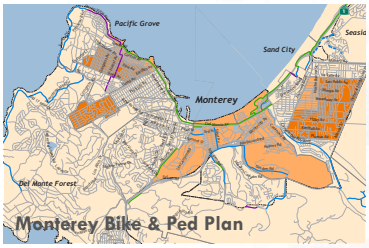
GKFF/River Parks Dual Trails

NW Arkansas Regional System

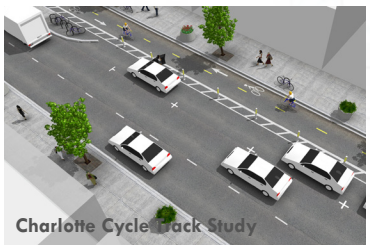
OU Bicycle Master Plan



Monterey Bike & Ped Plan

Broken Arrow South Loop (Liberty Trail)

Midland Valley Trail


Charlotte Cycle Track Study

RESPONSE TO:

TULSA AREA BICYCLE AND PEDESTRIAN MASTER PLAN

QUESTIONS

Prepared for:

INCOG
Regional Partners - Regional Solutions

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alta PLANNING + DESIGN

1) Discuss problem-solving approaches the team has used or anticipates using in developing a Bicycle/Pedestrian Master plans for other regions/cities?

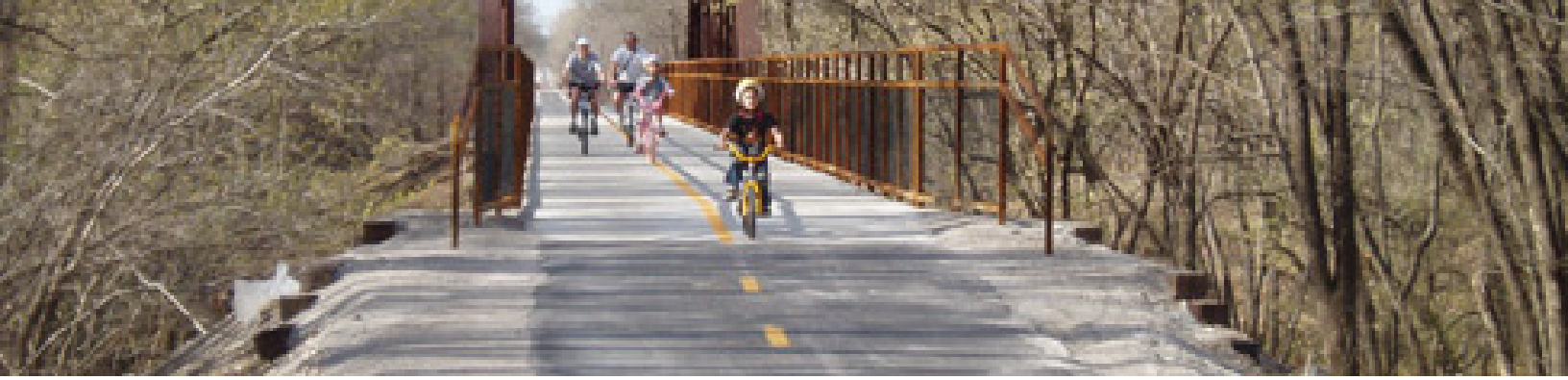
The LandPlan/Alta team stands prepared to develop the Bicycle and Pedestrian Master Plan because of its significant experience conducting this type of work. There are no other firms that have the amount of experience in Oklahoma and the nation with producing bicycle and pedestrian master plans. This gives us an advantage for anticipating and understanding problems that need solving along the way. We recognize that our role is to be a problem-solver for INCOG and the Steering Committee to develop a Plan that provides pragmatic solutions.

We believe it is essential to effectively communicate throughout the process with INCOG, the Steering Committee, elected officials, stakeholders, and the general public. An open, participatory process ensures buy-in, leading to fewer problems and more effective implementation of the Plan. Education about the many benefits of bikable and walkable communities is essential to build support and propel the Plan.

The Tulsa Area Bicycle and Pedestrian Master Plan will be a results-oriented plan and recommendations expanding the Tulsa Transportation Management Area Trails Master Plan, which resulted in 99 miles of new multi-use trails and 12 on-street bikeways in Tulsa area communities. Our belief in results-oriented planning and recommendations rings even more true in the face of a lack of funding resources for non-traditional transportation modes. We will develop an implementation plan that allows the Tulsa Metropolitan Area to build more facilities for bicycling and walking in a cost-effective manner.

We believe the Plan should be a living, breathing, action-oriented document that doesn't just focus on engineering recommendations. Facility development is one component of a larger process that must involve policy changes along with education, encouragement, and enforcement programs. Becoming a more walkable and bikable region requires a comprehensive approach, this Plan will outline to build a culture that understands the benefits of multi-modal integration and safety for all the people of the Metro Area. Our Plan will provide clear guidance with action steps geared towards improving bicycle and pedestrian safety and culture.

Finally, the Plan will provide evaluation procedures to track progress of its implementation. The Tulsa Metro Area Communities will need to monitor both successes and failures, report on findings, and adjust resources as needed.



2) Describe how your team plans to utilize analytical tools such as GIS to conduct demand analysis and analysis of existing infrastructure.

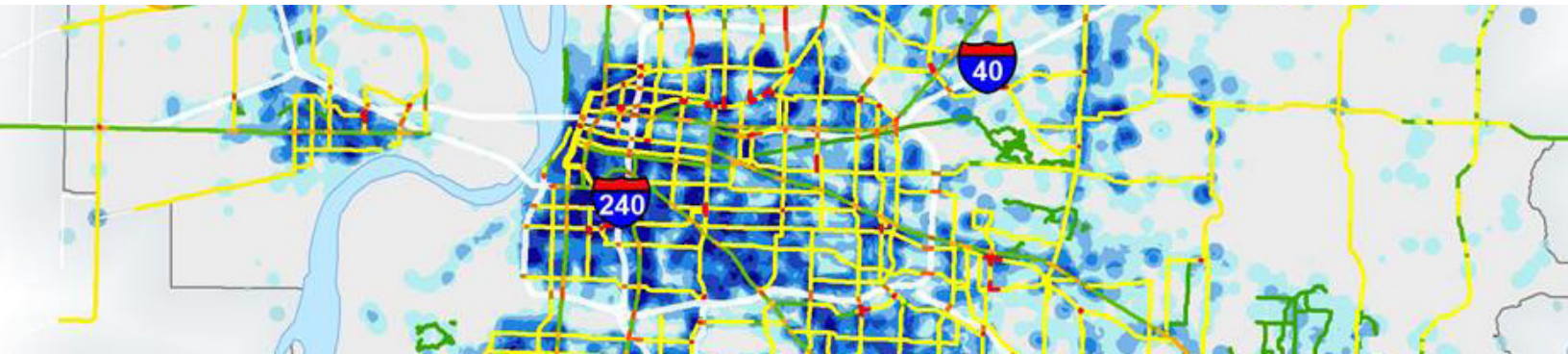
We understand INCOG has GIS resources and we plan to collaborate with your GIS staff as desired to develop our overall analysis for project. We will be an extension of INCOG staff and a resource in the capacity that best fits the need.

Our Team members regularly use the analytical tools in combination with data from various agencies to better quantify and visualize the world around us. Maps and models are abstractions of reality and looking at the abstractions can help us to see new patterns. A good example of this is Alta's activity demand model, which looks at the demand for biking and walking by analyzing where people live, work, play and access transit. Looking at high densities of activity and understanding how they relate to existing facilities leads to potential implementation strategies that are most appropriate for conditions on the ground. For example, an area with high demand and few facilities is a key area for new infrastructure while an area with high demand and good facilities would probably be a good place to explore encouragement programs.

Recently, our Team members have started to analyze and visualize network accessibility. Various destinations across a region are either connected or disconnected to specific points (e.g., a park) and can be reached by using various types of bike facilities -- for example trails and local streets. Mapping accessibility by facility type can quickly paint a picture of locations where a simple improvement provides accessibility to a large part of the region.

Our Team also uses GIS for zonal analysis, which can provide helpful insights into the differences between the walking and bicycling environments between different neighborhoods across a city. Used in tandem with network accessibility analysis, zonal analysis can help visualize areas of high latent potential for bicycling and walking activity could be unlocked by access improvements across barriers to bicycling and walking movement, such as major arterials, railroads or freeways.

Our team members often use demographic data to gain insight into current patterns of bicycling and walking activity across a region, including related modes such as transit that are often paired with walking or bicycling trips. Using GIS to show existing patterns of transportation mode choice across a region provides a data-driven method for matching perceptual and design-related analysis of the bicycling and walking network with the reality of actual transportation choices made by all community residents. This insight can help confirm priorities or provide new points of discussion.



3) What is your recommended methodology for determining the range of bicycle & pedestrian infrastructure needs, developing cost estimates, and prioritizing the improvements for construction with an implementation schedule? Discuss your past experience with the use of this methodology.

Our Team believes in recommending complete, connected bicycle and pedestrian networks that provide accommodation and safety for a complete range of bicyclist and pedestrian users. Our bicycle and pedestrian networks include on-road and off-road recommendations along with intersection and crossing improvements. Our methodology includes three main components: GIS analyses, fieldwork study, and stakeholder/public engagement. These components are combined together to accurately determine need and feasibility.

After developing a recommended network, our Team members conduct a prioritization process on network segments, based on factors such as public input, need, demand, safety, and overall ability of that segment to connect people to places. However, this prioritization matrix is only a tool as we provide an implementation schedule and strategy that takes into account other factors. For example, if bicycle lanes are recommended along a roadway segment which is scheduled for reconstruction or resurfacing, that project would become a first-phase, low-cost project.

After the prioritization is complete, we will develop project cutsheets that provide key statistics about the project such as construction method, cost estimate, and destinations serviced. These cutsheets may then be used to effectively communicate projects to implementing agencies and funders. Our cost estimates are accurate as they are based on costs for current projects recently constructed or under construction.

4) What type of data and survey methods do you anticipate using to create a comprehensive regional bicycle/pedestrian master plan?

Data and survey methods are key inputs into understanding issues and need. We offer a variety of tools for this regional bicycle/pedestrian master plan:

Bicyclist/pedestrian counts - We would utilize any pedestrian and bicyclist count data that exists in the region. In addition, Alta developed the National Bicycle and Pedestrian Documentation Project (http://bikepeddocumentation.org/) and is very comfortable leading and conducting counts as well as training local staff and volunteers.

Bicycle/pedestrian crash data - We will map existing, known bicycle and pedestrian crash data for the region. Crash data are indicators that bicyclist and pedestrian activity occurred in a location where safety concerns may be present. Sites of repeated crashes will be studied during this planning process. In addition, through community meetings, we will solicit input and will map near-crashes and other unsafe areas described by area residents.

Comment form - We would generate both an online and hard copy companion comment form. Our Team members uses SurveyMonkey online tool which is user-friendly and efficiently generates result databases and graphs. Hard copy comment forms would be available at community meetings and events.

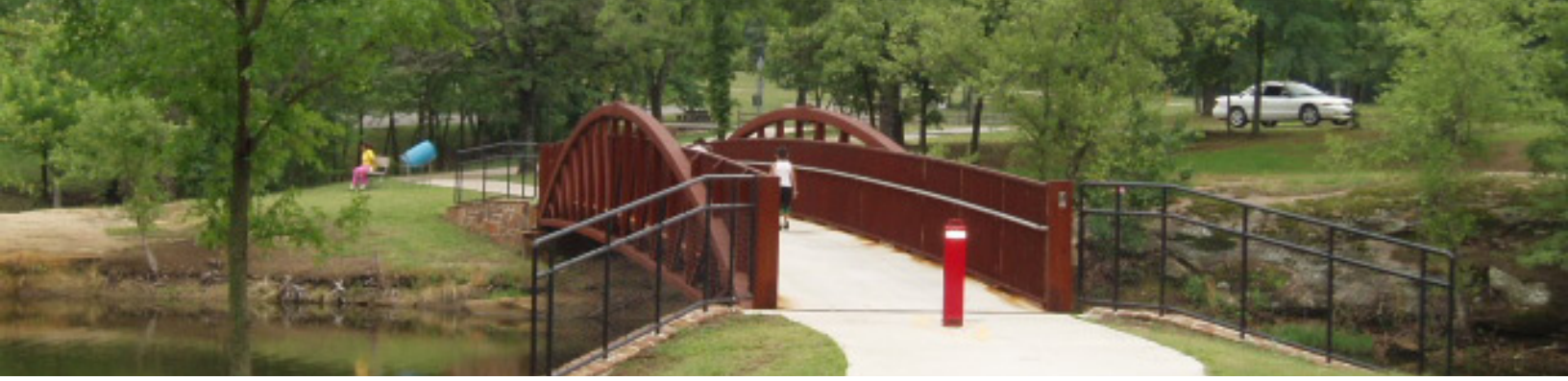
Online mapping tool - interactive, user-friendly input map that residents can complete at their home or work; offers opportunity to also see what others in the community suggest in terms of bicycle and pedestrian needs and safety concerns.

5) There are numerous existing local and regional plans that require careful consideration in developing the master plan. For example, the City of Tulsa Comprehensive Plan, ADA Transition Plan, Arterial and Non-Arterial Rehabilitation projects, Arterial Widening projects, Small Area Plans, INCOG Trails Master Plan, Major Street and Highway Plan, etc. What is your proposed approach to coordinating with existing local and regional plans?

Our Team will collect, review and understand the recommendations of each plan and the relevancy to bicycling and walking for each community. We will develop a matrix to profile plan recommendations with our recommendations so that it is easy to see the overlap. In addition, we are willing to conduct focus group meetings with other plan authors for both previous plans and ongoing planning efforts.

Our Team also will collect and incorporate any available GIS data to develop maps to communicate recommendations from previous plans and to assist with network analysis. In addition, we will collect information on upcoming roadway rehabilitation, widening, and resurfacing projects to overlay with the roadway network to assist with network recommendations.

We will utilize the TTMA Trails Master Plan to expand bicycle/pedestrian facilities in the metro area. This will ensure connectivity and compatibility between both plan's recommendations and ongoing success.



6) When discussing matters related to bike lanes and newer treatments, such as cycle tracks and buffered bike lanes, describe your team's experience communicating with citizens and the media regarding how these treatments work and when they are appropriate to apply.

Our Team members are at the forefront of innovative and FHWA-approved, bicycle treatments that are quickly being built all over the United States. We are working on Arkansas' first cycle track project along with cycle tracks in Memphis, Atlanta, Chicago and Charlotte. We understand that each bicycle network segment requires individual analysis to determine the best facility. We are also abreast of the latest national data concerning bicyclist preferences for separated facilities where possible. For example, the vast majority of the general public will not ride a bicycle along stressful roadways with higher traffic volumes and speeds - even with standard bicycle lanes. We consider separated bicycle treatments especially where they connect places where people live, work, and play.

Education is an integral part of the planning process as most of the population is not aware of different bicycle and pedestrian treatments that exist (it is a fast-moving design field). We suggest providing education for both public officials (Public Works, Engineering staff) and for the general public. We can conduct trainings of local staff to describe functional use of facility types and answer questions.

Regarding the general public, we can conduct a brief tutorial to provide on the project website. In addition, early public engagement events can provide a high-level overview of facilities, sample images, and other information to communicate what they are. We can also use a visual preference survey to receive data on preferred facility types.

7) Give an overview of the specific staff you are proposing for this project and the roles (i.e. traffic analysis, public involvement, GIS analysis, conceptual design) they will fill for the project. Include information about percentage availability to dedicate toward this project.

LandPlan
Keith Franklin, ASLA - Project oversight, stakeholder involvement (50% availability)
Jeffrey Morales, ASLA - Concept design (40% availability)
Michael Harmon, ASLA, LEED AP - Concept design/GIS (40% availability)
Barbara Tartar, ASLA - Concept design (35% availability)
Julie Graff, ASLA, LEED AP - Stakeholder involvement (30% availability)

NewTran Solutions
Jimmie Sitz, P.E., PTOE, PTP - Roadway design, traffic analysis, Level-of-Service analysis (35% availability)

Alta
Chuck Flink, FASLA, RLA - Project oversight, stakeholder involvement (40% availability)
Dennis Blind, RLA - Stakeholder involvement, concept design (30% availability)
Paul Wojciechowski, AICP, PE - Roadway design/transportation engineering (25% availability)
Matt Hayes, AICP - Document writing, fieldwork (30% availability)
Jason Reyes, AICP - Graphics, photo renderings, document layout (35% availability)
Anne Eshleman, LEED AP, EIT - GIS analysis, bike/ped network, Level-of-Service analysis (40% availability)

8) What other projects are this team and the Principal(s) committed to or pursuing that might interfere with staff availability?

The Team's principals, project manager, and key staff will be committed to this project. No other projects will interfere with staff availability for this very important project. The LandPlan/Alta team consider this master plan a top priority and will be accessible throughout the process to complete the project on-time, within budget, to meet standards and your expectations. We have the capacity for this work and assure INCOG and the Steering Committee of our availability and commitment to the Tulsa Area Bicycle and Pedestrian Master Plan.

9) The Bicycle/Pedestrian Master Plan will require a multi-disciplinary staff. This includes expertise in traffic operations, bicycle facility design (on- and off-road), commute shed analysis, public participation and visualization. Describe how your team plans to integrate this expertise in the Tulsa Bicycle/Pedestrian Master Plan.

Our Team is a multi-disciplinary group of planners, transportation engineers, traffic engineers, designers, graphic specialists, GIS experts, and landscape architects. Individual staff themselves have a variety of experiences and expertise in on-road bicycle facility design, off-road greenway design, traffic operations, transit oriented development, transportation planning for all modes, public engagement, and strong graphic capabilities. As a result, our recommendations are realistic and grounded in engineering best practice, stakeholder/public input, are context-sensitive, and contribute to a sense of place.

We have found success holding mini-charettes through the planning process where multi-disciplinary staff come together to plan, engineer, and design. We plan to work together during this process, not in our individual silos.

10) Describe your team's approach to public involvement on this project.

Our Team believes that successful public engagement is our hallmark and the most essential ingredient to an effective planning process and project legacy. For this reason, we offer a broad array of public engagement tools. A planning process like this offers the opportunity for education about bicycle and pedestrian transportation but more importantly, offers an opportunity for real participation. The process would be very participatory from the start allowing people the opportunity to connect via web, Facebook, and Twitter. In addition, we will meet people and talk to them at community events. Public input will be integrated throughout the planning process.

The following tools have been effective for our Team members in regional planning and could be successfully applied here:

Project website - can be interactive in nature; updates to project posted regularly.

Online mapping tool - interactive, user-friendly input map that residents can complete at their home or work; offers opportunity to also see what others in the community suggest in terms of bicycle and pedestrian needs and safety concerns.

Social media - can be linked to project website; Facebook posts and Twitter feeds are ways to reach many people.

Comment form - both online and hard copy versions; Online comment form can be linked from project website and from other public/private entity websites; Hard copy comment forms can be completed at events, schools, and meetings.

Community outreach - To reach a broad, diverse constituency requires involving leaders and key institutions within those communities.

Stakeholder meetings - convene various groups, interests, and perspectives to receive input.

Piggyback events - Set up booth at well-attended regional and community events where people are already.

Workshop events - must be as convenient as possible for residents and can be held at churches, libraries, or community centers (not necessarily government buildings); workshop should extend as an open period for several hours to fit as many schedules as possible; should be interactive, fun, and engaging and probably involve food; provide educational boards, comment forms, and maps as well as informal input opportunities. **Our team anticipates public meetings in each participating community similar to meetings conducted by the Team's 2000 TTMA Trails Master Planning effort.**

Spanish-speaking population outreach - With 14% of the population Hispanic in the City of Tulsa (for example), it is important to provide materials in Spanish and reach out to Hispanic leaders .

Rides and walkabouts - conduct planned bike rides or walks with staff and elected officials; invite media.

11) As a client, one expectation INCOG will have is to have the consultant be the "face" of the project to the public. Describe your team's experience communicating specific project details to the media and local government officials and how you expect to manage that process.

Our Team is accustomed to being the "face" of the project. Our goal is to always make our Clients look good and to positively represent and describe projects to the public. We have significant experience in communicating to the media and local government officials. It is our goal to communicate through formal and informal procedures with elected officials and the media so that decision-makers and the general public can understand the importance of the work being completed. We are well-versed in working with both supporters and non-supporters of bicycle and pedestrian transportation goals. We always listen to the public and also seek to educate about the benefits of creating more walkable and bikable communities.

Currently, Alta is the face of the high-pressure TIGER grant and private foundation-funded Razorback Greenway. Alta was the lead and face of the high-profile WalkBikeNC Plan, the state's comprehensive pedestrian and bicycle plan. LandPlan/Alta Greenways was the face of the 2000 TTMA Trail Master Planning effort.

12) How has your team integrated public transit into previous bicycle/ pedestrian planning efforts?

The critical components for success include:

- *Improved connections*: continuous sidewalks, shared-use paths and bicycle/pedestrian friendly streets must surround all transit hubs. Linear corridors carrying light rail or buses must include bicycle facilities and provide a comfortable environment for pedestrians

- *Signage:* improved wayfinding in both the immediate area around the transit hub as well as the surrounding neighborhoods will increase the chances that people will walk or bike there. Local bus stops need signs to not only indicate their presence but should provide a bus network map, along with information on the bus schedule

- *Parking:* high-quality bike parking at bus stops, transit hubs and train stations encourage people to bike, rather than drive. Plentiful bike racks--covered if possible--and bike lockers in well-lit areas help to ease concerns about theft, vandalism and exposure to rain and snow.

-*Bus stop areas*: High-quality bus stops that include a shelter, bench, lighting, and bike racks encourage more walking and bicycling.

Our team will incorporate these principles into your bicycle/pedestrian master plan. We recognize that non-motorized infrastructure improvements that lead to bus stops and transit hubs are critical for making a more pedestrian and bicycle friendly community. We consider cost, network connectivity, improvements to safety, and enhancements to walking/biking to schools, etc. We include "connections to transit" as a key criteria in our prioritization methodology. We develop a matrix of all recommended projects and score each one based on evaluation criteria developed in conjunction with the client, stakeholders and the community. Each criterion can be weighted as well, further elevating the importance of projects that provide walking and bicycling connections to transit, if desired.

13) Give examples of projects for which this team has recommended bicycle-oriented roadway treatments that were implemented after planning was completed.

Raleigh, NC: Alta completed the 2009 Raleigh Bicycle Plan when there were five miles of bicycle lanes on the ground. Since then, nine miles of bike lanes and nine miles of sharrows have been added. Currently, Alta is currently working with the City of Raleigh to design and implement 20 more miles of on-road bike facilities.

Jackson Hole, WY: In June 2013, the Town of Jackson accepted Alta's Bicycle Improvement Plan and immediately went to work! The plan was meant to establish in-town bike routes to connect the pathway network which doesn't reach into the center of Town. About half of Alta's entire network is going in this summer with more to follow next year.

TTMA Trail and Bikeway Master Plan - Since the Plan was adopted, more than 10 on-street bikeways have been implemented in Tulsa, Bixby, Sand Springs, Jenks, and Claremore per the master plan recommendations. The majority of these facilities are share the road bikeways.

14) Based on your experience, describe what the pedestrian element of the plan would address. Would the plan be infrastructure or policy oriented? Or both?

We believe that a successful Plan that is both infrastructure and policy-oriented. Ultimately, there are two major factors that determine whether a walking trip is possible: 1) presence of sidewalk or greenway network with safe roadway crossings, and 2) trip distance. Just as roadways are critical to move automobiles, sidewalks and greenways are critical to move pedestrians. Pedestrians and bicyclists are impacted directly by land use policy decisions. Segregation of uses and sprawl separate people further from their destinations. Connected street networks allow for a more direct pathway to destinations and often prevent pedestrians from having to walk along or across major arterial roadways. In addition, ADA access is an integral part of both policy and infrastructure development.

15) Has your team worked with policy-related issues, such as block length on previous plans? Describe how block length and connectivity might be addressed in the plan.

Members of our Team have worked with communities across the country to develop policies and development standards that promote best practices for pedestrian and bicycle oriented-design and Complete Streets. For example, members of our team helped to develop connectivity and block length policies and standards for Charlotte's nationally recognized Urban Street Design Guidelines and for Raleigh, NC's recently adopted Unified Development Ordinance (UDO) update. We are doing similar work in communities such as Cleveland, OH, where we recently developed Complete Street Guidelines for the City.

As part of our process, we typically review a community's land development standards, zoning requirements, and street design standards to determine if they adequately provide for elements that create walkable and bikeable neighborhoods, including requiring short block lengths and connected street networks for better pedestrian and bicycle access. (As part of our work on the Raleigh, NC's Bicycle Master Plan in 2008, we recommended policy updates to the UDO to address bicycle-related issues, such as block length, connectivity, parking standards, that were later implemented with the UDO update.) We know that block lengths as shorter than 600 feet (and preferably 200-400 feet) are best for pedestrian orientation, but we also know that block lengths are related to density of development and land use types and contexts. We will review current zoning and subdivision standards and make recommendations for block length, street and greenway connectivity standards that are appropriate for various land use contexts in the plan area to reflect national best practices. We will also look at other existing local standards/policies such as those for pedestrian facility design, bicycle parking, bicycle facility design, complete street policies, design guidance and make recommendations for bringing these up to the national state of the practice.

16) How has your team used visual aides (photographic renderings, maps, etc.) to illustrate to elected officials and the public the proposed projects of bicycle/ pedestrian master plans?

Our Team prides itself on the development of stunning, high-quality visual aides that communicate proposed projects effectively. These are in the form of maps, photographic renderings, cross sections, and cutsheets. While text and descriptions are essential, elected officials and the general public understand and respond to quality communicative graphics.

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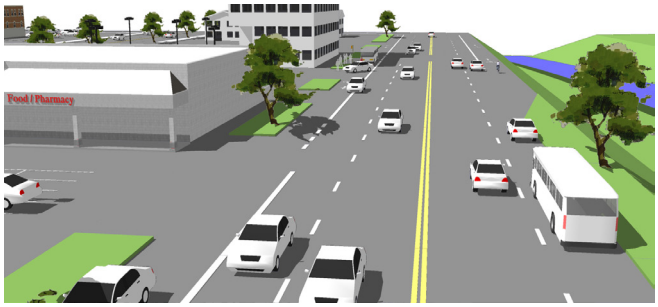
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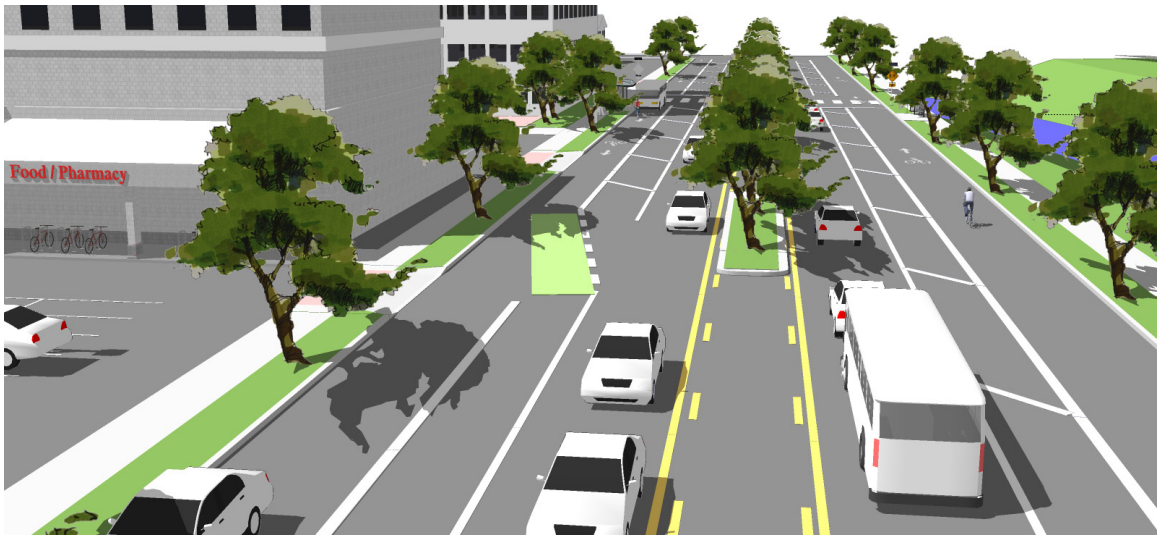
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