



# Stormwater Utility Discussion

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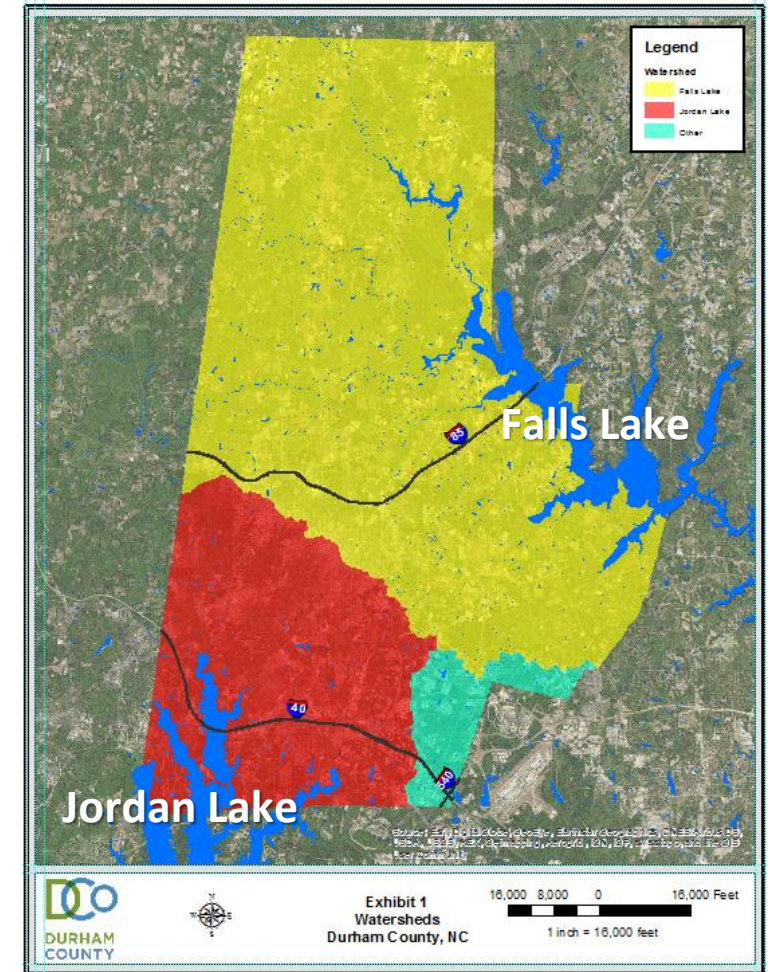
# What We Plan to Cover

- Background
- Purpose of Today's Presentation
- Guiding Principles
- Progress to Date
- Commissioner Input and Feedback
- Next Steps



# Durham County Watersheds

- Neuse River - including Falls Lake & Remainder
- Cape Fear River - including Jordan Lake
  - Neuse River Rules = No New Cost
  - Falls Lake Rules (estimated costs):
    - Stage 1 = \$1,000,000
    - Stage 2 = \$67,000,000
  - Jordan Lake Rules (estimated costs):
    - Stage 1 = No New Cost
    - Stage 2 = \$5,900,000





# Purpose

- Phase 1 of the Study (complete)
  - The BOCC directed staff to work towards the implementation of a fee funded Stormwater Utility that would pay for these costs
- Phase 2 of the Study (underway)
  - Refinement of the revenue requirements
  - Draft of the rate base
- Preliminary rates and rate structures to be presented for feedback



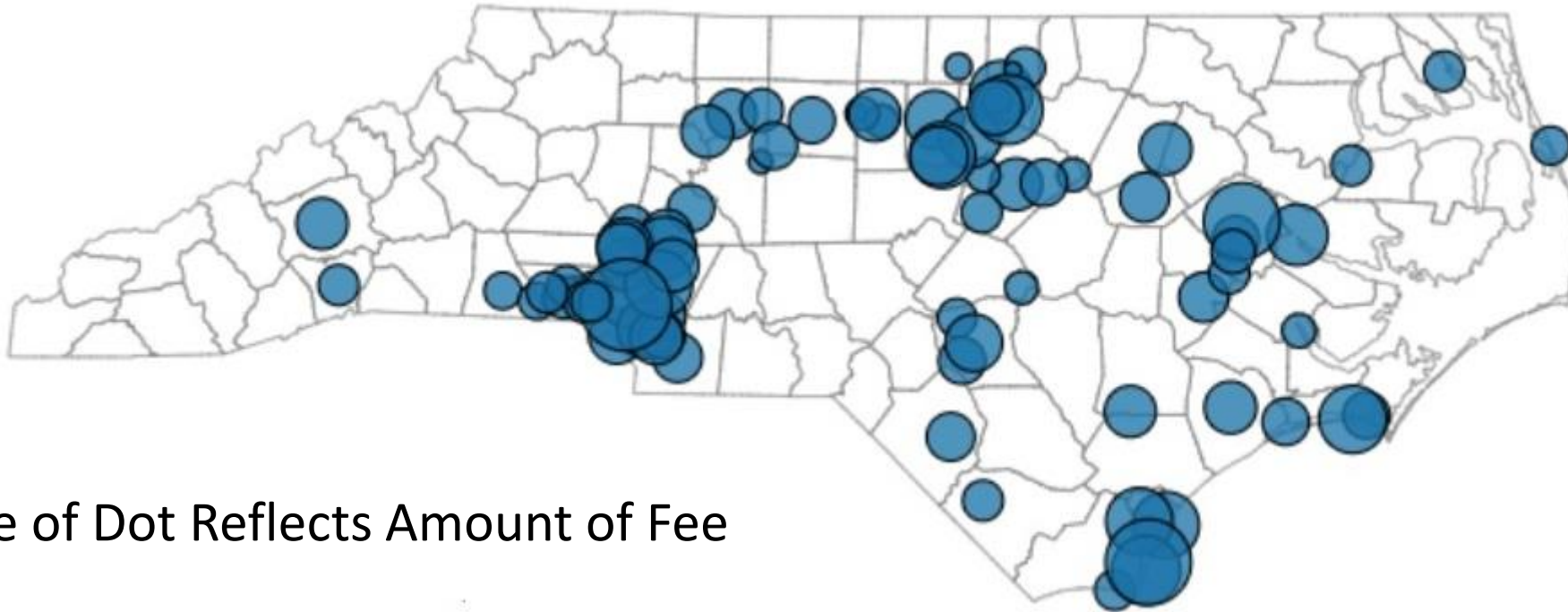
# Stormwater Utility

- A Stormwater Utility is a fair, equitable, and stable way to collect revenue to pay for these compliance costs
- Numerous neighboring jurisdictions have implemented a utility to pay for these compliance costs for similar reasons



# Jurisdictions with Stormwater Utilities

88 Stormwater Utilities in NC as of 2018



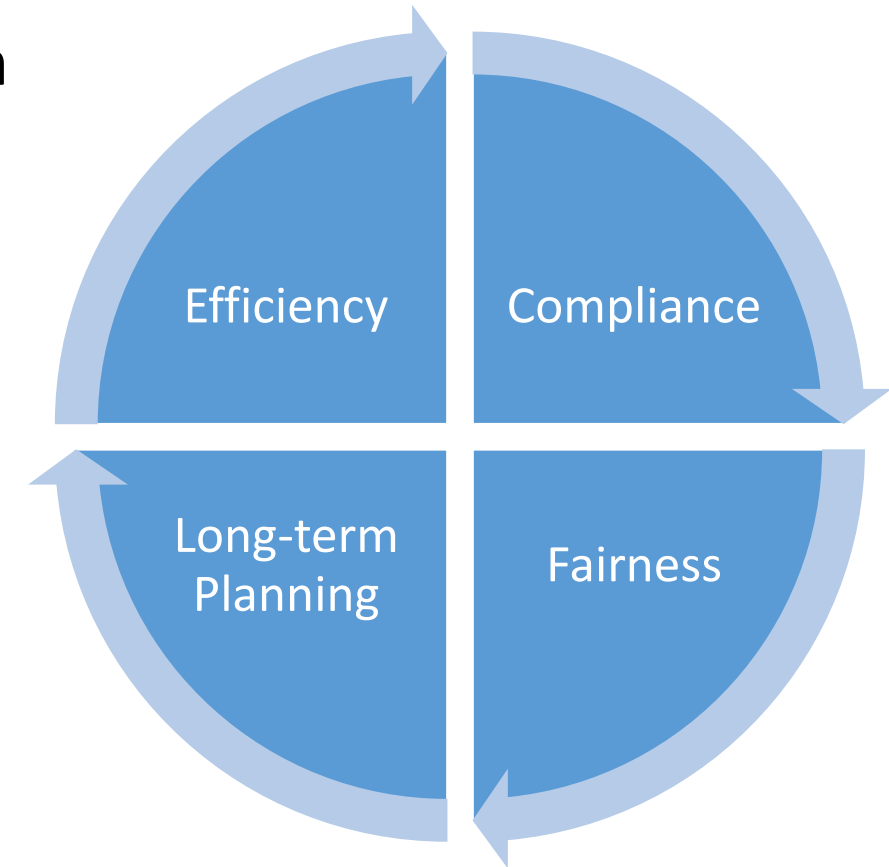
\* Size of Dot Reflects Amount of Fee

Source – UNC School of Government



# Guiding Principles

- **Comply with the law** and support a high quality of life, maintain public health, and be good stewards of the environment
- **Be fair** to our citizens in how we generate the needed revenue
- **Implement a long-term financial plan** being mindful of the need to increase revenues over time, minimize rate shocks, and account for future uncertainty regarding the regulations
- **Make efficient choices**







# Revenue Requirements

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Staffing	\$ 458,000	\$ 472,000	\$ 486,000	\$ 500,000	\$ 516,000	\$ 531,000	\$ 547,000
Program Expenses	\$ 118,000	\$ 119,000	\$ 120,000	\$ 120,000	\$ 121,000	\$ 121,000	\$ 122,000
Capital Administration	\$ 207,000	\$ 214,000	\$ 262,000	\$ 270,000	\$ 280,000	\$ 290,000	\$ 300,000
Capital and Reserves	\$ 699,000	\$ 795,000	\$ 834,000	\$ 871,000	\$ 4,674,000	\$ 5,211,000	\$ 5,437,000
Total Revenue Requirement	\$ 1,482,000	\$ 1,600,000	\$ 1,702,000	\$ 1,761,000	\$ 5,591,000	\$ 6,153,000	\$ 6,406,000

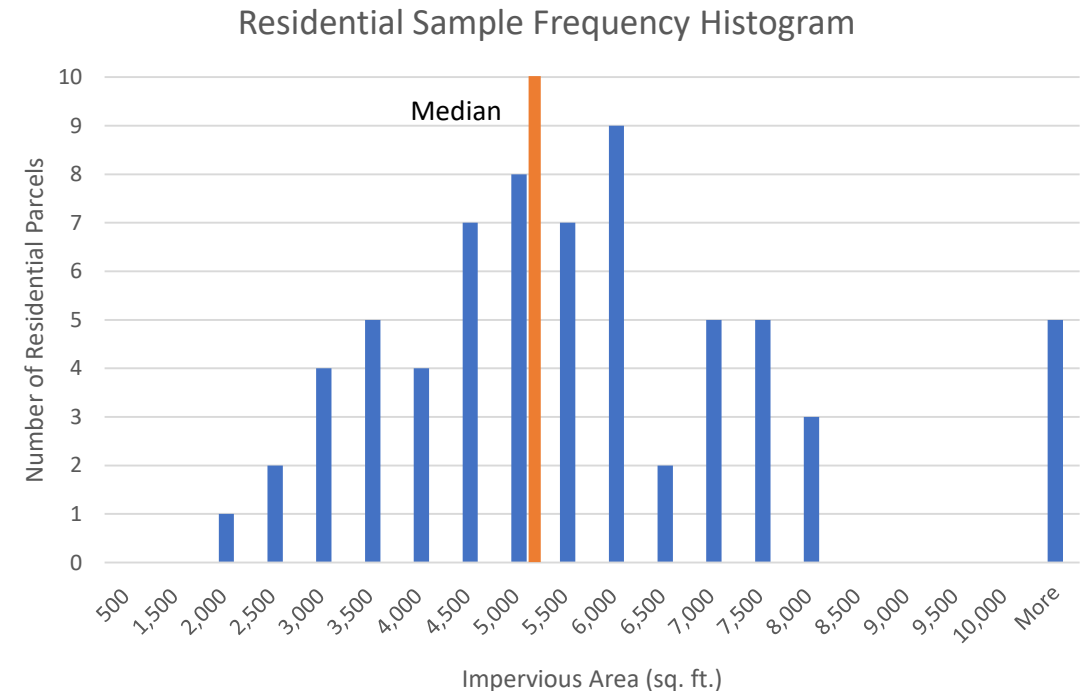

 Stage II Falls Lake
 





# Draft Rate Structure

- Based on impervious area only
- Flat rate residential rate structure
  - All single family residential properties are charged a single flat rate
  - The Equivalent Residential Unit (ERU) is about 5,000 square feet of impervious area.
  - All non-single family residential properties would be measured and charged based on the number of ERUs on the property.
- For reference, the ERU for the City of Durham is 2,400 square feet of impervious area
  - Three residential tiers with non-residential properties charged based on the number of ERUs





# Impervious Area Examples

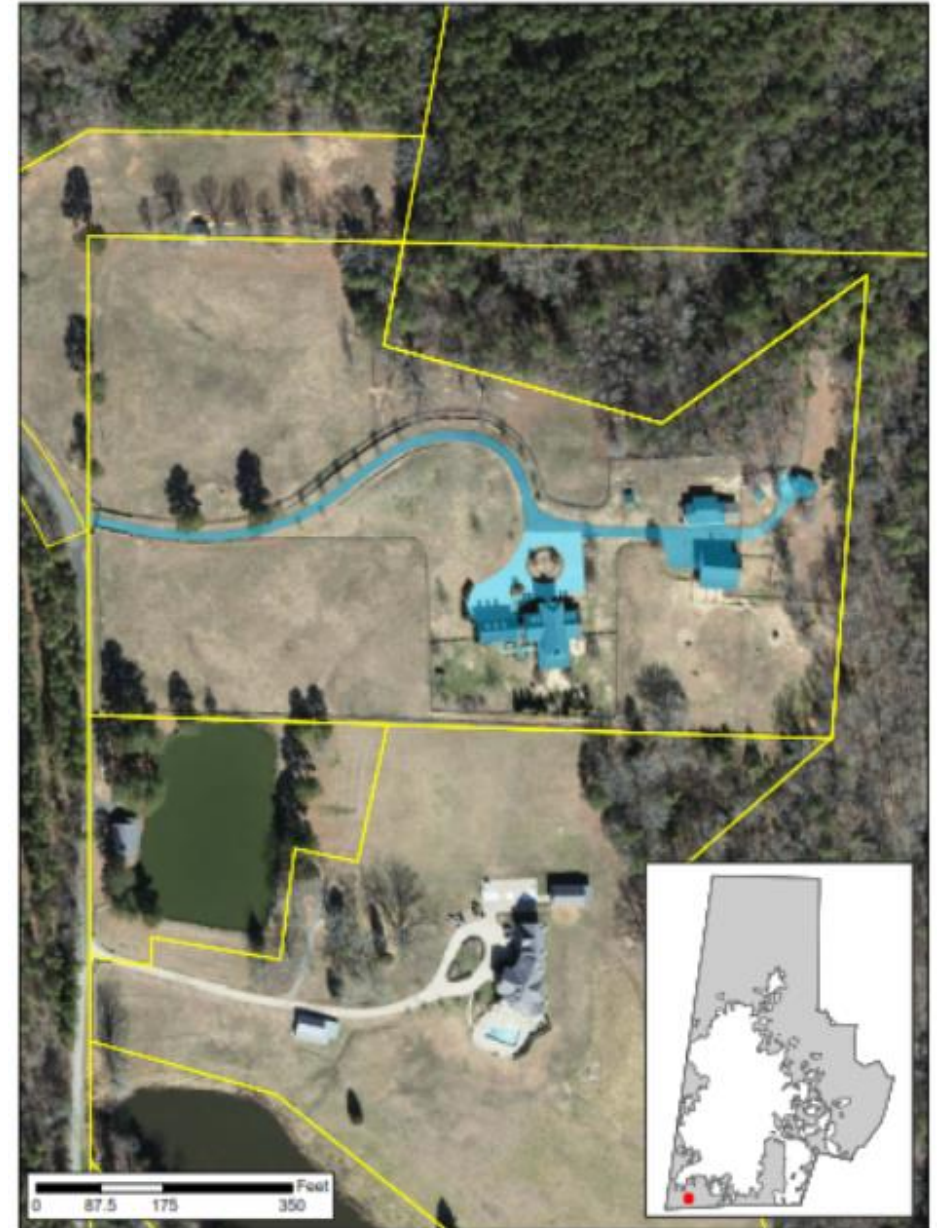
- Residential properties in the unincorporated County
- Non-residential properties in the unincorporated County



## Residential Property

Location – Southwest portion of the County

Impervious area – 41,381 square feet



Background

Work To Date

Discussion

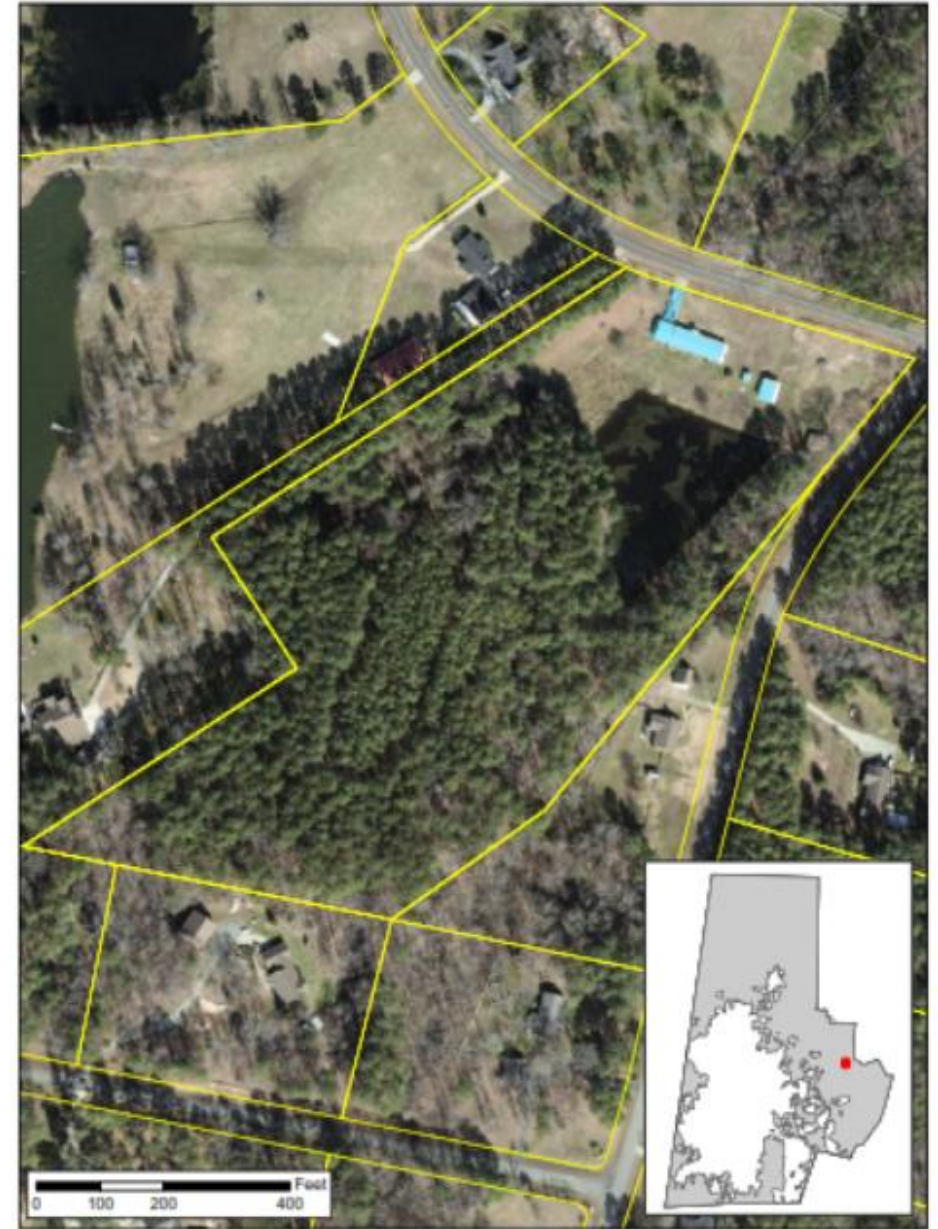
Next Steps



## Residential Property

Location – Eastern portion of the County

Impervious Area – 5,757 square feet



Background

Work To Date

Discussion

Next Steps





## Residential Property

Location – Western portion of the County

Impervious Area – 4,949 square feet



Background

Work To Date

Discussion

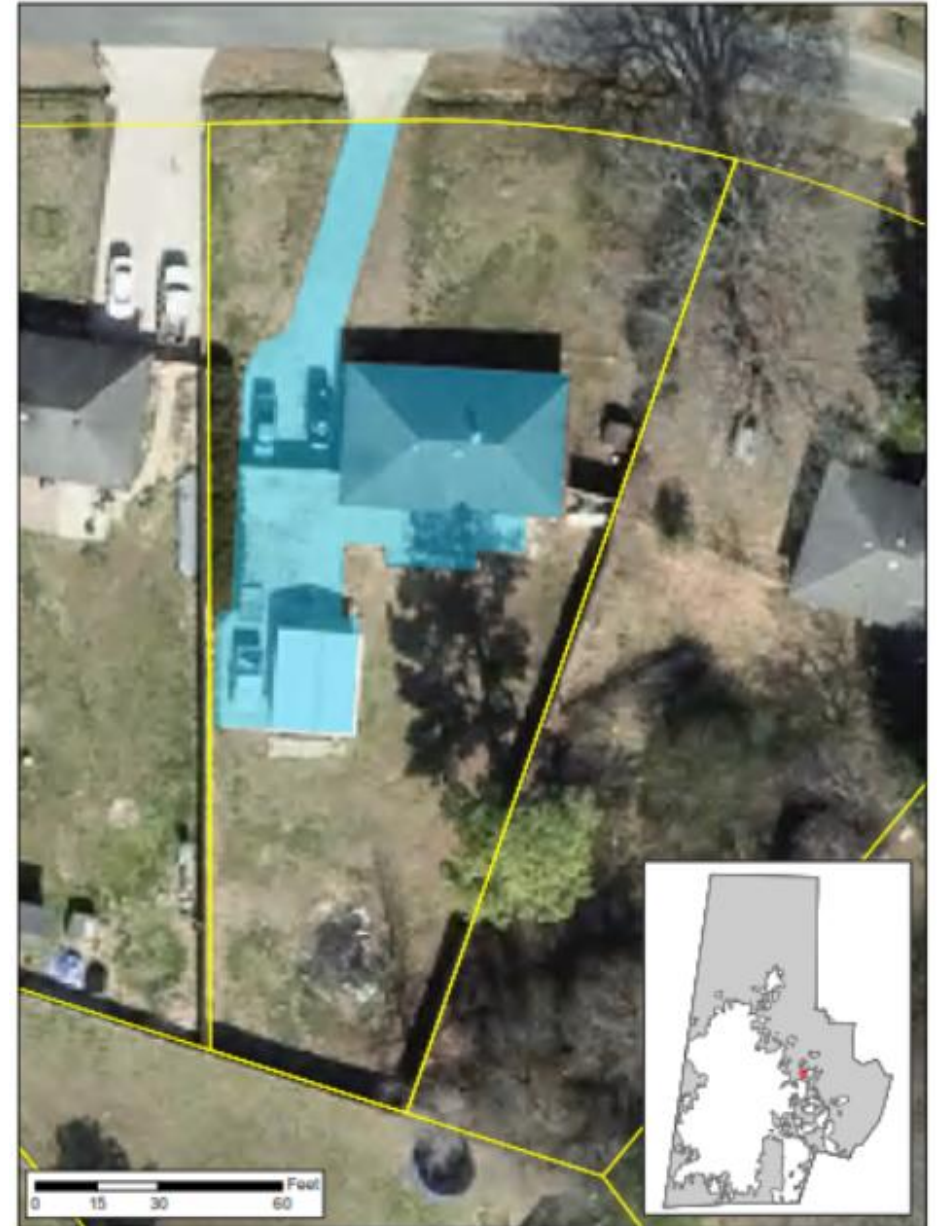
Next Steps



## Residential Property

Location – Eastern portion of the County, near the City limits

Impervious Area – 5,719 square feet



Background

Work To Date

Discussion

Next Steps



## Residential property

Location – Northwest portion of the County

Impervious Area – 4,636 square feet



Background

Work To Date

Discussion

Next Steps





## **Residential property**

Location – Southeast portion of the County, near the City limits

Impervious area – 7,441 square feet



Background

Work To Date

Discussion

Next Steps



## Residential Property

Location – Northern portion of the County, near the City limits

Impervious Area – 5,773 square feet



Background

Work To Date

Discussion

Next Steps



## Residential Property

Location – Northern Portion of the County

Impervious Area – 6,593 square feet



Background

Work To Date

Discussion

Next Steps





### **Non-Residential Property (Church)**

Location – Northern Portion of the County near the City limits

Impervious Area – 17,707 square feet (4 ERUs)



Background

Work To Date

Discussion

Next Steps



## **Non-Residential Property (Commercial)**

Location – Southeast portion of the County (RTP)

Impervious Area – 5,995,615 square feet (1,181 ERUs)



Background

Work To Date

Discussion

Next Steps

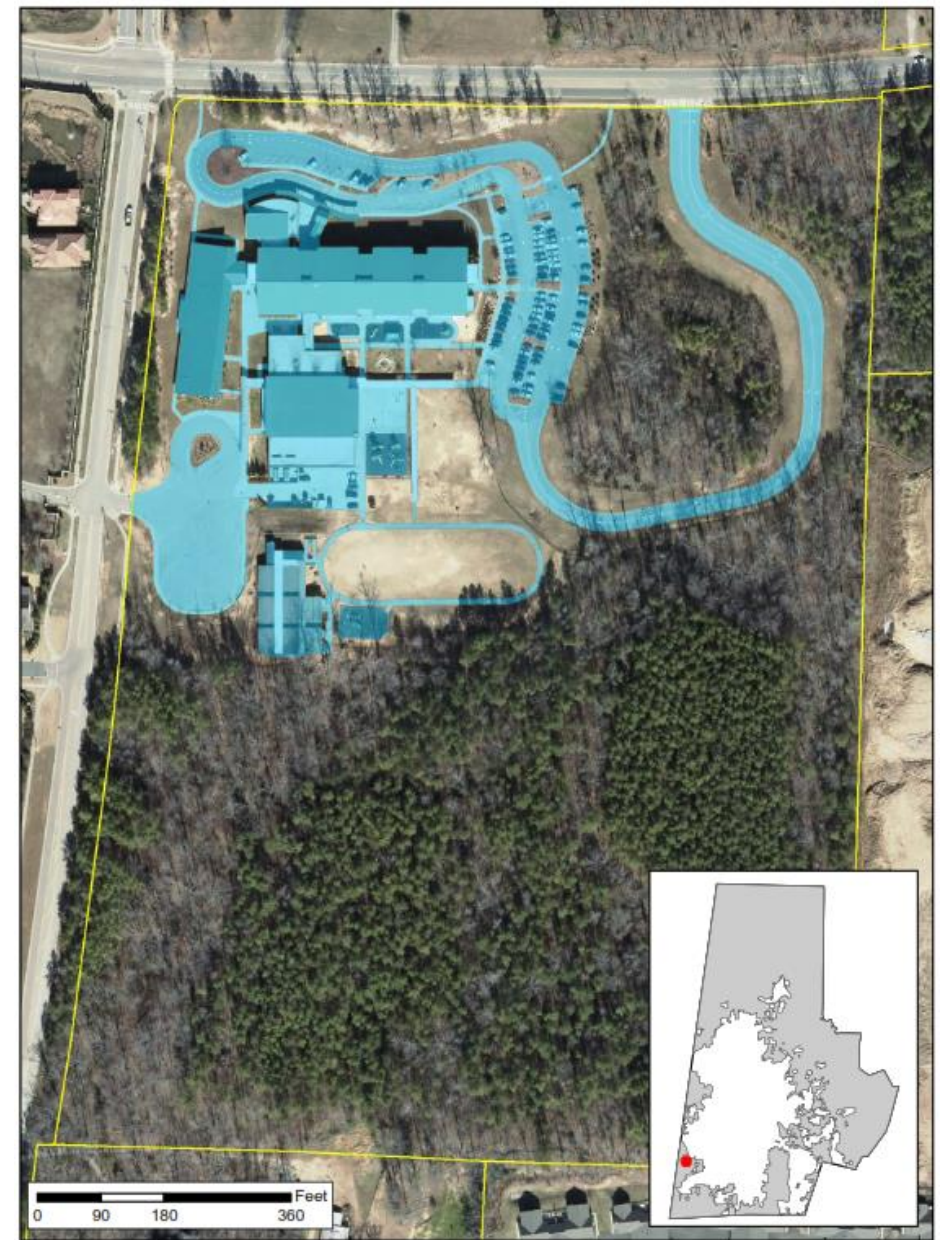




## Non-Residential Property (School)

Location – Southwest Portion of the County

Impervious Area – 281,357 square feet (56 ERUs)



Background

Work To Date

Discussion

Next Steps



## Non-Residential Property (Horticulture)

Location – Northeast Portion of the County

Impervious Area – 19,034 square feet (4 ERUs)



Background

Work To Date

Discussion

Next Steps

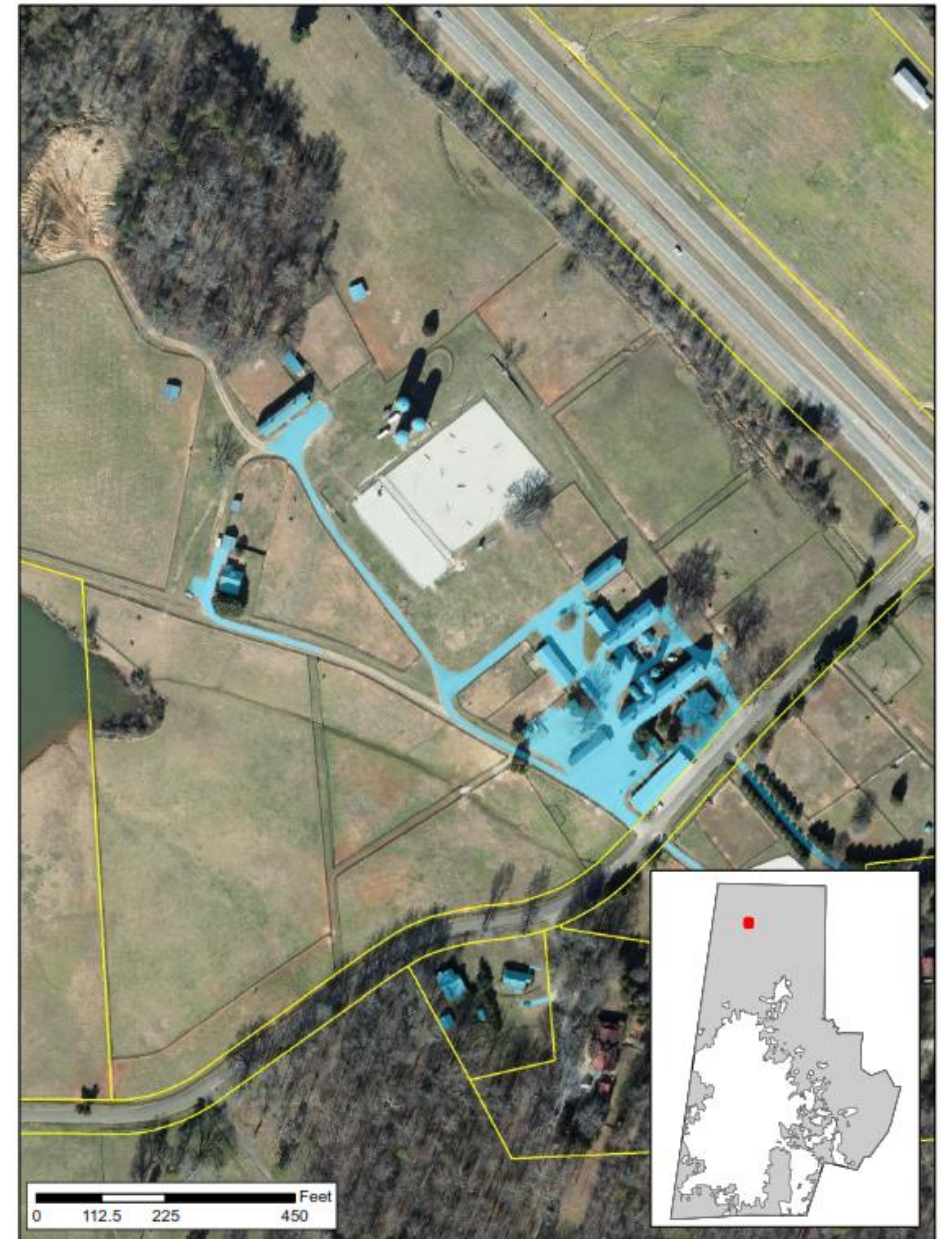




## **Non-Residential Property (Agriculture - Equestrian)**

Location – Northern Portion of the County

Impervious Area – 124,360 square feet (25 ERUs)



Background

Work To Date

Discussion

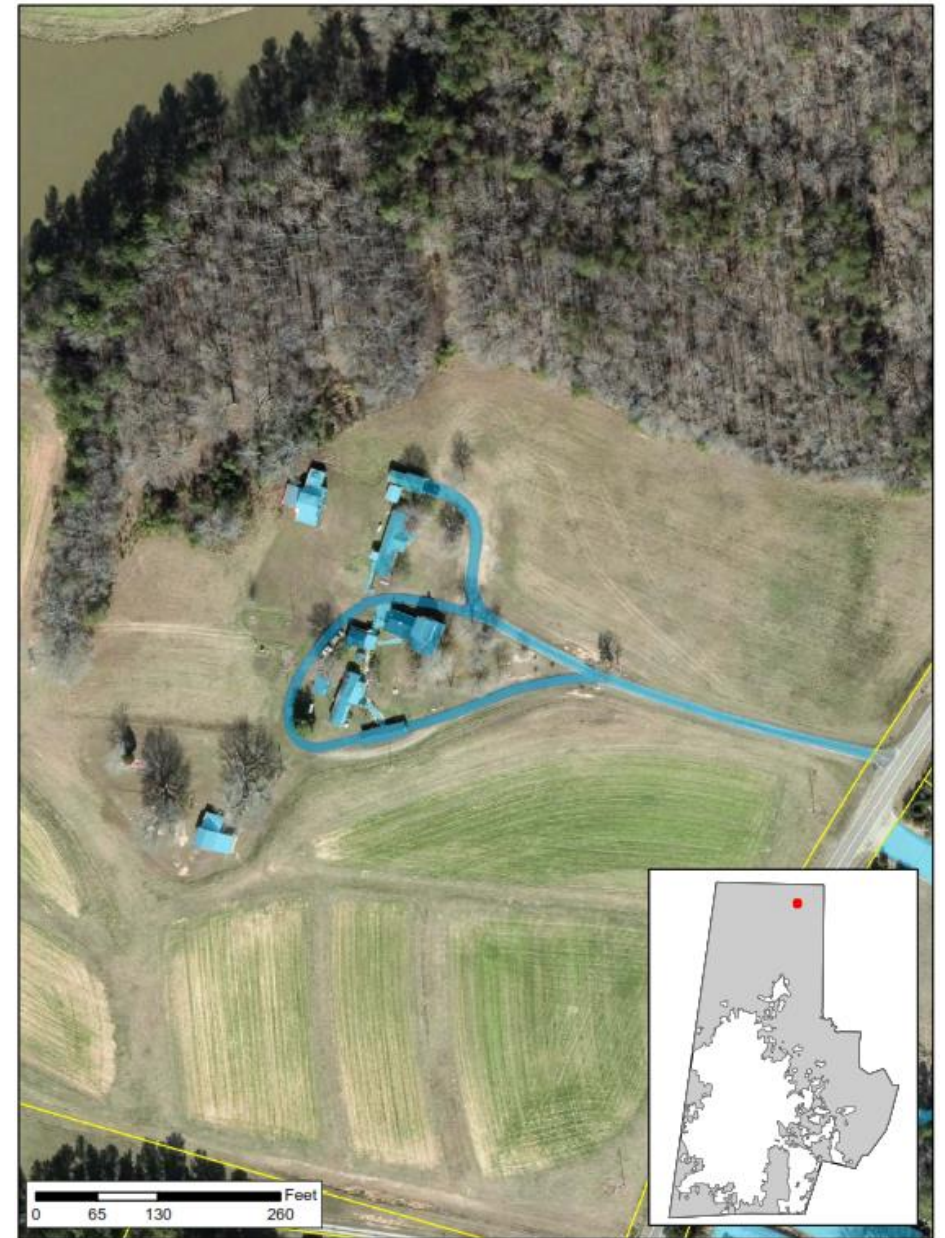
Next Steps



### **Non-Residential Property (Agriculture - Traditional)**

Location – Northern Portion of the County

Impervious Area – 22,803 square feet (5 ERUs)



Background

Work To Date

Discussion

Next Steps



# Rate Implications

- Rates can be calculated directly based on revenue requirements (Calculated Rates)
- In order to avoid large rate increases, rates could be regularly increased slowly to avoid rate shocks and still meet revenue requirements over a designated time period (Adjusted Rates)



# Rate Implications – Calculated Rates

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Total Revenue Requirement	\$ 1,482,000	\$ 1,600,000	\$ 1,702,000	\$ 1,761,000	\$ 5,591,000	\$ 6,153,000	\$ 6,406,000

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Annual Rates (per ERU)	\$ 52	\$ 56	\$ 59	\$ 61	\$ 191	\$ 209	\$ 217

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Monthly Rates (per ERU)	\$ 4.50	\$ 4.75	\$ 5.00	\$ 5.25	\$ 16.00	\$ 17.50	\$ 18.25

Stage II Falls Lake





# Rate Implications – Adjusted Rates

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Total Revenue Requirement	\$ 1,482,000	\$ 1,600,000	\$ 1,702,000	\$ 1,761,000	\$ 5,591,000	\$ 6,153,000	\$ 6,406,000

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Annual Rates (per ERU)	\$ 80	\$ 92	\$ 104	\$ 116	\$ 136	\$ 156	\$ 176

	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
Monthly Rates (per ERU)	\$ 7.00	\$ 8.00	\$ 9.00	\$ 10.00	\$ 11.25	\$ 12.50	\$ 13.75

Stage II Falls Lake



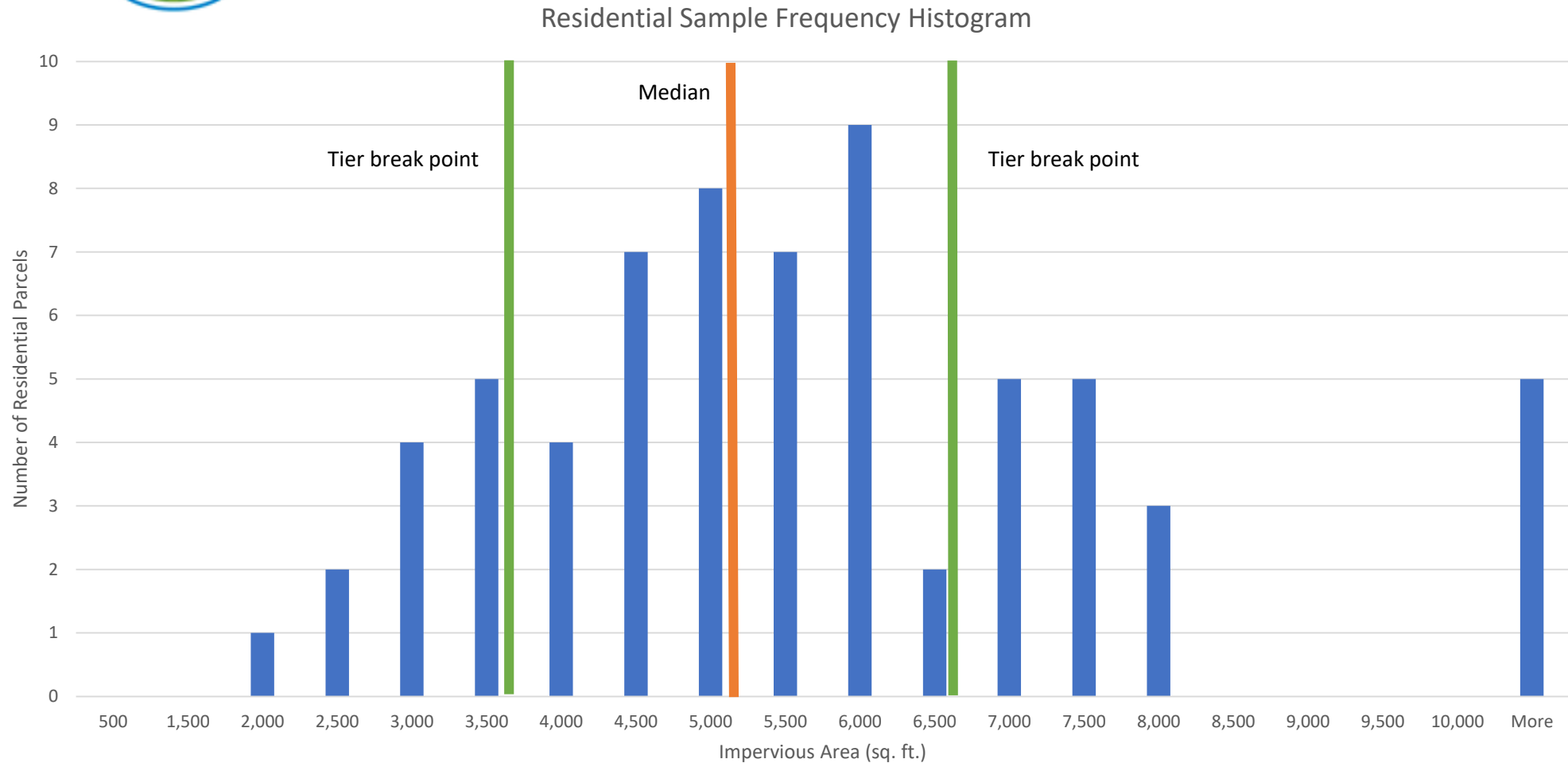
# Rate Structure Considerations

- Rate development to date based on Flat Rate Residential
- Flat Rate Residential versus Multiple Flat Rate Residential (Tiers)

	Easy	Equitable	Cost
Single Flat Rate	✓ ✓	✓	✓
Multiple Flat Rates	✓	✓ ✓ ✓	✓ ✓



# Rate Structure Considerations







# Rate Structure Considerations

- Data development Matrix

	Supports	Cost	Time Frame
Only non-single family residential properties measured	Single flat rate	No additional cost	No additional time
Linear regression for residential properties	Single flat rate, tiered rates	\$	✓
Linear regression + additional residential measurement	Single flat rate, tiered rates	\$\$	✓ ✓
Measure all properties	Single flat rate, tiered rates, individual rates	\$\$\$	✓ ✓ ✓



# Next Steps

- Feedback and Direction to Proceed



# Next Steps

- Inform the public prior to August 2020
  - Educate and answer questions
  - Reduce inquiries once bills go out
- Public Outreach
  - Early messaging important
  - Coordinate with County's Communications Resources
  - Develop Public Involvement Outline/Schedule
  - Public Open Houses - One each in North/South County
  - Assistance responding to calls during initial billing



Thank you!