City of Greenville, NC | Pavement Management System

*** Vendor: Enter your name/product here ***

| CODE | Availability Definition |
|------|---|
| Y | Functionality is provided out of the box through the completion of a task associated with a routine configurable area that includes, but is not limited to, user-defined fields, delivered or configurable workflows, alerts or notifications, standard import/export, table driven setups, and standard reports with no changes. These configuration areas will not be affected by a future upgrade. The proposed services include implementation and training on this function, unless specifically excluded in the Work Plan, as part of the deployment of the solution. |
| R | Functionality is provided through reports generated using proposed Reporting Tools. |
| Т | Functionality is provided by proposed third-party functionality (i.e. third party is defined as a separate software vendor from the primary software vendor). The pricing of all third-party products that provide this functionality must be included in the cost proposal. |
| М | Functionality is provided through customization to the application, including the creation of a new workflow or development of a custom interface, that may have an impact on future upgradability. |
| F | Functionality is provided through a future release that is to be available within 1 year of the proposal response. |
| N | Functionality is not provided. |

Note:

Place the appropriate code (Y,R,T,M,F, or N) in the Availability column. Please indicate any additional cost in meeting the requirement. Any cost that would be in addition to the standard product in order to meet the requirement must be identified here. Supply comments for clarification or additional information as needed.

City of Greenville, NC | Priority - High, Medium, Low

| No. | Application Requirement | Priority | Availability | Cost | Comment |
|-----|---|----------|--------------|------|---------|
| 1 | Software System Requirements | • | | | |
| | The pavement management system (PMS) should allow the agency to maintain a road segment network | | | | |
| | inventory and support a long-term maintenance, rehabilitation, and/or replacement strategy for the | | | | |
| 2 | network. | High | | | |
| 3 | The pavement management system should be a secure, web-based solution. | High | | | |
| | The pavement management system setup should require minimal staff, effort, and IT resources to | | | | |
| 4 | implement. | High | | | |
| | The solution must be accessible using various internet browsers, including Microsoft® Edge, Google® | | | | |
| 5 | Chrome, and Mozilla Firefox®. | High | | | |
| | It is preferred that the solution be a software-as-as-service (SaaS) deployment to reduce up-front | | | | |
| 6 | implementation costs and eliminate long-term IT system maintenance. | High | | | |

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|----|--|-------------|--|
| _ | The pavement management system shall be accessible to various users across agency departments and | | |
| 7 | locations, as defined by the designated system administrator. | High | |
| | The system administrator must be able to add or remove users, assign administrative unit(s) that a user can | | |
| 8 | specify when logging on, and assign one or more user security profiles. | High | |
| 9 | Data Management Requirements | | |
| | The pavement management system must have the capability to import and consolidate historical and | | |
| 10 | current datasets, including but not limited to: | | |
| 11 | Roadway segment inventory | High | |
| 12 | Pavement condition data | High | |
| 13 | Construction history data | High | |
| 14 | Traffic data (average daily traffic) | Med | |
| 15 | Ancillary assets including sidewalks, ADA ramps, roadway, parking lots and structure data | High | |
| | The pavement management system must have the capability to calculate pavement condition index (PCI) | | |
| 16 | according to ASTM D-6433. | High | |
| | The pavement management system must have the capability to manage roadway inventory of pavement | | |
| 17 | segments, history, and attributes. | High | |
| 18 | Decision Trees and Performance Models | | |
| | The pavement management system must have the capability to create new or use pre-configured decision | | |
| 19 | trees (graphical trees to define criteria that help determine treatment strategies). | High | |
| | The pavement management system must have the capability to provide out-of-the-box performance | | |
| 20 | models to help predict future pavement performance based on various criteria. | High | |
| | The pavement management system must have the capability to use deterioration models/curves to | | |
| 21 | accurately forecast the future condition of each pavement segment. | High | |
| 22 | Analytics | | |
| | The pavement management system must have the capability to calculate the timelines required to | | |
| 23 | preserve, rehabilitate, or reconstruct each pavement segment. | High | |
| | The pavement management system must have the capability to support the definition and execution of | | |
| 24 | multiple what-if scenario analyses across the road network to facilitate work planning. | High | |
| | The pavement management system must have the capability to support multiple period and multiple | | |
| 25 | constraint analyses across the road network to facilitate work planning. | High | |
| | The pavement management system must have the capability to generate optimal work plans for various | | |
| | budgets, roadway performance targets, and time frames that will result in higher network performance | | |
| 26 | ratings over the long term. | High | |
| | The pavement management system must have the capability to generate budget scenarios forecasted out | | |
| 27 | 15 years. | High | |
| 28 | GIS Capabilities | | |
| - | | | |

| The pavement management system must have the capability to provide full-featured GIS capabilities | | | |
|---|---|--|--|
| enabling users to view multi-layer maps showing current and future road network performance, work plans, | | | |
| project locations, etc. | High | | |
| The pavement management system must have the capability to provide map-based visualizations of | | | |
| geolocated data to correlate against the road network and to create new maps for deeper analysis. | High | | |
| The pavement management system must integrate with Esri® ArcGIS products to provide expanded | | | |
| mapping and spatial analysis capabilities. | High | | |
| Dashboards and Reporting | | | |
| The pavement management system must provide configurable dashboard views that summarize key | | | |
| metrics, such as current road network performance and performance trends. | High | | |
| The pavement management system must provide out-of-the box reports that summarize key information | | | |
| using different reporting methods and formats. | High | | |
| The pavement management system must allow users to create ad hoc reports, as needed. | High | | |
| Systems Integration | | | |
| The pavement management system must have the capability to integrate with the agency's existing | | | |
| software systems, including: | | | |
| Esri® ArcGIS products | High | | |
| Tyler Munis Work Order Management | Med | | |
| Technical | | | |
| The pavement management system must adhere to the City's Information Technology environment | | | |
| standards for databases, operating system, Active Directory, LDAP (Lightweight Directory Access Protocol) | | | |
| and hardware. | High | | |
| The pavement management system must integrate with Microsoft Active Directory. | High | | |
| The pavement management system must provide password control, audit trail by sign-on and user id | | | |
| security. | High | | |
| | enabling users to view multi-layer maps showing current and future road network performance, work plans, project locations, etc. The pavement management system must have the capability to provide map-based visualizations of geolocated data to correlate against the road network and to create new maps for deeper analysis. The pavement management system must integrate with Esri® ArcGIS products to provide expanded mapping and spatial analysis capabilities. Dashboards and Reporting The pavement management system must provide configurable dashboard views that summarize key metrics, such as current road network performance and performance trends. The pavement management system must provide out-of-the box reports that summarize key information using different reporting methods and formats. The pavement management system must allow users to create ad hoc reports, as needed. Systems Integration The pavement management system must have the capability to integrate with the agency's existing software systems, including: Esri® ArcGIS products Tyler Munis Work Order Management Technical The pavement management system must adhere to the City's Information Technology environment standards for databases, operating system, Active Directory, LDAP (Lightweight Directory Access Protocol) and hardware. The pavement management system must integrate with Microsoft Active Directory. The pavement management system must provide password control, audit trail by sign-on and user id | enabling users to view multi-layer maps showing current and future road network performance, work plans, project locations, etc. The pavement management system must have the capability to provide map-based visualizations of geolocated data to correlate against the road network and to create new maps for deeper analysis. High The pavement management system must integrate with Esri® ArcGIS products to provide expanded mapping and spatial analysis capabilities. High Dashboards and Reporting The pavement management system must provide configurable dashboard views that summarize key metrics, such as current road network performance and performance trends. High The pavement management system must provide out-of-the box reports that summarize key information using different reporting methods and formats. High The pavement management system must allow users to create ad hoc reports, as needed. High Systems Integration The pavement management system must have the capability to integrate with the agency's existing software systems, including: Esri® ArcGIS products High Tyler Munis Work Order Management Technical The pavement management system must adhere to the City's Information Technology environment standards for databases, operating system, Active Directory, LDAP (Lightweight Directory Access Protocol) and hardware. High The pavement management system must integrate with Microsoft Active Directory. High The pavement management system must provide password control, audit trail by sign-on and user id | enabling users to view multi-layer maps showing current and future road network performance, work plans, project locations, etc. The pavement management system must have the capability to provide map-based visualizations of geolocated data to correlate against the road network and to create new maps for deeper analysis. High The pavement management system must integrate with Esri® ArcGIS products to provide expanded mapping and spatial analysis capabilities. High Dashboards and Reporting The pavement management system must provide configurable dashboard views that summarize key metrics, such as current road network performance and performance trends. The pavement management system must provide out-of-the box reports that summarize key information using different reporting methods and formats. High The pavement management system must allow users to create ad hoc reports, as needed. High Systems Integration The pavement management system must have the capability to integrate with the agency's existing software systems, including: Esri® ArcGIS products High Tyler Munis Work Order Management Med Technical The pavement management system must adhere to the City's Information Technology environment standards for databases, operating system, Active Directory, LDAP (Lightweight Directory Access Protocol) and hardware. High The pavement management system must integrate with Microsoft Active Directory. High The pavement management system must integrate with Microsoft Active Directory. High The pavement management system must integrate with Microsoft Active Directory. |