

Downtown Redevelopment Master Plan

Presentation to:
Community Redevelopment Agency
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Reason for Master Plan

- Downtown is unique
 - Gravity collection system
 - Increase in densities
- GRU has sufficient capacity, BUT future growth will exceed capacities
- City of Gainesville is encouraging redevelopment
 - Wastewater infrastructure should not be an impediment

Outline of Topics

- I. Background
- II. Master Plan Objectives
- III. Engineering Analysis
- IV. Projection of Growth
- V. Identification of System Improvements
- VI. Funding Alternatives

**Current Use
Parking Lot**



WW Flow = 0 gpd

**Adjacent
Densities**



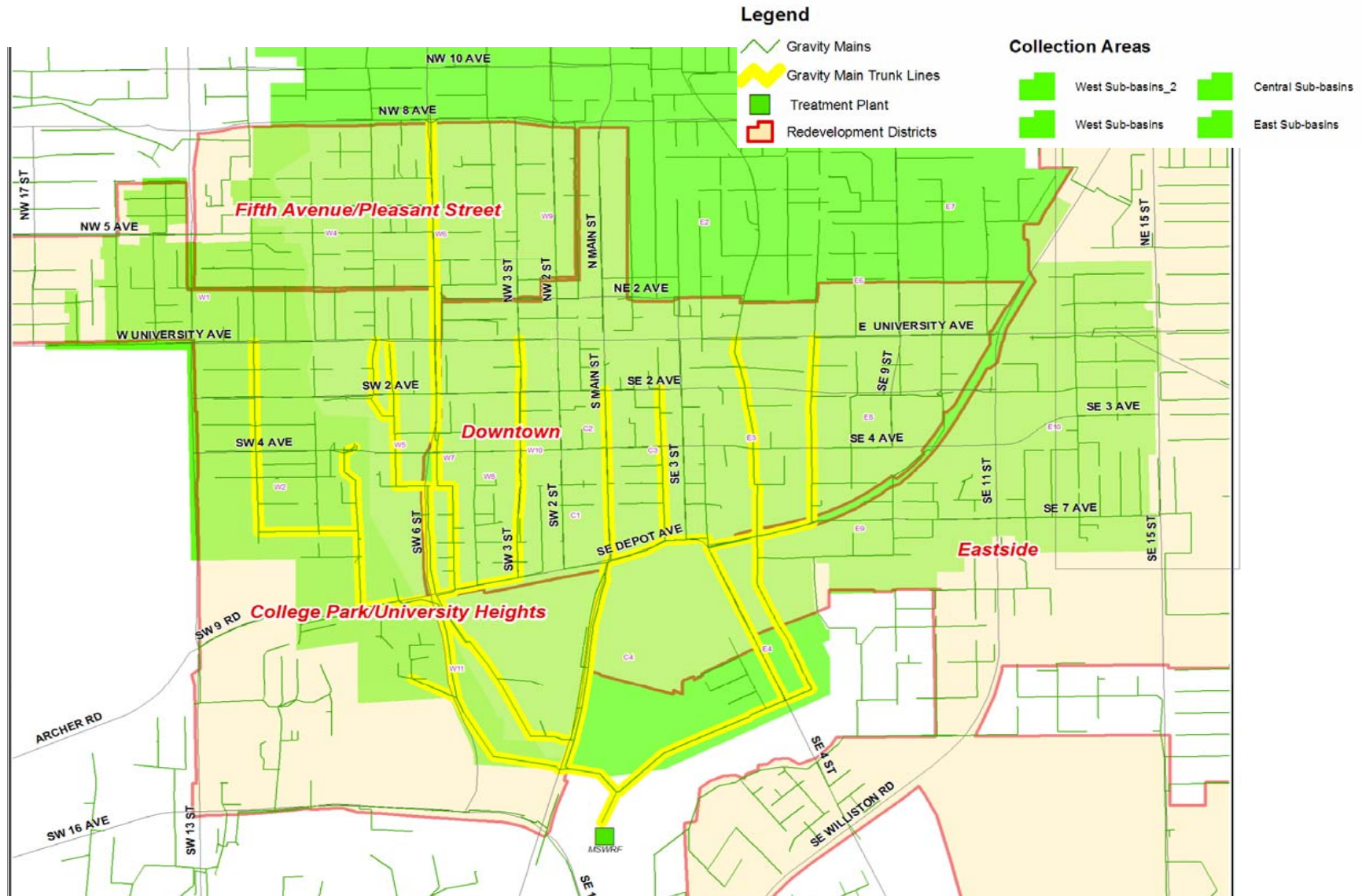
WW Flow ~ 5000 gpd

**Proposed
Gainesville Greens**



WW Flow = 144,000 gpd

Map Showing Areas Analyzed



Existing Downtown Gravity Collection System

- Older part of overall system
- Functions well without problems
- Adequate capacity for existing uses
- Portions of system have limited capacity for growth

Concerns

- Major facilities in the downtown area will require significant improvements when capacity is reached
- Major system improvements may be disproportionately borne
- Major system improvements may discourage redevelopment in this area

GRU Wastewater Extension Policy

Facility Types

Revenue Source	Extension & Capacity Upgrades	Plant Connection Charges	Collection Oversizing	System Improvements
GRU – Base Rates				X
GRU - Connect Charges			X	
Developer	X	X		

Downtown Redevelopment Master Plan Objectives

1. Evaluate and determine existing capacities
2. Estimate where and when future growth will occur
3. Determine available capacity for future growth
4. Identify improvements necessary to accommodate future growth
5. Develop funding mechanism to pay for improvements
6. Implement policies to accomplish these goals

Engineering Analysis of Gravity Collection System

- Field Survey (GPS elevations)
- Develop Hydraulic Model of Existing System
- Estimate Existing Wastewater Flows
- Field Flow Testing
- Assessment of Current Capacity
- Identify Improvements

Projection of Future Growth

Objective: Develop planning level estimates of growth

- Estimate Growth for 5-year & 10-year Horizons
- Estimate Growth for Buildout Conditions
- Compare to System Level and MTPO Forecasts

Projection Comparisons

Projected ERU's - Downtown Gainesville

	TAZ	GRU,CRA & COG	Overall GRU System
Existing	5366	5360	57166
5-year		8484	64213
10-year	6252	10170	70701
20-year	6831		80531
Buildout		20094	

TAZ - Traffic Analysis Zones (MTPO)

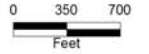
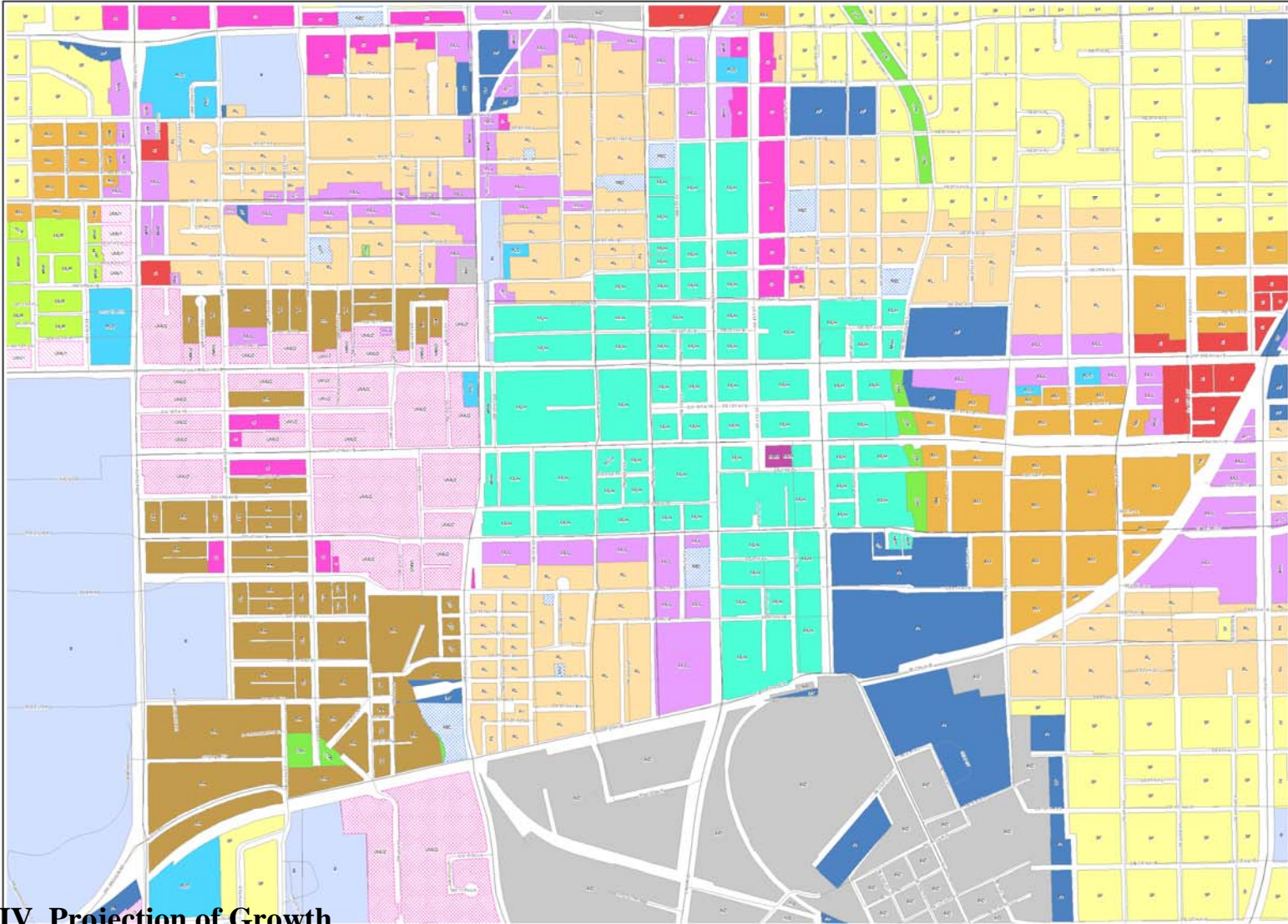
GRU/CRA - GRU & CRA identified potential projects and inquiries

GRU/COG - GRU & Community Development estimated max. growth downtown

Overall GRU System - ERU projections for the entire GRU system

Future Land Use Map

Future Land Use -- Downtown Gainesville



1 inch equals 350 feet



Future Land Use Legend

- Single Family (Up to 8 units/acre)
- Res Low (Up to 12 units/acre)
- Res Med (8-30 units/acre)
- Res High (8-100 units/acre)
- Mixed Use Res (Up to 75 units/acre)
- Mixed Use Low (8-30 units/acre)
- Mixed Use Medium (12-30 units/acre)
- Urban Mixed Use I (Up to 75 units/acre)
- Urban Mixed Use II (Up to 100 units/acre)
- Mixed Use High (Up to 150 units/acre)
- Office
- Commercial
- Industrial
- Education
- Recreation
- Public Facilities
- Agricultural
- Conservation
- Planned Use Dist

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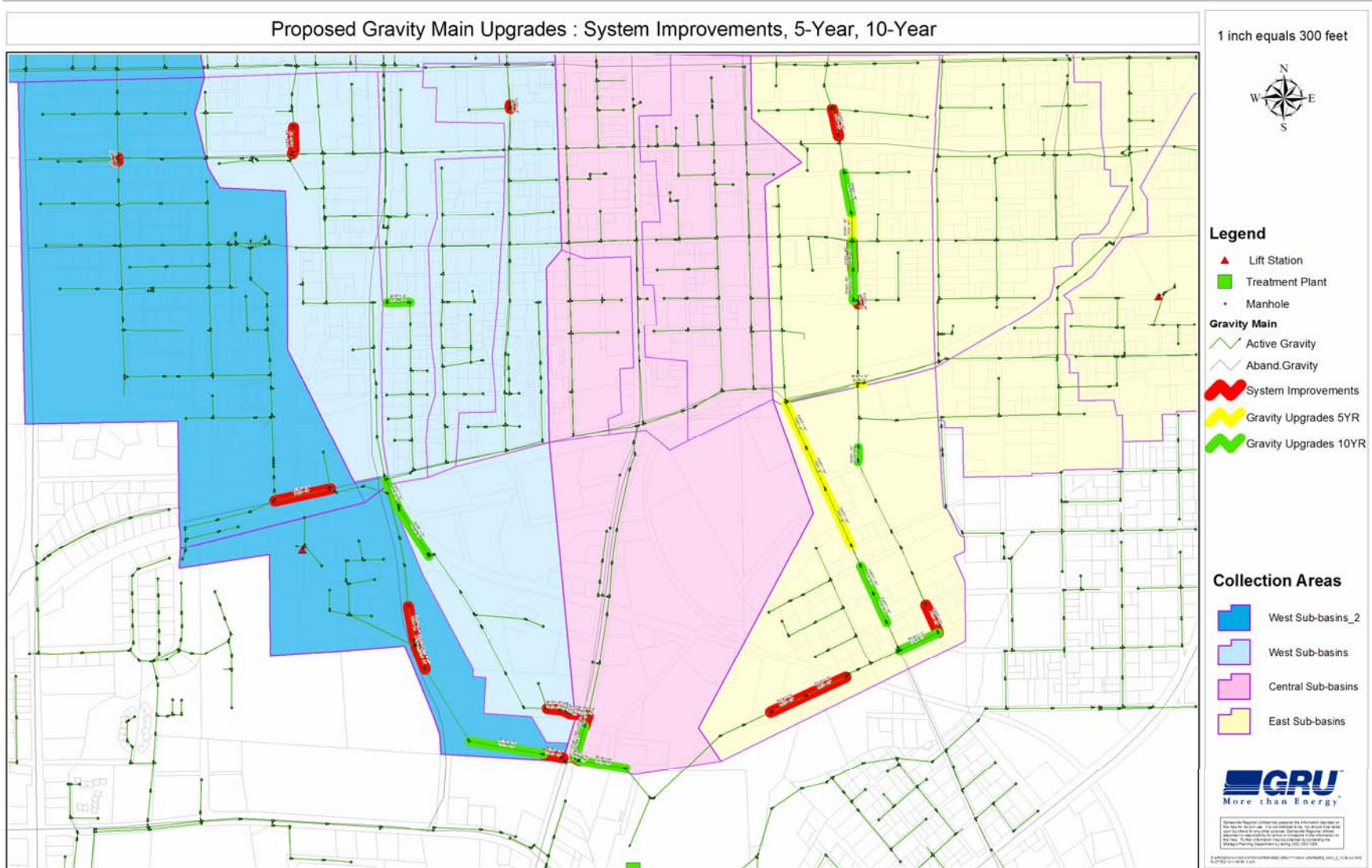
Identification of Future Sewer System Improvements

- Evaluate affect of wastewater flows on the wastewater collection system
- Identify improvements to accommodate future wastewater flows
- Estimate costs for necessary improvements

Categories of Improvements

Category	Description
<p align="center">System Improvements</p>	<ul style="list-style-type: none"> • R&R (Correction of Existing Problems) • <i>Existing Downtown Sewer Slopes Causing Capacity Constraints</i>
<p align="center">Oversizing</p>	<ul style="list-style-type: none"> • Cost Efficient Investment to Accommodate Future Development
<p align="center">Development Triggered Trunk Capacity Upgrades</p>	<ul style="list-style-type: none"> • Major Downstream Upgrades to Accommodate Development
<p align="center">Local Collector Upgrades</p>	<ul style="list-style-type: none"> • Local Collector Upgrades and Extensions to Accommodate Development

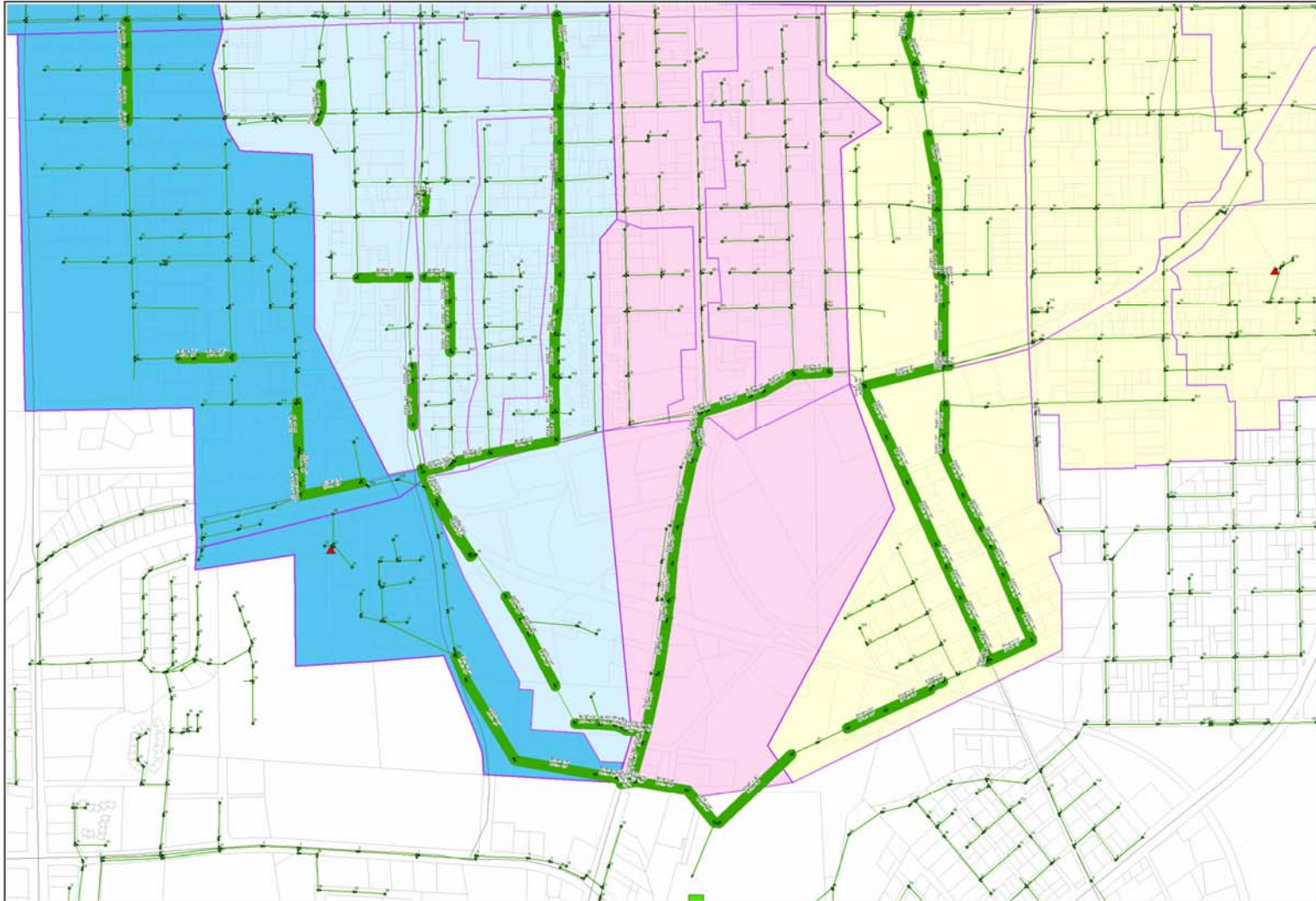
Improvements to Support Potential Projects (5-10 years)



Improvements to Support Potential Buildout (20-50 years)

Proposed Gravity Main Upgrades : Buildout

1 inch equals 300 feet



Legend

- ▲ Lift Station
- Treatment Plant
- Manhole
- Gravity Main**
- Active Gravity
- Aband Gravity
- Gravity Upgrades Buildout

Collection Areas

- West Sub-basins_2
- West Sub-basins
- Central Sub-basins
- East Sub-basins

Estimated Improvement Costs

Projections			Project Costs			
Year	Incr. ERU's	Cumul. ERU's	Developer Cost (\$)	GRU System Improvements (\$)	GRU Oversizing (\$)	Total Cost (\$)
Current	0	5400				
5	3100	8500	\$310,000	\$1,600,000	\$751,000	\$2,661,000
10	1700	10200	\$2,500,000	\$0	\$857,000	\$3,357,000
Buildout	9900	20100	\$6,200,000	\$0	\$2,100,000	\$8,300,000
Cumulative Total Cost			\$9,010,000	\$1,600,000	\$3,708,000	\$14,318,000

Criteria for Funding Alternatives

- Encourages redevelopment
- Fair
- Consistent with existing policy
- Easy to implement
- Flexibility to adjust to changes in growth
- Minimal impact on existing customers

Funding Alternatives to Assist Downtown Development

Current Extension Policy (Developer pays cost to serve)

Supplemental Funding Alternatives (from future growth)

- TIF (Tax Increment Financing)
- GFT or Utility Tax Increment
- Special Ad Valorem Assessment

Revise Existing Extension Policy

- Connection Charges
 - Special Area Charge
 - Levelize Connection Charges
- Base Rates

NPV Revenue – Supplemental Funding Sources

Projections		Potential Funding Sources					
Year	Cumul. ERU's	Trunk Capacity Upgrades Cost (\$)	Conn. Chg GFT (\$)	NPV Rate GFT (\$)	NPV 10% Utility Tax (\$)	NPV Tax Incr Revenue (\$)	GRU Special Area Connect Chgs (\$)
5	3100	\$310,000	\$905,000	\$1,970,000	\$1,340,000	\$30,900,000	\$852,000
10	4800	\$2,810,000	\$1,390,000	\$3,030,000	\$2,070,000	\$47,600,000	\$1,310,000
Buildout	14700	\$9,010,000	\$4,270,000	\$9,290,000	\$6,340,000	\$146,000,000	\$4,020,000

- Note:
1. All costs are cumulative
 2. NPV based on 7.5% interest at 20 years

Thank you!