

# REBUILD HOUSTON PHASE 2



January 26, 2011

**DRAINAGE CHARGE AND EXEMPTION ANALYSIS**

# Presentation Focus

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- Define legal basis of drainage charge
- Statement of Principles
- Definitions to be used
- Technology employed and results
- Impact of possible exemptions and interlocal agreement
- Federal Government
- Next steps

# Background

- Proposition 1 Charter Amendment:
  - “Drainage charges...shall be imposed in an equitable manner **as provided by law** to recover allowable costs...”
- Local Government Code, Section 552.047(a):
  - “The governing body of the municipality may charge... benefitted property...on any basis other than the value of the property, but the basis must be directly related to drainage...”
- Statement of Principles (9/29/10):
  - Only properties receiving drainage services will pay drainage charges
  - Properties exempt from a drainage charge will be only those required to be exempt by State Law
  - No one sector subsidizing another (residential/commercial/industrial/other)
  - All properties will be charged on the basis of their amount of impervious area

# Definition of Impervious Surface

- *Impervious Surface or Area* -- an area that has been compacted or covered, and as such, does not readily absorb water.
- Examples of materials that are considered impervious - bricks, pavers, concrete, asphalt, compacted oil-dirt, compacted or decomposed shale, oyster shell, gravel, or granite.
- Impervious surface features include: decks, foundations (whether pier and beam or slab), roofs, parking/driveways, sidewalks, compacted/rolled areas, paved recreation areas, swimming pools, and any other surfaces that have the effect of increasing, concentrating, or otherwise altering water runoff so that flows are not readily absorbed.

# Determination of Impervious Surface per Property--Use of Best Technology

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- Color Aerial Imagery (orthogonally corrected)
- Color Infrared Imagery
- ERDAS Software
- Oblique-Derived Building Footprint Polygons
- HCAD:
  - Parcel Boundaries (vector data)
  - PRI Data (primary floor sq. ft.)
  - Owner Data
  - State Exception Classifications

# Example 1 of GIS Measurement and Validation

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Computer Generated Impervious Area  
3,360 sf



Independent Validation of Impervious Area  
3,507 sf

Comparison  
 $3,361 \text{ sf} - 3,507 \text{ sf} = -146 \text{ sf}$

# Example 2 of GIS Measurement and Validation

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Computer Generated Impervious Area

174,113 sf



Independent Validation of Impervious Area

178,172 sf

Comparison

$$174,113 \text{ sf} - 178,172 \text{ sf} = -4,059 \text{ sf}$$

# State Law--Exemptions by Land Use; Mandated

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The following are exemptions under state law:

- Property appraised for use and designated as agricultural by the county appraisal district
- Property served by a wholly-sufficient and privately-owned drainage system
- No charges may be collected from:
  - A state agency
  - A public or private institution of higher education



# State Law--Exemptions by Land Use; Allowable

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Under state law, the following may be exempted:

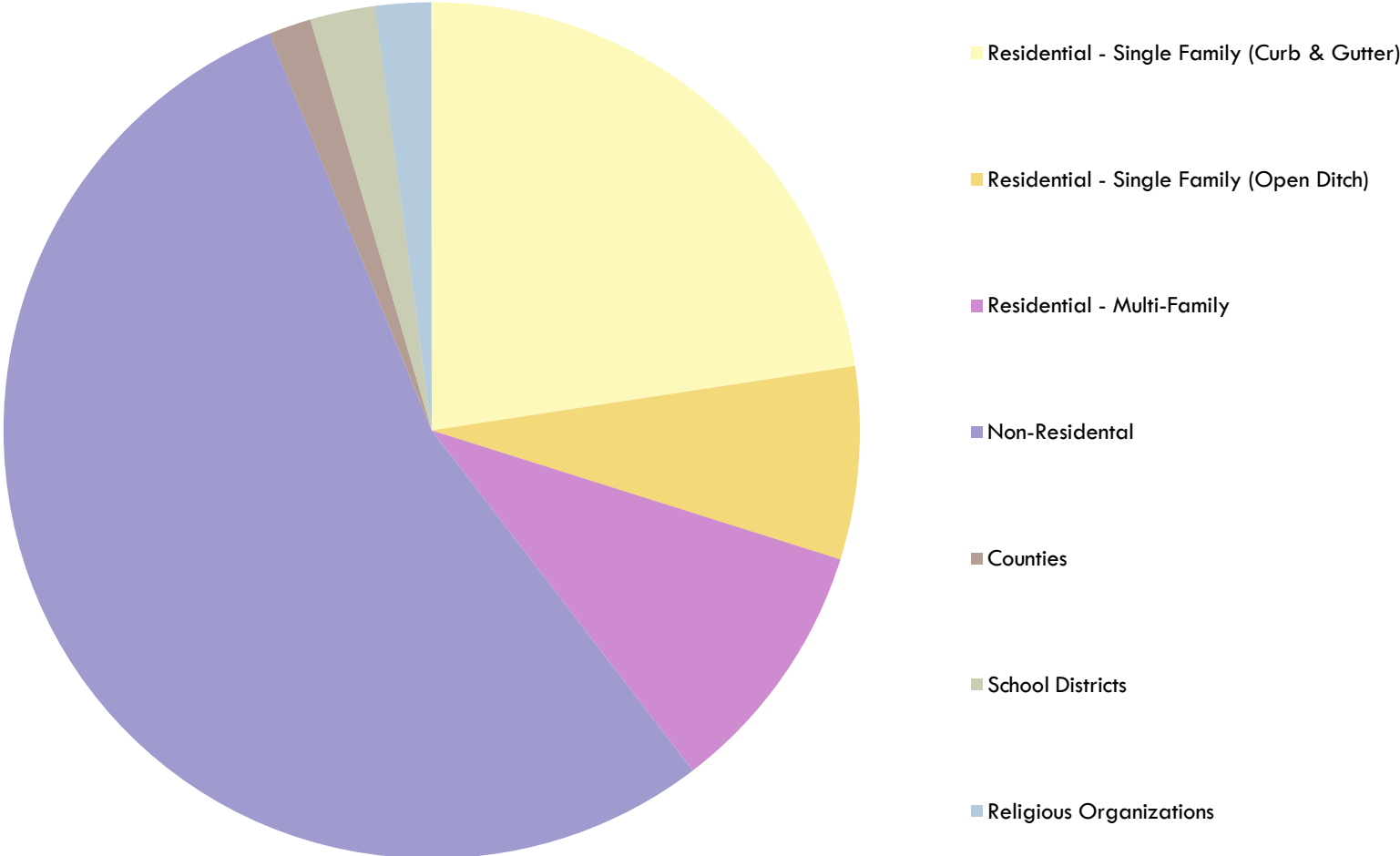
- Counties [Sec. 552.053(b)(2)]
- Municipality [Sec. 552.053(b)(3)]
- School Districts [Sec. 552.053(b)(4)]
- A religious organization that is exempt from taxation pursuant to Section 11.20, Tax Code [Sec. 552.053(d)]

# Profile of Impervious Surface for all Houston Property by Land Use

Land Use Type	Citywide Totals					
	Parcels	Acres	Percent of Total	Imp. Acres	Average % Imp	% of Billable
<b>City Limits (excluding Drainage System)</b>	<b>635,430</b>	<b>304,945</b>	<b>100.0%</b>	<b>130,320</b>	<b>42.7%</b>	<b>n/a</b>
<b>Mandatory Exemptions by State Law</b>	<b>3,824</b>	<b>37,887</b>	<b>12.4%</b>	<b>8,334</b>	<b>22.0%</b>	<b>n/a</b>
Privately owned and maintained Drainage Systems	234	2,184	0.7%	1,250	57.2%	n/a
Land appraised for Agricultural Use	2,314	31,460	10.3%	5,648	17.9%	n/a
State Agency	512	2,601	0.9%	579	22.3%	n/a
Public Institution of Higher Education	716	1,618	0.5%	842	52.0%	n/a
Private Institution of Higher Education	48	23	0.0%	16	66.2%	n/a
<b>Subtotal subject to Drainage Charge</b>	<b>631,606</b>	<b>267,059</b>	<b>87.6%</b>	<b>121,986</b>	<b>45.7%</b>	<b>100.0%</b>
Residential - Single Family (Curb & Gutter)	320,307	58,021	21.7%	27,566	47.5%	22.6%
Residential - Single Family (Open Ditch)	98,226	24,845	9.3%	8,876	35.7%	7.3%
Residential - Multi-Family	72,703	15,840	5.9%	11,828	74.7%	9.7%
Non-Residential	129,655	150,004	56.2%	66,178	44.1%	54.3%
Counties	3,879	6,160	2.3%	1,960	31.8%	1.6%
School Districts	1,320	6,680	2.5%	2,998	44.9%	2.7%
Religious Organizations	5,516	5,509	2.1%	2,580	46.8%	2.1%

# Profile of Impervious Surface on all Houston Property by Land Use

### Impervious Area by Land Use



# Factors for Design of Charge Structure

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- Accuracy of determination -
  - Verification and correction
  - Appeal rate (conservative method for accuracy of determination will keep this number low. Assume 2%)
- Collection rate – depends on billing method
  - Bill on water and sewer bill
  - Bill separately

# Federal Government

- Congress passed legislation requiring the Federal Government to pay drainage charges as part of Senate Bill 3481. The President signed the bill on January 4, 2011.
- Bill concludes that this is not a tax (which would exempt them) but rather is a fee for services received.
- All federal properties will be subject to same rules we establish in the ordinance.

# Possible School District Interlocal Agreement

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- Mayor sent a letter to all 11 school districts with facilities within the city of Houston
- Offered to work with each district to define and implement drainage and street projects directly adjacent to their schools
  - Will dedicate funds from each district for this purpose
  - Mechanism will be Interlocal Agreement
- Positive verbal responses from HISD, written support from Pasadena ISD.

# Projected Drainage Charge Revenue by Category

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Land Use	Projected Revenue by Customer Type
Residential - Single Family (Curb & Gutter)	\$ 30,935,076
Residential - Single Family (Open Ditch)	\$ 8,155,310
Residential - Multi-Family	\$ 12,950,323
Non-Residential	\$ 70,400,873
<i>Counties</i>	\$ 2,361,118
<i>School Districts</i>	\$ 3,612,095
<i>Religious Organizations</i>	\$ 3,108,738
<b>Total Subject to Drainage Charge</b>	<b>\$ 131,523,532</b>

Total project revenue will vary:

- Verification of data

- Actual revenue recovery from billing

# Summary of Exemptions Scenarios

	Scenario							
	Base	A	B	C	D	E	F	G
<b>Optional Exemptions by State Law</b>	<i>Exemption Included</i>							
<i>Counties</i>	x	✓	x	x	✓	✓	x	✓
<i>School Districts</i>	x	x	✓	x	✓	x	✓	✓
<i>Religious Organizations</i>	x	x	x	✓	x	✓	✓	✓
Annual Rate (cents per SF of Impervious area)	3.20	3.28	3.29	3.28	3.36	3.34	3.38	3.44
Annual Rate (Single Family Residential Open Ditch)	2.60	2.67	2.67	2.67	2.73	2.71	2.74	2.80

1,875 SF Impervious Area (5,000 SF Lot)	Example Monthly Charge							
Curb & Gutter	\$ 5.00	\$ 5.13	\$ 5.14	\$ 5.13	\$ 5.24	\$ 5.22	\$ 5.27	\$ 5.38
Open Ditch	\$ 4.06	\$ 4.16	\$ 4.18	\$ 4.16	\$ 4.26	\$ 4.24	\$ 4.28	\$ 4.37
Percent Increase over Base Scenario	n/a	2.5%	2.8%	2.5%	4.8%	4.4%	5.5%	7.5%



# Next Steps

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- Next week will describe draft ordinance during Mayor's report
  - Will show structure of ordinance
  - Definitions will be included
  - Verification and appeal process will be included
  - Separately we will work:
    - Oversight Committee
    - Billing process
    - Engagements of MWBE community and mentorship program
    - Project priorities

# Next steps (cont'd)

- Under state law, we must:
  - Publish notice of proposed drainage ordinance (3X)
  - Publish notice of proposed drainage rate structure (3X)
  - Hold hearings on both -- the rate structure and the ordinance -- after a 30-day period following first publication
  - Both will be posted on February 6, 2011
- Formal public hearings will be held in early March
- During these 30 days, a drainage presentation will be shown at the district CIP meetings

# Key Near Term Dates

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- January 2011
  - Develop & launch drainage utility website
  - Prepare draft ordinance and proposed rates
  - Develop drainage billing database
  - Develop fund structure
- February 2011
  - Report on ordinance and rates at town hall/CIP meetings/additional stakeholder meetings
  - Publish public notice of ordinance
  - Refine/revise capital improvement planning and programming methodology

# Key Near Term Dates (cont'd)

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- March 2011
  - Conduct required public hearings
  - Consider and act in Council
  - Input to FY 12 operating budget
- April 2011
  - Develop billing process
  - Establish segregation of funds and refine estimates
  - Plan for debt conclusion
  - Implement revised methodology for 2012-2016 CIP

# Questions