How do we measure dependable infrastructure?

The City of Kirkland relies on four measures to determine how well it is maintaining its residents’ infrastructure.

- The Pavement Condition Index measures the health of the street network.
- The number of water main breaks in the previous year measures the condition of the City’s water delivery system.
- The number of sewer obstructions in a given year measures the effectiveness of the wastewater collection system.
- A biennial, statistically valid survey measures residents’ overall satisfaction in their local government and the services they get from it.

The availability of funding and staff directly affects how well the City of Kirkland can maintain these essential services.
Kirkland voters approved a permanent property tax levy in 2012 to enhance funding of the City’s street maintenance and pedestrian safety measures. Since that year, the Pavement Condition Index, which measures the street network’s condition, has improved. The condition of major and minor arterials improved from 62.8 in 2014 to 77.4 in 2018. The Pavement Condition Index score for collectors and neighborhood streets has improved as well—from 72.8 in 2014 to 80.8 in 2018. Despite this, residents’ satisfaction of street maintenance has remained below the 90 percent target.

The improvement of Kirkland’s street network score on the Pavement Condition Index results from two factors. The first is a successful pavement maintenance program. The second is a change to the way Kirkland measures its streets’ conditions.

Throughout the last couple of years, water main breaks and sewer obstructions have been rare. Kirkland’s water delivery system suffered from twelve water main breaks and one sewer obstruction in 2018. Kirkland’s goal remains zero incidents per year.

**WHAT ARE WE DOING?**

Adopted in 2015, the Transportation Master Plan guides the City to “[e]stablish an acceptable level of service for all modes.” Progress towards those goals are to be reported annually, and in 2018 that report was formatted into an infographic. The 2018 progress report shows six units, with one to three modules per unit. The first five units are ordered consistent with the five priority areas identified in the TMP: safety, walk, bike, transit, drive. The sixth unit highlights key ongoing transportation projects.

**Kirkland Transportation Master Plan 2018 Progress Report**

- **SAFETY**
  - **COLLISION NUMBERS**
    - \[\begin{array}{|c|c|c|}
    \hline
    & \text{CITY-WIDE} & \text{NEIGHBORHOOD-
    \text{WIDE}} \\
    \hline
    \text{2015} & 30 & 3 \\
    \text{2016} & 31 & 3 \\
    \hline
    \end{array}\]
  - **COLLISION RATES**
    - \[\begin{array}{|c|c|c|}
    \hline
    & \text{CITY-WIDE} & \text{NEIGHBORHOOD-
    \text{WIDE}} \\
    \hline
    \text{2015} & 1.31 & 1.30 \\
    \text{2016} & 0.12 & 0.12 \\
    \hline
    \end{array}\]

- **WALK**
  - **SCHOOL WALK ROUTES (SWR)**
    - 96% of SWR’s network has sidewalks
  - **CROSSWALKS**
    - 16% of light deficient crosswalks now have sufficient lighting

- **BIKE**
  - **BIKE LANE NETWORK**
    - 40 of 52 miles – 77% of planned bike lane network complete
  - **NEIGHBORHOOD GREENWAYS NETWORK**
    - 12% of planned network complete

- **PAVEMENT**
  - **6th Street Utilities**
    - Kirkland’s contractor began construction in October 2018 to upgrade the five-decade-old cast iron and concrete water and concrete sewer mains that run beneath Sixth Street South. More than 2,200 linear feet of eight-inch water main and more than 1,000 feet of sewer main were upgraded as part of a comprehensive effort to increase capacity and improve reliability in that area. The City also coordinated the private communication cabling system upgrade projects, completing the underground utility work necessary prior to re-paving the 6th Street corridor. Kirkland has designed and completed the rehabilitation repaving of 6th Street from 4th Avenue to NE 68th Street, completing the Sixth Street South Corridor Projects a year ahead of schedule.