



AGENDA

City Council Transportation Committee
February 23, 2016
5:15 pm or Immediately after City Council Agenda Session
City Hall Room 326

Members: Matthew Petty, Adella Gray; Justin Tennant; Alan Long

City Staff: Chris Brown, City Engineer

1. **Old Business-None**

2. **New Business**

A. **Election of A Chairman**

B. **TRANSPORTATION MASTER PLAN:** Review of the proposed scope and fee provided by Nelson/Nygaard, Inc., the City's selected consultant.

(Staff requests a recommendation from the Committee to the City Council for this item).

3. **Reports**

A. None.

4. **Announcements**

Next meeting March 8, 2016 after City Council Agenda Session.

TO: City of Fayetteville Transportation Committee

THRU: Mayor Jordan
Don Marr, Chief of Staff
Jeremy Pate, Development Services Director

FROM: Chris Brown, City Engineer *CB*

DATE: February 19, 2016

SUBJECT: Transportation Master Plan-Contract with Nelson/Nygaard, Inc.

BACKGROUND:

In 2013, the City Council passed Resolution 221-13, expressing the intent to fund an updated Transportation Plan in the amount of up to \$500,000.

In 2014, staff began the process of procuring a consultant using the City's consultant selection procedures, with the intent of bringing a proposed contract and budget adjustment to the City Council. However, during negotiations with the selected consultant, it became apparent that the work scopes developed by the consultant were not in line with the City's vision for the project, and negotiations were ended with the consultant.

The City re-initiated the consultant procurement process in 2015, and on December 29th, 2015, a selection committee consisting of City staff members and City Council Member Matthew Petty selected the team of Nelson Nygaard Consulting Associates, Inc. and Garver, Inc. to provide consulting services for the Transportation Master Plan. City staff began negotiating the scope and fee with the selected consulting team shortly thereafter.

DISCUSSION:

The scope of work attached details the tasks to be completed by the consulting team. After initial kickoff meetings, and establishment of detailed goals and objectives, the consulting team will review the City's existing codes, policies, master plans, and other data in order to fully understand the existing conditions of the City's transportation systems. Once the initial review is completed, a "Mobility Facts Book" will be delivered, that will summarize existing conditions and provide a review of best practices from peer communities.

Public Participation will be an integral part of the plan development. Using the Mobility Facts Book and other outreach materials, the consultant will host multiple workshops throughout the project, and will develop a website and online interaction tools in order to engage as many citizens as possible across all demographics and in all areas of the City.

Using the existing conditions analysis and the information gathered during the public involvement process, the consultant will identify network needs across all modes of transportation, and will develop lists of issues and opportunities within the City's transportation system. Ultimately the final plan will be developed with both broad recommendations of policy

and overall direction of multimodal mobility for the City, along with detailed project priorities, and strategies for implementation of the plan. Critical deliverables with the final plan include:

- Planning and design policy recommendations
- Tools for evaluation and prioritization of projects
- Implementation and Financial Plans

Nelson Nygaard has scheduled this work to be completed over a period of approximately 13 months. This schedule will be modified and updated as the project progresses.

The proposed fee for the work scope detailed above is \$489,978.

Upon recommendation of the Transportation Committee, staff will place this proposed contract on the City Council's Agenda for review by the full City Council.

BUDGET/STAFF IMPACT:

This project will be funded from the Transportation Master Plan project budget. Currently this project has \$499,718 in funds available.

Attachments:

Project Scope

Fee Spreadsheet

City of Fayetteville, AR

Transportation Master Plan Project 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.

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 Master 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

Fayetteville TMP Budget 2/16		NelsonNygaard Labor Costs														Subconsultant Costs										Total Labor Hours	Total Labor Costs	Total Costs
		Paul Moore	Jason Schrieber	Lisa Jacobson	Zabe Bent	Drusilla van Hengel	Michael King	Iain Banks	Boris Palchik	Ezra Pincus-Roth	Joel Mann	Associate 2	Associate 1	GIS Services	mmunicatio ns	Project Accountant	Garver					Garver Labor						
		Principal 7	Principal 4	Associate 1	Principal 3	Principal 4	Principal 6	Associate 1	Associate 2	Associate 2	Associate 1	Associate 2	Associate 1	GIS Services			Ron Petrie	Tiner	Jeff Webb	Engineer n		Hours	Cost					
		89.26	69.42	47.93	64.46	69.42	82.64	47.93	51.24	31.40	47.93	31.40	26.45	49.59	36.36	36.36	E-6	E-6	E-4	E-2	T-1							
Overhead 175.00%	156.20	121.49	83.88	112.81	121.49	144.63	83.88	89.67	54.96	83.88	54.96	46.28	86.78	63.64	63.64													
Profit 10%	24.55	19.09	13.18	17.73	19.09	22.73	13.18	14.09	8.64	13.18	8.64	7.27	13.64	10.00	10.00													
Total Billing Rate	\$270.00	\$210.00	\$145.00	\$195.00	\$210.00	\$250.00	\$145.00	\$155.00	\$95.00	\$145.00	\$95.00	\$80.00	\$150.00	\$110.00	\$110.00	NN Labor												
Task Description	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost						
PROJECT MANAGEMENT			4	16											32	\$6,680					0	\$0	52	\$6,680	\$6,680			
QUALITY ASSURANCE / QUALITY CONTROL	8													8	\$3,040						0	\$0	16	\$3,040	\$3,040			
1 Project Initiation																												
1.1 Project Kick-Off			8	8	8					8					32	\$5,160	8	8				16	\$3,840	48	\$9,000	\$9,000		
1.2 Final Scope of work and Project Schedule			2	4				2	2	2	2				14	\$2,080						0	\$0	14	\$2,080	\$2,080		
Task Total	0	10	12	8	0	0	2	2	10	2	0	0	0	0	46	\$7,240	8	8	0	0	0	16	\$3,840	62	\$11,080	\$14,455		
2 Vision, Goals and Objectives																												
Goals, vision and Objectives			4	8	4			2	8			8		4	38	\$4,930	4				4	\$960	42	\$5,890	\$5,890			
Task Total	0	4	8	4	0	0	0	2	8	0	0	8	0	4	38	\$4,930	4	0	0	0	4	\$960	42	\$5,890	\$5,890			
3 Existing Conditions																												
3.1 Review of City Codes, Standards and Policies			4	4								14			22	\$2,750	4		2	8	14	\$2,162	36	\$4,912	\$4,912			
3.2 Review of Streets Classification			2	2	6			4						8	22	\$3,100	2	2		8	32	\$4,088	66	\$7,188	\$7,188			
3.3 Review of Street Cross Sections			2	4	12	4	4	8							42	\$7,100	4	4	8	12	32	\$6,748	102	\$13,848	\$13,848			
3.4 Transit System Evaluation			4	6					8	4	12	16	24		74	\$8,510						0	\$0	74	\$8,510	\$8,510		
3.5 Level of Service and Multi-Modal Analysis			8	6	8			12				16	24		74	\$9,290	4	4	24	50	80	162	\$16,838	236	\$26,128	\$26,128		
3.6 Geographic Information System Database			2	6								14		20	42	\$5,620					8	8	\$560	50	\$6,180	\$6,180		
3.7 Fayetteville Mobility Facts Book		2	8	12	4			4				24		6	60	\$8,260	4	2	8		8	22	\$3,256	82	\$11,516	\$11,516		
Task Total	2	30	40	30	4	4	28	8	4	12	92	56	20	6	336	\$44,630	18	12	42	78	160	310	\$33,652	646	\$78,282	\$78,282		
4 Ongoing Public Participation																												
4.1 Public Education Campaign Outreach			4	12						12		16	32		84	\$8,680						0	\$0	84	\$8,680	\$8,680		
4.2 Mobile Workshops			16	16						24			32		88	\$10,520	12			24	24	60	\$7,224	148	\$17,744	\$17,744		
4.3 Community Workshops			8	8	8					16			24		64	\$7,840	8			8		16	\$2,808	80	\$10,648	\$10,648		
4.4 Community Survey			4	8						16			16		52	\$5,560						0	\$0	52	\$5,560	\$5,560		
4.5 Project website and Social Media			4	12						8			16		104	\$11,300						0	\$0	104	\$11,300	\$11,300		
Task Total	0	36	56	8	0	0	0	0	76	0	48	120	0	48	392	\$43,900	20	0	0	32	24	76	\$10,032	468	\$53,932	\$75,632		
5 Identifying Network Needs																												
5.1 Street Opportunities	2	14	20	24	4	4	10				12	18	8		116	\$18,130	4	8	16	20	28	76	\$9,572	192	\$27,702	\$27,702		
5.2 Transit Opportunities		8	16				4	8			16	16	24	8	100	\$12,780						0	\$0	100	\$12,780	\$12,780		
5.3 Bicycling Opportunities		4	8	2	16						10	16	4		60	\$8,580						0	\$0	60	\$8,580	\$8,580		
5.4 Pedestrian Opportunities		8	16	4		20	4			32	16	16	8		124	\$19,000						0	\$0	124	\$19,000	\$19,000		
5.5 Land Use and Urban Design Opportunities	2	8	16	4									8		38	\$6,520						0	\$0	38	\$6,520	\$6,520		
5.6 Livability and Economics		2	4						8	8	16		2		40	\$4,740						0	\$0	40	\$4,740	\$4,740		
5.7 Sustainability and Carbon Emissions		4	8							8	16	8	2		46	\$5,620						0	\$0	46	\$5,620	\$5,620		
Task Total	4	48	88	34	20	24	18	8	8	64	86	82	40	0	524	\$75,370	4	8	16	20	28	76	\$9,572	600	\$84,942	\$84,942		
6 Streets Plan																												
6.1 Development of a Street Typology/Prioritization	2	8	16	24	2	2	24	2	24			40	8		152	\$20,610	4			16	16	36	\$3,856	188	\$24,466	\$24,466		
6.2 Establishment of Design Standards and Green Transit Service Improvements	2	6	6	36	8	8	36	2			70	32			206	\$28,110	8			16	24	48	\$5,376	254	\$33,486	\$33,486		
6.3 City Coordination Plan		4	4	4			4	40		24	80	40	24		224	\$26,860						0	\$0	224	\$26,860	\$26,860		
Task Total	4	34	38	64	10	10	64	44	24	24	170	112	32	24	654	\$85,220	16	0	0	32	40	88	\$10,192	742	\$95,412	\$95,412		
7 Performance Measurement Tools																												
Performance and Measurement Tools	2	20	20	16	16	8	16	10	60	16			60	16	260	\$38,770	24	16		8	8	56	\$11,048	316	\$49,818	\$49,818		
Task Total	2	20	20	16	16	8	16	10	60	16	0	0	60	16	260	\$38,770	24	16	0	8	8	56	\$11,048	316	\$49,818	\$49,818		
8 Final Plan																												
8.1 Draft Plan	2	16	24	16					32				8	32	130	\$18,260	12	12		8		32	\$6,648	162	\$24,908	\$24,908		
8.2 Draft Implementation Strategy	4	24	30	24			24	8	32		6	24			176	\$25,400	16	8	8	24	24	80	\$11,360	256	\$36,760	\$36,760		
8.3 Final Plan	2	8	8	4					20			12		16	70	\$8,780	8	4		4	4	20	\$3,604	90	\$12,384	\$12,384		
Task Total	8	48	62	44	0	0	24	8	84	0	6	36	8	48	376	\$52,440	36	24	8	36	28	132	\$21,612	508	\$74,052	\$75,827		
TOTAL HOURS	28	234	340	208	50	46	152	82	274	118	402	414	160	154	32	2,694	130	68	66	206	288	758	3,452					
TOTAL LABOR COST	\$7,560	\$49,140	\$49,300	\$40,560	\$10,500	\$11,500	\$22,040	\$12,710	\$26,030	\$17,110	\$38,190	\$33,120	\$24,000	\$16,940	\$3,520	\$362,220	\$31,200	\$16,320	\$10,362	\$22,866	\$20,160	\$100,908	\$463,128	\$489,978				
TOTAL COSTS																						\$105,953		\$489,978				