



Charlotte's Light Rail

Facilitating NC Brownfields Domino Effect

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Department of Environmental Quality



Outline



- Charlotte's industrial history and decline
- Reinvention as a banking center
- Housing shortage and demand
- Light Rail Construction
- Redevelopment along Light Rail
- Development of contaminated properties
- Brownfields role in redevelopment
- Feature Sites

A Change of Direction



View of Charlotte Skyline

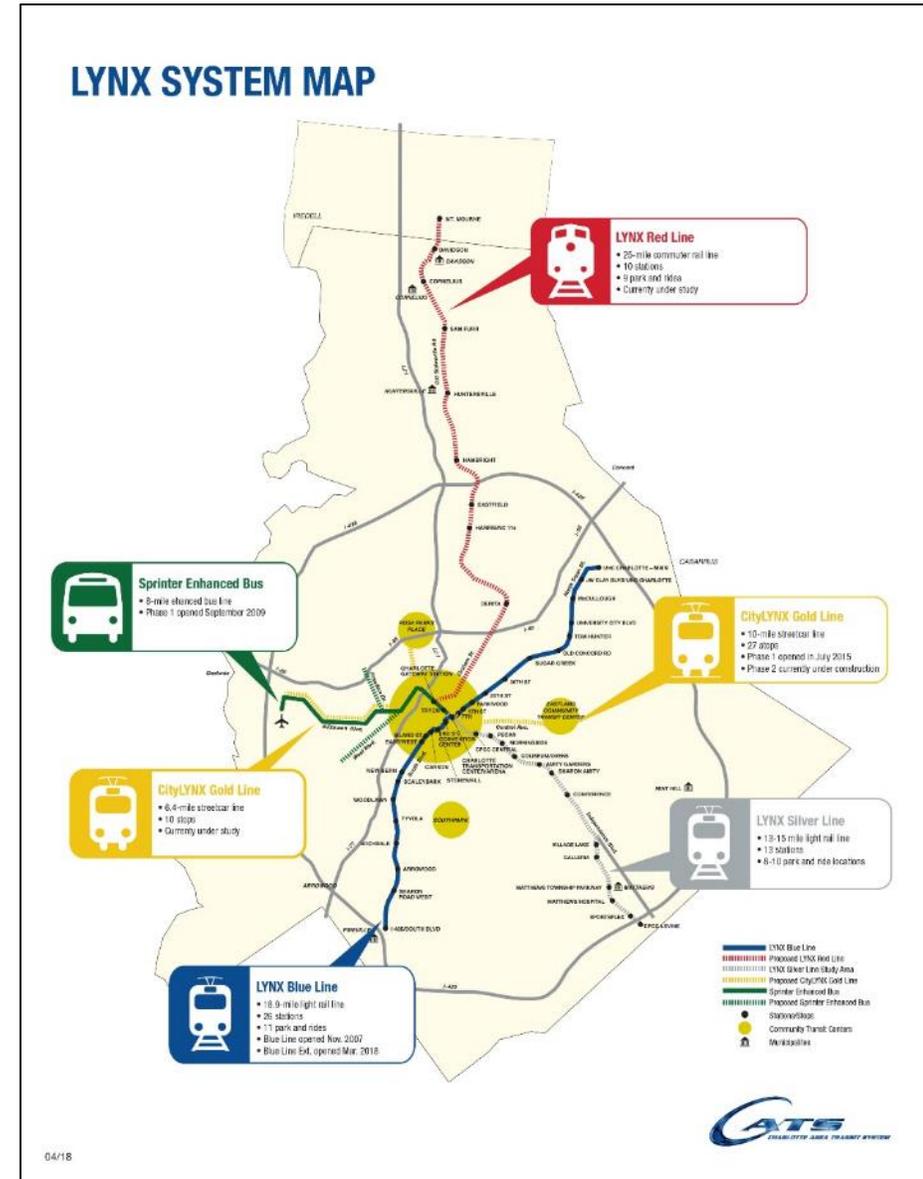
<https://www.bbbswnc.org/a-taste-of-the-vineyard/charlotte-skyline/>

- Charlotte recreated itself as a banking stronghold in the 1970s and 1980s
- Second largest banking center by assets held in the United States
- Changes in use also drove an influx of population
- April 2018 – Charlotte Planning Director stated that close to 60 residents move to Charlotte *per day*
 - Housing crisis is well under way



Charlotte's Light Rail History

- Opened in 2007
- Originally 9.6 miles of track and 15 stations
- Blue Line extension opened in 2019
 - Additional 9.3 miles of track
 - Light rail now extends from 485 to University area
- Constructed along former freight corridor
- Between 2005-2009, 9.8 million square feet of development along the blue line, \$1.8 *billion* investment in private development
- Light rail has expanded growth and residential opportunities to the Charlotte area



Challenges in Redevelopment



- Influx of residents created a demand for housing, affordable or not
- Land has become a scarce commodity, especially in the vicinity of public transportation corridors
- As the light rail was built along former railroad track, industrial properties abound in its vicinity
- Bank funding difficult for contaminated sites

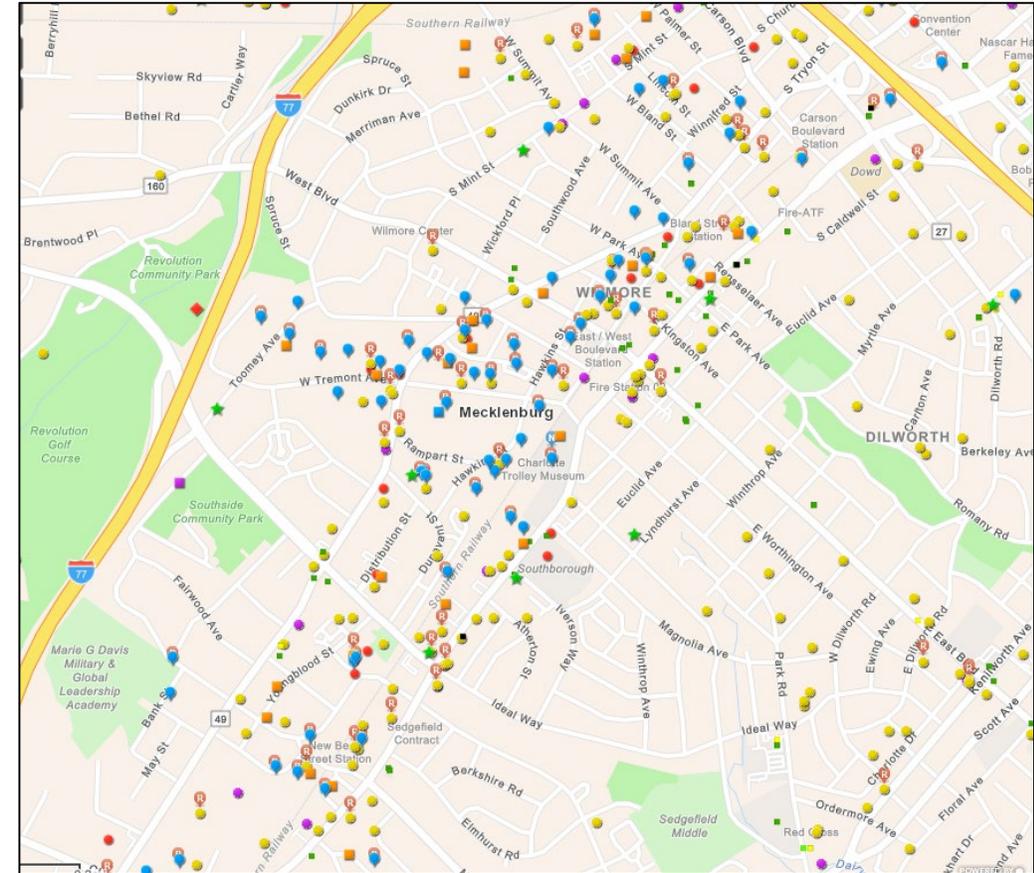
NC DEQ Brownfields Program

- Liability Protection
- Tax Incentives
- Lender assurances of protections
- Risk based mitigation vs. Remediation
 - Public Health and the Environment



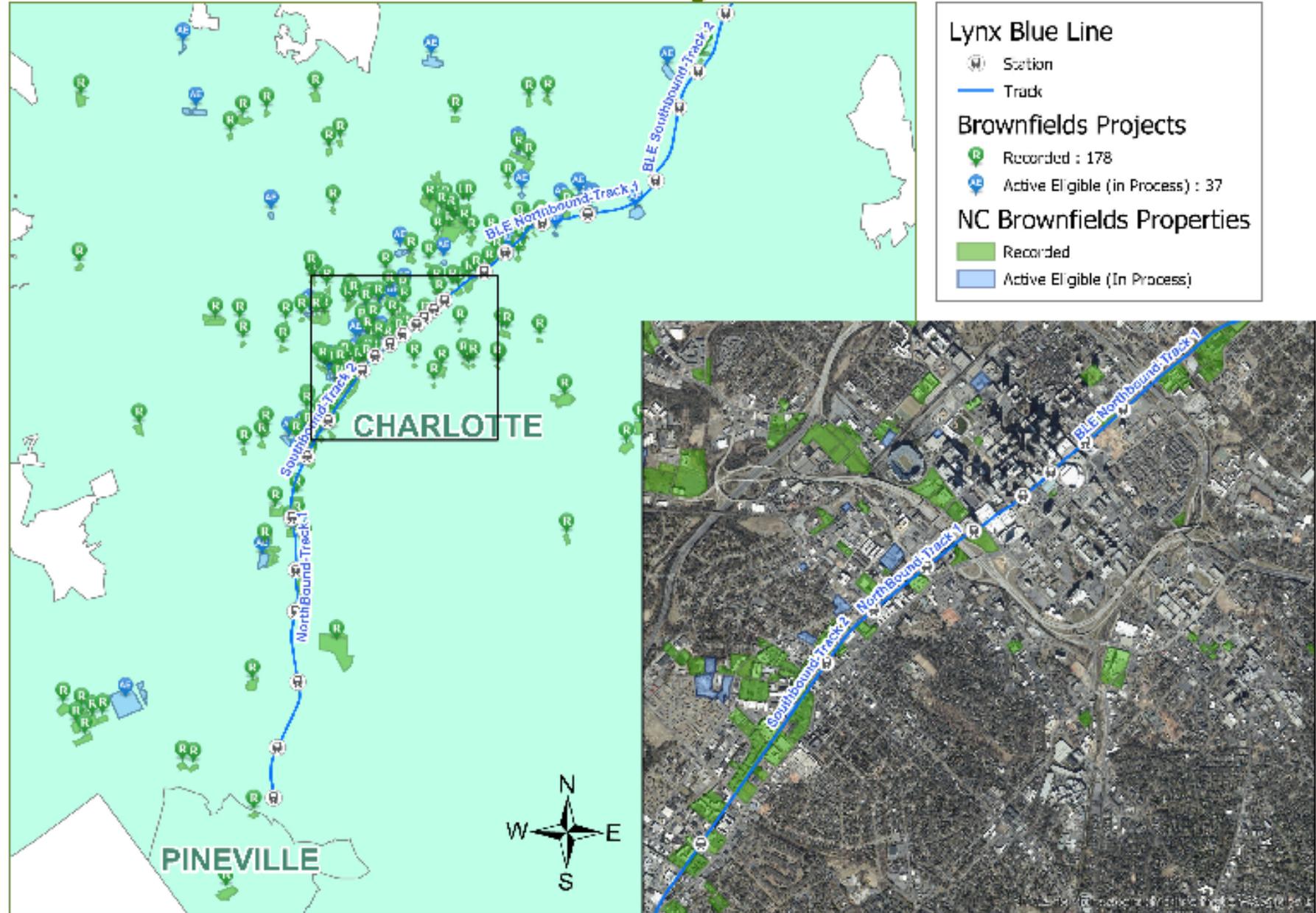
Redevelopment Partnerships

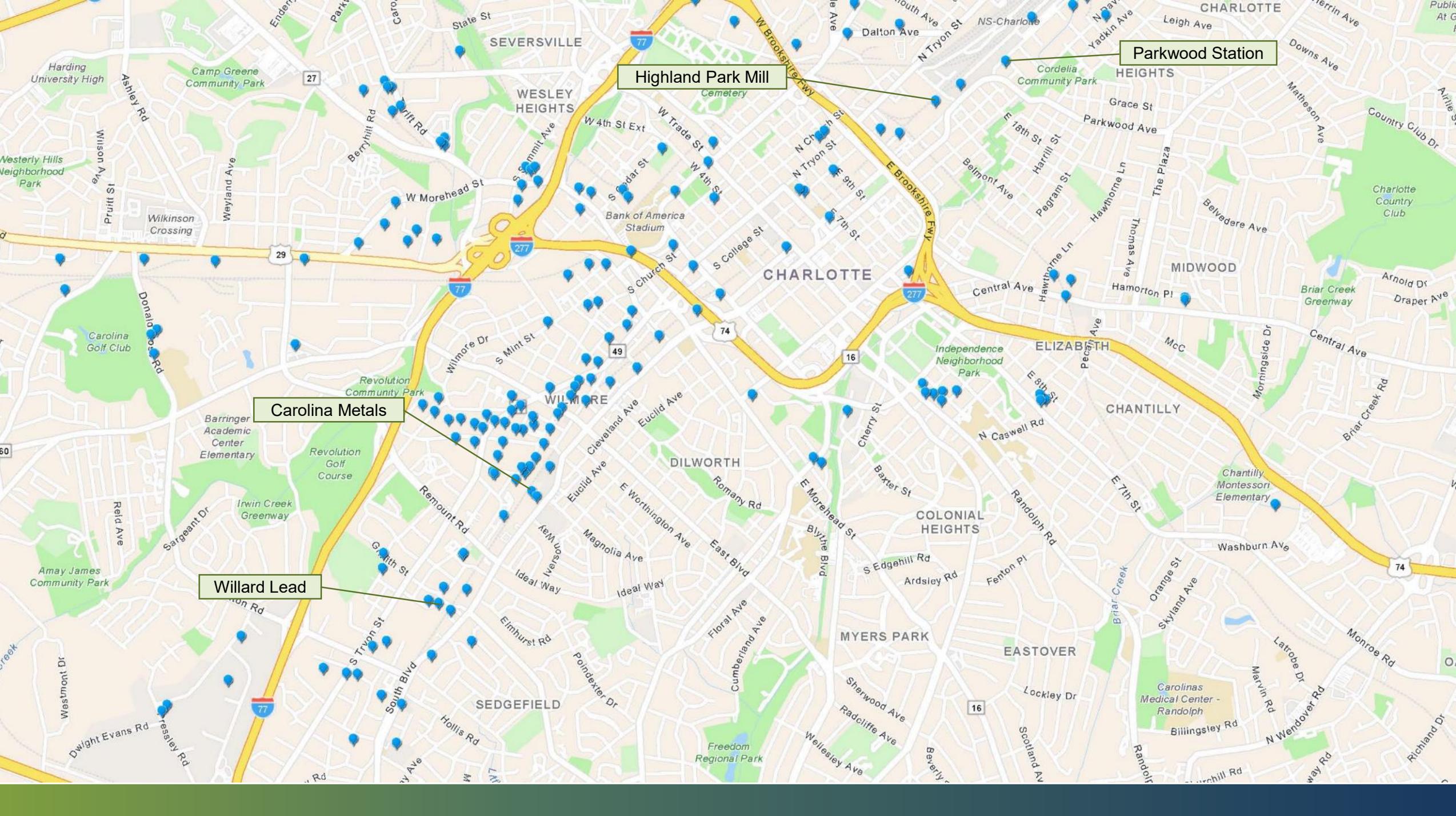
- Development within the Light Rail corridor frequently occurs on contaminated sites
 - LUST
 - IHSB
 - DSCA
- Unique structure of North Carolina Brownfields Program
 - Allows for liability protection and tax incentives
 - Mitigation must be maintained to ensure safe reuse of blighted properties
 - Protection obligations run with the land into perpetuity



Charlotte Brownfields - Lynx Blue Line 2019

- 500+ Recorded Brownfields Properties
- Charlotte is the leading city for Brownfields redevelopment in the state – 180 recorded agreements
- 70 within 500 ft of Light Rail (~13% of state total)





Highland Park Mill

Parkwood Station

Carolina Metals

Willard Lead

Willard Lead – Fountains at New Bern

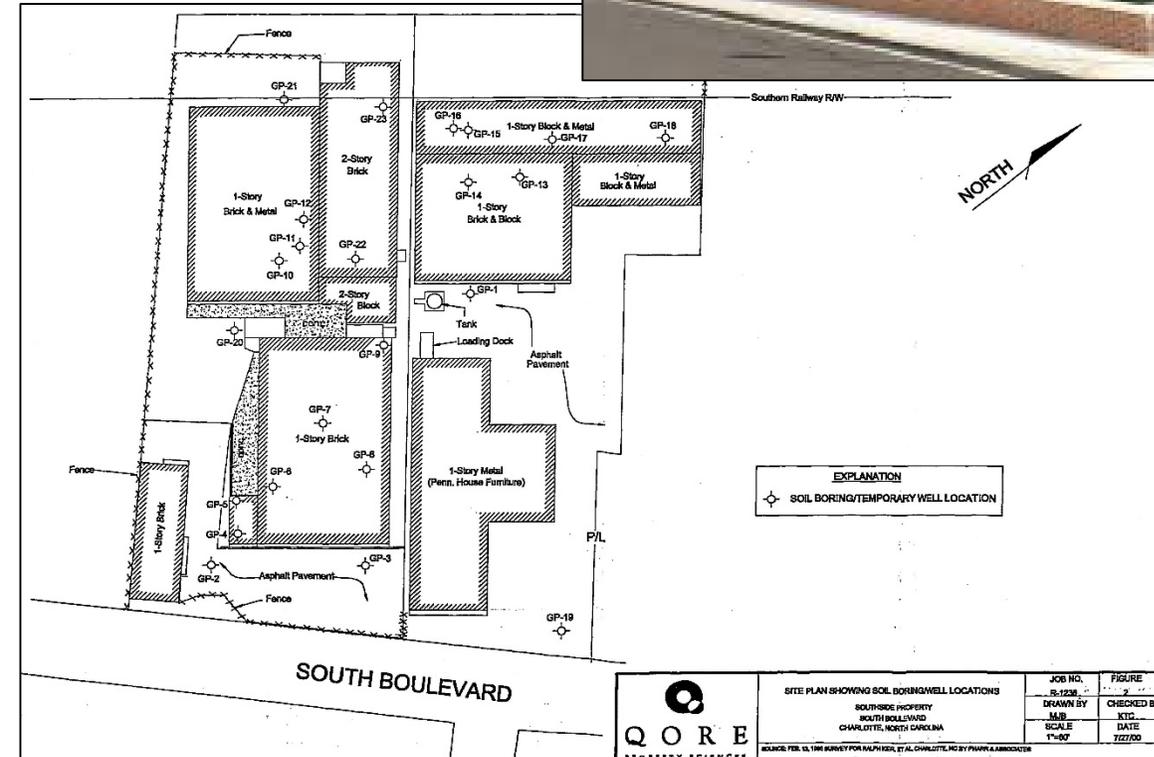
- Former lead smelter
 - Produced lead and lead alloys from scrap
- Soil, groundwater, and soil vapor impacts
- Redeveloped with 208 apartment units
 - Largest pool, spa and hot tub in South End
- Immediately adjacent to Light Rail
- Vapor mitigation system and soil stabilization for lead impacts



Carolina Metals - Publix Supermarket



- Former mixed use facility with commercial, retail, and industrial operations
- Soil and groundwater impacts present from on- and off-site operations
 - Vapor barrier system within subgrade parking areas
- First major grocery store to open along the light rail
- Immediately adjacent to Light Rail – no stop adjacent



Highland Park Mill – Optimist Hall

- Located in the Optimist Park Neighborhood
- Apx. 15 acre site
- Developed in late 1800s as a textile mill
- Also contained a railroad ROW and drycleaner
 - Soil, groundwater, and vapor impacts present
 - Below LICR and HI
- Renovation/construction wrapping up
- Commercial/retail tenants with food hall
 - Duke Energy to lease substantial amount of office space



Mixed Industrial Use - Parkwood Station

- Also located in Optimist Park neighborhood
- Initially developed in 1929, contained mixed use residential and industrial operations
- Adjacent and downgradient of Norfolk Southern railyard
- Soil, groundwater, and soil vapor impacts
- Vapor mitigation system is currently being installed



Takeaways

- Construction on these impacted sites would have been impaired or impossible without liability protections in place
- Mitigation of impacts and protection of site occupants ensured through Land Use Restrictions
- Property Management Unit reviewing older recorded Agreements
- Brownfields a proven aid to developers along the Charlotte Light Rail corridor.

