PARCELS AND PEPPERS
SAVORY IDEAS FOR ADDRESSING VACANCY IN ST. LOUIS

LAR 646: COMMUNITY PLANNING AND DESIGN STUDIO, 2015
KANSAS STATE UNIVERSITY
COLLEGE OF ARCHITECTURE, PLANNING & DESIGN
DEPARTMENT OF LANDSCAPE ARCHITECTURE AND REGIONAL & COMMUNITY PLANNING
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Parcels and Peppers: Savory Ideas for Addressing Vacancy in St. Louis

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LAR 646: Community Planning and Design Studio, 2015
Kansas State University
College of Architecture, Planning & Design
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**Preface**
By Professors Blake Belanger and Howard Hahn
Page xix

**1 Introduction**
How to Use This Book | Overview, Background, Dilemmas, and Opportunities | Studio Intent and Methods | Framework for Action
By Tyler Swehla with contributions from Blake Belanger, Howard Hahn, Emily Jagels, and Jonathan Knight
Page 1

**2 Vacancy Typology**
Parcels | Buildings | Location Evaluation | Parcel Types
By Taylor Allen, Kaitlin Bernal, Timothy Kellams, Morgan Taylor, and Tyler Tucker
Page 41

**3 Repurposing Vacant Parcels**
Overview | Example Strategies | Encyclopedia of Ideas
By Abigail Fiala, Sarah Jackman, Jonathan Knight, Lindsay Stucki, and Laura Vallo
Page 89

**4 Collection, Connection, and Communication**
Mobile Application | Website | Paper Surveys and Maps | Social Media Campaign | Funding Opportunities
By Haley Armstrong, Conner Bruns, Katelyn Rose, and Kelsey Steward
Page 147

**5 Conclusions**
By Blake Belanger and Tyler Swehla
Page 203

**Appendix**
Critical Mapping & References | STL Vacancy Contacts | Marketing Materials
Page 207
Beginning in the 1950s, many American cities experienced significant population decline in their urban core. The reasons for decline include local, regional and federal policies, housing preferences, social issues, transportation options, economic trends, quality of public schools, and many other interrelated complex variables. While some downtown areas have experienced a significant renaissance over the past 10 or 20 years, others remain relatively empty in the middle, so-called “Shrinking Cities” or “Legacy Cities.” The City of St. Louis experienced a 62% decline in population from its peak in 1950, and now has one of the highest rates of property vacancy in the nation.

While crime rates soar and educational attainment lags in areas of high vacancy, there are reasons for hope. Old North, an emergent district in an otherwise struggling area of St. Louis has begun attracting new residents and business owners – reversing the trend of depopulation, even at a minuscule scale. The City of St. Louis and major investors are considering a massive riverfront redevelopment that could catalyze change in nearby vacancy-plagued neighborhoods. Individual change-makers in transitional districts like the Cherokee Street District are investing funds and sweat in improving the quality of life of their neighborhoods.

In the summer of 2015, 18 students led by Associate Professors Blake Belanger and Howard Hahn addressed vacancy dilemmas and opportunities for the City of St. Louis. The students, midway through a Master's of Landscape Architecture degree in the Department of Landscape Architecture and Regional & Community Planning at Kansas State University, were enrolled in LAR 646 Community Planning and Design Studio and seminar. We worked with K-State's Technical Assistance for Brownfields Communities (TAB), the United States Environmental Protection Agency (EPA), the United States Department of Housing and Urban Development (HUD) and the City of St. Louis to address vacant urban property. The federal agencies are part of the White House Strong Cities, Strong Communities Initiative (SC2), which the Obama Administration tasked with providing technical advice and expertise to seven cities with the intent of regaining economic footing.

In this book you will find information, maps, neighborhood tools, planning tools, communication tools, mild ideas, spicy ideas, and ways to put it all together. Throughout the intense 8-week summer semester, we learned a lot about St. Louis and the challenges of urban vacancy, and we worked hard and thought creatively about how we could make a contribution. We hope the work contained herein will be inspirational to residents, planners, scholars, activists, non-profits, and anyone who cares about making a difference in St. Louis.
INTRODUCTION: HOW TO USE THIS BOOK

This book is about ideas. Our intent is to contribute to the long-standing dialogue about the challenges of vacant land and abandoned buildings in the City of St Louis. We are (1) providing ideas for understanding vacancy issues, (2) offering mild, hot, and spicy ideas for repurposing vacant land, and (3) suggesting ideas for reaching out to the people of St Louis. We are also providing five tools for action. Some tools are well-suited for residents in general, with easy-to-use formats and straightforward explanations. More sophisticated tools are geared for professionals, such as city planners, land consultants, and developers. Anyone can use any of the tools.

We prepared this book to inspire a wide variety of people, who might use it in different ways. Whether you are a resident wanting to improve a vacant lot near your house, or a city official working to transform the entire city, there are ways you can use this book. You don’t need to read the entire book to use the tools we provided. This section, “How to use this book,” is your guide to tailoring our work to meet your needs.
Grassroots Tools
These tools empower residents and individual change-makers. If you are trying to figure out what to do with a vacant parcel in your neighborhood, begin with the Vacancy Worksheet or the Encyclopedia of Ideas.

Neighborhood Tools
These tools give neighborhood leaders and non-profit organizations guidance to gain knowledge, organize, and make decisions about their community. The Vacancy Worksheet, the Encyclopedia of Ideas, and Outreach and Communication tools are for you.

Planning and Development Tools
These tools help city staff, government officials, and professional consultants communicate to wide audiences, gather much-needed detailed data, and match suitable vacant land-use strategies with appropriate locations. See Outreach and Communication, Information Collection and Vacancy Evaluation Framework.

Through this book, we hope to contribute to the conversation about improving vacancy conditions in St. Louis. We hope our ideas will introduce fresh optimistic perspectives about vacant land and abandoned buildings. We hope to inspire community leaders, nonprofit organizations, entrepreneurs, local change-makers, researchers, and residents to take action.

There are five tools that can be used individually or together, in whichever order works best for your situation.

**Explore ideas for repurposing vacant parcels**

Section 3.3: Encyclopedia of Brainstormed Strategies
Use this resource to envision new possibilities. It’s basically a menu of different ways to repurpose vacant areas, from a single lot to entire districts. It’s organized on a heat scale, from mild ideas to spicy visions.

**Find appropriate ideas for repurposing a vacant lot**

Section 2.0: Vacancy Worksheet
Use this tool to better understand the condition of one or more vacant parcels, and find ideas specific to the opportunities present. The worksheet can be completed by anyone who has access to the parcel. We provided images and maps to help you answer worksheet questions.
1.1 Introduction: How to Use This Book

**Share ideas or collect people’s ideas**

Sections 4.2: Website & 4.4: Social Media Campaign
Use this tool for connecting people. Here we provide ideas for creating a community-based website and initiating a social media campaign.

**Consider some ways of gathering information about vacant land**

Sections 4.1: Mobile Application & 4.3: Paper Surveys and Maps
Use this tool to help the city gather much-needed information about the condition of empty lots and abandoned buildings. We provide recommendations for mobile app and/or paper surveys that can help planners make better decisions.

**Look at the big picture and use a sophisticated framework**

Section 1.4: Framework for Action
Use this tool to match development goals with vacant land locations. The framework allows planners to include community input when evaluating alternative scenarios.
INTRODUCTION: OVERVIEW, BACKGROUND, DILEMMAS, AND OPPORTUNITIES

Since 1950, the population of St. Louis has declined 63% from a peak population of 856,796, losing 128,000 residents in the 1970s alone (Ihnen, 2014). Today, 318,416 residents populate the city, creating a large void in the city’s footprint (Quickfacts.census.gov, 2015). Correspondingly, there are nearly 25,000 vacant parcels (empty lots + lots with abandoned buildings) in the City of St. Louis (PDA 2015). Approximately, 47% of these vacant parcels are owned by various departments of the City, and the rest are privately owned. Many previously dense neighborhoods are now sparsely populated, left to deteriorate.

The reasons for decline include local, regional and federal policies, housing preferences, social issues, transportation options, economic trends, quality of public schools, and many other interrelated and complex variables. While some downtown areas have experienced a significant renaissance over the past 10 or 20 years, other areas remain relatively empty. St. Louis joins other “Shrinking Cities.”

This chapter provides a brief overview of the background dilemmas and opportunities related to vacancy which informed the studio work.
Vacancy Dilemmas

Vacancy is a symptom of changing economic, social, and cultural conditions where people have undergone hardship or have simply been attracted elsewhere to follow opportunities. As lower market demand ensues, less resources become available as capital and investment diminish, and many attendant problems set in.

Vacancy occurs throughout the City of St. Louis to some degree, but vacancy mapping shows the biggest concentrations in the north and southeast (Figure 1.2.1).

The history of this decline has been well documented by others in books such as Mapping Decline: St. Louis and the Fate of the American City (Gordon 2008) and St. Louis Metromorphosis: Past Trends and Future Directions (Baybeck and Jones, eds, 2004). The issues of this decline are well known and will not be repeated in depth. However, vacant areas in St. Louis are typically characterized by:

- **Low Income and Few Local Employment Opportunities**: There is a comparative lack of employment and revenue generating land uses in high vacancy areas. In the north half of the city for example, 90% of the residents are forced to travel outside the area for employment (Appendix, Maps 7 & 8). Many of these residents do not own personal vehicles (U.S. Census Bureau 2011).
- **Funding and Investment**: Compared to other cities in the United States, particularly “shrinking cities”, St. Louis roughly resides in the lower third relative to long-term debt per capita—a good thing. Long-term public debt per St. Louis resident is about $3,300 (Hahn 2015). However, relative to increasing debt at federal, state, and local levels, public assistance is limited compared to the magnitude of public needs found in areas of high vacancy and blight. Areas of vacancy moving toward blight are also unattractive to significant private investment where risk is perceived to be high. The local government is also resistive to large-scale “urban renewal” after a history of well-intentioned, but failed projects.
- **Crime**: Crime (including violent crime) is a significant factor in St. Louis. It affects the quality of life, deters action and investment at nearly every scale of planning, and affects vacancy remediation strategies. Regardless of the direction of potential cause-effect relationships, safer neighborhoods and increased feelings of security are an essential foundation for attracting investment and redevelopment/rehabilitation. This is especially true for areas of high vacancy and surroundings.
- **Ongoing Infrastructure Costs**: As areas vacate, aging infrastructure is supporting fewer and fewer residents. Some of these infrastructure systems are nearing their service life and replacement or operation is questionable for some locations.

Vacancy Opportunities

Despite some major challenges, the City of St. Louis as a whole offers major urban and natural amenities that are potentially attractive to new residents:

- **World-class river (and new riverfront development under consideration)**
- **Jefferson National Expansion Memorial (managed by the National Park Service)**
- **Historic Forest Park, famous botanic gardens, and many other nature/recreation oriented amenities**
- **Many energized mixed use and entertainment districts which attract diverse populations**

As more investment flows into the city, the greater the opportunity to repurpose vacant parcels.

Other recognized opportunities (to name a few) include:

- **Smaller-Scale Parcel Opportunity Sites**: Single, or small groupings of vacant parcels provide affordable opportunity sites for neighborhood or grassroots organizations dedicated to implementing projects that improve existing conditions, or contribute to redevelopment that is sensitive to local residents.
• **Green Infrastructure Potential.** St. Louis is in the process of separating stormwater from sanitary sewer water. Vacant parcels considered in linear patterns, or aggregated, can be used for daylighting once visible streams and creeks as well as detaining stormwater.

• **Large Vacant Parcel Inventory:** Although the large inventory of vacant parcels owned by the LCRA, LRA and private entities imposes on-going maintenance costs, fewer owners also make it easier to assemble parcel tracts for larger-scale redevelopment with less complex negotiations.

• **Areas of High Redevelopment Potential:** There are many prime areas in St. Louis that are undergoing huge investment infusions, or are being planned as catalysts for new investment. Lower cost vacant parcels adjacent to these high market value areas are attractive to other developers looking to buy low to make redevelopment financially feasible. The higher the vacancy, the lower the land clearance costs and need to relocate residents.

• **Neighborhood Ties:** Many neighborhoods in high-vacancy areas may have historical significance, and the current remaining residents often have strong social-cultural ties contributing to a strong sense of community amidst the challenges. For newer residents, despite the conditions, these neighborhoods are affordable. Even so, changes from the new norm are needed if continued decline is to be stabilized and reversed.

• **Historic Structures and Districts:** St. Louis contains 290 National Register Historic Sites, 80 National Historic Districts, 8 certified Local Historic Districts, and one uncertified Local Historic District (PDA 2014). These designations help ensure that the rich history of St. Louis is preserved. Some locally conducted studies show that historic preservation has created thousands of jobs and has had a positive impact on the economy (Coffin et al., 2010). Most historic districts in neighborhoods impacted by high vacancy are National Register Historic Districts, and rehabilitation incentives are often available to residents.

**A Look Forward Relative to Vacancy**

• **Need for Change:** For neighborhood/ward representatives and residents assisted by city planners, some relevant questions are: What is the clearest view of existing conditions? What changes might be appropriate and worth considering? How much change can be tolerated? What are the costs and benefits? What strategies, applied at what scale, could translate into positive change? How much self-determination and choice will remain? If relocation assistance is available, where would I move? Is the new location affordable and the conditions at least comparable to where I am currently living? How much do I want to be personally involved in directing my neighborhood’s destiny?

**Vacant Parcel Definition**

The City of St. Louis Planning and Urban Design Agency defines a vacant parcel as:

“Vacant parcel” = Vacant (empty) lot or a lot containing an abandoned building

Since the vacant parcel definition is a more inclusive term, all work presented in this book will use this definition.

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Figure 1.2.2: Non-residential Vacant Building Statistics. Vacancy includes more than just residential buildings. (Allen and Shy 2015)

Figure 1.2.3: St. Louis Parks. St. Louis has significant room for park growth and new park developments. (Swehla and Rose 2015)
INTRODUCTION:
STUDIO INTENT AND METHODS

Our studio focused on St. Louis and the overall intent is to help residents and decision-makers better understand conditions of vacancy, and to suggest potential strategies and ideas for repurposing vacant parcels. We envision this document can be applied in a variety of ways, from influencing policy, to inspiring grassroots actions. We hope this book that can be used by many different people involved with vacancy issues.

This studio also provided opportunities for us to learn more about city-scale issues and working with multiple groups, develop connections between vacancy types and specific enhancement/redevelopment ideas in a contextual framework, and explore the creation of infographics and maps to document the issues of vacancy and characteristics of a city.

Our methods included background research, critical mapping, assisting facilitation of a stakeholder’s workshop, an ideation exercise, development of a “Spice Scale” to accent potential changes, developing/compiling many ideas, and finally documenting our work in a digital and hard-copy volume.
Our Studio…
This work is associated with the LAR 646 Community Planning and Design Studio and supporting seminar led by Associate Professors Blake Belanger and Howard Hahn from Kansas State University, Department of Landscape Architecture and Regional & Community Planning (LARCP). The intensive 8-week studio is comprised of 18 mid-level landscape architecture students who are entering graduate studies.

The studio, offering an outside perspective, assisted the City of St. Louis Planning and Urban Design Agency (PDA), “Strong Cities, Strong Communities” (SC2) team, and the Technical Assistance to Brownfields (TAB) team. This work is centered around the evaluation of vacant parcels for the purposes of management, enhancement, or potential reuse that is sensitive to residents’ concerns.

<table>
<thead>
<tr>
<th>Studio Goals and Objectives</th>
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<tbody>
<tr>
<td><strong>G1)</strong> Assist the City of St. Louis Planning and Urban Design Agency, SC2 team, and TAB team in the planning and facilitation of Stakeholder Workshop #2.</td>
</tr>
<tr>
<td><strong>G2)</strong> Develop extended detail and compelling graphics in the form of maps, info-graphics, classification/typology schemes, strategy photomontages and prototypes, data collection methods, and illustrations supporting concepts and ideas to be communicated to a variety of audiences.</td>
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<td><strong>G3)</strong> Provide an outside perspective to vacancy issues in the City of St. Louis and propose organizational ideas, and conceptual imagery and strategy that may lie outside local agency and stakeholder constraints.</td>
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<td><strong>G4)</strong> Conceptualize how thousands of vacant buildings and parcels within the City of St. Louis can be assessed and evaluated for enhancement of existing conditions, or redeveloped relative to the adopted Strategic Land Use Plan (SLUP).</td>
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<tr>
<td>O1) Outline how a clear and current baseline assessment of building and parcel vacancy could be organized and synthesized relative to numbers/density, distribution, defining characteristics, conditions, and location factors;</td>
</tr>
<tr>
<td>O2) Create a vacancy typology to allow easier matching of parcel types with ideas for enhancement or redevelopment relative to acceptable change;</td>
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<tr>
<td>O3) Compile a list of ideas to support parcel strategies and develop several ideas in more detail;</td>
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<tr>
<td>O4) Provide a means to evaluate strategy options to arrive at a preferred option(s);</td>
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<td>O5) Identify factors to consider when planning implementation strategies; and</td>
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<tr>
<td>O6) Identify and outline methods for data/opinion collection and communications relative to vacancy field conditions and public opinion to inform planning and let community voices be heard.</td>
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Methods

**Background Research**
During the informative stages of this studio effort, we focused on researching St. Louis’ historical and current conditions related to shrinking cities and the many issues surrounding vacancy. This was informed through seminar readings. These readings were grouped under the categories of:

- Decline, Perspective, and Re(form)s
- Social and Urban Ecosystem Dimensions
- Rejuvenation

In addition, our studio examined data provided through the City’s website, GIS data provided by the PDA, and research into programs and initiatives being led by many city departments and outside non-profit groups.

**Info-Graphic Development**
A process of communicating information about the city was devised through a series of info-graphics research exercises. Each info-graphics was developed as a visual aid to express qualities of the city. The info-graphics spanned a wide variety of topics: employment and income, demographics, walkability and health, race and culture in urban areas, vacancy ownership, and
green infrastructure to name just a few. These exercises were a large part of our investigation, but also provided opportunities to refine graphic representation skills.

**Critical Mapping**

Critical mapping is a cross-mapping exercise where spatial data is analyzed, synthesized, and graphically represented to generate classification, correlation, comparative, evaluation, and strategy maps. Mapping helped us focus, visualize and understand city-wide patterns and connections, and generally informed our studio work. The maps revealed themes involving social infrastructure, vacancy patterns, green space, development potential, historic districts, and more. This extensive foundation of critical maps created a more cohesive understanding of dilemmas and opportunities associated with vacancy, and helped direct ideas how vacant parcels might be repurposed. A more detailed explanation of the critical mapping process, as well as a compendium of the maps, is found in the Appendix.

**Collection of Stakeholder Input**

The LAR 646 Studio directly supported and contributed to a Strong Cities, Strong Communities (SC2) Vacancy Workshop held in the HUD field office in downtown St. Louis. The morning portion of the workshop was a series of presentations from the St. Louis Planning and Urban Design Agency and SC2 team members. In the afternoon, the TAB team led the participation portion of the workshop and the LAR 646 Studio facilitated three breakout sessions centered around responses to vacancy and blight considered over 1-year, 5-year, and 20-year time frames. Our Studio served as table leaders for small group discussions, collected and synthesized responses, and facilitated a final “vote by spending STL coinage” exercise. More details and results of this meeting are found later in this document section.

**Idea Generation and Documentation**

During the final phase of the studio representing five weeks, we expressed our areas of interest (in rank order) and were then divided into teams for the purpose of developing and documenting:

- Classification schemes and a synthesized typology for representing vacant parcels;
- Ideas supporting strategies for potentially repurposing vacant parcels; and
- Methods for efficiently gathering field data related to vacant parcels and investigating electronic social media forms to encourage public discussion/input.

One team was responsible for developing documentation standards, graphic themes, and coordinated production of

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**Figure 1.3.1: Formulation of Vacancy Typology**

Student group formulates vacant lot, vacant building, vacancy pattern, and context classifications to arrive at a typology for vacancy. (LaBarbara James Wigfall 2015)

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The summary studio book. Studio professors, serving as editors, contributed to the Introduction and Conclusion, developed a framework for synthesizing the collection of student work as a “Vacancy Evaluation Framework”, and provided general review.

**The Spice Scale**

The St. Louis city boundary resembles a chili pepper (see graphic opposite the Table of Contents), which inspired us to frame our ideas for repurposing vacant land along a “spiciness scale.” Mild ideas are relatively inexpensive, quick to implement, involve only one or two parcels, and have few regulatory obstacles. Mild ideas, such as art installations, playgrounds, and community gardens, would help to improve the quality of life in struggling neighborhoods and are most sensitive to existing local culture. Next on the heat index, hot ideas require moderate investment, rely upon external influences (such as new Metrolink stops), and often involve groups of vacant parcels. Hot ideas would transform districts of the city and introduce new conditions such as ecological, agricultural, or employment uses. Finally, spicy ideas are ambitious visions that would transform large areas of the city and are significant catalysts for growth. Some – like introducing a Major League Soccer (MLS) stadium and regional soccer complex, or expanding the proposed riverfront development westward – would take years to implement, and would require heavy investment, strong external support, significant parcel consolidation, and regulatory review. We are providing ideas across a range of heat levels in order to provide alternatives that are implementable at various scales, require varying investment levels, and are driven by many types of urban actors.
Strong Cities, Strong Communities (SC2) Meeting and Workshop
June 9, 2015

Location: U.S. Dept. of Housing and Urban Development - St. Louis Field Office, Young Fed. Building, St. Louis, MO

Participants: City of St. Louis Planning and Urban Design Agency (Don Roe, Matt Mourning); SC2 Team (Charlie Foley & Dave Doyle, EPA; Keven Muesenfechter, HUD; Cory Kokko, CDC); TAB (Blase Leven); KSU LAR 646 Community Planning & Design Studio (Blake Belanger, Howard Hahn, 18 students); and other representatives (see Appendix)

Overview
On June 9th 2015, LAR 646 Studio was invited to support the SC2 team in a meeting and workshop of select community stakeholders. The meeting featured several presentations by City and SC2 team representatives:

- “Promise Zones” - James Heard
- “Resilient Cities” - Don Roe (PDA)
- EPA TA Report - Dave Doyle (EPA)
- “Designing Healthy Communities” - Cory Kokko (CDC)

In the afternoon workshop, headed by Blase Leven (KSU) of Technical Assistance to Brownfields (TAB) and supported by the LAR 646 Studio of Kansas State University, workshop participants were asked to provide input through three breakout sessions. The first session focused on reviewing a draft vision statement and objectives developed at a previous workshop meeting held on March 10. Breakout Session 2 asked participants to think about what goals they felt were important for St. Louis to achieve in 1-, 5-, and 20-year time frames. Breakout Session 3 asked participants how the different organizations they represented could help achieve the goals identified in the prior breakout session. There were four representative groups who provided input on the goals. LAR 646 students served as table leaders for small group discussions, and collected and synthesized responses.

As a means to solicit input for relative priorities related to the 1-, 5-, and 20-year goals, LAR 646 Studio devised and prepared a “vote by spending STL coinage” exercise. Workshop participants were given 5 nickels, 4 dimes, and 3 quarters that were temporarily altered as “STL coinage”. Participants were then asked to “vote” by depositing their coins in jars individually labeled with 1-, 5-, or 20-year goals which they felt needed the most attention (the jars were opaque to prevent a view of votes already cast by others). Voting results were then quickly tabulated as a bar graph and presented to the participants. The top choice for a 1-year goal was “Change of mind set (education)”. The top choice for a 5-year goal was “Implementation of watershed plans”. The top choice for a 20-year goal was “A walkable, transit-oriented city”. Complete voting results are shown in Figure 1.3.5.

Figure 1.3.2: Breakout Session Discussion Group A group of workshop participants, facilitated by LAR 646 students (center), discuss city-wide goals relative to 1-, 5-, and 20-year time frames. (Knight 2015)

Figure 1.3.3: Voting with STL Coinage Workshop participants vote on 1-year, 5-year, and 20-year goals perceived as needing most attention. (Hahn 2015)
Breakout Session 1 – Review of Vision Statement and Objectives

June 9 Workshop participants suggested the following revisions to the original Mission Statement, Goals, and Objectives developed in the March 10 Workshop:

Suggested revisions to Vision Statement
- Shorten up, move second and third part to objectives, address citizens directly
- Add “green-space”/“breathable” space into first part of vision statement (best places for people to thrive)

Suggested revisions to Goals
- Separate goals into two parts: Broad & Specific
- Make goals more specific to St. Louis and feasible
- Have a larger fund for rehabilitation of neighborhoods
- Market the city to bring more people in and created a more accurate idea to outsiders of what all St. Louis has to offer.

Suggested revisions to Objectives
- Objectives: Include all people – the government and local citizens are extremely diverse
- Add a statement about publicizing opportunities to the public about incentives and tax breaks that the national and local government already have in place
- Bring in the second and third part from vision statement as points

Vision Statement (revised on 07.15.15)
“The St. Louis Vacancy and Blight Plan will provide a framework for citizens, partnerships with the City, neighborhoods, developers, philanthropic institutions and others, to create vibrant and thriving places to live, work, and recreate— including open spaces—by re-using vacant properties. Citizens, leaders, and other partners will participate and help create new places that preserve the City’s heritage, that they are proud of, and that they deserve!”

Goals (revised 07.15.15)
Broad Goals
- Develop priorities in conjunction with economic development, green infrastructure and other existing plans
- Preserve historic structures and areas when possible
- Eliminate barriers to entry to home/occupancy
- “Middle neighborhoods” will be an area of focus

Site-Specific Goals
- Develop supportive local & State codes, regulations, and enforcement (including a consistent approach)
- Market the city to bring more people in and create a more accurate idea to outsiders of what all St. Louis has to offer.
- Develop good relocation / redevelopment density strategies
- Create a larger fund for rehabilitation of neighborhoods.

Objectives (revised 07.15.15)
- Build on and coordinate existing City capabilities and plans to create a comprehensive approach to prevent blight, and to identify, maintain, demolish and transfer ownership of vacant/abandoned properties, to facilitate feasible, sustainable interim and long-term multi-uses.
- Establish a managing entity, with multi-stakeholder advisory board, to coordinate Vacancy and Blight Plan responsibilities between City departments & other participating organizations.
- Identify adequate private and public funding for vacant property management, demolition, infrastructure improvements, and for the managing entity/participating City departments and organizations.
- Identify strategy to address community needs and weak market demand, to include the right mix of land uses to attract commerce, residents, and visitors.
- Coordinate and build on the City’s existing areas of strengths, including existing organizations who already track and manage vacant properties, and effective approaches to vacancy prevention and nuisance ordinances, low cost of demolition, and existing landholding organizations.
- Consider diverse housing types, unique infrastructure, retail and business, ecological corridors, community gardens, education, health care, walkable areas, and other interim and sustainable uses.
- Address community needs, based on what is determined feasible from neighborhood and other stakeholder input, and from economic and environmental evaluations.
- Publicize opportunities to the public about incentives and tax breaks that the national and local governments already have in place.
**Breakout Session 2 – “Where do you see your city in 1, 5, and 20 years?”**

**1-Year Time frame**
- Complete inventory of vacant land
- Identify watersheds at a neighborhood scale
- Land bank policy reform
- Find temporary uses for vacant lots
- Get a building stabilization bond
- Educate the public -to change the current mindset
- Citizen feedback / investment / encourage grassroots efforts

**5-Year Time frame**
- Implementation of watershed plans
- Neighborhood focused strategies
- Improved walking, bicycling, and bus line
- Improve urban infrastructure (sewers and amenity)
- Create a comprehensive master plan for city

**20-Year Time frame**
- Have a green ecological corridor that could have conservation areas along it
- Have a functioning real estate market
- Metrolink expansion and reconnection
- Walkable, transit oriented city
- Model for reduced density living

**Breakout Session 3 – What can different agencies do to help? (community official feedback)**

**St. Louis Development Corporation**
**1-Year Time frame**
- Prepare legislation
- Maintenance of vacant parcels and buildings
- Fight to retain historic tax credit
- Building of stabilization fund

**5-Year Time frame**
- Provide input to MSD on urban storm water projects
- Plan and incentivize a walkable city

**20-Year Time frame**
- Improve city to county relationships
- Facilitate Metrolink expansion

**Missouri Department of Conservation**
**1-, 5-, & 20-Year Time frames**
- Financial resources (short and long term)
- Technical conservation expertise
- Neighborhood outreach
- Publicize a successful major urban conservation project in St. Louis (beginning to end)

**Urban Vitality and Ecology Initiative** (Initiative of the Mayor’s Office via the Office of Sustainability)
**1-Year Time frame**
- Continue active partnership with MSD

**20-Year Time frame**
- Demonstration projects for large-scale green infrastructure
- Push forward large scale green space transformation projects with Missouri Department of Conservation

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**Figure 1.3.4: Goal Discussions** Workshop participants discuss goals and time frames related to vacancy. *(Knight 2015)*
Complete Voting Results:
Goals Perceived to Need the Most Attention in 1-Year, 5-Year, & 20-Year Time frames

1 YEAR

- complete inventory of vacant land: $0.65
- identify watersheds at neighborhood scale: $0.25
- land bank policy reform: $0.80
- temporary uses for vacant lots: $0.20
- building stabilization bond issues: $0.90
- change of mindset: $1.35
- citizen feedback/involvement: $0.70

5 YEAR

- implementation of watershed plans: $1.00
- neighborhood focused strategy: $0.60
- improved walking, bicycling, and bus lanes: $0.20
- urban infrastructure (sewer and amenity): $0.60
- master plan for city: $0.40

20 YEAR

- green ecological corridor: $0.30
- functioning real estate market: $0.00
- Metro-link expansion and reconnection: $1.30
- green space conservation area: $1.10
- walkable, transit oriented city: $1.70
- model for reduced density living: $1.35

Graphs represent the views of representatives from the following groups: Mayors Office Urban Vitality and Ecology “Initiative”, the City of St. Louis Planning and Urban Design Agency (PDA), Cultural Resources Office (part of PDA), Affordable Housing Commission, Metropolitan Sewer District (MSD), Missouri Department of Conservation, and the St. Louis Development Corporation.

Figure 1.3.5: Voting Results  Tabulated results of voting exercise asking workshop participants which 1-, 5-, and 20-year goals need the most attention. (Swehla 2015 based on data tabulations by Knight 2015)
Parcel vacancy, which can lead to blight, makes living conditions more difficult for the remaining residents and businesses. For the City of St. Louis, the costs to carry and maintain a growing inventory of vacant parcels also consumes city resources which could be better directed to the benefit of citizens. How can the city more effectively reduce the vacant building/parcel inventory?

This section highlights a conceptual framework for integrating vacant parcel data, typologies, and strategies for the purpose of evaluating enhancement and redevelopment ideas leading to action. The framework will facilitate better coordination between multiple public agencies who are analyzing and managing a large inventory of vacant buildings and parcels, and private groups who are contributing to isolated improvements. The overall intent is to define a conceptual process to efficiently and systematically match a large number of vacant parcels with wide-ranging ideas aimed at improving or redeveloping declining areas. Many underlying issues are beyond the reach of physical planning and development; nonetheless some measure of improvement is possible.

The remaining chapters of this book will expound upon framework components in greater detail.
Need for Vacancy Evaluation Framework
As of 2015 (Q1), the vacancy breakdown for the City of St. Louis is as follows (PDA 2015):

- Empty Lots: 17,881 (9,393 privately owned; 8,488 owned by LCRA/LRA/MSD)
- Lots with abandoned buildings: 6,905 (3,797 privately owned; 3,108 owned by LCRA/LRA)
- Total Vacant Parcels (vacant lots + lots with abandoned buildings): 24,786

With this many vacant lots and buildings, there are many potential stakeholders involved who are focused on different issues and priorities:

- Residents and businesses who have strong community, cultural or historical ties to areas undergoing decline and may not want to see widespread land clearance or gentrification;
- The Planning and Urban Design Agency (PDA) who is focused on strategic long range planning and development while balancing stakeholder concerns;
- The PDA Cultural Resources Office and St. Louis Preservation Board focused on preserving the city’s historic and cultural heritage;
- The Land Clearance for Redevelopment Authority (LCRA) focused on eliminating or preventing blight;
- The Land Reutilization Authority (LRA) who has ongoing vacant parcel management and maintenance costs while trying to reduce the vacant parcel inventory by locating willing parcel buyers;
- Building Division who handles building inspections, permitting, and demolitions. The department also conducts an annual vacant building survey;
- The Public Utilities Department and private utility companies (Ameren, Laclede) attempting to maintain infrastructure and provide utility services to fewer and fewer customers in high vacancy areas;
- The Metropolitan Sewer District (MSD) is the regional sewer district that spans the City-County line and is involved in a number of initiatives that deal with re-use of vacant land, specifically uses that deal in stormwater retention/flood control;
- Numerous non-profit organizations like OneSTL, Old North St. Louis Restoration Group, and many other groups involved with local improvement projects; &
- People and investors interested in purchasing parcels at a variety of scales and locations.

Considering the large number of vacant parcels and stakeholders involved, a framework tool is needed to help guide the vacant parcel evaluation process leading to eventual action.

Figure 1.4.1: Conceptual Vacancy Evaluation Framework (simplified) This framework provides a systematic process for vacant parcel assessment, strategy/idea evaluation, and coordinating agencies and partners who have a collective voice. (Hahn 2015)
Framework Overview & Goals
The proposed framework incorporates many components and processes that may already be in place to some degree, but clearly illustrates potential connections and how the evaluation process flows. The most significant portion is how parcel assessment data (mostly provided through Geo St. Louis) combined with vacancy pattern and location factors could be simplified into five vacancy “types”. In turn, these “types” could be cross-matched to one or more potential strategies and idea classes. The first portion of the framework could be particularly useful if automated to prepare parcel metrics across thousands of parcels for city-wide scenario forecasting relative to the Strategic Land Use Plan (SLUP).

Goals
- Integrate data collection, parcel characteristics, typing, and strategies
- Help ensure that multiple voices are heard during the option evaluation phase
- Support automated metrics

Process Steps
The following steps shown in Figure 1.4.1 (and in more detail in Figure 1.4.2) guide the process:

Step 1 - Baseline Vacancy Assessment: This step relies on building and parcel data available through Geo St. Louis and supplemented with additional field data to be collected (see Chapter 4). For a small number of small-sized parcels, enhancement or redevelopment ideas can be immediately identified, evaluated, and applied since overall change/investment is comparatively small and can be considered on a parcel-by-parcel basis. If a larger number of parcels is being considered within the same general area, then vacancy density and distribution factors come into account. Finally, locational factors are considered.

In general, as the number of parcels being considered increases (and potential land use changes might be involved), the vacancy density/distribution and location factors become more important. Similar to suitability mapping, classification schemes can then be used to characterize these factors in order to reclassify them into “low”, “moderate”, and “high” ratings for comparison or weighted aggregation. All of these factors in total constitute redevelopment potential. When parcel groups are compared across various geographic locations, the results should be similar to the Market Value Analysis (MVA) map where market value implicitly reflects these various factors.

Step 2 – Vacancy Typology: The purpose of this step is to categorize diverse vacant parcels into “types” having similar prioritized characteristics which might best support certain enhancement/redevelopment ideas. This is a simplification process to allow easier parcel to strategy/idea matching. The prioritized criteria defining each type is a first attempt that can be modified after the framework is tested. The criteria varies between the types, depending on the priority of parcel assessment factors being considered. For “typing” a few parcels, a subjective evaluation can simply be made as to which type seems to be the best fit according to the criteria. For a large number of parcels, the “typing” could be automated based on a scoring system of re-classed parcel factors (Step 1).

Step 3 – Strategy Options: This step is organized by three primary strategies which describe how vacant parcels can be treated. These strategies are ordered by the intensity of change/investment required (“spiciness”-see Chapter 3). Under each strategy, typical SLUP categories are listed which might support the strategy. Next, a list of Enhancement/Redevelopment Idea Classes are shown which also support the strategy. Figure 1.4.3 expounds upon these idea classes by listing typical issues/questions, and providing specific treatment ideas and implemented examples.

Step 4 – Option Evaluation: After one or more Vacant Parcel Type-to-Idea matches have been made, each option is evaluated against 11 criteria. This step involves much eventual dialogue between various stakeholders, particularly for Strategies 2 & 3 which might involve resident/business relocation, parcel clearing, and more intensive investment/development. From the PDA’s perspective, this evaluation is partially made through the lens of the Strategic Land Use Plan (SLUP) in terms of SLUP category compatibility, potential category modification, or resolving categories into finer levels of detail. This evaluation process also considers timeframes, projected metrics, and community input/discussion.

Step 5 – Preferred Option: This step is simply the outcome of Steps 1-4 (with possible Step 6 influence).

Step 6 – Implementation Strategies: This step explores all the strategies related to idea implementation. Some of the strategy issues might be considered earlier in the Option Evaluation (Step 4) because of potential influence in deriving a preferred option. This could be a sensitive social, cultural or political issue that could significantly propel an idea forward or pose a severe limitation.
### Baseline Vacancy Assessment

#### Vacancy Progression

**Vacant Buildings**

<table>
<thead>
<tr>
<th>Threatened Bldgs</th>
<th>Vacant Buildings</th>
<th>Vacant Parcels (at Individual Parcel Scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership (dB)</td>
<td>Ownership</td>
<td>Ownership</td>
</tr>
<tr>
<td>Location (dB)</td>
<td>Location</td>
<td>Location</td>
</tr>
<tr>
<td>Foreclosure status (?)</td>
<td>Condition (C)</td>
<td>Site conditions (C)</td>
</tr>
<tr>
<td>Tax rears (dB)</td>
<td>Size (sf, # units, # floors) (C)</td>
<td>Size/configuration (C)</td>
</tr>
<tr>
<td></td>
<td>Parcel coverage %</td>
<td>Utility provision</td>
</tr>
<tr>
<td></td>
<td>Historic designation?</td>
<td>Street frontage</td>
</tr>
<tr>
<td></td>
<td>Unauthorized occupant status</td>
<td>Access</td>
</tr>
</tbody>
</table>

**Vacancy Patterns**

<table>
<thead>
<tr>
<th>Vacancy Patterns</th>
<th>Vacancy Patterns (at Block, Neighborhood, or Dist. Scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Classification &amp; Thresholds</td>
</tr>
<tr>
<td></td>
<td>Vacancy density (C)</td>
</tr>
<tr>
<td></td>
<td>Vacancy distribution (C)</td>
</tr>
</tbody>
</table>

**Decisions:**
- Hold, demolish, or sell for re-use/rehab
- Maintain, sell individual parcels, change land use designation (if large parcel), remediate

**Data Status Codes:**
- **GIS =** GIS format: Geo-located + associated data table; new data could be interpreted/processed through analysis or aerial imagery
- **dB =** In Database, but not GIS linked/mapped
- **FC =** Field collection needed

**Cross-check**

**Current Market Value Analysis (MVA Map)**

**Location Evaluation (Filter)**

**Context**
- Land use/zoning
- Topog./landscape setting (+/-)
- Crime (-)
- Hist. District designation (+/-)
- Demographics (age, diversity)
- Infrastructure age (+/-)

**Adjacency**
- High market value uses (+)
- Natural amenities (+)
- Recreational amenities (+)
- Nuisance/disruptive feat. (-)

**Proximity**
- Schools (+)
- Employment centers (+)
- Transp. infrastructure (+/-)
- Utilities infrastructure (+/-)
- Emerging Districts (+)
- Potential TOD (+)

**Redevelopment Potential**

**Generally more important for Types 1-2**

**Generally more important for Types 3-5**
1.4 Introduction: Framework for Action

Strategy Options
(Identifying potential fits)

**Option Mapping**

1. **Type 1**:
   - Low vacancy density
   - Scattered vacancy pattern
   - Small lot size
   - Current rsd. or com land use
   - Less desirable location

2. **Type 2**:
   - Low-med. vacancy density
   - Scattered vacancy pattern
   - Medium to large sized lot
   - Mixed land use
   - Low market value

3. **Type 3**:
   - Med.-high vacancy density
   - Clustered vacancy pattern
   - Less favorable site conditions
   - Less desirable location
   - Low market value

4. **Type 4**:
   - High vacancy density
   - Clustered vacancy pattern
   - Less favorable site conditions
   - High location score
   - Current non-resid. land use

5. **Type 5**:
   - High vacancy density
   - Clustered vacancy pattern
   - Less favorable site conditions
   - More desirable location factors
   - Current low to med. market value

Enhancement/Redevelopment Idea Classes

1. **Clear, consolidate, and re-purpose for larger scale, open space oriented landscapes**
   - Typ. SLUP Categories: ROSPA, NDA
   - A. Transition back to woodlands, wetlands, and wildlife habitat
   - B. Urban agriculture (ngh or district scale)
   - C. Green infrastructure (district or city scale)
   - D. Parks or green corridors (dist. or city scale)
   - E. Green/Intentional communities
   - F. Estate/low density residential development

2. **Clear, consolidate, and re-purpose for larger scale urban development**
   - Typ. SLUP Categories: RCA, BIDA, SMUA, OA
   - A. New residential/special dist. (block or ngh)
   - B. Large Entertainment complex
   - C. Riverfront development
   - D. Large employment complex
   - E. Large mixed use or TOD districts
   - F. New transit ROW/stations

3. **Maintain overall status quo with scattered clearance, improvements, or re redevelopment/investment pockets**
   - Typ. SLUP Categories: NPA, NDA, NCA, BIPA, IPDA, SMUA, OA
   - A. Side lot sales (<10 per transaction)
   - B. Leased urban agriculture (lot or block scale)
   - C. Green infrastructure (lot or block scale)
   - D. Residential/Comm Infill (lot or street scale)
   - E. Phytoremediation
   - F. Pocket parks or special activity sites
   - G. School/church expansion or activity sites
   - H. Community/vocational centers or amenities
   - I. Event spaces (lot, block, ngh scale)
   - J. Art installations

4. **Change/Investment Intensity (“Spiciness”)**

- **Vacancy Typology**
  - **Type 1**: Low vacancy density
  - **Type 2**: Low-med. vacancy density
  - **Type 3**: Med.-high vacancy density
  - **Type 4**: High vacancy density
  - **Type 5**: High vacancy density

5. **Option Mapping**

- **(Example match)**

- **(Example match)**

(Hahn 2015)
### Option Evaluation

(Relative to Timeframe, Current SLUP, or Alternate Scenarios)

**City Agencies/Departments + Community Input + Projective Metrics**

<table>
<thead>
<tr>
<th>Strategic Land Use Plan (SLUP)</th>
<th>Crime mitigation</th>
<th>Employment potential</th>
<th>Revenue potential</th>
<th>Enhance quality of life</th>
<th>Ecosystem support</th>
<th>Social/cultural accept.</th>
<th>Investment required</th>
<th>Political benefit</th>
<th>Scale/change magnitude</th>
<th>Replication potential</th>
<th>Timeframe required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Maintain overall status quo with scattered clearance, improvements, or redevelopment/investment pockets</td>
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<tr>
<td>Idea Options (matched to parcel typology)</td>
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<tr>
<td>2. Clear, consolidate, and re-purpose for large scale, &quot;green&quot; landscapes</td>
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<td>Idea Options (matched to parcel typology)</td>
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</tr>
<tr>
<td>A. Transition back to woodlands, wetlands, and wildlife habitat</td>
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<td>M</td>
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<td>M</td>
<td>H</td>
<td>M</td>
<td>MT</td>
</tr>
<tr>
<td>3. Clear, consolidate, and re-purpose for large scale urban development</td>
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<tr>
<td>Idea Options (matched to parcel typology)</td>
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<tr>
<td>D. Large employment complex</td>
<td>M</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>L</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>L</td>
<td>LT</td>
<td></td>
</tr>
</tbody>
</table>

* = Examples of narrowed ideas (or idea classes) that have been matched to a parcel type (or specific parcel) being evaluated under different strategies to arrive at a preferred idea option.
1.4 Introduction: Framework for Action

(Hahn 2015)

Notes

**Horizontal Relationship:** In general, when determining vacant parcel types and matching types to strategies/ideas, there is a horizontal relationship. Individual parcel data is most relevant to parcel Types 1 & 2, and mild strategies (S1) which represent minimal overall change from existing conditions. As more vacant parcels are considered, then vacancy pattern and location become increasingly important since potential land use change and higher investments may be required (“spicier” strategies).

**Process Direction:** In general, vacant parcel owners (LRA and private) seeking potential buyers work forward through the process (matching vacant parcel types to potential strategies/ideas). In general, potential buyers of vacant parcels (at various scales) may work the process backwards seeking parcels that might be a best fit for an intended enhancement or redevelopment idea.

**Potential Automation:** To manage and “match” a large inventory of existing vacant parcels, parts of the evaluation process could be automated (Steps 1 & 2). Perhaps a first pass of the Step 2 to 3 matching process might be possible. Steps 4-6 which involve a smaller number of parcels under actual consideration and require much stakeholder dialogue/evaluation would not be automated. An exception might be automated metrics provided for Step 4 (Evaluation) relative to SLUP scenarios.
### Strategy Option 1. Maintain overall status quo with scattered clearance, improvement interventions, or redevelopment/investment pockets

**Strategy Summary:** Follow existing practices of maintenance/service provision. Maximize neighborhood self determination. Where opportunities arise, introduce targeted interventions and investment to improve the quality of life or provide new opportunities.

**Rationale**
- Outside resources are limited compared to the extent of current conditions and context factors.
- Vacancy is a symptom of stresses on the urban poor, however many high vacancy areas still offer a measure of affordability.
- Parcels will be cleared if a safety/liability issue. To the extent possible, vacant parcels will be matched to potential buyers.
- Where opportunities arise, improvements/investments can improve the quality of life or catalyze improvements in small areas.

**Overall Benefits**
- Most sensitive to residents/business owners who have strong social/cultural ties and may not wish to see major changes.
- Empowers individuals and neighborhood groups to constructively exert more influence.
- Improvements are generally less expensive, less complicated, and can be implemented in a more immediate timeframe.
- LRA owns and controls large number of individual parcels that are available if buyers can be matched.
- Fewer resident relocations and emphasis on self-determination within resource constraints.

**Overall Challenges** *(mostly related to context and attracting parcel/structure buyers)*
- Unless underlying factors are addressed, neighborhoods will continue to vacate.
- Infrastructure replacement/maintenance costs will continue to increase as service life nears.
- Conditions deter outside investors, discourages newcomers, and quality of life remains difficult for remaining residents.
- Contributes to de facto segregation based on housing affordability.
- How to transition from/mitigate current high crime areas?
- Underground economy is difficult to dislodge and replace.

<table>
<thead>
<tr>
<th>IDEA CLASSES</th>
<th>Notes, typical issues/questions</th>
<th>IDEAS &amp; EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>(General groups of ideas supporting strategies)</td>
<td></td>
<td>(specific ideas for area enhancement/redevelopment)</td>
</tr>
<tr>
<td>A. Side lot sales/leases (&lt;10 per transaction)</td>
<td>• Opportunities for consolidation?</td>
<td>Residential lot food gardens</td>
</tr>
<tr>
<td>B. Leased urban agriculture (lot or block scale)</td>
<td>• Improve communications for garden plot availability?</td>
<td>Bioswales, rain gardens, detention areas; Example: MSD Project Clear/Cortex</td>
</tr>
<tr>
<td>C. Green infrastructure (lot or block scale)</td>
<td>• Consolidate vacant parcels to support above ground drainage and water detention features</td>
<td>Residential/commercial building infill; Example: Old North</td>
</tr>
<tr>
<td>D. Residential/Commercial Infill (lot or street scale)</td>
<td>• Re(build) on vacant parcel(s) or acquire to expand existing buildings or yards. Special incentive financing?</td>
<td>Ex: Old North sunflower lot (Wash. Univ Landlab), hybrid poplars (Jeffco Landfill), etc.</td>
</tr>
<tr>
<td>E. Phyto remediation</td>
<td>• Best plant choices for remediation? Who maintains?</td>
<td>Sitting garden, small playground, etc.</td>
</tr>
<tr>
<td>F. Pocket parks or special activity sites</td>
<td>• On-going water requirements/costs?</td>
<td>School playground, church parking, etc.</td>
</tr>
<tr>
<td>G. School/church expansion or activity sites</td>
<td>• What types of spaces? access?</td>
<td>St. Louis Agency on Training and Employment (SLATE) or UrbanForce: remote workshop centers</td>
</tr>
<tr>
<td>H. Community/vocational centers or amenities</td>
<td>• What types of training? location?</td>
<td></td>
</tr>
<tr>
<td>I. Event spaces (lot, block, ngh scale)</td>
<td>• Construction/operational financing? Who staffs?</td>
<td></td>
</tr>
<tr>
<td>J. Art installations</td>
<td>• Temporary/permanent? Artist selection process?</td>
<td></td>
</tr>
</tbody>
</table>

---

**Relationship between Strategies, Idea Classes and Ideas**

Figure 1.4.3 (Hahn 2015)
### Strategy Summary:  Incentivize remaining residents to relocate in nearby areas of similar affordability, consolidate vacant parcels, change land use designation, and put land into ag production or transition back to natural areas requiring little maintenance.

### Rationale
- If confirmed by infrastructure investment and maintenance records, continued provision of city services in some areas may not be financially sustainable per number of residents served
- Extent and quality of remaining parcel infrastructure and/or buildings may have reached service life
- Quality of life and safety has deteriorated to the point where it is difficult to attract investors
- The holding timeframe may be too long or unpredictable. The land needs to generate net income.
- Degree and type of impact (positive or negative) depends on the scale and location being considered. However, this option provides opportunity for large scale “game changers” for reducing parcel inventory under right circumstances

### Overall Benefits
- LRA owns and has control of large land acreages making parcel assemblage easier/affordable
- Lower infrastructure upgrade/maintenance costs as some areas taken “offline”
- Vacant land is put into income-producing uses (net $ gain?)
- Areas are cleared of potential safety and liability issues
- Opportunity to process/sell recycled materials?

### Overall Challenges
- Unless private funding leads/assists with agricultural uses, the costs of other open space options are borne by public monies
- Building clearance cost in St. Louis is relatively expensive (avg. $10.3K/bldg.) Can economies of scale be achieved?
- Potential remediation required
- Political and financial costs to relocate residents to consolidated neighborhoods of similar affordability
- Even vacated/lower intensity land uses have holding costs (what is $/acre cost for yearly maintenance?)
- How to transition/mitigate current high crime areas?

### IDEA CLASSES

<table>
<thead>
<tr>
<th>A. Transition back to woodlands, wetlands, and wildlife habitat</th>
<th>Notes, typical issues/questions</th>
<th>IDEAS &amp; EXAMPLES (for area enhancement/redevelopment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cost/timeframe to clear?</td>
<td>Example: Urban Regeneration: Reforesting Vacancy in Philadelphia (<a href="http://scenariojournal.com/article/urban-regeneration/">http://scenariojournal.com/article/urban-regeneration/</a>)</td>
<td></td>
</tr>
<tr>
<td>• Cost/frequency of management?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Successional timeframe?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Access/security/encampment issues?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Potential transfer of ownership from LRA?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Urban agriculture (neighborhood or dist. scale)</th>
<th>Notes, typical issues/questions</th>
<th>IDEAS &amp; EXAMPLES (for area enhancement/redevelopment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Is dust/spray (if used) compatible with surrounding urban land uses?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Independent operations or neighborhood involvement?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Cost competitive produce compared to rural agriculture?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Distribution/food access/“specialty” advantages?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Most appropriate crops, orchard types?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Green infrastructure (district or city scale)</th>
<th>Notes, typical issues/questions</th>
<th>IDEAS &amp; EXAMPLES (for area enhancement/redevelopment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Size requirements per green infrastructure type?</td>
<td>MSD Project Clear stormwater projects</td>
<td></td>
</tr>
<tr>
<td>• Vacant parcel proximity to natural drainage pattern?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Useful if located away from developed areas?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• At this scale/option, emphasis is on changing impervious cover across large areas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Parks or green corridors (district or city scale)</th>
<th>Notes, typical issues/questions</th>
<th>IDEAS &amp; EXAMPLES (for area enhancement/redevelopment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Where might green corridors connect adj. land uses?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What types of habitat could be provided?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What types of green infrastructure could be supported?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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The table above provides a structured overview of the strategies and their implications, along with examples of successful implementations in various contexts. This approach helps in understanding the potential outcomes and challenges associated with each strategy.
<table>
<thead>
<tr>
<th>IDEA CLASSES</th>
<th>Notes, typical issues/questions</th>
<th>IDEAS &amp; EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E. Green/Intentional communities</strong>&lt;br&gt;(Residential enclaves integrated with productive land uses/microbusinesses)</td>
<td>• Offer lifestyle options; may integrate co-housing&lt;br&gt;• May give hope &amp; self-sufficiency to distressed neighborhoods&lt;br&gt;• Maintain/reserve affordable sections to avoid gentrification?&lt;br&gt;• Degree of involvement by residents in eco-village production/activities?&lt;br&gt;• Hybrids between mainstream/&quot;fringe&quot; lifestyles?&lt;br&gt;• If diverse income levels/culture among residents, potential for conflict?</td>
<td>• Co-housing (Metro Cohousing, STL; Heartwood, Bayfield, CO)&lt;br&gt;• Eco-villages (Culver Way, etc.)&lt;br&gt;• Conservation communities (Prairie Crossing, IL)</td>
</tr>
<tr>
<td><strong>F. Estate/low density residential development</strong>&lt;br&gt;(New construction or rehabilitation of noteworthy/historic structures; large expanses of surrounding open space)</td>
<td>• Could lead to gentrification?&lt;br&gt;• Secured perimeter?&lt;br&gt;• Search for compatible context</td>
<td></td>
</tr>
</tbody>
</table>
### Strategy Option 3. Clear, consolidate, and re-purpose for larger scale urban redevelopment (where appropriate)

#### Strategy Summary:
Incentivize remaining residents to relocate outside the area, consolidate vacant parcels, change land use designation, and redevelop land to support major industrial, commercial, or entertainment complexes.

#### Rationale
- Looking to repurpose large amounts of vacant parcel/building inventory to support incoming employment and revenue opportunities at larger-scale
- Leveraging available, city-owned land to entice major economic drivers to catalyze ancillary development, makes the city attractive to new residents, and increases tax base

#### Overall Benefits
- LRA owns and has control of large land acreages making parcel assemblage easier/affordable
- Opportunity to grow city and offset losses incurred through the decades
- Opportunity to provide mix of employment, living, and transportation options
- Opportunity to spatially plan for equitable distribution and integrated systems

#### Overall Challenges
- Attracting “major players” is a multi-faceted, long term effort
- Large investment costs; extensive financing strategy involved
- Clearance could force crime into adjacent areas
- Vacancy is scattered at this scale and requires major consolidation
- Financial and political costs of relocating remaining residents in high vacancy areas

#### IDEA CLASSES
(General groups of ideas supporting strategies)

<table>
<thead>
<tr>
<th>Notes, typical issues/questions</th>
<th>IDEAS &amp; EXAMPLES (for area enhancement/redevelopment)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. New residential/special dist.</strong>&lt;br&gt;(block, neighborhood, district)</td>
<td></td>
</tr>
<tr>
<td>• May be centered around theme&lt;br&gt;• Typ. centered around commercial/entertainment activity&lt;br&gt;• Typically neighborhood scaled&lt;br&gt;• May target specific user group/demographic</td>
<td></td>
</tr>
<tr>
<td>New Residential Streets/blocks: Old North&lt;br&gt;New Commercial Districts: Del Mar Loop, The Grove, Central West End</td>
<td></td>
</tr>
<tr>
<td><strong>B. Large Entertainment complex</strong></td>
<td></td>
</tr>
<tr>
<td>• How much should be publically financed?&lt;br&gt;• Where is the optimum location?&lt;br&gt;• What catalyzing effects are anticipated?</td>
<td></td>
</tr>
<tr>
<td>Proposed Rams Stadium. MLS stadium, STL North Riverfront Commerce Corridor</td>
<td></td>
</tr>
<tr>
<td><strong>C. Riverfront development</strong></td>
<td></td>
</tr>
<tr>
<td>• How can visual and physical access be provided to river?&lt;br&gt;• What are floodplain restrictions and mitigations?&lt;br&gt;• What recreational amenities can be integrated?&lt;br&gt;• What connections to ancillary development are provided?</td>
<td></td>
</tr>
<tr>
<td>National Geospatial-Intelligence Agency, Washington University Medical Complex, Cortex Innovation District</td>
<td></td>
</tr>
<tr>
<td><strong>D. Large employment complex</strong></td>
<td></td>
</tr>
<tr>
<td>• Opportunities for re-purposing large vacant buildings?&lt;br&gt;• What adjacent land uses such as commercial districts or recreational amenities could support a large concentration of workers?&lt;br&gt;• What close-by housing options would be attractive and entice a reduction in commuting?&lt;br&gt;• What site size, configuration, and linkages are required?</td>
<td></td>
</tr>
<tr>
<td>Delmar Loop and Forest Park-DeBaliviere TODs</td>
<td></td>
</tr>
<tr>
<td><strong>E. Large mixed use/TOD districts</strong></td>
<td></td>
</tr>
<tr>
<td>• What types of transit is being considered?&lt;br&gt;• Based on local market conditions, what types of associated development could be supported?</td>
<td></td>
</tr>
<tr>
<td>Grand Metrolink Station</td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES

TEXT


Figure 1.2.3

Figure 1.3.1

Figure 1.3.2

Figure 1.3.3

Figure 1.3.4

Figure 1.3.5

Figure 1.4.1

Figure 1.4.2

Figure 1.4.3

IMAGES

Figure 1.2.1

Figure 1.2.2
2

VACANCY

TYPOLOGY
Lot
Lot Size
Lot Relationships
Lot Conditions

Buildings
Residential
Non-Residential

% of Vacant Parcels within a Block

Location Evaluation
Crime Distribution
Future/Emerging Development
Market Value
Age of Population

Parcel & Building Condition Worksheet

Potential Improvement/Re-use Ideas

Scenarios
CHAPTER INTRODUCTION

In this chapter you will be introduced to a system of classifications that will be blended into “types” to be matched to potential strategies. These classifications have been created to be used as a tool to characterize vacant land by the City of St. Louis or individual property owners. This typology tool will allow the City, potential developers, and current property owners a method of understanding what conditions are present, and what could hinder development. This will allow property owners and developers to begin to formulate a strategy for the redevelopment of the lot. To formulate a strategy, developers must know what land is available, lot characteristics, and surrounding factors of influence.

The classifications included in this chapter are divided into three groups; Parcel, Buildings, and Location Evaluation. The Parcel group contains site specific conditions, and how the vacant parcel relates to its immediate surroundings. The Buildings group relates to the size and type of existing structure. Finally, the Location Evaluation group includes characteristics that may affect the parcel, but are viewed at a much larger scale. Each of these classifications can influence the suitability of the lot for future development.

Once the classification tool has been used to assess the conditions of available parcels, the final section of this chapter discusses how parcel conditions may be used to form vacant parcel “types”. Five parcel types have been defined. These types can then be used with the Vacancy Evaluation Framework, provided in Section 1.4, to match a set of strategies presented in Chapter 3.
### Site Condition Classifications

(With or without a building)

<table>
<thead>
<tr>
<th>What are the parcel relationships?</th>
<th>What amount of vacant parcels are next to each other?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.1.3 &amp; 2.1.4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What are the vegetation conditions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.1.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How sunny is the parcel?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.1.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is there any dumping?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.1.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is the soil health like?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.1.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What types of water are available?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.1.9 &amp; 2.1.11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is the parcel level with the street?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.1.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is the parcel size?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Overall, is there evidence of care?</th>
</tr>
</thead>
</table>

---

**Vacancy Condition Worksheet:**

The following worksheet is designed to be used by community members, neighborhood leaders, city staff, small-scale developers, and anyone else interested in improving a vacant parcel. This worksheet is not all-encompassing, but provides a baseline assessment for evaluating parcel conditions. We recommend the data be collected by on-site observations, supplemented with the location evaluation maps in Section 2.3. Findings from this worksheet will connect parcel conditions to viable strategies.
### Observed Conditions

<table>
<thead>
<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District/Neighborhood-based</strong></td>
<td>Block-Based</td>
<td>Street-based</td>
</tr>
<tr>
<td>Overgrown</td>
<td>Heavily Vegetated</td>
<td>Lightly Vegetated</td>
</tr>
<tr>
<td></td>
<td>Maintained</td>
<td></td>
</tr>
<tr>
<td>Low (0-30% Exposure)</td>
<td>Medium (30-60% Exposure)</td>
<td>High (60%+ Exposure)</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contaminated</strong></td>
<td>At Risk of Contamination</td>
<td>No Contamination</td>
</tr>
<tr>
<td>Present, Working</td>
<td>Present, Not Working</td>
<td>Not Present</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parcel is above street</strong></td>
<td>Parcel is level with street</td>
<td>Parcel is below street</td>
</tr>
<tr>
<td><strong>Small</strong></td>
<td>Medium (ex. retail, apartment complex)</td>
<td>Large (ex. industrial, large commercial)</td>
</tr>
<tr>
<td>Well Cared For</td>
<td>Some Evidence of Care</td>
<td>Neglected</td>
</tr>
</tbody>
</table>
## Vacant Building Conditions

<table>
<thead>
<tr>
<th>What was the building’s former use?</th>
<th>Residential use?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.2.1 &amp; 2.2.2</td>
<td>Non-Residential use?</td>
</tr>
<tr>
<td></td>
<td>No Building</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is the Building Coverage on site?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.2.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In general, what is the overall building condition?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building comments:</td>
</tr>
</tbody>
</table>

## Location Evaluation

<table>
<thead>
<tr>
<th>What is the market value of the parcel?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.3.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is the crime rate of the area?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.3.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are there a lot of kids nearby? Are there a lot of senior citizens nearby?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.3.6 &amp; 2.3.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is the site near a Future/Emerging Development?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.3.8 &amp; 2.3.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is the site near a school?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.3.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is the site near the employment centers?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.3.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is the site near public transportation stops?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.3.9 &amp; 2.3.11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is the site near a religious institution?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.3.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adjacency to what types of roadway?</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Figure 2.3.12</td>
</tr>
</tbody>
</table>
### Vacancy Typology: Introduction

#### Location Evaluation

- **what is the market value of the parcel?**
  - See Figure 2.3.4
  - 0-15,000
  - 15,001-30,000
  - 30,001-85,000
  - 85,001+

- **what is the crime rate of the area?**
  - See Figure 2.3.5
  - High Density
  - Medium Density
  - Low Density

- **Are there a lot of kids nearby? Are there a lot of senior citizens nearby?**
  - See Figure 2.3.6 & 2.3.7
  - A Lot of Kids
  - A Lot of Senior Citizens

- **Is the site near a future/Emerging Development?**
  - See Figure 2.3.8 & 2.3.10
  - Within 1/4 mile
  - Within 1/2 mile
  - Radius 1 mile

- **Is the site near a school?**
  - See Figure 2.3.8
  - Within 1/4 mile
  - Within 1/2 mile
  - Radius 3/4 mile

- **Is the site near the employment centers?**
  - See Figure 2.3.8
  - 5 mile Radius
  - 10 mile Radius
  - 15 mile Radius

- **Is the site near public transportation stops?**
  - See Figure 2.3.9 & 2.3.11
  - Within 1/2 mile
  - Outside 1/2 Mile

- **Is the site near a religious institution?**
  - See Figure 2.3.9
  - Within 1/2 mile
  - Outside 1/2 Mile

- **Adjacency to what types of roadway?**
  - See Figure 2.3.12
  - Along Interstate
  - Along Arterial
  - Intersection of Two Arterials
  - Along Local Road

#### Vacant Building Conditions

<table>
<thead>
<tr>
<th>Single Family Attached</th>
<th>Single Family Detached</th>
<th>House Converted to Apartments</th>
<th>Apartment Buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churches</td>
<td>Schools</td>
<td>Retail</td>
<td>Offices</td>
</tr>
<tr>
<td>Industrial</td>
<td>Healthcare</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimal (0-30%)</td>
<td>Moderate (30-60%)</td>
<td>Large (60-100%)</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>Average</td>
<td>Good</td>
<td></td>
</tr>
</tbody>
</table>

#### Observed Conditions

<table>
<thead>
<tr>
<th></th>
<th>0-15,000</th>
<th>15,001-30,000</th>
<th>30,001-85,000</th>
<th>85,001+</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Density</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium Density</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Density</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Lot of Kids</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Lot of Senior Citizens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 1/4 mile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 1/2 mile Radius</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1 mile radius</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 1/4 mile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 1/2 mile Radius</td>
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<tr>
<td>3/4 mile Radius</td>
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<tr>
<td>5 mile Radius</td>
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</tr>
<tr>
<td>10 mile Radius</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 mile Radius</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Within 1/2 mile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside 1/2 Mile</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Within 1/2 mile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside 1/2 Mile</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Along Interstate</td>
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<td></td>
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</tr>
<tr>
<td>Along Arterial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection of Two Arterials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Along Local Road</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At Intersection of Two Local Roads</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At Intersection of Local and Arterial Roads</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
A parcel, or a defined plot of land, can be classified through multiple characteristics that exist on site. We have developed a variety of classifications according to these site specific characteristics. These parcel classifications address parcel size, parcel context, and parcel conditions. These subcategories are used to help break down and understand the impact and influence of each classification.

Each subcategory contains basic factors that play a role in shaping the current, and future use, of a parcel. Parcel size examines the size of the vacant parcel and its relationship to a building. Parcel context addresses how the surrounding parcels and block affect current and potential future land uses.
CONTEXT VACANCY

Parcel Context vacancy

- = One Vacant Parcel (with or without building)

Low
Blocks with Vacancy between 0-25%

Moderate
Blocks with Vacancy between 26-50%

High
Blocks with Vacancy between 51-75%

Extreme
Blocks with Vacancy higher than 76%

Block Context Vacancy
Understanding the surrounding blocks’ vacancy levels may influence the use of the site. The selected strategy should be able to fit well within its surroundings.

Figure 2.1.2: Block Context (Right) Block context should be taken into consideration when determining the appropriate strategy. (Kellams 2015)
2.1 Vacancy Classification: Parcels

Strategy Examples:
- Restoration/Revitalization
- Mixed Use Development
- Installations/Parks
- Large Natural Systems

Figure 2.1.1: Parcel Context Application (Above) Parcel context greatly affects the potential strategies. Parcels range between developed and more natural, which effects what could be used on the site. (Bernal & Kellams 2015)
VACANCY PATTERN CLASSIFICATIONS

Consolidation of Vacant Area within Block

These diagrams show blocks that have been further divided into parcels. A purple parcel represents one that is vacant. Some blocks may have small and few vacant parcels; this would be in the ‘low’ category. As more vacancies are present, there is a higher chance that they are consolidated to look like it is one large parcel.

![Vacancy Consolidation Diagrams](image)

Figure 2.1.3: Vacancy Consolidation Depending on the block, vacancies may occur sparse and spread out or dense and consolidated (Allen 2015)

Potential Improvement/Re-use Ideas

- Art installations
- Bocce ball court
- Berry patch
- Petting zoo
- Skate park
- Fall destination
- Residential redevelopment
- Stadium arena/complex
- Urban vineyard
VACANCY PATTERN CLASSIFICATIONS

Vacant Parcel Assessment Scales & Context
Depending on the amount, size, and groupings of vacant parcels in a given area, the surrounding blocks can be assessed to see if there are any other large-scale patterns. These patterns can help when determining large or small scale improvements and re-use ideas.

![Vacancy Assessment Scales](image)

**Figure 2.1.4: Vacancy Assessment Scales** Once vacant parcels are located, the surrounding blocks should be assessed. This can provide opportunities for varying strategy scales (Allen 2015)

Potential Improvement/Re-use Ideas

- **Shooting range**
- **Urban campground**
- **Side lots**

- **Urban play district**
- **Mixed us district**
- **Greenway extension**

- **Daylighting Streams**
- **Fishing network**
- **Urban wetland**
SITE CONDITION CLASSIFICATIONS

Vegetation
Vegetation can help and/or hinder the use of a site

Overgrown

Heavily Vegetated

Lightly Vegetated

Maintained

Figure 2.1.5: Vegetation Present planting conditions may change the use of the site. Maintenance of the site may be costly. (Kellams 2015)

Sun Exposure
Shade may be created by vegetation or built structures

Low
0-30%
Exposure

Medium
30-60%
Exposure

High
60%+
Exposure

Figure 2.1.6: Sun Exposure Sun exposure may make or break a strategy, such as a urban vineyard. (Kellams 2015)

Potential Improvement/Re-use Ideas

Berry Patch
Coimmunity gardens
Hammock park

Alternative energy fields
Treehouse park
Greenway extension

Black walnut forest
Daylighting streams
Urban vineyard
SITE CONDITION CLASSIFICATIONS

Dumping on Site
Cleanup costs are generally influenced by dumping on site

Abandoned Vehicles

Trash/ Garbage

Building Material

Other

No Dumping

Soil Health*
Some soils may contain harmful chemicals. Soil contamination testing should be performed.

Contaminated

At Risk of Contamination

No Contamination

Nutrient Rich

*Evidence of contamination may be stains, abnormal coloring, and odors. Former land uses such as a gas stations, laundromats, and junk yards are prone to soil contamination. The use of lead paint, typically around building footprints, should be taken into account.

Figure 2.1.7: Dumping on Site (Left) Dumping may influence the cost of clean up. Knowing the site’s dumping condition may impact the decision to develop the site. (Kellams 2015)

Figure 2.1.8: Soil Health (Above) It is important to test the sites soil. Harmful chemicals may exist. (Kellams 2015)

Potential Improvement/Re-use Ideas

Phytoremediation
Junk playground
Design-build sites

Conservation community
Skate park
Urban play districts

Residential redevelopment
SITE CONDITION CLASSIFICATIONS

Water Access
Water may or may not be available and accessed on site

Present, Working

Present, Not Working

Not Present

Street to Parcel Level
Street level relation with parcel may influence its purpose

Parcel Above Street

Parcel Level with Street

Parcel Below Street

Water on Site
Water on site will influence the use of the site

Yes

No

Figure 2.1.9: Water Access (Above Left) Water access can greatly influence the use of site. Water access will be important for virtually any build structure and/or plantings on site. (Kellams 2015)

Figure 2.1.10: Street to Parcel Level (Above) The relationship between the street and parcel can shape the use of the site. One possible example could be the creation of a bio swale that treats stormwater. (Kellams 2015)

Figure 2.1.11: Water on Site (Left) If water is present on site, a variety of unique strategies may be used. (Kellams 2015)

Potential Improvement/Re-use Ideas

Urban nursery
Team building/obstacle course
Dog park

Water park
Greenway extension
Ecological exploration

Urban wetland
Large-scale urban agriculture
Fishing network
The classifications presented in this chapter defined abandoned buildings by size and former use. Conditions of these abandoned buildings will require collection of field data. In most cases this is a task yet to be done by the City. Chapter 4 presents some methods to facilitate this data collection. Building condition assessment will dictate whether abandoned buildings can be rehabilitated for future use or demolished.

Knowing more about abandoned building characteristics and condition will influence parcel redevelopment. As an example, could an abandoned commercial building be repurposed for residential lofts? These building classifications will help the City and potential developers analyze potential redevelopment options.
Residential Buildings

Single Family Attached
- Small
- Medium
- Large

Single Family Detached
- Small
- Medium
- Large

Multi-Family
- Small
- Medium
- Large

Apartment Buildings
- Small
- Medium
- Large

Figure 2.2.1: Residential Buildings Exhisting structures should be taken into consideration because of potential resale value, opportunities to renovate, and other strategies requiring a structure. Building size and type will affect the potential use. (Taylor 2015)

Potential Improvement/Re-use Ideas

- Art block
- Vertical garden

- Eco-village
- Residential redevelopment
VACANT BUILDING CLASSIFICATIONS

Non-Residential Buildings

Places of Worship
Small
Medium
Large

Healthcare
Small
Medium
Large

Schools
Small
Medium
Large

Offices
Small
Medium
Large

Retail
Small
Medium
Large

Industrial
Small
Medium
Large

Figure 2.2.2: Non-Residential Buildings Different buildings with varying spatial organization and amenities that affect their potential future uses. (Allen 2015)

Potential Improvement/Re-use Ideas

- Art block
- Vertical garden
- Team building/obstacle course
- Co-housing
- Outdoor climbing gym
**VACANT BUILDING CLASSIFICATIONS**

Building Coverage on Parcel

- Minimal Coverage: 0-30%
- Moderate Coverage: 30%-60%
- Large Coverage: 60%-100%

Context of vacant buildings should be taken into consideration. For example, if a large office building takes up the majority of its parcel and is in a dense urban setting, there would be no room for a parking lot. However, if a church or school occupies less than half of its parcel, there is opportunity for activity space in the lawn. In this case, one would assume that the vacant school or church would be fixed so that it becomes a usable building again.

*Figure 2.2.3: Building Coverage* Diagrams show relative size of the building in relationship to the parcel. *(Allen 2015)*

**Potential Improvement/Re-use Ideas**

- Recreational sport complex
- Art installations
- Church events
- Park or green space
- Skate park
- Co-housing
- Mixed use development
- Large scale urban agriculture
- Riverfront development extension
2.3

VACANCY CLASSIFICATION: LOCATION EVALUATION

The surrounding context of a vacant parcel is highly influential to the condition of a parcel and possible development. In this chapter we break down the parcel context into individual factors. These factors can help or hinder possible strategies for redevelopment. Some of the location evaluation classifications include market value, crime rates, and roadway adjacency. Location factors should be assessed before the formulation of any redevelopment option.
CONTEXT CONSIDERATION

Land Ownership
A High Percentage of Land is Owned by the LRA and McEagle Development

Private
Parcels of land in the St. Louis area under private ownership are maintained and operated by individual property owners. These properties can be redeveloped on a site-by-site basis by the land owner. If redevelopment cannot be completed due to neglect or abandonment, the land may be acquired by the LRA or other ownership.

Figure 2.3.1: Private Property (Above)  
(Champion-america.com 2015)

LRA
St. Louis’ Land Reutilization Authority is the city land bank authority. The LRA acquires properties through donation and title claims on neglected or abandoned properties. Properties in this category are city owned and cost the city money in ownership and maintenance. These properties should be sold for redevelopment.

Figure 2.3.2: Seal of St. Louis (Above)  
(Stlouis-mo.gov 2015)

McEagle
McEagle is a real estate development company that has acquired several tracts of land in the St. Louis area. These properties can be redeveloped into mixed-use development, or other city center development to promote development near McKee owned property.

Figure 2.3.3: McEagle Development (Above)  
(McEagle 2015)
**CONTEXT CONSIDERATION**

Residential Market Value

- O $0-$15,000
- # $15,001-$30,000
- 💡 $30,001-$85,000
- 💬 $85,001+

- block groups with fewer than 5 sales
- Estimated or split block groups
- Industrial Areas
- City neighborhoods
- Parks
- Interstate highways
- River

Figure 2.3.4: Residential Market Value
(City of St. Louis Planning and Urban Design Agency, 2014)

**Potential Improvement/Re-use Ideas**

- Art block
- Cleanup projects
- Apiary (bee yard)

- Incentivized development in lower market value areas
- Co-housing concentrated living in mixed use buildings in high market value areas

- Urban wetland
- Stadium/arena complex
- Riverfront development extension
CONTEXT CONSIDERATION

Crime Distribution
Crime Reported Per 4000 Residents

Figure 2.3.5: Crime Density Map Graphically shows density of crime in St. Louis (Arcgis.com 2015)

Potential Improvement/Re-use Ideas

Cleanup projects
Community garden
Recreational sport complex

Park or green space
Urban play district
Incentivized development

Black walnut forest
Residential redevelopment
Urban vineyard

St. Louis Crime Density Map
(Reported Violent and Property Crimes)

- High Density
- Medium Density
- Low Density

2014 St Louis Crime Rate
Per 4000 Residents
347.12

Low Density
Medium Density
High Density
CONTEXT CONSIDERATION

Concentrated Areas of Children and Senior Citizens

Age of population is important to consider when taking in the different needs of different ages.

Figure 2.3.6: Age of Population Over 65 (Above)
Percent of the population over 65 (GIS 2015)

Figure 2.3.7: Age of Population Under 18 (Above)
Percent of the population under 18 (GIS 2015)

Potential Improvement/Re-use Ideas

- Educational programs
- Dog parks
- Community gardens
- Treehouse park
- Mixed use district
- Residential redevelopment
- Outdoor climbing gym
- State park
- Urban play district
**PROXIMITY CONSIDERATION**

**Proximity to Future or Emerging Development**

- **A** Within 0.5 mile radius
  10-15 minutes walking

- **B** Within 0.75 mile radius
  15-20 minutes walking

- **C** Within 1.0 mile radius
  20-25 minutes walking

**Figure 2.3.8: Proximity Plan** Spatially radiating boundary lines graphically showing thresholds. *(Bernal 2015)*

**Schools**
- **A** Within .25 mile radius
- **B** Within .5 mile radius
- **C** Within .75 mile radius

**Employment Centers**
- **A** Within 5 miles radius
- **B** Within 10 miles radius
- **C** Within 15 miles radius

**Potential Improvement/Re-use Ideas**
- Bike share locations
- Design-build sites
- Educational programs in close proximity to schools
- Efficient public transit
- Efficient bike lanes and pedestrian paths
- Co-housing concentrated living in mixed use buildings
- Large Scale Residential Redevelopment
PROXIMITY CONSIDERATION

Proximity to Transportation Hub

Within 1/2 mile (walking distance) of Existing and Proposed MetroLink station

Not within 1/2 mile (walking distance) of Proposed MetroLink station

Proximity to Religious Institutions

Within 1 block (walking distance) of successful religious institute

Not within 1 block (walking distance) of successful religious institute

Potential Improvement/Re-use Ideas

- Church events
- Community gardens
- Car share lots
- Mixed use district
- Complete streets

Figure 2.3.9: Proximity Section Views Vacant lots within the threshold should acquire a higher priority for development. (Knight 2015)
PROXIMITY CONSIDERATION

Proximity to Future or Emerging Development

Figure 2.3.10: Proximity to Future or Emerging Development
(Bernal, adapted from City of St. Louis Planning and Urban Design Agency 2014)
PROXIMITY CONSIDERATION

Proximity to Transportation Hub

Figure 2.3.11: Proximity to Transportation Hub
(Bernal, adapted from City of St. Louis Planning and Urban Design Agency 2014)
Adjacency to Type of Roadway

- Along Interstate
- Along Arterial
- Intersection of Two Arterials
- Along Local Road
- At Intersection of Two Local Roads
- At Intersection of Local and Arterial Roads

**Figure 2.3.12: Adjacency to Road Types.** A graphic illustrating the various locations of a vacant lot in relation to road types. *(Knight 2015)*

**Potential Improvement/Re-use Ideas**

- Smaller/residential scaled strategies located along local roads
- Medium scaled strategies located along arterial roads
- Larger/industrial scaled strategies located along interstate
2.3 Vacancy Classification: Location Evaluation
In the Vacancy Evaluation Framework (Section 1.4), vacancy is divided into five defined types. These
types consider vacant parcel site conditions, proximity, abandoned buildings, and location factors to
arrive at a synthesized and simpler vacant parcel description to be matched to potential enhancement,
or redevelopment options. The Vacancy Evaluation Framework may also be used by property
developers in reverse process order. Using these “types”, a developer will be able to determine what
vacant parcel is most suitable for a desired development project.
VACANT PARCEL TYPES

Parcel types represent a synthesis and simplification of the many parcel classification schemes that were used to characterize empty lots, abandoned buildings, and existing site conditions. This simplification allows the vacant parcel inventory to be considered in broad groupings which can be more easily matched to classes of ideas for re-purposing vacant parcels. The long-range goal of this typology is to computer automate the first portion of the Vacancy Evaluation Framework to handle thousands of vacant parcels in order to match "types" with potential "strategies" to arrive at preferred repurposing options. This will be done relative to the Strategic Land Use Plan (SLUP) and considers community input during the evaluation step.

These vacant parcel “types” represent a first pass at selecting and prioritizing what vacant parcel characteristics might be most important to begin grouping vacant parcels for similar treatment strategies. Several questions exist: Did the criteria defining “types” lead to the most appropriate synthesis? Should the criteria be standardized across “types” or be more specific to each? How easy will it be to adapt this criteria to computerized processes leading to the generation of metrics and forecasting?

Additionally, more thinking and evaluation is required to ascertain if this is the best or most efficient approach to dealing with thousands of vacant parcels related to specific goals (most of which are centered around trying to locate interested buyers to reduce the inventory and carrying costs). A series of vacant lots in various locations needs to be tested to see how well the typology works or where it needs to be modified. Additionally, collection of field data is required to better document parcel conditions. This is most important for vacant parcel Types 1-3.

![Diagram of vacant parcel types and repurposing strategies](figure_2.4.1: General Type Examples (Allen & Kellams 2015))
## TYPE 1

**Description:** Characterized by a few scattered empty lots or abandoned buildings where the overall block is still intact.  
**Goal:** Prevent further decline and improve the quality of life for remaining residents, through short term low cost revitalization.

### Low Vacancy Density
0-20% block vacancy

### Scattered Vacancy Pattern
Vacant parcels are generally scattered or isolated

### Small Lot Size
Small residential or small commercial lot

### Current Residential or Commercial Land Use
Surrounded by similar land use

### Less Desirable Location Factors
Parcel is in an undesirable location based on context and proximity factors

---

### VACANCY THRESHOLDS

<table>
<thead>
<tr>
<th>Type</th>
<th>Vacancy Threshold</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>0-20% Vacant</td>
<td>Standard Residential or small scale commercial</td>
</tr>
<tr>
<td>Type 2</td>
<td>20-40% Vacant</td>
<td>Individual parcel characteristics are generally more important. Intended for low cost revitalization</td>
</tr>
<tr>
<td>Type 3</td>
<td>40-70% Vacant</td>
<td>Locations on the threshold of being revitalized or cleared in applicable strategies</td>
</tr>
<tr>
<td>Type 4</td>
<td>70% + Vacant</td>
<td>Large abandoned buildings, large number of empty residential or industrial lots</td>
</tr>
<tr>
<td>Type 5</td>
<td>70% + Vacant</td>
<td>Large abandoned buildings, large number of empty residential or industrial lots</td>
</tr>
</tbody>
</table>

---

**Figure 2.4.2: Vacancy Threshold** (Taylor 2015, adapted from Hahn 2015)
TYPE 2

*Description:* Characterized by moderate scattering of empty lots or abandoned building, where the overall block is moderately intact.

*Goal:* Prevent further decline and continue improving the quality of life for remaining residents, through short to midterm time frame and low to medium cost for revitalization.

**Low to Medium Vacancy Density**
20-40% block vacancy

**Scattered Vacancy Pattern**
Vacant parcels are generally scattered or isolated

**Medium to Large Sized Lot**
Medium-Large sized residential or non-residential lot

**Mixed Land Use**
Occupied or surrounded by residential/commercial development

**Low Market Value**
Resale value of parcel is low

![Figure 2.4.4: Type 2 (Allen 2015)](image)

TYPE 3

*Description:* Characterized by moderate scattering of empty lots or abandoned buildings, where the overall block is moderately intact.

*Goal:* Assess the likelihood that the area can be significantly improved or requires clearing to support other beneficial land uses.

**Medium to High Vacancy Density**
40-70% block vacancy

**Clustered Vacancy Pattern**
Vacant parcels are clustered in multiple groups

**Less Favorable Site Conditions**
Parcel has inadequate utilities, potential contaminated soil, and overgrown vegetation

**Less Desirable Location Factors**
Parcel resides in a less desirable location based on context and proximity factors

**Low Market Value**
Low resale value of parcel

![Figure 2.4.5: Type 3 (Taylor 2015)](image)
**TYPE 4**

*Description:* Characterized by a high density of empty lots or abandoned buildings, where the overall block is deteriorated to the point where long sustainability is questionable.  
*Goal:* Consider widespread clearing and consolidation to transition toward natural landscapes, which may support large scale green infrastructure or productive uses.

- **High Vacancy Density**  
  70%+ block vacancy
- **Clustered Vacancy Pattern**  
  Vacant parcels are clustered in multiple groups
- **Less Favorable Site Conditions**  
  Parcel has inadequate utilities, potential contaminated soil, and overgrown vegetation
- **Less Desirable Location Factors**  
  Parcel resides in a less desirable location based on context and proximity factors
- **Current Non-Residential Land Uses**  
  Lot is occupied or surrounded by institutional, industrial, and commercial development

![Figure 2.4.6: Type 4 (Bernal 2015)](image)

**TYPE 5**

*Description:* Characterized by a high density of empty lots or abandoned buildings, where the overall block is deteriorated to the point where long sustainability is questionable.  
*Goal:* Consider widespread clearing and consolidation to transition the land toward more urban development at a district scale.

- **High Vacancy Density**  
  70% + block vacancy
- **Clustered Vacancy Pattern**  
  Vacant parcels are clustered in multiple groups
- **Less Favorable Site Conditions**  
  Parcel has inadequate utilities, potential contaminated soil, and overgrown vegetation
- **More Desirable Location Factors**  
  Parcel resides in a more desirable location based on context and proximity factors (adjacent to an high investment node, etc)
- **Current Low to Medium Market Value**  
  High resale value of parcel may be achieved once intervention has occured

![Figure 2.4.7: Type 5 (Bernal 2015)](image)
CHAPTER 2: VACANCY TYPOLOGY

CONCLUSIONS

This chapter introduced a system of classifications intended to be used as a tool to characterize vacant parcels owned by the City of St. Louis or private entities. These classifications are merged into a simplified typology scheme. Vacant parcel “types” can then be matched to general categories of enhancement or redevelopment options. The typology criteria are an initial attempt meant to be reviewed, tested, and modified by the St. Louis Planning and Urban Design Agency. This part of the larger Vacancy Evaluation Framework (Section 1.4) has the potential of being computer automated to handle thousands of vacant parcels.
REFERENCES

IMAGES

Figure 2.0.1

Figure 2.1.1
Bernal, Kaitlin, and Kellams, Timothy. 2015. “Parcel Context Application”

Figure 2.1.2
Kellams, Timothy. 2015 “Block Context”.

Figure 2.1.3
Allen, Taylor. 2015. “Vacancy Consolidation”

Figure 2.1.4
Allen, Taylor. 2015. “Vacancy Assessment Scales”

Figure 2.1.5
Kellams, Timothy. 2015 “Vegetation”

Figure 2.1.6
Kellams, Timothy. 2015 “Sun Exposure”

Figure 2.1.7
Kellams, Timothy. 2015 “Dumping on Site”


Figure 2.1.8
Kellams, Timothy. 2015. “Soil Health”

Figure 2.1.9

Figure 2.1.10
Kellams, Timothy. 2015. “Street to Parcel Level”

Figure 2.1.11
Kellams, Timothy. 2015. “Water on Site”

Figure 2.2.1


Figure 2.2.2


**Figure 2.2.3**

**Figure 2.3.1**

**Figure 2.3.2**

**Figure 2.3.3**

**Figure 2.3.4**
City of St. Louis Planning and Urban Design Agency. 2014. “Residential Market Value.”

**Figure 2.3.5**

**Figure 2.3.6**
Taylor, Morgan. 2015 “Age of population Map65+” (ArcGisData, 2015)

**Figure 2.3.7**
Taylor, Morgan. 2015 “Age of population Map0--18” ArcGisData.

**Figure 2.3.8**
Bernal, Kaitlin. 2015. “Proximity Plan”

**Figure 2.3.9**
Bernal, Kaitlin. 2015. “Proximity Section View”

**Figure 2.3.10**
Bernal, Kaitlin. 2015. “Proximity to Future or Emerging Development”


**Figure 2.3.11**

**Figure 2.3.12**
Knight, Jonathan. 2015. “Adjacency to Road Type.”

**Figure 2.4.1**
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Parcels and Peppers: Savory Ideas for Addressing Vacancy in St. Louis

“Google Maps”. 2015. Google Maps. Accessed July 17. http://www.google.com/maps/@38.648226.-90.195657.3a.90y.159.22h.88.16t/data=!3m6!1e1!3m4!1suRHA9ou8y0gN5fvrF1H1cg!2e0!7i13312!8i6656


Figure 2.4.2
Taylor, Morgan. 2015. “Vacancy Threshold”.

Figure 2.4.3
Taylor, Morgan. 2015 “Type 1”


Figure 2.4.4
Allen, Taylor. 2015. “Type 2”


Figure 2.4.5
Taylor, Morgan. 2015 “Type 3”


Figure 2.4.6
Bernal, Kaitlin. 2015. “Type 4”


Figure 2.4.7
Bernal, Kaitlin. 2015. “Type 5”


REPURPOSING VACANT PARCELS
CHAPTER INTRODUCTION

This section outlines strategies and ideas for repurposing vacant parcels. Community leaders, alderpeople, city officials, community groups, and individual citizens are to be inspired and challenged by these strategies. How can St. Louis repurpose vacant parcels to create community assets? Where should investment be located? What current community assets can be utilized? Ideas considered were strengthened by relating them to community goals, aspirations, dilemmas, and opportunities as identified through research, critical mapping, and workshop participants (see Section 1.3). The highest-rated idea in the workshop was to “change the mindset.” These ideas were created to help instigate that change. Instead of viewing high levels of vacancy in St. Louis as a liability, we chose to see it as an opportunity—an opportunity for new forms of recreation, entertainment, job opportunities, and transportation options.

Ideas developed by the group as a whole were synthesized, prioritized, and hybridized to create six detailed strategies. Each of the six strategies carefully considers how the strategy will payoff for the people/community. In addition to these six strategies, an encyclopedia of ideas was created to provide quick examples of creative options and help interested groups or individuals think about the possibilities and define their own strategies for vacant lots.
This subchapter outlines the scale used to organize strategies and ideas. Within this chapter are over 60 ideas on how to address the issue of vacancy and abandonment in St. Louis. These ideas are organized on the Spice Scale, ranging from Mild to Hot to Spicy. Each different spice category has different requirements and factors related to idea compatibility. More detail regarding the Spice Scale can be found in the following pages.

This scale is intended to be used to provide a better understanding of the different range of projects and ideas that can be implemented to address vacancy. It shows that even the smallest ideas can make a difference, and that anyone - community members, alderpersons, councilmembers, or others can band together and begin to make changes within their own city.
SPICE SCALE OF IDEAS

In order to create a hierarchy of ideas for vacant parcels, we created a spice scale that divides the ideas into three categories; mild, hot, and spicy. This idea originates from the shape of the city of St. Louis which resembles a chili pepper.

Mild ideas designate land use and are quick and easily implemented. Ideas operate at grassroots and overall have very few resistance factors. Little or no policy change is needed for mild ideas.

Hot ideas evaluate vacant parcels on a block scale or larger. Strategies in this category often involve public and private partnership. They take more time and planning to implement compared to mild strategies.

Spicy ideas are the most ambitious of the presented ideas and include long term solutions. Development opportunities for spicy ideas are found on parcels presenting consecutive vacancies and may involve relocation incentives.
3.2 Repurposing Vacant Parcels: Example Strategies

- Alternative energy fields
- Urban play district
- Ecovillage / co-housing
- Vineyard
- Stadium
- Black walnut tree grove
- Constructed wetlands
- Incentivize development in north St. Louis
3.2 REPURPOSING VACANT PARCELS: EXAMPLE STRATEGIES

The pages in the following subsection show a more in-depth look at six ideas to address vacancy and blight in the City of St. Louis: Community Events, Churches, Urban Play Districts, Black Walnut Grove, Alternative Energy, and Constructed Urban Wetlands. These ideas range from mild to hot to spicy on the Spice Scale, and provide a more detailed explanation as to how each method can be applied to the city and what benefits are offered.

In addition to the goals and benefits of each idea, within each method there is an Opportunities Matrix, supporting images, as well as relating the idea or strategy back to Chapter 2: Vacancy Typology. The vacant lot types from the previous chapter help organize and single-out parcels with specific qualities that are best suited for specific strategies or ideas.
COMMUNITY EVENTS

GOALS:
- Create strong sense of community
- Encourage participation in neighborhood events
- Attract people to new areas of the city
- Increase economic activity
- Change in perception of neighborhoods with high vacancy

BENEFITS
There are a wide variety of events ranging from larger-scale activities such as concerts and festivals to small-scale activities like an outdoor yoga class or small farmer’s market. Examples of community events include, but are not limited to 5k Fun Run/Walks, concerts, pop-up shops, church events, cleanup projects, and more.

For example, in the image pictured above, a food truck park is shown. On a small to medium sized vacant parcel, local businesses are able to drive their food trucks onto the parcel and open them for business in a community that may have never tried that particular restaurant before. This creates new business for the restaurant while also creating economic activity in an area that has little retail. These food trucks may also attract visitors from other nearby neighborhoods as well as the rest of the city. This can be implemented at a relatively low cost by recycling found materials as furniture, such as mismatched chairs and cable spool tables. Inexpensive string lights can be used as lighting on the site, and gravel can be used as the ground material.

Figure 3.2.1: Food Truck Park. Community events such as food truck parks can be used to spark economic activity and create a destination within a neighborhood. (Fiala 2015)

Figure 3.2.2: Vacancy Requirements for Community Events. Conditions required for community events in vacant parcels can be found in many neighborhoods including the O’Fallon neighborhood. (Knight 2015)

These kind of grassroots community events are important because part of regenerating a community is instilling a sense of ownership and pride in one’s neighborhood, according to Andrew Smith in “Events and Urban Regeneration: the Strategic Use of Events to Revitalize Cities.” Smith also states that community participation is the key to success and should start at the very beginning stage of planning the event to the execution of the event itself (Smith 2012).
RUN FOR REVITALIZATION

Neighborhoods with a high percentage of vacancy often have little opportunity for outdoor recreation such as running trails and bike paths. By organizing a 5k run or walk in these areas, not only is the event providing an opportunity for a healthy lifestyle within the community, but it is also inviting running enthusiasts from the surrounding area to become more aware of the conditions within these neighborhoods, educating them, and making them more willing to help revitalize the area.

Opportunities Addressed by Strategies

<table>
<thead>
<tr>
<th>Community Events</th>
<th>Crime</th>
<th>Employment Potential</th>
<th>Revenue Potential</th>
<th>Improve Quality of Life</th>
<th>Ecosystem Support</th>
<th>Social Impact</th>
<th>Time</th>
<th>Investment</th>
<th>Citizen Involvement</th>
<th>Typology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities for fundraising</td>
<td>By increasing visitor traffic in vacant areas, more people will associate a positive image with vacant neighborhoods and foster investment</td>
<td>Can be implemented almost immediately</td>
<td>Private investing of funds and supplies</td>
<td>Opportunities for community involvement and neighborhood planning groups to come up with creative solutions</td>
<td>Crime, Age of Population, Parcel Size, Context, Vacancy, Size of Open Space, Ownership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 3.2.5: Opportunity Matrix. Visualizing opportunities addressed by vacancy strategies. (Jackman 2008)

Scheduling community events, whether through grassroots efforts, through local organizations, or through local government, creates lots of opportunity for neighborhood revitalization. In addition to revenue potential through food trucks and pop-up retail, having events where families within the community can gather and recreate provides an improved quality of life. This improved quality of life within the neighborhood then affects the rest of the area socially, transforming the area into one with a more positive image rather than letting them be defined by vacancy. These events can be planned by the community, giving them a sense of pride and involvement in their own neighborhoods.
PLACES OF WORSHIP CATALYSTS

GOALS
• Utilize vacant parcels near or adjacent to places of worship.
• Capitalize on strength of existing cultural communities.
• Create outdoor spaces for worship, community gatherings, weddings, and other activities.

BENEFITS
Cultural strengths should be harnessed whenever possible when reinventing vacant parcels. Places of worship represent one such cultural strength.

Places of worship are often the epicenter of African American community culture and the “blueprint for civic life in the neighborhood” (Patillo-McCoy 1998). Eighty-seven percent of African-Americans in the US report affiliation with a particular religious group (Soaries, Jr. 2010).

Catalyzing places of worship means boosting their chance of creating positive change in the community and recognizing them for their ability to gather caring and passionate people, create events, and create community.

Vacant parcels can be utilized in several ways each benefiting places of worship as well as the greater community:

• Congregation community gardens
• Sermon/worship areas
• Outdoor wedding venues
• Meditation/prayer gardens
• Facility expansions

Neighborhood places of worship can grow their influence even more in the community by utilizing vacant parcels. Utilizing vacant parcels for facility programming can be an effective use of vacant land and expand cultural capital.
3.2 Repurposing Vacant Parcels: Example Strategies

The photos above show existing examples of how places of worship have been able to use the landscape. Gardens, wooded areas, and amphitheaters are three design elements worth considering for the development of vacant parcels adjacent to worship facilities.

[pictures of community garden, church amphitheater, reflective wooded area]

**PRECEDENTS**

The photos above show existing examples of how places of worship have been able to use the landscape. Gardens, wooded areas, and amphitheaters are three design elements worth considering for the development of vacant parcels adjacent to worship facilities.

**Opportunities Addressed by Strategies**

<table>
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<tr>
<th>Crime</th>
<th>Employment Potential</th>
<th>Revenue Potential</th>
<th>Improve Quality of Life</th>
<th>Ecosystem Support</th>
<th>Social Impact</th>
<th>Time</th>
<th>Investment</th>
<th>Citizen Involvement</th>
<th>Typology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth programs, womens' shelters, outreach programs and others help reduce the number of individuals who turn to crime.</td>
<td>Maintaining lots, program workers, project managers, etc.</td>
<td>Places of worship can use lands to grow food and provide job training, consumables for sale</td>
<td>Shelters, food pantries, community gardens, and alternated community programs provide aid and care for persons in need</td>
<td>---</td>
<td>---</td>
<td>1-5 years</td>
<td>Private, grants, tax providers, donations</td>
<td>Citizens and neighborhoods can vote to give resources to their personal religious organization</td>
<td>Crime, age of population, lot size, block vacancy, context vacancy</td>
</tr>
</tbody>
</table>

**OPPORTUNITIES**

Places of worship represent one of the best opportunities to reinvigorate the community and vacant parcels because they are one of the biggest assets remaining in neighborhoods with high vacancy.

[pictures of community garden next to places of worship, church amphitheater for baptizing, reflective wooded area and path]
URBAN PLAY

Figure 3.2.12: Hardcore Parkour Vacant lots can be turned into places for paintball, parkour, and other extreme sport activities. (Stucki 2015)

GOALS
- Utilize areas of vacant land and vacant buildings.
- Create places for fun, physical activities.
- Create business opportunities within vacant buildings.
- Utilize on-site or recycled materials
- Promotes sense of excitement and adventure

BENEFITS
This strategy will expand community interactions and physical health by providing fun unique areas where outdoor play and socialization can take place.

These urban play developments present opportunities for more unconventional types of activities such as parkour, paintball, skateboarding, and BMX biking.

Urban play activities can use both vacant lots and vacant buildings with minimal intervention. Lots can be cleared and simple structures can be implemented to provide places to run, jump, bike, and skate. Empty buildings can be the setting for events like paintball or laser tag, which would require minimal building maintenance.

Urban play developments can be implemented relatively quickly and can utilize recyclable materials found on vacant parcels to build obstacle courses or playgrounds.

Figure 3.2.13: Areas of Opportunity Contiguous parcels in the North Riverfront neighborhood provide opportunities for urban play developments. (Knight 2015)

Many of these amenities could be open and free for public use. Other activities (such as the paintball and laser tag) could provide business opportunities for locals.

This type of development promotes the physical health of the community, while also allowing people of the community to bond over a shared interest.
Structures for urban play developments can be built out of a variety of recyclable materials. Tires can form playground amenities, walls can be built with glass bottles and cans, recycled wood or plastic can be turned into benches. Communities of St. Louis can utilize unused brick and concrete, as well as materials like glass bottles, cans, and tires to create unique, interesting structures for urban play. The activity of building these structures can also serve as a community bonding activity.

**Figure 3.2.14: Tire Slide** Earth filled tires are used to construct playground equipment in Leipzig, Germany. (Belanger 2010)

**Figure 3.2.15: Recycled Walls** Earthship structures in New Mexico are built of cans, bottles, tires, and concrete. (Parkins 2015)

**Figure 3.2.16: Upcycled Benches** Phones can be reformed into park benches. Reclaimed wood can also be used for benches. (4Eleven Images 2011)

**RECYCLED MATERIALS**

Urban play developments contain several opportunities and benefits to communities experiencing to solve vacancy problems. These are outlined above. This strategy centers around the opportunities for fun and unique physical activities. The chart above addresses several typologies that could utilize this strategy.

**Opportunities Addressed by Strategies**

<table>
<thead>
<tr>
<th>Typology</th>
<th>Crime</th>
<th>Employment Potential</th>
<th>Revenue Potential</th>
<th>Improve Quality of Life</th>
<th>Ecosystem Support</th>
<th>Social Impact</th>
<th>Time</th>
<th>Investment</th>
<th>Citizen Involvement</th>
<th>Typology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme Urban Play</td>
<td>Occupied land and assigning purpose to vacant areas will remove vacant areas used for criminal activity</td>
<td>Owners and workers for urban play establishments</td>
<td>Tax and commercial revenue</td>
<td>Exercise opportunities</td>
<td>Creates bonding opportunities for teammates and players</td>
<td>A few months to a couple years to renovate abandoned structures</td>
<td>Private investors</td>
<td>---</td>
<td>Non-Residential Building, Market Values, Age of Population, Size of Building</td>
<td>---</td>
</tr>
</tbody>
</table>

**Figure 3.2.17: Opportunities for Urban Play** This strategy provides opportunities for community health and well-being through play and physical activities (Jackman 2015)

**OPPORTUNITIES**

Urban play developments contain several opportunities and benefits to communities experiencing to solve vacancy problems. These are outlined above. This strategy centers around the opportunities for fun and unique physical activities. The chart above addresses several typologies that could utilize this strategy.
SOLAR FIELDS

Parcels and Peppers: Savory Ideas for Addressing Vacancy in St. Louis

Utilizing solar energy farms on vacant parcels provides a variety of benefits. Solar panels are a visible and tangible industry where people can walk, bike, or drive by and see investment and redevelopment.

Wind power is aesthetically and environmentally controversial because they are large structures which can obstruct views or be seen as an “eyesore.” Wind turbines can also disrupt wildlife habitat. In contrast, solar panels have minimal environmental impact, no moving parts, and are totally silent. (Wright 2013; energymatters.com.au 2015)

Solar panel leases can be finite (Curwin 2012). This leaves flexible options for future development open if markets and requirements change. Depending on the extent of panel coverage, concurrent land uses might also be possible.

GOALS
- Utilize moderate-to-high areas of contiguous vacancy.
- Develop new industry and economic opportunities.
- Create a spectrum of blue collar to white collar jobs.
- Reduce fossil fuel consumption and source energy locally.
- Capitalize on 200 days of full or partial sun per year.

BENEFITS
Utilizing solar energy farms on vacant parcels provides a variety of benefits. Solar panels are a visible and tangible industry where people can walk, bike, or drive by and see investment and redevelopment.

Solar panels would be a new industry in St. Louis. Thousands of jobs could be created from blue collar to white collar: solar panels require land acquisition, construction, battery designers, component manufacturing, and ongoing maintenance.

Opportunities to train the local workforce to work on solar farms may already exist. Technical high schools in St. Louis could begin integrating solar industry curriculum. Other “mild” vacancy strategies around the schools could provide hands-on, design-build opportunities to learn the solar industry.

Solar development could be integrated with other strategies including meadows, hiking trails (in/around the fields), or even productive landscapes in areas in transition to a solar field.
3.2 Repurposing Vacant Parcels: Example Strategies

Productive meadows—useful for growing, phytoremediation or aesthetics—accent solar fields in land once vacant in St. Louis. Solar fields would produce a new industry in St. Louis providing a variety of blue- and white-collar jobs. Nature trails or other paths could be utilized in the development of the solar fields to create hybrid strategies and overlapping uses. A co-op setup could be used to create the solar fields.

**CREATING ECONOMY**

Productive meadows—useful for growing, phytoremediation or aesthetics—accent solar fields in land once vacant in St. Louis. Solar fields would produce a new industry in St. Louis providing a variety of blue- and white-collar jobs. Nature trails or other paths could be utilized in the development of the solar fields to create hybrid strategies and overlapping uses. A co-op setup could be used to create the solar fields.

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<th>Time</th>
<th>Investment</th>
<th>Citizen Involvement</th>
<th>Typology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lands used for alternative energy fields will be monitored and secure</td>
<td>Job opportunities in maintenance, management, engineering, mechanics, and more.</td>
<td>Reduce cost of energy consumption, save money.</td>
<td>Hybrid strategies combined with solar panels can provide quality of life benefits.</td>
<td>Alternative energy reduces the need for carbon-emitting power plants.</td>
<td>---</td>
<td>20+ years of preparation and implementation</td>
<td>Grants, Private Funding, Lender</td>
<td>---</td>
<td>Parcel Size, Block Vacancy, Context Vacancy, Sun Exposure</td>
</tr>
</tbody>
</table>

**Figure 3.2.20 Alternative Energy Process** How alternative energy can work in St. Louis. *(Knight 2015)*

**Figure 3.2.21 Alternative Energy Opportunities** Alternative energy is a long-term solution for employment. *(Knight 2015)*

**OPPORTUNITIES**

The solar field strategy contain several opportunities and benefits to communities trying to solve vacancy problems. These are outlined above. Employment potential is one key opportunity contained within this strategy. Several typologies are addressed with this strategy.
GOALS

• Use vacant lots to create unique identity for city of STL
• Create jobs
• Urban agriculture and food production
• Sequester carbon
• Reduce urban heat island effect

BENEFITS

This strategy uses vacant parcels to create a strong identity within the city of St. Louis. Creating a black walnut tree grove is a “spicy idea” that utilizes unique urban agriculture opportunity to strengthen the sense of place and meaning in the city.

Black walnut trees are one of the most commercially valuable tree species in the country (Pennsylvania State University 2013). A mature stand of black walnut trees can bring in about $100,000 per acre in timber value alone (Thompson in Wallin 2015). Creating a black walnut tree grove will increase the job demand in north St. Louis. Employees will be needed to maintain, harvest, and distribute the walnuts. Black Walnut trees have a high density which allows them to sequester more carbon even when they are young (Jacobs 2014).

Designated land use would help reduce crime rate in these areas as they would be occupied for other uses.

Reduction in urban heat island effect would allow the city of St. Louis to become more energy efficient which will reduce cost of heating and cooling expenditure.

Revenue opportunities in harvesting and selling walnuts from the grove. Additionally, this strategy would draw in private investors and tax opportunities.

Promotes local food production which is also a major contributor toward environmental sustainability.
PROPOSED GROVE

Example of what an existing parcels in St. Louis would look like after walnut trees are planted in the vacant lots. Overtime, relocation incentives would be provided for non-vacant lots. As such a large neighborhood, this design would promote identity and provide jobs.

**Opportunities Addressed by Strategies**

<table>
<thead>
<tr>
<th>Typology</th>
<th>Crime</th>
<th>Employment Potential</th>
<th>Revenue Potential</th>
<th>Improve Quality of Ecosystem Support</th>
<th>Social Impact</th>
<th>Time</th>
<th>Investment</th>
<th>Citizen Involvement</th>
<th>Parcel Size, Block Vacancy, Context Vacancy, Sun Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large-Scale Urban Agriculture</td>
<td>Lands used for urban agriculture will be monitored and unavailable for criminal use</td>
<td>Maintenance, harvest, horticultural, equipment maintenance</td>
<td>Profit opportunities for exporting goods</td>
<td>Reduce urban heat island effect, sequester carbon, decrease runoff</td>
<td>---</td>
<td>20+ years of preparation and implementation</td>
<td>Private investors and tax providers</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

**Figure 3.2.24 Strategy Diagram** Current neighborhood conditions with future black walnut tree grove (Vallo 2015).

**Figure 3.2.25 Walnut Forest Opportunities Matrix** for black walnut tree grove (Jackman 2015)

**OPPORTUNITIES**

The black walnut tree grove is a long term strategy that would take more than twenty years to implement. This strategy provides great employment potential, providing jobs in a number of different areas. Additional opportunities include decreased crime rate, urban heat island reduction, and identity in the city of St. Louis.
URBAN WETLANDS

Figure 3.2.26 Photo montage of Urban Wetlands A conceptual illustration of what an urban wetlands could look like and the amenities it could offer. (Jackman 2015)

GOALS
• Consolidate density to areas of high activity in order to clear large areas of vacancy
• Provide wildlife education opportunities
• Sequester and filter air pollution
• Provide recreation opportunities
• Provide an identifying feature for the city of St. Louis

BENEFITS
Primarily, urban wetlands would serve a number of massive ecological functions. Wetlands provide wildlife habitats for native species of Missouri and create connectivity and refuge for migrating species according to USDA Forest Service (fs.fed.us). Healthy urban ecosystems prevent species die-off, preserve natural resources, create sanctuary for migrating species, and generally improve community and environmental health. A single tree can sequester 48 pounds of carbon and pollutants in a year (Americanforests.org). Multiple acres of trees could filter a significant portion of the pollutants released by cars and industrial sites.

Creating an urban forest and wetlands implements a riparian and forested buffer that will “physically protect and separate a ... wetland from future disturbance” and “can provide storm water management” (epa.gov). This reduces the pressure and load on storm water management systems in the city and prevents pollutant runoff into the river.

Figure 3.2.27: Figure-Ground of Vacancy Neighborhoods with a high density of vacancy could potentially be Wetlands in the future. (Knight 2015)

Once the wetlands are in place, boardwalks, cycle paths, hiking trails, and other recreational amenities can be implemented. These amenities open up opportunities for citizens of St. Louis to take small vacations or day trips to get away from any stress or pressures of the normal city life.

St. Louis is a river city that is woefully disconnected from its river. Implementing an urban wetlands would give the citizens of St. Louis a natural feature to identify with.
CITY OF TREES
Urban forests and wetlands provide a relaxing and refreshing escape from the typical strains of urban living. A chance to take a break and enjoy the forested and aquatic scenery while jogging, biking, having a picnic, or people watching.

Opportunities Addressed by Strategies

<table>
<thead>
<tr>
<th>Crime</th>
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<th>Ecosystem</th>
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<td></td>
<td></td>
<td></td>
<td>Ownership, Size of Open Space, Block Vacancy, Context Vacancy, Soil Health</td>
</tr>
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Figure 3.2.28 City of Trees This rendering shows how an urban wetland or forest could be a potential amenity for St. Louis. (Jackman 2015)

Figure 3.2.29 Opportunities Matrix for Urban Wetlands A qualitative analysis of the benefits of implementing an urban wetland. (Jackman 2015)

OPPORTUNITIES
Implementing urban wetlands could provide opportunities in education, ecosystem care and maintenance, research opportunities, and so much more. There are recreation amenities to improve physical health, and the natural plantings will filter pollutants that also have a positive impact on the health of the city. Citizens can get involved with the decision making process and determine where an urban wetland would be best utilized to create connection with the whole city.
The following pages are an encyclopedia of 65 different ideas to spark regeneration in vacant and blighted communities. These ideas range from easily implementable, low-cost methods to large-scale, long-term projects. Arranged on the Spice Scale from mild to spicy, this encyclopedia provides a wide range of different ideas that may reshape St. Louis. Each specific idea is explained briefly and simply, and is followed by the benefits or goals of that specific idea.

These ideas can be combined and changed in any way in order to suit the specific needs of a neighborhood or community. It is our studio’s hope that this encyclopedia will be used as a guide for generating new, creative, and unique ideas to incite change and contribute to the revitalization of struggling areas. We hope that in addition to the ideas presented in this section, communities can collaborate and create strategies of their own, take the first step, and help lead the City of St. Louis in a new direction when it comes to addressing issues of vacancy and abandonment.
MILD IDEAS
**MILD IDEAS**

Mild ideas address issues on a community level and provide opportunities for community involvement, education and economic improvement through low-cost projects and grassroots efforts that can be implemented quickly with little resistance.

**APIARY (BEE YARD)**

**Idea:** Build an apiary (also called a bee yard) and maintain it in partnership with local beekeeping organizations

**Goal:** Provide pollination to local gardens and urban agricultural productions, build community through beekeeping organizations, provide educational opportunities, and provide potential economic benefit through honey production

**ART BLOCK**

**Idea:** Select a block with a high percentage of vacancy and designate areas where artists can display their work in the form of a sculpture, installation, or gallery space in a vacant building or on the walls of a vacant building.

**Goal:** This block would become part of a larger art district, giving artists an opportunity to showcase their talents and attract art enthusiasts from the surrounding area as well as creating a sense of identity as a block

**ART INSTALLATIONS**

**Idea:** Use vacant parcels as opportunities to display local artists’ work

**Goal:** Art installations will attract people from all over the city of St. Louis who wish to view the work and will provide a temporary use for vacant parcels that is aesthetically pleasing

**BIKE SHARE LOCATIONS**

**Idea:** Implement bike share stations on residential neighborhoods with vacancy and abandonment issues on small parcels

**Goal:** Create a more accessible city, provide opportunities for families without cars, encourage a healthy lifestyle, and connect neighborhoods to transit stops and greenways.

**BERRY PATCH**

**Idea:** Convert vacant parcel into a berry patch for whichever berry is best suited for site and regional conditions

**Goal:** Create alternate local food source, educational opportunities, community building opportunities through patch maintenance, and potential economic benefit by selling at local farmers’ markets

**BLOCK BRIDGING**

**Idea:** Host a block party in which people who used to live in neighborhoods that are now struggling can come back and remain a part of their old community, much like a city-county exchange event.

**Goal:** Reconnect people with their roots, establish a sense of community without boundaries, and lessen the city/county divide

**BOCCÉ BALL COURT**

**Idea:** Transform smaller vacant parcels into bocce ball courts for the community to form leagues and use recreationally

**Goal:** Build community, provide a temporary or permanent use for vacant parcels, and provide recreational opportunities outdoors

**CHURCH EVENTS**

**Idea:** Churches located in areas of high vacancy can use those vacant parcels to hold events such as carnivals or rummage sales, or alternatively, use those parcels to construct prayer gardens or labyrinths

**Goal:** Activate the community by focusing on institutions with large and active congregations and improve their surrounding neighborhood

**CLEANUP PROJECTS**

**Idea:** Host community cleanup projects in which community members help improve the conditions of their own neighborhood by mowing, collecting litter, planting flowers, painting, and other simple aesthetic improvements

**Goal:** Create a sense of community in a neighborhood, instill a desire to create change in a community, improve the overall aesthetic of blocks within a neighborhood, and provide opportunity for service
COMMUNITY GARDENS
Idea: Convert vacant parcels into a community garden
Goal: Provide a healthy and natural food source for the community as well as educational opportunities, opportunities for community-building activity, and potential economic activity in the form of a farmers’ market or produce stand

DISC GOLF
Idea: Install a disc golf course in a neighborhood and on vacant parcels in an area
Goal: Provide recreational opportunities for people of all ages, encourage a healthy lifestyle, provide a permanent or temporary use for vacant parcels, and attract disc golf enthusiasts from all over the city into the neighborhood

DOG PARK
Idea: Utilize consecutive vacant parcels to create a dog park
Goal: Provide a recreational space that encourages outdoor activity and promotes a sense of friendship and community while also improving the air quality of a space as well as remediating any contamination on the site

DESIGN-BUILD SITES
Idea: Donate vacant parcels to trade schools or technical programs as sites for students to implement their own projects
Goal: Educational opportunities, temporary or permanent, and create a sense of community building neighborhood projects

EDUCATIONAL PROGRAMS
Idea: Hold events at local schools such as night classes or GED classes for adults, and after-school clubs and extracurricular programs that encourage community outreach, gardening, design-build, etc. for students
Goal: Activate the community, make schools a neighborhood center, encourage education, and create a sense of community

FOOD TRUCK PARKS
Idea: Dedicate a parcel to food trucks and invite local vendors to park their trucks in the space for lunch, dinner, late-night snacks, while reusing and recycling cable spools and furniture as tables and seating
Goal: Increase economic activity, create a community gathering space, temporary or permanent use, and is implementable at relatively low cost

GRILLING COMPETITION
Idea: Host a grilling/barbeque competition on a larger vacant parcel and invite the surrounding neighborhoods and communities to participate in cooking contests and competitions
Goal: Create a sense of community through healthy competition, provide opportunity for local restaurants/cooks to showcase their talents, and attract attendees and participants from all over the city and into a new area

HAMMOCK PARK
Idea: Create a small public space with hammocks as seating for the community to relax in
Goal: Provide a small park space that is relaxing for a relatively low cost, provide opportunity for recreation, create a community gathering space, and temporary or permanent use of parcel
MILD IDEAS
Mild ideas address issues on a community level and provide opportunities for community involvement, education and economic improvement through low-cost projects and grassroots efforts that can be implemented quickly with little resistance.

JUNK PLAYGROUND
Idea: Create a play space out of found objects such as tires, tubes, pipes, nets, tunnels, etc.
Goal: Provide a space where children can play and discover at a low cost and with few specific land requirements, and provide a temporary or permanent use

LIVE-WORK STUDIOS
Idea: Offer combination housing and retail/studio spaces available at a variety of sizes and affordable for a range of incomes
Goal: Provide opportunities to local business owners and artists, provide economic opportunity, spark retail development/mixed use development, and create a sense of community through local businesses

MURAL “TOUR”
Idea: Invite local artists to paint a mural on the outer wall of the abandoned building of their choosing in a neighborhood and feature each mural as part of a “mural tour” of St. Louis.
Goal: Provide a temporary, aesthetically pleasing, low-cost way of improving an area visually while providing opportunity to local artists to showcase their talent and attracting art enthusiasts from the surrounding area

OUTDOOR CONCERT
Idea: Use a larger vacant parcels or consecutive vacant parcels to host an outdoor concert featuring local or other musicians
Goal: Create a sense of community within neighborhoods, attract people to the area, provide economic opportunity, provide local musicians with chance to showcase their talents, and reduce crime by providing structured events to attend

OUTDOOR MOVIE SCREEN
Idea: use a small vacant parcel adjacent to a vacant building as an opportunity to host outdoor movies by projecting the film onto the building walls
Goal: Provide opportunity for community to gather and form strong connections while utilizing vacant space

OUTDOOR YOGA
Idea: Use vacant parcels as a location for outdoor yoga classes for the community
Goal: Provide opportunity for a healthier lifestyle, build community through events and activities, provide a temporary use for vacant parcels, and create a relaxing environment for neighborhood

PHYTOREMEDIATION
Idea: Use specific plants to remediate contamination from the soils; different plants will remove different contaminants
Goal: Improve the quality of brownfield sites and remove contaminants from the earth in a way that is also aesthetically pleasing.
(Example: Washington University’s Sustainable Land Lab Sunflower+ Project)

POP-UP RETAIL PARK
Idea: Designate a vacant parcel for pop-up shops and restaurants inside shipping containers, therefore easily portable and small enough to fit on one parcel
Goal: Increase economic activity, provide opportunity for local businesses to advertise, create a destination in the area, opportunity to build community by creating a gathering space, and attract visitors from all over the city. (Example: Bistro Box concept from Washington University in St. Louis Sustainable Land Lab competition)
RECREATIONAL SPORT COMPLEX
Idea: Use large areas of vacancy as fields for various recreational sports such as soccer, baseball, softball, tennis, basketball, and football; form youth and adult leagues
Goal: Reduce crime by providing a positive outlet for youth, build community, provide opportunity for a healthy lifestyle, and absorb large amounts of vacancy

SIDE LOTS
Idea: Allow homeowners to purchase vacant parcels adjacent to their property to expand their yards
Goal: Increase property value of homes by increasing the amount of greenspace on homeowner’s property

SHOOTING RANGE
Idea: Create an outdoor shooting range available to the public for target practice, gun safety programs, etc, can be temporary or permanent
Goal: Reduce gun-related crime through education, and provide recreation and education opportunities

TEAM BUILDING/OBSTACLE COURSE
Idea: Use areas of abandoned buildings and vacancy to create a team building course or challenge course with both high and low-ropes options such as walls, poles, cables, and zip lines as well as the opportunity for nationally recognized challenge courses such as the Warrior Dash or Tough Mudder races
Goal: Create a destination within the city for citizens and tourists, provide opportunity for recreation, and provide a temporary use of vacant parcels at a relatively low cost

URBAN CAMPGROUND
Idea: Use vacant parcels as campgrounds for families, scout troops, camping enthusiasts, etc.
Goal: Bring people into a new area of the city, provide opportunity for recreation, and provide temporary use of vacant parcels

URBAN NURSERY
Idea: Use vacant parcels as an opportunity to grow trees, perennials, shrubs, and annuals to sell for profit
Goal: Provide jobs, increase economic activity, and help remediate any contaminants that may be found in the soil of a site as well as improve air quality in the area

VERTICAL GARDEN
Idea: Improve the aesthetic of abandoned buildings by creating vertical gardens on the sides of buildings
Goal: Improve the appearance of abandoned buildings and surrounding vacant parcels, build community through gardening opportunities, and create environmental benefits

5K WALK/RUN
Idea: Organize a 5k Walk/Run through various neighborhoods with high vacancy and feature educational facts about vacancy and abandonment in St. Louis at points throughout the run, ending in an area that has overcome vacancy and is on the road to recovery
Goal: Educate the public about the issues of vacancy and abandonment in St. Louis, encourage an active lifestyle, bring people from all over to an area they may be unfamiliar with, and create a sense of community
HOT IDEAS

Hot ideas address St. Louis on a slightly larger scale and focus on creating public-private partnerships as well as neighborhoods that are accessible and desirable to live in through instilling a sense of place and identity.

ALTERNATIVE ENERGY FIELDS

Idea: Use vacant parcels as fields for alternative energy sources such as solar panels or wind fields
Goal: Provide a green energy source for the City of St. Louis, reducing reliance on fossil fuels and reducing the city’s carbon footprint

CAR SHARE LOTS

Idea: Improve the ZipCar car sharing system that is already in St. Louis, although only at the airport, by adding lots throughout the city, especially around areas with high vacancy
Goal: Improve accessibility, and provide opportunity for residents in areas of high vacancy

CO-HOUSING

Idea: Establish an intentional community in which residents are a part of a living organization that encourages working together
Goal: Absorb several consecutive vacant parcels to provide an ecologically friendly housing option with a strong sense of community and attract a new demographic to the City of St. Louis while increasing sustainability practices within the city through urban agriculture and alternative energy sources

COMPLETE STREETS

Idea: Incorporate more pedestrian-friendly sidewalks, bike lanes, and green space along streets in a community
Goal: Ecological benefits, creating a more accessible and well-connected city, potential for transit oriented development, and provide opportunity for economic growth

CONSERVATION COMMUNITY

Idea: Intentional community with an emphasis on conserving natural ecosystems in a community setting
Goal: Provide an opportunity for alternative living, attract people to the area, and create environmental benefits

DRIVING RANGE

Idea: Create a recreational driving range to be used by the local community and surrounding areas
Goal: Provide an amenity not currently found in the area, provide recreational opportunities, encourage a healthy lifestyle, and create potential economic opportunity

ECOLOGICAL EXPLORATION

Idea: Let nature take over a group of vacant parcels in an area and open up the area for exploration, discovery, and environmental education programs
Goal: Improve air quality and soil quality as well as rebuild ecosystems while attracting tourists and citizens to the area in search of an urban forest experience

ECOVILLAGE

Idea: Establish an intentional community that lives as part of a partnership with each other while emphasizing sustainable living practices and a green lifestyle
Goal: Provide an ecologically friendly housing option with a strong sense of community and attract a new demographic to the City of St. Louis while increasing sustainability practices within the city through urban agriculture and alternative energy sources
FALL DESTINATION
Idea: Create a “Fall Destination” or pumpkin patch, corn maze, etc. that would provide a family-friendly activity for all ages
Goal: Provide family-friendly recreation opportunities, potential economic opportunity, alternate food source for the community, and community gathering space/event space

GREENWAY EXTENSION
Idea: Expand upon the work of Great Rivers Greenways and create an extensive trail system, connecting existing greenways with the North Riverfront development, major parks, and use vacant lots as pocket parks or guides for trail development
Goal: Create a healthier and more accessible city by creating new connections for bikes and pedestrians while utilizing several vacant parcels as space for development

INCENTIVIZED DEVELOPMENT
Idea: Provide different incentives such as tax breaks or grants to developers or potential business owners who show interest in areas of high vacancy or vacant parcels
Goal: Encourage business districts in vacant blocks, create a stronger revenue stream in vacant neighborhoods and provide services that neighborhoods may be lacking, thus encouraging people to move back to the area

MIXED USE DISTRICT
Idea: Create a new district within the city that provides a wide range of services and uses, for example buildings with first level retail, second level office space, and upper level living space
Goal: Increase economic activity, provide jobs, encourage more dense development in the area, and provide a variety of housing types in an area

OUTDOOR CLIMBING GYM
Idea: Build upon existing outer walls of abandoned buildings as base for an outdoor climbing gym/rock wall
Goal: Create an attraction in the area, attract people from all over the city, provide economic opportunity, opportunity for community building activities, and encourage a healthy lifestyle

PARK OR GREEN SPACE
Idea: Create a large park or linked green spaces with amenities for the whole community to come together and enjoy
Goal: Provide amenities the community may be lacking, provide outdoor recreation space to encourage public health, and increase overall programmed green space in the area

PETTING ZOO
Idea: Transform a block or multiple blocks into a petting zoo, either as a satellite off the St. Louis Zoo or a private entity with a focus on animal education, either exotic or more typical petting zoo animals
Goal: Provide educational opportunities for all ages, attract tourists and people from all over the city, provide economic opportunities, and create a destination for the city

RESIDENTIAL REDEVELOPMENT
Idea: Redevelop entire blocks or multi-block areas with a large amount of abandoned buildings for residential use
Goal: Create a more dense area, provide housing for a variety of incomes and demographics, improve the aesthetic of the neighborhood by removing or renovating abandoned buildings and developing vacant parcels

SKATE PARK
Idea: Use larger vacant parcel(s) to create a skate park for teens and skateboarders in the area
Goal: Provide a recreational opportunity and amenity not found in much of the city, create an area where teens can gather in a safe and productive way therefore reducing youth crime/gang violence
HOT IDEAS
Hot ideas address St. Louis on a slightly larger scale and focus on creating public-private partnerships as well as neighborhoods that are accessible and desirable to live in through instilling a sense of place and identity.

TREEHOUSE PARK
Idea: In an area of high vacancy with a large amount of supportive trees, create a treehouse park or space where treehouses can be built and enjoyed by many. Can be used as an opportunity for local developers/artists/firms to showcase their work
Goal: Provide recreational green space and opportunity for outdoor play and the opportunity for phytoremediation of soils depending on plants on site and plants chosen

TRANSIT ORIENTED DEVELOPMENT
Idea: With the development of a new MetroLink line, choose specific stations to develop transit hubs around, including mixed income housing, retail, etc.
Goal: Create a more connected and accessible city and provide potential for economic activity

URBAN PLAY DISTRICT
Idea: Develop one or several blocks with both vacant parcels and abandoned buildings and create an urban play district with opportunities for free running, parkour, paintball, laser tag, obstacle courses, and more
Goal: Create a district in the city that will become a tourist destination, provide recreational opportunities, reduce crime by having a productive and safe outlet, and attract people from all over the city and let them explore areas they may have never experienced

WATER PARK
Idea: Convert areas with a high percentage of vacancy into a water park with a variety of types for various uses (lap pool, splash park, water slides, wave pool, lazy river, hot tub)
Goal: Provide recreational opportunities for all ages, encourage a healthy lifestyle, provide potential economic opportunities, provide an amenity that is not found in many neighborhoods in the city, and provide jobs (lifeguards, etc.)
Figure 3.3.7. Urban Play Create a space that encourages urban exploration and play (Stucki 2015)

Figure 3.3.8 Transit Oriented Development Create a more connected St. Louis (Fiala 2015)
SPICY IDEAS

Spicy ideas address St. Louis on a large scale and deal with projects that attempt to consolidate density, open up new areas for development, and require large amounts of support from the community as well as the city.

BLACK WALNUT FOREST
Idea: Convert several blocks with adequate vacancy to a black walnut (Juglans nigra) urban agriculture production, both for harvesting walnuts as a short-term use, and eventually harvesting the wood. Create an entire agricultural district with tourism opportunities, restaurants, shops featuring local products.
Goal: Create jobs in the area, create a unique new identity for St. Louis, consolidate density, and provide an opportunity for both tourism and revenue.

CANNABIS AS CASH CROP (IF LEGALIZED)
Idea: Contingent upon the legalization of cannabis of either recreational or medicinal use, currently being debated in Missouri legislature, convert several blocks with adequate vacancy to a large-scale cannabis agricultural production.
Goal: Decrease in drug-related crime, create jobs in the area, consolidate density in other areas of the city, and provide economic opportunity for the City of St. Louis.

DAYLIGHTING STREAMS
Idea: While updating the combined sewers within St. Louis City, take the opportunity to daylight the city’s streams, or in other words, bring the streams back above ground and create an urban stream network.
Goal: Provide a natural aesthetic element to the city, preserve and protect St. Louis’s stream system, reduce flash flooding, and reduce maintenance costs for drainage and culvert upkeep.

FISHING NETWORK
Idea: Convert larger vacant parcels into ponds or small lakes that provide recreational fishing opportunities for the community and provide an amenity not found in large amounts of the city.
Goal: Consolidate density in other areas of the city, encourage an active lifestyle, opportunity to link to existing greenways, and attract people from other parts of the city.

HIGHWAY DECOMMISSIONING
Idea: Remove/decommission one or more segments of highway or interstate within St. Louis city.
Goal: Increase property values, create more pedestrian connections, potential space for retail and economic development, and create potential for additional green space.

LARGE-SCALE URBAN AGRICULTURE
Idea: Convert every vacant lot in the city to one that is set aside specifically for agricultural purposes, both farms and ranches.
Goal: Provide a new healthy food source for the area, educational opportunities for the community, and create educational opportunities for local students and adults.

URBAN NATIONAL PARK
Idea: Transform several contiguous blocks of high vacancy into a large open space creating an urban national park in which visitors can watch the urban condition be taken back by nature over time.
Goal: Create a tourist destination within the city, consolidate density in other surrounding areas, provide opportunities for outdoor recreation including hiking, camping, exploration, etc., and provide job opportunities.

Figure 3.3.9 Black Walnut Grove Black Walnut production provides economic opportunities (Vallo 2015)

Figure 3.3.10 National Park Create an urban forest in the downtown fabric (Knight 2015)
SPICY IDEAS

RIVERFRONT DEVELOPMENT EXTENSION
Idea: Take the North Riverfront redevelopment even further and extend it in both directions to create a vibrant and active riverfront along the Mississippi River
Goal: Create connections between the north and south parts of the city, provide trails and opportunity for healthy lifestyles, economic opportunity, and create a tourist destination

MLS STADIUM & SOCCER COMPLEX
Idea: With the rapidly growing popularity of professional soccer, bring a Major League Soccer team to St. Louis and develop recreational soccer fields surrounding the complex similar to that in Denver at the Colorado Rapids Soccer Complex. Locate near a new MetroLink extention
Goal: Provide an amenity there is demand for in the St.Louis area, spark economic development, transit-oriented development, and increase sense of pride in STL by giving them a team to cheer for

URBAN VINEYARD
Idea: Convert several blocks within the city with high amounts of vacancy to an urban vineyard. Grapes grow well in Missouri and a one-acre vineyard can be created at a relatively low cost
Goal: Consolidate density into specific areas, provide jobs in the area, create a unique new district in the city with lots of opportunity for tourism such as a winery, tours, shops, restaurants, etc., and create economic opportunity

URBAN WETLAND
Idea: Create a network of wetland areas within the city, developing new parks and linkages to other green spaces in the area, potentially linking to the Great Rivers Greenway trail systems and more major parks
Goal: Improve both soil and air quality in the area, reduce urban heat island effect, provide outdoor recreational and educational spaces, and improve ecological health

WILDLIFE RESERVE
Idea: Convert areas of high vacancy into a wildlife reserve for endangered animals in Missouri; several species of birds, reptiles, fish, as well as several mammals are on the Missouri list of conservation concern
Goal: Create an environment that is safe for endangered species and an ecosystem they will thrive in, reduce urban heat island effect, create educational opportunities in the area, provide natural aesthetic in an urban environment, and consolidate density into specific areas

Figure 3.3.11 Urban Wetlands Consolidate vacancy and create new wetlands (Jackman 2015)
OPPORTUNITIES MATRIX
### GOALS MATRIX

Opportunities Addressed by Strategies

<table>
<thead>
<tr>
<th>Opportunities Addressed by Strategies</th>
<th>Crime</th>
<th>Employment Potential</th>
<th>Revenue Potential</th>
<th>Improve Quality of Life</th>
<th>Ecosystem Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Events</td>
<td>---</td>
<td>---</td>
<td>Opportunities for Fund-raisers, Draws consumers into business districts</td>
<td>Provide more entertainment and recreation opportunities</td>
<td>---</td>
</tr>
<tr>
<td>Implement Adult Classes and Use Vacant Lots Around Schools</td>
<td>---</td>
<td>Classes on job preparedness would improve citizen’s hire-ability</td>
<td>Vacant lots could be turned into gardens that would produce food that could be sold for school funding</td>
<td>Improve education opportunities for current students and adults, foster community investment in school property, and provide classes that teach life skills</td>
<td>If vacant lots are used as food and rain gardens they can raise awareness of urban ecosystems and sustainability</td>
</tr>
<tr>
<td>Side Lot Utilization</td>
<td>Reduces amount of unclaimed property where illegal activities occur</td>
<td>---</td>
<td>Small profit from selling properties to home-owners</td>
<td>Gives residents the opportunity to own properties with yards to grow gardens, own pets, and have children play in.</td>
<td>Reduce urban heat island effect from rooftop heating and fewer energy emissions</td>
</tr>
<tr>
<td>Interest-oriented Districts</td>
<td>The increase in commercial development, along with occupation by public, decreases opportunities for major crime to occur</td>
<td>Increased commercial establishments means an increase in entry-level job positions</td>
<td>Tax and tourism revenue.</td>
<td>Districts become part of the city’s character and define neighborhoods in positive ways, draw in tourism</td>
<td>---</td>
</tr>
</tbody>
</table>
### MILD IDEAS

<table>
<thead>
<tr>
<th>Social Impact</th>
<th>Potential Investment</th>
<th>Citizen Involvement</th>
<th>Typologies Considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing visitor traffic in vacant areas will associate a positive image with vacant neighborhoods and foster investment</td>
<td>Private investing of funds and supplies</td>
<td>Opportunities for community involvement and neighborhood planning groups to come up with creative solutions</td>
<td>Crime, Age of Population, Parcel Size, Context Vacancy, Size of Open Space, Ownership</td>
</tr>
<tr>
<td>Community investment in education and personal growth</td>
<td>Money into buying vacant lots around schools and removing structures, hiring teachers for community classes</td>
<td>Community volunteers to teach classes, donated equipment and resources for classes</td>
<td>Non-Residential Buildings, Context Vacancy</td>
</tr>
<tr>
<td>---</td>
<td>Buy vacant lots and sell to residents</td>
<td>Gives citizens and non-profit groups opportunities to create meaningful spaces</td>
<td>Building, Market Values, Parcel Size, Block Vacancy, Context Vacancy, Size of Open Space</td>
</tr>
<tr>
<td>Create neutral zones that allow mingling and interaction between different districts from around the city</td>
<td>Private investors</td>
<td>Vote on what sort of interests a district should be based around (music, international foods, art, etc.)</td>
<td>Crime, Market Values, Block Vacancy, Context Vacancy</td>
</tr>
</tbody>
</table>
## GOALS MATRIX

### Opportunities Addressed by Strategies

<table>
<thead>
<tr>
<th>Crime</th>
<th>Employment Potential</th>
<th>Revenue Potential</th>
<th>Improve Quality of Life</th>
<th>Ecosystem Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Live-Work Studios</strong></td>
<td>Occupy vacant buildings so they can no longer be used for illegal activity</td>
<td>Reduces the cost of starting a small business, so creates incentive to start one</td>
<td>Tax revenue</td>
<td>Provides jobs and living for small-business owners, artists, and other self-employed residents</td>
</tr>
<tr>
<td><strong>Community Gardens</strong></td>
<td>Assigns purpose to potentially dangerous vacant lots, community involvement could foster youth programs to prevent early crime</td>
<td>Working in community gardens could proved a wage, or be a volunteer opportunity</td>
<td>Increase community involvement, provide healthy food options for neighborhoods with no healthy food providers</td>
<td>Reduce heat island effect, increase water infiltration to reduce runoff, provide pollinator and small animal habitats, raise ecosystem awareness and sustainability awareness</td>
</tr>
<tr>
<td><strong>Phytoremediation</strong></td>
<td>Assign use to vacant lots in order to reduce crime locations</td>
<td>Lot maintenance</td>
<td></td>
<td>Draws contaminants out of the soil, purifies soil for future development,</td>
</tr>
<tr>
<td><strong>Transportation Redevelopment</strong></td>
<td></td>
<td>Development working, transit positions</td>
<td>Creates connectivity across the city, provides transportation despite economic means</td>
<td>Reduces emissions due to cars, efficiently ties in connectivity, allows for opportunity to create wildlife crossings</td>
</tr>
<tr>
<td>Social Impact</td>
<td>Potential Investment</td>
<td>Citizen Involvement</td>
<td>Typologies Considered</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Fosters investment in neighborhoods since residents work and live in the same location</td>
<td>Renovate old structures to accommodate new use, can be done by private investors</td>
<td>Determine in public meetings which neighborhoods would be the most benefited by these sorts of developments</td>
<td>Building Type, Market Values, Age of Populations, Context Vacancy, Size of Building, Ownership</td>
<td></td>
</tr>
<tr>
<td>Increase community involvement in neighborhoods</td>
<td>Initial startup costs</td>
<td>Highly involved citizens and non-profit organizations, neighborhood organizations</td>
<td>Crime, Parcel Size, Block Vacancy, Context Vacancy, Size of Open Space, Water Access, Sun Exposure, Soil Health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Initial startup costs</td>
<td>Possibly maintained by volunteer citizens</td>
<td>Parcel Size of Open Space, Water Access, Soil Health</td>
<td></td>
</tr>
<tr>
<td>Increases connectivity and integration between neighborhoods and districts</td>
<td>Government budget would need to be considered</td>
<td>Voting on where to make significant transit stops, crucial connections, and other important decisions</td>
<td>Block Vacancy, Market Values, Context Vacancy, Ownership, Street Proximity</td>
<td></td>
</tr>
</tbody>
</table>

**MILD/HOT IDEAS**

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3.3 Repurposing Vacant Parcels: Encyclopedia of Ideas
<table>
<thead>
<tr>
<th>strategies</th>
<th>Crime</th>
<th>Employment Potential</th>
<th>Revenue Potential</th>
<th>Improve Quality of Life</th>
<th>Ecosystem Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster Commercial Development in North St. Louis Neighborhoods</td>
<td>Commercial development in neighborhoods could foster a greater sense of safety</td>
<td>Increased commercial growth will lead to more job opportunities</td>
<td>Tax and retail opportunities</td>
<td>Creates job, retail, and diverse living styles</td>
<td></td>
</tr>
<tr>
<td>Eco Villages Co-housing</td>
<td>Tight community groups keep an eye on crime</td>
<td></td>
<td></td>
<td></td>
<td>eco-villages focus on sustainable living and reducing energy use, and co-housing cuts back on energy consumption of multiple housing structures</td>
</tr>
<tr>
<td>Extreme Urban Play Developments</td>
<td>Occupied land and assigning purpose to vacant areas will remove vacant areas used for criminal activity</td>
<td>Owners and workers for urban play establishments</td>
<td>Tax and commercial revenue</td>
<td>Exercise opportunities</td>
<td></td>
</tr>
<tr>
<td>Urban Wetlands Project</td>
<td></td>
<td>Parks rangers, wildlife conservationist, educator opportunities</td>
<td></td>
<td>Recreation opportunities, clean air</td>
<td>Carbon sequestration, habitat preservation, urban heat island reduction, wildlife habitat formation</td>
</tr>
</tbody>
</table>
## HOT/SPICY STRATEGIES

<table>
<thead>
<tr>
<th>Social Impact</th>
<th>Potential Investment</th>
<th>Citizen Involvement</th>
<th>Typologies Considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversify neighborhoods with commercial and retail attractions</td>
<td>Private investment and public investment in renovating buildings</td>
<td>Voting on locations of commercial districts</td>
<td>Crime, Market Values, Parcel Size, Block Vacancy, Context Vacancy, Street Proximity, Ownership</td>
</tr>
<tr>
<td>Create close community groups that care and provide for one another, and gives people from different lifestyles an opportunity to interact and live together</td>
<td>Private investment groups</td>
<td>—</td>
<td>Residential Buildings, Market Values, Age of Population, Block Vacancy, Context Vacancy, Size of Open Space, Size of Building</td>
</tr>
<tr>
<td>Creates bonding opportunities for teammates and players</td>
<td>Private investors</td>
<td>—</td>
<td>Non-Residential Building, Market Values, Age of Population, Size of Building</td>
</tr>
<tr>
<td>—</td>
<td>Tax payers</td>
<td>Helping decide locations for wetlands, preliminary design feedback</td>
<td>Ownership, Size of Open Space, Block Vacancy, Context Vacancy, Soil Health</td>
</tr>
</tbody>
</table>
## GOALS MATRIX

### Opportunities Addressed by Strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Crime</th>
<th>Employment Potential</th>
<th>Revenue Potential</th>
<th>Improve Quality of Life</th>
<th>Ecosystem Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large-Scale Urban Agriculture</strong></td>
<td>Lands used for urban agriculture will be monitored and unavailable for criminal use</td>
<td>Maintenance, harvest, horticultural, geological, equipment maintenance</td>
<td>Profit opportunities for exporting goods</td>
<td>--</td>
<td>Reduce urban heat island effect, sequester carbon, decrease runoff</td>
</tr>
<tr>
<td><strong>Alternative Energy Fields</strong></td>
<td>Lands used for Alternative energy fields will be monitored and secure</td>
<td>Job opportunities in maintenance, management, engineering, mechanics, and more</td>
<td>Reduce cost of energy consumption, save money</td>
<td>--</td>
<td>Alternative energy reduces the need for carbon-emitting power plants</td>
</tr>
<tr>
<td><strong>Fostering Community Involvement Through Religious Organizations</strong></td>
<td>Youth programs, Women's’ Shelters, Outreach Programs and others help reduce the number of individuals who turn to crime</td>
<td>Maintaining lots, Program workers, project managers, etc.</td>
<td>Churches can use lands to grow food and provide consumables for sale</td>
<td>Shelters, Food Pantries, Community Gardens, and alternated community programs provide aid and care for persons in need</td>
<td>--</td>
</tr>
</tbody>
</table>
## SPICY STRATEGIES

<table>
<thead>
<tr>
<th>Social Impact</th>
<th>Potential Investment</th>
<th>Citizen Involvement</th>
<th>Typologies Considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>———</td>
<td>Private investors and tax providers</td>
<td>———</td>
<td>Parcel Size, Block Vacancy, Context Vacancy, Sun Exposure</td>
</tr>
<tr>
<td>———</td>
<td>Private investors and tax providers</td>
<td>———</td>
<td>Parcel Size, Block Vacancy, Context Vacancy, Sun Exposure</td>
</tr>
<tr>
<td>By giving churches/religious organizations resources to help individuals in need, many people will receive aid and opportunities to succeed</td>
<td>Private investors, tax providers, donations</td>
<td>Citizens and neighborhoods can vote to give resources to their personal church/religious organization</td>
<td>Crime, Age of Population, Parcel Size, Block Vacancy, Context Vacancy</td>
</tr>
</tbody>
</table>

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By giving churches/religious organizations resources to help individuals in need, many people will receive aid and opportunities to succeed.
CHAPTER CONCLUSIONS

By presenting these suggested ideas, our class hopes to inspire creativity, collaboration, and excitement for the people of St. Louis and other cities facing the same difficulties. These ideas are by no means comprehensive, but they were chosen specifically to show what steps can be taken now, and what kinds of ideas to move towards in the future; small goals, and large goals, working together to create a vision of St. Louis as the integrated, sustainable, and healthy city that it can become.

The various ideas along the Spice Scale illustrate the way that different projects can address a variety of goals and opportunities. Depending on the Typology of a vacancy, certain methods may be more advantageous than others, and some ideas may not be listed in this text. We strove to create a tool for St. Louis to use when analyzing vacancies and creating plans for the future. St. Louis is growing into an incredible city once again, and these ideas are meant to inspire even greater growth, opening up the minds of those who read this text to excite the imagination and invite creative goals for the future.
REFERENCES

TEXT


IMAGES
Figure 3.2.1, Figure 3.3.3


"Fro Yo To Go" July 4, 2012. Digital photograph by Elvert Barnes. Accessed June 29, 2015. Reproduced from flickr: https://www.flickr.com/photos/perspective/8330752546/in/photolist-dghauU-dgaw3-8tM4Up-8tM4z-aph50M-bDNrs-8h5HgN-9sJqJ-9sJrCE-9sFxa-9sJr4-9sJro-9sJrZ-9skrp-9sJsu-9sJv9-9sJx9-9sJzK-9sK0z-9sK1j-9sK2l-9sK3l-9sK4l-9sK5l-9sK6l-9sK7l-9sK8l-9sK9l-9sKjl-9sK2p-9sK3p-9sK4p-9sK5p-9sK6p-9sK7p-9sK8p-9sK9p-9sKjl-9sK2r-9sK3r-9sK4r-9sK5r-9sK6r-9sK7r-9sK8r-9sK9r-9sKjr-9sK2s-9sK3s-9sK4s-9sK5s-9sK6s-9sK7s-9sK8s-9sK9s-9sKjs-9sK2t-9sK3t-9sK4t-9sK5t-9sK6t-9sK7t-9sK8t-9sK9t-9sKjt-9sK2u-9sK3u-9sK4u-9sK5u-9sK6u-9sK7u-9sK8u-9sK9u-9sKju-9sK2v-9sK3v-9sK4v-9sK5v-9sK6v-9sK7v-9sK8v-9sK9v-9sKjv-9sK2w-9sK3w-9sK4w-9sK5w-9sK6w-9sK7w-9sK8w-9sK9w-9sKjw. Made available under a Creative Commons Attribution Share-Alike 2.0 Generic License. https://creativecommons.org/licenses/by-sa/2.0/.


Figure 3.2.7

Figure 3.2.8

Figure 3.2.9

Figure 3.2.10

Figure 3.2.11

Figure 3.2.12

Figure 3.2.13

Figure 3.2.14

Figure 3.2.15

Figure 3.2.16

Figure 3.2.17

Figure 3.2.18, Figure 3.3.5


**Figure 3.2.19**

**Figure 3.2.20**

**Figure 3.2.21**

**Figure 3.2.22, Figure 3.3.9**
Vallo, Laura. 2015. “Black Walnut Tree Grove.” Photoshop Image

**Figure 3.2.23**

**Figure 3.2.24**
Vallo, Laura. 2015. “Black Walnut Tree Grove Isometric.” Photoshop Image


**Figure 3.2.25**

**Figure 3.2.26**


**Figure 3.2.27**

**Figure 3.2.28, Figure 3.3.11**


**Figure 3.2.29**

**Figure 3.3.1**

**Figure 3.3.2**


---

3.5 Repurposing Vacant Parcels: References

Kansas State University Department of Landscape Architecture and Regional & Community Planning


“Train Waiting to Depart.” December 20, 2009. Digital photograph by Oran Viriyincy. Accessed June 29, 2015. Reproduced from flickr, https://www.flickr.com/photos/viriyincy/4202048283/in/photolist-7pjAyk-9fufmP-ot3MxG-qCTbwe-e7gWl9-qCTbrz-nZVMM-av4K7r-7oFLJh-qCTbrz-6Aq2Kw-dl3cC8-7RP7Nu-fghH5-q5NbwW-6qvpCh-ryhRSV-ryhnWN-ohiJuL-ohi4E-vnZ81T-cFLHN-nZRAkf-ptXwy2-dRAX3x-e7gWbd-6FPCXb-r16Bzy-9yuFu-tbHYYwb-6IX57-4ak92f-rC6Vv-5kaKsA-eEFICm-dwzQpQ-kZpTk-bbB5Rr-9H7mQu-eHy4v8-8cn1D-aojgL8-8f5nX-oaxhU-6r4tZ-9yuGGA-1hFl-dGg1zC-rsWddv. Made available under a creative commons Attribution Share-alike 2.0 generic license. http://creativecommons.org/licenses/by-sa/2.0/


“Train Waiting to Depart.” December 20, 2009. Digital photograph by Oran Viriyincy. Accessed June 29, 2015. Reproduced from flickr, https://www.flickr.com/photos/viriyincy/4202048283/in/photolist-7pjAyk-9fufmP-ot3MxG-qCTbwe-e7gWl9-qCTbrz-nZVMM-av4K7r-7oFLJh-qCTbrz-6Aq2Kw-dl3cC8-7RP7Nu-fghH5-q5NbwW-6qvpCh-ryhRSV-ryhnWN-ohiJuL-ohi4E-vnZ81T-cFLHN-nZRAkf-ptXwy2-dRAX3x-e7gWbd-6FPCXb-r16Bzy-9yuFu-tbHYYwb-6IX57-4ak92f-rC6Vv-5kaKsA-eEFICm-dwzQpQ-kZpTk-bbB5Rr-9H7mQu-eHy4v8-8cn1D-aojgL8-8f5nX-oaxhU-6r4tZ-9yuGGA-1hFl-dGg1zC-rsWddv. Made available under a creative commons Attribution Share-alike 2.0 generic license. http://creativecommons.org/licenses/by-sa/2.0/

“Coco Momo, London.” January 7, 2012. Digital Photograph by La Citta Vita (flickr username). Accessed June 29, 2015. Reproduced from flickr, https://www.flickr.com/photos/la-citta-vita/7279831940/in/photolist-c6i3pN-a4Mqwj-8UcEazr-8xhqfD-d4MHv8-u9xQvaW-9xMxfh-9xMGex-9xMZDK-9jE6e-9xMJ4c-9xMx5B-9vEBN-cTuqDJ-BUceSa-a2Guxm-8lsQR8-6FrvxV-8g9NPq-8g6KX4-8g6H6n-9Vb3bc-9C6nXV-8g3Bkk-9V9nHF-8Uc9mR-8fZ9mi-6x2rDV-8fZprq-8g3Hsy-8fZplp-8fzQOF-8g3QwQ-8fZoD2-8g3Anj-8fwjo7-a3RhdK-a3RJzp-8Uc5fM-8RhdvJ-9Vc5WI-8g3qSG-a7hF3A-8g3zN-8fZn6V-8g3LM9-bPTskP-8fwGu-8g52Ax. Made available under a creative commons Attribution Share-Alike 2.0 Generic License https://creativecommons.org/licenses/by-sa/2.0/

**Figure 3.3.10**


Untitled. Digital Photograph by Blake Belanger. 2014.


COLLECTION, CONNECTION, AND COMMUNICATION
Methods for Collecting Vacant Parcel Data

1. Mobile App
2. Website
3. Paper Surveys
4. Social Media Campaign

Citizen Involvement

Data Collection

Informed Decision Making

A Better St. Louis
CHAPTER INTRODUCTION

Collection, Connection and Communication is a brainstorming effort for vacant parcel inventory processes, citizen engagement, feedback approaches, and how technology could be used for both.

The ideas are organized into four independent yet complementary methods. The first method addresses the task of vacant parcel data collection, and how technology such as Loveland’s Site Control could be utilized. The second method is about informing and receiving citizen feedback through a website or mobile application. This website would be organized by neighborhood, and provide vacant parcel information to citizens who could share their ideas for the neighborhood through an online citizen survey. The third method is a pencil and paper approach to inventorying vacant land. Each neighborhood would be provided with a vacant parcel land map accompanied with paper surveys that citizens would use to evaluate and record each parcel. The fourth method is about engaging the public through a social media campaign. The vision is to create a consistent hashtag for the city – #ourSTL – which could be used across Facebook, Twitter, Instagram, and even Pinterest. It is important to remember that these four methods were organized so that they could stand alone and be effective. However, the more methods that are implemented together, the more beneficial they will be for St. Louis!
One approach to a mobile application as a data collection tool is similar to what the City of Detroit, Michigan did to address their field data collection needs. Using Loveland’s Site Controls technology, a trained team of surveyors would systematically collect data throughout the entire city. This approach would consist of a more technical user interface, perhaps one developed in partnership with Loveland Technologies. Because of the small user group, not as much attention needs to be given to the user experience or the graphic interface. The logistics of the app should be a simple user interface with a series of questions regarding the conditions of the vacant parcel and its surrounding context.

If the City of St. Louis is to pursue an approach that utilizes a method of crowdsourcing vacant parcel information, then the user experience and graphic interface would be an incentive for citizens to gather this data. By carefully and thoughtfully designing the user interface, the City of St. Louis could garner significant support from volunteer citizens or groups willing to spend time answering questions about parcels and neighborhoods that will allow for more informed decision making.
MOBILE APPLICATION SUPPORT OF VACANCY EVALUATION FRAMEWORK

Figure 4.1.1: Mobile Application Support of Vacancy Evaluation Framework (Adapted From Hahn 2015) Shaded Framework steps indicate where a mobile application could be used to collect data and garner support from the public. (Rose 2015)
Option Evaluation
City Planning + Community Input + Projective Metrics

Preferred Option

Implementation Strategies
**METHOD 1.1: THE DETROIT APPROACH**

**Mobile App**

**PROS**
- Uniform data collection
- High degree of control
- Higher degree of reliability
- Greater speed and efficiency
- Job creation
- Utilize an existing platform (Loveland Technologies)
- Trained surveyors
- Other cities have done this

**CONS**
- May be higher cost
- Difficulty recruiting surveyors
- Minimal public participation
- App not customized for STL
- Data licensing contracts

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**Data Collection Method Evaluation Table 1.1 - The Detroit Approach**

<table>
<thead>
<tr>
<th>Required Personnel</th>
<th>Trained Surveyors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Integrity</td>
<td>High: Comprehensive</td>
</tr>
<tr>
<td>Short-Term Costs</td>
<td>Cost to Use Loveland App</td>
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<tr>
<td>Long-Term Costs</td>
<td>Ongoing Subscription Costs</td>
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<tr>
<td>User of Data:</td>
<td>City of St. Louis</td>
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*Figure 4.1.2: Data Collection Method Evaluation Table 1.1- The Detroit Approach. (Bruns 2015)*
The Loveland app uses Site Control Technologies to collect data systematically about parcels in North America. Cities such as Detroit have used the app to collect and map vacant parcel data. The survey questions can be customized to collect the information that St. Louis thinks is most pertinent.

**Figure 4.1.3: Loveland Application Icon**
App Icon. (Adapted from Loveland 2015)

**Figure 4.1.4: Loveland Application Interface** Many cities are represented in Loveland’s App. (Adapted from Loveland 2015)
1.2 Mobile App

METHOD 1.2: CROWDSOURCE DATA COLLECTION

PROS

- Public involvement
- Engaging user interface
- Neighborhood decision-making
- Existing apps/surveys to follow
- Strengthens communication
- Customized for St. Louis
- Transparent process
- Links to social media campaign
- Links to partnering organizations

CONS

- App development costs
- Data subject to gaps and errors
- Logistics and coordination among neighborhoods needed
- Data licensing contracts

Data Collection Method Evaluation Table 1.2- The Crowdsourcing Approach

<table>
<thead>
<tr>
<th>Required Personnel</th>
<th>Neighborhood Volunteers</th>
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<tr>
<td>Data Integrity</td>
<td>Low: Non-Comprehensive</td>
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<tr>
<td>Short-Term Costs</td>
<td>Cost to Develop Survey Tool</td>
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<tr>
<td>Long-Term Costs</td>
<td>No Ongoing Subscription Costs</td>
</tr>
<tr>
<td>User of Data:</td>
<td>City of St. Louis</td>
</tr>
</tbody>
</table>

Figure 4.1.5: Data Collection Method Evaluation Table 1.2- Crowdsourcing Approach. (Bruns 2015)
The ourSTL app is intended to be a valuable tool where citizens can communicate with the City of St. Louis. This would be a participatory platform where the city could crowdsource data collection with an engaging graphic interface and user experience. The city could develop ideas to incentivize users of the app to take the survey and provide their feedback and ideas. The ultimate goal of the ourSTL app is for the citizens of St. Louis and the city government to collect and organize data, and leverage this data to make more informed decisions.

App Interface:
1: User Settings/Profile
2: Information About App/Data Collection
3: Contact Information
4: Begin Survey- Linked to Parcel Survey
5: Partnership Information
6: Social Media

Figure 4.1.6: St. Louis Application App Icon. (Rose 2015)

Figure 4.1.7: St. Louis Application Interface St. Louis’ own surveying application. (Rose 2015)
The creation of a website, which would also be mobile-friendly, would be yet another outreach tool for the City of St. Louis to utilize in raising awareness about its data collection campaign, as well as collect ideas that are more value-based. This website would be used to inspire citizens to dream big and share their ideas for a better St. Louis; people would be inputting ideas at the neighborhood scale. The website could link to social media pages and have information about public meetings as well.
WEBSITE SUPPORT OF VACANCY EVALUATION FRAMEWORK

Baseline Vacancy Assessment

+ Location Evaluation (Filter)

= Redevelopment Potential

Vacancy Typology

Strategy Options

Figure 4.2.1: Website Support of Vacancy Evaluation Framework (Adapted From Hahn 2015) Shaded Framework steps indicate where a website could be used to collect ideas from the public and raise awareness. (Rose 2015)
Option Evaluation
City Planning + Community Input + Projective Metrics

Preferred Option

Implementation Strategies
METHOD 2: WEBSITE

PROS

• Accessible through many platforms
• Extension of city’s existing website
• Control and customization
• Friendly user-interface
• Links to social media campaign
• Prioritizes decision-making
• Transparent process
• Provide link to survey
• Links to partnering organizations
• Data owned and controlled by City

CONS

• Time to develop and promote site
• Contingent upon public support and use
• Vacant parcel data may not be as reliable or comprehensive

Data Collection Method Evaluation Table
2- The Website

<table>
<thead>
<tr>
<th>Required Personnel</th>
<th>Website Designer/Operator</th>
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</thead>
<tbody>
<tr>
<td>Data Integrity</td>
<td>High: Accessible and Transparent</td>
</tr>
<tr>
<td>Short-Term Costs</td>
<td>Cost to Develop Website</td>
</tr>
<tr>
<td>Long-Term Costs</td>
<td>Cost to Update and Operate Website</td>
</tr>
<tr>
<td>User of Data</td>
<td>City of St. Louis &amp; Interested Residents</td>
</tr>
</tbody>
</table>

Figure 4.2.2: Data Collection Method Evaluation Table 2- The Website. (Bruns 2015)
This is the website homepage. From here visitors would select their neighborhood or a neighborhood they’re interested in on the interactive map on the left. The tabs along the top banner would take viewers to simple pages giving more information about the ourSTL organization. The icons along the bottom banner would take website visitors to the various ourSTL social media sites. This social media banner will appear on every page. This whole idea was first conceived for a website, but could easily be altered to become a mobile app or HTML site.

Figure 4.2.3: Website Interface Neighborhood Selection. (Steward 2015)
After selecting a desired neighborhood, website visitors would be directed to the neighborhood's homepage. This page gives a visual map of where the neighborhood is located in the context of the city and a larger version of the neighborhood shape. From here website viewers can learn more about the neighborhood (ABOUT), discover what other people are dreaming about and add their dreams for the neighborhood (INSPIRE), give their individual input for the neighborhood’s future through an online survey (GIVE INPUT), and explore the opportunities available through vacant land parcels (OPPORTUNITIES).

Figure 4.2.4: Website Interface About, Inspire, Give Input, Opportunities. (Steward 2015)
The (ABOUT) page is to give people a basic description, history, and profile of the specific neighborhood. The pie chart at the bottom would be a constantly updating display of citizen survey data (found on the GIVE INPUT page). This would show website viewers what other people envision and would like to see for this specific neighborhood.
This page is all about generating ideas and dreaming up schemes for the neighborhoods future. An exciting way to do this is through Pinterest where citizens could find appropriate projects, images or precedents and then link them to the ourSTL Pinterest profile by using #ourSTL and hashtagging their neighborhood: i.e. #theVille. This way all the posts go to the ourSTL page but viewers can see which neighborhood the idea is intended for. Another way to inspire people visiting the site is to link them to the Strategy team’s Spice Scale and Encyclopedia of Ideas. By using the ideas listed people could do further research (and post their findings through Pinterest) on ideas they think could work in their neighborhood. A final way to inspire is to link readers to other success stories happening in St. Louis.

Figure 4.2.6: Website Interface Inspire page. (Steward 2015)
This page is for collecting citizens’ views, ideas, and specific opinions. Here people can take a survey asking a few questions about themselves, asking them what their biggest dreams are for the neighborhood, and what their short-term preferences are for the neighborhood. This page would also have a rotating image box that is linked to the ourSTL Facebook page. These images would come from people uploading pictures using the #ourSTL.

Figure 4.2.7: Website Interface Give Input page. (Steward 2015)
An ideal citizen preference survey would include three parts of information.
1) What kind of resident is taking the survey, and how old are they?
2) What are some of the big ideas and dreams this person has for the neighborhood?
3) What short-term ideas and priorities does this person have for the neighborhood?

The survey should include some short answer questions to allow for maximum freedom in responding. For this reason the survey should have only a few questions to not overwhelm or discourage people.
This page allows readers to get specific information about a neighborhood on a parcel-by-parcel basis. Someone visiting a website with the intent to learn more about a particular vacant lot would first locate the parcel block within the neighborhood map, next select the parcel, which would then take them to real images of that parcel. From there readers could click on links to the Strategic Land Use Map, the Market Value Analysis Map, and to the LRA Lot map regarding that particular parcel of vacant land. This page would especially useful for developers. Data could be supplied through the Geo-STL site or linked to it.
This option is the paper version of surveying vacant lots. This system will have a series of questions paired with maps of vacant parcels for each neighborhood. Surveyors would fill out the question sheets, which are in check-box format, for each parcel in the neighborhood and then the information would be used as a way to complete the vacant parcel maps and data sets. This survey option would require a high degree of coordination among the city and neighborhoods, in order to ensure reliable and comprehensive data collection.
Figure 4.3.1: Paper Maps and Surveys Support of Vacancy Evaluation Framework (Adapted From Hahn 2015) Shaded Framework steps indicate where paper surveys and maps could be used to collect data and garner support from the public. (Rose 2015)
### Paper Surveys

#### PROS
- Public involvement
- Face to face interaction
- Building trust and connections
- Raise awareness and support
- Could be easily digitized and mapped
- Prioritizes decision-making
- Engaging and tactile
- Data owned and controlled by City

#### CONS
- Printing costs
- Logistics and coordination
- Weather-dependent
- More time and energy
- Requires physical presence
- Subject to analog errors
- Difficulties recording data
- Lots of paper, not eco-friendly

#### Data Collection Method Evaluation Table 3- Paper Surveys and Maps

<table>
<thead>
<tr>
<th>Required Personnel</th>
<th>Trained Surveyors OR Volunteers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Integrity</td>
<td>High: Comprehensive</td>
</tr>
<tr>
<td>Short-Term Costs</td>
<td>Cost of Printing and Data Input</td>
</tr>
<tr>
<td>Long-Term Costs</td>
<td>No Ongoing Costs</td>
</tr>
<tr>
<td>User of Data</td>
<td>City of St. Louis</td>
</tr>
</tbody>
</table>

Figure 4.3.2: Data Collection Method Evaluation Table 3 Paper Surveys and Maps. (Bruns 2015)
Each neighborhood would be provided with a map, similar to the one shown above. The map would display the neighborhood, and its most recent conditions of vacancy. This map would be given to existing neighborhoods that have clear organizational structures, in order to ensure methodical decision-making. On the maps, only the most essential information would be displayed, such as: current vacant parcels, non-vacant parcels, parks, rivers, and roads. Accompanying the map would be an analogue survey.

Figure 4.3.3: Paper Maps Neighborhood Scale. (Bruns 2015)
Is there a structure on the site?
☐ Yes: A structure is a permanent building located on the site. This includes houses, garages, buildings—anything built on a foundation.
☐ No: If the site is empty or has temporary structures, like trailers, temporary sheds, or mobile homes, then it does not have a structure on site.

Is the structure occupied?
☐ No structure
☐ Occupied: The structure shows visible activity and consistent use or maintenance. Common characteristics are: porch furniture, a well-kept lawn, good landscaping, fences, cars in the driveway, a maintained garden, or a play area.
☐ Unoccupied: Common characteristics are: neglected facades, eviction notices, empty interiors, substantial physical or structural damages, extensive security measures, uncut or tall grass, weeds, trees, trash or debris accumulated over time, or accumulated flyers on the porch or door.
☐ Partially Occupied: One or more units in a multi-unit dwelling are occupied, while others are clearly vacant.
☐ Possibly Unoccupied: The property displays characteristics from both categories above, making it difficult to assess whether there is consistent use or maintenance.

What is/was the site used for?
☐ Residential: Includes single-family homes, duplexes, apartment buildings, senior living facilities, condominiums and row houses.
☐ Commercial: Includes properties used for retail, office, entertainment, hotels, parking and other services.
☐ Mixed-use Residential/Commercial: Includes multi-level structures where the ground level supports commercial uses like retail, while the top levels support residential uses like apartments, condominiums and lofts.
☐ Industrial: Includes properties used for manufacturing, storage areas, warehousing, junk yards, landfill operations and waste disposal sites.
☐ Institutional: Includes all public and religious buildings, including churches, schools, government offices, libraries, permanent park structures and hospitals.
☐ Unknown: The use of the property cannot be determined from looking at the outside alone.

How many residential units?
☐ Single Family: A house designed for occupancy for one family and has only one address number.
☐ Multi-Family: A single building designed for occupancy for one to three families with multiple addresses.
☐ Apartments: Individual or multiple buildings designed for occupancy by four or more families.
☐ Garage/Shed: A detached garage or shed which is the only structure on the parcel.
What type of commercial occupants?
- Restaurant/Bar: Stand-alone eateries and drinking establishments.
- Grocery: Stand-alone stores where people can buy food. Sale of food may not be the primary purpose of the business. Includes liquor stores.
- Retail: Stores that sell items to the general public.
- Service: Businesses that provide a service to the general public, including banks, hair salons, tattoo parlors, auto repair shops.
- Offices: Businesses that provide services or office spaces for individual or multiple tenants.
- Entertainment: Structures whose sole purpose is to provide entertainment.
- Multi-Occupant: A building housing multiple commercial business, but no residential units. Small strip malls.
- Other: for when you’re unsure about what the commercial building is being used for.

What type of industrial occupant?
- Manufacturing: Manufacturing and production plants that generally do not do business with the general public.
- Warehouses: Buildings that store goods, but don’t produce them. Indicators include large loading docks, and signage indicating warehouse use. May be multi-story.
- Multi-occupant: Multi-occupant industrial buildings have multiple tenants or companies, and are sometimes located in industrial parks.
- Other: For when you’re unsure about what the industrial building is used for.
- Not an industrial use.

What type of institutional occupant?
- Schools: Any building whose primary purpose is that of education.
- Religious: Any building whose primary purpose is religious in nature. This includes a wide range of buildings from cathedrals down to storefronts. Primarily places of worship, but also buildings where religious services are offered.
- Public Safety: Primarily police and fire stations. Does not include private security firms.
- Health: Hospitals, health centers, medical clinics. Any place where medical services are offered, including doctors offices.
- Recreation: Different from a park in that it has a permanent structure on it for the purpose of recreation.
- Government: Government buildings are offices through which the local, state and federal government operate out of. Includes libraries.
- Non-Profit/Charity: Organizations providing services to the needy, including soup kitchens, homeless shelters.
- Other: For when you’re unsure about what the institutional building is being used for.

What is the condition of the structure?
- Good: No obvious repairs needed.
- Fair: Needs minor repairs. Windows and doors are intact, but roof may be missing shingles, exterior elements may be sagging, painting/siding missing, graffiti.
- Poor: Needs major repairs. Windows and doors are broken or boarded up. Light fire damage that can be repaired. Non-load bearing elements like awnings/porches collapsed. Holes in roof.
Is the structure fire damaged?
☐ Yes: Indications of fire in or around the structure that caused visible damage, from as small as melted siding to buildings that have burned to the ground.
☐ No: No apparent fire damage.

What is the level of fire damage?
☐ Minor: Visible damage to the building that is superficial or repairable, and does not render the building uninhabitable. Includes soot marks around doorways and windows.
☐ Major: Significant damage to the building that would be costly to repair and makes it uninhabitable. Major may include holes in the roof, but once there is any sort of structural collapse, the damage level is considered collapsed.
☐ Collapsed: Fire that has caused partial or total structural collapse, making it no longer building-shaped. This includes buildings that have burned down to the foundation. Walls may still be standing, but parts or all of the roof have caved in.
☐ No fire damage.

Is the building open to trespass?
☐ Secured: A building is secured when all windows or doors are intact or secured. This includes occupied buildings with original windows/doors, and buildings that may be vacant but are not open to trespass.
☐ Open to Trespass: If a building has missing windows, doors or is otherwise open and accessible to scrappers, squatters, or vandals, it is open to trespass.

What is the site used for?
☐ Vacant Lot: A lot that is not being used.
☐ Parking Lot: A lot used for parking, can be paved or unpaved. Does not include cars on lawns.
☐ Park: A lot that is clearly designated or has some permanent indicator or park use such as playground equipment and trails.
☐ Garden: Land being used for agricultural purposes, includes personal gardens and larger farms.
☐ Other: For when you're unsure about what the lot is being used for.
☐ Attached lot: A lot adjacent to or in between occupied houses that is clearly maintained or used as an extension of an existing property. Attached lots are not considered vacant lots because they are in use.

Is the lot maintained?
☐ Yes: A lot is maintained when the lot shows sign of care and maintenance, regardless of what is physically on the lot. Grassy lots are mowed with some regularity and paved lots show signs of consistent car.
☐ No: Characteristics of an unmaintained lot include tall grass, overgrown trees or bushes, weeds in the cracks or pavement and so on.

Is there dumping on the site?
☐ Yes: Debris has been purposely left or placed on the property. This does not include litter or debris from a recent fire or ongoing demolition.
☐ No: No trash or debris on site.

Note the condition of site elements.
☐ Sidewalks:
☐ Streets:
☐ Trees:
Step 1: Locate Neighborhood

Step 2: Indicate Parcel

Step 3: Answer Survey Questions

Although a majority of surveying with this method is not digital, inputting answers into either a scantron format grading card or into a very simplified survey app would greatly increase speed of workflow, allowing data to be recorded and used in a more timely manner.

Figure 4.3.4: Use of Paper Surveys Steps in Surveying. (Rose 2015)
A social media campaign would complement the various methods of data collection, because it would foster awareness about the initiative. By leveraging the free marketing power of multiple social media channels including Facebook, Instagram, Twitter, Pinterest, and Tumblr; the City of St. Louis could garner widespread involvement, and thus better data collection. The benefit of social media campaign would be two-fold: it would raise awareness about the data collection initiative, and it would allow citizens to post their ideas in open and public forums, where an engaging dialogue may occur. A deliberate hashtag, such as #ourSTL would get ideas trending.
SOCIAL MEDIA SUPPORT OF VACANCY EVALUATION FRAMEWORK

Figure 4.4.1: Social Media Support of Vacancy Evaluation Framework (Adapted From Hahn 2015) Shaded Framework steps indicate where social media could be used to collect ideas, opinions and start conversations. (Rose 2015)
Option Evaluation
City Planning + Community Input + Projective Metrics

Implementation Strategies
METHOD 4: SOCIAL MEDIA CAMPAIGN

PROS

• Little to no technical expertise needed
• Ability to reach a massive market and get ideas ‘trending’ with hash tags
• Utilize free social media sites to raise awareness and encourage civic involvement
• Multiple platforms and creative communications
• Encourages civic engagement and ideation
• Gives a positive image

CONS

• Will need to be centrally managed, controlled and updated
• Time intensive
• Difficulty organizing data

Data Collection Method Evaluation Table
4- Social Media Campaign

<table>
<thead>
<tr>
<th>Required Personnel</th>
<th>Social Media Outreach Manager</th>
</tr>
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<tbody>
<tr>
<td>Data Integrity</td>
<td>Low quantitative data, High qualitative data</td>
</tr>
<tr>
<td>Short-Term Costs</td>
<td>Free Social Media Platforms</td>
</tr>
<tr>
<td>Long-Term Costs</td>
<td>Hiring a Social Media Director</td>
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<tr>
<td>User of Data:</td>
<td>City of St. Louis, Citizens</td>
</tr>
</tbody>
</table>

Figure 4.4.2: Data Collection Method Evaluation Table 4 - Social Media Campaign. (Bruns 2015)
Less than **HALF** of St. Louis Neighborhoods are represented on websites and social media.

![Map showing social media usage by neighborhoods](image)

- **24** Neighborhoods have a Facebook Page
- **20** Neighborhoods have a Twitter Page
- **31** Neighborhoods have a Website

Legend:
- Purple: Have a Facebook, Twitter, and Website
- Medium Purple: Have 2 types of online representation
- Light Purple: Have 1 type of online representation

*Figure 4.4.3: Neighborhood Social Media Usage (Armstrong 2015)*
Figure 4.4.4: Example Twitter Pages Philadelphia, St. Louis, Detroit & Chicago. (Adapted from Twitter 2015)
Figure 4.4.5: Example Instagram Pages Chicago & Dallas. (Adapted from Instagram 2015)
Figure 4.4.6: Example Pinterest Pages Chicago & Detroit. (Adapted from Pinterest 2015)
These examples of Instagram and Twitter show that a hashtag could be easily used by the public. After a hashtag is used, other users or the city can easily search the hashtag to see what others are posting about, that are related to the ourSTL movement.

PlaceSpeak is an online location-based community consultation utility to allow participants to interact with topics in their neighborhoods, cities or regions. By geoverifying our user base, PlaceSpeak provides a platform for the City of St. Louis to collect the evidence based feedback needed to make informed decisions.
The purpose of this section is to make readers aware of the variety of funding types available to St. Louis. Three of the funding opportunities indicated in this section are useful for the city, while the fourth funding opportunity is intended more for individuals, non-profit groups, or private project leaders. The funding opportunities for the city—What Works Cities, SC2, and 100RC—provide monetary support along with program and technical support. For this reason, these three funding opportunities will be most effective for the city if the strategies of the three initiatives are connected together by sharing common goals. The private funding opportunity—KickStarter—could be used by the city for smaller experimental projects. But the intention of including funding opportunities in this section is mainly to point individuals and independent groups with new, creative, progressive project ideas for St. Louis in a direction where they can make their dream known, and potentially get funded.
FUNDING OPPORTUNITIES SUPPORT OF VACANCY EVALUATION FRAMEWORK

Figure 4.5.1: Funding Opportunities Support of Vacancy Evaluation Framework (Adapted From Hahn 2015) Shaded Framework steps indicate where funding could be used to implement strategies of addressing vacancy. (Rose 2015)
Option Evaluation
City Planning + Community Input + Projective Metrics

Implementation Strategies

Preferred Option

4 5 6
"What Works Cities is a new, national initiative from Bloomberg Philanthropies. Its mission is to elevate and accelerate cities’ use of data and evidence to engage citizens, make government more effective, and improve people’s lives" (Bloomberg Philanthropies, 2015). The philanthropic organization is investing $42 million in this effort, and only 100 cities across the United States (that meet the eligibility criteria) will be selected. The eligibility criteria is very straightforward. All U.S. cities with a population between 100,000 and 1,000,000 are eligible to participate. As of June 9, 2015 108 cities scattered across the country have already applied for the program, indicating a strong demand across the U.S. for data-driven decision-making. Their mission is simple: “to serve citizens in the most effective ways possible.” All cities selected as What Works Cities would receive support from five world-class partners including: The Center for Government Excellence at John Hopkins University, Results for America, The Sunlight Foundation, The Behavioral Insights Team, and the Government Performance Lab Harvard Kennedy School.

**FUNDING:**
$42 million for 100 U.S. Cities

**SUGGESTION:**
If the City of St. Louis has not already, it is our suggestion that a statement of interest and an application for the program be filed with Bloomberg Philanthropies as soon as possible. There is no indication of when the applications will be closed, therefore it is safest to assume the sooner the better.
SC2 is the second cohort of cities to be admitted into this program, which was initially launched by the Obama Administration in July of 2011. The primary objective of the initiative is “to build ladders of opportunity for all Americans who are working hard to make it to the middle class” (United States Department of Housing and Urban Development, 2014). Through strategic investments and partnerships, SC2 is attempting to provide funding, support, and technical expertise to communities that were hardest hit by the recession. Cities which are part of the SC2 cohort include: Brownsville, TX; Flint, MI; Gary, IN; Macon, GA; St. Louis, MO; Rockford, IL; and Rocky Mount; NC.

**FUNDING:**
Over $368 million in existing federal funds and investments

**SUGGESTION:**
Devise a strategy for how the goals of SC2, What Works Cities, and 100 Resilient Cities could align and work towards like-minded objectives.

**3 100 RESILIENT CITIES (100RC) BY THE ROCKEFELLER FOUNDATION**

“100RC is dedicated to helping cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century. 100RC supports the adoption and incorporation of a view of resilience that includes not just the shocks – earthquakes, fires, floods, etc. – but also the stresses that weaken the fabric of a city on a day to day or cyclical basis” (100 Resilient Cities, 2015). The acute shocks and chronic stresses that cities around the world face must be addressed and managed at a scale that will make a difference, which is why a core component of 100RC is to establish a new position in city government, a Chief Resilience Officer (CRO).

**FUNDING:**
Varies, but “the value of our core offerings will likely far exceed $1 million for each city” (100 Resilient Cities, 2015).

**SUGGESTION:**
Identify how St. Louis can become more resilient through data-driven decision-making, and the role that the CRO of the city plays in coordinating these initiatives and funding opportunities. In the upcoming resilience plan for the city, outline how What Works Cities, SC2, 100RC, and other initiatives would be coordinated such that they inform and inspire one another.

**4 KICKSTARTER PROJECT FUNDING PLATFORM**

Kickstarter is an international funding platform that helps projects big and small “come to life” through the support of donors. “We believe that creative projects make for a better world, and we’re thrilled to help support new ones. Building a community of backers around an idea is an amazing way to make something new” (KickStarter, 2015). Through this website independent creators launch their projects setting a funding goal and deadline. The idea is all or nothing—all projects must reach their funding goals to receive any money.

**FUNDING:**
Funding varies greatly using KickStarter. Funding depends on the goal and deadline of the project creator along with the popularity of the project among backers or “investors.”

**SUGGESTION:**
This creative project funding effort could be used in many ways for St. Louis. Kickstarter is an ideal source of funding for non-profit, religious, and volunteer groups looking to begin projects in St. Louis. Also, if there are smaller pilot projects the city is wanting to implement but stalled because of funding, Kickstarter could be the answer.
CHAPTER CONCLUSIONS

The City of St. Louis, Missouri has already been utilizing its plethora of data resources in order to make more informed decisions about land-use redevelopments. Open data is something that the city supports heavily, as valuable datasets and ArcGIS shapefiles are shared publicly on the city’s website. However, every city can always learn how better to manage and organize this data while obtaining a higher degree of citizen involvement. The idea of crowdsourcing data collection is not new, in fact, many other cities have leveraged the power of harvesting data to solve urban dilemmas. For example, the city of New Orleans, which faces similar conditions of blight and vacancy, launched its BlightSTAT program in 2010, which allowed citizens as well as city officials to participate in a survey which evaluates the city’s progress on urban blight. Embracing open data offers many benefits to cities, including managing resources more effectively, fostering a sense of trust and transparency, and making informed place-based decisions.

We hope that this chapter can be utilized by the city of St. Louis in order to strategize how best to coordinate the various methods of data collection it may pursue. Whether it be an app, a website, a social media campaign, or some combination of the four, this can serve as a framework from which priorities can be discussed and decisions can be made. In order to work towards common goals and the betterment of St. Louis, it is important that the multiple initiatives/efforts that can offer funding or expertise to St. Louis, such as SC2, 100RC, What Works Cities, and Kickstarter, are all coordinated and managed collectively. St. Louis has faced significant challenges in its past, but the Gateway City is well on its way to becoming “THE urban place in this part of the world,” and data-driven decision making will help realize that goal more quickly and more efficiently.
REFERENCES

TEXT


IMAGES

Figure 4.1.1 Hahn, Howard. 2015. “Vacancy Evaluation Framework.”

Banner Image

Figure 4.1.2 Bruns, Conner. 2015. “Data Collection Evaluation Table.”

Figure 4.1.3 Bruns, Conner. 2015. “Data Collection Evaluation Table.”


Banner Image

Figure 4.1.5 Bruns, Conner. 2015. “Data Collection Evaluation Table.”
4.7 Collection, Connection, and Communication: References

**Figure 4.1.6**
Rose, Katelyn. 2015. “St. Louis Application Design.”

**Figure 4.1.7**
Rose, Katelyn. 2015. “St. Louis Application Design.”

**Figure 4.2.1**

**Banner Image**

**Figure 4.2.2**
Bruns, Conner. 2015. “Data Collection Evaluation Table.”

**Figure 4.2.3**
Kelsey, Steward. 2015. “Website Interface.”

**Figure 4.2.4**
Kelsey, Steward. 2015. “Website Interface.”

**Figure 4.2.5**
Kelsey, Steward. 2015. “Website Interface.”

**Figure 4.2.6**
Kelsey, Steward. 2015. “Website Interface.”

**Figure 4.2.7**
Kelsey, Steward. 2015. “Website Interface.”

**Figure 4.2.8**
Kelsey, Steward. 2015. “Citizen Survey.”

**Figure 4.2.9**
Kelsey, Steward. 2015. “Website Interface.”

**Figure 4.3.1**

**Banner Image**

**Figure 4.3.2**
Bruns, Conner. 2015. “Data Collection Evaluation Table.”

**Figure 4.3.3**

**Figure 4.3.3**

**Figure 4.4.1**

**Banner Image**

**Figure 4.4.2**
Bruns, Conner. 2015. “Data Collection Evaluation Table.”

**Figure 4.4.3**

**Figure 4.4.4**


Figure 4.4.5

Figure 4.4.6

Figure 4.4.7

Figure 4.4.8

Figure 4.4.9

Figure 4.4.10

Figure 4.5.1

Banner Image
An optimistic future lies ahead for the City of St. Louis. We set out to study vacancy conditions and develop new visions for addressing the many vacant parcels affecting the economy and social character of the region. Ideas continued emerging throughout the progression of the seminar research and studio project. Using research discovered in seminar readings revealed new and innovative avenues for development. This document begins to express alternatives to development strategies that may benefit the growth of the city, physically and socially. Our research inquiries helped us to visualize the potential of St. Louis and the numerous options for addressing vacant parcels.

The work presented here encompasses a broad spectrum of ideas compiled by our studio. Some of these ideas are visionary while some are pragmatic, creating a variety of proposals applicable to the city leadership and residents. Some ideas suggest immediate action, while others implement a lengthier holistic plan for the entire city. These proposals have an element of give-and-take between each other, able to be implemented by themselves, or as a combination of solutions.

Urban vacancy is a very challenging dilemma. High density of vacancy in struggling neighborhoods is particularly difficult, and there are no easy solutions. Thinking about the future of high-vacancy urban areas requires a shift in perspective away from traditional planning models, which rely heavily on comprehensive planning and assumptions of growth and investment, toward non-traditional models that consider indeterminate variables, placeholders, and ad-hoc incremental improvements on the part of many urban actors. High rates of violent crime, particularly homicide, hinder overcoming vacancy at all scales.

Through our general research of urban vacancy, and our in-depth study of St. Louis in particular, it seems there are primarily three overall strategies for action. The first, which we have deemed “mild,” promotes grassroots efforts on the part of individual change-makers and nonprofit organizations. Ideas supporting the mild strategy are generally low-cost and can be implemented in a year or less. They are sensitive to cultural context, and might improve the quality of life for residents in high-vacancy areas. While they are unlikely to make sweeping changes quickly, they may result in improving conditions in localized areas, which could yield momentum for widespread change over time.

Larger-scale and more ambitious, the “hot” strategy involves neighborhood engagement and consolidating parcels for repurposing land into deliberate long-term uses. Some of these uses, such as urban agriculture, may provide small-scale employment opportunities, and may serve as a temporary placeholder until economic conditions warrant redevelopment investment. Hot ideas demand collaboration between local stakeholders and civic leaders, and promote re-envisioning districts with non-traditional functions in an urban context. They may require planning policy changes and relocating some residents living in high-vacancy areas.

The most ambitious efforts fall under the “spicy” strategy, which would require large investment from public and/or private sources and a decades-long time horizon for implementation. Significant relocation incentives would be required to open large tracts of land for major initiatives, such as sports complexes or large-scale green infrastructure. While the spicy strategy has the potential to create significant employment opportunities and catalyze large-scale future investment and growth from private investors, it may overwhelm local social systems and significantly alter the character of entire neighborhoods.

The primary outcome from Parcels to Peppers is five tools for action. The first is an encyclopedia of over 60 ideas for repurposing vacant land and salvageable abandoned buildings. The encyclopedia, which ranges from mild ideas already being implemented by the LRA and other actors to highly ambitions alterations in urban land use, might inspire action from a variety of players at a variety of scales. The second tool is a vacancy typology worksheet that empowers residents and landowners to evaluate vacant lots and match appropriate ideas for action. The third tool, Outreach and Communication suggests ideas for connecting people with a common purpose and collecting ideas for change. Information Collection is the fourth tool, which proposes different methods for gathering relevant data about vacant parcels to fill gaps in the city’s databases. Lastly, and perhaps most significant, the Vacancy Evaluation Framework provides a holistic and sophisticated armature for connecting the other four tools and assisting decision-makers and large-scale investors to implement vacant land repurposing strategies.

From the student’s perspective the process of developing research, making maps, and developing tools has allowed for a deeper understanding of St. Louis, as it exists today, as well as a thorough understanding of its future potential. The experiences gained through this studio have better prepared us to work in the professional field of landscape architecture and urban design, demonstrated by the advancement of students’ critical mapping, diagrammatic, communication, and graphic skills. We now feel better
prepared to create more complete, integrated, and resilient solutions for future projects.

Looking forward, vacant parcels have potential to transform St. Louis. Understanding past and present conditions will help planners decide what development opportunities are most appropriate for the City’s future. Many of our ideas are ambitious, innovative, and fresh; our hope is that our work will inspire people and bring new life to St Louis. While we recognize the issues we have wrestled with in this studio are highly complex and have been studied for years, we hope Parcels and Peppers will make a contribution to the dialogue on addressing urban vacancy.
Critical Mapping

Early in the semester, we followed a method of mapping, research, and design called “Critical Mapping”. More than simply gathering and mapping information, Critical Mapping seeks to classify, correlate, and compare site information across a broad spectrum of topics for the directed purpose of identifying dilemmas and opportunities, leading to design strategies. The intent of critical mapping is to (1) help students address wicked problems, those problems with many dynamic interrelated variables, (2) teach students to be adept at shifting between analysis and design, and (3) quickly identify, synthesize, prioritize, and evaluate critical information in generating design strategy.

Some critical maps examine St Louis in the broader regional context relative to demographic conditions and K-12 education, and some maps compare St Louis to other cities. Most critical maps examine the area contained within the city boundary, and many target particular areas of focus.

Mapping relied heavily on Geographic Information Systems (GIS) data supplied by Matthew Mourning with the City of St. Louis Planning and Urban Design Agency. Other data sources include ARCGIS Online, Google Earth imagery, maps and data from city agencies, data published by non-profit organizations, and historical maps and data. We created the maps using ESRI ARCGIS, Adobe Illustrator, and/or Adobe Photoshop. We used Adobe InDesign for page layout.

Critical Mapping Process

Critical Mapping is a cyclical method of working, requiring students to move quickly between critical inquiry, evaluation, creative design and planning, back to critical inquiry, and so on, thus allowing the studio to begin unfolding proposals as information is still becoming available. Each student developed three maps during the second week of the semester, created in a particular order: Truth Maps, Evaluation Maps, and Proposal Maps. This process helped the class better understand conditions, develop planning and design ideas, and develop arguments for their recommendations. Each student created one map during week three, after the field trip to St Louis. The professors adapted the Critical Mapping Framework from the book “Writing Arguments: A Rhetoric with Readings.” (Ramage et al 2012). Figure A.1 details the inquiries, goals, and activities associated with each type of critical map.

Truth Maps

These maps draw out significant conditions from the expanse of available data. There are three types of truth maps: classification maps extract and categorize site conditions; correlation maps identify two or more variables and investigate possible relationships; and comparison maps compare study area conditions with an implemented design in another location or with practices being used elsewhere.

Evaluation Maps

The second type, Evaluation Maps, build on the Truth Map findings and assess existing conditions relative to community agendas, project goals, and/or planning vision. These findings are documented as opportunity maps or dilemma maps.

Strategy Maps

Lastly, strategy maps identify ways to leverage opportunities or overcome dilemmas. Intended to inspire a vision for the future, the strategy maps collectively point toward policy and/or design decisions.

Every map is guided by a focused research inquiry, intended to draw out conclusions salient to the overall project. Students define their question, discuss their methods, and describe their findings in writing to support the graphic mapping. A “headline” serves as more than just a map title, but draws the audience’s attention to key conclusions from the mapping exercise.

A select set of critical maps follows. Certainly not every planning issue pertaining to urban vacancy in St Louis is covered, but we have attempted to probe some of the most relevant and influential conditions and phenomena that might guide our recommendations.
**Critical Mapping Framework**

<table>
<thead>
<tr>
<th>Claim Type*</th>
<th>Research Inquiry</th>
<th>Critical Map</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitional</td>
<td>To what group does this thing (these things) belong?</td>
<td>Classification</td>
<td>Maps that extract and categorize things or conditions in a study area.</td>
</tr>
<tr>
<td>Causal</td>
<td>What conditions or processes correlate to phenomena?</td>
<td>Correlation</td>
<td>Maps that identify correlations and potential reasons what a certain condition has come to be in a particular place. Correlations have at least two related variables.</td>
</tr>
<tr>
<td>Resemblance</td>
<td>How is our site like another site?</td>
<td>Comparative</td>
<td>(1) Maps that compare current conditions with an implemented design in another location (precedent study). (2) Maps that compare current conditions or strategies of our site with conditions or practices that are being used elsewhere.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>What do these site conditions mean for the goals of our project?</td>
<td>Dilemma or Opportunity</td>
<td>Maps that apply the agendas of a client, stakeholder, or designer to current site conditions.</td>
</tr>
<tr>
<td>Proposal</td>
<td>How can we change undesirable conditions or introduce something new and desirable?</td>
<td>Strategy</td>
<td>Maps that make claim about how to accomplish on or more project goals. Strategies proposed should be big moves that lay the foundation for suture action and often require additional research</td>
</tr>
</tbody>
</table>

*Critical mapping types are based on 5 claim types used for making arguments.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Activities</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorize things for the purpose of simplifying complex conditions and identifying relationships. Conclusions from this map should set the stage for identifying dilemmas and/or opportunities.</td>
<td>Measuring, extracting, coding, plotting</td>
<td>Identifying differences in street types, building types, land use, or ecosystem health. Identifying proximity or extractions to on another.</td>
</tr>
<tr>
<td>Describe why something has come to be . - OR - Describe the consequences of past actions. Conclusions from this map should set the stage for identifying dilemmas and/or opportunities.</td>
<td>Relating, extracting, coding, plotting</td>
<td>Explaining potential causes for vacancy in an area, erosion in a particular location, or land values.</td>
</tr>
<tr>
<td>Emphasize similarities and differences. Conclusions from this map should set the stage for identifying dilemmas and/or opportunities.</td>
<td>Comparing, extracting, coding, plotting</td>
<td>Identifying an urban design proposal from another city an placing it in our study area to see ho wit might fit. Comparing budget spending in another city to that of our study area. (Later - comparing one of your strategies to those implemented in another place to evaluate cost, timeframe, or another unknown.)</td>
</tr>
<tr>
<td>Identify either (1) obstacles to achieve goals or (2) locations or processes well positioned for achieving goals. Conclusions from this map should set the stage for identifying on more design strategies.</td>
<td>Applying, evaluating, abstracting</td>
<td>Dilemma: Infrastructure that limits desired growth expansion. Specific conditions that prevent desirable pedestrian environments. Developed areas that prevent ecological connections. Opportunity: Vacant or partially vacant parcels. Large contiguous parcels, or parcels that could be easily assembled for redevelopment.</td>
</tr>
<tr>
<td>Proposed new ideas for accomplishing goals. Conclusions from this map should articulate how the strategies will overcome dilemmas or leverage opportunities and should identify how to move forward. What additional information is needed? Should it be combined with one or more different strategies?</td>
<td>Projecting, proposing, abstracting</td>
<td>Proposing new infrastructure to bridge gaps in connectivity. Proposing new land use policy that will promote desired redevelopment. Proposing new forms or transportation. Proposing green infrastructure solutions that accomplish multiple goals.</td>
</tr>
</tbody>
</table>
Students living in North and Downtown St. Louis are at a disadvantage
Students attending public and private schools in the northern metropolitan area typically have lower test scores

Figure 01. Public and Private Schools in Metro St. Louis ranked by ACT scores
Source: St. Louis Magazine, Missouri Dept. of Elementary & Secondary Education, STL City Schools, Saint Louis Public Schools

Inquiry: Where are the public and private high schools located in the St. Louis metro area?
Key Extractions: St. Louis Schools, ACT Scores, Education, St. Louis Public Schools, Private Schools, High Schools
Methodology: After gathering information from various websites, school names, locations, ACT scores, attendance rates, tuition rates, spending per student, neighborhood, graduation rate, and college attendance rates were entered into a spreadsheet. Both public and private high schools within the St. Louis Metropolitan area were then separated into categories based on average composite ACT score and mapped.
Conclusions: Students attending schools in northern Metro St. Louis as well as downtown St. Louis are at a significant disadvantage. High schools in this area received lower ACT scores on average than those of students attending schools in West St. Louis County, where scores are significantly higher than in the rest of the metro area. Public schools located north of Delmar Blvd. within the St. Louis Public School District reviewed an average of 15.9 on the ACT, while private schools also within that school district received an average score of 24.1. Every single private school located in the St. Louis Metro area received at least an average of 21 or higher with the exception of one school, Cardinal Ritter College Prep High School, which averaged a 20 and is located just north of Delmar Blvd. in St. Louis City, furthering the "Delmar Divide."
33 public high schools in St. Louis County
33 private high schools in St. Louis County
18 public/magnet/charter high schools in St. Louis City
6 private high schools in St. Louis City

ACT Scores by school type and location:

- private school - county: 25.73
- public school - county: 21.14
- private school - city: 24.17
- charter school - city: 15
- magnet school - city: 17.99
- public school - city: 14.56

Highest Scoring Public School: Clayton High School, 26
Highest Scoring Private School: John Burroughs School

Spending per student:
- CITY: $14,375
- COUNTY: $11,802
- PRIVATE: $16,036

Graduation rates:
- CITY: 80%
- COUNTY: 89%
- PRIVATE: 99%

Composite ACT:
- CITY: 15.85
- COUNTY: 21.14
- PRIVATE: 25.48

Free/Reduced Lunch:
- CITY: 82%
- COUNTY: 42%
- PRIVATE: Not Applicable
Inquiry: Why are test scores lower in the city and the northern Metro St. Louis area?

Key Extractions: Distressed neighborhoods, vacant lots, St. Louis public schools, St. Louis High Schools, Private schools, ACT scores

Methodology: Using data from Missouri Data Spatial Information Service and Revised Statuses of the Missouri Constitution, distressed communities were identified and located on a map of Greater St. Louis and layered with school locations as well as vacant parcel locations in St. Louis City.

Conclusions: Schools that are not performing well are located within what the state of Missouri categorizes as a “Distressed Community,” indicated by the gray areas on the map. The entire City of St. Louis is categorized as a distressed community along with several of its suburbs in North St. Louis County. In all of the northern half of St. Louis, including St. Louis County, all schools with ACT averages of 20.1 or higher are private schools. Only one of these private schools has ACT averages above 25. This puts many of the students in North Metro St. Louis at a serious disadvantage. Private schools in these distressed communities have lower tuition rates than private schools in the rest of St. Louis, but if a family were unable to afford private education, there are very few good public options within their district. Within the St. Louis Public School District, every public school north of Delmar Blvd. has average ACT scores of 20 or below, while the majority of St. Louis County public schools have ACT scores of 20 or above.
**What is a Distressed Community?**

- **2500 residents**

31 of St. Louis’ schools are in a **Distressed Community**

21 of those schools are **public schools**

---

**Figure 03.** District spending disproportional to school performance

Darker color = more spending
Inquiry: How does the distribution and density of gang members correlate with high school drop-out rates?

Key Extractions: 2014 Public high school drop-out rates in the St. Louis City area, gang distribution in neighborhoods

Methodology: After assessing the locations of the four high schools with the highest drop-out rates and the four with the lowest drop-out rates, a gang member density was placed underneath. This was done to determine whether or not there was any correlation between the gang member density of a neighborhood and what neighborhood a school with low or high drop-out rates is located amongst. Drop-out rates were taken from the 2014 Building Annual Drop-out Rate Spreadsheet which was compiled by the Missouri Department of Elementary and Secondary Education Comprehensive Data System.

Conclusions: High schools with significantly higher drop-out rates are located in proximity to neighborhoods where the density of gang members is high. The high schools with the lowest drop out rates are located in neighborhoods and areas where there is either very minimal, or there are no gang members at all.

Figure 01. High school drop-out rates in relation to gang member density
Source: Gang information from University of Missouri-St. Louis and compilation of police data, Base from Arc GIS 2015
Inquiry: How does the distribution and density of gang members correlate with high school drop-out rates?

Key Extractions: 2014 Public high school drop-out rates in the St. Louis City area, gang distribution in neighborhoods

Methodology: After assessing the locations of the four high schools with the highest drop-out rates and the four with the lowest drop-out rates, a gang member density was placed underneath. This was done to determine whether or not there was any correlation between the gang member density of a neighborhood and what neighborhood a school with low or high drop-out rates is located amongst. Drop-out rates were taken from the 2014 Building Annual Drop-out Rate Spreadsheet which was compiled by the Missouri Department of Elementary and Secondary Education Comprehensive Data System.

Conclusions: High schools with significantly higher drop-out rates are located in proximity to neighborhoods where the density of gang members is high. The high schools with the lowest drop-out rates are located in neighborhoods and areas where there is either very minimal, or there are no gang members at all.

Legend

50-100 gang members per sq. mile
100-150 gang members per sq. mile
150-200 gang members per sq. mile
More than 200 members per sq. mile

Darker color shows % of drop-outs; size of circle reflects avg. ACT score
Vacancy Can Be Reduced by Diversity
Diversity Within St. Louis Provides Many Opportunities for the Economy

“321 large global enterprises—companies with at least $500 million in annual revenue—surveyed in a Forbes study in 2011, 85 percent agreed or strongly agreed that diversity is crucial to fostering innovation in the workplace.” Center for American Progress

Inquiry: What is the best area to start promoting more diverse neighborhoods?
Key Extractions: Diversity bands within the middle of the city, struggling areas in the community, and vacant parcels
Methodology: Overlay and analysis of population diversity with areas of low vacancy were compared to historical codes that hold the most vacant land.
Conclusions: The central corridor, and areas near it, are among the most ethnically diverse areas in the City and are also economically prosperous. It would make sense to expand outward from these areas to increase ethnic diversity.
Figure 03. Radiating Diversity Strategy

Sources: Demographic Center of the United States; St. Louis; Jagels, Emily. Gordon, Collin. Kerby, Sophia. and Burns, Crosby.
Inquiry: What are the challenges and benefits of living in a historic district?

Key Extractions: National historic districts, local historic districts, vacant parcels, neighborhood boundaries

Methodology: Historic districts and vacant parcels within these districts were layered in GIS. Neighborhood boundaries were also added for reader orientation. Exterior appearance requirements and tax benefits were found on the St. Louis cultural resources office’s website. Raise in the cost of living were found in an article on Bankrate.com. Historic districts with high vacancy were called out by name.

Conclusions: The number of vacant parcels is not significantly higher in historic districts. However, challenges for building in historic districts make it more difficult and costly to maintain, rehabilitate, and build new structures in high vacancy areas. If historic districts with high vacancy were reduced in size or taken off the register, it may be easier to build on these vacant lots.

Figure 04. Historic Districts Limitations and Benefits
Source: GIS 2013, City of St. Louis Cultural Resources Office 2011, Bankrate 2008
Vacant Historic Buildings in North St. Louis are Less Valuable Than Those in the South
Market values of vacant historic buildings in tend to be highest in the center of the city

Figure 01. Market values of vacant buildings in the historic districts of St. Louis
Source: City of St. Louis 2014-2015

Inquiry: Is there a trend in market values among vacant buildings in the historic districts of St. Louis?

Key Extractions: Market Value Analysis, vacant buildings, historic districts, city boundary

Methodology: Vacant building and residential Market Value Analysis data was obtained from the City of St. Louis. The “kriging” tool in ArcGIS was used to generate a heat map based on the market values for each parcel with a vacant building on it. This heat map was cropped to the extents of historic districts within the city, and the city’s boundary and point locations of vacant buildings within it were superimposed on the heat map. Finally, images of vacant buildings were obtained from Google Maps Street View. Market values were estimated for vacant buildings based on median prices given in the City’s Market Value Analysis map. (Note: Market value data is limited to residential buildings and does not include other building types.)

Conclusions: The highest market value among vacant buildings within historic districts occurs within the middle latitudes of the city. Vacant buildings in southern historic districts have a market value slightly below the city’s median and those in northern historic districts. Also, higher concentrations of vacant buildings appear to indicate lower market values. There appears to be no correlation between the market value of vacant buildings in nationally recognized historic districts versus the market value of those in locally recognized historic districts.
Figure 02. Samples of vacant buildings within historic districts
Source: City of St. Louis 2014-2015, Google Maps 2014

Legend
- Vacant buildings
- Highest Market value
- Lowest
- National Register of Historic Places sites
- Local historic sites

- Evaluation Map

Cote Brilliant Avenue between Billups Avenue and Annie Malone Drive, facing north

West Pine Boulevard between North Newstead Avenue and North Boyle Avenue, facing north

Minnesota Avenue between Wyoming Street and Utah Street, facing west
Employment Class, Locations Differ by Income and Area of Residence
North St. Louis low-income residents more likely to travel outside area for work

St. Louis | All Workers

56% of all City of St. Louis workers leave the city for employment.

North St. Louis | All Workers

90% of North St. Louis workers leave the area for employment.

Inquiry: In what ways does employment locations and commutes to work differ across the City of St. Louis?

Key Extractions: Origin/Destination of Workers, Heat Map of High Concentration, Dot Density of High Concentration, Top Employers in High Concentration Areas

Methodology: Maps were created using Longitudinal Origin-Destination Employment Statistics (LODES) from the Longitudinal Employer-Household Dynamics dataset from the U.S. Census Bureau (2011). “Primary jobs” were selected for analysis. All Workers and Workers Earning $1,250 Or Less were highlighted for analysis. Business location was cross-referenced with Google Maps, Census tract data from LODES and the St. Louis Regional Chamber, which cited the top employers in the region.

Conclusions: St. Louis workers in the north portion of the city are more likely to commute west of the city limits to work instead of staying in North St. Louis to work. Workers in that area display a higher spread of employment locations compared to the population of workers in the City as a whole. The population of workers across the entire city is concentrated more closely downtown. Few workers living in North St. Louis also work in North St. Louis. This could be explained by several factors including the percent of land which is vacant and/or the overall residential nature of the area. There is a more even split of workers staying and working in their area of residence in the City as a whole compared to residents living in North St. Louis. The Mississippi River is a barrier for employment, and workers across all three groups tend to work in the City of St. Louis or west of the city.
90% of low-income North St. Louis workers leave the area for employment.
North St. Louis Lacks Diversity of Job Opportunities

Interstate best predictor for job locations in area

Profile of People Working in North St. Louis

- **52%** make $3,333 per month or less
- Top Industries
  - **25%** Manufacturing
  - **17%** Transportation and Warehousing
  - **12%** Healthcare and Social Assistance

Profile of Workers Living in North St. Louis

- **82%** make $3,333 per month or less
- Top Industries
  - **22%** Healthcare and Social Assistance
  - **12%** Administration & Support, Waste Management and Remediation
  - **12%** Accommodations and Food Service

---

**Inquiry:** Based on the previous analysis, what conclusions can be made about industry and employment in North St. Louis?

**Key Extractions:** Origin/Destination of Workers, Heat Map of High Concentration, Top Employers in High Concentration Areas

**Methodology:** Maps were created using Longitudinal Origin-Destination Employment Statistics (LODES) from the Longitudinal Employer-Household Dynamics dataset from the U.S. Census Bureau (2011). “Primary jobs” were selected for analysis. Business location were cross-referenced with Google Maps and Census tract data from LODES.

**Conclusions:** North St. Louis industry is focused on lower-skill jobs on the periphery of the area. The organizations employing North St. Louis workers are largely industrial/manufacturing in nature, as opposed to the health and university organizations prevalent in the city. There is a strong correlation between the interstate highways and job locations. A large void of low employment opportunities exists in the core of the North St. Louis district.
North St. Louis | All Workers

North St. Louis | Workers Earning $1,250 or less per month

Study Area
Lowest Density of Employment
Highest Density of Employment

Mississippi River as Barrier
more likely to work outside area

North St. Louis | All Workers

tight cluster of jobs in central corridor

more likely to work outside area

Profile of People working in North St. Louis

52% make $3,333 per month or less
25% Manufacturing
17% Transportation and Warehousing
12% Healthcare and Social Assistance

Appendix
Areas with High Unemployment Have High Vacancy
Neighborhoods with High Unemployment Averages also Have Areas of Unoccupied Land

Inquiry: How is unemployment rate impacted by vacancy?

Key Extractions: Occupied Parcels, Neighborhood Boundaries, Unemployment Rates

Methodology: Vacant parcel and neighborhood boundary information from GIS was layered over average unemployment rates per neighborhood found on areavibes.com. Neighborhoods with high unemployment are called out by name on the map.

Conclusions: Neighborhoods with more than 16% unemployment (dark orange) seem to be only covered by about 50% occupied land (blue). Although vacancy land doesn’t always have high unemployment, areas of high unemployment have a lot of vacant land.
## Household Earnings

<table>
<thead>
<tr>
<th>Location</th>
<th>Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>$53,046</td>
</tr>
<tr>
<td>Missouri</td>
<td>$47,333</td>
</tr>
<tr>
<td>St. Louis</td>
<td>$34,383</td>
</tr>
<tr>
<td>North St. Louis</td>
<td>$25,022</td>
</tr>
</tbody>
</table>

## Unemployment Rates

<table>
<thead>
<tr>
<th>Location</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>6.0%</td>
</tr>
<tr>
<td>Missouri</td>
<td>5.5%</td>
</tr>
<tr>
<td>St. Louis</td>
<td>9.4%</td>
</tr>
<tr>
<td>North St. Louis</td>
<td>13.7%</td>
</tr>
</tbody>
</table>

## Neighborhood Average Unemployment Rate

- Hyde Park
- Wellsgoodfellow
- The Ville Fairgrounds
- Near North Riverfront
- Kingsway East
People Without Transportation Have Fewer Healthy Food Choices
Many residents are not within a 30 minute walk of a grocery store

Figure 01. Grocery Store Locations

Inquiry: Are grocery stores that provide fresh food accessible to all residents of St. Louis?

Key Extractions: Grocery, Food Desert, Travel Distance, Population, Racial Distribution

Methodology: I located grocery stores that provide fresh foods in St. Louis City boundaries using Google Maps along with further investigation into each one, proving that some were still marked on the map, but were no longer in use- leading me to omit those from the maps above. I then delineated areas within a 1/2 mile and 1 mile radius of grocery stores to see how many people were left out of those areas. Layering the grocery stores onto a population density basemap allows conclusions to be made. On the second map, neighborhood markets were located in the same way as grocery stores were. With neighborhood markets, only 1/2 mile radius’ were shown, since those were located more densely than grocery stores.

Conclusions: Conclusions drawn from the map are that many people in St. Louis City live in a “food desert” since they live outside of the 1 mile zones of grocery store locations- meaning they would have more than a 30 minute walk. However, smaller neighborhood markets were accessible to more of the population of St. Louis City, but do not provide as much selection or fresh food choices. Another observation is that the amount and distance to grocery stores and neighborhood markets appear to be about the same between north and south St. Louis.
The average grocery store size is **46,500** sq. ft.

The average neighborhood market size is **1,660** sq. ft.

NOTE: Stores were located through Google Maps and some locations might not be included. Also, no field verification was undertaken.

---

**Legend**

- **Grocery Store**
- 1/2 Mile Radius from Grocery Store
- 1 Mile Radius from Grocery Store
- Neighborhood Market/Convenience Store
- 1/2 Mile Radius from Grocery Store
- White People (1 dot = 1 person)
- Black People (1 dot = 1 person)

**NOT TO SCALE**

---

**Figure 02. Neighborhood Market Locations**


**Figure 03. Grocery Store With Health Food**


**Figure 04. Neighborhood Market**


Parcels and Peppers: Savory Ideas for Addressing Vacancy in St. Louis

High Concentration of Health Amenities

Inquiry: Is there a relationship between the location of health amenities and the health of residents in north St. Louis?

Key Extractions: neighborhood health, hospitals, gyms, health food stores, heart disease, obesity, diabetes

Methodology: Collect data on number of hospitalizations in zip code locations due to heart disease and diabetes. Collect percentages of overweight and obesity in zip code areas. Overlay all three and create a gradient of health risk, and then overlay locations of health amenities. The thresholds for High, Elevated, Medium, and Low were assigned to correlate to the data found in 2012 Decade Review of Health Status for City of St. Louis and County 2000-2010.

Conclusions: High-risk health areas are located in the north St. Louis City and county, and generally health amenities are scarce in these locations. The majority of health amenities are clustered in south and central St. Louis city, where there is a much lower reported health risk.

Figure 02. Hospitalizations, Obesity, and Composite Health
Source: 2015 City of St. Louis Obesity Report & 2012 Decade Review of Health Status for City of St. Louis and County 2000-2010

Inquiry: Is there a relationship between the location of health amenities and the health of residents in north St. Louis?

Key Extractions: neighborhood health, hospitals, gyms, health food stores, heart disease, obesity, diabetes

Methodology: Collect data on number of hospitalizations in zip code locations due to heart disease and diabetes. Collect percentages of overweight and obesity in zip code areas. Overlay all three and create a gradient of health risk, and then overlay locations of health amenities. The thresholds for High, Elevated, Medium, and Low were assigned to correlate to the data found in 2012 Decade Review of Health Status for City of St. Louis and County 2000-2010.

Conclusions: High-risk health areas are located in the north St. Louis City and county, and generally health amenities are scarce in these locations. The majority of health amenities are clustered in south and central St. Louis city, where there is a much lower reported health risk.
Hospitalization Rate of Heart Disease
- No Data
- High: 1 (Greater than or equal to 181 per 10K)
- Elevated: 2
- Medium: 3
- Low: 4 (Less than or equal to 135 per 10K)

Hospitalization Rate of Diabetes
- No Data
- High: 1 (Greater than or equal to 34.1 per 10K)
- Elevated: 2
- Medium: 3
- Low: 4 (Less than or equal to 10.9 per 10K)

Obesity as Reported on DMV Records
- No Data
- 67.4% - 76.0%
- 60.4% - 63.8%
- 54.4% - 59.0%
- 31.7% - 51.3%

1 inch = 20,833 feet
1:250,000
Inquiry: What factors correlate with obesity in St. Louis?

**Key Extractions:** Crime, safety, obesity, income, trails, food desert

**Methodology:** This map was made by analyzing data from The City of St. Louis Department of Health’s data on obesity. Classmate Sarah Jackman then transferred this data by county into ArcGIS. First, homicide data mapped in Google Earth provided by STL today was overlaid in photoshop. Each placemark was then mapped by a purple dot. Next, income, bike trails, and food desert data was provided by ArcGIS, and compared with the obesity map.

**Conclusions:** In general, struggling areas tend to correlate with obesity. Areas with higher instances of poverty have less access to healthy food and are more likely to sit within a food desert. Both these qualities directly correlate with obesity. Though figure 4.3 mapping bike routes does not show any correlations, biking and obesity are directly correlated. This is probably due to poor conditions and lack of maintenance on these bike paths. Figures 4.5 to 4.8 show some of the conditions of these paths. Additionally, many people in these areas may not feel safe enough to ride bikes in these areas. Figure 4.4 locates grocery stores that provide fresh produce. Those who are not within a 10 mile radius of these stores are considered to be in a food desert. Areas reporting higher instance of obesity are less likely to have adequate access to healthy food options.
Figure 03. St. Louis Regional Trails. The majority of the trails in areas of high obesity are bike routes with signage only. Many people may not feel safe using these routes or even know they exist.

Figure 04. Food deserts, grocery stores within 10 mile radius. This map shows that areas of high obesity does not correlate to food deserts in St. Louis. Source: ArcGIS, The City of St. Louis Department of Health.

Figure 4.5 Sidewalk in north St. Louis in poor condition likely due to lack of funding (Vallo)

Figure 4.6 Sidewalk in north St. Louis stops abruptly (Tucker, 2015)

Figure 4.7 Uninviting areas with high crime rates reduce desire for physical activity (Vallo)

Figure 4.8 Artwork located in Old North St. Louis shows hopeful community (Vallo)
High Percentage of Vacant Land Parcels Occur within Low Areas
Many vacant parcels could potentially support green infrastructure in St. Louis

W2_KJS02_EcologicalEvaluationMap.PDF

Inquiry: What possibilities arise when vacant parcels locations are mapped in proximity to drainage networks or drainage buffer zones?

Key Extractions: Parks, Vacant Land Parcels, Land Elevation, Drainage Networks, Drainage Buffer Zones

Methodology: Analyzing the land elevation of STL reveals where surface drainage is directed. Drainage networks were drawn in the darkest or lowest areas of the elevation map (seen in Fig. 2.2). Buffer zones were set 500 feet out from drainage networks (seen in Fig. 2.4 and 2.5). Many of St. Louis’s vacant land parcels were visible within these buffer zones (see fig. 2.5).

Conclusions: There are multiple drainage networks running through North St. Louis City. All of these drainage networks run through areas of vacant land. The vacant land parcels occurring in buffer zones provide an opportunity. Vacant land within buffer zones should be prioritized for green infrastructure development and “rainscaping.” “Rainscaping is any combination of plantings, water features, catch basins, permeable pavements, and other activities that manage stormwater as close as possible to where it falls, rather than moving it someplace else.” (MSD Project Clear 2015) Rainscaping is a part of the MSD Project Clear, or the city’s combined sewer revamp project. Locating vacant land within drainage buffer zones helps planners and city leaders begin to prioritize where vacant transformation efforts should be focused initially in order to maximize ecological and municipal benefits.
Legend
- Existing Parks
- Vacant Parcels of Land
- Drainage Networks or Low Areas
- Drainage Buffer Zones

NOT TO SCALE

Figure: 04. 500ft Drainage Buffer Zones
Source: STL GIS

Figure: 05. Vacant Parcels of Land within 500 feet of Drainage Networks
Provide Opportunity
Source: STL GIS edited in photoshop
Inquiry: When addressing vacancy, how can STL set aside vacant land intended for ecological development in a manner that is connective and functionally proactive?  

**Key Extractions:** Drainage Networks, Vacant Land Parcels, Parks, Existing Rainscaping Projects  

**Methodology:** Using the buffer zones created in the evaluative map, vacant parcels within buffer zones are highlighted in pink. Existing bioretention projects (an effort by MSD to reduce stormwater entering the city’s new sewer system) were identified on map 3.2. These existing systems occurred within the targeted vacant land area.  

**Conclusions:** Considering drainage networks and surface water flows helps planners and city officials initially prioritize which vacant parcels should be set aside for ecological development and which parcels should be considered for other functions. Managing surface water, or storm water, creates healthier urban ecosystems and aligns with MSD’s PROJECT CLEAR sewer revamp project. The existing pilot bioretention projects, led by MSD’s rainscaping campaign, are located within identified drainage buffer zones. This indicates that the buffer zone target area is an accurate and appropriate ecological designation for vacant land in STL.

**Legend**  
- **Vacant Land Parcels in Low Areas**  
- **Vacant Land Parcels**  

NOT TO SCALE

Figure 01. Buffer Zones Prioritize Vacant Land Intended for Bioretention and Rain Gardens  
Source: STL GIS
Recently completed bioretention projects by MSD are located in the targeted low areas. This is a future green network opportunity for STL. Source: STL GIS

Vacant land in low areas can be transformed into green networks and bioretention systems. Developing vacant land parcels within buffer zones into bioretention systems takes pressure off the city's sewer AND increases green connectivity.

Figure 02. Recent MSD Projects Have Developed Vacant Parcels into Bioretention Areas
Source: STL GIS

Figure 03. Drainage areas often run through impervious urban areas. This is a future green network opportunity for STL.
Source: STL GIS
Inquiry: Where are Owner Occupied, Renter Occupied, and Vacant Properties in the City of St. Louis?

Key Extractions: Home Owners, Renters, Vacancy

Methodology: For figure 1.1 Census block data was obtained from The City of St. Louis Planning and Urban Design Agency. Census block shape files were obtained from https://www.census.gov/cgi-bin/geo/shapefiles2014/main.. The layers “Owner Occupied by %” and “Renter Occupied by %” were created from the data and turned on. The layers “Vacant lots 2015” and “Vacant bldg 2015” were also turned on. For figure 1.2 Vacant lots 2015 and Vacant bldg 2015 were turned off and dot density layers were created for Owner occupied parcels and renter occupied parcels from the census block data.

Conclusions: High concentrations of owner occupied housing are in the southwest part of St. Louis. High concentrations of renter occupied properties are in the southeast. In the north, owner occupied properties and renter occupied properties are mixed.
Figure 02. Owner Occupied Renter Occupied Block Distribution
Source: The City Arc GIS 2014, The City of St. Louis Planning and Urban Design Agency
Vacancy is Predominantly in the North
Both Owner Occupied and Renter Occupied Properties Show Signs of High Vacancy

File: W2_LS01_10K_OwnerRenter.PDF

Figure 01. Areas of Property Types
Source: The City of St. Louis Arc GIS 2014 and The City of St. Louis Planning and Urban Design Agency
Inquiry: How do owner occupied properties and renter occupied properties relate to vacancy?

Key Extractions: Area Concentrations, Blight

Methodology: Concentrations of property types were determined and areas of vacancy were noted

Conclusions: The area with the highest level of vacancy is a mix of owner occupied and renter occupied properties. The area with the second highest level of vacancy is in the southeast. The area with the lowest level of vacancy is in the southwest. Vacancy is spread evenly throughout owner occupied and renter occupied properties indicating that the area is stressed.
Inquiry: How to redistribute vacant homes?

Key Extractions: Vacancy Consolidation

Methodology: Analysis of maps to determine areas of high vacancy and low vacancy within north St. Louis City.

Conclusions: Blocks with a 70% vacancy rate should be fully vacated. Blocks will then be consolidated into an area of vacant land. This vacant land can remain undeveloped or be repurposed for other uses such as parks or business developments. Property owners that have to vacate can move to vacant properties surrounding the vacated area that are only beginning to show signs of stress.
Conclusions: Model can be repeated strategically throughout St. Louis to create vacant land patches to be repurposed.

Figure 02. Consolidated Vacant Property Reduces Vacancy in Surrounding Properties
Source: The City of St. Louis ARC GIS 2014 and The City of St. Louis Planning and Urban Design Agency
Inquiry: Does the City of St. Louis’s Strategic Land Use Plan (SLUP) address all of the vacant parcels throughout the city using development?  

Key Extractions: City of St. Louis Ownership Parcels featuring Vacancy Data, SLUP, Interstates  

Methodology: Vacant building and lot data was obtained from the City of St. Louis for 2015. These datasets were then merged the SLUP dataset, also obtained from the city of St. Louis, using ArcGIS. Next, vacant parcels were plotted according to SLUP designation colors, with occupied parcels left white. A similar map was made for occupied parcels. Interstate data was obtained from the University of Missouri and superimposed upon both maps to show the relationship between vacant parcels and proximity to interstates.  

Conclusions: Vacant parcels occur in highest concentrations in the northern and southeastern portions of the city, as well as along interstates. Much of this vacancy is designated as “areas where the existing housing and corner commercial building stock will be preserved and augmented with infill residential and corner commercial development.” Parcels designated as “suitable for new residential construction of scale/associated neighborhood services” however, primarily feature either a vacant building or vacant land.
Occupied Parcels

Scattered occupied parcels, primarily residential and commercial

New developments upon occupied parcels are few and far between

Legend
- Neighborhood Preservation Area
- Neighborhood Development Area
- Neighborhood Commercial Area
- Regional Commercial Area
- Recreational and Open Space Preservation and Development Area
- Business and Industrial Preservation and Development Area
- Business and Industrial Development Area
- Institutional Preservation and Development Area
- Specialty Mixed Use Area
- Opportunity Area
- Interstates
Inquiry: What areas of St. Louis can be redeveloped into mix-use development?

Key Extractions: Land Value, Mixed-Use, Surrounding Area

Methodology: Using the land value data and the SLUP data provided by the city of St. Louis, I created maps in ArcGIS for the value of land in mix-use areas and the land that surround them. Using these maps I examined the areas of St. Louis with low land value that may benefit from mix-use development. I created the final map using land value data provided by St. Louis and created areas of redevelopment using Photoshop.

Conclusions: St. Louis has many mix-use areas with high land values. These areas tend to have high land values surrounding them. If St. Louis was to create more mix-use redevelopment, land value in those areas have the chance to rise and bring in other development.
Figure 03. Proposed Areas for Mix-Use Redevelopment
Source: (St. Louis, 2015)
Inquiry: Are crimes more likely to happen on or around vacant land?

Key Extractions: Crimes per Capita and Vacant Land with World Street Map as background

Methodology: Two main data sets were used to create these maps. The first data set was the KSU_STL.gdb which contained the vacant parcels and building files for the city. That data was changed form a shape file into a point file, which was then used to create a kernel density map (also known as a heat map). Next, a Block Group data set was obtained from ArcGIS Online. This data set contained the number of crimes per capita per year (2014) throughout areas of the city. This data was changed to a dot density map then placed on top of the vacancy kernel density map. In order to mask out other parts of the data a mask created by Neal Heidt was used. Next, locations of high amounts of crimes per capita and vacant land were circled in order to draw attention to the correlation between the two.

Conclusions: Overall, the North and Southeast parts of the City of St. Louis contain more crimes per capita than other parts of the city. However, there are significantly more vacant houses in the North than in the Southeast. The number of vacant land has a correlation with number of crimes per capita.
High amounts of crimes per capita occur in areas with large amounts of vacant lands.

The North and Southeast part of the City of St. Louis contains the highest number of vacant lands. Other areas in the city contain similar crime statistics.

Figure 02. North St. Louis Crimes per Capita in Areas with Large Amounts of Vacant Lands
Source: BGPerCapitaHotSpot from ArcGIS Online (jenn775 2014); Vacant Land Data provided to Class (City of St. Louis 2015); World Street Map (City of St. Louis)
Localized Landscape Interventions Work to Strengthen Surrounding Communities
Localized Landscape Interventions Provide Centralized Locations to Serve as a Community Base and Anchor

Inquiry: How might individual designed landscape hot spots act to reduce vacant land and crime within its surrounding context?

Key Extractions:
High amounts of vacant land

Methodology:
Within the KSU_STL.gdb the Parcels2013 shape file was used. The Parcels2013 file contains the vacancy of each parcel in the city. That data was changed form a shape file into a point file, which was then used to create a kernel density map (also known as a heat map). In this map only vacant properties of 2.28 or higher per acre are show to illustrate their geometries. In order to mask out other parts of the data a mask was used. In order to show context a city map was placed below the extracts. In order to mask out other parts of the data a mask was used. This mask was obtained form Neal Heidt. Next, a hot spot locations were placed on top of all other maps. The images to the right are used to illustrate what these areas might look like.

Conclusions:
Individual designed landscape sites might help reduce vacant land and crime by beautifying the landscape and reducing structures that might house crime. These sites can function as localized landscape interventions for community building and engagement.

Figure 01. Entire City of St. Louis Crimes per Capita in areas with large amounts of Vacant Lands
Source: Vacant Land Data provided to Class (2013); World Street Map (City of St. Louis)

Located in the middle of high vacancy, Localized Landscape Interventions will serve as a base or anchor for communities. These Interventions will be located on currently vacant parcels. The interventions will provide community activities and strengthen neighborhood identity. The Interventions will place more eyes on the neighborhood, which will hopefully begin to lower crime. As the community grows, smaller vacant properties will be revitalized as roots off of the anchor landscape interventions.
Hot Spot Precedents

Figure 02. Sea of sunflowers used as a community hot spot
Source: Reilly 2015

Figure 03. Community garden and open space as community hot spot
Source: Pennsylvania Horticultural Society 2015
Inquiry: How do St. Louis’ highways disconnect the city and community neighborhoods?

Key Extractions: Divided Neighborhoods, Highway Boundaries

Methodology: Neighborhood Boundary, City Limit Boundary, Highway Routes, Park Locations, City Context

Conclusions: The four highways traversing through St. Louis bisect the neighborhood communities. The physical characteristics of the highway system impact the neighborhoods directly adjacent to, or bisected by, the roads.
Inquiry: How do St. Louis' highways disconnect the city and community neighborhoods?

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Conclusions: The four highways traversing through St. Louis bisect the neighborhood communities. The physical characteristics of the highway system impact the neighborhoods directly adjacent to, or bisected by, the roads.

40 of 79 neighborhoods are adjacent to, or bisected by, a highway in St. Louis City.

Fig. 02. Neighborhood Bisection Map
Source: City parcel data accessed through ArcGIS, provided by Howard Hahn and Blake Belanger, Highway Route found by Google Maps (www.google.com/maps)

Fig. 01. Highway vs. City Bisection Map
Source: City Boundary accessed through ArcGIS, provided by Howard Hahn and Blake Belanger, Highway Route found by Google Maps (www.google.com/maps)
Comparing St. Louis City and St. Louis County

St. Louis City and St. Louis County have very different demographics.

Median income

Median income in St. Louis County is higher on average.

Minorities

Concentration of minority populations higher in St. Louis City.

Percent living below poverty line

Poverty concentrated in St. Louis City.

Percent vacant buildings

High concentration of vacant buildings in St. Louis City compared with County.
Inquiry: How do the demographics in St. Louis City compare to St. Louis County?

Key Extractions: St. Louis County, St. Louis City, Median Household Income, Minorities, Education

Methodology: 2010 Census data was used to extract information for St. Louis City and St. Louis County. Areas are divided by census tract. Data was manipulated to show differences in demographics between St. Louis City and the surrounding county.

Conclusions: St. Louis County and St. Louis City are divided not just by a boundary but by several other social and economic aspects.

Figures 01-05. Differences between St. Louis City and St. Louis County
## Five Shrinking Cities Suggest Strategies for Desegregation in St. Louis

Five shrinking cities that are no longer hypersegregated serve as a model for St. Louis.

The cities listed above have consecutively declined in population over the last five decades. The underlined cities are ones that are both shrinking and no longer hypersegregated. St. Louis is still classified as hypersegregated and has still been shrinking as of the 2010 U.S. Census report.

*Figure 01. Shrinking and Hypersegregated Cities and what St. Louis can learn*


### Inquiry
What strategies can the city of St. Louis employ to remove its status as one of America’s most hypersegregated cities?

### Key Extractions
- St. Louis, Segregation, Mixed-Use Development, Transit Oriented Development, Shrinking Cities, Urbanization

### Methodology
A recent study by Princeton University reveals that St. Louis is one of America’s most hypersegregated cities. From 1970 to 2010, 19 cities no longer received a hypersegregated designation, hinting at a positive trend of demographic mixing. This list of 19 cities was cross referenced with a shrinking cities list, in order to relate to St. Louis current population trends.

### Conclusions
Eleven out of twelve cities listed on the shrinking cities list are also listed as hypersegregated cities, drawing a strong correlation between population decline and extreme demographic polarization. Of these eleven shrinking cities, five also appear on the Princeton University study as no longer receiving a hypersegregated status. Therefore, the City of St. Louis can look to the development patterns in these five cities, whether intentional or unintentional, that promoted a higher degree of demographic mixing, and subsequently no longer receive a status of hypersegregated. The cities are: Buffalo, New York; Cincinnati, Ohio; New Orleans, Louisiana; Pittsburgh, Pennsylvania; and Washington D.C.
## Transit-Oriented and Mixed-Use Development as a Means to Stimulate Growth and Reduce Segregation

<table>
<thead>
<tr>
<th>City</th>
<th>Strategies and Land Use Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>St. Louis, MO</strong></td>
<td>The cities listed below, along with St. Louis, are all classified as shrinking cities. However, the cities below no longer receive a hypersegregated designation, while St. Louis still does. What strategies of spatial development and land use have contributed to more demographic mixing?</td>
</tr>
<tr>
<td><strong>Buffalo, NY</strong></td>
<td>• “Investment Corridors” identified&lt;br&gt;• Commercial district types: mixed-use neighborhood commercial, mixed-use transit station area, mixed use downtown (inside and outside of CBD), mixed use medical</td>
</tr>
<tr>
<td><strong>Pittsburgh, PA</strong></td>
<td>• Preliminary land development plans precede specially planned districts, which are created from a process of public involvement and participation&lt;br&gt;• Comprehensive plans for “The Five Ways”: Throughways, Pedestrian Ways, Transit Ways, Cycle Ways, Green Ways</td>
</tr>
<tr>
<td><strong>Cincinnati, OH</strong></td>
<td>• “Through strategies like transit-oriented, mixed-use development and land recycling…”&lt;br&gt;• “Develop an efficient multi-modal transportation system that supports neighborhood livability”</td>
</tr>
<tr>
<td><strong>Washington D.C.</strong></td>
<td>• “Through strategies like transit-oriented, mixed-use development and land recycling…”&lt;br&gt;• “Develop an efficient multi-modal transportation system that supports neighborhood livability”</td>
</tr>
<tr>
<td><strong>New Orleans, LA</strong></td>
<td>• “Locate higher-density uses at existing and proposed transit stations and hubs for critical mass and locate new transit to serve higher density areas.”&lt;br&gt;• “Convert suburban style commercial strips and malls into walkable, mixed-use centers.”</td>
</tr>
</tbody>
</table>
Sewing a Stronger North-South Connection in St. Louis
An opportunity to make a better connection between communities

Figure 01.
Source: (Coopercenter.org) (ArcGIS. The City of St. Louis, MO. 2013)

Inquiry: What are the areas of greatest opportunity to provide a mixed-use North-South circulation corridor?

Key Extractions: St. Louis, Segregation, Mixed-Use Development, Transit Oriented Development, Shrinking Cities, Urbanization

Methodology: A demographic dot map of the city of St. Louis shows a clear racial divide between the north and the south, a divide that is further enforced by the infrastructural barriers that bisect the city. Strategically targeting north-south commercial corridors can provide guidance from which the city can channel investment. Mixed-use commercial corridors, as opposed to mixed-use areas have greater potential to be linked to transit-oriented development schemes, and can provide a framework from which density can spread.

Conclusions: There were two potential North-South connector streets that presented opportunity to become a mixed-use, multi-modal investment corridor: Kingshighway and Grand Boulevards. Kingshighway was not chosen because it is highly fragmented by the highway and railway infrastructure, and the intersection exists at a point where it splits, which widens the gap in the potential urban fabric. Grand Boulevard, on the other hand has great potential. There are two prominent parks that could serve as the anchor points to the investment corridor.

Demographic Map
- Black
- White
- Asian
- Other

Commercial Corridors

Relatively little demographic mixing throughout the city

The majority of commercial corridors run East-West
Grand Boulevard would be an ideal North-South mixed-use corridor because it is located at a pinch point in the railway corridor. Additionally, it traverses diverse ground with a mix of parks and unique urban character, and could link multiple nodes of interest/activity.
St. Louis has only 10 streets that provide a continuous North-South pedestrian and vehicular connection across major east-west infrastructural barriers.

From West to East, the streets with the strongest north-south connections are:

1. McCausland Ave
2. Hampton Ave
3. S Kingshighway Blvd
4. S Vandeventer Ave
5. S Grand Blvd
6. S Compton Ave
7. S Jefferson Ave
8. S Tucker Blvd
9. S 7th St
10. S Broadway

Figure 02.
Source: ArcGIS. The City of St. Louis, MO. 2013 (Google Earth Streetview, 2015)

**Inquiry:** Which of St. Louis’ 10 streets that have strong north-south connections would best serve a mixed-use and transit-oriented corridor?

**Key Extractions:** St. Louis, Segregation, Mixed-Use Development, Transit Oriented Development, Shrinking Cities, Urbanization

**Methodology:** In order for the city of St. Louis to have a stronger connection between the people and places in the northern and southern portions of the city, it seems necessary to identify the best possible areas where these connections can form. There are many points along each of the infrastructural barriers (the highways, and railway corridor) that allow movement across them. However, there are only 10 streets that have a continuous connection across all three. These ten streets were narrowed down to two streets, Kingshighway and Grand, as the best possible candidates for a mixed-use north-south commercial corridor. Grand was selected for its diverse urban character and because it reaches into the hearts of the residential zones in the north and south of the city. There are over 10 major place connections along Grand.

**Conclusions:** Grand Boulevard in St. Louis, Missouri would be an ideal place to study the possibility of implementing a mixed-use and transit-oriented corridor. This corridor could bridge the gap between two seemingly separate areas of the city, and help unify communities in the north and the south.
From north to south, Grand Boulevard connects these major destinations in the city:

1. St. Louis Public Library
2. Fairground Park
3. St. Louis University
4. Metrolink Station Grand Blvd.
5. St. Louis University Medical Center
6. Compton Hill Reservoir Park
7. Tower Grove Park
8. Schnucks grocery store
9. St. Mary’s High School
10. Carondelet Park

Grand Boulevard contains an existing as well as a proposed Metrolink rail station.
Cities of Similar Size Have More Rail Transit Lines
St. Louis may need more transit rail lines in order to become a more sustainable city.

St. Louis, Missouri
Size: 66.2 square miles
Population: 319,365 as of 2010 Census
Population Density: 4824 people / square mile

Washington D.C.
Size: 68.3 square miles
Population: 601,222 as of 2010 Census
Population Density: 8803 people / square mile

Inquiry: What kind of transit rail systems do cities similar in size to St. Louis have? What kind of system should St. Louis be thinking about for the future?

Key Extractions: Light Rail, Transit,

Methodology: Using Google Maps to look at other cities’ sizes and transit systems, the maps were edited in Adobe Photoshop to give a clear visual of the transit rail lines in each city.

Conclusions: People at the Strong Cities, Strong Communities workshop (Section 1.3, Figure 1.3.5) expressed a 20-year goal of having a more walkable, transit oriented city. Other cities in the United States have different social and economic situations, but by looking at cities that are close in size to St. Louis, multiple rail transit lines going in multiple directions support a growing and densified population. Comparatively, St. Louis is population depleted and shrinking. It is less dense than ever in its history. Even so, an East/West line and a North/South Line is planned for the future to supplement the existing Metrolink system.
Boston, Massachusetts
Size: 89.6 square miles
Population: 617,594 as of 2010 Census
Population Density: 6893 people / square mile

Figure 03. Boston MBTA Lines
Source: Google Maps 2015

Maps Not to Scale

Legend
- City Boundary
- Rail Lines
- Proposed St. Louis Line
- Water
Various Factors Contribute to Diverse Urban Areas

Percent of family households in diverse urban areas based on Census data.

Source: demographics.coopercenter.org
Photo images: See Critical Map References section,

Inquiry: What factors contribute to highly diverse neighborhoods?

Key Extractions: Diversity, Housing Type, Eateries, Universities, Active Streets, Mixed-Use Buildings

Methodology: The Racial Dot Map provided a base map where I identified clusters of high density and Google searched images from those districts.

Conclusions: This map calls out factors that contributed to areas of high diversity in both social and economic ways. Some of the factors include:
- types of housing units
- mixed-use buildings
- active streets
- successful eateries
- nearby universities

Many of these diverse neighborhoods have fewer families based on the Census Data report, suggesting that young adults and/or empty nesters are occupying these districts. This map could encourage future investment in developing highly diverse, family oriented neighborhoods. It also provides examples for successful diverse districts.

Figure 01. Diversity Factors

Delmar Loop
Restaurant District
Mixed-use Buildings

Tower Grove South
Variety of Housing Types

Dutchtown South
Successful Eateries

58%

47%

50%
Classification Map

Old North St. Louis
Mixed-use Buildings
Historical District
37%

Skinker Debaliviere
Washington University
Student Living
33%

Grand Center
St. Louis University
Student Living
1%

Central West End
Mixed-use Buildings
Restaurant District
25%

Shaw Neighborhood
Mixed-use Buildings
30%

Cherokee Street
Active Street
38%

Legend
- African Americans
- Asians
- Caucasians

Percent of family housing units
53%
Dense Areas of Diversity Located in Downtown St. Louis and Directly South of Delmar Blvd.
Few children 18 years of age and younger live directly south of Delmar Blvd.

Racial Population Density

**Figure 01. The Racial Dot Map**
Source: demographics.coopercenter.org

**Inquiry:** Where is there the most diversity in the city of St. Louis and how does that affect future plans for the city?

**Key Extractions:** Racial Diversity, Population Density, Younger Generation Population Density

**Methodology:** Information gathered from the Racial Dot Map from the University of Virginia was used as a baseline for Figure 01. I further located areas of high diversity, which included high density. Figure 02 was developed based on the population of children 18 and younger, information gathered from the St. Louis Census records. A gradation of green was then applied to the number of people in the demographic based on the population in each ward. Figure 03 is specifically population density based on block groups.

**Conclusions:** There are two areas in St. Louis in which a high diversity is present, that occurs in the Southeast part of the city and just south of Delmar Blvd. There are few children in the area south of Delmar Blvd., suggesting that there are fewer families in this area and more singles, couples, and/or empty nesters. Both of these areas have a high population density.
Figure 02.18 Younger Population Density
Source: St. Louis Census Records

Figure 03. Population Density
Source: St. Louis Census Records

Distribution of Young People

Low Population of Children

Moderate/ High Population of Children

Areas of Dense Population

Total Population Density

Classification Map

Less than 1,499
1,500 - 1,999
2,000 - 2,499
2,500 - 2,999
3,000 - 3,499
More than 3,500

101 - 1,000
1,001 - 10,000
10,001 - 25,000

Dense Areas of Diversity Located in Downtown St. Louis and Directly South of Delmar Blvd.

Few children 18 years of age and younger live directly south of Delmar Blvd.
Non-profit Organizations Have Had a Major Impact on the City by developing, redeveloping, and garden leasing vacant parcels.

Organization: Land Reutilization Authority
Type of Work: Receives tax delinquent property. Works with the St. Louis Development Corporation.

Organization: RISE
Type of Work: Receives tax delinquent property. Works with the St. Louis Development Corporation.

Inquiry: Where is there work that has been done on vacant properties? What organizations are doing them?
Key Extractions: Non-Profit, Development, St. Louis, LRA Parcels, Brownfields
Methodology: After locating the LRA owned properties in ArchGIS and locating development and redevelopment projects done by non-profit groups in St. Louis via Internet research, and maps were made using ArchGIS and Adobe Photoshop for each Project Program and compared to each other.
Conclusions: A lot of development has taken place in Northern St. Louis, and most was done by non-profit groups. The LRA owns thousands of vacant parcels that are an opportunities for development of community gardens, public and civic spaces, and affordable housing. These organizations have done work throughout St. Louis, and there seems to be plenty of work being done in areas that need more development.
Organization: St. Louis Brownfield Program
Type of Work: Works with the St. Louis Development Corporation and LRA to develop vacant parcels deemed as contaminated.

Organization: Multiple
Successful Developments that have contributed to the economic and social growth of an area in St. Louis.

Figure 03. Brownfield Program Redevelopments
Source: City of St. Louis, MO https://www.stlouis-mo.gov/government/departments/sldc/brownfields/

Figure 04. Successful Development Areas
Source: City of St. Louis, MO and Google Maps 2015

Legend
- Water
- Parks
- LRA Parcels
- RISE Projects
- Brownfield Projects
- Successful Developments
REFERENCES

MAP 1

Figure 01


MAP 2

Figure 01


MAP 3

Figure 01
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MAP 4

Figure 01
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MAP 5

Figure 01

Historic Districts, Vacant Parcels, and Neighborhood Boundaries. 80,000. City of St. Louis GIS data.

MAP 6

Figure 01

Figure 02
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MAP 7

Figure 01

MAP 8

Figure 01

MAP 9

Figure 01

Non-Vacant Parcels and Neighborhood Boundaries. 80,000. City of St. Louis GIS data.

MAP 10

Figure 01

Figure 02

Figure 03
Figure 01

Other Sources:

MAP 11

Figure 01


Figure 04

Figure 05

Figure 06

Figure 07

Figure 08

Other Sources:

MAP 12

Figure 01

Figure 02

Figure 03

Figure 04

Figure 05

Figure 06

Figure 07

Figure 08

Other Sources:

MAP 11

Figure 01


Figure 04

Figure 05

Figure 06

Figure 07

Figure 08

Other Sources:

MAP 12

Figure 01

Figure 02
MAP 13

Figure 01

Figure 02

Figure 03

Figure 04

Figure 05

MAP 14

Figure 01

Figure 02

Figure 03

MAP 15

Figure 01
Stucki, Lindsay. 2015. Owner Occupied vs. Renter Occupied. GIS Map. Source Data: The City of St. Louis Planning and Design GIS. “Parcels 2013” “Owner Renter Parcels by %”. Census Block Data was obtained via email from The City of St. Louis Planning and Design Agency.

Figure 02
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MAP 16

Figure 01
Stucki, Lindsay. 2015. Areas of Property Types. Photoshop Diagram using GIS Owner Occupied vs. Renter Occupied Map.

Figure 02
Stucki, Lindsay. 2015.Vacancies are found both on owner occupied properties and renter occupied properties. Photoshop Diagram using GIS Owner Occupied vs. Renter Occupied Map.

MAP 17

Figure 01
Stucki, Lindsay. 2015. Shift of Property Owners to Consolidate Vacant Areas. Photoshop Diagram using GIS Owner Occupied vs. Renter Occupied Map.

Figure 02

MAP 18

Figure 01
MAP 19

Figure 01

MAP 20

Figure 01

Figure 01

MAP 21

Figure 01

Figure 02

Figure 03

MAP 22

Figure 01


Figure 02


MAP 23

Figure 01- 05

MAP 24

Figure 01

MAP 25

Figure 01

Figure 02

Figure 03

Figure 04
MAP 26

Figure 01

Figure 02

MAP 27

Figure 01
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Figure 02


Figure 03


MAP 28

Figure 01


MAP 29

Figure 01

Figure 02

Figure 03

MAP 30

Figure 01
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Figure 03
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Figure 04
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Executive Director, Affordable Housing

Jeffrey Boyd
Alderman, Ward 22

Stephen Acree
President of RISE (RISE acts as both a developer and a development consultant, utilizing a proven strategy to catalyze the neighborhood revitalization process)
**Poster** 36-inch by 72-inch poster promoting the ideas found in the Parcels and Peppers book, as well as the book itself, for hanging in the Planning and Urban Design Agency office, in the College of Architecture, Planning, and Design at Kansas State University, and in other locations. (Designed by Katelyn Rose and Kelsey Steward)
Flyer 8.5-inch by 11-inch handout advertising the Parcels and Peppers book and ideas. (Designed by Conner Bruns)
THE AUTHORS

Students of Kansas State University’s Community Planning and Design Studio Back row, from left to right: Tyler Swehla, Morgan Taylor, Kelsie Shy, Emily Jagels, Taylor Allen, Abigail Fiala, Sarah Jackman, Katelyn Rose, Laura Vallo, and Lindsay Stucki.

Front row, from left to right: Jonathan Knight, Tyler Tucker, Kelsey Steward, Timothy Kellams, Kaitlin Bernal, Conner Bruns, Haley Armstrong, and Neal Heidt. (Photo credit: Ethan Moulder)