COUNCIL BUDGET BRIEFING

August 22, 2011

DATE

(FOR GENERAL INFORMATION AND RULES OF COURTESY PLEASE SEE OPPOSITE SIDE.)

(LA INFORMACIÓN GENERAL Y REGLAS DE CORTESÍA QUE DEBEN OBSERVARSE DURANTE LAS ASAMBLEAS DEL CONSEJO MUNICIPAL APARECEN EN EL LADO OPUESTO, FAVOR DE LEERLAS.)
The Dallas City Council regularly meets on Wednesdays beginning at 9:00 a.m. in the Council Chambers, 6th floor, City Hall, 1500 Marilla. Council agenda meetings are broadcast live on WRR-FM radio (101.1 FM) and on Time Warner City Cable Channel 16. Briefing meetings are held the first and third Wednesdays of each month. Council agenda (voting) meetings are held on the second and fourth Wednesdays. Anyone wishing to speak at a meeting should sign up with the City Secretary's Office by calling (214) 670-3738 before 9:00 a.m. on the meeting date. Citizens can find out the name of their representative and their voting district by calling the City Secretary's Office.

Sign interpreters are available upon request with a 48-hour advance notice by calling (214) 670-5208 V/TDD. The City of Dallas is committed to compliance with the Americans with Disabilities Act. The Council agenda is available in alternative formats upon request.

If you have any questions about this agenda or comments or complaints about city services, call 311.

Rules of Courtesy

City Council meetings bring together citizens of many varied interests and ideas. To insure fairness and orderly meetings, the Council has adopted rules of courtesy which apply to all members of the Council, administrative staff, news media, citizens and visitors. These procedures provide:

- That no one shall delay or interrupt the proceedings, or refuse to obey the orders of the presiding officer.
- All persons should refrain from private conversation, eating, drinking and smoking while in the Council Chamber.
- Posters or placards must remain outside the Council Chamber.
- No cellular phones or audible beepers allowed in Council Chamber while City Council is in session.

"Citizens and other visitors attending City Council meetings shall observe the same rules of propriety, decorum and good conduct applicable to members of the City Council. Any person making personal, impertinent, profane or slanderous remarks or who becomes boisterous while addressing the City Council or while attending the City Council meeting shall be removed from the room if the sergeant-at-arms is so directed by the presiding officer, and the person shall be barred from further audience before the City Council during that session of the City Council. If the presiding officer fails to act, any member of the City Council may move to require enforcement of the rules, and the affirmative vote of a majority of the City Council shall require the presiding officer to act." Section 3.3(c) of the City Council Rules of Procedure.

Informacion General

El Ayuntamiento de la Ciudad de Dallas se reúne regularmente los miércoles en la Cámara del Ayuntamiento en el sexto piso de la Alcaldía, 1500 Marilla, a las 9 de la mañana. Las reuniones informativas se llevan a cabo el primer y tercer miércoles del mes. Estas audiencias se transmiten en vivo por la estación de radio WRR-FM 101.1 y por cablevisión en la estación Time Warner City Cable Canal 16. El Ayuntamiento Municipal se reúne el segundo y cuarto miércoles del mes para tratar asuntos presentados de manera oficial en la agenda para su aprobación. Toda persona que desee hablar durante la asamblea del Ayuntamiento, debe inscribirse llamando a la Secretaría Municipal al teléfono (214) 670-3738, antes de las 9 de la mañana del día de la asamblea. Para enterarse del nombre de su representante en el Ayuntamiento Municipal y el distrito donde usted puede votar, favor de llamar a la Secretaría Municipal.

Intérpretes para personas con impedimentos auditivos están disponibles si lo solicita con 48 horas de anticipación llamando al (214) 670-5208 (aparato auditivo V/TDD). La Ciudad de Dallas se esfuerza por cumplir con el decreto que protege a las personas con impedimentos, Americans with Disabilities Act. La agenda del Ayuntamiento está disponible en formatos alternos si lo solicita.

Si tiene preguntas sobre esta agenda, o si desea hacer comentarios o presentar quejas con respecto a servicios de la Ciudad, llame al 311.

Reglas de Cortesía

Las asambleas del Ayuntamiento Municipal reúnen a ciudadanos de diversos intereses e ideologías. Para asegurar la imparcialidad y el orden durante las asambleas, el Ayuntamiento ha adoptado ciertas reglas de cortesía que aplican a todos los miembros del Ayuntamiento, al personal administrativo, personal de los medios de comunicación, a los ciudadanos, y a visitantes. Estos reglamentos establecen lo siguiente:

- Ninguna persona retrasará o interrumpirá los procedimientos, o se negará a obedecer las órdenes del oficial que preside la asamblea.
- Todas las personas deben de abstenerse de entablar conversaciones, comer, beber y fumar dentro de la cámara del Ayuntamiento.
- Anuncios y pancartas deben permanecer fuera de la cámara del Ayuntamiento.
- No se permite usar teléfonos celulares o enlaces electrónicos (pagers) audibles en la cámara del Ayuntamiento durante audiencias del Ayuntamiento Municipal.

"Los ciudadanos y visitantes presentes durante las asambleas del Ayuntamiento Municipal deben de obedecer las mismas reglas de comportamiento, decoro y buena conducta que se aplican a los miembros del Ayuntamiento Municipal. Cualquier persona que haga comentarios impertinentes, utilice vocabulario obsceno o difamatorio, o que al dirigirse al Ayuntamiento lo haga en forma escandalosa, o si causa disturbio durante la asamblea del Ayuntamiento Municipal, será expulsada de la cámara si el oficial que esté presidiendo la asamblea así lo ordena. Además, se le prohibirá continuar participando en la audiencia ante el Ayuntamiento Municipal. Si el oficial que preside la asamblea no toma acción, cualquier otro miembro del Ayuntamiento Municipal puede tomar medidas para hacer cumplir las reglas establecidas, y el voto afirmativo de la mayoría del Ayuntamiento Municipal precisará al oficial que esté presidiendo la sesión a tomar acción." Según la sección 3.3(c) de las reglas de procedimientos del Ayuntamiento.
AGENDA
CITY COUNCIL BUDGET WORKSHOP
MONDAY, AUGUST 22, 2011
CITY HALL
1500 MARILLA
DALLAS, TEXAS 75201
10:00 A.M.

10:00 am Invitation and Pledge of Allegiance

Briefings

A. FY 2011-12 Water Utilities Proposed Budget
B. FY 2011-12 Building Inspection Proposed Budget

Lunch

C. Park and Recreation Department - Aquatics Master Plan
D. Capital Construction, Operations & Maintenance of Dallas Streets & Thoroughfares

Adjournment

The above schedule represents an estimate of the order for the indicated briefings and is subject to change at any time. Current agenda information may be obtained by calling (214) 670-3100 during working hours.

Note: An expression of preference or a preliminary vote may be taken by the Council on any of the briefing items.
A closed executive session may be held if the discussion of any of the above agenda items concerns one of the following:

1. Contemplated or pending litigation, or matters where legal advice is requested of the City Attorney. Section 551.071 of the Texas Open Meetings Act.

2. The purchase, exchange, lease or value of real property, if the deliberation in an open meeting would have a detrimental effect on the position of the City in negotiations with a third person. Section 551.072 of the Texas Open Meetings Act.

3. A contract for a prospective gift or donation to the City, if the deliberation in an open meeting would have a detrimental effect on the position of the City in negotiations with a third person. Section 551.073 of the Texas Open Meetings Act.

4. Personnel matters involving the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of a public officer or employee or to hear a complaint against an officer or employee. Section 551.074 of the Texas Open Meetings Act.

5. The deployment, or specific occasions for implementation of security personnel or devices. Section 551.076 of the Texas Open Meetings Act.

DATE: August 19, 2011

TO: Honorable Mayor and Members of the City Council

SUBJECT: Water Utilities Department Overview of Proposed FY11-12 Budget Briefing

On Monday, August 22, 2011, you will be briefed on the Water Utilities Department Overview of Proposed FY11-12 Budget. The presentation material is attached for your review.

If you have questions or need additional information, please let me know.

Forest E. Turner
Assistant City Manager

Attachment

cc: Mary K. Suhm, City Manager
Rosa Rios, Interim City Secretary
Thomas P. Perkins, Jr., City Attorney
Craig D. Kinton, City Auditor
C. Victor Lander, Administrative Judge
A.C. Gonzalez, First Assistant City Manager
Ryan S. Evans, Assistant City Manager
Jill A. Jordan, P.E., Assistant City Manager
Joey Zapata, Interim Assistant City Manager
Jeanne Chipperfield, Chief Financial Officer
Frank Librio, Public Information Office
Helena Stevens-Thompson, Assistant to the City Manager

“Dallas – Together, we do it better!”
Water Utilities Department
Overview of Proposed FY11 - 12 Budget
August 22, 2011
Purpose

This briefing provides an overview of Dallas Water Utilities’ recommended FY11-12 Budget
Dallas Water Utilities: FY11-12 Budget Focus

- Dallas Water Utilities is a large, municipally owned regional water/wastewater supplier
  - Costs are driven by infrastructure requirements for both growth and renewal
  - Responsibility for planning to meet water requirements for service area
  - Self-supporting

- Proposed budget continues the focus on maintaining infrastructure and conserving resources through:
  - Water and wastewater systems maintenance
  - Pro-active detection of water system leaks
  - Water conservation efforts
  - Annual replacement rate of 1.5% for aged water and wastewater mains
Dallas Water Utilities

- The Proposed Budget includes Operating Budget of $551.6M and Capital Budget of $276.7M
- Overall retail rate increase of 5.9%
- Continue to provide high quality and sufficient water/wastewater services to meet current and future customer needs
- Continue Water Conservation Program to reduce per capita water consumption
- Provide wholesale water and wastewater services by contract based on cost of service. On average, wholesale customers retail rates are 12% higher than Dallas

Future Considerations
- Operational outlook
  - Drought conditions
  - Required restriction in water treatment capacity due to East Side Water Treatment Plant expansion and associated water quality improvements
- Estimated retail rates outlook
  - FY2013: 7.3% increase
  - FY2014: 6.9% increase
Dallas Water Utilities is funded from water and wastewater revenues and receives no tax dollars

- Approximately 1,500 employees
- Population served (treated water)
  - 1.2 million - City of Dallas
  - 1.1 million wholesale customer cities
- 699 square mile service area
- 306,000 retail customer accounts
- 5,130 miles of water mains
- 4,340 miles of wastewater mains
- 3 water treatment plants
- 2 wastewater treatment plants
- Wholesale customers
  - 23 treated water
  - 3 untreated water
  - 11 wastewater
Where We Are Today

- **Surface water** is “owned” by the State of Texas, who in turn, grants permits for its beneficial use
- Dallas’ existing water rights were granted by the State based on serving the needs of Dallas and its customer cities
- Both Dallas and customer cities enjoy lower water rates because of a regional approach to water acquisition and supply
  - Dallas has had a successful relationship with its customer cities for more than 50 years, and has shared costs with customer cities based on a 30-year Memorandum of Agreement (MOA)
  - FY12 budget includes wholesale rate increase of 3.2%
- Dallas currently has water to meet its needs, but even with conservation and reuse, additional water supply sources will be needed by 2035
- Dallas and other area water agencies are looking for additional water sources to meet projected needs through 2060
  - Regional approach for new water sources is more efficient and reduces costs
- Since Senate Bill 1 was passed in 1997, Dallas has been part of the Region C Planning Group, which includes a 16 county area
Utility Overview

- Capital intensive operation with assets of over $4.8B including:
  - Water Supply-$0.5B
  - Treatment Plants-$1.5B
  - Water/Wastewater Pipeline-$2.8B
- Utilize 10 year capital improvement program (CIP) supported by system master planning
- Use Financial Management Performance Criteria (FMPC), including:
  - Dallas Water Utilities funds solely for use of the utility
  - Commercial Paper used for interim financing of capital projects
  - Long-term debt used only for capital infrastructure (30 year debt)
  - Debt service coverage should be at least 1.3 times at all times and 1.5 times at fiscal year-end
- Customer cities rates based on 2010 MOA and contractual agreement
- Strict adherence to TCEQ/EPA regulations
As of 8/15/11 FY11 consumption is 3% or 5.3 BG below FY11 Budget.
Sustainability Actions

- Dallas built its water system to meet the drought of record
  - The drought of record is the worst recorded drought used for planning municipal water supplies
  - Dallas’ drought of record was a seven year period in the 1950’s
- To minimize water usage, Dallas has undertaken several sustainability actions
  - Leak detection
  - Maintenance and repair
  - Conservation and reuse
- Actions are to sustain what we have, and add new sources to meet future growth
Sustainability Initiatives

- **Major Maintenance Initiatives**
  - Continuing to reduce water loss by expanding leak detection program
  - Unaccounted For Water was 9.7% for FY10 and 9.6% year to date for FY11 with an industry goal of 10%
  - Increased large wastewater main assessment and replacement
  - Maintains an annual replacement rate of 1.5% for aged mains

- **Focus on Infrastructure Rehabilitation and Maintenance**
  - For the prior four years, approximately half of the Capital Program went for the maintenance of existing infrastructure
  - For FY12, $164.5M of the $276.7M capital program is budgeted for water/wastewater main replacements and infrastructure rehab

- **Dividends from enhanced conservation initiatives**
  - 36 MGD savings in water from 2001 to 2010
  - Equates to 76% of the 47.4 MGD goal for 2060

- **Reuse Initiatives** – 88 MGD identified in current efforts
  - Working with other agencies for reuse water
    - 40 MGD to Lake Ray Hubbard
    - 48 MGD to Lake Lewisville
  - Cedar Crest golf course (less than 1 MGD), and Stevens Park under construction
Dallas’ Water Supply

- Dallas’ plan is to have enough water during a drought equal to the 1950s drought of record
- Dallas’ planned new water supply sources are based on:
  - Costs – capital construction and power
  - Efficiency
  - Environmental impact
  - Likelihood for development
- Water located closer to the City is generally less expensive
  - Lower infrastructure costs due to shorter pipelines
  - Lower pumping (energy) costs – a recurring, annual expense
- Close-in water has been 100% allocated by the State
- Future water will be farther away and much more expensive
- Working with other area water providers to achieve greater economies of scale in an effort to reduce costs
Economic Impacts of an Inadequate Water Supply

If water is unavailable, State’s 2060 estimates for Region C, including Dallas:

- Population reduced by one million (7%)
- Employment off by 700,000 jobs (17%)
- Income shrinks by $58.8 billion (21%)

Providing sufficient water comes at a price:

- Even with $200M in savings from regional participation in the Council adopted IPL project, it will cost Dallas approximately $1B to connect Lake Palestine
- Plan is to spread costs out 10+ yrs
- Results in annual rate increases
FY11-12 Proposed Operating Budget
2012 Budget Provides the Following Services

- 157.6 BG of water treated and delivered
- 70.0 BG of wastewater treated
- Capital Improvement Program of $276.7M
- Continuation of plant expansion at Eastside Water Treatment Plant and replacement of aged water and wastewater mains
- Meets all Financial Management Performance Criteria
- Meets all State and Federal water and wastewater quality requirements
- Continues conservation initiatives to reduce water use
Major Expenditure Impacts

- Recommended Expenditures of $551.6M
  - Integrated Pipeline Project to connect Lake Palestine - $3.8M
  - Capital Funding increase - $10.9M
    - Revenue bond sale of $185M Spring 2012
  - Last year of PILOT phase-in from 90% to 100% - $3.1M
  - Conservation program additions - Industrial, Commercial and Institutional (ICI) customers incentives and training - $1.3M
  - Other O&M costs, including full year funding for leak detection and repair crews and operations for Lake Fork Pump Station - $1.4M
FY 12 Capital Budget Funding

- Proposed Capital Budget of $276.7M funded by:
  - Cash Transfer - $70.1M
  - Commercial Paper (CP) for interim financing
    - Lower interest rates
    - Greater financing flexibility
  - Revenue bond debt
    - Approved by City Council
    - Used to pay off short term debt (CP)
    - 30 year term
- Meets all FMPC requirements
  - Bond Coverage budgeted at 1.61
  - Equity Funding of 25%

Lake Fork pipeline construction
FY12 Capital Improvement Program

- Capital Improvement Program (CIP) of $276.7M
- CIP includes projects categorized as:
  - Rehab and Replacement $164.5M
  - Regulatory $68.2M
  - Growth $44.0M

- Major FY12 projects include:
  - Pipeline Program - $80.6M
    - Construct 57 miles of pipeline as part of the replacement, relocation, growth, and private development programs
  - Elm Fork Improvements - $49.7M
    - Replace and renew obsolete and deteriorated equipment for improved reliability and efficiency
    - Clean sludge lagoons to ensure uninterrupted water production
    - Construct new Chlorine containment facility to secure long-term safety and reliability of the plant
FY12 Capital Improvement Program

- Major FY12 projects include:
  - Central WWTP Improvements - $44.1M
    - Rehabilitation of grit removal equipment at both Dallas and White Rock headworks to improve overall efficiency and reliability
    - Replace obsolete electrical infrastructures for improved reliability – transformers, high voltage cables, and switchgears
    - Renewal of badly deteriorated diversion structures to minimize the risk of sewer overflows and to improve flow diversion between plants
  - East Side WTP Expansion and Improvements - $29.0M
    - Filter media replacement and hydraulic improvements for meeting treated water regulations and reduced backwashing frequencies
    - Construct new electrical substation and distribution system to supply sufficient power to meet the 540 MGD plant expansion needs
  - Southside WWTP Improvements - $9.6M
    - Rehab and replace obsolete and/or deteriorated equipment and instrumentation for improved reliability
FY12 Proposed Retail Revenue Requirement

Proposed FY12 Budget $551,600,305

Preliminary Revenues at Current Rates ($525,827,810)

FY12 Preliminary Additional Revenue Requirement $25,772,495

= 5.9%* Proposed Retail Rate Increase

* A 7.4% preliminary rate increase was identified in the August 2010 Future Outlook Briefing to Council
Retail Rate Impact
# Impact of Proposed Rate Adjustment to Residential Water and Sewer Bills

<table>
<thead>
<tr>
<th>Customer Usage in Range</th>
<th>Average Bill at Current Rates</th>
<th>Proposed Average Rates</th>
<th>Proposed Increase</th>
<th>% Increase</th>
<th>Number of Customers Impacted</th>
<th>% of Customers in Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 4,000 gallons</td>
<td>$21.52</td>
<td>$22.56</td>
<td>$1.03</td>
<td>4.8%</td>
<td>73,876</td>
<td>31.3%</td>
</tr>
<tr>
<td>4,001 to 10,000 gallons</td>
<td>$50.02</td>
<td>$52.84</td>
<td>$2.81</td>
<td>5.6%</td>
<td>98,507</td>
<td>41.8%</td>
</tr>
<tr>
<td>10,001 to 15,000 gallons</td>
<td>$70.10</td>
<td>$74.24</td>
<td>$4.14</td>
<td>5.9%</td>
<td>27,702</td>
<td>11.8%</td>
</tr>
<tr>
<td>Above 15,000 gallons</td>
<td>$171.49</td>
<td>$183.40</td>
<td>$11.90</td>
<td>6.9%</td>
<td>35,661</td>
<td>15.1%</td>
</tr>
<tr>
<td>(Includes conservation tier rate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>235,746</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note: 85% of residential customers will see an average monthly bill increase of $4.14 or less. Data based on January 2010 through December 2010 usage.

- a Average water and sewer use: 2,271 gallons
- b Average water use 6,497 gallons and sewer use: 6,400 gallons
- c Average water use 12,087 gallons and sewer use: 6,400 gallons
- d Average water use 30,308 gallons and sewer use: 6,400 gallons
Impact of Proposed 5.9% Rate Increase

- Typical monthly residential water and wastewater bill would increase from $55.69 to $58.87
  - Based on water use of 8,300 gallons and 6,400 gallons Winter Months Average for sewer
- US EPA affordability guideline for wastewater bills is 2% of median income
  - Dallas’ wastewater bills would be 1.7% of median income
Future Outlook
Future Forecast Considerations

- Continued maintenance of water and wastewater systems
- Trends in power, fuel, chemicals and contracts with others
- Trends in water sales, conservation and the weather
- Implementation of the Integrated Pipeline Project
- Implementation of master plan and major maintenance recommendations for capital improvements program (CIP)
- Forecasts will change as numbers are refined
Five Year Capital Improvement Program
Basis for Capital Planning

- CIP includes three major categories:
  - Regulatory
    - Projects initiated due to changes in regulation by the Federal, State, or local governing agencies in regards to treatment processes, security issues, power reduction, air quality, dam safety, building codes, etc.
  - Growth
    - Projects identified in master planning efforts as required in anticipation of growth demands and projects in support of private development needs.
  - Rehab and Replacement
    - Projects requiring renewal of existing infrastructure or equipment that are beyond their useful life and causing operational inefficiency, costly maintenance, or repeated failure that negatively impacts customer service delivery. This category also includes replacement of pipelines in concert with proposed paving projects.
Capital Program Development

- Major capital improvements are guided by master plans and consider:
  - impending legislation for regulatory impact
  - population growth patterns
  - usage and demand patterns
  - scheduled maintenance

- 5 and 10 year Capital Program projections are developed to prioritize and schedule projects enabling the City’s water and wastewater systems to operate efficiently and economically

- Council approves Capital Program funding annually as part of the budget process

- Capital Program is typically funded by a combination of cash and debt
### FY12 - FY 16 Capital Improvement Programs

<table>
<thead>
<tr>
<th></th>
<th>FY 11-12</th>
<th>FY 12-13</th>
<th>FY 13-14</th>
<th>FY 14-15</th>
<th>FY 15-16</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory</td>
<td>$68.2M</td>
<td>$51.1M</td>
<td>$28.0M</td>
<td>$40.6M</td>
<td>$4.6M</td>
<td>$192.5M</td>
</tr>
<tr>
<td>Growth</td>
<td>$44.0M</td>
<td>$65.7M</td>
<td>$22.6M</td>
<td>$32.1M</td>
<td>$150.9M</td>
<td>$315.3M</td>
</tr>
<tr>
<td>Rehab and Replacement</td>
<td>$164.5M</td>
<td>$195.5M</td>
<td>$305.9M</td>
<td>$244.1M</td>
<td>$162.5M</td>
<td>$1,072.5M</td>
</tr>
<tr>
<td>Total</td>
<td>$276.7M</td>
<td>$312.3M</td>
<td>$356.5M</td>
<td>$316.8M</td>
<td>$318.0M</td>
<td>$1,580.3M</td>
</tr>
</tbody>
</table>
Future Outlook: Capital Improvement Program  (Amounts in Million Dollars)

Note: Does not include cost of additional future water supply acquisitions
FY12 - FY 16 Capital Project Systems

- Raw Water Supply, Reservoirs, Dams, Pumping, and Transmission - $82.1M
  - Rehab Iron Bridge Pump Station to improve reliability and increase capacity
  - Repair Carrollton, California Crossing, Frasier, and Bachman Dams to meet safety regulations

- W & WW Pipelines, Pump Stations, Storage Facilities, and Meter Vaults - $589.2M
  - Continue replacement of deteriorated infrastructures and pipelines
  - Continue building new infrastructures to support development and growth demands

- Elm Fork Water Treatment Plant Improvements - $343.7M
  - Complete all water quality projects to convert to enhanced coagulation and biological active filtration to meet regulatory requirements
    - Sedimentation basin conversion to enhanced coagulation
    - Filter backwash and solids handling to facilitate biological active filtration
    - Modification to chemical addition lines and facilities – ammonia, chlorine, orthophosphate, ferric sulfate
    - Sludge handling improvements
  - Rehab deteriorated pump station #1 for improved reliability
FY12 - FY 16 Capital Project Systems

Bachman Water Treatment Plant Improvements - $58.1M
- Complete all water quality projects to convert to enhanced coagulation and biological active filtration to meet regulatory requirements
  - Chemical rapid mix improvements to optimize chemical addition and settlement of floc
  - Modification of ammonia and chlorine addition feed points eliminate nitrification and improve water stability and pH control
- Sludge lagoon cleaning
- Rehab of pump station #1

Eastside Water Treatment Plant Improvements - $166.9M
- Complete all water quality projects to convert to enhanced coagulation and biological active filtration to meet regulatory requirements
  - Sedimentation basin conversion to improve water stability
  - Filter/hydraulic improvements to optimize organics removal causing nitrification
  - Residuals recovery to improve overall plant efficiency and eliminate recycling of filter backwash
- Complete 540 MGD plant expansion
  - Construct Stage 4 sedimentation basins to meet future demands
  - Construct Stage 5 filters to increase plant capacity and meet future demands
FY12 - FY 16 Capital Project Systems

- **Southside WW Treatment Plant Improvements - $94.8M**
  - Build new peak flow basin #5 and rehab peak flow basin #'s 1, 2 &3 to better manage wet weather flow events
  - Construct new grease digestion facility to maximize co-generation facility to increase power generation
  - Replace deteriorated grit removal system with more efficient system to reduce power consumption at the plant
  - Hickory Creek Interceptor Improvements

- **Central WW Treatment Plant Improvements - $179.6M**
  - Rehab badly deteriorated primary clarifiers to extend the life of the facility
  - Rehab deteriorated White Rock pump station to improve reliability
  - Construct new peak flow basin D to increase storage capacity and better manage wet weather flows
  - Construct stormwater facilities to eliminate run-off and eliminate flooding at the plant
  - Construct chemical feed polishing facility for enhanced biological phosphorus removal to meet regulatory change
Future Outlook: Retail Rate Increases

Note: Dallas Estimated Share of IPL project is $832M; with estimated capital savings of $196M
Summary

- Dallas Water Utilities is a large, municipally owned regional water/wastewater utility provider
  - Self-supporting
  - Costs are driven by infrastructure requirements for both growth and renewal
  - Responsibility for planning to meet water requirements for Dallas and service area

- Recommend Proposed Operating Budget of $551.6M
  - Average retail rate increase of 5.9%
  - Typical bill increases $3.18/month

- Recommend Proposed Capital Budget of $276.7M

- Budget increase primarily driven by increases in debt to fund capital projects
# Services by Key Focus Areas

<table>
<thead>
<tr>
<th>Service Number</th>
<th>Economic Vibrancy</th>
<th>Clean Healthy Environment</th>
<th>E3 Government</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY 11 Budget</td>
<td>FY 11 Estimate as of June FTA</td>
<td>FY 12 Proposed Budget</td>
<td></td>
</tr>
<tr>
<td>2.61</td>
<td>Water Capital Funding</td>
<td>$252,754,883</td>
<td>$235,983,531</td>
<td>$267,111,055</td>
</tr>
<tr>
<td>2.62</td>
<td>Water Production &amp; Delivery</td>
<td>$100,404,142</td>
<td>$98,575,150</td>
<td>$100,886,708</td>
</tr>
<tr>
<td>2.63</td>
<td>Water Utilities Capital Program Management</td>
<td>$13,213,687</td>
<td>$12,930,406</td>
<td>$13,464,228</td>
</tr>
<tr>
<td>3.36</td>
<td>Wastewater Collection</td>
<td>$16,477,259</td>
<td>$16,419,676</td>
<td>$16,758,918</td>
</tr>
<tr>
<td>3.37</td>
<td>Wastewater Treatment</td>
<td>$48,411,040</td>
<td>$48,153,595</td>
<td>$48,796,287</td>
</tr>
<tr>
<td>3.39</td>
<td>Water Conservation</td>
<td>$5,391,708</td>
<td>$5,388,834</td>
<td>$6,607,759</td>
</tr>
<tr>
<td>6.71</td>
<td>Water Planning, Financial and Rate Services</td>
<td>$3,244,995</td>
<td>$2,757,552</td>
<td>$3,160,024</td>
</tr>
<tr>
<td>6.72</td>
<td>Water Utilities Customer Account Services</td>
<td>$21,471,647</td>
<td>$21,281,672</td>
<td>$21,543,938</td>
</tr>
<tr>
<td>6.70</td>
<td>Vital Statistics</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.73</td>
<td>DWU General Expense</td>
<td>$69,870,934</td>
<td>$68,749,905</td>
<td>$72,859,818</td>
</tr>
<tr>
<td>6.21</td>
<td>City GIS Services</td>
<td>$100,202</td>
<td>$18,235</td>
<td>$411,570</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$531,340,497</td>
<td>$510,258,556</td>
<td>$551,600,305</td>
<td></td>
</tr>
</tbody>
</table>
Components of Water Utilities Revenues

Interest Income $4.0M
Interest earned on cash in various department funds

Other Fees & Charges $4.7M
Includes full cost recovery for miscellaneous fees and charges such as permits and cross connection fees

Wholesale Sales $82.5M
Revenue earned from sales to wholesale customers for treated water, untreated water and wastewater services

Retail Sales $460.4M
Revenue from sales to retail customers for water and wastewater services including residential, commercial, industrial and municipal

Total Revenues $551.6M
Retail Rates
## Dallas Water Utilities Monthly Payment Rates

<table>
<thead>
<tr>
<th>Customer Charge</th>
<th>Current Water</th>
<th>Proposed Water</th>
<th>Current Sewer</th>
<th>Proposed Sewer</th>
<th>Combined</th>
<th>Proposed Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8 Inch Meter</td>
<td>$4.18</td>
<td>$4.20</td>
<td>3.95</td>
<td>4.10</td>
<td>$8.13</td>
<td>$8.30</td>
</tr>
<tr>
<td>3/4 Inch Meter</td>
<td>5.45</td>
<td>5.79</td>
<td>4.94</td>
<td>5.25</td>
<td>$10.39</td>
<td>$11.04</td>
</tr>
<tr>
<td>1 Inch Meter</td>
<td>7.90</td>
<td>8.40</td>
<td>7.16</td>
<td>7.61</td>
<td>$15.56</td>
<td>$16.01</td>
</tr>
<tr>
<td>1 1/2 Inch Meter</td>
<td>14.88</td>
<td>15.81</td>
<td>13.51</td>
<td>14.35</td>
<td>$28.39</td>
<td>$30.17</td>
</tr>
<tr>
<td>2 Inch Meter</td>
<td>23.21</td>
<td>24.67</td>
<td>21.09</td>
<td>22.41</td>
<td>$44.30</td>
<td>$47.08</td>
</tr>
<tr>
<td>3 Inch Meter</td>
<td>59.68</td>
<td>59.18</td>
<td>50.51</td>
<td>53.79</td>
<td>$109.29</td>
<td>$112.97</td>
</tr>
<tr>
<td>4 Inch Meter</td>
<td>52.80</td>
<td>58.63</td>
<td>54.33</td>
<td>69.62</td>
<td>$177.12</td>
<td>$186.25</td>
</tr>
<tr>
<td>6 Inch Meter</td>
<td>185.57</td>
<td>197.22</td>
<td>168.66</td>
<td>179.25</td>
<td>$354.23</td>
<td>$376.47</td>
</tr>
<tr>
<td>8 Inch Meter</td>
<td>310.70</td>
<td>330.20</td>
<td>282.51</td>
<td>300.24</td>
<td>$593.21</td>
<td>$630.44</td>
</tr>
<tr>
<td>10 Inch Meter or larger</td>
<td>475.11</td>
<td>504.93</td>
<td>430.08</td>
<td>457.08</td>
<td>$905.19</td>
<td>$962.01</td>
</tr>
</tbody>
</table>

### Usage Charge per 1,000 gallons

<table>
<thead>
<tr>
<th>Residential</th>
<th>Current Water</th>
<th>Proposed Water</th>
<th>Current Sewer</th>
<th>Proposed Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 4,000 gallons</td>
<td>1.55</td>
<td>1.68</td>
<td>4.34</td>
<td>4.60</td>
</tr>
<tr>
<td>4,001 to 10,000 gallons</td>
<td>3.15</td>
<td>3.35</td>
<td>4.34</td>
<td>4.60</td>
</tr>
<tr>
<td>10,001 to 15,000 gallons</td>
<td>4.33</td>
<td>4.63</td>
<td>4.34</td>
<td>4.60</td>
</tr>
<tr>
<td>Above 15,000 gallons</td>
<td>5.80</td>
<td>6.26</td>
<td>4.34</td>
<td>4.60</td>
</tr>
</tbody>
</table>

**General Services**

<table>
<thead>
<tr>
<th></th>
<th>Current Water</th>
<th>Proposed Water</th>
<th>Current Sewer</th>
<th>Proposed Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 10,000 gallons</td>
<td>2.14</td>
<td>2.35</td>
<td>2.85</td>
<td>3.04</td>
</tr>
<tr>
<td>Above 10,000 gallons</td>
<td>2.61</td>
<td>2.85</td>
<td>2.85</td>
<td>3.04</td>
</tr>
<tr>
<td>Above 10,000 gallons for usage more than 1.4 times annual monthly average</td>
<td>3.83</td>
<td>4.12</td>
<td>2.85</td>
<td>3.04</td>
</tr>
</tbody>
</table>

**Optional General Services**

<table>
<thead>
<tr>
<th></th>
<th>Current Water</th>
<th>Proposed Water</th>
<th>Current Sewer</th>
<th>Proposed Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st million gallons or less (minimum)</td>
<td>1,650.21</td>
<td>1,753.79</td>
<td>2.79</td>
<td>2.92</td>
</tr>
<tr>
<td>Above 1 million gallons (per 1,000 gallons)</td>
<td>2.15</td>
<td>2.29</td>
<td>2.79</td>
<td>2.92</td>
</tr>
</tbody>
</table>

**Proposed rates effective Oct. 1, 2011**

The above Prompt Payment Rates apply if payment is received on or before the due date shown on the bill. These represent a 5% discount from the Standard Rates.

* Sewer Charges for residential accounts are calculated on an average of the water billed in December, January, February, and March (40,000 gallons maximum) or the actual month's water consumption, whichever is less. Sewer charges for general services and optional general services accounts are based on the month's water consumption unless sewer is metered separately.

Industrial wastewater discharge containing concentrations of BOD and/or Suspended Solids greater than 250 milligrams per liter are assessed sewer surcharges. Certain commercial users such as restaurants, bars/lounges, small food processors and equipment service facilities are assessed standard surcharges. These surcharges are included as part of the monthly bill.
# Proposed Miscellaneous Fee Changes

<table>
<thead>
<tr>
<th>Applications &amp; Deposits</th>
<th>Existing Fee</th>
<th>Proposed Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Service Application Fee</td>
<td>$13</td>
<td>$15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Charges for Use of Fire Hydrants</th>
<th>Existing Fee</th>
<th>Proposed Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Monthly Fire Hydrant Service Charge</td>
<td>$55.68</td>
<td>$59.18</td>
</tr>
</tbody>
</table>
Index Cities Comparison of Average Monthly Water & Sewer Residential Bills

Note: Bill comparison based on rates effective June 2011; water consumption of 8,300 gallons; and, 6,400 gallon Winter Months Average for sewer
Customer Cities Comparison
of Average Monthly
Water & Sewer Residential Bills

Note: Bill comparison based on rates effective June 2011; water consumption of 8,300 gallons; and, 6,400 gallon Winter Months Average for sewer.
Dallas’ Water Conservation Program

- Conservation measures adopted by the City Council in Oct 2001 have been positive
  - Added 4th tier water rate for usage over 15,000 gallons
  - Passed an ordinance regulating lawn and landscape irrigation:
    - Avoiding water runoff and waste
    - Maintaining sprinkler systems
    - Summer daytime watering restrictions from June 1 to September 30 annually
    - No watering during any form of precipitation
    - Installation of rain and freeze sensors by 2005
- In 2007, the City extended the time of day watering restriction to April 1 through October 31
- Dallas continues to aggressively pursue conservation strategies
  - 25% of future water will be met by conservation and reuse
Water Conservation Five-Year Strategic Plan 2010 Update

- City’s long-term planning tool to help curb water waste and improve water efficiency management
- Serves as foundation for state mandated water conservation plan
- Strategies include projected long-term water savings and reductions in gallons per capita usage
- Updated plan adopted by the City Council in June 2010
Dallas GPCD Trends

Over 120 billion gallons saved since 2001
Water Supply
**U.S. Seasonal Drought Outlook**

**Drought Tendency During the Valid Period**

Valid September - November 2011
Released August 18, 2011

**KEY:**
- **Brown**: Drought to persist or intensify
- **Brown with diagonal stripes**: Drought ongoing, some improvement
- **Green**: Drought likely to improve, impacts ease
- **Yellow**: Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events.

"Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity).

For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.
DALLAS WATER SUPPLY SYSTEM CONNECTED RESERVOIRS
Lewisville Ray Roberts Grapevine Ray Hubbard Tawakoni Lake Fork

Historical Dallas Drought vs. Current Drought

Dallas Reservoir Capacity (Acre Feet)

1950 Record Data

Current Data

Stage 1 - 35% Depleted
Stage 2 - 45% Depleted
Stage 3 - 55% Depleted
Stage 4 - 70% Depleted
DATE          August 19, 2011
TO             The Honorable Mayor and Members of the City Council
SUBJECT       Building Inspection FY 11/12 Budget Briefing

On August 22, 2011, you will be briefed on the Building Inspection budget for fiscal year 2011/2012. You will be provided an overview on recent trends in the development and construction industry influencing Building Inspection workload and staffing, as well as an update on recent process improvements within the division. Attached are the briefing materials for your review.

Please contact me if you need additional information.

[Signature]
Ryan S. Evans
Assistant City Manager

C: Mary K. Suhm, City Manager
   A.C. Gonzalez, First Assistant City Manager
   Jill A. Jordan, P.E., Assistant City Manager
   Forest Turner, Assistant City Manager
   Joey Zapata, Interim Assistant City Manager
   Jeanne Chipperfield, Chief Financial Officer
   Thomas P. Perkins, Jr., City Attorney
   Rosa A. Rios, Interim City Secretary
   Craig Kinton, City Auditor
   Judge C. Victor Lander, Administrative Judge
   Helena Stevens-Thompson, Assistant to the City Manager – Council Office
Building Inspection Division
FY 11/12 Budget

Sustainable Construction and Development

City Council Briefing

August 22, 2011
Purpose

- Provide an overview of the Building Inspection Division.
- Report on recent economic trends in the development and construction industry influencing Building Inspection workload and staffing.
- Update the City Council on recent process improvements to our services for our customers.
- Review the key highlights of proposed budget request for the Building Inspection division.
- Provide an overview of continuing efforts and proposals to improve service delivery and customer satisfaction.
Building Inspection Division

- The Building Inspection Office is charged with:
  - Ensuring compliance with construction standards
  - Enforcing construction and zoning codes and ordinances
  - Archiving/record keeping of plans and permits

- Services provided include:
  - Issuing building permits and Certificates of Occupancy
  - Reviewing and approving site and construction plans for compliance with zoning and building codes
  - Performing construction inspections in the field
  - Responding to 311 and Open Records Requests
Building Inspection Division

• In FY 10/11 Building Inspection Division has a staff of 175 employees with a budget of $16.5M (This 175 includes the 20 staff added in January 2011)

• Building Inspection is funded through an Enterprise fund.

• Staff and operational expenses are paid for out of revenues generated by fees collected for services. Division receives no revenue from the General Fund.
Impact of the Recession on Construction Activity in Dallas
Impact of the Recession on the Building Inspection Division

- Significant fall in number of permit’s, valuations and revenues began in late 2007 and continued into 2009.

- In FY 08/09, the division made the difficult decision to NOT implement a mid-year RIF, but rather to spend down an existing fund balance and RIF employees at the end of the fiscal year.

- In October 2009, deep cuts in staffing equated to an almost 50% reduction in FTE’s.

- Decline in revenues and staffing levels outpaced the decline in workload and service requests.

- Type of work and demand for services changed.
FY09/10 - Year of Transition

Revenues declined much greater and faster than workload

- Workload decreased between 12% and 42%
- Revenues decreased between 30% and 50%
- Staffing levels were reduced by almost 50%
Impact felt by our customers

Following those deep cuts, Building Inspection experienced a spike in customer complaints and dissatisfaction with:

- Length of time to review and approve construction plans
- Same day inspections were not met, particularly for plumbing
- Staff was not readily accessible for consultation, information requests and courtesy reviews
- Continued demand for services that had been eliminated
- Technology interruptions further disrupted customer experience
FY 10/11 - Steady Rebuilding to Improve Customer Service

- Through consultation with industry stakeholders, Building Inspection began rebuilding and reorganizing staff and resources to better meet the needs of our customers.

- Began increasing staffing levels in January 2011. Added 20 FTEs in critical areas and rebalanced existing staff in specific functional areas to
  - Enhance productivity, accountability and responsiveness
  - Improve Customer Service

- Implemented new functional initiatives to address customer needs and operationalize stakeholder goals
  - Q-Team (expedited plan review) March 2011
  - Customer Consultation Center April 2011
  - Certificates of Occupancy Team May 2011 (for smaller projects)
Continued improvement as construction activity increases

- Steady decrease in customer complaints and dissatisfaction since January (58% drop since FY09/10)
- Reduced length of time to review and approve construction plans. (FY08/09 >14 weeks; currently 4-6 weeks)
- Inspections provided the same day requested (currently - 95%; up from 88%)
- Staff is more readily available for consultation, information requests and courtesy reviews.
- Restored some of the popular services that were eliminated and added some new services, such as Q Team review, Customer Service Consultation Team and Certificate of Occupancy Team.
Q-Team Success

- Dedicated team of code experts that provide pre-development reviews and plan reviews by scheduled appointments.
- A coordinated, collaborative plan review that offers predictable timeframes and face-to-face problem resolution in cooperative atmosphere.
- Since going live in March, the Q-team has:
  - Reviewed 240 Permits/Building projects
  - Issued 270 permits
  - Convened over 175 Q TEAM Meetings
  - Resulted in $3.5+M in revenues to date
Commitment to customer satisfaction

- Staff continues to
  - Monitor key workload indicators and revenues on daily and weekly basis
  - Make staffing adjustments to meet workload demands

- Staff remains committed to working with our customers to resolve issues and deliver desired services
Highlights of Next Year’s Budget

- Additional staffing- 17 FTE’s
  (1 manager, 6 plans examiners, 6 inspectors, 4 support staff)

- Identified several key initiatives to focus on during FY 11/12 (detailed on page 17)

- Working toward the implementation of a performance plan to keep staff efforts focused and track progress on issues important to our clients and stakeholders (detailed on page 18)
Revenues sufficient to sustain additional staff

Enterprise Fund Revenues

FY 08/09
FY 09/10
FY 10/11
## Budget Snapshot

<table>
<thead>
<tr>
<th></th>
<th>FY08-09</th>
<th>FY09-10</th>
<th>FY10-11</th>
<th>FY11-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenses</td>
<td>$21,743,723</td>
<td>$16,420,064</td>
<td>$16,469,771</td>
<td>$17,863,350</td>
</tr>
<tr>
<td>FTE's</td>
<td>290</td>
<td>161</td>
<td>175</td>
<td>194</td>
</tr>
</tbody>
</table>
What gets measured, gets done!
Key Initiatives for FY 11/12

- Will employ the ZIP process (similar to process the municipal courts undertook) to perform an assessment of technology needs and process improvements. This will result in a three year improvement plan with budgetary impacts.

- Training – this division has lost a significant amount of “institutional knowledge” through down-sizing and retirements. Emphasis will be on rebuilding knowledge base and skill sets of new employees to increase efficiency, productivity and consistency in decision-making.

- Third Party/ Green Opportunities
  - Stakeholder/Customer interviews and surveys
  - Employee morale/recognition programs
Performance Plan

- Quarterly report that establishes division goals and work plan objectives; measures performance on key metrics; and documents progress on important initiatives.

- Desired results will be improved staff accountability, enhanced performance, improved responsiveness and higher quality customer service.

- Create a structured environment that welcomes constructive customer communication and feedback on operational and service delivery issues.
Other Issues

- Staff proposed a 3 year plan to transition the Historic Preservation function from Enterprise Fund to General Fund.
- FY 11/12 allocation for Historic Preservation is $200k from the General Fund.
Summary

- Evident that Zip Process is necessary to perform processes, staffing and technology assessment.
- Continue to carefully guide the rebuilding of the Building Inspection workforce and services.
- Gradually transition work that is appropriate for General Fund resources into the General Fund budget.
- Staff will seek guidance and direction regarding the Building Inspections performance plan and work program from appropriate City Council Committee.
- Staff will continue to collaborate with key stakeholders and customers as the development and construction industry slowly transitions out of the current economic recession.
Memorandum

DATE
August 19, 2011

TO
Honorable Mayor and
Members of the City Council

Through: Joey Zapata
Interim Assistant City Manager

SUBJECT
August 22, 2011 City Council Briefing:
Aquatic Facilities Master Plan

Attached is a copy of the “Aquatic Facilities Master Plan” briefing which will
be presented to the City Council on August 22, 2011.

Please contact me at 214-670-4071 if you have any questions.

Paul D. Dyer, Director
Park and Recreation Department

c: Mary K. Suhm, City Manager
Rosa A. Rios, Acting City Secretary
Thomas P. Perkins, City Attorney
Craig Kinton, City Auditor
Judge C. Victor Lande, Judiciary
A. C. Gonzalez, First Assistant City Manager
Ryan S. Evans, Assistant City Manager
Forest E. Turner, Assistant City Manager
Jill A. Jordan, P.E., Assistant City Manager
Jeanne Chipperfield, Chief Financial Officer
Helena Stevens-Thompson, Assistant to the City Manager

Dallas - Together, we do it better
Aquatic Facilities Master Plan

City Council Briefing
August 22, 2011
Purpose of Briefing

- Present observations and assessment of current aquatic system
- Review 3 scenarios for proposed future aquatic system
  - Baseline Comparison: Replace existing pools with similar-sized facilities at existing locations
  - Option 1: Community Family Aquatic Centers
  - Option 2: Metropolitan Family Aquatic Centers
  - Option 3: Option 1 / Option 2 Hybrid
Background Information

- May 11, 2010 – PARD contracted with Kimley-Horn and Associates, Inc. for:
  - Assessment of existing Dallas aquatic facilities
  - Analysis of national trends in aquatics
  - Report on preliminary findings and options to Park Board and staff

- February 17, 2011 - PARD executed Supplemental Agreement No. 1 for a **Citywide Aquatic Facilities Master Plan** which includes:
  - Develop aquatic system master plan with public input
  - Develop phasing and transition strategy
  - Develop marketing and branding plan
Existing Community Pools – Summer 2011

- Bonnie View
- Everglade
- Exline
- Fretz
- Glendale
- Grauwyler
- H.R. Moore
- Harry Stone
- Jaycee Zaragoza
- Kidd Springs
- Lake Highlands North
- Martin Weiss
- Pleasant Oaks
- Samuell Grand
- Tietze
- Tommie Allen
- Walnut Hill
Observations

- Existing pools have reached the end of their useful life
  - Physically and functionally obsolete
    - Spent $512K to repair pools for 2011 season
  - Programmatically obsolete
  - Not in compliance with ADA regulations

- Current 17-pool system is geographically inefficient
  - Overlapping service areas
  - Gaps in service areas
  - Average daily attendance per pool is 37 visitors a day
Existing Pool Service Areas

A

B
Existing Pools – Date Built

- Grauwyler 1947 (64 years)
- Tietze 1947
- Glendale 1949
- Martin Weiss 1953
- Samuell Grand 1953
- Walnut Hill 1954
- Exline 1957
- Harry Stone 1958
- Kidd Springs 1958
- Pleasant Oaks 1958
- Bonnie View 1963
- Fretz 1970
- Lake Highlands North 1970
- Tommie Allen 1970
- H.R. Moore 1974
- Jaycee Zaragoza 1974
- Everglade 1975 (36 years)

Average age: 50.4 years
Existing Pools
Baseline Comparison

Replace existing pools with similar-sized facilities at existing locations average cost of $2.2M per site

Replacement Total: $37.4M
Option 1 – Community Family Aquatic Center

Features:
- Slides
- Zero-Depth Entry Beach
- Interactive Play Features and Geysers
- Lap Pool

Cost Per Complex = $4.1 M
Average Projected Daily Attendance = 300 per site
Option 1 –

Community Family Aquatic Center
Option 1 –
Community Family Aquatic Centers

Total Project Cost = $36.9 M
(9 @ $4.1M)
Service Area = 3.5-mile Service Radius
Option 1:
Replace existing pools with system of
9 New Community Family Aquatic Centers
Total: $36.9M

* Bahama Beach serves as the 10th Family Aquatic Center
Option 2 – Metropolitan Family Aquatic Centers

Features:
- Slides
- Zero-Depth Entry Beach
- Interactive Play Features and Geysers
- Lap Pool
- Multi-Purpose Pool
- Tot Pool/Pad
- Lazy River
- Pavilions and Shade Structures

Cost Per Complex = $6.4M

Average Projected Daily Attendance = 560 per site
Option 2 – Metropolitan Family Aquatic Centers
Option 2 – Metropolitan Family Aquatic Centers

Total Project Cost = $32 M
(5 @ $6.4M)
Service Area = 5-mile Service Radius
Option 2:
Replace existing pools with system of
5 New Metropolitan Family Aquatic Centers
Total: $32.0M

* Bahama Beach serves as the 6th Family Aquatic Center
Option 3:
Replace existing pools with system of
6 New Community Family Aquatic Centers
3 Metropolitan Family Aquatic Centers

Total: $43.8M

* Bahama Beach serves as the 10th Family Aquatic Center
## Summary

<table>
<thead>
<tr>
<th>Option</th>
<th>Facilities</th>
<th>Attendance</th>
<th>Cost per Unit</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Replace Existing System</td>
<td>97,000</td>
<td>17 @ $2.2M</td>
<td>$37.4M</td>
</tr>
<tr>
<td>Option 1</td>
<td>Community Family Aquatic Centers</td>
<td>225,000</td>
<td>9 @ $4.1M</td>
<td>$36.9M</td>
</tr>
<tr>
<td>Option 2</td>
<td>Metropolitan Family Aquatic Centers</td>
<td>225,000</td>
<td>5 @ $6.4M</td>
<td>$32.0M</td>
</tr>
<tr>
<td>Option 3</td>
<td>Combination of Community and Metropolitan</td>
<td>285,000</td>
<td>6 @ $4.1M</td>
<td>$43.8M</td>
</tr>
<tr>
<td></td>
<td>Family Aquatic Centers</td>
<td></td>
<td>3 @ $6.4M</td>
<td></td>
</tr>
</tbody>
</table>
# Cost Comparison

- **Baseline versus Option 3**

<table>
<thead>
<tr>
<th>Option</th>
<th>Facilities</th>
<th>Unit Expenses</th>
<th>Total Expenses</th>
<th>Unit Revenues</th>
<th>Total Revenues</th>
<th>Net Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>Existing Pools</td>
<td>$63K</td>
<td>$1.1M</td>
<td>$8,800</td>
<td>$150K</td>
<td>($950K)</td>
</tr>
<tr>
<td></td>
<td>Bahama Beach</td>
<td></td>
<td>$600K</td>
<td></td>
<td>$500K</td>
<td>($100K)</td>
</tr>
<tr>
<td></td>
<td>Major Maint.</td>
<td></td>
<td>$250K</td>
<td></td>
<td></td>
<td>($250K)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>($1.3M)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option</th>
<th>Facilities</th>
<th>Unit Expenses</th>
<th>Total Expenses</th>
<th>Unit Revenues</th>
<th>Total Revenues</th>
<th>Net Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 3</td>
<td>Community</td>
<td>$120K</td>
<td>$720K</td>
<td>$60K</td>
<td>$360K</td>
<td><strong>($360K)</strong></td>
</tr>
<tr>
<td></td>
<td>Metropolitan</td>
<td>$400K</td>
<td>$1.6M</td>
<td>$300K</td>
<td>$1.2M</td>
<td><strong>($400K)</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>($760K)</strong></td>
</tr>
</tbody>
</table>
Summary

- **Baseline Comparison** – Replace all pools with similar configuration
  - $37.4M capital investment
  - Highest operational subsidy
  - Does not meet current aquatic trends
  - Lowest projected attendance (97,000)

- **Option 1** – Replace all pools with 9 new Community Family Aquatic Centers
  - $41M capital investment
  - Lower operational subsidy
  - Higher projected attendance (225,000)
Summary

- Option 2 – Replace all pools with 5 new Metropolitan Family Aquatic Centers
  - $32M capital investment
  - Lower operational subsidy
  - Higher projected attendance (225,000)

- Option 3 – Replace all pools with 6 new Community Family Aquatic Centers and 3 new Metropolitan Family Aquatic Centers
  - Combination of Options 1 and 2
  - $43.8M capital investment
  - Lower operational subsidy
  - Highest projected attendance (285,000)
Recommendations

- Provide a uniform level of aquatic service citywide
- Maximize citywide aquatics attendance
- Replace 17 existing pools with new Community and Metropolitan Family Aquatic Centers (Option 3)
- Seek funding for implementation from:
  - Proposed 2012 Bond Program
  - Proceeds from Elgin B. Robertson Park sale
  - Selling the naming rights and/or sponsorships
Next Steps

- Establish criteria for site selection
- Determine appropriate locations based on criteria
- Seek public input
- Refine cost estimates and an overall development budget
- Develop phasing and transition plan
- Develop pricing structure and business plan
- Present proposed Aquatic Facility Master Plan to Park and Recreation Board and City Council for adoption
Aquatic Facilities Master Plan
City Council Briefing
August 22, 2011
DATE:  August 19, 2011

TO:  Honorable Mayor and Members of the City Council

SUBJECT:  Capital Construction, Operations & Maintenance of Dallas Streets & Thoroughfares Briefing

On Monday, August 22, 2011, you will be briefed on the Capital Construction, Operations & Maintenance of Dallas Streets & Thoroughfares. The presentation material is attached for your review.

If you have questions or need additional information, please let me know.

Forest E. Turner
Assistant City Manager

Attachment

cc:  Mary K. Suhm, City Manager
     Rosa Rios, Interim City Secretary
     Thomas P. Perkins, Jr., City Attorney
     Craig D. Kinton, City Auditor
     C. Victor Lander, Administrative Judge
     A.C. Gonzalez, First Assistant City Manager
     Ryan S. Evans, Assistant City Manager
     Jill A. Jordan, P.E., Assistant City Manager
     Joey Zapata, Interim Assistant City Manager
     Jeanne Chipperfield, Chief Financial Officer
     Frank Librio, Public Information Office
     Helena Stevens-Thompson, Assistant to the City Manager

“Dallas – Together, we do it better!”
Capital Construction, Operations, & Maintenance of Dallas Streets & Thoroughfares

Presented to the
Dallas City Council
August 22, 2011
Purpose

- Provide an overview of the Street Services and Public Works Departments

- Review street condition ratings
  - Rating descriptions
  - Street condition timeline
  - FY 2011-12 street condition projection
Interrelationship between Street Services and Public Works Departments

- The Bond Program invests in construction and reconstruction of street and alley projects and street resurfacing projects. Preventive maintenance is required to extend the service life of infrastructure improvements.

<table>
<thead>
<tr>
<th>Street Services – General Fund</th>
<th>Public Works – Capital Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Routine maintenance</strong></td>
<td><strong>Bond Program implementation including:</strong></td>
</tr>
<tr>
<td>• Potholes</td>
<td>• Construction and reconstruction of streets and alleys</td>
</tr>
<tr>
<td>• Full depth repairs</td>
<td>• Street resurfacing</td>
</tr>
<tr>
<td>• Level ups</td>
<td>• Street and alley petitions</td>
</tr>
<tr>
<td><strong>Preventive maintenance</strong></td>
<td>• Bridge rehabilitation</td>
</tr>
<tr>
<td>• Slurry seal</td>
<td>• Sidewalks and barrier free ramps</td>
</tr>
<tr>
<td>• Micro surfacing</td>
<td>• Crack sealing</td>
</tr>
<tr>
<td>• Crack sealing</td>
<td>• Partial reconstruction</td>
</tr>
<tr>
<td><strong>Major maintenance</strong></td>
<td>• Rehabilitation</td>
</tr>
<tr>
<td>• Partial reconstruction</td>
<td>• Restoration</td>
</tr>
<tr>
<td>• Rehabilitation</td>
<td></td>
</tr>
</tbody>
</table>
Street Services Department

- $72M budget with 563 positions
- Maintains over 11,800 lane miles of streets
- Organized into five business units:
  - Street Repair Division – Asphalt
  - Street Repair Division - Concrete
  - Service Districts (4 plus Night Operations)
  - Contracts, Finance and Inspections
  - Transportation Operations
Street Services: What do we do?

- **Street Repair Division Asphalt, Street Repair Division Concrete, Service Districts**
  - Pothole repair
  - Street & Alley repair
  - Litter removal
  - Response to roadway hazards
  - Roadside drainage
  - Guard rail repair
  - Inlet cleaning
  - Severe weather response

- **Contracts, Finance and Inspection**
  - Street sweeping (major thoroughfares)
  - Mowing of medians/ TXDOT rights-of-way
  - Sealing of streets (prevent water infiltration)
  - Environmental and Quality Management (ISO 9001 and 14001 certified)

- **Transportation Operations**
  - Traffic Studies
  - Signs & Signals
  - Street Striping
  - Street Lighting
  - Congestion Management
  - Lane Closure Permits
Public Works Department

- $12.9M annual operating budget with 158 positions of which $7.9M and 107 positions are dedicated to streets
- $117.7M capital budget for street and thoroughfare improvements in FY 11-12
- Organized into 3 main work units
  - Street and paving infrastructure
  - New facility and facility major maintenance
  - Air Quality, Parking Adjudication, and Finance
Public Works: What do we do?

- Street and Paving Infrastructure – Design and Construction Through Contracting
  - Street and alley reconstruction and street resurfacing
  - New street and alley petitions
  - Sidewalk - new and replacement; barrier free ramps
  - Thoroughfares and urban design / streetscaping
  - Intergovernmental partnerships and bridge repairs
  - Pavement management and life cycle analysis (in house)
  - Survey (in house)
  - Needs Inventory (in house)
  - Bond Program preparation (in house)
# Street Condition Ratings

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
</table>
| **A**  | Excellent  
Pavements that have no distress  
(mostly new or newly rehabilitated surfaces) |
| **B**  | Very Good  
Very good ride quality -  
require preventive maintenance (slurry seal or similar) if any |
| **C**  | Good  
Acceptable ride quality, though road surfaces are becoming worn – slurry, microsurfacing, or similar is needed to prevent rapid deterioration |
| **D**  | Fair  
Marginally acceptable ride quality – microsurfacing, chip sealing, or partial reconstruction is needed to prevent rapid deterioration |
| **E**  | Poor  
Pavements that have extensive amounts of distress  
and require partial or full reconstruction |
Satisfactory Streets

- “A” Condition
  - 5200 Cedar Springs Road
  - 700 S Hampton Road
  - 6300-6600 Bonnie View Lane

- “B” Condition
  - 6000 Frankford Road
  - 3500-4300 Simpson Stuart Road
  - 5300 Maple Springs Blvd
  - 1500-1900 E Camp Wisdom Road
Satisfactory Streets (cont.)

- “C” Condition
  - 5200 Harry Hines Blvd
  - 3700 N Fitzhugh Avenue
  - 9600 Webb Chapel Road
  - 5600-6300 Mockingbird Lane
Unsatisfactory Streets

“D” Condition
- 3100 Inwood Road
- 4800-5500 Lemmon Avenue
- 2100-3200 Canada Drive
- 2500 La Prada Drive

“E” Condition
- 9600-9700 Teagarden Road
- 3100-3400 Edd Road
- 2100-2500 Greenville Avenue
- 2100-2500 N Henderson Avenue
### Street Satisfactory Rating - Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>% Satisfactory</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>89%</td>
<td>Satisfactory rating high point reached</td>
</tr>
<tr>
<td>Late 1980’s</td>
<td>71%</td>
<td>1985 bond program was delayed and budget cuts reduced street maintenance</td>
</tr>
<tr>
<td>1994</td>
<td>62%</td>
<td>Satisfactory rating low point reached after downturn in economy</td>
</tr>
<tr>
<td>1995</td>
<td>62%</td>
<td>Council adopted 75% satisfactory goal by 2015...goal was accelerated to 2010 in 1996</td>
</tr>
<tr>
<td>2006</td>
<td>86%</td>
<td>Council adopted 87% satisfactory goal by 2010 with all districts at a minimum of 80%</td>
</tr>
<tr>
<td>2009</td>
<td>86.7%</td>
<td>15 years to improve from low of 62% in FY95 to peak in FY09</td>
</tr>
<tr>
<td>2010</td>
<td>83.2%</td>
<td>Citywide rating decreased due to deferred maintenance and development of a more precise rating system</td>
</tr>
</tbody>
</table>
Impacts of Maintenance on Street Condition

- Typical life of a street ranges from 20 to 50 years depending on a number of factors such as:
  - Pavement design
  - Traffic loads
  - Weather/precipitation patterns
  - Maintenance schedule

- Street maintenance can cost effectively extend useful lives by factors of three or more
  - **Routine maintenance** such as pothole repair *does not increase* condition ratings but slows deterioration and improves the ride surface on a small scale
  - **Preventive maintenance** such as crack sealing, slurry sealing, and micro surfacing adds years to a street’s useful life at a fraction of the cost of resurfacing or full reconstruction…*does not increase* condition ratings but prevents deterioration that would decrease ratings
  - **Major maintenance** including Rehabilitation, Restoration, and Partial Reconstruction, in general, **immediately** increases condition ratings
Street Condition Ratings - 1995-2011

- 15 years to improve from low of 62% in FY95 to peak in FY09
- Citywide rating decreased from 86.7% to 83.2% in FY10 due to deferred maintenance and development of a more precise condition rating system

87% Goal Adopted in 2006
Street Condition Ratings - Current and Projected (through September 30, 2012)

<table>
<thead>
<tr>
<th>Council District</th>
<th>% Satisfactory Rating 2011</th>
<th>% Satisfactory Rating Sept 2012 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>91.2</td>
<td>94.1</td>
</tr>
<tr>
<td>2</td>
<td>85.5</td>
<td>94.1</td>
</tr>
<tr>
<td>3</td>
<td>88.0</td>
<td>87.0</td>
</tr>
<tr>
<td>4</td>
<td>85.5</td>
<td>87.0</td>
</tr>
<tr>
<td>5</td>
<td>83.0</td>
<td>87.0</td>
</tr>
<tr>
<td>6</td>
<td>84.5</td>
<td>87.0</td>
</tr>
<tr>
<td>7</td>
<td>84.5</td>
<td>87.0</td>
</tr>
<tr>
<td>8</td>
<td>87.0</td>
<td>87.0</td>
</tr>
<tr>
<td>9</td>
<td>87.0</td>
<td>87.0</td>
</tr>
<tr>
<td>10</td>
<td>88.5</td>
<td>87.0</td>
</tr>
<tr>
<td>11</td>
<td>88.5</td>
<td>87.0</td>
</tr>
<tr>
<td>12</td>
<td>88.7</td>
<td>87.0</td>
</tr>
<tr>
<td>13</td>
<td>87.1</td>
<td>87.0</td>
</tr>
<tr>
<td>14</td>
<td>90.1</td>
<td>87.0</td>
</tr>
<tr>
<td>City</td>
<td>87% Citywide Goal</td>
<td>87% Citywide Goal</td>
</tr>
</tbody>
</table>

80% District Goal

87% District Goal
Achieving and Maintaining the Goal

- Achieving and maintaining the goal of 87% satisfactory citywide and minimum 80% satisfactory in all council districts requires Bond Programs approximately every four years and the requisite street maintenance allocation.
  - The capital and O&M funding needed to achieve 87% citywide and minimum 80% in all council districts is included in the proposed FY 2011-12 budget:
    - FY 2011-12 Capital budget includes $118M for street improvements
    - FY 2011-12 O&M budget includes $28M for street maintenance
  - To maintain 87% citywide and minimum 80% in all council districts requires:
    - Capital investment for street improvements of $225M over a 4 year period beginning in the fall of 2012
    - O&M funding of $28M per year for street maintenance
Questions / Discussion
Appendix A – Condition Rating
Equipment and Method

Additional Information
Street Condition Assessment: Transition from pen/paper to high-tech

Reduced annual operating costs from $760k in FY05 to $250k in FY11
Data Analysis Continues to Evolve

- Technical rating of streets based on extent and severity of distress (roughness, cracking, etc.) = Pavement Condition Index (PCI)

- Weighting factors adjusted based on field quality control verification - roughness 35%, cracking 35%, other distress 30%

- PCI (ratings) expressed as letter grades: A (best) to E (worst) for decades

- Each “letter grade” had a very wide range prior to technology upgrade in 2007
Appendix B – Street System and Needs

Additional Information
Lane Miles of Streets by Council District

Council District

# Lane Miles

1 2 3 4 5 6 7 8 9 10 11 12 13 14

618 901 1,153 863 839 824 863 1,029 884 673 694 560 985 922
Total City Street Inventory by Surface Type

11,805.8 Lane Miles

Concrete: 5,574.5 lane miles 47%
Gravel: 22.9 lane miles 0%
Asphalt: 3,765 lane miles 32%
Asphalt Over Concrete: 1,646.3 lane miles 14%
Diversity of Districts

- No two districts have the same size street network - varies from 559.5 to 1,153.3 lane miles
- No two districts have the same composition of street types – all have different combinations of concrete and asphalt with and without curbs and gutters
- Unit costs of cost-effective treatments vary by surface type
## Estimated Value of Total Maintenance and Capital Street Needs

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Current Universe (Lane Miles)</th>
<th>Approx Cost ($)</th>
<th>Typically Performed By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partial Reconstruction</td>
<td>678.5</td>
<td>78,366,750</td>
<td>Street Services</td>
</tr>
<tr>
<td>Restoration</td>
<td>231.3</td>
<td>37,008,000</td>
<td>Street Services</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>165.8</td>
<td>24,870,000</td>
<td>Street Services</td>
</tr>
<tr>
<td>Full Depth - Asphalt</td>
<td>690.1</td>
<td>30,019,350</td>
<td>Street Services</td>
</tr>
<tr>
<td>Microsurfacing</td>
<td>377.4</td>
<td>9,057,600</td>
<td>Street Services</td>
</tr>
<tr>
<td>Slurry Seal</td>
<td>1,256.1</td>
<td>16,329,300</td>
<td>Street Services</td>
</tr>
<tr>
<td>Full Depth - Concrete</td>
<td>3,034.5</td>
<td>62,207,250</td>
<td>Street Services</td>
</tr>
<tr>
<td>Regravel / Blade and Grade</td>
<td>15.2</td>
<td>2,871,398</td>
<td>Street Services</td>
</tr>
<tr>
<td>Crack Filling</td>
<td>1,464.5</td>
<td>3,092,975</td>
<td>Street Services</td>
</tr>
<tr>
<td><strong>O&amp;M Totals</strong></td>
<td><strong>7,913.4</strong></td>
<td><strong>$263.8M</strong></td>
<td></td>
</tr>
<tr>
<td>Reconstruction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resurfacing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Capital Totals</strong></td>
<td><strong>1,554.6</strong></td>
<td><strong>$951.7M</strong></td>
<td></td>
</tr>
<tr>
<td>No Treatment</td>
<td>2,216.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Citywide Totals</strong></td>
<td><strong>11,684.7</strong></td>
<td><strong>$1.2 billion</strong></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C – Maintenance and Construction Methods

Additional Information
Slurry Seal (Street Services)

Candidate streets are predominately residential asphalt surfaced streets with curb and gutter.

Slurry seal consists of a 1/4" thick layer of sand and finely crushed stone mixed with asphalt emulsion. In addition to sealing, it provides an aesthetically smooth and uniform surface that conceals scars from previous repairs. The mix contains less stone and is a less expensive asphalt based product than micro surfacing, but takes longer to cure. Slurry seal is outsourced to a private contractor with specialized equipment. Preparation work is performed by the Department of Street Services and includes minor base repair and crack sealing.
Micro Surfacing (Street Services)

Candidate streets are predominately higher traffic volume asphalt surfaced streets with curb and gutter.

Micro surfacing consists of a 1/4” layer of crushed stone mixed with asphalt emulsion. In addition to sealing, it provides an aesthetically smooth and uniform surface that conceals scars from previous repairs. The mix contains more stone and is more expensive than slurry seal, but cures quicker. Micro surfacing is outsourced to a private contractor with specialized equipment. Preparation work is performed by the Department of Street Services and includes minor base repair and crack sealing (and curb & gutter repair where necessary).
Full Depth - Asphalt (Street Services)

This repairs surface and base failure on an asphalt street. Repairs are typically larger than a pothole, but smaller than an area that would necessitate a street resurfacing or street rehabilitation project. After the failed area is cut square and excavated, a new base and asphalt surface is placed and compacted.
Partial Reconstruction (Street Services)

Partial reconstruction is the removal and replacement of large, failed sections of concrete streets. The process includes breakout and removal of the old pavement section, repair of any existing base failures and the placement of new concrete in the failed areas.

Residential and thoroughfare streets with less than 25% failed areas are candidates for partial reconstruction.
Street rehabilitation is a treatment performed on an asphalt street where a large portion of the surface and base have deteriorated to an unsatisfactory level. It includes the full-depth repair of base failures, followed by a chip seal and a new two-inch layer of hot mix asphalt placed over the entire treated segment.

Candidate streets are predominately residential asphalt surfaced streets without curb and gutter.
Restoration (Street Services)

Candidate streets are predominately residential asphalt surfaced streets without curb and gutter.

Street restoration is a treatment performed on an asphalt street where the entire surface and base have deteriorated to an unsatisfactory level. It includes rebuilding the entire base by recycling the old base and surface materials into the new base, followed by a chip seal and new two-inch layer of hot mix asphalt placed over the entire treated segment.
Resurface (Public Works)

Candidate streets are usually D condition asphalt or concrete streets with curb and gutter.

Resurfacing consists of two inches of asphalt placed over a prepared surface. It includes base repair, a chip seal, and replacement of curb and gutter where necessary.
Reconstruction (Public Works)

Street reconstruction involves the entire removal and replacement of paved streets that are primarily in E condition and which cannot cost effectively be repaired or resurfaced to a satisfactory condition.