

City of Fayetteville Staff Review Form

2018-0514

Legistar File ID

10/2/2018

City Council Meeting Date - Agenda Item Only  
N/A for Non-Agenda Item

Chris Brown

9/14/2018

ENGINEERING (621)

Submitted By

Submitted Date

Division / Department

Action Recommendation:

A Resolution to approve a contract with Infrastructure Management Services, LLC for Pavement Analysis and Inventory Services, per RFQ #18-09, in the amount of \$206,159, and to approve a contingency of \$15,000.

Budget Impact:

4470.800.8820-5314.00

Sales Tax Capital Improvements

Account Number

Fund

06035.4100

Pavement Analysis and Inventory

Project Number

Project Title

Budgeted Item? Yes

Current Budget \$ 225,844.00

Funds Obligated \$ 316.00

Current Balance \$ 225,528.00

Does item have a cost? Yes

Item Cost \$ 221,159.00

Budget Adjustment Attached? No

Budget Adjustment

Remaining Budget \$ 4,369.00

V20180321

Purchase Order Number:

Previous Ordinance or Resolution #

Change Order Number:

Approval Date:

Original Contract Number:

Comments:



**MEETING OF OCTOBER 2, 2018**

**TO:** Mayor and City Council

**THRU:** Don Marr, Chief of Staff  
Garner Stoll, Development Services Director

**FROM:** Chris Brown, City Engineer

**DATE:** September 14, 2018

**SUBJECT:** **A Resolution to approve a contract with Infrastructure Management Services, LLC for Pavement Analysis and Inventory Services, per RFQ #18-09, in the amount of \$206,159, and to approve a contingency of \$15,000.**

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**RECOMMENDATION:**

Staff recommends City Council approval of a contract in the amount of \$206,159 with Infrastructure Management Services, LLC (IMS) for pavement analysis and inventory services.

**BACKGROUND:**

During the Fayetteville Mobility Plan public input process, citizens identified maintenance of existing facilities as a high priority. One of the identified strategies in the implementation plan for increasing the level and quality of our existing infrastructure maintenance programs is to implement a data-based approach to development of pavement overlay and sidewalk programs. More specifically, procuring a contractor to provide an inventory of pavement condition, along with inventories of sidewalks and ADA ramps, is an identified need.

**DISCUSSION:**

In July of this year, City staff issued a request for qualifications from firms interested in providing these services, and IMS was selected as the most qualified of the 5 firms that submitted statements of qualifications. Since their selection, staff has worked with IMS to finalize the contract terms and scope of work, which includes:

- Collection of pavement surface condition data
- Structural testing of arterials and collectors
- Inventory and condition assessment of sidewalks and ADA ramps
- Development of pavement rehabilitation recommendations, and development of a 5 year pavement preservation plan using techniques that are appropriate for the level of pavement distress

The work products provide to the City will be linked to the City's GIS system and will be used to develop pavement maintenance and sidewalk improvement plans in future years. Once the sidewalk inventories are developed, staff will maintain and add to the inventory database as new sidewalks are constructed. In addition, the City will receive digital images at 25 foot intervals, that

can be used by staff to collect additional inventory items. These images that can also be used to quickly review existing conditions on design and development review projects, and to provide better customer service to citizens.

Per IMS's schedule, the contract will be completed and the final report ready in April 2019.

**BUDGET/STAFF IMPACT:**

This contract is funded through remaining Sales Tax Capital Improvement funds in the Transportation Bond Program project.

**Attachments:**

Contract signed by IMS

Attachment A Scope of Services

Attachment B Schedule



Contract for Pavement Analysis and Inventory Services

This contract executed this \_\_\_\_ day of \_\_\_\_\_, 2018, between the City of Fayetteville, Arkansas, and IMS Infrastructure Management Services, LLC In consideration of the mutual covenants contained herein, the parties agree as follows.

WITNESSETH:

WHEREAS, the City of Fayetteville has previously determined that it has a need for pavement analysis and inventory services, to be used to develop a more robust pavement management plan; and

WHEREAS, the City of Fayetteville is also in need of various other inventory services, to include sidewalks, ramps, and obstructions of same; and

WHEREAS, the City of Fayetteville, after soliciting statements of qualifications for such services pursuant to City of Fayetteville RFQ 18-09 (herein after referred to as Request for qualifications or RFQ), has awarded this contract to IMS Infrastructure Management Services, LLC; and

WHEREAS, IMS Infrastructure Management Services, LLC has represented that it is able to satisfactorily provide these services according to the terms and conditions of the RFQ, which are incorporated herein by reference, and the terms and conditions are contained herein;

NOW THEREFORE, in consideration of the above and mutual covenants contained herein, the parties agree as follows:

1. **Services to be Performed:** IMS Infrastructure Management Services, LLC hereby agrees to provide the City with pavement analysis and inventory and related services services, as requested and more specifically outlined in the RFQ, this agreement, and Attachment "A" *Scope of Work*.

2. **Time of Service:** Time is of the essence in this Agreement, and services shall be performed as identified in the Timeline found in Attachment "B" attached hereto, subject to revisions mutually agreed upon.

3. **Compensation:** As compensation for IMS Infrastructure Management Services, LLC providing services to the City as described herein, the City shall pay IMS Infrastructure Management Services, LLC an amount not to exceed **\$206,159** inclusive of out-of-pocket expenses, based on the submission of invoices for work completed and properly authorized. IMS Infrastructure Management Services, LLC shall submit invoices at minimum 1



month intervals to the City. The invoices shall include charges for all labor and costs in accordance with Contract.

Payment will be made for work completed in accordance with the unit and lump sum prices as detailed in Attachment A.

The City agrees to pay all approved invoices within thirty (30) days of receipt. The City shall not be obligated to pay any invoices which are not in accord with the terms of this Contract.

IMS Infrastructure Management Services, LLC reserves its rights to stop all work on this project if, at anytime, an approved invoice remains unpaid for a period exceeding sixty (60) days.

4. **Insurance:** IMS Infrastructure Management Services, LLC shall provide and maintain in force at all times during the term of the services contemplated herein insurance for Workers' Compensation, Commercial General Liability, Automobile Liability, and Professional Liability. Such policies shall be issued by companies authorized to do business in the State of Arkansas. Evidence of such coverage is to be submitted with contract approval. Minimum amount for Commercial General Liability and Professional Liability is \$1,000,000 aggregate. Notwithstanding any other provision, IMS Infrastructure Management Services, LLC will not be required to include City as an additional insured on its Professional Liability coverage.

5. **Term of Agreement:** Services performed pursuant to this Contract shall commence upon execution of this agreement and continue for the period specified in the Timeline in Exhibit "A" attached hereto, unless canceled or terminated within thirty (30) days written notice by either party. IMS Infrastructure Management Services, LLC will be compensated for services performed in accordance with the terms of this Contract prior to the effective date of termination.

6. **Amendment of Contract:** This Contract may be amended only by mutual agreement of the parties.

7. **Legal Compliance:** IMS Infrastructure Management Services, LLC is responsible for full and complete compliance with all applicable laws, rules, regulations and licensing requirements imposed by any public authority having jurisdiction.

8. **Approval of Agent:** The City reserves the right to require IMS Infrastructure Management Services, LLC to replace the assigned agent with another agent of the same company if, in the opinion of the City staff, the agent is not rendering or is incapable of rendering the quality of service and cooperation required.

9. **Auditable Records:** IMS Infrastructure Management Services, LLC shall maintain such accounts and records in connection with its performance of services for the City as may reasonably be required by the City. IMS Infrastructure Management Services, LLC shall, at any reasonable time during the term and for a period of one year following the completion of work under the contract, afford the City's agents and auditors reasonable

facilities and access for examination and audit of its records pertaining to its performance and shall, upon request by the City, produce and exhibit all such records.

10. **Assignment and Subcontracting:** IMS Infrastructure Management Services, LLC shall perform this contract. In the event of a corporate acquisition and/or merger, IMS Infrastructure Management Services, LLC shall provide written notice to the City within thirty (30) business days of such notice of action or upon the occurrence of said action, whichever occurs first. The right to terminate this contract, which shall not be unreasonably exercised by the City, shall include, but not be limited to, instances in which a corporate acquisition and/or merger represent a conflict of interest or are contrary to any local, state, or federal laws. Action by the City awarding a proposal to a Proposer, which has disclosed its intent to assign or subcontract in its response to the RFQ, without exception shall constitute approval for purposes of this Agreement. No assignment or additional subcontracting shall be allowed without the prior written consent of the City.

11. **Cancellation:** Either party reserves the right to cancel this Contract, without cause, by giving thirty (30) days' notice of the intent to cancel, or with cause if at any time either party fails to fulfill or abide by any of the terms or conditions specified.

Failure of IMS Infrastructure Management Services, LLC to comply with any of the provisions of this contract may be considered a material breach of contract and shall be cause for termination of the contract at the discretion of the City of Fayetteville. In the event of such a breach, the City of Fayetteville will promptly notify IMS Infrastructure Management Services, LLC which will have five (5) days to cure the failure to City's satisfaction.

In the event that sufficient budgeted funds are not available for a fiscal period, the City shall notify IMS Infrastructure Management Services, LLC of such occurrence and the Contract shall terminate on the last day of the then current fiscal period without penalty or expense to the City. The City reserves the right to terminate within the thirty (30) day notice because of budgetary issues.

12. **Indemnification:** IMS Infrastructure Management Services, LLC shall indemnify, pay the cost of defense, including but not limited to attorneys' fees, and hold harmless the City from all suits, actions or claims of any character brought on account of any injuries or damages received or sustained by any person, persons, or property by or from the said negligence of IMS Infrastructure Management Services, LLC; or by, or in consequence of any neglect in safeguarding the work; or on account of any negligent act or omission, neglect or misconduct of IMS Infrastructure Management Services, LLC; or by, or on account of, any claim or amounts recovered under the Workers' Compensation Law or of any other laws, by-laws, ordinances, order of decree, except only such injury or damage as shall have been occasioned by the sole negligence of the City of



Fayetteville. The first ten dollars (\$10.00) of compensation received by IMS Infrastructure Management Services, LLC represents specific consideration for this indemnification obligation.

Furthermore, IMS Infrastructure Management Services, LLC, in performing its obligations under this contract, is acting independently and the City assumes no responsibility of liability for the IMS Infrastructure Management Services, LLC' acts or omissions to third parties, and IMS Infrastructure Management Services, LLC shall agree to indemnify and hold harmless, the City, its officers and employees against any and all claims, lawsuits, judgments, costs and expenses for which recovery of damages is sought, suffered by any person or persons, that may arise out of or be occasioned by IMS Infrastructure Management Services, LLC' breach of the terms or provisions of contract, or by any negligent act or omission of IMS Infrastructure Management Services, LLC, its officers, agents, employees, or invitee, in the performance of this contract; except that the indemnity specified in this paragraph shall not apply to any liability resulting from the sole negligence of the City, its officers, or employees. In the event of joint and concurrent negligence of both IMS Infrastructure Management Services, LLC and the City, responsibility and indemnity, if any, shall be apportioned comparatively in accordance with the laws of the State of Arkansas, without, however, waiving any governmental immunity available to the City under Arkansas law and without waiving any defense of the parties under Arkansas law. This paragraph is solely for the benefit of IMS Infrastructure Management Services, LLC and the City and is not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

13. **Governing Law & Jurisdiction:** Legal jurisdiction to resolve any disputes shall be Washington County, Arkansas with Arkansas law applying to the case.

14. **Severability:** The terms and conditions of this agreement shall be deemed to be severable. Consequently, if any clause, term, or condition hereof shall be held to be illegal or void, such determination shall not affect the validity of legality of the remaining terms and conditions, and notwithstanding any such determination, this agreement shall continue in full force and effect unless the particular clause, term, or condition held to be illegal or void renders the balance of the agreement impossible to perform.

15. **Changes in Scope or Price:** Changes, modifications, or amendments in scope, price, or fees to this contract shall not be allowed without a prior formal contract amendment approved by the Mayor (if the total cost of the contract with such proposed changes, modifications or amendments does not exceed the approved contract price including any approved project contingency) or the City Council (if the total contract cost with such proposed changes, modifications or amendments exceeds the approved contract price including any approved project contingency) in advance of the change in scope, cost or fees.

16. Freedom of Information Act: Documents prepared while performing City contractual work are subject to the Arkansas Freedom of Information Act. If a Freedom of Information Act request is presented to the City of Fayetteville, IMS Infrastructure Management Services, LLC will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. §25-19-101 et. seq.) Only legally authorized photocopying costs pursuant to the FOIA may be assessed for this compliance.

17. Documents Comprising Contract: The contract shall include this Agreement for Transportation Master Planning services, as well as the following documents, which are attached:

- a. Attachment "A" Scope of Services
- b. Attachment "B" Schedule

If there is a conflict between the terms of this Agreement and the above referenced documents, the conflict shall be resolved as follows: the terms of this Agreement shall prevail over the other documents, and the terms of the remaining documents shall be given preference in their above listed order.

WITNESS OUR HANDS THIS 11<sup>th</sup> DAY OF September, 2018.

IMS INFRASTRUCTURE MANAGEMENT SERVICES, LLC

CITY OF FAYETTEVILLE, ARKANSAS

By: Anthony Conyers  
Principal  
Printed Name & Title

LIONELD JORDAN, Mayor

ATTEST: ARC  
Pamela Kracht, Office Mgr  
Name

ATTEST:  
Sondra Smith, City Clerk

1820 W. Drake Dr, Ste 104  
Business Address

Date Signed: \_\_\_\_\_

Tempe, AZ 85283  
City, State & Zip Code

Date Signed: 9/11/18





IMS Infrastructure Management Services  
1820 W. Drake Dr, Ste 104, Tempe, AZ 85283  
Phone: (480) 839-4347 Fax: (480) 839-4348  
www.ims-rst.com

# Attachment A - Scope of Services

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**To:** Chris Brown, City Engineer

**Date:** August 23, 2018

**From:** Zac Thomason, MBA, Client Services  
Manager

**Project:** City of Fayetteville 2018  
Pavement Analysis and  
Inventory Services

**Subject:** Project Scope of Work

**Project No.:** N/A

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IMS Infrastructure Management Services is pleased to submit this scope of services document in reference to the 2018 "Pavement Analysis and Inventory Services" assignment. As discussed, a scope of services has been developed from our recent discussions and a budget has been provided following this page. The subsequent pages of this document will define activities and deliverables associated with each task in the budget.

## PROJECT SUMMARY

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The base scope of services includes the following activities:

- RST surface distress field testing on 388 centerline miles of roadway. The RST will double pass test the arterial and collector roadways resulting in approximately 484 survey miles.
- The data will be collected and assembled following the ASTM D6433 methodology. Collection of roughness in the form of the International Roughness Index (used to calculate a 0 – 100 Roughness Index).
- Structural testing using a Dynaflect device will be utilized on the City's arterial and collector roadways. The resulting Structural Index will be populated within ESA for PCI integration and rehabilitation activity triggers.
- Development of logical projects (multiple segments aggregated to form a homogenous project) to be used in the pavement analysis.
- The analysis operating parameters will be configured and loaded. The operating parameters include the priority weighting factors (functional classification, pavement type, & strength), cost of deferral sequencing (optimization), rehab activity unit rates, and rehab activity triggers.
- Comprehensive pavement analysis, budget model development, and 5-year rehabilitation plan. Existing City commitments will be programmed into ESA for completion
- Delivery of a final report that includes an executive summary, pavement management review, current PCI review, rehabilitation activities & costs, analysis parameters, budget scenarios, and final recommendations. All data will be linked to the City's existing GIS centerline files.
- Right of way asset inventory development for ADA curb ramps and sidewalks. The end deliverable will be a Personal Geodatabase that contains each asset type and the attributes assigned to each individual asset.

# City of Fayetteville, AR

## Scope of Services – Pavement Analysis & Inventory Services

Task	Activity	Quant	Units	Unit Rate	Total
<b>Project Initiation</b>					
1	Project Initiation	1	LS	\$4,834.00	\$4,834.00
2	Network Referencing & Survey Set Up	484	T-Mi	\$17.00	\$8,228.00
<b>Field Surveys</b>					
3	RST Mobilization/Calibration	1	LS	\$3,000.00	\$3,000.00
4	RST Field Data Collection	484	T-Mi	\$110.00	\$53,240.00
5	Dynaflect Mobilization	1	LS	\$2,500.00	\$2,500.00
a.	Deflection Testing (Arterials & Collectors)	192	T-Mi	\$167.00	\$32,064.00
6	Right-of-Way Asset Data Collection (GPS & ROW Imagery)	484	T-Mi	\$20.00	\$9,680.00
<b>Data Management</b>					
7	Pavement Condition Data QA/QC, Processing, & Format	484	T-Mi	\$18.00	\$8,712.00
8	Delivery of Digital Images @ 25 Foot Intervals (Per View)	484	T-Mi	\$16.00	\$7,744.00
9	Data Load to ESA	1	LS	\$1,850.00	\$1,850.00
	a. "ESA - Easy Street Analysis" Pavement Management Spreadsheet Software			Included in Base Activities	
	b. Customizable Prioritization & Cost-Benefit Analysis			Included in Base Activities	
	c. Online ESA Spreadsheet Training			Included in Base Activities	
10	ADA Curb Ramp & Obstructions Database	484	T-Mi	\$60.00	\$29,040.00
11	Sidewalk & Obstructions Database	484	T-Mi	\$50.00	\$24,200.00
12	Final Pavement Analysis, Budget Models, & Report	1	LS	\$11,667.00	\$11,667.00
13	Project Management	1	LS	\$9,400.00	\$9,400.00
<b>Project Total:</b>					<b>\$206,159.00</b>

### Supplemental Activities:

14	Street Lights Database	484	T-Mi	\$50.00	\$24,200.00
15	Signs & Support Database	484	T-Mi	\$100.00	\$48,400.00
16	Pavement Markings & Stripings Database (Linear Features)	484	T-Mi	\$60.00	\$29,040.00
17	Curb & Gutter Database	484	T-Mi	\$50.00	\$24,200.00
18	GIS Clean-Up Services	12	HR	\$175.00	\$2,100.00
19	Functional Classification Review	484	T-Mi	\$7.00	\$3,388.00
20	Council Presentation	1	LS	\$3,500.00	\$3,500.00
21	Web Hosted Digital Image Viewer	1	LS	\$7,000.00	\$7,000.00
22	Additional or Specialty Maps for Reporting (beyond typical 2 sets)	1	EA	\$175.00	\$175.00
23	Additional Onsite Meetings	1	EA	\$3,000.00	\$3,000.00
24	Additional Hard Copies of the Final Report (Above Typical 2 Sets Inc)	1	EA	\$200.00	\$200.00

**City of Fayetteville, AR****Scope of Services – Pavement Analysis & Inventory Services**

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<b>Task</b>	<b>Description</b>	<b>Activities</b>	<b>Deliverables</b>
<b>Project Initiation:</b>			
1.	Project Initiation	<ul style="list-style-type: none"><li>• Confirm scope, extent and content of surveys, set milestones, and deliverables.</li><li>• Confirm key contacts, roles and responsibilities, and project documentation.</li><li>• Identify location of key data elements such as traffic data, GIS, existing roadway inventories, historical data, and pavement management data.</li><li>• Identify deficient data and the means to obtain it.</li><li>• Discuss existing rehab practices and level of service policies.</li><li>• Develop a Master Asset List (MAL) that defines the attributes for extraction during the asset inventory development.</li><li>• Confirm phases of the work and invoicing methodology.</li></ul>	Technical memo detailing scope of work, budget and deliverables.  Master Asset List (MAL) defining asset attributes for extraction.
2.	Network Referencing & Survey Set Up	<ul style="list-style-type: none"><li>• Obtain roadway attributes from GIS for functional class, ownership, length, pavement type, etc. If not available, devise plan to obtain them from the City.</li><li>• Using the City's existing GIS centerline topology, develop a network wide roadway inventory on a block-to-block and/or intersection-to-intersection basis.</li><li>• Include street number and block order in referencing.</li><li>• Ensure each segment is linked to its parent GIS section.</li><li>• Utilizing aerial photography, measure and confirm lengths and widths for each segment. RST length checks will be integrated after data collection.</li><li>• Develop survey maps for use by the RST and client review.</li></ul>	Survey maps and inventory for use during the survey.
<b>Pavement Field Surveys:</b>			
3.	RST Mobilization & Calibration	<ul style="list-style-type: none"><li>• Mobilize surface distress, roughness, and rutting testing equipment to project.</li><li>• Demonstrate the equipment to the City.</li><li>• Calibrate equipment.</li><li>• The Crew Chief will schedule an onsite meeting upon arrival and departure.</li></ul>	Equipment calibration results
4.	RST Field Data Collection	<ul style="list-style-type: none"><li>• On all arterials and collectors, complete 2 pass testing collecting ASTM D6433 distresses and</li></ul>	Survey 484 miles with Laser RST technology.



## City of Fayetteville, AR

### Scope of Services – Pavement Analysis & Inventory Services

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		attributes at 100-foot intervals on a block by block basis.	
		<ul style="list-style-type: none"><li>Local roadways will be surveyed in a single pass.</li><li>IMS will survey approximately 484 miles of roadway based upon 388 centerline miles.</li></ul>	
5.	Dynalect Mobilization	<ul style="list-style-type: none"><li>Mobilize deflection testing equipment to project.</li><li>Demonstrate the equipment to the City.</li><li>Calibrate equipment.</li><li>The Field Operator will schedule an onsite meeting upon arrival and departure.</li></ul>	Equipment calibration results
5a.	Deflection Testing & Analysis (arterials and collectors only)	<ul style="list-style-type: none"><li>On all arterials and major collectors, collect multi-sensor deflection data at an average of 500 foot intervals.</li><li>Arterials and collectors will require a return run in the opposite direction (2 pass testing).</li><li>Collect GPS and temperature.</li><li>Deflection testing is a stop and go process that will require a shadow vehicle on the high traffic routes. Most clients prefer to supply a public works shadow vehicle to reduce project costs. If a public works shadow vehicle is unavailable, IMS can contract with the local PD and add traffic control to the scope of services.</li></ul>	Deflection testing on the arterial and collector roadways.  Deflection results delivered in an Excel Spreadsheet with the surface condition results.
6.	Right of Way Asset Data Collection (GPS & ROW Imagery)	<ul style="list-style-type: none"><li>Mount and configure up to 7 HD camera views on the RST for right of way asset extraction purposes. The number of cameras required is dependent on the assets to be inventoried.</li><li>Arterial and collector roadways will be driven in 2 directions while local roadways will receive a single pass.</li></ul>	Field survey maps and raw video collection for use in asset extraction activities.

### Data Management:

7.	Pavement Condition Data QA/QC, Processing, & Format	<ul style="list-style-type: none"><li>Develop exceptions report for lengths that do not match GIS.</li><li>For each data stream (surface distress, roughness, structural, &amp; GPS), aggregate the 100-foot data and process at the segment/block level.</li><li>Develop individual index scores for surface distress, structural, and roughness as appropriate.</li><li>Develop a pavement condition index for each section.</li><li>Shape files of the processed data.</li><li>Complete QA of data.</li></ul>	Excel spreadsheet of the sectional data and index values.  Segment level condition data will be supplemented with network comps and several graphs to illustrate network condition.
8.	Delivery of Digital Images @ 25 Foot Intervals	<ul style="list-style-type: none"><li>Process 1 forward view of HD pavement imagery at</li></ul>	GPS coordinate data and HD digital images on City roadway

## City of Fayetteville, AR

### Scope of Services – Pavement Analysis & Inventory Services

	(Center Forward View)	20-25-foot intervals.	network in a Personal Geodatabase format.
		<ul style="list-style-type: none"> <li>Deliver the images in .jpeg format with an associated geodatabase containing image hyperlinks.</li> <li>Additional views can be added and supplied at the unit rates provided.</li> </ul>	
9.	Data Load to ESA	<ul style="list-style-type: none"> <li>Load the pavement inventory, attributes, project limits, and inspection data into the ESA software for completion of the analysis.</li> </ul>	Load the inventory, attributes, and field inspection data into the ESA software.
10 - 11	ADA Curb Ramp and Sidewalk Database Development	<ul style="list-style-type: none"> <li>Develop an asset inventory following the attributes defined in the Master Asset List (MAL).</li> <li>Collect multiple attributes for each asset type including type, material, condition, compliance (ramps only), obstructions (ramps and sidewalks), etc.</li> <li>Asset condition ratings will be performed on a 3 tier scale ranging from Poor to Good.</li> <li>All assets are positionally placed in GIS through the utilization of RST imagery, aerial photography, and internal GIS tool-kits.</li> </ul>	Personal geodatabase with asset inventories.
12.	Pavement Analysis, 5-Year Rehab Plan, & Final Report	<p>Develop the analysis operating parameters (the intelligence that drives rehabilitation and maintenance selection):</p> <ul style="list-style-type: none"> <li>Develop deterioration models for load during pavement analysis.</li> <li>Develop cost of deferment optimization, strength indexes, functional classification, pavement type, and all other weighted criteria used in the prioritization of rehabilitation candidates.</li> <li>Complete a full review of the available maintenance and rehabilitation strategies, unit rates, and post rehab PCI increase.</li> </ul> <p>Following the operating parameter development, complete the following analysis:</p> <ul style="list-style-type: none"> <li>Present status and PCI report in Excel format c/w PCI charts and backlog.</li> <li>Fix all needs analysis and budget.</li> <li>Steady state (SS), do nothing, unlimited, SS plus 50%, SS minus 50%.</li> <li>Budget driven analysis (\$/yr estimate).</li> <li>Level of service driven analysis (target PCI).</li> <li>Integrate City capital plans and "must do's" (\$ to hit set PCI and backlog target.</li> <li>Deliver the results of the analysis in the ESA</li> </ul>	<p>Meeting or call with IMS to discuss the analysis methodology and approach to ensure it meets the needs of City staff and management.</p> <p>Draft analysis results. Up to 7 models/budget analysis options will be completed.</p> <p>Delivery of draft pavement management report in an electronic file format.</p> <p>City staff will review content and provide feedback or revisions as necessary.</p> <p>Final report development and delivery of 3 hard copy reports.</p> <p>Full size maps will be delivered electronically along with a Personal Geodatabase.</p>

## City of Fayetteville, AR

### Scope of Services – Pavement Analysis & Inventory Services

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interactive spreadsheet. Within the spreadsheet, include the deterioration curves utilized, treatments, unit rates, and their impact on the analysis results.

- Present the results to the City via an onsite meeting or WebEx and identify any deficiencies in the analysis. Make any necessary edits or revisions.
- The report shall include a summary of the network value, pavement condition, rehabilitation & maintenance treatments, budget scenarios, PCI definitions, analysis operating parameters, and the results of the survey.
- The written report shall be supplemented with appendices that contain the following:

Street Inventory and Condition Summary  
\$ Driven 5-year Rehab Program by Segment  
\$ Driven 5-year Rehab Program by Year  
Alternate \$ Driven Rehab Programs by Year & Segment.

- Deliver draft report to City and incorporate any modifications to the analysis or reporting methodology.

#### 13. Project Management

- Provide client with periodic e-mail updates and reports. Status reports and invoices
- Meetings to be completed on-site and by conference calls.
- Complete project administration and invoicing.





IMS Infrastructure Management Services  
1820 W. Drake Dr, Ste 104, Tempe, AZ 85283  
Phone: (480) 839-4347 Fax: (480) 839-4348  
www.ims-rst.com

# Attachment B - Project Schedule

**To:** Chris Brown, City Engineer

**Date:** September 10<sup>th</sup>, 2018

**From:** Zac Thomason, MBA, Client Services Manager

**Project:** City of Fayetteville 2018  
Pavement Analysis and  
Inventory Services

**Subject:** Project Schedule

**Project No.:** N/A

Currently IMS has a total capacity to complete 2,500 miles/month based on urban surveys, so completing the Fayetteville surveys in a timely fashion is not an issue. Field surveys are expected to progress at a conservative rate of 25 to 35 miles per day. Surveys usually proceed at 5.5 to 6 days per week depending on weather, congestion, and statutory holidays. Elapsed time for the City of Fayetteville field surveys is estimated at **3-4 weeks**. The Deflection testing will take approximately 2- 3 weeks. IMS has the necessary staff, equipment, and availability to complete this assignment in a timely manner for the City of Fayetteville.

On all projects three rate-determining functions rise to the top as being critical in maintaining the proposed project schedule. In general, it is not the surveys that take the longest time, but rather handling the data that causes project schedules to slide. The three steps we wish to highlight, so they can be addressed by the City are:

- Finalizing the inventory and maps to be used for the field surveys.
- Review of the field data and exceptions reports delivered to the clients.
- Obtaining feedback and acceptance of the final format and load.

