

Raleigh Growth, Annexation & City Service Coverage

February 21, 2023

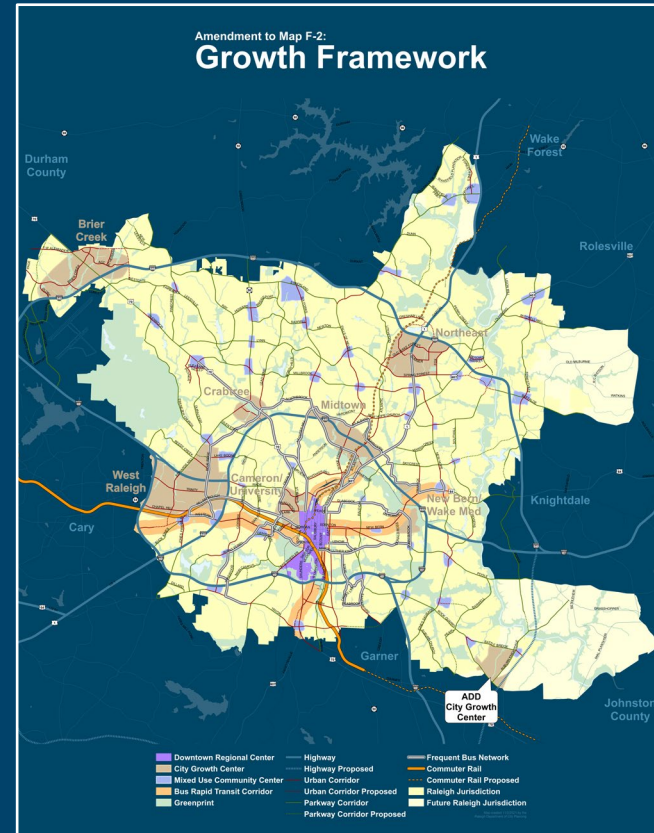




Growth and Service Coverage

Agenda

- Community Growth
- Management Tools
- Utility Infrastructure
- Fire Service
- Council Options





Growth in Raleigh



- People continue to move to Raleigh
- Growth pressures to annex continue in the NE and SE
- Growth pressures result in new construction of housing, commercial and institutional uses.
- City zoning and services have potential to improve community quality of life.



Growth in Raleigh



- I-540 construction and relatively affordable land will fuel continued development pressure in the NE and SE.



Growth Management Tools

State granted powers to manage growth



- The state gives municipalities the authority to manage growth through G.S. § 160A
- Raleigh manages growth through:
 - Existing City limits
 - Extra Territorial Jurisdiction (ETJ)
 - Annexation
 - Urban Service Areas (USAs) (Long and Short-term)
 - Annexation Agreements



Growth Management Tools

Corporate City Limits



- Corporate (or "City") limits = Raleigh for all legal purposes.
- Raleigh regulates land use through zoning and UDO
- For services and infrastructure provided, Raleigh is obligated to serve all lands located within the city limits.
- Examples include:
 - Water and Sewer
 - Police
 - Fire
 - Roads
 - Solid Waste



Growth Management Tools

Extra Territorial Jurisdiction (ETJ)



- ETJ is subject to Raleigh development regulations, but Raleigh has no legal obligation to provide municipal services
- The state sets the rules for ETJ expansion, concurrent with annexation agreements with nearby municipalities.



Growth Management Tools

Annexation



- Annexation is the process of adding new areas to the City's corporate limits
- City growth occurs through annexation.
- Annexation is voluntary (Since 2011).



Growth Management Tools

Annexation and Service Provision



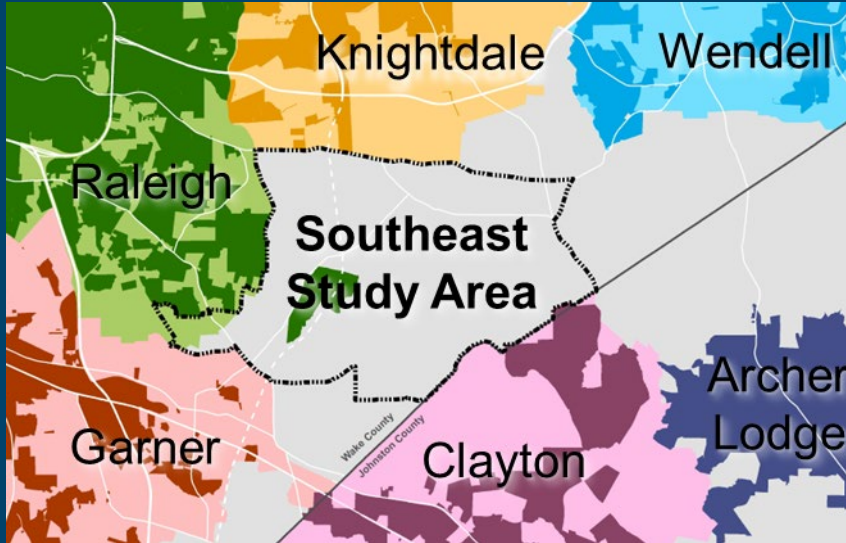
- Annexation approval by Council requires Raleigh to provide police, fire, solid waste and street maintenance on the effective date of the annexation.
 - Fire service and solid waste can be delivered via contract service
- Water and sewer service must be provided within 3.5 years of annexation effective date.



Raleigh

Urban Service Areas (USAs)

Plans and Planning Efforts



- Southeast Area Study is planning for the Southeast USA (on today's agenda to set public hearing)
- The Northeast USA will be the subject of a future study.
- There are areas of USA on the Durham County line, which are already covered through annexation policy and annexation agreement.



Raleigh

Urban Service Areas (USAs)

Long-Range and Short-Range



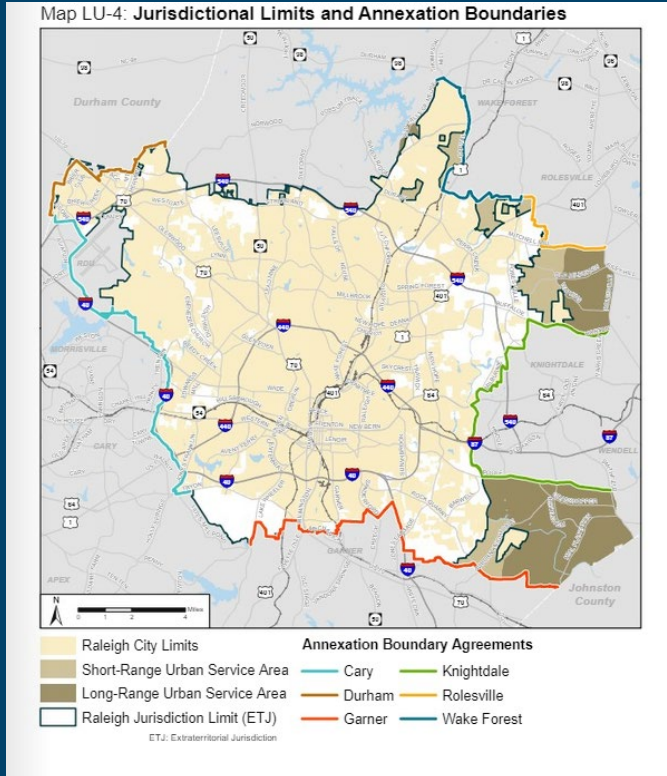
- USAs are in the County's jurisdiction and service area.
- USAs are areas where Raleigh is anticipated to grow and serve-but many years in the future.
- Raleigh applies Future Land Use Map (FLUM) designations to all USA areas.
- USAs are divided into long-range USA and short-range USA planning areas.



Raleigh

Annexation Agreements

Agreements with Surrounding Municipalities



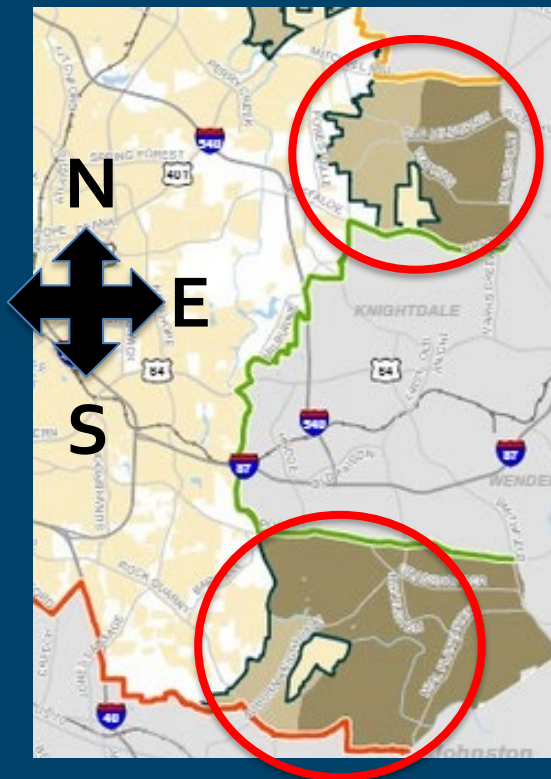
- State authorizes municipalities to enter into annexation agreements.
- Agreements with other municipalities, Wake and Durham counties determine where Raleigh (and other municipalities) can annex.
- Raleigh's agreements with other municipalities last 20 years and are then renewed.
- Wake County is a deeply invested partner in this process.



Raleigh

Growth Pressures

Growth in NE and SE Urban Service Areas (USA)

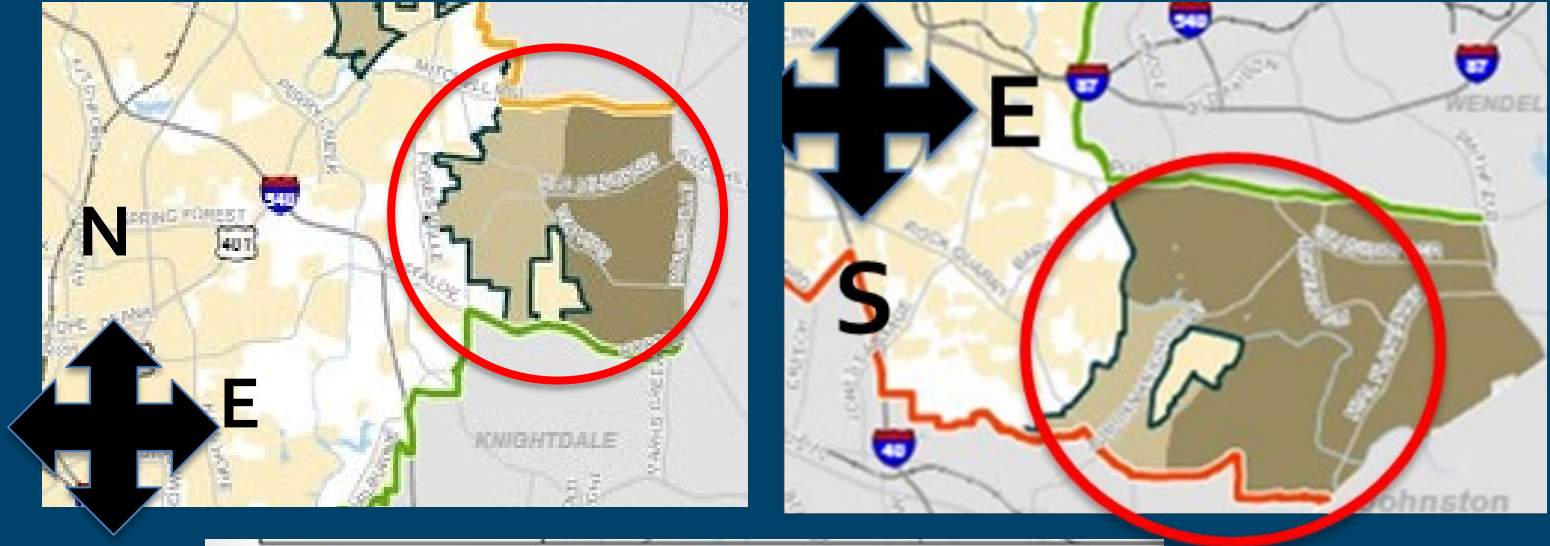


- Much of Raleigh's growth is occurring at the Northeast and Southeast peripheries.
- The northeast and southeast peripheries border Raleigh's Urban Service Areas.



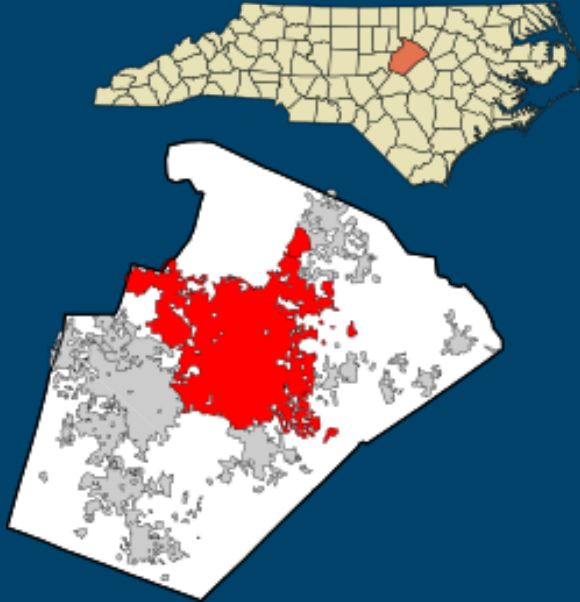
Growth Pressures

Growth in NE and SE Urban Service Areas (USA)





Growth Management Tools



- City Council Resolutions and 2030 Comprehensive Plan policy guide which parcels qualify for annexation.



2030 Comprehensive Plan Policy

Annexation and Infrastructure

Policy	Policy Title	Policy Theme
LU 3.1	Zoning of Annexed Lands	Zoning consistency with Future Land Use Map
LU 3.2	Location of Growth	Develop in city jurisdiction first, then USAs
LU 3.3	Annexation Agreements	Support & honor agreements, renew when needed
LU 3.4	Infrastructure Concurrency	Development only approved with appropriate infrastructure (Transportation, water, wastewater and stormwater)
LU 3.5	Watershed Management	Annexations in watershed managed to minimize impervious service and protect water quality



Resolutions Guiding Annexation

Resolution 2008-460

No annexation petitions accepted outside of the ETJ or in an area formally being considered for extension of Raleigh ETJ.

Some geographic exceptions based on utility and watershed boundaries, emergency connections, publicly owned land and municipality transfers.

Resolution 2009-22

Amendment of language in 2008-460, allowing for the acceptance of annexation petitions outside of the ETJ where the property is contiguous to the City limits of Raleigh and in close proximity to existing Raleigh water and sewer lines.

Resolution 2022-380

Amends 2008-460 and 2009-22 to allow for the acceptance of annexation petitions on a case-by-case basis when is adjacent to satellite city limits of Raleigh and is in an area formally being considered for extension of Raleigh's ETJ within the next five (5) years and is adjacent to or in close to existing City of Raleigh water and sewer lines.



Raleigh

Annexation Requests/Service Concerns

Cases with concurrent rezoning requests

Annexation Request	Related Rezoning Request	Location	Parcel Size (Ac)	ETJ Status	Potential Development	Fire Service Concern	Status
AX-12-20	Z-16-20	Hodge Rd. South of Poole Rd.	531.24	Contiguous- Outside ETJ	2,660 Unit- Residential	Service response- All types	Planning Commission Review 2/28
AX-1-22	Z-2-22	6720 Rock Quarry Rd.	53.51	Contiguous- Outside ETJ	871 Units- Residential	Service response- All types	Public Hearing continued to 3/21/2023
AX-21-22	Z-38-22	7640 Oak Hill Dr.	28.25	Inside ETJ	168 Units- Residential	Service response- All types	Public Hearing continued to 3/21/2023
AX-22-22	Z-69-22	3540 Auburn Knightdale Rd.	43.95	Contiguous to Satellite- Outside ETJ	200 Units- Residential	Service response- All types	Planning Commission Review 2/28



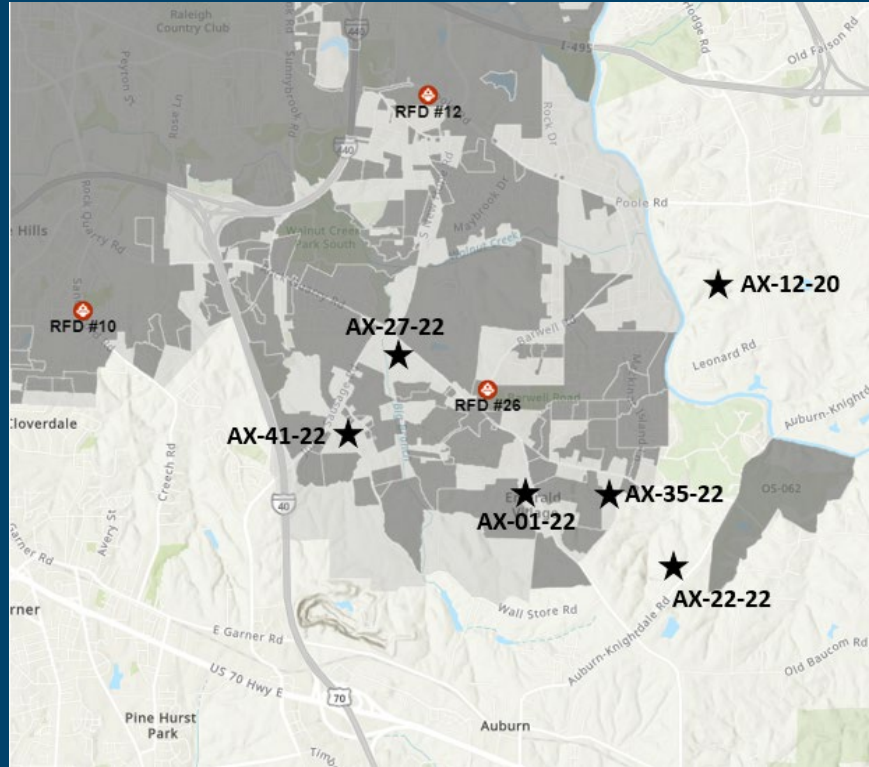
Annexation Requests/Service Concerns

Annexation Only Requests

Annexation Request	Location	Parcel Size (Ac)	ETJ Status	Potential Development	Fire Service Concern	Status
AX-27-22	5500 Rock Quarry Rd.	3.16	Inside ETJ	Institutional-Church	Service response- All types	Public Hearing anticipated on 3/21/23
AX-32-22	5100 Forestville Rd.	25.25	Inside ETJ	73,400 sq. Ft. Commercial	Service response- All types	Public Hearing held until 3/21/23
AX-35-22	4301 Whitfield Rd.	1.01	Inside ETJ	Residential-(pre-existing)	Service response- All types	Public Hearing held until 3/21/23
AX-41-22	2004, 2008 Citation Drive	13.29	Inside ETJ	Industrial	Service response- All types	Public hearing anticipated on or after 3/21/23

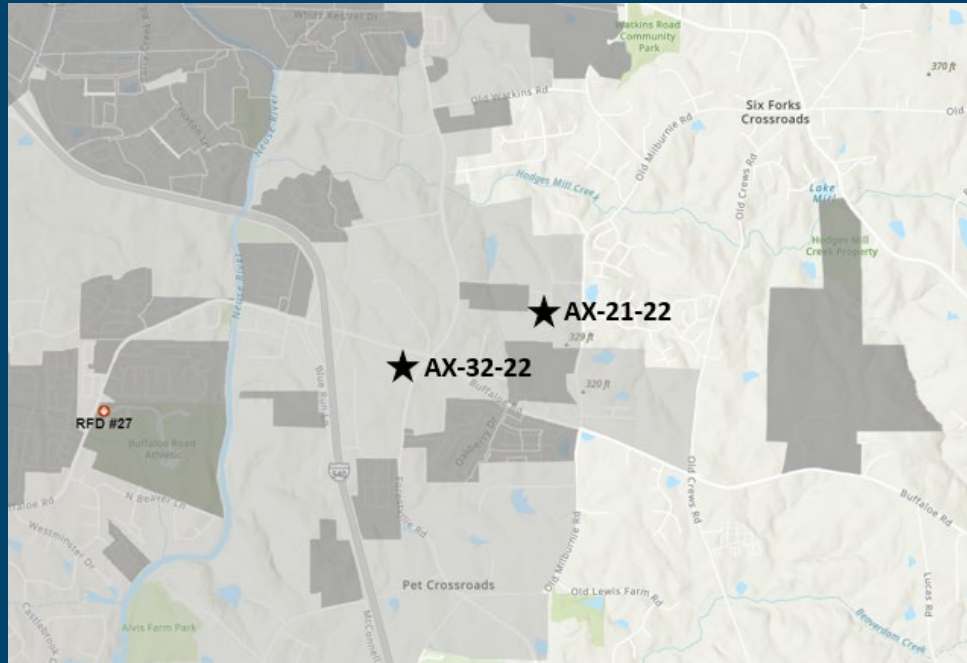


Locations of pending annexation cases (SE)





Locations of pending annexation cases (NE)



Utility Infrastructure





City Service Spectrum



- By statute city must provide:
 - Water and Sewer
 - Police
 - Fire
 - Road Maintenance
 - Solid Waste
- Raleigh chooses to also provide:
 - Parks & Recreation Facilities
 - Stormwater Management



Cost/Revenue Considerations

Development activity and growth scenarios

- The type of development at the periphery matters.
- Higher-growth scenarios result in higher costs to serve than lower-growth scenarios but also generate higher tax revenues (SESSA Study estimate - 8.24x higher).
- Any expansion of the ETJ in the SESSA Study “Area 1” requires a new fire station
- Areas closest to Raleigh’s corporate limit and upcoming I-540 construction is seeing the most annexation petitions.



Cost/Revenue Forecast Case Study

Projected Cost and Revenue for Southeast Areas 1 – 4 (30-year timeframe)

	Operating costs (Low growth)	Operating costs (High growth)	Capital costs
Parks, Recreation, and Cultural Resources	\$200,000	\$700,000	\$80,000,000 - \$150,000,000
Transportation	\$300,000	\$1,200,000	\$45,000,000*
Police	\$1,872,000	\$12,589,000	
Fire	\$3,500,000	\$7,850,000	\$40,000,000
Total	\$9,372,000	\$25,389,000	\$165,000,000 - \$235,000,000
	Low growth	High growth	Capital costs
Property Tax Revenue Estimates	\$36,500,000	\$275,000,000	-

*Raleigh Department of Transportation, Policy and PRCR forecasting that an expansion of corporate limits could trigger the need for a shared remote operations facility in southeast Raleigh to improve service delivery for operational departments. It is important to note that the FY23 Capital Improvement Plan includes funding to study the feasibility of a remote operations facility that would serve several departments in the southeast portion of the city.

- Significant upfront capital costs
- Recurring operating expenses
- Uncertain timing and amount of future revenue



City Service & Growth

Focus on Utilities and Fire



- Required with annexation
- Both impact life-safety
- Fire service requires water service

Utility service availability is a key driver of growth; Fire Service requires hydrants.



Raleigh

Utility Infrastructure



- Raleigh Water is an enterprise fund.
- Raleigh Water has plant capacity to serve growth in the ETJ and in the short-term and long-term urban service areas.
- If an annexation is denied, the owner can still develop to city standards and connect to water and sewer (at double rates).



Raleigh

2030 Comprehensive Plan Policy

Utility Service

Utility Service Outside the City- Policy PU 2.1

Ensure extensions outside the city are consistent with service expansion plans, not in watersheds except in accordance with watershed plan policies, sufficient in capacity, meet city standards and enhance the contiguous development of the city.

Utility Extension Beyond Raleigh's Jurisdiction- Policy 2.2

Limits utility extension outside the city only to cases in which there is a threat to public health, safety and welfare and to Raleigh's drinking water supply, to serve merger communities or provide the ability to provide interconnects with other utility systems for use in times of drought or extreme weather. **(Merger Communities are towns outside of Raleigh in which Raleigh Water has an agreement to provide water and sewer services).**

Emergency Utility Extension- Policy PU 2.3

Allow only existing development posing a specific threat to public health, safety and welfare to Raleigh's drinking water supply to connect to emergency utility extensions.

Fire Service





City of Raleigh Growth

	2015	2022
Population	449,546	471,001*
Land Area	145.17 mi ²	150.3 mi ²
Call Volume	39,145	53,238
Fire Station Facilities	28	28

* Census data for 2022 has not been released, thus, this population calculation is an estimate based on a 0.4% average growth rate over the last 5 years.

- 4.8%* increase in population over the last 7 years.
- 3.5% increase in square mileage over the last 7 years.
- 36% increase in RFD call volume in the last 7 years.
- 0% increase of new Fire Station infrastructure since the construction of Fire Station 29 in 2015.



Fire Service in Raleigh

Responsibilities of the Raleigh Fire Department

Through a commitment to excellence and adhering to the National Fire Protection Association (NFPA) standards, the Raleigh Fire Department is committed to providing:

- Emergency Medical Services
- Fire protection
- Rescue
- Emergency Communications
- Fire Prevention
- Community Outreach
- Fire and Life Safety Education



Fire Service Response

Mutual Aid

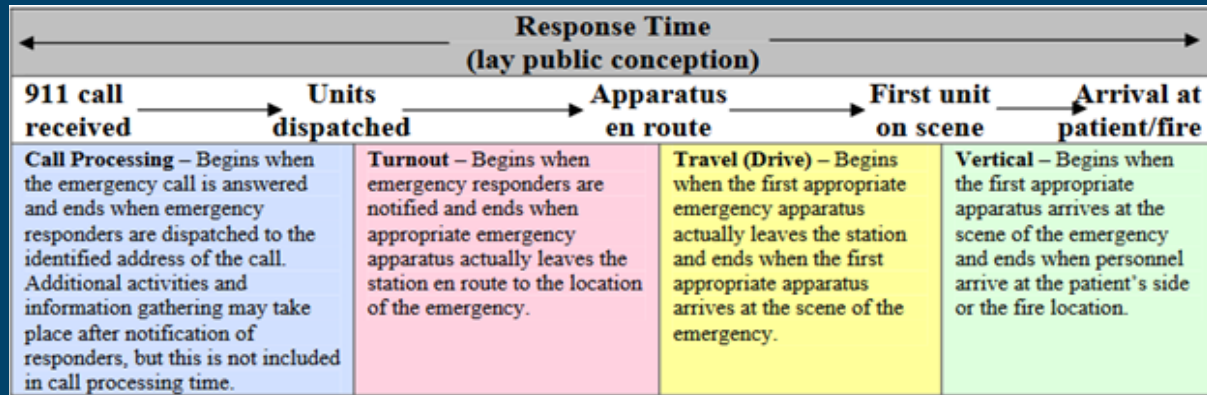
- Written mutual aid agreements with Wake County for Hazardous Materials response and a service level agreement for New Hope Station 1 coverage area.
- All other forms of mutual aid provided to other jurisdictions through informal partnership is based on the CAD system for closest unit response.
- 5,750 or 10.8% of 53,238 calls in 2022 were for incidents outside of the City of Raleigh jurisdiction.



Fire Service Response

How Fire Response is Deployed

- RFD utilizes the Computer Aided Dispatch (CAD) system to deploy services.
- The closest unit to the incident, from any jurisdiction, will be dispatched initially. If any agency outside of COR jurisdiction is the initial responder, the incident will be transferred to RFD once they arrive.
- The call type will dictate the initial response type.





Fire Service Response

What is full alarm assignment ?

- For any fire suppression incident, the initial response will always have a full alarm assignment.
- A full alarm assignment consists of 6 apparatus total:
 - 4 Engines
 - 2 Aerial Ladders
- Based on the incident/need, other units can be added or rescinded.



Fire Service Response

How Service is Tied to ISO and Insurance Ratings

- Insurance Services Office (ISO) rating reflects how prepared a community and area is for fire.
- Four key focus areas for scoring:
 - Emergency Communications
 - Fire Department Operations (personnel, training, equipment, etc.)
 - Water Supply
 - Community Risk Reduction
- Better ISO Rating = Commitment to Fire Service Excellence AND Lower Insurance Premiums.



Fire Service Response

NFPA 1710 Response Time Standards

- Guiding metrics for fire department and EMS emergency response.
- NFPA Standards relevant to Annexation Cases:

NFPA 1710 4.1.2.1 Sec 3 - 240 seconds (4 min) or less travel time for the arrival of the *FIRST ENGINE* company at a fire suppression incident

NFPA 1710 4.1.2.1 Sec 4 - 360 seconds (6 min) or less travel time for the arrival of the *SECOND COMPANY* with a minimum staffing of 4 personnel at a fire suppression incident

NFPA 1710 4.1.2.1 Sec 5 - For other than a high-rise, 480 seconds (8 min) or less travel for the deployment of an initial *FULL ALARM* assignment .



Fire Service in Growth Areas

Planning Area Statements

1. There is no active planning in the area; unknown when area can be served.
2. There is active capital or partnership planning in the area; city expects to be able to serve this area in the future, but exact timing yet to be determined.
3. There is active capital or partnership planning in the area with a defined date for future service.



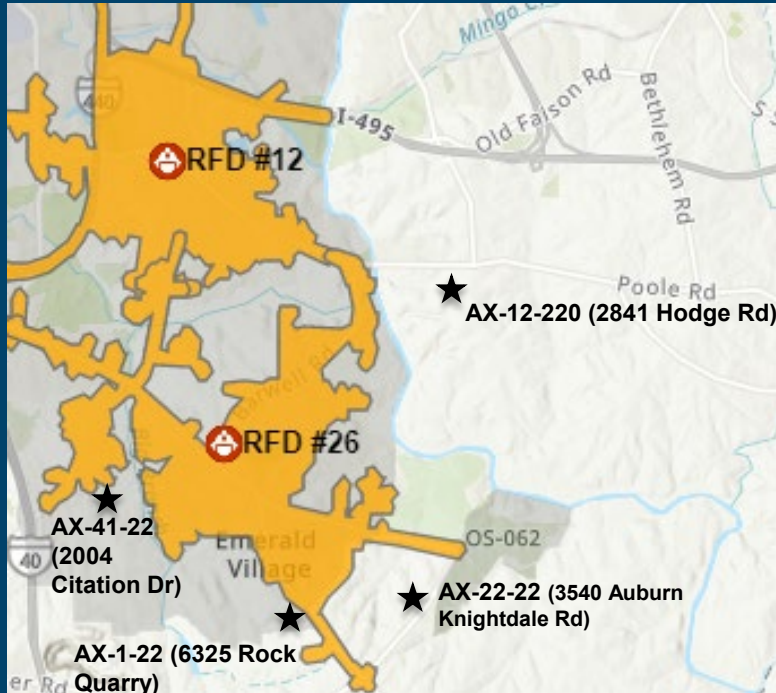
Fire Service in Growth Areas

Pending Case	1 st Engine Arrival	2 nd Company Arrival	Full Response	Planning Status
AX-12-20	X	✓	X	Partnership Possible
AX-01-22	✓	X	X	Not Planned
AX-21-22	X	✓	X	Not Planned
AX-22-22	✓	X	X	Not Planned
AX-27-22	✓	X	X	Not Planned
AX-32-22	✓	✓	X	Not Planned
AX-35-22	✓	X	X	Not Planned
AX-41-22	X	X	X	Not Planned



Fire Service in Growth Areas

Fire Service Areas: Focus on Southeast (SE)



Currently the SE (council district C) annexation cases inside and outside of the ETJ are reflecting significant emergency response delivery issues. With second company response averaging over 8 minutes.

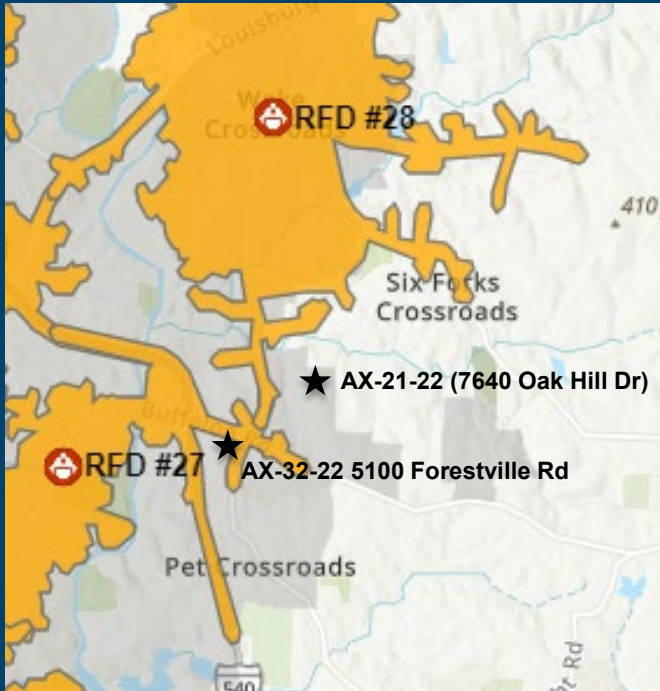
AX-22-22 Full Alarm Response Times

Engine 26 (3929 Barwell Rd)	4 min
Engine 12 (4306 Poole Rd)	10 min
Engine 10 (2711 Sanderford Rd)	11 min
Engine 2 (263 Pecan Rd)	15 min
Ladder 12 (4306 Poole Rd)	10 min
Ladder 1 (220 South Dawson St)	17 min



Fire Service in Growth Areas

Fire Service Areas: Focus on Northeast (NE)



Currently the NE (Council District B) annexation cases at the edge of the ETJ are reflecting significant emergency response delivery issues. Specifically, with Ladder response averaging over 11 min.

AX-21-22 Full Alarm Response Times

Engine 27 (5916 Buffaloe Rd)	6 min
Engine 28 (3500 Forestville Rd)	6 min
Engine 19 (4209 Spring Forest Rd)	9 min
Engine 22 (9350 Durant Rd)	12 min
Ladder 22 (9350 Durant Rd)	12 min
Ladder 15 (1815 Spring Forest Rd)	14 min



Fire Service Growth Needs

Short-Term	Long-Term
<ul style="list-style-type: none">• Additional ladder apparatus in the Northeast• Temporary station(s) in the Southeast	<ul style="list-style-type: none">• Investment in Permanent Fire Infrastructure<ul style="list-style-type: none">○ 1 new construction fire station in the Northeast (including staff and equipment)○ 2 new construction fire stations for the Southeast (including staff and equipment)



Fire Service Cost Considerations

Typical station related costs (in 2023 Dollars)

- Land Acquisition \$810,000
- Facilities: Fire Station construction (temporary) \$1,607,670
- Facilities: Fire Station construction (permanent) \$26,470,760
- Staffing, Equipment, Expenses (per yr. per station) \$4,893,956

The Takeaway:

Serving city expansion comes with additional costs for service delivery.

Council Options for Annexation Action





Council Options for Annexation Action

Denial Outside
ETJ

Denial Inside
ETJ

Denial + ETJ
Relinquishment

Defer Action
Until a Plan for
Service is in
Place

Approve +
Delayed Service



Annexation Option

Denial Outside ETJ

- ✓ Consistent with city policy not to extend utilities or provide service outside of ETJ.
- ✓ Wake Co remains responsible for regulation/permitting, provision of service.
- ✗ Limits develop options
- ✗ Property owners continue to ask for annexation.
- ✗ Could preclude future tax revenue.
- ✗ Possible donut holes if ETJ is expanded in the future.



Annexation Option

Denial Inside ETJ

- ✓ Property develops to city standards but remains in Wake County service area.
- ✓ No obligation for additional services - Fire, Police, Solid Waste, etc.
- ✗ Obligation to allow connection to water & sewer (at double rates).
- ✗ Significantly reduces opportunities for future voluntary annexation.
- ✗ No increase in property tax revenue.
- ✗ Donut holes create confusion and inefficiency of service.



Annexation Options

Denial + ETJ relinquishment

- ✓ Transparency of city's intent never to serve an area.
- ✗ Requires relinquishment process and renegotiation of annexation agreements.
- ✗ Loss of control: Incompatible development in areas that remain in the county and uncertain outcomes in areas that transfer to other municipalities.
- ✗ Could limit future opportunities for ETJ expansion.
- ✗ Raleigh Water would still serve if part of a merger community.



Annexation Options

Defer Action Until Plan for Service is in Place

- ✓ Transparency of service limitations.
- ✓ More time to budget and plan for needed services.
- ✓ Expectation of future property tax revenue.
- ✓ Opportunity for partnerships or temporary solutions.
- ✗ Time required to develop plan.
- ✗ Increased service costs for city.
- ✗ Uncertainty for property owners.



Annexation Options

Approve + Delayed Delivery of Service

- ✓ Establishes date-certain for delivery of all services.
- ✓ More certainty for property owners.
- ✓ Increased property tax revenue.
- ✗ Time required to implement service.
- ✗ Increased service costs.
- ✗ Limited service during interim.
- ✗ Possible higher insurance premiums for property owners during interim.

Discussion

