# City of Fayetteville, AR
# Transportation Master Plan Project
# Exhibit A – SCOPE

## TASK 1 PROJECT INITIATION

### *1.1 Project Kick-Off Meeting*

The Consultant will meeting with City staff, any key stakeholders identified by the City, and potentially a Steering Committee to discuss the final scope of work and project schedule, establish communication protocols, coordinate preparation activities, and collect studies, data, and other information that will be used throughout the project. During the kick-off, the Consultant will conduct a brainstorming session to clarify key roles, schedules, community event types / dates/ locations, and consistent graphics elements for outreach materials.

### *1.2 Final Scope of Work and Project Schedule*

Based on the discussions at the project kick-off meeting and follow-up correspondence, the Consultant will work with the City to finalize the Scope of Work and Project Schedule, including the Community Outreach Schedule.

**DELIVERABLES:** Meeting Notes
Final Scope of Work and Project Schedule

## TASK 2 VISION, GOALS, OBJECTIVES

Knowledge of the community's values is necessary to effectively produce network typologies, design standards, measurement tools, and an implementation plan. The Consultant will incorporate the goals of the City Plan 2030, Downtown Master Plan, and other guiding documents. The Consultant will also talk to citizens, stakeholders and elected officials about how the transportation plan can improve their lives through and inclusive public participation process that receives input from sometimes disengaged users and from all areas of the city, not just special interest groups and downtown areas (see Task 4 for details). With robust public input, designs for transportation solutions can be tailored entirely to the community context and preferences. Such a system is only effective, however, if the solutions are reflective of Fayetteville's values. A small (as small as possible), tailored set of community-based project goals will be developed during Task 4 before any network priorities are set. This process will necessarily involve and inform key stakeholders who may not fully appreciate the community's vision, such as AHTD, large institutions and employers, and members of the community itself.

The overall goals, when set, will lead to a set of measurable evaluation criteria in Task 7 designed to meet the objectives included in the Request for Qualifications. These measures will encompass choice modes of travel such as bus, bicycling, bikeshare, walking, carshare, taxi, scooter, etc. with careful attention paid to the need to balance automobile throughput against other community needs.

**DELIVERABLES:** Goals Statement Measurement, Prioritization Framework and Criteria

## TASK 3 EXISTING CONDITIONS

The following subtasks are intended to be conducted in parallel with overlapping input and feedback informing each subtask's analysis and conclusions.

### *3.1 Review of City Codes, Policies, Standards, and Design Guidelines*

The Consultant will conduct a review of all appropriate municipal codes and ordinances that support or should support plan development, as well as other broader goals identified early in Task 2. These go beyond standard elements such as vehicle lane dimensions, crosswalk standards, curb ramp designs, other traffic, street or sidewalk elements and extend further into elements such as parks and recreation, parking regulations, land use and growth policies, development regulations, , and citywide zoning. In addition, the Consultant will work with City staff to fully understand existing street design, evaluation, and implementation practices across applicable City divisions, as well as curb management practices.

### *3.2 Review of How Streets Are Classified*

Traditional roadway functional classification is an ordering system that defines "the part that any particular road or street should play in serving the flow of trips through a network." Functional classification, by most definitions, is mono-modal; it focuses on one type of traffic, in this case, motorized vehicles. Classification systems that are more relevant to settings like Fayetteville should include non-driving modes and non-travel uses of streets that allow for flexibility in street design.

The Consultant will conduct a review of Fayetteville's existing circulation patterns, capacity (planning level), traffic volumes, and non-motorized usage to identify how these factors align with the classification of existing streets. This information will guide recommended street typologies developed in Task 6, considering community-based criteria on circulation, environmental protection, neighborhood livability, land use, and other factors to provide additional context sensitivity. Doing so will help ensure that Fayetteville's streets are planned and designed to serve a variety of uses and not simply vehicular movement.

### *3.3 Review of Street Cross-Sections*

Based on information provided by the City, a close review of the City's Master Street Plan cross sections and field reconnaissance, the Consultant will develop a spatial map of the City's street widths with overlays of existing traffic volumes, land use, and density. This effort will feed into Task 3.2 above and help to develop Complete Streets typologies and design guidance in Task 6, where the Consultant will highlight areas that show opportunities for repurposing of right-of-way and areas with constrained street width (areas, for instance, that can potentially be addressed by adding to the pedestrian realm through easements or during development projects).

An important part of this subtask will be evaluating curb management practices throughout the city and especially in downtown where the Master Plan calls for changes to parking management practices. On-street parking can greatly impact the environment for motorists, bus drivers, bicyclists, and pedestrians depending on where it is placed relative to street width, design speed, cross-streets, and adjacent land uses. The Consultant will identify where parking or its management conflicts with broader study goals and the implementation of complete streets.

### *3.4 Transit System Evaluation*

The Consultant will draw upon its established understanding of local transit systems to develop a cost-effective evaluation of City opportunities based on current and likely bus transit operations in Fayetteville. The Consultant already has a firm understanding of ridership patterns and service productivity from its work at the University of Arkansas, including underlying system strengths and weaknesses and proposed routing changes. The Consultant will prepare evaluations of the context around transit stops and routes, including infrastructure assessments, amenities, walking environment, connectivity to land uses, etc. The analyses will use existing data as available, including service characteristics, ridership volumes and patterns, compatibility with other street functions, amenities, and other factors relevant to the creation of Complete Streets.

### *3.5 Level of Service and Multimodal Analysis*

Traditionally, motor vehicle Level of Service (MVLOS) standards have been focused solely on vehicle delay and travel time, and they may therefore have a detrimental effect on non-motorized users and on the implementation of Complete Streets. Multimodal Level of Service (MMLOS) has been adopted by some communities as a new performance standard. However, the high data requirements of MMLOS may be limiting for some jurisdictions.

As part of this task, the Consultant will provide an evaluation of how MMLOS can be applied in Fayetteville. The Consultant will then present its full recommendations on Level of Service standards or alternative performance metrics that should be adopted by the City of Fayetteville.

To develop guidelines for street standards and typologies, the Consultant will then conduct the preferred analysis on as many streets in Fayetteville as the methodology allows within the approved budget. The methodology should be conducted by the City now and in the future as a way to prioritize future streets projects and project elements according to the final community-based criteria.

The Consultant team will analyze no less than six major corridors, and at least 24 intersections (specific corridors to be determined in Task 1.2).

### *3.6 Geographic Information System Geodatabase*

Benefitting from existing in-house GIS data and skills, the Consultant will quickly develop a base geodatabase of the City's streets that will eventually contain recommended typologies and eventually be a City-maintained asset, incorporated into other planning initiatives in the future. The team will focus significant effort on compiling and reviewing multimodal transportation data. While all of the following elements may not be readily available for the expected budget, the Consultant will work with the City to incorporate as much static and field information as possible, including but not limited to:

- Sidewalk coverage: conditions
- ADA deficiencies
- Curb ramp locations: compliance status
- Signalized intersections;:phasing & timing
- Turning movement counts
- AADT volumes
- Crash locations
- Transit stops, shelters, and routes
- Recent boarding counts

The Consultant will deliver this GIS database as early in the project as possible since it forms the basis for much analysis in later tasks, but the Consultant is expected to continue to add to it throughout, incorporating recommendations and results from performance measurement tools at later stages.

### *3.7 Fayetteville Mobility Facts Book*

The Consultant will produce a highly-accessible report on all above existing conditions that can be loaded to a project website and distributed as a complete package. This format is an alternative to the unwieldy and overwhelming technical existing conditions reports that are of little use to anyone but well-informed staff.

**The Fayetteville Mobility Facts Book** would be a product of field study and review of existing conditions through data analysis, outreach, interviews and review of past planning efforts. The Facts Book will also provide a review of best practices from relevant peer communities. It will be designed with a graphic, internet-

ready focus, employing maps, illustrations, and photo imagery. The information it contains will serve as the content basis for much of the outreach program. It will be linked to existing data sources where possible.

**DELIVERABLES:** City Policies and Ordinances Memo
Street Classification Memo
Street Widths Memo
Level of Service and Multimodal Analysis Memo
Transit Evaluation Memo
GIS Geodatabase
Fayetteville Mobility Facts Book

## TASK 4 ON-GOING PUBLIC PARTICIPATION

Prior to outreach, the Consultant will consult the City for initial stakeholder contacts, possible mobile workshop and community meeting locations, and consistent graphics elements for outreach materials. The process described below represents the initial proposal for outreach, based on successful public outreach on other projects. These details and the actual meeting schedule will be refined based on input from the City, Steering Committee, and other key stakeholders. At all times the intent of the outreach will be to receive input from sometimes disengaged users and from all areas of the city, not just special interest groups and downtown areas.

### *4.1 Public Education Campaign and Outreach Materials*

The Consultant will develop a public education campaign and outreach materials to educate the community about planning for Complete Streets. Implementation of Complete Streets can be a significant paradigm shift for some residents, so educational materials will emphasize why it is important to balance all modes of transportation and how this balance is achieved. This task and the materials will be developed and refined in close collaboration with City staff.

### *4.2 Mobile Workshops*

The core of the outreach strategy will utilize the "mobile workshop" concept, allowing integration with existing events, rather than creating a whole new outreach effort. The preferred format employs interactive maps, guides, and touchpad-based input tools stationed at a simple table with visible pop-up tent, all quickly packed into and out of a van. By being mobile, the team can ensure the outreach campaign receives input from sometimes disengaged users and from all areas of the city. The purpose of focusing on mobile workshops, rather than a static location, is to engage as diverse of a population as possible, including diverse geographies.

The first two substantial public engagement efforts will be mobile:

1. **Values Mobile Workshop** serves as a welcome and public kickoff for the project. It will include a project overview and be focused on participant input on the goals and objectives for the project. During the workshops, participants will have hands-on exercises to prioritize values and highlight areas of opportunity and concern.
2. **Concepts Mobile Workshop** will be the forum where the Consultant presents preliminary concepts and alternatives for street and network typologies, cross-sections, and evaluation criteria. This workshop should be scheduled midway through the project. The mobile format will include both educational materials as well as provide opportunity for participant input.

These mobile workshops assume 3-4 consultant staff with assistance from the City in up to 10 locations total.

The mobile workshop exercises will be replicated in online versions (Task 4.4) to maximize participation.

### *4.3 Community Workshop*

A community workshop represents the major public involvement event necessary to review the draft Transportation Master Plan components and to share and solicit feedback from the public on draft plans. It could follow a charrette process, where the meetings for plan reviews, and much of the final production work, takes place in a compressed period – sometimes even a few days. It is recognized that Fayetteville citizens are familiar and comfortable with this format as evidenced by other recent planning initiatives.

This **Draft Plan Workshop** will present the Draft Transportation Master Plan. Citizen input at this meeting is anticipated to be primarily public comment and map markup to confirm that the input provided at earlier meetings is incorporated into the document.

### *4.4 Community Survey*

Surveys reach community members who are unwilling or unable to attend workshops. The survey will include questions about vision and goals as well as specific items related to policy and street design. The survey is not intended to be a statistically significant and is instead fun, brief, and informative. It will be distributed in paper, by email, on social media, and via the City's website in a format to be finalized in coordination with the City.

### *4.5 Project Website and Social Media*

An effective project website will help fill in the gaps for those who cannot or who choose not to attend meetings and provide up-to-date study information while soliciting feedback in-between meetings. The project website provides a fast and simple way to keep up to date with the project. The website provides a single location for study announcements, updates, contact information, meeting results, and work products. Social media will supplement this by providing frequent updates and link users to the project website.

**DELIVERABLES:** Workshop Notes
Survey and Results Memo
Project Website and Social Media
Education and Outreach Materials

## TASK 5 IDENTIFYING NETWORK NEEDS

Building directly upon the existing conditions review of Task 3 and the public input developed during Task 4, the Consultant will work with City staff and potentially a Steering Committee to identify key areas of need in Fayetteville's streets (both topical and geographical). Key questions to be asked are:

- Where must we improve street user safety?
- Where should we work hardest to enhance the City's bicycle/pedestrian friendliness?
- Where do barriers to transit, bicycling, and walking need to be overcome?
- Where can we increase and incentivize multimodal opportunities?
- Where are additional street linkages, intersection improvements (both capacity and safety), and other capacity improvements needed?

As issues and likely opportunities are identified, the Consultant will also identify the tradeoffs they represent. For example, proposed improvements such as cycle tracks or rapid bus treatments would require that more roadway space be used for transit and bikes, with less for regular traffic. This road capacity trade-off may benefit congestion in general but directly affect a subset of drivers on targeted corridors. A major issue for this study will be how far the city is willing to accept these trade-offs to shift to alternative modes.

## *5.1 Street Opportunities*

Fayetteville's street system is its front door. Every building, plaza, and open space abuts a street, and most places are reliant on streets for direct access. The quality and condition of streets is, therefore, of paramount concern to most residents, whether they be a motorist, cyclist, walker, or transit rider.

The Consultant will focus on locations where a mix of modes is not seen because the street is too threatening for anything besides cars or through buses. The Consultant will also identify clear system gaps, conflicts, pinch points, and other barriers to seamless and safe movement by all modes and illustrate these as a "gap analysis."

Particular consideration will be given to policies that influence the demand for driving. Many communities have recognized that dramatic shifts to alternative modes of transportation are possible with the right set of public and private incentives, including:

- Parking pricing/cash-out
- Free rides home
- Web-enabled ridesharing
- Car-sharing
- Bike-sharing
- Flex-hours
- Secure bicycle parking

Vehicular congestion and safety analysis will be performed to identify needed improvements, through better signal timing, revised lane utilization, additional linkages, improvements to roadway geometry, construction of additional capacity, or other structural or non-structural improvements.

## *5.2 Transit Opportunities*

Transit improvements provide one of the best opportunities to shift very large number of travelers out of single-occupancy automobiles, allowing streets to transform. After the transit service evaluation, the Consultant will evaluate community-based options to address identified opportunities. These may include:

- Sources of Operational Delay
- Stop Consolidation to make transit service faster
- Bus Stop and Area Improvements
- Land Uses and Zoning

## *5.3 Bicycling Opportunities*

As it works with the City and Steering Committee to focus on preferred street typologies, the Consultant will work to identify biking improvements to resolve the gaps in the system identified by the Active Transportation Plan that can enhance bicycling. These may not only resolve facility gaps but intersection delays, needed lighting, conflicting vehicle movements, and information and wayfinding gaps. Some of the strategies that can further enhance Fayetteville's streets and intersections for bikers include:

- Bicycle boulevards
- Cycle tracks
- Median lanes
- Bike signals
- Bike jug-handles
- Bus-bike lanes

- Shared-use markings
- Contra-flow lanes
- Multi-use paths
- Bike stations

The Consultant will work with the City and committee to test these strategies and how they might fill gaps in Fayetteville by showing how best practice examples from around the country have been applied.

### *5.4 Pedestrian Opportunities*

Several pedestrian design principles should be maintained in Fayetteville, as described below. These will be assessed citywide during this task.

- Connectivity
- Safety
- Accessibility
- Traffic Engineering Elements
- Landscaping and Aesthetics

While the Consultant brings national experts at evaluating walking systems, it will rely heavily on the input of the public for finding the best opportunities. The Consultant will be clear about its approach to pedestrian design as part of educating the public about the improvements that can happen in their neighborhoods.

### *5.5 Land Use and Urban Design Opportunities*

The demand for any form of transportation rests solely with the land uses that generate residential, commute, shopping, and tourist trips. The Transportation Master Plan must emphasize the types of land uses that support alternative modes in order to inform the upcoming City Plan 2030 process. Typically, multimodalism increases when following these basic land use principles, which will be explored with the City, Steering Committee, and other stakeholders:

- Creating a matching live-work mix locally
- Providing a sufficient mix of affordable locally-serving retail
- Increasing residential density
- Promoting a horizontal and vertical mix of uses
- Concentrating density near transit nodes
- Limiting the geography for exclusive residential use
- Integrating a minimum but restricted amount of open space

### *5.6 Livability and Economics*

The effect of the transportation costs is a principle factor in mode choice. For the average motorist, the perceived cost to drive is simply the cost of gasoline, and in most instances, this is less than the equivalent transit fare. However, this cost entirely ignores the tremendous amount of hidden subsidies for automobile travel such as insurance premiums, registration costs, taxes, and maintenance. More progressive cities have realized the true value of the land occupied by excess road and parking surface by reclaiming this space for infill development; thus reducing vehicle trips while offsetting growing budget deficits.

The Consultant will work with the City, the Steering Committee, and the public to reveal the real economics of parking and transportation as part of identifying possible regulatory opportunities that will promote vehicle trip reduction in Fayetteville. In the downtown especially, this will be closely tied to a parking management strategy that addresses merchant and business perceptions about the need to preserve parking supply.

### *5.7 Sustainability and Carbon Emissions*

At the forefront of recent transportation debates has been the impact of greenhouse gas (GHG) emissions on global climate change. Recent debate has minimized public fears somewhat, even though the scientific community is nearly unanimous in its conclusions about the ill-effects of tailpipe emissions on the planet. Other local impacts of GHGs include increased asthma rates along high-volume roadways, incidence of cancer pockets near Interstates, local smog effects, and water pollution from particulate runoff.

Furthermore, the extra space needed to accommodate automobile travel and parking means greater building heating and cooling costs due to reduced density; increased remote pollution impacts from paving materials production; and greater fossil fuel consumption and utility distribution costs to serve auto-oriented land uses.

The Consultant will work with the City and the Steering Committee to identify clear policy and infrastructure gaps that are contributing to adverse climate change.

### *5.8 Downtown and Entertainment District Parking and Mobility Study*

Focus area parking and mobility study scope and sub-tasks are included in detail at the end of Transportation Master Plan scope.

**DELIVERABLES:** Streets Needs Memo
Biking Needs Memo
Walking Needs Memo

Land Use and Urban Design Memo
Livability and Economic Memo
Sustainability and Carbon Emissions Memo

## TASK 6 STREETS PLAN

### *6.1 Development of a Street Typology/Prioritization*

The Consultant will work with City staff to identify "families" of streets based on accepted utilization, context, land use, and other measures. Building on the Master Street Plan Cross Sections, the Consultant will develop conceptual cross-sections for each family as well as conceptual plan views in areas where families intersect. Proposed solutions to better accommodate all users (pedestrians, bicyclists, transit, and motor vehicles) - as deemed appropriate based on the context of the street - will be shown for each family, including features such as curb-and-gutter, bulb-outs, medians, lane markings, parking space marks, crosswalks, driveways, sidewalks, bike lanes and other bike facilities, transit facilities, and streetscape features.

### *6.2 Establishment of Design Standards and Green Streets Network*

The Consultant will use the Task 3 existing conditions analysis, street typology recommendations, and Task 5 needs analysis to develop a comprehensive design guideline manual that includes, but is not limited to, all improvements relating to pedestrian and bicycle facilities, street lighting, transit stops, on-street parking, utilities, landscaping and signage. This manual will recommend revisions to city codes, policies, standard drawings, design guidelines, and City signage, as reviewed in Task 3. The design guidelines are anticipated to include recommendations related to a range of factors such as lane widths for motor vehicles and bike lanes, pedestrian realm (sidewalks and furniture zones), street trees and other landscaping, lighting (pedestrian-scale and roadway), intersection design details (corner radii, curb extensions, signal displays and timing, etc.), transit-supportive streetscape design, medians, islands, and pedestrian refuges, parking lane treatments, parking management practices, traffic calming and roundabouts.

These design guidelines will include design modules and overlays for each of the street types that allow for the integration of design features associated with Low Impact Development in the "Green Streets Network," the downtown zone, or other identified focus areas. For instance, the incorporation of green streets features into an urban main street environment will require a different design approach from that for a street lined by single-family residences.

### *6.3 Transit Service Improvements*

The Consultant will complete a series of recommended improvement plans for Razorback Transit and Ozark Regional Transit that work to meet the goals outlined in Task 2, is reflective of the needs collected in Task 5, relates to existing and new transit-oriented development areas, and complements the streets typology and design standards. Service improvements will be summarized according to normal measures used by the local providers, such as total service hours. Capital improvements such as shelters, benches, and other passenger amenities are expected to be incorporated as part of the street design standards. Recommended improvements also will include coordinated policies as they relate to parking pricing, demand management, transit-oriented development opportunities, other forms of transit (including transportation network providers), and transit information. While it is expected that the majority of

recommendations will be for the existing fixed route bus system, the Consultant will also provide high-level recommendation for demand-responsive service and future fixed-guideway plans (bus rapid transit, light rail, streetcar, etc.)

### *6.3 City Coordination Plan*

Implementing Complete Streets in Fayetteville will require notable changes to City policy, regulations, and governance. The Consultant will work closely with City staff to lay the groundwork for Departmental policy changes, re-evaluating roles, budgets and authority. The City Coordination Plan will be supported by performance criteria derived in Task 7. Change of this scale can be difficult and incremental, but the opportunity to rejuvenate City policies is tremendous given the potential and interest in pushing for growth and change in Fayetteville.

**DELIVERABLES:** Street Typology/Prioritization Networks
Green Streets Network
Transit Services Improvements
Streetscape Design Guidelines
City Coordination Plan

## TASK 7 PERFORMANCE AND MEASUREMENT TOOLS

For this task, the Consultant will develop a set of performance and measurement tools that can be used to evaluate the quality of City streets and impacts of future projects. Based directly on the goals and criteria developed in Task 2 as prioritized during public outreach (Task 4), the measures will be multimodal in nature and reflect community-based considerations of land use, health impacts, safety based on public input. While the accepted measures will be used to finalize the Master Plan, the tools that utilize these measures are intended to live on with City staff for future planning efforts.

These tools may include:

- **Automobile Movement Compensator** – Candidate road projects could be tested. Measures should acknowledge that throughput is not the same as delay (i.e. a skinny street or intersection can handle as much throughput as a wide road that is poorly managed, but the skinny street has safer speeds that may mean greater – but acceptable – delay).
- **Bicycle & Pedestrian Evaluation Tools** – One of the most insightful and current evaluation criteria is from the League of American Bicyclists, which named Fayetteville as a bicycle friendly community in 2010. The League's evaluation is goal-focused and contains dozens of performance measures that could be considered as part of a City evaluation tool. A GIS-integrated method for prioritizing sidewalk improvements should also be developed.
- **Transit Evaluation Tool** – Leveraged by best practices across the country, this tool would evaluate system changes with simple quantitative criteria (peak passenger load, travel time factor, hours of service, etc.) and qualitative factors (comparison to other future transit service, land use plans, zoning, etc.).
- **Street Design Assessment** –This tool would include assessments of sidewalk characteristics, location and quality of crosswalks, signing and protective measures, compensated spatially based on proximity to key land uses, such as schools, transit stations/stops, and activity centers.

- **Health and Safety Evaluator** – This tool would assess linkages between physical infrastructure and health by considering factors such as emissions, VMT, crash rates, vehicle speeds, sound impacts, and other variables.
- **Economic Evaluator** –This tool would evaluate the potential economic benefits of a project and relate those to long-term municipal revenue growth, individual wealth creation, and more equitable allocation of costs and benefits.

Any of the above tools can be supplemented, modified, and tailored to Fayetteville's needs, based on the prioritized goals and needs that are identified. All are intended to be part of regular planning activities and to be easily maintained by City staff for years to come.

**DELIVERABLES:** Performance and Measurement Toolkit
Evaluation of Recommended Projects

## TASK 8 FINAL PLAN

### *8.1 Draft Transportation Master Plan*

The Consultant will work with City staff to develop an outline of the report based on the findings from Tasks 2 through 5 and the recommendations of Task 6. The Consultant will then assemble the Draft Transportation Master Plan and guide it through a review process involving City staff and the public. Based on the comments and feedback received, the Consultant will produce a final version and present it to City leadership.

Following the evaluation of streets and improvement projects versus the performance and measurement tools during Task 7, public feedback will help to confirm that the right projects and typologies are rising to the top. During these sessions the Consultant will also begin to discuss funding constraints and opportunities to gain a sense of whether there are enough highly desirable projects to expand the pool of funding.

Following the input received at the prioritization sessions, the Consultant will assemble the results into a final draft. The plan will include street standards, street typologies, possible capital projects, City policy recommendations, City policy positions regarding partner agency projects, and other elements described above. This includes recommendations on travel demand management, parking policy, traffic and bicycle system enforcement, community education, etc. The Consultant will recommend practical steps toward implementation, bringing experience from other communities that have had success with various programs and providing insight regarding the keys to their success.

### *9.2 Draft Implementation Strategy*

Successful plan implementation is the greatest challenge for any planner. With so much at stake for Fayetteville, the Transportation Master Plan cannot run the risk of being an end point, regardless of how well-developed, documented, and implementable it might appear. While the Transportation Master Plan must have a forward-thinking vision that ensures it is only the beginning of a process, the Plan must be well-grounded in the realities that City staff, lawmakers, business-owners, and landowners must face every day. The Plan's **Capital Plan** will be accompanied by a real on-going Maintenance and Operations Cost Program that acknowledge the realities stakeholders will face once the Plan is complete. The implementation steps and timeline will be grounded in a sequence that is realistic, given time, budgets, and regulatory constraints.

Nonetheless, the Transportation Master Plan process should create the kind of motivation and support from all internal and external stakeholders necessary to keep implementation on track.

The Implementation Strategy will include three components for each recommended initiative: a Capital Plan, a Maintenance and Operations Cost Program, and a Financial Plan. The Strategy also will identify the parties that will be responsible for implementation and funding. The Financial Plan will outline the costs associated with each individual project, as well as potential costs and strategies for long-term Citywide projects. For example, the Consultant will likely quantify the costs for the development of a completed citywide bicycle network, but that network would be implemented over a period of years. In this case, the Consultant would also propose annual funding levels that would allow the system to be developed over a set number of years.

For each of these measures, the Consultant will also propose potential funding sources. This may mean becoming involved in community discussions on topics about revenue capture, such as tax increment financing, that relate to local funds. It will mean helping Fayetteville understand the latest Federal funding programs as well as State of Arkansas priorities.

Once recommendations are prioritized, the Consultant will develop the Implementation Strategy that incorporates a Capital Plan, Maintenance and Operations Cost Program, and Financial Plan, and includes details such as the following elements:

- Specific implementation steps for each recommendation
- Thresholds or triggers to undertake actions - for example, public streetscape projects that will couple with privately constructed new network
- Responsibilities for each action
- The level of effort that will be required
- Interrelationships between activities and agencies
- Recommended travel demand management policies (both public and private) along with the potential for Transportation Management Association (TMA) structures.

A Draft Implementation Strategy will be circulated to City staff and key stakeholders as established by the City. Comments will be solicited, and comments received will be reviewed with the City. Appropriate modifications will be made to the Draft Report.

### *9.3 Final Plan*

The Final Mater Plan will convey the recommended mobility policy, related strategies, and priority projects for the City of Fayetteville. The report will be detailed to include a work program broken down by year along with costs and schedules, as well as broad, including recommendations of policy and overall direction of multimodal mobility for the City. Detailed implementation and financial considerations may be in a separate document for City consumption.

**DELIVERABLES:** Draft Plan
Implementation & Financial Strategy
Final Plan

# 5.8 Downtown and Entertainment District Parking and Mobility Study Scope of Work

## TASK 5.8.1 EXISTING PARKING FACILITIES SUPPLY AND DEMAND

### *A. Kick-off and Background*

*Project Initiation*

Nelson\Nygaard can use the citywide Transportation Master Plan effort kick off meeting to begin the parking study effort. At the kick-off meeting, the Consultant will work to identify exact study area boundaries.

*Plan Review*

Nelson\Nygaard will work with City staff to identify and collect all relevant and available data, reports, and studies related to parking in Fayetteville, including but not limited to:

- **City studies and reports:** downtown parking studies, economic development plans, Entertainment District studies, etc.
- **Parking data:** digital files of parking inventory and regulations data by block and by lot, as available
- **Parking management practices:** enforcement practices, revenues and expenses, parking technology information, permit information, specialized parking arrangements (i.e. event, employee, resident permit parking, etc.), parking signage location inventory and locations
- **Land use information:** existing, proposed, and expected future land use information, including type and gross square footage for all buildings in the study areas
- **Regulations:** zoning code, related City ordinances
- **Geographic Information Systems (GIS) files:** a specific list of GIS shapefiles will be requested

### *B. Parking Inventory and Utilization*

*Parking Inventory*

Utilizing in-house Geographic Information Systems (GIS) skills and experience, the Consultant will build on existing parking inventory information provided by the City. The Consultant will work with the City to conduct a full field inventory to verify existing public on- and off-street data. The Consultant and the City will add to the public parking facility inventory by adding all privately owned parking facilities, excluding private driveways and lots fewer than five spaces.

The Consultant will build a GIS shapefile and develop parking inventory maps that include the private and public on- and off-street facilities, including elements such as regulations, permits, enforcement period, special use restrictions, compliance with parking ordinances, and price (when applicable). All data will be collected by block face for on-street and by individual for off-street lots. All information will be geocoded and submitted to the City.

*Parking Utilization*

Nelson\Nygaard is well practiced at leading, conducting, and analyzing parking utilization data. More importantly, Nelson\Nygaard presents this data in a way that is easy for stakeholders and the public to understand how the parking system is being utilized, where the hotspots are, and places that are underused. This data is critical to reflecting back to Fayetteville stakeholders how parking actually functions.

The Consultant will train City staff to conduct field surveys of parking accumulation and utilization for all identified publicly and privately owned parking lots and all on-street parking within the study area to identify the vacancy rates throughout typical days, including loading zones, bus stops, and other "live" areas. These surveys will establish the peak daily parking accumulation and daily utilization for the study area's parking.

The Consultant agrees that adequate parking utilization data is a necessary component to building sound analysis and recommendations. It recommends focusing data collection efforts when public school and the University of Arkansas are in session, on non-holiday days. At minimum, the City (working with the Consultant) will conduct:

- One (1) full weekday utilization counts, from 7am - 9pm (unless otherwise discussed), likely a Wednesday and/or Thursday
- One (1) full weekend utilization counts, from 9am - 11pm (unless otherwise discussed), on a Saturday

If the City would like more sample utilization counts, the Consultant can conduct them on a time and materials basis (through an add-on task), or the Consultant will provide materials and train City interns or staff to conduct the counts. The Consultant will provide all data collection materials and training to City staff; the Consultant will be available in person if needed for the primary utilization count day.

The Consultant will develop detailed maps of parking supply versus utilization for Fayetteville to identify patterns of use over time and space.

## C. Existing and Future Parking Demand Analysis

*Evaluation of the Existing Conditions*

Today's parking utilization rates and patterns will be analyzed to assess whether the existing supply meets current demand. The analysis will evaluate system-wide demand, as well as subgroups such as public parking lots, employee spaces, private lots, and on-street spaces. Data by user groups (visitors, employees, residents, commuters) will be tabulated to understand behaviors and trends among particular population subsets. Charts will be created to represent the dynamics of the supply and demand relationship across the day and throughout the study area, the different facility types, locations, including five minute walk radii, and user groups.

### *Evaluation of Parking Expansion Needs*

A summary parking Excel model starts with data from the Parking GIS database, developed in Task 1.B Parking Inventory and Utilization, in order to analyze the relationship between supply and demand in the entire study area, plus sub-areas as identified in coordination with the City.

The Consultant will account for potential parking demand in the next three-, five-, and ten-year horizons as determined from:

- Existing and on-going development projects
- Planned and anticipated projects
- Residential and commercial population shifts
- Residential and commercial demand
- Vehicle and foot traffic patterns
- Available parking distance from major destinations/trip attractors and venue locations
- Transit service improvements, dedicated bicycle facility additions, and transportation demand management (TDM) programs

This work stems from data collection efforts in Task 1.B but takes the data one step further by relating it to surrounding land uses and adjusting national standards in order to determine if parking supply is sufficient. This analysis will lead the Consultant to incorporate projections on future parking supply and demand based on changes in land use (i.e. potential development, build out of underutilized sites) in the study area. More specifically, this task will analyze:

- Existing land use in downtown Fayetteville
- Future land use in downtown Fayetteville
- Expected parking demand based on downtown land use relative to the Institute of Transportation Engineers and a Fayetteville parking generation rate
- Observed parking demand relative to the Institute of Transportation Engineers and a Fayetteville parking generation rate
- Shared use analysis (peaking by time of day)
- Ratio between parking spaces and built square footage, existing and future
- Scenario adjustments based on mode split and future planned uses

Nelson\Nygaard has experience all over the country in developing Excel spreadsheet tools that can be easily adjusted based on new land uses, parking supply, and mode split. In similar studies, the Consultant has found that traditional parking projections overstate demand. Downtowns offer the opportunity to share parking spaces between various uses throughout times of the day and week, thereby reducing the total number of spaces required compared to the same uses in stand-alone developments. This is a primary benefit in mixed-use contexts.

The Consultant will develop detailed projection scenarios of potential future demand, drawing upon parking demand in Task 1.B, Urban Land Institute (ULI) methodologies, and the Fayetteville context. Existing land use and projections will be based on information provided from the City and other stakeholders in the study, plus potential development scenarios based on vacant sites, sites identified for redevelopment, and development permitted through existing zoning.

### *D. Stakeholder and Public Participation*

Nelson\Nygaard understands that parking utilization data alone does not tell the whole story of the parking situation in town. Hearing from residents, employees, customers, visitors, commuters, and others on the day-to-day and seasonal parking issues helps to paint a more complete picture. As well as hearing first-hand why parking works in some parts of downtown and not work in others, what signage is confusing, or whether or not time limits impact behavior; substantially aids in determining how the downtown's parking functions for different users of the system. The Consultant will engage the users of Fayetteville's parking system via three primary

methods: stakeholder interviews, public workshop (followed by a public meeting in Task 3), and an online survey.

### *Stakeholder Interviews*

To help inform the project, the Consultant will coordinate and conduct up to six (6) interviews and meetings with identified stakeholders. Stakeholders may include City of Fayetteville staff, downtown and Entertainment District merchants, small business owners, Chamber of Commerce, key property owners, employers, developers, neighborhood groups, and others. The City may decide to include individual interviews with specific interviewees or "key stakeholders" with input from the project Consultant.

### *Public Workshops*

The Consultant will integrate parking study elements into the proposed Transportation Master Plan public outreach efforts.

### *Online User Survey*

To gain a better understanding of the way parking is used in Fayetteville, the Consultant can create an online user survey accessible from the City's website, local newspapers, city email lists, and other sources, as identified by City staff. Information collected from surveys will be used to identify use patterns, perceptions of the parking system, and the potential willingness to accept changes. The goal is to get as many completed surveys as possible from a diverse set of users.

These surveys will specifically address the following end-user issues for groups such as shoppers, diners, employees, commuters, residents, and tourists through questions including:

- Demographic information
- Parking location
- Parking location preference
- Parking turnover/length of stay
- Reasons influencing location selection
- Final destination
- Purpose of visit
- Perception of parking availability
- Perception of parking costs & price sensitivity
- Awareness of alternate parking locations
- Use of alternate parking locations
- Conditions for use of alternate parking locations
- Awareness of alternate mode options

**Deliverables** Technical Memorandum #1: Parking Supply and Demand

## TASK 5.8.2 REVIEW CURRENT MANAGEMENT STRUCTURE

### *A. Document Current Management Practices*

*Parking Management*

Nelson\Nygaard will work with City staff to identify and collect all relevant and available data, reports, and studies related to parking and relevant transportation programs in Fayetteville.

The Consultant will work closely with City staff to identify and document:

- Parking permit sales and pricing structure (historical and current)
- Specialized parking arrangements (i.e., event, valet, resident permit parking, etc.)
- ADA access
- Equipment and technology
- Enforcement and revenue collection, including staffing, responsibilities, routes and protocols, and schedules
- Existing Transportation Demand Management (TDM) programs
- Planned transit service improvements
- Planned pedestrian safety improvements
- Expected new bicycle facilities, including dedicated lanes and parking
- Planned vehicular traffic circulation improvements, including evaluation of one-way to two-way conversions
- Parking violation fees and fines, including associated revenues and expenses by category
- Parking-related zoning ordinance

### *B. Document Supportive Elements that Impact Parking Management*

Many blocks in Fayetteville are wonderful places to walk, with many downtown destinations under a five-minute walk from each other. The City's recent development projects are expected to add to the sidewalk-level activity. However, challenges such as topography and proximity of major destinations can be a barrier to a “park once” effort.

Every motorist becomes a pedestrian upon exiting the car. Thus, the Consultant will evaluate how a “parker” would access destinations from parking locations throughout the study areas on foot, based on both on-the-ground observation and national statistics. This will include the identification of specific barriers to walking such as distance, topography, incomplete or inadequate sidewalk networks, lengthy or dangerous intersection crossings, vehicular circulation barriers, land use mix, and more.

**Deliverables** Technical Memorandum #2: Current Management Structure

## TASK 5.8.3 RECOMMENDED PARKING MANAGEMENT STRATEGIES AND SYSTEM DESIGN

### *A. Initial Parking Management Strategies*

Based on Task 1 and Task 2 findings, Nelson\Nygaard will develop a suite of parking management alternatives that will be evaluated and vetted with the City. Parking management strategies

include supply-side options (additional off-street parking, shared parking, striping efficiencies, etc.), demand-side options (pricing adjustments, wayfinding/signage, real-time parking information, time limit adjustments, transportation demand management strategies, etc.), and administration & customer service (permit programs, policy strategies, management structure, etc.).

The Downtown and Entertainment District will be evaluated as separate districts, but the strategies developed will either apply to both or be modified appropriately for each context. The plan could consider strategies including:

- **Pricing strategies:** appropriate on-street and off-street pricing, event or evening pricing, leasing of private spaces (shared parking), graduated parking rates, etc.
- **Parking regulatory strategies:** appropriate parking time limits, shared parking, parking benefit districts, etc.
- **Parking technologies:** use of smart parking meters, kiosks, pay by cell technology, electronic permits, etc.
- **Parking permit programs:** employee permits and residential parking stickers/permits
- **Supportive parking strategies:** regulatory or information signage, information distribution, bike and pedestrian access, transit improvements, transportation demand management (TDM), enforcement practices, curb management, etc.
- **Parking information program:** wayfinding signage, directional signage, regulatory signage, permit information, online visitor information, major destination/special event parking practices, etc.
- **Optimization of existing supply and additional supply:** structured parking, shared parking of private lots, reconfiguration of public lots, etc.

### *B. Public Input to Refine Initial Parking Management Strategies*

The Consultant will use the Transportation Master Plan's outreach process to vet initial recommendations. This process is critical to refine ideas and strategies with everyday system users. The recommendations will be presented as a draft set of ideas, open to public input. The input will be incorporated as appropriate, and used to create a preferred parking management plan.

The Consultant will first present draft options to the City for review and will incorporate comments/input into the strategy options. The revised set of strategies will then be presented to key stakeholders, such as the merchant/downtown business community, likely in a morning meeting, and then to the general public as part of the Transportation Master Plan.

### *C. Draft and Final Parking Management Strategies and System Design*

*Draft Parking Plan*

Based on a single set of consolidated non-conflicting comments, the Consultant will refine the draft strategies into a draft Parking Management Plan that includes summaries of all work from Tasks 1, 2, and 3. The plan will include:

- Study process
- Key findings

- Appropriate maps, charts, and diagrams
- Case studies from comparable communities and national best practices
- Strategies/recommendations that are focused on sound parking management principles to support downtown vitality
- Timeframe for immediate, short- and long-term actions
- Planning-level capital cost estimates, where applicable
- A planning-level pro forma with expected revenue and expenses, based on recommendations

The budget assumes a draft will be submitted for one (1) round of revisions before moving on to creating a final document.

### *Final Parking Plan*

The final report, along with all maps, graphics, presentation materials, and other materials will be submitted to the City as raw electronic files and PDF formats.

In addition to a series of technical memorandums, presentations, and an electronic final report, the deliverables will also include all parking data collected in ArcGIS format, HTML text, graphics for the City's website, and electronic copies of presentation and meeting materials.

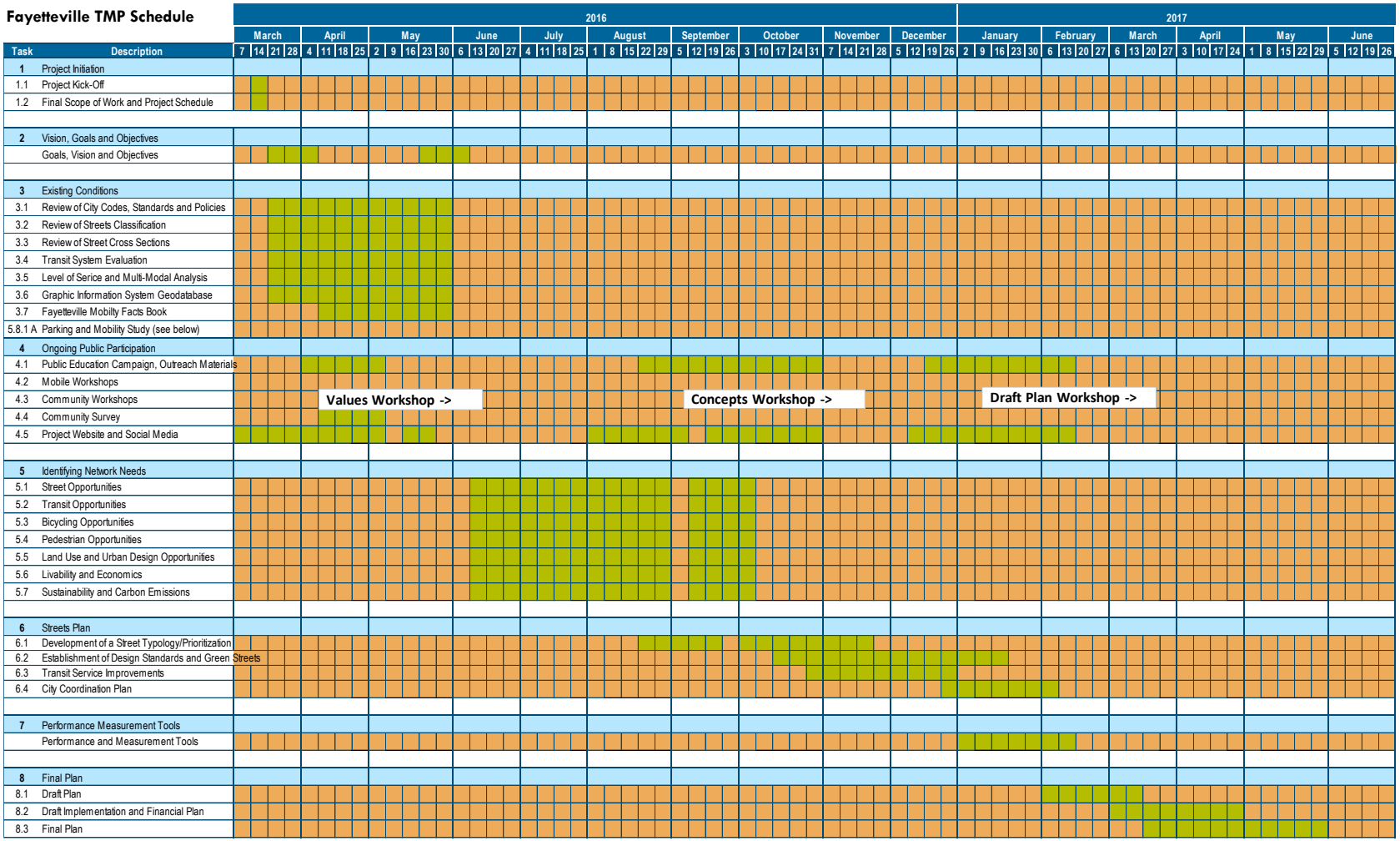
### *Final Presentations*

The Consultant will present the final plan to the core City team and the City government (Mayor and City Councilors) as part of the Transportation Master Plan.

**Deliverables** Draft and Final Reports

# Exhibit B - SCHEDULE

**Fayetteville TMP Schedule**




**PARKING AND MOBILITY STUDY**