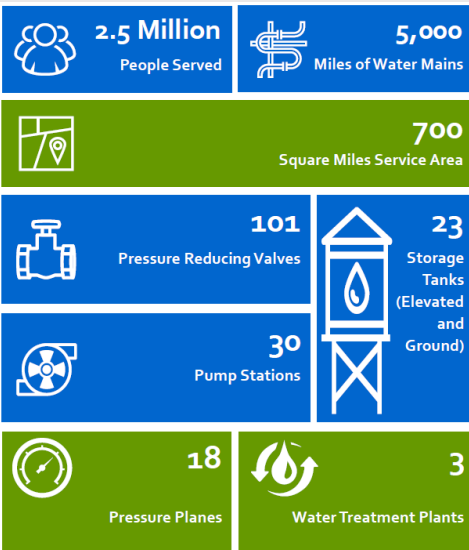
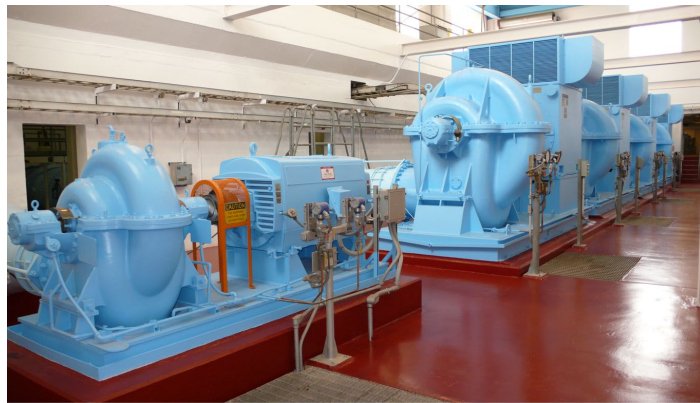


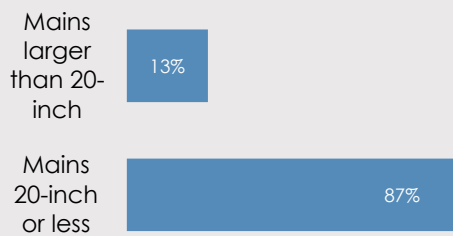


WATER DELIVERY

Distribution, Pumping and Water Quality Divisions



PERCENTAGE OF WATER MAINS BY SIZE

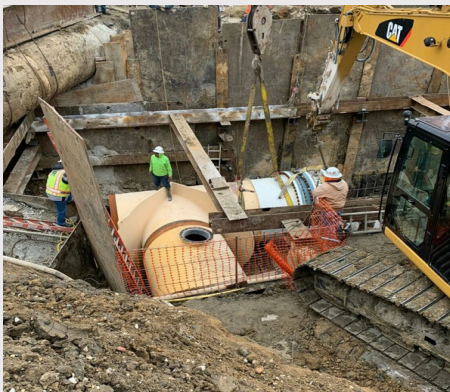


WATER DELIVERY SYSTEM

DWU provides drinking water and fire flow protection to approximately 2.5 million people (As of June 2021) in the City of Dallas, DFW International Airport and 23 nearby customer cities. DWU's service area covers approximately 700 square miles, is divided into a total of 18 pressure planes and contains three water treatment plants (WTPs), 23 Storage tanks (10 elevated and 13 ground storage), 30 pump stations, 101 pressure reducing valves (PRVs) and more than 5,000 miles of water mains. DWU's system is designed to provide operational flexibility and redundancy.

The total average demand on the DWU water system is anticipated to increase by approximately 22 percent from 2020 to 2040, or from 370 MGD to 435 MGD.

WEBSITE:
www.dallascityhall.com



MISSION STATEMENT

The mission of Water Delivery Divisions is to operate and maintain the water distribution system (Over 5,000 miles of pipe and associated components) to pump and deliver potable water to the residents and businesses of the City Dallas and Customer Cities with the best quality and reliability possible. Our services are available on a 24 hour per day, seven days a week basis. Further, the division provides friendly, courteous and timely response to customer's emergency water problems.

KEY ACTIVITIES OF THE MISSION

- Regular maintenance of pump stations, storage tanks, water mains and valves.
 - Preventive Maintenance (Condition Assessments).
 - Pumps and Water Mains repairs.
 - Water Quality – TCEQ Compliance Sampling and Monitoring, Line Flushing to maintain water quality.
 - Maintaining adequate System Flow and Pressure to provide reliable Fire Protection.
 - Back Flow Prevention Activities.
 - Water Mains Replacement Requests.
 - Water Mains Locates.
 - Water Mains and Storage Tanks Inspections.
 - Coordination with Other Departments.
 - Support Capital and Private Development.

SYSTEM DESCRIPTION

Water Mains

The City of Dallas has 5,014 miles of water mains. 4,371.51 miles are water mains less than 20-inch in diameter, the rest (643.32 miles) are larger than 20-inch in diameter.

The most common pipe materials in the system are:

- PVC – 27.6%
- Cast Iron (CI) – 22.6%
- Enamel Cast Iron (ECI) – 20.0%
- Ductile Iron (DI) – 17.8%
- Pre-stress Concrete PCCP -L, E) – 5.7%
- Bar Wrap Concrete (BWCCP) – 3.9%
- Reinforce Concrete – RC, RCCP – 0.8%
- Steel – 0.3%

System Valves

The distribution system has about 116,971 isolation valves

- Valves on hydrant leads – 30,935.
- Valves on distribution main – 73,447.
- Valves on transmission mains – 4,470.
- Valves on other services – 8,119

Fire Hydrants – Fire Suppression System

The City of Dallas has about 31,064 fire hydrants (June 2021 Report).

Pumps and Booster Pump

The City of Dallas operates 30 potable water pump stations containing 150 individual pumps. The pumps range in size from 5 hp to 3500 hp. The maximum pumping capacity of all these pump stations added together is around 3 billion gallons per day.