigan. Lead QA/QC Engineer for design and construction engineering for 7 miles of new non-motorized pathway to extend the Paul Henry Trail along the M-6 corridor to Kent Trail. The design included a railroad crossing, design of a grade separation at Division Avenue, boardwalk, retaining walls, wetland mitigation, and right-of-way.

35th Street over the Kalamazoo River, Galesburg, Michigan. Lead QA/QC Engineer for American Public Works Association award-winning design and construction engineering services for the replacement of 35th Street bridge over the Kalamazoo River, including surveying, permanent signing and pavement markings, maintenance of traffic plans, and wetland mitigation and design. The design accounted for a future boat launch area and hike-and-bike trail near the site.

Silver Line BRT Visioning, Streetscape Design, and Utility Infrastructure Station Design, Grand Rapids, Michigan. AECOM designed numerous aspects of the Silver Line's 33 stations including hardscape pavement design, landscaping and planting beds, electrical infrastructure design, and utility relocation designs for water services.

US-127BR from Townsend Road to US-127, St. John's, Michigan. Project Manager for design for improvements to 4.1 miles of US-127BR, including reconstruction between Baldwin Street and Steel Street with conversion to 3-lane pavement markings, watermain replacement, bridge removal and design of a precast culvert for a future nonmotorized path, traffic signals, permanent signing and pavement markings, and MOT plans.

I-94BL from Reid Street to Water Street, Port Huron, Michigan. Lead Road Engineer for the design for reconstruction of 2.6 miles of I-94BL in Port Huron, including watermain and sanitary sewer replacement, landscape improvements, street lighting, design of a "pocket park", traffic signals, permanent signing and pavement markings, and maintenance of traffic plans.

D Avenue over the Kalamazoo River, Kalamazoo County, Michigan. Lead QA/QC Engineer for design and construction engineering for complete bridge replacement, including survey, realignment of D Avenue approaching the bridge, hydraulic and scour analysis, culvert design, maintenance of traffic and public meetings. AECOM received a CRAMmy for public communications related to the 7-mile detour route.

Mosel Avenue from Westnedge Avenue to Kalamazoo River, Kalamazoo County, Michigan. Lead QA/QC Engineer for Design and construction engineering services for the rehabilitation of 0.83 miles of Mosel Avenue, including new curb and gutter, HMA base crush and shape, new storm sewer, traffic signal improvements, maintenance of traffic plans, construction staking, full-time inspection, and testing services.

Mike DeVries, PE

Quality Review

Education
BSE/University of Texas/1995
BSE/Calvin College/1993

Registration/Certification
Professional Engineer/MI

Years of Experience
With AECOM: 21
With Other Firms: 0

Mr. De Vries' technical experience includes design of maintenance of traffic plans for complex urban freeways and arterials, signing, pavement marking and traffic signal design, access management, EPE studies, EIS and PEL documentation, traffic impact studies, and roundabout design and analysis. Mr. De Vries also has extensive expertise in the areas of traffic simulation modeling and optimization of signal networks, arterial streets and isolated intersections.

I-94/Pipestone Road PEL Study; Berrien County, Michigan. Lead Traffic Engineer for the examination of potential improvements to the I 94/Pipestone Road interchange near Benton Harbor. Completed detailed analyses of Level of Service and traffic safety and assisted in leading an extensive stakeholder engagement campaign. Oversaw conceptual development of multiple interchange alternatives that improved traffic flow and safety. Authored the final technical report which included a Road Safety Audit, bridge scoping report, hydraulic analysis, and an environmental screening. The project was completed following the FHWA PEL process in order to streamline entry into NEPA.

US-131/I-96 Corridor Planning and PEL Study; Kent County, Michigan. Lead Traffic Engineer for a comprehensive corridor planning and early preliminary engineering (EPE) study for 30 miles of US-131 and 10 miles of I 96 encompassing 29 interchanges in Kent County using a Planning and Environmental Linkages (PEL) process. Completed a detailed traffic operations and safety analysis of the two corridors and prepared conceptual geometrics for the freeway, bridges, and interchanges, resulting in practical and buildable alternatives to modernize these corridors and enhance economic development opportunities over the next 25 years.

City of Adrian, Two-Way Street Study, Adrian, Michigan Lead Traffic Engineer for the detailed traffic and geometric study of the conversion of one-way streets in Adrian to two-way operations in order to improve wayfinding and enhance economic development, including analysis of city streets and MDOT trunkline (M-52 and US-223BR). Significant traffic simulation modeling of downtown Adrian to MDOT standards was completed for existing and future-year conditions, as well as preliminary intersection geometrics and cost estimates. Following approval of the conceptual plan, the final signing, signal, and pavement marking modifications were developed by URS.

Louis Glick Highway / Washington Avenue Two-Way Conversion, Jackson, Michigan. Project Manager for the Comprehensive traffic and geometric analysis for the conversion of I-94BL / US-127BR /M-50 (Louis Glick Highway and Washington Avenue) from one-way operation to two-way operation around the central business district of downtown Jackson, including traffic redistribution, traffic operations analysis, safety review, conceptual geometric modifications, and project cost estimates.

Grand Valley Metro Council – 4 Mile Road Corridor Study; Kent County, Michigan. Project Manager for a corridor study of 4 Mile Road, a primary county route providing the boundary between the City of Walker and Alpine Township. The study included a detailed examination of existing and future traffic volumes in order to determine the future roadway cross-section and an implementation plan that will allow the GVMC and local agencies to plan for future capital expenditures based on anticipated economic development initiatives. URS also worked with the various stakeholders to reach consensus regarding project methodology and the subsequent implementation plan for future improvements.

I-94BL from Reid Street to Water Street, Port Huron, Michigan: Lead traffic engineer for the design for reconstruction of 2.6 miles of I-94BL in Port Huron, including watermain and sanitary sewer replacement, landscape improvements, street lighting, design of a "pocket park", traffic signals, permanent signing and pavement markings, and maintenance of traffic plans.

Josh Bocks, MBA

Deputy Project Manager

Education
MBA/Business Administration/ Kaplan University/2013

BS/Geography/Michigan State University/2004

Registration/Certification
Certified Project Manager (AECOM)

Years of Experience
With AECOM: 1
With Other Firms: 12

Mr. Bocks has over 13 years of experience as a planner and has participated in multiple projects in a variety of fields of discipline. These projects include traffic modeling, access management, PD&E, and long range planning. His experience also includes working with strategic planning efforts, public involvement process, charrettes and workshops, and transit studies; as well as comprehensive plans, mobility studies, and transportation master plans.

KATS Pedestrian, Greenway & Transit Plan, Kalamazoo, Michigan. Deputy Project Manager to develop recommendations to connect nonmotorized infrastructure to existing transit routes and encourage commuting. The team identified potential new greenways, trails, and other non-motorized facilities that will connect with each other, to major activity centers, and to high ridership transit routes.

The Rapid Laker Line BRT Alternatives Analysis, Grand Rapids, Michigan. Serving as Deputy Project Manager Phase II of the Bus Rapid Transit alternatives along the 12-mile corridor connecting the Allendale campus of Grand Valley State University (GVSU) with downtown Grand Rapids.

Village of Palmetto Bay Bike & Pedestrian Master Plan. Project Manager for the Miami-Dade MPO and Village of Palmetto Bay for the development of a bicycle and pedestrian master plan to both connect the municipalities' facilities with those in surrounding communities but also to develop prioritized project for future development. This project included a vigorous public involvement plan that was accompanied by literature review of dozens of documents that included previous non-motorized plans, transportation master plans, and design guides. The analysis included a review of existing conditions and recent crash data. The final recommendations were created with careful consideration of both needs and available funding. The results of this effort won the "Award of Excellence" for "Outstanding Transportation Study" from the American Planning Association.

Cutler Bay Bike Ped Master Plan. Project Manager for a comprehensive non-motorized master plan for the Town of Cutler Bay. This project included literature review of dozens of documents that included previous non-motorized plans, transportation master plans, and design guides. The analysis included a review of existing conditions and recent crash data. The final recommendations were created with careful consideration of both needs and available funding. The public involvement of this effort included workshops and even a bike-a-thon to help increase awareness.

City of Southfield Non-Motorized Master Plan, Southfield, Michigan. Deputy Project Manager for the development of a Non-Motorized Master Plan to help coordinate with a recently completed downtown master plan. This sub-area plan began with a review of the previous planning efforts and on-going City sponsored projects. Public input included an on-line survey, and interviews with City staff and Lawrence Technological University's Transit Authority. Analysis was completed and issues that needed to be addressed were identified. Several pathway gaps were recommended to be filled, as well as miles of bike lanes and side paths depending upon location and past crash data for the area.

Village of Palmetto Bay Safe Routes to School Program Study. Project Manager for this effort to create a more favorable environment for non-motorized transportation to and from local schools. To complete this study, Josh had to coordinate multiple agencies and local jurisdictions, as well as technical review of several factors influencing transportation and behavior. In initiating the study, an examination of crash data was undertaken as the primary criteria for the Traffic Safety Team to select the schools for study. Safe Routes were recommended, as were projects along those routes to make them adequate for pedestrian and bicycle travel.

RTA Michigan Avenue Corridor Study, Detroit, Michigan. Transit Planner for a rapid transit corridor study evaluating options for transit investment and service in the 40-mile corridor linking Detroit, Ann Arbor, and Metro Airport. This ongoing study is scheduled to be completed in 2016.

LYNEE WELLS, AICP

principal + planner

wells@williams-works.com

Years of Key Experience

Project Management	●●●●●●●●●●●●○
Community Planning	●●●●●●●●●●●○○
Public Engagement Facilitation	●●●●●●●●●●○○○
Zoning Administration	●●●●●●●●○○○○○
Form Based Code	●●●●●●●○○○○○○

Bio

Ms. Wells is a community planner and project manager working with public and private sector clients. Lynee is a systems-thinker, connecting cause and effect through a shared education and engagement process unique to the time, place, and people involved. Interests include connectivity, livability, roots and culture, multi-generational collaborative places and processes.

Ms. Wells led the public engagement process for the Laker Line Advanced Conceptual Engineering Study leading to a locally-preferred alternative. After completing the Greater Lowell Vision Plan in 2013, her team completed a Downtown Placemaking Plan. Earlier that year, Ms. Wells organized the City of Grand Rapid's first Build a Better Block on State Street installing the City's first protected bike lane (protected by rolls of sod). Last year, she and a colleague organized GR UrbanExplorers, a multi-modal, urban field day for kids.

Ms. Wells recently completed the downtown Muskegon Form Based Code, a PlacePlan for the City of Niles., and a Form Based Code for Traverse City. She is currently leading community engagement for Grand Rapids' second Bus Rapid Transit line, the Laker Line and developing a bike plan for the City of Hastings.

Professional Credentials

Education

M.S., Community and Regional Planning
University of New Mexico

B.A., Geography and Spanish
University of Iowa

Registrations and Certifications

Form Based Code Institute

American Institute of Certified Planners

Certificate of International Business, University of Iowa

Professional Affiliations

American Planning Association

Michigan Association of Planning
Professional Development Officer

Downtown Grand Rapids Inc., Chairwoman
Alliance for Livability, Board Member

State Board of Speech Language Pathology
Member, Chair Disciplinary Committee

City of Grand Rapids Parking Services
Commission Member

williams&works
engineers | surveyors | planners

MAX DILLIVAN, AICP

community planner

dillivan@williams-works.com

Community Planning
GIS Mapping
Public Engagement Facilitation
Transportation Planning
3-D Visualizations / Urban Design

EDUCATION

Master of Urban and Regional Planning
Ball State University

B.S., Geography
Grand Valley State University

REGISTRATIONS AND CERTIFICATIONS

American Institute of Certified Planners

PROFESSIONAL AFFILIATIONS

American Planning Association

Michigan Association of Planning

Creston Neighborhood Association

Mayor's Millennial Advisory Board (City of Grand Rapids)

Citizen Labs

With degrees in geography and urban planning, Maxwell brings the latest skills and techniques in the field providing services in planning and design. His focus is on public engagement platforms, graphics and 3-dimensional renderings, and physical mapping projects including creating and customizing GIS datasets and utilizing spatial analytic tools to better inform policy recommendations and decisions.

Maxwell has assisted a wide range of communities and private clients in developing motorized and non-motorized transportation plans, sub-area studies, parks and recreation plans, master (comprehensive) plans, and zoning ordinances. Maxwell recently developed the 2015 Cannon Township (MI) Master Plan and the WestSide Area Specific Plan (Grand Rapids, MI), and is currently assisting on the Byron Township Master Plan (MI), the Pedestrian, Greenway, and Transit Plan for the Kalamazoo (MI) region, and the Kalamazoo to Grand Rapids Non-Motorized Interurban Trail Plan.

Additionally, Max provides planning services in the form of project composition, site plan review, and on-going zoning consultation.

williams&works

Eric Dryer, AICP

Existing Conditions Analysis

Education
BS/Biology/University of Michigan/2010

MURP/Environmental Planning/University of Oklahoma/2013

Registration/Certification
American Institute of Certified Planners

Years of Experience
With AECOM: 1
With Other Firms: 2

Mr. Dryer serves as a transportation planner in the AECOM Southfield, Michigan office and is responsible for assisting in various transportation projects around the state and region. He brings three years of transportation planning experience at AECOM and in Oklahoma City at the Metropolitan Planning Authority.

KATS Pedestrian, Greenway & Transit Plan, Kalamazoo, Michigan. Provided non-motorized planning to develop recommendations to connect nonmotorized infrastructure to existing transit routes and encourage commuting. The team identified potential new greenways, trails, and other non-motorized facilities that will connect with each other, to major activity centers, and to high ridership transit routes.

RTA Michigan Avenue Corridor Study, Detroit, Michigan. Currently assisting in the development of bus rapid transit corridor plan along Michigan Avenue for the Regional Transit Authority. The project currently involves data collection, analysis, mapping, and graphic work of various existing conditions in the Michigan Avenue Corridor as well as public outreach to the communities in the corridor.

Notre Dame Parking and Shuttle Study, South Bend, Indiana. Currently working with the University of Notre Dame to provide an update to their campus parking and shuttle system and determine a location for a new parking garage. Assisting with the development of scenarios for the University to implement as campus parking becomes more constrained by analyzing parking and development data, financial impacts, and travel patterns.

Detroit People Mover NTD Passenger Miles Traveled Report, Detroit, Michigan. Assisted with the development of the Passenger Miles Traveled reporting required for the National Transit Database (NTD). Lead the data collection portion of the project by managing the surveyors, aggregating the data, and summarizing the collected information. Assisted with the development of the Final Report.

SARTA 2015 Transit Development Plan, Canton, Ohio. Assisted with the development of the 5 year plan. Collected data, created maps and technical memos for the existing conditions in Stark County. Developed recommendations to improve SARTA's bus and paratransit service, assisted with public involvement, and created the final report document.

Ann Arbor Connector Alternatives Analysis, Ann Arbor, Michigan. Assisting in a project studying the feasibility of rapid transit in Ann Arbor, Michigan linking northeast and south Ann Arbor via transit in a dedicated right-of-way. The project includes public outreach, data collection, analysis, and graphic work.

Central Oklahoma Commuter Corridors Study, Oklahoma City, Oklahoma. Assisted in the development of an 18-month feasibility study of three commuter corridors in the Oklahoma City metro. LPAs utilizing commuter rail were selected that align with existing and abandoned freight rail corridors.

ACOG Regional Transit Vision, Oklahoma City, Oklahoma. Served as project lead on an effort to identify potential transit friendly corridors in the Oklahoma City metro that would benefit from increased funding. Worked with local transit agencies to identify new corridors and created updated, simplified, and stylized map.

Ray Schneider, AICP

Existing Conditions Analysis

Education
BS/Transportation/Western Michigan University/1980

Years of Experience
With AECOM: 18
With Other Firms: 10

Registration/Certification
American Institute of Certified Planners

Mr. Schneider is a senior transportation planner with experience transportation engineering design, analysis, project coordination and management. Mr. Schneider's technical skills include transportation planning, traffic engineering, traffic impact analysis, parking system studies, financial feasibility analysis, and research and assessment.

I-196 / I-96 Freeway Corridor Planning / Traffic Study, Grand Rapids, Michigan. Transportation planner involved with conducting a freeway corridor planning / traffic study for the purpose of developing a master plan for the I-196 corridor in the City of Grand Rapids. Personal responsibilities included data collection, coordination, traffic operations analysis utilizing HCS, and traffic forecasts using the local MPO'S TRANPLAN model. The study addressed existing problems and future needs and in turn help MDOT develop future construction strategies and phase various segmental projects along the corridor that will fit their master plan.

US-131/I-96 Corridor/PEL Study, Kent County, Michigan Crash Analysis Lead for corridor planning and Early Preliminary Engineering (EPE) for 30 miles of US-131 and 10 miles of I-96 encompassing 29 interchanges in Kent County using a Planning and Environmental Linkages (PEL) process. AECOM completed a detailed traffic operations and safety analysis of the two corridors and prepared conceptual geometrics for the freeway, bridges, and interchanges, resulting in practical and buildable alternatives to modernize these corridors over the next 25 years.

M-121 Access Management Plan, Ottawa County Transporation Planner for the development of an Access Management. Plan for M-121 (Chicago Drive). AECOM efforts focused on the segment between 40th Avenue and 80th Avenue, including capacity analysis and conceptual geometrics for reconstructing the existing divided roadway as an undivided roadway in order to avoid areas of poor soil and to create separation from the paralleling railroad just north of M-121.

Coldwater Study, Coldwater, Michigan. Project analyst for US 12 study through the City of Coldwater. Collected traffic data and computed capacities for intersections along US 12.

I-196 Baldwin Street Interchange Modification Report, Grandville, Michigan. Project analyst responsible for the analysis of alternative design concepts which improve traffic operations at the I-196 interchanges with 28th Street and Chicago Drive and on several affected surface streets. Performed capacity analyses with HCS for existing year and future year scenarios. Developed design year traffic projections and performed capacity analyses throughout the study area for several alternative design concepts, including a partial interchange at Baldwin Road, a connector on White Street from Wilson Avenue to Chicago Drive and a local structure across the Grand River connecting Wilson Avenue to Baldwin Road. The study will also analyze less expensive, TSM improvements such as re-timing of traffic signals and revised lane usage and lane markings. The results of the study will be included in an Interchange Modification Report, which MDOT will submit to FHWA.

US 31 Location Design Study, Holland to Grand Haven, Michigan. Project analyst for major corridor bypass study. Assisted in coordination of traffic data collection. Computed capacities and levels of service for intersections, ramps and weave sections, existing and future. Developed design year (2020) traffic projections based on computer network models and historical growth for various bypass alternatives.

East Grand River Avenue Traffic Study, East Lansing, Michigan. Project analyst for the study of traffic-related improvements to a one-mile segment of East Grand River Avenue on the north side of the Michigan State University campus. Coordinated all traffic data collection and analyzed existing intersection capacity analyses.

Grand Haven Robbins Road Traffic Study, Grand Haven, Michigan. Project analyst for a site access traffic study. Existing and future traffic conditions were assessed including analysis of four alternative site access configurations. Findings included recommendations for traffic control improvements and site access configuration.

Hannah "Hank" Kelley, AICP

Alternative Concept Evaluation

Education
BA/Political Science/Wayne State University/2012

MUP/Urban and Regional Planning/University of Michigan/2014

Registration/Certification
American Institute of Certified Planners

Years of Experience
With AECOM: 2
With Other Firms: 3

Mx. Kelley is an urban planner with experience in public transit, non-motorized, and community development planning, whose perspective on local planning is shaped by 5+ years working in the public, non-profit and private sectors. Areas of expertise include public and stakeholder engagement, data collection and summarization, spatial analysis, mapping, urban bus route and system analysis, and non-motorized audits.

KATS Pedestrian, Greenway & Transit Plan, Kalamazoo, Michigan. Assisted in safety analysis to develop recommendations to connect nonmotorized infrastructure to existing transit routes and encourage commuting. The team identified potential new greenways, trails, and other non-motorized facilities that will connect with each other, to major activity centers, and to high ridership transit routes.

Huron Street / I-94 Bridge Crossing Study – Ypsilanti, Michigan. Planner for a study of options for improving non-motorized transportation at the existing Huron Street Bridge over I-94. The study developed five alternatives, including elements such as shared use paths, pedestrian and bike lanes, and pedestrian-controlled traffic signals.

MDOT University Region Non-Motorized Plan Update. Worked with environmental planning staff and project partners to create up-to-date GIS inventory by compiling data from existing sources. Work included GIS quality control and digitization, and designing regional and county maps in Illustrator.

Laker Line Study, Grand Rapids, Michigan. Provided GIS and design support for this analysis of Bus Rapid Transit alternatives along the 12-mile corridor connecting the Allendale campus of Grand Valley State University (GVSU) with downtown Grand Rapids.

Regional Transit Authority of Southeast Michigan, Michigan Avenue Bus Rapid Transit Study, Detroit, Michigan. Assisted with development of technical memos, summarization/ analysis and graphical display of demographic data from regional agencies, US Census, and other sources; led key public engagement tasks including development of public outreach materials for meetings and on-line forums, arrangement of "pop-up" engagement events in corridor, and representation of project at public outreach events.

DDOT Bus Stop Infrastructure Project, Detroit, Michigan. Provided client with ground-truthed inventory of bus stops and improvement plan for shelters and bus stop amenities. Work included extensive peer review and outreach, best practices research, and coordination with other government entities.

Ann Arbor Connector, Ann Arbor, Michigan. Provided GIS, mapping and data analysis support as part of the NEPA process.

Seamless Fare Integration Study for the Detroit Region. Work included cataloging and analyzing materials from existing providers to produce an existing conditions report.

City of Ferndale, Michigan - Community and Economic Development Assistant. Assisted CED director, City Manager and staff with research, public meetings and information material. Coordinated with consultant on "Ferndale Moves!" multi-modal transportation plan, including steering committee meetings, strategic direction for bicycle facilities and amenities, and developing FerndaleMoves.com in WordPress. (with previous firm)

Jen McNeil Dhadwal, AICP

Alternative Concept Evaluation

Education
Master of Urban Planning and Policy/University of Illinois-Chicago/2004

BA/Vanderbilt University-Nashville/1993

Registration/Certification
American Institute of Certified Planners

Years of Experience
With AECOM: 13
With Other Firms: 10

Ms. McNeil Dhadwal is an urban and transportation planner who works on a broad range of economic development and transportation planning consulting engagements throughout the United States. Her project work includes planning and development/redevelopment strategies for public and private sector clients, most typically including state and local governments and transportation agencies.

Transit and Multi-Modal Planning Studies

Ms. McNeil Dhadwal is a leading AECOM resource for the analysis of transit-supportive land use and development patterns. She leads assessment and analysis tasks for feasibility studies, alternatives analyses, federal funding applications, and environmental actions for all transit modes. Her experience includes:

- Assessing land use plans and policies for transit-supportiveness.
- Guiding site selection for multi-modal transportation stations to optimize land use and local economic development benefits.
- Estimating the typology and potential capacity of transit- oriented development along transit corridors or lines as part of strategic plans.
- Designing small-area plans around current and proposed transit stations or transportation nodes, including real estate market analysis and outreach.

Transit Planning Studies

- Ann Arbor, Michigan (Ann Arbor Connector Feasibility Study): summarized national trends for land use and development impacts and benefits from transit system implementation.
- Lansing, Michigan (CATA Michigan / Grand River Avenue Transportation Study and Alternatives Analysis): led economic and real estate assessment for transit alternatives analysis study of three potential transit modes along a major corridor through Lansing, East Lansing and Meridian Township, Michigan.
- Detroit, Michigan (Woodward Avenue Light Rail): supported economic and land use analysis for Federal New Starts funding report.
- Detroit, Michigan (Detroit Transit Options for Growth): led economic and real estate assessment for transit alternatives analysis study of three potential transit alignments into Detroit's central business district.
- St. Paul, MN (Rush Line Pre-Project Development Study): Task manager for economic development analysis for pre-project development alternatives analysis of transit service from St. Paul to northeast suburbs.
- Dune Park, IN (NICTD Strategic Business Plan for Commuter Rail): assistant project manager and task lead for land use and outreach for study to identify investment opportunities for the railroad that maximize service benefits and support economic development; project conducted jointly with the Northwest Indiana Regional Development Authority.
- Concord, NH (Capitol Corridor Transit Alternatives): Task manager for land use policy and TOD analysis for alternatives analysis of rail and bus service extensions from Lowell MA (originating in Boston) to Nashua, Manchester and/or Concord NH.
- Minneapolis, MN (Nicollet-Central Transit Alternatives): Task manager for land use policy and TOD analysis for alternatives analysis of BRT and Streetcar through an urban 10-mile corridor.

Jen Byle, PE

Conceptual Design

Education
MS/Civil Engineering/Michigan State University/2012

BS/Civil Engineering/Michigan Technological University/2005

Registration/Certification
Registered Professional Engineer/MI

Years of Experience
With AECOM: 11
With Other Firms: 0

Ms. Byle is a transportation engineer responsible for road design, drainage design, and quantity calculations. Her projects range from multi-lane freeways and interchanges to local roads and non-motorized facilities. Ms. Byle is very familiar with both the AASHTO Bicycle Guidelines and the NACTO guidelines.

M-6 Non-Motorized Trail, Kent County, Michigan. Lead Design Engineer. Design and full CE for seven miles of new non-motorized pathway funded and constructed in three phases to extend the Paul Henry Trail along the M-6 corridor to Kent Trail, including a railroad crossing, a timber structure over an unnamed creek, a grade separation at Division Avenue, retaining walls, wetland mitigation, and right-of-way.

Two-Way Street Study, Adrian, Michigan. Engineer. Detailed traffic and geometric study of the conversion of one-way streets in Adrian to two-way operations, including analysis of city streets and MDOT trunkline (M-52 and US-223BR). Significant Synchro modeling of downtown Adrian to MDOT standards was completed for existing and future-year conditions, as well as preliminary intersection geometrics and cost estimates.

9th Street Water/Sewer/Snowmelt Project, Holland, MI Design engineer. Full design and construction engineering services for 1.35 mi of hot mix asphalt reconstruction, drainage, watermain, sanitary, snowmelt, concrete curb, gutter, sidewalk and ramp, signing and pavement markings on 9th Street from west of Washington Avenue to 8th Street in the city of Holland.

I-75 Integrated Corridor Management Design, Wayne County, Michigan. Road Engineer. Design of an Integrated Corridor Management (ICM) system that utilizes ITS devices such as dynamic trailblazing signs, interconnected traffic signals, and surveillance cameras to improve mobility, safety, and alternate route performance when major incidents occur on I-75 between McNichols Road and M- 102 (Eight Mile Road).

East Paris Avenue from 60th Street to 52nd Street, Kentwood, Michigan. Engineer. Design and full CE services for reconstruction of one mile of East Paris Avenue, including widening to a three-lane pavement with curb and gutter and an enclosed storm sewer, sanitary sewer upgrades, geo-grid structural base, fire hydrant relocation, concrete culvert liner, pavement markings and signing, new sidewalk, grouted rip rap and ADA ramps.

Concrete Pavement Data Collection, Statewide, Michigan. Engineer. Data collection and investigation for 130 concrete pavement projects constructed over the past 20 years, including field reviews of pavement sections to determine pavement type and amount of distress, review of construction files to determine the year the project was built and what type of aggregates were used for the base and concrete mix, and database development to organize the data.

Michigan Avenue / River Avenue Reconstruction, Holland, Michigan. CADD Designer. Design and full CE for the reconstruction of Michigan Avenue from 28th Street to 19th Street and River Avenue from 19th Street to the Black River through downtown Holland, including storm and sanitary sewer, water main, traffic signals, signing and pavement markings, street lighting design, and streetscape improvements.

Novi 10 Mile Road Pathway, Novi, Michigan. Engineer. This project included the construction of a new sidewalk along the north side of Ten mile Road between Catherine Industrial Drive to the CSX Railroad Crossing. A new sidewalk crossing of the CSX Railroad was included as part of the project. Drainage improvements were also included in the design. AECOM provided full design, right of way, and construction phase services to the City of Novi for the project. Legal descriptions for the pathway right of way and coordination with the railroad concerning the work were completed by AECOM.

Brian Czosnyka, PE

Conceptual Design

Education
BS/Civil Engineering/
University of Illinois-Urbana-Champaign/2001

Years of Experience
With AECOM: 15
With Other Firms: 1

Registration/Certification
Registered Professional Engineer/IL

Mr. Czosnyka's experience focuses on urban roadway and bike trail design, creating complete streets and multi-modal connections. His experience includes a variety of preliminary engineering, planning (Phase I) and detailed design (Phase II) projects. Mr. Czosnyka's experience includes complex roadway geometrics and intersection design, site planning, streetscape improvements, ADA improvements, bike and pedestrian path layout, and transit studies.

City of Blue Island. Cal-Sag (East) Multi Use Trail, South Suburban Cook County, Illinois. Project Manager for the design of the eastern portion of the 26-mile long bike trail along the Cal-Sag Channel from Palos Park to Burnham, Illinois. The Cal-Sag Trail connects 14 communities, 5 commuter rail stations, multiple schools, colleges and jobs. As a park, the Cal-Sag Trail puts 94 acres of outdoor recreational space within a 10 minute walk of almost 300,000 people. Responsibilities include project coordination, final design and preparation of construction plans, specifications, and engineer's opinion of cost for proposed improvements.

Forest Preserve District of Cook County, North Branch Trail Extension, Chicago, Illinois. Project Manager for the 3-mile extension of the existing 18-mile long North Branch Trail. The extension of the North Branch Trail includes two new bridge crossings over the North Branch of the Chicago River and the Amtrak / Metra – North Line Railroad in the Edgebrook neighborhood of Chicago. When completed, the Trail will provide a safe and direct off-street connection between the Irene Hernandez Picnic Grove on the City's northwest side and the Chicago Botanic Garden in Glencoe, Illinois.

City of Evanston, Evanston Lakefront Corridor Bicycle Path, Evanston, Illinois. Project Engineer for design of a bicycle and pedestrian path system with ornamental lighting through Evanston's lakefront park system. The 1.1-mile trail provided a key link along the City's lakefront, connecting numerous parks and neighborhood amenities from Lee Street Beach to Northwestern University.

Muskegon Lakeshore Trail, City of Muskegon, Michigan. Project Manager for 2.4 mile lakeshore trail on the southern shore of Muskegon Lake. The Enhancement funded project included bituminous trail and over 800 feet of pilesupported boardwalks. [Prior to AECOM]

Kollen Park Boulevard and Heinz Waterfront Walkway, Holland, Michigan. Project landscape architect for $3 million waterfront project. Improvements include lakeshore boardwalk with fishing and overlook decks, lighting, boat launch and parking. Construction also included the realignment of an industrial railroad spur to eliminate pedestrian and vehicular crossings. Park improvements were partially funded with MDNR Trust Fund Grant money. [Prior to AECOM]

Chicago Department of Transportation, Division of Project Development, Lincoln, Ashland, Belmont Streetscape – Section 2, Chicago, IL. Project Manager for the design of streetscape and infrastructure improvements to seven blocks of arterial and collector roadways, including new sidewalk, pavement, vaulted sidewalk filling and restoration, and ornamental street lighting. Pedestrian and bicyclist movements have been prioritized as part of the redesign of the major, 6-legged intersection.

Phillip J. Vogelsang, PE
Technical Advisor

Education
BS/Civil Engineering/
University of Michigan

MS/Civil Engineering/
University of Michigan

Registration/Certification
Registered Professional Engineer/MI

Years of Experience
With AECOM: 16
With Other Firms: 17

Mr. Vogelsang has 33 years of design and project management experience. He has an extensive background designing non-motorized trail and bike path projects, applying AASHTO and ADA design guidelines and pedestrian bridge and tunnel design.

I-94 Crossing, Ypsilanti, Michigan. Engineer for a study of options for improving non-motorized transportation at the existing Huron Street Bridge over I-94. The study developed five alternatives, including elements such as shared use paths, pedestrian and bike lanes, and pedestrian-controlled traffic signals.

M-6 Non-Motorized Trail, Kent County Road Commission Phases 1 - 4, Kent County, Michigan. Project Manager for the design and construction engineering for over 10 miles of new non-motorized pathway to extend the Paul Henry Trail along the M-6 corridor to Kent Trail. The design included a railroad crossing, design of a grade separation at Division Avenue, boardwalk, retaining walls, wetland mitigation, and right-of-way.

Novi Greenways Trail Phase 1, Novi, Michigan. Engineer for the design and the preparation of plans and specifications for the Greenways Development Phase 1 project, which is a non-motorized pathway extending from the ITC Community Sports Park to Fire Station #4 on Ten Mile. This initial design phase includes survey and base plans which will then be used to determine the final design scope.

Washtenaw Border to Border Trail, Dexter, Michigan. Lead Engineer for a 1000 foot extension of the existing trail system through Warrior Park. Improvements include over 700 feet of pile-supported boardwalk, two overlook decks and a bridge over Mill Creek.

Novi 10 Mile Road Pathway, Novi, Michigan. This project included the construction of a new sidewalk along the north side of Ten mile Road between Catherine Industrial Drive to the CSX Railroad Crossing. A new sidewalk crossing of the CSX Railroad was included as part of the project. Drainage improvements were also included in the design. AECOM provided full design, right of way, and construction phase services to the City of Novi for the project. Legal descriptions for the pathway right of way and coordination with the railroad concerning the work were completed by AECOM.

Grand River Greenway, Spring Lake, Michigan. Project Manager for the development of construction documents and construction oversight for a CMAQ/MDNRE funded 0.60 miles non-motorized trail along the Grand River shoreline, including over 800 feet of elevated boardwalk through designated wetlands, overlook decks, floating docks and over 2,300 feet of paved trail.

Non-Motorized Trail Experience
Mr. Vogelsang has acted as project manager and / or lead design engineering for numerous non-motorized path projects throughout Michigan. A few of these include:

- Ottawa County Road Commission, Michigan - Riley Street non-motorized path and pedestrian tunnel to facilitate crossing to Zeeland High School. AECOM processed the grant application, prepared bid plans and provided full construction engineering services.
- Blackman Township, Michigan - Airport Road, one mile bituminous non-motorized path east of Jackson County Airport. Design included extension of major drain culvert to avoid cost of pedestrian bridge.
- City of Rockford, Michigan - Pedestrian bridge crossing over tributary to Rogue River as part of the "missing link" in The White Pine Trail System.
- Village of Fife Lake, Michigan - Non-motorized path through downtown village area constructed concurrently with reconstruction of widened curb and gutter street section. This project was followed by a second phase that included street lights, for which AECOM prepared the successful grant application.

Stan Wang, PE, PTOE

Technical Advisor

Education
BS/Civil Engineering/ University of Illinois-Urbana-Champaign/1998

MS/Civil Engineering/ University of Illinois-Urbana-Champaign/1999

Registration/Certification
Registered Professional Engineer/IL

Professional Traffic Operations Engineer/IL

Years of Experience
With AECOM: 16
With Other Firms: 2

Mr. Wang is a civil and traffic engineer with a variety of experience in the planning and design of urban roadways and infrastructure. His roadway design experience includes a mix of preliminary engineering/ planning (Phase I) and final design (Phase II) projects, with specific skills in urban roadway and complex intersection design; construction staging/maintenance of traffic; streetscape improvements; planning and design of complete street solutions to incorporate transit, bicycle, and pedestrian facilities; roadway signing, sign structure design, Phase I coordination, and project development reports; and preparation of construction plans, specifications, and opinions of cost. Mr. Wang's traffic engineering expertise covers urban arterials, major expressways, and complex interchanges including traffic simulation modeling; traffic forecasting; freeway, arterial, and local intersection analysis; transit signal priority strategies and technologies; traffic signal design; and signal timing/coordination.

City of Evanston, Lakefront Corridor Phase I Engineering Study, Evanston, Illinois. Project manager for the Phase I engineering study (Group I categorical exclusion) to design pedestrian and bicycle facilities within the lakefront park system.

City of Evanston, Evanston Lakefront Corridor Bicycle Path, Evanston, Illinois. Project manager and engineer of record for the final design and preparation of construction plans, specifications, and engineer's opinion of cost for a bicycle and pedestrian path system with ornamental lighting through the lakefront park system.

Chicago Department of Transportation, Cherry Avenue Bridge over North Branch Canal Superstructure Rehabilitation, Chicago, Illinois. Project civil engineer of record for repurposing a historic railroad truss bridge into a bicycle and pedestrian facility.

Chicago Department of Transportation, Division of Engineering, Wells Street Bascule Bridge Rehabilitation, Chicago, Illinois. Project civil engineer responsible for the development of a Phase 1 project development report (Group I categorical exclusion) for one of the most complex, double-leaf, trunion style, double-deck bascule bridges in the city involving a critical link across the Chicago River into the Downtown Loop area for cars and the Chicago Transit Authority's Brown and Purple elevated train lines. Also responsible during Phase II for the development of detour routes and maintenance of traffic plans for the short term closure of the bridge.

City of Evanston, Lakefront Corridor Master Plan, Evanston, Illinois. Project engineer for development of a master plan to guide the redevelopment of the lakefront within city limits. Safety, connectivity, and accessibility improvements were important components to this plan which emphasized natural enhancement and sustainable maintenance of the city's lakefront parks and beaches.

City of Chicago, Green Urban Design Framework Plan, Chicago, Illinois. Member of the public right-of-way task force appointed to provide recommendations on the design, management, and operation of Chicago's public right of way that will help maximize its environmental benefits while reducing negative impacts for current and future generations. This task force helped identify initiatives that could be implemented into the Chicago green urban design framework plan to improve sustainability.

AECOM

02

Experience & Capacity

02. Experience & Capacity

AECOM is at the forefront in the concept of complete streets and its components of planning, design, and construction of roadway and non-motorized projects. AECOM continues to set the standard for developing new approaches and designs, improving constructability with cost-effective installation methods, integrating green design features and enhancing vehicular, transit, pedestrian, and bicycle safety. These techniques can create a safer environment for mobility in all modes as well as boost economic activity and create a sense of community in adjacent neighborhoods.

The specific team who will be working on this project has completed corridor studies and system analysis on projects from around the country and on systems of all sizes and although we are globally renowned, we are most proud of our ability to bring our distinguished resources to provide client focused and place-focused solutions locally.

The components of this planning process will involve a wide range of activities. Each of them is critical to developing innovative designs and cost-effective solutions to meet existing and projected transportation needs for the Napier Avenue corridor. To arrive at a viable plan, one that addresses real mobility needs and financing capacities, it is necessary to address several key elements. In AECOM's transportation planning and design process, those elements include stakeholder engagement, operational analysis, conceptual design, engineering design, and financial feasibility planning.

The following pages detail just a few of our projects that most closely relate to Napier Avenue. These projects are relevant in size and scope to this effort, and demonstrate our team's cohesion on numerous successful projects.

Reduce speeds where necessary

Make motorists aware of the speed limit to improve pedestrian safety

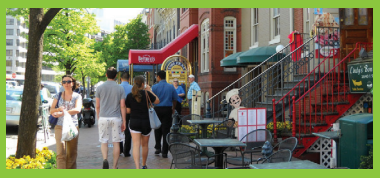
Invigorate neighborhoods and create a sense of community

Revitalize neighborhoods and bring people together to create a culture of engagement

Increase safety with crosswalks and medians

Increase awareness of places where people may cross the street safely

Boost economic activity by drawing new business



Expand economic opportunity and create a culture of engagement

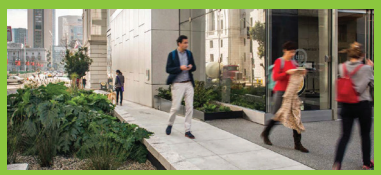
Promote active transportation and physical activity

Provide a safe environment to go outside and play, which is essential to combat the epidemic of childhood obesity

Provide safe, low-stress cycling facilities

Ensure cyclists can access areas throughout a city without being an extremely confident rider

Reduce harmful emissions



Provide an enticing atmosphere for people to get out of their cars.

Encourage a compact urban forum

Expand mobility choices for safe and convenient travel

Remove barriers for those with access issues

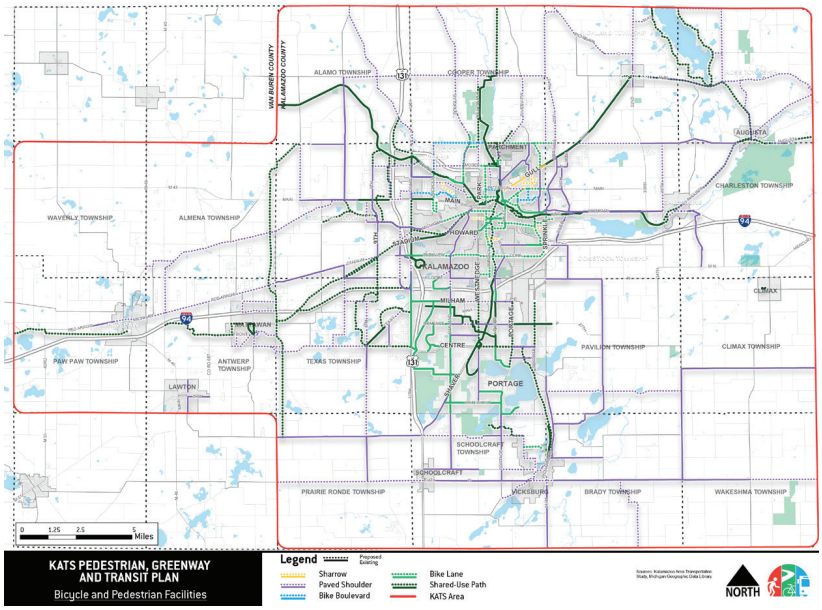
Povide a safe access for all users, including people with disabilities

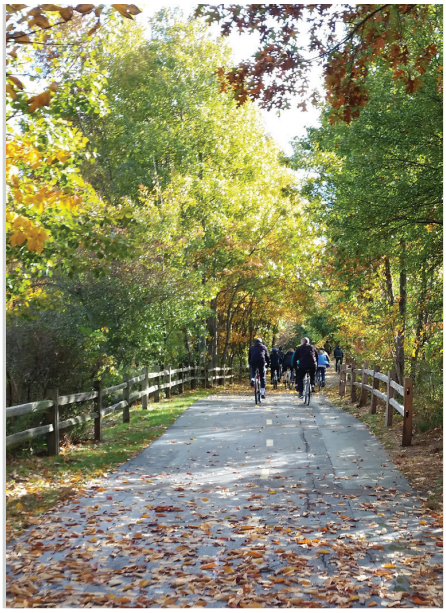
Integrate locations for green stormwater management

Replenish groundwater supplies, improve air quality, and provide connections between parks and open space

The following project examples demonstrate our team's understanding and experience at successfully delivering projects of similar nature to the services outlined in the RFP.

Project	Key Staff	Stakeholder Engagement	Non-Motorized Planning	Traffic & Street Operations	Conceptual Design	Crash Analysis	Non-Motorized Design & Engineering	Roadway Design & Engineering	GIS Mapping & Analysis
KATS Pedestrian, Greenway and Transit Plan	Jeromie Winsor Josh Bocks Eric Dryer Hank Kelley Lynee Wells (William & Works) Max Dillivan (William & Works)	✓	✓	✓	✓	✓			✓
I-94 Huron Street Crossing Feasibility Study	Jeromie Winsor Phil Vogelsang Hank Kelley Jen Byle	✓	✓	✓	✓				✓
I-94 Pipestone Interchange PEL Study	Sean Kelsch Mike DeVries	✓		✓	✓	✓			✓
MDOT University Region Non-Motorized Plan	Jeromie Winsor Phil Vogelsang Hank Kelley	✓	✓						✓
Louiis Glick Highway / Washington Avenue Two-Way Street Conversion	Mike DeVries Sean Kelsch	✓	✓	✓	✓	✓		✓	
Woodward Avenue Widetrack Loop (Two-Way) Traffic Study	Josh Bocks Ray Schneider Mike DeVries	✓	✓	✓	✓	✓	✓	✓	✓
M-6 Non-Motorized Trail	Phil Vogelsang Jen Byle	✓			✓		✓		
Laker Line BRT	Jeromie Winsor Josh Bocks Eric Dryer Jen McNeil	✓		✓	✓	✓			✓
Michigan Avenue Alternative Analysis	Jeromie Winsor Josh Bocks Hank Kelley Eric Dryer	✓	✓	✓	✓	✓			✓
9th Street Water/Sewer/ Snowmelt Project	Sean Kelsch Jen Byle						✓	✓	✓

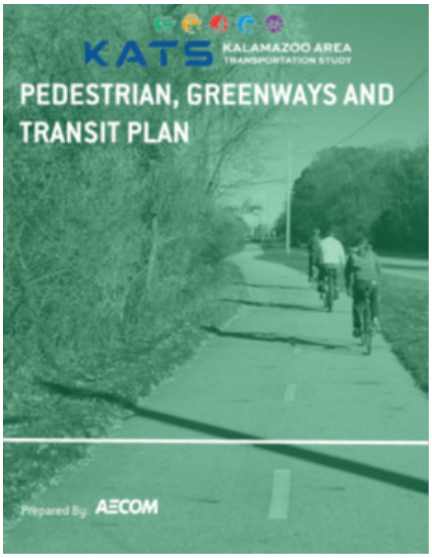




KATS Pedestrian, Greenway & Transit Plan

The Kalamazoo Area Transportation Study (KATS) is prioritizing new nonmotorized travel options for their region and is looking to connect this new infrastructure to existing transit routes. As part of the Pedestrian, Greenway, and Transit Plan, the AECOM team has identified connections between new and existing non-motorized infrastructure and with the Kalamazoo Metro Transit (KMetro) network, with the goal of increasing commuting by alternative modes of transportation. These potential connections between the transit network and the non-motorized network will help KMetro riders with "last mile" connections, and further extend the reach of the existing transit network.

A number of greenways and other on-street non-motorized infrastructure have been identified by the AECOM team. In a series of public meetings, participants will be asked to provide feedback on the recommendations and submit additional ideas for greenways. The proposed facilities will be evaluated against the goals developed for the project, including integrating non-motorized facilities with the transit network and determining new greenways corridors. A prioritized list of projects will be developed based on the scoring criteria from the KATS 2045 Metropolitan Transportation Plan and input from the public. The final list of projects is to be compiled, as part of the Final Report, into a project implementation tracking tool for KATS staff to use to keep track of the progress made toward achieving the plan.



Client / Sponsoring Agency
Kalamazoo Area Transportation Study

Start date
10/2016

Completion date
On-going

Budget
$125,000

Project Team
Jeromie Winsor (Projject Manager)
Josh Bocks (Deputy Project Manager)
Eric Dryer (Non-Motorized Planning)
Hank Kelley (Safety Analysis)
Lynee Wells - William & Works (Public Engagnement)
Max Dillivan - William & Works (Public Engagement)

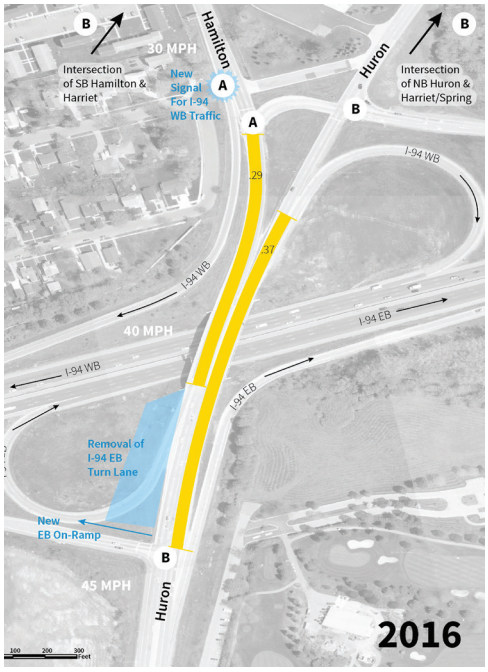
Client Reference / Sponsoring Project Manager
Steve Stepek, AICP, Senior Planner
5220 Lovers Lane, Suite 110
Portage, MI
E SStepek@katsmpo.org
T (269) 343-0766

I-94 Huron Street Crossing Feasibility Study

Ypsilanti, Michigan

In 2015, AECOM completed a study of options for improving non-motorized (pedestrian and bicycle) transportation at the existing Huron Street Bridge over I-94. The bridge connects the City of Ypsilanti to Ypsilanti Township and has been identified in numerous previous plans as a deficient and unsafe link in the local non-motorized network.

The study developed five alternatives for improving the crossing environment at Huron Street and I-94, including elements such as shared use paths, pedestrian and bike lanes, as well as other amenities like pedestrian-controlled traffic signals. Through stakeholder involvement and agency coordination, the study selected the preferred options that will now advance toward implementation. The project is currently seeking funding.



Client / Sponsoring Agency
Washtenaw Area Transportation Studty

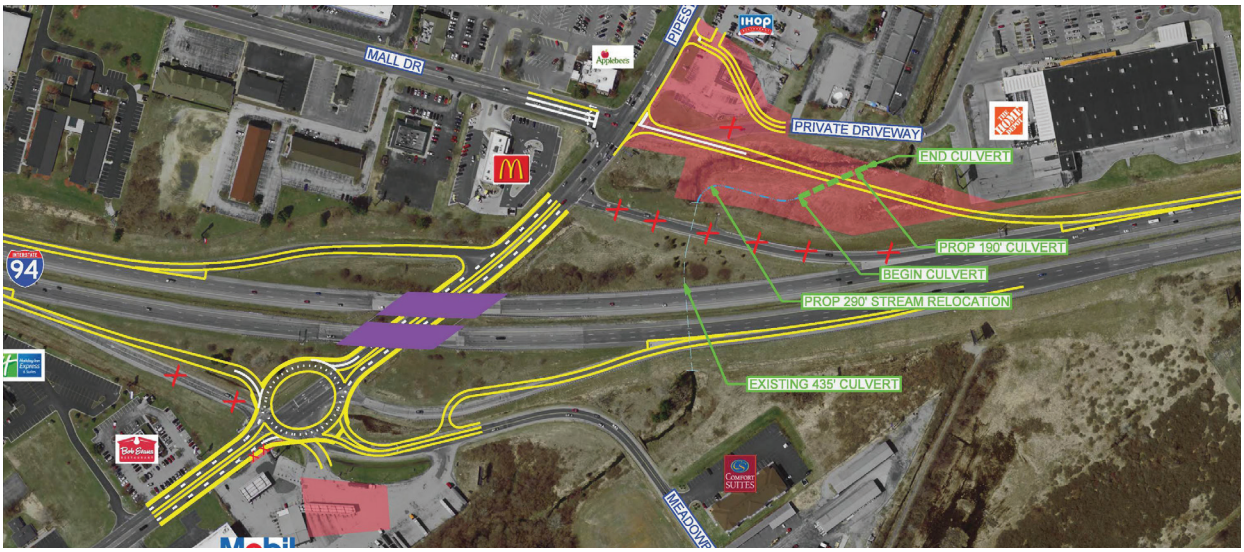
Start date
6/2014

Completion date
5/2016

Budget
$90,000

Project Team
Jeromie Winsor (Project Manager)
Phil Vogelsang (Conceptual Design)
Hank Kelley (GIS Analysis)

Client Reference / Sponsoring Project Manager
Nick Sapkiewicz
220 North Main, B-35
Ann Arbor, MI 48107
E sapkiewiczn@miwats.org
T (734) 994-3129



I-94 / Pipestone Interchange PEL Study

Berrien County, MI

AECOM (URS) was retained by the Michigan Department of Transportation (MDOT) to study potential improvements to the I-94/ Pipestone Road interchange in Berrien County. The existing bridges carrying I-94 over Pipestone Road are functionally obsolete and are in need of rehabilitation. AECOM completed a formal bridge scoping study which resulted in a recommendation that the bridges be replaced.

Understanding that bridge replacement is a long-term improvement within the interchange, MDOT retained AECOM to examine and consider whether other interchange improvements should be considered as part of a future project to replace the bridges. AECOM completed a detailed traffic analysis, which revealed an ongoing congestion problem at the westbound I-94 off-ramp and the intersection of Pipestone Road and Mall Drive just north of the westbound I-94 off-ramp.

AECOM conducted three meetings with key stakeholders that included adjacent business owners, the Road Commission, and the local MPO. The first meeting focused on developing a common understanding of what the issues and concerns were with the interchange and how it operated. Potential solutions were brainstormed. The second meeting included a presentation of six (6) potential interchange alternatives that AECOM developed in response to the concerns raised in the first meeting. The key stakeholders provided comments on the six alternatives and assisted in developing criteria for ranking and comparing them. The third key stakeholder meeting involved a discussion of the rankings and the decision to eliminate three of the alternatives.

After the three stakeholder meetings, AECOM developed the remaining three interchange alternatives in more detail and presented them at a public information meeting. After the public meeting, AECOM developed a technical report of the project findings, including completion of the Planning and Environmental Linkages (PEL) questionnaire, so that the remaining alternatives could enter the NEPA process if necessary. The final technical report included a traffic and safety analysis, a Road Safety Audit, bridge scoping report, hydraulic analysis, PEL documentation, and an environmental screening.

Client / Sponsoring Agency
Michigan Department of Transportation

Start date
12/2012

Completion date
9/2012

Budget
$599,770

Project Team
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Tara Weise (Project Engineer)

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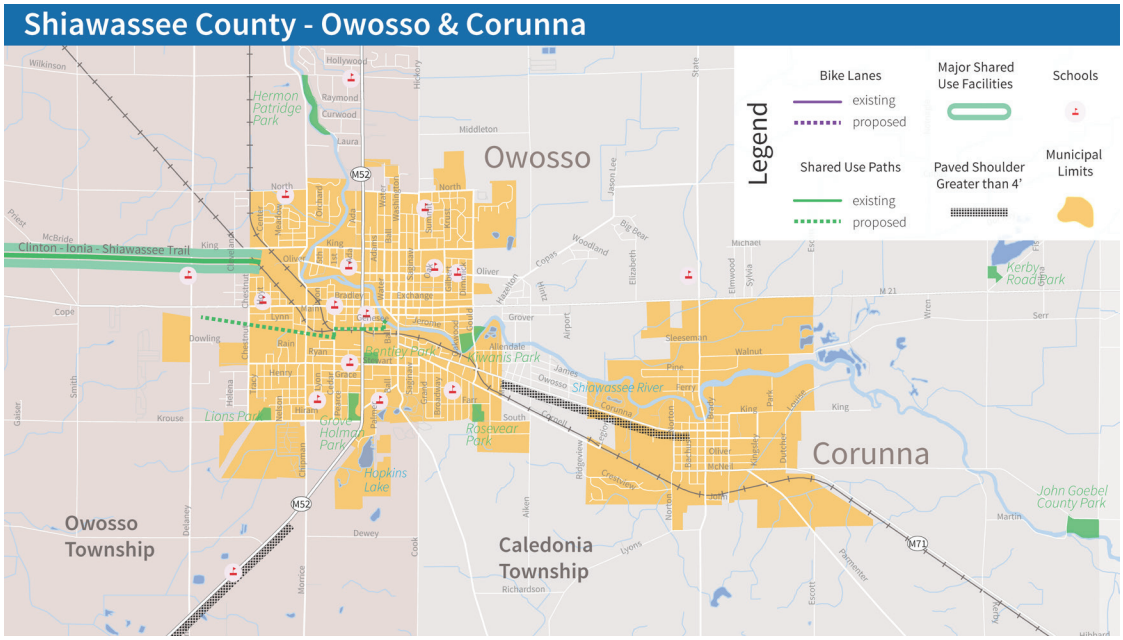
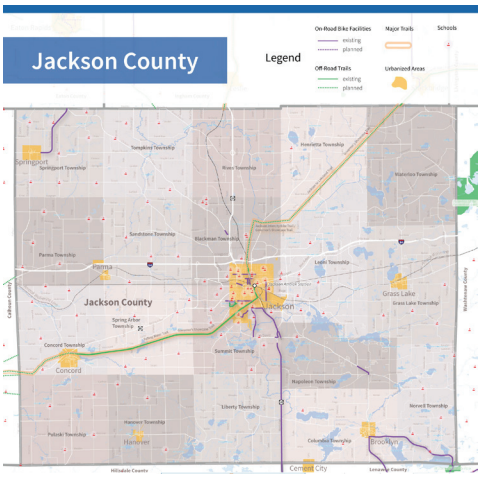


MDOT University Region Non-Motorized Plan

As a subconsultant to Living Lab, AECOM provided supported for this compilation plan of existing and future non-motorized features over a multi-county region. Specific elements led by AECOM included:

- Development of a comprehensive digitized database of existing and future non-motorized facilities
- Detailed mapping of infrastructure for plan documents and public engagement
- Support for public and stakeholder engagement efforts with organizations and the public withing each county of the region.



Client / Sponsoring Agency
Michigan Department of Transportation

Start date
8/2014

Completion date
8/2015

Budget
$150,000

Project Team
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Phil Vogelsang (Engineering Design)
Hank Kelley (GIS Analysis)

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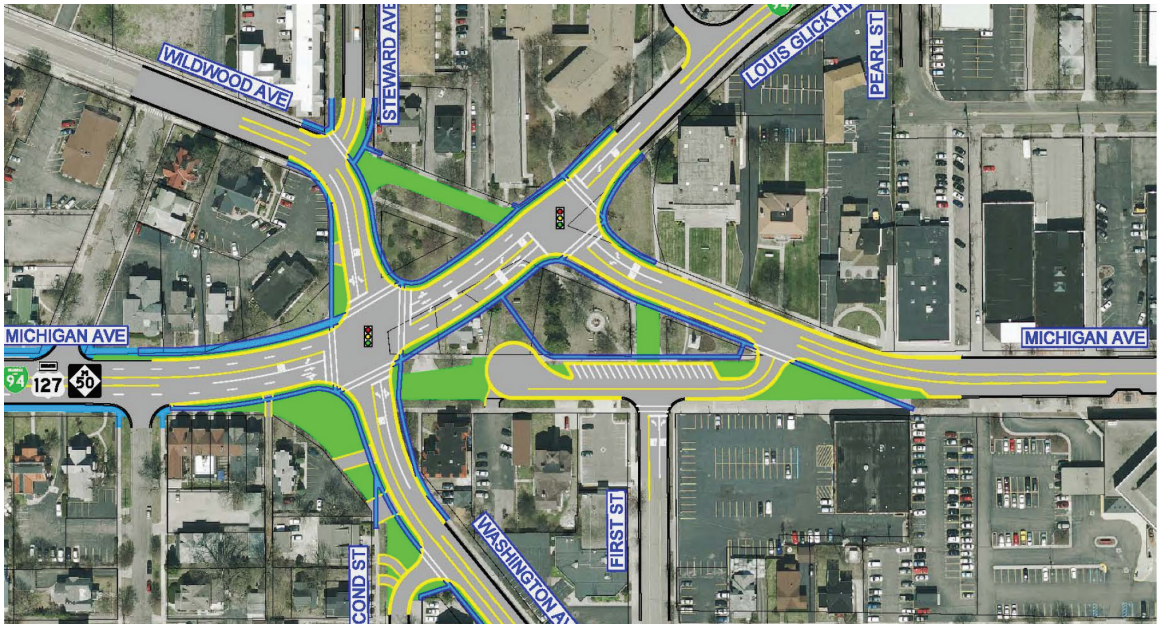

Louis Glick Highway / Washington Avenue Two-Way Street Conversion

Jackson, MI

AECOM was retained by the City of Jackson to complete a detailed traffic study for the potential conversion of existing one-way streets into two-way roadways.

Louis Glick Highway carries westbound traffic along the north side of the Central Business District, while Washington Avenue carries eastbound traffic along the south side. Significant coordination with the Michigan Department of Transportation (MDOT) was required since Louis Glick Highway and Washington Avenue are actually MDOT trunkline routes, carrying the I-94BL, US-127BR, and M-50 route designations. AECOM also participated in public outreach endeavors, including public open houses, meetings with key city staff, and presentations to emergency services. Coordination with Amtrak was also required as the Amtrak line crosses Louis Glick Highway.

AECOM collected turning movement counts and intersection inventories in order to generate a traffic simulation model of the existing one-way street system using Synchro software. A detailed redistribution of traffic was then completed, assuming the two-way conversion. Annual growth rates were developed by MDOT. Origin-destination data was collected at key intersections to estimate the amount of traffic redistribution that would occur. Preliminary intersection layouts were prepared in plan view in order to determine intersection laneage, intersection curb radius modifications, the need for new traffic signals, turn prohibitions, preliminary traffic signing needs, and railroad crossing impacts. The analysis revealed that neither roadway will require widening. The existing three lane cross-section of each street will remain, but will be striped as one lane in each direction with a two-way center left-turn lane.

The simulation models of the proposed two-way street system were presented to the City and to MDOT for review. Multiple iterations were developed in order to address the comments and concerns of MDOT and the City. The study resulted in the design of the two-way conversion, which is now under construction.

Client / Sponsoring Agency
City of Jackson

Start date
6/2014

Completion date
7/2015

Budget
$57,500 (fee)

Project Team
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Sean Kelsch

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Woodward Avenue Widetrack Loop (Two-Way) Traffic Study

The Michigan Department of Transportation (MDOT) has partnered with the City of Pontiac and Oakland County to examine the possibility of converting the existing Woodward Widetrack Loop (i.e. the Loop) around Pontiac and other one-way trunkline arterials to two-way operation in order to improve connectivity between the Central Business District (CBD) and adjacent neighborhoods. The Loop currently acts as a barrier, separating downtown from the community with wide one-way streets that are not pedestrian-friendly, promote high vehicle speeds, and create circuitous travel paths. AECOM completed this study which included conceptual design and has now begun the 30% design of the conversion.

A comprehensive stakeholder engagement campaign was undertaken in order to: 1) understand the key issues and concerns associated with the existing roadway network, 2) brainstorm potential solutions to any safety or capacity issues that were identified, and 3) develop criteria to compare potential solutions. Multiple "build" alternatives were generated and examined in detail as well as a No-Build Alternative that maintained the existing.

The project is located on the Woodward Avenue Widetrack Loop (1-75 Business Loop) in the city of Pontiac. The study area will extend approximately in a three mile radius around the Woodward Loop in Auburn Hills, Bloomfield Township, and Waterford Township. This project builds off the previous work and expands the study area (previously confined to the Loop) to fully analyze traffic operations and safety for up to four alternatives.

Client / Sponsoring Agency
Michigan Department of Transportation

Start date
4/2016

Completion date
6/2017

Budget
$322,130

Project Team
Josh Bocks (Deputy Project Manager)
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RTA Michigan Avenue Transit Corridor Study

Detroit, MI

The newly established Regional Transit Authority (RTA) of Southeast Michigan was formed with the purpose of coordinating services of the existing transit systems (DDOT, DTC, SMART, and AAATA) and conducting corridor planning studies to enhance public transportation options in the region. In 2015, AECOM began leading the study of the 38-mile Michigan Avenue Corridor, which connects Detroit, Ann Arbor and Metro Airport.

AECOM conducted a public transit corridor alternatives analysis and environmental permitting study between downtown Detroit, Metro Airport, and Ann Arbor.

The planning study evaluated multiple bus and rail transit alternatives against the overall goals of the Regional 4-County Master Plan. The goals included improved transit in the corridor, improved regional mobility, increased travel options and destination choices, and expanded opportunities for transit-oriented development (TOD) along the corridor. These potential benefits were weighed against the associated costs of the alternatives, as well as the potential for the RTA to advance them through the FTA New Starts/Small Starts process.

The resulting recommended Locally Preferred Alternative (LPA) featured a series of 3 projects: a regional rail connection for long-distance trips between Wayne and Washtenaw Counties, a Bus Rapid Transit

in the densely populated areas on the East end of the corridors, and a Bus Rapid Transit in the densely populated areas of the West ends of the corridors. Each project consisted of a blend of commuter/ regional rail, bus rapid transit in dedicated median lanes, airport express coach services, feeder transit, and non-motorized transportation facilities.

Client / Sponsoring Agency
Regional Transit Authority of Southeast Michigan

Start date
2014

Completion date
2016

Budget
$2.3 million

Project Team
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Hank Kelley
Eric Dryer

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9th Street Water/Sewer/Snowmelt Project

Holland, MI

Full design and construction engineering services for 1.35 mi of hot mix asphalt reconstruction, drainage, watermain, sanitary, snowmelt, concrete curb, gutter, sidewalk and ramp, signing and pavement markings on 9th Street from west of Washington Avenue to 8th Street in the city of Holland.

Reconstruction of 9th Street from Kollen Park Dr to the 8th Street transition and College Avenue from 10th Street to 8th Street. Parking lanes were added between River Avenue and Columbia Avenue, and a bike lane was added between River Avenue and Lincoln Avenue along the north side of 9th Street. Utility work within the limits of roadway (water main, snowmelt transmission lines, and storm sewer) and decorative brick sidewalk and ADA compliant sidewalk ramps were also constructed with this project.

Two mid-block crossings were also added near Hope College with pedestrian activated beacons and overhead cross walk signage. 3100 feet of new bike line was added to 9th Street to accommodate the growth of bicycle traffic in and around the City of Holland. At the terminus of the new bike lane, "Share the Road" signage was added to bring the presence of bicycles to motorists' attention.

Both the parking lane and bicycle lane were added to the existing roadway cross section without removing the existing curb. The existing 9th Street cross section was three eastbound lanes. The new cross section features two eastbound lanes and bike lane and parking lane.

Client / Sponsoring Agency
City of Holland

Start date
7/2015

Completion date
4/2017

Budget
$7,125,000

Project Team
Jen Byle (Project Engineer)

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M-6 Non-Motorized Path from Kent Trail to the Paul Henry Trail

Kent County, MI

The Kent County Road Commission (KCRC) contracted with AECOM to prepare plans to construct the M-6 Southbelt Non-Motorized Trail. With construction of the M-6 Freeway complete, an ideal corridor was established to connect the Paul Henry Thornapple Trail to the Kent Trail—a length of over 10 miles. The proposed path consists of an asphalt trail meeting all current non-motorized design standards. In addition to the asphalt pathway, the project includes several bridges.

- Project Coordination and Communication
- Pathway Design
- Bridge Design over Buck Creek
- Bridge Design across Norfolk Southern/ Elk RR
- Bridge Design over Division Avenue
- Bridge Design over Cutlerville Drain
- Boardwalk across Wetland/Floodplain
- Maintenance of Vehicular and Pedestrian Traffic
- Environmental Permitting
- Landscaping Design
- Railroad and Utility Coordination
- Geotechnical Engineering
- Public Meetings
- MDOT Local Agency Program

The project was split into four phases:

- Phase 1 – Kent Trail to Clyde Park (2007), $1.1 million
- Phase 2 – Paul Henry Trail to Division (2008), $1.3 million
- Phase 3 – Division Avenue Bridge (2012), $0.5 million
- Phase 4 - Over Elk RR and Buck Creek (2016), $1.6 million

This project was awarded the Project of the Year for 2010 in the category of Quality of Life <$5 million by the Michigan Chapter of the American Public Works Association.

Client / Sponsoring Agency
Kent County Road Commission

Start date
7/2006

Completion date
3/2008

Budget
$235,000 (fee)

Project Team
Phil Vogelsang (Project Manager)
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Mike DeVries
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Laker Line Bus Rapid Transit A/E Services

Grand Rapids, MI

As a subconsultant to CDM Smith, AECOM is providing architectural and engineering services for the construction of the Laker Line Bus Rapid Transit (BRT) project, including shelter/station design, landscape design, electrical and utility coordination, and traffic signal design.

The BRT is a system of buses traveling on selected corridors to emulate the speed, comfort and convenience of a rail transit system. The BRT route and corresponding stations will be located in the cities of Grand Rapids, Walker, and on the Campus of Grand Valley State University (GVSU) in Allendale Township.

Prior to this project, AECOM led the analysis of Bus Rapid Transit alternatives along the 12-mile Lake Michigan Drive (M-45) corridor connecting the Allendale campus of Grand Valley State University (GVSU) with the Standale area, the GVSU Pew Campus, and downtown Grand Rapids. Through this phase of work, AECOM assisted The Rapid with building community consensus around the route and service plan for the line, and also helped to successfully move the project into the pipeline for federal grant funding.

Client / Sponsoring Agency
The Rapid

Start date
2013

Completion date
2015

Budget
$600,000 (Planning)
$1.2 million (Design)

Project Team
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Lynee Wells - William & Works

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AECOM

03

Responses to Scope of Work

03. Responses to Scope of Work

Project Understanding

The Napier Avenue Corridor is an important east-west transportation corridor in the Benton Harbor – St. Joseph metro area, providing connectivity from the expressway into the core cities, providing access to major shopping and medical destinations, and serving a number of neighborhoods and community businesses. While it may function well for vehicular travel, it is not a "complete street" that comfortably and safely accommodates all users.

This project aims to lay the groundwork for changing that, and is consistent with an encouraging trend seen around the country and throughout the state where engineers, planners, health officials and others are increasingly rethinking the auto-centric design of cities and roadways. This is not necessarily a "new" approach, but more a return to the idea that streets are prominent elements of our communities, defining a city and providing a gateway to our favorite places. As a result, street design needs to better balance the need to efficiently move vehicles with the more varied social, economic and safety needs of the broader community.

This approach is bolstered by new guidance from the federal and state government as well as organizations like AASHTO and NACTO for how to design for the safety of all users. And it is strengthened by a growing set of project examples that demonstrate that the benefits of adopting a "complete streets" approach are numerous (and that often the perceived negative impacts are overstated).

The AECOM Team is pleased to have played an increasing role in such project. Based on that experience as well as our review of the RFP, we offer the following key elements for success for this effort along the Napier Avenue Corridor:

- **Documenting the Need** – Transportation projects are about improving networks, but also need to respond to their surrounding context and community needs. This project needs to begin with a thorough documentation of not only the current roadway conditions and challenges for users, but link that to larger community needs for safety, economic sustainability, and equity. The process developed for this project intends to build upon the corridor documentation already created by SWMPC to create a concise and compelling case for why a retrofit of the Napier Avenue Corridor is necessary and beneficial.
- **Thinking Multi-Modally:** The project needs to come from the basis that despite a lack of dedicated infrastructure, there are already numerous people relying on Napier Avenue as a walking, biking and transit corridor. A review of safety incidents indicates indicates a number of serious injuries, including fatalities, that have occurred along Napier in the past 10 years, many of them occurring under clear weather conditions and during daylight hours. Improvements to the safety of walking and biking will also set the stage for improved transit, serving as a precursor to successful fixed-route transit service.
- **Feasibility & Constructability** – The consideration of infrastructure and design alternatives needs to advance from a complete understanding of relevant and emerging design standards, as well as a strong idea of what can be achieved in the near term to begin improving. The AECOM Team has an unmatched history of transportation network design within the State, and can ensure that the preferred alternative has been developed from the ground up as a feasible, constructible plan.
- **Engaging Stakeholders & the Public** – As described in our scope of work, regular public and community input will be an important factor for refining and selecting a preferred alternative for the Napier Avenue Corridor. The AECOM Team will work with SWMPC and the project

Despite a lack of non-motorized infrastructure, the Napier Avenue corridor is clearly already used as a pedestrian corridor.

Steering Committee to carry out a public involvement strategy that incorporates active and equal participation both in-person and on-line engagement strategies. Based on our experience, this will be a necessary component to ensuring that project implementation is achievable in the near term, and that there is community support from not only residents and businesses, but their representatives in local leadership positions.

Project Approach

Task 1 – Project Kick-Off

At the outset of the Napier Corridor Pedestrian & Bicycle Feasibility and Conceptual Engineering Plan (the "Plan"), the AECOM Team will hold a project kick-off meeting with the project management team from Southwest Planning Commission (SWMPC) to confirm the work plan, schedule, and study area for Plan. This meeting will also incorporate a corridor walking audit, which will provide important background to the purpose and need statement for the project.

Study Management Plan

The AECOM Team will create a Project Management Plan that defines the organizational, communications, and project management goals and protocols for the Plan. The Study Management Plan will define the following:

- Project organization: Establish project goals as well as roles and responsibilities of key participants
- Work scope and schedule: Solidify the approach to the overall project tasks and establish a schedule
- Project management and monitoring: Develop procedures for effective project management and templates for monthly progress reports
- Communications program and protocols: Create guidelines for internal and external project communications including establishment of a weekly or semi-weekly project team call
- Quality management plan/procedures: Incorporate AECOM's quality management system, which ensures that each study deliverable is reviewed by qualified staff prior to client review.

Corridor Walking Audit

The AECOM Team will lead a walking audit of the corridor with SWMPC staff and interested members of the project Steering Committee. The group will utilize the Center for Disease Control (CDC) Walkability Audit as a base for the assessment, as this methodology tends to capture most aspects of walkability using a quick and easy scoring sheet that indicates the presence of:

- Continuous pedestrian facilities
- Pedestrian conflicts with driveways, traffic, intersections, etc
- Presence and visibility of crosswalks
- Maintenance deficiencies
- Path width
- Buffer space between sidewalk and roadway
- General accessibility for mobility impaired
- Aesthetics of surrounding area
- Amount of shade

The walking audit will also be used as a method to collect numerous pictures for use in existing conditions documentation. Following the audit, the AECOM Team will document the images and observations of the corridor in an audit summary that folds into the documentation of existing conditions (Task 2).

Purpose & Need Statement

As part of the project kick-off process, the AECOM Team will develop a Purpose and Need statement that clearly describes the transportation problem to be addressed by the Plan and form the basis against which all alternatives are measured. It will draw on information developed in previous studies, the existing conditions, travel characteristics, and community features in the Study Area (as documented in Task 2).

In order to ensure the Plan addresses the broader transportation and community issues, the AECOM Team, with the help of SWMPC and Steering Committee, will identify a series of project goals and objectives. The project goals and objectives are expected to guide the Plan toward a recommended alternative that takes into account specific transportation needs, as well as other issues like social and environmental impacts, economic development opportunities, and traffic impacts.

Task 1 Deliverables:

- Study Management Plan
- Walking Audit Summary
- Purpose & Need Statement

Task 2 – Document Existing Conditions

As a basis for initial public engagement as well as establishing a purpose and need for the project, the AECOM Team will document existing conditions in the corridor including comprehensive mapping.

Corridor Mapping & Documentation

Concurrent to the Task 1 Project Kick-Off activities, the AECOM Team will develop detailed mapping of the corridor on an aerial base to support the development of alternatives. At the initial stage in the process, this is expected to focus on identification of vehicular as well as non-motorized transportation elements, signalization, right-of-way widths, utilities, easements, and parcel data. The assessment of these elements will be based on review of aerial imagery, GIS data, and field verification.

Corridor images collected during the walking audit will be utilized to supplement and present the summary of the corridor on a segment-by-segment basis, with a focus on the pedestrian and bicycle features (or lack thereof).

Data Collection & Analysis

To supplement the corridor mapping and feed into development of Purpose & Need, the AECOM Team will also collect, assemble, and analyze data related to transportation, land use and demographics in the study area. It is expected that data will be collected from SWMPC as well as other regional sources such as TwinCATS, Cities and Townships, Berrien County Road Commission, Twin Cities Area Transportation Authority and Michigan DOT. The following data, as well as other data, may be requested or collected by the AECOM Team:

- Transit routes, stops, and ridership data
- Current and future population and employment projections
- Average Daily Traffic count data
- Zoning and land use data
- Demographic data
- Major regional destinations, including employment areas, hospitals, higher education centers, and major commercial centers

At the project kick-off meeting there will be a review of data needs and resources as the AECOM Team begins the data collection process.

Aerial Survey

At this stage in the project development process, the AECOM Team recommends, and has assumed in the budget, conducting an aerial survey to capture the base elements needed to perform an accurate conceptual design. This approach may not confirm all corridor details as described in the RFP, but would provide SWMPC with an accurate starting point from which to advance to final design of the preferred alternative, whether it is implemented altogether or on a segment-by-segment basis. (Note: AECOM team members would welcome the opportunity to review other options or approaches at the request of SWMPC).

To conduct the survey via aerial photogrammetry, horizontal and vertical ground control targets of known coordinates and elevations will be selected or installed in the project. The survey is conducted with a low level flight using a Cessna TU206 or T310Q plane and photographed with a Zeiss RMK camera. The basic process is as follows:

1. The basic control survey determines accurately the horizontal and vertical position of monumented points along the corridor. This survey should be of first or second order accuracy and should start and end on high order geodetic points. The horizontal position of these points should be described by coordinates in the State Plane Coordinate System, datum adjusted on an area or project basis.
2. Photographic targets are placed on all basic control points within the area to be photographed. When supplemental control is by ground survey methods, targets may also be placed on supplemental control points. Since cadastral surveying and surveying of auxiliary points to be used during construction may be included in supplemental control surveys by photogrammetric methods, photographic targets may also be placed on property corners and on auxiliary points.
3. Large scale photography of the corridor is taken using a cartographic camera.
4. The supplemental control survey determines the position, to the needed accuracy, of enough additional points between the basic control points to fully control the photogrammetric mapping. Supplemental control may be by ground survey, by analog photogrammetric bridging, or by aerial analytical triangulation. A cadastral survey of the corridor may be included in a supplemental control survey by photogrammetric methods. The horizontal position of auxiliary points along the route, to be used during the construction survey, may also be included in a supplemental control survey by photogrammetric methods. The cadastral survey and the survey of auxiliary points benefit from the high accuracy of horizontal position inherent in analog photogrammetric bridging and aerial analytical triangulation.

5. Detailed cadastral and topographic maps of the corridor are prepared, using the large scale photography in photogrammetric instruments of sufficient precision to com pile maps adequate for design, acquisition of right-of-way, and preparation of construction plans. Culture and cover may be shown graphically, or orthophotographs may be used as the base for the maps.
6. Supplemental conventional survey will be used in areas obscured by vegetation.

Public Meeting #1

An initial public meeting will focus on the existing corridor conditions and be used to introduce the purpose and need of the study, as well as to gather input on needed pedestrian, bicycle and transit improvements. The meeting will be held in a location along or near the corridor, and emphasis will be given to ensuring nearby residents and business owners have an opportunity to provide feedback. For interested parties not able to attend in person, the first public meeting will be supplemented by an on-line digital mapping exercise that allows respondents to pinpoint specific issues or opportunities they see along Napier Avenue. All input received will be compiled into a summary report that identifies key outcomes and ideas provided by the public.

Task 2 Deliverables:

- Corridor Mapping Exhibits
- Existing Conditions Summary Memo
- Public Meeting #1 Summary
- Aerial Survey

Task 3 Alternative Concepts & Evaluation Matrix

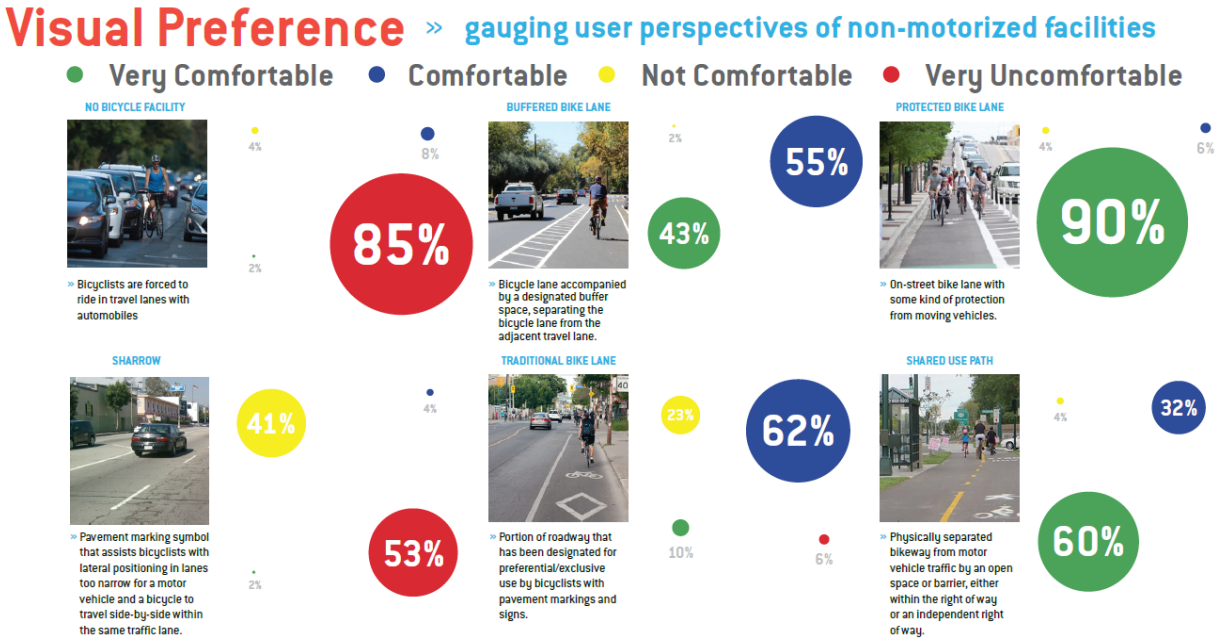
The AECOM Team will develop and evaluate design and location options for the Napier Corridor,

Alternatives Development

The AECOM Team will develop a set of up to three conceptual design options that bring improved walking and biking infrastructure to the Corridor. The alternatives will be based upon an understanding of best practices in transportation and non-motorized design, incorporating guidance from AASHTO, Michigan DOT, and NACTO standards.

It is expected that each alternative will be developed to include plan view and typical cross-section exhibits by Corridor segment that indicate vehicular lane widths, sidewalks, bike lanes, and other street side elements. The alternatives will also address intersection design at major cross-streets. Based on recent experience, it is likely that some or all of the following approaches could be integrated as alternatives:

- Adding complete sidewalk and crosswalk infrastructure to support safe walkability and also the development of Napier into an accessible transit corridor



The conceptual engineering plans will specify and help determine the cost of adding improved pedestrian and bike infrastructure to the major destinations along Napier Avenue.

- Developing a separated shared-use path alongside Napier Avenue to facilitate bi-directional walking and biking along the corridor
- Integrating traffic calming elements such as bulb-outs, median treatments, reduced curb radii, and narrower traffic lanes into areas of the Corridor where pedestrian and bicycle safety are currently issues.
- Converting portions of Napier Avenue to a three-lane cross section with a center turn lane to improve safety for turning movements and potentially dedicate roadway space for dedicated bike lanes

The initial set of Corridor alternatives will be shared with the Steering Committee for their input prior to the detailed comparative analysis. The AECOM Team will refine alternatives based on Committee input.

Evaluation Matrix & Methodology

A matrix will be used to compare and evaluate the alternatives, and will be populated with criteria based on the purpose and need for the Plan as well as input from SWMPC and the Steering Committee. Based on previous projects, criteria are likely to include, but not be limited to:

- Safety (for all users)
- Impact/Benefits to Transportation Operations (all users)
- Constructability
- Cost
- Community Support/Public Input

The evaluation will primarily be a comparative exercise, with elements such as cost and traffic impacts estimated based on standard methodologies rather than detailed modeling. All alternatives will be compared to the base "do-nothing" scenario for the corridor.

In addition, given the range of alternatives under consideration, the AECOM Team will develop a summary of funding options for the improvements, with a focus on non-traditional and innovative sources.

It is understood that the transportation agencies may want a detailed study of operational impacts to the corridor via traffic modeling techniques, but while the AECOM Team has the capabilities to perform a detailed traffic evaluation, it is not specifically accounted for in this scope of work or the associated budget. If, upon selection of a preferred alternative, additional traffic analysis is required, the AECOM Team will work with SWMPC to determine how or whether this analysis could be incorporated into the project.

Public Meeting #2

Upon the development and evaluation of alternatives, the AECOM Team will host a public open house at a convenient location near the project site. At this meeting, area residents, businesses and other interested parties will have an opportunity to review the conceptual design options and evaluations, and to ask questions of the project team. The AECOM Team will also provide an overview presentation of the various options. Once again, for those unable to attend there will be information posted on-line regarding the different options, as well as a survey allowing respondents to rate or rank the alternatives for themselves.

The input received from the public is expected to be used as a factor when selecting a preferred alternative for the corridor. All input received will be summarized, and will provide a clear indication of how the input has been used to help guide the recommendation of a preferred alternative.

The conceptual engineering plans will specify and help determine the cost of adding improved pedestrian and bike infrastructure to the major destinations along Napier Avenue.

Task 3 Deliverables:

- Corridor Alternatives Exhibits
- Evaluation Methodology & Matrix
- Public Meeting #2 Summary

Task 4 Conceptual Engineering Design Plan for Preferred Alternative

Based on technical evaluation and input from the public, the AECOM Team will convene another meeting with SWMPC and the Steering Committee to select a preferred alternative for the Napier Corridor. Based on commentary and review by the Steering Committee, it is understood that there may be a need for refinement of the preferred alternative (e.g., combining preferred elements of two different alternatives, reducing cost of preferred option).

Documentation of this preferred alternative will then be developed for sharing with officials from key partners (e.g., Townships, Road Commission) prior to commencement of the following sub-tasks.

Conceptual Engineering Plan

The AECOM Team will develop conceptual engineering plans that fully indicate elements such as pavement geometrics and markings, traffic signal locations, sidewalks, crossing signals, crosswalks, pedestrian refuge islands, and bicycle lanes. AECOM proposes to develop plans using MDOT CADD standards. The plans will conform to current AASHTO, NACTO, and MDOT guidance for all features, as well as ADA standards.

The plans are also expected to provide a basis for a more detailed cost estimate for the improvements to the corridor, building upon the order-of-magnitude cost developed during the evaluation phase. The cost estimate for the preferred alternative will be developed utilizing base unit cost estimates as confirmed by local road agencies in the corridor to ensure consistency with other programmed improvements.

Task 4 Deliverables:

- Design Survey
- Conceptual Engineering Plan & Cost Estimate

Task 5 Document Study Process & Final Report

Concurrent to the development of engineering exhibits, the AECOM Team will create a Final Report that documents the entire the study process and the rationale for the final conceptual plan for bike, pedestrian and transit improvements.

Draft & Final Report

The Final Report will incorporate the following from the previous tasks:

1. Summary of the need for non-motorized improvements
2. Description of process for developing preferred alternative
3. Public involvement summary
4. Illustration depicting preferred alternative
5. Summary of project positioning for funding and grant programs

A draft version of the Report will be made available to SWMPC and the Steering Committee for the project. Based on review, the AECOM Team will work with corridor communities to obtain resolutions for the design plan for inclusion in the final document as well (these can be critical for obtaining funding support for project implementation).

The report described above will be supplemented by detailed engineering work as it is developed during Task 4.

Public Meeting #3

The raft version of the Final Report as well as the conceptual engineering plans will also be the subject of a final public meeting that is used to showcase the design solution, answer questions about the project implementation, and identify any accompanying enhancements that could be integrated into the Final Report and Plans. Draft final materials will also be posted on-line for review and comment. The input from this meeting will be documented in a summary report.

Task 5 Deliverables:

- Draft and Final Report
- Public Meeting #3 Summary

Proposed Staffing Plan and Availability

Jeromie Winsor

Project Manager

A proven project leader with a clear path to success.

Jeromie will serve as SWMPC's primary contact throughout the duration of of the contract. Jeromie brings multiple years of experience in managing multi-modal and transit planning and research projects.

JEROMIE'S THOUGHTS ON THE PROJECT:

"The Napier Corridor project is an opportunity to act on the growing consensus that Michigan's communities need more balanced, multi-modal transportation systems."

As Project Manager, Mr. Winsor will direct the efforts of a multi-disciplinary project team of transportation planners and engineers. This project directly builds upon his work history, which has focused on the relationship between multi-modal transportation planning, land use, economic development, and community revitalization. He has successfully led projects for a variety of state, regional and local transportation agencies throughout Michigan and the Midwest.

Jeromie is the right fit to lead this important project. He has:

- ☑ 13 years of experience in multi-modal transportation planning and policy research.
- ☑ Managed dozens of multi-modal planning and policy research studies in Michigan, including:
  - Regional Pedestrian, Greenway & Transit Plan (Kalamazoo, MI)
  - Laker Line BRT Study & Design (Grand Rapids, MI)
  - Michigan Avenue Corridor Study, RTA of Southeast MI (Detroit, MI)
  - I-94 Huron Street Crossing Feasibility Study (Ypsilanti, MI)
  - MDOT University Region Non-Motorized Plan
- ☑ Serves as a Single Point of Accountability & Communication
- ☑ Directly manages all project efforts to ensure adherence to quality, schedule and budget targets.

Key Team Member Availability

AECOM understands the significant amount of time required to train substitute team members. Should the AECOM team experience an unavoidable circumstance that requires a key team members' replacement, we have access to experienced staff locally and throughout the region, that serve in various roles on similar projects. Project Manager, Jeromie Winsor, would relay any staff changes with the Southwest Michigan Planning Commission, and will work closely with SWMPC to ensure a seamless transition.

Staff	Role	% Time Available
Jeromie Winsor	Project Manager	25% - 50%
Sean Kelsch	Principal-in-Charge	20%
Josh Bocks	Deputy Project Manager	25% - 50%
Lynee Wells (WW)	Public Engagement	25%
Max Dillvan (WW)	Public Engagement	25%
Eric Dryer	Existing Conditions Analysis	50%
Ray Schneider	Existing Conditions Analysis	50%
Hank Kelley	Alternative Concepts Evaluation	50%
Jen McNeil	Alternative Concepts Evaluation	25%
Jen Byle	Conceptual Design	25% - 50%
Brian Czosnyka	Conceptual Design	20% -30%
Phil Vogelsang	Technical Advisor	25%
Stan Wang	Technical Advisor	25%
Mike DeVries	Quality Review	10%
Denny Sauers, Jr. (AER)	Aerial Survey	25%

Quality Assurance Plan

Quality is defined as achieving specified requirements and providing advice and work products that allow projects to move forward to implementation. Quality is an attitude, a culture, and a way of life at AECOM. It is part of everything we do, every day. It is inherent in the way we plan, do, check and act to produce the work we deliver to our clients. Therefore, quality is a function of project management, cost control, technical scope, document control and quality assurance planning.

All work products will be prepared in accordance with AECOM's ISO-compliant quality assurance and quality control (QA/QC) procedures. The ISO 9001:2000 quality management system to be applied to this project comprises a comprehensive quality management policy and implementing procedures. The AECOM Team will tailor these procedures to meet the project's specific needs and the Council's QA/QC standards. The AECOM Team will submit a project-specific quality management plan (QMP) covering all project activities including: general tasks; work integration; and intra and inter-discipline review and coordination among other consulting teams and resource specialists.

The QMP will describe the controls to be implemented to verify compliance, and will identify staff and discipline reviewers as well as specific deliverables subject to the QA procedures. Furthermore, it is AECOM's intent that all team members, including Subcontractors as appropriate, will comply with the design and quality requirements as specified in the QMP.

The AECOM Team will assign a quality representative to organize, develop and submit a project-specific QMP covering all project activities. The QMP will describe the controls to be implemented to verify compliance, and will identify staff and discipline reviewers and specific deliverables subject to the QA procedures. We will establish and maintain procedures to control and verify relevant regulatory agencies' requirements have been met. The QMP will include the team's process for ensuring quality in terms of proofing data, method for how data was created, standardization and author identifications.

As a part of the QA/QC program, our team will implement review procedures for analyzing the work products for the entire consultant team including subcontractors. Control procedures will be documented and will include provisions for at least the following:

- Reviewing, identifying, and documenting inputs.
- Verifying analysis inputs, applicable codes and standards.
- Mandating review of documents to assure appropriatequality standards are achieved.
- Assuring analyses are performed in a planned, controlled, and documented manner; and
- Assuring invoicing is correct and current.

Our team will perform planned and periodic internal quality audits and surveillance to verify QA/QC procedures implementation and effectiveness, including work performed by subcontractors. We will maintain records of these audits and document how quality issues have been addressed.

The draft QMP will be prepared and submitted within 30 days of Notice to Proceed (NTP). The final QMP will be provided with 15 days of receiving the Council's comments. Quality and timeliness are the keys to the AECOM Team's success as well as to the success of this project as a whole. AECOM places a very high premium on timeliness in addition to quality. To achieve this, the AECOM Team will:

- Quickly respond and promote effective communications.
- Maintain a close working relationship with FRA.
- Staff the project with professionals experienced in the types of services required.

Performance Audit Plan

Please refer to Section 6.

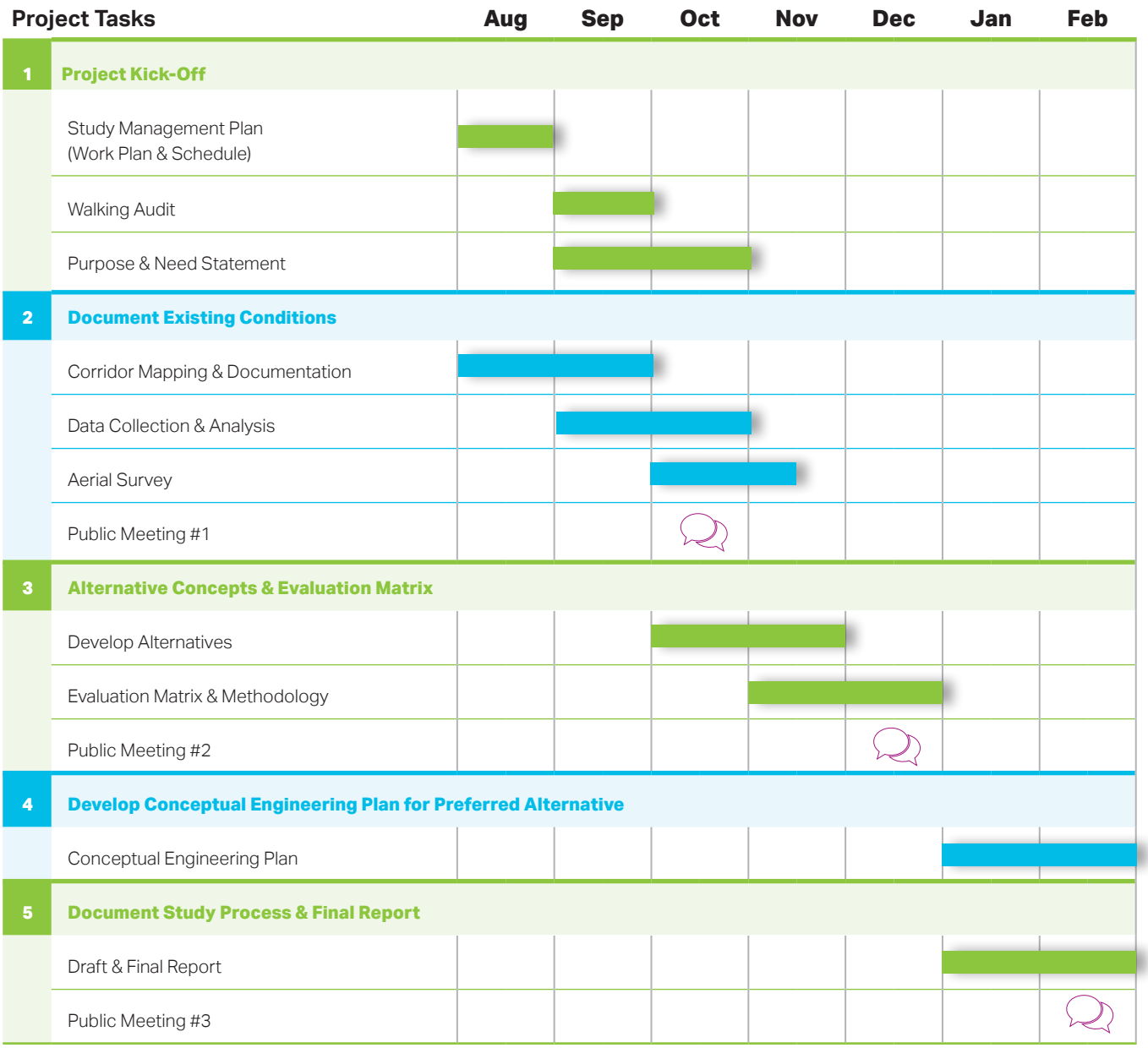
AECOM

04

Schedule

04. Schedule

A proposed project schedule for the study is shown below, and anticipates a seven-month project timeline with a notice-to-proceed in August. The AECOM Team will drive the completion of the project in this timeline with regular, weekly team calls with SWMPC that will be used to track progress on tasks and prepare for upcoming project needs.



AECOM

05

Cost Proposal

06

Performance Measures

06. Performance Measures

AECOM takes pride in our performance and actively follows up with all clients to gauge customer satisfaction. Our customer care surveys also provide clients an opportunity to provide input on the professionalism and innovation provided by the team assigned to the project.

For this project, proposed performance measure that could be used to evaluate deliverables and services could include:

Work quality and attention to detail

Responsiveness to client needs

Timeliness of team members

Schedule adherence

Budget adherence

Innovation in solutions provided

The AECOM Team would look forward to an opportunity to further discuss SWMPC's expectations for the project, and deliver a process and Plan that meets or exceeds them.

07

Required Forms

07. Required Forms

Forms Index

Certificate of Non-Collusion

Agreement of Goods and Services

Required Forms and Certification

CERTIFICATE OF NON-COLLUSION

I hereby swear (or affirm) under penalty for perjury:

1. That I am the Bidder or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);

2. That the attached bid has been arrived at by the Bidder independently and has been submitted without collusion and without any agreement, understanding, or planned course of action with any other vendor of materials, supplies, equipment, or service described in the Invitation for Bid, designed to limit independent bids or competition;

3. That the contents of the bid have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished with the Bidder, and will not be communicated to any such person prior to the official opening of the proposals; and,

4. That I have fully informed myself regarding the accuracy of the statement made in this affidavit.

Signed _____

Firm Name AECOM Great Lakes, Inc.

Subscribed and sworn to before me this 12th day of June, 2017

_____
Notary Public

JENNIFER S. HALE
Notary Public, State of Michigan
County of Kent
My Commission Expires Jun. 30, 2021
Acting in the County of Kent

My commission expires 6/30/2021

Bidders E.I. Number 38-1776252
(Number used on employer's Quarterly Federal Tax Return)

June 12, 2017
Date

AECOM Great Lakes
Bidder

Michael De Vries, Vice President
Authorized Representative

AGREEMENT OF GOODS and SERVICES

TO: Southwest Michigan Planning Commission
376 W. Main Street
Suite 130
Benton Harbor, Michigan, 499085

The undersigned hereby agrees to furnish the goods and services as listed below in accordance with the specifications which have been carefully examined and are attached.

Signed: _____

Printed Name: Michael De Vries Title: Vice President, Operations Mgr - Trans.

Date: June 12, 2017 Telephone: 616.574.8591

For (Company): AECOM Great Lakes, Inc.

Address: 3950 Sparks Drive SE, Grand Rapids, MI 49546

REQUIRED FORMS AND CERTIFICATIONS

ADDENDA

The undersigned acknowledges receipt of the following addenda to the document:

Addendum No. 1, Dated May 30, 2017

Addendum No. _____, Dated _____

Addendum No. _____, Dated _____

Failure to acknowledge receipt of all addenda may cause the bid to be considered non-responsive to the solicitation. Acknowledged receipt of each addendum must be clearly established and included with the offer.

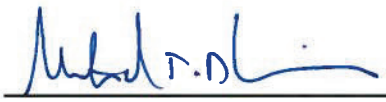
The undersigned understands that any conditions stated above, clarifications made to above or information submitted on or with this form other than that requested, will render bid unresponsive.

Michael De Vries (AECOM Great Lakes, Inc.)

(Name of Individual, Partnership or Corporation)

3950 Sparks Drive SE, Grand Rapids, MI 49546

(Address)



Vice President , Operations Manager - Transportation

(Authorized Signature) (Title)

June 12, 2017 616.574.8591

(Date) (Telephone)

AECOM

About AECOM

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A Fortune 500 firm, AECOM companies have annual revenue of approximately US$18 billion. See how we deliver what others can only imagine at aecom.com and @AECOM.

Contact
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T 616.574.8591