



Advisory Committee: Minutes of Regular Meeting – October 22, 2013

IN ATTENDANCE:

Gilbert A. Herrera, Chair – **Present**

Jeri Brooks – **Present**

Frances Castaneda Dyess – **Present**

Kathryn Easterly – **Present**

Vernita Harris – **Present**

Bert Keller – **Present**

Jeff Ross – Absent with notice

Edward Taravella – Absent without notice

Patrick Walsh – **Present**

Council Member Oliver Pennington, Ex-Officio – **Present**

1. Call to Order / Welcome

Chairman Gilbert Herrera called the meeting of the ReBuild Houston Advisory Committee to order at 10:50 a.m. Also in attendance were Council Members Stephen Costello and Larry Green.

2. Approval of the Minutes

Motion to approve the September 24, 2013 meeting minutes was made by Ms. Vernita Harris and was seconded by Mr. Patrick Walsh. Motion carried unanimously.

3. Open Drainage Assessment Overview

Mr. Eric Dargan, Deputy Director – Street and Drainage Division and Ms. Carol Haddock, Sr. Assistant Director – Infrastructure Planning Branch of the Planning & Development Services Division each gave a presentation discussing the Open Drainage Assets Inventory & Survey Project. The purpose of the presentations was to illustrate how the collected data will benefit the operations & maintenance of our open ditch drainage system and incorporation of the data into the SWEET model during the planning

Rebuild Houston Oversight Committee Meeting Minutes: October 22, 2013

phase. Both PowerPoint presentations were dispersed (attached) to committee members. Mr. Dargan stated the goal of the project is to help us meet the standards contained within our *Infrastructure Design Manual*. Mr. Dargan informed Committee Members that the Project will help fill in the gap for the nearly 50% of Houston that is served by an open ditch drainage system. City Council has approved the professional services contract and a pilot section has recently been completed by the consultant to help ensure the quality of the data meets organizational expectations. The Notice to Proceed (NTP) will soon be issued and the Project is expected to be complete within 120 days after the NTP.

Council Member Costello asked if driveway culverts are being addressed in this survey. Mr. Dargan responded that this data will provide the capacity and flow lines of the ditches as well as the cross culverts underneath the public streets. Driveway culverts will be handled as an operation and maintenance issue should we need localized improvements to the system.

Council Member Green raised concern regarding streets and communities which are lacking drainage ditches such as the 5th Ward community. Mr. Dargan stated that the Open Drainage Assets Inventory and Survey Project will, for the first time, provide a complete picture of the drainage system, allow PWE to look at a customer concern in the context of the capacity of the system and allow for setting standards such as an established flow line.

Ms. Haddock then gave a presentation on the Open Drainage Assets Inventory and Survey Project and how the additional data will affect PWE's capital improvement planning process. Ms. Haddock stated that the project will provide two immediate benefits: a new data set and better defined subsystems with smaller areas that are more in line with areas represented in the Comprehensive Drainage Plan. The new data set will also provide the edge of pavement locations to determine whether or not the pavement width meets the City's standards.

Chairman Herrera stated that one can see with these presentations that PWE staff is needed and is an important part of ReBuild Houston for proper planning, operations, maintenance, equipment, etc. He then asked Council Member Pennington to provide a brief overview of the history of the ReBuild Houston Advisory Committee. Mr. Pennington said the purpose of the amendment to the ordinance, which created the Committee, was to ensure that ReBuild Houston revenue went to projects and related activities. It provided an extended planning horizon to 10 years for the street and drainage CIP. He also noted that we have transitioned from a debt structure to a pay-as-you-go system and that historically, we have been substantially underfunding the CIP.

4. Meeting Schedule for CY 2013 & CY 2014

Copies (attached) of the proposed "hold dates" for the 2014 ReBuild Houston Advisory Committee Meetings were dispersed to Committee Members. Mr. Rudick requested that the Committee review the proposed 2014 meeting schedule and finalize all dates at the Tuesday, November 19, 2013 meeting. Mr. Rudick also noted that the CIP District Town Hall Meetings are conducted during February and March and, therefore, particular attention should be paid to the months of January through April. Chairman Herrera suggested that after the first four months, we use these dates as placeholders. Council Member

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Costello suggested that the committee also meet during the budgeting process which occurs during the months of May and June. In an effort to further educate the committee on the ReBuild Houston and PWE processes, Chairman Herrera recommended that, during alternating months, the meetings should offer educational presentations by various divisions / branches of PWE. Ms. Brooks recommended that the Committee not meet during the summer months of July and August.

Chairman Herrera stated the 2014 calendar discussion would be on the agenda in November to finalize. Due to the upcoming 2013 holiday season, Mr. Rudick suggested that the committee consider combining the November and December 2013 meetings. Ms. Brooks recommended that the two meetings be combined and the remainder of the committee was in agreement and determined the last meeting for 2013 will be held on Tuesday, November 19, 2013 at 10:30 a.m.

5. Executive Report

Mr. Rudick shared with the Committee that he and Mr. Daniel Krueger, PWE Director, had the opportunity to interview with 'Houston Matters,' a local radio show on KUHF on Thursday, October 17, 2013. Additionally, on Friday, October 4, 2013, Mr. Rudick conducted a presentation on infrastructure finance and pay-as-you-go to the American Planning Association's Texas Conference in Galveston.

Copies (attached) of the monthly Drainage Utility Fees Collections & Expenditures (as of September 30, 2013) exhibit were dispersed to Committee Members.

6. Old Business/New Business

Mr. Patrick Walsh announced that he has accepted a position with the City of Houston as Deputy Director of the Planning and Development Department and, as a result, has tendered his resignation from the ReBuild Houston Advisory Committee effective November 1, 2013. He stated that he has enjoyed serving on the committee and hopes to see the committee members in the future.

7. Public Comments – None

8. Adjourn:

Meeting adjourned at 12:30 p.m.

Attachments:

- Open Drainage Assets Inventory and Survey Project (Storm Water maintenance Branch) PowerPoint presentation
- Open Drainage Assets Inventory and Survey (Infrastructure Planning Branch) PowerPoint presentation
- Complete Streets PowerPoint presentation
- Complete Streets Executive Order
- Drainage Utility Fees Collections & Expenditures exhibit (as of September 30, 2013)



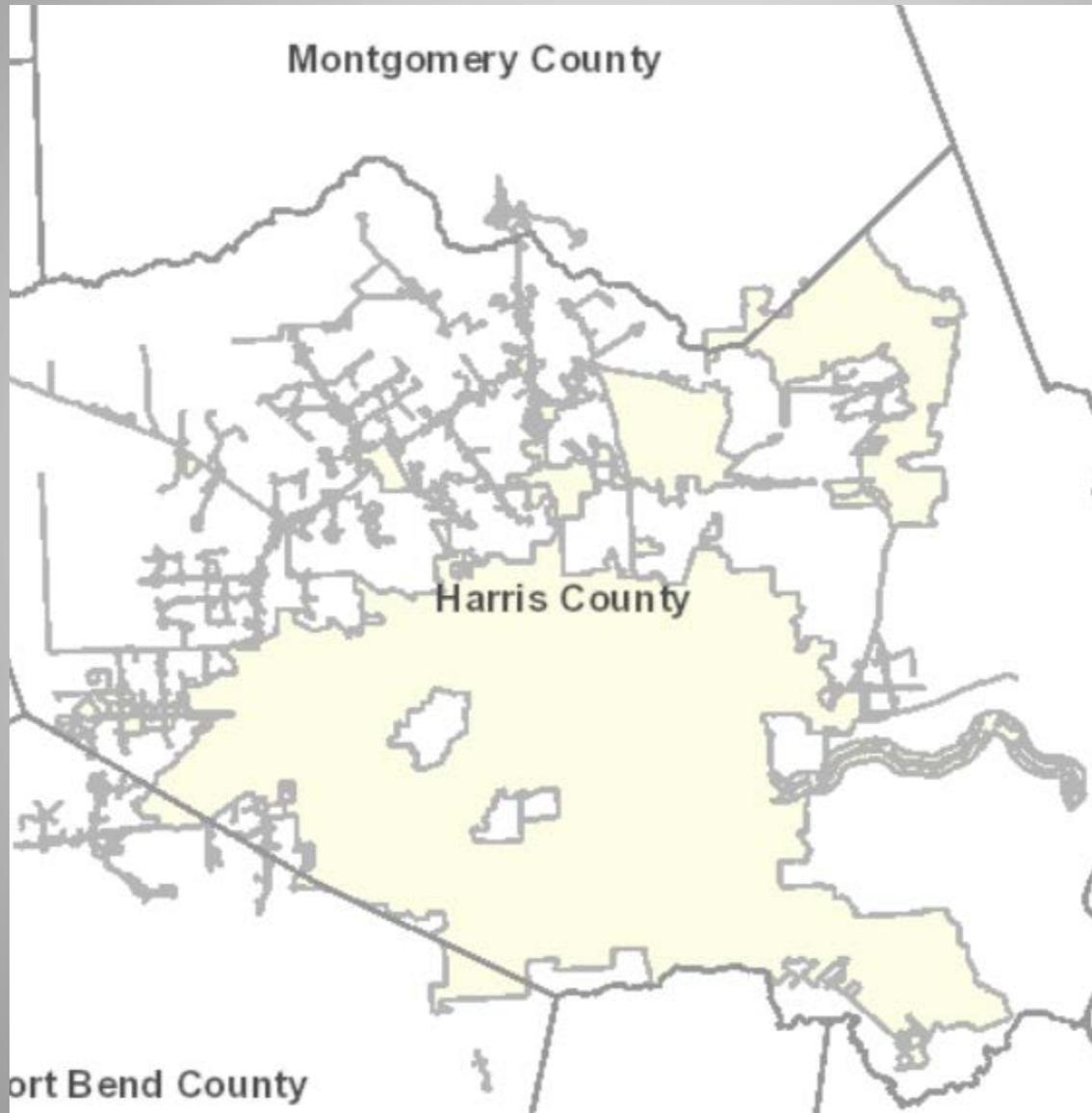
Open Drainage Assets Inventory and Survey Project

ReBuild Houston Advisory Committee
October 22, 2013

Storm Water Maintenance Branch
Street and Drainage Division



City of Houston Extent of Storm Water Infrastructure - 650 Square Miles



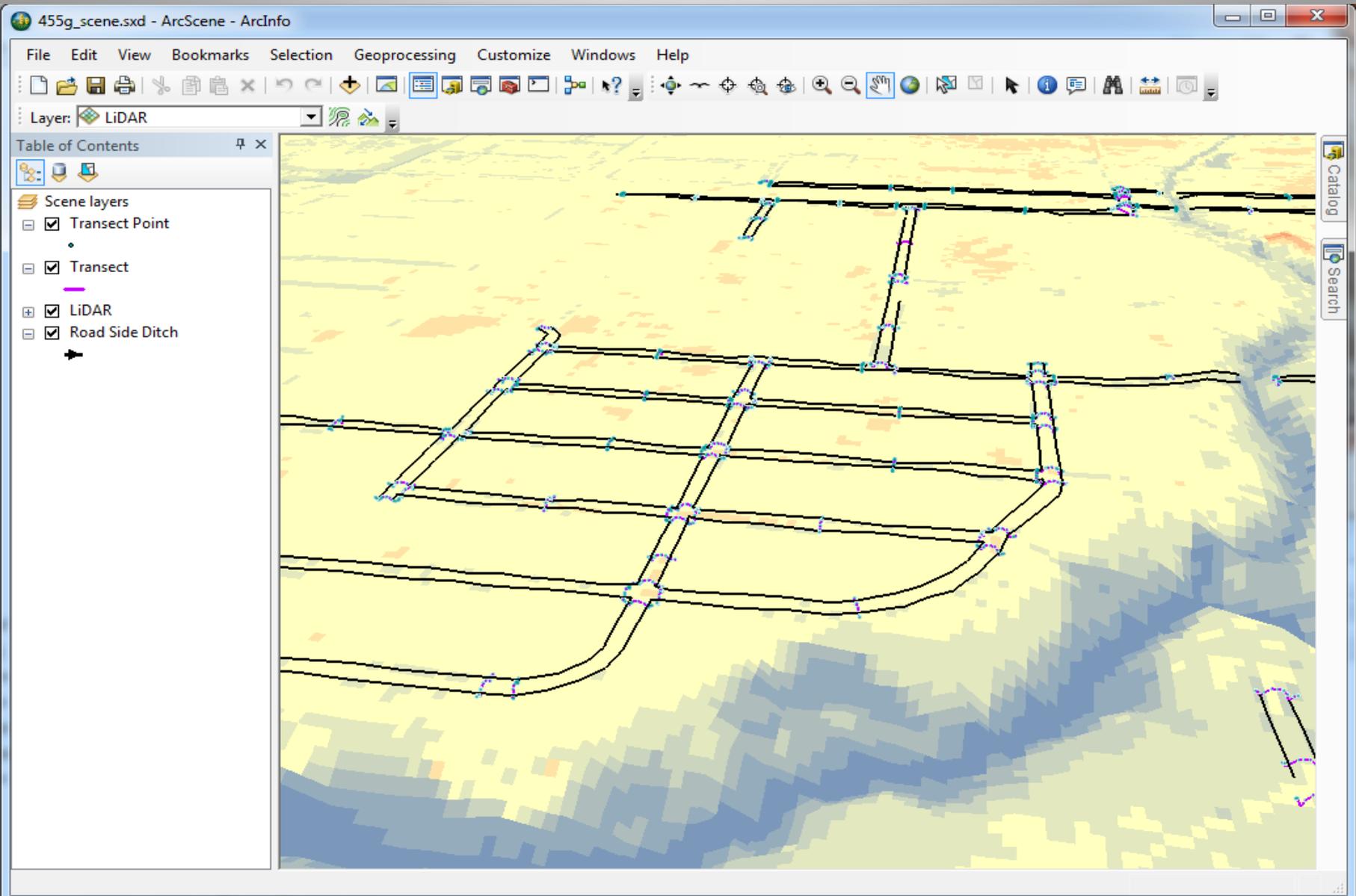
Road Side Ditches are approximately 50% of the complete storm drainage system network

- **3,600+ Miles of Roadside Ditches**
- **3,500+ Miles of Storm Gravity Mains**

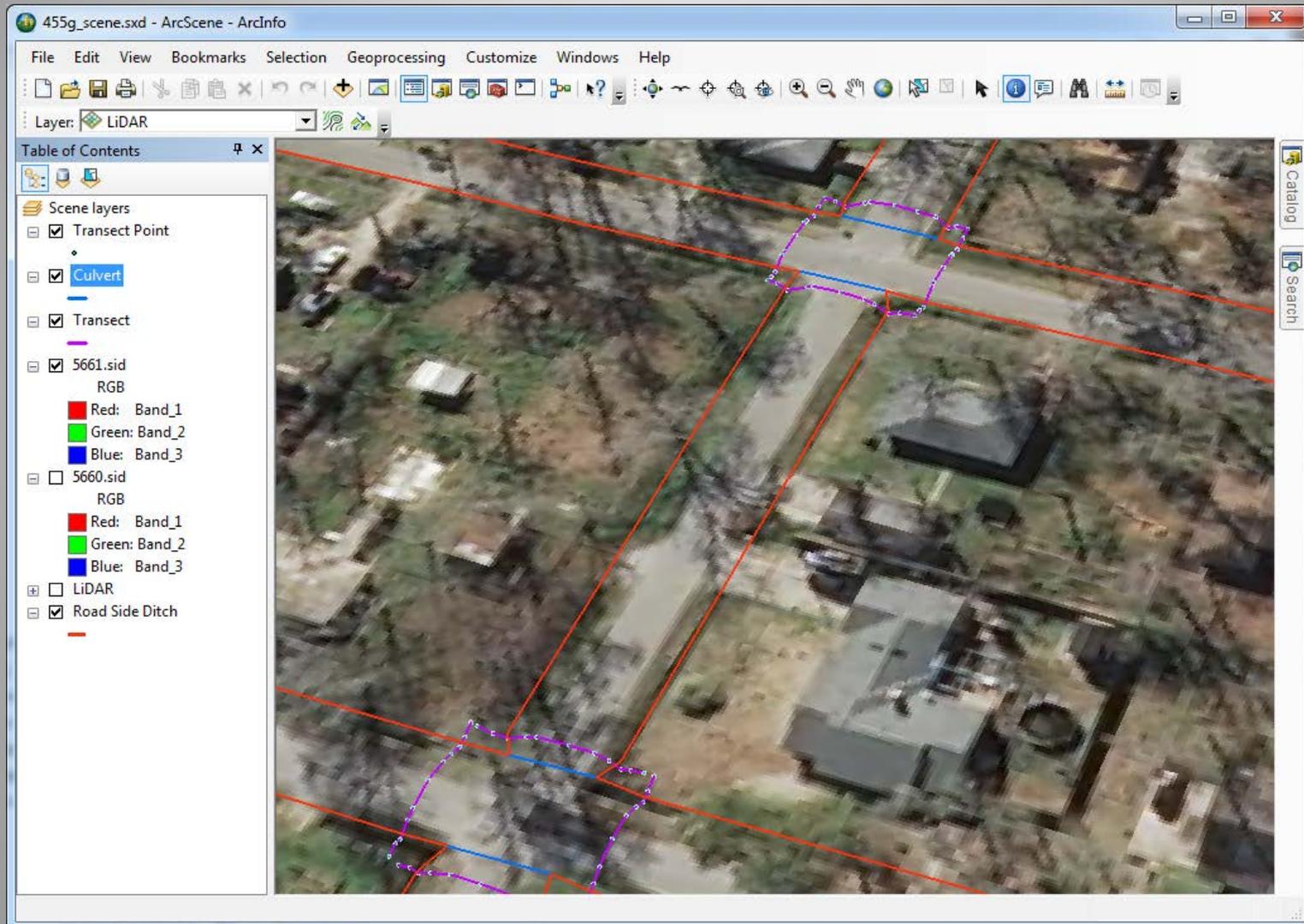
Typical Road Side Ditch



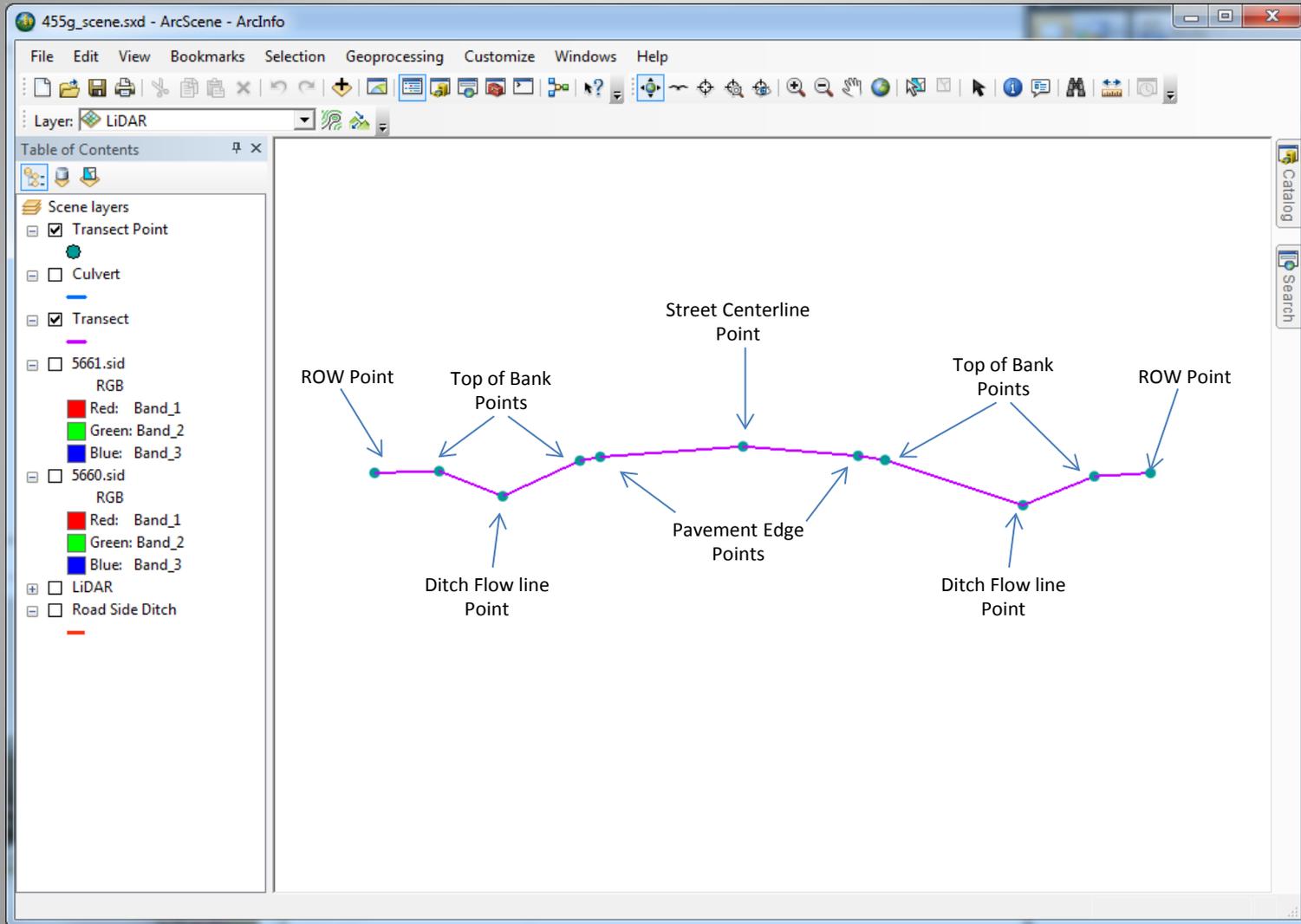
Example of Open Drainage Portion linked to HCFCD Overland Flow LiDAR Topography Data



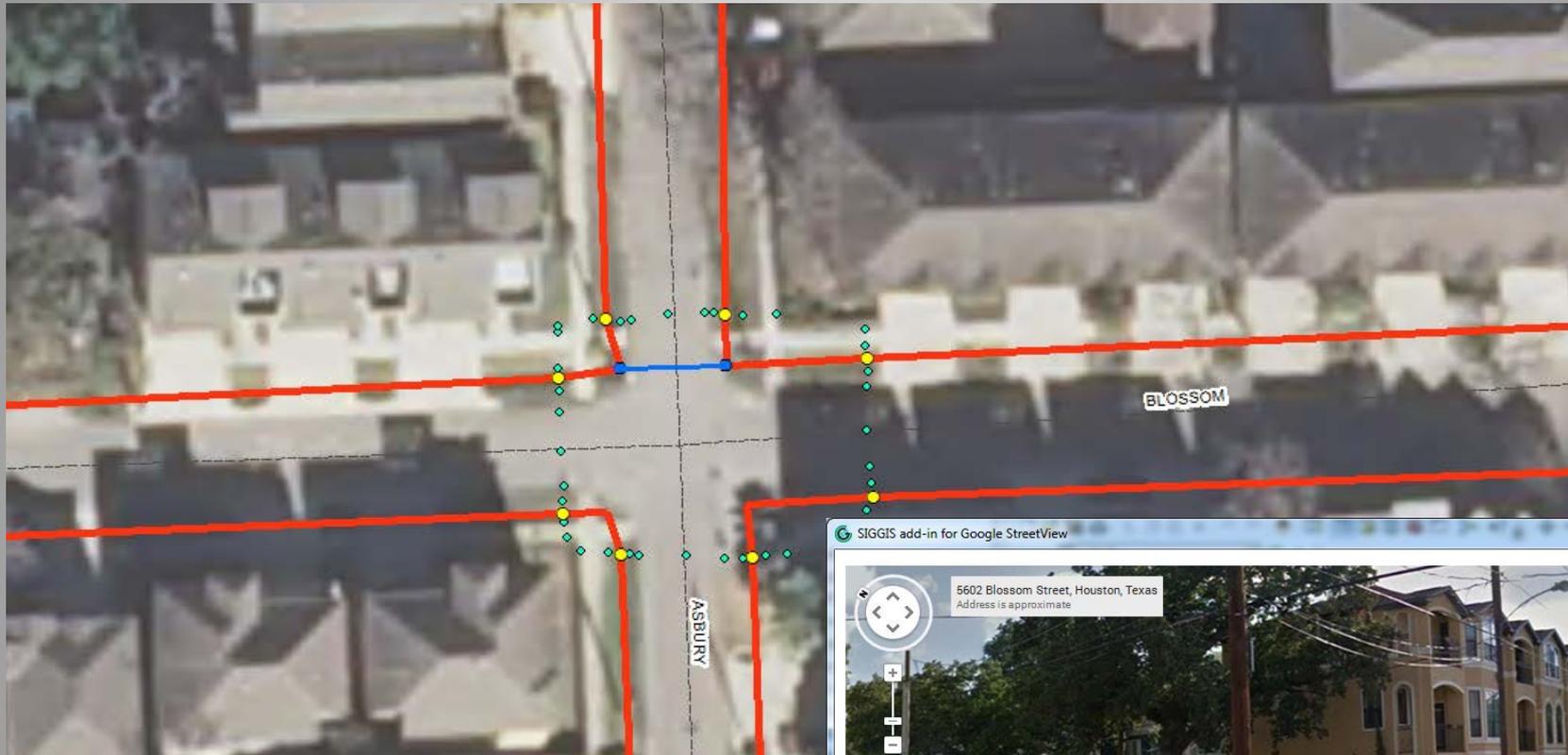
Example Aerial View of Open Ditch Lengths, Cross Culverts and Transects



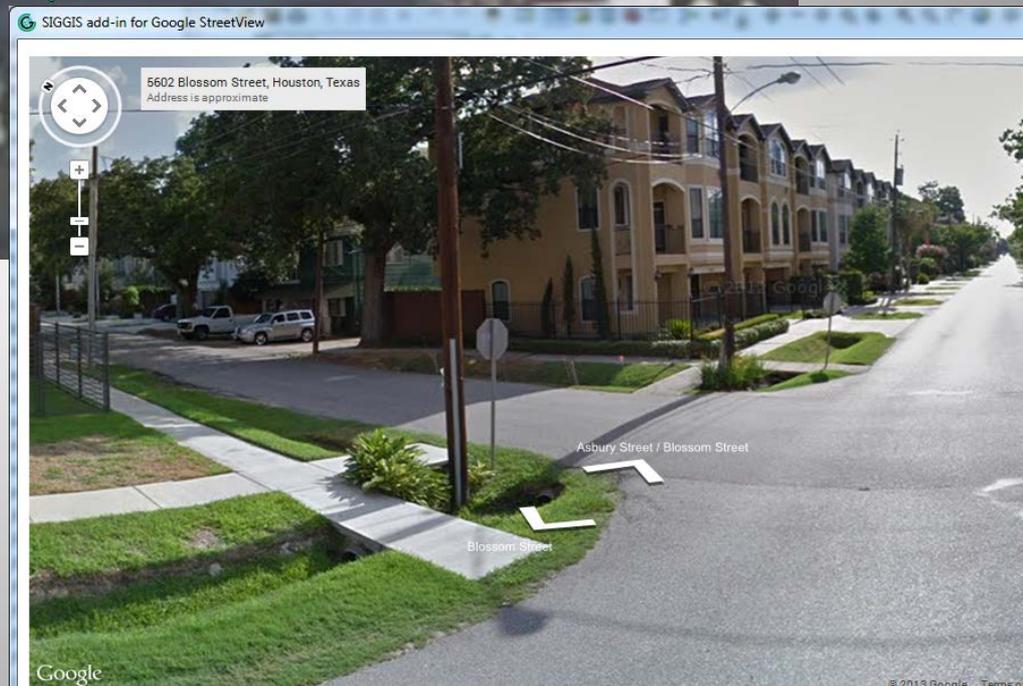
Street Profile Transect (Cross Section)



Typical intersection with transect points, cross culverts and ditch flow lines



Corresponding Street View of intersection



Example of 1) GIS Underground Storm Pipe System; and Example of 2) Connecting Road Side Ditch Drainage System

EXAMPLE 1: Before Open Drainage Assets Project



Example of 1) GIS Underground Storm Pipe System; and Example of 2) Connecting Road Side Ditch Drainage System

EXAMPLE 2: After Open Drainage Assets Project



How project will benefit O&M:

- Provides a complete picture of the drainage system.
- Allows PWE to look at a customer concern in the context of the capacity of the system.
- Allows for setting standards such as an established flow line.

Time Schedule

- Pilot currently underway
- NTP issued upon completion of pilot
- 120 days to complete after NTP issued



thumbs up



for progress

REBUILD HOUSTON

better streets. better drainage. better future.



Open Drainage Assets Inventory and Survey

Planning with the Improved Data

Department of Public Works & Engineering

10/22/13

Today's Topics

- SWEET Dataset overview for Drainage
- Improvements to Datasets
 - ▣ Analysis versus Observation
 - ▣ Outfall Area Definition

SWEET Parameters

Storm Drainage

Table 2.1
Storm Drainage Need Prioritization Weighting Factors

Parameter	Percent
Capacity of Existing Storm Drainage System	38%
Design Event System Adequacy	40%
Extreme Event System Adequacy	20%
Reported "Non-Structural" Flooding	40%
Existence of Structural Flooding	38%
Reported "Structural" Flooding	65%
Flood Insurance Claims	35%
Drainage Impacts to Mobility	24%
Reported "Street Impassable" Flooding	100%



STATUS

STORM DRAINAGE



PRESENTED TO COMMITTEE IN AUGUST 2011

	Inadequate	Adequate
System Adequacy for Design Event		
Analysis Performed	21%	15%
Based on Observation	8%	32%
Others	25%	
System Adequacy for Extreme Event		
Ponding in ROW	31%	69%

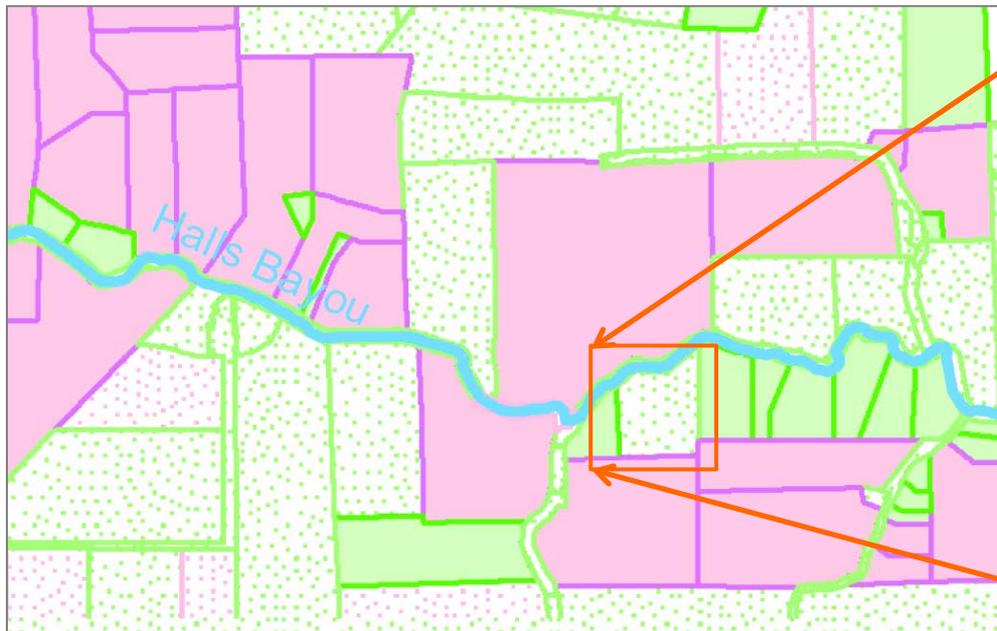
- Storm Drainage needs are driven by the capacity of the existing system and documented structural flooding.
- Ponding in the ROW indicates a need in the extreme event system.

Open Drainage Assets

Analysis versus Observation

5

- Systems “by Observation” relied on reported structural flooding
- Inventory and Survey Data will be used to Analyze Drainage Area and Capacity (Adequate/Inadequate)



Design System Adequacy Parameter

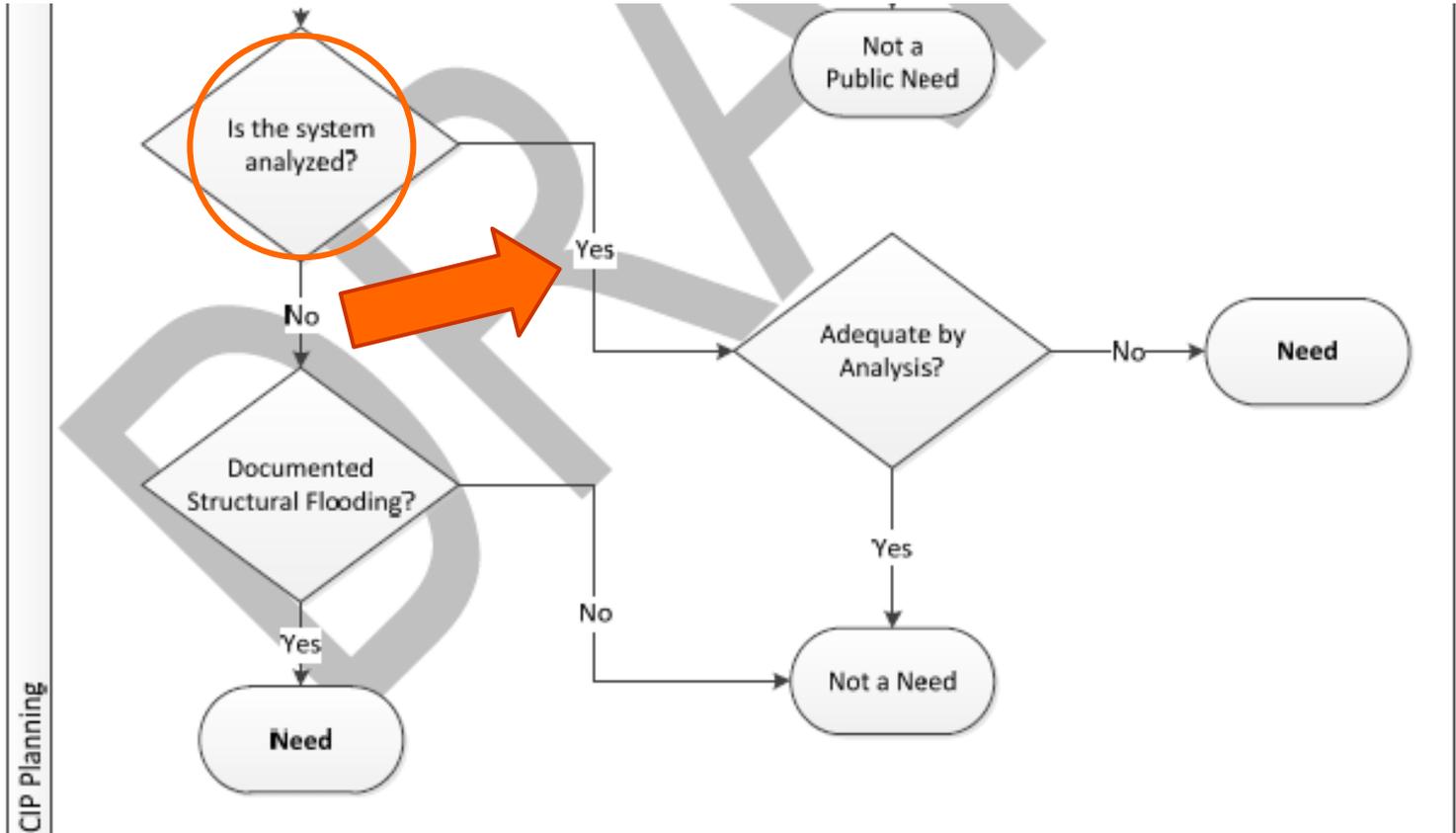
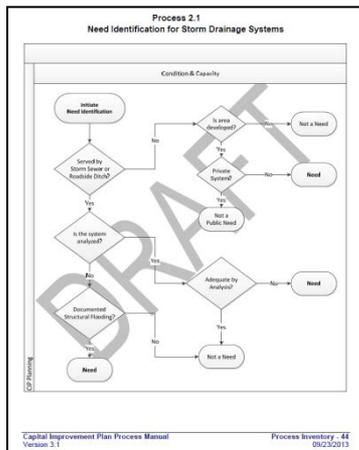


Key Map 455G

SWEET Parameters

Design System Adequacy

- Move Open Drainage Assets from Observation to Analyzed Status



Open Drainage Assets

Outfall Area Definition

7

- Refine Outfall Areas based on Open Drainage System network



thumbs up  for progress

REBUILD HOUSTON

better streets. better drainage. better future.

QUESTIONS

www.ReBuildHouston.org

COMPLETE STREETS EXECUTIVE ORDER

Presented by:

Planning and Development Department &
Public Works and Engineering Department

October 21, 2013



Transportation, Technology & Infrastructure Committee

Executive Order

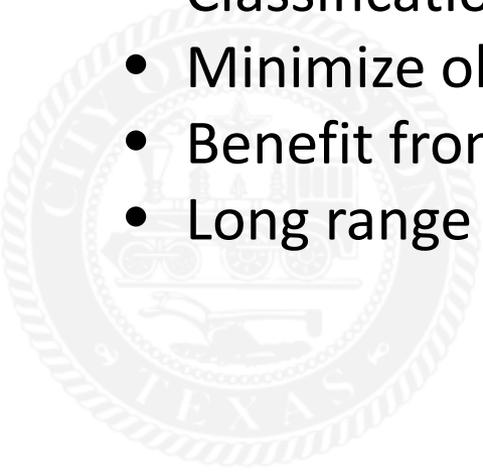
Purpose and Objectives

Purpose:

Direct City's efforts to achieve Complete Streets

Objectives:

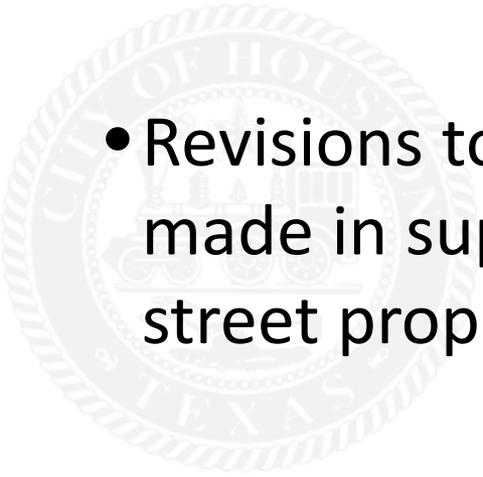
- Menu of Complete Street Typed based upon Multi Modal Classification
- Minimize obstructions in sidewalks
- Benefit from Community input
- Long range vision of Complete Streets



Executive Order

Products

- Houston Complete Streets & Transportation Plan
- Provide an overall framework
- Develop an implementation plan for transition and then sustainment of planning and plans
- Revisions to the current plans and manuals will be made in supportive ways to encourage complete street proposals



Executive Order

Scope

- Amend Codes and Policies to Implement Plan
- Entities will partner with PWE and PDD
- Encourage alternative designs based upon complete street standards early in proposed development



Executive Order

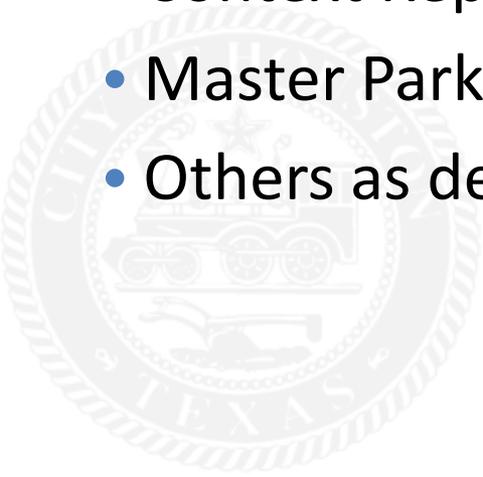
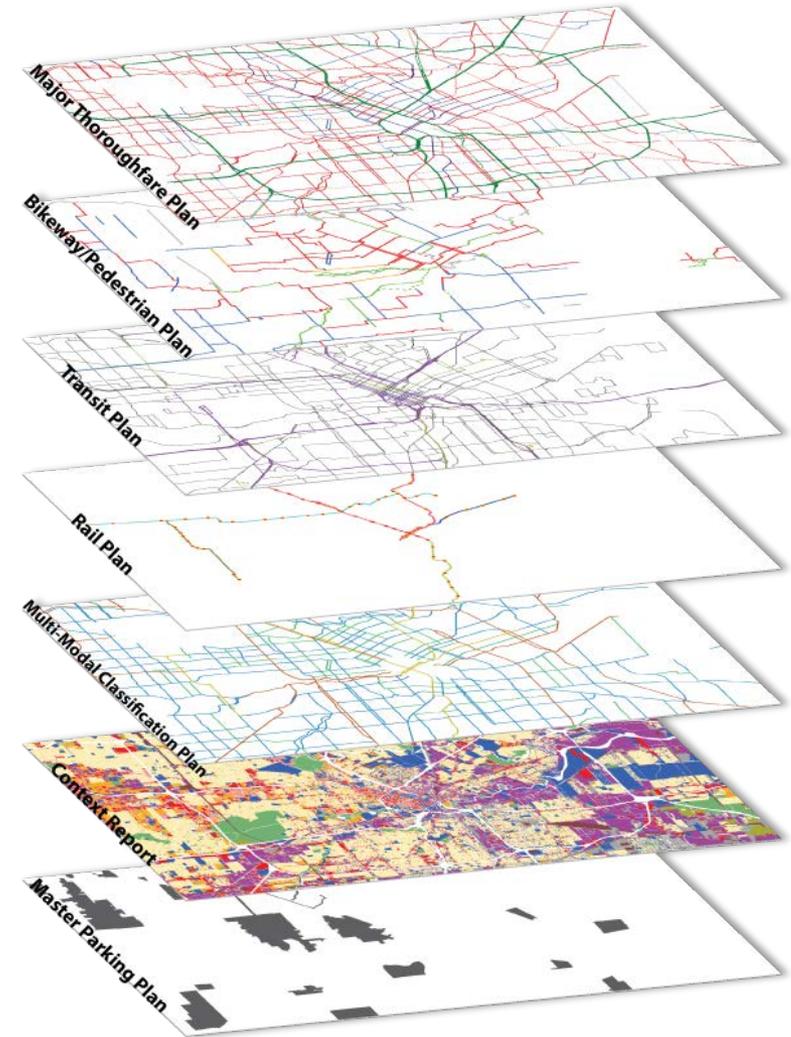
Complete Street Definition



Executive Order

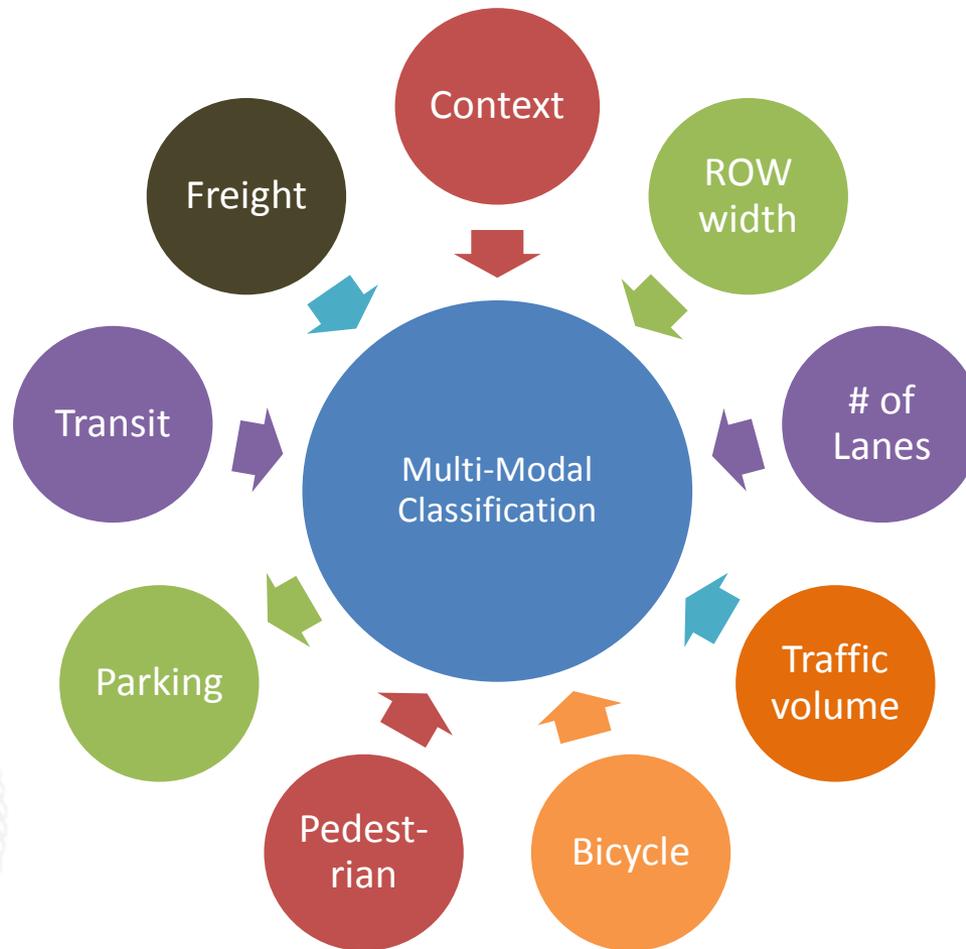
HCSTP - Components

- Major Thoroughfare Plan
- Bikeway/Pedestrian Plan
- Transit Plan
- Rail Plan
- Multi-Modal Classification Plan
- Context Report
- Master Parking Plan
- Others as developed



Executive Order

Multi-Modal Classification Street Type



Executive Order

Functional Classification



- Principal Thoroughfare
- Major Thoroughfare
- Major Collector
- Minor Collector
- Local Street
- Transit Corridor Street

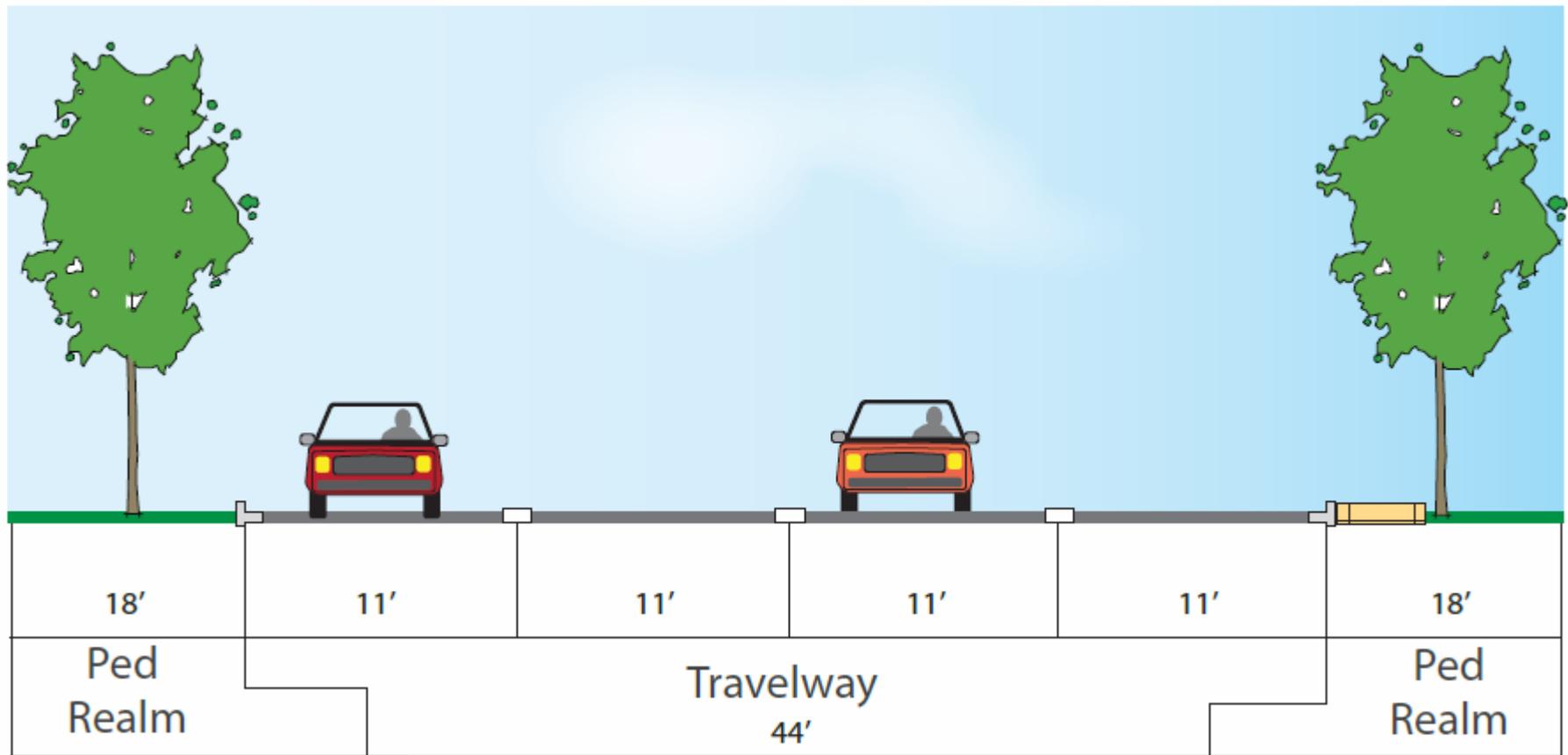


Executive Order

Multi-Modal Classification

Old MTFP

T-4-80



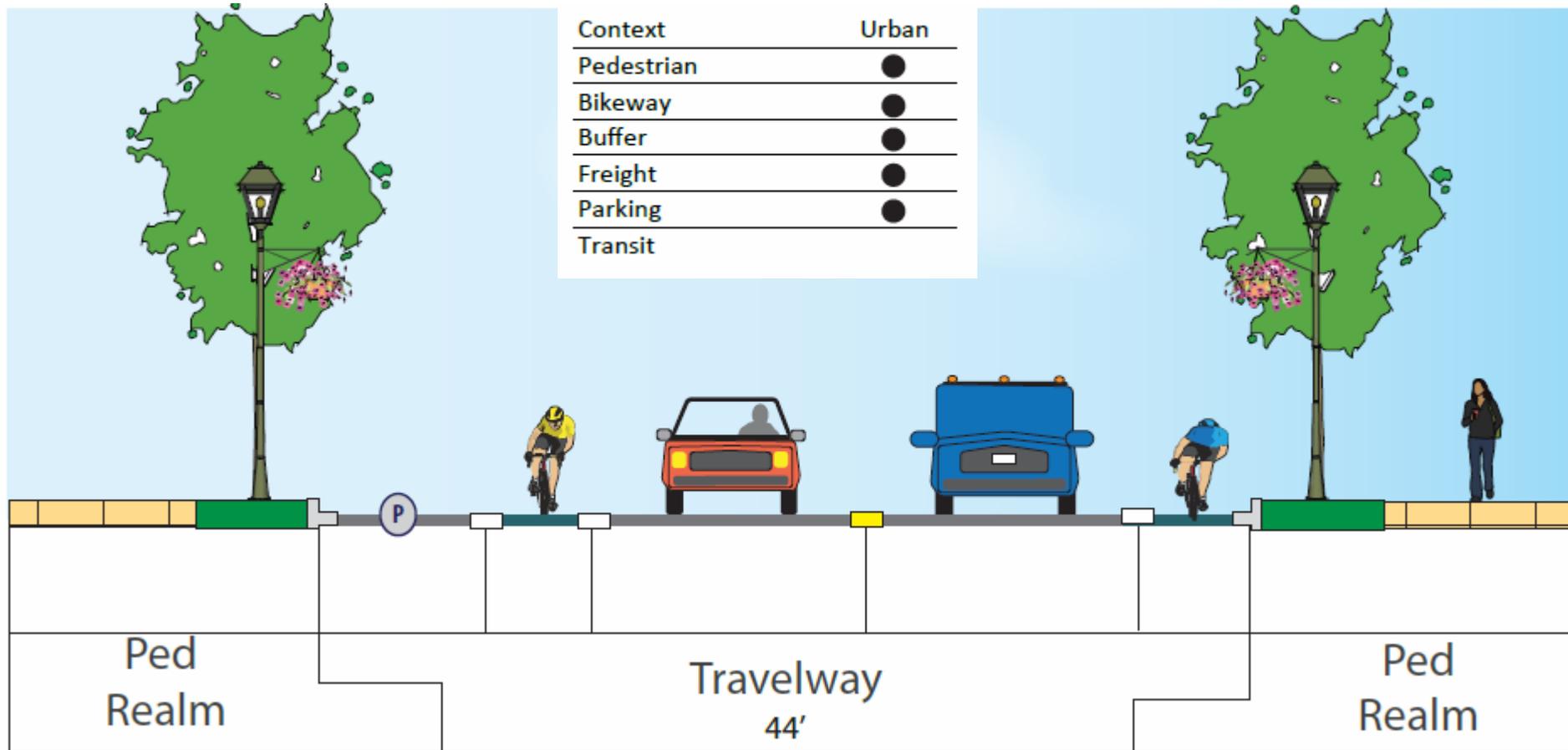
Executive Order

Multi-Modal Classification

MULTI-MODAL CLASSIFICATION

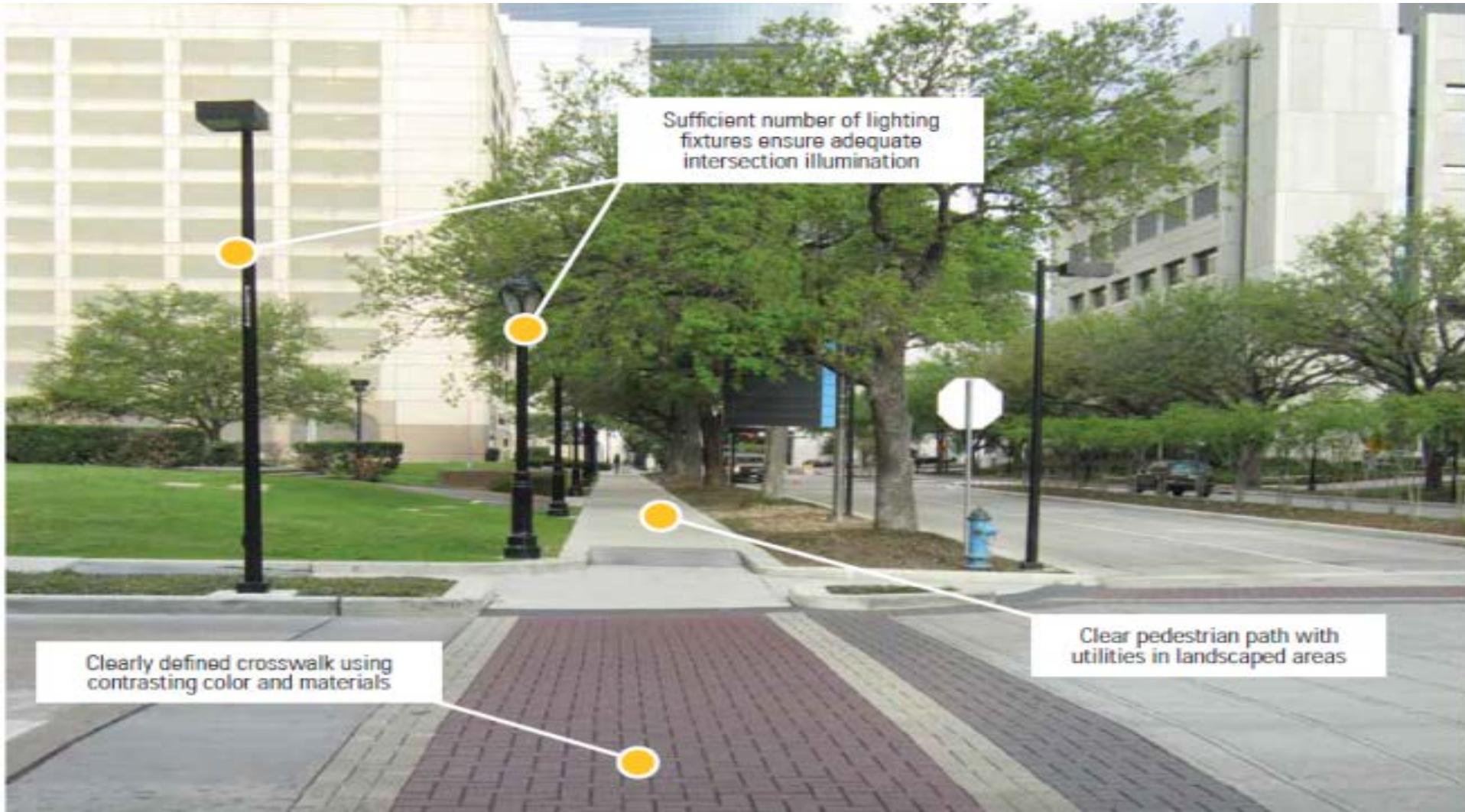
Functional Classification: C-2-80

Context: Urban



Executive Order

Measuring Success



Before



Navigation Boulevard

After



QUESTIONS?



PLANNING &
DEVELOPMENT
DEPARTMENT





CITY OF HOUSTON

Executive Order

Subject: **Houston Complete Streets and Transportation Plan**

E.O. No:

1-15

Effective Date:

Upon Approval

1. AUTHORITY

Article II. - Corporate and General Powers, Sec. 4 – Street Powers, of the City Charter of the City of Houston.

2. PURPOSE

This Executive Order directs City efforts to achieve complete streets, as defined herein, through the planning, designing, budgeting, constructing, and reconstructing of all transportation improvements while recognizing that complete streets are achieved over time through single projects, new and redevelopment, and through a series of incremental improvements. This Executive Order also builds upon recent code and policy improvements such as, Chapter 42 of the Code of Ordinances including the requirement for existing conditions surveys and plans for recently completed and on-going city mobility studies.

3. OBJECTIVES

- 3.1 Establish a menu of complete street types based upon Multi Modal Classification.
- 3.2 Develop a forecast of street type citywide to complement and extend currently established plans to create the long range vision of complete streets
- 3.3 Establish city standards to minimize obstructions in public pedestrian travel ways.
- 3.4 Benefit from community input and thought rendered through reports such as Livable Center Studies and Scenic Houston's Streetscape Resource Guide.

4. PRODUCTS

- 4.1 Provide policies and procedures that shall direct the development of the Houston Complete Streets and Transportation Plan (The Plan) by utilizing City Mobility Planning efforts conducted by Planning and Development Department (PDD) and the Public Works and Engineering Department (PWE); and by utilizing prior and existing governance and existing planning tools as a basis.
- 4.2 Provide an overall framework for revision and expansion of City Mobility Planning and deliverables.
- 4.3 Transition to and then sustain The Plan.
- 4.4 Provide framework for coordination and integration of revisions to current plans, such as, Major Thoroughfare and Freeway Plan, Houston's Bikeway Plan, with new component

Approved:

Date Approved:

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plans, and vice versa, in supportive ways to encourage complete streets.

5. SCOPE

The Plan will be inclusive of multiple transportation plan components created, adopted and implemented by the City and entities other than the City of Houston. It is intended that those entities will partner with PDD and PWE on the planning and finalization of The Plan as it relates to their specific transportation planning roles. For example, Metropolitan Transit Authority of Harris County (METRO), author of METRO's Transit Plan, will provide input on The Plan regarding mass transit through a periodic transit plan update. The Planning and Development and Public Works and Engineering Departments will integrate all planning efforts for compilation and implementation of the HCSTP.

6. DEFINITIONS

There are four new definitions that will need to be defined in certain documents used by PDD and PWE that guide planning, construction and reconstruction efforts of land planners, developers and civil engineers. These documents include the MTFP Policy Statement and PWE's Infrastructure Design Manual.

The new definitions are as follows.

Complete Streets – Public roadways that take into account all users, including people who are driving or riding in cars, using mass transit, riding bikes, walking, using wheelchairs, driving or riding in trucks, driving or being transported by emergency vehicles, and being served at their residence or property by other users. Complete streets do not mean that all streets are identical. The complete street concept takes the following variables into account when providing services:

- a. People being served at their residence or property by other ROW users
- b. People of all ages and abilities, including children, older adults, and persons with disabilities.
- c. The function of the road (e.g. local, collector, and thoroughfare) and the level of vehicular, pedestrian, and bicycle traffic.
- d. Multi-Modal Classification Street Types

Houston Complete Street and Transportation Plan - A plan that at a minimum includes the Major Thoroughfare and Freeway Plan, Bikeway/Pedestrian Plan, Rail Plan, Multi-Modal Classification Street Type and Master Parking Plan, Bayou Greenway Initiative, Context Report and METRO's Transit Plan.

Multi-Modal Classification Street Type – A public street type classification system that takes into account the functional classification (MTFP designation) and land use context, inclusive of right-of-way width, number of lanes, and traffic volume.

The context of the land use adjacent to the road comprises population and job densities (present and future), projected land use types (residential, commercial, community facility, or industrial), and modes of operation (pedestrian, bicycle, transit, rail, freight and vehicle lanes) can be used as a determinant in identifying Multi-Modal Classifications.

Minor Collector – A public street that accumulates traffic from local streets for distribution into a

Subject:

Houston Complete Streets and
Transportation Plan

E.O. No.:

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thoroughfare or major collector. A minor collector typically serves residential uses. Although in some circumstances, it may serve commercial or mixed uses.

Existing definitions below that are contained within this Order are here for the ease of reading the document.

Major Thoroughfares are divided into two classifications; Principal Thoroughfare and Thoroughfare. Major Thoroughfares are those streets designed for fast, heavy traffic, and are intended to serve as traffic arteries of considerable length and continuity throughout the community.

Principal Thoroughfares are public streets that accumulate traffic from collector streets and other Major Thoroughfares for distribution to the freeway system. They may be a highway and typically provide a high degree of mobility for long distance trips.

Thoroughfares are public streets that accumulate traffic from Collector streets and local streets for distribution through the thoroughfare and freeway system. These streets distribute medium to high volume traffic and provide access to commercial, mixed use and residential areas.

Transit Corridor Streets are rights-of-way or easements that METRO has proposed as a route for a guided rapid transit or fixed guideway transit system and that is included on the City's MTFP.

Collector Streets are public streets that accumulate traffic from local streets for distribution to the Major Thoroughfare streets. A Collector Street may be a Minor Collector or a Major Collector.

Major Collectors are public streets that accumulate traffic from local streets and Minor Collectors for distribution to the Major Thoroughfare. A Major Collector Street may have commercial, residential or have mixed uses abutting.

7. COMPONENTS

- 7.1 The Plan, at a minimum, shall include the components specified in the table below.
- 7.2 The component plans address different transportation related elements of our City and areas multimodal transportation network. The planning horizon specifies a regular period of time an authority will look into the future when preparing an update to the plan. Validation of assumptions and reprogramming of needs will be re-modeled and re-evaluated so that amendments to the plan can occur periodically. The re-modeling will identify positive and negative data trends for analysis and possible adjustments moving forward.

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CONTENT OF COMPONENTS

Plan Components	Existing Conditions Information	Planned Information	Plan Horizon
Major Thoroughfare and Freeway Plan	Right-of-way owned or to be acquired	Classification to include type, number of traffic lanes and right-of-way widths	+ 30 yrs
Bikeway/Pedestrian Plan	Route alignment, type routes	Route alignment, type routes	5 yrs
Transit Plan	Route alignment by mode	Route alignment by mode	10 yrs
Rail Plan	Rail corridors, street crossings, quiet zones	Crossing improvements; quiet zones planned and requested	5 yrs
Multimodal Classification Plan	Current section types	Future section type at reconstruction	20 yrs
Context Report	Land use and development pattern	Population and Job growth forecasting	10 yrs
Master Parking Plan	Street capacity for parking; metered zones, public lots/garages; residential permit zones	Planned lots/garages	5 yrs

7.3 The Plan components have differing planning horizons. Each component would continue to be amended on its own plan horizon – some sooner than others.

8. RESPONSIBILITIES

- 8.1 Planning and Development and Public Works and Engineering Departments along with METRO are responsible for the administration of the plan components. Planning and Development through the Planning Commission and City Council revises and adopts a new MTFP annually. The METRO Transit Plan is updated periodically through the METRO Board’s adoption.
- 8.2 The parties having component responsibilities will work together when amending and updating their own specific plans in order to remedy conflicts between plans and analyze opportunities to improve comprehensively elements where they converge.
- 8.3 Public Works and Engineering or Tax Reinvestment Zone design consultants and private development design consultants will propose during preliminary engineering a design concept consistent with the Multi-Modal Classification Street Type as designated in that component plan.
- 8.4 Additional amenities in the rights-of-way, such as, pedestrian lighting, street furniture, etc., will be considered when it is proposed by an entity responsible for acquisition, installation, operation and maintenance, repair or replacement, with PWE approval as needed.
- 8.5 PWE will refine standards for accomplishment of the objectives and document such standards within the Department’s Infrastructure Design Manual.

COMPONENT RESPONSIBILITY

Plan Component	Content Management	Promulgation of Update
Major Thoroughfare and Freeway Plan	Planning and Development—annual process of general input as established through MTFP Policy; specific input from mobility studies	Council adoption of annual revision after Planning Commission consideration and recommendation
Bikeway/Pedestrian Plan	Public Works and Engineering, Planning and Development —annual process, inter-departmental coordination	Public Works and Engineering

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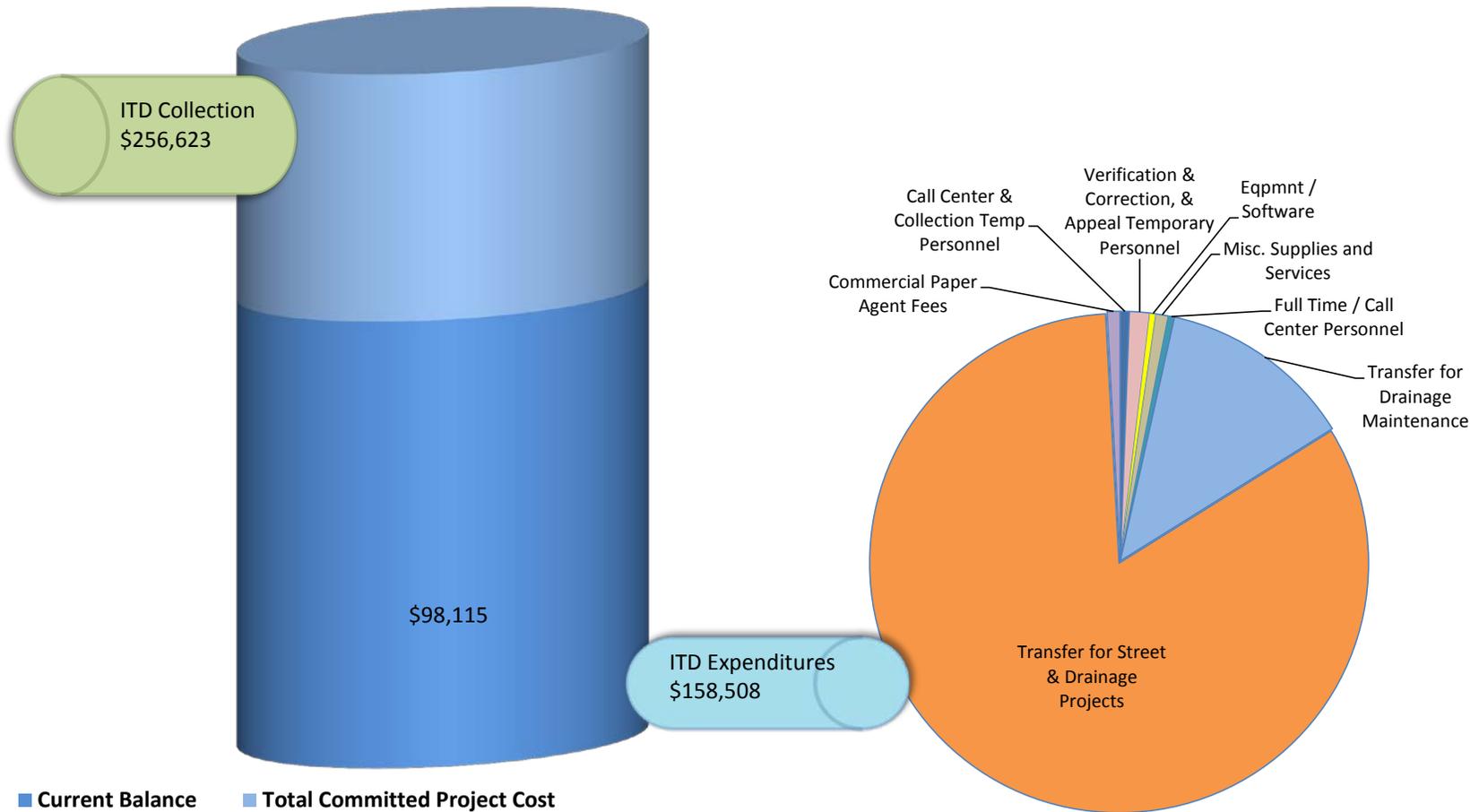
Transit Plan	METRO	Planning and Development will integrate to Houston Complete Street Transportation Plan after METRO presents Transit Plan to Transportation and Infrastructure Council Committee
Rail Plan	Public Works and Engineering with Gulf Coast Rail District	Public Works and Engineering
Multimodal Classification Plan	Planning and Development—recurring process to receive proposed changes from the public by Policy TBP	Planning and Development
Context Report	Planning and Development	Planning and Development
Master Parking Plan	Public Works and Engineering with Administrative and Regulatory Affairs Departments	Administrative and Regulatory Affairs Departments with support from PWE

9. MEASURING SUCCESS

Planning and Development shall prepare a report to the Mayor on an annual basis for system-wide totals within the City limits detailing efforts that support fulfillment of The Plan. A baseline will be established with Fiscal Year 2014 and cumulative improvements documented. METRO and the Planning Department shall provide documentation related to their expertise. PWE's information will be created from permitted private development data, Tax Increment Reinvestment Zones and Management District projects, as well as the Capital Improvements Plan developed throughout the time period. Examples of this data may be:

- 9.1 Linear feet of new/reconstructed sidewalks (PWE)
- 9.2 Linear miles of new/restriped on-street bicycle facilities (PWE)
- 9.3 Number of new/reconstructed curb ramps (PWE)
- 9.4 Number of new street trees planted (PDD)
- 9.5 Number of transit stops added to system (METRO)
- 9.6 Percentage of new/reconstructed transit stops with shelters (METRO)
- 9.7 Percentage of transit stops accessible via sidewalks and curb ramps (METRO)
- 9.8 Number of linear miles of new streets constructed or reconstructed in accordance with The Plan (PWE)

Drainage Utility
Inception to Date (ITD) Collections / Expenditures
(\$ in Thousands)
(As of September 30, 2013)



Note: Currently committed project costs total \$152.4 Million.