



# Brownfields Community Benefits Assessment Report

Area/Neighborhood Name:	Russell
Site Name:	Porter
Reuse Type:	FOOD SOURCE

**FOOD SOURCE  
REUSE PROJECTIONS**

OCTOBER 24, 2021

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## **Background**

This summary report of community benefits compares demographic characteristics and other features of Russell before the redevelopment of **Porter** with post-redevelopment characteristics. Estimated changes are projected to occur as a result of cleanup and reuse of the site.

The projections rely on *user*-provided information about the development and the estimated property value increase expected from the project:

<b>Area/Neighborhood and Project Information</b>	
% of Property Value Increase Expected	15.0
Accepted Distance from Food Source (mi)	1
Construction Cost Estimate (\$)	4,650,000
Estimated Food Source Size (sq ft)	44,000

This report shows how the construction of a new food source on **Porter** could affect the area/neighborhood and its current residents. A new food source could improve residents' access to fresh food and potentially improve health conditions in the area/neighborhood. If this type of development were to occur on a different site, the impacts might be different. While all neighborhoods and sites are unique, the following tables and maps provide estimated projections of area/neighborhood impacts that existing residents may experience as a result of brownfield redevelopment.

## **Contents**

- I. Area/Neighborhood Profile
- II. Access and Distance
- III. Jobs
- IV. Property Tax Revenue
- V. Risk of Exposure
- VI. Risk of Displacement
- VII. Additional Resources
- VIII. References
- IX. Area/Neighborhood Maps

## Area/Neighborhood Profile<sup>i</sup>

	<i>Pre-Redevelopment</i>	
	#	%
<i>Households in Area/Neighborhood Selected</i>	3,405	
<i>Renter Households</i>	2,877	84
<i>Owner Occupied Households</i>	528	16
<i>Households Headed by Elderly</i>	638	19
<i>Households with Children</i>	1,573	46
<i>White non-Hispanic Households</i>	123	4
<i>Black/African American non-Hispanic Households</i>	3,156	93
<i>Hispanic/Latino Households</i>	63	2
<i>Asian/Pacific Islander Households</i>	0	0
<i>Native American Households</i>	0	0
<i>Mixed/Other Households</i>	102	3
<i>Area/Neighborhood Median Household Income (MHI)</i>	\$ 21,948	
<i>County Median Household Income</i>	\$54,357	
<i>Ratio: <math>\frac{\text{Area/Neighborhood MHI}}{\text{County MHI}}</math></i>	40	

This table provides a profile of households in **Russell** where the brownfield chosen for redevelopment is located to inform decision-making. Demographic characteristics can provide an indicator of households that might bear higher health risks or be more at risk of displacement due to high housing costs.<sup>ii</sup> For instance, renters are more likely to be negatively affected by property value increases in an area/neighborhood than homeowners. Children and elderly are more sensitive to environmental conditions as well as housing instability than other age groups, therefore the number and percent of old and young in **Russell** provide a measure of age-based risk. Areas/neighborhoods with histories of redlining and other racist land-use and housing policies shape where Black households and other households ‘of color’ are located. Areas/neighborhoods with racially and ethnically-concentrated households are also likely to carry higher environmental burdens and risks than those that are predominantly White. This table shows that **93%** of households in **Russell** are Black/African American, **2%** are Hispanic/Latino and **3%** are Asian/Pacific Islander, Native American, and Mixed/Other households. Finally, area/neighborhood household median income provides a measure of financial well-being in **Russell** when compared to the county in which it is located. In this area/neighborhood, the median income is **\$21,948** before brownfield development, which is **40%** of the county median household income.

## Access and Distance

### to a Food Source

	<i>Pre-Redevelopment</i>	<i>Post-Redevelopment</i>	<i>Change</i>
<i>Households in Food Desert</i>	47%	0%	-47%
<i>Households Headed by Elderly</i>	26%	1%	-25%
<i>Households with Children</i>	52%	0%	-52%
<i>White non-Hispanic Households</i>	25%	1%	-24%
<i>Black/African American non-Hispanic Households</i>	48%	0%	-48%
<i>Hispanic/Latinx Households</i>	62%	2%	-60%
<i>Asian/Pacific Islander Households</i>	0%	0%	0%
<i>Native American Households</i>	0%	0%	0%
<i>Mixed/Other Households</i>	60%	1%	-59%
<i>Average Household Distance to Food Source</i>	5,626 ft	2,527 ft	3,099 ft

Food deserts are present when residents of an area/neighborhood do not have sufficient access to a full-service fresh food source. In urban areas, households that are not within a 1-mile radius of a supermarket or a large grocery store are located in a food desert.<sup>iii</sup> Research shows that eliminating food desert conditions by increasing residents' access to fresh food may contribute to positive health outcomes, like lower levels of obesity and diabetes.<sup>iv</sup> Putting a food source on this brownfield site would decrease food desert conditions in this area/neighborhood by **-47%**. At the completion of redevelopment, **0%** of area/neighborhood residents will reside in a food desert. The benefits of food access can be maximized by ensuring that food options at this store are both healthy and affordable to existing residents.<sup>v</sup> Food sources that provide fresh food at prices current residents cannot afford may signal gentrification and involuntary displacement.

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## Jobs

### *Post-Redevelopment*

<i># of Person-Years if Construction Work Created</i>	5
<i># of Long-Term Jobs Created</i>	35

Planning for jobs requires knowledge of the neighborhood context, including existing community benefits agreements, education and employment characteristics of the population, and the construction and cleanup strategy proposed. <sup>vi</sup> Assuming there are 2000 hours in a typical work year, then the construction phase of this project will produce **5** person-years of work. Whether the on-site construction jobs in question are available to members of the local community will depend on the builder’s hiring practices. In addition, these job projections do not include jobs related to cleaning up the on-site contamination.

The project may generate up to **35** long-term jobs. These are jobs that will be there as long as the proposed business activity continues on the redeveloped site. The new business(es) and jobs may be more likely to benefit the current residents of the area/neighborhood if the educational levels required for the new jobs tend to match those of current residents looking for work , or if training is made available for residents to get those jobs.

Establishing community benefit agreements with the developers can ensure that redevelopment projects directly benefit their community through new employment opportunities. <sup>vii</sup> Learn more about CBAs from the U.S. Department of Energy Office of Economic Impact and Diversity. <sup>viii</sup>

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## Property Tax Revenue

	<i>Post-Redevelopment</i>
<i>\$ Increase in Tax Revenue</i>	+\$17,575
<i>% Increase in Tax Revenue</i>	+1.16%

When brownfields are redeveloped, the surrounding property value tends to rise , which can lead to increased property tax revenues for the municipality. <sup>ix</sup>

If the area/neighborhood has a property tax rate of **5.0%**, then one could expect the tax revenue to increase by **1.16%** after the next reassessment of neighborhood properties. The overall increase in property tax revenue from redeveloping this brownfield is projected to be **\$17,575**. While this revenue increase may not directly benefit the existing residents of the area/neighborhood, this provides an estimate of the return on investment that can be used to justify investment of public funds in an area/neighborhood that might not otherwise be able to raise or attract private redevelopment investments.

The property tax revenue projections presented here are estimated using property value increases of **15.0%** for properties within 2,500 feet of **Porter**. Unless the user chose to enter their own estimate of property value increase, this tool estimates the property value increase near the new brownfield redevelopment as a function of the area/neighborhood median household income relative to the county household median income recorded in 2018 and relies on property values in that year. The dollar figure above may thus be an underestimate if property values have grown in the metropolitan area. The projected tax revenues also take into account the on-going negative effect that remaining undeveloped brownfields have on property values in the area/neighborhood. The effect of these other sites is estimated to cut the property value increase in half for properties that remain within 2,500 feet of at least one other undeveloped brownfield in the selected area.

## Risk of Exposure

	<i>Pre- Redevelopment</i>	<i>Post- Redevelopment</i>	<i>Change</i>
<i>Total # Households at Risk of Exposure in Area/Neighborhood Households</i>	2,740	2,584	-156
<i>Headed by Elderly (#)</i>	561	557	-4
<i>With Children (#)</i>	1,226	1,125	-100
<i>White non-Hispanic (#)</i>	95	94	-1
<i>Black/African American non-Hispanic (#)</i>	2,545	2,399	-146
<i>Hispanic/Latinx (#)</i>	50	45	-5
<i>Asian/Pacific Islander (#)</i>	0	0	-0
<i>Native American (#)</i>	0	0	-0
<i>Mixed/Other (#)</i>	81	75	-6

Any site that has earned the label “brownfield” from local officials indicates that people may be at risk of exposure to potential hazardous contaminants from being on or near that site. The clean-up and remediation of a brownfield is intended to reduce the risk of human exposure to harm. This table shows the number of households in **Russell** that are within ¼ mile from a brownfield site boundary before redevelopment (**2,740**) and the decrease in those numbers after cleanup and redevelopment (**156**). The table also includes the number of households that may be more vulnerable due to racial or age group and the impact the redevelopment might have on reducing their risk of exposure. The benefits of cleaning up nearby brownfields for these groups is magnified due to assumed cumulative health risks.

In general, the higher the number of households near the brownfield, the greater impact any cleanup will have on the remaining risk to residents. However, the numbers here take into account the risk that the continued presence of any other contaminated site may pose to households that remain within a ¼ mile proximity. When there is a cluster of brownfields in an area, any remaining brownfields could undermine risk reduction gained from the cleanup of only a single site. While the BAT does not estimate actual reduced health risks—since that requires knowledge of the extent and type of contamination, pathway of exposure, and baseline health of the population at risk of exposure—it does provide an estimate of the number of households that will benefit from some amount of risk reduction.

## Risk of Displacement

	<i>Pre- Redevelopment</i>	<i>Post- Redevelopment</i>	<i>Change</i>
<i>% of Renters Paying 30%+ of Income on Rent</i>	56%	58%	+2%
<i>% of Renters Paying 50%+ of Income on Rent</i>	35%	35%	+0%

In general, the redevelopment of a brownfield will produce new property values on-site and may also change values off-site, resulting in potentially improved property values for existing owners as well as new property tax revenues for local government. Property values can be expected to rise when a brownfield is redeveloped and environmental risks are reduced. However, if property values and thus property taxes, insurance, and rent costs rise as the result of clean-up/remediation and development on this site, low-income residents—especially renters—will likely have increased risk of displacement due to increased housing cost burdens. Low-income households may have to cut back on other necessary expenses or move to an area/neighborhood with lower housing costs. Increases in foreclosures and evictions might also occur.

The table shows data for existing renters since renters are more likely to experience involuntary displacement as a result of new development. Residents are “cost-burdened” when their housing costs exceed 30% of a household’s yearly income and may be at risk of displacement from their home. They are severely cost-burdened when paying more than 50% of their income. <sup>x</sup>

If this area/neighborhood sees a **15.0%** rise in property values close to the redeveloped site, we estimate that the percent of renters who are at risk of displacement will rise from **56%** before development, to **58%** after development.

Additionally, **35%** of this area/neighborhood's renters before development are already severely cost burdened, paying more than 50% of their household's annual income on housing costs. This brownfield development has the potential to raise this to **35%** of renters if the development causes property values to rise by **15.0%**.



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## **Additional Resources**

- [EPA Brownfields](https://www.epa.gov/brownfields) <https://www.epa.gov/brownfields>
- [EPA EJSCREEN](https://ejscreen.epa.gov/mapper/) <https://ejscreen.epa.gov/mapper/>
- [EPA EJSCREEN Indexes and Data](https://catalog.data.gov/dataset/ejscreen-indexes-2018-public-release) <https://catalog.data.gov/dataset/ejscreen-indexes-2018-public-release>
- [EPA EnviroAtlas](https://enviroatlas.epa.gov/enviroatlas/interactivemap/) <https://enviroatlas.epa.gov/enviroatlas/interactivemap/>
- [U.S. Department of Energy Office of Economic Impact and Diversity](https://www.energy.gov/diversity/community-benefit-agreement-cba-toolkit) <https://www.energy.gov/diversity/community-benefit-agreement-cba-toolkit>

### **Data Sources, Limitations, and Assumptions:**

<https://louisville.edu/cepm/publications/tool-kits/brownfields-community-benefits-assessment-guide> .

## **References**

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<sup>i</sup> Data Source: U.S. Census, American Community Survey 5-year Estimates 2014-2018

<sup>ii</sup> Wilson, Ellen and Mary Schwartz. 2008. "Who Can Afford to Live in a Home?: A Look at Data from the 2006 American Community Survey." Vol.: U.S. Census Bureau.

<sup>iii</sup> Jiao, Junfeng, Anne V. Moudon, Jared Ulmer, Phillip M. Hurvitz and Adam Drewnowski. 2012. "How to Identify Food Deserts: Measuring Physical and Economic Access to Supermarkets in King County, Washington." *American journal of public health* 102(10):32-9.

<sup>iv</sup> Ahern, Melissa, Cheryl Brown and Stephen Dukas. 2011. "A National Study of the Association between Food Environments and County-Level Health Outcomes." *The Journal of Rural Health* 27(4):367-79.

Morland, Kimberly, Ana V. Diez Roux and Steve Wing. 2006. "Supermarkets, Other Food Stores, and Obesity." *American journal of preventive medicine* 30(4):333-39. doi: 10.1016/j.amepre.2005.11.003.

Drewnowski, Adam, Anju Aggarwal, Philip M. Hurvitz, Pablo Monsivais and Anne V. Moudon. 2012. "Obesity and Supermarket Access: Proximity or Price?." *American journal of public health* 102(8):e74-e80.

<sup>v</sup> Drewnowski, Adam, Anju Aggarwal, Philip M. Hurvitz, Pablo Monsivais and Anne V. Moudon. 2012. "Obesity and Supermarket Access: Proximity or Price?." *American journal of public health* 102(8):e74-e80.

<sup>vi</sup> Lowe, Nichola and Brian J. Morton. 2008. "Developing Standards: The Role of Community Benefits Agreements in Enhancing Job Quality." *Community Development* 39(2):23-35;

Metropolitan Council. 2019. "Local Planning Handbook." doi: <https://metro council.org/Handbook/Files/LPH-Printed-Version.aspx>;

Kaiser, Edward John, David R. Godschalk and F. Stuart Chapin, Jr. 1995. *Urban Land Use Planning*. Urbana: University of Illinois Press.

<sup>vii</sup> Lowe, Nichola and Brian J. Morton. 2008. "Developing Standards: The Role of Community Benefits Agreements in Enhancing Job Quality." *Community Development* 39(2):23-35. doi: 10.1080/15575330809489728

<sup>viii</sup> <https://www.energy.gov/diversity/community-benefit-agreement-cba-toolkit>

<sup>ix</sup> Haninger, K., L. Ma and C. Timmins. 2017. "The Value of Brownfield Remediation." *Journal of the Association of Environmental and Resource Economists* 4(1):197-241;

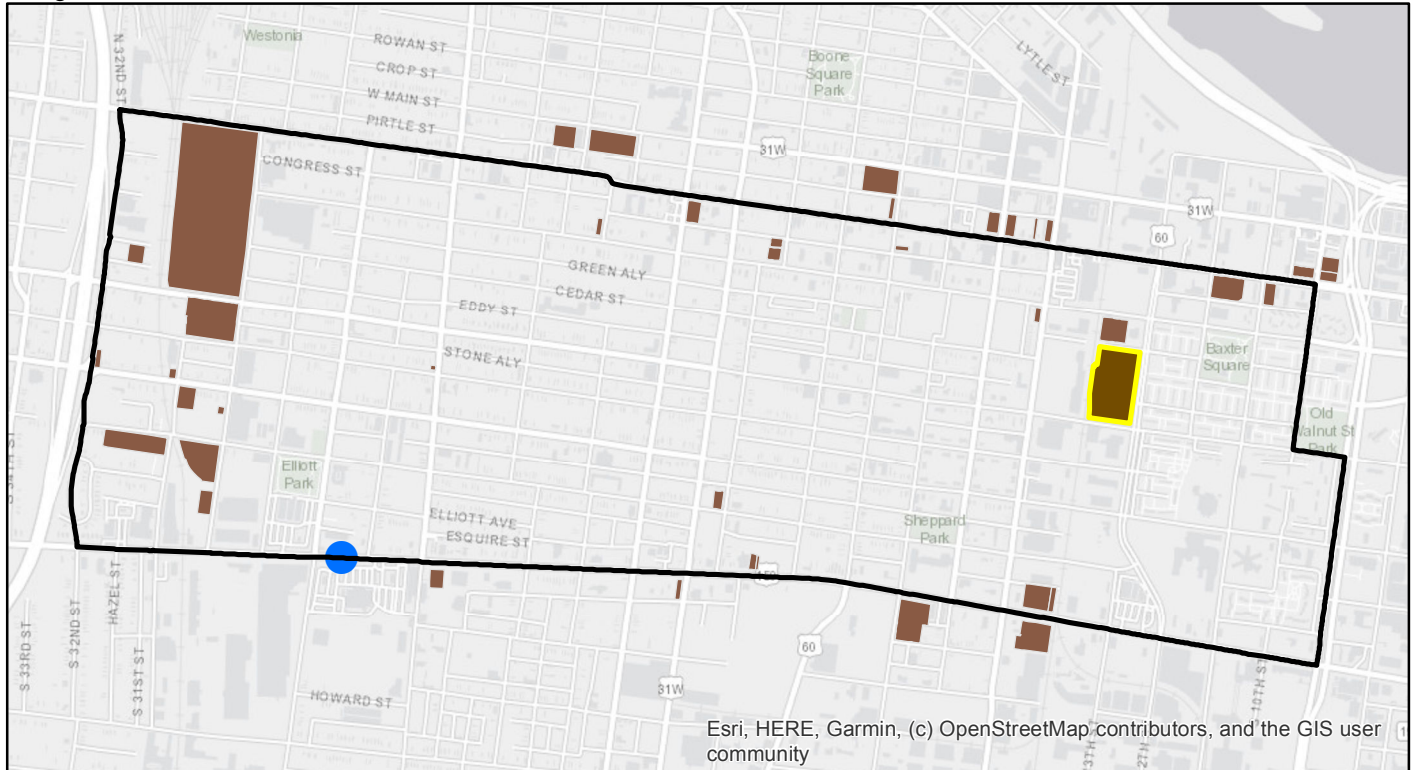
Linn, Joshua. 2013. "The Effect of Voluntary Brownfields Programs on Nearby Property Values: Evidence from Illinois." *Journal of Urban Economics* 78:1-18. doi: 10.1016/j.jue.2013.04.002.

Woo, Ayoung and Sugie Lee. 2016. "Illuminating the Impacts of Brownfield Redevelopments on Neighboring Housing Prices: Case of Cuyahoga County, Ohio in the Us." *Environment and Planning A: Economy and Space* 48(6):1107-32.

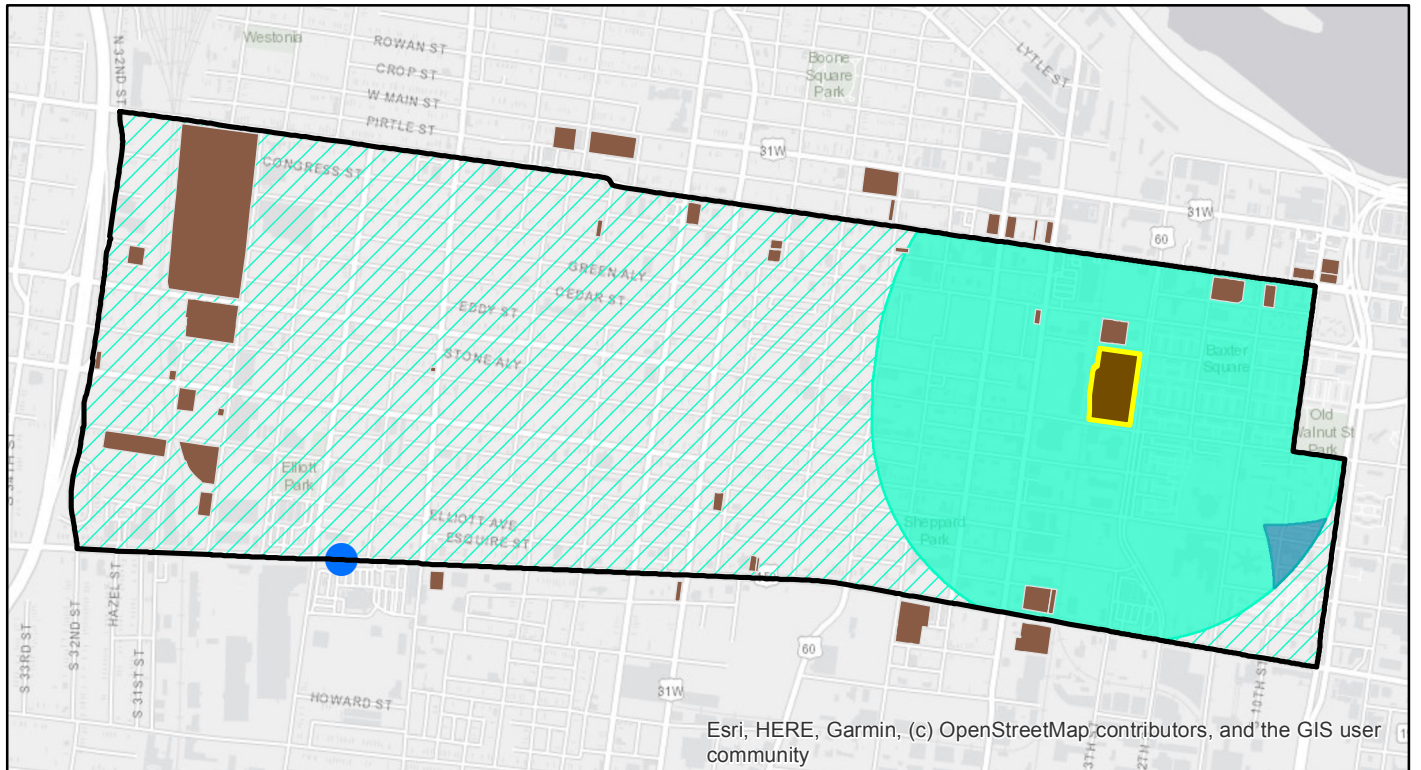
<sup>x</sup> Wilson, Ellen and Mary Schwartz. 2008. "Who Can Afford to Live in a Home?: A Look at Data from the 2006 American Community Survey." Vol.: U.S. Census Bureau.

# AREA MAPS

## Neighborhood



## Weighted Property Value Increase

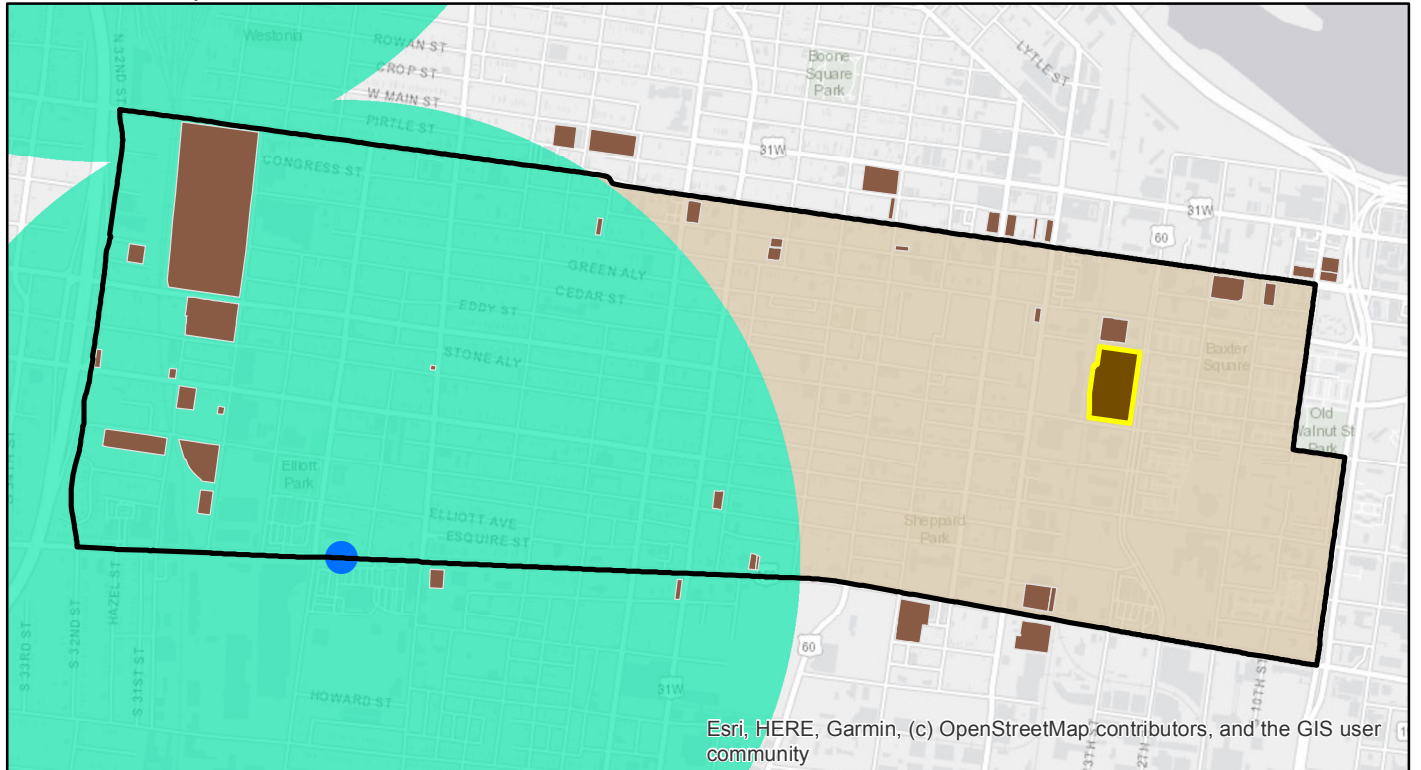


### Legend

- |                    |                      |                  |
|--------------------|----------------------|------------------|
| Neighborhood       | Brownfields          | Full Increase    |
| Redevelopment Site | Existing Food Source | Partial Increase |
|                    |                      | No Increase      |

# AREA MAPS

Pre Redevelopment Access to Food & Food Desert



Post Redevelopment Access to Food & Food Desert

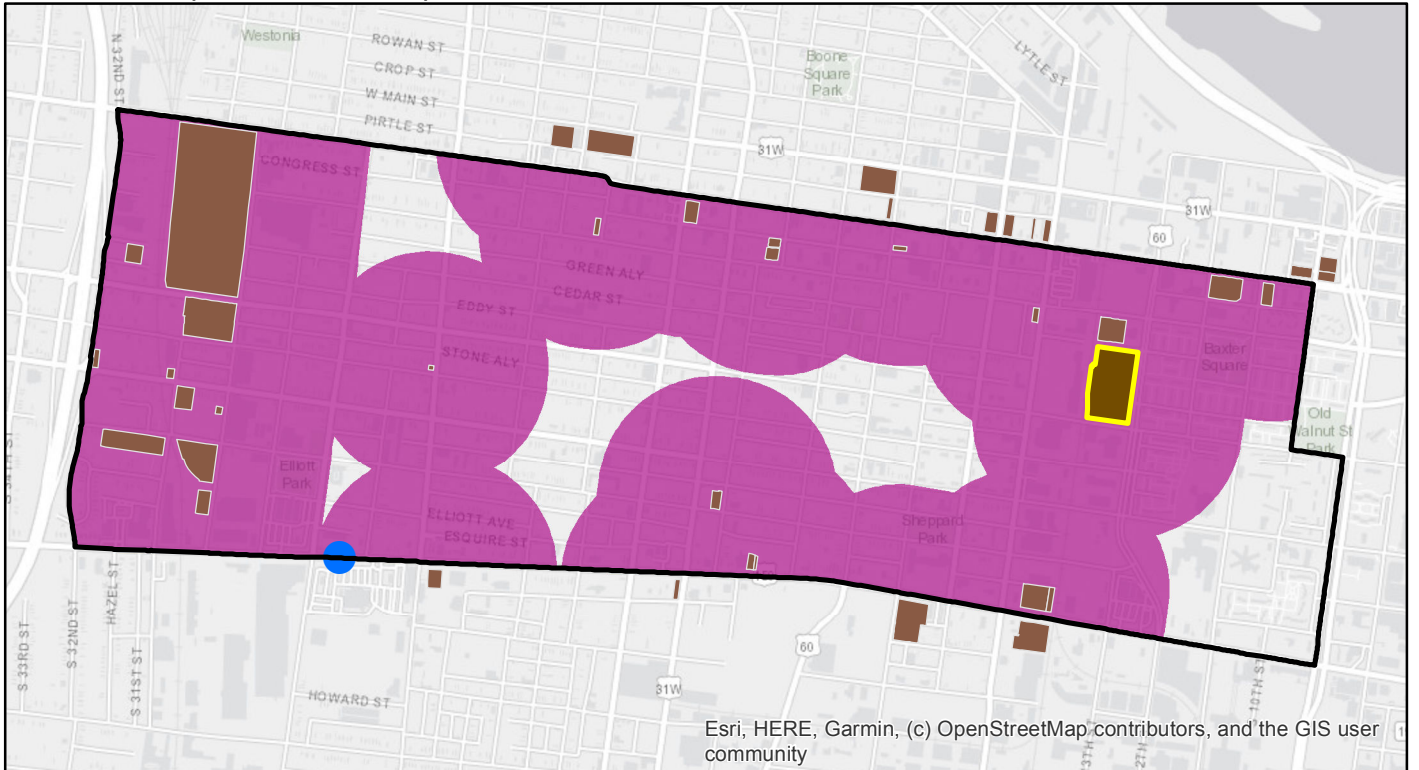


**Legend**

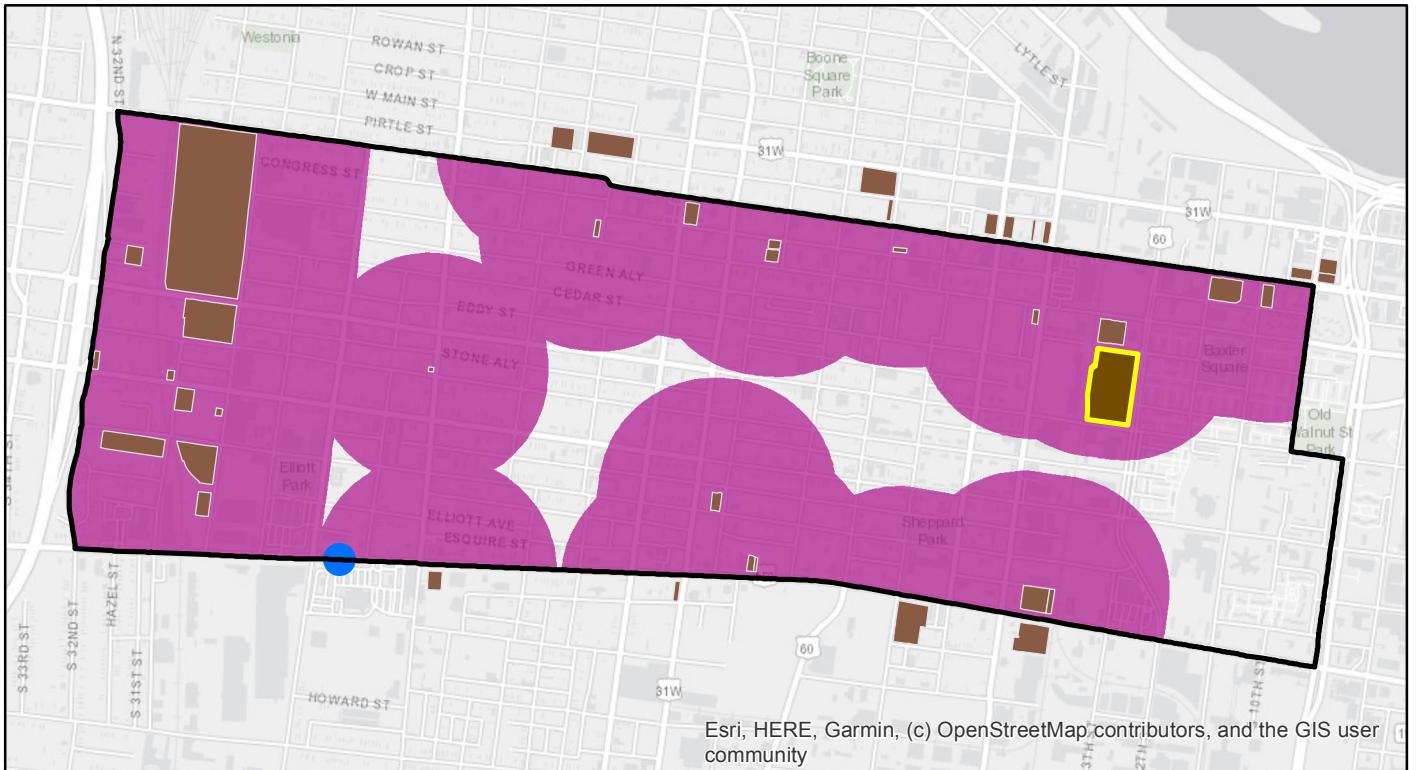
- Neighborhood
- Brownfields
- Neighborhood Food Desert
- Redevelopment Site
- Existing Food Source
- Access to Food

# AREA MAPS

## Pre Redevelopment Risk of Exposure



## Post Redevelopment Risk of Exposure



### Legend

- Neighborhood
- Brownfields
- Risk of Exposure
- Redevelopment Site
- Existing Food Source