



City of San Marcos

Update on Stormwater Utility Study

February 4, 2020



Purpose of Update Today

Provide Update on Stormwater Utility and seek Council feedback

Agenda

- History of Stormwater Utility
- Stormwater Utility Study
 - Rate Structure Analysis
 - Billing system Analysis
 - Council Feedback
- Stormwater Program & Rate Model
- Next Steps

History of Stormwater Utility

1999 - Drainage Utility Implemented:

- \$25M in projects from 1994 Drainage Master Plan
- O&M funded through transfer from General Fund
- Focus on pipe capacity improvements

2019 – Stormwater Utility is a dedicated funding source to:

- \$200M in projects
- O&M for expanded network of pipes, channels, detention and water quality facilities
- Reduce flooding, improve water quality & maintain regulatory compliance (MS4)

Stormwater Utility Rate History

| Year | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020* | 2021* | 2022* |
|-------|--------|--------|--------|--------|---------|---------|----------------|----------------|----------------|
| Rate | \$7.08 | \$7.43 | \$8.32 | \$9.15 | \$10.52 | \$12.10 | \$13.92 | \$16.04 | \$18.45 |
| Incr. | 5% | 5% | 12% | 10% | 15% | 15% | 15% | 15% | 15% |

Rate Increases Per Previous Council Direction

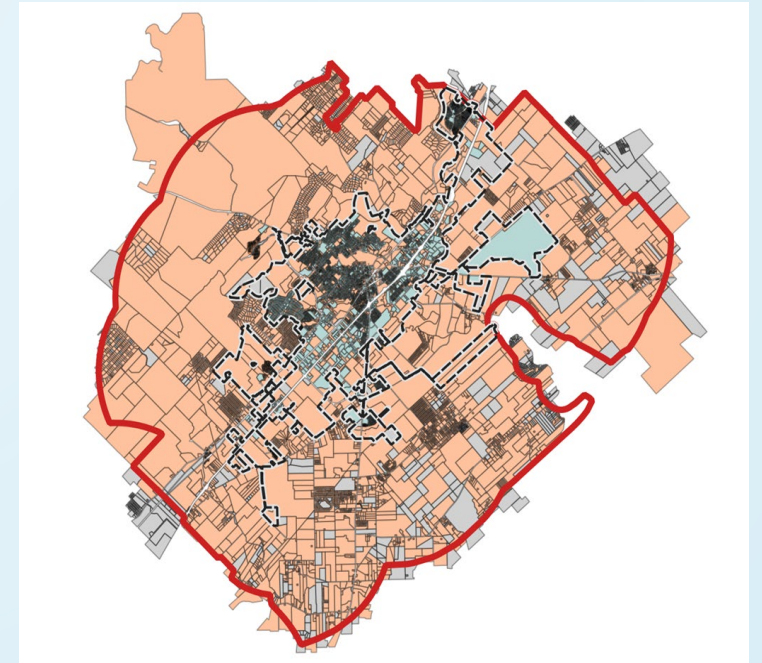
* 2020 & Future Rate increases not implemented pending analysis of stormwater utility rate structure

- 2018 Council direction to expedite stormwater projects with 5 yrs of 15% rate increases
- Stormwater Utility rate structure update to explore potential rate structures & requirements
- Goal to establish financial framework for more equitable and sustainable program

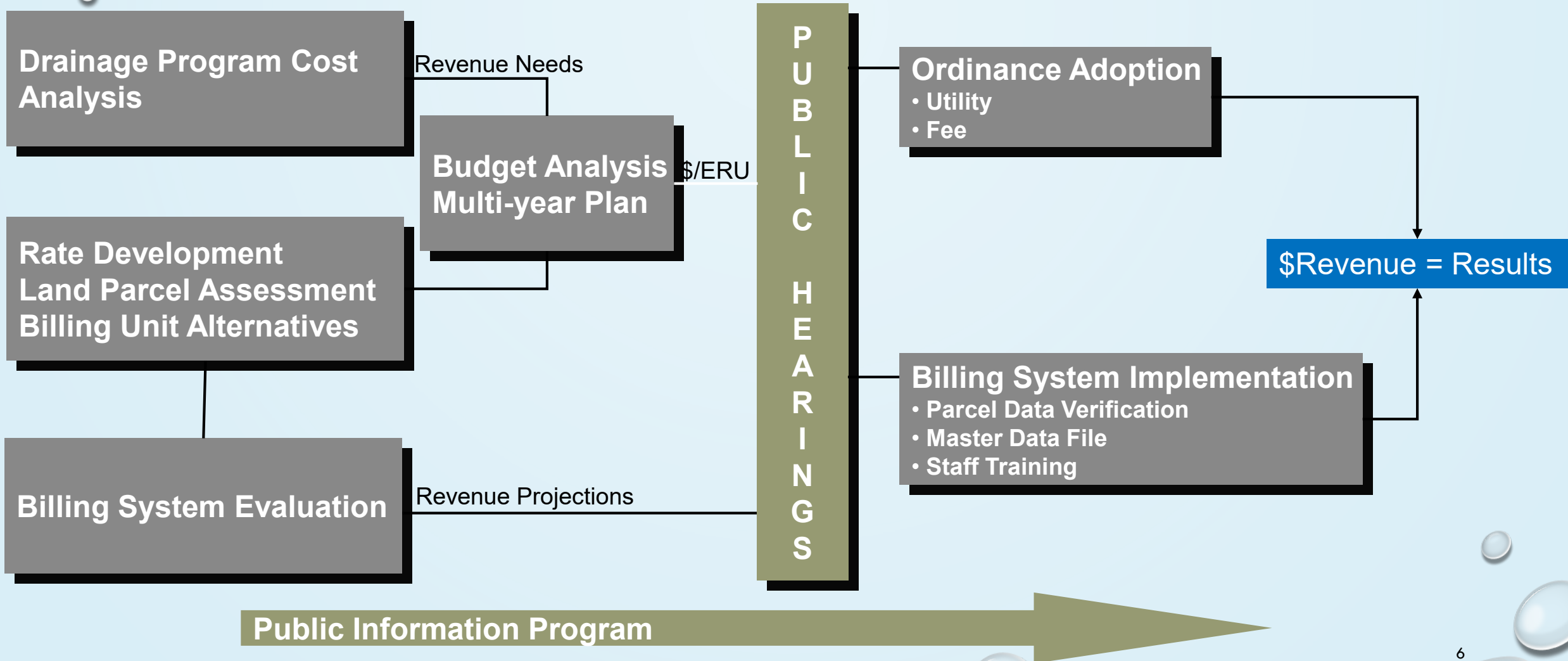
Purpose of the Study

Develop more equitable & sustainable program funding

- Better Customer Data
 - Impervious cover
 - Account & parcel matching
- Rate Structure recommendations
- Billing system recommendations
- Stormwater Program Cost Analysis (Rate Model)
- Ordinance update

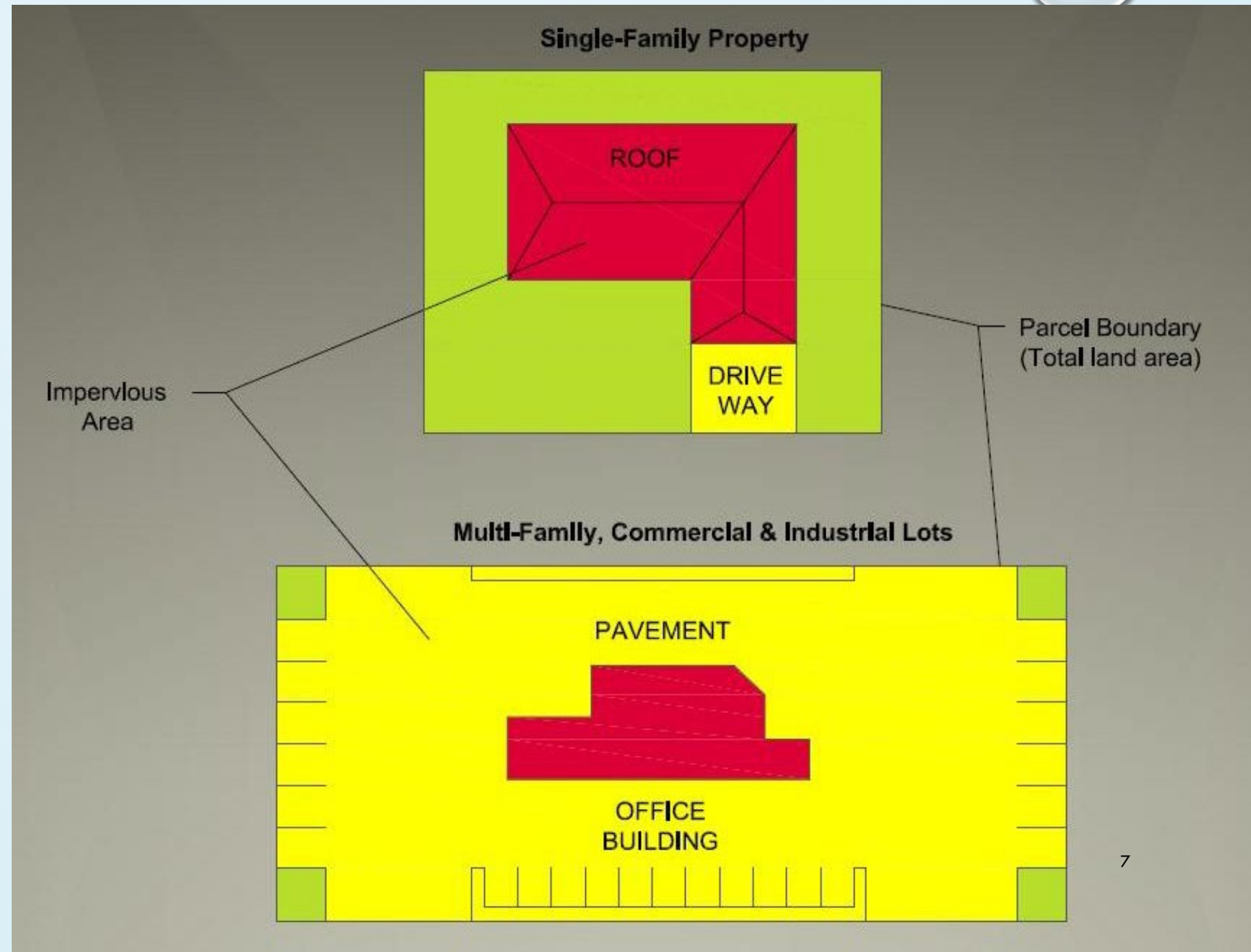


Study and Implementation Process



Impervious Area rate basis

- Impervious area is a better indicator of a parcel's demand on the drainage system than lot area
- The Equivalent Residential Unit (ERU) is used to link fees between the residential and non-residential rate class. It is considered by industry standards the most equitable and proportional method.



Better Customer Data – Impervious Cover

- Leaf-off 2017 0.5" 4-band aerial imagery used to assess impervious cover (IC).
- Extensive QA/QC process undertaken to ensure accuracy of impervious determination.
- 2019 Hays County Appraisal District parcel boundaries used for IC by parcel

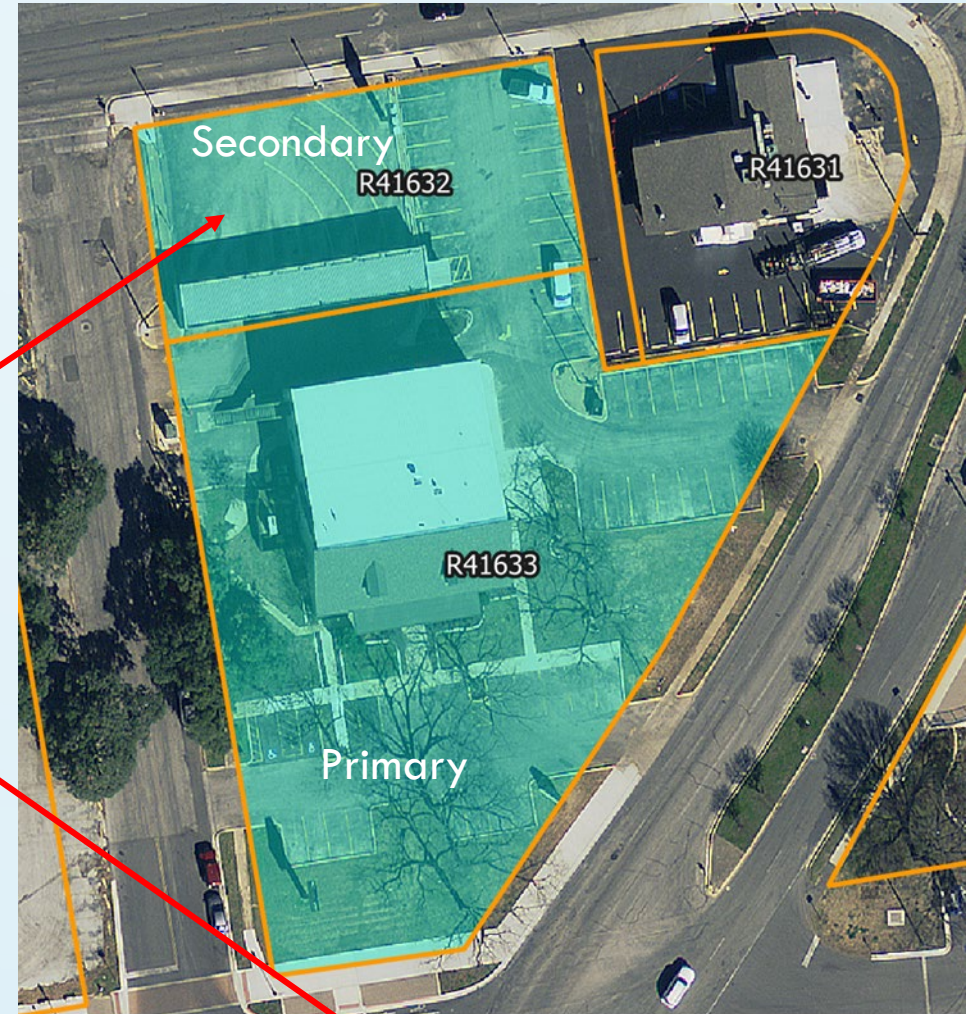
| Study Year | IC = Equivalent Residential Unit |
|------------|----------------------------------|
| 1999 | 2250 sf |
| 2019 | 2575 sf |

Better Customer Data - Account Matching

- Each active billing account must be associated with a parcel, most commonly by matching the address.
- Some parcels have multiple billing accounts and the charge is split to reflect a proportional share of the charge.
- Parcels with impervious cover but without account matches can typically be associated with adjacent parcel accounts.

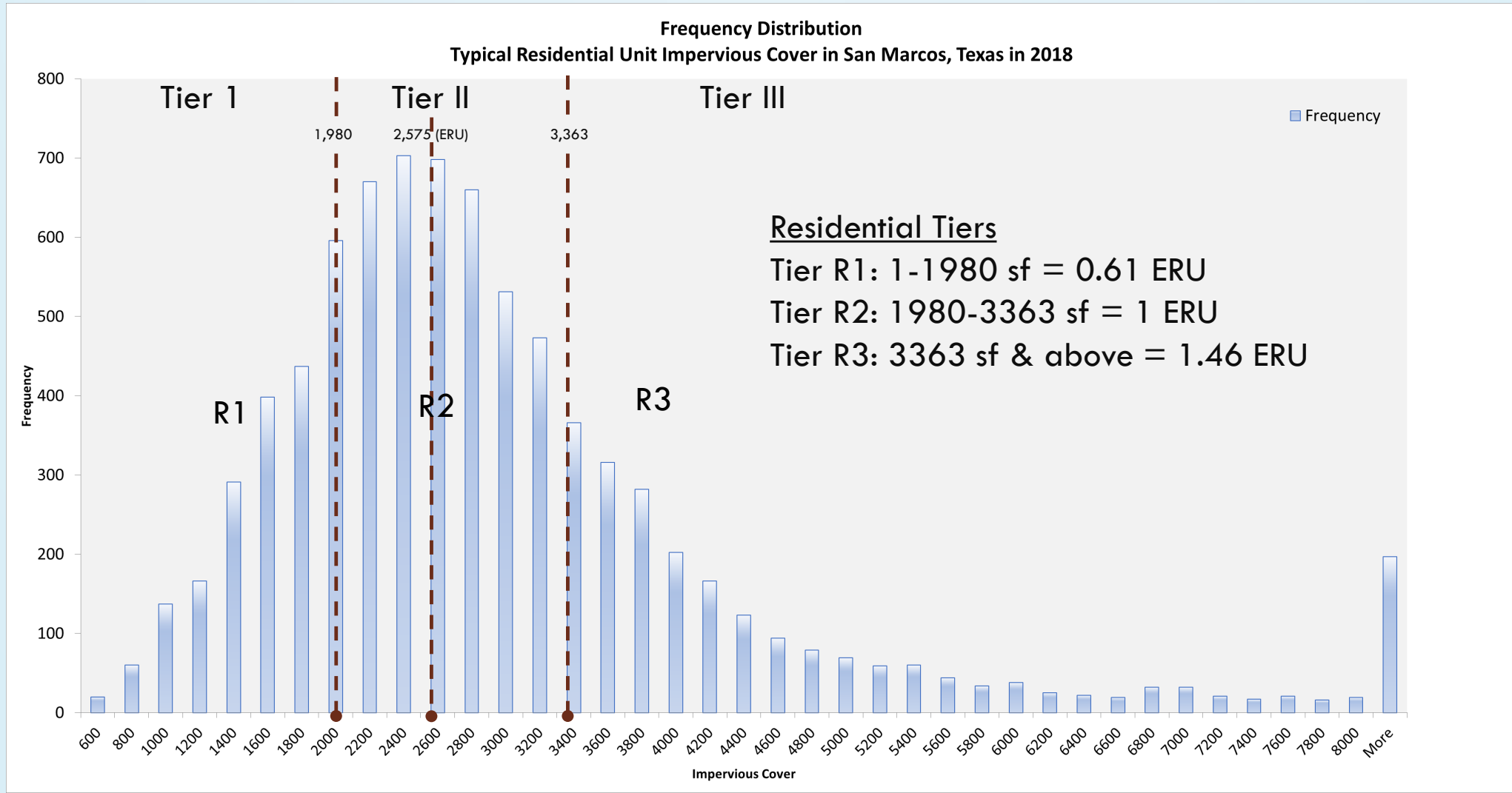
Account Matching Example

- Multiple Parcels Per Account
 - Primary
 - Secondary
- Impervious Cover for secondary parcel not included in total



| I | J | K | L | M | N | O | P | U | V | W |
|---------------------|---------|-------------|-----------------|---------|-------------|--------------|------------------|--------|-------------|-----------|
| trim | account | Consolidate | impervious area | impervi | Parcel Area | IM Parcel Id | Secondary Parcel | serv_u | Class | bill_code |
| 1221 W HOPKINS ST | 3658 | R47374 | 21,314.66 | 73.96 | 28,818.94 | R47371 | | | Commercial | DRN1 |
| 301 N CM ALLEN PKWY | 1513 | R41633 | 30,065.22 | 71.58 | 42,004.58 | R41633 | 41632 | | Commercial | DRN2 |
| 220 THIRD ST | 8043 | CA10200 | 4,857.21 | 30.45 | 15,953.74 | 10200 | | | Residential | DRN3 |

Residential Distribution – Development of the Rate Structure



Proposed Rate Classes

- Three total classes:
 - Residential (R1, R2, R3)
 - Non-Residential (NR)
 - Exempt (Ex).
- Residential parcels with 1-4 units/parcel:
 - Remain in the residential class.
 - Charge is based on each unit's share of total impervious on the parcel.
- Residential parcels with 5+ units/parcel (Multi-Family):
 - Now classified as Non-Residential
 - Drainage characteristics mimic commercial developments
- Non-Residential: Former Commercial category with addition of Multi-Family

Rate Structure Review and Recommendations

- New Equivalent Residential Unit (ERU) value = 2,575 sf (median value for all SFR parcels)
- Residential Class:
 - The 3 residential tiers change from parcel area to an impervious cover area.
 - Residential parcels with 1-4 units/parcel remain in the residential class.
- Non-residential Class:
 - Residential parcels with 5+ units/parcel classified as Non-Residential
 - Commercial, Retail, Government, Religious, Non-Profit
 - Calculated by dividing total impervious cover by 2,575 to determine ERU's.
- Exemption for only City and Texas State University owned properties.

Feedback?

Rate Structure Comparison

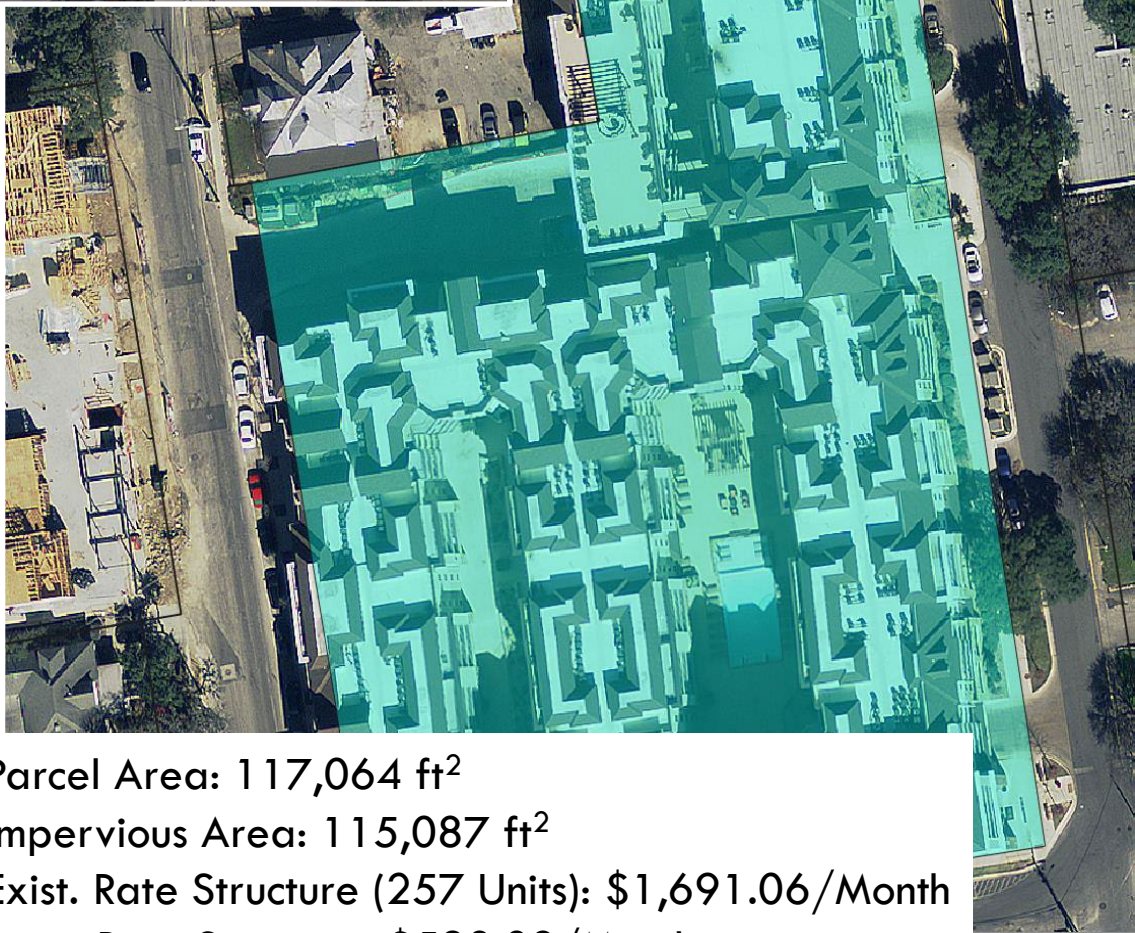
Existing (ERU 2,250 sf)

| Class Description | Total Lot Size-Square Feet | Current Rate |
|---------------------|----------------------------------|--------------|
| Small Residential | 0-6,000 | \$7.57 |
| Typical Residential | 6,001-12,000 | \$12.10 |
| Large Residential | 12,001+ | \$13.86 |
| Commercial | Impervious Area /ERU *Rate | |
| Multi-Family | # of units * residential rate | |

Proposed (ERU 2,575 sf)

| Class Code | Description | Imperious Cover Range | Rate Example |
|------------|--|--|--------------|
| R1 | Small Residential | 0-1,980 | \$7.43 |
| R2 | Typical Residential | 1,981-3,336 | \$12.10 |
| R3 | Large Residential | 3,334+ | \$17.68 |
| NR | Commercial, Retail, Governmental, Multifamily, religious, non-profit, etc. | Impervious Area /ERU *Rate (\$12.10) | |

Residential Multi-Family Rate Comparison



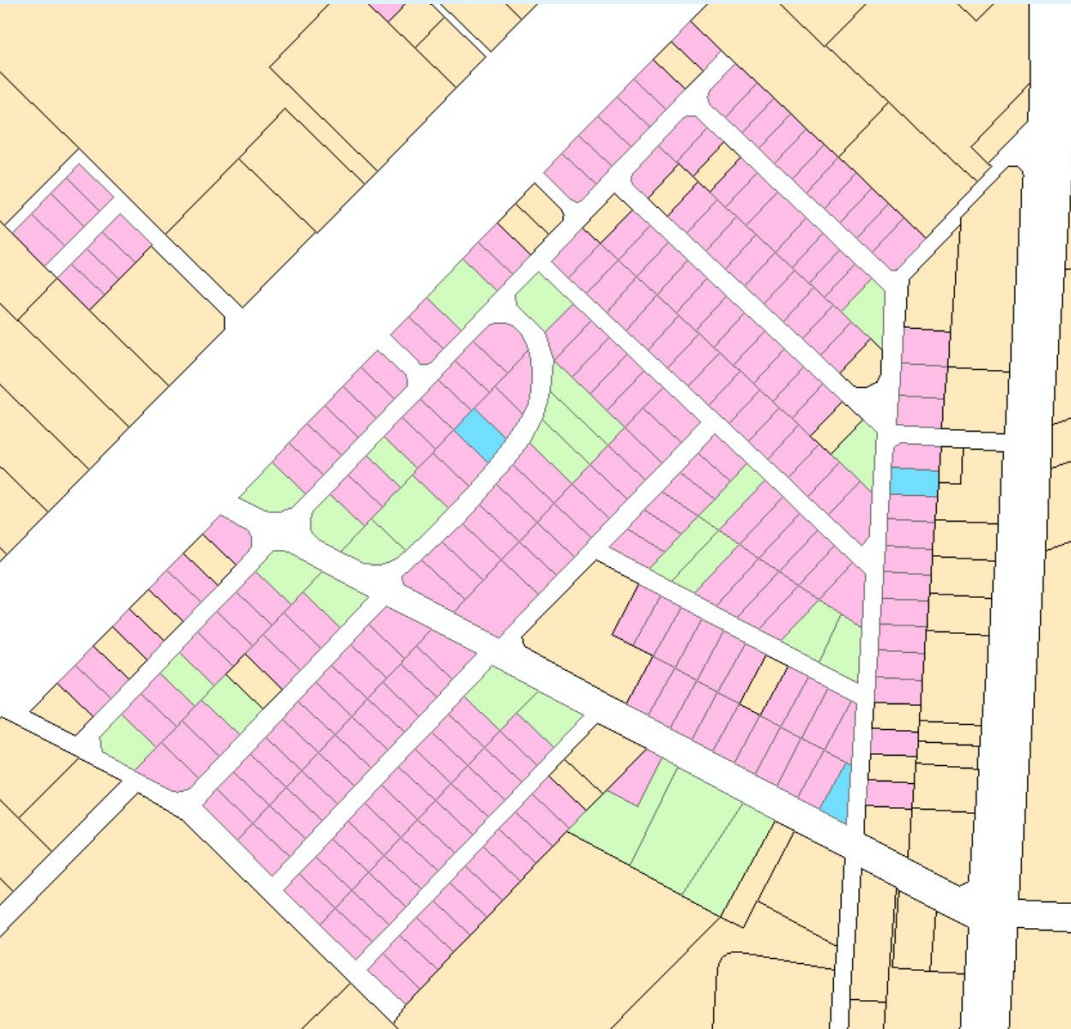
Parcel Area: 117,064 ft²
Impervious Area: 115,087 ft²
Exist. Rate Structure (257 Units): \$1,691.06/Month
Prop. Rate Structure: \$538.09/Month



Parcel Area: 1,530,020,ft²
Impervious Area: 808,326 ft²
Exist. Rate Structure (257 Units): \$2,040.88/Month
Prop Rate Structure: \$3,779.37 /Month

Residential Areas Comparison Sunset Acres

Existing Rate Structure

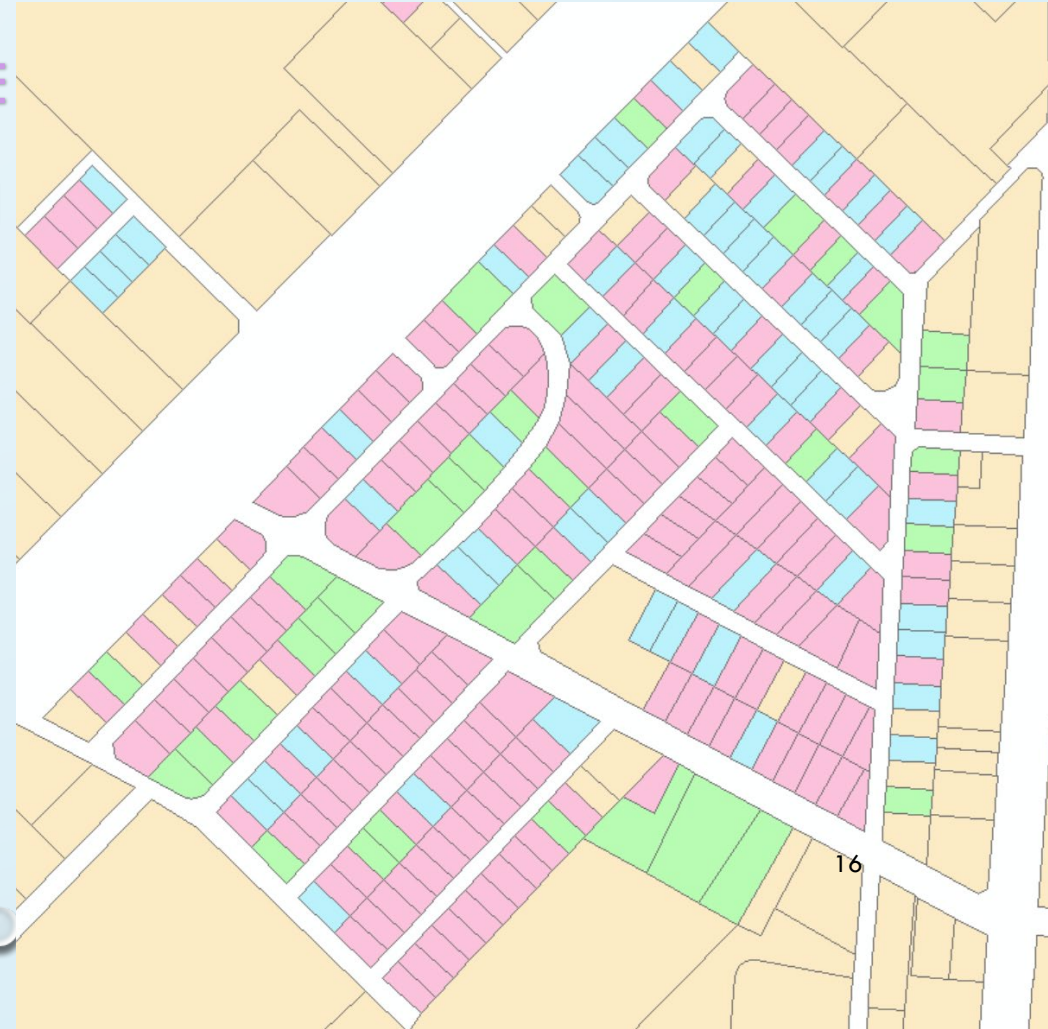


TIER R1: BLUE

TIER R2: PURPLE

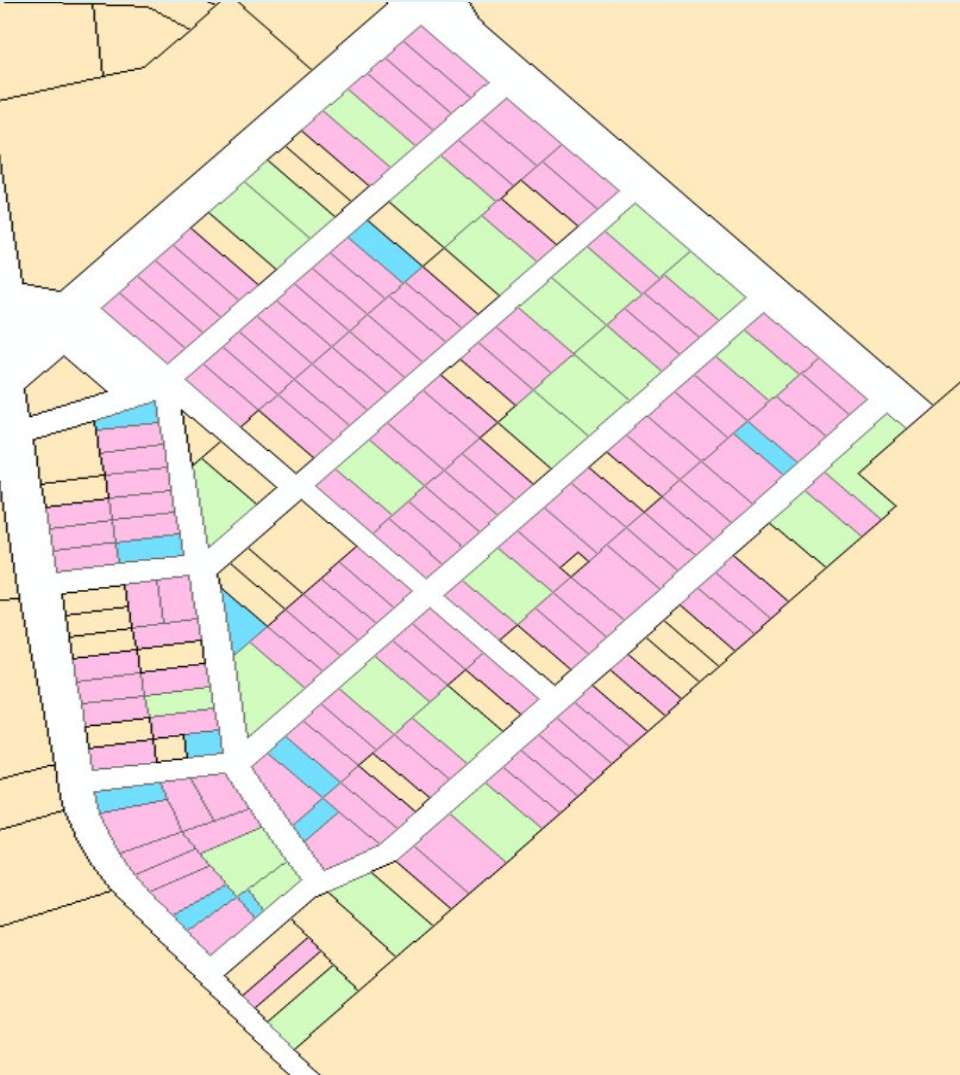
TIER R3: GREEN

Proposed Rate Structure

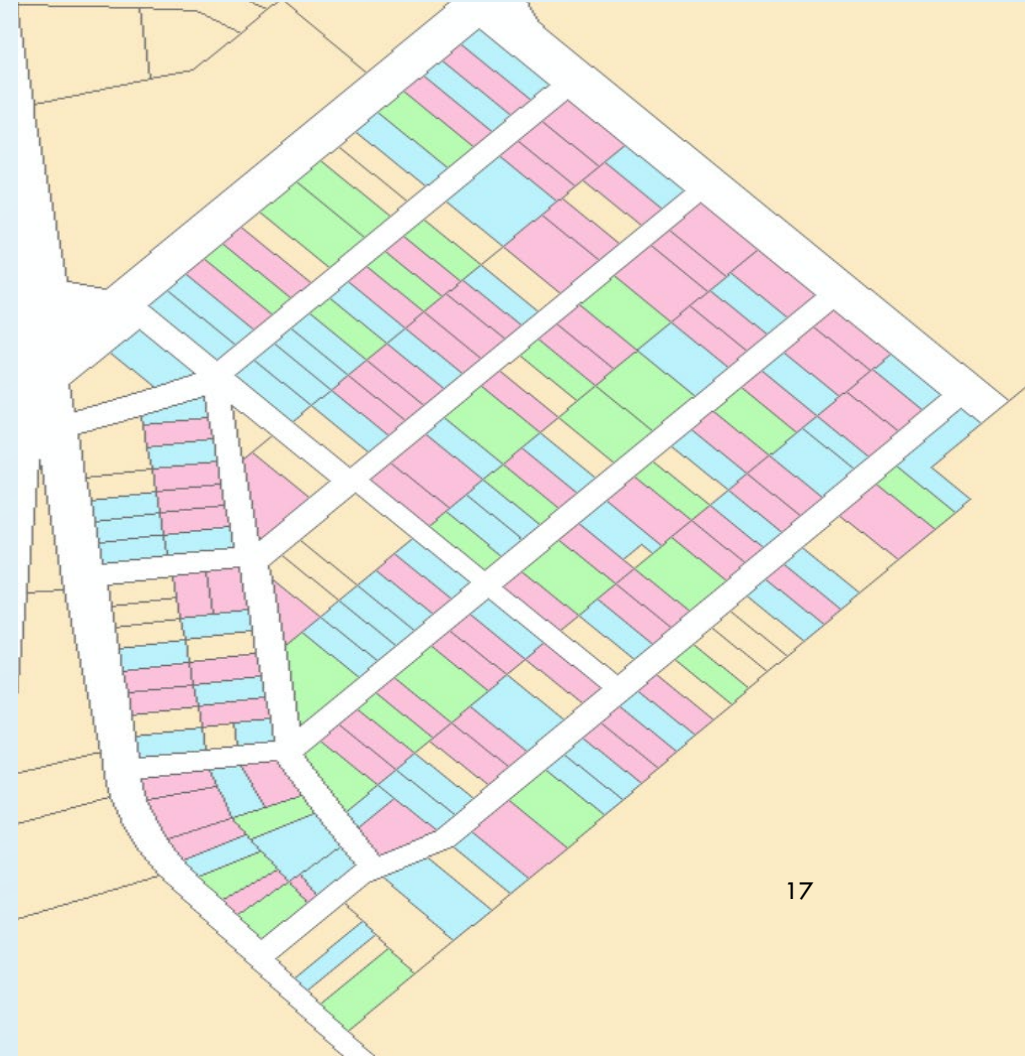


Residential Areas Comparison Wallace Addition

Existing Rate Structure



Proposed Rate Structure



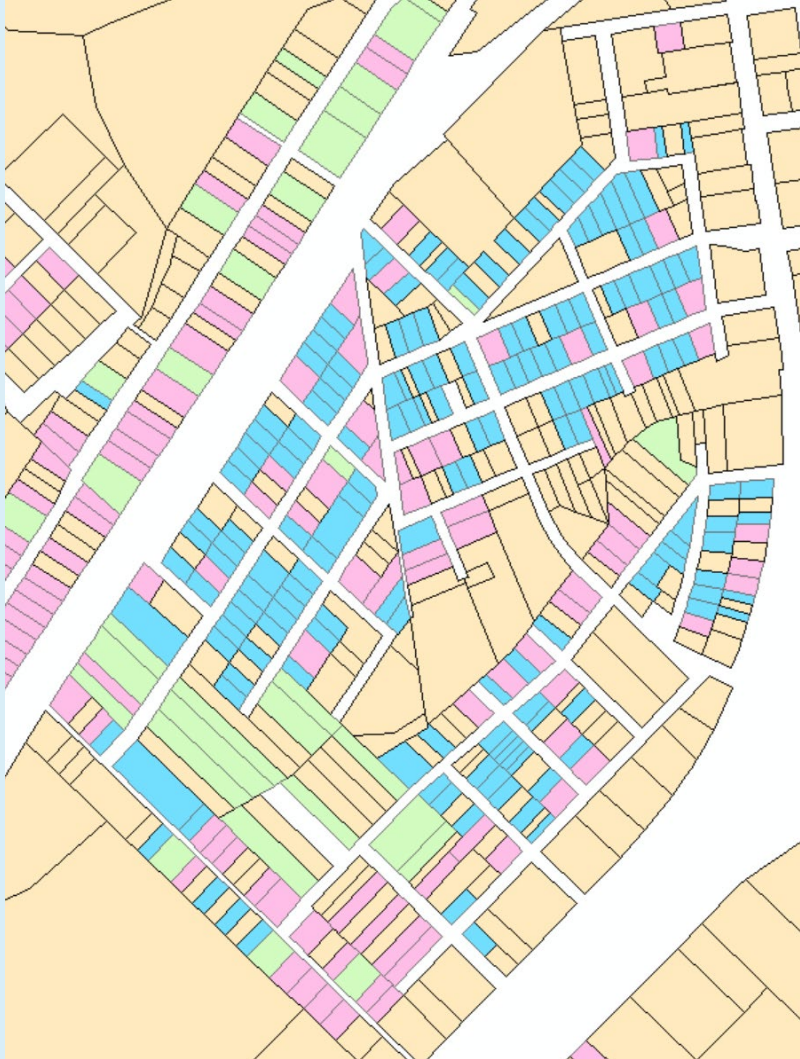
TIER R1: BLUE

TIER R2: PURPLE

TIER R3: GREEN

Residential Areas Comparison Victory Gardens

Existing Rate Structure

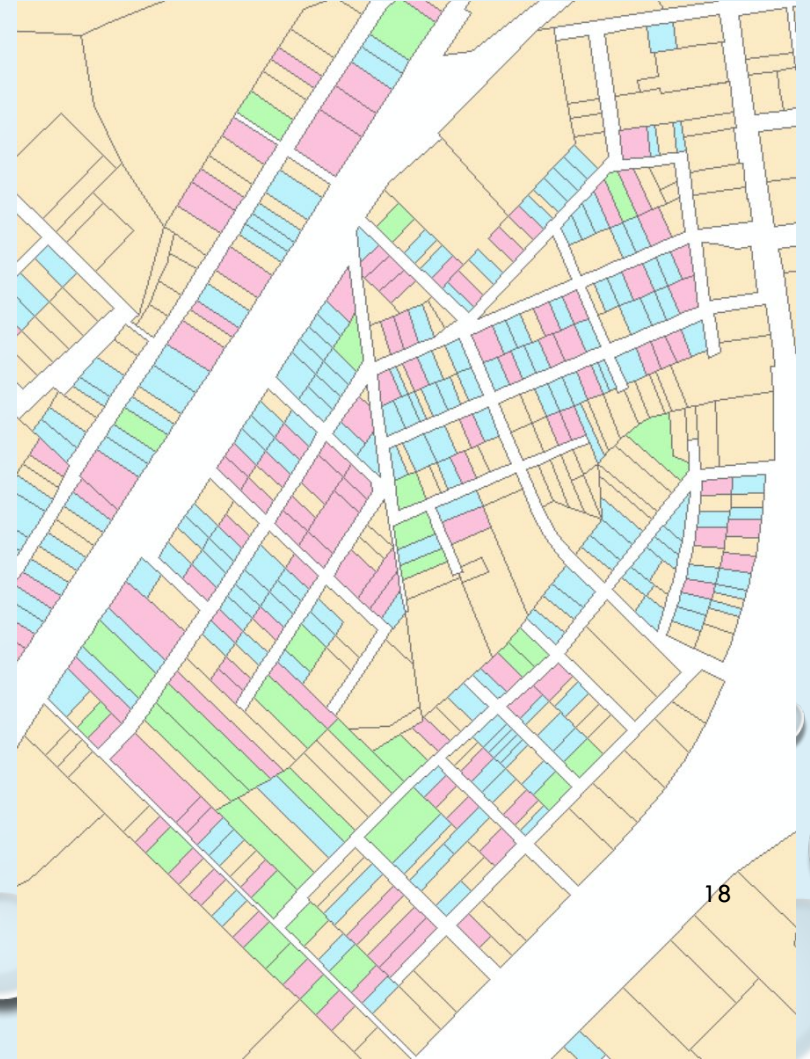


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TIER R3: GREEN

Proposed Rate Structure

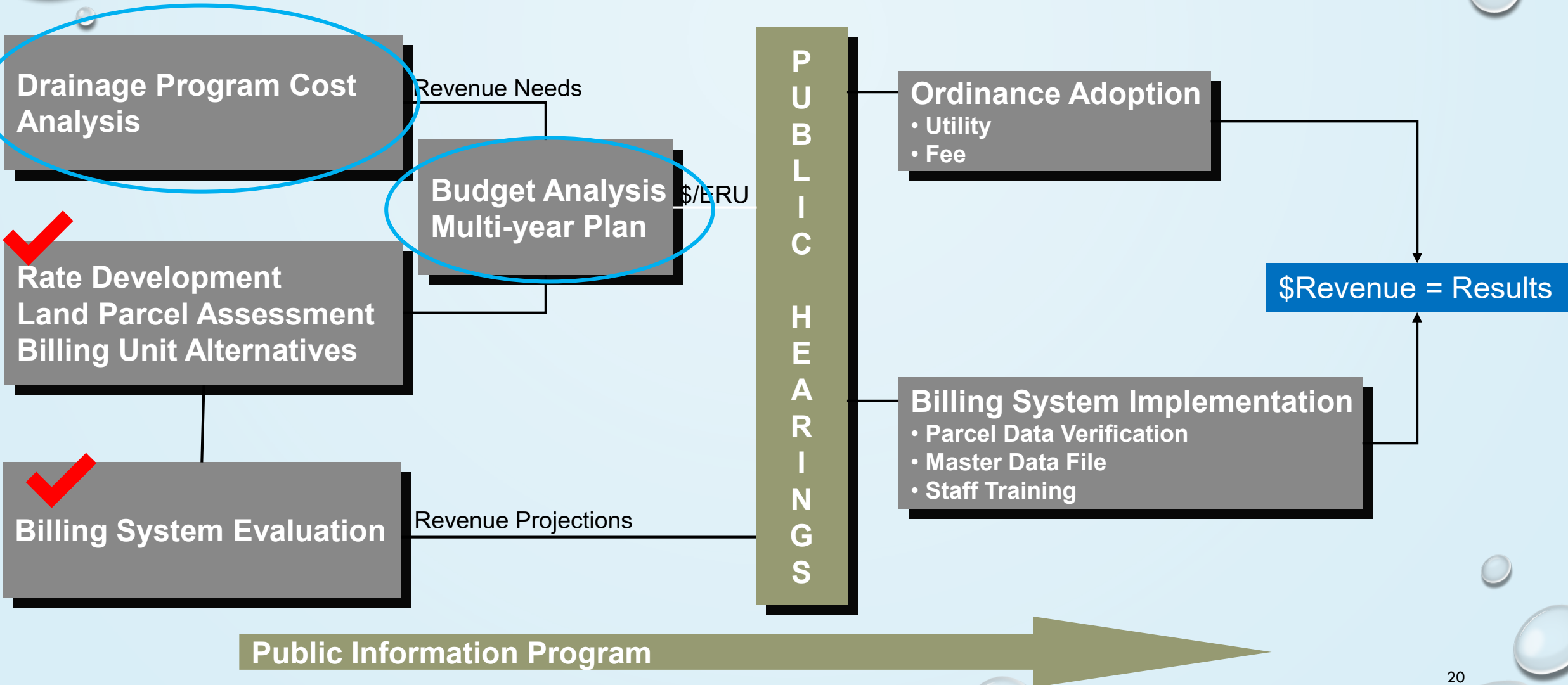


Billing System Review & Recommendations

- Bill for uninterrupted stormwater impervious cover even in the absence of other active utility service (electrical, water, wastewater.)
- Parcels that contain more than 1 drainage account will have fee apportioned between accounts based on impervious cover associated with each account.
- Bill owner of record for residential parcels with 5+ units.
- Implement concurrent update of the impervious cover data and the rate structure to avoid multiple bill changes.

Feedback?

Study and Implementation Process



Program Analysis - Building a Rate Model

What is it?

- It is a spreadsheet (Excel) based tool to forecast the stormwater utility's financial performance into the future.
- Its based on historical performance and assumptions about the future.
- It includes:
 - Revenue projections
 - Cost of Service
 - Expense projections

What does it provide us?

It allows us to run various scenarios on funding future expenses and the effect on rates.



Program Analysis - Status & Preliminary Recommendations

- Internal review and scenario testing on model underway
- Model is based upon recommended rate structure
- Debt/CIP costs driving rate increases
- Must increase O&M funding to achieve system performance – especially with water quality
- Link operational increases with capital project expenditures
- Amount of rate increases control CIP expenditures and competitiveness with other cities.

ERU Rate Comparison with other Texas Cities

| City | Monthly Stormwater Fee (FY19) |
|------------------|-------------------------------|
| Austin (approx.) | \$15.00 |
| San Marcos | \$12.10 |
| Fredericksburg | \$6.50 |
| Georgetown | \$6.50 |
| Killeen | \$6.00 |
| Fort Worth | \$5.40 |
| Schertz | \$5.20 |
| Cibolo | \$5.00 |
| Kyle | \$5.00 |
| San Antonio | \$4.94 |

Multi-Year Plan

Will come back to Council for discussion/direction on stormwater CIP and future rates.

- Currently an estimated \$68 Million over next 5-yrs
- Prioritize projects
 - Projects to prevent property damage
 - Council Priority projects



Summary of Next Steps

- Address any City Council recommendations/concerns
- Provide Council Update on rate model and program analysis (future rate increases)
- Update Drainage Utility Ordinance
- Update Utility Billing System
- Education/Public Outreach
 - Finalize Internal Procedures
 - Outreach
- Implement new Rate Structure