

Infrastructure and Utilities

Guiding Principle:

In 2035, Fairfax is a city with... safe, well-maintained infrastructure and use of advanced technology.



Well-maintained infrastructure and utility systems are critical to the City's continued growth and development. The services covered under this Guiding Principle include water, wastewater, stormwater, energy, telecommunications, and solid waste and recycling. These services support existing and future development and contribute to the health, safety and welfare of the community's residents, businesses and visitors. As technology advances, the City will have greater opportunity to expand the use of information and communications technologies to enhance livability, economic growth, public safety and sustainability.

The proper functioning of infrastructure systems can have major environmental implications. Water, wastewater, and stormwater systems are embedded in the region's hydrology, and the quality of our watersheds is heavily influenced by the operation of these systems. Overhead utility wires are a distracting visual element within the streetscape and present a maintenance concern. Trees must be trimmed away from the overhead lines on a regular basis, resulting in odd-shaped and unnatural-looking trees unable to grow to their fullest potential. Undergrounding utilities can enhance safety, improve aesthetics, reduce maintenance, and improve street tree health.

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Goal 1

Provide quality utility services and infrastructure systems.

Utilities and infrastructure will be compliant with applicable federal and state standards and requirements to meet anticipated growth and development needs. The City should continue to ensure its infrastructure and utility systems meet the demand of projected growth and the community's needs. Significant investments in infrastructure (such as stormwater management facilities) will be needed to keep pace with maintenance, regulatory requirements and advancing technology.

OUTCOME IU1.1: Access to a clean, safe and reliable potable water supply.

ACTION IU1.1.1 Continue to work with Fairfax Water to ensure the City has access to safe and reliable drinking water.

ACTION IU1.1.2 Encourage residents and businesses to conserve water in an effort to protect and preserve the water supply.

OUTCOME IU1.2: A reliable and efficient wastewater system that collects, conveys and treats wastewater.

ACTION IU1.2.1 Maintain the ability to collect and transmit wastewater.

ACTION IU1.2.2 Continue to perform regular testing, maintenance and improvements to the City's wastewater collection system to ensure compliance with federal and state environmental regulations.

OUTCOME IU1.3: A sustainable and efficient stormwater system.

ACTION IU1.3.1 Continue to implement the Virginia Stormwater Management Program (VSMP) and the City's stormwater management program to ensure compliance with federal and state regulations.

ACTION IU1.3.2 Continue to maintain and improve the City's stormwater system, utilizing green stormwater infrastructure where practical.

OUTCOME IU1.4: Access to reliable energy and telecommunications infrastructure.

ACTION IU1.4.1 Partner with utility providers, local municipalities, and regional groups to improve access to utility data and service outage data.

ACTION IU1.4.2 Coordinate upgrades and replacement of non-City provided utilities, including electricity, water, natural gas and communications networks.

ACTION IU1.4.3 Work with utilities, developers, and state agencies to relocate above-ground utility lines underground, where feasible, with an emphasis on major corridors.

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Goal 1



ACTION IU1.4.4 Encourage the placement and appearance of utility infrastructure (e.g. substations, transmission towers and lines, and switching boxes) to minimize visual disruption and negative effects on quality of life, and to enhance streetscapes.

ACTION IU1.4.5 Work with utility companies to ensure the reliability and availability of electricity, water, natural gas, and communications services during both normal times and times of stress (e.g. storm events, flooding, extreme heat, etc.).

OUTCOME IU1.5: A safe and well-connected right-of-way system that provides a functional surface transportation system and utility infrastructure services throughout the City.

ACTION IU1.5.1 Evaluate and ensure that there is adequate lighting along all major streets.

ACTION IU1.5.2 Convert light fixtures and street lights to light emitting diodes (LEDs) and down-cast lighting.

ACTION IU1.5.3 Develop an inventory of existing public right-of-way infrastructure assets (e.g., street lights), current infrastructure conditions, and priorities for maintenance or rehabilitation.

ACTION IU1.5.4 Provide rights-of-way that will permit the expansion of tree planting strips and tree wells to provide more suitable growing conditions for street trees.

OUTCOME IU1.6: Access to reliable and efficient solid waste and recycling services and infrastructure.

ACTION IU1.6.1 Maintain and enhance solid waste and recycling infrastructure in City parks, trails, sidewalks, and public facilities, and at events.

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Goal 2

Expand the use of advanced technology.

Advanced technology infrastructure helps support economic growth and public safety, improve access to information, and ensure a broad range of communications services. Technology is rapidly progressing while the price of these advanced technologies is decreasing. The City will monitor, evaluate, and utilize advances in technology to improve efficiency, connectivity and quality of life.

OUTCOME IU2.1: All City residences, businesses and institutions have access to reliable and affordable advanced technology and telecommunications infrastructure and services.

ACTION IU2.1.1 Periodically update policies and regulations for the design and siting of telecommunications facilities to ensure they remain applicable with fast-changing technologies.

ACTION IU2.1.2 Explore public-private partnerships as a way to enhance the City's telecommunications infrastructure.

ACTION IU2.1.3 Consider implementing innovative pilot initiatives that advance new technologies (e.g., regenerative power, solar-powered charging stations, etc.).

