

PHASE II PROPOSAL

Knoxville Speed Management Plan

CITY OF KNOXVILLE



NOVEMBER 22, 2024

PREPARED BY **ALTA PLANNING + DESIGN, INC.**
IN ASSOCIATION WITH STANTEC

Photo Credit: Warren LeMay



Penny Owens
City of Knoxville
powens@knoxvilletn.gov

NOVEMBER 22, 2024

RE: Phase II Proposal - Speed Management Plan

Dear Ms. Owens and Members of the Selection Committee:

Alta Planning + Design, Inc. (Alta) is excited to submit our proposal for the Knoxville Speed Management Plan. With extensive experience in Vision Zero, Complete Streets, and the Safe System Approach, we recognize that effective speed management is crucial to reducing life-altering crashes. Our approach will leverage our team's regional expertise alongside our national safety and speed management experience to thoroughly analyze speed and safety data, engage the public equitably, and recommend both immediate and long-term actions essential for the success of this plan.

Our team is robust and collaborative. **We are currently working seamlessly with our proposed partner, Stantec, on the Knoxville TPO Metropolitan Transportation Plan update. This experienced partnership will translate to cohesive project delivery for the Knoxville Speed Management Plan.** The Alta team will be led by Project Manager **Bianca Popescu, AICP**, a safety expert with recent experience leading Speed Management Plans funded by FHWA. As Principal-in-Charge, I, **Ryan Sharp, PP, AICP** will utilize my extensive experience with safety planning to provide strategic oversight and ensure consistency across all deliverables. In my former role as Director of Transportation and Parking for the City of Hoboken, NJ, my leadership contributed to the City's immense success in Vision Zero, achieving seven consecutive years with zero traffic fatalities. Bianca and I will be supported by **Mike Rutkowski, PE, AICP** (Stantec's Complete Streets Expert) and **Matthew Roe** (Stantec's Speed Guidelines Specialist).

Why the Alta Team is the best candidate to support the City of Knoxville in developing a comprehensive Speed Management Plan:

- **Local Knowledge and Familiarity:** Our deep understanding of the City of Knoxville's unique safety and transportation context stems from our work on the City's Vision Zero Action Plan. Additionally, our involvement in the Knoxville TPO Regional Roadway Safety Action Plan and Metropolitan Transportation Plan has equipped us with valuable insights into regional safety issues. Our team includes local staff ready to undertake the crucial steps needed to deliver a successful Speed Management Plan for the City.
- **Unparalleled Expertise in Speed Management Plans and Context-Sensitive Speed Limits:** Bianca Popescu has successfully led **speed management plans** funded by FHWA. Her experience also encompasses stakeholder and public engagement, data-driven prioritization, safe speed limit setting, and the implementation of effective speed management countermeasures. I championed a citywide speed limit reduction in Hoboken, implementing a context-sensitive approach that resulted in a citywide 20 MPH speed limit. Matthew Roe served as the Technical Writer and Editor of NACTO's **City Limits: Setting Urban Speed Limits** guide and led a three-year initiative that resulted in context-sensitive speed limits being introduced into the 11th Edition of the Manual on Uniform Traffic Control Devices (MUTCD), marking a significant advancement for urban speed management.
- **Robust Safety Analytics and Countermeasure Expertise:** Both Alta and Stantec are at the national forefront of transportation, safety analytics, and countermeasures. Our previous work in the region includes a comprehensive, data-driven systemic safety analysis for the Knoxville TPO Regional Roadway Safety Plan. Through our extensive work in safety analysis in Tennessee, we are well versed in crash and roadway characteristics databases offered by TDOT and other partners and are able to efficiently utilize this information to produce an action-oriented Speed Management Plan.
- **Inclusive and Effective Public Engagement:** Great ideas come from dynamic exchange between the people who use the streets and the project team. Our team is skilled at asking questions that tap into the inherent wisdom of the community, with a focus on effectively engaging the most vulnerable road users and underserved community members. We produce engaging public outreach and awareness campaign materials that effectively communicate ideas and foster community involvement.

We would be honored to have the opportunity to work with the City of Knoxville on this transformative project. Please contact me at (305) 501-0519 or ryansharp@altago.com or Project Manager Bianca Popescu at (206) 928-7861 or biancapopescu@altago.com to discuss our qualifications in more detail.

Sincerely,

Ryan Sharp, PP, AICP
Principal-in-Charge
Alta Planning + Design, Inc.

Bianca Popescu, AICP
Project Manager
Alta Planning + Design, Inc.

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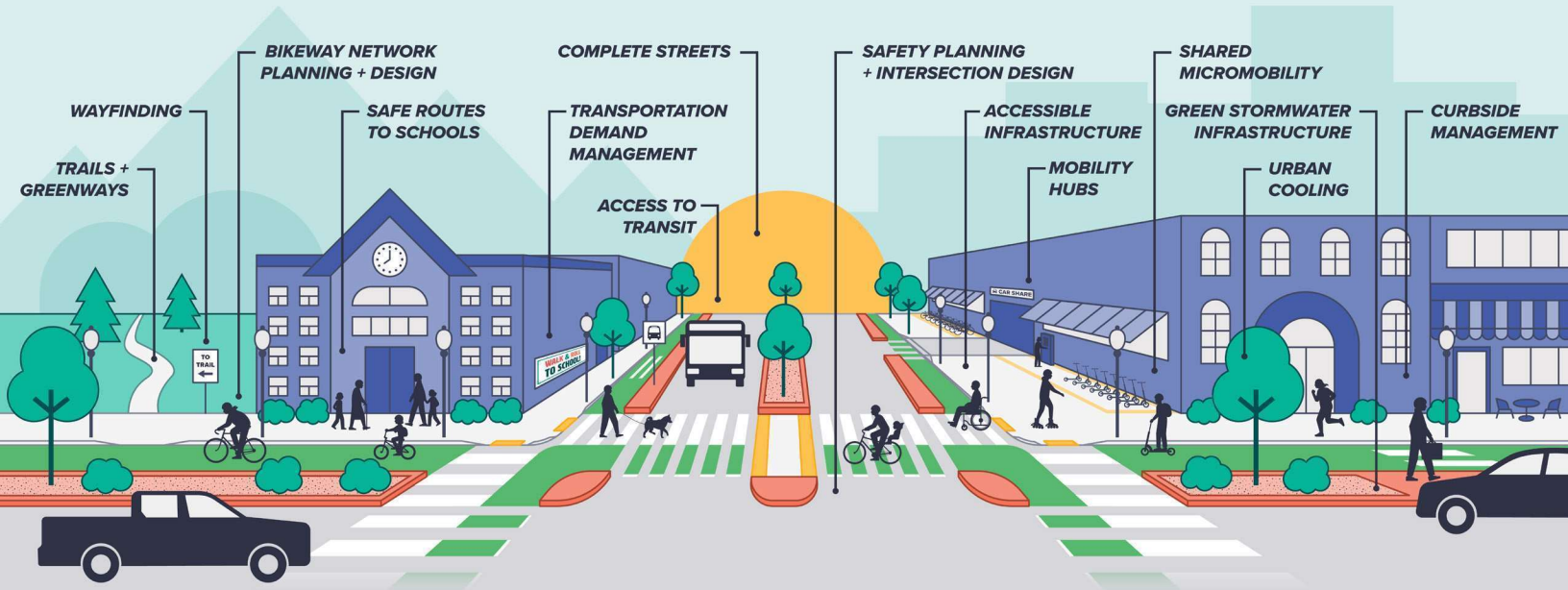
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Creating Sustainable Communities

Resilient • Equitable • Safe



Firm Qualifications and Experience on Similar Contracts



Alta is a sustainable transportation consulting firm dedicated to creating active, healthy communities through planning, landscape architecture, engineering, and education/encouragement programs. Alta's work is centered on people, regardless of the way they move, providing our clients with specialized expertise to create effective safety action plans.

SAFETY IS OUR MISSION

We guide our clients through the planning process, fostering momentum and cultivating a culture that prioritizes safer streets and roadways for everyone. Together, we set up leadership systems to see that partners, stakeholders, and the public are engaged throughout the development of the plan and beyond. We elevate equity as a primary element of opportunity and develop comprehensive safe system recommendations that consider policy, programs, and design, recognizing that it takes an "all in" approach to achieve true systemic safety.

Safety: The Alta Difference

Multimodal Design + Strategic Implementation

- ◆ Alta takes a multimodal approach to roadway design, prioritizing the needs of all users, with a particular focus on vulnerable populations.

Civic Analytics

- ◆ Alta pioneered the development of advanced tools to analyze and prioritize equity, safety, and connectivity. Our process determines who benefits from investments and centers the safety needs of underserved communities.

Equity-Centered Engagement

- ◆ Our team creates culturally appropriate messages, speaks multiple languages, and goes to where community members are to gather input so our recommendations reflect and address the real needs of underserved communities.

Campaigns and Programs

- ◆ Alta is a leader in multimodal transportation campaigns, programs, and branding, using data-driven messaging and strategies to create programs that promote safety for all users.

Low-Cost, High Impact Strategies

- ◆ Alta develops solutions that can be implemented quickly and built into routine processes, such as repaving. We routinely lead demonstration projects and have written Quick Build design guides for our clients.

Securing Funding

- ◆ Alta staff have assisted jurisdictions across the country to secure more than \$1 billion in grant funding for multimodal projects.

SPEED MANAGEMENT EXPERIENCE

Alta is at the forefront of safety planning, particularly in Speed Management strategies. Building on the foundation of Vision Zero and similar initiatives, these strategies are critical for implementing the Safe System Approach and achieving a community's Vision Zero goals. With extensive experience planning and implementing Speed Management Plans and initiatives, Alta leverages diverse data sources to highlight necessary interventions and identify the most effective countermeasures. Our expertise includes forming implementation teams, securing funding, and strategically aligning efforts with city and regional partners. We also provide analytic expertise through our advanced data analyses and mapping tools. Alta's comprehensive approach encompasses safe speed limit setting, a safety toolbox, stakeholder and public engagement, data-driven prioritization, and the execution of proven speed management measures.





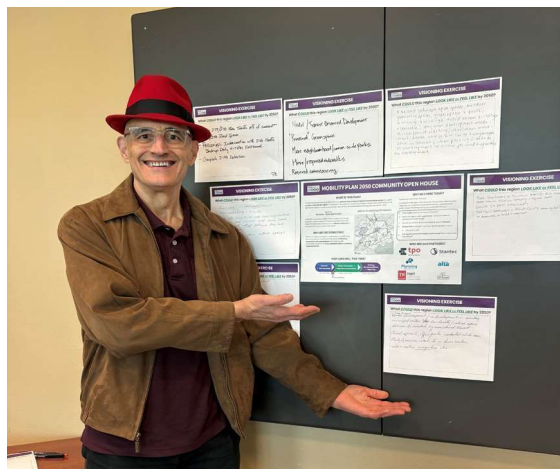
Stantec looks at projects holistically, including elements of access management, traffic calming, land use, connectivity, economic development, transit integration, parking, along with traditional capacity/operational improvements. They envision future conditions with low stress bike facilities, safe pedestrian crossing locations, transit amenities, and green infrastructure improvements. Focusing on elements like multimodal network gaps, perpetually unsafe intersections, and limited roadway connectivity, builds a better vision for all — including low-income, minority, elderly, young, or disabled residents. These approaches connect neighborhoods, improve health by promoting active lifestyles, create destinations, and enhance economic potential.



PROVEN ENGAGEMENT AND CHARRETTE-BASED DESIGN PROCESS

Stantec emphasizes meaningful and timely public outreach while integrating cultural and community considerations, ensuring that your plan or project is built on a foundation of community support and advocacy. Many of their featured projects were successfully developed through charrette-based and integrated planning-engineering activities, which focus on engaging underserved communities. Recognizing the challenges of building informed consent amidst diverse stakeholders and seemingly competing interests, Stantec employs proven tools and methodologies to effectively engage and communicate with stakeholders, fostering broad support for the final plan.





Knoxville Mobility 2050 Metropolitan Transportation Plan Update

KNOXVILLE, TN | 2023-ONGOING

The Knoxville Regional Transportation Planning Organization (KRTPO) is developing a Long Range Mobility Plan for the six-county metro area. The Metropolitan Transportation Plan is updated every four years and provides direction for regional growth and mobility policy for future transportation projects. With this update, the TPO's priorities were meaningful public outreach efforts and adopting a Safe System Approach to make places safer for people.

Stantec's Multimodal Planning Group is facilitating a 20-month planning process, guiding an engagement strategy that provided virtual and in-person opportunities for the region's 925,000 residents to weigh in on their priorities for the region. Examples of these outreach methods included community meetings, stakeholder 'listening sessions', online surveys, and an interactive webmap to document issues, barriers, safety hazards, and feedback on mobility priorities. As a collaborative partner, **Alta** is supporting the development of multimodal project priorities for the expansion of greenways and regional bicycle facilities.

The community's feedback and discussion enabled the planning team to prioritize mobility improvement projects that would be most beneficial for residents, businesses, and visitors. A data-driven evaluation process helped score and rank projects given their proximity to schools, parks, bus stops, grocery stores, or similar community assets. Additional factors included performance measures for safety, travel time reliability, and preservation.

To streamline project prioritization efforts with the Technical Committee, Stantec developed a financial model that projects future revenues from federal, state, and local funding programs, incorporates year of expenditure (YOE) project costs, and identifies horizon year benchmarks to align projects with expected revenues.

A point of key relevance of this project is the collaboration between Stantec and Alta, as well as the ongoing successes the team has accomplished working with the KRTPO. This team brings familiarity in working in the Knoxville area. In addition, the Alta-Stantec team brings national expertise from several regions of the US, converging in Knoxville to provide open communication and availability to the project. Stantec's Mike Rutkowski is the Project Manager and is eager to continue working closely with the KRTPO as well as the Alta team. He is joined by Timothy Tresohlavy who has been working on the project. Sarah Littlefield and Eric Scott from Alta have been diligent planners on this effort and are familiar with the KRTPO and the Stantec leadership team.

CLIENT

Knoxville Regional Transportation Planning Organization (KRTPO)

CONTACT

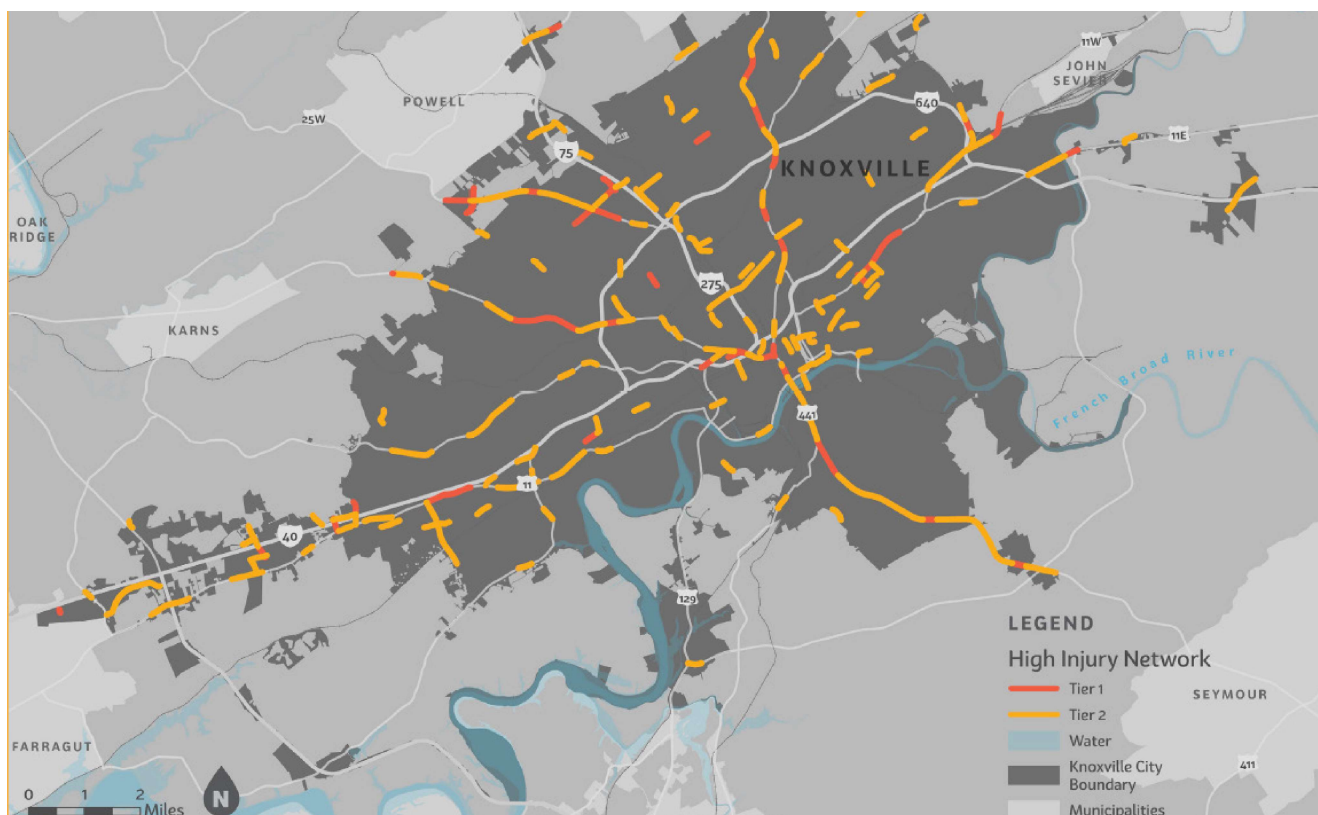
Mike Conger
(965) 215-3813
mike.conger@knoxtop.org

RELEVANCE

- ✓ Multijurisdictional coordination and engagement
- ✓ Crash data and safety analyses
- ✓ Prioritization and integration with existing policies and programs
- ✓ Safety planning
- ✓ Safety countermeasures
- ✓ Grant assistance

KEY STAFF

- ✓ Mike Rutkowski, PE, AICP, Project Director
- ✓ Timothy Tresohlavy, AICP, GISP, Safety Data Analyst
- ✓ Sarah Littlefield, Planner
- ✓ Eric Scott, Multimodal Planner



Knoxville Regional Roadway Safety Plan

KNOX COUNTY, TN | 2022-2023

Alta worked with the Knoxville TPO to create a **Regional Roadway Safety Action Plan** that was adopted on June 28, 2023. The plan focused on the Knoxville Region with a stand-alone Vision Zero Action Plan for the City of Knoxville.

The Knoxville region includes a mix of urban and rural areas. Alta led regional coordination and identified specific needs and projects within the City of Knoxville and across multiple jurisdictions in the TPO region. With the University of Tennessee as an anchor, the City had pressing, specific needs for the project. Alta led a robust stakeholder process comprised of task force meetings, focus group meetings, online user surveys, intercept surveys, public focus groups, and stakeholder listening sessions. Alta also led a systemic safety analysis and the development of an HIN for the region, which helped to prioritize future improvements. Other elements of the plan included crash profiling, predictive crash modeling, and policy and infrastructure recommendations to change the culture of safety for all roadway users. Alta completed the Safety Action Plan in time for the City and County to submit an application for an SS4A Implementation grant, which was awarded in late 2023.

CLIENT

Knoxville Regional Transportation Planning Organization (TPO)

REFERENCE

Ellen Zavisca
Former Senior Transportation Planner
Knoxville Regional TPO
(202) 407-7614
ezavisca@ampo.org

RELEVANCE

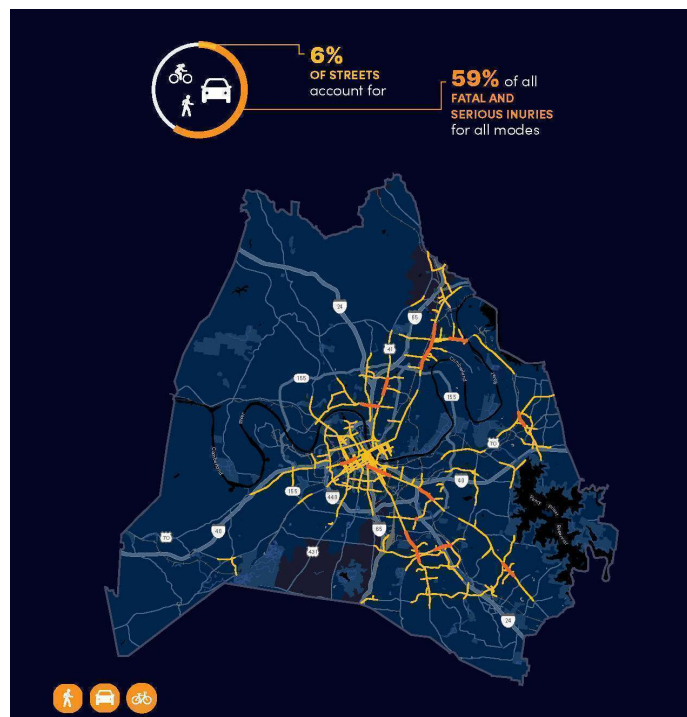
- ✓ Multijurisdictional coordination and engagement
- ✓ Crash data and safety analyses
- ✓ Prioritization and integration with existing policies and programs
- ✓ Preparation for grant funding

KEY STAFF

- ✓ Alia Awwad, PE, Principal-in-Charge
- ✓ Collin Hodges, Planner
- ✓ Sarah Littlefield, Planner
- ✓ Eric Scott, Multimodal Planner

VISION ZERO

Safe Streets in Nashville



Nashville-Davidson County Vision Zero Action Plan + Implementation Plan

NASHVILLE-DAVIDSON COUNTY, TN | 2021-2022

Alta helped Nashville/Davidson County develop the county's first comprehensive Vision Zero Action Plan as well as a separate, fiscally constrained and detailed Implementation Plan. This data-driven and community focused plan will help guide Metro's investment in traffic safety improvements over the next five years.

Alta used the latest available data and digital mapping techniques to provide a comprehensive process for identifying and prioritizing safety improvements. Alta also facilitated a robust stakeholder and public engagement process comprised of task force meetings, TDOT focus group meetings, online user surveys, intercept surveys, public focus groups, and stakeholder listening sessions. This information was combined with a systemic safety analysis to understand and develop a High Injury Network (HIN) for the county. HINs help prioritize future improvements by identifying segments in road networks where pedestrian and bicycle collisions have occurred.

To assist with understanding the data and prioritizing investments, Alta developed an easy to navigate online data dashboard that helps visualize the crash patterns and areas in Nashville that are particularly unsafe for people walking, biking and driving. This dashboard helps build the case for change in Metro Nashville, identifies evaluation metrics for full transparency, and showcases potential locations for future countermeasures. In 2023, the City/County of Nashville submitted an SS4A Implementation grant for safety improvements along Nolensville Pike, a dangerous, State-owned roadway that Alta conducted a corridor-level analysis for, and was awarded \$13 million.

Link to [Nashville Vision Zero Action Plan Webpage](#)

CLIENT

Metro Nashville Davidson County

CONTACT

Anna Dearman, AICP
Walking & Biking Manager
Nashville Department of Transportation & Multimodal Infrastructure (NDOT)
(615) 862-8735
anna.dearman@nashville.gov

RELEVANCE

- ✓ Public, DOT, and stakeholder engagement
- ✓ Civic analytics
- ✓ Crash data and safety analyses
- ✓ Prioritization
- ✓ Integration with existing policies and programs
- ✓ Corridor analysis
- ✓ Funding strategy
- ✓ Performance metrics

KEY STAFF

- ✓ Alia Awwad, PE, Senior Advisor
- ✓ Sarah Littlefield, Planner



Alpharetta Local Road Safety Action Plan

ALPHARETTA, GA | 2023

Alta developed a local Safety Action Plan for Alpharetta that made the City eligible for implementation grant funding through various opportunities, including the federal SS4A and SMART grant programs. As part of the plan, Alta conducted stakeholder interviews, facilitated a public charrette, carried out extensive data collection and analysis, and identified key corridors and intersections for safety improvements. Additionally, Alta established corridor-level countermeasures and provided guidance on competitive grant opportunities. This support included preparing a SMART grant application, which the City successfully submitted in October 2023.

CLIENT

City of Alpharetta

CONTACT

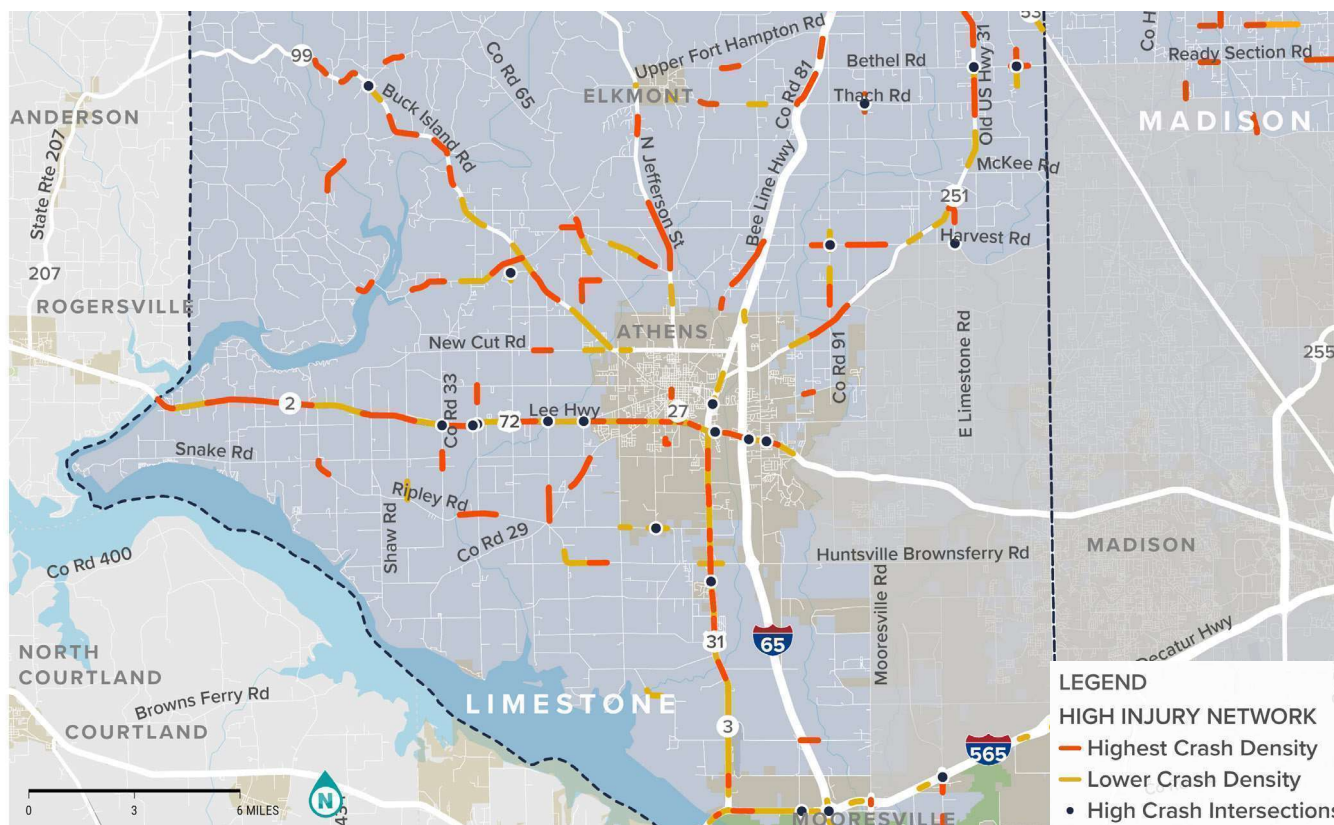
Arash Moradkhani, PhD, PE
Transportation Engineering Manager
(678) 297-6260
amoradkhani@alpharetta.ga.us

RELEVANCE

- ✓ Public, DOT, and stakeholder engagement
- ✓ Crash data
- ✓ Safety analyses
- ✓ Corridor-level countermeasure development
- ✓ Prioritization and integration with existing policies and programs
- ✓ Funding strategy + SS4A Implementation Grant project identification and concept design
- ✓ Performance metrics

KEY STAFF

- ✓ Alia Awwad, PE, Principal-in-Charge
- ✓ Eric Scott, Project Manager
- ✓ Sarah Littlefield, Planner



TARCOC Regional Safety Action Plan

NORTH ALABAMA | 2023–ONGOING

Alta is developing a Safety Action Plan for the Top of Alabama Regional Council of Governments (TARCOC) as part of their SS4A planning grant award. Alta has created an HIN and crash profiles and conducted meaningful public engagement by conducting intercept surveys, collecting responses via an online survey, and attending events in each of the five counties. The final plan will provide technical and safety stakeholders in the TARCOC region with the analysis and a countermeasure toolkit to identify projects, funding, and action items to implement projects. As the HIN analysis includes state-maintained roads and highways, Alta is actively coordinating with Alabama Department of Transportation's (ALDOT's) North Region office and Design Bureau. The plan aims to provide local practitioners with the tools and resources to identify projects, collaborate at a regional scale, and apply for funding to address some of the highest crash and highest volume roadways in North Alabama.

CLIENT

TARCOC

CONTACT

Lee Terry, AICP

Economic Development and Planning Director
(256) 716-2483; (256) 788-0478

lee.terry@tarcog.us

RELEVANCE

- ✓ SS4A Safety Action Plan
- ✓ Public, ALDOT, and stakeholder engagement
- ✓ Crash data, safety analyses, and crash profile identification
- ✓ Prioritization and integration with existing policies and programs
- ✓ Performance metrics

KEY STAFF

- ✓ Alia Awwad, PE, Engineering Advisor
- ✓ Sara Kovachich, AICP, RSP1, Safety Planner

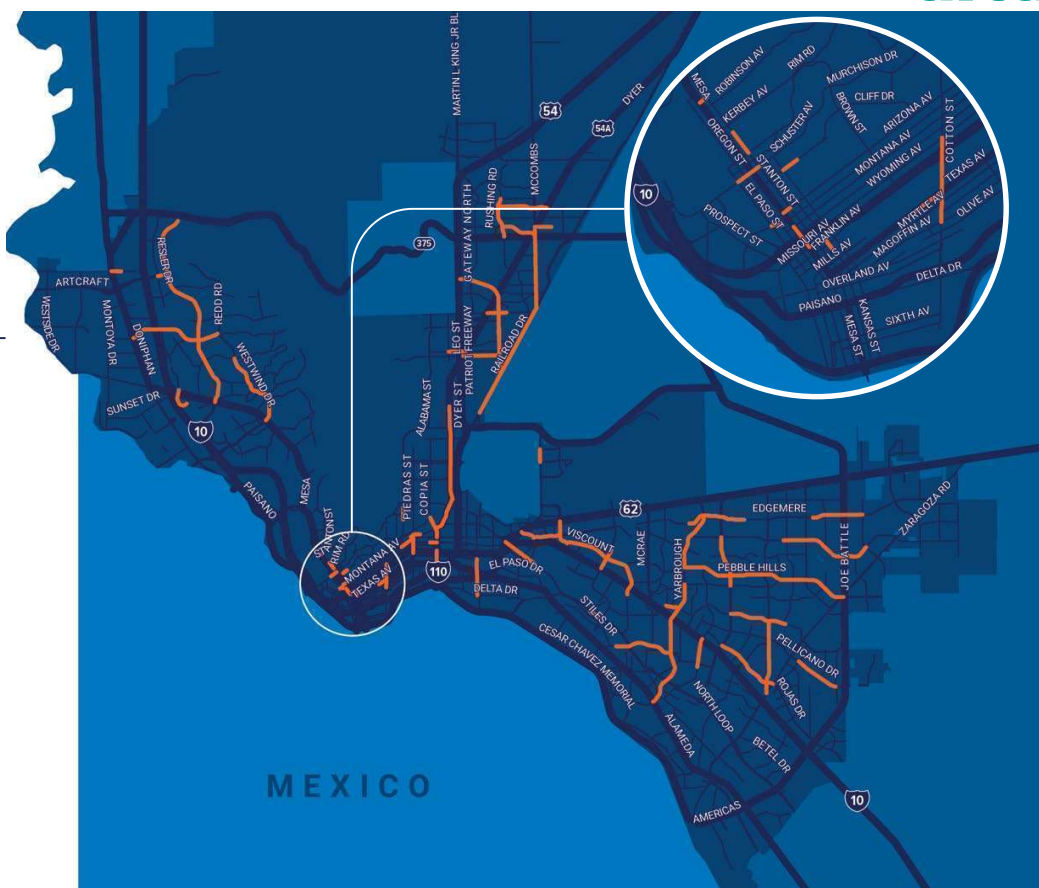
MAP 5

Motor Vehicle and Bicycle/Pedestrian HIN Overlap

— Motor Vehicle and Bicycle/Pedestrian High Injury Network



78 miles of HIN are on both the vehicle/motorcycle HIN and the bicycle/pedestrian HIN. **These areas are unsafe for all modes of travel.**



El Paso Vision Zero Action Plan

EL PASO, TX | 2022-2023

Alta completed an extensive Vision Zero Action Plan for the City of El Paso with the aim of securing implementation funding through the SS4A grant program. The process involved a robust and complex systemic safety analysis resulting in vehicular and pedestrian HINs, ten unique crash profiles, predictive modeling, and crash cost implications. The systemic safety analysis was used to guide specific policy updates, organized by the Safe Systems Approach criteria, and prioritize locations for infrastructure improvements.

Innovative components include the development of an insightful data dashboard and the use of connected vehicle data to conduct a proactive safety analysis that accounts for observed speeding, harsh braking, or other risky behaviors. The Plan has an implementation focus that will take this process beyond the adoption of the Action Plan. Alta is also preparing conceptual designs to guide countermeasure applications and is performing a corridor deep dive to help systemically match policy and design objectives to an existing city corridor context. The plan also includes an extensive community outreach process and development of unique graphics and materials, in both English and Spanish, that convey technical information in public-friendly and understandable ways. Alta helped the City submit for an SS4A Implementation grant, and was awarded \$10 million for safety improvements along its highest priority corridor.

CLIENT

City of El Paso

CONTACT

Joaquin Rodriguez
Transportation Planning Administrator
City of El Paso
(915) 212-0000
rodriguezj2@elpasotexas.gov

RELEVANCE

- ✓ SS4A Funding
- ✓ Safety planning
- ✓ Safety countermeasures
- ✓ Grant assistance
- ✓ Robust analytics and predictive modeling
- ✓ Bilingual engagement

KEY STAFF

- ✓ Alia Awwad, PE, Safety Advisor
- ✓ Sarah Littlefield, Planner

Greenville Pedestrian Safety Action Plan

GREENVILLE, SC | 2022

From 2012-2021, there were 298 crashes involving pedestrians in the City of Greenville. To improve community safety, the city partnered with Stantec to develop Greenville's first pedestrian safety action plan.

Plan development began with the team analyzing 64 high traffic-volume corridors and school zones to provide the basis for prioritization and implementation of safety countermeasures. The analysis identified proactive measures to improve the safety for all roadway users and resulted in a prioritized list of viable project recommendations with high benefit/cost ratios, and therefore candidates for Federal and/or State funding or other City safety-related funding programs.

The scope of work included extensive traffic engineering tasks, such as collecting and analyzing crash data, road inventory data, GIS resource data, police report data, as well census and transit ridership data. Using both state and national safety guidance and best practices, Stantec identified countermeasures and projects to help improve safety within the city.

The City of Greenville was able to seek a Phase II Implementation funding grant because Stantec provided a Safety Action Plan that met the eligibility requirements of the SS4A Program (Phase I).



CLIENT

City of Greenville

CONTACT

Valerie Holmes
Assistant City Engineer -
Traffic
(864) 467-4360
vholmes@greenvillesc.gov

RELEVANCE

- ✓ Extensive public outreach program
- ✓ Road Safety Audit
- ✓ Crash Analysis
- ✓ Safety countermeasures

KEY STAFF

- ✓ Mike Rutkowski

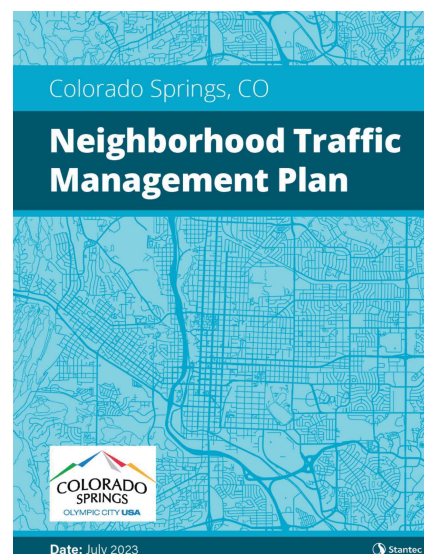
Colorado Springs Neighborhood Traffic Management Plan & Speed Control Measures

COLORADO SPRINGS, CO | 2022-2023

Knowing that speeding and neighborhood cut-through traffic is unsafe for the community, the Colorado Springs Department of Public Works sought to formalize its established Neighborhood Traffic Management Process (NTMP) by streamlining citizen requests in a public-facing document and program website.

Stantec guided this process by establishing benchmarks for best practices, identifying critical elements of the existing program, and suggesting improvements. Staff looked at various street types for program eligibility and introduced a new matrix of potential traffic calming measures based on the categories. To help the public visualize the process of making their request through installation and review of treatment effectiveness, a concise and visually appealing document was produced. Stantec's team put together one-page traffic calming handouts which describe the typical installation for 17 common traffic control solutions.

Lastly, the team developed a public engagement toolbox (purpose, context, treatments, and voting process) and drafted website content which explains the purpose and safety benefits of the program.



CLIENT

City of Colorado Springs

CONTACT

Tim Roberts
Senior Transportation
Planner
timroberts@
coloradosprings.gov
(719) 335-5908

RELEVANCE

- ✓ Online/virtual and in-person engagement
- ✓ Development of Traffic Calming Decision Process
- ✓ Safety metrics and data needs
- ✓ Speed Reduction Countermeasure & Costs
- ✓ Design Standards and Specifications

KEY STAFF

- ✓ Timothy Tresohlavy, AICP, GISP
- ✓ Mike Rutkowski, PE, AICP

Hampton Historic District Traffic Calming Study

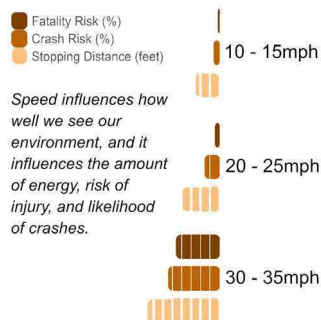
SUMTER, SC | 2015-2016

The Stantec team developed traffic calming measures on Calhoun Street between Guignard Drive and North Washington Street that will improve the safety and comfort of all roadway users without unduly impacting vehicle movements. The project involved four steps: 1) existing conditions data collection and reporting, 2) neighborhood meetings, 3) alternatives development and 4) final reporting.

As part of Step 1, our project leaders met with local planning officials to retrieve existing data and establish a protocol for collecting turning movement counts for all modes at important intersections along the corridor. Additionally, our planners conducted a lighting study, collected speed data and determined origins and destinations through floating car studies and direct observation.

Finally, we presented the alternatives to stakeholders, evaluated the merits of each alternative, and identified a preferred traffic calming implementation strategy for the corridor. Our summary report included final costs and construction phasing in accordance with City policies and staff directives.

EFFECTS OF SPEED



CLIENT

City of Sumter

CONTACT

George McGregor,
AICP
Former Planning
Director
(860) 658-3252
gmcgregor@
simsbury-ct.gov

RELEVANCE

- ✓ Speed Measurements and Data Analysis
- ✓ Neighborhood Slow Speed Campaign/ Pilot Project
- ✓ Extensive community outreach
- ✓ Crash analysis
- ✓ Speed Countermeasures Analysis
- ✓ Corridor Concept Design

KEY STAFF

- ✓ Mike Rutkowski, PE, AICP

Quick Build Speed Control Demonstration Projects

NATIONWIDE | 2015-ONGOING

Stantec worked closely with Smart Growth America to design, prepare, and deliver a series of virtual and in-person Complete Streets Training workshops focusing on quick build demonstration projects. These temporary, low-cost improvements emphasize speed control mechanisms through testing design changes to street design, including lane reductions through painted bike lanes, ped paths, parklets, potted landscaping or raised beds that acts as traffic calming medians, and artist designed colorful crosswalks and intersection treatments. Several of these roadways were on State (DOT) owned right of way.

These speed control demonstrations allow communities and transportation departments to try new ideas to improve safety and accessibility for people walking and biking, while also gathering feedback about a tangible redesign concept before proposed changes are made permanent. In total, Stantec has assisted more than 15 municipalities nationally, with the design and implementation of Speed Control Demonstrations.

Focusing on the quick build model, Stantec's key tasks included preparing and delivering an overview of designing streets for safety and multimodal accessibility, as well as presenting and educating on the benefits of a quick build approach, pavement marking design concepts, and key steps for planning and implementation. In addition, Stantec presented on inclusive community engagement strategies and developed and facilitated engagement planning exercises.



CLIENT

City of Colorado
Springs

CONTACT

Beth Osbourne
Executive Director
Smart Growth
America
(202) 302-0240
beth.osbourne@
t4america.org

RELEVANCE

- ✓ Over 60 Speed Countermeasures and Safety Training Courses with SGA conducted
- ✓ Over 30 speed control demonstrations/quick build projects implemented
- ✓ Extensive out programs with DOTs and municipal leadership

KEY STAFF

- ✓ Mike Rutkowski, PE, AICP, Lead Instructor

CRTC Vision Zero Action Plan

CAPITAL REGION, NY | 2024-ONGOING

Stantec is part of a team currently working with the Capital Region Transportation Council (CRTC) in collaboration with the Cities of Albany, Saratoga Springs, Troy, and Watervliet, the Village of Green Island, and NYSDOT to develop a Vision Zero Action Plan within the Capital Region. The CRTC Vision Zero Action Plan is building off the Transportation Council's 2019 Local Road Safety Action Plan and is an extensive effort given the large geographic area covered by the MPO.

The Plan will focus on a reduction of fatal and serious injury crashes to an eventual goal of zero and a prioritized listing of actionable projects that includes infrastructure projects eligible for Highway Safety Improvement Program (HSIP) funding in New York State. Stantec is leading the Speed Limit Reduction studies, design charettes and Targeted Safety Investigations components of the study as well as contributing to the Safety Analysis, Strategy/Project Selection and Public Engagement tasks.

CLIENT

Capital Region
Transportation Council

CONTACT

Carrie Ward
CRTC
(518) 458-2161
cward@capitalmpo.org

RELEVANCE

- ✓ Vision Zero action plan
- ✓ Safety planning
- ✓ Safety analysis
- ✓ Design charettes

KEY STAFF

- ✓ Matthew Roe

Roswell Safety Action Plan

ROSWELL, GA | 2024-ONGOING

Roswell, a growing suburban Atlanta city, was awarded a \$200,000 SS4A grant to develop a Safety Action Plan. Stantec is working with Roswell DOT staff to conduct a study that will result in a Safety Action Plan, allowing the city to implement the recommended safety projects. The plan includes proven safety countermeasures such as traffic calming concepts, sidewalk improvements, as well as bicyclist and pedestrian amenities.

With a goal of reducing traffic violence on Roswell's roadways through a community-centered plan, a key component of the approach is public outreach.

The project includes innovative outreach initiatives such as open houses, pop up events, and focus groups. Stantec is reviewing crash data through GDOT GEARS and NuMetrics crash reporting systems to form the basis for network screening. A final draft plan will be presented to the City of Roswell's elected officials and made available to the public.

CLIENT

City of Roswell

CONTACT

Jeff Littlefield
Director of
Transportation
(770) 594-6420
jlittlefield@
roswellgov.com

RELEVANCE

- ✓ SS4A Funding
- ✓ Public, DOT, and stakeholder engagement
- ✓ Safety countermeasures

KEY STAFF

- ✓ Catrina Meyer

Worcester Vision Zero Safety Action Plan

WORCESTER, MA | 2024

The City of Worcester is entering a new era in its approach to mobility and transportation safety. Stantec, with subconsultant Speck Dempsey, is working with Worcester to complete a SS4A funded Vision Zero Safety Action Plan. On the heels of a Master Plan and a Mobility Action Plan, the City is embarking on a plan that takes a comprehensive approach to Vision Zero, including strong and sustained engagement with community stakeholders, identification of high-injury roadways, and enhanced partnerships across municipal departments, including planning, public safety, public works, and more. Stantec is leading this effort with a focus on meaningful community engagement paired data-driven recommendations. The project also includes two more phases of engagement, including a recent pop-up event, street demonstration project, and several walking-audits in partnership with community organizations.

Stantec is developing an HIN to identify the small percentage of roadways where the majority of and the most severe crashes occur. The HIN will also be layered together with an equity analysis that explores how over-burdened and under-served communities have been impacted by traffic violence. Outcomes include a federally compliant SS4A Action Plan, broader community awareness about Vision Zero and how the City is addressing traffic violence, and a plan with a roadmap to improving roadway safety through infrastructure improvements and institutional policy/program changes.

CLIENT

City of Worcester

CONTACT

Betsy Goodrich
Transportation Planning
Manager
Department of Transportation
& Mobility
(508) 929-1300 ext. 49034
goodriche@worcesterma.gov

RELEVANCE

- ✓ SS4A Funding
- ✓ Safety planning
- ✓ Public, DOT, and stakeholder engagement

KEY STAFF

- ✓ Catrina Meyer

Project Approach/ Methodology



Project Understanding and Approach

In 2021, the City of Knoxville committed to eliminating traffic fatalities on its streets by 2040. In 2023, the City adopted a Vision Zero Action Plan, reduced speed limits on unposted roads from 30 MPH to 25 MPH, and launched the “Save Lives with 25” campaign. That same year, the City was awarded an \$8 million Safe Streets and Roads for All (SS4A) implementation grant to construct safety improvements on three high-injury corridors and develop supplemental safety studies.

To advance the City’s efforts towards achieving zero traffic deaths by 2040, additional steps are needed to eliminate traffic fatalities and serious injuries. In 2022 and 2023, Knoxville averaged over 260 crashes involving a severe injury or death. Speed was a contributing factor in many of these life-altering crashes. Additionally, the Dangerous By Design 2024 (Smart Growth America) publication states that Knoxville is the 62nd most dangerous metro area in the U.S. for pedestrians.

Alta’s approach to developing a Speed Management Plan focuses on an efficient, outcome-driven work plan that emphasizes timely data collection, public engagement, and tangible deliverables. The Plan will augment the City’s Vision Zero Action Plan, align with FHWA and USDOT guidelines, and will address speed-related fatalities and serious injuries for all road users, including pedestrians, bicyclists, public transportation users, motorists, personal conveyance and micromobility users, and commercial vehicle operators.

The Alta team believes in a flexible approach and scope to maximize project success. Our proposed scope of work is adaptable and can be refined during contract/scoping negotiations and throughout the planning process. We offer a range of innovative options that can be tailored to align with the City’s priorities and direction. **Our focus is on developing a practical, actionable, and implementable plan for Knoxville.**

AGENTS OF CHANGE AND INDUSTRY LEADERS:

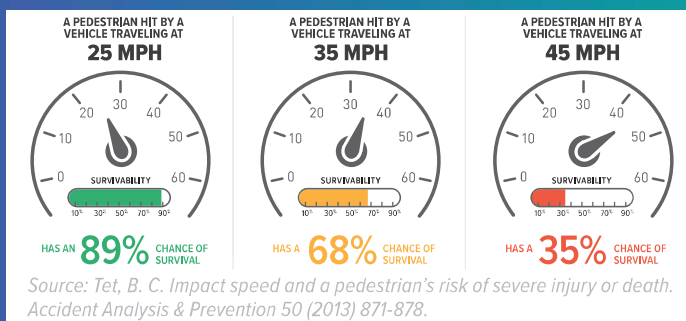
The Alta Team’s Expertise in Speed Management

The Alta team brings unmatched industry experience in setting speed limits, particularly in urban environments like Knoxville. We have been at the forefront of crafting context-sensitive speed management plans, pioneering methodologies for citywide speed limit reductions, and successfully advocating for the adoption of these practices into national standards. Notably, our efforts directly led to the inclusion of context-sensitive speed limits in the 11th Edition of the Manual on Uniform Traffic Control Devices (MUTCD), leading to award-winning implementations.

1. Project Management

Effective and proactive project management from the outset is the foundation of Alta’s approach to ensuring project success. Alta has decades of experience delivering high-quality, award-winning transportation projects for cities like Knoxville. We identify key objectives early in collaboration with the client, adhere to the work plan, and adapt to new information as the project progresses. Strong communication will be critical to the success and the plan, and Alta’s Project Manager will coordinate regularly with Knoxville’s Project Manager by email and phone to ensure that the project stays on track. Biweekly or monthly meetings will be held to review progress, provide status updates, discuss schedule and budget, and recap next steps.

Bianca Popescu, our proposed Project Manager, will work closely with the City of Knoxville to build and adhere to the project schedule, outline clear deliverables, and lead technical task teams. Proposed Project Principal Ryan Sharp will oversee the development of the Plan, maintain quality control, as well as on-budget and on-time delivery. The Project Management Team will be supported by a team of safety and technical experts from Alta and Stantec who are specialized in speed management processes, strategies, and tools.



Moreover, crash data analysis conducted by Alta for the 2023 City of Knoxville Vision Zero Action Plan showed that speed was a significant factor in crashes throughout the City, particularly impacting people walking and biking. Specifically, Alta found that pedestrian and bicyclist-related crashes on arterials in commercial areas caused 56 pedestrian and cyclist fatalities and serious injuries. The City’s 2023 Vision Zero Annual Report also found that speeding was a major factor in fatal crashes in the City, contributing to 17% of all fatal crashes in 2023. The Annual Report found that 97% of all fatal crashes in the City occurred on streets with a speed limit greater than 25 mph, and that 94% of all fatalities occurred on roads within commercial areas.

In response, the City has taken targeted steps to improve safety on its high-speed roadways, including securing the \$8 million SS4A Implementation grant, which funds the proposed Speed Management Plan. This plan will adopt a comprehensive approach to reduce speeding and advance the City’s Vision Zero goal of eliminating traffic fatalities by 2040.

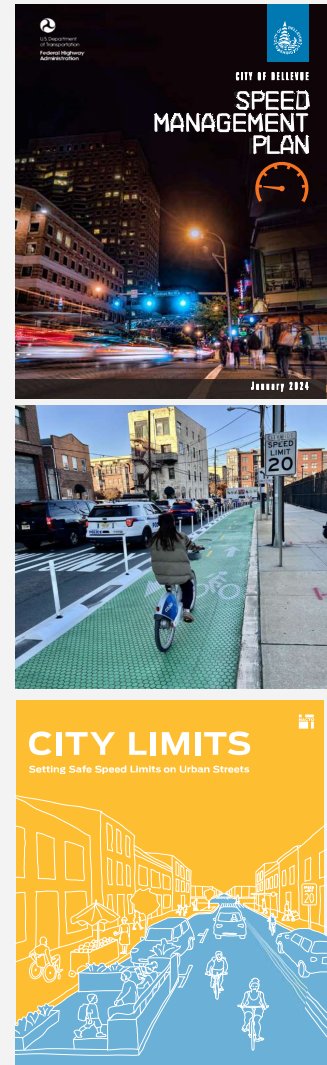
PROJECT LEADERSHIP

Bianca Popsecu, our proposed Project Manager, previously led the development of the City of Bellevue, Washington’s innovative **Speed Management Plan (SMP)**. Funded by the Federal Highway Administration (FHWA), Bellevue’s SMP addressed speed-related safety concerns on arterials with speed limits exceeding 30 MPH by proposing targeted safety countermeasures and comprehensive strategies to reduce speeding.

Ryan Sharp, our proposed Principal-in-Charge for the Knoxville Speed Management Plan, successfully led Hoboken, New Jersey’s citywide speed limit reduction initiative. This effort integrated FHWA’s USLIMITS2 tool, NACTO’s City Limits recommendations, and MUTCD guidance to prioritize context-appropriate speed limits over traditional reliance on 85th-percentile speeds. This project earned the Vision Zero Award from the Institute of Transportation Engineers (ITE) in 2024.

Matthew Roe, from Stantec, “wrote the book” on setting context-sensitive speed limits. As the Technical Writer and Editor of NACTO’s City Limits: Setting Urban Speed Limits Guide, Matthew established a new framework for setting speed limits in urban areas based on conflict density and activity levels. This guide offers an alternative to traditional percentile-based speed setting, using a three-pronged approach:

- » Setting default speed limits for broad street categories (e.g., 25 MPH on major streets and 20 MPH on minor streets),
- » Creating designated slow zones in sensitive areas, and
- » Establishing corridor speed limits on high-priority streets through safe speed studies that consider conflict density and activity levels.



Sarah Littlefield, who was instrumental in developing the City’s Vision Zero Action Plan and Knoxville TPO Region’s Roadway Safety Plan, will serve as Assistant Project Manager, assisting with task assignments and technical analysis.

2. Data Collection and Plan Review

2.1 DATA COLLECTION

Alta will conduct a comprehensive review of existing data sources relevant to the project and develop a data needs request memo. Data sources may include:

- Crash data
- Roadway inventory, including roadway characteristics (number of lanes, horizontal curvature, vertical elevations, paved shoulders, lighting, clear zones, etc.) and traffic volume data
- existing speed zones and speed limits
- Spatial data, such as land use, jurisdictional overlays, school zones, and equity considerations
- Speed data from traffic studies
- Real time speed data from sources like Replica, StreetLight Data, Michelin, AirSage, Urban SDK, or Iteris ClearGuide
- Spot speed data collected using radar
- Survey data, such as driver surveys about speeding, attitudes toward countermeasures, etc.
- Enforcement citations and conviction data (to be used alongside crash data, as citations alone may not indicate where speeding issues are most prevalent)
- Speed complaint databases compiled by law enforcement agencies
- Existing safety program analyses or plans that may have already identified speeding-related crash problems or other speed management challenges
- Field assessments or Road Safety Audits to identify speed-related safety concerns
- Stakeholder interviews or meetings to identify challenges related to speed limit setting, design and engineering, enforcement, and education. These conversations will help identify policies, practices, and guidelines that may influence the effectiveness of speeding-related countermeasures.

As part of this task, we will conduct speed radar measurements at select spot locations. This data will be used to augment key corridors that lack proper speed measurements. This provides more efficient and reliable speed measurement data.

The collected data will help put together and tell the story of the prevalence, location, and typologies of speeding-related crashes and issues across the city. Our goal from this Task is to build a robust, data-driven foundation for the city's Speed Management Plan that will serve as the baseline from which Knoxville can advance towards identifying targeted, effective speed management strategies.

2.2 PLAN & POLICY REVIEW

The Alta team will review relevant policies, plans, and guidelines to identify opportunities for implementing enhanced speed management strategies. It will be important to capture information such as current and ongoing planning studies and efforts, Complete Streets and traffic calming policies, design guidelines, capital improvement prioritization processes, and crash reporting guidance to understand the planning, design, and implementation mechanisms that would hinder or facilitate the advancement of speed management strategies. The plan and policy review and assessment results will be summarized in a matrix to clearly demonstrate the linkages to the proposed strategies.

3. Stakeholder and Public Engagement

Alta's unique approach to stakeholder and community engagement emphasizes forging forward relationships with stakeholders and the community that last long after the Speed Management Plan is completed. Alta will consider the context of prior public engagement efforts and planning activities throughout the Knoxville community. While we will meet minimum federal public outreach requirements, our approach is designed to go beyond compliance and produce genuinely meaningful results.

We propose conducting a range of innovative engagement strategies, including a public awareness campaign, interactive online mapping and engagement tools, specific strategies focused on reaching underrepresented groups, pop-up events, canvassing along high-injury corridors, and a client-facing dashboard. We believe these initiatives are vital to achieving sustained success and community buy-in.

Stakeholder and community engagement from Knoxville's Regional Roadway Safety Plan Update: "walking workshop" (walking audit) and engagement meeting presentation (photo credit: KRTPO)

3.1 STAKEHOLDER ENGAGEMENT & TASK FORCE

Alta's approach focuses on helping the City strengthen relationships with stakeholders while diverse voices are heard in the decision-making process. This effort will begin with a Stakeholder Mapping process, where stakeholders will be mapped according to their influence and impact and grouped into the appropriate level of engagement. The stakeholder mapping process is crucial for long-term project success, particularly as selected projects advance to implementation.

Key stakeholders identified through this process will lead a standing Task Force that will meet at key milestones throughout the project. Examples of Task Force members include the different City Departments responsible for the planning, funding, and implementation of programming and capital improvements, as well as TDOT. Alta will schedule and facilitate the Task Force meetings to incorporate community feedback and provide opportunities for input on high-crash and high-speed locations, speed limit setting, speed management countermeasures, and proposed policies and safety projects.

Specifically, at the first Task Force meeting, Alta will host a virtual workshop to set guiding principles and goals for the Speed Management Plan that align with the City's existing Vision Zero framework. During a subsequent Task Force meeting, we will host a Speed Management Plan workshop to review the data analysis results and gain consensus on speed management countermeasures for the project toolbox. At the final Task Force meeting, Alta will present a draft of the complete plan along with recommendation summaries.



3.2 COMMUNITY ENGAGEMENT

The Alta team will draw upon our extensive experience leading speed management strategies, safety action plans, and multimodal transportation planning across the country to develop a robust engagement strategy that offers diverse methods for community members to participate. This approach centers on equitable outreach to all segments of Knoxville's population, including underrepresented groups who are often disproportionately affected by speeding in their communities. While Speed Management Plans are inherently data-driven, it is equally important to thoughtfully integrate community input into project development and prioritization. We aim to strengthen the City's existing relationships with its community as part of this process.

Alta will create a Public Involvement Plan (PIP) that outlines various engagement activities, such as workshops, interviews, focus groups, community walk audits, pop-up events, surveys, and online tools like an interactive web map. These activities will be conducted in-person, virtually, or in a hybrid format depending on the preference of the City and the needs of the targeted stakeholder groups.

Engagement milestones will include:

- **Phase 1 — Listening and Learning:** We will aim to collect input from community members and key partners about their mobility needs, safety experiences, and traffic speed-related concerns to inform the project vision and goals.
- **Phase 2 — Reflecting and Diving In:** We will incorporate feedback from the community and provide further opportunities for the public to weigh in on high-crash locations, crash profiles involving speed as a factor, and speed management strategies, and projects. This phase will include more in-depth context about the planning process, evaluation themes, and potential recommendations.
- **Phase 3 — Refining:** We will share the draft plan and recommendation summaries with the public, gathering additional feedback and refining the plan based on input.



Safety Planner Sara Kovachich works with community members during a project symposium.

PROJECT SYMPOSIUM

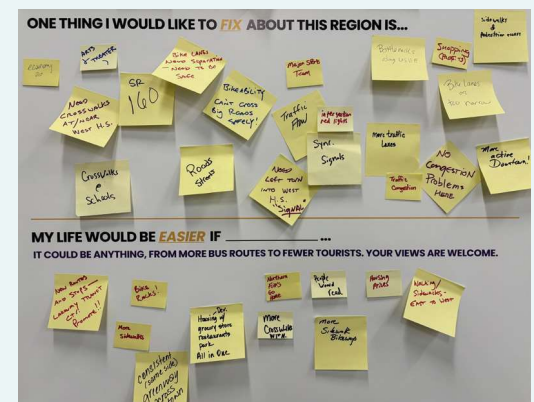
The first public meeting will focus on the project history, a validation of the problems (i.e., speeding, safety, etc.) and begin developing a future vision for improving speed management in Knoxville. The meeting will include a facilitated discussion to engage the community and discuss success stories from around the nation about implementing traffic calming, modal choices, equity, and walkable communities. The event will include an interactive mapping exercise to build excitement, identify key issues, and solicit ideas. A visioning exercise using **Instant Polling**, will invite participants to identify both multimodal connections and problems, and prioritize modes of transportation. A **Visual Preference Survey** will allow participants to identify/prioritize specific speed countermeasures and design features that they would like to see throughout the community.

Walking and Riding Audits, often referred to as “walking workshops,” will be conducted on the same day as the Symposium. These audits will involve community members and stakeholders exploring select corridors to experience firsthand what it feels like to navigate the area as a pedestrian, bicyclist, or individual with a disability. Typically lasting one to two hours, walk audits are a powerful tool for discussing issues related to streets, their context, and qualitative factors such as comfort, safety, aesthetics, trail connections, and other corridor features.

The process allows participants with an interest in specific issues or areas to closely observe and engage with the environment, gaining a deeper understanding of the perspectives of others in the group. This shared experience fosters a more comprehensive appreciation of the context, encourages practical idea generation, and facilitates more meaningful discussions moving forward. We will also provide a Walking Audit Form for participants to document their observations and insights.



Above: Alta team members lead a riding audit. Below: Community members participated in an “instant poll” for Knoxville’s Regional Roadway Safety Plan update.



The Alta team will incorporate input received from public outreach to develop context-sensitive solutions to manage traffic speeds and improve roadway safety for all users in Knoxville. Insights from the stakeholder mapping process will guide the alignment of engagement methods with the project's objectives, ensuring that outreach efforts are both effective and supportive of long-term, collaborative relationships between the City and its stakeholders.

3.3 SPEED MANAGEMENT PUBLIC EDUCATION CAMPAIGN

As part of the development of the Speed Management Plan, Alta will develop a comprehensive educational campaign focused on promoting safer speeds. The campaigns ideally will include media advertising, community outreach, and partnerships with local organizations. Based on direction from the City, the campaign graphics will feature illustrations of local landmarks, accompanied by clear, simple messaging tailored to Knoxville.

The media blitz will be paired with community outreach, incorporating community events, art contests, ambassador programs, influencer activities, and more. Media and collateral may include community posters, postcards, yard signs, bus and radio ads, and digital advertising on platforms like mobile apps, gas stations, convenience stores, and streaming services.

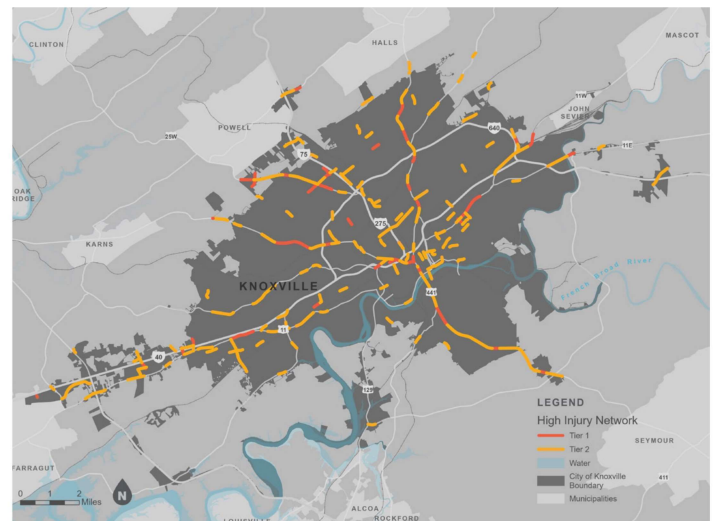
To effectively communicate with diverse audiences, the campaign will include a series of short videos that will be easily shareable via social media platforms. The videos will explain the project's purpose, highlight the Vision Zero and Speed Management initiatives, and will feature interviews with community members to capture their perspectives on traffic safety and speeding in Knoxville.



Alta's Creative Services team works alongside our planners and designers to create compelling graphics to engage community members.

4. Data Analysis and Issue Identification

Using the data collected in Tasks 2 and 3, Alta will employ an efficient and targeted approach to produce a comprehensive speed and safety analysis. The analysis will focus on identifying locations with crashes, examining crash severity, and evaluating contributing factors such as speed and crash types for various road users (motorists, pedestrians, transit users, etc.). The Alta team will prioritize speed-related safety concerns and crash locations where speed was a contributing factor, leveraging the HIN previously developed by Alta for the Knoxville Regional Roadway Safety Plan as a key input in the prioritization process.



Knoxville region High Injury Network, developed by Alta for the Knoxville Regional Roadway Safety Plan

The speed and safety analysis will focus on the roads in Knoxville with the highest incidence of severe and fatal crashes, including, but not limited to:

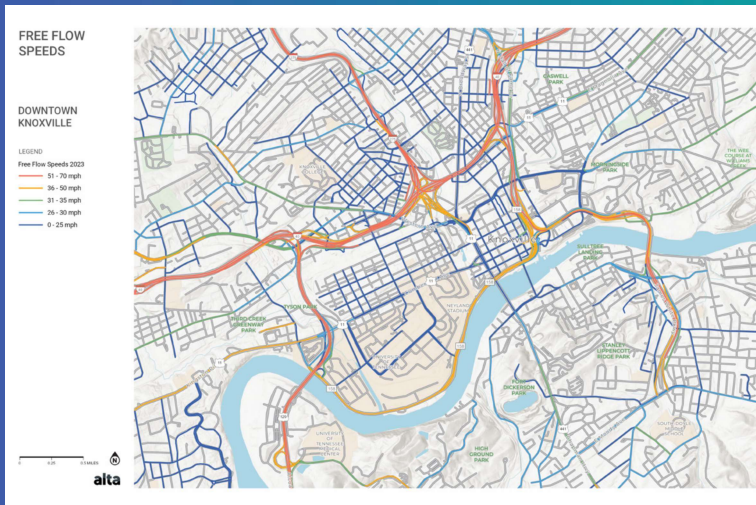
- Clinton Highway (US-25W) from Old Callahan Drive to Schaad Road
- North Broadway from Old Broadway to Highland Drive
- Chapman Highway (SR-71) from Nixon Road to Norton Road
- Western Avenue from 17th Street to Interstate 40
- East Magnolia Avenue from North Harrison Street to North Beaman Street

The team will also explore trends in contextual variables, such as posted speed limits, traffic volumes, observed travel speeds, availability of pedestrian and bicycle facilities, and nearby land use classifications. This assessment will determine how these factors influence the safety of road users, with a focus on speed-related serious injury and fatal crashes. Alta will present the findings in a visually appealing and accessible format, using maps and graphics for public communication accompanied by a detailed technical memorandum.

4.1 SPEED DATA ANALYSIS

As essential aspect of implementing the Safe System Approach is identifying strategies to reduce traffic speeds and thereby reduce the severity of crashes. The Alta team can leverage mobile or connected vehicle data from vendors such as Streetlight, Replica, Michelin, AirSage, HERE or UrbanSDK to proactively assess speed-related safety risks on Knoxville's streets. This analysis will focus on evaluating traffic speed and volume distributions to identify high-speed hotspots within a network.

We will compare observed speeds from connected vehicle providers with posted speed limits to analyze speed differentials. The findings will be presented using maps and charts to highlight areas where speeds exceed safe thresholds. This analysis will not only help pinpoint high-speed routes but also guide the selection of countermeasures and integrate seamlessly into crash analysis and prioritization efforts. The data collection can cover a full month for the entire city or be scaled down to specific corridors identified in the HIN, depending on project scope and budget.



Using our existing Replica speed data subscription, we have pulled free flow speeds in the City of Knoxville. Alta can download quarterly speed data from Replica within 15 minute bins that provide average speeds during the bin time periods throughout the day.

4.2 EQUITY ANALYSIS

The Alta team will conduct an equity analysis using a data-driven approach that identifies areas with concentrations of historically disadvantaged or vulnerable populations by utilizing public health and demographic indicators. We will pay particular attention to demographic groups that are more likely to experience mobility challenges and/or face exposure to streets with speed safety hazards, including low-income populations, households without vehicle access, communities that face high pollution levels and health disparities, and communities of color.

Leveraging internal tools, along with federal, non-profit, and regional datasets, the Alta team will customize the analysis to reflect Knoxville's local priorities and needs. Relevant datasets may include:

- County-specific data and U.S. Census (ACS) data
- CDC Social Vulnerability Index (SVI)
- HUD Location Affordability Index (LAI)
- EPA's EJScreen
- CDC Places data
- Federal datasets relevant to grant applications, such as USDOT's APPHDC and Justice40 CEJST data.

This analysis will produce maps highlighting areas of high need based on population indicators, with a summary of findings provided in a brief memo.

4.3 NETWORK SCREENING AND PRIORITIZATION

The integrated safety, speed, and equity data analyses will be used to identify both systemic and location-specific speeding issues. The Alta team will conduct a network screening to identify corridors with significant speeding-related safety threats and prioritize them for targeted speed management strategies and countermeasures. Corridors will be evaluated and categorized using consistent metrics.

This analysis will not only inform the development of a prioritized list of projects, but also serve as one of four factors – alongside existing policy objectives, current or planned transportation projects, and community feedback – that may initiate a review of speed limits on selected corridors.

5. Speed Limit Setting

TRANSFORMATIVE SPEED LIMIT POLICY

The Alta team will leverage a blend of methodologies to recommend speed limit changes for Knoxville's streets, aligned with the latest MUTCD guidance. The 11th Edition of the MUTCD advises against using the 85th-percentile speed as the sole criterion for setting speed limits on urban and suburban arterials, especially in areas with developed land use. Instead, context-sensitive factors—such as roadway characteristics, geographic context, and crash history—should be considered. We will collaborate closely with the City of Knoxville to select a diverse range of street typologies, with the goal of setting a precedent for adjusting speed limits across the city based on similar contexts.

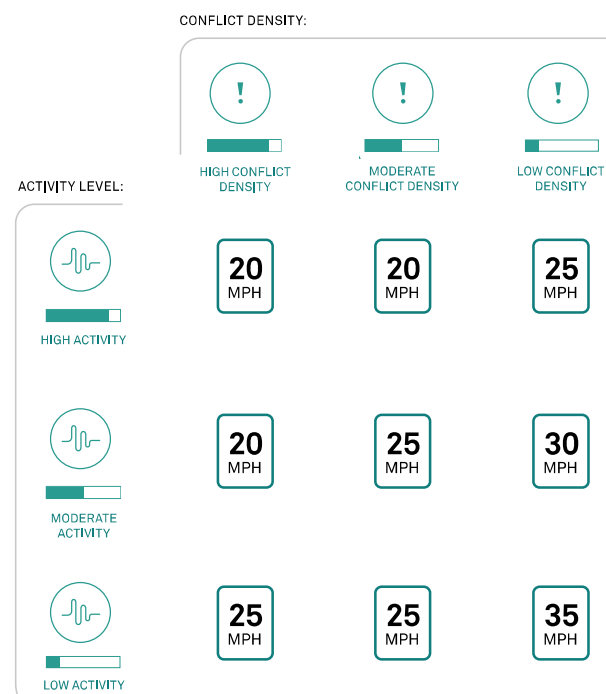
The team will take a best-practice contextual approach to speed limit setting inspired by the NACTO City Limits guide, for which team member Matthew Roe served as Technical Lead. Consistent with the Safe System Approach, this evidence-based method breaks out of the cycle of setting speed limits based on existing speeds, basing speed limits on the type of multimodal activity and conflicts present. The NACTO guidance will be supplemented with other tools such as FHWA’s USLIMITS2 method, which encourages the use of 50th percentile speeds in most urban and suburban settings. Changes to national standards over the last several years provide an impetus to revisit speed limits on urban and suburban streets using contextual guidance. As of 2024, the U.S. Manual on Uniform Traffic Control Devices (MUTCD) requires that speed limit studies primarily consider roadway context, along with such factors as pedestrian and bicycle activity levels and facilities and recommends against the stand-alone use of the 85th percentile of free-flow motor vehicle speeds.

DATA COLLECTION AND ANALYSIS

After selecting the target streets for speed limit (re)setting, the Alta team will collect critical data inputs, including speeds, recent crash histories, traffic volumes, and various context-sensitive factors like adjacent land uses, activity levels, conflict density, and curbside regulations. These inputs will be analyzed using FHWA’s USLIMITS2 tool and NACTO’s Risk Matrix Checklist to determine speed limits that align with each street’s context and Knoxville’s safety and mobility objectives.

- **USLIMITS2** assesses factors such as operating speeds, annual average daily traffic (AADT), roadway characteristics, development density, crash rates, on-street parking presence, and pedestrian/bicycle activity.
- **NACTO’s City Limits guide** incorporates a Risk Matrix Checklist for urban streets, using Conflict Density Analysis and Activity Level Analysis to set speed limits.

The results from USLIMITS2 and NACTO’s Risk Matrix will inform a comprehensive table of recommended speed limits, along with a map highlighting these recommendations.



TURNING REGULATIONS INTO ACTION

In addition to establishing speed limits, the Alta team will support Knoxville in developing an actionable implementation plan. This will include:

- Assessing signage costs and quantities
- Proposing new pavement markings
- Strategically deploying speed radar feedback signs
- Preparing educational materials to inform the public about the changes

By combining data-driven analysis with practical implementation strategies, the Alta team aims to create safer, more context-appropriate speed limits throughout Knoxville.

6. Develop Speed Management Countermeasures and Actions Toolbox

6.1 SPEED MANAGEMENT COUNTERMEASURES AND ACTIONS TOOLBOX

The Alta team will develop a Speed Management Countermeasure Toolbox for the City of Knoxville that will serve as a resource of engineering, enforcement, and behavioral strategies designed to reduce speeds on city streets. The team will customize this toolbox to Knoxville’s specific needs, incorporating solutions such as geometric design modifications, systemic safety improvements, behavioral strategies, and intelligent transportation systems. Given Knoxville’s diverse land-use contexts, the application of these countermeasures will be aligned with various street typologies and contexts. Each countermeasure’s effectiveness will be assessed using national best practices and guidelines, such as FHWA’s Proven Safety Countermeasures and the Desktop Reference for Crash Reduction Factors, to document relevant crash reduction and modification factors.

6.2 CORRIDOR CONCEPTUAL DESIGN

Our approach is augmented by our analysis of existing traffic, speed, congestion, and safety data. Concept designs represent a combination of our team's understanding of the community's vision with analysis of the best-available data and filtered through a lens of sound engineering principals. We have built a successful process on similar projects by following a two-phase approach that integrates well with stakeholder outreach and charrette-based planning. The first step is to develop a ***preferred access plan***, which leads to the second step, ***corridor concept design***.

Preferred Access Plan

This phase involves collection and analysis of existing data, field measurements, traffic operational/speed/safety analysis, and identification of potential design constraints. Corridor context may include items listed below:

- Speed differential
- Streetscape character
- Public transportation (transit)
- Circulation of traffic patterns and volume
- Sidewalk continuity
- Lighting and security concerns
- Stormwater drainage, infrastructure, and water quality
- Corridor assets
- Utilities infrastructure
- Signage and wayfinding
- Traffic control signals
- Freight mobility and routing, including state route designations
- Safety analysis including frequency, severity, and contributing factors
- Topography constraints

The ***Preferred Access Plan*** is represented through a schematic mapping exercise to identify the baseline street network improvements relative to multimodal connectivity, speed countermeasures, access considerations, management of access, and alternative intersection treatments. A combination of ArcGIS and Photoshop are utilized to develop this feasibility-level schematic illustration, which allows the team to 'test-fit' a range of alternatives and receive feedback from stakeholders. After incorporating feedback and direction from the City, our team will advance to concept design.

Corridor Concept Designs

The Alta Team will develop ***Corridor Concept Designs*** for the entire length of the project corridor. The concept designs build upon the vision and recommendations reflected in the Preferred Access Plan supplemented by urban design concepts for the surrounding land uses.

We use our CAD designers to develop 10% - 15% design concepts, which can easily be parlayed into final design plans. This will include streetscape elements and identification of the physical footprint and relative impact of the speed countermeasures and access management corridor improvements. Design features may incorporate:

- Recommendations to improve traffic movement, including lanes, channelization, or medians;
- Speed Countermeasures strategies, including both physical or non-physical (driver behavior) elements;
- Pedestrian safety elements, such as visibility and marked crosswalk enhancements, accessibility needs, pedestrian countdown signals, or lighting;
- Bicycle facility improvements: on-road facility markings, bicycle signage, or intersection improvements;
- Streetscape features, such as vegetation or gateway treatments;
- Access management considerations; and
- Visibility and safety improvements.

As with most street improvements, public right-of-way is often limited. Concept designs will balance tradeoffs and focus on the cost-effective alternatives that align with the feedback curated early in the process with stakeholders. Stantec will lead this task and will field-verify the concept designs with drainage, utilities, property rights-of-way impacts in mind.

Cost Element

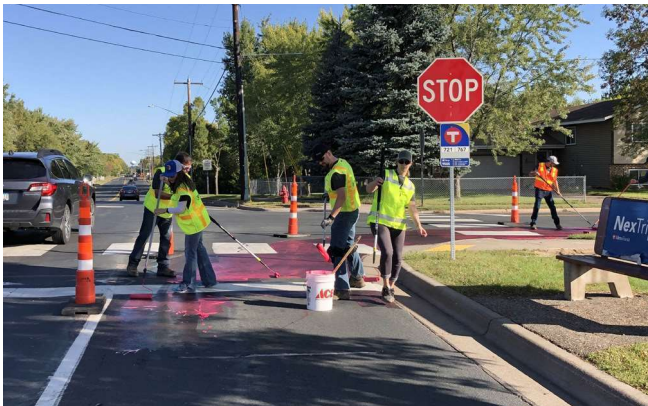
Planning-level construction cost estimates will be prepared for multimodal planning and design recommendations within the corridor. Unit costs will be determined using the latest cost values provided by TDOT and/or the City of Knoxville. Project phasing will be considered to identify potential funding resources, level of constructability, timeframe, and responsible agencies. Inflation factors may be incorporated to provide considerations for short- and long-term investments.

6.3 DEMONSTRATION PILOT PROJECT

Recognizing that a Vision Zero commitment is fundamentally about change management, meaningful community engagement will be critical to every aspect of our work and will be woven into each task described in this proposal. Our goal is to empower community members to be informed participants in shaping solutions that speak to their experiences and needs— and to generate durable support for implementation. Additionally, an integral part of the engagement process is to use demonstration speed management projects to show the value and effectiveness of reduced speed limits, especially when combined with speed management techniques.

The Alta team will work closely with the City to design, prepare, and deliver a series of quick build demonstration projects. These temporary, low-cost improvements emphasize speed control mechanisms through testing design changes to roadway characteristics, including lane reductions through painted bike lanes, ped paths, parklets, potted landscaping or raised beds that acts as traffic calming medians, and artist designed colorful crosswalks and intersection treatments, to.

These speed control demonstrations will give the community an opportunity to experience innovative safety improvements firsthand while allowing the City to test new approaches for enhancing safety, speed control, and accessibility for pedestrians and cyclists. They also serve as a platform to gather feedback on tangible redesign concepts before implementing permanent changes. Close collaboration between TDOT and the City will be crucial, offering a chance to identify potential barriers to collaboration and develop strategies to overcome them effectively.



7. Ongoing Monitoring, Evaluation and Performance Measures

Speeding on public roadways is a multifaceted issue influenced by cultural, economic, political, environmental, and engineering factors. Given the strong correlation between speed and the severity of crashes, speed management should be a core focus of the City of Knoxville's Vision Zero program as it strives to eliminate traffic fatalities on city streets by 2040.

The Alta team will collaborate with the City to develop a formal Performance Measurement Plan, maintaining transparency and accountability. This plan will provide a set of metrics to track progress on the current Speed Management Plan as well as future speed management initiatives. The Performance Measurement Plan will include:

- **Intuitive, Easy-to-Update Performance Measures:** These will encompass key metrics required by the USDOT Grant Agreement, such as equity, cost assessments, and lessons learned. Additional measures will be designed to track Knoxville's progress towards achieving project goals that may evolve throughout the implementation of the Speed Management Plan. Potential metrics include changes in crash frequency and severity, as well as shifts in speed distribution following the implementation of countermeasures or speed limit reductions.
- **Clear Reporting Guidance:** This will provide detailed instructions, timelines, and requirements for:
 - » Regular progress reports on performance measures to the public and stakeholders.
 - » Identification and reporting of project outcomes.
 - » Evaluations of the effectiveness of implemented strategies.
 - » Updates to the Speed Management Plan every five years to ensure continued alignment with safety objectives.

This approach will help Knoxville effectively monitor its progress, adjust strategies as needed, and sustain momentum toward achieving its Vision Zero goals.

8. Development of a Draft and Final Speed Management Plan

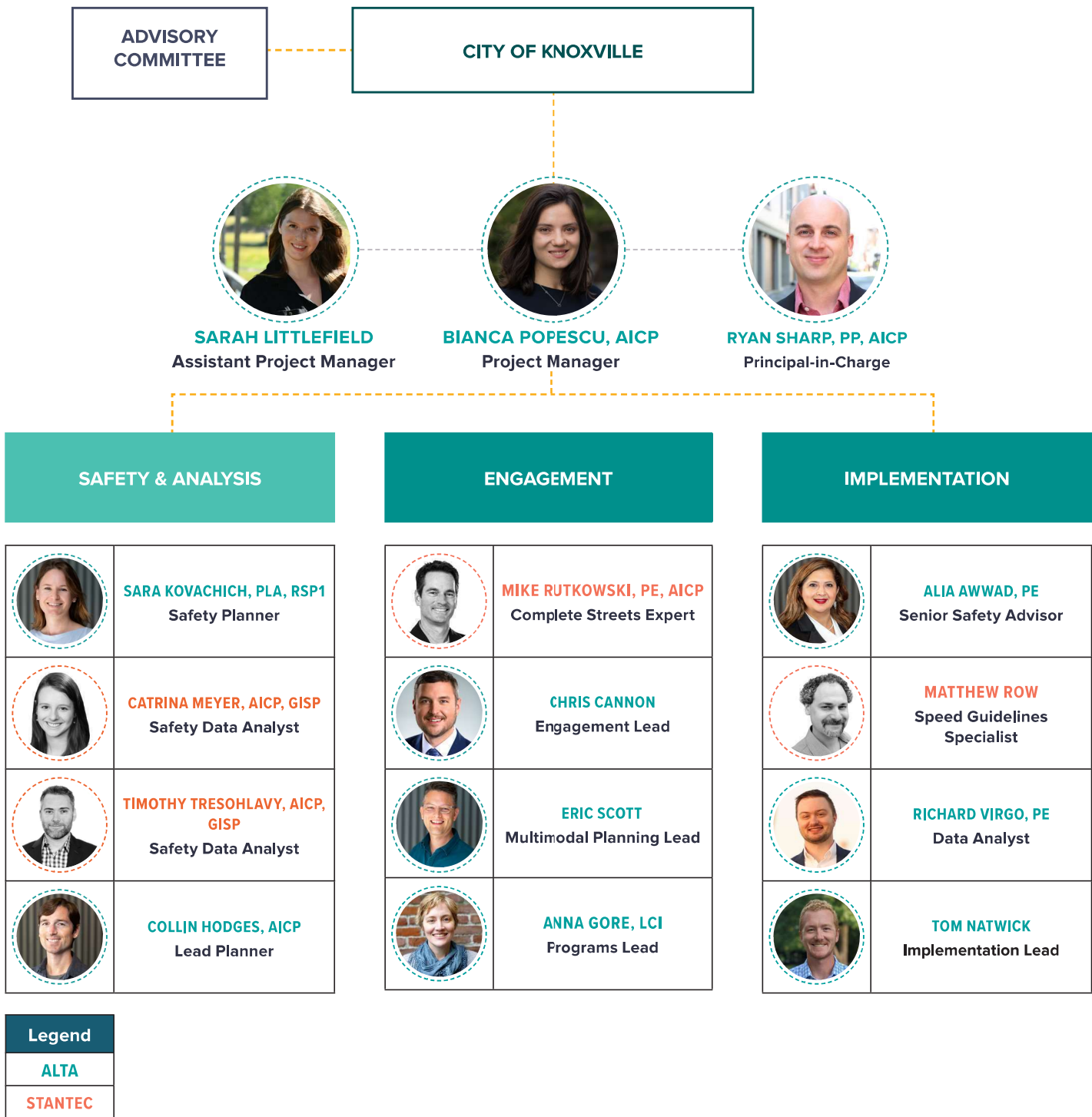
The Speed Management Plan will be designed as a public facing, “living document” that can be easily updated over time. Following the guidelines outlined in the FHWA Speed Management Action Plan Template, the Alta team will work closely with City of Knoxville staff and the Task Force to refine the draft plan before finalization and approval. The final report will consolidate all previous deliverables, along with supporting graphics, maps, and appendices, into a cohesive, clean, and easy-to-read document.



Alta is the leading firm in creating action-oriented plans with realistic, implementable recommendations.

Key Project Personnel Qualifications & Experience

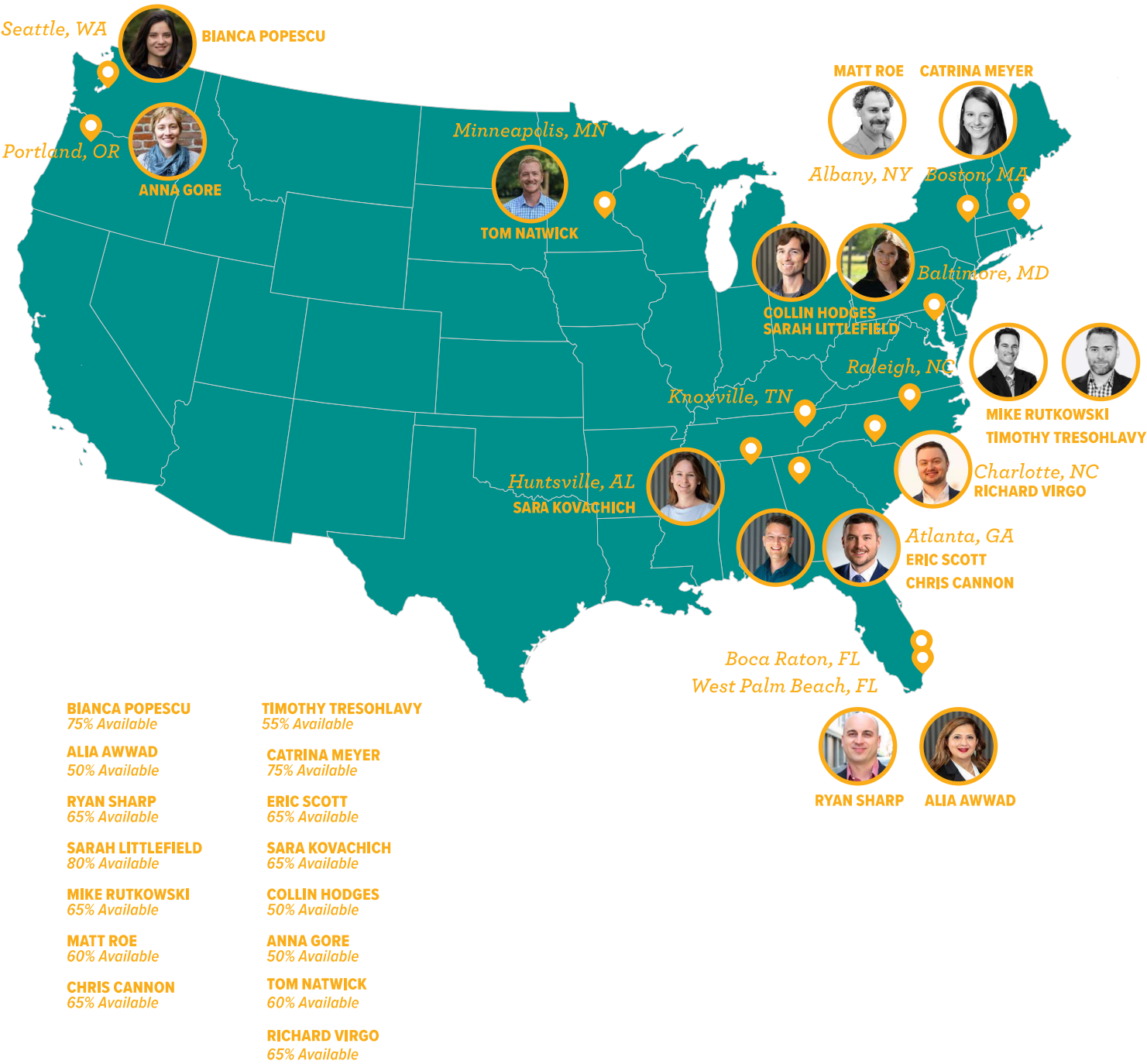
Organizational Chart



Firm Availability

Alta and Stantec offer a powerful combination of national expertise and deep local understanding to benefit this project. With offices across the US, both firms excel at seamless collaboration, leveraging a nationwide network of knowledge and best practices. Our teams have a proven track record of successful collaboration, including our current work on the Knoxville Regional TPO Metro 2025 Transportation Plan Update.

This project demonstrates our ability to effectively combine remote and in-person collaboration. We have team members on the ground in Knoxville who provide local insights and build strong relationships, while also drawing upon the expertise of colleagues across the country. This approach ensures that the project benefits from both a national perspective and a nuanced understanding of Knoxville’s unique context.





Ryan Sharp, PP, AICP

Principal-in-Charge

YEARS OF EXPERIENCE

16 years

LOCATION

Boca Raton, FL

EDUCATION

BS, Public Administration,
Florida International University

AREAS OF EXPERTISE

Complete Streets
Vision Zero
Safety analysis
Safe System principals
Traffic operation analysis
Bicycle and pedestrian
planning
Data collection/analysis
Transportation master plans

AVAILABILITY



Ryan's strategic vision and skill at navigating complex stakeholder relationships have driven numerous successful projects, including major multi-modal street redesigns and the implementation of New Jersey's densest bicycle facilities network. Under Ryan's leadership as the Director of Transportation and Parking for the City of Hoboken, Hoboken's Complete Streets and Vision Zero Programs earned national acclaim, achieving seven consecutive years without a traffic death.

Relevant Experience

Hoboken Complete Streets Design Guide and Implementation Plan, NJ*

As Project Director, Ryan led the City of Hoboken's effort to develop a cutting-edge street design guide and implementation plan for Hoboken's Complete Streets Program. Under Ryan's direction, the Street Design Guide utilized an innovative approach to reclassify Hoboken's street typologies, updated the City's nine-year-old complete streets policy, and developed a site plan review checklist to streamline the implementation of complete streets projects. The purpose of this project was to provide policy and design guidance for governmental agencies, consultants, developers, community groups, and all others involved in street design decisions with the intent to support safe, affordable, equitable, and healthy mobility options.

The Curb Reimagined: Hoboken Curbside Mobility and Parking Master Plan, NJ*

As Project Director, Ryan led the City of Hoboken's effort to create its first ever Curbside Management Plan. The purpose of the plan was to better balance the use of curbside space across the city among different uses, such as bicycle lanes, loading zones, bus stops, parking, outdoor dining, and more. Ryan led the development of an innovative project scope of work that included the planning of a citywide protected bicycle lane network using a holistic approach that incorporated impacts to other curbside regulations.

Frank Sinatra Drive Complete Street Redesign, Hoboken, NJ*

As Project Director, Ryan led the City of Hoboken's effort to redesign the city's waterfront boulevard, Frank Sinatra Drive, into a world class complete street. Through Ryan's vision and leadership, the project team used Safe System principles and proven FHWA safety countermeasures to redesign Frank Sinatra Drive in a safer, more inclusive, resilient, and attractive street. The redesign included a two-way bikeway physically separated by a buffer zone with 150 new shade trees, raised pedestrian crosswalks with Rapid Flashing Rectangular Beacons (RRFBs), curb extensions, enhanced street lighting, curbside EV charging stations, parking for persons with disabilities and ADA-compliant curb ramps, loading zones, and drainage improvements.



Experience Spotlight:

Hoboken Vision Zero Action Plan, NJ*

As Project Director and Chair of Hoboken's Vision Zero Task Force, Ryan led a project team of City staff, consultants, and community task force members to develop a best-in-class Safety Action Plan for Hoboken's Vision Zero Program. The purpose of the Vision Zero Action Plan was to create a comprehensive framework using Safe System principles to help the City of Hoboken achieve its goal of eliminating traffic deaths and serious injuries by 2030. **As part of this effort, Ryan oversaw a speed limit study that resulted in the City reducing its citywide speed limit to 20 MPH and 15 MPH in school zones.** This initiative received the Project of the Year award from the Institute of Transportation Engineers in February 2024.

*Completed prior to joining Alta



Bianca Popescu, AICP

Project Manager

YEARS OF EXPERIENCE

10 years

LOCATION

Seattle, WA

EDUCATION

MASc, Transportation Engineering, University of British Columbia

BEnvSc, Planning, University of Waterloo

AREAS OF EXPERTISE

Stakeholder engagement
Public engagement
Traffic operation analysis
Bicycle and pedestrian planning
Safety analysis
Vision Zero planning and implementation
Data collection/analysis
Transportation master plans

AVAILABILITY



Through her work as a diligent planner and Project Manager, Bianca strives to improve communities by increasing the safety and accessibility of the transportation system, especially for vulnerable road users. She specializes in safety and Vision Zero plans, road safety assessments, multimodal corridor studies, bicycle and pedestrian planning, and spatial GIS analyses, aiming to create safer streets for all.

Snohomish County Road Safety Plan, WA*

As the Project Manager for the County's inaugural safety plan, Bianca championed the adoption of the Safe Systems approach, driving a paradigm shift towards a more holistic and data-driven approach to road safety. Leading a dedicated project team, Bianca spearheaded the development of crucial components including a systemic safety analysis, HIN, interactive Collision Data Dashboard, and a project prioritization tool. She facilitated a virtual stakeholder engagement effort and received buy-in from multiple stakeholders for the project.

Local Road Safety Plans, Cities of Tacoma, Auburn, and DuPont, WA*

Bianca served as Project Manager for these cities' first Local Road Safety Plans, identifying priority safety improvement projects based on high-risk roadway features that are correlated with KSI and bike/pedestrian collision types, allowing the cities to successfully apply for HSIP funding.

Ellensburg Active Transportation Plan, WA*

As Project Manager for the City's first Active Transportation Plan, Bianca identified gaps in the bicycle, pedestrian, and trail networks to develop a project prioritization list. Leveraging both in-person stakeholder engagement sessions and an innovative online web mapping tool, the project team integrated valuable feedback from the community, ensuring a comprehensive and inclusive approach to network improvement.

Senior Transportation Planner, City of Bellevue*

Bianca previously served as a Senior Transportation Planner for the City of Bellevue. In this role, she acted as Project Manager for efforts including Road Safety Assessments, where she identified safety issues for vulnerable road users, and for the City's Speed Management Plan, where she developed the scope for prioritizing arterials based on safety, equity and infrastructure data and developing a safety countermeasure toolbox for arterials. Her responsibilities included leading public engagement, overseeing consultants, managing grant funding, coleading workshops and walk audits for City staff, designing methodologies for implementation; and facilitating workshops for internal and external stakeholders.

Experience Spotlight:

Bellevue Speed Management Plan, WA*

Bianca served as the City of Bellevue's Project Manager for the City's Speed Management Plan (SMP). To work towards the City's 2030 goal of eliminating traffic deaths and serious injuries, the SMP uses various types of data to identify where speed management is needed and what countermeasures would be appropriate for different contexts. The SMP also establishes next steps, including initiation of an implementation team, establishing programming and funding, making strategic alignments within city and outside jurisdictions, and continued monitoring and refinement of the SMP. Bianca developed the scope for prioritizing arterials based on safety, equity and infrastructure data, and developed a safety countermeasure toolbox for arterials.



*Completed prior to joining Alta



Sarah Littlefield

Assistant Project Manager

YEARS OF EXPERIENCE

5 years

LOCATION

Baltimore, MD

EDUCATION

MURP, Harvard University
BA, Global Sustainability and Government, University of Virginia

AREAS OF EXPERTISE

Campus transportation projects
Urban design
Spatial analysis
Cartography
3D Modeling
Data visualization

AVAILABILITY



Sarah is a planner for Alta whose interests lay at the intersection of transportation, health, and placemaking. She has extensive professional experience in transportation safety and active transportation planning, focusing on creating safer, more enjoyable transportation systems for all users. Her expertise includes urban design, spatial analysis, cartography, graphic design, and data visualization.

Relevant Experience

Knoxville Regional Roadway Safety Plan, TN

Sarah is a Project Planner on the Regional Roadway Safety Action Plan in partnership with the Knoxville TPO. The plan focuses on the Knoxville Region, with one of the elements of the plan being a stand-alone Vision Zero Action Plan for the City of Knoxville. The final plans will include extensive interagency and cross-agency stakeholder coordination, focused public engagement, the development of a HIN, crash profiling, predictive crash modeling, and policy and infrastructure recommendations to change the culture of safety in Knoxville for all roadway users.

El Paso Vision Zero Action Plan, TX

Sarah is a Project Planner for the El Paso Vision Zero Action Plan. Work involves inter-agency and cross-agency stakeholder coordination, extensive public engagement, evaluation and creation of a HIN, crash profiling, and policy and infrastructure recommendations to change the culture of safety in El Paso for all roadway users.

Nashville Vision Zero Action Plan, TN

Alta led the Nashville/Davidson County Vision Zero Plan, the first comprehensive Vision Zero effort completed by Metro Nashville. As Project Planner, Sarah assisted with the project's robust community engagement efforts such as interactive maps, surveys, and focus groups. She also helped conduct crash data assessments and analyses. Through this work, Alta also conducted a priority corridor road safety audit and an assessment of existing policies and programs. This resulted in a prioritized set of implementation-focused projects that will help Metro Nashville reach its Vision Zero goals.

Kirkwood Vision Zero and Complete Streets, MO

The City of Kirkwood's Vision Zero Action Plan includes a systemic safety analysis approach, facilitation of recurring Task Force and Steering Committee meetings, development of a Complete Streets Policy, safety walk audits and demonstration projects, and development of an Action Plan for the City. Sarah was a Planner on the project.

Delaware County Vision Zero Action Plan, PA

Alta is working with Delaware County to create a Vision Zero plan to more fully address the recommendations made in its 2013 and 2017 transportation plans. Objectives include supporting the implementation of Complete Streets in Delaware County and improving the safety of the Delaware County transportation Network. With the issuance of the Notice of Funding Opportunity for the Federal Grant, the County was able to identify what the exact goals of the federal government are for addressing road safety across the county. By ensuring the county Vision Zero Plan is in compliance with the goals of the federal government grant SS4A, Alta will empower the County to be eligible to federal funding opportunities. Sarah is the Assistant Project Manager of this effort.



Alia Awwad, PE

Senior Safety Advisor

YEARS OF EXPERIENCE

22 years

LOCATION

West Palm Beach, FL

EDUCATION

MCRP, Georgia Institute of Technology

BS, Civil Engineering, University of Minnesota

AREAS OF EXPERTISE

Transportation planning

Roadway design

Traffic analysis

Urban planning

Civil engineering

REGISTRATIONS

Professional Engineer:
FL (#76279); GA (#035234); AL (#2954); DC (#PE923247); NJ (#24GE05623300)

PROFESSIONAL HIGHLIGHTS

NCHRP 17-63: Guidance for the Development and Applications of Crash Modification Factors, and 03-112: Operational and Safety Considerations in Making Lane Width Decisions on Urban and Suburban Arterials, Panel Member

AVAILABILITY



Alia's interest in transportation planning and engineering stems from a passion in providing safe, convenient, and sustainable transportation options and creating livable places. Alia's experience in both the public and private sectors allows her to understand the policy and planning nuances that local jurisdictions encounter and manage. Additionally, Alia's background in roadway design, traffic analysis, and context-sensitive transportation planning projects enables her to lead, communicate, and implement innovative and practical solutions to transportation issues.

Relevant Experience

Knoxville Regional Roadway Safety Action Plan, TN

As Principal-in-Charge, Alia led the Regional Roadway Safety Action Plan in partnership with the Knoxville TPO. The plan focused on the Knoxville Region, with one of the elements of the plan being a stand-alone Vision Zero Action Plan for the City of Knoxville that was adopted in the summer of 2023. This included a mix of urban and rural areas. Alta led regional coordination but also identified specific needs and projects within the City of Knoxville and across multiple jurisdictions in the TPO region.

Nashville-Davidson County Vision Zero Plan, TN

Alia served as Senior Advisor for this first joint Vision Zero plan between Nashville and Davidson County. She assisted with transparent stakeholder and public engagement process and a priority corridor road safety audit and existing policy/program review to see that recommendations were implementation-focused. She contributed to countermeasure recommendations and crash data and systematic safety analysis that led to the development of an easy to navigate online data dashboard that helps people visualize high-crash/unsafe areas and showcases locations for countermeasures to help build the case for change in the area. Alia's contributions to the plan also led to a \$13 million SS4A grant, as well as a \$2 million SMART grant.

El Paso Vision Zero Action Plan, TX

Alia served as Safety Advisor for the El Paso Vision Zero Action Plan. Work involved interagency and cross-agency stakeholder coordination, extensive public engagement, evaluation and creation of a HIN, crash profiling, and policy and infrastructure recommendations to change the culture of safety in El Paso for all roadway users. Alia also helped the City write a successful SS4A Implementation grant worth \$10 million that will be used for Safe Routes to School projects, quick build safety improvements, and systemic safety infrastructure.

Alpharetta Local Roads Safety Action Plan, GA

Alta produced a local Safety Action Plan, making the City of Alpharetta eligible for implementation grant funding through a range of opportunities, including the federal SS4A and SMART grants program. In support of the plan, Alta led stakeholder interviews, a public charrette, conducted extensive data collection and analysis, and identified key corridors and intersections for safety improvements, as well as established corridor-level countermeasures. Alia served as Principal-in-Charge.

Kirkwood Vision Zero and Complete Streets, Kirkwood, MO

As Project Manager, Alia led the City of Kirkwood's Vision Zero Action Plan, which includes a systemic safety analysis approach, facilitating recurring Task Force and Steering Committee meetings, developing a Complete Streets Policy, leading safety walk audit and demonstration projects, and developing the Action Plan for the City. Kirkwood was awarded an SS4A Implementation grant award in the 2022 round of funding based on this plan, and received a 2023 local APA award. Kirkwood was officially accepted into the Vision Zero Network in January of 2024.



Chris Cannon

Engagement Lead

YEARS OF EXPERIENCE

14 years

LOCATION

Atlanta, GA

EDUCATION

BA, Media Studies: Journalism and Art, Shorter College, Rome, GA

AREAS OF EXPERTISE

Community and Stakeholder Engagement for short-term project success and long-term partnership development
Stakeholder Identification and Mapping
Strategic Planning Development and Consultation
Engagement and outreach plan development
Workshop Development and Facilitation
Community Capacity Building

PROFESSIONAL ASSOCIATIONS & CERTIFICATIONS

International Association for Public Participation
Certified Public Participation Practitioner, Issued June 2022 by the International Association for Public Participation

AVAILABILITY



Chris has 14 years of public involvement, community engagement and community development experience and is a Certified Public Participation Practitioner by the International Association of Public Participation. His career has centered on ground-level work to craft successful community collaboratives for positive community action and advancement. Chris is known for balancing complex stakeholder relationships with a focus on community goals and individual stakeholder needs to facilitate productive progress through individualized community-based exchanges. He focuses on a wide range of techniques to ensure all engagement is designed with intent and his results reflect the reality of the community while establishing a system for improved future engagement.

Relevant Experience

The Stitch, Atlanta, GA

The Stitch is a transformational civic infrastructure investment needed to reconnect Downtown and Midtown Atlanta. The project will “Cap the Downtown Connector (I-75/I-85)” to unite all parts of Atlanta through interconnected parks, plazas, and surface streets for walking and biking, creating new public gathering places for the community to come together and thrive while redeveloping underutilized real estate surrounding the project site. As Community Engagement Project Director, Chris oversees the strategy and implementation for a complex, multi-year public and stakeholder engagement plan that will act as the blueprint for all engagement activities for the duration of the project.

Atlantic Station Access Program (ASAP), Atlanta, GA

Atlantic Station is undergoing a 17th Street Corridor Study. Chris led community conversations to scope the study. Through outreach to neighboring communities, neighborhood associations and Community Improvement Districts, Alta (formerly UrbanTrans) identified the needs of the corridor as well as the creation of a future engagement plan for the development of the 17th Street corridor.

Denver Regional Council of Governments (DRCOG) TDM Strategic Plan, Denver Region, CO

As the Public Engagement Lead, Chris developed the comprehensive Public Engagement Plan for a regional TDM plan inclusive of over 50 cities and towns throughout the Denver Region to result in a new strategic action plan for TDM service development. Planning and facilitation processes included in-depth work with a Stakeholder Steering Committee to refine the TDM mission, determine key goals for regional work, and establish key objectives for regional programs and collaborations. Later work will include aligning strategies and actions with objectives to produce a comprehensive strategy for implementation across the region. Engagement techniques included a stakeholder steering committee, a Regional Consortium, interviews, focus groups and online meetings utilizing interactive tools.

Fort Collins Shift Your Ride Travel Options TDM Strategic Plan; Fort Collins, CO*

As the Public Engagement Lead, Chris developed the Public Engagement Plan for a city-wide TDM plan establishing a framework and action plan for TDM delivery in the region. With an in-depth understanding of key community partners and the public, the TDM plan was branded without industry terminology to better meet stakeholders at their current understanding of TDM. Engagement techniques included a Technical Advisory Committee, stakeholder workshops, interviews, focus groups, and online meetings utilizing interactive tools.



Collin Hodges, AICP

Lead Planner

YEARS OF EXPERIENCE

12 years

LOCATION

Baltimore, MD

EDUCATION

MURP, University at Albany,
SUNY

BA, New York University

AREAS OF EXPERTISE

Bicycle facility design

Sustainable transportation
planning

GIS analysis

Public outreach

PROFESSIONAL HIGHLIGHTS

2020 Planner of the Year (APA
Alaska Chapter)

AICP #32623, American
Planning Association

AVAILABILITY



Collin is an AICP-certified urban planner with 12 years of experience in active transportation, public transportation, shared mobility, and land use planning. His diverse professional experiences in a variety of locations, from New York to Alaska and several places in-between, have given him a thorough understanding of how our land use policies and transportation systems interact to influence fundamental aspects of our lives. He especially enjoys working on projects that improve our multimodal transportation networks and encourage more efficient uses of our limited urban land resources. These types of projects have enormous potential to help make our cities more equitable, sustainable, prosperous – and fun!

Relevant Experience

Knoxville Regional Roadway Safety Plan, Knoxville, TN

Alta is developing a safety action plan for the Knoxville Regional (TPO) with the goal of identifying priority roadways and intersections for safety improvements. Collin is working on all aspects of the project, from data analysis and project prioritization to safety practice assessments and formulating safety strategies.

Delaware County Vision Zero Action Plan, PA

Alta is working with Delaware County to create a Vision Zero plan to more fully address the recommendations made in its 2013 and 2017 transportation plans. Objectives include supporting the implementation of Complete Streets in Delaware County and improving the safety of the Delaware County transportation Network. With the issuance of the Notice of Funding Opportunity for the SS4A Federal Grant, the County was able to identify what the exact goals of the federal government are for addressing road safety across the county. By ensuring the county Vision Zero Plan is in compliance with the goals of the federal government grant SS4A, Alta will empower the County to be eligible to federal funding opportunities. Collin is a Senior Planner on the project.

Pedestrian Safety Action Plan, Maryland Department of Transportation State Highway Administration (MDOT SHA), Statewide, MD*

Collin performed key tasks in the development of the Pedestrian Safety Action Plan for MDOT SHA. Collin's work on this project included detailed crash data analyses, GIS mapping/analysis, writing the plan, preparing the plan document, project management support, and public involvement. The Pedestrian Safety Action Plan was a component of MDOT SHA's wider Context Driven initiative, which seeks to integrate land use context into roadway design decisions.

Teton County SS4A Safety Action Plan, WY

Alta is leading a team to develop a Comprehensive Safety Action Plan for the Town of Jackson and Teton County. Alta is leading work on a systemic safety analysis, a new multimodal mobility network, and updates to Town/County design guidelines with the intent of seeking SS4A implementation funding in the 2025 funding cycle. In addition to cultivating local partnerships through a strong community engagement effort, this SS4A Safety Action Plan incorporates a variety of crash data analyses, including an HIN and crash profiles, that will provide insights on the County's most pressing safety needs. Collin is the Project Manager of this effort.

Alpharetta Local Roads Safety Action Plan, GA

Alta is developing a Safety Action Plan with key elements that would make the City eligible for implementation grant funding through the SS4A federal grant including: community engagement, data collection and analysis, identification of key corridors and intersections for safety improvements, establishing corridor-level countermeasures. Alta will then advise the City on competitive grant opportunities and provide project cutsheets and concept level designs. Collin is serving as a Senior Planner on this project.



Anna Gore, LCI

Programs Lead

YEARS OF EXPERIENCE

12 years

LOCATION

Portland, OR

EDUCATION

Master of Environmental Planning and Design, University of Georgia
BS, Media Studies with highest honors, Radford University

AREAS OF EXPERTISE

Bicycle planning
Education, promotion, and marketing programs
Program evaluation
Campaign strategy

REGISTRATIONS

League of American Bicyclists, League Cycling Instructor: (#3296)

PROFESSIONAL HIGHLIGHTS

Transportation Options Group of Oregon board member
Member, Women Transportation Seminar
Member, Association of Commuter Transportation
Member and League Certified Instructor, League of American Cyclists

AVAILABILITY



Anna is dedicated to connecting people to the active and shared transportation options available in their communities and has nearly a decade of experience with active transportation programs. Through her work with Alta, she has managed behavior change programs, coordinated outreach campaigns, and provided TDM services in communities around the country. As an experienced project manager, Anna engages community members and clients about the benefits of reducing drive-alone trips, and offers practical and fun ways to integrate walking and biking into people's daily lives. Her background in community outreach, planning, and TDM programs encourages her passion to create more lively, safe, and equitable places.

Relevant Experience

Roanoke Pedestrian Safety Campaign, VA

Anna is Project Manager for Alta's work with the City of Roanoke to reduce pedestrian-involved crashes through annual safety campaigns targeted at people driving and pedestrians. Alta designed and implemented a campaign each year with a different focus: In 2020 the campaign focused on crosswalk compliance, in 2021 it focused on speeding, and in 2022 the focus was on traffic safety in school zones with an emphasis on speeding. For each campaign, Alta coordinates a six- to eight-week paid media campaign with community outreach that includes events, print materials and yard signs, art contests, ambassador programming, influencer activities, and more.

Kelowna Trip Reduction Program, BC, Canada

Alta led the development of an Employer Commute Trip Reduction Program for the City of Kelowna, BC that includes tactics and actions that the City of Kelowna, local employers, and other partner agencies (e.g. BC Transit) can take to effectively reduce single-occupancy vehicle commute trip. As Project Manager, Anna led a process that included review and assessment of programmatic and commute trip data, stakeholder engagement, strategy identification, and plan development. The intent of the program is to help deliver on Kelowna City Council's priorities that more trips are being made by transit, carpooling, cycling, and walking, greenhouse gas emissions are decreasing, and travel times are optimized.

King County Metro Connecting to Transit, WA

Anna is serving as Project Manager on this campaign to improve access to transit without building additional parking capacity. The program's urgency stems from transit ridership growth, which has led to customer dissatisfaction with crowded park and rides. Alta's role is to help market Metro's new services and encourage access to transit without relying on solo driving trips. Alta is employing community outreach, guerrilla marketing, direct mail, traditional and social media, and other techniques to communicate to the various audiences.

King County Metro Connecting to Transit, WA

Anna is serving as Project Manager on this campaign to improve access to transit without building additional parking capacity. The program's urgency stems from transit ridership growth, which has led to customer dissatisfaction with crowded park and rides. Alta's role is to help market Metro's new services and encourage access to transit without relying on solo driving trips. Alta is employing community outreach, guerrilla marketing, direct mail, traditional and social media, and other techniques to communicate to the various audiences.



Eric Scott

Engagement Planner

YEARS OF EXPERIENCE

15 years

LOCATION

Atlanta, GA

EDUCATION

Master of City and Regional Planning, Transportation, Georgia Institute of Technology

B.A., Economics and History, Covenant College

AREAS OF EXPERTISE

Project Management

Safety Action Plans

Public Engagement

QA/QC

CERTIFICATES

GDOT Plan Development Process (PDP)

GDOT Local Administered Project (LAP)

GDOT Right of Way (ROW)

GDOT Title VI/ADA

AVAILABILITY



Eric Scott has 15 years of experience as a project manager, both in transportation and in criminal justice. At Alta, Eric serves as a Planning Associate in a project management role, providing leadership on all sides of the transportation project delivery process, with a focus on safety action, bike and pedestrian and multimodal Plans, as well as competitive federal grant applications.

Relevant Experience

Knoxville Regional TPO, Regional Roadway Safety Action Plan

Alta completed safety action plan for the Knoxville Regional TPO, identifying priority roadways and intersections for safety improvements. Eric was instrumental in writing the final plan as Project Planner.

SS4A Hall County Action Plan, GA

Alta is leading the effort to create a regional county-wide SS4A Action Plan in Hall County, in partnership with the Gainesville-Hall MPO, Hall County, the Cities of Gainesville, and Oakwood and Flowery Branch, with the goal of eliminating roadway fatalities and serious injuries. The robust planning effort includes significant public involvement, including public meetings, stakeholder committee interviews and meetings, targeted outreach to the Hispanic community, a survey, and a project website. In addition, the project team developed an equity analysis, HINs, crash profiles, and is crafting priority projects as well as strategic policy and program recommendations. Eric is the Project Manager, guiding all project deliverables.

Alpharetta Local Roads Safety Action Plan, Alpharetta, GA

Alta's Local Roads Safety Plan built a HIN and cutting-edge countermeasure recommendations, all grounded in the Safe Systems Approach. The plan is implementation focused, and the project included Alta producing a SMART Grants Application, in lieu of applying for SS4A funding. Eric served as Project Manager.

Brookhaven Multimodal Study, Brookhaven, GA

Alta is priming the Brookhaven Multimodal Study, a revised approach to Brookhaven's first Bike & Pedestrian Plan (2016). The plan included a sophisticated existing conditions analysis, (safety risk factor, level of traffic pedestrian and bicyclist traffic stress, gap, active trip potential), and extensive multimodal network development: and public engagement. Eric is the Project Manager for the study and active in all aspects of production.

Orange Belt Trail Planning Study, Pasco County, FL

Alta conducted extensive field work and subsequent comprehensive alignment analysis for a cross-county 37 mile trail. Alta presented multiple options to the community and the team will ultimately create a plan for the trail alignment. This alignment will immediately undergo engineering for the first phase. Eric is the Project Manager, providing production QC and leading public engagement.



Sara Kovachich, PLA, RSP, Safety Planner

YEARS OF EXPERIENCE

9 years

LOCATION

Huntsville, AL

EDUCATION

Master of Landscape
Architecture, University of
Florida

BS, Environmental Science,
University of Florida

AREAS OF EXPERTISE

Landscape architecture
Natural surface trail planning
Bike park planning

REGISTRATIONS

Registered Landscape
Architect: FL (#LA6667323)
American Society of
Landscape Architects (ASLA)
Road Safety Professional –
Level 1

PRESENTATIONS

“Juniper Basin Bike Park
Conceptual Plan” delivered to
City of Farmington NM staff,
Mayor, and City Council, 2021
“Resilient Trail Planning,
Design, and Construction”
delivered to Omaha NE land
managers, 2020

AVAILABILITY



Sara is a planner and designer who actively strives to create context-sensitive solutions that support healthy, connected, and vibrant communities. Her experience includes both private and public sector projects, including park, university campus, commercial, and residential site planning. Prior to joining Alta, Sara was a natural surface trail planner for the International Mountain Bicycling Association where she created high-quality trail networks and bike parks for a wide range of user groups. Her skills include visioning and conceptual planning, spatial analysis, graphic communication, technical drawings, and community engagement. With her diverse skill set of planning and design, she creates thoughtful solutions to enhance active transportation networks and identify new recreational opportunities.

Relevant Experience

Knoxville Vision Zero Plan, Knoxville, TN

Alta is working with the Knoxville TPO to create a Regional Roadway Safety Action Plan. The plan focuses on the Knoxville Region, with one of the elements of the plan being a stand-alone Vision Zero Action Plan for the City of Knoxville. The final plans will include extensive interagency and cross-agency stakeholder coordination, focused public engagement, the development of a HIN, crash profiling, predictive crash modeling, and policy and infrastructure recommendations to change the culture of safety in Knoxville for all roadway users. Sara serves as Planner for this effort.

TARCOG Safety Action Plan, AL

Sara served as the Project Manager for the TARCOG regional safety action plan in Northeast Alabama. She coordinated closely with the safety committee to create a customized five-county HIN analysis and led the development of the countermeasure matching tool to provide the region with a list high priority corridors for safety improvements and quick-win project ideas. The final plan will provide technical and safety stakeholders in the TARCOG region with the analysis and a countermeasure toolkit to identify projects, funding, and action items to implement projects.

Greensboro MPO Safety Action Plan, NC

With Sara as Project Manager, Alta developed detailed project workplans for engagement, data analytics, and safe system approach for the Greensboro MPO Safety Action Plan. The plan originated from an ongoing contract between Alta and the City to provide transportation planning and engineering projects using federal funding. The City received an SS4A grant to complete this plan. Alta's workplans will lay the blueprint for the development of the robust plan, which will include speed management, road safety audits, cross functional stakeholder engagement, quick-build projects, and data analytics.

Multimodal Master Plan, Cape Coral, FL

Alta was part of a team that created the Multimodal Transportation Plan for the City of Cape Coral. The objective was to update the long-term vision of a multimodal transportation system, provide policy direction, and guide the implementation of transportation projects throughout the city in the short-, mid-, and long-term timeframe. This plan will support the expansion of transportation options throughout the city by documenting a vision for the multimodal transportation system, providing policy direction, and guiding the funding and implementation of transportation projects throughout the city and into the future. Alta led the plan's active transportation and scenario development, with Sara at the helm as Project Manager.



Tom Natwick, PE

Implementation Lead

YEARS OF EXPERIENCE

17 years

LOCATION

Minneapolis, MN

EDUCATION

BS, Civil Engineering,
Valparaiso University

AREAS OF EXPERTISE

Roadway design
Greenway design
Feasibility studies
Master planning

REGISTRATIONS

Professional Engineer:
MN (#62785); AL (#40000-E);
AR (#198158); CA (#C78770);
CO (#0049093); FL (#81209);
GA (#PE042749)
ID (#17145); LA (#0045265);
NC (#045928); TN (#125522);
UT (#9799949-2202)
NCEES Record Holder #55659

AVAILABILITY



Tom is a Professional Engineer with a comprehensive background in civil transportation design. He has worked on projects involving active transportation, site design, roadway, pedestrian facility design, light rail, grading, stormwater management, and utilities design across the U.S. and internationally. Tom has expertise in multimodal design, Complete Streets, and accessibility and is passionate about making a positive difference in communities.

Relevant Experience

TH 55 Interim Pedestrian Safety Project, Minneapolis, MN

Alta assisted MnDOT in the development of an interim pedestrian safety project along Olson Memorial Highway (Hwy 55) between Bryant Avenue North and Thomas Avenue North in Minneapolis. The pedestrian safety improvements aimed to create shorter crossings for pedestrians and better overall visibility for people walking and driving. Tom served as Assistant Project Manager.

Atlantic Avenue Multimodal Feasibility Assessment, Raleigh, NC

Alta conducted a high-level feasibility assessment to identify key opportunities and constraints for a multimodal facility, with the goal of providing a safe, all-ages-and-abilities connection for the corridor that considers future development and augments alternative transportation options between major destinations. As Project Manager for this multimodal study, Tom was responsible for leading existing conditions analysis and production of an opportunities and trade-offs mapbook for the corridor.

Tamarind Avenue Corridor Design, West Palm Beach, FL

Tom served as Senior Engineer for the Tamarind Avenue Corridor Design, a transit corridor in downtown West Palm Beach. Intended to transform into a more multimodal street, the design included adding channelization islands, controlled midblock crossings, as well as traffic warrant analysis and justification for a signalized intersection.

Cross Charlotte Trail Design, 7th to 10th Street Segment, Charlotte, NC

Tom served as Project Engineer for the planning and design of this segment of the Cross Charlotte Trail. This project includes the design and permitting of approximately 3,700 linear feet of trail between 7th Street and 10th Street, an underpass at the 7th street bridge, connections to open space facilities, separated bike lanes, and a greenway/multi-use trail. Tom aided Alta's efforts to develop preliminary and final plans and designs for stormwater and drainage, structures, traffic signals, right-of-way phasing, and trail alignment.

Palo Alto Bike Boulevards, CA

Tom served as a Primary Engineer for design services for five bicycle boulevard corridors in Palo Alto. These projects included various design treatments including, green infrastructure, green bicycle lanes, cycle tracks, intersection treatments, traffic circles, and traffic calming.

Pitkin Low Stress Bikeway, Fort Collins, CO

Tom served as Project Engineer on this Alta-led project to create a comfortable, east-west bicycle route across Fort Collins. Alta developed conceptual designs and construction documents for the trail, which featured intersection and signing and striping improvements. Tom worked with the City through the public involvement process to determine the preferred design for intersection improvements across four major street crossings.



Richard Virgo, PE, RSP₁

Data Analyst

YEARS OF EXPERIENCE

7 years

LOCATION

Charlotte, NC

EDUCATION

BS, Civil Engineering, Georgia
Institute of Technology

AREAS OF EXPERTISE

Transportation Engineering
Transportation Planning
Complete Streets
GIS

REGISTRATIONS

Professional Engineer: NC
(#54447)

Road Safety Professional –
Level 1

AVAILABILITY



Richard is an Engineer with a background in transportation engineering and transportation planning. He has experience in creating comprehensive transportation plans in both urban and rural contexts, public engagement, feasibility studies, corridor development, and Complete Streets, having worked on projects across North Carolina and California. Richard works on engineering projects, including intersection retrofits and greenway corridors, as well as planning projects, including past experience with transportation plans in a multi-county and MPO-wide context, as well as other GIS and data analyses. Richard's professional interests include transportation engineering, tactical urbanism, demonstration projects, and Complete Streets.

Relevant Experience

El Paso Vision Zero Action Plan, TX

Alta is leading the production of the Vision Zero Action Plan for the City of El Paso in Texas. Richard serves as a Project Engineer, producing GIS analysis and mapping of priority corridors for the motor vehicle and the bike/pedestrian modes on the HIN, as well as working to compile data for the crash profiles, including the effectiveness, cost, and ease of implementation of each identified countermeasure within the crash profile. He was also responsible for developing the content and preliminary sketches for the Countermeasures Toolkit that would be incorporated into the City's Street Design Manual. He also determined countermeasures and the cost estimates for a set of priority projects. These projects were a major component of the City's submission for a \$10 million SS4A Implementation grant, which it was awarded in December 2023.

Naples Complete Streets - 10th Street, 12th Street South, and 1st Avenue South, Naples, FL

Alta was part of a team developing the concept for the Naples Complete Streets project in the Design District of Naples, incorporating three corridors. Richard served as Project Engineer for the design and conceptual phase. Richard developed the initial concepts for all three corridors, incorporating elements such as protected intersections, separated sidewalk-level bicycle lanes, shared use paths, and bicycle boulevards, in accordance with FDOT and City of Naples standards and best practices, incorporating elements of NACTO guidance. Richard presented the concept elements at a public design workshop, which was attended by members of the public and City Council. The project is currently in final design phase, with Alta responsible for reviewing the signing and striping plans.

Miami Beach Flamingo Slow Streets Demonstration Project, FL

Alta is serving as engineer of record for a set of demonstration/quick build bicycle facilities in Miami Beach. Richard was in charge of reviewing the 90%, 100%, and Approved as Noted submissions from StreetPlans, the subconsultant, and providing comments, feedback, and guidance based on best practices and applicable standards, including the updated 11th edition of the MUTCD. Richard was also in charge of quality control on the plan sheets.

Delaware County Vision Zero Action Plan, PA

Alta is developing the Safety Action Plan for Delaware County. This project entails developing an HIN, developing crash profiles, and eventually developing countermeasures. Richard serves as a Project Engineer for the safety analysis and countermeasures, which includes developing the methodology for crash profiles and reviewing the countermeasures toolbox measures developed by other project engineers.



Michael (Mike) Rutkowski, PE, AICP

Complete Streets Expert

YEARS OF EXPERIENCE

34 years

LOCATION

Raleigh, NC

EDUCATION

Master of Science, Civil Engineering, North Carolina State University

Bachelor of Science, Civil Engineering, University of North Carolina at Charlotte

CERTIFICATIONS & TRAININGS

Youth Bicycle Trainer, League Cycling Instructor Training Seminar, League of American Bicyclists, North Carolina, 2014

Certified Charrette Manager, National Charrette Institute, Raleigh, North Carolina, 2020

REGISTRATIONS

Certified Planner #134824, American Institute of Certified Planners

Professional Engineer: NC (#20734)

AVAILABILITY



Relevant Experience

Complete Streets Training, National Complete Streets Coalition, Smart Growth America

Mike has been working closely with the National Complete Streets Coalition director, Emiko Atherton, to develop Complete Street policies and train planning and engineering practitioners across the nation. These training courses engage stakeholders in communities across the US in interactive work sessions that include Vision Zero initiatives, speed control countermeasures, place-making themes, stormwater best management practices and Complete Streets design process. As the lead facilitator, Mike uses push button technology, interactive mapping exercises, speed perception visualization, walking audits, and local case studies to interact with participants in a fun and active way. Some of the training sessions include the planning, design, and implementation of a Complete Streets demonstration project. To date, Mike has conducted more than 50 Complete Streets Training workshops on behalf of the Coalition and Smart Growth America. These have taken place at conferences or are held for local planning and government agencies nationwide. He is also a host of several webinars on the subject matter.

Summer Avenue Complete Streets Study, Memphis, TN

Mike was the Project Manager for this Complete Streets Safety Corridor Study. Currently, the corridor is a 5-to-7 lane 'speedway' with approximately 25,000 vehicles per day cutting through the east side of Memphis, TN, and has seen very little change over the past two decades. Mike led the team in creating a safer, more inclusive environment for multimodal users, including developing intersection crash trends, involvement in a Multimodal level of service (MMLOS) analysis highlighting the disparity between driving and all other modes, and intensive equity analysis. Mike engaged the public in a diverse set of events and strategies (digital, in-person, pop-up events, and interactive mapping) to engage the majority Hispanic and black populations along the corridor – directly influenced the conceptual redesign – enabling safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Mike also led the team in examining safety challenges along the corridor, related to land use decisions, access management and traffic calming, improvements to connectivity, economic development, transit integration, and parking choices. A toolkit for Complete Streets provided multimodal safety policy and design guidance for enhancing the corridors mobility options, for all.

Burlington Traffic Calming Manual, Burlington, VT

Mike served as Technical Advisor for this project, assisting the City of Burlington is committed to creating safer streets for everyone by making walking and biking a viable and enjoyable way to get around Town. In the late 1990s, the City developed and implemented a Traffic calming and Neighborhood Enhancement program as one way to achieve this goal. The program realized successes, but over time became a burden to City staff and the community due to the length of time required to get through the process. Many proposed improvements were taking four years or more to implement upon first receiving the neighborhood petition. A more transparent, streamlined process that was guided by accepted engineering standards was needed. The City hired Stantec, a trusted partner with the needed skills and commitment, to help them refine their program. Stantec worked collaboratively with City staff to understand the good and the bad of the current program. Based on this information, a new data-driven decision process was developed that eliminated the burdensome petition process, and instead relied on measured speed, crash, and heavy truck volume criteria thresholds. Stantec summarized this process in the final deliverable - the City of Burlington Traffic Calming Manual.



Matthew Roe

Speed Guidelines Specialist

YEARS OF EXPERIENCE

14 years

LOCATION

Albany, NY

EDUCATION

Master of Science, Urban Planning, Columbia University

Bachelor of Arts, Social Studies, Wesleyan University

AREAS OF EXPERTISE

NACTO, *Urban Bikeway Design Guide, 3rd Edition*, 2025.

Don't Give Up at the Intersection. *NACTO*, 2019.

Designing for All Ages and Abilities. *NACTO*, 2017.

Transit Street Design Guide. *NACTO*, 2015.

Safety countermeasures and crash reduction in New York City - Experience and Lessons Learned. *Accident Analysis and Prevention*, 2013, pp. 50.

Improving Traffic Safety in New York City. *NYC Vital Signs*, 2010, pp. 9(6).

MEMBERSHIPS

Sponsor Representative, National Committee on Uniform Traffic Control Devices

Vice Chair, Complete Streets Council, Institute of Transportation Engineers

AVAILABILITY



Relevant Experience

City Limits: Setting Urban Speed Limits*

Matthew served as the Technical Writer and Editor for the first context-based guide to setting speed limits in North American cities. Focused on urban streets, the project concentrated on the relationship between speed, volume, and conflict points, taking into account the many modes that use urban streets. The resulting guidance, NACTO's City Limit speed limit setting guide, was published in 2020.

NACTO Global Street Design Guide*

As Technical Editor, Matthew developed the text and street design concepts for the world's first comprehensive guide to designing people-first streets in developing and industrial contexts.

NACTO Urban Bikeway Design Guide, 3rd Edition*

As Technical Lead, Matthew developed design guidance and illustrations and served as editor for all technical content in the overhaul of this critical document. Matthew led NACTO's network of city practitioners to build consensus on guidance for all-ages-and-abilities bikeway design in the most challenging urban conditions.

NACTO MUTCD Campaign*

Matthew spearheaded a three-year effort that resulted in watershed changes to the Manual on Uniform Traffic Control Devices, embedding contextual speed limits, improved crosswalk guidance, red transit lanes, quality bikeway design, and other critical safety measures in Federal standards. He wrote NACTO's 400 comments on the FHWA proposal. Matthew also coordinated and built consensus for responses among dozens of engineers in US cities to comment on the proposal and summarize final document.

High-Crash Corridors Program*

Matthew developed concept and oversaw traffic analysis and quick-build design of dozens of miles of major streets in New York City, including 7-to-5 lane conversions on Brooklyn's 4th Avenue and Pennsylvania Avenue. He built the nation's premier city transportation safety planning & analysis team and oversaw development of NYCDOT's first-ever digital crash data viewer.

NYC Pedestrian Safety Study & Action Plan*

Matthew introduced evidence-based approach to NYCDOT's globally-recognized street design programs. He managed academic project team and city staff to produce landmark geographic analysis of pedestrian severe injuries and fatalities, laying foundation for Vision Zero.

Bikeway & BRT Projects, Atlanta, GA*

Matthew supported the plan and design for three protected bike lane projects in Atlanta, including critical segments of the \$6M DeKalb Avenue project. He led a series of virtual sessions with City and MARTA staff to optimize the Summerhill Ave BRT project. Matthew also supported policy staff in successfully passing a 25 mph speed limit resolution through the City Council.

Quick-Build Projects, Detroit, MI*

Matthew delivered planning and design training for the Detroit Mayor and engineering staff. He developed geometric and signal phasing recommendations for Gratiot-Randolph plaza, Grand River Avenue pedestrian improvements, and 20 miles of protected bike lanes implemented with 7-to-5 lane and 5-to-3 lane conversions on East Jefferson Ave and East Warren Ave.

*Completed prior to joining Stantec



Catrina Meyer, AICP, GISP

Safety Data Analyst

YEARS OF EXPERIENCE

7 years

LOCATION

Boston, MA

EDUCATION

Master of City and Regional Planning, Edward J. Bloustein School of Planning and Public Policy, Rutgers University

Bachelor's of Arts in Historic Preservation, minor in Urban Studies and Certification in GIS, University of Mary Washington

PRESENTATIONS

Diagnosing Pedestrian Crossing Safety Using Video-Based Conflict Analysis Techniques. *Transoft Solutions (ITS) Webinar*, 2020.

CERTIFICATIONS & TRAININGS

American Planning Association, Certified Planner (AICP) #33070, Boston, Massachusetts, 2021

Certified Geographic Information Systems Professional (GISP), GIS Certification Institute (GISCI) #160876, Boston, Massachusetts, 2020

AVAILABILITY



Relevant Experience

Roswell Safety Action Plan, Roswell, GA

Stantec is a consultant to Atlas for the analytical components of the Roswell Safety Action Plan. As Safety Analysis Lead, Catrina facilitated a comprehensive crash analysis and summaries to clearly communicate crash trends and risk factors. Guided by Catrina, the Stantec team also prepared materials for Council presentations and public engagement.

Worcester Vision Zero Safety Action Plan, Worcester, MA

Catrina is serving as Project Manager for Worcester's SS4A funded Vision Zero Safety Action Plan. Worcester embarked on this plan on the heels of establishing a new Department of Transportation & Mobility (DTM) and completing a Master Plan and Mobility Action Plan. Stantec is working with Worcester to execute a Safety Action Plan process that results in political and community support for safety-forward policies across all city departments.

Bar Harbor SS4A Safety Action Plan, Bar Harbor, ME

Stantec is leading the SS4A Safety Action Plan for Bar Harbor Maine, which sees crash rates that are disproportionately high compared to its roughly 5000 residents, in part, due to the presence of Acadia National Park. Catrina is leading the data analysis, including developing powerful maps and charts for public engagement to emphasize the safety needs. Catrina is also guiding the data collection and prioritization processes to ensure that SS4A requirements are met with each step of the project.

Los Angeles Vision Zero Transportation Assessment *

In order to assess the impact of their Vision Zero program, the Los Angeles Department of Transportation (LADOT) engaged a team to study some of their significant and complex Vision Zero corridors identified as part of their HIN. Catrina conducted corridor-specific origin-destination analysis using Location Based Services (LBS) data from Streetlight to assess the multimodal travel environment and identify the potential for latent demand for active transportation trips. She also led an analysis of curbside demand along these corridors, including analysis of trip patterns throughout the day using private scooter-share and public-bike share. These various analyses were used to better understand current and potential future travel patterns on LADOT's high-profile Vision Zero corridors.

Culver City Bike and Pedestrian Action Plan*

As a subconsultant to Alta Planning, Catrina worked with a team to complete a Vision Zero supportive subsection of Culver City's Bike and Pedestrian Action Plan (BPAP). Reacting to a recent increase in crashes, especially crashes involving vulnerable road users (VRUs), people walking and bicycling, Catrina completed a deep dive into crash patterns for this plan. Through this analysis Catrina made recommendations to update and expand the city's HIN based on recent crash data. The resulting HIN captured 15% of the City's streets and accounted for over 80% of the fatal and severe (KSI) collisions. Catrina also identified priority intersections to highlight the 30 intersections where the most collisions occur. This analysis informed the project list in the Culver City BPAP.

*Completed prior to joining Stantec



Timothy Tresohlavy, AICP, GISP

Safety Data Analyst

YEARS OF EXPERIENCE

18 years

LOCATION

Raleigh, NC

EDUCATION

MA, Geography and Planning,
East Carolina University

BS, Environmental Land Use
Planning, SUNY College of
Environmental Science &
Forestry

PRESENTATIONS

Diagnosing Pedestrian
Crossing Safety Using Video-
Based Conflict Analysis
Techniques. *Transsoft Solutions
(ITS) Webinar*, 2020.

CERTIFICATIONS & TRAININGS

NCI Charrette System Training,
National Charrette Institute,
East Lansing, Michigan, 2019

AWARDS

2021 Engineering Excellence
Award from the American
Council of Engineering
Companies (ACEC) Vermont
Section, City of Burlington VT
Traffic Calming Manual

AVAILABILITY



Relevant Experience

Knoxville Mobility 2050 MTP, Knoxville, TN

As Project Manager, Timothy organized and facilitated Technical Advisory Committee meetings, coordinated a two-round public engagement campaign, and synthesized public feedback from digital and in-person outreach events. He also provided performance-based transportation planning and analysis of safety along roadways, transit service area, walking/biking networks, freight and rail corridor considerations. Timothy also developed prioritization criteria for fiscally-constrained projects out to a 2050 horizon year for the region.

Pedestrian Safety Action Plan, Statewide, NY*

Timothy was Safety Data Analyst for this project. He assembled 5-year crash database for State of New York (2011-2015), and performed data analysis review of crash types, locations, contributing factors, and roadway characteristics to identify risk factors and potential systemic treatments. Contributed maps, tables, and summaries for the final PSAP report to FHWA, and NYSDOT.

Summer Avenue Complete Streets Safety Plan, Memphis, TN

Timothy was a Lead Transportation Safety Planner for this Complete Streets Safety Corridor Study. Currently, the corridor is a 5-to-7 lane 'speedway' with approximately 25,000 vehicles per day cutting through the east side of Memphis, TN, and has seen very little change over the past two decades. Timothy led multiple safety planning tasks to create a safer, more inclusive environment for multimodal users, including developing intersection crash trends, involvement in a Multimodal level of service (MMLOS) analysis highlighting the disparity between driving and all other modes, and intensive equity analysis. Timothy participated in intensive public engagement (digital, in-person, pop-up events, and interactive mapping) to engage the majority Hispanic and black populations along the corridor – directly influenced the conceptual redesign – enabling safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Timothy's work on this safety plan examined safety challenges along the corridor, related to land use decisions, access management and traffic calming, improvements to connectivity, economic development, transit integration, and parking choices. A toolkit for Complete Streets provided multimodal safety policy and design guidance for enhancing the corridors mobility options, for all.

NEAS Northeast Area Study, Wake/Franklin Counties, NC

Timothy served as Project Manager leading the NEAS update, coordinating land use and transportation planning tasks for 435 square mile regional study. A major task under this study was organizing and facilitating region-wide public outreach and engagement activities, including an online survey and interactive webmap to identify safety issues and regional priorities. Key to the outreach was finding innovative ways to engage underserved populations as well as the transportation disadvantaged community to receive feedback on long-term needs to increase safety and community resiliency. Timothy synthesized stakeholder and CAMPO directives with crash analysis trends and traffic congestion patterns to create a cohesive regional plan.

Tchulahoma Road Complete Streets Study, Memphis, TN

Timothy was a Transportation Planner for this project. He coordinated assembly and analysis of mobility needs, as well as community engagement strategies. Generated resources for multi-day design workshop. QC review of draft plan narratives.

*Completed prior to joining Stantec

Appendix: Required Licenses + Forms



May 22, 2020

ATTN:PAUL L. WOJCIECHOWSKI
ALTA PLANNING + DESIGN INC
128 WEST MONROE AVE
SAINT LOUIS, MO 63122

RE: Profession and Registration Number: Engineering Firm # 9799

This will acknowledge the Board's acceptance of your updated disclosure, which authorizes your organization to engage in the practice of architecture, engineering, or landscape architecture in the State of Tennessee, in accordance with Tennessee Code Ann. §§ 62-2-601 and 62-2-602.

Please advise the Board, in writing, within sixty (60) days for any change of status or address.

For the Board,

Administrative Staff
Board of Architectural and Engineering Examiners

Board of Architectural & Engineering Examiners • 500 James Robertson Parkway • Nashville, TN 37243-1142
• Tel: 800-256-5758 or 615-741-3221 • Fax: 615-532-9410 • www.tn.gov/commerce/regboards/architects-engineers

CERTIFICATION OF PRIMARY PARTICIPANT REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION – FIRST TIER PARTICIPANTS

The Primary Participant/Contractor, certifies to the best of its knowledge and belief, that it and its principals:

- 1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency,
- 2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction,- violation of Federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
- 4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. If the primary participant (potential third party contractor) is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.

THE PRIMARY PARTICIPANT/CONTRACTOR Alta Planning + Design, Inc CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET. SEQ. ARE APPLICABLE THERETO.

Katherine Mangle
Signature of Contractor’s Authorized Official

10/25/2024
Date

Katherine Mangle
Typed Name and Title of Contractor’s Authorized Official

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION –
LOWER TIER PARTICIPANTS**
(This form is for Subcontracts estimated to cost \$25,000 or more – 2 CFR Parts 180 and 1200)

The potential lower tier participant Stantec Consulting certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

Where the potential lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

<div><div>Rutkowski, Mike</div><div><div>Digitally signed by Rutkowski, Mike</div><div>Date: 2024.10.29 09:20:39 -04'00'</div></div></div>	<div><div>Mike Rutkowski</div><div></div></div>
<div><div>Signature/Authorized Certifying Official</div><div></div></div>	<div><div>Typed Name</div><div></div></div>
<div><div>Senior Principal</div><div></div></div>	
<div><div>Title</div><div></div></div>	
<div><div>Stantec Consulting</div><div></div></div>	<div><div>10-28-24</div><div></div></div>
<div><div>Applicant/Organization</div><div></div></div>	<div><div>Date Signed</div><div></div></div>

CERTIFICATION OF FEDERAL TAX LIABILITY AND RECENT FELONY CONVICTIONS

The Contractor certifies that it:

1. Does not have any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and
2. Was not convicted of the felony criminal violation under any Federal law within the preceding 24 months.

If the Contractor cannot so certify, the City of Knoxville will refer the matter to the Federal Transit Administration (FTA) and not enter into any Third Party Agreement with the Third Party Participant without the FTA's written approval .

The Contractor agrees to include this requirement down to all subcontractors participating in the award without regard to the value of any sub-agreement.



Signature of Contractor's Authorized Official

10/25/2024

Date

Katherine Mangle

Typed Name and Title of Contractor's Authorized Official

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, Alta Planning + Design, Inc, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Katherine Mangle
Signature

Vice President
Title

Katherine Mangle
Printed Name

10/25/2024
Date

Submission Affidavits and Certifications

We Alta Planning + Design, Inc
(Company Name)

do certify that on the

LOI - Speed Management Plan
(Solicitation Title / Project Name)

we are in receipt of the following checked items and do hereby certify or affirm as follows:

☒ **SUBCONTRACTOR/CONSULTANT STATEMENT**

Please select one:

☐ **Option A: Intent to subcontract using Diverse Businesses**

A Diversity business will be employed as subcontractor(s), vendor(s), supplier(s), or professional service(s). The estimated **percentage** of the amount that we plan to pay is:

_____%.

Total Estimated Percentage of Subcontracted Service

Diversity Business Enterprise Utilization (See Section 7.4 for Classifications)			
Description of Work/Project	Percentage	Diverse Classification (MBE, WBE, SBE, SDVBE, PDBE)	Name of Diverse Business

☒ **Option B: Intent to perform work "without" using Diverse Businesses**

We hereby certify that it is our intent to perform 100 % of the work required for the contract; work will be completed without subcontracting, or we plan to subcontract with non-Diverse companies.

☐ **Option C: Intent to self-perform work as a Diversity Business Enterprise.**

We intend to self-perform 100% of the work required for the contract as a Diversity Business Enterprise.

Page 1 of 3

■ NON-COLLUSION AFFIDAVIT

- (1) Submitted qualifications is genuine and is not a collusive or sham submission;
- (2) Neither the said firm nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this signatory, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other vendor, firm or person to submit a collusive or sham submission in connection with the contract or agreement for which the attached qualifications has been submitted or to refrain from submitting qualifications in connection with such contract or agreement, or collusion or communication or conference with any other firm, or, to fix any overhead, profit, or cost element of the proposed price or the proposed price of any other firm, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the City of Knoxville or any person interested in the proposed contract or agreement; and
- (3) The scope of service outlined in the submission is fair and proper and is not tainted by collusion, conspiracy, connivance, or unlawful agreement on the part of the firm or any of its agents, representatives, owners, employees, or parties including this signatory.

■ NO CONTACT / NO ADVOCACY AFFIDAVIT

1. **NO CONTACT POLICY:** After the posting of this solicitation to the Purchasing Division's website, any contact initiated with any City of Knoxville representative concerning this Request for Qualifications is strictly prohibited, unless such contact is made with the Purchasing Agent (Penny Owens) or the listed point of contact. Any unauthorized contact may cause disqualification from this procurement transaction.
2. **NO ADVOCATING POLICY:** To ensure the integrity of the review and evaluation process, companies and/or individuals submitting qualifications for any part of this project, as well as those persons and/or companies representing submitting entities, may not lobby or advocate to the City of Knoxville staff including, but not limited to, members of City Council, Office of the Mayor, Engineering Department, or any other City staff.

Any company and/or individual who does not comply with the above stated "No Contact" and "No advocating" policies may be subject to having their qualifications rejected from consideration.

■ DRUG-FREE WORKPLACE AFFIDAVIT

The submitting firm has personal knowledge of the policies of the above-named firm with respect to the maintenance of a drug-free workplace; and certifies that all provisions and requirements of the Tennessee Drug-Free Workplace Program, as established by Tenn. Code Ann. §§ 50-9-101 et. seq., have been met and implemented.

■ CHILD CRIME AFFIDAVIT

The submitting firm agrees not to allow any employee or volunteer who is awaiting trial or has been convicted of a felony crime involving the sexual exploitation of children, sexual offenses involving children or violent crimes to participate in this Agreement at sites where children may be present. Failure by the proposer to comply with this requirement is grounds for immediate termination of the Agreement.

■ IRAN DIVESTMENT ACT

CERTIFICATION OF NONINCLUSION

Page 2 of 3

NOTICE: Pursuant to the Iran Divestment Act, Tenn. Code Ann. § 12-12-106 requires the State of Tennessee Chief Procurement Officer to publish, using creditable information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in § 12-12-105. Inclusion on this list makes a person ineligible to contract with the state of Tennessee; if a person ceases its engagement in investment activities in Iran, it may be removed from the list. A list of entities ineligible to contract in the State of Tennessee Department of General Services or any political subdivision of the State may be found here:

[https://www.tn.gov/content/dam/tn/generalservices/documents/cpo/cpo-library/public-information-library/List_of_persons_pursuant_to Tenn. Code Ann. 12-12-106 Iran Divestment Act updated 7.7.17.pdf](https://www.tn.gov/content/dam/tn/generalservices/documents/cpo/cpo-library/public-information-library/List_of_persons_pursuant_to_Tenn._Code_Ann._12-12-106_Iran_Divestment_Act_updated_7.7.17.pdf)

By submission of this form, the submitting entity certifies that the above-named firm, under penalty of perjury to the best of its knowledge and belief, and any proposed suppliers are not on the list created pursuant to § 12-12-106.

■ **NON-BOYCOTT OF ISRAEL**

For submissions with a total cost of \$250,000 or greater, the Signatory certifies that the submitting firm and any subcontractors or suppliers certify that the firms, subcontractors and suppliers are not boycotting Israel pursuant to Tenn. Code Ann. §12-4-1 and will not during the term of any award.

State of Oregon County of Multnomah

Proposer's Name: Katherine Mangle

being duly sworn, deposes, and says that:

They are a principal officer of Alta Planning + Design, Inc, the firm submitting the attached qualifications, their title being Vice President, as duly authorized and has authority to affirm and/or certify the listed declarations.

Katherine Mangle
Signed

V.P., as duly Authorized
Title

Subscribed and sworn to before me this 28th day of October, 2024.

Erin Cox November 21, 2026
NOTARY PUBLIC My Commission expires

