GREEN LINE SOUTH CORRIDOR ECODISTRICT RECOMMENDATIONS

High-impact health and economic challenges in the Green Line South Corridor include:

1. Asthma / Air Pollution
2. Heat Stress
3. Flooding
4. Obesity
5. Traffic Crashes
6. Public Safety
7. Economic Hardship
8. Underutilized Land / Vacant Land

Each challenge can be addressed by one or more EcoDistrict strategies listed in the table below. See the Strategies section of the Feasibility Scan for more information about each strategy.

A portion of the the Green Line South Corridor eHub, in the Washington Park neighborhood, is considering EcoDistrict formation.

What Are EcoDistricts?
EcoDistricts integrate innovative green building techniques and sustainable infrastructure (the "Eco"), within a defined boundary (the "District"). EcoDistricts are formed through deep resident and stakeholder engagement, and sustained through community-based governance. EcoDistricts are developed over time, with the goal of creating long-term catalytic neighborhood transformation.

Strategy	Reduces Air Pollution	Reduces Flooding	Lessens Heat Stress	Reduces Obesity	Reduces Traffic Crashes	Relieves Stress + Aggression	Supports Workforce Development / Jobs	Lowers Household Expenses	Reactivates Vacant Land
Community Solar	●		●				●	●	●
District Stormwater	●	●	●			●	●		●
Complete Streets	●			●	●			●	
Buffer Park	●	●	●			●	●		
Sustainable Manufacturing	●				●				

Community Solar supports workforce development and local jobs, reduces air pollution, lowers household energy expenses, and activates underutilized buildings and land. In addition, solar canopies lessen urban heat island effect by shading large rooftops and parking lots. Sites must be carefully designed to avoid potential negative impacts to neighbors.

Recommendations include supporting proposed community-led building-level clean energy projects such as the Green Cathedral and the Legacy of Washington Park developments, as important tools for community visibility.

See the EcoDistrict Opportunities Map for potential solar project locations. Several institutional campuses may be able to host a community solar array. Solar canopies may be possible at urban heat island hot spots such as parking lots.

Potential project partners include ComEd, which is implementing a "Community of the Future" initiative to the north of the Green Line South Corridor, in Bronzeville. A solar developer should be engaged early on to lead site selection, financing, and engineering.

District stormwater reduces the risk of flooding. District stormwater, which uses vegetation-based practices (such as bioswales), also reduces heat stress, air pollution, and mental stress. Vegetation also provides opportunities for local landscaping jobs and workforce development. Larger-scale practices, such as stormwater parks, can reactivate vacant land. Smaller-scale practices, such a home rain garden and flood retrofit program, lower household expenses by reducing the potential for costly flood damage repairs to buildings.

See the EcoDistrict Opportunities Map for potential project locations. Potential partners for implementing district stormwater practices include Chicago Department of Transportation, Chicago Department of Planning and Development, Chicago Department of Water Management, Metropolitan Water Reclamation District, the Chicago Park District, and the Cook County Land Bank. Potential locations for large stormwater elements could include Washington Park, vacant parcels owned by local government, large parking lots, the planned CTA station renovation, and streets and alleys.

A combined district stormwater and urban heat island engineering study and site plan is recommended to optimally site large stormwater infiltration elements and tree canopy. The site plan should address future conditions, as flooding will likely increase when vacant parcels are developed by builders, and due to more intense storms. The site plan should include the anticipated stormwater benefits of the BIG tree canopy and community garden initiatives, the GSDC sunflower phytoremediation project, and the 61st Street streetscaping project.

Complete streets are essential for reducing the high rates of traffic crashes, injuries, and fatalities. Complete streets can also reduce obesity, air pollution, and household expenses, by reducing residents' need to drive. Traffic calming street retrofits, and protective measures such as refuge islands, should be pursued to increase traffic safety in the corridor. Complete street improvements could be incorporated in all planned and proposed projects, such as the 61st Street streetscaping. Potential implementation partners include the Chicago Department of Transportation and the Vision Zero initiative.

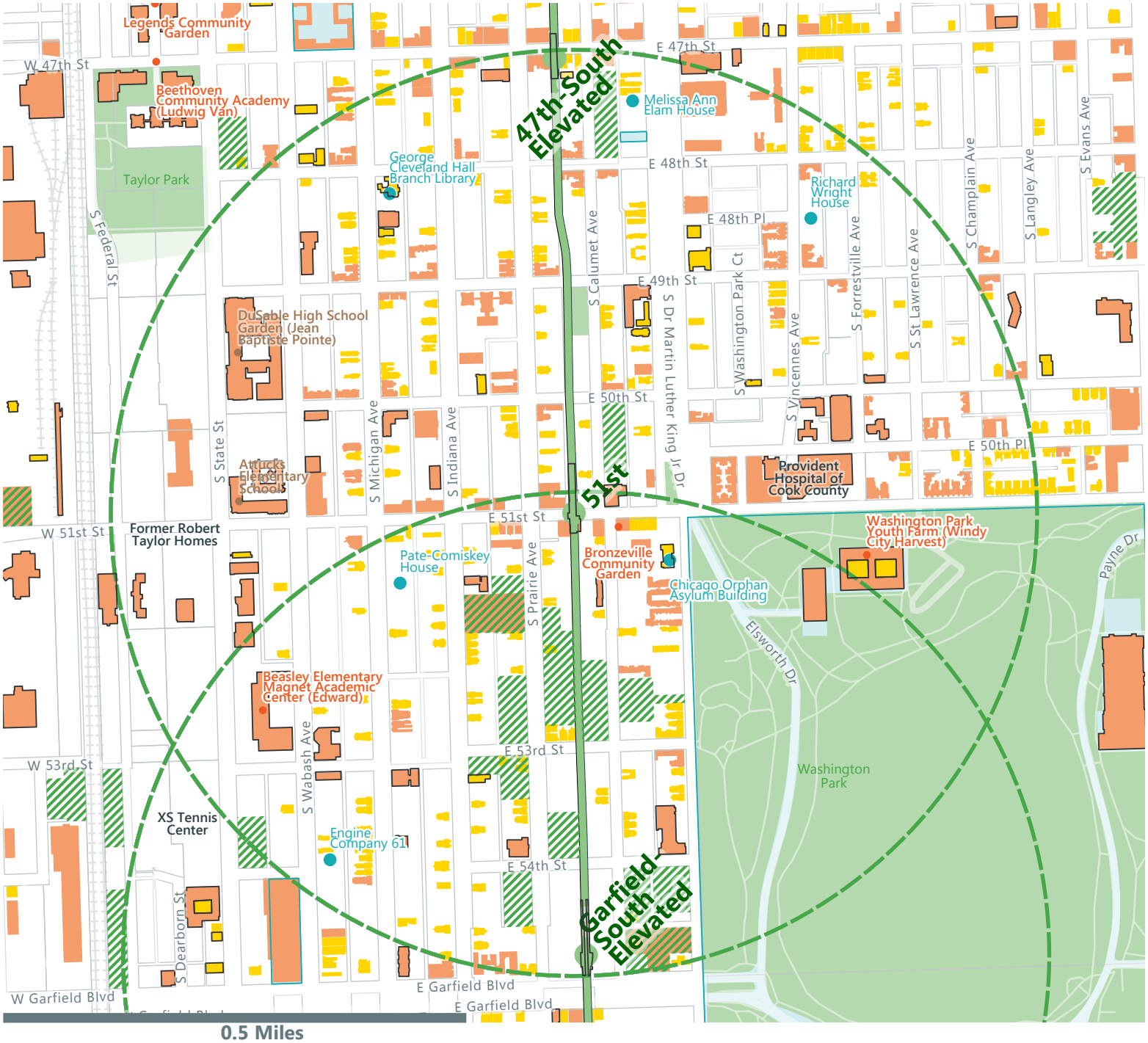
Buffer parks protect residents by creating a physical barrier against air pollution from vehicles, manufacturing facilities, and other sources. The vegetation also relieves mental stress, lessens heat stress, and can provide local economic opportunities through local hire and jobs training for landscape installation and maintenance.

An air quality study is recommended to optimally site the buffer park. Potential partners for air quality monitoring include the Array of Things sensor initiative, IEPA's Ambient Air Monitoring Network, and/or UIC's citizen scientist air monitoring program. Potential locations for a buffer park could include corridors along the expressway, railyards, and streets, and surrounding local manufacturing sites.

Sustainable manufacturing and freight practices protect residents by reducing the amount of air pollution emitted by these facilities. These practices can also improve traffic safety by separating freight movement from residents. Potential implementation partners include Norfolk Southern Rail and other manufacturing facilities who could add a vegetated barrier on their campuses, improve loading and parking areas and practices, and transition to a cleaner fleet of vehicles.

Ecodistrict Opportunities

Asset Map



- Elevated Chicago eHub 1/2 Mile Buffer
- Historic Landmarks (National Register)
- Historic Landmarks (City)

[1] Excludes residential buildings
[2] From Elevate Energy: Estimate of technical potential for PV, i.e. the maximum feasible capacity of a PV system based on available area at site, accounting for shading, obstructions and other site features. We assume PV capacity at 1 kW per 10 square meters or approximately 1 kW per 100 square feet.

Community Gardens

- Food-Producing
- Not Food-Producing/ Unknown
- Parks
- Contiguous Vacant Parcels Suitable For Stormwater Infrastructure (>1 acre)

Solar Capacity By Building Or Site [2]

- 25-99 kW
- 100-999 kW
- 1-4.99 MW
- 5+ MW
- Exempt Building/Site Suitable For Solar

September 10, 2018

Sources:
Chicago Urban Agriculture Mapping Project (CUAMP)
City of Chicago
Cook County
Elevate Energy
Esri
SB Friedman

SBFRIEDMAN

Enterprise

Ecodistrict Opportunities

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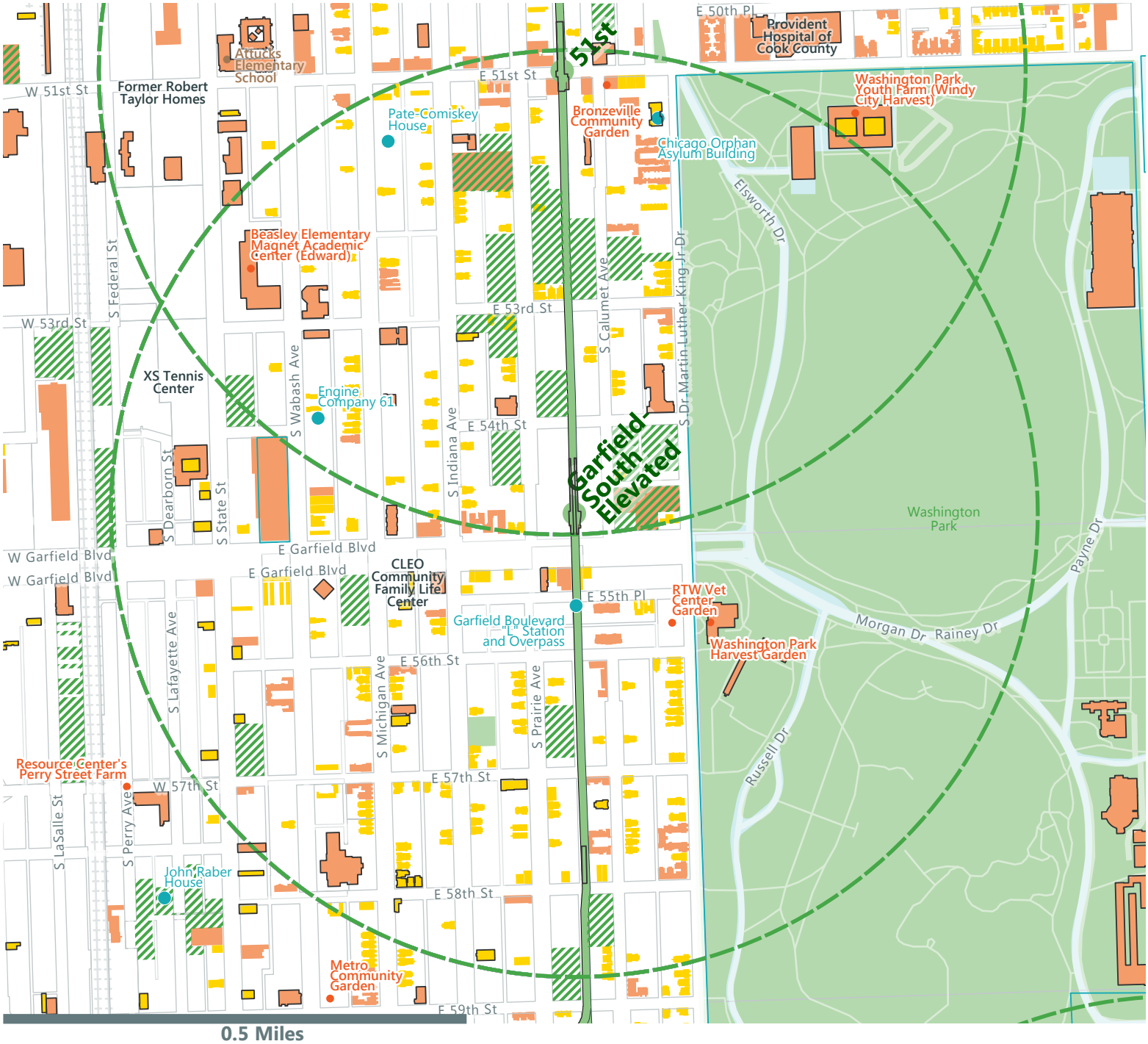

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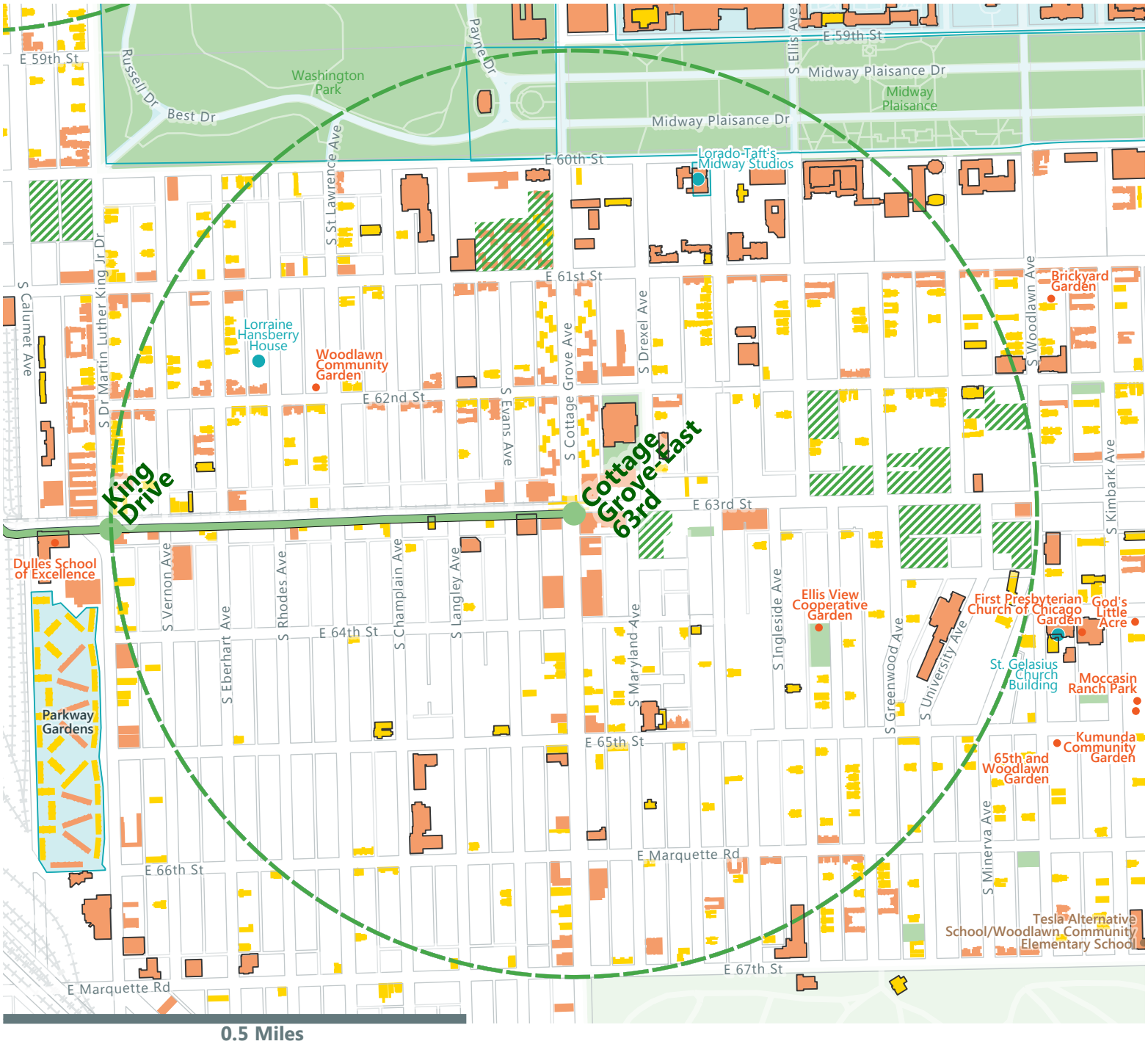

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