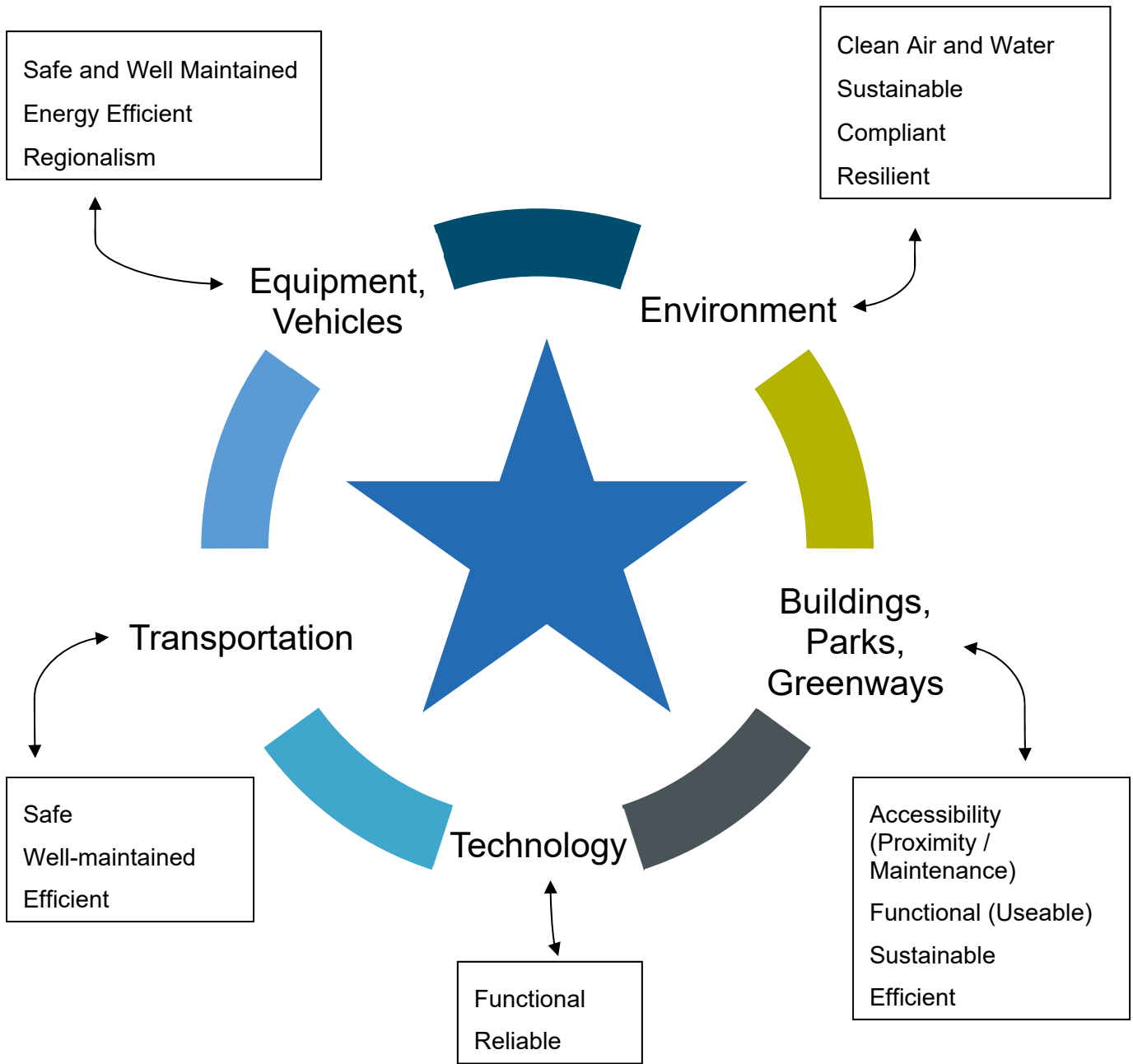


# Infrastructure

*Maintain and build quality infrastructure that supports healthy residential neighborhoods, successful commercial areas, and accessible public facilities and amenities.*



- Indicators
- Proactive Maintenance
  - Compliance with Regulatory and Legal Mandates
  - Citizen's Satisfaction
  - Sustainability and Resiliency

# Infrastructure



## Statement of Request for Results

### Priority Statement

Maintain and build quality infrastructure that supports healthy residential neighborhoods, successful commercial areas, and accessible public facilities and amenities.

### Summary of Priority

The focus of this priority is to proactively and efficiently maintain needed infrastructure. Infrastructure means the fundamental capital assets required to support the operation of City activities. It includes the City's complete streets and rights of way, parks, information technology equipment and software, fleet and capital equipment, buildings, greenways, public spaces and stormwater facilities. Many types of infrastructure necessary for the community to function are provided by other agencies such as the WWA, Roanoke Regional Airport, Norfolk Southern, VDOT, and utility companies. The infrastructure priority includes the City's collaborative relationship with these other organizations. Infrastructure is important because it provides the framework of interrelated systems that provides commodities and services essential to enable, sustain or enhance societal living conditions. New infrastructure should be built for quality, and resources for its maintenance must be anticipated and provided.

### Transportation

Mobility needs should be provided through a well-connected multi-modal transportation system. Great streets, alleys and rights of way will improve both Roanoke's image and function by providing a safe and attractive environment for street users of all ages and abilities including pedestrians, bicyclists, transit users, and motorists.

### Environment

Citizen expectations and regulatory mandates require the City to provide infrastructure to facilitate clean air, land and water. Environmental infrastructure includes the facilities and programs that support the city's comprehensive compliance with applicable environmental regulations, sustainability, resiliency, and the over-all integrity of our region's environment.

## **Technology**

Technology includes the hardware, software, and services for supporting a robust, secure, and reliable communications, telecommunications, and computer infrastructure to efficiently conduct City business operations. This infrastructure is the foundation for providing citizens, the business community and City staff with convenient access to appropriate information and online services.

## **Buildings/Parks/Greenways**

Our goal is to provide optimum cost effective maintenance outcomes by enhancing the value of the City's assets, reducing net annual operating costs with continual improvements to the working environment of our buildings/parks/greenways.

## **Equipment/Vehicles**

Capital equipment/vehicles will be purchased and proactively maintained with emphasis on sustainability and optimum life cycle costs.

## **Indicators**

### **Indicator 1** Proactive maintenance:

Proactive maintenance improves customer service, reduces the number of calls for service, reduces backlogs of work requests, minimizes costs for emergency repairs and extends the life of City assets.

Measure 1: Percent of sidewalk work requests scoring 100 or higher completed within 180 days

Measure 2: Percent compliance with annual 79 lane mile goal

Measure 3a: Percent compliance with the 14-day mowing cycle for medians

Measure 3b: Percent compliance with the 14-day mowing cycle for parks

Measure 4: Average age of City of Roanoke fleet vehicles

Measure 5: Percent of Facilities' annual Capital Improvement Plan projects that are completed

### **Indicator 2:** Regulatory and legal mandates:

Compliance will be measured through reporting mechanisms and absence of negative compliance findings relative to federal, state and local requirements.

Measure 1: Percentage of City Streets that are in compliance with VDOT safety standards.

Measure 2: Percentage of Roanoke's FHWA National Bridge Inventory (NBI) that are rated structurally deficient.

### **Indicator 3:** Citizens' satisfaction:

Citizens should be satisfied with the City's infrastructure and the way it is maintained.

Measure 1: Maintain or improve customer satisfaction with greenways and transportation based on citizen surveys.

**Indicator 4: Sustainability and resiliency:**

City effort to improve the environment can be tracked through measures of the City's carbon footprint. Additionally, assessments of air and water quality maintained by state and federal agencies, as well as the number of environmental code violations documented.

Measure 1: Environmental accomplishments

Measure 2: Community Greenhouse Gas Emissions

Measure 3: Municipal Greenhouse Gas Emissions

**Indicator 5: Asset Availability:**

Measure 1: Percentage of time Fleet vehicles are available

Measure 2: Percentage of network uptime

**Purchasing Strategies**

1. Maintain first. We will look for offers that:
  - a. Identify and meet all applicable legal mandates and regulations.
  - b. Provide a prioritized inventory of opportunities, deficiencies, and recommended maintenance of all infrastructure.
  - c. Address life cycle costs and benefits of infrastructure maintenance.
  - d. State specific goals and performance indicators for documenting results.
2. Describe the resources required (including but not limited to labor, equipment and materials) to support the proposed offer.
3. Offers that promote functionality, accessibility, partnerships, collaboration, and innovations that leverage existing resources and reduce the long term costs of maintenance, and that incorporate infrastructure improvements into regular maintenance and management activities will be given preference.
4. We will look for offers that incorporate environmentally-friendly and energy efficient practices.

**Statement of Request for Offers**

In order of priority, we seek offers that best address maintaining the infrastructure, which includes the City's complete streets and rights of way, parks, information technology equipment and software, fleet and capital equipment, buildings, greenways, conservation areas, monuments, public art, public spaces, and stormwater facilities. We encourage offers that promote partnerships, collaboration and innovations that utilize existing resources.

**We are seeking offers that will evaluate, maintain, and operate the Transportation infrastructure needed by our community.**

Specifically we are looking for offers that:

1. Proactively evaluate and maintain existing assets within the City's rights of way and provide clean and attractive transportation corridors.
2. Maintain, and improve multi-modal transportation and recreational infrastructure.
3. Demonstrate innovative and sustainable technology or maintenance techniques that will extend the life of assets or improve the condition of the assets and minimize resource expenditures.
4. Improve coordination between public and private entities (such as Water Authority, Roanoke Gas, AEP, and developers) to ensure that construction and maintenance activities provide safe, sustainable, and durable infrastructure.
5. Enhance coordination that affects regional transportation initiatives.

**We are seeking offers that will protect and help improve the environment.**

Specifically we are looking for offers that:

1. Protect existing and/or contribute to the long term improvement of water quality through management, maintenance and improvement of the City's stormwater infrastructure and applicable federal, state and local stormwater regulations.
2. Maintain or reduce the impacts of regulated waste management through increased operational efficiencies, reduced waste volumes, increased reuse and recycling and/or the generation of less hazardous waste streams.
3. Improve environmental awareness public participation, and contribute to the long term improvement of environmental quality, and the overall aesthetics of our community, particularly in partnership with other public and/or private entities (neighboring governments, non-profits, businesses, schools, and stewardship organizations) that fosters regional collaboration around environmental stewardship, natural resources management, improving or maintaining the environmental attractiveness of our region.

**We are seeking offers that ensure the viability, relevancy, and long-term value of the City's technology infrastructure.**

Specifically we are looking for offers that:

1. Provide a prioritized inventory of technology infrastructure and recommended life-cycle maintenance, repair, replacement, and/or improvement.
2. Effectively manage technology assets and improve enterprise technology service delivery.

3. Utilize innovative strategies resulting in improved services, improved results, or reduced costs throughout the organization.

**We are seeking offers that address the City's maintenance and evaluation needs for equipment and vehicles.**

Offers shall:

1. Provide a prioritized inventory of vehicles, equipment/machinery and recommended life-cycle maintenance, repair, replacement, and/or improvement.

**We are seeking offers that will maintain buildings/parks/greenways owned by the City of Roanoke.**

We are seeking offers that:

1. Provide a prioritized inventory of deficiencies and recommended life-cycle maintenance, repair, replacement, and/or improvement to:
2. Demonstrate the ability to provide preventative maintenance, cost effective repairs and life cycle trending of equipment to justify the cost of systems modifications, upgrades and replacements.
3. Encourage regional cooperation to develop and manage park and recreation facilities that serve multiple jurisdictions (e.g. large recreation centers and aquatic centers).

# Infrastructure



## 1. Proactive Maintenance

**MEASURE 1: Percent of sidewalk work requests scoring 100 or higher completed within 180 days.**

<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
100%	100%	0%

**MEASURE 2: Percent compliance with annual 79 lane mile goal.**

<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>
67%	70%	72%

**MEASURE 3: Percent compliance with 14-day mowing cycle.\***

	<u>FY 2020</u>
Medians	69%
Parks	0%

**MEASURE 4: Average age of City of Roanoke fleet vehicles.\***

<u>FY 2020</u>
9 years

## 2. Compliance with Regulatory and Legal Mandates

**MEASURE 1: Percentage of City streets that are in compliance with VDOT safety standards.**

<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>
100%	100%	100%	100%

**MEASURE 2: Percentage of Roanoke’s FHWA National Bridge Inventory (NBI) that are rated structurally deficient.**

<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>
2.4%	1.6%	0%	0%

**3. Citizens’ Satisfaction**

**MEASURE 1: Citizen Survey results.**

<u>Citizen Survey Results</u>	<u>Favorable Ratings from FY16 Survey</u>	<u>Favorable Ratings from FY19 Survey</u>
Greenway development effort is valuable asset to City.	89.3%	N/A
Transportation system offers good mix of transportation options like auto, public transit, pedestrian, and bicycle	83.1%	83.0%

Comments:

Results are from the two most recent surveys. The questions are evaluated and periodically updated to ensure relevancy with the citizens and organizational goals. The Greenway Development Effort was one such item that was eliminated in the most recent survey, and therefore there is no rating to report.

**4. Sustainability and Resiliency**

**MEASURE 1: Environmental accomplishments.**

FY 2018

- 1) The Citizens for Clean & Green hosted the 7<sup>th</sup> Green Academy in conjunction with Roanoke City Public Schools. The Academy invites a variety of environmental leaders to speak to the group, over the course of five weeks, educating them on all things “green” in Roanoke.
- 2) The Citizens of Clean & Green also hosted the second annual Envision Roanoke with community partner Virginia Western Community College. This community forum collected feedback and ideas for the future direction of the Climate Action Plan and sustainability program.
- 3) Completed the ICLEI greenhouse gas community and municipal footprint for 2016, both inventories remained relatively flat with little change. We are still on target for our long term goals.
- 4) DEQ Sustainability Partner 2018
- 5) The Greater Roanoke Solar Co-op was launched in early 2018; the Co-op is administered by Solar United Neighbors (SUN) a non-profit that provides technical assistance and consumer resources.



This program offers citizens outstanding prices on residential solar with an experienced installer and support of the SUN staff. The Co-op signed up 59 members that will meet with the vendor to receive an estimate for solar on their homes. The program ends at the end of CY2018.

- 6) The Single Stream Recycling educational campaign “Trash and Recycling Don’t Mix” was launched in May, 2018. In April, the recycling vendor, RDS, advised the city that due to market conditions the acceptable materials collected would eliminate plastics #3 – #7. In addition, contamination level needed to be drastically reduced. The city provided a comprehensive media campaign to stabilize the program.
- 7) VML Platinum Award for Go Green Virginia
- 8) Continued multi-year Urban Stormwater Research with VA Tech Department of Civil & Environmental Engineering focusing upon completion of the Trout Run Watershed Master Plan (WMP) as well as starting the Peters Creek WMP.
- 9) Submitted updates to the Sediment and Bacteria as well as PCB TMDL Action Plans to VADEQ in conjunction with the annual MS4 permit report due Oct 1 and made operational and educational progress on required water quality items throughout the fiscal year.
- 10) Completed the annual ISO Verification Audit for the Community Rating System Program to retain the City’s Class 7 rating which results in a 15% discount on flood insurance premiums for any parcel owners within City limits.
- 11) Completed ten stormwater improvement projects including: Westover/Edgewood; Trevino/Monterey Phase II; Queen/Courtland; Inglewood/Hartland; Oliver/Troy; 3700 Blk Heatherton; 1600 Blk Blair; Blenheim Rd; 1700 Blk Mercer; and 3700 Blk Salem Tpk.

#### FY 2019

- 1) Achieved the Exemplary Environmental Enterprise recognition from the VA Department of Environmental Quality for the Public Works Service Center.
- 2) Comprehensive update and revision was made to the Environmental Management System to achieve easier implementation, greater accountability, and improved compliance assurance.
- 3) The Citizens for Clean & Green hosted the 8<sup>th</sup> Green Academy in conjunction with Roanoke City Public Schools. The Academy invites a variety of environmental leaders to speak to the group, over the course of five weeks, educating them on all things “green” in Roanoke.
- 4) Completed the ICLEI greenhouse gas community footprint for 2017, the inventory remained relatively flat. In order to continue to provide accurate data, Council approved that the baseline has been changed to 2016, and the target dates moved the end of CY 2024. We are still on target for our long term goals.
- 5) Roanoke exceeded the Department of Energy’s Better Building Challenge, the target was a 20% reduction by 2022 on over 1 million square feet of building space, and the actual reduction was 23% reduction, 3 years early.
- 6) The Berglund Center, a Department of Energy Showcase Building Project, achieved its goal of a 30% energy reduction, 1 year early.
- 7) DEQ Sustainability Partner 2019
- 8) The Greater Roanoke Solar Co-op was completed in December 2018; the Co-op is administered by Solar United Neighbors (SUN) a non-profit that provides technical assistance and consumer resources. This program offers citizens outstanding prices on residential solar with an experienced installer and support of the SUN staff. The Co-op signed up 59 members and 20 contracts.
- 9) The Single Stream Recycling educational campaign “Trash and Recycling Don’t Mix” was launched in May 2018 and ran through October 2018. The city provided a comprehensive media campaign to stabilize the program.
- 10) VML Platinum Award for Go Green Virginia 2019
- 11) 811/911 building is registered for LEED Certification
- 12) Continued the multi-year Urban Stormwater Research with the VA Tech Department of Civil & Environmental Engineering focusing this year upon Hydraulic and Hydrologic modelling of the Lick Run and Trout Run watersheds as well as completion of the Peters Creek Watershed Master Plan (WMP) and starting WMPs for the Mudlick creek and Murdock creek watersheds.

- 13) This year, the Stormwater Utility was one of only 22 recognized nationwide by the industry association, Water Environment Federation (WEF), as part of the fifth annual National Municipal Stormwater and Green Infrastructure Awards. A gold level award was bestowed for program management and a silver level award was bestowed for innovation related to the City's FY2019 MS4 (Stormwater) Permit activities.
- 14) Stormwater completed the annual ISO Verification Audit for the Community Rating System Program to retain the City's Class 7 rating which results in a 15% discount on flood insurance premiums for any parcel owners within City limits.
- 15) 11) This year, the following 6 stormwater improvement projects were undertaken: Troxell/Mabry Av; Cove Rd – Dansbury Dr; 1300-1400 Graybill Rd; 1800-2000 Blk Shenandoah Ave; 2100 Blk Staunton Av; and 4500 Blk Narrows Ln – Phase I.

FY 2020

- 1) 9th Annual Green Academy - a free 5 week program offered to citizens to learn about all things "green" from local subject matter experts. This year the Academy added composting and reduced paper use to improve the environmental footprint of the event.
- 2) DOE Better Building Challenge "Goal Achiever" - Roanoke is one of the few cities across the country to achieve this high honor, with a 25% energy reduction.
- 3) Electrify Your Ride Community Event and the National Drive Electric Week Proclamation - On Saturday Sept. 21, 500 people came downtown to see the electric vehicle event. Working in partnership with Gen 180, "Electrify Your Ride" was a free public event with electric vehicles on display to touch and see, educational resources, refreshments and fun. Over 350 people signed pledge cards promising to "Buy Electric" when their next vehicle was purchased.
- 4) Council signed a proclamation for the National Drive Electric Week September 14 -22.
- 5) Fill It Forward Employee Challenge - A plastic water bottle reduction program that provides an app that records your water consumption and then relates that to the amount of plastic water bottles you save through the use. Through the use of a free App, participants can scan a sticker that is applied to a water bottle. The App then records the water bottles saved the user's hydration level and then donates one cent for every cup tracked to a community that lacks clean drinking water. The stickers were distributed at the Employee Health Fair, with 233 people participating in the program.
- 6) NOAA Urban Heat Island Mapping Grant - Roanoke was selected to participate in the Heat Wave Campaign using "citizen science" to collect data to produce a heat island map of Roanoke. Heat island refers to the increased surface temperature that results from hard surfaces (asphalt, roofing materials, developed land) absorbing the sun's rays. According to NOAA, escalating heat is the number one threat to Roanoke as a result of climate change.
- 7) Virginia DEQ Sustainability Partner 2020
- 8) Achieved the Exemplary Environmental Enterprise recognition from the VA Department of Environmental Quality for the Public Works Service Center for the 13<sup>th</sup> consecutive year.
- 9) Successfully resolved an underground fuel system leak in Grandin Village that had introduced noxious fumes into two area businesses causing a Fire/EMS emergency temporary closure, and temporarily disrupted construction of the new Fire Station #7. Business operations and construction both resumed normal operations quickly as Environmental Management oversaw the application of interim mitigations while longer-term corrections evolved over the course of several weeks. Roughly, 64 Tons of petroleum-contaminated soils were removed from the area.
- 10) Successfully closed ten different pollution complaints/investigations where spills, dumping, illicit discharges, and other harmful releases were contaminating public and/or private lands, waters and/or air.
- 11) Oversaw the abatement of asbestos at City of Roanoke facilities totaling over 6,850 square feet, 1,300 linear feet and 14 different miscellaneous materials of various sizes and types.

**MEASURE 2: Reduce Community Greenhouse Emissions.\***

FY 2020

-1.2%

**MEASURE 3: Reduce Municipal Greenhouse Emissions.\***

FY 2020

-1.9%

**5. Asset Availability**

**MEASURE 1: Percentage of time Fleet vehicles are in service.\***

FY 2020

96.0%

**MEASURE 2: Percentage network uptime.\***

FY 2020

99.95%

\*Note: New measures for FY2020, therefore no prior year data is included.

**INFRASTRUCTURE**

<b>DEPARTMENT</b>	<b>OFFER / SUPPLEMENT TITLE</b>	<b>FY22</b>
Transportation	Alley Maintenance	\$377,580
Facilities Management	Berglund Center HVAC Required Frequency Preventative Maintenance Measures	\$64,313
Engineering	Bridge Rehabilitation and Renovation	\$616,922
Engineering	Bridge Safety Inspection Program	\$320,442
Engineering	Capital Project Management Services	\$606,481
Solid Waste	Containers and Distribution	\$126,014
Environmental Management	Environmental Management	\$446,194
Facilities Management	Facilities Management - City Utilities and Work Order Management	\$891,140
Facilities Management	Facilities Management - Contracts & Service Agreements	\$538,914
Facilities Management	Facilities Management - Custodial Services: Cleaning of City Facilities	\$766,600
Facilities Management	Facilities Management - Custodial Services: Cleaning of City Facilities - Supplement	\$37,399
Facilities Management	Facilities Management- Trades Services	\$3,094,181
Fleet Capital	Fleet Capital	\$2,450,569
Fleet Capital	Fleet Maintenance and Repair	\$3,219,118
Fleet Management	- Fleet Management Information System	\$475
Fleet Management	Fleet Motor Fuel	\$1,051,014
Fleet Management	Fleet Vehicle Wash Program	\$68,295
Technnology	Information Technology Support	\$4,314,766
Technnology	- Technology Contract Increase and Software	\$89,600
Libraries	Library Technology and Innovation	\$168,395
Engineering	Map and Graphics Production	\$121,390
Transportation	Median and Right of Way Landscape Maintenance	\$1,487,923

**INFRASTRUCTURE**

Transportation	Paving Program	\$4,361,858
Technnology	Radio Technology Support	\$587,291
Technnology	- Radio System Maintenance Increase and Training	\$100,832
Transportation	Sidewalk Repair & Maintenance	\$433,212
Transportation	Snow Removal	\$169,233
Transportation	Street Maintenance	\$914,780
Technnology	Technology Capital (ITC)	\$1,000,000

## Infrastructure

### Offer Executive Summary

<b>Offer:</b>	<b>Alley Maintenance</b>	
<b>Dept:</b>	Public Works	<b>Factor:</b> Transportation
<b>Outcome:</b>	Safe	Existing

**Executive Summary:**

Last fall, the City Manager and Vice Mayor Cobb convened a Citizen focus group related to the "Infrastructure Priority." Alleys were of particular importance to the group: "Recognize the importance of investing in infrastructure to support village centers - maybe focus on more of the small things (sidewalks, alleys, etc.) This offer provides contract funding for maintenance/repair of approx. 380 alleys in which Solid Waste Management collects trash plus another nine alleys which provide sole access to parcels. Maintenance is focused on surface repairs as City Code section 33-17 requires property owners to maintain vegetation within any alley right-of-way that adjoins their parcel. The inspector works with a contractor to complete surface repairs and with adjoining property owners to ensure property owners maintain vegetation per City Code. Successful completion ensures safe and efficient access for solid waste vehicles & property owners and enhances safety & security in the alleys.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Inspect and ensure alley surfaces are maintained in an acceptable condition. Goal is to review one-third (~125) of alleys annually (all alleys every three years.)	90%	90%	100%

**Seller/Owner:** 4110 - Transportation - Street Maintenance

<b>Offer:</b>	<b>Berglund Center HVAC Required Frequency Preventative Maintenance Measures</b>	
<b>Dept:</b>	General Services	<b>Factor:</b> Buildings, Parks, and Greenways
<b>Outcome:</b>	Functional (Usable)	Existing

**Executive Summary:**

To maintain an effective preventative maintenance program for identified deficiencies on aging HVAC equipment at the Berglund Center. This work is an ongoing task that will renew on an annual basis. Preventative Maintenance of this equipment is crucial to the continuing operations of the Berglund Center.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Compliance with Berglund Center HVAC preventative maintenance, annual rotation program.	100%	100%	100%

**Seller/Owner:** 4330 - Facilities Management - Building Maintenance

<b>Offer:</b>	<b>Bridge Rehabilitation and Renovation</b>	
<b>Dept:</b>	Public Works	<b>Factor:</b> Transportation
<b>Outcome:</b>	Safe	Existing

**Executive Summary:**

The City of Roanoke owns, operates and maintains 118 bridges and culverts meeting the federal definition of a bridge structure. Additionally, the City owns, operates and maintains 14 other transportation structures including overhead signs, pedestrian bridges, culverts and tunnels. Approximately 52% of Transportation structures are rated as Good or Very Good, 48% are Fair, and 0% are Poor. Approximately one third of our bridges are operating beyond their design life and are approaching the end of their service life. Deferred rehabilitation shortens service life and increases future repair and/or replacement costs. The total estimated cost of repairs to our structure inventory is \$13,314,720 based upon the most recent 2020 inspections.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percentage of bridge rehabilitations and renovations using technologies to delay deterioration.	100%	100%	100%

**Seller/Owner:** 4310 - Engineering

**Infrastructure**  
**Offer Executive Summary**

Offer: **Bridge Safety Inspection Program**  
 Dept: Public Works  
 Outcome: Safe  
 Factor: Transportation Existing

**Executive Summary:**

The City of Roanoke owns and operates 132 transportation structures, 77 of which are on the National Bridge Inventory (NBI) and require periodic safety inspections under federal law. Roanoke has the fourth largest number of NBI structures of all municipalities in Virginia. Modern bridges have a design life of 80 years, whereas structures built during or before the 1960s were closer to a 50 year design life. Approximately one third of our bridges are operating beyond their design life. In general, bridges are assigned a condition rating of Good, Fair or Poor. Approximately 52% of our bridges are rated as Good, 48% are rated Fair, and 0% are rated Poor.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percentage of bridge inventory inspected annually.	50%	50%	50%

**Seller/Owner:** 4310 - Engineering

Offer: **Capital Project Management Services**  
 Dept: Public Works  
 Outcome: Sustainable  
 Factor: Buildings, Parks, and Greenways Existing

**Executive Summary:**

The Engineering Division provides project management services for a variety of projects. These projects undertaken by the City of Roanoke include new and existing buildings, Parks, Libraries, greenways, and infrastructure (sidewalks, curb, streetscapes, and other improvements in the public street right of way). Project management services are provided throughout the project development cycle including the initiation phase, planning phase, execution, monitoring and controlling and project closure.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent of projects with scheduled completion within 30 days of contract time	100%	100%	100%

**Seller/Owner:** 4310 - Engineering

Offer: **Containers and Distribution**  
 Dept: General Services  
 Outcome: Sustainable  
 Factor: Environment Existing

**Executive Summary:**

Since 1997, Solid Waste management (SWM) has distributed 96 gallon automated collection containers as well as various sizes of recycling carts and bins to city residents and businesses. Although they have a 10 year warranty, over 30,000 of the 96 gallon automated collection containers, a.k.a. "Big Blues", have been in service for nearly 20 years. Due to normal service and outdoor elements, these automated containers have begun to fail at an alarming rate and are necessarily being replaced. Simply put, we must plan to replace our inventory of containers that are in service as they reach the end of their useful lives. (Please see the attached analysis of container models, number of cans in service, and number of years in service.) The container distributor is also responsible for satisfying new requests for containers (for new homes), requests for replacement containers for new owners at existing homes, as well as all recycling cart and bin requests.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent of households with outdated containers that will receive new 96 gallon containers	10%	10%	2.48%

**Seller/Owner:** 4210 - Solid Waste Management

**Infrastructure**

**Offer Executive Summary**

Offer: **Environmental Management**  
 Dept: Public Works  
 Outcome: Compliant  
 Factor: Environment Existing

**Executive Summary:**

Numerous City operations are subject to mandates from regulatory authorities at the State and Federal level. Assuring our compliance is critical to maintaining effective operations and meeting the expectations of citizens, businesses, and neighboring jurisdictions. This work requires the development and implementation of well-integrated environmental policies, practices and programs by career subject matter experts. An ability to understand applicable regulations and their bearing on city operations and plans is needed to anticipate issues and manage risks. The Office of Environmental Management provides the only in-house source of the requisite experience, training and certification necessary.

Example duties: regulated waste management & disposal, spill & incident response, property transfer due diligence, asbestos and other haz-mat mgmt/abatement, compliance programs, regulatory liaison, subject matter expertise, scientific and technical support, etc.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Number of inspections completed.	110	110	17

**Seller/Owner:** 1214 - Environmental Management

Offer: **Facilities Management - City Utilities and Work Order Management**  
 Dept: General Services  
 Outcome: Functional (Usable)  
 Factor: Buildings, Parks, and Greenways Existing

**Executive Summary:**

The requested funding is used to support the business process for the Facilities Management group. This includes payment of utilities for various City facilities, work order and custodial inventory database management, City-issued cell phones, Engineering services for energy-saving projects, etc.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Tracks, document and trend Facilities funds	100%	100%	100%

**Seller/Owner:** 4330 - Facilities Management - Building Maintenance

Offer: **Facilities Management - Contracts & Service Agreements**  
 Dept: General Services  
 Outcome: Functional (Usable)  
 Factor: Buildings, Parks, and Greenways Existing

**Executive Summary:**

Manage, administer and develop the most cost effective and comprehensive solution for all of the Facilities Management service agreements and third party contracts. Additionally manages (either through in house personnel or through outside contractor) all needs that are not covered by a contract.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent of contracts managed (contractor adherence and performance), reviewed, and renewed on schedule	100%	100%	100%

**Seller/Owner:** 4330 - Facilities Management - Building Maintenance



**Infrastructure**

**Offer Executive Summary**

Offer: **Facilities Management - Custodial Services: Cleaning of City Facilities**  
 Dept: General Services Factor: Buildings, Parks, and Greenways  
 Outcome: Functional (Usable) Existing

**Executive Summary:**

Provide daytime cleaning services managed by the Custodial Supervisor. Custodial Supervisor works with the Business Coordinator to manage the 3rd party contracts awarded for certain structures not cleaned by the City's in house staff.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent for use of Orbio water as alternative cleaning fluids	100%	100%	100%
Specialized floor maintenance cleaning	100%	100%	100%

**Seller/Owner:** 4220 - Facilities Management - Custodial Services

Offer: **Facilities Management - Custodial Services: Cleaning of City Facilities Supplement**  
 Dept: General Services Factor: Buildings, Parks, and Greenways  
 Outcome: Functional (Usable) Supplemental

**Executive Summary:**

Provide daytime cleaning services managed by the Custodial Supervisor. Custodial Supervisor works with the Business Coordinator to manage the 3rd party contracts awarded for certain structures not cleaned by the City's in house staff.

**Seller/Owner:** 4220 - Facilities Management - Custodial Services

Offer: **Facilities Management- Trades Services**  
 Dept: General Services Factor: Buildings, Parks, and Greenways  
 Outcome: Functional (Usable) Existing

**Executive Summary:**

HVAC: Responsible for all major buildings, Recreation Centers, Libraries, Park structures including ball field structures and the entire Public Works Service Center. City HVAC group has taken full responsibility for the preventative maintenance and all repairs at the Berglund Center.

Structural/Municipal: Responsible for all of the carpentry, new building renovations, roofs and building envelopes and day to day cosmetic needs with all surfaces.

Mechanical: Responsible for the City's electrical, plumbing, renovation, building upgrades and any required maintenance.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent of listed items on the Capital Improvement Plan completed	100%	100%	80%
Percent of periodic required maintenance completed on City mechanical equipment	100%	100%	85%
Percentage of City utility cost reductions.	7%	7%	25%

**Seller/Owner:** 4330 - Facilities Management - Building Maintenance

**Infrastructure**

**Offer Executive Summary**

<b>Offer:</b>	<b>Fleet Capital</b>	
<b>Dept:</b>	General Services	<b>Factor:</b> Equipment and Vehicles
<b>Outcome:</b>	Safe and Well-maintained	Existing

**Executive Summary:**

Timely replacement of vehicles/equipment is vital for maximizing the delivery of services by City user groups while maintaining optimum utilization levels. The Fleet Management Division has a fleet replacement policy which it adheres to which outlines replacement criteria. Vehicles/Equipment are eligible for replacement based on meeting two of the three qualifying criteria (Age, Mileage, LTD maintenance costs). Additionally, Fleets' management information system (Faster) computes these qualifiers and scores each category from 0-5.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Availability of Entire Fleet	95%	95%	96%
Availability of Snow Equipment	95%	95%	97%
Availability of Solid Waste Trucks	90%	90%	90%

**Seller/Owner:** 2642 - Fleet Management - Non Op

<b>Offer:</b>	<b>Fleet Maintenance and Repair</b>	
<b>Dept:</b>	General Services	<b>Factor:</b> Equipment and Vehicles
<b>Outcome:</b>	Safe and Well-maintained	Existing

**Executive Summary:**

The resources necessary to maintain, manage, and repair the City's fleet are provided in this offer. Included in the offer are funds for: administrative and maintenance personnel salaries, parts, tools, and supplies. User departments/agencies are billed for maintenance, repairs, and parts generating revenues to the Fleet Fund that will offset the annual operating expenses. Vehicles are maintained and scheduled for preventative maintenance using Fleet's management information system (FASTER). The system keep track of all schedules and electronically sends notices when vehicles/equipment are due. Each tagged vehicle is seen at a minimum annual for Virginia State Inspection although most are brought in throughout the year for maintenance, service, or repair.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Availability of Entire Fleet	95%	95%	96%
Availability of Snow Equipment	95%	95%	97%
Availability of Solid Waste Trucks	90%	90%	90%

**Seller/Owner:** 2641 - Fleet Management Fund

<b>Offer:</b>	<b>Fleet Management Information System</b>	
<b>Dept:</b>	General Services	<b>Factor:</b> Equipment and Vehicles
<b>Outcome:</b>	Safe and Well-maintained	Supplemental - New

**Executive Summary:**

Mandatory contract increase in FASTER fleet management information system.

**Seller/Owner:** 2641 - Fleet Management Fund

**Infrastructure**

**Offer Executive Summary**

Offer: **Fleet Motor Fuel**  
 Dept: General Services  
 Outcome: Energy Efficient  
 Factor: Equipment and Vehicles  
 Existing

**Executive Summary:**

All City fleet vehicles utilize bio-diesel, E-10 gasoline and/or propane as the fuel source. Fleet Management has spearheaded the utilization of Fixed Price Fuel Futures purchasing. This concept allows for budget stabilization by contracting a fixed price for the fuels for a twelve month period. The Fleet Management Division uses an automated management information system to dispense and track fuel purchases. Fuel purchases are then imported into the Fleets' management information system (FASTER) for proper billing. Fuel transactions and usage are monitored daily and reported monthly to user departments and City leadership.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Number of times per day fuel inventory reports are reviewed	1	1	1
Number of times per day fuel site and fuel dispensing equipment are inspected	1	1	1

**Seller/Owner:** 2641 - Fleet Management Fund

Offer: **Fleet Vehicle Wash Program**  
 Dept: General Services  
 Outcome: Safe and Well-maintained  
 Factor: Equipment and Vehicles  
 Existing

**Executive Summary:**

Fleet Management oversees the vehicle/equipment wash facility and the operation of vehicle/equipment wash and corrosion control program. This facility provides exterior and interior cleaning of City vehicles/equipment in addition to wash services that neutralize harsh chemicals ie: (road salt, grease, refuse waste, etc). By providing these services, the City fleet can be presented to the citizens of Roanoke with a clean appearance while providing a means of delaying corrosion which, in turn, increases effective life of vehicles/equipment.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Number of City vehicles/equipment washed per day	10	10	6

**Seller/Owner:** 2641 - Fleet Management Fund

Offer: **Information Technology Support**  
 Dept: Technology Fund  
 Outcome: Supports Business Processes and Community Needs  
 Factor: Technology  
 Existing

**Executive Summary:**

One of the core functions of the Department of Technology (DoT) is to provide information technology services for City operations. All City of Roanoke departments depend on the availability and reliability of business applications and internet connectivity. DoT maintains the business application systems, the data center to host the systems, and network to provide internet and system connectivity. DoT provides tasks related to information technology including project management, application management and integration, vendor relationship management, contract negotiation, technology incident and change management, strategy and budgeting. DoT is responsible for assuring that information technology services are delivered in accordance with current and future business needs and are maintained and performing optimally.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent network uptime; unplanned downtime	99.9%	99.9%	99.95%

**Seller/Owner:** 1601 - Technology Fund

## Infrastructure

### Offer Executive Summary

<b>Offer:</b>	<b>Technology Contract Increase and Software</b>	
<b>Dept:</b>	Technology Fund	<b>Factor:</b> Technology
<b>Outcome:</b>	Supports Business Processes and Community Needs	Supplemental

**Executive Summary:**

The City is obligated to pay vendors in which we have entered into contracts with. As a result of standard increases, this supplemental offer is necessary to remain in compliance with terms of various contracts. This offer also includes some new off the shelf software to maintain or enhance services.

**Seller/Owner:** 1601 - Technology Fund

<b>Offer:</b>	<b>Library Technology and Innovation</b>	
<b>Dept:</b>	Libraries	<b>Factor:</b> Technology
<b>Outcome:</b>	Supports Business Processes and Community Needs	Existing

**Executive Summary:**

The Roanoke Public Libraries constantly adapts, creates, and upgrades its own technology to match the needs of the community. The library provides over 275 computers for public use and research assistance with over 200,000 log-in sessions last year. The library was accessed digitally 216,684 times last year. The Library has offered the circulation of e-books for over six years and last year's circulation increased dramatically to 237,659 e-books.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Number of citizens who use the library's computers	250,000	250,000	200,850

**Seller/Owner:** 7310 - Libraries

<b>Offer:</b>	<b>Map and Graphics Production</b>	
<b>Dept:</b>	Public Works	<b>Factor:</b> Technology
<b>Outcome:</b>	Supports Business Processes and Community Needs	Existing

**Executive Summary:**

The Engineering Division provides map and graphics production services for citizens and within other City departments including libraries, Police, Commonwealth Attorney, City Manager, Department of Management and Budget, HUD, etc. Approximately 500 maps and graphics are produced annually. This team also provides for the archival and retrieval of Engineering maps and plans online. We maintain in excess of 15,000 plans of existing infrastructure assets including roads, bridges, storm drains, buildings and surveys of record.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Average number of days to complete map and graphics requests	1 day	1 day	1 day

**Seller/Owner:** 4310 - Engineering

## Infrastructure

### Offer Executive Summary

<b>Offer:</b>	<b>Median and Right of Way Landscape Maintenance</b>	
<b>Dept:</b>	Public Works	<b>Factor:</b> Transportation
<b>Outcome:</b>	Well-maintained	Existing

**Executive Summary:**

Median and right of way landscape maintenance includes mowing of medians and steep slopes, weed abatement, maintenance of landscaped beds, litter collection, mulching, pruning, turfgrass improvement projects, watering, and maintenance of all equipment necessary to perform this work. As the City strives to implement its Complete Streets Policy and to create "Great Streets," this function plays a key role in providing a safe and attractive environment for all users of the right of way. Appropriately maintained and aesthetically pleasing landscaping and green spaces also support the Livability priority under both the Attractive Community and Quality Amenity factors.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent adherence to established mowing cycle of 14 days.	90%	90%	69%

**Seller/Owner:** 4110 - Transportation - Street Maintenance

<b>Offer:</b>	<b>Paving Program</b>	
<b>Dept:</b>	Public Works	<b>Factor:</b> Transportation
<b>Outcome:</b>	Well-maintained	Existing

**Executive Summary:**

The Paving Program provides funding to resurface City streets. City Council has previously expressed a desire to maintain an average 20-year paving cycle on City streets, a cycle which requires paving of approximately 79 lane-miles of streets annually. The FY22 budget will allow repaving of approximately 50 lane-miles. While we continue to try and stretch these limited funds and lengthen the time between resurfacing, neighborhood streets, in particular, deteriorate faster than we can repave and many are beyond the point of repair or rehabilitation. Paving ensures safe and well-maintained streets, efficient traffic flow and supports transit and bicycle use. Finally, paving supports multiple factors under the Safety and Livability priorities.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent conformance to goal of 79 lane-miles resurfaced annually	95%	95%	72%

**Seller/Owner:** 4120 - Transportation - Paving Program

<b>Offer:</b>	<b>Radio Technology Support</b>	
<b>Dept:</b>	Technology Fund	<b>Factor:</b> Technology
<b>Outcome:</b>	Supports Business Processes and Community Needs	Existing

**Executive Summary:**

The City and County of Roanoke jointly own, operate, support and maintain the regional 23 channel 800MHz digital radio system. The City has FCC licenses for 13 channels, 6 of which currently provide radio service to public works, parks & recreation and across other various City departments (remaining are for public safety) . In addition, there are non-City agencies on the City's analog radio technology infrastructure. The 800MHz analog radio system is the sole responsibility of the City to manage and support. Maintaining the analog system allows the City's non-public safety to remain analog and reduces capital outlay for several years. It also allows those 3rd party users to remain on the analog and gives ample time to budget for the transition to digital. All 3rd party users contribute to the support & maintenance.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent radio network uptime; unplanned downtime	99.9%	N/A	N/A

**Seller/Owner:** 4170 - Radio Technology

## Infrastructure

### Offer Executive Summary

<b>Offer:</b>	<b>Radio System Maintenance Increase and Training</b>	
<b>Dept:</b>	Technology Fund	<b>Factor:</b> Technology
<b>Outcome:</b>	Supports Business Processes and Community Needs	Supplemental

**Executive Summary:**

The City is a partner in the Regional Radio System and shares cost with surrounding localities. As part of recent upgrades, along with the move of our E911 Center to Blue Hills, certain equipment is coming out of warranty which results in increased annual maintenance costs.

In addition, supplemental training would enable Radio Shop staff to provide better support to new consoles at Blue Hills E911 Center as well as allow Infrastructure Division staff to meet new expectations of supporting the radio network infrastructure. Training on the Radio System for the Infrastructure Division aligns with the department's 5 year goals and strategic plan.

**Seller/Owner:** 4170 - Radio Technology

<b>Offer:</b>	<b>Sidewalk Repair &amp; Maintenance</b>	
<b>Dept:</b>	Public Works	<b>Factor:</b> Transportation
<b>Outcome:</b>	Multimodal	Existing

**Executive Summary:**

Sidewalk Repair and Maintenance addresses requests for repair and maintenance of damaged sidewalks, curb, and/or curb and gutter throughout the City and to install accessible curb ramps in areas where repairs are being made. Current funding levels do not permit a reduction in the backlog of work. While a comprehensive review of Citywide sidewalk inventory in need of repairs will be forthcoming, as of January 2021, more than 2,011 concrete repair requests and ADA ramps currently exist in the system with total value of apx \$6.2 million. Absent additional funding, no progress will be made in reducing the backlog. Either an increase in annual operating funds and/or annual capital funding is required to significantly reduce the backlog.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent of new work requests scoring 100 or higher (severe trip hazard) completed within 180 days	75%	75%	0%

**Seller/Owner:** 4110 - Transportation - Street Maintenance

<b>Offer:</b>	<b>Snow Removal</b>	
<b>Dept:</b>	Public Works	<b>Factor:</b> Transportation
<b>Outcome:</b>	Safe	Existing

**Executive Summary:**

Snow Removal provides funding to support clearing of snow and ice from City streets, greenways and sidewalks during winter storm events. Snow removal is an essential function necessary to ensure that citizens and businesses are able to return to normal daily activities as soon as possible both during and after snow events.

Removal of snow from City streets and sidewalks also supports the Safety priority under the Prevention and Responsiveness factors as snow removal is a service that mitigates hazards and requires a reasonable response time to assure safe travel.

Likewise, snow removal supports the Livability priority under the causal factors for Attractive Community and Accessibility as this service helps promote a safe, clean, and attractively maintained community and ensures that our rights of way are safe and accessible and promote the convenient delivery of public services.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent of arterial streets and Valley Metro bus routes plowed and treated within 24 hours of the end of snow and ice accumulation	90%	95%	100%

**Seller/Owner:** 4140 - Transportation - Snow Removal

## Infrastructure

### Offer Executive Summary

<b>Offer:</b>	<b>Street Maintenance</b>	
<b>Dept:</b>	Public Works	<b>Factor:</b> Transportation
<b>Outcome:</b>	Well-maintained	Existing

**Executive Summary:**

Street Maintenance includes the operation, maintenance and repair of pavement surfaces (utility cuts, sinkholes, cave-ins, and potholes,) roadway shoulders and pavement edges, and other features within the right of way that promote safe and efficient travel within the City. Street maintenance supports the Livability priority under both the Attractive Community and Accessibility factors. It also supports the Safety priority under the Prevention and Responsiveness factors. Preventive maintenance efforts and repairs to deficiencies mitigate infrastructure hazards and making repairs in a responsive manner is essential to eliminate hazards and to address citizen requests.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Percent of potholes repaired within 15 calendar days of notification.	90%	90%	88%

**Seller/Owner:** 4110 - Transportation - Street Maintenance

<b>Offer:</b>	<b>Technology Capital (ITC)</b>	
<b>Dept:</b>	Technology Fund	<b>Factor:</b> Technology
<b>Outcome:</b>	Functional	Capital Only

**Executive Summary:**

In order to keep the City of Roanoke's technology infrastructure operating at a manageable level several projects are set for this coming budget year: Firewall replacement, switch replacement, PC Mobile replacement, Wireless Access Point replacement, and UPS replacements are needed to replace aging equipment that is no longer supported, no longer under warranty, or both. Microsoft Licensing, Time and Attendance, Business Expense workflow are tied to the exit from the Lotus Notes platform. Police car cameras are replacement of existing in car cameras. Time & Attendance is a phased replacement of an existing system that may also include functionality enhancements over the current system.

The Intrusion Detection System (IDS) and Police Building cameras are related to improve the security of our network assets or physical security. Adding an IDS will increase our visibility into cybersecurity threats and allow us to react in real-time to respond to threats.

**Performance Measures:**

Measure Title	FY 2022 Target	FY 2021 Target	FY 2020 Actual
Projects are completed within approved budget.	80%	75%	N/A
Projects completed within the month identified in schedule baseline	80%	75%	N/A

**Seller/Owner:** 1602 - Dept of Tech - Capital Outlay