



Advisory Committee: Minutes of Regular Meeting – November 19, 2013

IN ATTENDANCE:

Gilbert A. Herrera, Chair – **Present**
Jeri Brooks – **Present**
Frances Castaneda Dyess – Absent
Kathryn Easterly – **Present**
Scott Elmer – **Present**
Vernita Harris – **Present**
Bert Keller – **Present**
Jeff Ross – **Present**
Edward Taravella – **Present**
Council Member Oliver Pennington, Ex-Officio – Absent

1. Call to Order / Welcome

The meeting was moved to the 4th floor Conference Room of City Hall. Chairman Gilbert Herrera called the meeting of the ReBuild Houston Advisory Committee to order at 10:45 a.m. and thanked all those in attendance.

2. Approval of the Minutes

Motion to approve the October 22, 2013 meeting minutes was made by Ms. Vernita Harris and was seconded by Ms. Kathryn Easterly. Mr. Jeff Ross abstained. Motion carried.

3. Meeting Schedule for CY 2014

Copies (attached) of the proposed “hold dates” for the 2014 ReBuild Houston Advisory Committee Meetings were dispersed to Committee Members. Mr. Rudick also notated 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 as it relates to the release of the next Draft “5+5 Plan”, public comment and Committee input prior to it being submitted to the administration in April.

4. Street Surface Assessment Update

Mr. Rudick introduced Mr. Brant Gary, Deputy Assistant Director, and Mr. Eric Dargan, Deputy Director, of the PWE Street and Drainage Division. Mr. Gary delivered a presentation on the Street Surface Assessment Vehicle (SSAV) and an update regarding its utilization as a tool to gather comprehensive citywide data on road conditions. The PowerPoint presentation (attached) was distributed to Committee Members. He informed the committee that initial data testing began in July 2009 and the first run of the SSAV was completed in 2011. PWE is currently performing the 2nd run with the SSAV and it will be completed by the end of the year. This is consistent with PWE's plan to perform an assessment of all city streets every two years. Mr. Gary informed the committee that prior to purchasing the vehicle, PWE had researched having the service contracted out. However, it was shown to be much more cost-effective to purchase the vehicle to have greater control utilizing the cutting edge technology for planning and maintenance purposes. Mr. Gary shared that the SSAV has an anticipated five year life due to ever evolving technological advances and, during the 5 years, would include three full citywide assessments. For the 2nd SSAV run, several updates were made including equipment upgrades, dampened pavement crack sensitivity, normalizing concrete surfaces and asphalt surfaces, utilization of a different GIS layer to better coincide with other departmental information, a new algorithm and more.

Mr. Brant also discussed how the Pavement Condition Rating (PCR) data is used, stating that the data serves as an indicator in identifying "need areas", guides maintenance programs (including overlay and concrete repairs), assists in the development of capital projects and is one of several factors for projects involving drainage, transportation, traffic control and other right-of-way projects.

Mr. Bert Keller brought up a range of points related to crack widths. Mr. Ed Taravella asked which lane gives the most accurate reading. Mr. Dargan responded that we typically drive the outside curb lane.

Mr. Daniel Krueger, Director of PWE, notated that the algorithm from the 1st to the 2nd SSAV run has changed. Therefore, the PCR scores for 2011 and 2013 cannot be compared. Although there are differences between the two runs, the change is not appreciable. He also stated that when the 2nd run is complete, the findings will be posted to the ReBuild Houston website (www.rebuildhouston.org).

5. Overview & Status of Program

Mr. Dale Rudick gave a presentation on the status of the ReBuild Houston program. The PowerPoint presentation (attached) was distributed to Committee Members. He began by saying the City as well as other cities throughout the State of Texas and beyond has a 5-year Capital Improvement Program (CIP). Although ReBuild Houston is technically only a funding mechanism, the administration and the department have incorporated and published a ten-year planning methodology. The second half of the ten-year plan, known as the '+5 Year Plan' provides the avenue for proper planning to ultimately allow the most cost-effective candidate projects be recommended for the next 5-year CIP. Mr. Rudick provided an overview of the various phases of this planning process. This process consists of identifying a 'Need Area' or the 'Worst First' by utilizing objective data and comparing it to a defined Level of Service as set by established City standards. Once a need area is identified, it is pre-engineered. The pre-engineering process includes solution development, defining the scope of a project and determining

Rebuild Houston Oversight Committee Meeting Minutes: November 19, 2013

an estimated cost of the candidate project. It is then scored and prioritized based on benefit and cost. The highest ranking candidate projects are then recommended for the next CIP (within the funding constraints) where it is typically scheduled for construction in Year 5 of the annualized 5 year CIP.

The implementation of the ReBuild Houston methodology (as illustrated on Slide #8 of the PowerPoint) where the most cost-effective projects that have gone through this process were scheduled in FY 17 and FY 18 of the current FY 14-18 CIP. From this point forward, Year 5 of the future annual CIP's will be populated with new cost-effective projects that have gone through this transparent methodology which is posted on the ReBuild Houston website. The anticipated January through April 2014 '5+5 Plan' schedule was also presented.

6. Executive Report

Mr. Rudick provided a review of three financial reports (attached) including the Drainage Utility Collections quarterly report (as of September 30, 2013), the Dedicated Street & Fund Group report (quarter ending September 30, 2013) and the FY13 (Year 2) End of Year Financial Summary, all of which were dispersed to Committee Members.

7. Old Business/New Business

Chairman Herrera welcomed the Committee's newest member, Mr. Scott Elmer. Mr. Elmer is a resident of the Meyerland area. He is the Assistant City Manager for the City of Missouri City and is a professional engineer.

Chairman Herrera asked the Committee if there is any one thing they would like to see ReBuild Houston track or measure. Mr. Elmer's response was tracking progress and how long a project stays in the CIP. Mr. Elmer also suggested we work toward defining measurable goals. Mr. Jeff Ross stated that progress needs to be reported in a statistical format but does not necessarily mean dollars. Ms. Vernita Harris would like to see measureable goals.

8. Public Comments

Mr. Robert Fiederlein with the East End Management District provided comments from the district as it relates to need identification, prioritization and programming.

9. Adjourn: Meeting adjourned at 12:30 p.m.

Attachments:

- ReBuild Houston Advisory Committee Meeting Hold Dates
- Street Surface Assessment Update PowerPoint Presentation
- Overview of ReBuild Houston Program PowerPoint Presentation
- Drainage Utility Collections quarterly report (as of September 30, 2013)
- Dedicated Street & Fund Group report (quarter ending September 30, 2013)
- FY13 (Year 2) End of Year Financial Summary



REBUILD HOUSTON
better streets. better drainage. better future.

ReBuild Houston
Advisory Committee Meeting Hold Dates

Time:

10:30 a.m. – 1:00 p.m.

Dates:

January 28, 2014

February 25, 2014

March 25, 2014

April 22, 2014

May 27, 2014

June 24, 2014

July 22, 2014

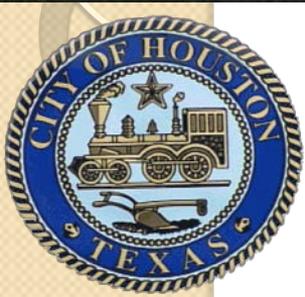
August 26, 2014

September 23, 2014

October 28, 2014

November 18, 2014

December 16, 2014



Street Surface Assessment Update

ReBuild Houston Advisory Committee

November 19, 2013





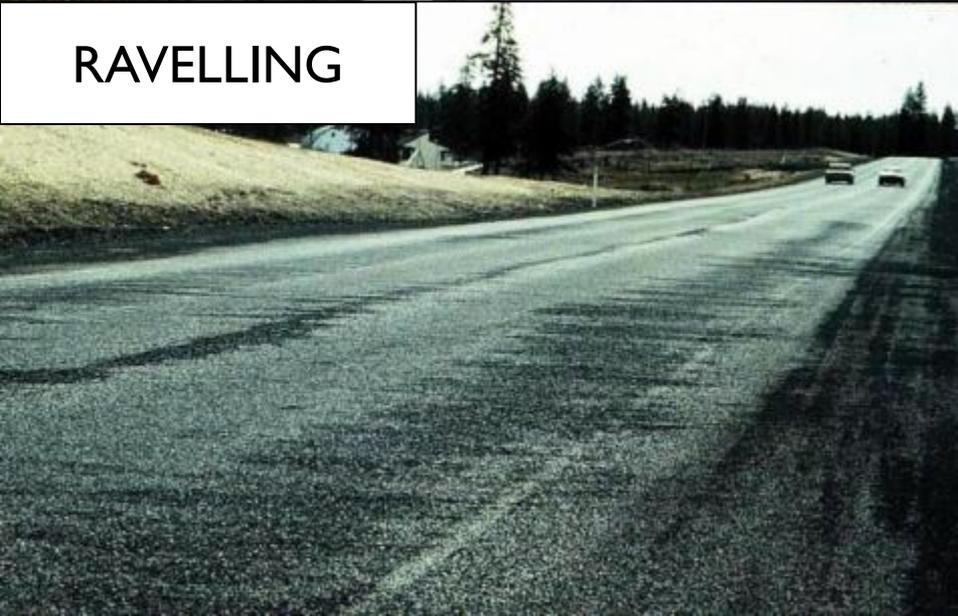
Typical Roadway Problems



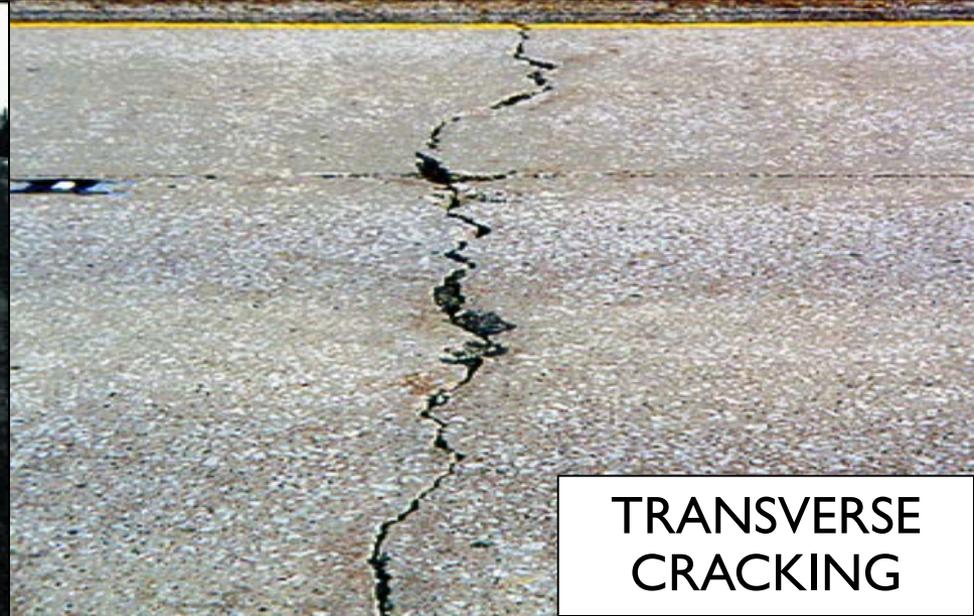
RUTTING



ALLIGATOR
CRACKING



RAVELLING



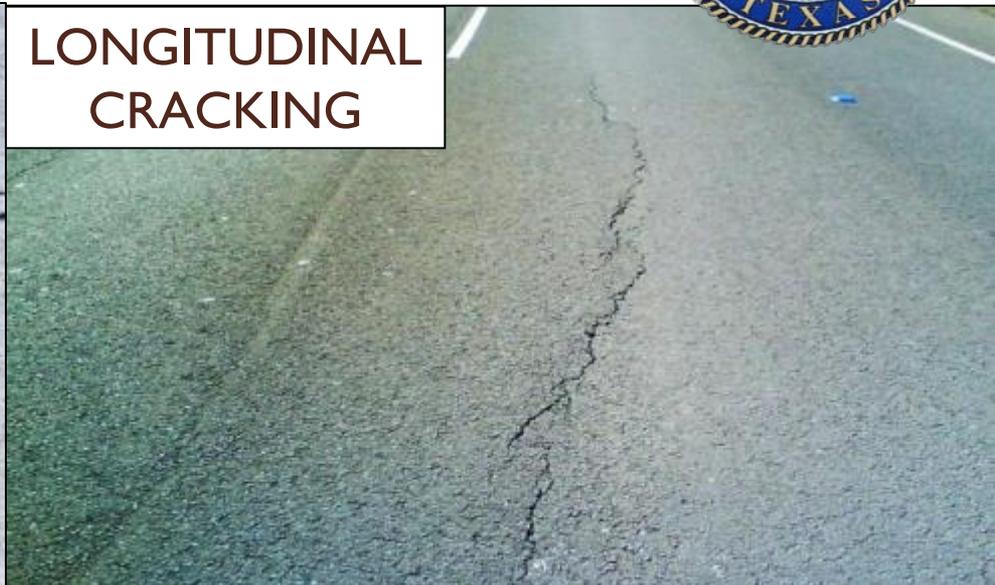
TRANSVERSE
CRACKING



Typical Roadway Problems



CONCRETE
CRACKS



LONGITUDINAL
CRACKING



SLAB
REPLACEMENT



JOINT SEAL



Pavement Assessment Considerations



- **Contractor**
 - Contract rate per assessment - \$1.7 million
 - Less control over assessment process
 - Extensive time requirement
- **Reallocation of PWE workforce**
- **Subjective Assessments – human judgment**
 - Ratings vary by inspector (turnover)
 - Safety concerns (traffic)
 - Review of assessment decisions require re-assessments
- **Other concerns**
 - GASB 34 requirements
 - Maintenance priorities still a question



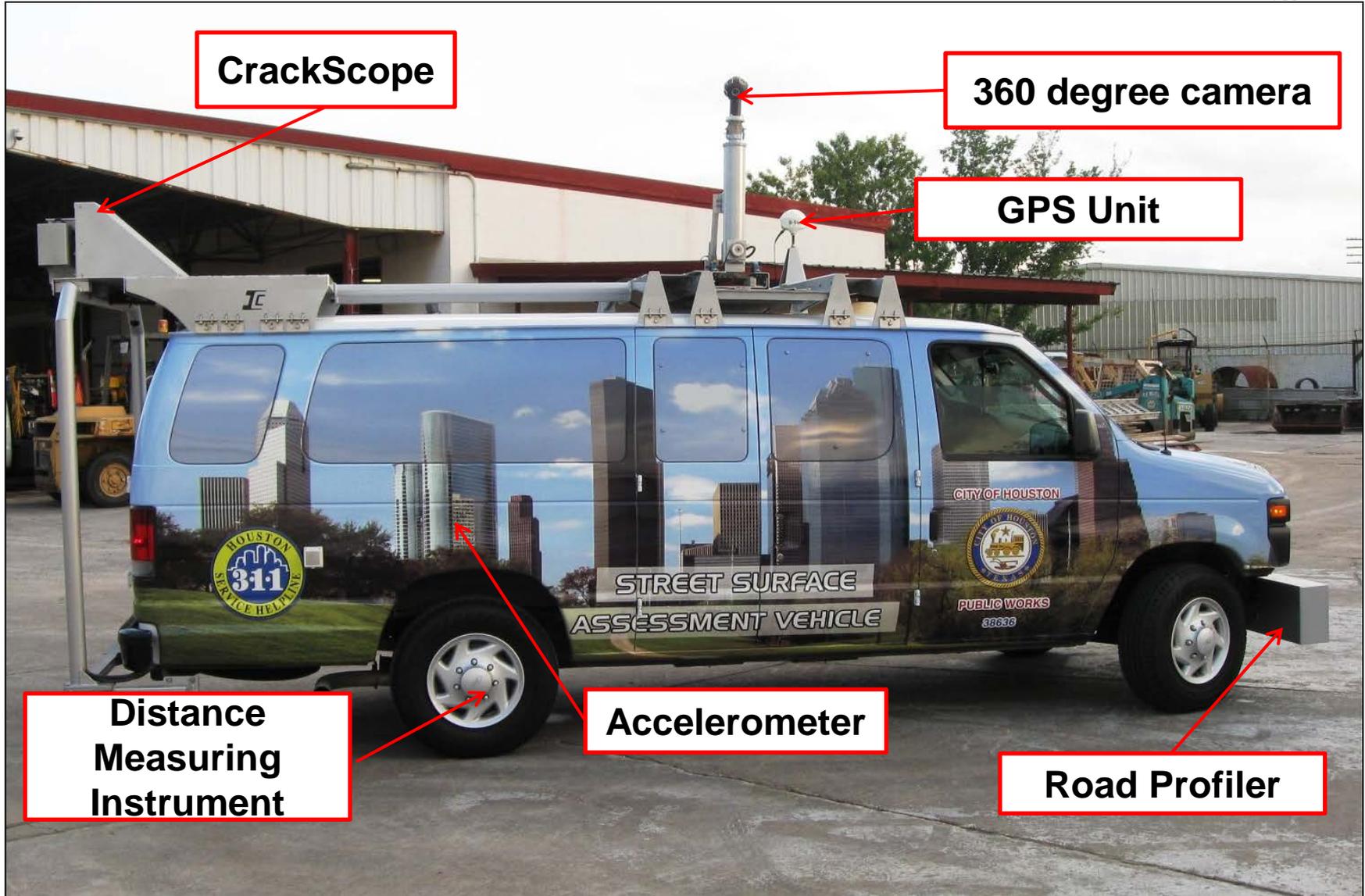
Overview of SSAV



- Initial data testing began July 2009
- 1st Run began May 2010
- Full assessments to occur every other year
 - 2nd Run underway
 - 2nd Run to be completed by end of year
- Estimated 5-year system life = 3 Assessments



Technical Components of the Street Surface Assessment Vehicle



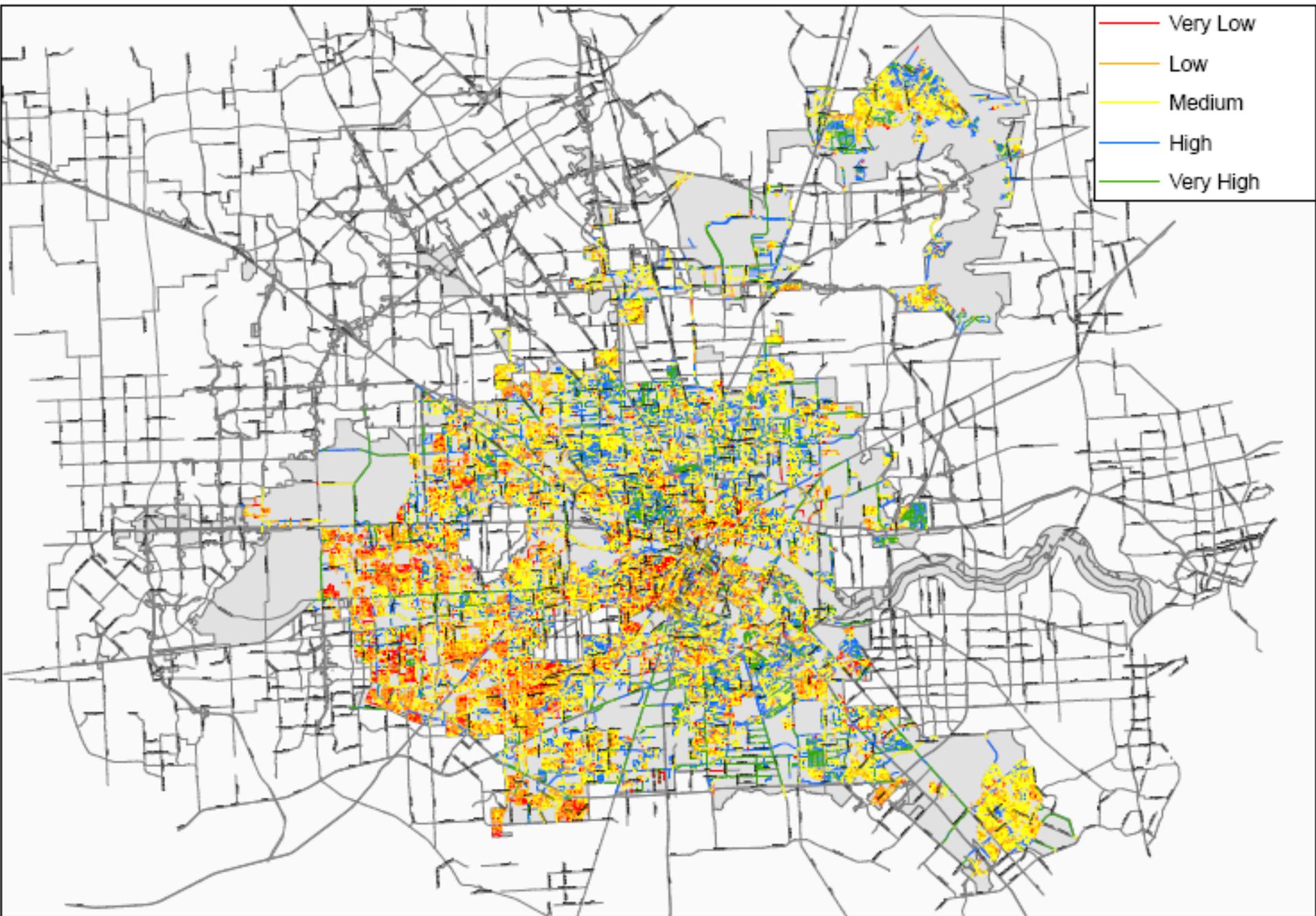


Assessment Costs



- Contract rate/assessment - \$1.7M (no video)
- PWE Annual Total Operational Cost - \$590k (includes video collection)
- 3 Full Assessments over 5 years
 - \$5.21M contract cost vs. \$2.95M internal cost

COMPLETED STREET ASSESSMENTS - 2011





How PCR Data is Used



- Identifies 'Need Areas'
 - Recommendations reflect most efficient use of funds
 - Political influence is minimized
- Guides maintenance programs
 - Overlay program
 - Concrete repairs
- Development of capital projects
- Factor for projects that involve:
 - Drainage
 - Transportation
 - Traffic Control
 - Other projects in the right of way



How PCR Score is Calculated



- $PCR = 100 - (\text{Rutting Deduction} + \text{IRI Deduction} + \text{Total Cracking Deduction})$
- *Total Cracking Deduction* is combination of low, med. & high severity cracking deductions
- Overall PCR score for road segment is the avg. PCR of ea. lane driven in the segment
- Each category is weighted by a max. possible PCR point deduction



How PCR Score is Calculated



- Max. deduction of 70 pts. per street segment:
 - Rutting Up to 15 points
 - IRI (Roughness) Up to 30 points
 - Cracking Up to 25 points
- A PCR of 30 is the lowest possible score
- Deductions are set to AASHTO standards



PCR Score Algorithm



- Cracking Deduction:
 - Low (up to 5 pts.) Widths < 4mm
 - Medium (up to 8 pts.) Widths 4-8mm
 - High (up to 12 pts.) Widths > 8mm
- Min. crack width reflects camera capabilities
- 2011 data is not directly comparable to the 2013 data due to different GIS base maps



Review of Changes for 2nd Run



- Technical evolution req'd equipment upgrades
- Dampened pavement crack sensitivity
- Different GIS layer (Starmap vs. Roads)
- Algorithm developed to merge new software & hardware w/ existing SSAV technology
- Missing road segments captured in 2nd Run
- 2nd Run scores are relative only to 2013 Need



SSAV 2nd Run Schedule



- Thoroughfares completed
- Thoroughfare Data being used in SWEET
- Local Streets to be completed by EOY
- Additional capabilities being considered for future run



REBUILD HOUSTON

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1

Overview of ReBuild Houston Program

Department of Public Works & Engineering

November 19, 2013

“5 Year Plan” Process (CIP)

- performed annually

2

CIP Programming

(Years 1 thru 5)

- Design
- Bid
- Award
- Construct

2 – 6
years



- Since 1984 -

“5+5 Year Plan” Process

- performed annually



3

CIP Programming

(Years 1 thru 5)

- Design
- Bid
- Award
- Construct

“+5” Planning

(Years 6 thru 10)

1. ID & Prioritize Needs
2. Pre-Engineering
 - Develop Solutions
 - Define Scope w/ cost est.
3. Prioritize Candidate Projects
 - Based on Benefit/Cost
4. Best Projects go to CIP

- Since 1984 -

- Since 2011 -

“+5” Planning (Years 6-10):

- 3 Phases of Planning

1) ID & Prioritize NEEDS

- ▣ Data driven, fact based
- ▣ Comprehensive, city-wide data
 - 311 info
 - Flooding reports; FEMA records
 - Pavement condition
 - LiDAR topographic survey
 - Special studies
- ▣ Data continuously updated

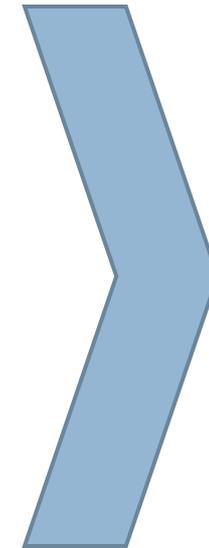


“+5” Planning (Years 6-10):

- 3 Phases of Planning

2) Pre-engineering

- ▣ Develop specific solution
- ▣ Define Scope
- ▣ Estimate project cost



Performed by
Engineering
Consultant

“+5” Planning (Years 6-10):

- 3 Phases of Planning



26

3) ‘Candidate’ project evaluation & prioritization based on

- **Benefit** - # of residents, parcels, motorists, etc.
- **Cost** - design, real estate, construction, etc.

4) **Best projects go to CIP!**

- Construction typically programmed for Year 5 of CIP



In Summary ...



- **Need Area – Worst First**
 - ▣ Based on a defined Level of Service using objective data
- **Candidate Project**
 - ▣ Pre-engineering develops solution, defines scope w/ cost est.
 - ▣ Prioritization based on benefit & cost
- **Funded Project**
 - ▣ Best projects go into next CIP

Annualized 5-year CIP

RH Methodology Implementation

FY 12 – 16

Legacy CIP

- Committed CIP
- CIP Process Methodology Published
- Need Intensity identified using SWEET model

FY 13 – 17

1st '5+5' Plan

- No new CIP projects added
- 1st '+5' Need Areas published
- Pre-engineering of Need Areas begins

FY 14 – 18

2nd '5+5' Plan

- Cand. Projects developed
- Scoring by Benefit/Cost
- CIP projects proposed using Methodology
 - FY 17
 - FY 18

'5+5 Plan' Schedule

- **January**
 - 2013 Pre-engineering completed
 - Candidate projects compete based on benefit/cost
 - DRAFT '5+5 Plan' provided to RHAC
 - DRAFT Plan discussion w/ RHAC
- **February/March**
 - Posting of '5+5 Plan' prior to CIP TH meetings
 - District CIP Town Hall meetings (12) & TTI meeting
 - Public Comments/Surveys received
- **April**
 - SWEET rerun to include public input/data
 - Final DRAFT CIP presented to Mayor
 - Changes in Plan presented to RHAC

Drainage Utility Collections
Quarterly Collections and Annual Projections as of 09/30/2013

	Billing and Collection through September 2013			Projections for Fiscal Year		
	Billings	Collections	% Collected	Billings	Collections	Projected % Collected
Monthly Bills - Active Accounts	\$ 21,149,045	\$ 17,832,310	84.32%	\$ 81,520,000	\$ 77,444,000	95.00%
Annual/Bi-Monthly Accounts ¹	\$ 26,189	\$ 7,107	27.14%	\$ 3,300,000	\$ 750,000	22.73%
Quarterly - 1 quarter ²	\$ 6,887,572	\$ 5,973,938	86.74%	\$ 28,960,000	\$ 26,064,200	90.00%
City Bills	\$ -	\$ -	0.00%	\$ 1,621,800	\$ 1,621,800	100.00%
Total	\$ 28,062,806	\$ 23,813,355	84.86%	\$ 115,401,800	\$ 105,880,000	91.75%

- 1 Accounts with total annual drainage charges of \$60 or less and accounts for which no payment has ever been remitted are billed annually. Accounts with sewer and drainage charges only (no water) are billed bi-monthly.
- 2 Quarterly bills are systematically being moved from quarterly to monthly as matched. Some monthly bills have been consolidated based on owner request and billed quarterly. As of this report, only the first quarter has been billed.

City of Houston
Public Works and Engineering Department
Dedicated Street & Drainage Fund Group
FY14 Budget and CIP Report
For the Quarter ending September 30th, 2013

CONSOLIDATED APPROPRIATIONS	Adopted Budget	Adopted CIP	Adopted Budget + Refined CIP²	Actual 09/30/13	Current Projection
OPERATIONS AND MAINTENANCE					
Street and Drainage ¹	\$ 14,880,503		\$ 14,880,503	\$ 3,400,138	\$ 14,799,972
Traffic Operations ¹	\$ 22,006,400		\$ 22,006,400	\$ 4,856,837	\$ 21,730,423
Support Operations	\$ 837,700		\$ 837,700	\$ 135,960	\$ 821,185
Transfer to Stormwater Fund	\$ 10,000,000		\$ 10,000,000	\$ 8,896,542	\$ 8,896,542
Other Drainage Operational Expenditures	\$ 4,317,300		\$ 4,317,300	\$ 462,988	\$ 4,306,746
Total O&M	\$ 52,041,903		\$ 52,041,903	\$ 17,752,465	\$ 50,554,868
PERMANENT AND CAPITAL IMPROVEMENTS					
Street Resurfacing ¹	\$ 14,363,884		\$ 14,363,884	\$ 3,544,407	\$ 14,385,550
Bridge Replacement ¹	\$ 1,377,532		\$ 1,377,532	\$ 234,678	\$ 1,353,594
Concrete Replacement ¹	\$ 8,205,680		\$ 8,205,680	\$ 2,749,809	\$ 8,070,617
Capital Equipment	\$ 68,300		\$ 68,300	\$ -	\$ 68,300
Total Permanent Impr./Capital Impr.	\$ 24,015,397		\$ 24,015,397	\$ 6,528,894	\$ 23,878,060
Sub-total - Budget	\$ 76,057,300				
CIP					
Metro Capital		\$ 50,019,000	\$ 55,693,642	\$ 585,000	\$ 49,038,902
Grant Funds		\$ 15,221,000	\$ 15,221,000	\$ -	\$ 15,601,000
Capital Contribution		\$ 10,298,000	\$ 10,298,000	\$ -	\$ 5,157,000
Other		\$ -	\$ 269,483	\$ -	\$ 269,483
DDSRF Capital Fund (4042)		\$ 140,549,000	\$ 167,835,647	\$ 7,028,155	\$ 178,835,647
Total CIP		\$ 216,087,000	\$ 249,317,772	\$ 7,613,155	\$ 248,902,032
Total Permanent and Capital			\$ 273,333,169	\$ 31,628,552	\$ 272,780,092
Reconciling Items					
Transfers to Capital Funds					
Transfer to Drainage Capital Fund	\$ 110,000,000				
Total Transfers	\$ 110,000,000				
Grand Total	\$ 186,057,300	\$ 216,087,000	\$ 325,375,072	\$ 49,381,017	\$ 323,334,960
O&M Expenditure as Percentage of Total O&M Budget and CIP Appropriation³			15.99%		15.56%

- 1) Budgeted amounts for ongoing level of service provided by City Personnel - previously in the General Fund and reimbursed by METRO, now in fund 2310 and reimbursed by METRO.
- 2) The difference between Adopted CIP vs. Refined CIP is due to rollover of projects that were in the FY13 CIP that were not appropriated until FY14.
- 3) Based on the ReBuild Houston charter amendment, the percentage calculation is: The amount of the O&M (purple) divided by the amount appropriated (sum of blue highlighted numbers).



FY13 (YEAR 2) END OF YEAR FINANCIAL SUMMARY

(amounts expressed in thousands)



Drainage Utility Fee

Drainage Fees	\$104,425
Penalties	\$1,008
City Drainage Fees	\$1,618

Total Revenues **\$107,051**

Expenses

Capital Projects (CIP)	
Project Contractual Costs	\$62,594
Project Management Costs	\$7,353
Land Acquisition Costs	\$1,743
O&M for drainage infrastructure ⁵	\$11,154
Administration (includes Commercial Paper Fees)	\$3,048

Total **\$85,892**

Beginning Fund Balance¹ **\$74,073**

Ending Fund Balance² **\$95,232**

Developer Impact Fee

Developer Impact Fees	\$0
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Total Revenues **\$0**

Expenses

Drainage projects	\$0
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Total **\$0**

Beginning Fund Balance **\$0**

Ending Fund Balance **\$0**

Ad Valorem Taxes

(Dedicated Property Taxes net of debt service)

Ad Valorem Taxes	\$10,897
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Total Revenues **\$10,897**

Expenses

Capital Projects (CIP)	
Project Management Costs	\$1,651
Land Acquisition Costs	\$4,880

Total **\$6,531**

Beginning Fund Balance¹ **\$5,638**

Ending Fund Balance² **\$10,004**

Third-Party Funds

(Metro, TxDOT, Federal Grants)

METRO GMP for Capital Projects	
Advance Payments	\$48,166
Reimbursements	\$2,523
METRO GMP for City Forces	
O&M	\$30,136
Capital	\$21,064
TxDOT Revenues ⁴	\$0
Federal Grants	\$4,392
Contributed Capital	\$647
Other	\$3,779

Total Revenues/Deferred Revenues **\$110,707**

Expenses

Capital Projects (CIP)	
Project Contractual Costs	\$41,425
Project Management Costs	\$4,224
City Forces	
Capital	\$21,164
O&M for Streets and Traffic	\$31,352
Administration	\$520

Total **\$98,685**

Beginning Fund Balance¹ **\$82,131**

Ending Fund Balance³ **\$94,153**

- The FY13 beginning fund balance is slightly different than the FY12 ending balance due to final FY12 year end adjustments.
- The drainage fee and ad valorem tax balances support ongoing CIP projects; the FY13 ending balance of appropriated, but not spent, on these projects is \$140.9M.
- Third party fund balances are encumbered to purpose for which received.
- TxDOT awards and manages most of their projects for the City - approximate value of FY13 dedications was \$17.5M. Most TIRZ projects are also handled similarly.
- Drainage O&M was partially paid for by the Combined Utility System (\$24.6M). Total amount of the FY13 Drainage O&M is \$35.8M.

Note: This report is designed to reflect actual sources and uses of drainage funds and is not in accordance with Governmental Accounting Standards Board methods.