



City of Richardson

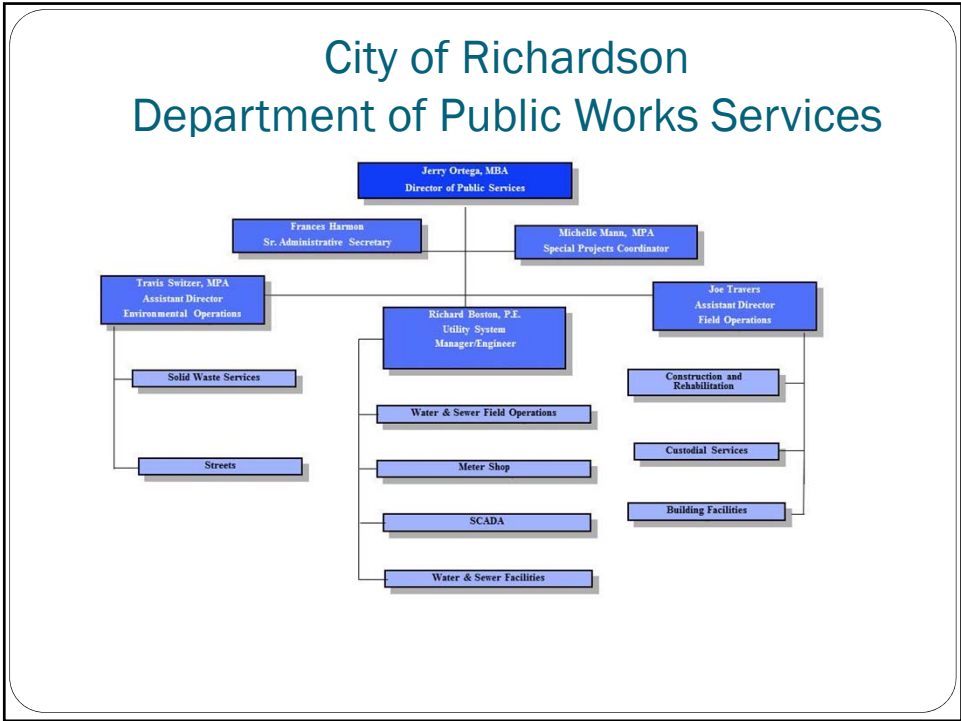
Department of Public Works Services



City of Richardson

Department of Public Works Services

- Public Works Services Department consists of 5 divisions:
 - Administration
 - Streets
 - Facilities
 - Water & Sewer
 - Solid Waste
- Currently, department has 190 FTEs



Streets Division

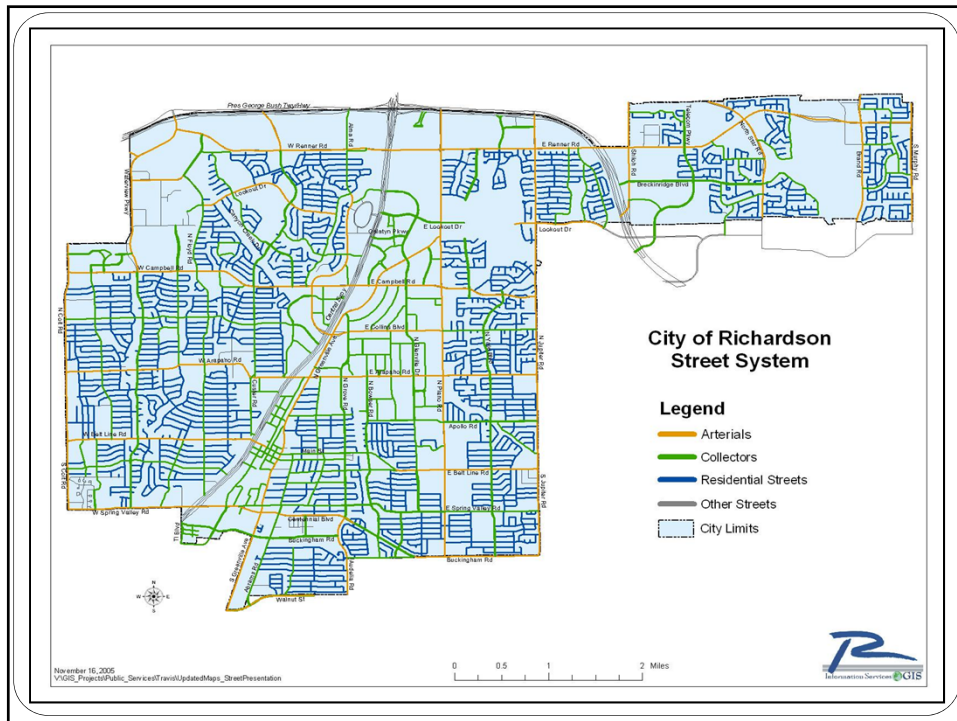
- Street Division responsible for maintenance of:
 - Streets
 - Alleys
 - Storm Sewer Systems
 - Screening walls
 - Debris/tree removal (rights-of-way, creeks, culverts, bridges)
 - Inclement weather road sanding – de-icing applications
- Construction of:
 - Street, alleys, storm sewers, HC ramps, sidewalks, turn lanes, curbs and city owned parking lots



Street w/Curb Reconstruction

Streets Division

- City has:
 - 1,063 lane miles of streets
- Distance from City to:
 - Detroit, Michigan
 - Charlotte, N. C.
 - Jacksonville, Florida





Facilities Division

- Facilities Division is responsible for:
 - Preserving, extending useful life of all public buildings
- This division is divided into 2 Service Groups:
 - Custodial - Support:
 - 15 municipal buildings with approximately 330,000 SF (City Hall/Library/Civic Center/PD – 911 & Jail Bldg/Rec Centers, etc)
 - General cleaning & Civic Center Events Config. Setups/Takedowns
 - Maintenance – Repair:
 - 23 municipal buildings with approximately 422,000 SF (Eiseman Center, plus same as above)
 - HVAC & other mechanical, plumbing, lighting, emergency power, PM



Facilities Division

- Energy Efficiency and Conservation Block Grant
 - **Grant total: \$850,000**
 - Energy Efficiency Projects in Public Facilities – \$365K
 - Huffhines Renewable Demo Project (in progress) – \$275K
 - Intelligent Energy Management Systems – \$150K
 - Research/Policy Dev. & Grant Writing – \$60K

Estimated savings/year = \$300,000-plus

Payback time estimate = 3 years

Facilities Division

Green Building and Energy Efficiency

FS # 2 – LEED Certification
(Silver)



Huffhines Rec Center - LEED
Certification (Silver)

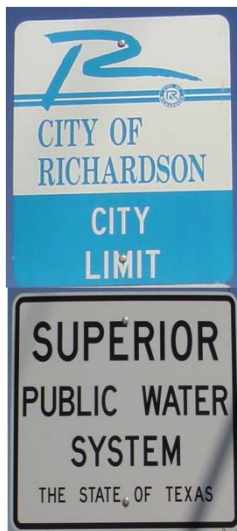


Water and Sewer Division

Water and Sewer Division

- Water and Wastewater Division comprised of:
 - SCADA (Supervisory Control And Data Acquisition)
 - Operations Response Center team (24/7)
 - **Magic Number: 972 744-4111**
 - Field Operations
 - Utility Plant Maintenance
 - Meter Shop
- Water and Wastewater Division responsible for:
 - Distribution and operations of water supply
 - Wastewater collection system, lift stations and appurtenances
 - Division maintains licensing required by the TCEQ (Texas Commission on Environmental Quality)
 - Currently over 40 employees hold licensing in a range of disciplines

Water and Sewer Division



- Richardson is recognized by the State of Texas as a **“Superior Public Water System”**
- Superior Water rating is achieved by adhering to a strict sets of standards and benchmarks
- City of Richardson Utility System personnel maintain the “Superior” designation through their daily maintenance, testing, and operation of the entire Distribution System
- Annual Consumer Confidence Report

Water and Sewer Division

- 553 Miles of Water lines – from 2” to 36” in diameter
- System includes 12,600 valves and over 4,000 fire hydrants
- On average repair over 200 main breaks annually
- Annually responded to over 2,100 after hour calls to address any issues or concerns our residents have
- Maintain valve operation program which ensures valve maintenance and accountability



Water and Sewer Division

- **Where does Richardson gets its water?**
 - Since 1965, Richardson obtains water through the NTMWD (1954)
 - NTMWD treats, distributes water from Lake Lavon, Tawakoni, Chapman/Cooper, Texoma
 - Richardson’s water NTMWD’s plant in Wylie, TX:
 - Eastside Pump Station – 56 inch mains
 - North Side Pump Station – 42 inch mains
 - Shiloh Pump Station – 60-72 inch mains
- **Where does Richardson wastewater go?**
 - NTMWD, Dallas, Garland sanitary sewer treatment plants



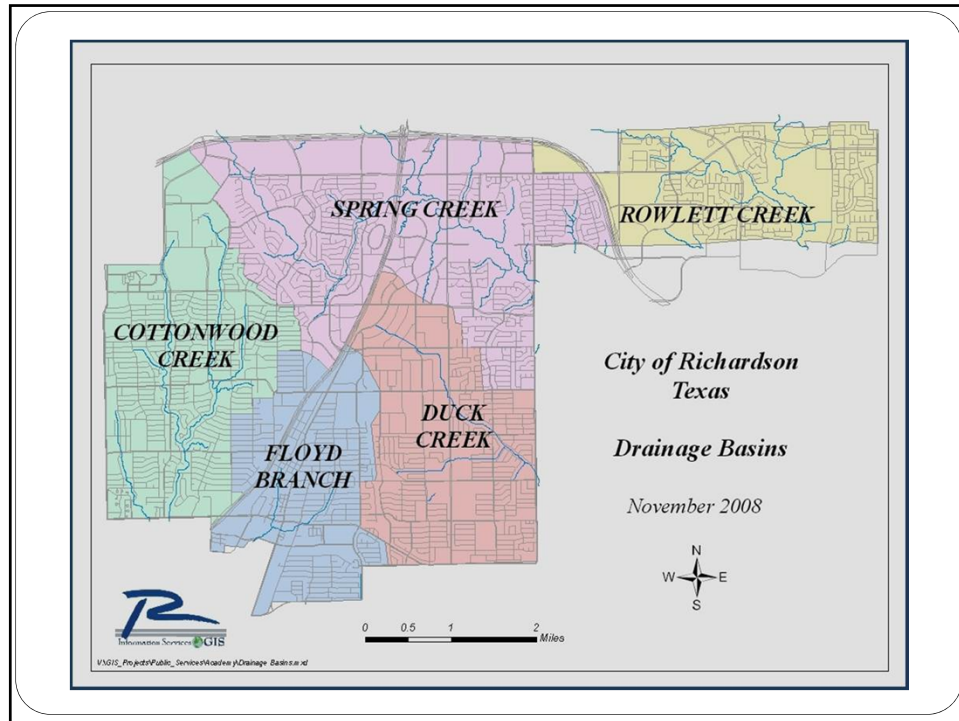
Water and Sewer Division

- Wastewater Collection System
 - 500 miles of pipes ranging in size from 4” – 36”
 - 3,900 manholes and 1,700 mainline cleanouts
 - Addressed 468 emergency calls

Since 1978 Richardson has offered a Two-Way Cleanout for every Residence at a cost of \$60.00.

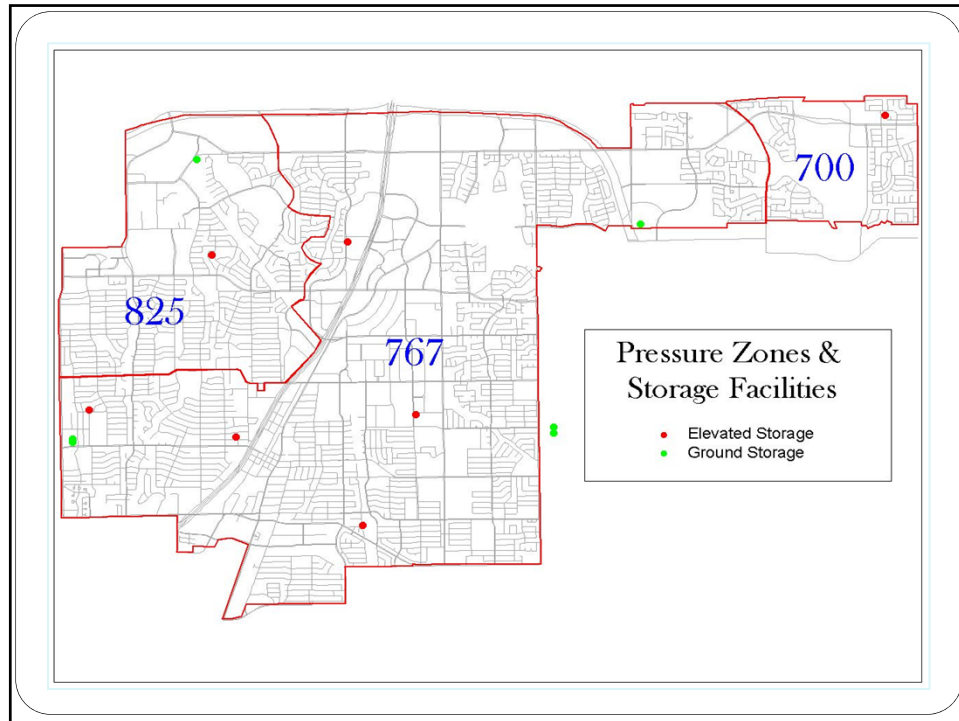
Over 7,433 residents have taken advantage of this program.





Water and Sewer Division

- City's Water System divided into three zones referred to as: 825, 767, and 700
- Richardson has elevated and in-ground storage tanks
 - Seven elevated tanks – total maximum capacity is 8.75 million gallons. Construction dates range from 1957 (Lockwood) to 1992 (Renner).
 - Seven ground tanks – total maximum capacity is 24.5 million gallons. Construction dates range from mid 1950's to 2003. Maintenance program designed to Provide 50-75 year useful life.
 - Storage capacity = 33,250,000 gallons
- System capable to pump 100 million gal/day



Water and Sewer Division

- Construction and Rehabilitation (C&R) is responsible for:
 - Water:
 - Replacement of inadequate water mains
 - Since 1986 replaced 109,413 lf (20.72 mi of 6" and 8" pipe)
 - Testing and chlorinating water replacements
 - Water service taps
 - Valves
 - Fire hydrants
 - Blow-offs (used for system cleaning)
 - Sewer:
 - Replacement of inadequate sewer mains
 - TV inspection, inflow/infiltration reduction,
 - Replacement of utility-driven concrete surfaces
 - Maintenance of submerged and elevated utility creek crossings

Water and Sewer Division

Construction and Rehab. Repairs



Water and Sewer Division

Water Conservation

- City's Efforts
 - Ordinance
 - Water restrictions during warmer months
 - Indoor and Outdoor Water Conservation Kits
 - Regional Landscape Guides
 - Continuous Education
 - Richardson Today articles, community outreach, information on greencor.net
 - Rainwater Harvesting Ordinance





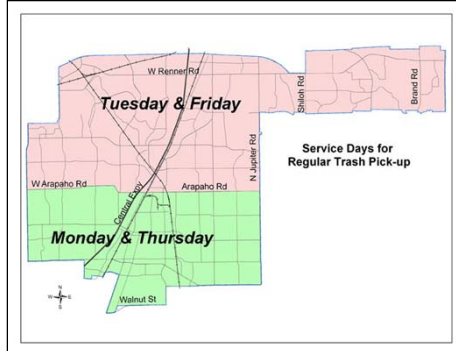
Solid Waste Division

- Residential Services
 - Trash Collection (by city forces)
 - Big and Bulky Item Collection (BABIC)
- Commercial Services
 - Collection (by city forces)
- Residential Recycling Program
 - Collection (by city forces)
- Commercial Recycling Program
 - Pilot Projects Underway (by city forces)
 - City-Wide implementation soon

Solid Waste Division

Residential Trash Collection

- 2/week
- Collect through bag program; collected manually by city staff
- 30,710 tons collected in 2010



Solid Waste Division

BABIC Collection

- Brush and Bulky Item Collection (BABIC)
- Service designed to help residents dispose of large amounts of brush, oversized items (unwanted appliances or furniture)



Solid Waste Division



Commercial Collection

- Commercial Service is provided to approximately 1,500 customers
- Have more than 1,100 frontload and 200 roll-off containers in service.
- 53,886 tons collected in 2010

Solid Waste Division

Residential Recycling Program

- City of Richardson initiated a residential recycling program in 1992
- In 2008 collections were moved in-house
 - Taken to private industry for sale
 - Receive rebates from sales
- Residential recycling done through “Blue” bag program; collected manually
- Recyclables collected 1/week on 2nd day of trash pick up

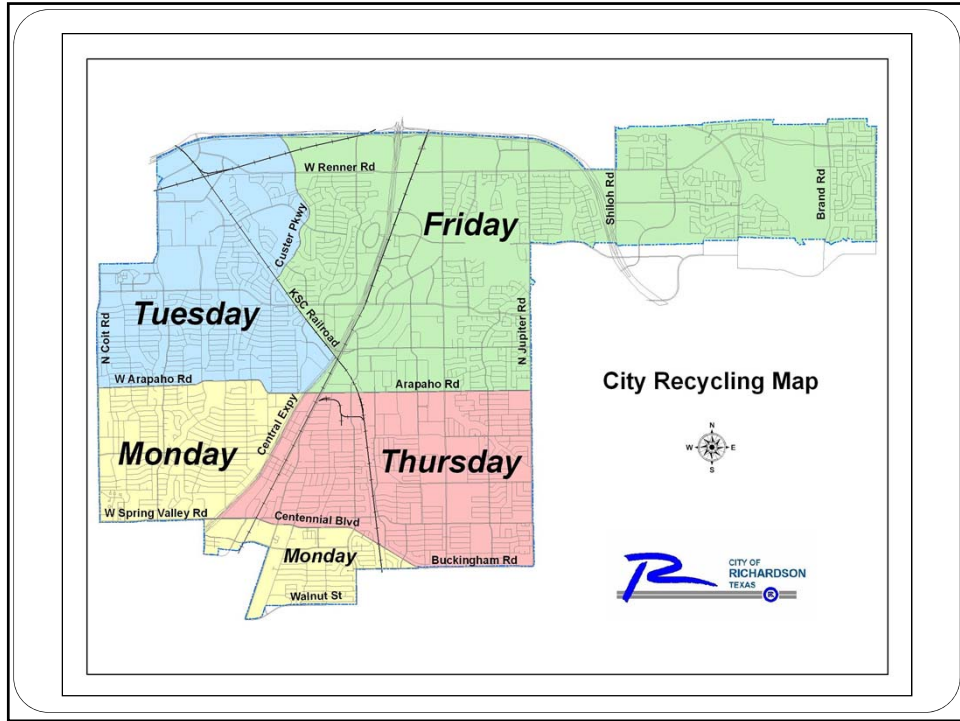
Solid Waste Division

- Items Accepted in the Recycling Program:
 - Plastic Items Marked #1-#7 (excluding Styrofoam)
 - Tin and Aluminum Cans
 - Glass Bottles and Jars
 - Paper (newspaper, magazines, phone books, etc.)
 - Paperboard/Chipboard, Corrugated Cardboard
 - For a Complete List visit www.cor.net
- 5,618 tons collected in 2010
 - Represents increase of 14% from year prior

Solid Waste Division

- Recycling Education
 - Richie's Recycle Roundup
 - In fall
 - Live Green Expo Partnership
 - April 16, 2011
 - Wildflower
 - May 20, 21, 22
 - Presentations at schools and area organizations





Residential Recycling Rearloader

Solid Waste Management Master Plan

- Commissioned to HDR Engineering, Inc. – McKinney, TX
- Goal: Identify opportunities, strategies to leverage our resources, increase efficiencies and responsibly manage overall cost of the new services as each is implemented
- Master Plan will address:
 - Current practices
 - Emerging trends
 - Waste collection methodologies
 - Waste reduction options/incentives
 - Sustainable initiatives
 - Timing
 - Budgeting

Solid Waste Management Master Plan

- Master Plan analysis highlights include:
 - Residential and commercial collections
 - Recycling collections including residential, commercial, multifamily)
 - BABIC
 - Yard waste collection/compost operations
 - Construction & Demolition Debris – collection and disposal methods
- **Will provide City of Richardson a 20-year outlook on BMP in SW Industry**

Solid Waste Management Master Plan

- The Master Plan's five phases:
 - Phase 1: Initial data collection, evaluation of current solid waste system – 12 weeks
 - Phase 2: Define future needs and identify implementation processes – 12 weeks
 - Phase 3: Define program options – 8 weeks
 - Phase 4: Future program refinement/cost impacts – 6 weeks
 - Phase 5: Solid Waste Management Master Plan Document – 8 weeks
- **Plans' estimated completion date is: Spring 2012**

Questions or Comments

