



Professional Services Fee Proposal

January 2022

Mr. Craig Light P.E.
Engineering Director
City of Jonesboro, Arkansas
300 S Church
Jonesboro, AR 72401

Re **City of Jonesboro, Arkansas**
2022 Street Conditions
360-Degree Patrol - Option
Sidewalk Inventory - Option

The University of Arkansas' Technology Transfer Program, Ergon Asphalts and Emulsions, Inc., and DataStream are pleased to work with Jonesboro, Arkansas Public Works Department to develop First Step Pavement Management. First Step Pavement Management is designed to incorporate all hard-surfaced roadways maintained by the City and address the following immediate goals:

- Develop an Inventory of hard-surfaced roadways under the authority of the City
- Perform a condition patrol of all inventoried, hard-surface roadways
- Perform the condition patrol with optional 360-Degree Cameras
- Develop and Inventory of existing, city-maintained sidewalks

Additional Goals may include:

- Review the Department's current street maintenance practices and techniques
- Extend the functional life of hard-surfaced roadways maintained by the City

PROJECT SCOPE OF WORK

1.0 Pavement Management – Inventory

Pavement Inventory

- Create an inventory and associated map of all public, hard-surfaced roadways
- Receive known roadway information (construction history, work history, maintenance cost history, etc.)
- Quickly review maintained roadway inventory with the client
- Export Google Earth (KMZ) files for the client's immediate use



Figure 1 - Pavement Inventory

2.0 Pavement Management – Inventory Condition Assessment / Distress Patrol

- Pavement health is illustrated as:

EXCELLENT

- A pavement in condition EXCELLENT is in perfect condition
- No corrective maintenance or preventive maintenance is recommended
- Distress should be both localized and isolated

GOOD

- Preventive maintenance may be recommended
- Corrective maintenance is typically not recommended
- Pavement distress is limited to oxidation, weathering and minor climate (non-structural) related damage.
- Structural distress (if present) is both localized and low density (<5%)

FAIR

- Preventive maintenance may be recommended
- Corrective maintenance may be recommended
- A variety of pavement distresses may be present
- Structural distress may be localized as well as global
- Global Structural damage is low severity / low density

CRITICAL

- A pavement in condition CRITICAL is likely to be LOST (and require reconstruction) within 2 years
- A variety of pavement distresses may be present
- Surface and Structural distresses are typically global in nature
- A combination of corrective and preventive maintenance may be recommended

LOST

- A LOST pavement requires major M&R (Maintenance and Repair/Reconstruction)
- Shallow, Deep, and/or Full-Depth Reconstruction may be recommended



- **L Su** - Surface Distress – Low Density



- Climate (non-structural) related distress including:
 Surface Cracking, Longitudinal and Transverse Cracking, Block Cracking, Edge Cracking
 Severe Weathering, Raveling, Bleeding, Scaling (PCC), Durability Cracking (PCC)



- **#** - Structural Distress and **####** - Mass Structural Distress
 - Evidence of structural/durability distress present
 - Depth of structural damage (shallow, deep) is not indicated
 - Distresses include Alligator Cracking, Rutting (High Severity), Depression (High Severity), Utility Cuts



- **1** - Pothole 01 and **2** - Pothole 02
 - Observed Pothole 01 is of higher importance than observed Pothole 02
 - Pothole 01 is a Major Pothole and is typically structural in nature
 - Pothole 02 is a minor pothole and may consist of edge conditions / small popouts



- **Water Drop** - Drainage / Water Issue
 - Observed drainage issues present on the pavement surface – may be a variety of causes
 - Depression, rutting, drainage (or lack of drainage), condensate lines, roof drains, etc

2.3 Reporting – Dynamic Roadway Condition Map

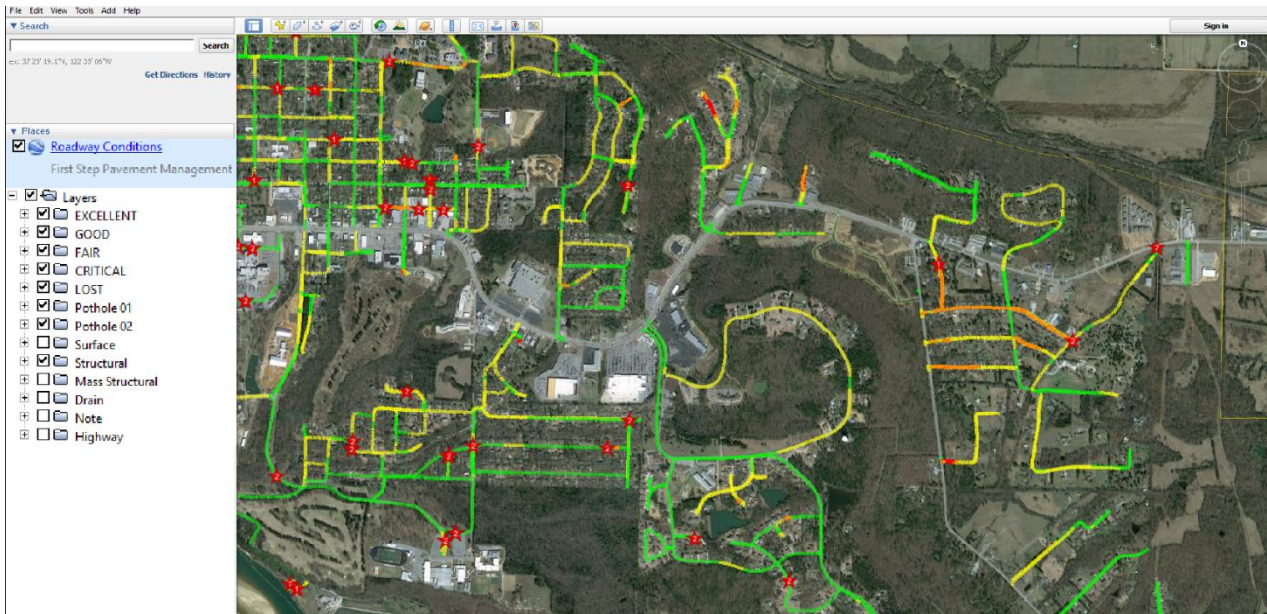


Figure 2 – Dynamic Condition Map with Road Condition and Distress Toggle Buttons

2.4 Geolocated Video, Road Book, Project Planner



Figure 3 - Condition Map with Video (1080p / 30fp)

SHERWOOD 2020 PAVEMENT INVENTORY, CONDITION, & PROJECT WORKBOOK											FIRST STEP						
INVENTORY											Lineal Feet Per Condition Category					PCI	Priority Project
ID	Pre	Street Name	Type	Length (mi)	Length (ft)	Width (ft)	Area (sq ft)	Area (sq yd)	Lanes	Priority	EXCEL	GOOD	FAIR	CRITICAL	LOST		
788		BROCKINGTON	RD	3.98	21,010	20	420,207	46,690	2	1-Arterial	9,906	10,906				79.6	--
3133		LANDERS	RD	3.35	17,666	20	353,312	39,257	2	2-Collector	1,778	746				83.1	--
5786		WARDEN	RD	3.21	16,939	20	338,787	37,643	2	2-Collector		108				72.5	--
2823		JACKSONVILLE	CTF	2.10	11,105	20	222,102	24,678	2	1-Arterial	5,900	2,966		47		82.3	--
3557	E	MARYLAND AVE	AVE	2.07	10,942	20	218,836	24,315	2	1-Arterial	5,855	4,934		171		80.4	--
6072	E	WOODRUFF	AVE	1.72	9,096	20	181,921	20,213	2	2-Collector	10,059	389				86.9	--
1431		COUNTRY CLUB	RD	1.61	8,513	20	170,269	18,919	2	1-Arterial	246	8,650				72.9	Yes
2824		JACKSONVILLE CATO	RD	1.61	8,500	20	169,991	18,888	2	1-Arterial	8,222	381		228		86.1	--
3206	E	LEE	AVE	1.60	8,450	20	169,006	18,778	2	2-Collector	3,212	5,770		192	15	77.4	--
3981		OAKDALE	RD	1.57	8,278	20	165,565	18,396	2	1-Arterial	4,172	198				87.6	--
6509		JOHNSON	DR	1.56	8,244	20	164,884	18,320	2	2-Collector	7,627	1,001		73		85.5	--
5554		TRAMMEL	RD	1.48	7,792	20	155,841	17,316	2	1-Arterial	6,685	3,149		620		78.7	--
2987		KELLOGG ACRES	RD	1.22	6,464	20	129,284	14,365	2	1-Arterial	1,819	5,080				76.5	--
2465		HATCHER	RD	1.07	5,638	20	112,768	12,530	2	2-Collector	1,128	4,873		7		75.3	--
2230		GIBSON	RD	0.98	5,166	20	103,325	11,481	2	3-Residential	291	4,178		906		70.8	--
6261		GAP CREEK	DR	0.95	5,001	20	100,015	11,113	2	2-Collector	4,107	598		465	227	80.6	--
1285		CLUB	RD	0.92	4,882	20	97,650	10,850	2	2-Collector	722	755		64		93.0	--
5937		WILDWOOD	AVE	0.92	4,859	20	97,170	10,797	2	2-Collector	13	1,114		123		86.1	--
3725		MILLER	RD	0.89	4,698	20	93,962	10,440	2	3-Residential	368	3,334		1,227		69.9	--
7067		TRAMMEL ESTATES	DR	0.89	4,675	20	93,494	10,388	2	3-Residential	3,307	1,074		669		80.3	--
666		BOBBITT	LN	0.85	4,472	20	89,433	9,937	2	2-Collector	4,114	743				85.2	--

Figure 4 - Road Book and Project Planner

3.0 360-Degree Camera

- In addition to Standard Patrol Video Cameras, professional 360-Degree Spherical Cameras will be utilized
- Completed 360-Degree Data will be uploaded to Google Maps for the Street View™ Program
- Completed 360-Degree Data will be utilized to develop 4.0 Public Sidewalk Network Inventory

4.0 Public Sidewalk Network Inventory

- Will build upon existing sidewalk data (if available)
- Receive known sidewalk information (construction history, work history, maintenance cost history, etc.)
- Refine sidewalk inventory linework:
 - Identify existing hard surfaced, publicly maintained sidewalks



Figure 5 - Example Sidewalk Inventory

5.0 Compensation

Jonesboro, Arkansas	Method	Fee
FirstStep Pavement Management		\$33,225.00
Optional 360-Camera Patrol		\$8,500.00
Sidewalk Network Inventory		\$7,775.00
TOTAL:	Lump Sum	\$49,500.00

6.0 Additional Services

Services requested by the Owner falling outside the Scope of Basic Services described above shall be considered Additional Services.

- Enhanced Site Assessments, Patrols and Reports
 - 360 Degree Camera Data Collection (Option Proposed)
 - Google Earth Street View™ Patrol (Option Proposed)
 - Sidewalk Inventory and Patrol (Option Proposed)
 - Striping Inventory and Patrol
 - Sign Patrol
 - Drainage / Ditch Patrol
 - Private Roadways / Parking Lots / Boat Ramps
 - Night Patrol
 - Sanitary / Storm Sewer Inventory and Patrol
 - Mapping of existing subsurface video inspections
 - Perimeter Fences and Exterior Drives
 - Building / Facility Patrol

- Building Interior / Product Patrol
- Geotechnical Investigations and reports
- Contract administration, bidding and negotiation
- Construction administration
- Additional site visits at the request of the owner

7.0 Method of Payment

Method of payment shall be a monthly invoice or one single invoice per patrol. Hourly tasks or services approved by the Client are invoiced monthly based upon time spent performing the task or service outlined above. Invoices are due and payable upon receipt and within 30 days.

We appreciate the opportunity to be of service in the development of your pavement management program.

Please indicate your acceptance of the terms, scope of work and fee by signing and returning a copy to our office. A facsimile signature is sufficient to indicate your understanding of the proposed agreement. If you have any questions or concerns, please do not hesitate to call. This proposal is valid for 120 days from receipt. Additionally, the proposal may become null and void 12 months from the date of acceptance by the client, if the work has not been authorized to begin within that time.

Sincerely,



Michael G. Morgan
Senior Project Manager

Agreed to and accepted this date:

Agreed to and accepted this date:

Signature

Signature

Printed Name

Printed Name

Title / Authorizing Agent

Title / Authorizing Agent