

# Memorandum



CITY OF DALLAS

DATE February 29, 2008

TO The Honorable Mayor Tom Leppert and  
Members of the Dallas City Council

SUBJECT ZIP Process Improvement

As part of the City's commitment to continuously improving our business practices, staff has piloted a process improvement methodology branded as "ZOOM". Staff tested this methodology on 6 different processes during the 1<sup>st</sup> Quarter of FY2008. Results were impressive enough to adopt ZOOM as a citywide standard. ZOOM has been retooled to meet the specific needs of our organization and will be known as "ZIP" from this point forward. The attached materials provide an overview of the results achieved during the pilot project, as well as the schedule of upcoming process improvement projects. Please feel free to contact me should you have any questions about this effort.

A handwritten signature in black ink, appearing to read 'Mary K. Suhm'.

Mary K. Suhm  
City Manager

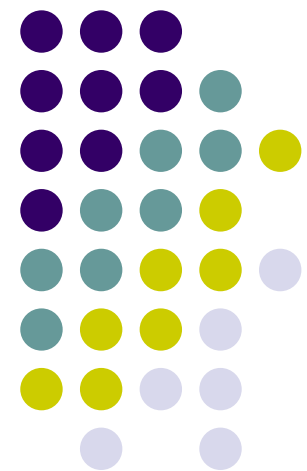
C: Ryan S. Evans, First Assistant City Manager  
David O. Brown, Interim Assistant City Manager  
A. C. Gonzalez, Assistant City Manager  
Jill A. Jordan, PE, Assistant City Manager  
Ramon F. Miguez, PE, Assistant City Manager  
David K. Cook, Chief Financial Officer  
Deborah A. Watkins, City Secretary  
Thomas P. Perkins, City Attorney  
Craig Kinton, City Auditor  
Judge Jay Robinson  
Frank Libro, Public Information Office

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# ZIP Process Improvement

## Briefing to the Dallas City Council

March 5, 2008



# Purpose

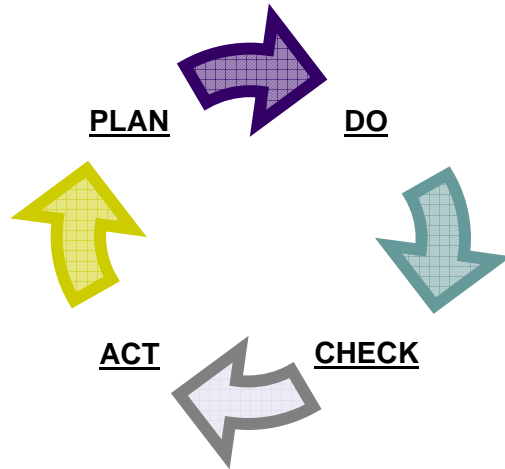
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- To discuss process improvement in context of the City's commitment to continuous improvement
- To provide a status update on staff's efforts to implement a standard citywide methodology
- To review results obtained through 6 pilot process improvement projects
- To provide a roadmap for moving forward

# What is Process Improvement?

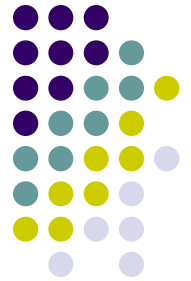
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- Process Improvement touches all areas of the continuous improvement model (Plan-Do-Check-Act)
- A process is a set of activities performed in order to achieve a goal. Process Improvement is the intentional enhancement of the performance of such activities in order to:
  - ❖ Increase their efficiency or effectiveness
  - ❖ Improve customer satisfaction

# Approach to Process Improvement

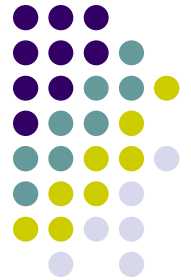
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- Selected the **ZOOM Process Improvement methodology** which was originally developed by Hewlett-Packard due to the following characteristics:
  - ❖ Based on the Plan-Do-Check-Act (PDCA) model
  - ❖ Generated impressive cost savings and reduction in errors for other government agencies
  - ❖ Practical and simple to apply
  - ❖ Flexible enough to accommodate a wide range of processes
  - ❖ Engaging and empowering for participants

# Approach to Process Improvement

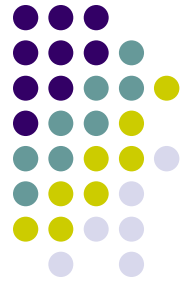
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- CMO selected **six 'pilot' projects** from among several dozen suggested processes submitted from individuals throughout the organization. This approach allowed for:
  - ❖ Testing of the ZOOM methodology under controlled conditions
  - ❖ Hands on training for the staff

# Approach to Process Improvement

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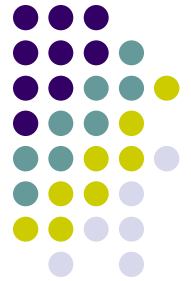


- **Six pilot Process Improvement projects:**

- ❖ **Hiring:** reduce time from department request to hire to the return of first candidate list
- ❖ **311 Customer Response:** improve Code's rate of successful customer contact regarding service requests
- ❖ **Fire Protection Plan Review & Inspection:** reduce time from plan submission to green tag
- ❖ **Fleet Procurement & Make-Ready:** reduce time to get vehicles on the street from approval to purchase
- ❖ **Grants:** decrease time and errors in the preparation of grants
- ❖ **Building Permits:** reduce wait time at the Oak Cliff Municipal Center

# Approach to Process Improvement

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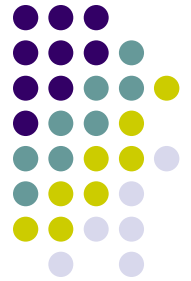


- Because of the success of the pilot projects the City has adopted the methodology
- The methodology and training has been tailored to make it our own
- The tailored approach, now known as ZIP, will be rolled out through the City University
- ZIP is the City's new standard methodology for bringing about change to existing processes



# Approach to Process Improvement

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- **Characteristics of ZIP:**

- ❖ Teams of 5-7 employees are selected who have “**hands on**” **experience** with the process to be improved
- ❖ A **Team leader** runs the day-to-day activities; a **Team sponsor** allocates resources and approves changes
- ❖ A signed “**Sponsor Agreement**” establishes the Team’s scope of work, and empowers Team members to make changes to the process
- ❖ **Facilitators** serve as methodology experts, and coach the Teams toward rapid success
- ❖ **Common sense**, “outside of the box” thinking is encouraged and all assumptions are challenged

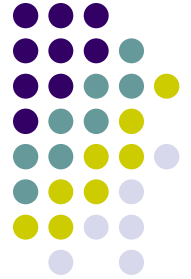
# Approach to Process Improvement

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- **ZIP Team activities:**

- ❖ **Step 1:** Develop an objective statement to capture the purpose of the project as agreed upon by the executive sponsor
- ❖ **Step 2:** Define the measurable objectives to identify “success”
- ❖ **Step 3:** Map the current process focusing on wait times and decision points
- ❖ **Step 4:** Identify other causes of delays and/or errors
- ❖ **Step 5:** Brainstorm solutions for improvements
- ❖ **Step 6:** Gather baseline data to support recommendations for change
- ❖ **Step 7:** Test each recommendation in a simple way to prove that it works
- ❖ **Step 8:** Repeat Steps 4-7 as time allows



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# Building Permits Team Presentation

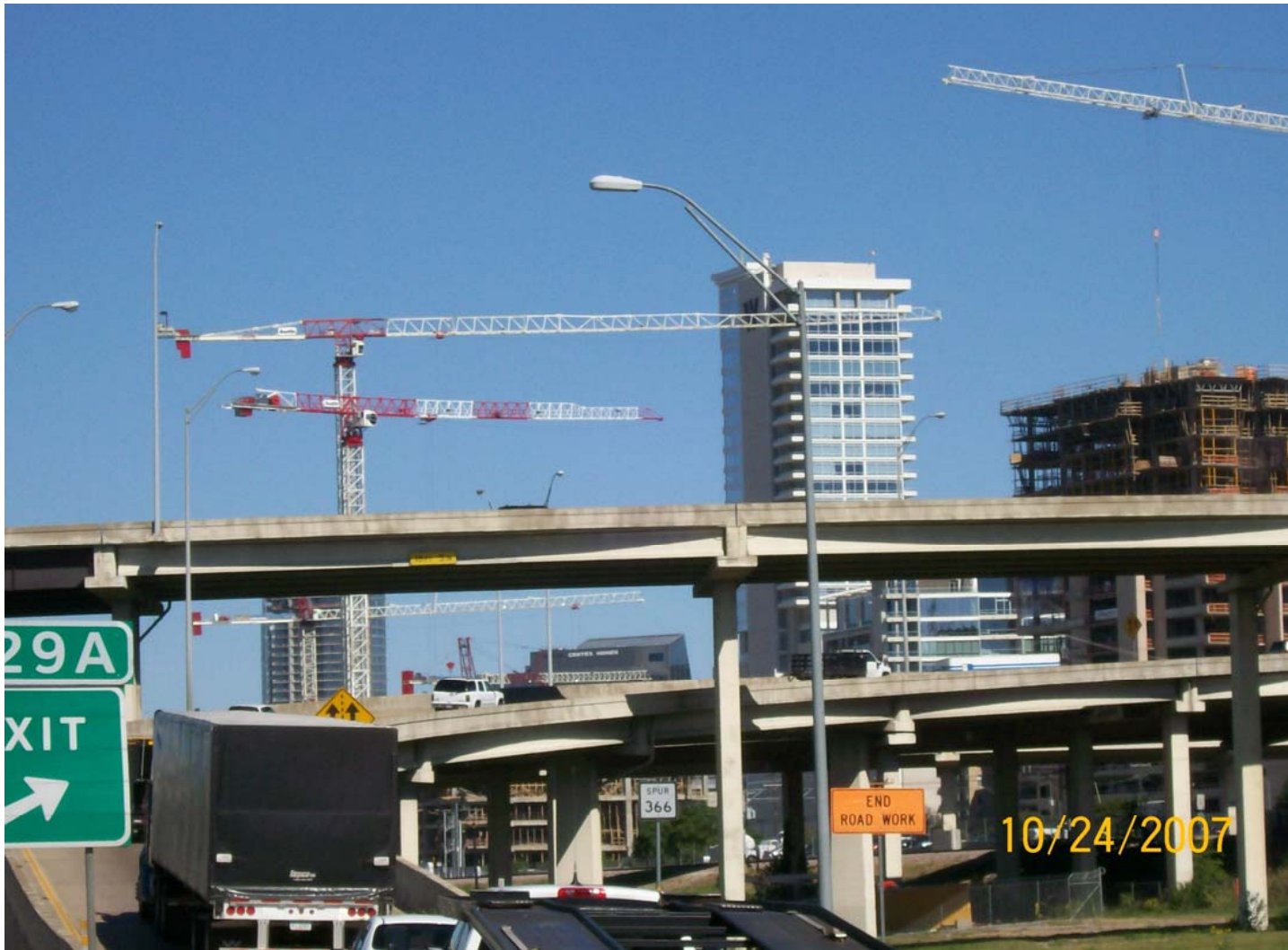
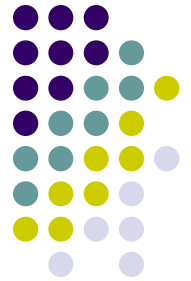
# Objective Statement

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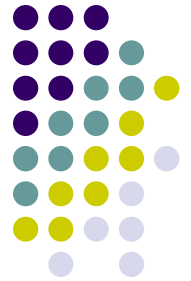


**To decrease customer wait time  
while increasing customer  
awareness of city codes and our  
permitting processes**

# Work in Progress

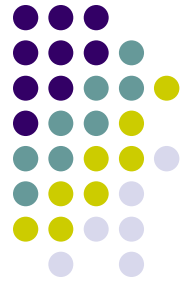


# Work in Progress

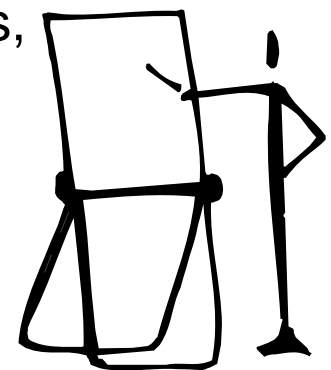


# Tested & Approved Changes

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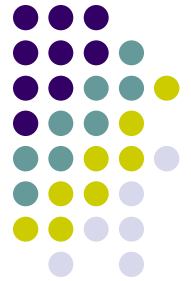


- Updated internet site to make more user friendly
- Allow appointment scheduling for previously assisted customers
- Update customer brochures on how to get a building permit, electrical permit, fence permit, understand the building inspection process, etc. and distribute to customers via pertinent locations (Home Depot, Lowe's, etc.)
- Make available automated fax line for customers to receive checklists and permit applications

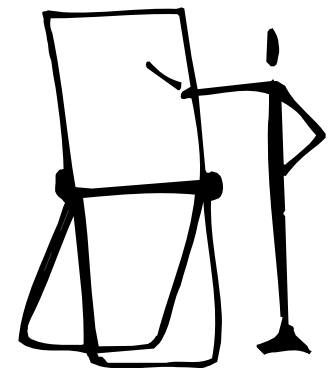


# Tested & Approved Changes

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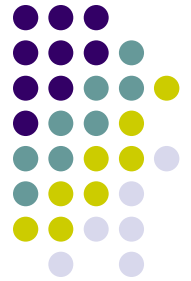
- Make available the previously completed denial forms to all staff via the network so they can pick up where they left off with customer and not repeat information gathering
  - ❖ Form renamed more positively “Insufficient Information Form”
- Assign staff in waiting area to prescreen customers for required documents
- Create/assign staff to lobby desk at OCMC for directional /informational services





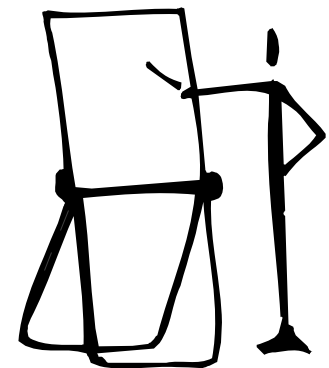
# Anticipated Results

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- Average time saved by each customer during testing phase was **18 minutes and 21 seconds**.
- Estimated that over **400 customers per month** will save time navigating through our website.

Results presented are estimates at this time as the improvements are currently being implemented

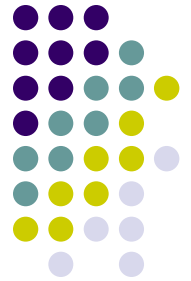


# What Did We Learn?

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- There is always room for improvement
- Gathering baseline data and testing is critical, prior to implementing any changes
- Simple tests can prove large concepts
- It takes a team to see the big picture
- Issues are easier resolved when you determine the cause
- Assumptions in a process often lead to inefficiency of the process

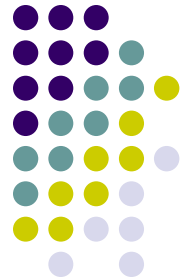


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# Fire Protection Plans Review & Inspection Team Presentation

# Objective Statement

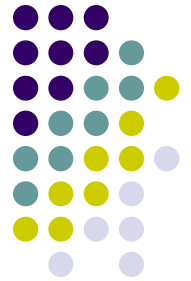
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**Reduce time in plan review and fire inspection process (from plan submission to green tag)**

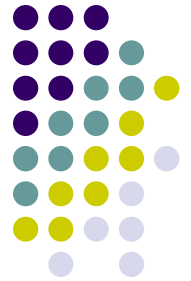
# Baseline Data

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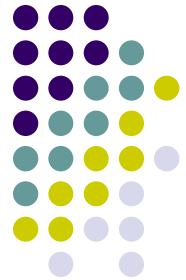
- Total elapsed time from when customer submits fire protection plan until the site receives a green tag is 136.51 days or 19.5 weeks, and includes the following components
  - ❖ Plan Review (Alarms) = 6 working days per plan elapsed time from time of submittal, with the group reviewing 160 plans per month
  - ❖ Plan Review (Sprinklers) = 8.66 weeks per plan elapsed time from time of submittal, with the group reviewing 80-100 plans per month
  - ❖ 20% of inspections received red tags (avg. 64.25 red tags issued per month against 322 fire inspections), meaning re-inspections required

# Results



Improvement	Benefit
Hire clerical worker to complete administrative tasks such as stamping and folding plans, notifying contractors, closing out log spreadsheet and Posse	Provides reviewers with an estimated 680 hours to perform plan reviews or educate contractors instead of administrative tasks
Conduct quarterly contractor forums to educate contractors	Provides reviewers an estimated 450 hours to perform plan reviews or educate contractors by reducing the number of plans required to be resubmitted and re-reviewed
Require pre-test form, alarm panel printout, and issue/enforce re-test fee	Provides inspectors an estimated 600 hours to perform inspections by reducing the number of red tags and re-inspections Generates revenue from re-test fee
Encourage scheduling the same inspector for re-inspection	Provides inspectors an estimated 830 hours to perform inspections by reducing the need to familiarize self with initial inspection for a re-inspection

# Results



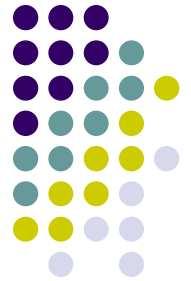
Improvement	Benefit
Improve New Construction staff meetings, provide written training program and testing, provide updated training manual	Provides inspectors an estimated 300 hours to perform inspections by reducing the number of phone calls with questions for other inspectors, supervisors, or plan review
Archive only 1 set of plans instead of 2	Provides reviewers and Central Files with an estimated 400 hours to perform plan reviews or archive materials instead of duplicating effort
Rubber stamp with signature and date to approve plans	Provides reviewers with an estimated 60 hours to perform plan reviews or educate contractors instead of administrative tasks
Train inspectors and do not require engineers to be present at pump test	Provides reviewers with an estimated 160 hours to perform plan reviews or educate contractors instead of conducting pump tests when not required
No longer enter information in duplicate system (CRMS)	Provides inspectors an estimated 2400 hours to perform inspections by eliminating the need to enter the same information in duplicate systems

# Results



Measure	Baseline Data (As of 9/07)	Original Estimates with Improvements (Projected One Year After Implementation)	January 2008 with Partial Improvements (One Month of Data Only)
Average Time to Complete Plan Review (Alarms)	6 days	5 days	2.56 days
Average Time to Complete Plan Review (Sprinklers)	8.66 weeks	4 weeks	2 weeks (9.29 days)
% of Inspections Receiving Red Tags	20%	14%	12.85%





# What We Learned

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- The City of Dallas empowered this team to identify improvements to the process that must be implemented to see results. If not implemented, we will have accomplished nothing other than to reinforce the belief that changes cannot be made
- This project opened up lines of communication that had previously been closed
- Our definition of customer service was clarified
- Duplication across the City happens more than we thought

# Anticipated Results - Other Teams

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- **Grants**

- ❖ Improve grant success rate from 28% to 50% awarded
- ❖ Decrease time to get grant funds from 150 days to 45-60 days from notice of award until funds available
- ❖ Estimated cost avoidance
  - \$150,000/year in future external audit fees
  - \$50,000 in staff time due to decrease in time spent responding to audit findings

- **Fleet Procurement and Make Ready**

- ❖ Reduce elapsed time from when funding for purchase is approved until the equipment is placed in service
  - Decrease by approximately 5 weeks for non-squad cars and,
  - Decrease by 5 months on marked squad cars added to the fleet

# Anticipated Results - Other Teams

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- **Hiring**

- ❖ Reduce work time spent per labor hire by 11 hours
- ❖ For Civil Service hires, reduce work time spent per list of candidates by 18 – 22 hours
- ❖ Eliminate advertising in The Dallas Morning News, saving \$36,000

- **311 Customer Response**

- ❖ Reduce errors in service request customer contact from 39% to less than 10%
- ❖ Reduce processing time of each Service Request by 3 minutes
- ❖ Reduce time to generate customer response letters by 4 minutes each
- ❖ Eliminate 218 hours annually spent processing invalid out of area service request submitted via the web

# Moving Forward with ZIP

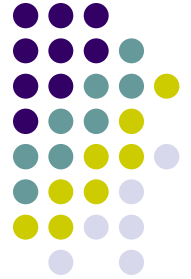
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- Capture and build upon the enthusiasm of Team members and share lessons learned with all interested parties
- Increase customer satisfaction as a result of empowering staff to believe that they can make great changes one process at a time

# Moving Forward with ZIP

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- **Team Launches**

- ❖ New ZIP teams will be launched quarterly beginning March 2008 to include the following processes:
  - Code relocations
  - Accounts payable
  - Performance appraisals
  - Litter service requests
  - Addressing standardization for new development
- ❖ The existing group of trained facilitators will serve as a resource for the new ZIP teams

# Appendix A: Team Members



- **Hiring**
  - ✦ Pamela McDonald, Team Lead, Civil Service
  - ✦ Annabel Chantaca, Team Member, Civil Service
  - ✦ Janice Favors, Team Member, Civil Service
  - ✦ Raymond Lee, Team Member, Human Resources
  - ✦ Sherry Durant, Team Member, Human Resources
  - ✦ Todd Gaston, Team Member, Human Resources
  - ✦ David Etheridge, Sponsor, Human Resources
  - ✦ Patricia Marsolais, Sponsor, Civil Service
  - ✦ Eric Griffin, Facilitator, Strategic Customer Services
  - ✦ Liza Bustamante, Facilitator, Equipment and Building Services
- **311 Customer Response**
  - ✦ Antrim Green, Team Leader, Strategic Customer Services
  - ✦ Connie Reese, Team Member, Code Enforcement
  - ✦ Matthew Yager, Team Member, Strategic Customer Services
  - ✦ Nicole Connors, Team Member, Code Enforcement
  - ✦ Jeri Carter, Team Member, Code Enforcement
  - ✦ Kenneth Gwyn, Sponsor, Strategic Customer Services
  - ✦ Robbie Porter Wooten, Facilitator
  - ✦ Jeff Glover, Facilitator, Equipment and Building Services
  - ✦ Michael Puente, Facilitator, CIS
- **Permitting**
  - ✦ Vernon Young, Team Lead, Development Services
  - ✦ Don Caldera, Team Lead, Development Services
  - ✦ Ethel Gaston, Team Member, Development Services
  - ✦ Margarita Carrasco, Team Member, Development Services
  - ✦ Elizabeth Fitzgerald, Team Member, Development Services
  - ✦ Phillip Sikes, Team Member, Development Services
  - ✦ Tito Olaleye, Team Member, Development Services
  - ✦ Raul Martinez, Sponsor, Development Services
  - ✦ Betty Antebi-Taylor, Facilitator, Strategic Customer Services
  - ✦ Deritte Fernandez, Facilitator, Human Resources
- **Fleet Procurement & Make- Ready**
  - ✦ Michael Tribble, Team Lead, Equipment and Building Services
  - ✦ Michael Horton, Team Member, Equipment and Building Services
  - ✦ John O'Valle, Team Member, Equipment and Building Services
  - ✦ David McPherson, Team Member, CIS
  - ✦ Joseph Fogle, Team Member, Sanitation
  - ✦ Allen Nelson, Team Member, Dallas Police Department
  - ✦ Jack Ireland, Sponsor, Equipment and Building Services
  - ✦ Mary Nix, Co-Sponsor, Sanitation
  - ✦ Stephanie McHenry, Co-Sponsor, Dallas Police Department
- **Grants**
  - ✦ Anna Lamberti Holmes, Team Lead, Intergovernmental Services
  - ✦ La Toya Jackson, Team Member, Intergovernmental Services
  - ✦ Shelia Robinson, Team Member, Financial Services
  - ✦ Jeanne Chipperfield, Team Member, Financial Services
  - ✦ Edward Scott, Team Member, Financial Services
  - ✦ Brett Wilkinson, Sponsor, Intergovernmental Services
  - ✦ David Cook, Co-Sponsor, City Manager's Office
  - ✦ Sandra Caro, Facilitator, Strategic Customer Services
  - ✦ Diana Richard, Facilitator, Streets
  - ✦ Frank Fowsky, Facilitator, CIS
- **Fire Protection Plan Review & Inspection**
  - ✦ Kathy Davis, Team Lead, Development Services
  - ✦ Patricia Martinez, Team Member, Dallas Fire Rescue
  - ✦ Jason Kimball, Team Member, Development Services
  - ✦ Rick Matsuda, Team Member, Development Services
  - ✦ David Session, Team Member, Development Services
  - ✦ Michelle Robinson, Team Member, Dallas Fire Rescue
  - ✦ Jay Loucks, Team Member, Development Services
  - ✦ Ray Wazny, Sponsor, Development Services
  - ✦ Sandra Marsh, Sponsor, Dallas Fire Rescue
  - ✦ Debra Carlin, Sponsor, Dallas Fire Rescue
  - ✦ Kevin Sipes, Sponsor, Dallas Fire Rescue
  - ✦ Kris Sweckard, Facilitator, Efficiency Team
  - ✦ Molly McCall, Facilitator, Efficiency Team
  - ✦ Maibel Medina, Facilitator, Strategic Customer Services