

Public Works
Capital Improvement Program
& Stormwater Utility
Budget Retreat 2022

Presented August 10, 2022



## **PUBLIC WORKS DEPARTMENT**

- PERSONNEL (51 Total)
  - 5- Administration (includes Director and Div. Superintendents)
  - 1- Project Engineer
  - 1- Special Projects Manager
  - 1- Permit Technician
  - 1- Engineering Technician
  - 1- GIS Specialist
  - 18- Streets Division (1 Open Position)
  - 23-Utility Division (5 Open Positions)
- Facilities to Maintain
  - Streets Division
    - 401 Lane Miles of Streets
    - 60 Traffic Signals



#### **PUBLIC WORKS DEPARTMENT**

- Facilities to Maintain
  - Streets Division Con't.
    - Storm Sewer Drainage System
  - Utilities Division
    - 3- Pump Stations
    - 1- 2.0MG Elevated Tank
    - 3- 1.5MG Elevated Tanks
    - 2- 5.0MG Ground Storage Tanks
    - 6- Sanitary Sewer Lift Stations
    - 802,560 feet of Sanitary Sewer Pipes (58% Clay Tile)
    - 2163 Manholes (48% Brick)
    - 1,151,000 feet of Water Lines (52% Cast Iron & Asbestos Cement)
    - Approximately 50% of system in over 50 years old



## **Street Improvement Program:**

- Non-Bond CIP
  - Street Revitalization \$2,300,000
  - Scheduled Streets:
  - Myra Lane Templeton to Webb Chapel
  - Tom Field Valley View to Farmers Branch Lane
  - Dennis Ln. Valley View to Richland
  - Gillis Rd.
  - Beltwood South
  - Beltwood East
  - Albemarle Dr. Bee St to Rugby
  - Shoredale Ln
- Budget Years 22-25 \$500K for Valley View Lane Reduction Project



## **Utility Replacement & Improvement:**

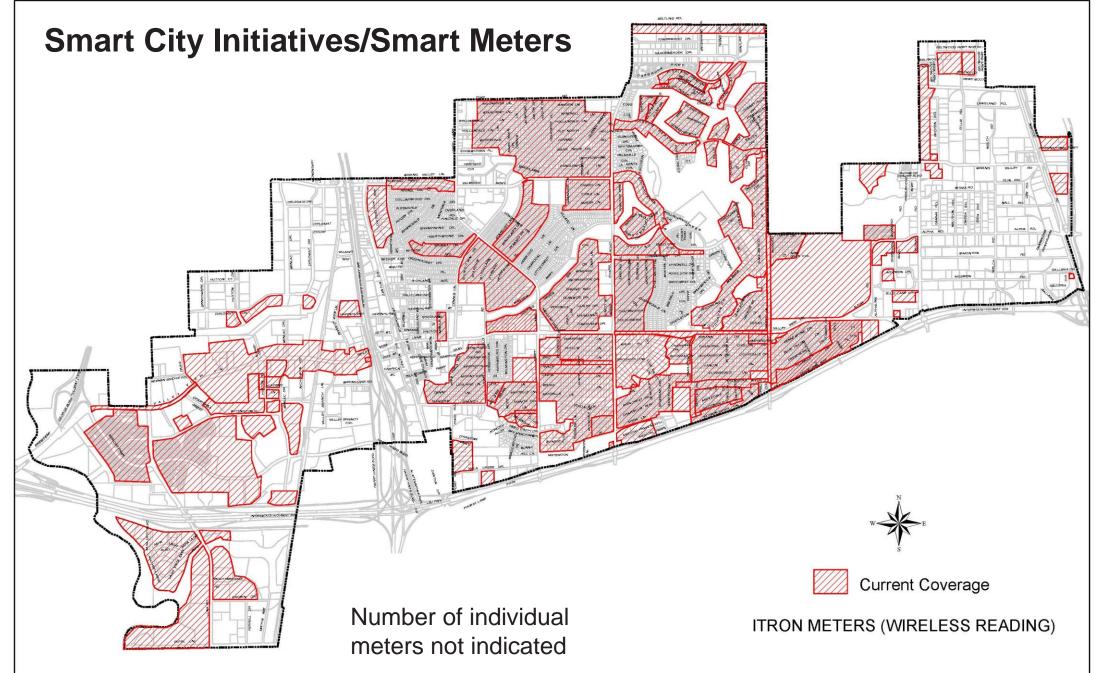
- Budget \$2,500,000
- Water Line Projects
  - Tom Field Valley View to Farmers Branch Lane (\$436K)
  - Dennis Ln Valley View to Richland (\$368K)
  - Richland Ave Dennis to Pyramid (\$232K)
  - Tom Field Richland to Rawhide (\$189K)
  - Pyramid Dr. Richland to Rawhide (\$179K)
  - Heartside Pl. Josey to Rawhide (\$314K)
  - Janwood Ln Josey to Rawhide (\$266K)
  - Balance of funds Projects from Prioity List (Total \$17M)
- New EPA Lead & Copper Program
  - Inventory & Testing required Cost: \$275,000 (Phase 1)
  - Five Phase Program Cost: TBD



## **Inflow & Infiltration Reduction:**

- Budget \$1,300,000
- Sanitary Sewer Projects
  - Oxfordshire & Mark Twain Heartside to Webb Chapel (\$386K)
  - Mark Twain & Valwood Heartside to Dennis (\$234K)
  - Joanna Dr. Dutch Valley to Webb Chapel (\$182K)
  - Littlecrest & Rawhide Josey to 13517 Littlecrest (\$174K)
  - Old North & Joanna Heartside to 2974 Old North (\$179K)
  - Manhole Rehab \$150K







#### **SMART METER BASICS**

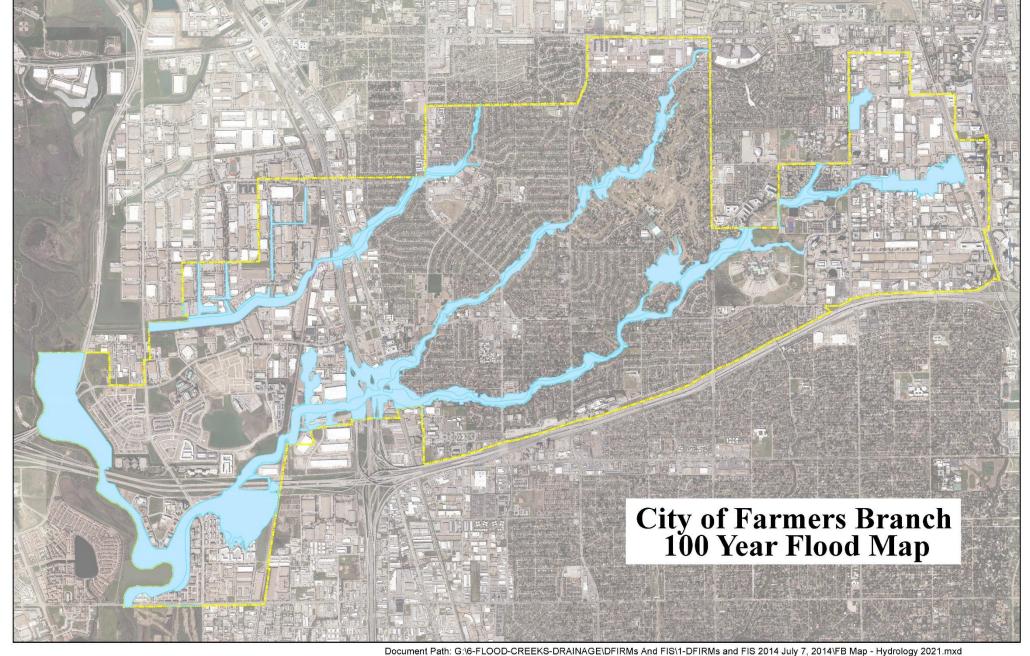
- How they work Wireless Communications
- Benefits to Customers
  - Track Water Usage
  - Education on Usage
  - Alert to Possible Leak
  - Fewer Misreads
- Sustainability Benefits
  - Water Conservation
- Accuracy
  - Old Meter less Accurate
- Affects on Staffing
  - Readers become Technicians



#### **SMART METER FUNDING**

- Annual Budget
  - Annual Hosting & Maintenance Fee \$25,000 (Increase with additional meters)
  - Large Meter Replacement 3" & Above Annual \$200K (Commercial)
- Project Cost (Residential Only)
  - Meters ¾" & 1" \$325K (City to purchase)
  - Meter Boxes \$350K (City to purchase)
  - Installation of Meter & Meter Box by Contractor \$700K
  - Itron Endpoint \$300K (City to purchase and install)
  - \$125K Software update required
  - Total Project Cost \$1.8M
- Time Frame
  - Meters and Meter Boxes lead time 6-8 months
  - Order to be placed in October 2022 or 12% increase







### HOMES IN FLOODPLAIN BY DRAINAGE BASIN

- Farmers Branch Creek
   Floodplain 96 Homes
   Affect Floodway 15 Homes
- Rawhide Creek
   Floodplain 45 Homes
   Affect Floodway 5 Homes
- Cooks Creek
   Floodplain 90 Homes & 11 Apartment Buildings
   Affect Floodway -23 Homes
- Total 231 Homes in Floodplain of which 43 affect Floodway



#### Farmers Branch Creek Update

#### Priority List Legend:

- Blue Line: Complete or Not Considered
- Red Line: Completed in 2020
- A City Facilities (Completed)
- B Reach 1 Projects (Completed 2022)
- C Reach 2 Projects (Scheduled 2023)
- D − Reach 3 Projects (Completed 2022)
- ADD Reach 4 (Const. 2023)

(Related to Rank 28 – FC2 – Alt 1)

#### TOTAL SPENT TO DATE: \$6.2M

#### Projects & Budget 2022-2023:

Budget \$2.0M

- Reach 2 (C) \$800K
- Reach 4 \$800K
- NPP for wall repair \$100K/yr
- Mallon Park Pond Dredging \$450K (if funds available)

Farmers Branch Watershed Study - CIP Project Rankings					
Rank	Reference Address	Project Type	Project ID	Project Cost	Score
-1	Webb Chapel Rd Bridge	Erosion Control	E16	\$623,700	19.9
2 C	3100 Block of Brookhollow Dr	Erosion Control	E12	\$764,340	17.3
-3	2900 Block of Maydelle Ln	Erosion Control	E20	<del>\$76,560</del>	16.7
-4	12200 Block of Treeview Lit	Erosion Control	E21	\$243,330	16.5
5 A	3500 Block of Valley View Ln	Erosion Control	E7	\$1,138,840	15.9
-6	3300 Block of Chaparral Dr	Erosion Control	E9	\$117,690	15.6
7	3100 Block of Brookhollow Dr	Erosion Control	E10	\$214,110	15.3
-8-	3300 Block of Valley View Ln	Erosion Control	E8	\$128,230	14.7
-3	Farmers Branch Lane	Flood Risk Reduction	FC1-Alt2	\$5,000,000	14.6
-10	Josey Lane to Veronica Road	Flood Risk Reduction	FC2-Alt2	\$5,000,000	14.5
11 C	3200 Block of Brincrest Dr	Erosion Control	E14	\$42,550	14.3
12 🗋	2900 Block of Maydelle Ln	Erosion Control	E19	\$47,320	13.7
13 C	Lost Vally Dr	Erosion Control	E13	\$163,980	13.7
14 B	13100 Block of Glad Acres Dr	Erosion Control	E6	\$309,850	13.4
15 B	13200 Block of Cedar Ln	Erosion Control	E5	\$495,010	13.1
16 B	13800 Block of New Bark Cir	Erosion Control	E3	\$267,050	12.5
17 B	13800 Block of Wooded Creek Dr	Erosion Control	E4	\$53,020	12.1
18	2900 Block of Maydelle Ln	Erosion Control	E18	\$29,700	12.1
19	3000 Block of Selma Ln	Erosion Control	E17	\$131,950	11.8
20 🕻	3200 Block of Brincrest Dr	Erosion Control	E15	\$139,740	11.4
-21	Farmers Branch Lane	Flood Risk Reduction	FC1-Alt1	\$2,000,000	11.4
-22	3700 Block of Wooded Creek Ln	Erosion Control	E2	\$130,620	11.1
-23	3300 Block of Valley View Lin	Erosion Control	E1	\$1,388,130	10.0
24 C	12200 Block of Brisbane Ave	Erosion Control	E11	\$105,730	9.9
-24	2800 Block of Reederoft Dr	- Erosion Control	E22	\$59,250	9.9
-26	Marsh Lane	Flood Risk Reduction	FC3-Alt2	\$5,000,000	9.5
<del>-27</del>	2700 Block of Farmers Branch Ln	Erosion Control	E23	\$55,690	9.4
-28	Josey Lane to Veronica Road	Flood Risk Reduction	FC2-Alt1	\$2,000,000	9.3
-29	Marsh Lane	Flood Risk Reduction	FC3-Alt1	\$2,000,000	8.0

- Reach 1 Valley View to North City Limits
- Reach 2 Webb Chapel to Valley View
- Reach 3 Veronica to Webb Chapel
- Reach 4 Josey to Veronica



# **Stormwater Utility:**

A Non-Bond CIP fund has been created for Stormwater Utility

- Budget \$2,030,000
- Expenditures
  - Scheduled Projects- \$1.7M
  - MS4 Consultant \$40K
  - Street Sweeping & GIS Analyst \$84,800 (Transfer to General Fund)
  - Cooks Creek Channel Improvements Projected shortfall of \$350K



#### PUBLIC WORKS DEPARTMENT

- Budget Overview
  - 7.1% of General Fund
  - Smallest Budget of All Large Departments (50 or more)
  - Minimal Increases (mainly due to inflation)
  - Personnel Adjustments
  - Request for 1 New position (Traffic Technician)
    - Position Needed for past 10 years
    - Currently have 2 Traffic Techs
    - Workload excessive for crew of 2
    - Failure to meet 5 PM's per month on signals
    - Reduce street crews to provide assistance





# DISCUSSION