To: Owen Kerney, Assistant Director, Division of Syracuse City Planning
From: Chloe Coffman and Anjali Joseph, Analysts
Subject: Benefits of brownfield remediation in Syracuse

Executive Summary

Both identified and unidentified brownfield sites located throughout Syracuse, NY cause numerous negative consequences for the city and its residents. The City of Syracuse should (1) conduct a complete assessment of all brownfield sites in the city and release this information to the public and (2) finish the rehabilitation of the four identified brownfield opportunity areas. These actions would result in an increased property tax base for the city, provide additional development opportunities on the rehabilitated land, and remove the danger posed by contamination levels on the brownfield sites.

Brownfields in Syracuse

Brownfields are tracts of land in cities that remain undeveloped or underdeveloped due to the possible presence of a hazardous or toxic substance. Most often these are areas that were previously used for industrial purposes and have since been abandoned as a result of the uncertainty of information concerning their contamination level. There are more than 450,000 existing brownfield sites in the U.S. and 50,000 in New York State.[1] Interestingly enough, while the EPA has cited the number of brownfields across New York State, no formal record exists of all brownfields located in Syracuse or Onondaga County.

As a result of their cost to economic growth, property valuation and resident health, there is a widespread effort to investigate the toxicity levels and then remediate and redevelop brownfields.[2] A summary of national brownfield program accomplishments from the EPA can be found in Appendix 1. Revitalizing brownfield sites has the potential to create benefits throughout the community including community involvement in the project, job creation, and an increase in residential property values once a nearby brownfield is assessed or cleaned up.

Brownfield Opportunity Areas

The New York State Government identifies more than 50,000 brownfields in cities across the state, as of 2016.[3] New York State has grouped some of these brownfields into zones called Brownfield Opportunity Areas (BOAs), allowing cities to focus efforts to a concentrated number of sites that require remediation. This designation results in an increase of Brownfield Cleanup Program tax credits (to be discussed later), priority and preference for remediation, and formal support from the New York Department of State.[4]

The New York State Office of Planning and Development has identified four BOAs in the City of Syracuse.[5] A map of Syracuse outlining these BOAs is in Appendix 2.

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[1] New York State Office of Planning and Development, BOAs. (2016).
[2] Environmental Protection Agency, Brownfields Overview. (2017).
[3] New York State Office of Planning and Development, BOAs. (2016).
[4] Environmental Protection Agency, BOA Designation. (2017).
[5] New York State Office of Planning and Development, BOAs. (2016).

1. The Syracuse Erie Boulevard East BOA is located between Highway 690 and Erie Boulevard in East Syracuse. A large amount of residential housing is located near this BOA.
2. The Syracuse Hiawatha-Lodi BOA is located on Syracuse's northside, and is in a highly commercial district. It is highly visible, as it is adjacent to I-81, Destiny Mall, the Syracuse baseball diamond, and the regional transportation center.
3. The Syracuse South Salina St. BOA is located in southwest Syracuse, near University Hill and Oakwood Cemetery. It is located near a high concentration of residential housing.
4. The Village of East Syracuse BOA is located near DeWitt. It is located alongside 690 and is surrounded on one side with concentrated residential housing.

Costs and benefits of brownfield remediation

The average cost of brownfield cleanup is approximately $600,000, based on data from the EPA's brownfield program.[6] However, the actual cost to remediate a brownfield varies according to its level of contamination, which is often not known until a project is undertaken.

The EPA established the Brownfields Economic Revitalization Initiative in 1995 to empower states, communities, and other stakeholders in economic revitalization to work together to accomplish the redevelopment of brownfield sites. The enactment of the Small Business Liability Relief and Brownfields Revitalization Act in 2002 expanded EPA assistance to provide greater support to brownfields and cleanup and reuse.[7]

Funding Options: Many funding options exist for brownfield remediation. Brownfields Assessment Grants, which provides funding for brownfields inventories, planning, environmental assessments, and community outreach. The Brownfields Revolving Loan Fund Grants provide funding to capitalize loans that are used to clean up brownfields, and the financing is then paid back through gained revenue from remediation. Brownfields Job Training Grants provide environmental training for residents of brownfields communities. Brownfields Cleanup Grants provide direct funding for cleanup activities at certain properties with planned greenspace, recreational, or other nonprofit uses. Brownfields Area-Wide Planning Grants provide funding to communities to research, plan and develop implementation strategies for cleaning up and revitalizing a specific area affected by one or more brownfields sites.[8]

Based on the assessment of use for Syracuse brownfield sites, there are several avenues for funding options. The most prudent would likely be the Brownfields Area-Wide Planning Grant Brownfields Assessment Grant and the Brownfields Job Training Grant.

Policy Proposal

The City of Syracuse should take two recommended policy steps within the next three years. First, the city should conduct a complete assessment of all brownfield properties throughout the city of Syracuse and make the assessment publicly available. Second, the city should complete the cleanup and redevelopment of the four already identified BOAs. There are three objectives

[6] Haninger, et al (2017)
[7] Environmental Protection Agency, Brownfields Road Map. (2019).
[8] Environmental Protection Agency, Brownfields Grant Funding. (2017).

and results associated with this policy proposal, which are outlined and explained in the remainder of this memo.

Objective 1: Increase the property tax base in Syracuse

Numerous studies have found that brownfields have a negative effect on property values surrounding said brownfields. In Charlotte, NC, investigators found that the properties within 0.5 miles of brownfield sites saw decreased property values by 17 percent on average.[9] In Cincinnati, OH, the closer a home is located in a brownfield, the greater level of depreciation is realized in property value. Specifically, the change from 500 feet to 100 feet from a brownfield was associated with a decrease in property value by more than 10 percent.[10] Other studies find that property values consistently increase post-remediation of brownfield sites. In Milwaukee, house values increased by 11.4 percent after brownfield remediation.[11] Consistent with this finding, investigators used data from 51 brownfield brownfield remediation projects across the country and found that surrounding property values increase 5 percent to 11.6 percent. This was an average benefit of more than $4 million per site, in terms of increased property value.[12]

As such, brownfield remediation at the four identified BOA sites in Syracuse could provide an additional source of revenue for the city, where the property tax base is quite low, further discussed in the next section.

Syracuse Property Tax

Based on the 2018-2019 Comprehensive Annual Financial Report (CAFR), we found that Syracuse raised $96.9 million in property tax revenue which consisted of 12.16% of the total $796.7 million revenue.[13] The 2019 adopted budget projected property tax revenue increasing to $101.5 million which makes up 14.1% of the total budget of $718.5 million.[14] Please refer to Appendix 3 for a breakdown of the 2018-2019 adopted budget. To better understand the financial health of the City of Syracuse, one should look at the liabilities to assets ratio; in 2018 this was 1.80. In comparison, Rochester, which shares similar characteristics to Syracuse, has a property tax revenue of $162.1 million making up 21.85% of their $741.9 million total revenue, and a liabilities to assets ratio of 1.28. A healthy liabilities to asset ratio is considered to be 0.5 or less. Syracuse's budget woes are relatively worse than nearby cities.

Property tax base increase

Based on the case studies outlined above, the increase in property values associated with remediating these four BOAs and the subsequent increased property tax base in Syracuse can be quantified. To determine this increase in property values, the four BOA sites were identified in ArcGIS and a buffer of 0.25 miles was drawn around each site. We chose a conservative buffer compared to the referenced studies in order to mitigate for an overestimation of the observed benefits. and because a buffer is already embedded in the BOA as it groups multiple brownfield sites. The assessed value of properties within this buffer zone was then collected to determine the

[9] Schwarz et al (2017)
[10] Mihaescu and vom Hofe (2012)
[11] De Sousa et al (2009)
[12] Haninger et al (2017)
[13] Financial Statements as of June 30, 2018, CAFR Syracuse
[14] City of Syracuse Annual Budget, Fiscal Year Ending June 30, 2019

possible benefits in increased property values. Appendix 4 displays the ArcGIS map of each BOA and the associated buffer zone around the site. The only property values examined in this analysis are family homes and apartments, as industrial and commercial properties were excluded from the previous studies summarized here. Additionally, these are relatively naive calculations as it does not account of STAR exemptions or various other property tax exemptions, but serves as an adequate starting point.

Table 1 shows the results of brownfield remediation at each of the four BOAs identified in Syracuse. Due to the uncertainty of contamination level in brownfields and the varying factors affecting Syracuse property values, a range of 5-11% estimated increase in property values is used. This range captures the findings of the more relevant studies explained previously, namely the case study in Milwaukee and the aggregated impacts found across the country. Using a range of a 5-11% increase allows a more realistic expectation of realized benefits for brownfield remediation.

Assuming an 11% increase in property values post-remediation, nearby properties will increase in value by more than $1 million, which would increase the property tax base by more than $470,000. Using a more moderate estimate, a 5% increase in property values post-remediation would increase nearby property values by $12 million, which would increase the property tax base by more than $470,000. This would be of significant help to Syracuse's budget woes from its low property tax base, and demonstrates the additional impact remediation other brownfield sites could offer.

Table 1: Additional property tax collected and increase in property values

	Additional tax collected		**Change in property value**	
ZONE	5% increase	11% increase	5% increase	11% increase
Zone 1	$96,897	$213,173	$2,484,532	$5,465,969
Zone 2	$138,700	$305,140	$3,556,413	$7,824,109
Zone 3	$142,797	$314,153	$3,661,459	$8,055,209
Zone 4	$93,169	$204,971	$2,388,941	$5,255,670
TOTAL	**$471,562**	**$1,037,437**	**$12,091,344**	**$26,600,957**
Per BOA average	*$117,891*	*$259,359*	*$3,022,836*	*$6,650,239*

Objective 2: Create development opportunities on brownfields

Brownfields are ripe with development opportunities. Brownfields sites tend to have greater location efficiency than alternative development scenarios. Results of five pilot studies conducted by the EPA showed a 32 to 57 percent reduction in vehicle miles traveled when development occurred at a brownfields site rather than a greenfield, which is land that has had no previous work and development would start from scratch. Fewer vehicle miles traveled means a reduction in pollution emissions including greenhouse gases. These same site comparisons show an estimated 47 to 62 percent reduction of storm water runoff for brownfields site development. Finally, the EPA also found that through fiscal year 2018, on average, $16.86 was leveraged for each EPA Brownfields dollar spent on cleanup and 8.6 jobs leveraged per $100,000 of EPA brownfields funds expended on assessment, cleanup, and revolving loan fund cooperative agreements.[15]

Remediating a brownfield site provides new land space for development opportunities and this can range anywhere from commercial development, green space, or mixed-use opportunities. Brownfield remediation at the four identified BOA sites in Syracuse would provide land for new development for businesses, the parks system, or energy generation.

An alternative use for brownfields in Syracuse other than personal or corporate development is for energy generation through community solar farms. Community solar can refer to both 'community-owned' projects as well as third party-owned plants whose electricity is shared by a community.[16] Brightfields, defined by the U.S Department of Energy as solar projects on brownfields (contaminated land or closed landfills), are attractive opportunities for solar developers to diversify their pipeline beyond traditional rooftop and greenfield locations. The number of potential locations for solar on brownfields is enormous: the EPA has pre-screened more than 80,000 brownfields and contaminated lands for renewable energy, and NREL estimates landfills and other contaminated sites cover 15 million acres across roughly 10,000 closed landfills.[17]

Brownfields often offer development benefits including minimal shade, pre-cleared sites with few other uses and locations in industrial zones near interconnection points and customer demand. Governments frequently offer incentives to improve project economics, creating a win-win for brownfield owners and solar developers. The primary purpose of community solar is to allow members of a community the opportunity to share the benefits of solar power even if they cannot or prefer not to install solar panels on their property. Project participants benefit from the electricity generated by the community solar farm, which costs less than the price they would ordinarily pay to their utility. Syracuse should consider projects like these, along with greater economic development on prior brownfield sites.

Developing brownfields comes with a few tax incentives as well. The credits tend to help reduce the burden of remediation costs for individuals and businesses. There are three refundable tax credits are available for taxpayers who remediate a brownfield:

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[15] Environmental Protection Agency, Brownfields Program Accomplishments. (2017).
[16] Energy Sage, Community Solar Explained. (n.d.)
[17] Solar Power World Online, Brownfields to Brightfields. (2017).

- A brownfield redevelopment credit of 10% to 22% is dependent on remediation level, location and type of taxpayer (personal or corporate);
- A credit for real property taxes for remediated brownfields based on number of employees at the location can reach 100% of real property taxes;
- Environmental remediation insurance credit for remediation insurance premiums up to $30,000 or 50% of the premium cost, whichever is less.[18]

Objective 3: Eliminate the dangers of brownfields to residents

The soil and water quality around brownfields are often untested, yet since these sites have an industrial history are likely polluted. When a brownfield is contaminated, it has negative impacts on the health and safety of nearby residents. The rehabilitation of the four identified BOA sites in Syracuse can subvert these issues. However, the unknown contamination levels in these sites increases the uncertainty of realized benefits post-remediation.

1. Syracuse Erie Boulevard East BOA: OPD has identified priority brownfield sites within this BOA. However, the contamination levels are not publicly known, but the site has a history of construction and manufacturing.
2. The Syracuse Hiawatha-Lodi BOA: The city has broken up the 11 brownfield parcels within this BOA by likelihood of contamination. The majority of the parcels are either probably or possibly contaminated. The site history includes steel manufacturing, and crude oil processing and storage.
3. The Syracuse South Salina St. BOA: The parcels are not differentiated by likelihood of contamination, and the site history is not publicly known.
4. The Village of East Syracuse BOA: The brownfield parcels are not differentiated by likelihood of contamination, and the entire BOA is considered possibly contaminated, but to determine the contamination level requires soil testing. The site history includes the use of crude oil, volatile organic compounds (VOCs), and acid wastes.

The rehabilitation of these four identified BOAs will help to remove the risk of this pollution and contamination to nearby residents. Identifying and rehabilitating other brownfields throughout the city will further this effort and remove other sources of contamination that pose a risk to residents.

Caveats & important considerations

Superfund sites in Syracuse

There is a crucial distinction between brownfield sites and Superfund sites, as both are present in Syracuse. The most basic difference is a Superfund site is an area where contamination levels are known, and the U.S. Federal Government has plans to manage and enforce cleanup efforts. A brownfield site is a property where development is avoided or complicated by the possible existence of contaminants.[19] Onondaga Lake is currently classified as a Superfund site, and remediation efforts are ongoing.[20] Interesting, the Hiawatha-Lodi BOA is quite near Onondaga Lake and so properties located near the lake and this BOA may eventually see even greater benefits to remediation.

[18] New York State Department of Economic Development, BCP Tax Credits. (n.d.)
[19] Environmental Protection Agency, Types of Contaminated sites. (2019).
[20] Environmental Protection Agency, Superfund National Priority Areas. (2019).

However, rehabilitation efforts for brownfields and Superfund sites do not conflict because remediation is managed by different levels of government. The EPA manages Superfund sites, while NYS and the City of Syracuse manages brownfield remediation. This is typical practice nationwide.[21]

Capitalization issues

The City of Syracuse has a history of infrequent assessments and drastic increases in assessed values. This is an important consideration, and if large scale brownfield remediations were to continue with known impacts on property values, homeowners in surrounding areas should be aware to avoid drastic spikes and shocks in assessed values. Homeowners should be thoroughly informed about brownfield cleanup timelines and expected effects on property values, so unfair capitalization impacts on them can be avoided.

However, it is important to note that while their property values may increase, the value of their homes will also increase. And so, brownfield remediation is generally a benefit to homeowners. The exception in this case is renters living in homes surrounding brownfields, who may bear the cost of increased property taxes but would not see the financial benefit of increased property value upon resale of the home.

Property tax increase cap in NYS

Another caveat when it comes to increasing property tax revenue is the property tax cap. New York State does have a property tax cap of 2% per year, meaning taxpayers cannot pay more than 2% more in property taxes than they did the previous year. As such, it is likely that a more conservative estimate of the increase in property tax revenue should be used in calculating these benefits. Additionally, the levy limit doesn't exist for new development, just existing property that becomes more valuable.

Displacement concerns

If sites with households on the property are remediated, there will also be displacement concerns. Residents will need to be relocated to other locations while remediation occurs, however increased property values will result in an increase in resident assets.

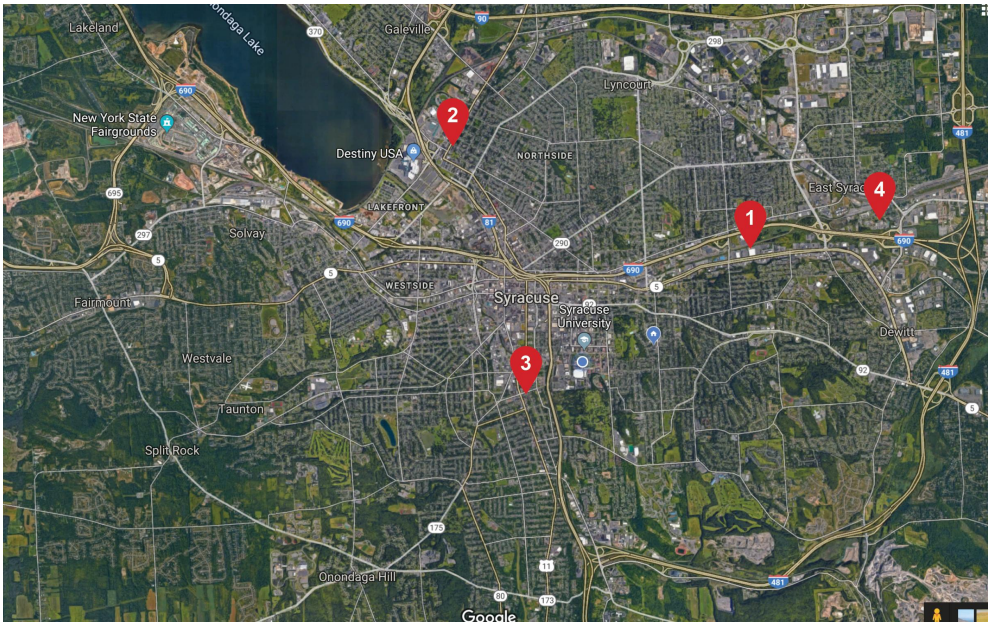
[21] Environmental Protection Agency, Types of Contaminated sites. (2019).

APPENDIX 1: Identified BOA site maps

Summary of Brownfields Program Accomplishment as of February 1, 2019

Performance Measure	FY2019 Targets	FY2019 Accomplishments	Cumulative Program Accomplishments
Properties Assessed	1,300	705	28,697
Properties Cleaned Up	130	98	1,816
Jobs Leveraged	7,000	3,475	144,800
Dollars Leveraged	$1.3 BN	$731.345 MN	$27.527 BN
Properties Made Ready for Reuse	684	426	7,262
ACRES Made Ready for Anticipated Reuse	5,500	3956	80,952

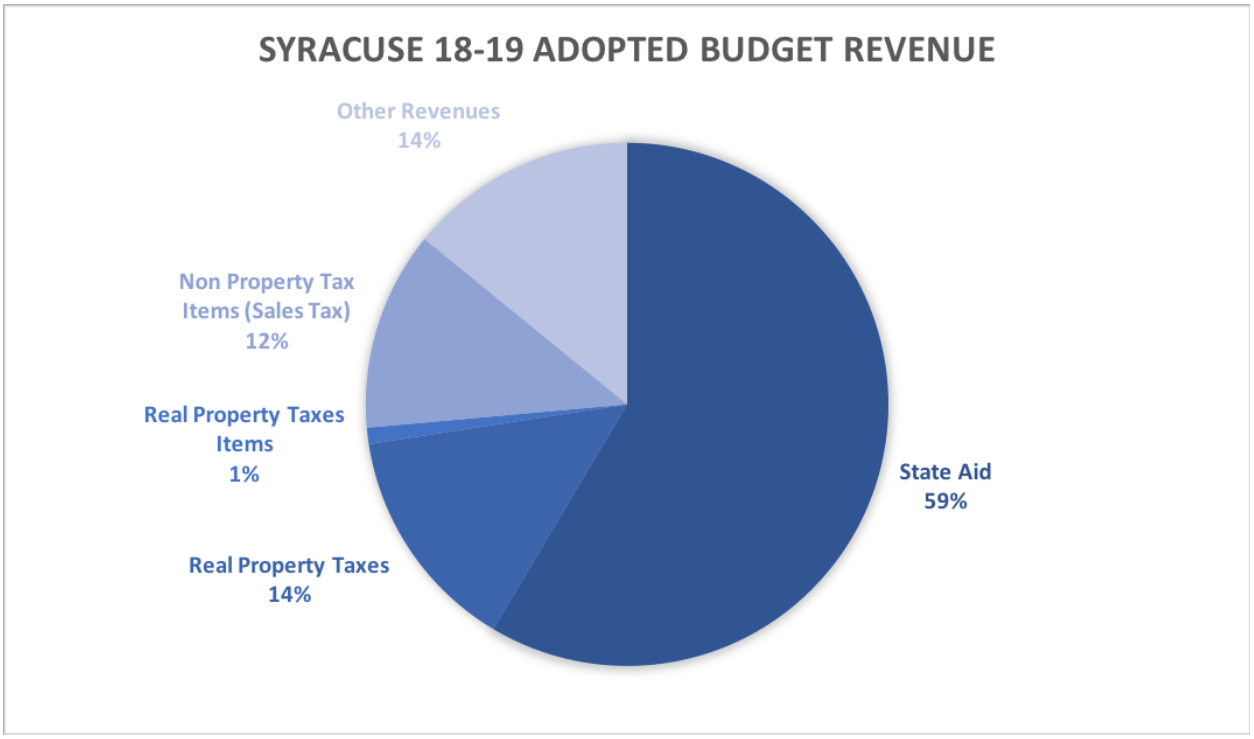
APPENDIX 2: Identified BOA site maps



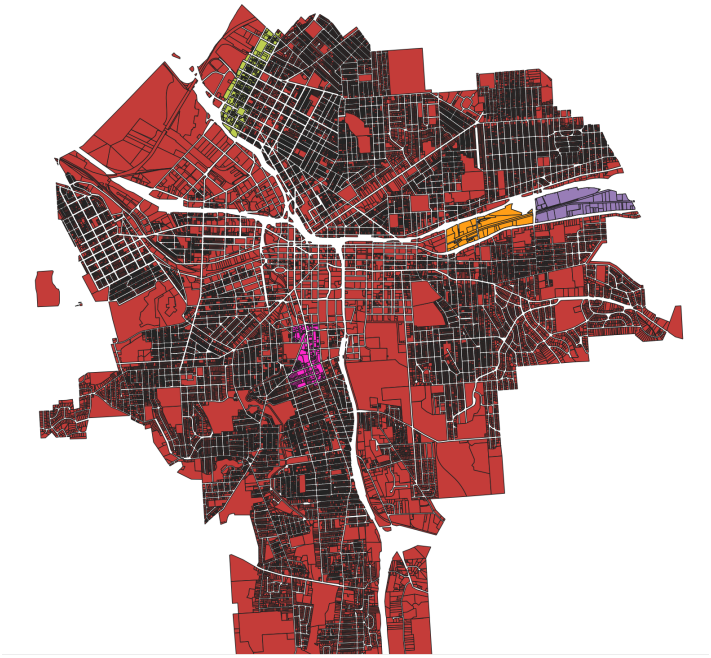
Four BOA sites located in Syracuse, NY

BOA sites (clockwise): Syracuse Erie Boulevard East BOA; Syracuse Hiawatha-Lodi BOA; Village of East Syracuse BOA; Syracuse South Salina St. BOA

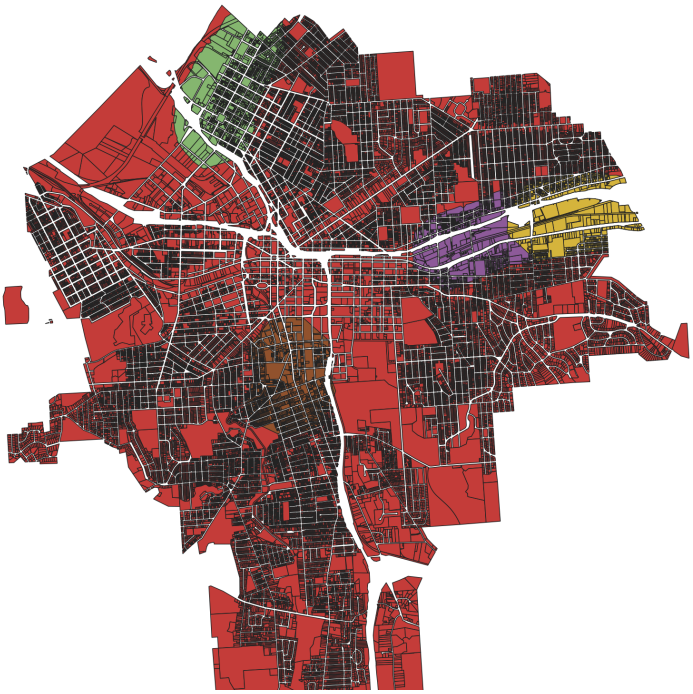
APPENDIX 3:


SYRACUSE 18-19 ADOPTED BUDGET REVENUE
Other Revenues
14%
Non Property Tax
Items (Sales Tax)
12%
Real Property Taxes
Items
1%
Real Property Taxes
14%
State Aid
59%

APPENDIX 4: ArcGIS maps (created by Chloe Coffman)



Four BOA sites in Syracuse, NY



Four BOA sites with 0.25 buffer zone in Syracuse, NY

ANNOTATED BIBLIOGRAPHY

Environmental Protection Agency. (2017a). Brownfield overview and definition. *EPA*. https://19january2017snapshot.epa.gov/brownfields/brownfield-overview-and-definition_.html

This site provides a thorough overview of brownfields and definitions including history of brownfield clean up pilot programs. Provides details on the 2002 Small Business Liability Relief and Brownfields Revitalization Act (the "Brownfields Law") which codified many of EPA's practices, policies and guidance

Environmental Protection Agency. (2017b). Types of Brownfields Grant Funding. *EPA*. https://19january2017snapshot.epa.gov/brownfields/types-brownfields-grant-funding_.html#tab-3

This site provides an overview of all the funding and grant opportunities provided by the EPA. Along with descriptions of each grant, there are detailed instructions for application processes and commonly asked questions and concerns about each funding option.

New York State. (2016). Brownfield Opportunity Areas. *Office of Planning and Development.*

This presentation was released by the NYS Office of Planning and Development in 2016 to give an overview of all existing BOA sites located throughout the state, as well as give updates about the progress made in site rehabilitation. It also features descriptions and diagrams of post-remediation site uses and development ideas.

New York Department of State. (n.d.). BOA Designation. *Office of Planning and Development.* Accessed 30 March 2019 from https://www.dos.ny.gov/opd/programs/brownFieldOpp/BOA designation_About.html

This site provides instructions and details on how to apply to be a Brownfield Opportunity Area and criteria for approval and details on the possible tax credits to lessen the burden for cost of assessment, clean up, and development. BOA designation facilitates the realization of the vision and goals laid out in the BOA Plan, to return brownfield sites to productive use, and to restore environmental quality.

Environmental Protection Agency. (2017c). Brownfields Road Map to Understanding Options for Site Investigation and Cleanup. *Office of Land and Emergency Management.*

The Brownfields Road Map to Understanding Options for Site Investigation and Cleanup, Sixth Edition, provides a general outline of the steps in the investigation and cleanup of Brownfields sites and introduces Brownfields stakeholders to the range of technologies and resources available to them. The Road Map provides valuable information for stakeholders typically involved in or affected by redevelopment of Brownfields sites, whether through public projects, private development or public-private partnerships.

Comprehensive and Audited Financial Reports for the City of Syracuse. (2018). *City of Syracuse*.

Each year the City of Syracuse's financial statements are audited and released to the public on the Department of Finance websites. These statements include information about capital flows in all departments in the city government.

2018-2019 Budget for the City of Syracuse. (2018). *City of Syracuse*.

Each year the City of Syracuse releases their budget which details the balanced budget plan for the coming year, alongside the capital flows from the previous year. This budget is created by the Mayor's office and the budget office in concert with all departments in the government.

EnergySage. (n.d.). Community solar: What is it? *Energy Sage.* (2019) https://www.energysage.com/solar/community-solar/community-solar-power-explained/

This site provides definitions and uses of a community solar. It provides a cost-benefit analysis, funding options, tax credits and current community solar projects being worked on across the nation.

New York State Economic Development Council. (n.d.). Brownfield Cleanup Program (BCP) tax credits. *NYSDEC.* https://www.nysedc.org/economic-incentive/brownfield-cleanup-program-bcp-tax-credits/

This site provides details on the various tax credits available to personal or corporate entities that choose to remediate a brownfield. The tax credits vary from personal to corporate use and can be applied towards property tax relief or insurance premiums.

Solar Power World. (2017). From brownfields to brightfields. *Solar Power World.* https://www.solarpowerworldonline.com/2017/03/from-brownfields-to-brightfields/

A news article that talks about why brownfields are attractive opportunities for solar development. Details the number of brightfields identified by the EPA that can be used as community solar farms.

Environmental Protection Agency. (n.d.). Types of Contaminated Sites. *EPA*. https://www.epa.gov/enforcement/types-contaminated-sites

There are numerous categories of contaminated land in the U.S. and so the EPA released this defined list of sites developers may encounter. This includes brownfield sites and Superfund sites, which are both addressed in this memo. The EPA then entails the proper processes for dealing with these land types.

Environmental Protection Agency. (n.d.). Superfund National Priorities List. *EPA*. https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1

There are hundreds of Superfund sites throughout the country that are on the National Priorities List (NPL). The EPA has created an interactive map on WebGIS that allows users to explore the Superfund sites throughout the country, learn more about their rehabilitation plans, and their current contamination level.

Sullivan, K.A. (2017). Brownfields Remediation: Impact on Local Residential Property Tax Revenue. *Journal of Environmental Assessment Policy and Management*, 19(3): 1-20.

This academic journal article analyzed the property tax revenue gained from 48 remediated sites which were funded by the EPA Brownfields Program. The scholars found that nearby property values increase 5-15% post-remediation and alongside local tax laws, assessment ratios, and property tax rates this resulted in between $29 million and $97 million

increase in property tax revenue in a single year across all 48 sites. This source is credible as it is in a peer reviewed journal and uses strong methodology. This is useful to the analysis here, with the caveat of the author stating that this methodology and analysis is most appropriate in states where properties are regularly reassessed every 2-5 years, which is not the case in Syracuse, and where there is not a tax cap, but there is a 2% cap in NYS.

Haninger, K., L. Ma, and C. Timmins. (2012). The Value of Brownfield Remediation. *Journal of the Association of Environmental and Resource Economists*, 4(1): 197-241.

Using data from 51 brownfield brownfield remediation projects across the country, investigators found that surrounding property values increase 5 percent to 11.6 percent post-remediation. This was an average benefit of more than $4 million per site, in terms of increased property value. The authors used a revealed preference approach to determine the impact of brownfields on nearby houses with data that is both high resolution and high frequency. This source is credible as it is in a peer reviewed journal, and uses strong methodology. These findings are in line with the Sullivan et al article, and is applicable to the analysis in this memo.

Schwarz, P.M., G.L. Gill, A. Hanning, and C.A. Cox. (2017). Estimating the effects of brownfields and brownfield remediation on property values in a new south city. *Contemporary Economic Policy,* 35(1): 143-164.

In Charlotte, NC, it was found that the properties with the most significant increase in value were within half a mile of the brownfield, and that there were more than $4 million unrealized benefits. The authors used a hedonic model to gather information about home values within this buffer zone around the brownfields in Charlotte to reach these conclusions. This source is credible as it is in a peer reviewed journal, and uses strong methodology. These findings are interesting in that they line up with similar studies, but are not generalizable outside of Charlotte.

Mihaescu, O. and R. vom Hofe. (2012). *Journal of Regional Analysis and Policy,* 42(3): 223-236.

In Cincinnati, OH, the closer a home is located to a brownfield, the greater level of depreciation is realized in the property value. Specifically, the change from 500 feet to 100 feet from a brownfield was associated with a decrease in property value by more than 10%, determined through a hedonic pricing model. This source is credible as it is in a peer reviewed journal, and uses strong methodology. These findings are interesting in that they line up with similar studies, but are not generalizable outside of Cincinnati, though the methodologies can be used in other cities.

De Sousa, C.A., C. Wu, and L.M. Westphal. (2009). Assessing the Effect of Publicly Assisted Brownfield Redevelopment on Surrounding Property Values. *Economic Development Quarterly*, 23(2): 95-110.

In Milwaukee, house values within 1500 feet of brownfields increased by 11.4% after brownfield remediation, while house values in Minneapolis property values only increased by 2.7%. Interestingly, the study did not find a negative impact on property values that were located near brownfields in Minneapolis but found a significant impact in Milwaukee. As a result, Milwaukee saw a greater net benefit as a result of remediation, relative to Minneapolis. These

findings are interesting in that they line up with similar studies, and the methodologies can be used in other cities.