EAST-WEST GATEWAY

BEVO

GREAT STREETS

THE NEXT PHASE OF
THE NEIGHBORHOOD

FARR ASSOCIATES

EcoDistricts
DEVELOPMENT STRATEGIES
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BEVO, THE NEIGHBORHOOD, & ITS IDENTITY

EXECUTIVE SUMMARY

DIVERSITY AT ITS CORE

The Bevo Mill neighborhood located on St. Louis's south side is historic, stable, affordable, and ethnically-diverse. For generations Bevo has been an immigrant portal, quietly welcoming large numbers of Bosnians, Mexicans, and Southeast Asians from across the globe. Bosnians are well-represented by organizations and in neighborhood leadership while LatinX, south Asians, and African-Americans are not. Nonetheless, this diversity is a core neighborhood asset and a source of immense pride and entrepreneurship with numerous ethnic cafes and groceries located along Gravois Ave, a street that both unites and divides Bevo.

GRAVOIS: NECESSARY YET INSUFFICIENT

The Gravois of today—a "highway in the city" operated by MoDOT—is a struggling street. The prevailing travel speed is a pedestrian-hostile 37 MPH. Crosswalks are on average 1,000 feet apart, and the sidewalks are too narrow to support lively pedestrian activities. There is a lack of quality public space, with extensive paving and lack of shade. Not surprisingly, more than 30% of the Gravois Ave storefronts are vacant, and walkers and bikers are few and far between. On top of that, the north end of the study area faces unique challenges: a railroad underpass interrupts the city fabric and the intersection with Chippewa is an in-city pocket of unwalkable sprawl development.

Fortunately, Gravois Ave is much better off today than it was just three years ago thanks to a MoDOT-funded road diet. That "diet" eliminated two travel lanes, added bike lanes, and reduced average vehicle speeds by 6 MPH. However, an unintended consequence left the width of clear pavement between hard obstructions (parked cars) at nearly 45', inducing drivers to still drive 7 MPH above the posted 30 MPH speed limit. Also, bike policies have quickly shifted to favor "low-stress" protected facilities (screened by parked cars) over "high stress" unprotected lanes.

THE GRAVOIS REDESIGN

This study proposes a redesign of the Gravois Ave right-of-way that successfully addresses these concerns by eliminating a continuous center turn lane while retaining on-street parking and introducing a two-way protected cycle-track. This multi-year ROW transformation is phased to align with need and the availability of government funding. To avoid introducing a bicycling hazard, the shift from bike lanes to cycle track along the corridor needs to happen all at once, reinforcing the strong desire to synchronize pavement restriping with the rebuilding of the structurally-challenged viaduct. Integrated stormwater enhancements will do double-duty in calming traffic. Since funding for major street improvements may be a few years away, the plan's early projects will be implemented by private businesses in coordination the Bevo CID and Better Bevo Now.

THE CREATION OF A GREAT PLACE

While the proposed street sections vary only slightly along the corridor, the land use recommendations are finely tuned to context specifically for segments distinguished by landscape and hydrology, market conditions, and placemaking potential. The highest priority segment, called The Bowtie, is named after the plan of the Gravois Ave /Morganford Rd intersection. The Bowtie is anchored by the iconic Bevo Mill, the universally acknowledged heart and soul of the community and the Bevo neighborhood's *de facto* flagship.

The plan proposes to develop the Bowtie into a unique outdoor room and public destination that encompasses the Mill and a revamped Sebilj Park. In addition to an updated streetscape, just three projects are needed to make this room a reality: a new mixed-use building on the site of the Midwest Bank, which is already in process; a new building on the front of the old QuikTrip lot; and a new "backstop" building on the Sebilj Park parking lot.

All five segments of the corridor—The Bowtie, Cars and Bars (Christy Blvd to Eichelberger St), the United Nations (Gannett St to Taft Ave), the Viaduct, and Chippewa—would be governed by a form-based code (i.e. an overlay zoning code) calibrated to each context. The plan calls for lot-by-lot improvements such as driveway closures, parking lot screening, and infill parks or buildings. Major projects include signage at the entrances to Bevo, stormwater parks and streetscapes, neighborhood park places, street lighting, and public art. The design for the underpass reconstruction would include art and stormwater retention while the form-based code would help to use new buildings and landscape to create a walkable environment at Chippewa.

SETTING THE STAGE

The master plan will be implemented in four phases. The first five-year phase called Setting the Stage is a series of interconnected policies and projects that will fundamentally change how Bevo is governed and perceived. Every plan needs early wins to build confidence; in this case, this confidence would manifest in stabilizing the CID's funding and management, reducing vacancies, adding sidewalk dining and cornice lighting, introducing gateway elements and art pieces, and getting the mixed use building built, among many others. Inspired by the involvement of Ecodistricts in the project, a Memorandum of Understanding outlines the tight coordination between the City of St. Louis, the Alderpersons, the Bevo CID, Better Bevo Now and other organizations that needs to occur during this phase.

SHOWTIME ACT I

The second phase called Showtime is focused on the transformation of the ROW and requires a coordinated effort between many levels of government. The Alderperson, the City of St. Louis, MoDOT, and MSD all have a role to play in making that happen. The accomplishments of the first phase together with a redone Gravois Ave will enhance the viability of one of the defining building projects of this plan, the "backstop" building.

SHOWTIME ACT II

When funding to rebuild Gravois Ave becomes available, this will allow the ROW improvements to become permanent, sending a strong market signal to invest in Bevo.

ENCORE

The fourth and final phase called Encore is a list of nice-to-haves. At this point, many projects and conditions that now seem unlikely may now occur: the development of a new neighborhood produce store, the redevelopment of Chippewa, the redevelopment of Upper Viaduct. Additionally, displacement due to price pressures is an unintended and undesired possibility. Looking back, the early focus on assuring affordability will seem prescient.

The result of this Plan is a truly Great Street: a prosperous Gravois Ave that activates a healthy and welcoming Bevo For All.

Promotional image from the Bevo Community Improvement District (CID)

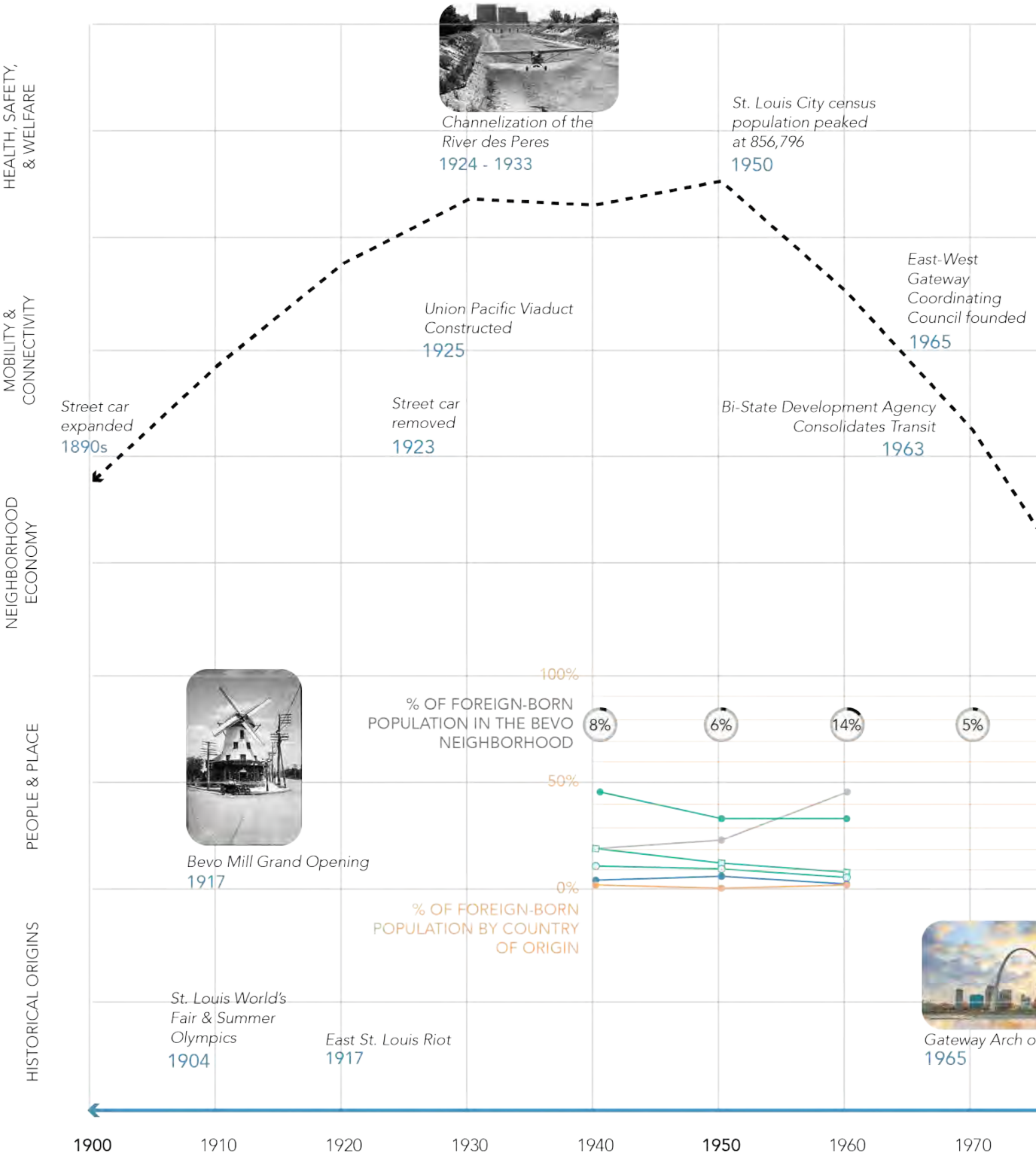
ILLUSTRATIVE PLAN FOR GRAVOIS AVE

1

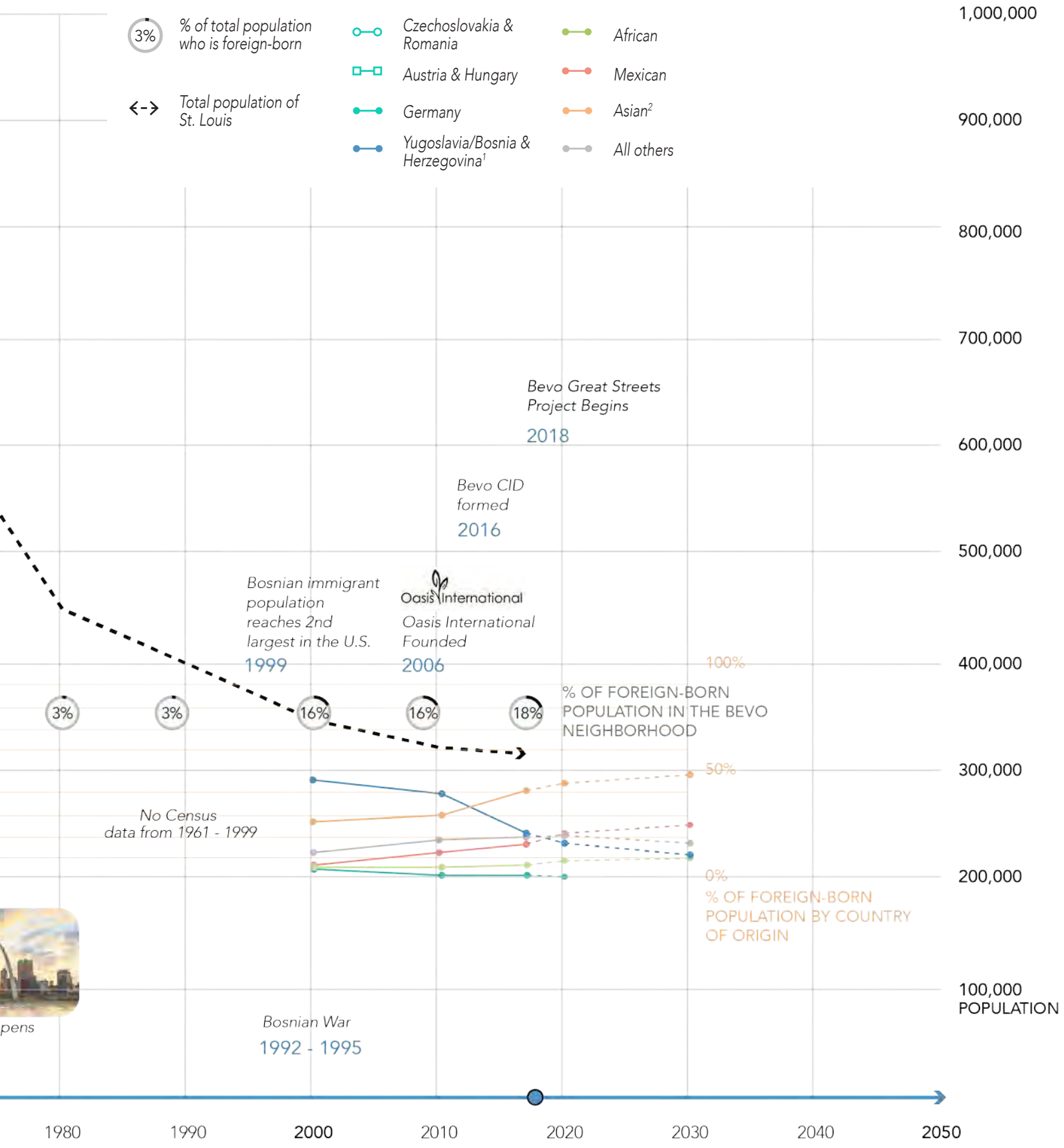
Chapter One:

DISCOVERING AN ASSET-RICH NEIGHBORHOOD

BUILDING THE FOUNDATION OF A GREAT STREET PLAN



A TIMELINE OF THE ST. LOUIS POPULATION & RELEVANT EVENTS



1: Bosnia & Herzegovina declared independence from Yugoslavia during the Bosnia War.

2: 1940 - 1960 Censuses do not distinguish by country of origin for Asian immigrants

INTRODUCTION TO THE GRAVOIS CORRIDOR

A GREAT STREETS PLAN

WHERE IS BEVO?

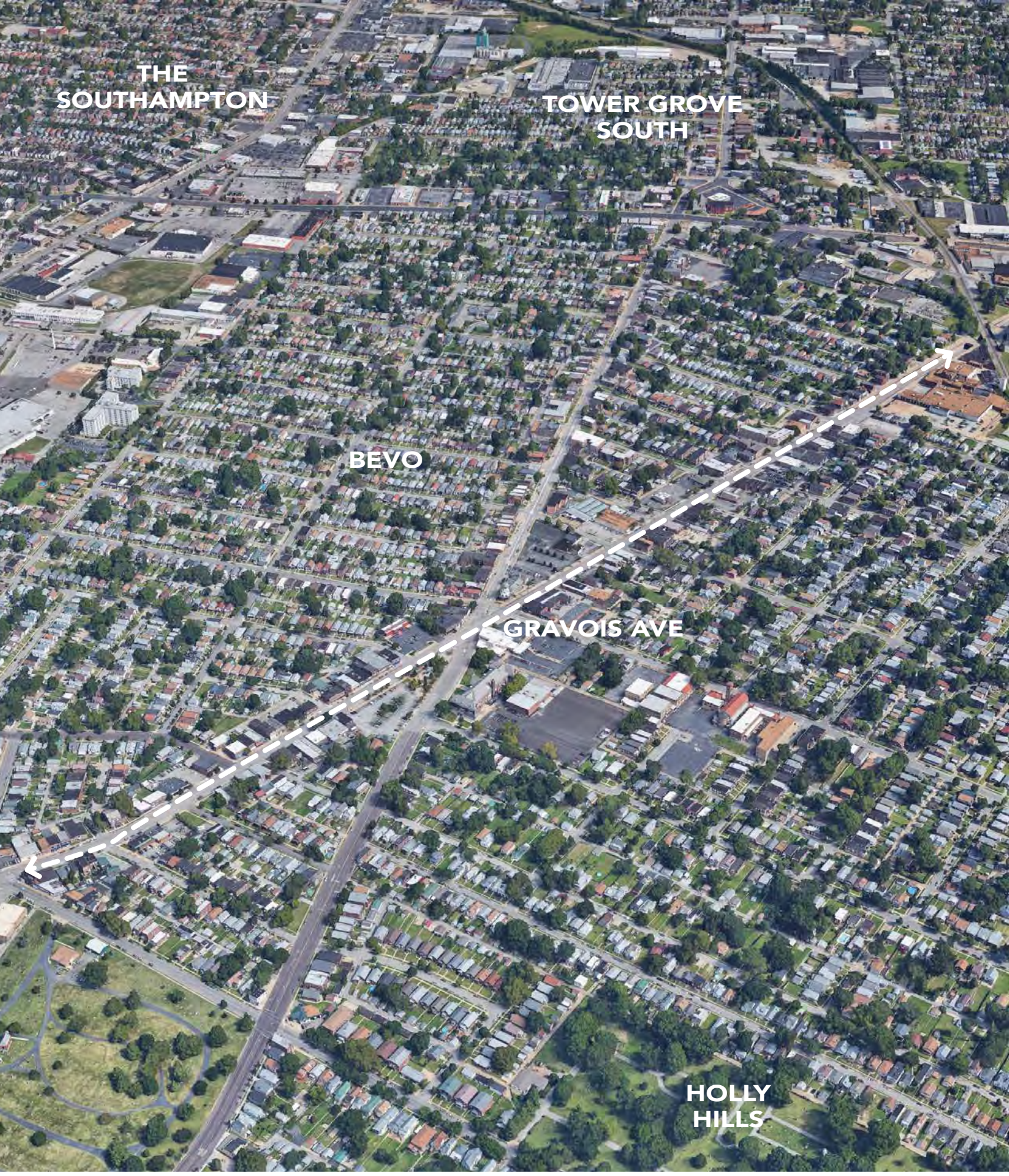
The Bevo Mill neighborhood is bordered by Chippewa Street to the north, Kingshighway Boulevard to the west, the Union Pacific Rail to the east, and Holly Hills Boulevard and Bates Street to the south. Officially named Bevo Mill, but lovingly referred to as simply "Bevo", the neighborhood encompasses roughly 1.4 sq. miles of land in south St. Louis. Bevo accommodates just under 13,000 residents and is defined nearly completely by the zip code 63116.

KEY ISSUES: RETAIL, WALKABILITY, & HOUSING

The Study Area and its surrounding neighborhoods have many assets that position it to attract new businesses to the area, help existing businesses thrive, and provide a high quality of life for new and existing residents alike. However, the community must address the physical, economic, and market conditions that currently limit this potential.

The Study Area is a distinct mixed-use corridor in South City. Commercial and residential uses are the most common, while civic and industrial uses are also present. The broader South City market, where there continues to be significant reinvestment and growth, shows what is possible in the Study Area and surrounding neighborhoods. It also shows, particularly in comparative study areas like South Grand and The Grove, that a strong corridor can support reinvestment in the surrounding neighborhood and vice versa.

The market analysis also shows that the Study Area has challenges. For instance, the prevalence of vacant storefronts and marginally maintained buildings in the Study Area suggests that various interventions are needed to strengthen market conditions, as well as the physical environment.


THE SOUTHAMPTON
TOWER GROVE SOUTH
BEVO
GRAVOIS AVE
HOLLY HILLS

WAYS BEVO EXCELS ABOVE THE REST

ASSETS OF THE GRAVOIS CORRIDOR

LANDMARKS & COMMUNITY DESTINATIONS

Several landmarks exist at the crossroads of Gravois Ave and Morganford Rd, including the iconic south-facing windmill—the Bevo Mill—and the similar German-style building Little Bevo. The Bosnian wood-and-stone Sebilj monument, dedicated in 2013, is a replica of an ornate Sebilj built in 1753 in Sarajevo. A Sebilj comes from the Ottomans and is a public fountain or monument built at the intersection of important roads.

SUCCESS IN LOCALLY OWNED BUSINESSES

Locals have had great success at revitalizing the Bevo community and surrounding areas in the last several decades. While The Bevo Mill windmill serves as a physical landmark, the business operating inside (whatever it happens to be at the time) is a cultural institution in the community. The community has very few nationally-known retailers and businesses, which speaks to the local grassroots culture of Bevo.

CONNECTION TO NATURAL TRAILS

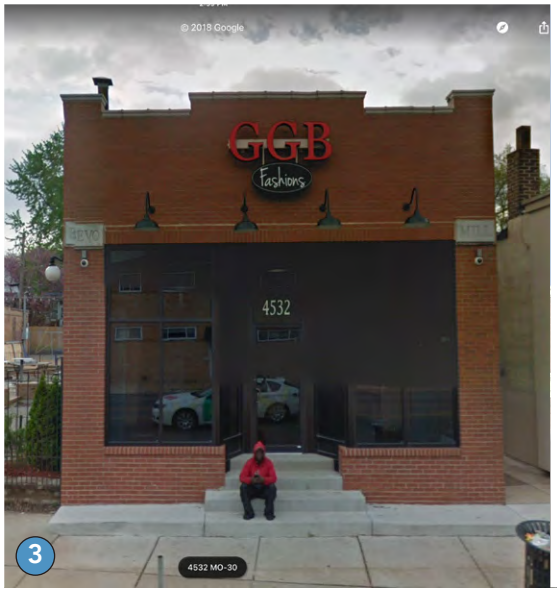
The Great Rivers Greenway constructs and manages off-street bike and pedestrian trails. Christy Blvd connects the Greenway to Christy Park, a community meeting place.


GRAVOIS

1


OPEN
NO
OPEN
Marlboro

2


© 2019 Google
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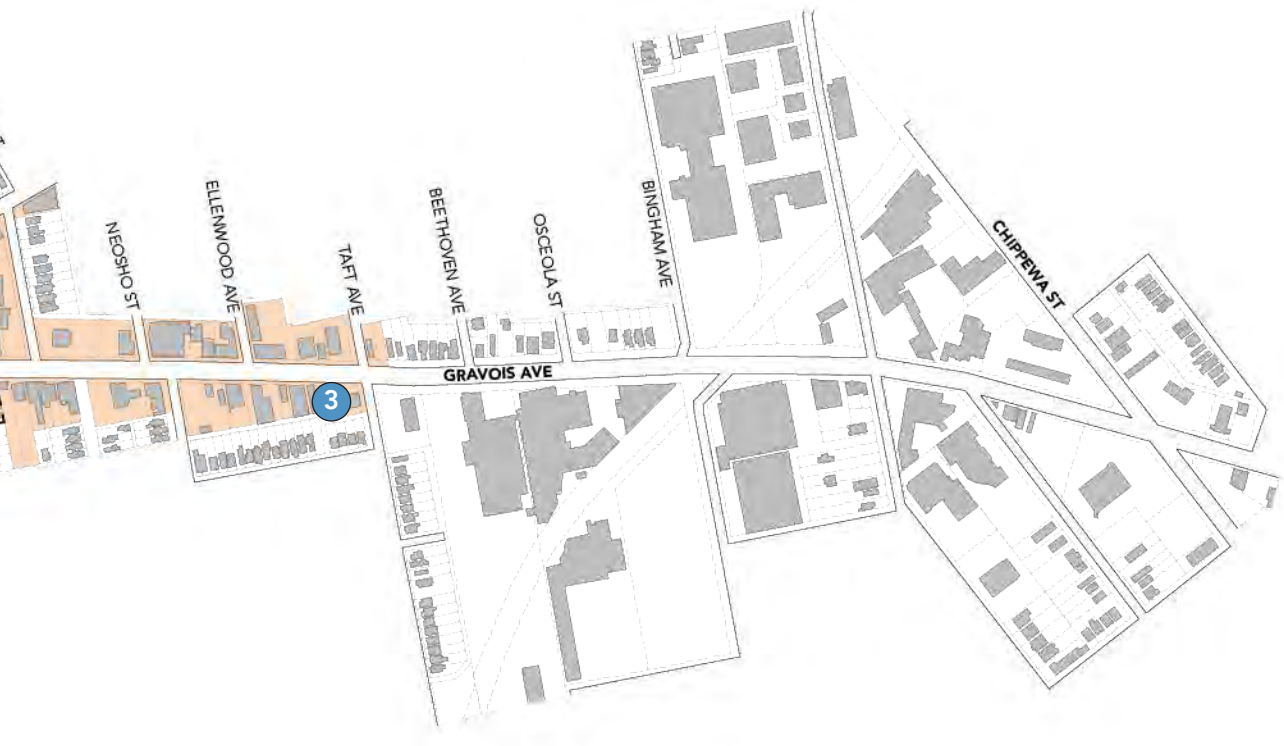

NEOSHO ST
ELLENWOOD AVE
TAFT AVE
BEETHOVEN AVE
OSCEOLA ST
BINGHAM AVE
CHIPPEWA ST
GRAVOIS AVE
3
0'
400'
600'

NEIGHBORHOOD GOVERNANCE

A SELF-GOVERNING NEIGHBORHOOD

Self-governing neighborhoods realize locals understand what a community needs better than outsiders. The more remote a decision-maker is from the action, the less appropriate or nuanced an action will be. People often resist or become defensive at ideas or projects initiated by outsiders, but might get behind the same idea if it started from within. The Bevo Community has an abundance of local governance. With a community improvement district, generous business owners, and community organizations, Bevo has the structures in place to articulate and implement desired change.

THE BEVO CID

The Bevo Community Improvement District (CID), a formal self-governance organization formed in 2017, generates revenue from a special property tax assessment on all property owners within the district boundary for a 10-year period.

The northern boundary of the Bevo CID extends roughly to Taft Ave and the southern boundary extends to Christy Blvd. The boundary excludes the viaduct and the Chippewa and Gravois intersection, an exclusion that limits redevelopment.

COMMUNITY MANAGEMENT STRUCTURE

Self-governing business groups, non-profits, and community groups share a vested interest in the development of the Bevo Mill neighborhood. Organizations that operate with/within Bevo include (but are not limited to):

- Alderpersons for Wards 13 & 14
- City Seniors, Inc.
- Better Bevo Now Neighborhood Association
- Bevo Community Improvement District (CID)
- Bosnian Chamber of Commerce
- Healthy Schools Healthy Communities
- Midwest BankCentre
- Neighborhood Specialists
- Oasis International

THE NEIGHBORHOOD OWNERSHIP MODEL

The mission of the Better Bevo Now Neighborhood Association (BBN) is "to promote a safe, vibrant neighborhood by facilitating community awareness, involvement, inclusiveness, investment, and sustainability."

The neighborhood follows the Bevo Mill Neighborhood Ownership Model – a resident-driven initiative committed to improving the quality of life in Bevo and surrounding neighborhoods and based on the Neighborhood Ownership Model designed by the City of St. Louis Circuit Attorney's Office.

In partnership with Better Bevo Now, volunteers participate in the following initiatives:

- Block Captain Program
- Neighborhood Watch
- Victim Support
- Court Advocacy

CITY & FEDERAL DELINEATIONS

Census boundaries provide necessary demographic, economic, and cultural information about the people living in that zone. Funding for government programs and initiatives, as well as examination of social and health issues, can all be examined on the census tract level. The Study Area includes six census tracts which have remained relatively unchanged, geographically, in the last 100 years.

RACIAL & CULTURAL DIVERSITY

IDENTITY OF BEVO RESIDENTS IS DIVERSE

Because of the changing cultural identity of Bevo, any examination of current populations is an inevitably blurred snapshot of that dynamic. Yet, under an examination of Bevo's past, a few questions come up. What is the proper cultural expression for Bevo? Is Bevo still the cultural hub for the Bosnian population even after the neighborhood has seen steady declines of this group? How do Mexican and Vietnamese populations mix in? Are all cultures represented in leadership? And what about African Americans? These complex questions about Bevo stems from a changing past where first Germans, then Bosnians, and now Mexicans call home. Race, referring to physical characteristics shows a predominately white population. However, a dive into culture, referring to societal customs, tells a much more complex story. The Long Middle School in Bevo includes students that represent more than 22 different cultures.

CULTURAL STATISTICS

The Bosnian community in St. Louis reflects the 2nd largest concentration of Bosnians in the world, outside of Bosnia. Recently, Mexican immigrants have added their flavor to the Bevo neighborhood through a myriad of restaurants on Gravois, as well as the Sebilj monuments in the wedge park opposite the Bevo Mill. 8.3% of people identify as Hispanic and 18 - 20% of the population does not speak English as their first language. While Southeastern Asians, Bosnians, and Mexicans have been the dominant immigrant groups for the past 20 years, Bevo has recently accepted immigrants from other places. Oasis International, an organization which helps new refugees transition into the United States, reports a large number of African and Western Asian immigrants between 2014 and 2017.

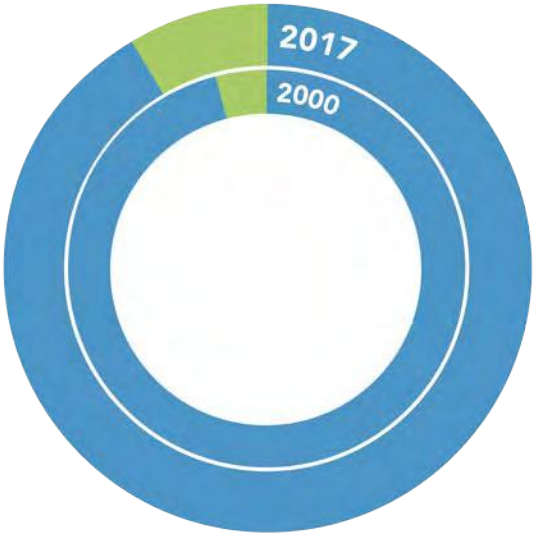
This plan thoroughly celebrates and accommodates the cultural and racial diversity welcomed in the Bevo community.

RACIAL STATISTICS

In addition to a diverse cultural identity, Bevo also includes a diverse racial identity. The percentage of white-only individuals fell between 2000 and 2017 while *all other* minority groups grew.

FOREIGN-BORN POPULATIONS

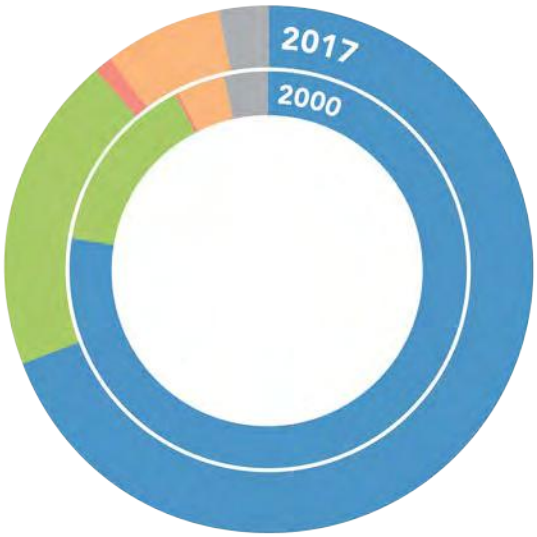
More individuals than reported may have cultural ties to other countries, however; census data only reports the number of individuals born outside the country. Bosnians represent the largest foreign-born populations as reported by the Census between 2000 and 2010. Mexican and Southeastern Asians are the fastest growing immigrant groups, while those of European decent see their populations declining. Bosnian immigrants largely settled north of the Gravois corridor; Vietnamese and southeastern Asian immigrants to the south; and Mexicans to the north of the Study Area.



CULTURAL IDENTITY

Does not identify as Hispanic

Identifies as Hispanic



RACIAL IDENTITY

White

Asian

Black

2+ Races

American Indian

NEIGHBORHOOD ECONOMY

DEMOGRAPHIC SUMMARY

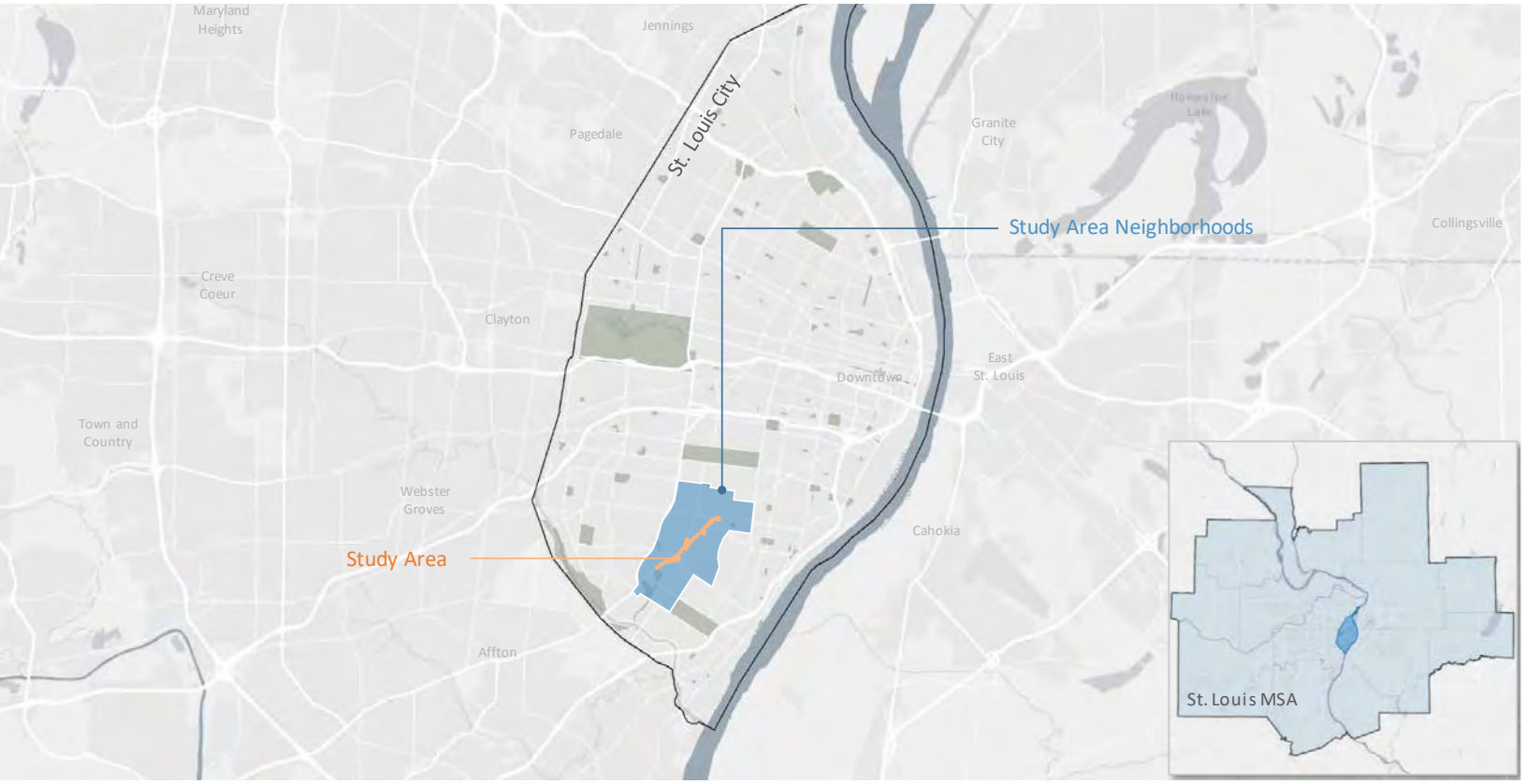
The following table presents key demographic metrics in neighborhoods surrounding the Study Area (Study Area Neighborhoods) in comparison to the City of St. Louis and the St. Louis Metropolitan Statistical Area (MSA).

The Study Area Neighborhoods:

- Include some of the more densely-populated areas
- Saw a modest population decline since 2010, and lost almost 10 percent of its population since 2000.
- Have median incomes in line with the City, with relative high proportions of low- and moderate-income households, and fewer high-income households. This highlights the need to provide a wide range of for-sale and rental housing options and price points.
- Have a demographic of senior households (65+) that is growing faster than any other cohort—a trend in line with the region—but there is a decrease of young adults and young families.

The Study Area shares many of the attributes that are present in nearby South City corridors—a historic building stock, relative affordability, and close proximity to neighborhoods with more significant investment under way.

POPULATION & HOUSING DEMOGRAPHICS	POPULATION	POPULATION CHANGE (2010-2018)	# OF HOUSE-HOLDS	MEDIAN AGE	MEDIAN HOUSEHOLD INCOME	MEDIAN HOUSING VALUE	RENTER HOUSEHOLD %
STUDY AREA NEIGHBORHOODS	23,600	-3.3%	10,236	37.4	$40,000	$111,000	47%
ST. LOUIS CITY	315,300	-1.3%	140,620	35.6	$40,100	$139,000	57%
ST. LOUIS METROPOLI-TAN AREA (MSA)	2,859,400	2.6%	1,136,663	39.4	$60,000	$180,000	32%



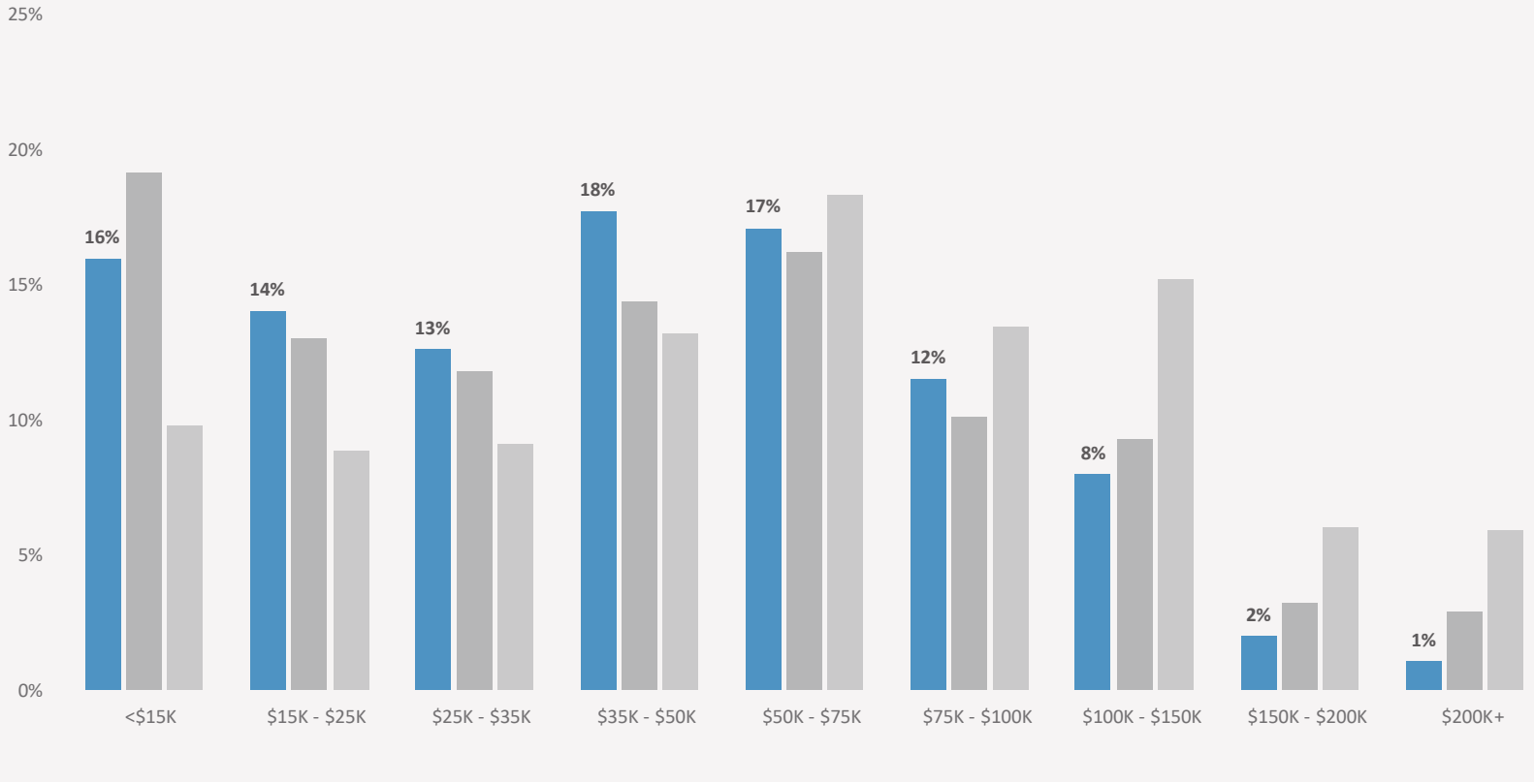
MARKET AREAS MAP: STUDY AREA NEIGHBORHOODS IN CONTEXT

VARYING INCOMES NEED DIVERSE HOUSING

There is significant variation in household incomes within and around the Study Area Neighborhoods, with much higher incomes toward the south of the Study Area and to the west of Kingshighway.

The median income in the Study Area Neighborhoods is $40,000 — the same as in the City of St. Louis, and about 60 percent of the median income in the MSA.

- *0 - 500 people per square mile*
- *501 - 1,000 people per square mile*
- *1,001 - 2,500 people per square mile*
- *2,501 - 5,000 people per square mile*
- *5,001 - 10,000 people per square mile*
- *10,000+ people per square mile*



(Top) Population density per square mile (by block group), 2018; (Bottom) Household income by bracket, 2018, data by ESRI. Data shown are Study Area neighborhoods, the City, and MSA, respectively.

ASPECTS HOLDING BEVO BACK

CONSTRAINTS OF THE GRAVOIS CORRIDOR

VACANCY RATE NEAR 30%

Vacant buildings and vacant lots diminish the pedestrian friendliness, vitality, and safety of the Gravois corridor. Vacant buildings also represent unrealized economic potential and diminished prospects for Bevo residents to benefit from walk-to jobs and/or neighborhood employment.

ACTIVE VS. INACTIVE STOREFRONTS

The retail and commercial along the Study Area can be divided into four categories:

- Vacant Parcel: No structures exist
- Unoccupied: Tenants do not occupy the space
- Occupied, but Inactive: Tenants occupy the space but pedestrians cannot witness the activity from the street
- Occupied & Active: Tenants occupy the space and pedestrians can witness the activity from the street

Permits issued within 2013 - 2018 show improvements occurring on the north end of the corridor, but little to activate ground-floors past the viaduct.

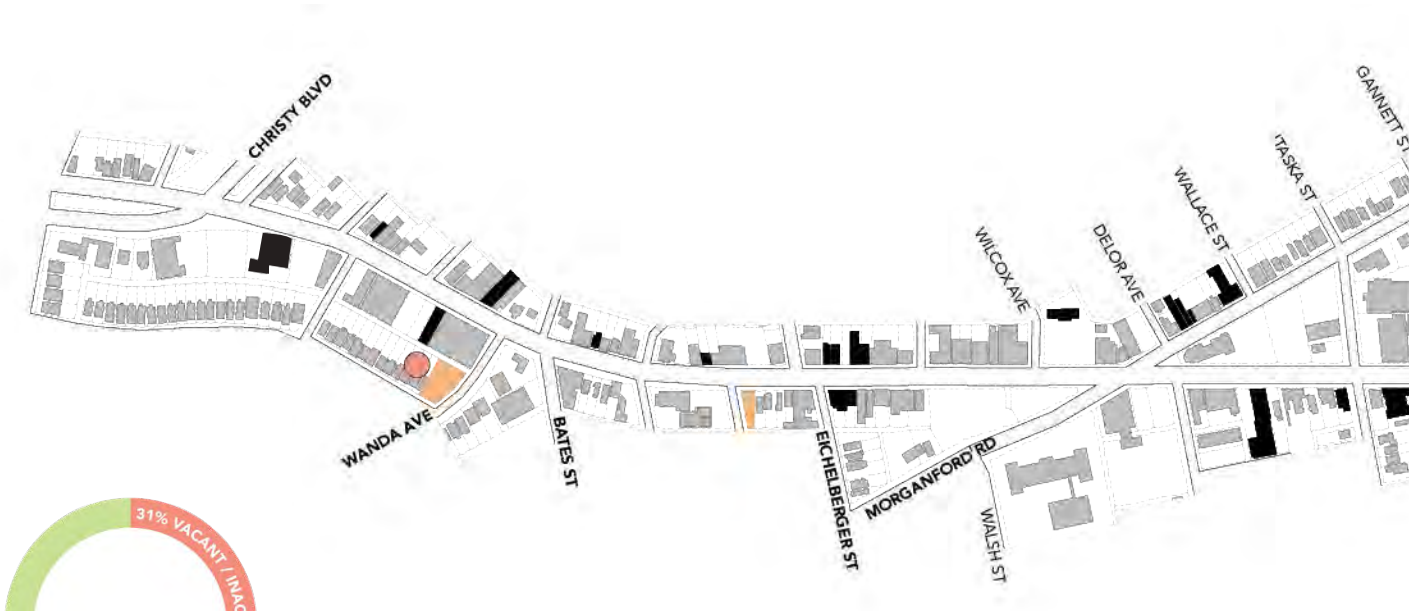
CLUSTERED VACANCIES

Vacant buildings and parcels tend to cluster together, shutting down an entire side of the street for a block. Several stakeholders cited high asking prices and rent rates as reasons for the extensive vacancies. Many of the properties appear to need extensive upgrades.

Unfortunately, of the 4,180 linear feet of retail and commercial storefronts between Eichelberger St. and Taft St., 31% are either "Occupied but Inactive" or "Unoccupied" as of January 2019.

SUBURBAN BUILDING TYPES

Automobile-oriented developments—characterized by minimal lot coverage, large setbacks, and parking abutting the sidewalk—also appear along the corridor. While an individual business in a suburban building may do well financially, the introduction of excessive paving, driveways, and other pedestrian-hostile aspects can diminish the desirability of abutting properties.

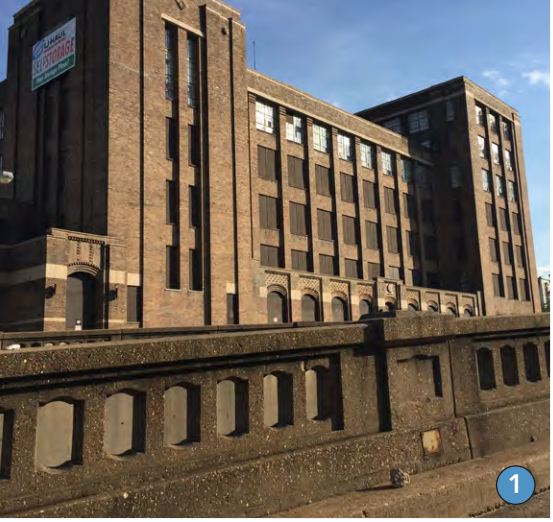


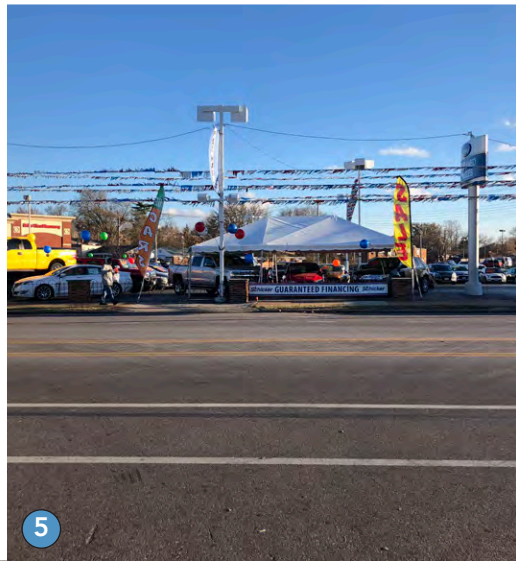
PERCENTAGE OF STOREFRONT VACANT

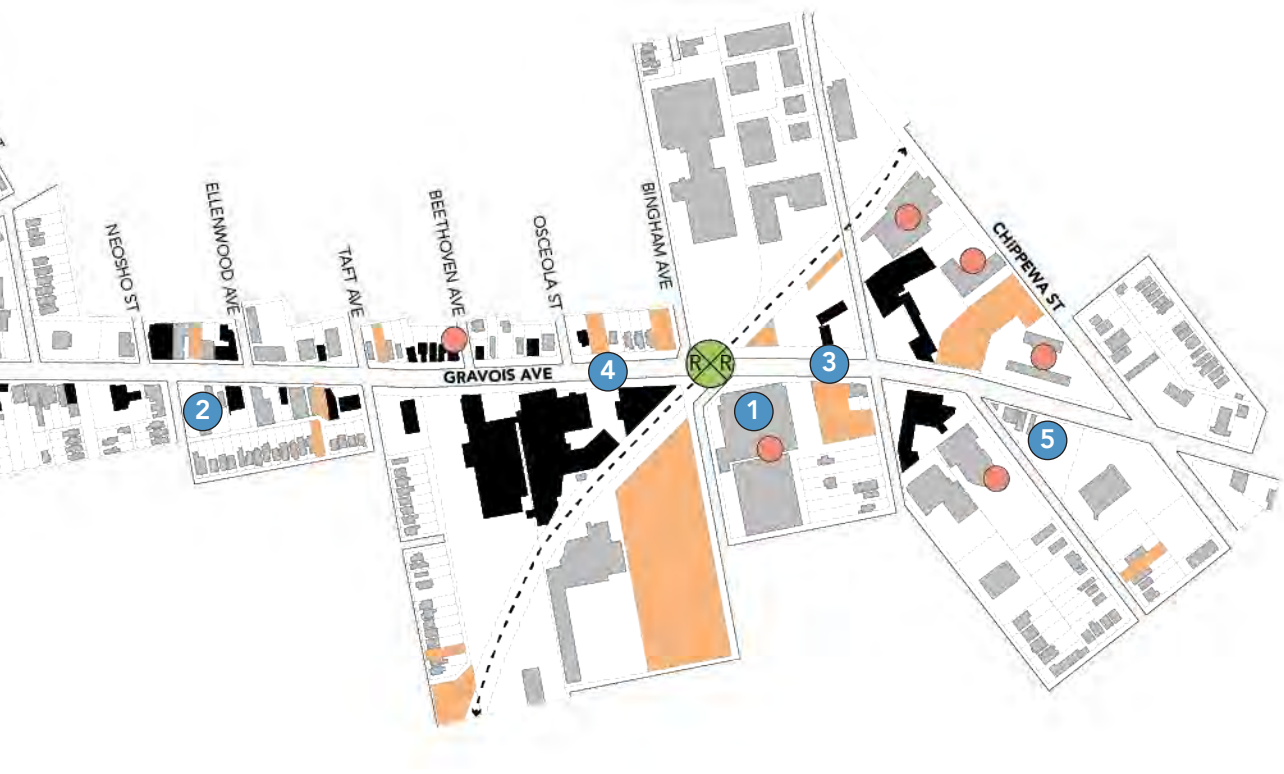
Building Permits Issued between 2013 - 2018

Vacant or Inactive Buildings

Vacant or Inactive Parcels







(Top, left) National Candy Factory, now U-Haul Rental Facility, photo by Wikipedia Commons; (Others) Gravois pedestrian conditions

NEIGHBORHOOD STRUCTURE & DEFINITION

BEVO HAS A CENTER ICON BUT NO "PLACE"

A neighborhood should have an identifiable center: the heart of the neighborhood, a physical location where neighbors know to gather for spontaneous events (for instance the Cardinals winning the World Series, or the Blues winning the Stanley Cup).

The Bevo Mill is clearly the iconic center and heart of the neighborhood. However, the Sebilj park across from it does not offer the functional public gathering space desired for this area.

Additionally, there are few "third places" in Bevo: places that provide a neutral, communal space for activities outside of the home and workplace. Examples include coffee shops with community programming, libraries, shared work spaces, etc.

BEVO EDGES ARE POORLY DEFINED

Neighborhood theory views clear neighborhood edges as optional—nice to have if you can get them—but not essential. Bevo's neighborhood boundaries sometimes appear to correspond with hard physical barriers and sometimes appear to be gerrymandered.

Most important for this plan is what residents perceive and whether they feel part of Bevo or not.

Seven neighborhoods border Bevo, including Tower Grove South to the north and Dutchtown to the east. Additionally, the viaduct has negative impact on the surrounding properties and serves as a poor gateway to the rest of the corridor.

Improving the concept and condition of the viaduct and associated infrastructure, while identifying appropriate land uses for the areas immediately surrounding them, will serve to enhance the perception of the entire area.

FOUR-IN-ONE WALK SHEDS

At its current size, Bevo comprises four pedestrian sheds (the 5-minute radius that reflects how far people will willingly walk.)

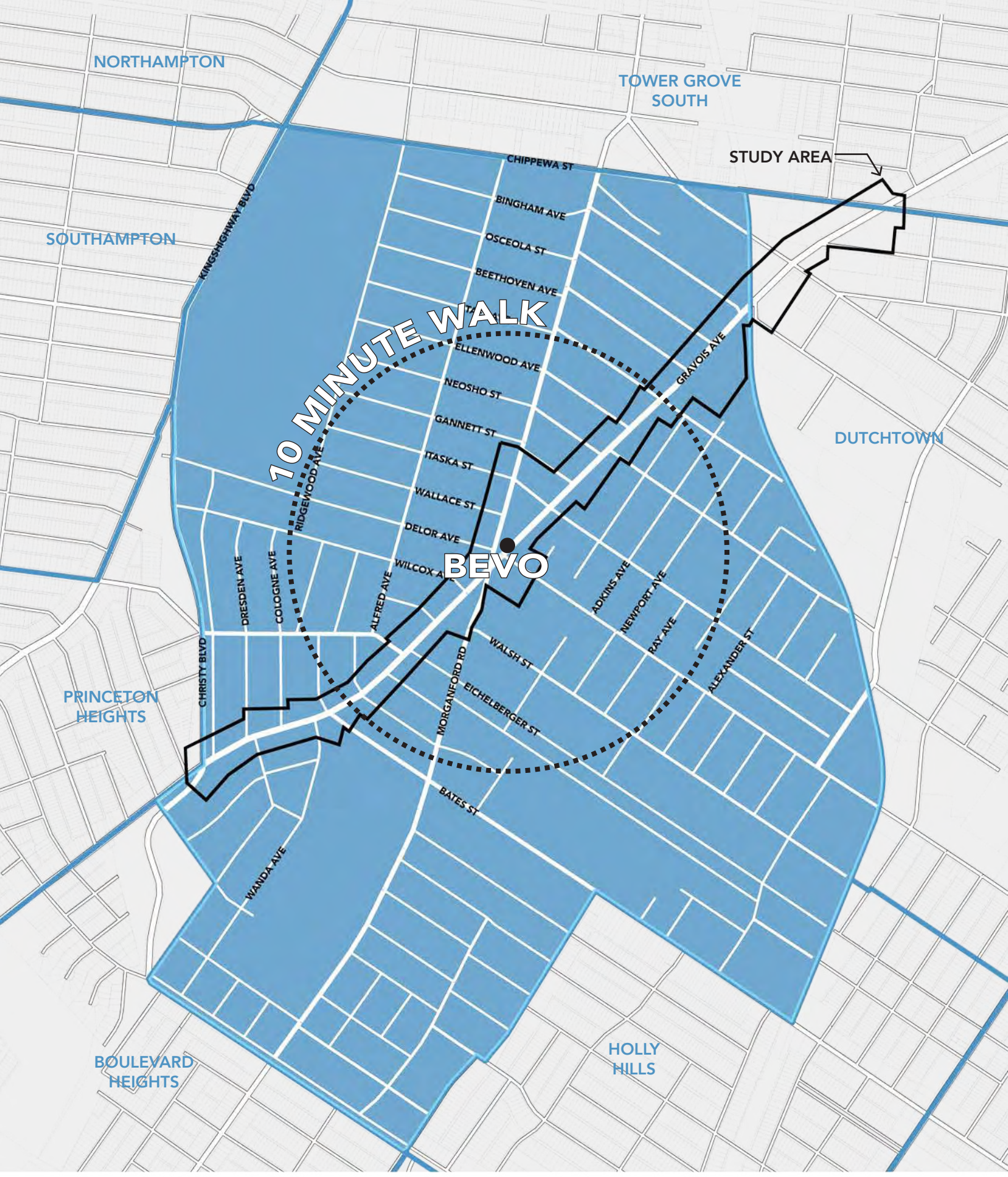
When comparing the City of St. Louis's delineation of the Bevo neighborhood to a theoretical diagram of a sustainable neighborhood, a mismatch results: The "official" Bevo neighborhood measures 1.37 square miles or 876 acres, four times the diagram's 160-acre ideal.

ACTIVE LIVING

While many determinants of health—such as smoking rates or the high cost of health care—are out of the reach of planning and neighborhood development to influence, a few are, especially walking.

Walking has been the dominant form of human physical activity for millennia and was until the last few generations, especially in cities. However, the national trends of dismantling public transportation and mainstreaming car ownership has shifted the typical American to make more than 90% of their daily trips by car. Against this auto-dominated backdrop, people who walk a lot (a common measure is 10,000 daily steps) enjoy many health advantages. Research shows that cities can be the best places for people to walk, as long as the public health benefits are more powerful than the injury or harm that might result from drivers hitting pedestrians or bikes.

A Sustainable Neighborhood, Image from Sustainable Urbanism, *Farr. "Preferable Area: 160 acres, min 40, max. 200. Population: Min. 400 dwellings to support walk-to-destinations." Original concept by Peter Calthorpe.*



THE BEVO NEIGHBORHOOD

CASE STUDIES: ELEMENTS OF "WALKABILITY"

THE IMPORTANCE OF WALKABILITY

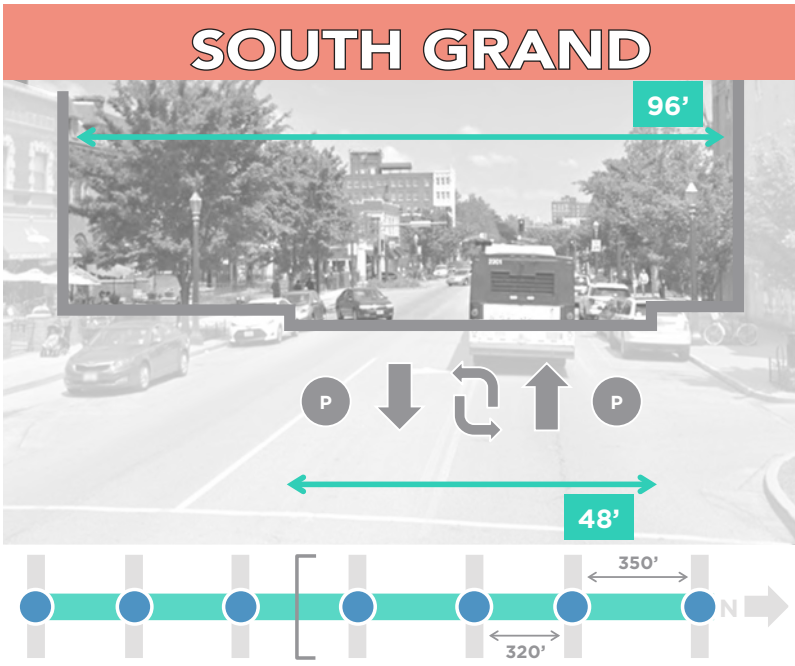
The Study Area's existing pedestrian environment limits Gravois' ability to compete with nearby retail districts. **Nationally, consumers spend up to 15% more when public spaces are more inviting.** The Study Area must offer an attractive, unique, and pedestrian-friendly environment to successfully compete with other districts and attract demand from a broader market.

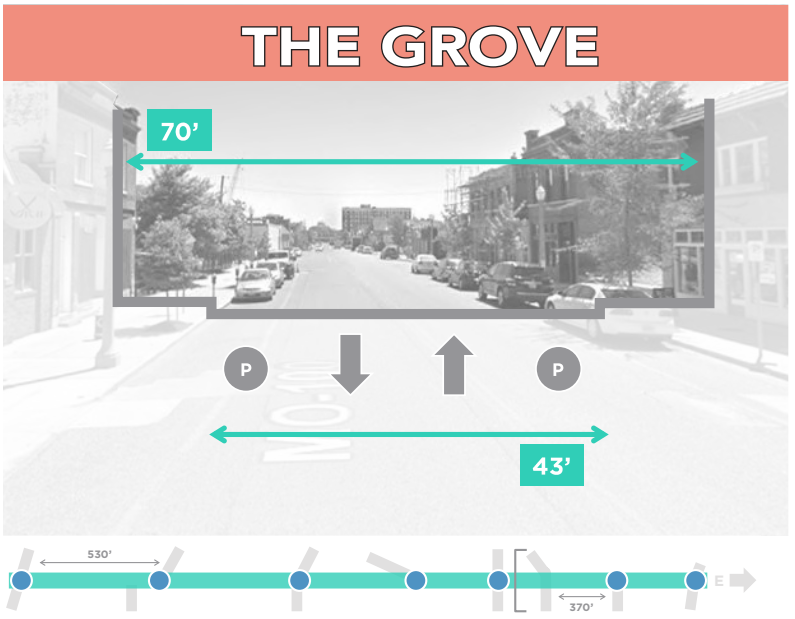
The physical character of Bevo's core retail district is different from those of its peer retail districts in several notable dimensions. Its road width (56 feet) is much wider than the widths in the comparison districts (36 to 48 feet), even where the right of way (building-to-building) dimension is comparable. It also has far fewer pedestrian crossings, and much longer distances between those crossings.

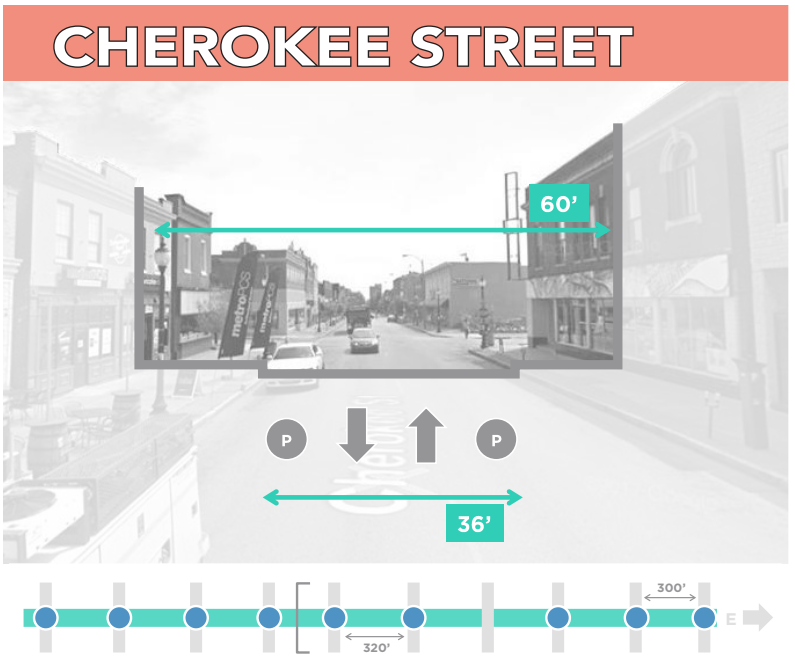
In fact, one of the shortest distances between pedestrian crossings along Gravois is still twice as long as the distance between crossings in the comparison neighborhoods.

These features contribute to an environment that is unwelcoming—and in some cases, dangerous—for pedestrians.

The comparison suggests that peer districts' pedestrian environments serve as a competitive advantage for capturing non-residential retail activity—contributing to lower vacancies, higher lease rates, and much larger retail surpluses. The retail metrics for each of the comparison districts support the theory of a "walkability premium" for retail environments, and suggest that these area's pedestrian-friendly environments contribute to stronger market conditions. All three comparison districts command higher retail surpluses—the degree to which a retail district captures spending beyond the demand in the immediate market area—than Bevo's core retail district. Improving the pedestrian environment will be critical for Bevo to capture greater retail demand, attract new businesses, and fill vacant space.

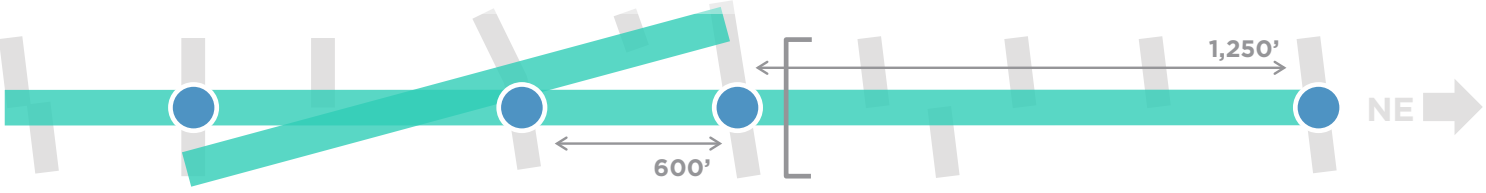




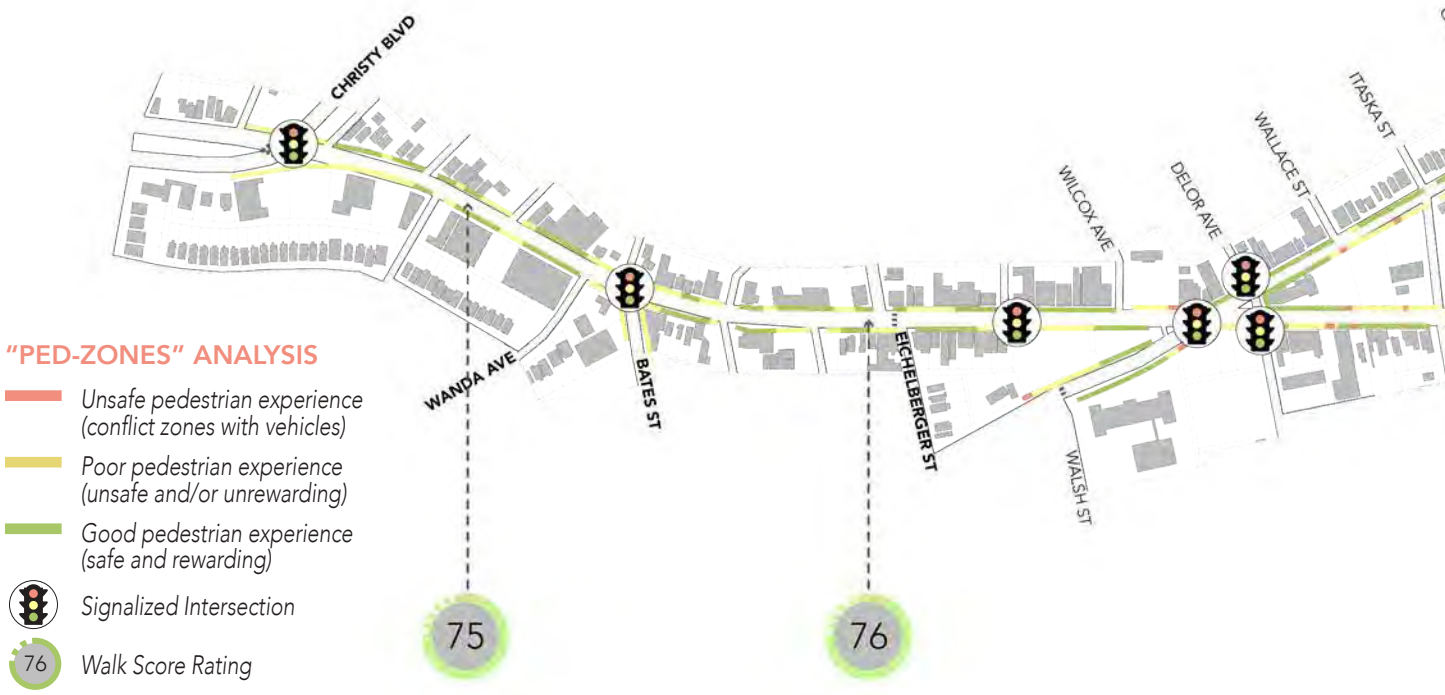


	SOUTH GRAND	THE GROVE	CHEROKEE STREET	GRAVOIS AVE
PEOPLE / SQ. MILE	13,000	10,200	10,700	11,200
MEDIAN HOUSE-HOLD INCOME	$49,000	$23,000	$19,000	$39,000
HOME SAKES IN LAST 6 MONTHS	$290,000	$165,000	$92,000	$92,000
RETAIL SURPLUS	$14.6 M	$8.6 M	$14.8 M	$3 M
AVG. RETAIL LEASE RATE	$13.55	$13.58	$5.46	$9.36

GRAVOIS AVE



PEDESTRIAN NETWORKS



"PED-ZONES" ANALYSIS

- *Unsafe pedestrian experience (conflict zones with vehicles)*
- *Poor pedestrian experience (unsafe and/or unrewarding)*
- *Good pedestrian experience (safe and rewarding)*
- *Signalized Intersection*
- 76 *Walk Score Rating*

DELIGHTING PEDESTRIANS, SOMETIMES

Gravois Ave transitions from delightful and rewarding pedestrian experiences to automobile dominated and poor pedestrian experiences. Near the south end of the corridor, where the urban fabric is tighter knit and there are few vacancies, pedestrians can interact with landscaping and established businesses. However, on the north end of the corridor, curb cuts and disengaging frontages invite drivers, not pedestrians.

SIGNALIZED CROSSINGS AT INTERSECTIONS

In addition to Gravois being a challenging corridor to travel along, the experience for pedestrians crossing the street is quite difficult. Signalized crossings have all been updated with new crosswalk markings and pedestrian signals (including push buttons and pedestrian signals with countdown timers); however, signals are located approximately 1/3 of a mile apart in some locations, which means a person may have to walk up to ½ mile out of the way to cross the street and come back. Most pedestrians are not willing to travel that far out of their way, which means businesses are negatively impacted.

MIDBLOCK CROSSINGS ARE LACKING

Additionally, crossings at unsignalized locations or mid-block locations are important for transit users given the high ridership of the Gravois Ave route. Currently there is one crossing at the unsignalized intersection near Itaska St and Gravois Ave. The crossing is at a transit stop and near the Family Dollar store. The crossing is marked with a continental crosswalk, painted curb extensions and flexible bollards, and a rectangular rapid flashing beacon (RRFB). The RRFB is a pedestrian activated signal that flashes yellow lights to warn motorists to a pedestrian in the crosswalk crossing the street.

Currently this is an insufficient crossing as motorists do not know to stop and yield, and pedestrians are unsure of how to work the device. Many pedestrians do not push the buttons to activate the flashing lights. Additionally, there is no pedestrian signal at the other side that lets a pedestrian know when it is safe to walk,. While these signals can enhance crossings, the challenge on Gravois Ave is a lack of education to both motorists and pedestrians about how to operate the signal.

THE URBAN ENVIRONMENT

Additionally, pedestrians have very little refuge while walking Gravois Ave. There is extensive pavement throughout, with little-to-no street trees or greenery.

PED-ZONE ANALYSIS: GOOD, NOT GREAT

Providing a sidewalk is a minimum to achieve walkability. Redevelopment plans of Gravois Ave should prioritize creating an environment in which people not only can walk but also where they want to walk. "Ped-zone" analysis examines and categorizes streets into three categories of walkability. According to this analysis, the Study Area provides a mix of rewarding and poor pedestrian experiences.

REWARDING EXPERIENCE: 44% OF SIDEWALKS

Rewarding streets entice pedestrians, sheltering them from cars and offering an engaging experience by either the built or natural environment.

- Building are set close to the sidewalk
- Buildings have a sidewalk-facing entrance/storefront
- Pedestrian connection from sidewalk to entrances
- Engaging landscapes

POOR EXPERIENCE: 49% OF SIDEWALKS

In poor street experiences, pedestrian have little to no engagement with the built or natural world and/or are unsheltered from traffic.

- Little to no pedestrian separation from traffic or parking lots
- Buildings are set back far from the sidewalk and/or include blank walls or tall fences
- No pedestrian connection to entrances

CONFLICT ZONE: 7% OF SIDEWALKS

Conflict zones show areas where pedestrians and vehicle infrastructure overlap through curb cuts in the sidewalk. Conflict zones interfere with the flow of pedestrian travel and could lead to dangerous interactions between pedestrians and vehicles.

While the overall conflict percentage is low, the conflict zones are located near targeted areas of economic development, such as the Bevo Mill, which prevent a contiguous flow of the pedestrian experience. The places with the best chances of improvement can be found south of Delor, where poor experiences mainly come from vacant storefronts or between Delor and Taft where poor experiences mainly derive from curb cuts to private drives.

This suggests the need to tackle specific areas along the corridor that will improve the entire corridor by bridging gaps in the pedestrian experience.

SAFETY & SECURITY

INCONSISTENT LIGHTING

Lighting along the corridor comes mainly from tall street lamps which do little to illuminate the pedestrian realm. Few businesses along the corridor have their own lighting; however, gas stations are a notable exception. In fact, gas stations remain the brightest beacons along Gravois Ave.

VIADUCT LIGHTING

The viaduct at Chippewa St and Gravois Ave is poorly lit from all perspectives. As a motorist or bicyclist traveling underneath, lighting could present an opportunity to turn the viaduct into an entrance to the community. Additionally, little-known pedestrian paths exist under the viaduct; they are currently closed off and abandoned, and lack proper access, signage, and lighting.

Lighting should be beautiful from all angles, be adjustable and pedestrian-sized, and respect biological rhythms by minimizing blue light. Proper lighting can slow down traffic, enhance pedestrian-friendliness, and create a sense of community.

This planning process will examine the role that appropriate, right-sized, and delightful lighting can play along Gravois.

PERCEIVED VS. ACTUAL CRIME

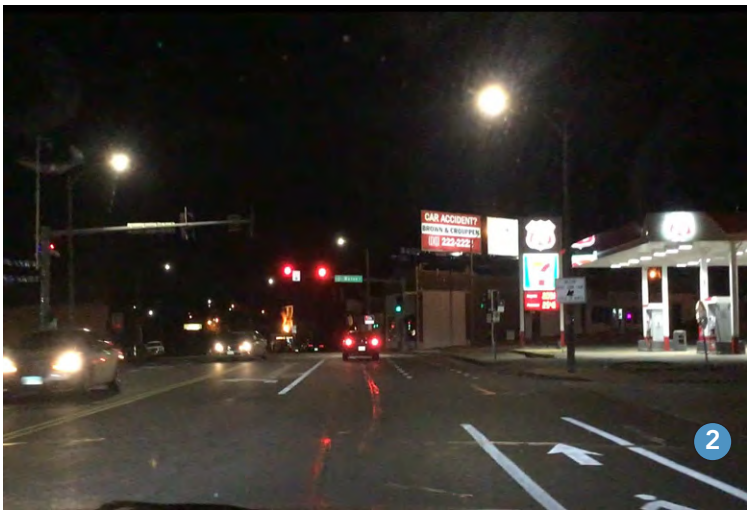
A common misconception is that poor lighting leads to higher incidences of crime. Instead, in the Bevo Study Area, higher crime rates often occur at or near gas stations—the most well-lit areas of the corridor. Despite these hot spots, Bevo has seen a decrease in nearly all personal and property crimes. Total crime in Bevo decreased between 2017 and 2018 by 10.2%.

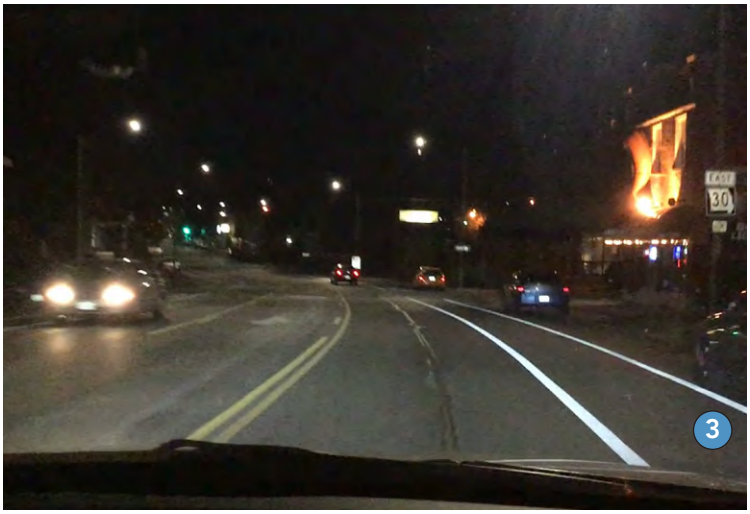
However, Bevo ranks 9th in the City in terms of total crimes reported per neighborhood. Simple assault, a less egregious offense than aggravated assault, was reported 105 times in 2018, while theft from a vehicle was reported 73 times. In regards to homicide, Bevo only saw 2 of the 186 city-wide homicides reported in 2018.

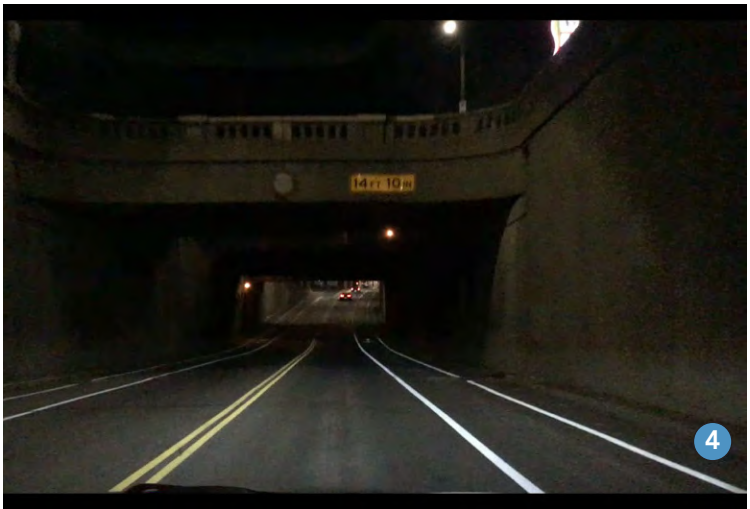
Fire Station #36, at Kingshighway Blvd / Christy Blvd, and a secondary fire station, located in the neighborhood of Boulevard Heights, serve the Bevo neighborhood. The precinct police station, the St. Louis Police Department South Patrol, is located approximately a mile north of Bevo. The Bosnian Chamber of Commerce used to host a police substation on the second floor, but due to a ceiling collapse, the space is no longer available.

This plan will suggest improvements to the streetscape which will put eyes on the street and hopefully further decrease the crime rates in the neighborhood.

Lighting studies from four locations along Gravois Ave.







CRIMES REPORTED OCT. - DEC. 2018

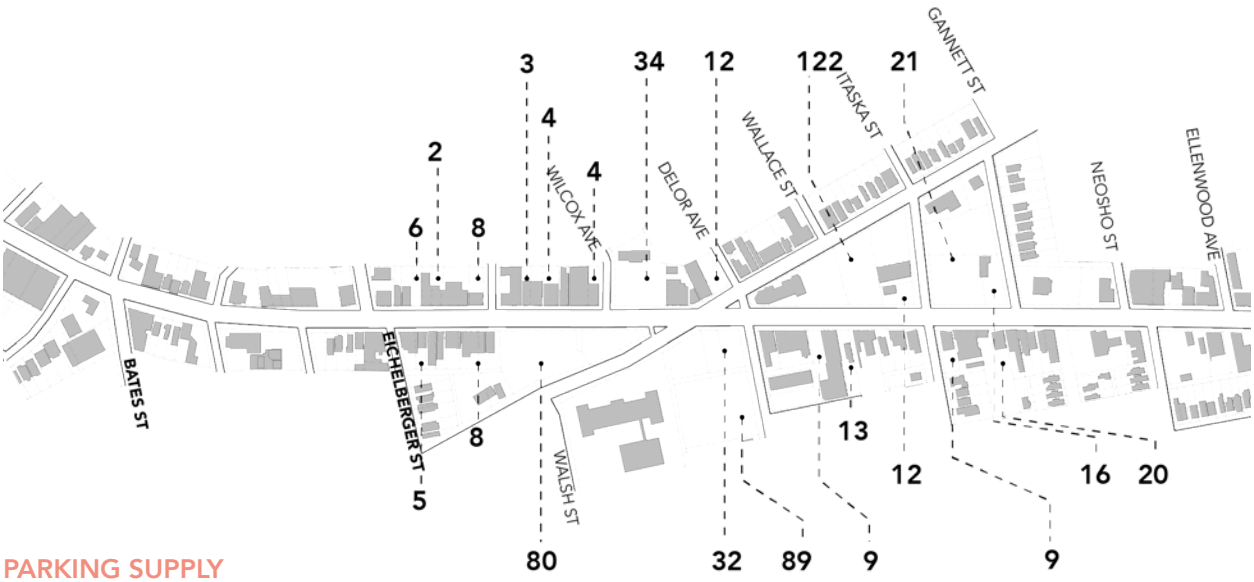
0' 500' 1000'

1. *Gravois near Dresden Ave*
2. *Phillips 66 on Bates St*
3. *Pepper's Bar & grill near Gertrude Ave.*
4. *Union Pacific Viaduct*

- *Property Crime - Theft from or of a vehicle*
- *Property Crime - Theft*
- *Violent Crime - Assault of any kind*
- *Violent Crime - Robbery*
- 2 *Indicates more than one events*
- *Heat Map showing concentrations of crimes*

Source: Crimewatch.

PARKING SUPPLY & DEMAND



PARKING SUPPLY

XX *Number of Spaces in Lot*

FREE ON-STREET PARKING

All on-street parking supply within the corridor is free. Old meter posts still exist in the event the City wants to meter the spots using the ParkMobile technology, but they are not currently metered.

PARKING: THERE'S PLENTY OF IT

Parking studies conducted on May 11 and May 13, 2019 show a snapshot of supply and demand for on- and off- street parking in the Study Area. Videos capture parking locations at four times during the day—8am, 12pm, 5pm, and 10pm on Sunday and Monday—and show the utilization rate of each area. This analysis of parking supply and demand reveals that there is a surplus of parking on average in each district. **During this time, the region near Morganford Rd and Delor St was never at more than 26% parked on average;** however, the section from Eichelberger St to Duke St did get busy later at night, likely due to an increased number of bars in the area. While individual parking lots may be 100% full, the area as a whole was never more than 78% parked during this sample period.

HOT SPOTS OF ASPHALT

Most of the corridor includes street parking and limited amounts of parking in private lots. Especially near the southern portion of the corridor, parking lots are reserved for employees or a small amount of visitors with the rest relying on street spots. However, moving out towards both the north and south ends of the Gravois study area, parking lots become more abundant and larger. The public lot at Morganford Rd and Gravois Ave includes 80 spots, as an example. Many of the curb cuts between Delor St and Taft Ave lead to parking lots and long frontages of Gravois between Delor and Chippewa are dedicated to unscreened parking lots. The area north of the viaduct requires particular attention as lots there tend to be larger than the buildings they serve.

PARKING DEMAND

XX *% parked Monday @ Noon*

XX *% parked Monday @ 5pm*

0' 400' 600'

PARKING SUPPLY & DEMAND	CHRISTY TO DRESDEN	DRESDEN TO BATES	BATES TO EICHEL-BERGER	EICHEL-BERGER TO DUKE	DUKE TO WILCOX	WILCOX TO DELOR	DELOR TO ITASKA	ITASKA TO GANNETT	GANNETT TO NEO-SHO	NEOSHO TO TAFT	MERAMEC TO CHIPPEWA
TOTAL ON-STREET SPOTS	11	46	57	50	27	35	77	33		51	50
TOTAL OFF-STREET SPOTS	--	--	--	29	91	167	156	66	--	--	--
% SPOTS PARKED (SAT AVERAGE, 8A-10P)	--	--	--	50%	27%	12%	13%	31%	--	--	--
% SPOTS PARKED (MON AVERAGE, 8A-10P)	--	--	--	43%	26%	8%	11%	28%	--	--	--
MAX. % SPOTS PARKED AT ANY TIME	--	--	--	78%	53%	19%	25%	35%	--	--	--

Summary of parking study conducted May 2019. See Appendix #4: Transportation, p. 528, for more information.

LAND USE & ZONING

LOCAL ZONING

Both Gravois Ave and Morganford Rd allow for zoning designation "F: Neighborhood Commercial" with the purpose of serving surrounding neighborhoods with office, commercial, and services on a day-to-day basis. Some allowed zoning uses include everyday shops such as:

- Bakeries
- Barber & Beauty Shops
- Butchershops
- Drug Stores
- Dry Cleaners
- Florists
- Hardware Stores

Another zone use is "G: Local Commercial & Office District," the purpose of which is to accommodate a range of larger businesses for personal and home needs. For example, this zone allows for the following uses:

- Dyeing & Cleaning Works
- Laundries
- Printing Shops
- Wholesale Businesses

While the Zoning F designation along Gravois Ave encourages local owners and niche businesses, the Zoning G designation often serves as regional anchors for businesses with larger market areas. Neighborhood Commercial serves the residents in and around Bevo and should be encouraged to build an attractive street presence. However, the Local Commercial with large box uses does not.

Immediately adjacent to Bevo and the railroad tracks to the east is a swath of land designated as "Unrestricted." This zoning designation tends to take place near highways, industrial tracks, or other large pieces of infrastructure. All uses are allowed, excluding any use which allows for permanent or temporary dwelling.

This study will look at the Local Commercial and Unrestricted Zoning in the Study Area and make recommendations for upgrading the zoning to neighborhood friendly uses.

RESIDENTIAL ZONING

Around the Study Area, most residential parcels are zoned as Single-Family. Ideally, neighborhoods provide a variety of housing typologies to include families of different sizes and income levels.

This study will look at the residential zoning near the Study Area and make recommendations for upgrading the zoning to allow for a greater diversity of housing choice.

- *A: Single - Family*
- *B: Two - Family*
- *C: Multiple - Family*
- *D: Multiple - Family*
- *F: Neighborhood Commercial*
- *G: Local Commercial & Office District*
- *J: Industrial*
- *K: Unrestricted*
- *Public Land*
- *Building permit issued between 2013 - 2018*

ZONING & BUILDING PERMITS

0' 500' 1000'

GROUND-FLOOR RETAIL & OFFICE SPACE

CURRENT STATE OF GROUND-FLOOR RETAIL

Current low market rents limit the type of improvements owners can make to their property, which impacts the marketability of commercial space in the corridor and contributes to the high vacancy rate. The average lease rate for retail space in the Study Area ($10.68) is below what is needed to support capital investments that can make space marketable to new tenants.

Lease rates for commercial space range from $9 to $12 per square foot. Only one example from the survey of lease rates in a market area surround the Study Area demands a lease rate at a level that would support more major capital investments (approximately $16 to $18 per square foot). Current vacancy of ground-floor storefront space is estimated at 31%—high compared to similar districts in the city.

These lower lease rates contribute to the persistence of high vacancy and the uninviting condition of some storefronts. Among currently vacant storefronts, there is likely a wide range of move-in readiness. This "readiness"—including the condition of heating, ventilation, and cooling systems, compliance with building code, and the general condition of the space—impacts the immediate marketability of vacant spaces and the cost of needed improvements.

The area's average storefront size of 3,300 square feet is larger than the typical neighborhood center retail suite size in St. Louis. Across all neighborhood center retail spaces in the city with leases signed in the past three years, the average suite size was 1,700 square feet. For newer space (built after 2010), the average size was 2,400 square feet.

Configuring retail space to allow for smaller retail bays could lower the barriers to entry presented by larger retail spaces that require extensive upgrades.

OCCUPYING & ACTIVATING GROUND-FLOORS

The Study Area has an oversupply of retail space relative to what can be supported by the area's residential population alone. The opportunity to capture "leaking" residential spending in neighborhood-scale retail space is also limited. Attracting new households to the neighborhoods surrounding the Study Area would help increase residential buying power and market support for neighborhood-scale retail. Attracting visitors from outside of the immediate market area by making the Gravois Corridor an unique destination would further enhance the corridor's market potential. In the near term, a strategy to focus new retail activity within key nodes or subareas could enhance the broader area's identity as a vibrant and attractive destination.

RETAIL LEASE RATE IMPLICATIONS FOR CAPITAL INVESTMENT

ESSARY MAINTENANCE

MAJOR REHAB & REINVESTMENT

NEW CONSTRUCTION

$10.68

$10 to $14

$16 to $18

$20+

Study Area

MOBILITY & CONNECTIVITY

ROAD HIERARCHY

Roadways are classified according to their urban or rural setting and the type of service they provide based on considerations such as: connectivity, mobility, accessibility, vehicle miles traveled, average annual daily traffic, and abutting land use. Gravois Avenue is identified as a principal arterial. Safely accommodating pedestrians and cyclists on these routes should be considered given how they currently function to move motor vehicles.

STATE OWNERSHIP OF GRAVOIS AVE

The Missouri Department of Transportation and the City have an agreement on the jurisdiction of Right-of-Way (ROW): MoDOT is responsible for any maintenance and reconstruction on Gravois Ave within the public ROW, defined as between the curbs. The City has jurisdiction over the decisions of roadway configurations and the changes or additions of any traffic control measures or safety enhancements (pedestrian crossings, etc.).

THE 2017 ROAD DIET

In 2017, Gravois received a "road diet." The initial project started out as a resurfacing effort by the Missouri Department of Transportation. However, neighborhood interest in the project grew and many stakeholders wanted MoDOT to look at other changes to assist with slowing down traffic and enhancing neighborhood development along the corridor.

The final outcome was to stripe a road diet in some sections, changing the lane configuration from 4 traffic lanes (2 thru lanes in each direction) and 2 on-street parking lanes to a 3-lane section (2 thru lanes and a center two-way left-turn lane) on street bike lanes in each direction and on-street parking. The striping there includes the two 6' bike lanes, two 10' travel lanes, and a small buffer area between the bike lane and underpass wall on each side.

BIKING ALONG GRAVOIS

The 2017 Gravois restriping project considered the installation of a parking protected bike lane. A parking protected bike lane reverses the 'traditional' location of bike lanes and parking lanes, so that on-street parking lanes are next to the motor vehicle lane, and act as a buffer for the bike lane.

However, after analysis of the roadway space from curb to curb, it was determined this roadway section would not fit in the existing space.

GRAVOIS AS A BIKE CONNECTOR

The guiding bike document for the St. Louis Region is the Gateway Bike Plan, which was completed in 2011. While the plan serves as the guiding document, the plan is always being updated as different municipalities, or even neighborhoods within municipalities take on their own bicycle and pedestrian plans.

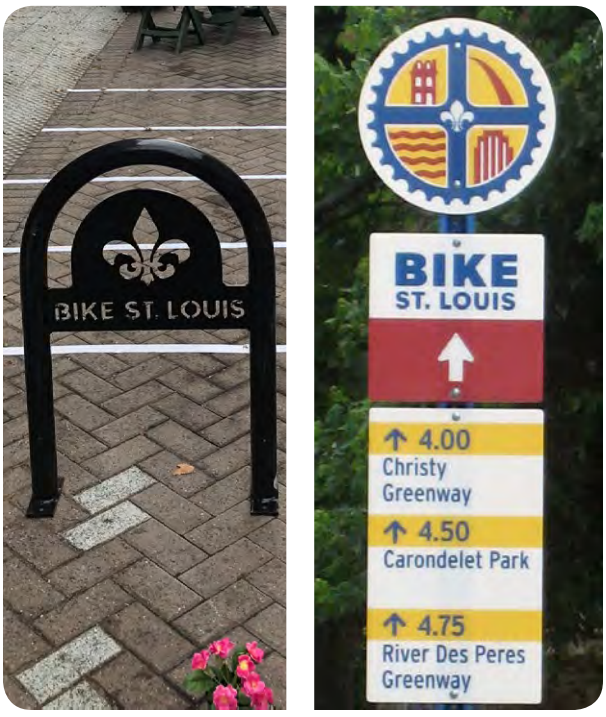
The Gateway Bike Plan Map for the area of South St. Louis City, with the Gravois corridor called out. Notice Gravois was indicated as a route for shared lane markings. This was updated with the implementation of the new paving job in 2017, which striped dedicated bike lanes on Gravois for the majority of the corridor from City limits to Downtown, and throughout the entire study corridor for the Bevo Great Streets Plan.

GRAVOIS: STILL UNSAFE FOR BIKES & PEDS

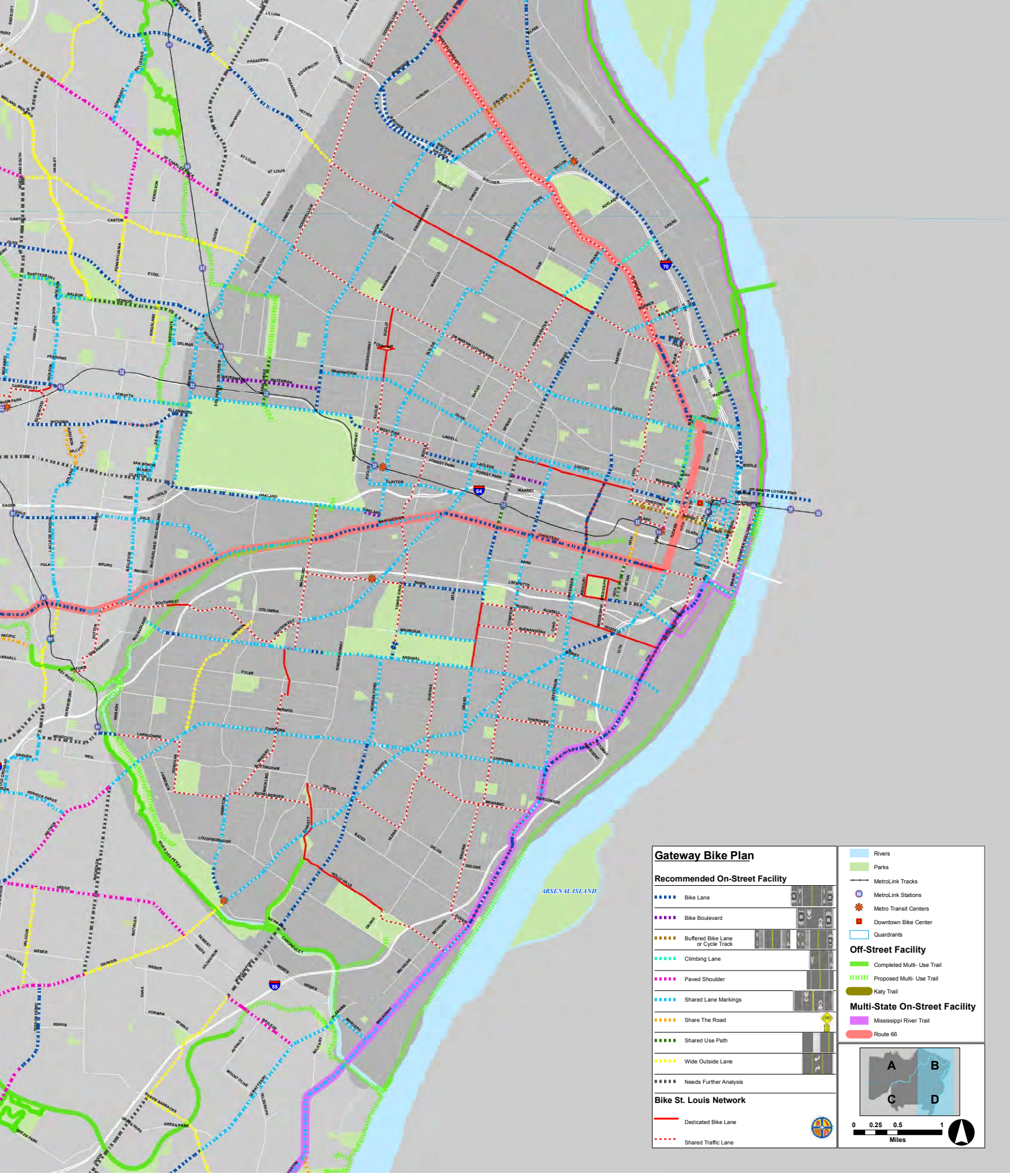
Despite the new road diet, which reduced driving speeds from ~43 MPH to ~37 MPH, speeds are still higher than the 30 MPH posted limit. Additionally, the bike lanes remain unprotected, a condition taken advantage of by drivers to extend the allowable driving space. These conditions combine to create a high-stress condition for bikers, and continue to make pedestrians feel unsafe.

REIMAGINING BUS ROUTES

MetroReimagined passed in 2018 by Metro expands bus service across the city with lines moving to 15-minute headways. Both Gravois and Morganford will received the increased service.



(Left) St. Louis bike rack, photo by CBB; (right) St. Louis bike wayfinding signage, photo by Flickr, Karen Goodman.



GATEWAY BIKE PLAN BY THE CITY OF ST. LOUIS

0' 500' 1000'

EXPANDING BEVO'S SUCCESSES

OPPORTUNITIES BEVO SHOULD PURSUE

RETAIL & OFFICE SUPPLY

Typical retail and office space in the Study Area is contained in the ground floor of a one- or two-story row-type building, or a free-standing single-story building. *See Appendix #1: Existing Conditions Report, p. 280 for more information.*

The supply analysis of office and retail are combined in this context because of the character of the corridor and the fact that office and retail users occupy similar spaces in the Study Area. Lease rates for commercial space range from $9 to $12 per square foot. Only one example from the survey—ground-floor space in the northwestern portion of the Study Area Neighborhoods—demands a lease rate at a level that would support more major capital investments (~ $16 per square foot).

RESIDENT-DRIVEN RETAIL SHOWS PROMISE

Area residents are currently spending retail dollars outside of the Study Area Neighborhoods that could be "captured" by retailers within the Study Area Neighborhoods. However, most of this spending is for types of retail typically served by big box retailers—or through online purchases—rather than by neighborhood-scale retailers. The retail gap analysis for the Study Area Neighborhood suggests demand for approximately 12,500 square feet of neighborhood-scale retail[2] (such as specialty food/liquor), enough to fill up to 5 retail storefronts. The gap analysis for the Secondary Market Area shows more unmet demand for uses that could be accommodated in neighborhood-scale retail space, particularly in the apparel and specialty food and liquor sectors.

This demand could be captured by any competitive retail district within the Secondary Market Area. Improving the Study Area's marketability, pedestrian environment, and physical condition will better position it to capture a share of this spending.

Creating a destination that captures buying power from a broader area, combined with attracting more households to the surrounding neighborhoods, could lower vacancy and improve the corridor.

A 10% increase in households in the Study Area Neighborhoods could support an additional 20 to 25 retail businesses if that spending was captured in the Study Area Neighborhoods.

NEIGHBORHOOD SERVICES: DINING?

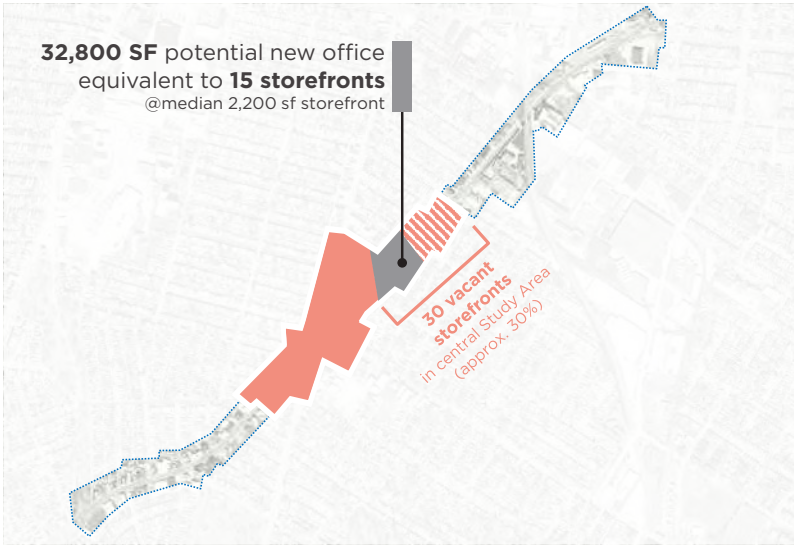
Preliminary data from the community survey indicate that survey respondents mostly dine outside of the neighborhood. neighborhood. As the Study Area's physical environment becomes more attractive and welcoming, new dining options along Gravois could capture some of this spending within the neighborhood, while contributing to the area's vibrancy."

POTENTIAL FOR URGENT CARE SERVICES

An analysis of the population surrounding urgent care centers in other parts of South City suggests that there is a potential market for an urgent care facility within the Study Area. If there is an appropriate site within the Study Area corridor, and if likely users match the demographic profile sought by urgent care providers, such a facility would provide an anchor for the district as well as a valuable service to neighborhood residents.

OVER SUPPLY OF GROCERY IN THE AREA

The retail gap analysis indicates that the Study Area Neighborhoods currently have an oversupply of grocery spaces relative to resident spending. Nationally, consumers now spend 7% more at restaurants than conventional grocers, suggesting a shift away from a grocery-oriented consumer food economy. The majority of existing square footage lies outside of the Study Area, comprised of chain grocers (e.g., Aldi and Save-A-Lot). These larger, full-service grocers located outside of the Study Area are also the primary source of fresh produce.



The Study Area is not a likely target for a new grocery store in the near term. However, if the area's population and local buying power grow, and if local development partners align the right subsidies and incentives, a neighborhood market or similar model could become feasible.

FILLING VACANCIES THROUGH NEW OFFICES

An office demand analysis was conducted to examine growth industries in the MSA--focusing on appropriate uses for the corridor such as social services, business services, technology, and design--and estimate what share of this new office demand could be captured in the Study Area through a market strategy to attract and welcome these users to the area. See Appendix #2: Market Analysis, pp. 372 - 381, for more details.

If the Study Area attracted 1% of the region's growth in each of five focus industries (Business & Finance; Computer/Tech; Social Services; Architects & Engineers; and Art & Design), those users could fill up to 13 vacant storefronts.

Emerging "coworking" spaces—with a mix of small offices, open workspaces, and other shared facilities—have also been successful models for attracting small business startups in similar districts. These users, if successful, move into larger space in the future.

4540 GRAVOIS AVE 1

4630 GRAVOIS AVE 2

3945 GRAVOIS AVE 3

4736 GRAVOIS AVE 4

1 **4540 GRAVOIS AVE: BUILT 1911**
2,000 SF Office
$10.80 PSF

2 **4630 GRAVOIS AVE: BUILT 1930**
1,500 SF Office
$9.60 PSF

Tenant: American Goldfinch Preservation Trust

3 **3945 GRAVOIS AVE: BUILT 1910**
3,094 SF Retail
$10.00 PSF

Tenant: African International Store

4 **4736 GRAVOIS AVE: BUILT 1920**
3,575 SF Retail
$11 - $12 PSF

Tenants: Tim's Chrome Bar Stari Grad

EXISTING SUPPLY: GROUND FLOOR RETAIL SPACE

Source: CoStar

DEVELOPING A ROBUST HOUSING STOCK

RESIDENTIAL SUPPLY REMAINS AFFORDABLE

Residential uses in the Study Area primarily consist of multifamily buildings with 20 units or more, two- to four-unit buildings, or two-story single-family homes. Residential properties in the surrounding Study Area Neighborhoods are predominantly single-family detached homes. The area also has a mix of two- to three-story duplexes, four-unit walkups, and larger multifamily properties. Most of the existing multifamily housing stock in the corridor and surrounding market areas was built before 1970.

While the age of the stock might suggest the presence of deteriorated housing, the low vacancy rate (5.5%) and average rents in the Study Area Neighborhoods ($555 to $1,055), indicate the presence of a stable affordable rental market. Larger multifamily properties surveyed in the Study Area have very small units and low monthly rents. Duplex and four-unit walkups surveyed have larger units, and a wide range in rents ($550 to $1,100). However, overall the housing units in the Study Area are small and do not provide a large selection of larger, move-up housing for growing or diverse families and households.

These trends suggest that new market-rate multifamily construction could be possible in the Study Area, but would be feasible only with higher rents and a somewhat stronger market environment than exists today. These future projects will rely on incentives and other sources of gap funding.

The diverse housing typologies and price points in the neighborhoods surrounding the Study Area offer a wide range of options for existing and potential residents. **The diverse housing stock can be leveraged and expanded to retain residents as their preferences change, preserve affordability, and attract new households to the area.**

1 4729 MORGAN FORD RD: BUILT 1916

24 units | 490 SF
$1.00 PSF
AVG. RENT 1BR:
$1.00/SF

2 4746 GRAVOIS AVE: BUILT 1930

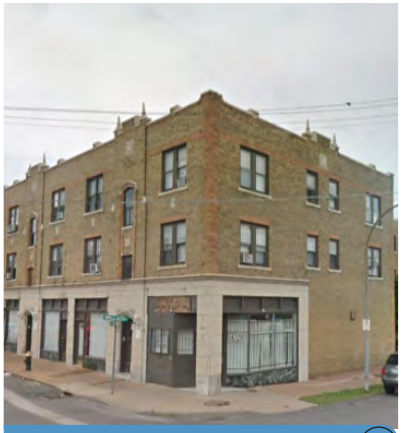
24 units | 513 SF
$1.47 PSF
AVG. RENT 1BR:
$1.47 SF

3 4250 NEOSHO ST: BUILT 1929

34 units | 300 – 650 SF
$0.94 - $1.24 PSF
AVG. RENT
Studio: $1.24/SF
1BR: $0.98/SF
2BR: $0.94/SF

4 4635 RIDGEWOOD AVE: BUILT 1979

198 units | 530 SF
$1.75 PSF
AVG. RENT
1BR: $1.75/SF



4729 MORGANFORD RD 1

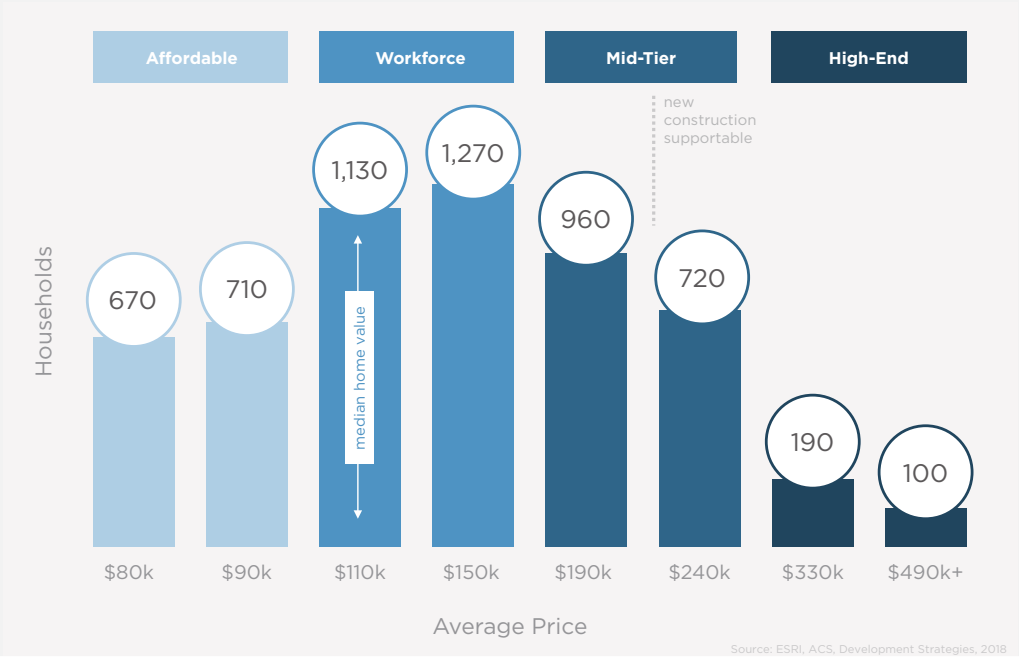
4746 GRAVOIS AVE 2

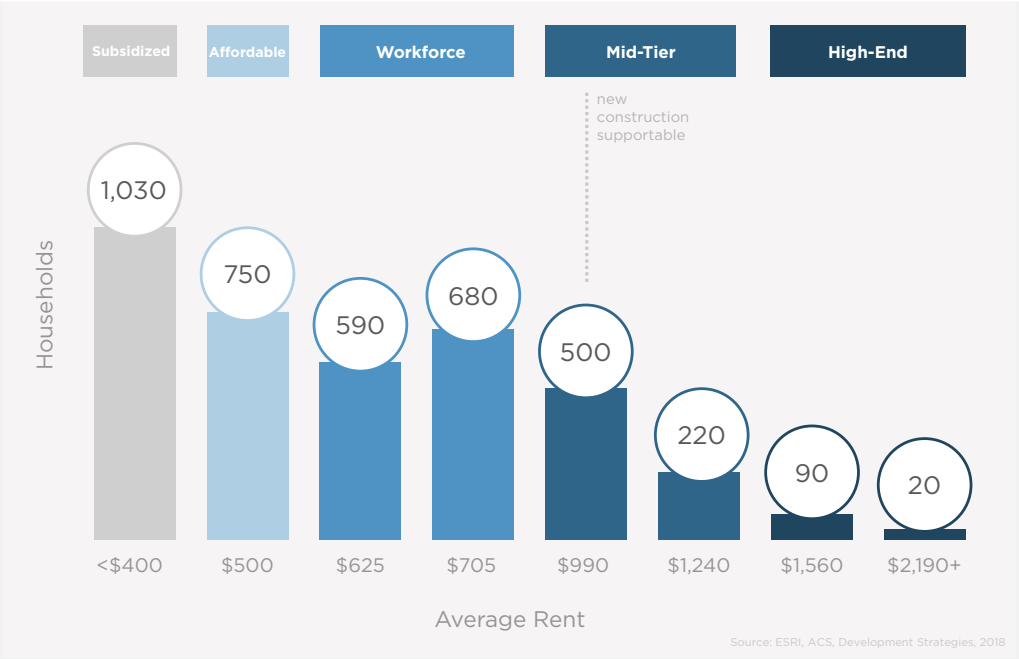
4250 NEOSHO ST 3

4635 RIDGEWOOD AVE - AFFORDABLE SENIOR 4

MULTIFAMILY HOUSING SUPPLY

Sources: CoStar, Apartments.com





POTENTIAL FUTURE DEMAND

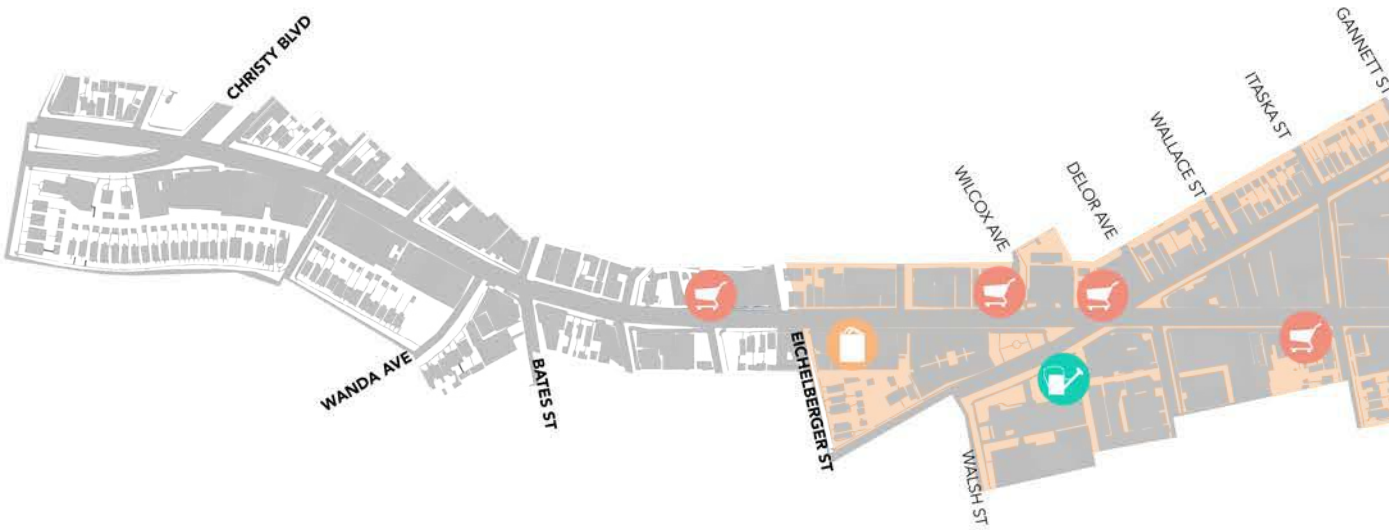
The analysis of existing homeowner affordability by product pricing indicates that a large share of homeowners in the Study Area Neighborhoods could afford homes priced above the area's current median home value—some at prices that could support new construction. This suggests that there may be a market among existing residents for new homes.

The analysis of existing renter affordability by product pricing, also above, illustrates the deep demand for affordable housing among current renters in the Study Area Neighborhoods. The neighborhoods' growing demographic of older households, including many households on fixed incomes, reinforces the need for affordable housing options in the area and many opportunities to age in place.

An attractive retail and neighborhood environment, along with a range of housing products, would help attract target groups to the area: those with strong preferences for walkable urban environments. For instance, if one percent of these groups were captured in the Study Area Neighborhoods, there would be demand for up to 1,450 units in a mix of apartments, single-family homes, and two- to four-unit buildings. *See Appendix #2: Market Analysis, p. 368.*

(Top) Owner affordability by product pricing; (Bottom) Rental affordability by product pricing, Sources: ESRI, ACS, Development Strategies, 2018.

BOLSTERING NATURAL SYSTEMS



WATERSHEDS

The Bevo community is located within the River des Peres watershed. The watershed's namesake River des Peres has been re-graded and paved, straightened, and buried in sewer lines for much of its length. The Study Area is divided into two smaller watersheds—Rock Creek and Glaise Creek—which have also been buried as combined sewer systems. The outfall of Rock Cree is along Loughborough between Gravois and Morganford. Glaise Creek is further east in Carondolet.

SEWERS & THE US CONSENT DECREE

The City of St. Louis was built with a combined sewage system with both stormwater and sewage accumulating in the same pipes. Unfortunately, the elimination of green space and increased runoff has resulted in the overflow of the sewers into natural waterways. In 2007, the State of Missouri and the U.S. Environmental Protection Agency, sued the Metropolitan St. Louis Sewer District regarding the overflow. MSD, as of 2012, is under obligation to spend at least $4.7 billion by 2035 in stormwater improvements which reduce overflow, of which $100 million is dedicated to rainscaping. All developments in the right-of-way should consider the problem of stormwater when redesigning infrastructure.

This plan will suggest long-term improvements which would assist MSD in achieving its stormwater goals. However, the plan will prioritize natural solutions over highly engineered ones as well as solutions which add landscape value to the neighborhood.

NATURAL ECOLOGY

The St. Louis area falls within the River Hills Ecoregion, which is characterized as "a transition zone between the loess-covered and till-covered plains to the norther and the lighter colored, rocky soils of the more dissected interior Ozark Highlands regions." Nearly 50% of the City of St. Louis and St. Louis County were once prairie, connected to the vast tallgrass prairie which dominated much of the midwestern United States and a third of what would become the State of Missouri.

0' 400' 600'

PERVIOUS & IMPERVIOUS SURFACES

- Garden
- Grocery stores
- Farmer's Market
- Food Desert
- Impervious surfaces

IMPROVING THE HEALTH OF THE NEIGHBORHOOD

FOOD ORIGINS: RARE BUT POWERFUL

Farms and gardens are rare in most urban centers. In St. Louis, there are four small-scale, environmentally responsible farms in south St. Louis; there are two near the Bevo Study Area, one of which is a flower farm.

This lack of visible connection to food origins can have adverse effects on healthy food choices. Local foods provide fresh food options but also education and potentially even jobs. Additionally, there is simply a lack of local food available to be sold to local customers.

COMMUNITY GARDENS

In addition to farms, community gardens offer a physical and psychological connection to food. In the Bevo Study Area, there are four informal community gardens:

- Cologne Corner Community Garden (butterflies only)
- Long School Community Garden
- Peter Matthews Memorial Skate Garden
- Food Project backyard garden

While not formally listed in the Missouri Coalition for the Environment Local Foodshed database, the indoor Bevo Farmer's Market occurs weekly year-round at The Heavy Anchor on Gravois Ave.

GROCERY STORES: FEW WITH FRESH PRODUCE

Another form of local food sales not available in most South St. Louis communities is grocery stores. An analysis of any grocery outlets (not just those carrying locally-grown food) reveals that there are few walkable produce outlets available to the Bevo Study Area.

According to the U.S. Department of Agriculture, some of the Bevo Study Area is considered to be a food desert as of 2017; in other words, have low-access to food. A food desert is defined as an area where at least 500 people and/or at least 33% of the census tract's population resides more than one mile from a supermarket or large grocery store. With the addition of a new Aldi north of the study area at Gravois Ave and Gustine Ave, some of the community may be better served than the 2017 USDA data is showing; however, most families travel to several grocery stores to meet their grocery shopping needs, and none of the relatively local options in the area are walkable to Bevo residents.

Finally, additional components of a local food system, including community-supported agriculture (a model where consumers pay up front at the beginning of the growing season in exchange for weekly farmed produce) and food incubators (facilities that house kitchen spaces, food processing equipment, and distribution infrastructure for small-scale entrepreneurs) are not prominent in South St. Louis.

CLIMATE CHANGE

A changing climate is affecting communities around the globe with more frequent, and more intense, weather-related conditions including flooding, heat, storms, and drought.
According to the City of St. Louis 2018 Climate Risk Assessment Report, extreme summer heat, hot and cold waves, drought, tornadoes, and flooding are all expected in St. Louis under climate change scenarios. A longer mosquito season may also occur, in addition to still unforeseen consequences.

According to an analysis of weather trends, is predicted that by 2050, St. Louis will have the climate of Tulsa, Oklahoma.

This becomes particularly important given the current Gravois context of large expanses of paving with little to no greenery or shade.

(Top) Long Middle School Community Garden, photo by Better Bevo Now.

GREENHOUSE GAS EMISSIONS

Carbon emissions are a large part of the climate change picture of any city, including St. Louis. According to the City's 2015 Community GHG Emissions Inventory, 97% of community-wide GHG emissions came from two main sources: (1) the built environment comprising commercial, residential, and industrial sectors (77%); and (2) vehicle miles traveled (20%).

The Center for Neighborhood Technology (CNT) has calculated annual greenhouse gas emissions from auto use on a per acre and per household basis for the United States.

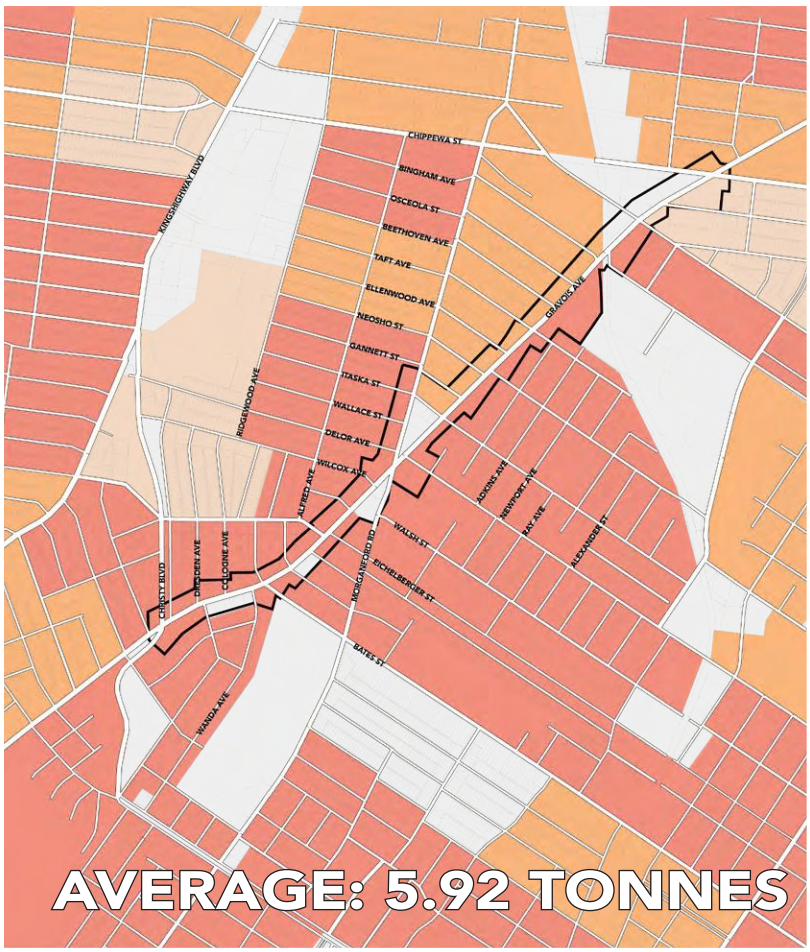
It is interesting to take a look at both metrics to see how the higher-density areas, while releasing more greenhouse gases per acre, tend to release fewer greenhouse gas emissions per household. This is because urban areas offer more alternatives to gas-powered vehicles than rural areas do.

A look at the per acre data reveal that most block groups in the study area emit 30% more greenhouse gas emissions than the St. Louis city average. A potential reason for this discrepancy is that the area is not well connected to pedestrian and transit options, which results in more people driving.

Similarly, measured at the per household level, Bevo community members are emitting 20% more greenhouse gas emissions than the average St. Louis household. Because Bevo is more dense than the City of St. Louis average (6.8 dwelling units per acre vs. 4.1 dwelling units per acre, respectively), per household emissions should be lower than the city average.

This discrepancy could be caused by the large amount of century-old building stock and the low number of renovations that have occurred, which result in energy-inefficient buildings that people waste energy trying to heat or cool. Additionally, more people driving negates any efficiencies that come from increased density.

This plan presents an opportunity for Bevo to discuss ways it can reduce its CO^2 emissions in meaningful ways which will directly benefit the community.



Annual greenhouse gas (GHG) emissions per household, per Center for Neighborhood Technology.

No data

6 - 14 Tonnes

14 - 20 Tonnes

20 - 30 Tonnes

30+ Tonnes

2

Chapter Two:

BUILDING A COLLECTIVE VISION

OFFERING DESIGN CHOICES & THEN LISTENING

REACHING MEMBERS OF THE BEVO COMMUNITY

KEY OBJECTIVES

A RANGE OF ENGAGEMENT

We worked with the residents and businesses in Bevo to create a collective action plan that reflects all the energy and passion of those already at work to make Bevo a great place.

The objectives for public engagement included:

- Inform the stakeholders by providing balanced and objective information to assist them in understanding the problems, alternatives, opportunities, and solutions.
- Consult the stakeholders by obtaining feedback on analysis, alternatives, and/or decisions.
- Involve the stakeholders by working directly with them throughout the process to ensure that concerns and aspirations are consistently understood and considered, ensuring all stakeholder groups are included and consulted.
- Demonstrate that the feedback has influenced the decision-making and planning priorities.
- Build partnerships with other agencies and stakeholders, recognizing the effect this effort has on the community, and that it complements other community initiatives.

WHO IS INVOLVED?

Bevo Neighborhood Participants

- Residents
- Business Owners
- Commercial Property Owners/ Developers
- Better Bevo Now Neighborhood Association
- Bosnian Chamber of Commerce
- Oasis International
- Community Groups
- Local artists
- Alderpersons

South St. Louis Participants

- Newport Heights Neighborhood Association
- City Seniors
- Healthy Schools, Healthy Communities
- Alderpersons

St. Louis City Departments Participants

- City of St. Louis Streets Department
- City of St. Louis Police Department
- City of St. Louis Fire Department
- City of St. Louis Planning & Urban Design Agency

Regional Participants

- Metro Transit
- Great Rivers Greenway
- East-West Gateway Council of Governments

State & Regional Participants

- Missouri Department of Transportation
- Union Pacific Railroad

PROACTIVE INFORMATION SHARING

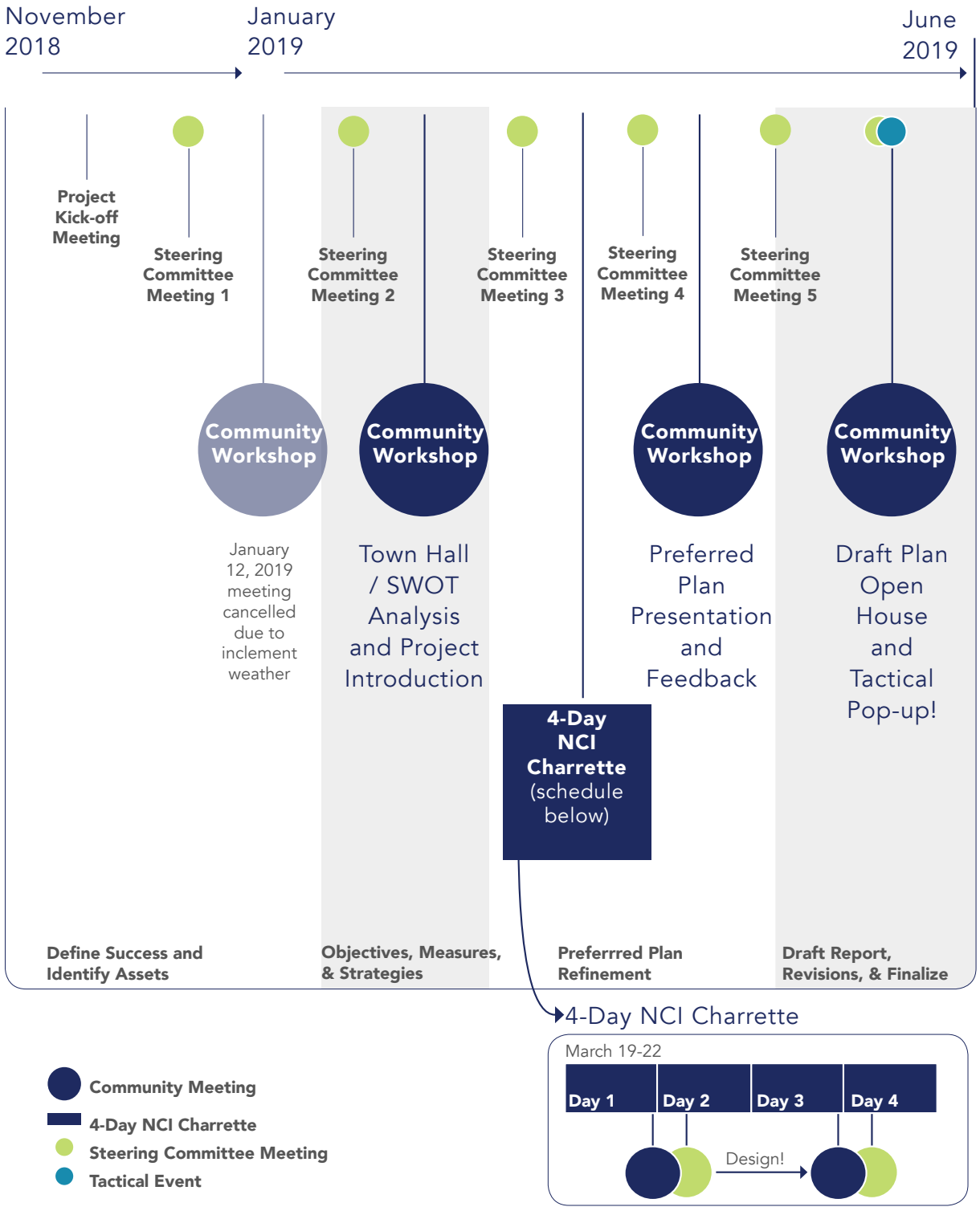
Tools: Project webpage, email notifications, social media, targeted mailings

To foster an open, transparent process that keeps the larger community and stakeholders informed, we utilized several tools to share information along the way, including a project-specific website (www.bevogreatstreets.com). The site, which offers basic project information and the opportunity to share comments, was updated throughout the process.

Social and print media of planning partners Better Bevo Now and others was also used to get the word out about important project developments and upcoming opportunities for public involvement.

FOREIGN LANGUAGE CONSIDERATIONS

Bevo is a diverse neighborhood with a population that includes Bosnians, Spanish-speakers, and Vietnamese residents. Our outreach included targeted efforts to include these groups. Meeting notices were translated into these languages and distributed through community contacts to encourage participation. Flyers included information on the availability of interpreters for public meetings.



TIMELINE OF PROJECT ENGAGEMENT

GATHERING INPUT & COLLABORATING

KEY STAKEHOLDER INTERVIEWS

Stakeholder interviews provide the opportunity for a select group of individuals who represent relevant organizations to have in-depth discussions and discovery as it relates to the project. Interviews took place throughout the project: first, to understand the issues and opportunities of participants and later, to build consensus and consider possible recommendations.

RESIDENT SURVEY

The resident survey helped the project team understand resident priorities and concerns. The survey was made available online, distributed electronically through existing online and social media, and on paper, distributed in person at community events. *A copy of the survey, as well as survey results, is available in Appendix #3: Community Engagement, pp. 490 - 527.*

STEERING COMMITTEE MEETINGS

A steering committee was formed to guide the work of the consultant team. An initial meeting began generating ideas on the plan's vision, goals, opportunities to be leveraged, and who could be responsible for moving forward. During these meetings, the Committee also reviewed and refined the Public Engagement Plan and actively participated in the planning of the tactical event in June. Six meetings of the Steering Committee took place during the process (5 in-person, one teleconference).

TECHNICAL COMMITTEE MEETINGS

A technical committee met several times to vet and refine the preferred roadway configuration. This committee included the Missouri Department of Transportation, the City of St. Louis Streets Department, bike advocates Trailnet and Great Rivers Greenway, and the City's Active Transportation Planner.

GO TO THE PEOPLE EVENT ATTENDANCE

To complement the community workshops, pop-up engagement was conducted to meet residents where they were out in the community. The project team tabled at the Heavy Anchor 's Farmers Market and Oak Hill Elementary School's Resource Fair, sharing project information and gathering input with community members. The team also sent a representative to the January meeting of the Better Bevo Now Neighborhood Association.

BUSINESS AND PROPERTY OWNER OUTREACH

Realizing the importance of business and property owners to the planning process, the project team made extra efforts to notify these groups of opportunities for input and partner with them to share information with the public. Leading up to the charrette, a mailing was sent to all business owners in Bevo and high-traffic local businesses were visited by the project team to encourage their participation in the process; they were also given materials to share with patrons. This same group was also invited to a meeting during the Charrette Week to discuss concerns specific to them. Leading up to the April community workshop, a mailing was sent to all property owners on Gravois Ave.

COMMUNITY WORKSHOPS & FINAL PLAN OPEN HOUSE

Group participation was encouraged at these events to capture feedback. Community workshops were extensively advertised – through local church bulletins, eblasts to interested residents and stakeholders, door hangers distributed by Better Bevo Now Neighborhood Association, variable message signs offered by the City of St. Louis, and for early meetings, promotion on a locally run Bosnian cable television station.

The team planned dynamic and interactive events that presented information in compelling ways. We also encouraged group participation at these events that will capture feedback. Public meetings used a combination of tabled discussions, keypad polling, and dot exercises to solicit feedback from the community. *Detailed information on slides and results from the public meetings is available in Appendix #3: Community Engagement, pg. 398 - 487.*

4-DAY NCI CHARETTE, MARCH 19-22

The project team employed the 4-day NCI "Quarter" format in which one feedback loop happens before the charrette, one during, and one after. This charrette included two public meetings, one on opening night and one on closing night of the charrette. *A full charrette schedule is available in Appendix #3: Community Engagement, p. 423.*

CONCLUSION

Overall, the response from the community for the planning process was enthusiastic and consistent. Community workshops were well-attended and participation in the process from key stakeholders was strong. Themes of public opinion were the community's desire for slower speeds on Gravois Ave, more opportunities to cross Gravois Ave, improvements to safety throughout Bevo, and the desire for more pedestrian traffic and retail activity.

Of note, engaging minority populations in Bevo including African-Americans and those born in other countries was challenging. While participation from Bosnian business owners was strong through the Bosnian Chamber of Commerce, the team struggled to attract interest and participation from Hispanic and Vietnamese residents. Early efforts to identify champions for these groups were met with limited success and perhaps an indication of the need for diverse leadership to emerge as Bevo develops.

WORKSHOP #1: JANUARY 12 (Canceled due to inclement weather)

VISION & OPPORTUNITIES

- ☐ Strengths, Weaknesses, Opportunities, & Threats (SWOT)
- ☐ Mapping Your Neighborhood

2 WORKSHOP: FEBRUARY 13

OPENING WORKSHOP

- ☐ Kit of Parts: Concept Designs
- ☐ Deciding neighborhood priorities
- ☐ Group discussion with neighbors

CLOSING WORKSHOP

- ☐ Refined Kit of Parts: Concept Designs

C CHARRETTE: MARCH 19 - 22

CONCEPT DESIGNS & PREFERRED CONCEPT

- ☐ Presentation of plan

3 WORKSHOP: APRIL 16

OPEN HOUSE & TACTICAL EVENT

- ☐ Preferred design in action
- ☐ Tactical installation of public art
- ☐ Pop-up artist showroom in vacant storefront

4 WORKSHOP: JUNE 25

ASSEMBLING THE PLAN

TRANSLATING VISION TO RECOMMENDATIONS

GREAT STREETS MEASURE OUTCOMES

The foundation for the Bevo Great Streets project is the first Great Streets Principle: Great Streets are Great Places.

As specified through the Great Streets Initiative, the overarching goal of these types of projects is to develop effective multimodal networks, land uses, and policy management practices that will support improved access to and overall functions of Gravois Ave and connect well with the Bevo community and surrounding neighborhoods.

In addition to that foundation, this project uses the EcoDistricts Protocol as a framework for collaboration and measuring success throughout the plan development and implementation. The Protocol focuses on setting intentions collectively, measuring outcomes accurately, and celebrating and adjusting performance according to built-in checkpoints. Measuring successful outcomes was baked into the process from the beginning.

CONTINUOUS REFINEMENT

Project partners and the community helped refine this broad goal into a Bevo-specific agenda for this plan. During the first phase of the project, the project team engaged with stakeholders and the steering committee to identify common themes and to better understand the main issues preventing GravoisAve from reaching its full potential as a Great Street.

From these conversations, three main goals of the Bevo Great Streets project emerged:

Reduce traffic speeds along Gravois Ave
Increase pedestrian trips across and along Gravois Ave
Reduce retail vacancies along Gravois Ave

During the project's first public workshop, the community had the opportunity to also directly express their preferred outcomes. Recurring themes included access, vibrancy, diversity, safety, and inclusion. There was a strong desire for a family- and business-friendly community.

This shared visioning process culminated in the following vision statement:

A PROSPEROUS GRAVOIS THAT ACTIVATES A HEALTHY AND WELCOMING BEVO FOR ALL.

The EcoDistricts Protocol outlines 6 Priorities that communities should measure as part of a protocol towards EcoDistricts Certification. However, the objectives are a good set of sustainability- and equity-minded focus areas that are appropriate for the Bevo community.

The EcoDistricts Protocol identifies 6 Priorities that were used in this planning process:

- People & Place (inclusive and vibrant communities);
- Prosperity (education and economic opportunities);
- Connectivity (effective connections between people and places);
- Health & Wellbeing (people's health and happiness);
- Resource Renewal (net positive energy, water, and waste); and
- Living Systems (flourishing ecosystems).

The EcoDistricts Protocol also outlines Objective Categories within each of the 6 Priorities. Of the 17 Objective Categories in the EcoDistricts Protocol, this project includes the 12 most relevant to the Bevo community: Economic Development, Culture & Identity, Housing, Street Network, Mobility, Leadership, Air & Climate, Ecosystem Health, Food Systems, Safety, Health, and Active Living. This process uses these categories as a tool for organizing the objectives, strategies, and metrics of the plan, as well as vetting how well strategies and recommendations meet overall project goals.

Using these 12 Objective Categories, the team then built out a thorough set of objectives, indicators, targets, and strategies to achieve rigorous, meaningful performance outcomes that matter to people and planet (see next page). The 12 icons on the outside of the following page represent these 12 objective categories.

(Top) The timeline of the Bevo vision and OSM compilation.

1. Great Streets Are Great Places

2. Great Streets Integrate Land Use & Transportation Planning

3. Great Streets Accommodate All Users and All Modes

4. Great Streets are Economically Vibrant

5. Great Streets are Environmentally Responsible

6. Great Streets Rely on Current Thinking

7. Great Streets are Measurable

8. Great Streets Develop Collaboratively

8 GREAT STREETS: PROJECT INITIATION

Feedback Loop: Stakeholder Interviews

- ☐ Reduce traffic speeds along Gravois
- ☐ Increase pedestrian trips across and along Gravois
- ☐ Reduce retail vacancies along Gravois

3 PRELIMINARY GOALS: DEC. 2018

Feedback Loop: Public Input

6 OBJECTIVE CATEGORIES: FEB. 2019

Feedback Loop: Preferred Plan Development

30 METRICS & TARGETS: MARCH 2019

BEVO TARGET & METRICS

30 CRITERIA FOR THE BEVO NEIGHBORHOOD

Enhanced commercial activity.
- *Net number of businesses added annually* (3 /year)
- *Increase in sales & property tax assessments annually* (+$)
- *Increase in active storefront usage* (59% → 85%)

High cultural diversity.
- *Percentage of foreign-born population in the Bevo neighborhood* (>15% → >15%)

Many opportunities to participate.
- *Number of community events per year* (7 → 12)

Housing for larger households.
- *Number of homes larger than 1,200 sq. ft.* (1,300 → 1,400)

Affordable homes.
- *Median home values* (<$139,000)

More affordable, quality housing.
- *Number of income-restricted rental units* (360 → 500)
- *Extreme renter cost burden* (27% → 20%)

Reduced housing vacancies.
- *Percentage of unoccupied housing units* (14% → 10%)

Improved access to recreation and nature.
- *Percentage of community within a 5-minute walk of a public outdoor park* (47% → 75%)

Enhanced walkability.
- *Percentage of street length in the district considered pedestrian-friendly* (44% → 70%)

Equitable health outcomes.
- *Annual obesity rate* (61% → 55%)
- *Number of heat-related emergency room visits* (1.8 → 1.0)

Enhanced public safety.
- *Annual incidence of Index Crimes* (-10% / year)
- *Annual incidence of Quality of Life Crimes* (-5% / year)

Enhanced perception of public safety.
- *Public news coverage in the media* (1 / month)

Reduced traffic speeds.
- *Reduce 85th percentile driving speeds* (37MPH → 30MPH)

Street network supports all travel modes.
- *Bike counts along the corridor* (16 → 50)
- *Bus boardings and alightings* (2x)

Street network supports more & safer ped. crossings.
- *Average distance between crossings* (1,000' → 400')
- *Number of pedestrian trips made across and along Gravois* (2x)

Safe, efficient, and multimodal district travel.
- *Proportion of households commuting by driving alone* (75% → 70%)

Strong self-goverance.
- *Annual budget of the CID* ($82,200 → $130,000)

Reduced heat island effect.
- *Percentage of district with tree canopy* (25% → 40%)

Reduced CO2 emissions.
- *Per household CO2 emissions* (5.92 Metric tons → 5.0 Metric tons)

Managed rainwater.
- *Percentage of impervious surfaces* (76% → 70%)

Managed stormwater.
- *Acre feet of stormwater retained* (+0.26 acre feet)

Increased connection to food production.
- *Number of places where food is grown* (2 → 5)

KEY

Objective
- *Metric* (existing → target)

VISION: **A prosperous Gravois that**

GOAL	OBJECTIVE CATEGORIES	OBJECTIVE	ILLUSTRATIVE INDICATOR	IN
PLACE  **CREATE INCLUSIVE AND VIBRANT COMMUNITIES**	CULTURE + IDENTITY	Cultural diversity is high.	Percent of foreign-born population in the Bevo neighborhood.	Maintain the percenta Bevo neigl
		Opportunity to participate in community events is high.	Number of community events within the district per year.	Increase the number place from 7
	HOUSING	Housing options are available for larger households.	Number of homes larger than 1,200 square feet.	Increase the number feet fron
		Affordable entries into the homeownership market are available.	Median home values.	Median home valu
		The number of affordable, improved-quality housing units is increased.	# of income-restricted affordable rental units in the neighborhood.	Affordable rental
			Extreme renter cost burden.	Extreme renter cost income) de
		Vacancies are reduced.	Percent of housing units that are unoccupied.	Vacancy rate in the n Area decr
PROSPERITY  **BUILD PROSPERITY AND ACCELERATE INNOVATION**	ECONOMIC DEVELOPMENT	Commercial activity is enhanced.	Net number of businesses added annually.	Increase the net n Gravois by 3 p
			Increase in sales and property tax assessments annually.	Assessed values incr total retail and trade
			Increase in active storefront usage.	Increase the percer frontage occupied w
HEALTH + WELLBEING  **NURTURE PEOPLE'S HEALTH AND HAPPINESS**	ACTIVE LIVING	Access to recreation facilities and services, as well as natural spaces, is improved.	Percentage of community within a 5-minute (0.25 mile/0.4 km) walk of a public outdoor park.	Increase the percen minute (0.25 mile/0. fr
		Walkability is enhanced.	Percentage of street length in the district considered ped-friendly (via ped-zone analysis).	Increase the percen considered pe
	HEALTH	Health outcomes and life expectancy are more equitable.	Annual obesity rate.	Decrease the % of pe the 63116 z
			Number of heat-related emergency room visits annually in the 63116 zip code.	Reduce the number room visits in the 6
	SAFETY	Public safety is enhanced.	Annual composite index score of crimes against persons and property.	Decrease annual inc 10% per y
			Annual incidence of Quality of Life crimes.	Continue to decrease
		Public safety perception is enhanced.	Positive news coverage in the media.	Increase the number Google analytics) th
		Traffic Speeds are reduced.	85th percentile driving speeds.	Reduce 85th percenti
	FOOD SYSTEMS	People have a connection to food production.	Number of places where edible food is grown.	Increase the number
CONNECTIVITY  **BUILD EFFECTIVE CONNECTIONS BETWEEN PEOPLE AND PLACES**	STREET NETWORK	The street network supports all travel modes.	Bike counts along the corridor.	Increase the numbe an
			Bus boardings and alightings.	Increase the numbe stops along the corr
		The street network supports more frequent and safer pedestrian crossings.	Average distance between crossings.	Decrease the averag
			Number of pedestrian trips made across and along Gravois.	Increase the averag made across and
	MOBILITY	District travel, internally and externally, is safe, efficient, and multimodal.	Proportion of households commuting by driving alone.	Reduce the % of pe
	LEADERSHIP	Self-governance is strong in the neighborhood.	Annual budget of the CID.	Increase the annual b to
LIVING INFRASTRUCTURE  **ENABLE AND CONNECT TO FLOURISHING ECOSYSTEMS**	ECOSYSTEM HEALTH	Rainwater is managed.	Percent of impervious surface.	Reduce the percent area
		Stormwater is managed.	Acre feet of stormwater retained.	Increase the acre fe
RESOURCE REGENERATION  **WORK TOWARDS NET POSITIVE ENERGY, WATER, AND WASTE**	AIR & CLIMATE	Heat island effect is reduced.	Percent of district with tree canopy.	Increase the percent
		All sectors improve energy efficiency, reduce waste, and increase natural carbon sinks.	Per household CO2 emissions (metric tons/year).	Reduce per househ m

NOTE: Baseline data are from 2018 unless otherwise noted.

activates a healthy and welcoming Bevo for All.

DICATOR TARGET	INDICATOR STATEMENT	FROM #	TO #	GEOGRAPHY	STRATEGIES
age of foreign-born population in the hborhood of at least 15%.	Maintain the percentage of foreign-born population in the Bevo neighborhood	<15%	<15%	Study Area Neighborhoods	Include diverse culture (historical and present) through gateway signage/marketing
of one-time or annual events taking to 10 of 12 months of 2019.	Increase the number of one-time or annual events	7 events	12 events	Study Area Neighborhoods	CID marketing strategy encourages celebration of multicultural businesses, events, and populations.
of homes larger than 1,200 square m 1,300 (20%) to 1,400.	Increase the number of homes larger than 1,200 square feet	1,300 homes	1,400 homes	Study Area Neighborhoods	infill, allowance for accessory dwelling units, family units
es remain below the City median.	Median home values remain below the City median.	<$139,000	<$139,000	Study Area Neighborhoods	small-scale infill, missing middle housing
units increase from 360 to 500.	Affordable rental units increase	360	500	Study Area Neighborhoods	Development of new and preservation existing affordable housing
burden (rents greater than 50% of creases from 27% to 20%.	Extreme renter cost burden (rents greater than 50% of income) decreases	27%	20%	Study Area Neighborhoods	Development of new and preservation existing affordable housing, small business development
eighborhoods surrounding the Study reases from 14% to 10%.	Vacancy rate in the neighborhoods surrounding the Study Area decreases	14%	10%	Study Area Neighborhoods	Strategic code enforcement, vacancy prevention partnerships, improvements to commercial corridor, residential redevelopment of underutilized sites
umber of businesses added along per year for the next 3 years.	Increase the net number of businesses added along Gravois	3 per year	3 per year	Study Area	pop-ups, CID marketing strategy, new For Lease signs, small business technical assistance
rease from $4.8 per sf (land area); sales increase from $26.65 million	Assessed values increase	$4.8 per sf	$5.5 per sf	Study Area	Improved lighting, greenery along Gravois
ntage of ground-floor commercial ith an active use from 59% to 85%.	Increase the percentage of ground-floor commercial frontage occupied with an active use	59%	85%	Study Area	CID recruitment, small business technical assistance
ntage of the community within a 5- 4 km) walk of a public outdoor park rom 47% to 75%.	Increase the percentage of the community within a 5-minute (0.25 mile/0.4 km) walk of a public outdoor park	47%	75%	Study Area Neighborhoods	parklet parks, soccer field
tage of street length in the district ed-friendly from 44% to 70%.	Increase the percentage of street length in the district considered ped-friendly	44%	70%	Study Area	prioritize redevelopment of properties with lots of curb cuts; incentivize elimination of curb cuts; focus on ped experience at the Bowtie (there is conflict and poor areas within this heart of Bevo)
ople who are overweight or obese in ip code from 61% to 55%.	Decrease the % of people who are overweight or obese in the 63116 zip code	61%	55%	Study Area Zip Code	inviting stairs that start in the lobbies of buildings; ped walkway under viaduct; connection to Christy trail, active parks
of annual heat-related emergency 3113 zip code from 1.8 to 1.0 per 10,000.	Reduce the number of annual heat-related emergency room visits in the 63113 zip code	1.8 visits	1 visit	Study Area Zip Code	Add bus and park shelters, emergency clinic
cidence of Index Crimes by at least ear for the next 3 years.	Decrease annual incidence of Indec Crimes for the next 3 years	10% per year	10% per year	Bevo Mill Neighborhood	Beautiful, pedestrian-oriented lighting; clear glass in retail storefronts; more street-fronting buildings (eyes on the street), sight lines, short blocks, street-level and street-facing entrances against the curb; mix of old and new buildings with multiple uses
crime by 5% every year for the next 3 years.	Continue to decrease crime for the next 3 years	5% per year	5% per year	Bevo Mill Neighborhood	recommend that a substation be added back into Bevo, lighting, etc.
of positive news articles online (per hat pertain to the Bevo community.	Increase the number of positive news articles online (per Google analytics) that pertain to the Bevo community	--	1/month	Bevo Mill Neighborhood	CID marketing campaign to attract attention to positive events, stories, people
le driving speeds from 37 MPH to 30 MPH.	Reduce 85th percentile driving speeds	37 MPH	30 MPH	Study Area	narrower lanes, bumpouts, center medians.
of places where edible food is grown from 2 to 5.	Increase the number of places where edible food is grown	2	5	Study Area Neighborhoods	add edible landscaping into streetscape, pocket parks
r of bikers counted during TrailNet nual bike counts.	Increase the number of bikers counted during TrailNet annual bike counts.	16	>50	Study Area Neighborhoods	cycle track along Gravois; ped/nike bridge under viaduct
r of boardings and alightings at all idor, and in particular those in the Bowtie area.	Increase the number of average daily weekday boardings and alightings at all stops along the corridor	334 and 243, respectively	50% more	Study Area	bus shelters and improved crossings, streetscape improvements
ge distance between crossings from 1,000' to 400'.	Decrease the average distance between crossings	1,000'	400'	Study Area	add crosswalks between Taft and Morganford, etc.
ge number of daily pedestrian trips along Gravois from 165 to 330.	Increase the number of pedestrian trips made across and along Gravois	--	2x	Study Area	new developments have synergies with other buildings, enticing urbanism
ople commuting alone from 75% to 70%.	Reduce the % of people commuting alone	75%	70%	Study Area Neighborhoods	Wider sidewalks, fewer curb cuts, shared and pay-per-use parking
udget of the Bevo CID from $82,200 at least $130,000.	Increase the annual budget of the Bevo CID	$82,200	$130,000	CID	pass sales tax, redo website, consider EcoDistricts governance tips to strengthen self-governance
of impervious surface in the study from 76% to 70%.	Reduce the percent of impervious surface in the study area	76%	70%	Study Area	pervious pavers as part of the streetscape, rain gardens, LID strategies
eet of stormwater retained by 0.26 acre feet.	Increase the acre feet of stormwater retained	0 acre feet	0.26 acre feet	Study Area	Street trees, Pocket parks/Treevo, stormwater infrastructure in bumpouts and under viaduct
of study area with tree canopy from 25% to 40%.	Increase the percent of study area with tree canopy	25%	40%	Study Area	street trees, other vegetation along corridor (conflicts with visibility of storefronts along Gravois?), paint rooftops white, road surfacing (concrete, coolseal)
old CO_2 emissions from 5.92 to 5 metric tons/year.	Reduce per household CO_2 emissions	5.9 metric tons/year	5 metric tons/year	Study Area Neighborhoods	awnings instead of tinted glass; energy-CID-supported energy efficiency retrofit programs, insulation

CONCEPT DESIGN & ESTABLISHING PREFERRED OPTIONS

A KIT OF PARTS

Armed with these objectives and metrics, the project team developed a 'kit of parts' - an early set of recommendations across a variety of priorities. These priorities were:

Geographic Areas
Christy
Bevo Bowtie
Tactical Streetscape
Lower Gravois
Upper Gravois
Chippewa

Topics
Mobility
Vacant Storefronts
Lighting & Security
Open Space & Parks
Local Stormwater
Regional Stormwater

Community voting on the ballot choices helped refine the recommendations and set the Design Team in motion for Charrette Week.

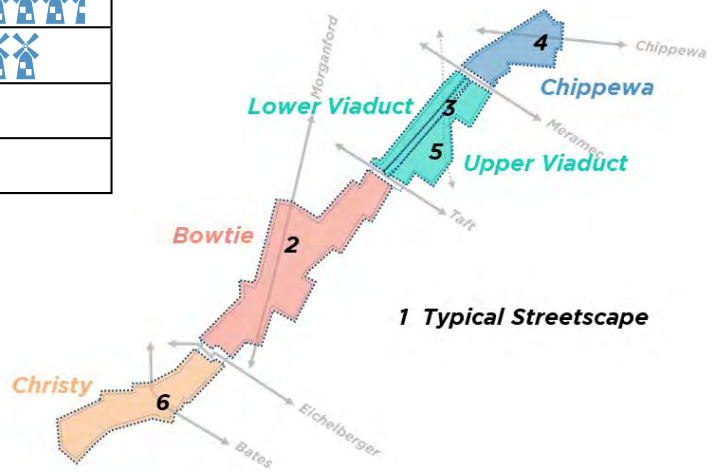
At the closing workshop, the Design Team presented some designs based on the following topics:

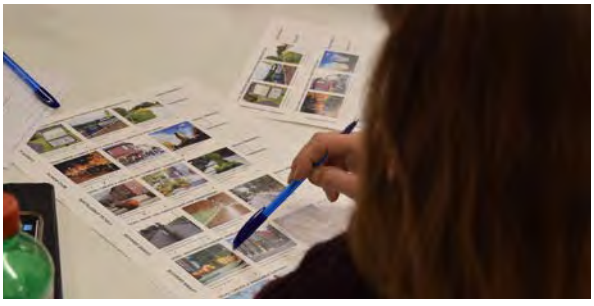
Streetscape
Bevo Bowtie
Viaduct
Parks
Districted Branding

Bevo Ballot page 1 of 2

Bevo Ballot page 2 of 2

ISSUE	STRATEGY	IMPORTANCE
Mobility	Create a more pedestrian friendly Gravois	
Vacant Storefronts	Attract more businesses, seek combinations that complement each other	
Lighting and Security	Maximize perceived & actual safety	
Open Space and Parks	Provide different types of open space, no more than a 5-minute walk away	
Local Stormwater	Reduce runoff block by block	
Regional Stormwater	Reduce runoff with a neighborhood stormwater park	





Results from the Bevo Ballot exercise on Opening Night of the Charrette.

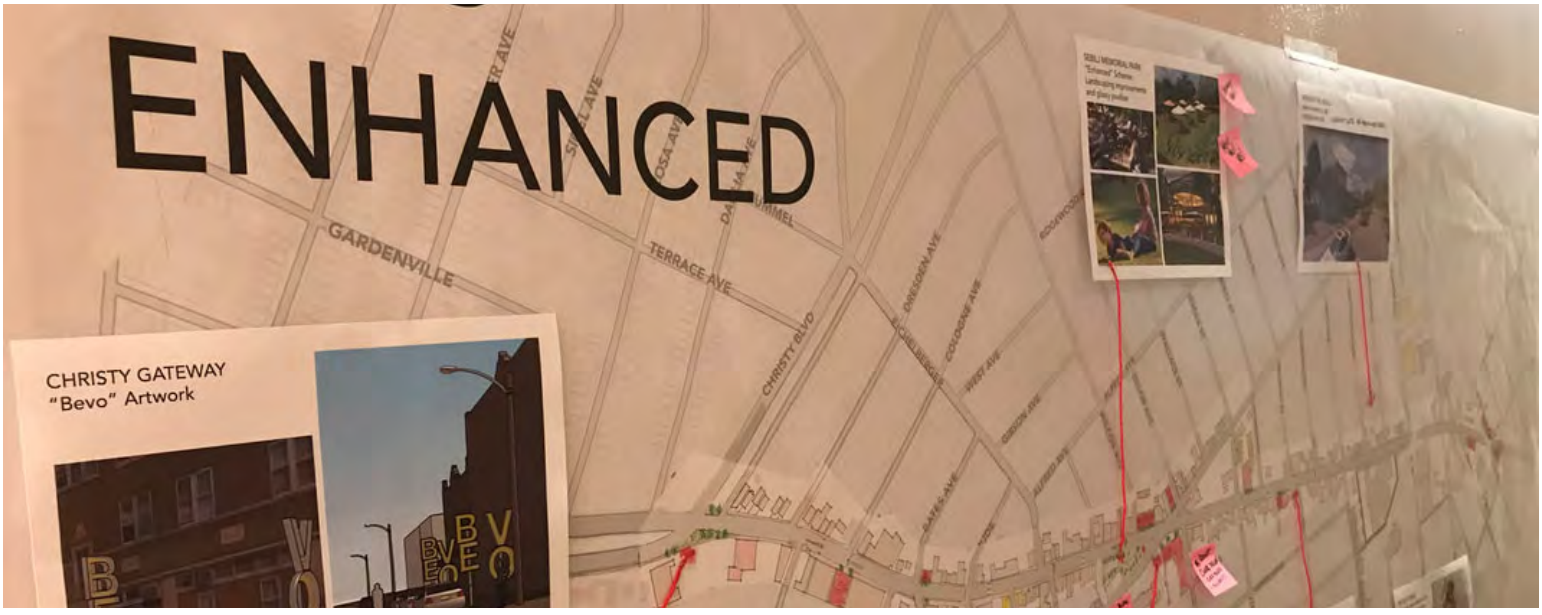
CONCEPT REFINEMENT

TWO REDEVELOPMENT SCENARIOS

The Design Team's recommendations were organized into two overall schemes: Bevo Enhanced and Bevo Transformed. After receiving feedback, the best options from both schemes were combined into the final plan for Bevo, which is outlined in the next chapter.

THE PLAN TAKES SHAPE

The objectives and indicators were developed based on an analysis of existing conditions – they summarize baseline metrics for what matters most in this plan. Potential strategies generated throughout the process were vetted according to whether, or how effectively, they made progress towards these targets. Additionally, the creation of these objectives and indicators allowed the project team and partners to discuss important tradeoffs throughout the plan development process. When conflicts emerged (for example, reflective glass in retail frontages to reduce glare and heating costs conflicts with the creation of a walkable, pedestrian-friendly retail environment with eyes on the street), the community and project partners



had the opportunity to examine these tradeoffs and weigh in on what priorities mattered most. The three project goals of travel speeds, pedestrian trips, and vacancies are the critical points of influence that will determine whether this plan creates the Bevo For All envisioned by the community.

STREET OPTION CRITERIA

Choosing the improved streetscape design for Gravois was a particularly important decision in this plan. While the overall plan prioritizes the main goals of reducing traffic speeds, increasing pedestrians, and filling vacancies, all the streetscape options advanced these criteria.

An additional selection criteria was developed that characterized the options according to six factors, which relate to the three original goals - travel speeds (measured by travel speeds); pedestrian trips (measured by pedestrian environment and driveway access); and vacancies (sidewalk dining, on-street parking) - but also add bike experience and stormwater as fundamental priorities.

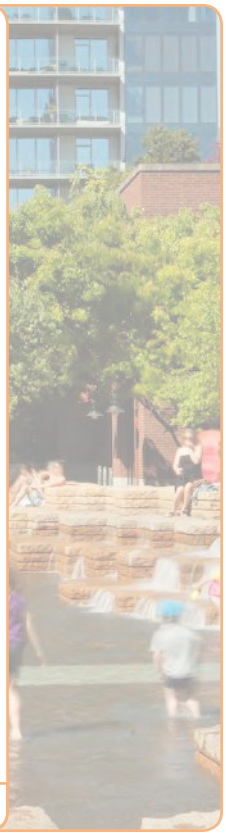
PROJECT OPTION CRITERIA

The projects (aka strategies) outlined in the implementation of this plan were also vetted (and improved) by a list of criteria that identifies how the plans relate back to the the 12 Objective Categories.

- ☐ Vehicle Travel Speeds
- ☐ Pedestrian Environment
- ☐ Driveway Access
- ☐ Bike Experience
- ☐ Sidewalk Dining
- ☐ On-Street Parking
- ☐ Stormwater

6 STREETSCAPE CRITERIA

- ☐ Culture & Identity
- ☐ Housing
- ☐ Economic Development
- ☐ Active Living
- ☐ Health
- ☐ Safety
- ☐ Food Systems
- ☐ Street Network
- ☐ Mobility
- ☐ Leadership
- ☐ Ecosystem Health
- ☐ Air & Climate



12 OBJECTIVE CATEGORIES

PHYSICAL & SOCIAL PROJECTS

Plan projects include both physical and social. The physical projects – things like streetscape infrastructure improvements – are translated directly into what's visualized in the preferred plan graphics in Chapter 3. The Implementation Plan in Chapter 4 includes project sheets on both these physical strategies, as well as the social ones – things like action plans for various stakeholders, policy change recommendations, etc.

TRACKING OVER TIME

Who is responsible for tracking these metrics over time? The Bevo Great Streets Project outlines a Memorandum of Understanding (MOU) that clarifies the roles of the main partner organizations in the community, including their roles and responsibilities in tracking and measuring the success of the plan over time. *A copy of the MOU is in Appendix #9: Memoradum of Understanding , pp. 604 - 631.*

3

Chapter Three:

RECOMMENDING A ROBUST PLAN

STRIKING A BALANCE BETWEEN VIBRANT COMMERCE & HEALTHY MOBILITY

BEVO'S NEIGHBORHOOD SPINE TODAY

THE CURRENT GRAVOIS CORRIDOR

THE SUM OF ITS PARTS

The Gravois Ave corridor comprises several systems that work together to create a truly Great Street. This page outlines those systems, which are then combined in the following pages to create the illustrative plan for Bevo.

Only 47% of the Bevo Neighborhood is within a 5-minute walk to a park

Only 24% of the Study Area are pervious surfaces

35% of the storefronts along Gravois are vacant

Pedestrian activity averages 165 people crossing per day

Bevo includes self-governing organizations like the Bosnian Chamber of Commerce & the Community Improvement District (CID)

ECONOMY

Local businesses and the CID are working hard to fill vacancies and create a more attractive experience for pedestrians and motorists alike, but a few key changes can go a long way.

GOVERNANCE

Policies and regulations currently in place in Bevo prevent the corridor from reaching its full potential in terms of growth and development.

MOBILITY

Capital improvements to the right-of-way are needed to adjust Gravois into a more complete street that slows traffic.

COMMUNITY

Urban design and public realm improvements are needed to turn the diverse spaces along Gravois into a place that reflects Bevo.

Average traffic speed is 7MPH over the speed limit

An average number of 334 board the bus along Gravois daily

The Bevo CID failed to pass a sales tax in 2017

The CID hosts events 7 out of the 12 months of the year

TRANSFORMING THE BEVO NEIGHBORHOOD

DETAILED LOOK AT THE PROPOSED PLAN

BEVO FOR ALL

The illustrative plan is presented here; this is the basis for the detailed plans that will follow both in this Plan chapter and the Implementation chapter.

DIVERSITY IN DISTRICTS

A districting strategy offers a framework for identifying, branding, and reinforcing unique identities in various segments of a long commercial corridor.

Cars & Bars **The Bowtie**

In the near term, this framework can shape investments in the public realm, and guide a marketing strategy for the area. In the longer term, this framework can guide a tenanting and tenant recruitment strategy. A districting strategy is important to the Bevo Study Area because of the length of the corridor, finite market demand, and the unique attributes present in different sections of the corridor.

Accordingly, the district diagram shown below segments the Gravois corridor into five subdistricts. The character, land use, and tenanting strategies for each of these districts are described and shown in detailed plan in the following pages.

All details shown in the following illustrative pages are part of a concept plan. Exact placement of technical elements including crosswalks, landscapes, and curb cuts is subject to future engineering designs that take into account bus stops, tree sight lines, traffic studies, etc.

0' 400' 600'

United Nations

Viaduct

Chippewa

CARS & BARS: CHRISTY BLVD. TO EICHELBERGER ST.

HISTORIC ROUTE 66 VIBE

With an eclectic mix of residential and commercial uses, the section of Gravois Ave bounded by Christy Blvd to the south and Eichelberger St to the north can be characterized by its auto repair and sales shops, bars and restaurants, and neighborhood-oriented service businesses. This district embraces Gravois Ave's Route 66 heritage both in form and function. The streetscape includes shaded trees that start to transition into bioretention elements around Bates Street.

ECONOMY

New restaurants and services should be targeted to vacant space in the Bowtie to the greatest extent possible. However, in this area, the CID should foster the existing mix of neighborhood-oriented businesses and services (such as salons, barber shops, and daycare), small restaurants and bars (e.g., coffee shops, bakeries, grill restaurants, patios, delis, and bars), and service firms (e.g., realty, insurance, or mortgage companies). And while evening entertainment uses should be welcomed, the CID should help ensure that these are operated in a way that is not disruptive.

MOBILITY

The new Gravois redesign allows for extended sidewalks perfect for current and future restaurants to provide sidewalk dining. An improved Christy Greenway trailhead at the Christy Blvd /Gravois Ave intersection provides a bit of respite to bikers entering the two-way cycle track on Gravois. See *Project #25, p. 249*.

1. *Public realm improvements such a gateway marker and a stormwater infiltration garden, coupled with adaptive reuse of the Dorm-In-A-Box building, create a more positive impression at this key entrance to the corridor and better connect pedestrians and cyclists to the Christy Greenway.*

2. *Attractive & functional streetscape plantings screen auto uses and bring more greenery into the corridor, while maintaining the access and signage needed for the continued success of these businesses.*

3. *Public realm improvements can incorporate car-themed art and murals that playfully complement the land uses in the area.*

4. *The properties on either side of the Gravois / Frieda intersection are currently vacant sites. This, along with the fact that several stormwater inlets are located at the corners make these sites prime opportunities for creating open space amenities designed to detain, treat and filter stormwater and reduce impervious surfaces.*

The Cars & Bars theme can be reinforced through architectural design, such as this example from Disney's Hollywood Studios.

Gravois' Route 66 heritage can be expressed through the mid-century "Googie"architectural style.

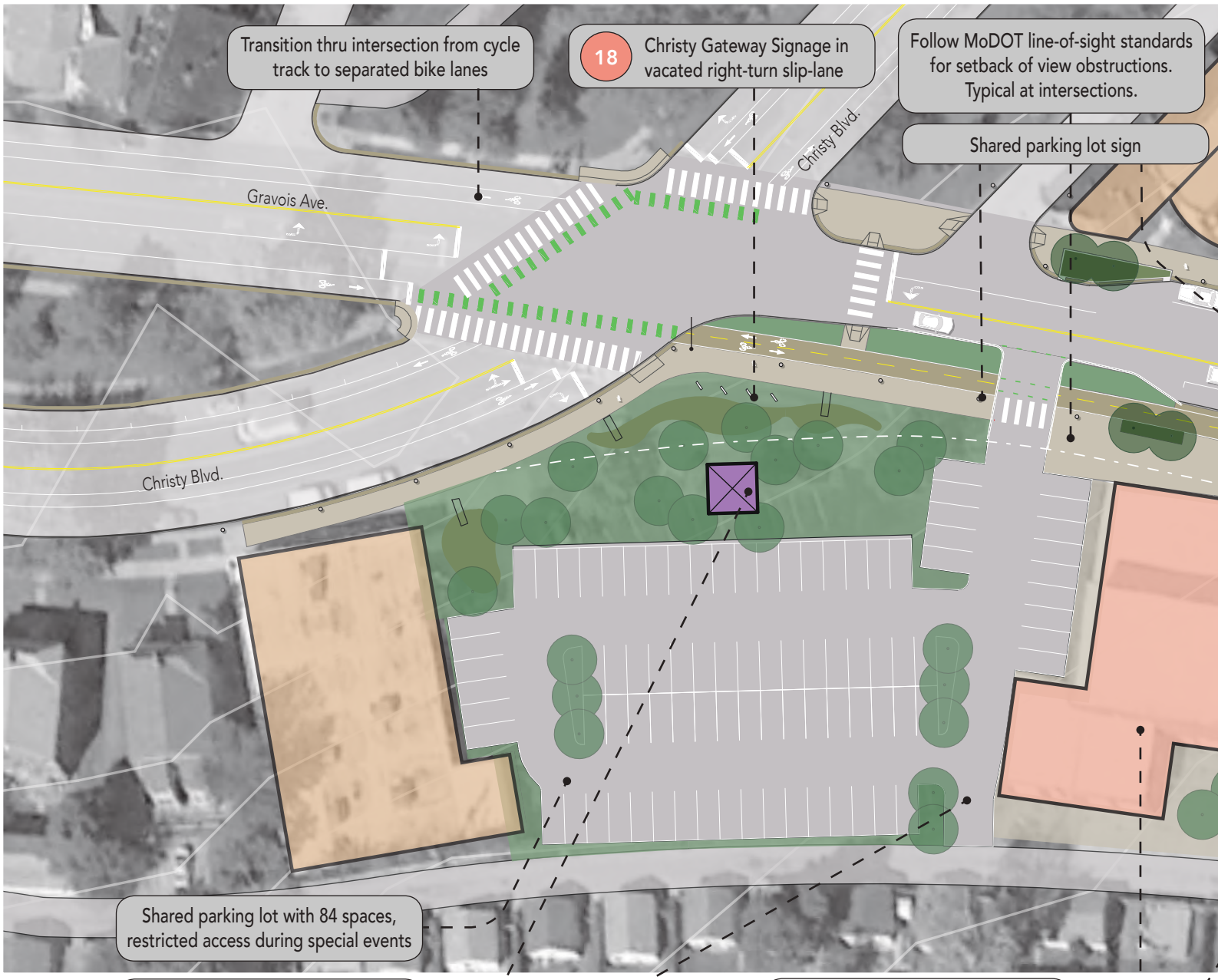
GOVERNANCE

A form-based code overlay across the entire project area encourages pedestrian-oriented urbanism. See *Project #2, pp. 222 - 223*.

COMMUNITY

This plan improves the appearance of this southern gateway to the Bevo Mill area. There are two commercial nodes in this district and recommended improvements must balance what is possible from a market perspective, physical design perspective, and from community preferences. In this case, there is finite commercial demand in the corridor, high vacancy in existing retail space, and a community desire to see new commercial investment focused around Bevo Mill.

CARS & BARS: CHRISTY BLVD. TO DRESDEN AVE.



X *Recommended Project #, See Chapter 4 for more information*

MetroBus *MetroBus Stop Location*

Existing Buildings

Renovated Buildings

New Buildings: Retail

New Buildings: Residential

0' 15' 30'

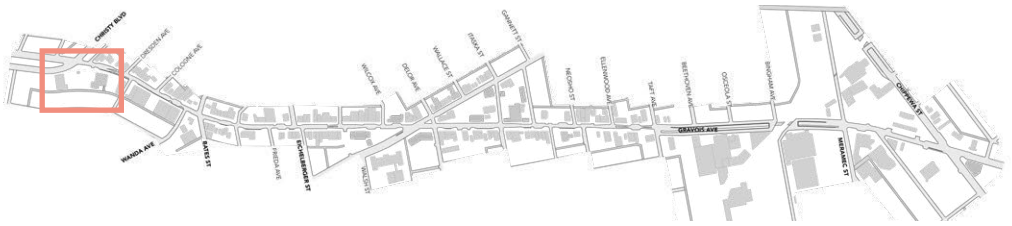
CARS & BARS: CHRISTY TRAILHEAD/DORM IN A BOX

A SOUTHERN GATEWAY

The intersection of Gravois Ave and Christy Blvd marks the southern boundary to the Bevo neighborhood. The location of the proposed gateway is currently a right turn lane onto northbound Gravois Ave. The plan proposes eliminating the extra turn lane, instructing right-turning drives to wait for the light, and installing a landscaped monument sign to mirror the one at Taft Ave. *See Project #18 and #25, pp. 240 and 249.*

The "Dorm-In-A-Box" building at 5822 Gravois Ave is an architecturally unique building near the southern extent of the Study Area. Believed to be built as a car showroom, the structure has an elevated parking deck facing the street, and a ramp from the alley providing upper-floor access for vehicles. The building is currently used for a combination of warehousing, storage, and the sale of dorm room furnishings. It is an ideal site for a more active use open to residents and visitors, and serving as a gateway between the Bevo neighborhood and the Christy Greenway.

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Commercial	LAND USE	Commercial + Park
PUBLIC AMENITIES	0	PUBLIC AMENITIES	Park & Pavilion
STORMWATER DETAINED	0 cubic feet	STORMWATER DETAINED	2,650 cubic feet
PARKING	58 Spaces	PARKING	85 Spaces



EXISTING

The intersection of Christy Blvd and Gravois Ave is a gateway to the Bevo neighborhood from the south and a is a connection point to the regional bike network. The surface parking lot between the Christy banquet hall and Dorm-in-a-Box and the adjacent slip lane present an opportunity to re-imagine this important site.

PHASE #1 (ILLUSTRATED AT LEFT)

The slip lane connecting the east leg of Christy Blvd with Gravois Ave is an unnecessary remnant of outdated traffic design. By closing off this slip lane, the existing island can be absorbed into the pedestrian realm on the east side of Gravois Ave and turned into a landscape amenity.

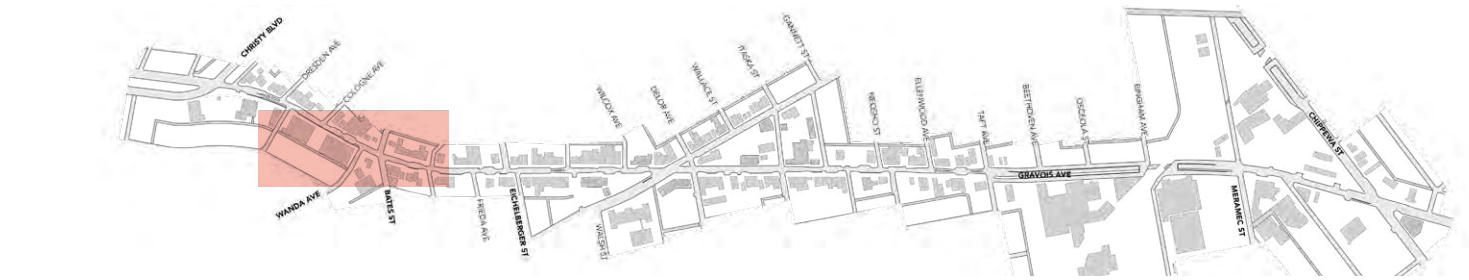
PHASE #2

The new park could be integrated into a larger concept that utilizes the parking lot for bike trail users and serves as a stormwater detention facility.

PHASE #2 (ALTERNATIVE)

In an alternate scenario, the property lines could be re-drawn to expand into the existing right of way to accommodate a new building development.

CARS & BARS: COLOGNE AVE. TO BATES ST.



X *Recommended Project #, See Chapter 4 for more information*

MetroBus *MetroBus Stop Location*

Existing Buildings

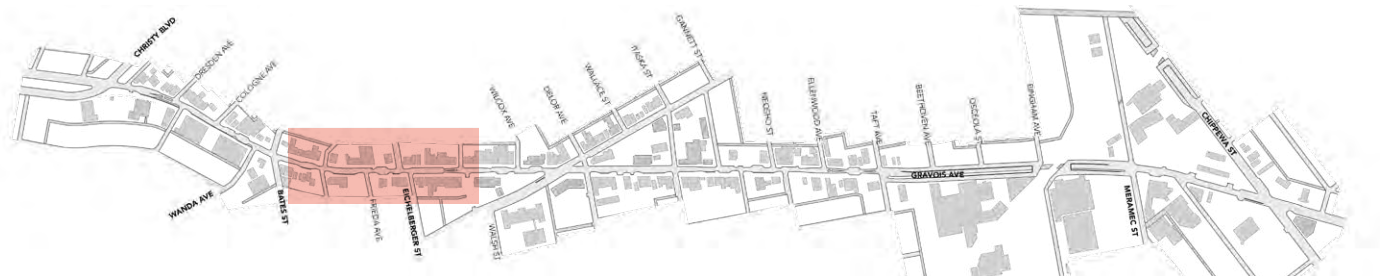
Renovated Buildings

New Buildings: Retail

New Buildings: Residential

0' 15' 30'

CARS & BARS: GERTRUDE AVE. TO EICHELBERGER ST.



X *Recommended Project #, See Chapter 4 for more information*

MetroBus *MetroBus Stop Location*

Existing Buildings

Renovated Buildings

New Buildings: Retail

New Buildings: Residential

0' 15' 30'

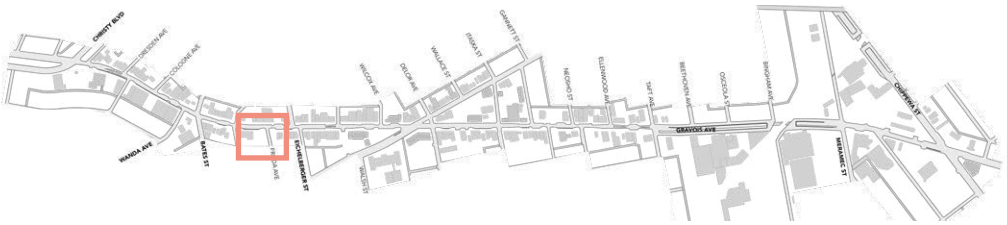
CARS & BARS: GRAVOIS AVE / FRIEDA AVE

GREEN INFRASTRUCTURE AMENITY

The vacant lots on either side of Frieda present an opportunity to create a neighborhood amenity that serves a social and environmental function. Constructing community rain gardens here would add natural beauty to the streetscape, and perform a valuable service in reducing polluted runoff that can contribute to flooding. Just like rain gardens at your home, or school, community rain gardens can provide habitat for bees, birds, butterflies and other wildlife. There would be particular synergies with the adjacent day care center, as the rain gardens would serve as areas for recreation and education. Blue arrows represent flows of stormwater into the six inlets that currently exist at these sites. *See Project #24, page 248.*

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Vacant; Day Care	LAND USE	Stormwater Park; Day Care
COMMERCIAL	5,000 SF	COMMERCIAL	5,000 SF
STORMWATER DETAINED	0 cubic feet	STORMWATER DETAINED	6,327 cubic feet
PARKING	20 Spaces	PARKING	20 Spaces

Aerial of the intersection at Gravois Ave / Frieda Ave, facing southeast



EXISTING

The properties on either side of the Gravois Ave / Frieda Ave intersection are currently vacant sites with several stormwater inlets located at the corners, making these sites prime opportunities for creating open space amenities designed to detain stormwater.

RECOMMENDED

Four existing stormwater inlets would drain into community rain gardens.

(Middle) Existing stormwater inlets. (Bottom left and right) Examples of public parks that integrate rain gardens.

CARS & BARS: DESTINATION VENUE


CHRISTY

THE BOWTIE: EICHELBERGER ST. TO GANNETT ST.

BEVO'S LIVING ROOM

Centered around the iconic Bevo Mill, the "Bowtie" is the historic center of the Bevo community. Bounded by Eichelberger St to the south and Gannett St to the north, this district has the most intact urban form and greatest potential to prosper as an active retail and entertainment destination. This area transitions away from shaded woodland and into a wet savannah/prairie feel, with character trees and planters.

With its iconic buildings, historic building stock, and neighborhood institutions, the Bowtie has many of the ingredients needed to compete as a retail and entertainment destination within the City and region. Infrastructure investments that address the wide right-of-way, reduce traffic speeds, and facilitate comfortable pedestrian crossings through the area help unlock this potential, and improve the area's marketability.

ECONOMY

The CID should target a broad, eclectic mix of local businesses to the Bowtie. Prioritize filling vacancies in this area. Creative firms and other daytime office users can help to fill vacant storefronts while also expanding local buying power to support retailers, restaurants, and bars. A new co-working space in an existing building could attract startups to the area. Other unique entertainment uses—such as a microbrewery or additional music venues—could serve as new destinations that draw more visitors to the area.

New housing development on sites in the Bowtie present the best opportunities in the Study Area to attract young professionals, and provide affordable senior and family apartments that are in high demand in the area.

MOBILITY

Improved and more frequent crosswalks encourage pedestrians to venture along and across Gravois.

GOVERNANCE

Within the recommended Bevo form-based code, the Bowtie will have its own neighborhood type and includes specific regulations to allow taller buildings, increased transparency, etc. Site-specific recommendations that go beyond the level of detail specified in a FBC may be attached to incentives. While a grocery store is not currently viable, if Bevo develops the need and/or capacity for one, the Family Dollar block is a good place for this larger use within the community.

1. *The addition of many new crosswalks throughout the Bowtie increases walkability by shortening the average distance between crossings. These installations can be phased for highest impact.*

2. *In the long-term, the wedge could be developed with one or more buildings that frame the park space and provide a housing or commercial product not currently available within the area, such as a market-rate apartment product and/or space with a more contemporary architectural character. .*

3. *The existing building at the west corner of Gravois and Wilcox, a single story structure set back from the sidewalk behind a surface parking lot, is not supportive of the vision for an "outdoor room" in the Bowtie district. Better suited for the district would be a 2 to 3 story mixed-use building set close to the sidewalk with parking screened behind. This development scenario demolishes the existing structure to accommodate an expanded parking lot, which would provide a higher ratio of parking spaces for the residential and commercial uses. Alternatively, the existing structure could be kept and repurposed for office, storage or even residential flats.*

4. *The existing bank building at the corner of Delor and Morganford is slated to be replaced by a mixed use building containing approximately 42 units of senior housing and 4,500 sf of commercial space, including a drive-thru teller. Design Guidelines and FBC would encourage this building to be set close to the sidewalk to define the form of the Bowtie space.*

5. *This building could be renovated and repurposed as a co-working space, with a mix of small private office uses, open workspaces, and shared community facilities. Depending on the interior configuration and circulation within the building, some apartment units—such as those on the west side of the building—could be retained in their current use even as other portions of the building are repurposed for co-working uses. Other unique entertainment uses—such as a microbrewery or additional music venues—could serve as new destinations that draw more visitors to the area.*

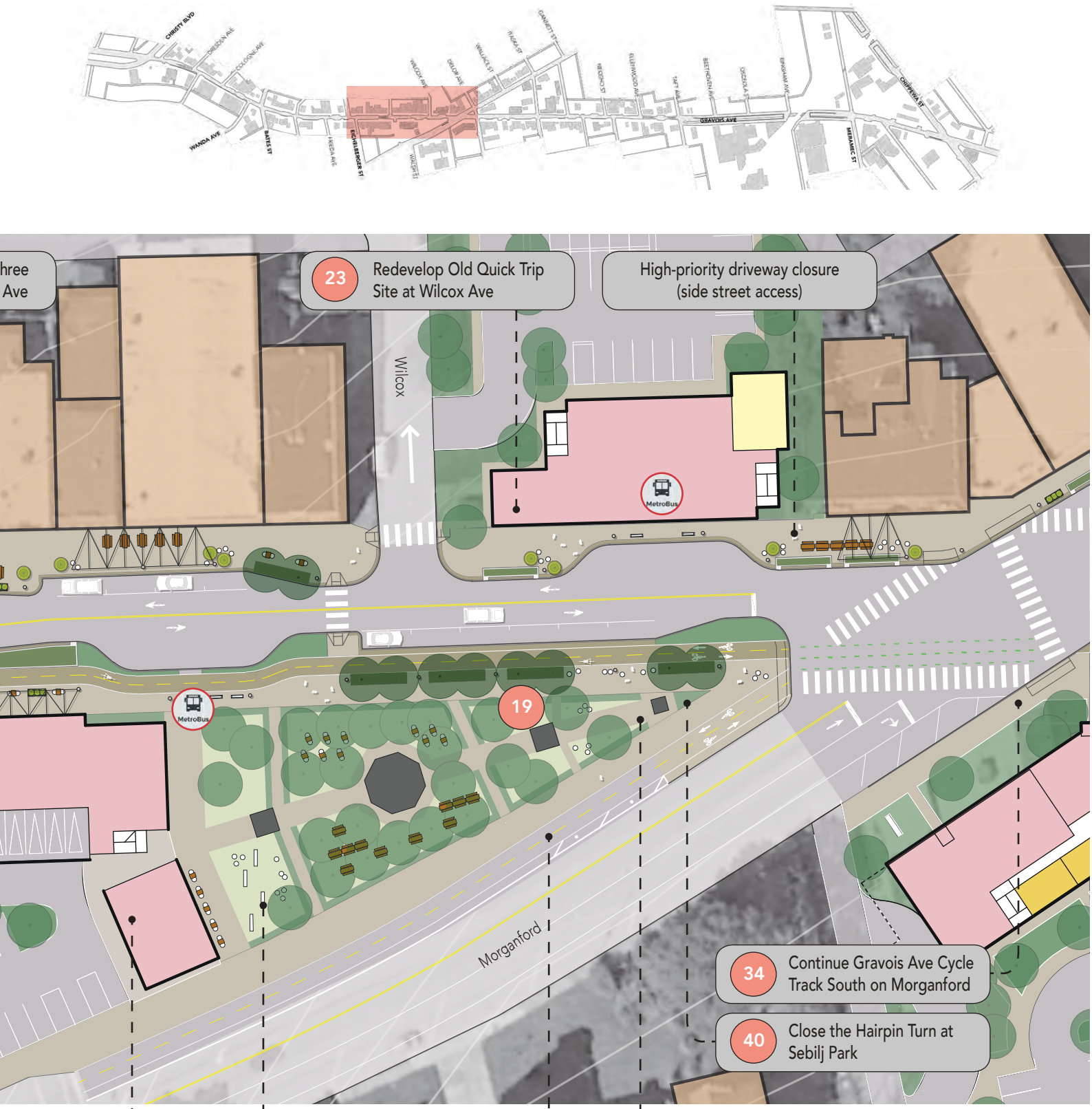
6. *When redevelopment of this parcel becomes an option in the future, the surface parking lot behind the Bevo Mill can be reconfigured to accommodate mixed-use buildings that would add density to the district and fill in the "missing teeth" of the streetscape.*

7. *The block between Itaska and Gannett can be improved by adding liner buildings to either side of the current Family Dollar structure. Thoughtful multifamily housing (with parking tucked under the housing) complements the neighborhood housing uses already existing across Gannett. Case Study #7, p. 562.*

COMMUNITY

Design guidelines specifically for the Bowtie encourage architecture that complements the Bevo Mill, and suggested developments create a sense of enclosure around an 'outdoor room' where community can continue to gather and celebrate.

THE BOWTIE: DUKE ST. TO WILCOX AVE.


hree
Ave
23
Redevelop Old Quick Trip Site at Wilcox Ave
High-priority driveway closure (side street access)
Wilcox
MetroBus
MetroBus
19
Morganford
34
Continue Gravois Ave Cycle Track South on Morganford
40
Close the Hairpin Turn at Sebilj Park
16
Develop Public Art in the Sebilj Monument Park
20
Develop Public Art in the Sebilj Monument Park
Sebilj Monument signage
34
Continue Gravois Ave Cycle Track South on Morganford

THE BOWTIE: BEVO BACKSTOP

ANOTHER ICON FOR BEVO

The plan imagines a building behind the Sebilj Monument, envisioned as artist housing, with gallery spaces on the ground floor facing towards the Bevo Mill. The City should issue an RFP for the site for affordable housing with active, open to the public, ground-floor uses which will ensure programming in the park year-round. While this will be a transformative project when it occurs, waiting for this redevelopment until there is improved market capacity means that less required subsidy; and higher-quality construction. Since this site is so visible within the Bowtie, a high-quality building is a must. *See Project #20, page 242*.

SEBILJ MONUMENT PARK

The existing Sebilj Park received limited work during the 2013 installation of the Sebilj Monument. As the feature across the street from the Bevo Mill, the Sebilj Park should be a place to gather around a Bosnian shrine, but also to enjoy the atmosphere of the Bowtie. The plan proposes beautifying the park and screening the public parking lot behind. *See Project #19, page 241*.

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Open Space	LAND USE	Open Space; Commercial; Residential
COMMERCIAL	0 SF	COMMERCIAL	8,000 SF
RESIDENTIAL	0 SF	RESIDENTIAL	23,500 SF
RESIDENTIAL UNITS	0	RESIDENTIAL UNITS	23
PARKING	62 Spaces	PARKING	23 Dedicated Residential + 48 Shared

Aerial of the Sebilj Memorial Park, facing southeast

EXISTING

The City-owned lot, currently public parking, is in fair to poor condition, and laid out inefficiently. Analysis during the charrette suggests the existing 62 spaces could be accommodated in ~60% of the space. The adjacent property, also City-owned, features monuments installed during St. Louis's 250th anniversary to honor the region's Bosnian Community and their leadership.

NEAR TERM

The construction of a new "backstop" building is not likely to happen in near future. In the mean time, a large scale public art project could be installed along the back of the park to create the "backstop" effect, screening the parking lot and helping to define the urban space. An illustrative concept for this art could be letters spelling the word "love." *See Project #16, page 238.*

LONG TERM - GROUND LEVEL

The Wedge could be developed with one or more buildings that frame the park space and provide a housing or commercial product not currently available within the area, such as a market-rate apartment product such as artists housing and/or a space with a more contemporary architectural character.

LONG TERM - UPPER LEVELS

The form of the "backstop" building will be important in defining the space of the Bowtie. Its massing should match the height of the middle school, then set back with upper stories to create an iconic form. There should be a grand scale archway through the middle of the building connecting the park to the parking lot behind.

THE BOWTIE: WILCOX INFILL

COMPLETING THE BOWTIE SPACE

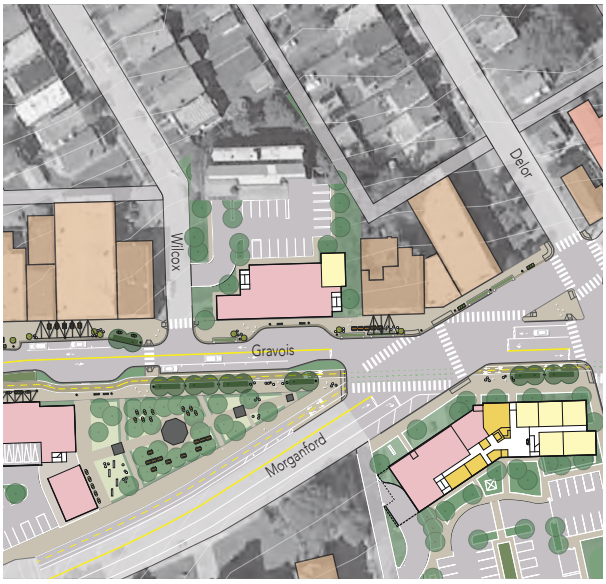
The building on the NW corner of Gravois Ave and Wilcox Ave, once a QuikTrip gas station, sat vacant for years. While a tenant has recently signed a lease to use the building as a hookah lounge, the long-term plan for the site recommends infill construction. Waiting to do this redevelopment until there is improved market capacity means that less subsidy will be required; and higher-quality construction will be more viable. A high-quality building is a must at this highly-visible site. Re-occupying this property will be an immediate benefit to the area, and will bring new vitality to the Bowtie. The plan shows a mixed-use building with a small ground-floor commercial space, and apartments above. This type of redevelopment of this property would reinforce the urban street wall of the Bowtie and bring new residential density (and associated buying power) to this highly-visible site. *See Project #23, page 247.*

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Commercial; Residential	LAND USE	Commercial; Residential
COMMERCIAL	4,000 SF	COMMERCIAL	6,000 SF
RESIDENTIAL	0 SF	RESIDENTIAL	14,500 SF
RESIDENTIAL UNITS	0	RESIDENTIAL UNITS	17
PARKING	36 Spaces	PARKING	38 Spaces

Aerial of the old Quick Trip property, facing northwest

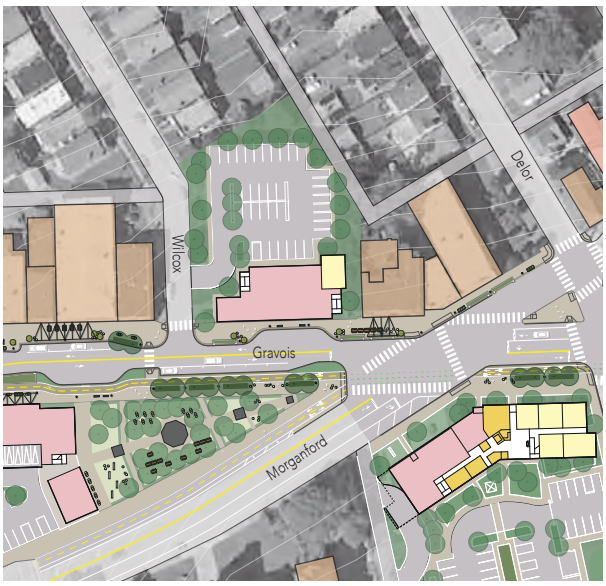
EXISTING

The existing building at the west corner of Gravois Ave and Wilcox Ave, a single story structure set back from the sidewalk behind a surface parking lot, is not supportive of the vision for an "outdoor room" in the Bowtie district.



NEAR TERM

Better suited for the district would be a two- to three-story mixed-use building set close to the sidewalk with parking screened behind. This development scenario could keep the existing structure, repurposing it for office, storage or even residential flats.



LONG TERM - GROUND LEVEL

Alternatively the existing building could be demolished to accommodate an expanded parking lot, which would provide a higher ratio of parking spaces for the residential and commercial uses.

LONG TERM - UPPER LEVELS

By placing one residential unit on the ground floor, the building design is able to meet the accessibility requirements of the Fair Housing Act (FHA) and avoid the costly installation of an elevator. At three stories, the schematic design shown here accommodates approximately 17 one and two bedroom units.

THE BOWTIE: MIDWEST BANKCENTRE

A PLACE TO AGE IN THE NEIGHBORHOOD

The existing Midwest BankCentre building is oversized given the bank's current operations. At three stories, plus a basement, the bank would like to occupy a smaller space on the same site. At the same time, Tower Grove CDC is working to secure funding for much needed affordable senior housing on this site. The plan proposes a four-story building which maintains the street wall of the Bevo Bowtie. *See Project #21, pp. 244 - 245*.

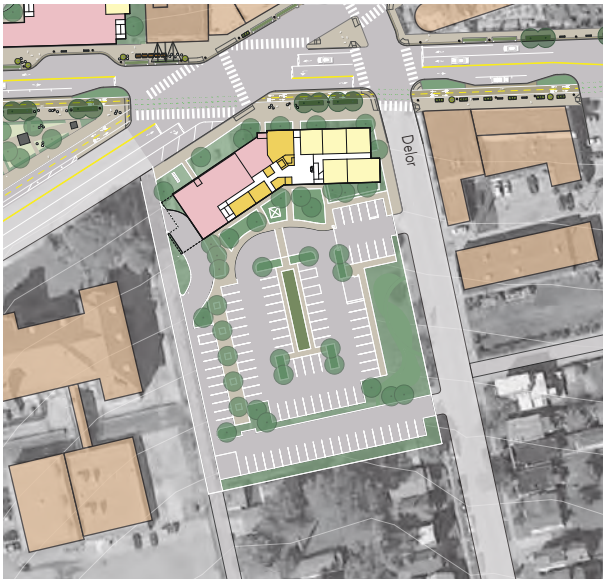
DELOR TOWNHOMES

Behind the proposed update to the Midwest BankCentre building, the plan proposes five townhomes, facing Delor St, to provide homes for larger families. The townhomes also signal the change from the Gravois commercial corridor to a residential street. *See Project #21, page 244*.

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Commercial	LAND USE	Commercial; Residential
COMMERCIAL	30,000 SF	COMMERCIAL	4,400 SF
RESIDENTIAL	0 SF	RESIDENTIAL	48,000 SF
RESIDENTIAL UNITS	0	RESIDENTIAL UNITS	42
PARKING	116 Spaces + Drive Thru	PARKING	101 Spaces + Drive Thru

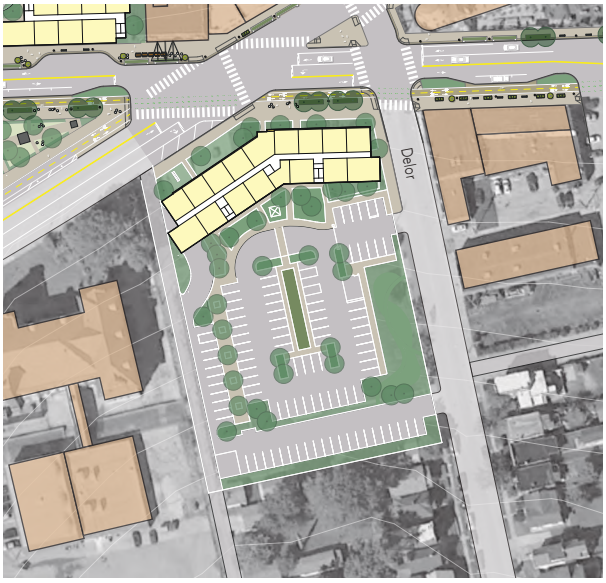
Aerial of the Midwest Bank site, facing southwest

EXISTING: The site currently occupied by Midwest BankCentre is a highly-visible, currently underutilized site in the core of the Bevo Bowtie. At nearly two acres—all owned by Midwest BankCentre—it is one of the largest developable sites in the Study Area. A mixed-use development with upper-floor residential and active ground-floor uses would be ideal at this location, and has the potential to increase market support.



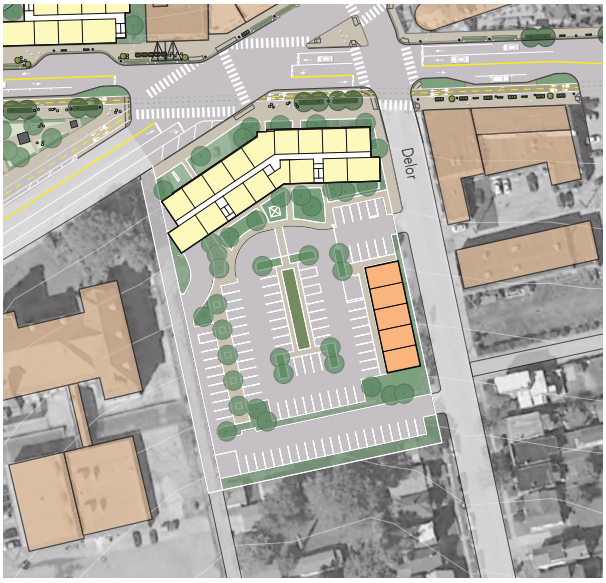
GROUND LEVEL

The ground floor of the new mixed-use building should aim to locate public rooms with ground-floor transparency facing Gravois Ave and Morganford Rd, particularly at the corner of Delor St.



UPPER LEVELS

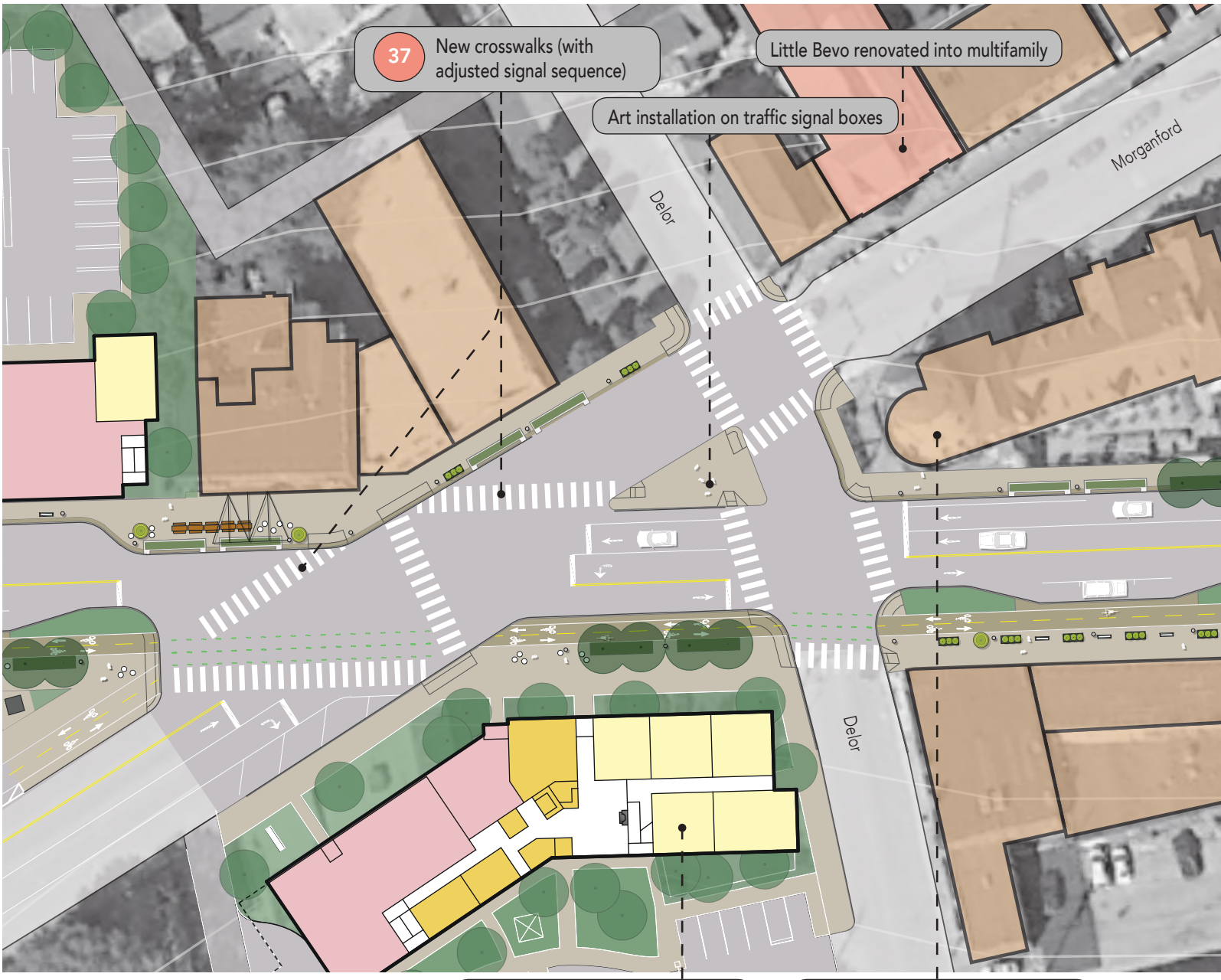
The addition of 40+ residential units works towards fulfilling one the project's goals: adding population and buying power within the neighborhood.



FUTURE PHASE

The recommended site plan accommodates the building program while setting aside land for future development. This illustration depicts five townhouse units.

THE BOWTIE: DELOR ST. TO ITASKA ST.



X *Recommended Project #, See Chapter 4 for more information*

MetroBus *MetroBus Stop Location*

Existing Buildings

Renovated Buildings

New Buildings: Retail

New Buildings: Residential

0' 15' 30'

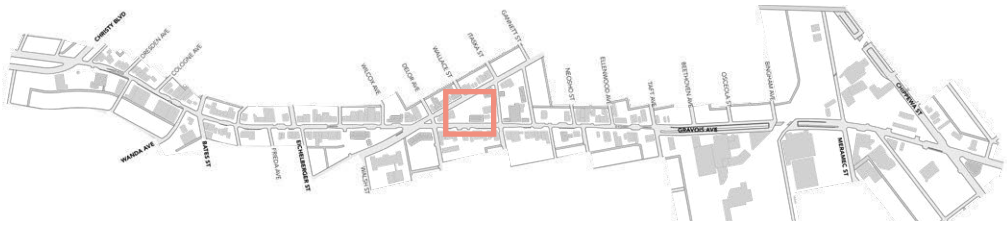
THE BOWTIE: MILL INFILL

FILLING IN THE STREET'S "MISSING TEETH"

The surface parking lot behind the Bevo Mill is currently a gap in the Gravois streetscape that should be filled. As a long-term strategy, the parking lot can be reconfigured to accommodate mixed-use buildings while maintaining the majority of its parking spaces. This kind of infill development would add density to the district and fill in the "missing teeth" of the streetscape. This recommendation is meant to be a secondary recommendation that follows the primary recommendations that fill existing vacant retail space.

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Commercial	LAND USE	Commercial; Residential
COMMERCIAL	0 SF	COMMERCIAL	8,000 SF
RESIDENTIAL	0 SF	RESIDENTIAL	13,100 SF
RESIDENTIAL UNITS	0	RESIDENTIAL UNITS	18
PARKING	125 Spaces	PARKING	67 Shared + 18 Resident

Aerial of the Bevo Mill parking lot, facing southeast



EXISTING

The surface parking lot behind the Bevo Mill is an under-utilized asset due to its prime location in the Bowtie district and its relatively infrequent use.

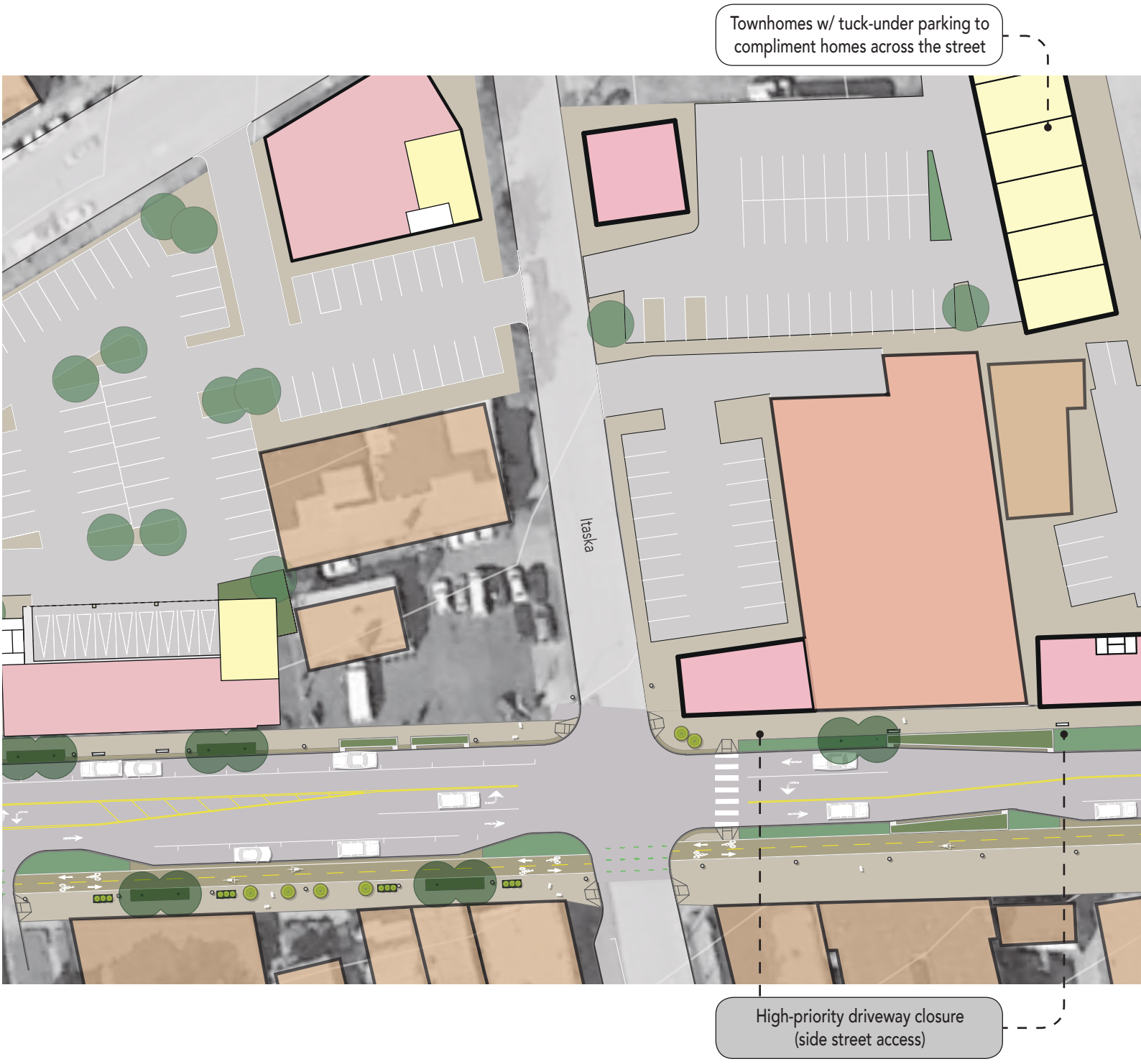
GROUND LEVEL

New mixed-use buildings could be constructed as shown on the conceptual plan while maintaining a significant portion of the existing parking spaces. Uses including artist lofts and showrooms may be appropriate here.

UPPER LEVEL

By placing one residential unit on the ground floor, these buildings are designed to meet the accessibility requirements of the Fair Housing Act (FHA) while avoiding the costly installation of elevators.

THE BOWTIE: ITASKA ST. TO NEOSHO ST.



12 Add Pedestrian-Scaled Lighting

High-priority driveway closure (consolidate access w/ adjacent parcel)

32 Install Stormwater Pedestrian Islands

Gannett

Neosho

Newport

MetroBus

MetroBus

X *Recommended Project #, See Chapter 4 for more information*

MetroBus *MetroBus Stop Location*

Existing Buildings

Renovated Buildings

New Buildings: Retail

New Buildings: Residential

0' 15' 30'

THE BOWTIE: FAMILY DOLLAR BLOCK

ADAPTIVE RE-USE WITH INFILL

Properties on this block could be assembled for a series of developments that complement the Bevo Mill and establish strong urban form at a key entry point into the Bevo Bowtie. A mix of commercial and residential uses would be appropriate on this site; the site is also one of few in the area large enough to accommodate a 40- to 60-unit affordable family housing development. The Family Dollar building, if preserved, could be repurposed as an urgent care facility or other commercial use. The plan shows how the land can be phased to accommodate coordinated near term and long term development, while prioritizing the pedestrian experience in each phase.

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Commercial; Residential	LAND USE	Commercial; Residential
COMMERCIAL	28,600 SF	COMMERCIAL	17,700 SF
RESIDENTIAL	16,500 SF	RESIDENTIAL	20,400 SF
RESIDENTIAL UNITS	12	RESIDENTIAL UNITS	9
PARKING	53 Spaces	PARKING	56 Spaces

Aerial of the block between Gannet and Itaska, facing northwest

EXISTING

The properties on this block have a key location in the Bowtie District. Several buildings on this block are currently underutilized and/or likely to see change in the coming years: the industrial Rausch Aluminum building at 4220 Gannett St is currently for sale; and while the Family Dollar on Gravois Ave is not on the current store closure list, the long-term viability of Family Dollar stores is in question.

GROUND LEVEL

The urban form of this block would be improved by adding two new structures: an addition to the Dollar Store building that would serve as a new entry that screens its parking lot, and a small mixed-use building at the corner of Gannett St and Gravois Ave. This plan also depicts a redevelopment of the property behind the Dollar store that includes a public parking that is visually connected to the Mill parking, and townhomes with tuck-under parking facing the existing residences along Gannett.

UPPER LEVELS

The small mixed-use building at the corner of Gannett and Gravois shown here is designed to have no more than three residential units above ground floor commercial space. By having fewer than four units, the building is not subject to the Fair Housing Act and can therefore avoid the costly installation of an elevator.

BEVO'S LIVING ROOM


CHRISTY BLVD
DRESDEN AVE
COLOGNE AVE
WANDA AVE
BATES ST
FREDA AVE
EICHELBERGER ST
WALSH ST
WILCOX AVE
DELOR AVE
WALLACE ST
ITASKA ST
NEOSHO ST
ELLENWOOD AVE
TAFT AVE
BEETHOVEN AVE
OSCEOLA ST
BINGHAM AVE
GRAVOIS AVE
MERAMEC ST
CHIPPEWA ST


Legend

UNITED NATIONS: GANNETT ST. TO TAFT AVE.

INTERNATIONAL FLAIR

The United Nations district currently is home to a cluster of international restaurants and food businesses, car sales and repair shops, and other small businesses.

ECONOMY & GOVERNANCE

The strategy for the United Nations district is to cultivate it as a small international village showcasing the rich diversity present in the Bevo community and St. Louis. Design Guidelines that eliminate tinted / reflected storefront glass in favor of greater transparency would be particularly effective in this district, allowing the surprisingly interesting and occupied interiors to be visible from the street.

MOBILITY

Creating pinch points at Taft Ave, where drivers currently speed through after coming back up from under the viaduct, will slow down motorists and allow for easier pedestrian movement between the businesses in this area. Improved signal phasing at Taft Ave will allow motorists entering Gravois Ave from the local one-way Gravois Ave from the north to have their own phased signal. See *Project #41, page 273*. This will reduce vehicular conflict at this intersection, improving the experience at this intersection and surrounding businesses.

Sidewalk dining is encouraged in this area, with its many restaurants and food retailers. *See Project #10, page 231*.

1. *The addition of many new crosswalks throughout the Bowtie increases walkability by shortening the average distance between crossings. These installations can be phased for highest impact.*

2. *Consolidation of driveways should be encouraged. The parking lots of the existing restaurants on the west side of Gravois between Gannett and Neosho can share a single curb cut on Gravois as well as utilize the alley for access to their parking lots.*

3. *The existing building at the east corner of Gravois and Gannett is vacant at the time of this report. The form of the existing building, a bank with several lanes of covered drive through tellers, could lend itself to a restaurant with covered outdoor seating. Like the strategy described in item 1, the driveways from the property to Gravois can be eliminated by directing access to the parking lot to the rear alley or Gannett.*

4. *The east block of Gravois between Neosho and Taft is currently littered with curb cuts. Driveways should be closed and access redirected to the rear alley in conjunction with the creation of the cycle track.*

5. *Utilizing the existing surface parking lot as a shared parking lot for the United Nations district would offset the loss of the on-street parking spaces associated with the re-striping of Gravois. Alternatively, future development of this property could replace the surface parking lot with multi-family housing, greatly improving the compatibility of the form and use with the adjacent residential properties to the south and east.*

6. *At the Taft/Gravois intersection, safety enhancements including upgraded signal programming, bumpouts, and local gateway signage work together to slow down traffic and announce the arrival into a walkable stretch of Gravois.*

COMMUNITY

This district aligns with the Prairie ecological zone, which results in fewer shade trees and an increase in planters with groundcover. *See pages 164 - 171 for more information on the Ecological Transect*.

UNITED NATIONS: NEOSHO ST. TO TAFT AVE.

X *Recommended Project #, See Chapter 4 for more information*

MetroBus Stop Location

Existing Buildings

Renovated Buildings

New Buildings: Retail

New Buildings: Residential

0' 15' 30'

VIADUCT: TAFT AVE. TO MERAMEC ST.

Existing Buildings

Renovated Buildings

A PLACE FOR MANUFACTURING

While sites adjacent to the viaduct present opportunities to introduce a more dense housing product, the remediation costs associated with redevelopment for residential use would likely be prohibitive. Additionally, there is local interest in maintaining manufacturing and other active uses that create jobs in the area. Key is integrating these areas with the surrounding residential neighborhood.

ECONOMY

Maintaining access across Gravois Ave in the form of the City bridges on either side of the viaduct was considered essential to the viability of these properties by local stakeholders, including the Dutchtown community.

MOBILITY

Underneath the viaduct, a raised pedestrian and bicycle platform to the south/east allows for safer passage between Meramec St and Taft Ave. Art and landscaping soften the experience of traveling under such a large hardscape element.

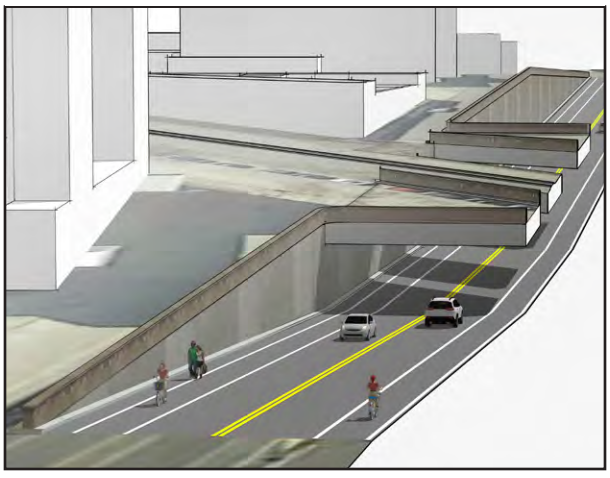
GOVERNANCE

Code changes in this area allow for light manufacturing, rather than currently allowed heavy industrial uses not complementary to the surrounding residential neighborhoods.

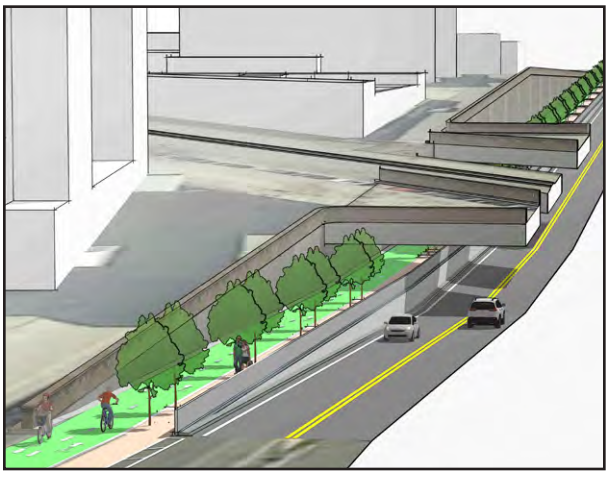
COMMUNITY

Murals and pedestrian-scale lighting add flair to the walls under the viaduct. Evergreens, textures, and wood elements reflect the dry savanna ecological zone of the area. Sight lines are maintained between the pedestrians and motorists.

1. *Lower viaduct transformed from a dangerous pedestrian area to a multimodal zone by separating the pedestrians and cyclists with an elevated multi-use path. Sight lines are maintained between motorists and pedestrians through the use of steel pickets (no cement barricade). Further studies are needed, but an appropriate elevation at the point of maximum separation is six feet above Gravois, maintaining a nine-foot clearance.*
2. *Potential removal of the existing bridges over the viaduct was assessed due to their need for repair in the future. However, these bridges provide important vehicular connections and their removal would affect viability of the existing industrial properties. Therefore it is recommended that both bridges be retained and repaired as necessary. Because of the large financial and logistical investment required to rebuild these bridges, construction of this repair project could coincide with the construction of the elevated multi-use trail described in item #1, which would be more efficient than if each project were conducted independently.*
3. *Pedestrian path from existing bridge infrastructure to Meramec St., following the railroad tracks.*
4. *One or more of the existing historic structures at the previous Alligator Clothing Factory site rehabilitated as a creative maker space or lofts. See* *Project #22, page 246*.
5. *Existing industrial property retained and broken down into small-scale industrial instead of the current use of heavy industrial.*
6. *New 60,000 sf park with basketball court, amphitheater, etc. See* *Project #29, page 254*.



Viaduct - existing condition.



Viaduct - proposed condition separates cyclists and pedestrians with elevated path on one side.

VIADUCT: 4450-4316 GRAVOIS

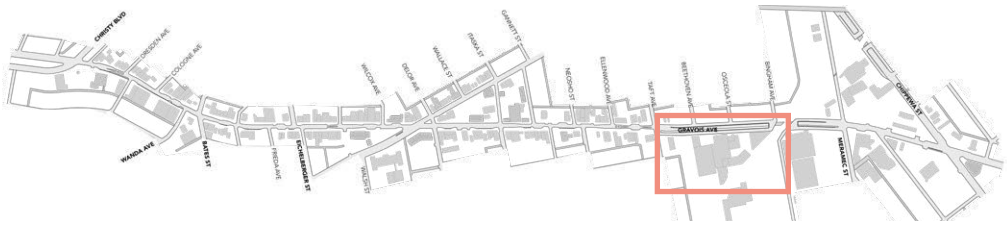
REUSE OF AGING INDUSTRIAL

While the site presents an opportunity to introduce a more dense housing product (taller buildings here would present fewer issues in terms of compatibility with single family homes), a Phase 1 Environmental Study is recommended to verify potentially high remediation costs associated with redevelopment. Furthermore, the large industrial building on the northeast side of Taft could function as an employment center for the neighborhood. Small-scale manufacturing would work well on this site - something that needs more space for deliveries and manufacturing space, but that is more friendly to neighboring residential uses than the currently allowed industrial uses.

If full remediation is not possible or necessary, environmental improvements to the property can also make the area more cohesive with the rest of the Gravois corridor and connect to the new park on the side of the development near the tracks.

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Industrial	LAND USE	Mixed
INDUSTRIAL	136,000 SF	INDUSTRIAL	136,000 SF
RESIDENTIAL	0 SF	RESIDENTIAL	12,000 SF
RESIDENTIAL UNITS	0	RESIDENTIAL UNITS	0
PARKING	30 Spaces + 12 loading bays	PARKING	25 Spaces

Aerial of the "Industrial High" property, facing northeast



EXISTING

While the existing industrial buildings are under-utilized (apparently storage or previously used manufacturing), their form and the zoning classification of the property present an opportunity for re-use into small-scale manufacturing that provides jobs to the city's south side. Examples include small-scale brewing, or other art maker-spaces.

RECOMMENDED

Utilizing the existing surface lot at the east corner of Taft Ave / Gravois Ave as a shared parking lot for the district could offset the loss of on-street parking spaces associated with the restriping of Gravois Ave. Alternatively, future development of the property could replace the surface parking lot with multi-family housing, greatly improving the compatibility of the form and use with the surrounding residential properties, since the site is likely to require costly remediation, the housing product would be dense enough to justify the site work. Construction costs can be mitigated by balancing density with "lean" construction types.

VIADUCT: 4019 TAFT

4019 TAFT AVENUE

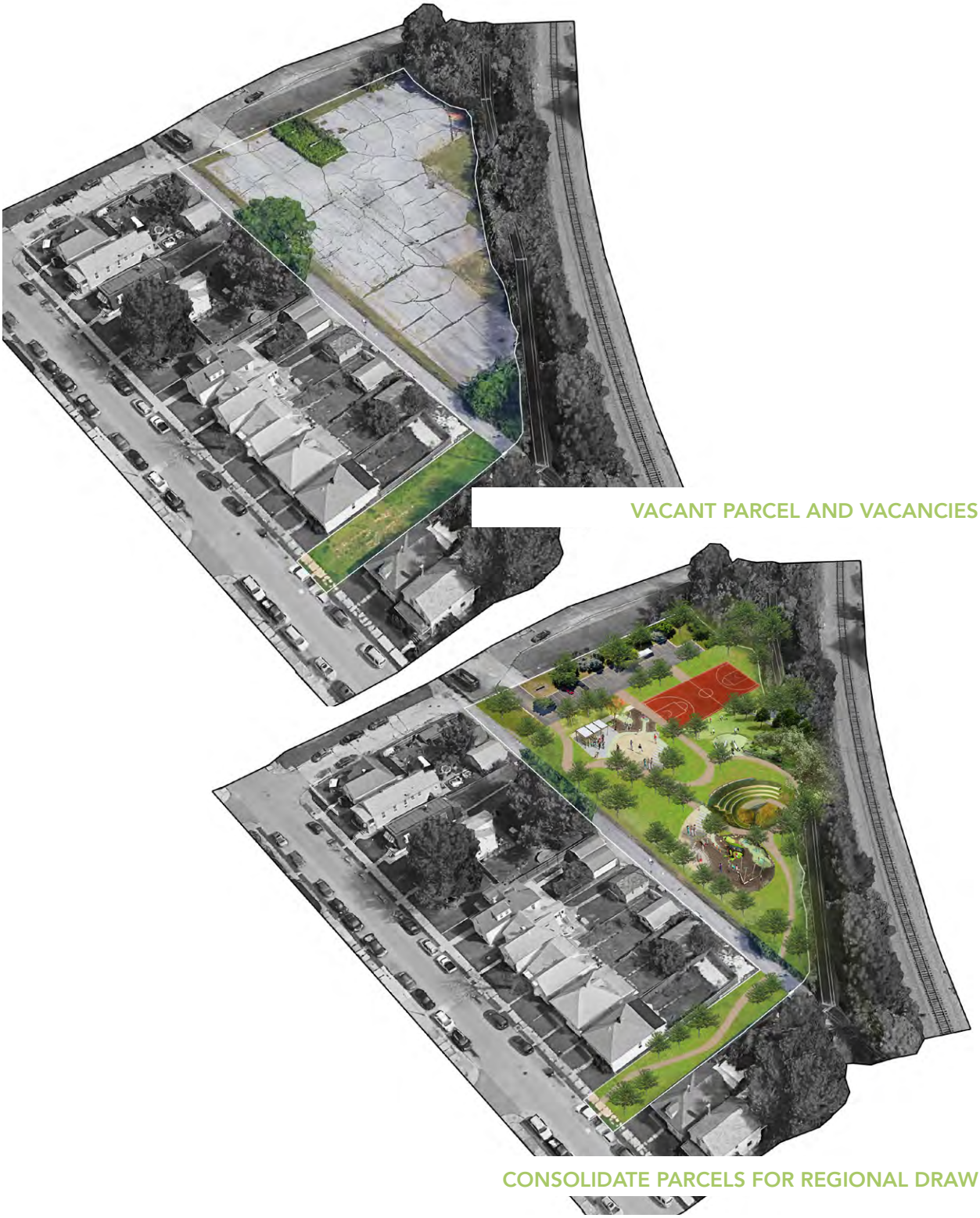
By combining the single LRA lot with the adjacent vacant parcels to the north, the area for implementation grows from 3,600 square feet to almost 60,000 square feet of land, allowing for endless programmatic opportunities. Also, this vacant parcel is within a 5-minute walk of Gravois Ave, as well as a 10-minute walk from proposal step-up housing and potential park use across Gravois Ave.

CONSOLIDATE VACANCIES TO DEVELOP A REGIONAL DRAW

Adjacent properties eligible for larger-scale redevelopment, there exist opportunities to consolidate parcels in an effort to maximize impact on the parks desert. These parcels can begin to offer amenities beyond what is possible on single or small-scale properties. Active recreation, play equipment and pavilions for rent are all possible on larger properties - while providing ecological benefits for the neighborhood that buffers from industrial and rail land uses. In particular, the addition of a basketball court, which were removed from many St. Louis communities due to noise complaints, would be in line with the Bevo community's welcoming and inclusive attitude.

We propose a strategic consolidation in support of future development at the Taft site that will provide active recreation and varied other uses. This can act as a gathering area with stage and pavilions - away from dense residential uses to encourage evening use.

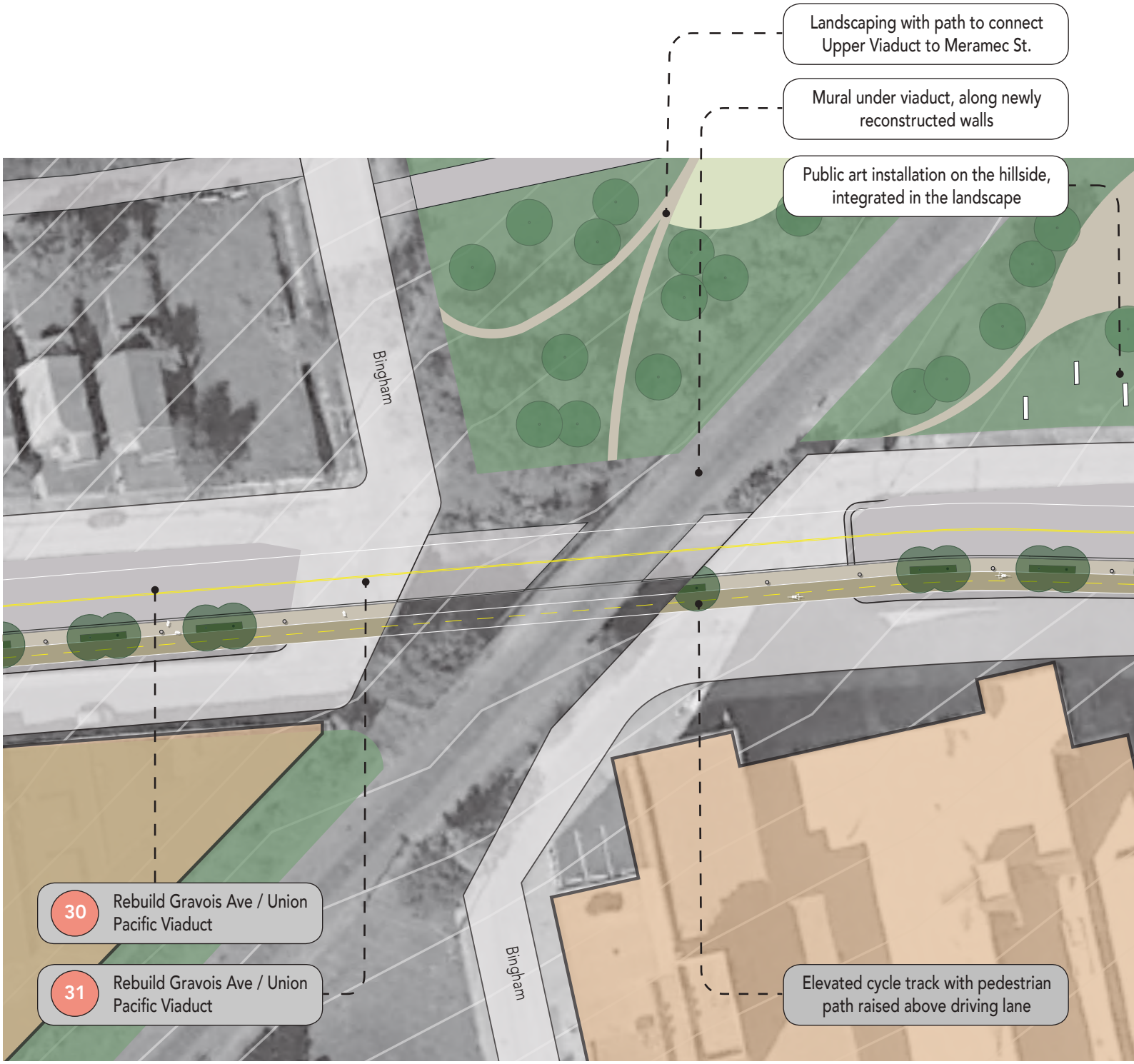
Projects of this scale could be piggy-backed with a development agreement for nearby parcels, as such funding and implementation plans should be written into development agreements and RFPs.

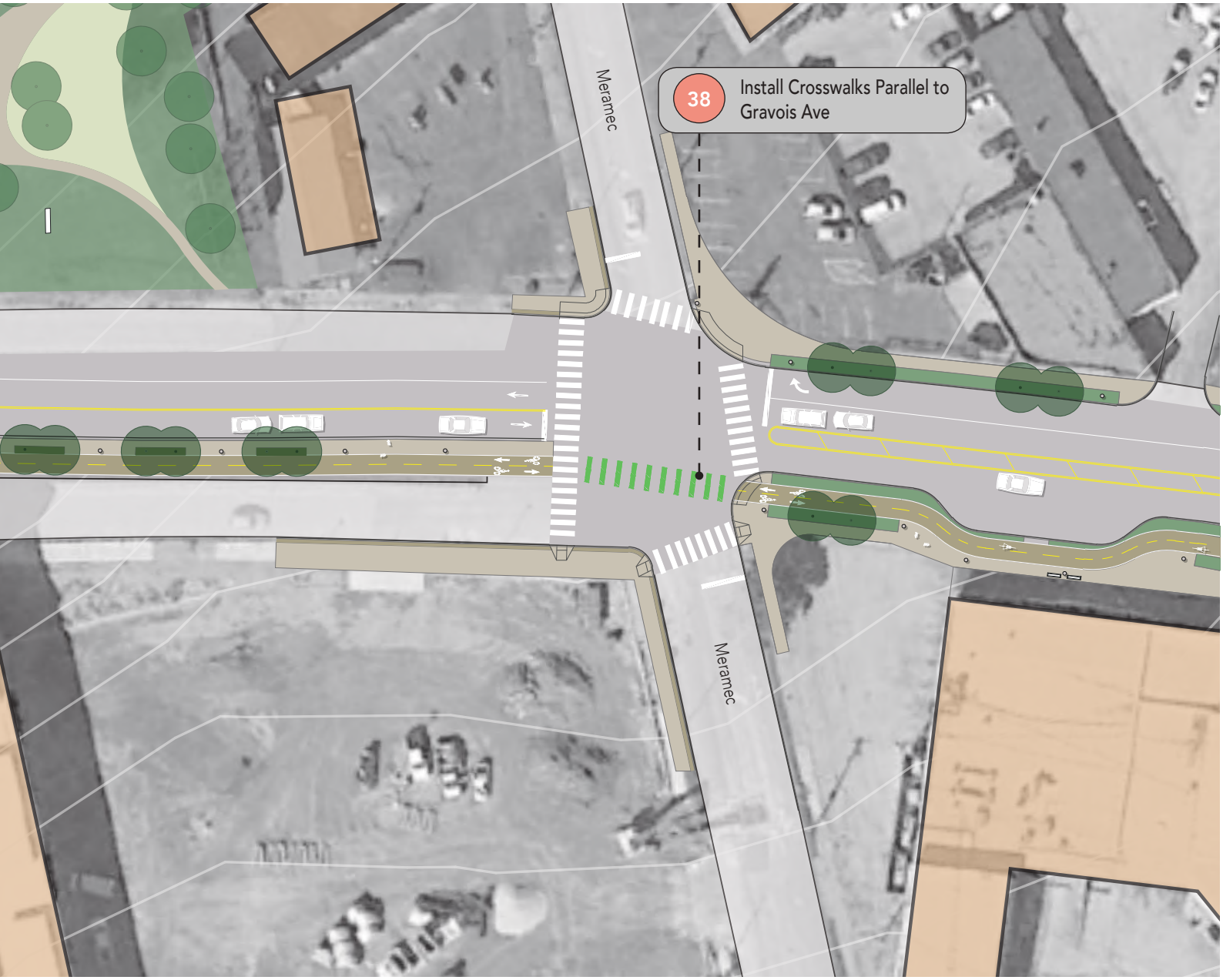


VACANT PARCEL AND VACANCIES

CONSOLIDATE PARCELS FOR REGIONAL DRAW

VIADUCT: BINGHAM AVE. TO MERAMEC ST.





X *Recommended Project #, See Chapter 4 for more information*

MetroBus *MetroBus Stop Location*

Existing Buildings

Renovated Buildings

New Buildings: Retail

New Buildings: Residential

0' 15' 30'

VIADUCT: 4153 BINGHAM AVE (ALLIGATOR CLOTHING SITE)

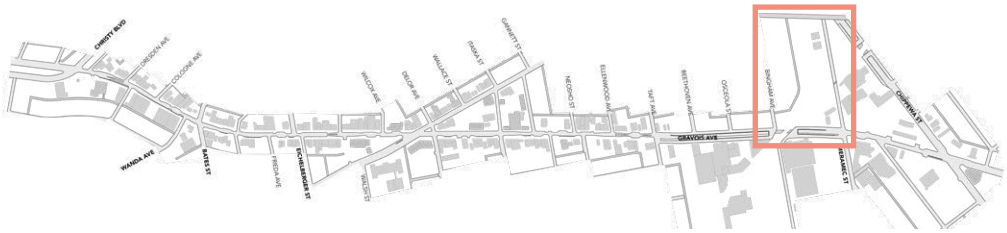
VACANT TO VIBRANT

While this site is not within the official boundary of the Study Area, it is a potential asset within the larger context of this area. One approach to this property would be to rehabilitate one or more of the existing structures as a creative maker space. A second, complementary, approach would be to convert one or more of the existing structures into loft apartments. In a later phase, the site's remaining 1.5 acres could be used for the development of infill housing, providing a larger "move-up" housing type as a detached single-family typology, as duplexes, or as townhomes.

Both uses would benefit from a broader plan for the area surrounding Meramec St that addresses vacant properties and improves connectivity to Chippewa St and the Tower Grove South neighborhood to the north. *See Project #22, page 246.*

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Commercial; Residential	LAND USE	Commercial; Residential
COMMERCIAL	0 SF	COMMERCIAL	50,000 SF
RESIDENTIAL	0 SF	RESIDENTIAL	34,000 SF
RESIDENTIAL UNITS	0	RESIDENTIAL UNITS	6-30
PARKING	0	PARKING	(as req'd)

Aerial of Alligator Clothing Factory property, facing northwest



EXISTING

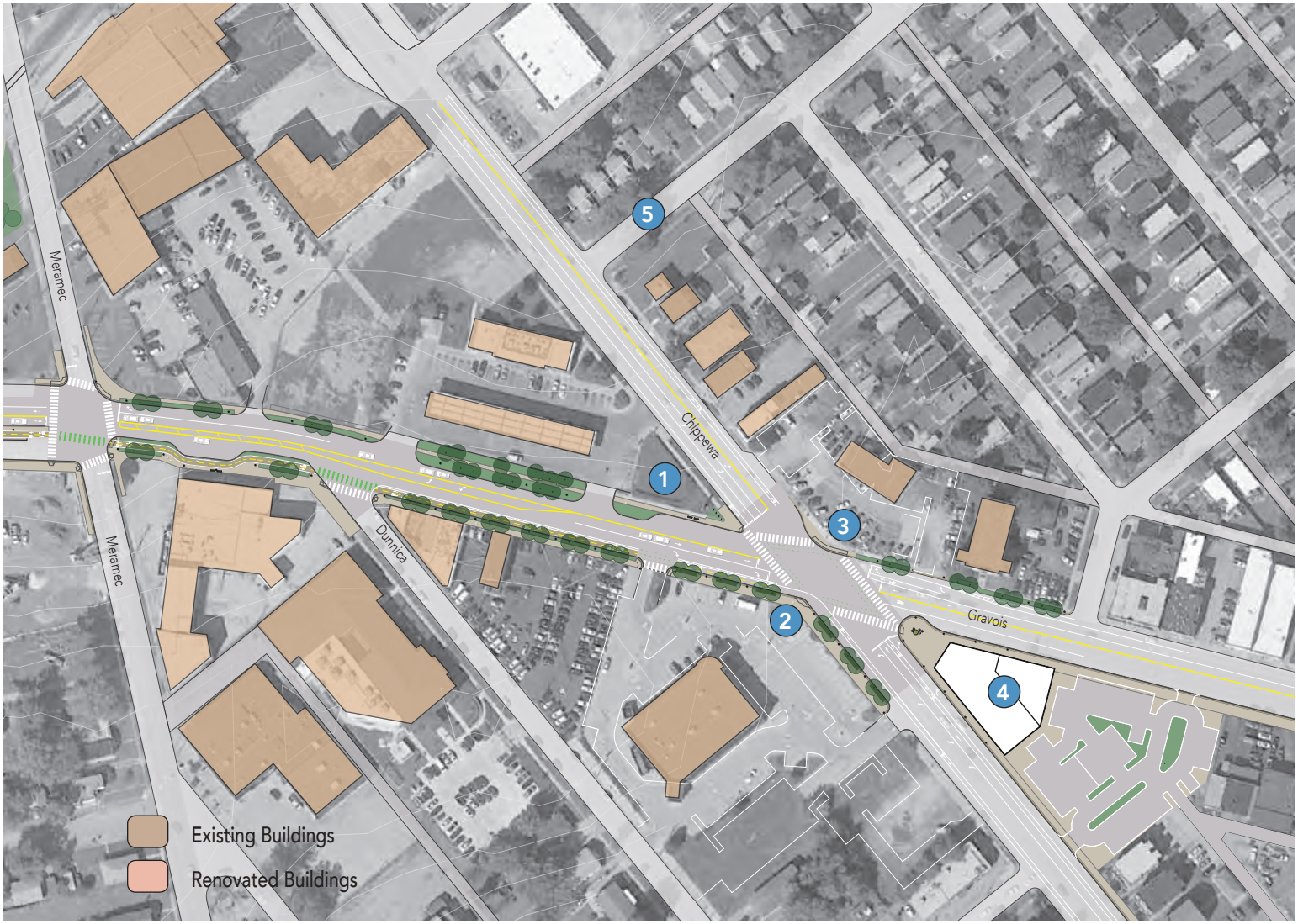
At nearly five acres, the property at 4153 Bingham Ave is one of the largest sites in the area surrounding the viaduct.

The property's current vacancy and poor condition have a blighting influence on the neighborhood to its south. Improving this property can create the conditions for addressing vacancies and promoting reinvestment in the housing stock in this area, which is in poor condition in some cases.

RECOMMENDED

Rehabilitation of one or more of these buildings, using state and federal Historic Tax Credits, could establish a new anchor within this part of the neighborhood. While these buildings do not have the iconic presence and visibility equivalent to the National Candy Company Building (now occupied by U-Haul), the largest building of the complex is clearly visible from Gravois Ave. Improving the appearance of this building—particularly its north-facing façade—could make a positive contribution to the broader goal of creating a positive gateway into the neighborhood. A Phase 1 Environmental Study is recommended to verify potentially high remediation costs.

CHIPPEWA: MERAMEC ST. TO CHIPPEWA ST.



PEDESTRIAN- & AUTO-ORIENTED RETAIL

The area between the viaduct and Chippewa St is dominated by auto-oriented businesses such as the QuikTrip, the CVS, various auto-repair and sales shops, the Gravois car wash, and the U-Haul moving and storage facility. The intersection of Chippewa St and Gravois Ave is the most visible site within this district; key parcels at this corner are held by owners with plans to use them for future auto-oriented development such as an expanded gas station and convenience store, and a drive-through fast food restaurant.

ECONOMY

The strategy for the Chippewa area is to continue to accommodate auto-oriented uses, but in a way that minimizes pedestrian and automobile conflicts (i.e. curb cuts and long intersection crossings) and includes possibility of mixed-use development in the much longer term. Assuming limited demand for neighborhood-scale retail in the near term, more walkable commercial uses and complementary housing development are focused in the Bowtie, Christy, and United Nations districts within the Study Area.

MOBILITY

The two-way cycle track connects with existing separated bike lanes on both Chippewa St and Gravois Ave. This transition is

enhanced by the recommendation to turn Oak Hill Ave into a Calm Street that has lower traffic, and therefore safer conditions for pedestrians and bikers. This Calm Street could continue north to Tower Grove South, providing a much-desired connection between these two communities. While outside the boundary lines of the Bevo Great Streets Study Area, this recommendation should be explored and vetted with the communities more directly impacted by it.

GOVERNANCE

The Bevo form-based code overlay should have a Chippewa neighborhood type that addresses the automobile-oriented chain brands at this intersection to truly transform it into a more walkable area. Over time, this code will allow for long-term developments to provide improvements to the pedestrian experience beyond any of the short-term improvements. See *Project #2, pp.222 - 223* for more information on the code recommendations for this district.

COMMUNITY

Extended sidewalks provide a more pleasant pedestrian experience, with shade trees along the sidewalk. Adding to the experience is an improved space at the wedge in front of the QuikTrip. Dry savanna landscaping or a place to sit would be appropriate. Screening of the parking lots along the CVS parking lot will provide a buffer between pedestrians and parked cars, eliminating the possibility of cars hanging over the sidewalk. Signage is still oriented to motorists in the short-term, and lighting levels are more intense due to the intersection of the major arterials of Gravois Ave and Chippewa St.

1. *The wedge at the tip of the QuikTrip property has a prominent aspect in terms of the urban design quality of the intersection. Improved landscape treatments are recommended to establish a higher quality public environment at the entry to the Bevo neighborhood.*

2. *The CVS parking lot is currently over-sized and the building is set back very far from the street. Form-based code standards for auto-oriented development that guide building placement and circulation can help to create a development pattern that supports a more comfortable pedestrian experience. If this site is redeveloped in the long-term, the parking lot could be reconfigured to accommodate future development close to the street while allowing the existing pharmacy building to function. Unspecified underground utilities at the Gravois Ave /Chippewa St corner of this parcel should be considered. See Appendix #8: Option Selection, pp. 586 - 587.*

3. *The form of the existing business at the northwest corner of the intersection, an auto dealership, is not supportive of walkable urbanism. Form-based code standards would guide future development to place buildings close to the sidewalk with parking screened behind.*

4. *Like the parcels described in items 2 and 3, future development at the wedge shaped property opposite the QuikTrip would be guided to build close to the sidewalk.*

5. *Transforming Oak Hill Street into a Calm Street to enhance pedestrian and bike connectivity to Tower Grove South to the north. See Project #35, page 265.*

CHIPPEWA: MERAMEC ST. TO CHIPPEWA ST.

X *Recommended Project #, See Chapter 4 for more information*

MetroBus *MetroBus Stop Location*

Existing Buildings

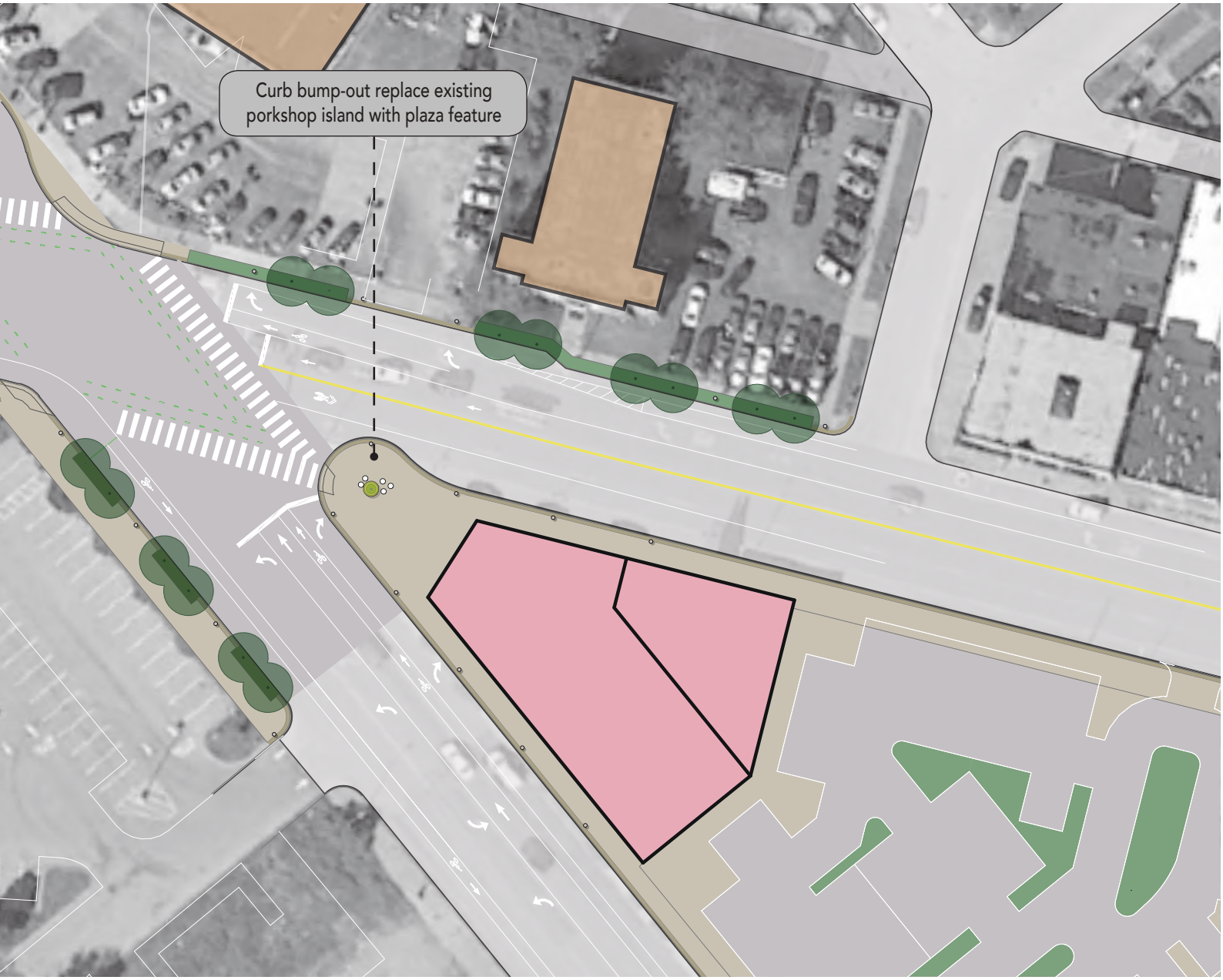
Renovated Buildings

New Buildings: Retail

New Buildings: Residential

0' 15' 30'

CHIPPEWA: CHIPPEWA ST. / GRAVOIS AVE. INTERSECTION



X *Recommended Project #, See Chapter 4 for more information*

MetroBus *MetroBus Stop Location*

Existing Buildings

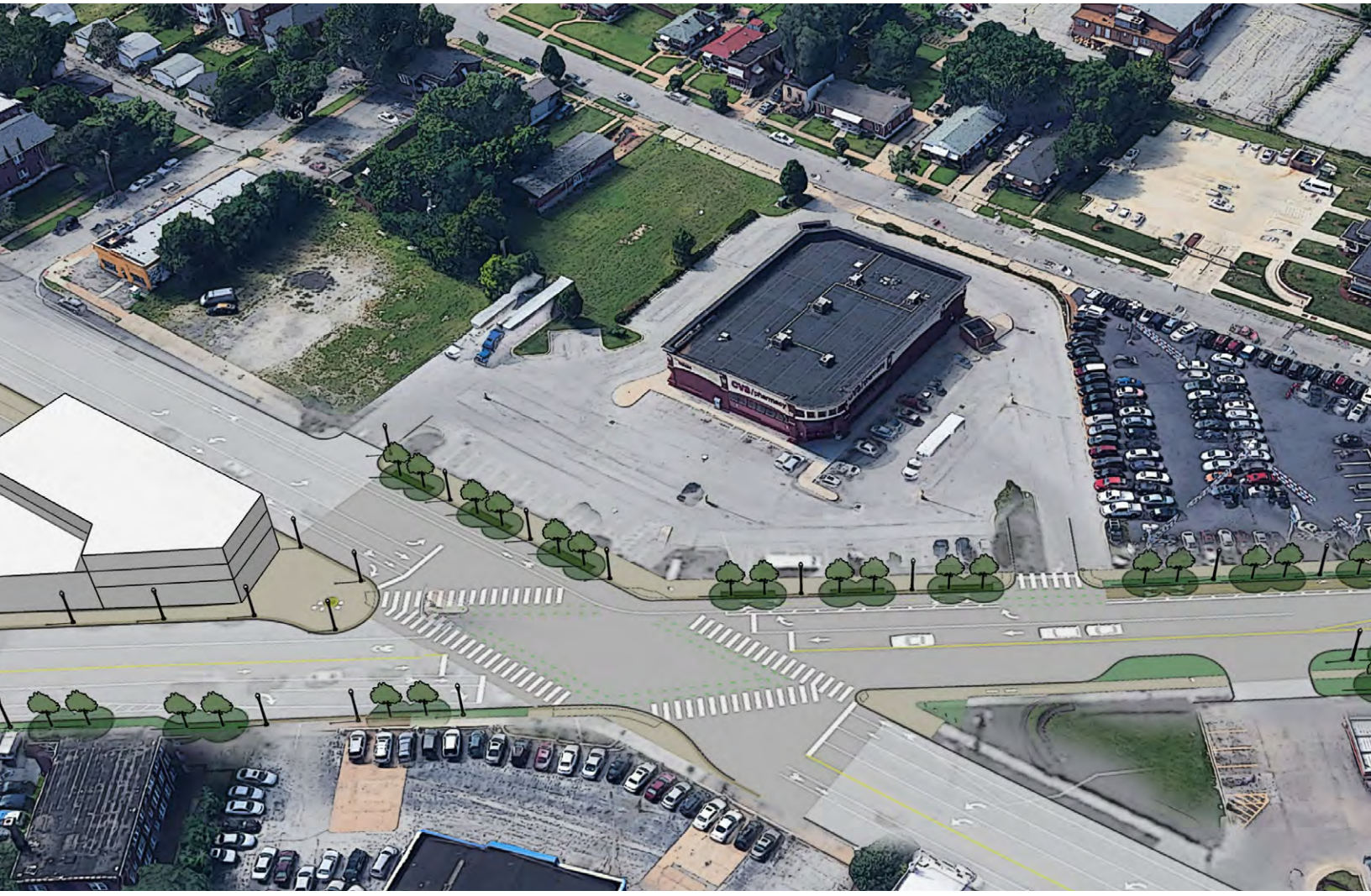
Renovated Buildings

New Buildings: Retail

New Buildings: Residential

0' 15' 30'

CHIPPEWA: CVS SITE



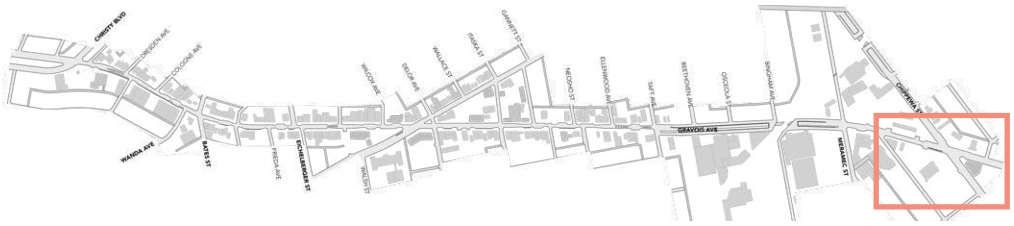
IMPROVING THE PEDESTRIAN & BIKE EXPERIENCE

The CVS parking lot is currently over-sized and the building is set back very far from the street. Sidewalks feel unprotected between driving lanes on one side and parking stalls on the other. Greening the sidewalk, providing a larger buffer, and allowing for a shorted crossing distance would make the intersection more accessible to pedestrians.

The parking lot could be reconfigured to accommodate future development close to the street while allowing the existing pharmacy building to function. FBC standards for auto-oriented development that guide building placement and circulation can help to create a development pattern that supports a more comfortable pedestrian experience.

SITE DETAILS			
EXISTING		PROPOSED	
LAND USE	Commercial	LAND USE	Commercial
COMMERCIAL	12,500 SF	COMMERCIAL	43,000 SF
RESIDENTIAL	0 SF	RESIDENTIAL	0 SF
RESIDENTIAL UNITS	0	RESIDENTIAL UNITS	0
PARKING	86 Spaces	PARKING	137 Spaces + Drive Thru

Aerial of CVS property, facing southeast



EXISTING

The intersection of Chippewa St and Gravois Ave is a gateway to the Bevo neighborhood from the north. The surface parking lot in front of the CVS building at Chippewa and Gravois contributes to an unwelcoming pedestrian realm. While redevelopment of this site is unlikely in the short- and medium-term, in the long-term there is an opportunity to re-imagine this important site as a more pedestrian-friendly place defined by the surrounding urban form.

RECOMMENDED

The transition from cycle track to separated bike lanes on the opposite side of the intersection requires southbound bikers to transition across the intersection via a separate signal phasing when Chippewa right-turn traffic occurs. Alternatively, bikers may dismount and cross as a pedestrian. Trailnet may consider this a location to put a bike service "out lot" station near the intersection. A bike service station and water refill station provide amenities for the active users of the corridor. Further, Metro should consider enhanced transit stop amenities for cyclists that are using transit. With both Gravois Ave and Chippewa St as high frequency routes in the new Metro Reimagined plan, this could be an ideal location for a multimodal hub.

REGULATIONS IN BEVO

ZONING & LAND USE

IT'S ALL ABOUT FORM

The map to the right indicates the zoning changes recommended in the Study Area. Concerns about the current Gravois zoning address both form and use. The form concerns include building height, parking placement, and density, while the use concerns involve instances of both restrictiveness and permissiveness.

The zoning governing the Bevo neighborhood is the conventional text-based approach ("Euclidean zoning") that is the norm across St. Louis. In form and substance this type of zoning is suboptimal: it is opaque to non-professionals and regulates design attributes the opposite of what is required to create a walkable district. For instance, building setbacks and off-street parking requirements are set as minimums rather than maximums. The alternative approach to zoning is called form-based, an innovative approach now becoming mainstream.

Fortunately, the City of St. Louis has developed a template form-based code that this plan recommends be adopted for the entire Study Area. The code would have to be calibrated to deliver different desired outcomes in different segments of the corridor including the unique attributes of the outdoor room at the Bevo Bowtie, a typical street frontage along Gravois Ave and the sprawl repair needed at Chippewa St.

PEDESTRIAN STREET OVERLAY

All along Gravois Ave, this plan recommends the adoption of an overlay that requires the basic elements of walkability: entries facing the street, a minimum of 80% of the street facing frontage needs to include a building entry (typically recessed), storefront transparency along 75% of the façade between 2' and 8' above finished grade, parking lot screening, no driveways, and parking in the rear.

Bowtie

The Bowtie is envisioned as an outdoor room, the parameters of which fall outside what current zoning allows. For example, buildings are limited to three stories as of right while the Bowtie recommends buildings as tall as six stories. In addition, there is public support for the Midwest BankCentre redevelopment at 4914 Gravois Ave to be four or five stories tall. The zoning needs to be modified to require a minimum three-story building height and a maximum eight story height.

Chippewa

The code in the Chippewa district should be focused on sprawl repair: a minimum of 50% of the street facing frontage needs to include a building entry, maximum 10' setback, and storefront transparency along 80% of the façade between 2' and 8' above finished grade.

EXISTING COMMERCIAL ZONING

Both Gravois Ave and Morganford Rd fall in zoning designation "F: Neighborhood Commercial" which has the purpose of serving surrounding neighborhoods with office, commercial, and services on a day-to-day basis. In the Bevo Bowtie, the "G: Local Commercial & Office District" zoning type applies. This zone accommodates a range of larger businesses for personal and home needs. While the Neighborhood Commercial Zoning along Gravois Ave encourages local owners and niche businesses, the Local Commercial Zoning often serves as regional anchors for businesses with larger market areas.

Downzone Unrestricted Uses at Gravois/Viaduct

Immediately adjacent to Bevo and the railroad tracks to the east is one of the few areas in this part of the City that has unrestricted and industrial zoning types. Maintaining the industrial and manufacturing employment opportunities inherent to these zone types is of interest to the communities participating in this Plan. If this area becomes more ripe for new development in the future, the City should consider zoning that would encourage mixed-use and residential redevelopment. However, that change would be after a focus on redevelopment and filling vacancies along the corridor/Bowtie district.

This area (east of Gravois Ave and directly south of the railroad tracks) is designated "K: Unrestricted." This zoning designation tends to take place near highways, industrial tracks, or other large pieces of infrastructure. All uses are allowed, excluding any use which allows for permanent or temporary dwelling. Conditional uses include fertilizer manufacturing, petroleum refining, and stockyards. This report recommends that the zoning be changed to prohibit the following uses:

- Fertilizer manufacture and potash refining
- Fuel manufacture
- Garbage, offal, or dead animals, reduction or dumping
- Petroleum refining
- Stockyards or abattoir

This area of the community should be rezoned to prohibit


CHIPPEWA ST
BINGHAM AVE
OSCEOLA ST
BEETHOVEN AVE
TAFT AVE
ELLENWOOD AVE
NEOSHO ST
GANNETT ST
ITASKA ST
WALLACE ST
DELOR AVE
WILCOX AVE
WALSH ST
EICHELBERGER ST
BATES ST
KINGSHIGHWAY BLVD
RIDGEWOOD AVE
ALFRED AVE
CHRISTY BLVD
DRESDEN AVE
COLOGNE AVE
MORGANFORD RD
WANDA AVE
GRAVOIS AVE
ADKINS AVE
NEWPORT AVE
RAY AVE
ALEXANDER ST
Proposed down-zoning from "K: Unrestricted" to "J: Industrial"
Proposed down-zoning from "J: Industrial" to "G: Local Commercial"
Form-Based Code Overlay District

some of the current conditionally-allowed uses that are not neighborhood-friendly. The "J: Industrial" zoning type is an example. The J Industrial zoning allows small-scale manufacturing, which refers to small businesses producing tangible goods, and is a good fit for this area. Shared kitchens and workshops, as well as small businesses producing for broad distribution, would work well in the existing building and street connectivity. They would also work well under a future long-term redevelopment scenario that adds a street parallel to the railroad and a mixed-use development with a variety of housing types.

Downzone Industrial Uses at Gravois/Viaduct
Immediately adjacent to Gravois Ave and the railroad tracks to the west is a large block currently designated J: Industrial. Similar to the case across Gravois Ave, maintaining the industrial and manufacturing employment opportunities inherent to these zone types is of interest to the communities participating in this Plan. However, as this area becomes more ripe for new development in the future, the City should consider zoning that would encourage mixed-use and residential redevelopment, such as lofts and artist uses as proposed in this plan.

HOUSING FOR ALL

Outside the Great Streets study area in the Bevo neighborhood, most residential parcels are zoned as Single-Family. Contrary to its name, this zoning type allows for both single- and two-family homes. As the desirability of the Bevo neighborhood continues to grow the housing stock should be allowed to incrementally add dwelling units to provide for affordability. This goal can be accomplished by providing a range of housing types that accommodate families of different sizes and income levels called missing middle.

SPECIAL USE DISTRICT

While a Form Based District may be feasible in the long term, the City should work with the CID in the short-term to enact a Special Use District (SUD). A Special Use District is intended to assist in the implementation of a plan, and may prohibit the creation or expansion of existing uses, subject uses to a specific list of limitations, and/or give flexibility by allowing prohibited uses as conditional. Additionally, a SUD may deal with other criteria including height, parking, vehicular and pedestrian access, and outdoor lighting among other things.

Given the extensive outreach and participation seen in this Great Streets planning process, and to build on the wishes of the community as heard through this process, the proposed SUD should allow for uses such as residential in areas where residential isn't currently permitted; and cafes, bar & grill restaurants, and meat, produce, grocery, and deli businesses with outdoor seating which historically have needed to be approved through the variance process.

Additionally, the SUD should prohibit uses which do not promote a walkable, vibrant street such as (but not limited to) auto-uses, gas stations, uses with open storage, and drive-through restaurants. Finally, the SUD should allow for a height of 8 stories in the Bowtie area along Gravois Ave and Morganford Rd between Eichelberger and Itaska Streets.

While these are the major issues that can be addressed by a SUD overlay, the City should review the entire plan and ensure that all applicable recommendations, which can be addressed by the SUD, should be included in the formation of such legislation.

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DESIGN GUIDELINES

SYSTEMS OF THE GRAVOIS CORRIDOR

CREATING A WELCOMING URBAN PLACE

These design guidelines are intended to guide the redevelopment of Gravois into a Great Street that offers a beautiful, inviting, and functional public realm. Design guidelines for the streetscape, building frontages, and branding are included.

PURPOSE

These guidelines are meant to help implement the goals and objectives of this plan.

Site planning guidelines should be codified in amendments to existing code regulations, or in the creation of form-based code overlays. *Please see Project #1 and #2, pp. 221 - 223, for more information about recommended regulatory changes.*

DESIGN ELEMENTS

Guidelines are organized into the following topics:

- Branding
- Street Elements
- Redevelopment
- District Architecture
- Non-Building Architectural Elements
- Signage
- Parking
- Art
- Lighting
- Streetscape Furnishings
- Landscaping
- Stormwater
- Parks

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BRANDING

DISTRICTING

A districting strategy offers a framework for competitively positioning the Study Area as a commercial corridor with a distinct character and identity. There are many neighborhood districts throughout St. Louis, each with its own identity. Successful districts are known not for a single thing, but for two or three or more distinct features that help them stand out from others. Bevo will be well-served to identify, enhance, and amplify these features to the broader St. Louis public.

At 1.5 miles in length, the Bevo Study Area does not have a singular, cohesive district identity, and establishing one would be challenging given the range of uses present. Bevo's diversity is one of its greatest strengths and points of pride, and offers a foundation on which to build a districting strategy. Accordingly, the District Diagram defines four sub-districts along the Gravois corridor, and suggests brands intended to communicate the identity of these districts.

CHRISTY/CARS & BARS

With an eclectic mix of residential and commercial uses, the section of Gravois Ave bounded by Christy Blvd to the south and Eichelberger to the north can be characterized by its auto repair and sales shops, bars and restaurants, and neighborhood-oriented service businesses. Given Gravois' history as part of Route 66 and the community's interest in vintage cars (as expressed through its tradition of antique car shows), embracing, celebrating, and enhancing the area's car-focused businesses is an opportunity. Public realm improvements can incorporate car-themed art and murals that playfully complement the land uses in the area.

The CID should continue to work with property owners to expand public visitor access to properties with vintage car collections, and/or install lighting that highlights these collections as attractions from the sidewalk; over time, the CID and these efforts will contribute to a unique visitor experience for the area. This car-focused thematic element could also be carried beyond Christy into other districts.

THE BOWTIE: BEVO'S LIVING ROOM

Centered around the iconic Bevo Mill, the "Bowtie" is the historic center of the Bevo community. This subarea is characterized by the confluence of historical, traditional architecture and the neighborhood's eclectic, artsy vibe. Branding in this area should creatively and thoughtfully incorporate these two identities. Focusing a mix of eclectic arts-oriented users around the Heavy Anchor could establish an arts and music cluster within the Bowtie over time. Twenty-six buildings in this district are contained within the Bevo Mill Commercial Historic District, added to the National Register of Historic Places in 2013. This designation allows property owners to use state and federal Historic Tax Credits to cover a portion of the costs of renovating the buildings.

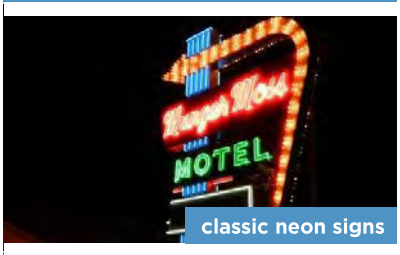

Service firms (e.g., mortgage & insurance)
Salons and barber shops
EICHELBERGER
CHRISTY
Coffee shop
Car-themed art


Local retail
coworking
restaurants
Thrift shop
Art studios and galleries
HISTORIC DISTRICT
Creative firms
ARTS/ CREATIVE
Mixed-income housing

CARS & BARS

references to Route 66

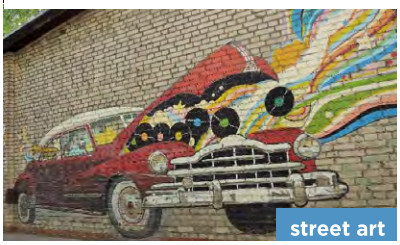

drive-in theatres



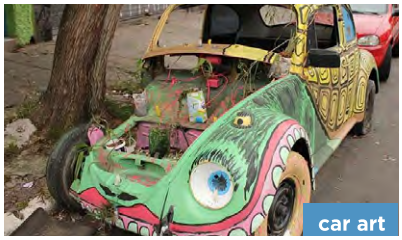
classic neon signs


reuse old car parts


antique car show


street art

drive-in dining


car art

UNITED NATIONS: INTERNATIONAL VILLAGE

The United Nations district currently is home to a cluster of international restaurants and food businesses, car sales and repair shops, and other small businesses.

The strategy for the United Nations district is to cultivate it as a small international village showcasing the rich diversity present in the Bevo community and St. Louis.

CHIPPEWA: GATEWAY TO BEVO

The area between the viaduct and Chippewa is dominated by auto-oriented businesses such as the QuikTrip, the CVS, various auto-repair and sales shops, the Gravois car wash, and the U-Haul moving and storage facility. The intersection of Chippewa St and Gravois Ave is the most visible site within the district; key parcels at this corner are held by owners with plans to use them for future auto-oriented development such as an expanded gas station and convenience store, and a drive-through fast food restaurant.

GRAVOIS AVE AS A COMPLETE STREET

A 30 MPH STREET

Although the recent restriping of Gravois Ave resulted in a significant reduction in vehicular speeds, the current average speed is still 7 MPH above the desired 30 MPH limit. Despite the lane reduction from 4 to 3, the perceived width of the street, established by the physical limits on either side, is still 40 feet.

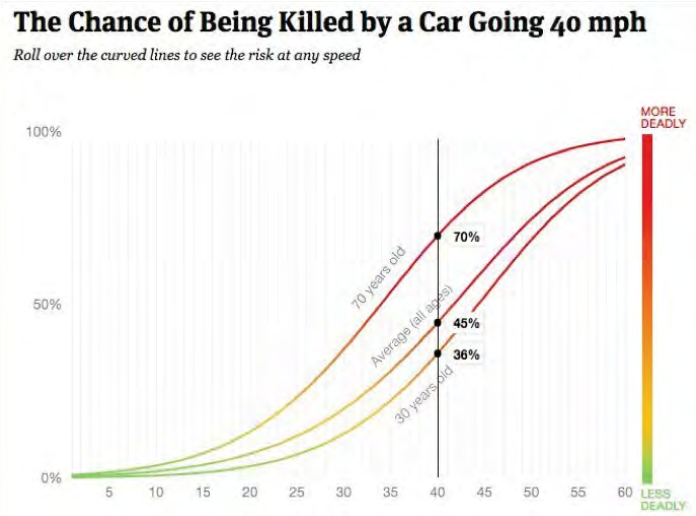
To further slow vehicular speeds, this perceived width must be reduced. A series of alternatives for how to accomplish this within the existing right of way were studied, including the removal of on-street parking and the removal of the continuous middle turn lane. In all cases, the alternative designs improved the level of stress for the bicycle facility.

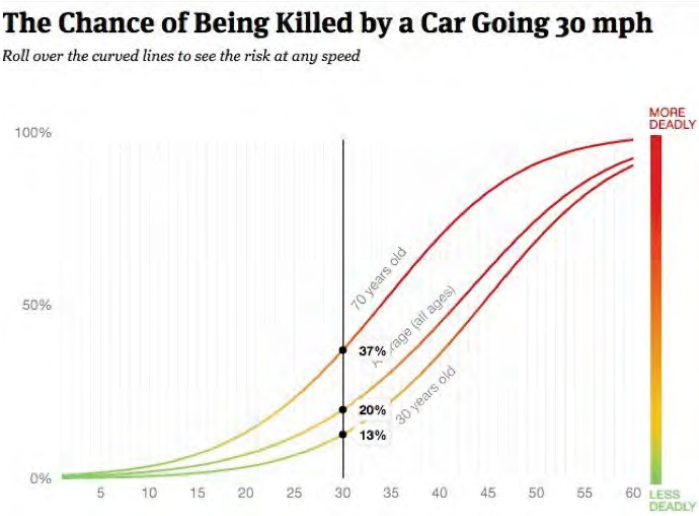
Getting the speed down to 30 MPH has huge implications for the severity of a crash, including the chances of being killed by an impact at that speed.

STREETSCAPE ILLUSTRATIVES

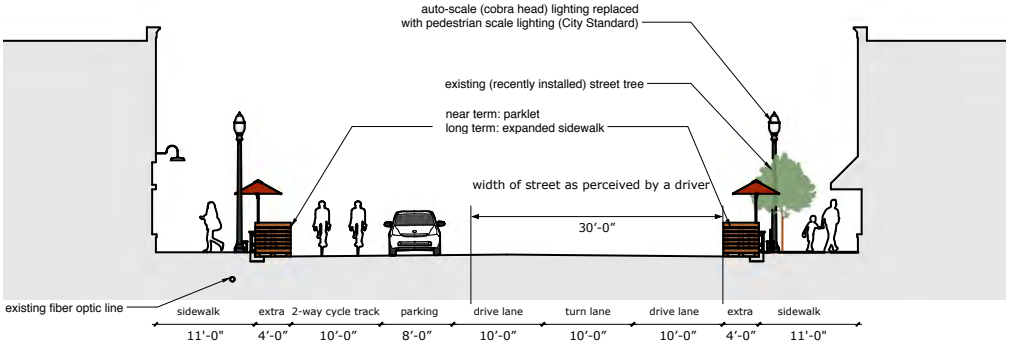
Slowing traffic is a multidisciplinary task. Traffic and streetscape elements work together to create a sense of place that people want to spend time in. With more street activity, drivers have more to pay attention to, and slow down. Additionally, the urban form creates more of a sense of enclosure, slowing traffic further.

The following pages show before-and-after views of how this plan's overall streetscape improvements will look and feel to a pedestrian.

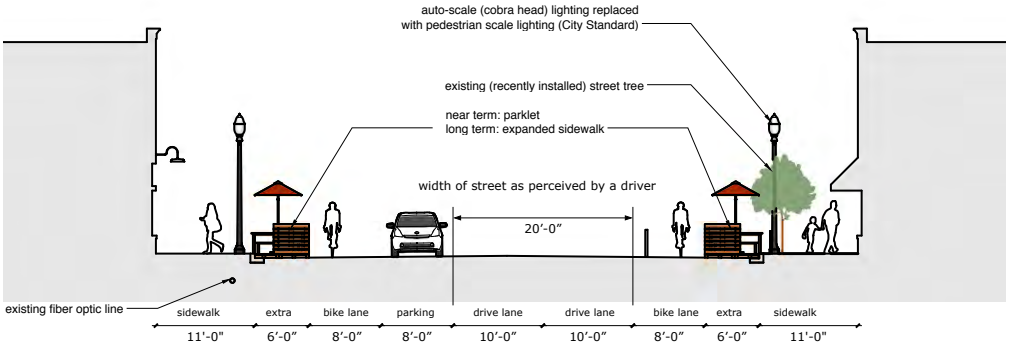




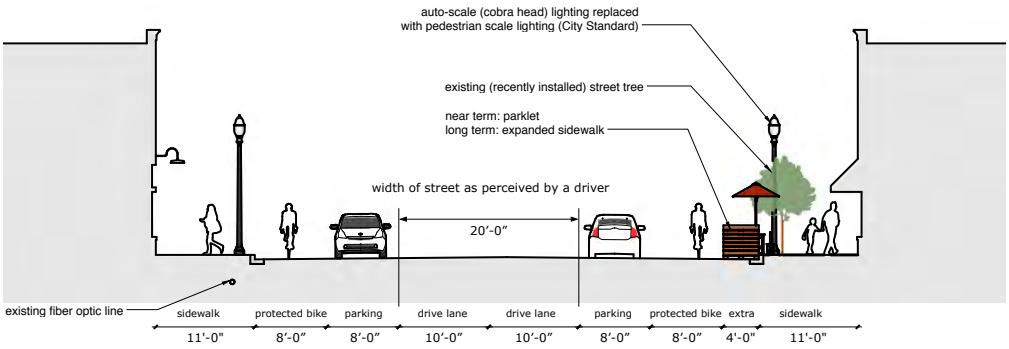
The severity of a crash with a car going 40 MPH (left) and 30 MPH (right). Source: ProPublica.



OPTION A
REMOVE 1 SIDE PARKING;
KEEP CONT. TURN LANE

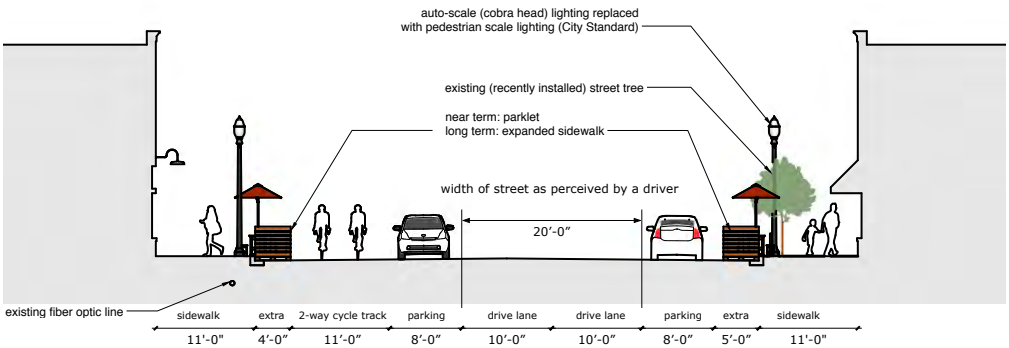


OPTION B
REMOVE 1 SIDE PARKING;
REMOVE CONT. TURN LANE



OPTION C
SEPARATED BIKE LANES;
REMOVE CONT. TURN LANE

RECOMMENDED



OPTION D
2 WAY CYCLE TRACK;
REMOVE CONT. TURN LANE

CARS & BARS DISTRICT - **EXISTING**

EXISTING CONDITION

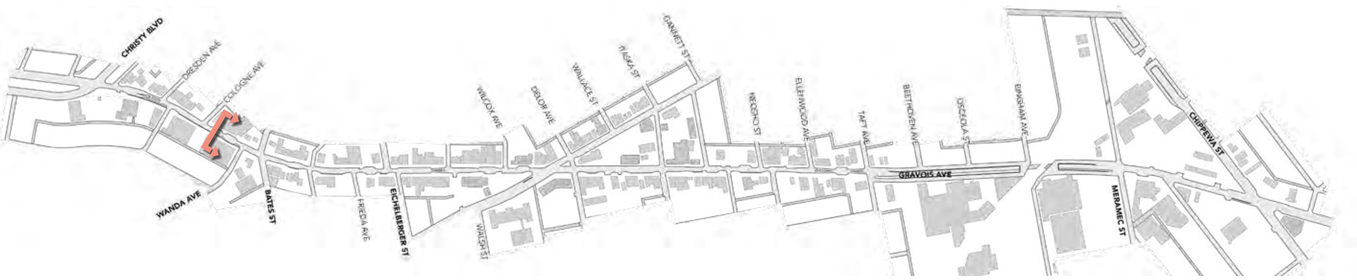
Although the recent restriping of Gravois Ave resulted in a significant reduction in vehicular speeds, the current average speed is still 7 MPH above the desired 30 MPH limit. Despite the lane reduction from 4 to 3, the perceived width of the street, established by the physical limits on either side, is still 40 feet.

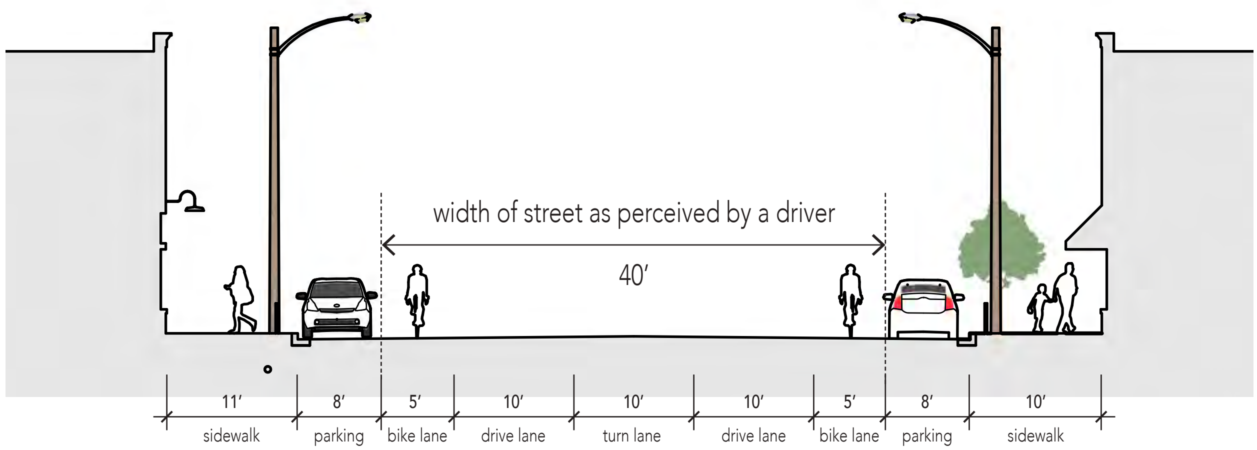
40 feet

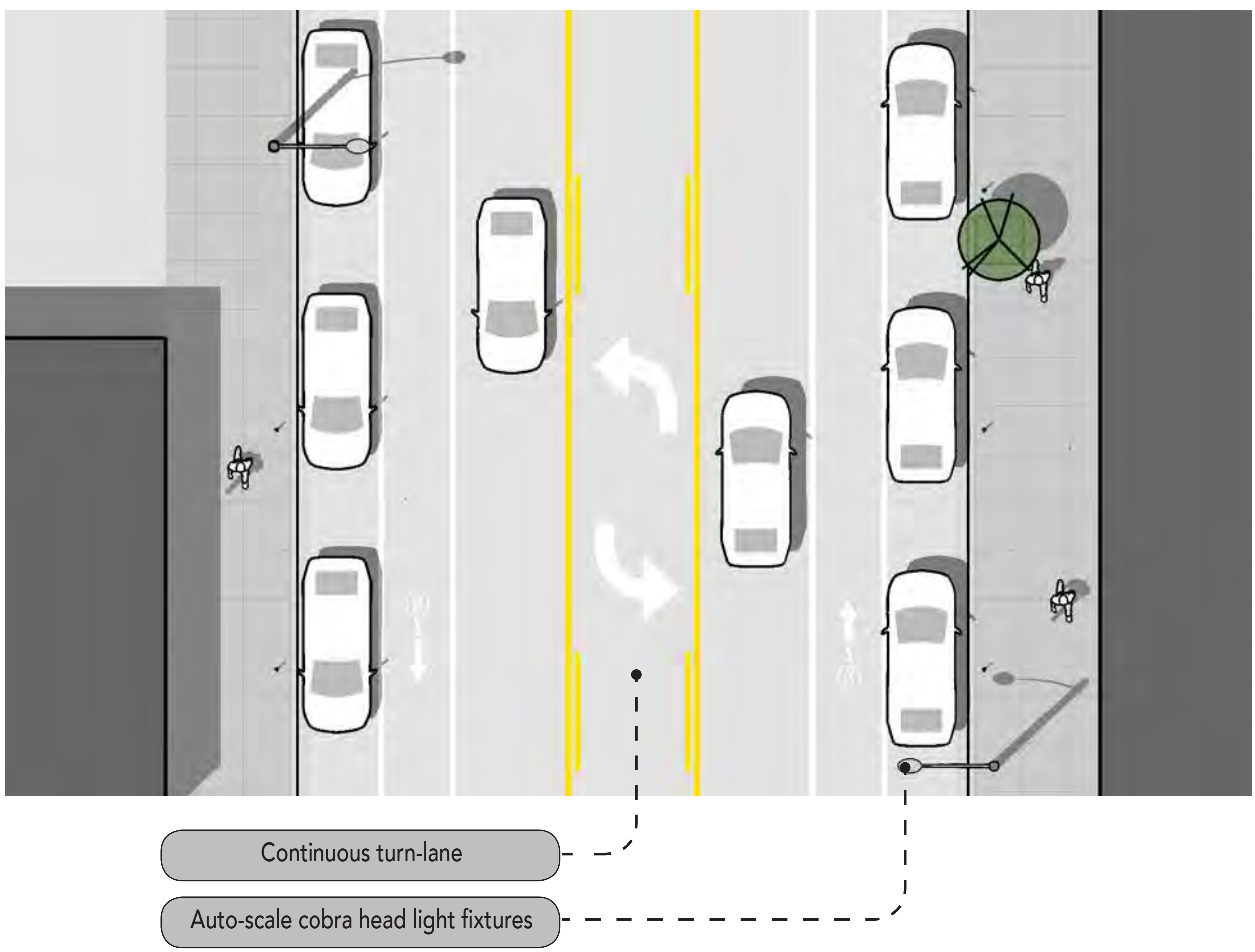
PERCEIVED WIDTH OF STREET

37mph

AVERAGE TRAFFIC SPEEDS


CHRISTY BLVD
WANDA AVE
BATES ST
EICHELBERGER ST
GRAVOIS AVE
CHIPPEWA ST
MERAMEC ST


width of street as perceived by a driver
40′
11′
sidewalk
8′
parking
5′
bike lane
10′
drive lane
10′
turn lane
10′
drive lane
5′
bike lane
8′
parking
10′
sidewalk


Continuous turn-lane
Auto-scale cobra head light fixtures

CARS & BARS DISTRICT - **RECOMMENDED**

RECOMMENDED

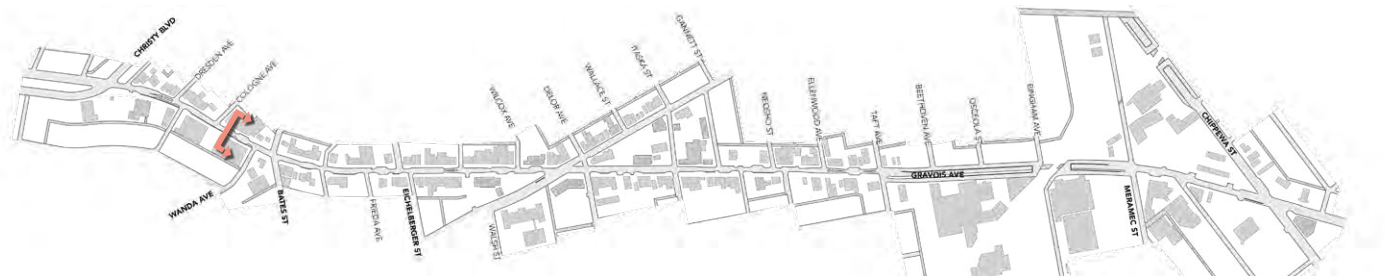
To further slow vehicular speeds, the perceived width must be reduced. This is accomplished by eliminating the continuous turn lane in certain areas of the corridor along with reconfiguring the bicycle facility into a two-way cycle track protected from travel lanes by parking and landscaping. By shifting the bicycle facility to the curb-side of the parking lane, the perceived street width is pinched an additional 8 feet.

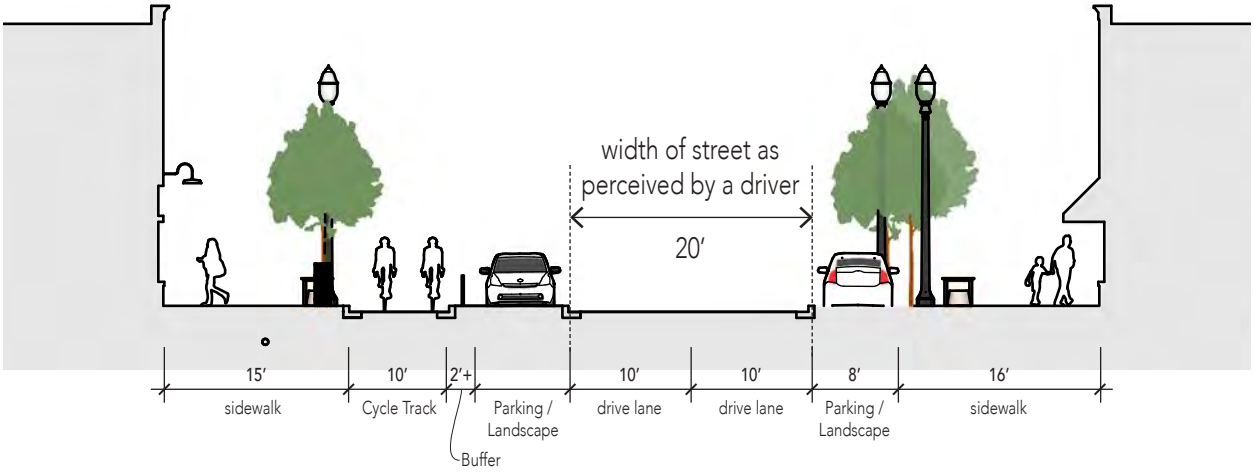
20 feet

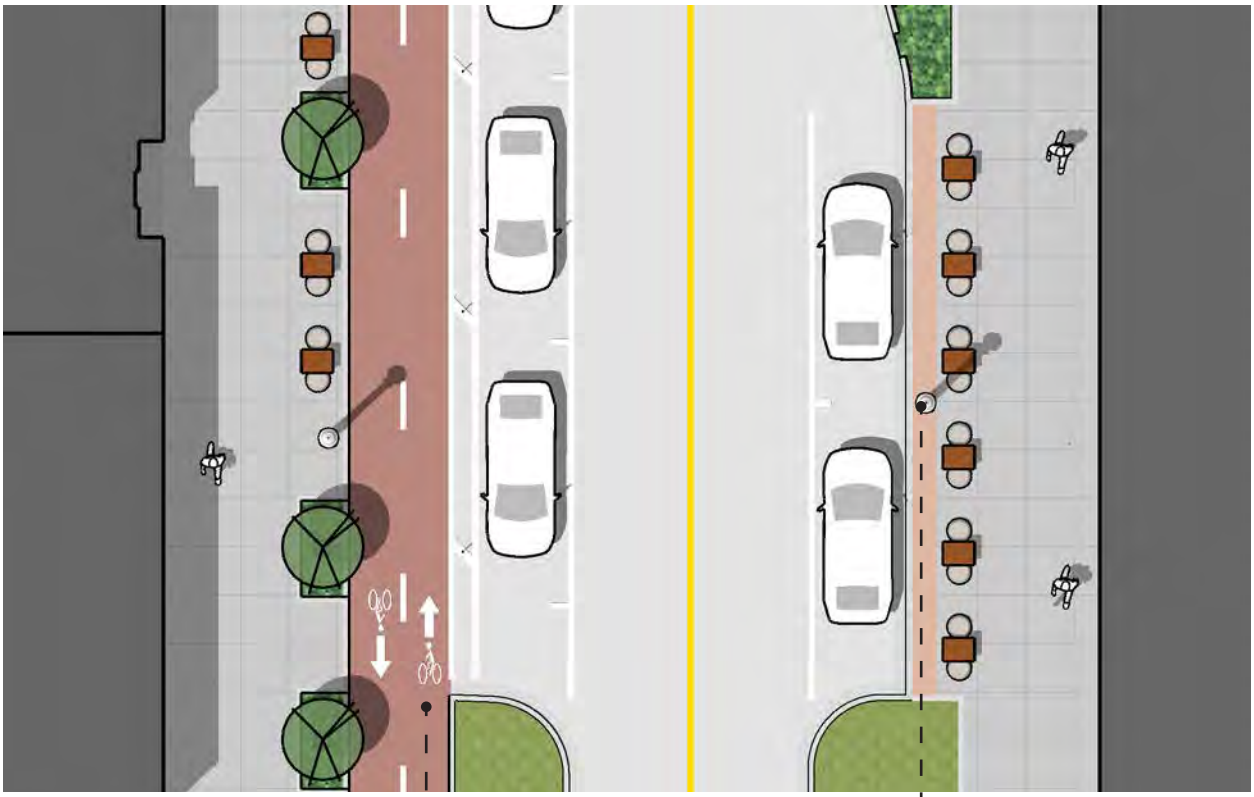
PERCEIVED WIDTH OF STREET

30mph

ANTICIPATED TRAFFIC SPEEDS







Continuous cycle track

12 Pedestrian-scaled ornamental light fixture

BOWTIE DISTRICT - **EXISTING**

EXISTING CONDITION

The existing width of sidewalks, between 10 and 11 feet, is only wide enough to accommodate two-top tables, with chairs arranged parallel to the sidewalk, since seating that backs up to the curb will be forced to interfere with the pedestrian zone.

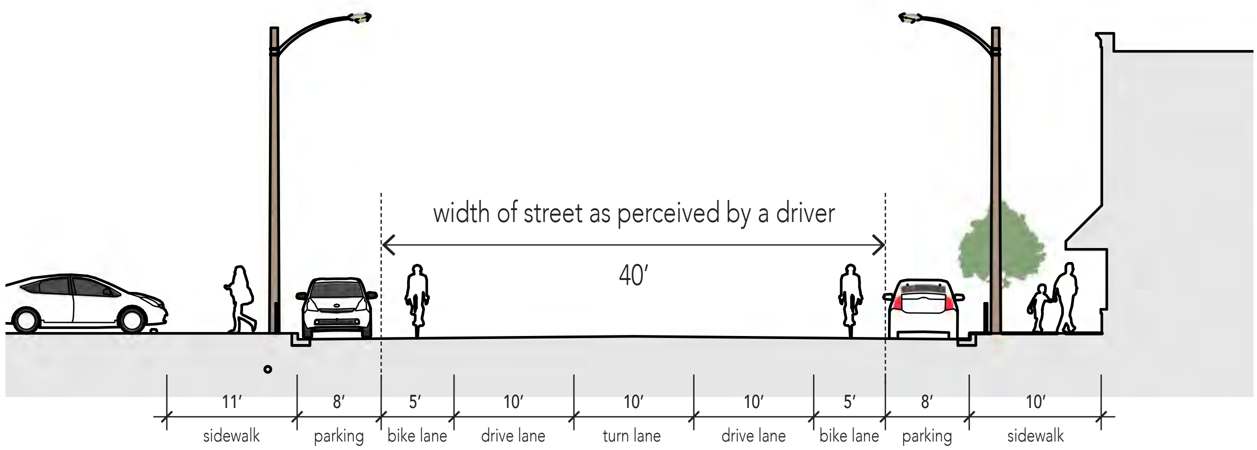
40 feet

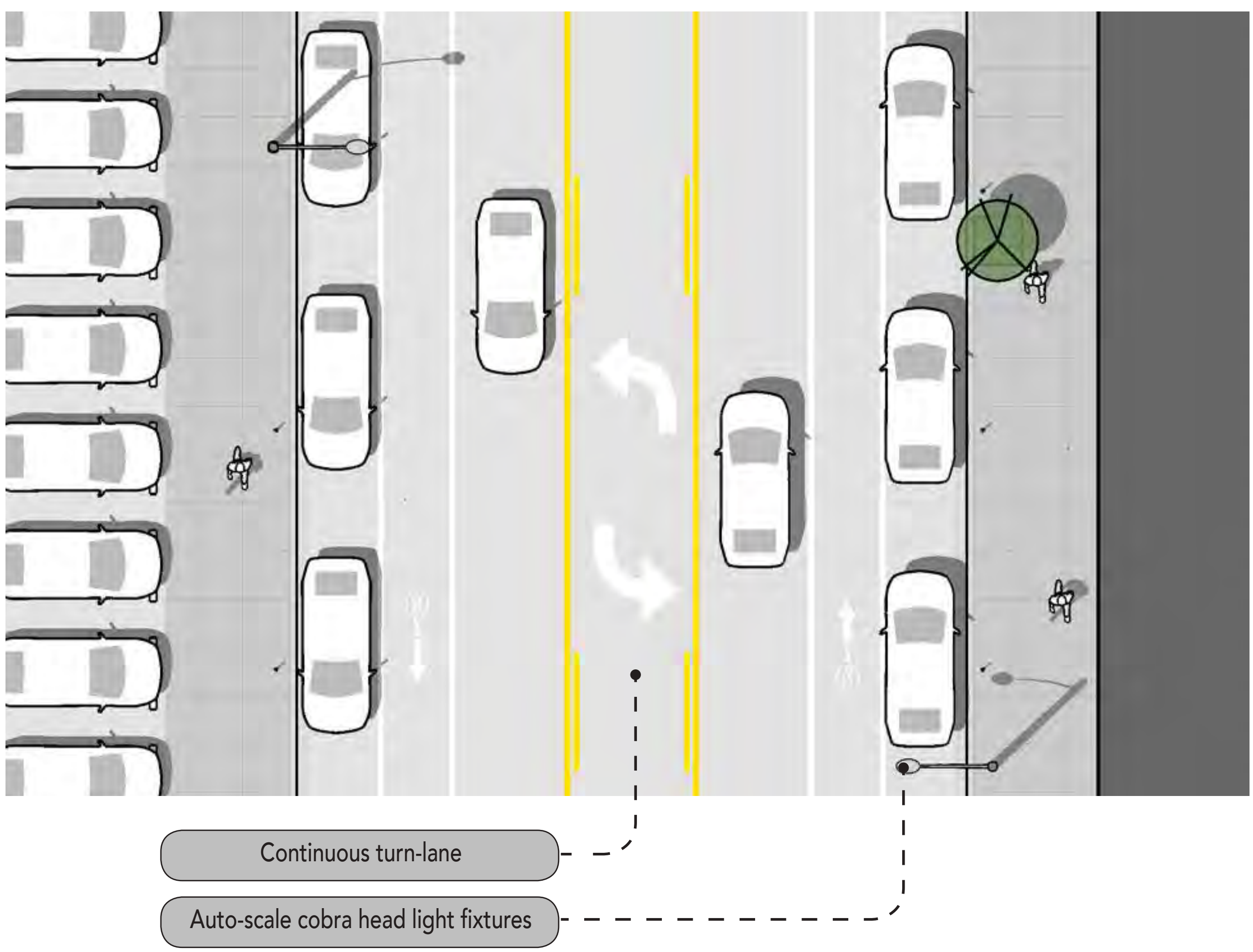
PERCEIVED WIDTH OF STREET

37mph

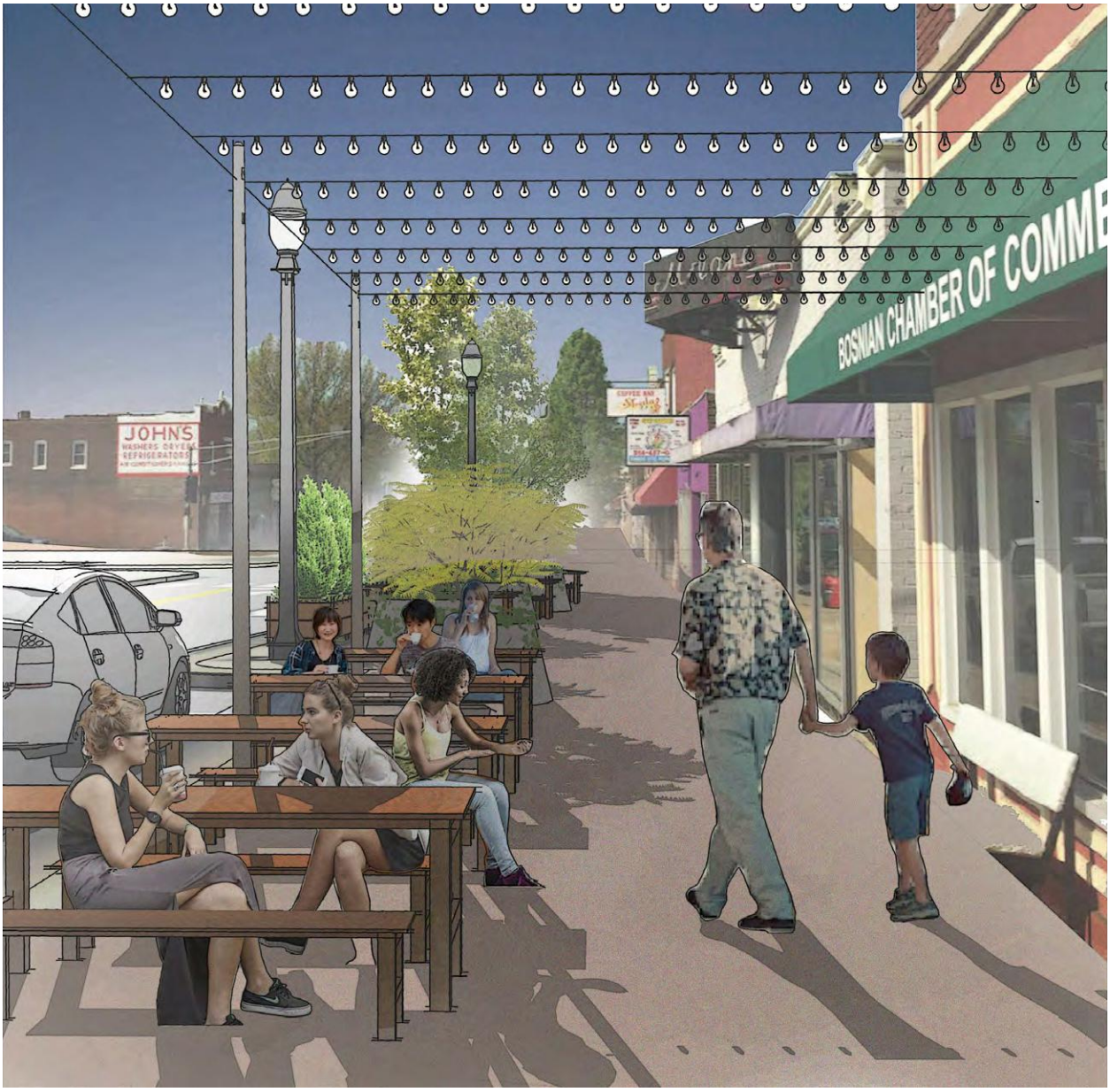
AVERAGE TRAFFIC SPEEDS


CHRISTY BLVD
WANDA AVE
BATES ST
EICHELBERGER ST
GRAVOIS AVE
MERAMEC ST
CHIPPEWA ST


width of street as perceived by a driver
40'
11'
sidewalk
8'
parking
5'
bike lane
10'
drive lane
10'
turn lane
10'
drive lane
5'
bike lane
8'
parking
10'
sidewalk


Continuous turn-lane
Auto-scale cobra head light fixtures

BOWTIE DISTRICT - **RECOMMENDED**



RECOMMENDED

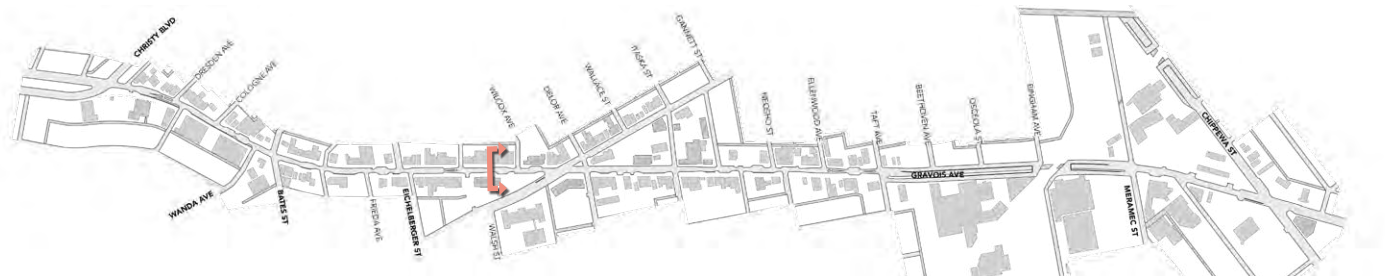
Where sidewalks can be expanded by at least 4 feet the potential for sidewalk seating / dining is greatly increased. With a clear distance of 15 feet, furniture and/or landscaping can be contained within a separate zone that does not interfere with pedestrian movements. This expansion will also allow for a wider range of landscaping treatments. Along with these improvements to the right of way infrastructure, filling-in gaps in the streetwall along the Bowtie District should be a priority.

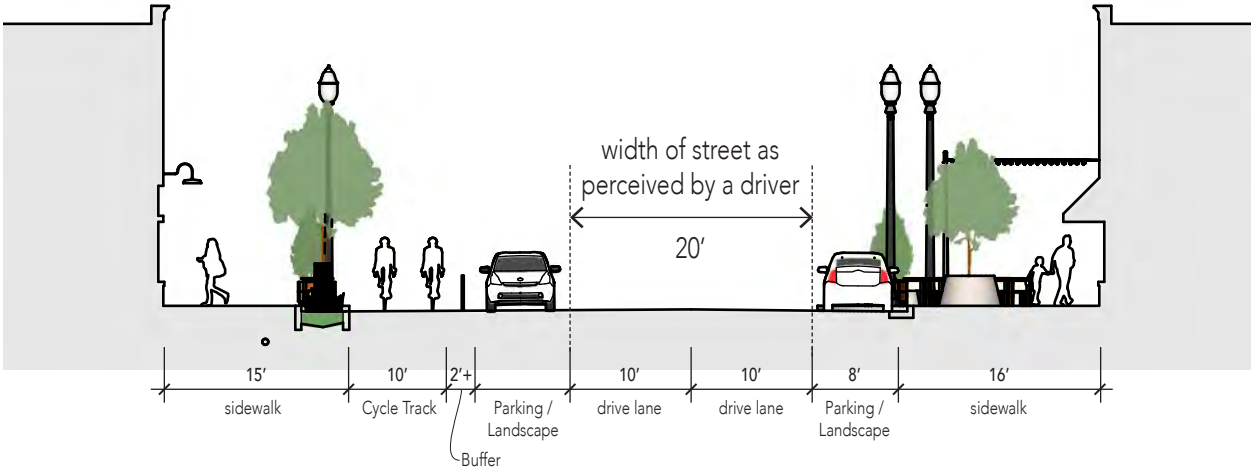
20 feet

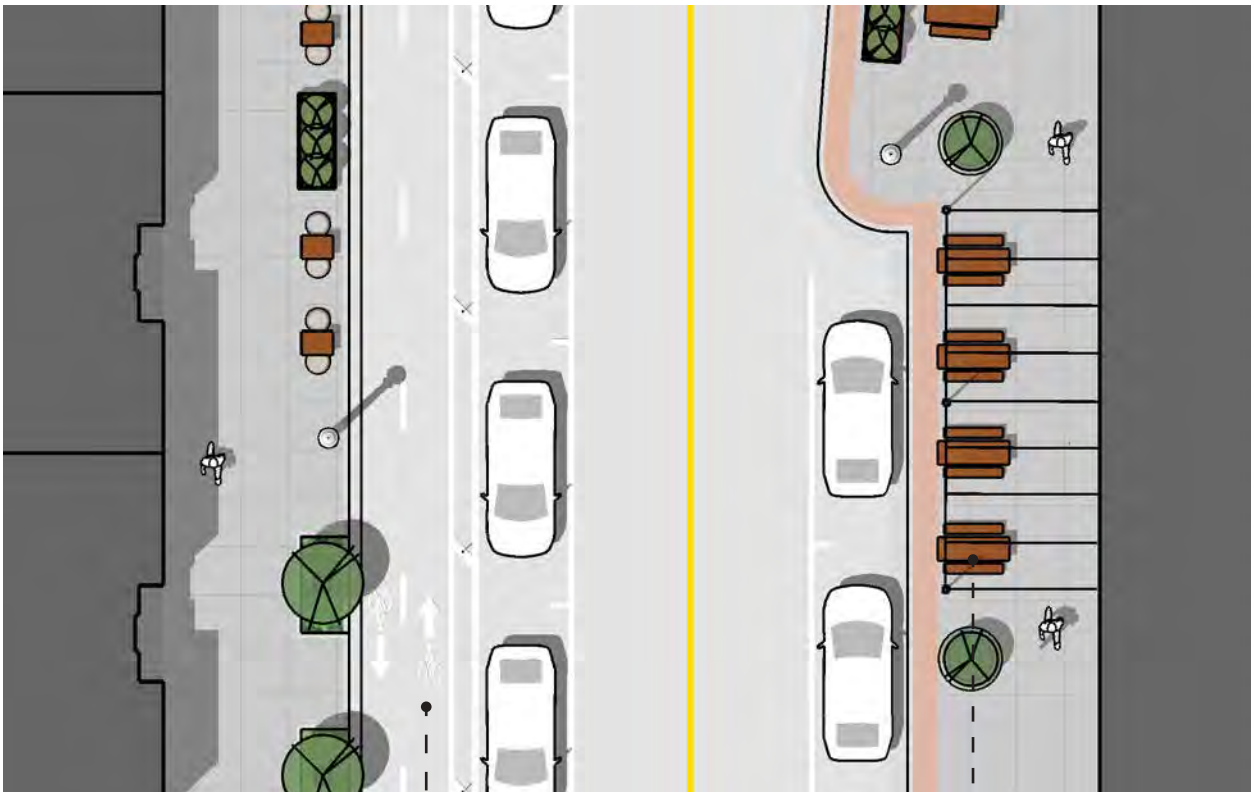
PERCEIVED WIDTH OF STREET

30mph

ANTICIPATED TRAFFIC SPEEDS







Continuous cycle track

10 Sidewalk dining in a designated zone

UNITED NATIONS DISTRICT - **EXISTING**

EXISTING CONDITION

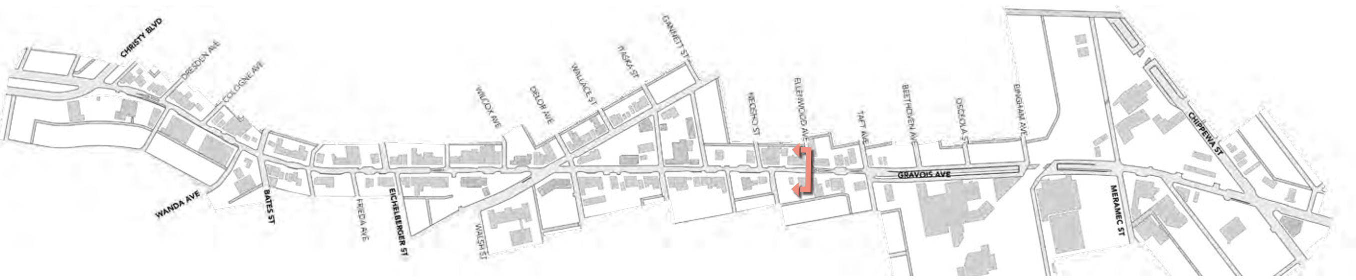
Driveway access management should be a priority in the United Nations District. This is particularly important along the south side of Gravois Ave where the cycle track is located.

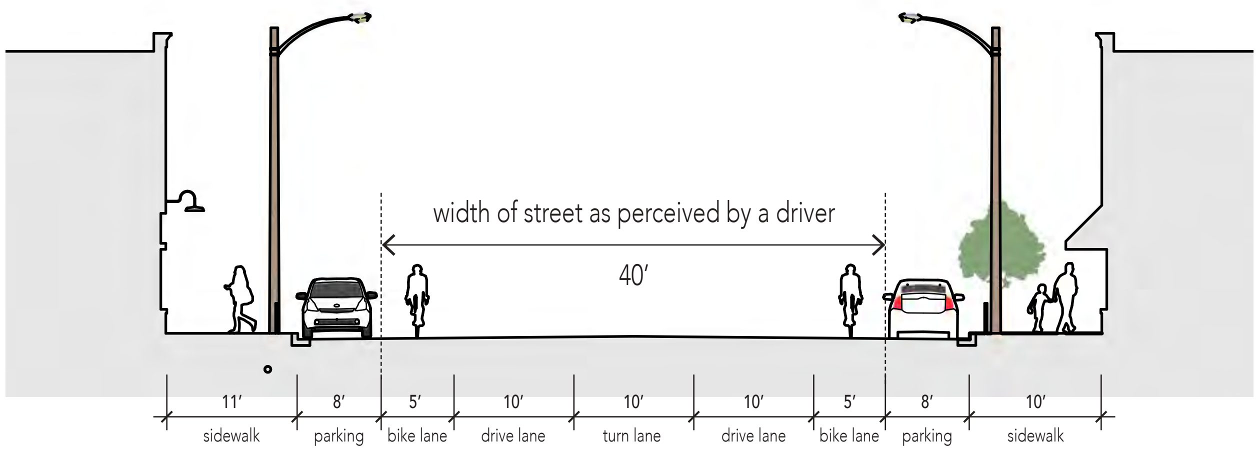
40 feet

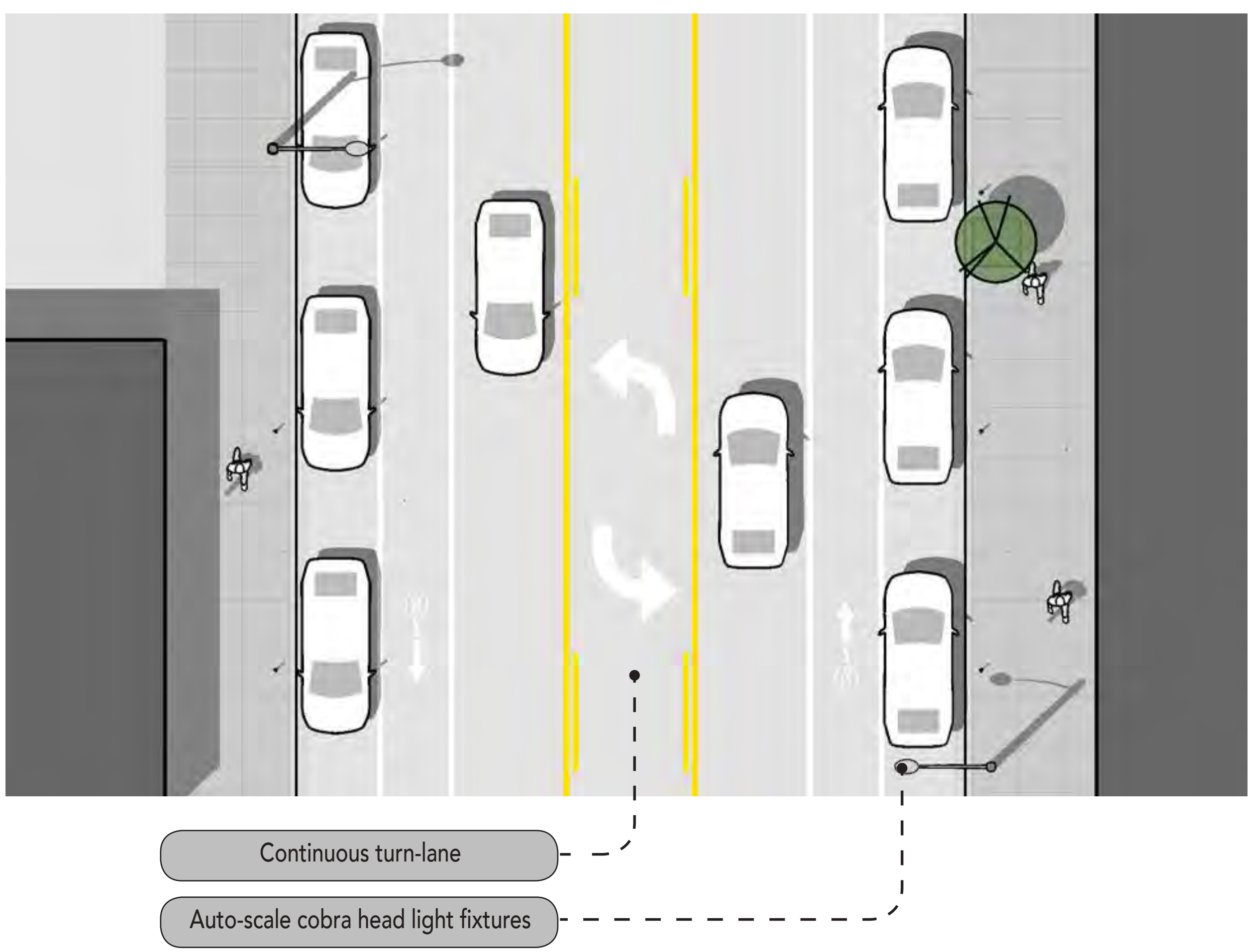
PERCEIVED WIDTH OF STREET

37mph

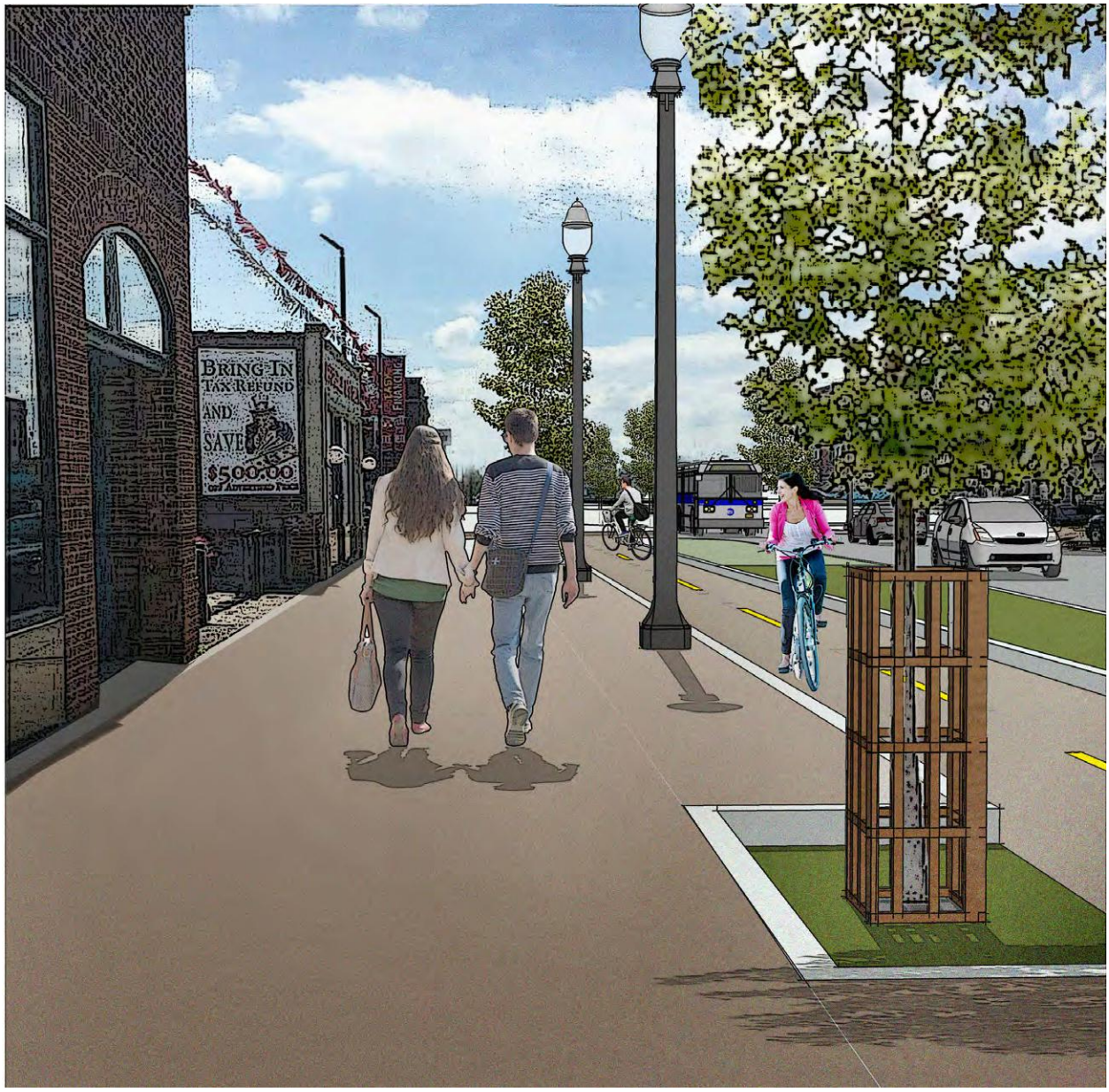
AVERAGE TRAFFIC SPEEDS


CHRISTY BLVD
DRESDEN AVE
COLOGNE AVE
WANDA AVE
BATES ST
FREDA AVE
EICHELBERGER ST
WALSH ST
WILCOX AVE
DELOR AVE
WALLACE ST
ITASKA ST
GANNETT ST
NEOSHO ST
ELLENWOOD AVE
TAFT AVE
BEETHOVEN AVE
OSCEOLA ST
BINGHAM AVE
GRAVOIS AVE
MERAMEC ST
CHIPPEWA ST


width of street as perceived by a driver
40′
11′
sidewalk
8′
parking
5′
bike lane
10′
drive lane
10′
turn lane
10′
drive lane
5′
bike lane
8′
parking
10′
sidewalk


Continuous turn-lane
Auto-scale cobra head light fixtures

UNITED NATIONS DISTRICT - **RECOMMENDED**



RECOMMENDED

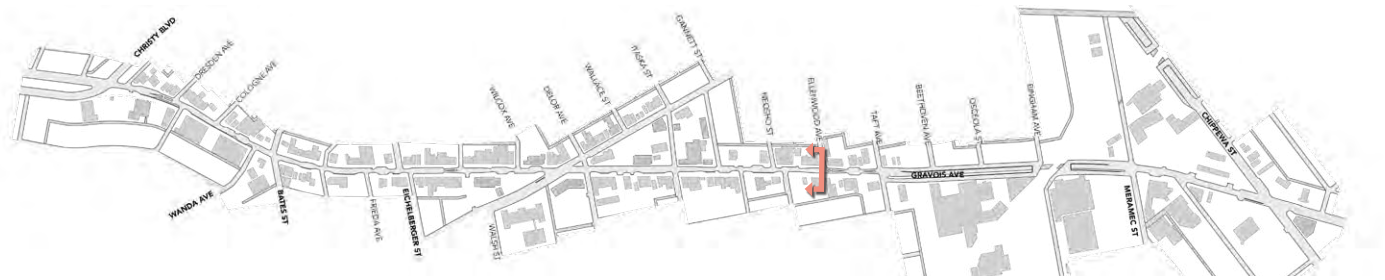
Properties whose existing parking lots can be accessed from a side street or rear alley should be encouraged to relinquish their driveways or consolidate access with adjacent properties to reduce points of conflict with cyclists and pedestrians. This access management will also help to alleviate potential congestion associated with the elimination of the continuous turn lane.

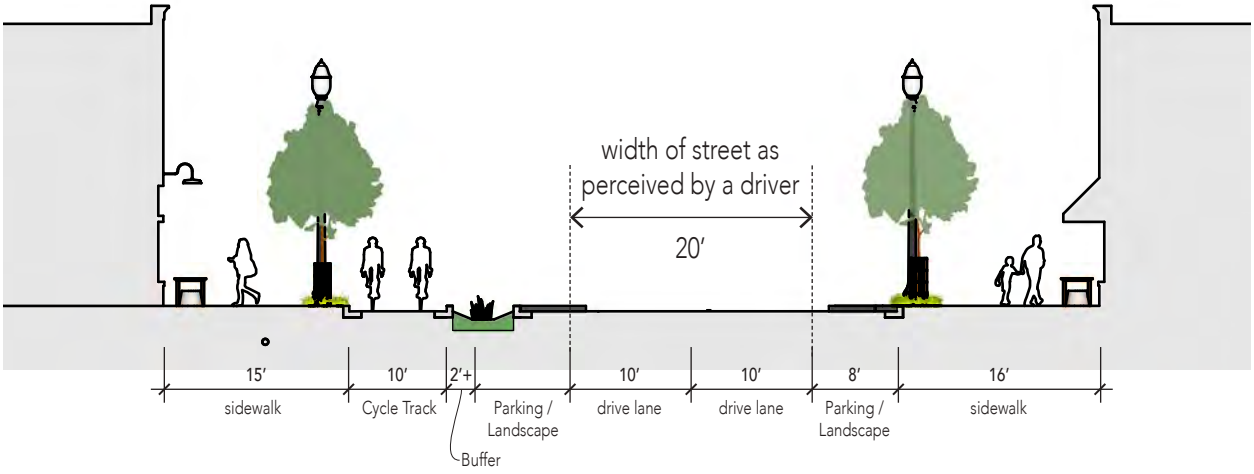
20 feet

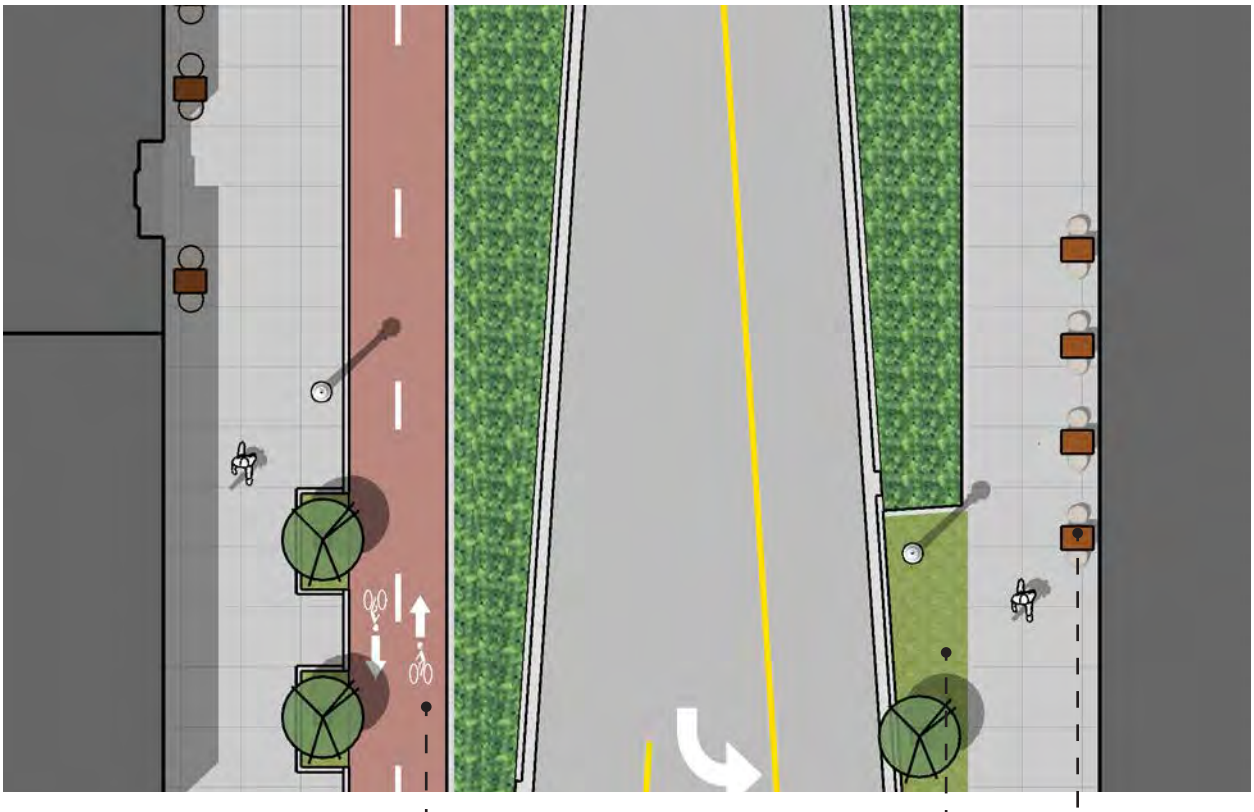
PERCEIVED WIDTH OF STREET

30mph

ANTICIPATED TRAFFIC SPEEDS







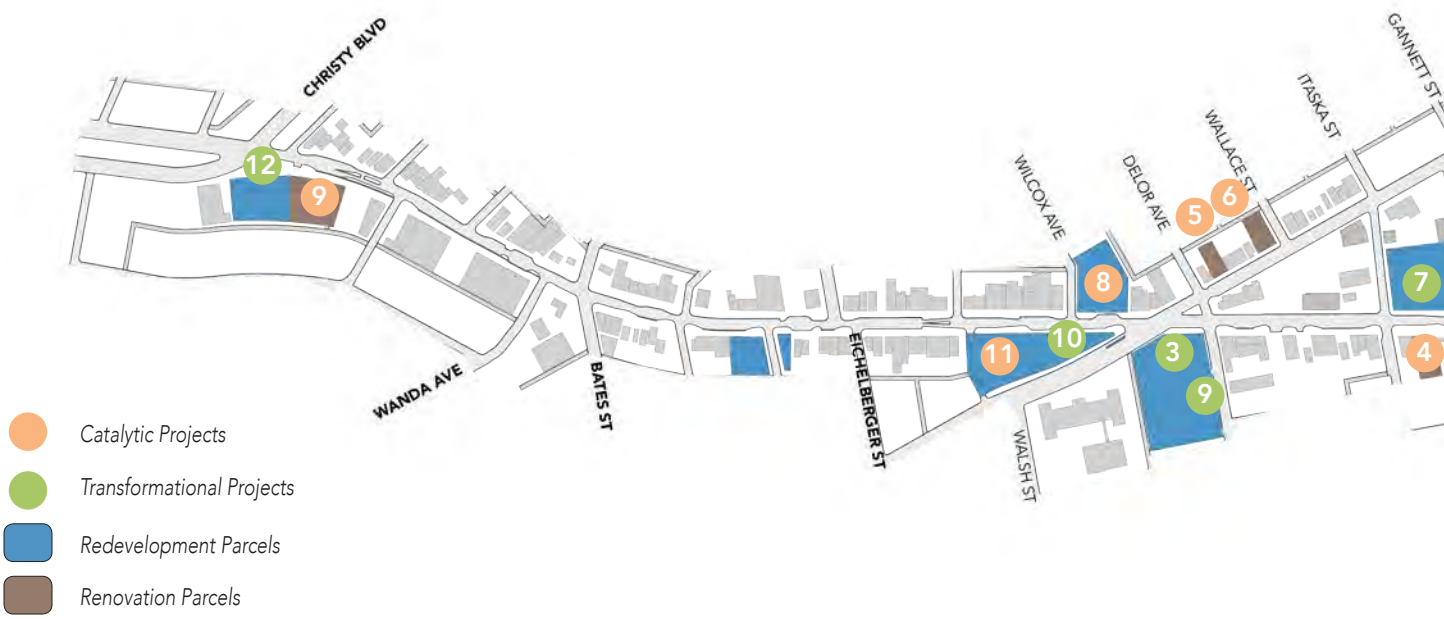
Continuous cycle track

Landscape buffer zone

10 Sidewalk dining in a designated zone

CATALYTIC & TRANSFORMATIONAL SITES

IMPACT TO CHANGE THE CORRIDOR



RENOVATION VS. REDEVELOPMENT

To fill vacant storefronts in Bevo, renovation of existing spaces should be considered first. This spread highlights some key candidates for renovation, due to their proximity to the Bowtie as well as their historical significance. Contributing structures within the Bevo Commercial Historic District are eligible for Historic Tax Credits, which would be necessary to make these projects possible.

Vacant storefronts throughout the corridor that are in relatively good condition could be considered in the long-term for a small-scale neighborhood co-op grocery use.

CATALYTIC VS. TRANSFORMATIONAL

Some sites, called catalytic sites, are areas where a small investment now could turn into larger investments in the future. Transformational sites, while not projects that can or should be implemented right away, are ones that transform the community.

For example, adding Bevo gateway signage is a small investment that could capture people's attention, help brand Bevo, and spark interest both within Bevo and in the surrounding St. Louis area. But it will not transform Bevo dramatically from what it is today.

In contrast, the Backstop Building opposite the Bevo Mill is a transformational project. The addition of a building will add an element of enclosure to the space that is unattainable without the full effect of the building's massing and occupancy. But this project is not currently feasible in Bevo's market, so it has no catalytic effects to spur additional investment. This, along with the Wilcox Infill property, would be a huge benefit once the market can sustain a higher quality design and materials that this plan calls for on such significant sites.

ORDER OF IMPLEMENTATION

1. BEVO GATEWAY SIGNAGE
2. BELOVE PUBLIC ART
3. MIDWEST BANK BUILDING
4. CRIMINAL JUSTICE MINISTRIES
5. LITTLE BEVO
6. BEVO CO-WORKING HUB
7. SW CORNER OF GANNETT / ITASKA
8. WILCOX INFILL
9. DELOR ST. TOWN HOMES
10. SEBILJ MONUMENT PARK
11. BACKSTOP BUILDING
12. CHRISTY GATEWAY
13. 4450-4316 GRAVOIS

BOWTIE ARCHITECTURAL GUIDELINES

MAINTAIN THE MILL AESTHETIC

The distinctive architecture of the Bevo Mill and Little Bevo reflect the community's past and provide an iconic palette of building materials and colors. These guidelines preserve the character of the Bevo Mill by maintaining consistent colors, materials, and non-competing sight lines of Bevo Mill.

COLOR & MATERIALS

Light colors typical of those found on Das Bevo and Little Bevo are preferred. The teal accent can and should be used in other buildings within the Bowtie.

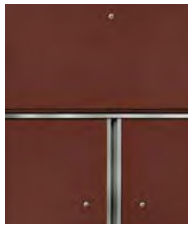
The use of complementary materials is encouraged: clean cut stone; wood elements; and plaster/white stucco.

VIEWS OF BEVO MILL

It is important to maintain and find opportunities for view corridors that include the Bevo Mill. Given the signature style of the Bevo Mill, a quieter and simpler design approach is recommended. Buildings should be appropriately sited and designed to explicitly frame views of Das Bevo and maintain sight lines down Gravois Ave.

Copies of Bevo Mill, as well as turrets and towers that distract from Bevo Mill, are discouraged.

Reveal Recess Trim



Reveal Surround Trim

Reveal Surround Trim

Reveal Countersunk Fastener

Artisan V-Groove

Artisan Bevel Channel

Artisan Shiplap

Artisan Square Channel

Upper left: light colored cement board siding, used in panels or lock joint siding, can be an appropriate substitute for stucco. Upper right: painted or stained wood elements with contemporary detailing used at the ground level.
Lower left: Natural or cast stone base in ashlar or brick bond setting pattern.

1. LIGHT COLORED UPPER STORIES
2. WOOD BRACKETS
3. STONE BASE
4. TEAL ACCENT COLOR

UPGRADING THE RETAIL EXPERIENCE

STOREFRONTS AS ECONOMIC DRIVERS

The design of a retail storefront is crucial for businesses. A corridor with poorly designed storefronts will continue to underperform, all else created equal. The Bevo CID needs a set of storefront design guidelines that ensure the long-term success of businesses along the corridor.

FRONT-FACING ENTRIES

All retail storefronts need a front-facing entry. While a second entry off the back to a parking lot or other accessible feature is permitted, most retailers will want a single entry-exit point; this point should face the primary street.

RECESSED ENTRIES

All entries should be recessed from the front facade closest to the street. Recessed entries complement sidewalk dining by providing pedestrians with breathing room along a narrow sidewalk pinched by a building facade on one side and sidewalk dining on the other.

GROUND STORY TRANSPARENCY

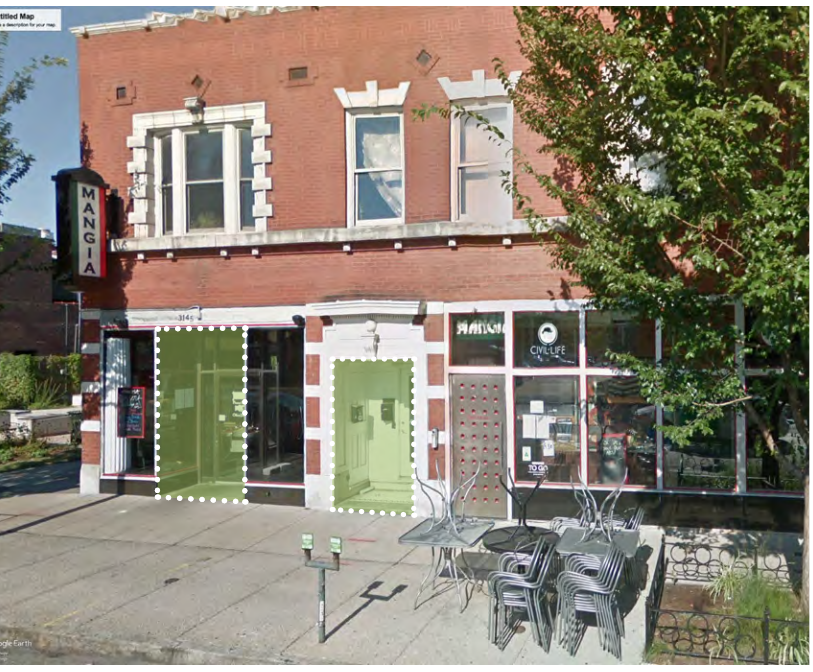
Glass in windows and/or doors, including any mullions, should be highly transparent with low reflectance. Tinted or reflective glass should be prohibited, while awnings should be encouraged.

EXTERNAL POWER PLUG

Buildings fronting Gravois Ave should incorporate an external power source on or accessible from the roof to accommodate cornice lighting.

CLOSE DRIVEWAYS

Wherever possible, driveways should be consolidated or eliminated along Gravois Ave and redirected to secondary streets.



Ground-floor entrances are recessed to avoid door swings in the pedestrian walkway, photo by Google.

Entrances are easily accessed from the sidewalk.

SCREEN PARKING ALONG GRAVOIS

To lessen the visual impact of parking areas located adjacent to the Gravois Ave right-of-way, the area between street facing property line and vehicular areas shall contain either landscape, patio space, or sidewalk space.

Provide landscaping at building frontages and in parking lots to screen automobiles and provide shade.

Buffer pedestrian facilities from automobiles, particularly in locations where parking lines commercial development and cars overhang the sidewalk.

PARKING AS PRIMARY

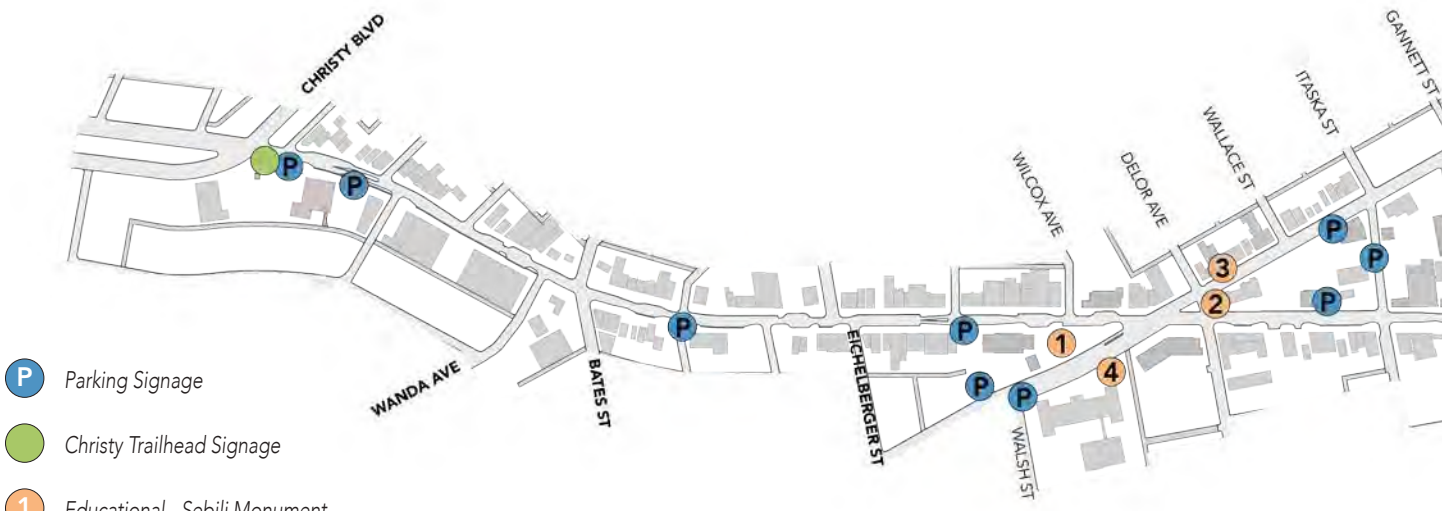
On properties for which the parking of cars is the primary use (car sales, for example), require low-rise screening (max. 2'. Recommended screening includes a continuous landscape. *Refer to streetscape ecologies on pp. 164 - 171*.

PARKING AS SECONDARY

Where parked cars is not the primary use, require higher screening. Fence, placed 2' from the back of curb of vehicular area, are recommended at a min. 3' and max. 4' height. *Refer to the streetscape palette on pp. 162 - 13 for colors and materials recommendations.*

(Both) Parking lot screening techniques using landscaping and fencing to distinguish the pedestrian zone without blocking needed advertisements.

IMPROVING WAYFINDING & SIGNAGE



P *Parking Signage*

Christy Trailhead Signage

1 *Educational - Sebilj Monument*

2 *Educational - Bevo Mill*

3 *Educational - Little Bevo*

3 *Educational - Long Middle School*

GATEWAY SIGNAGE

Elements at community gateways send the signal to people that they are entering a "place," and gives the sense that "something is happening here." Gateway signage also has an opportunity to brand a place, giving a first impression to new visitors.

WAYFINDING

Wayfinding signage orients people to particular destinations. In the case of Bevo, wayfinding should guide people to the Bevo Mill and other cultural landmarks, but also to shared parking locations. Four locations should include educational signage to provide relevance to residents and visitors alike:

- The Sebilj Monument: discussing the significance of a Sebilj and the Bosnian culture in the Bevo neighborhood
- Bevo Mill: telling the story of the Anheuser family building the Mill in the early 20th century
- Little Bevo: discussing the architectural significance of this distinctly styled building
- Long Middle School: discussing the magnet school mission to promote cultural diversity

WINDOW SIGNAGE

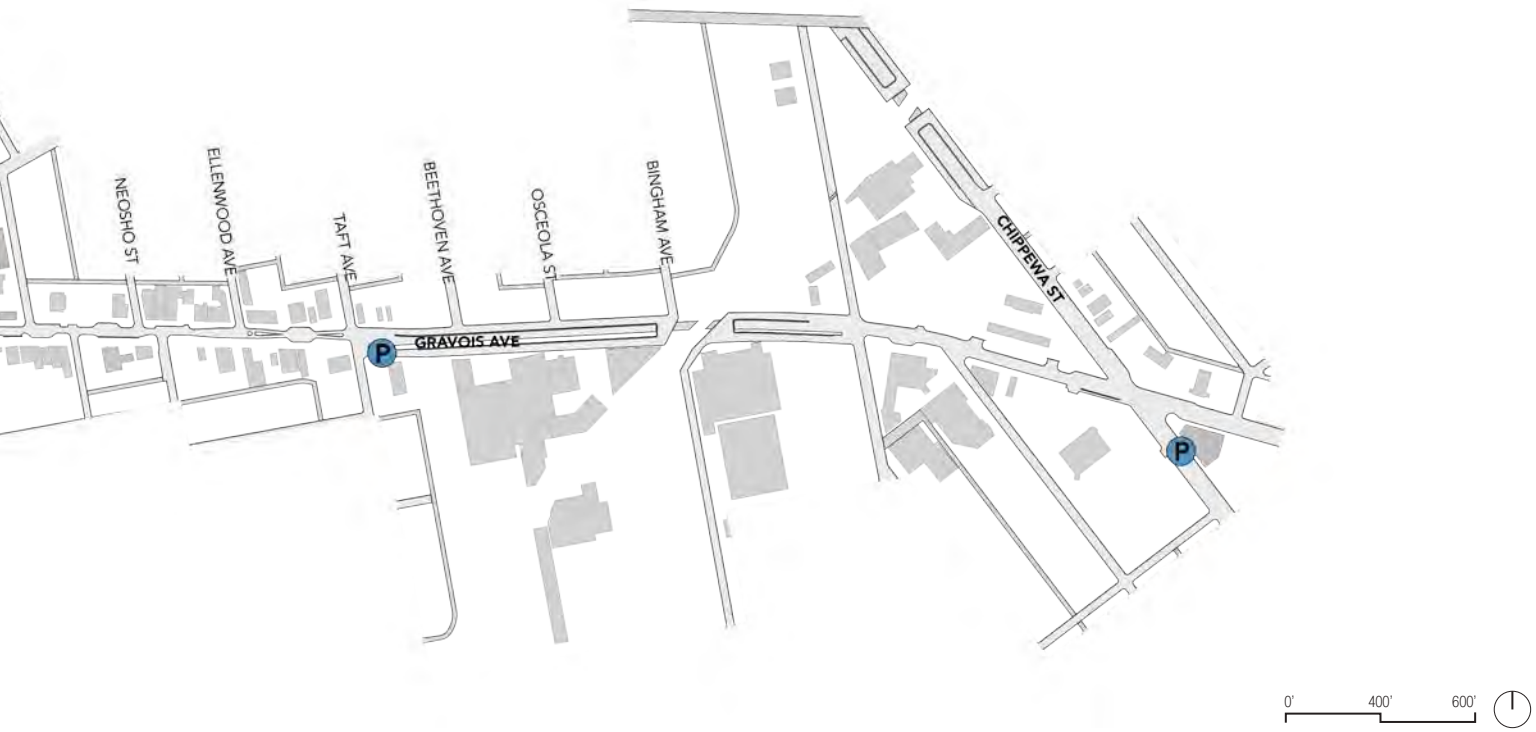
The use of hand-made and unprofessional looking "for lease" signs is discouraged on all Bevo CID properties. While advertising available space is important and encouraged, signage should be tasteful and market the district in a positive light. Examples include:

- Window decals with a silhouette scene of something inside
- Large-format historic images or maps from the area as a backdrop
- Participatory art; *See Case Study #4, p. 559.*

Window signs (of whatever kind) should be matched to the size of the pane between mullions. Vinyl window decals that can be cut to size, washable, and semi-transparent are preferred.

BLADE SIGNAGE

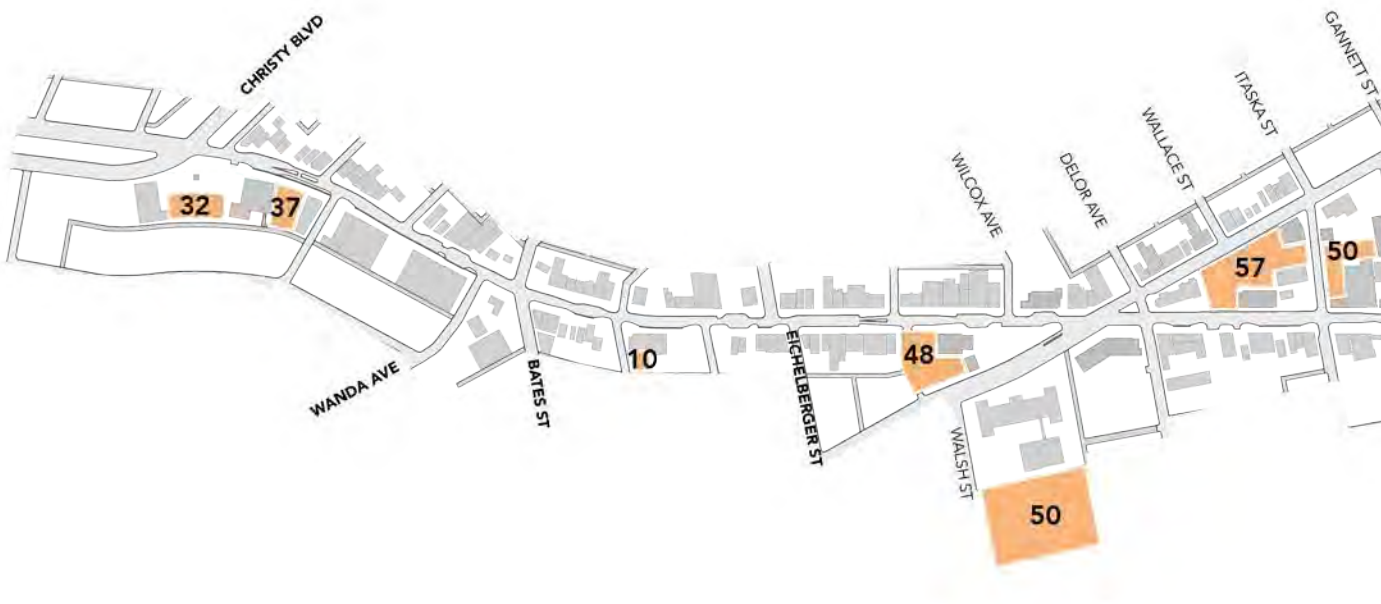
Businesses might also display blade signs above entrance doorways as a means of attracting pedestrians from down the street. Where at all possible, the singage should match the district branding. For example, the Cars & Bars district may include neon signs or pop-art influenced signs.



Trailhead signage, Helix Park, Falkirk, Scotland, photo by Blueton Limited.

Educational signage, Meran, Italy, photo by Lupo Burtscher.

CREATING REDEVELOPMENT-READY PARKING



XX *Number of parking spaces*

Shared parking lot

INTERIM PARKING

Off-street parking demand may be less in the future. According to some transit experts, parking demand peaked in 2005 and will drop dramatically in the future due to autonomous vehicles. While it is impossible to predict how technology and behavior will impact Bevo parking in the future, the Bevo Great Streets project plans ahead for changes in parking by designing parking lots to be more efficient today, both spatially and programmatically; as well as redevelopment-ready if parking demand is much less in the future.

A significant underutilization of current parking means that this plan's 58% reduction of on-street parking spots still provides excess parking supply (of current demand) in all areas except Eichelberger St to Duke St.

SHARED PARKING IN THE BOWTIE

The Bowtie is well-served by parking today; in the near-term, signage directing patrons to public parking can help create a welcoming experience for visitors. As the Bowtie fills vacancies and new development occurs, the Bevo CID will need to more actively manage parking in the Bowtie. Exploring shared-use parking agreements with Long Middle School, the owner of the Midwest BankCentre site, and owners of smaller vacant lots would help to accommodate additional demand with existing parking space.

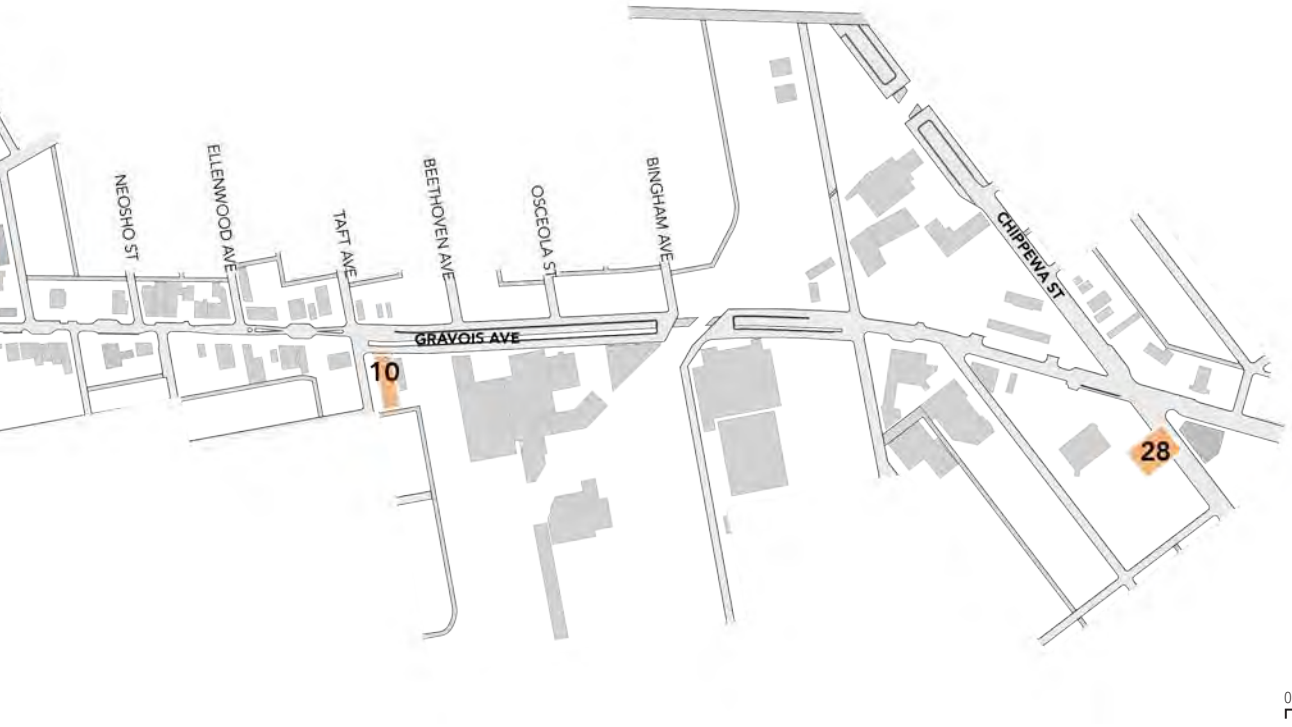
In the long-term, the City and Bevo CID could explore selective demolition of non-contributing structures to create additional dedicated public parking.

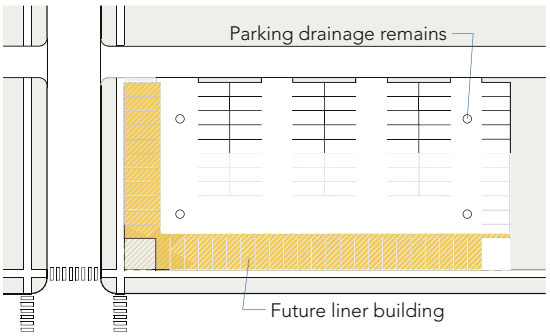
DESIGN GUIDELINES

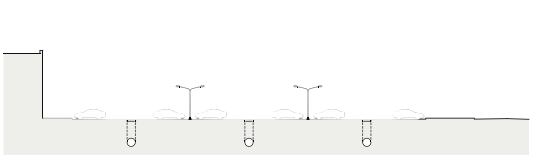
For future developments, parking spaces are arranged to allow for liner buildings to fill in, preserving the existing parking format. Pavement on areas where cars travel or are parked should have a Solar Reflective Index (SRI) of at least 29. This plan recommends Uni-Lock Ecopreoria pavers for low-traffic streets including alleys. For public and private parking lots, Eco-Optiloc pavers are recommended.

LANDSCAPING AND PEDESTRIAN BUFFERS

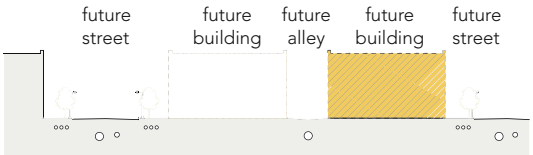
Parking lots should provide a built-in buffer from the sidewalk to avoid cars encroaching on the pedestrian realm. Cars overhanging the sidewalk detract from the allowed pedestrian space. All parking lots should provide landscaping at building frontages and in parking lots to screen automobiles and provide shade.







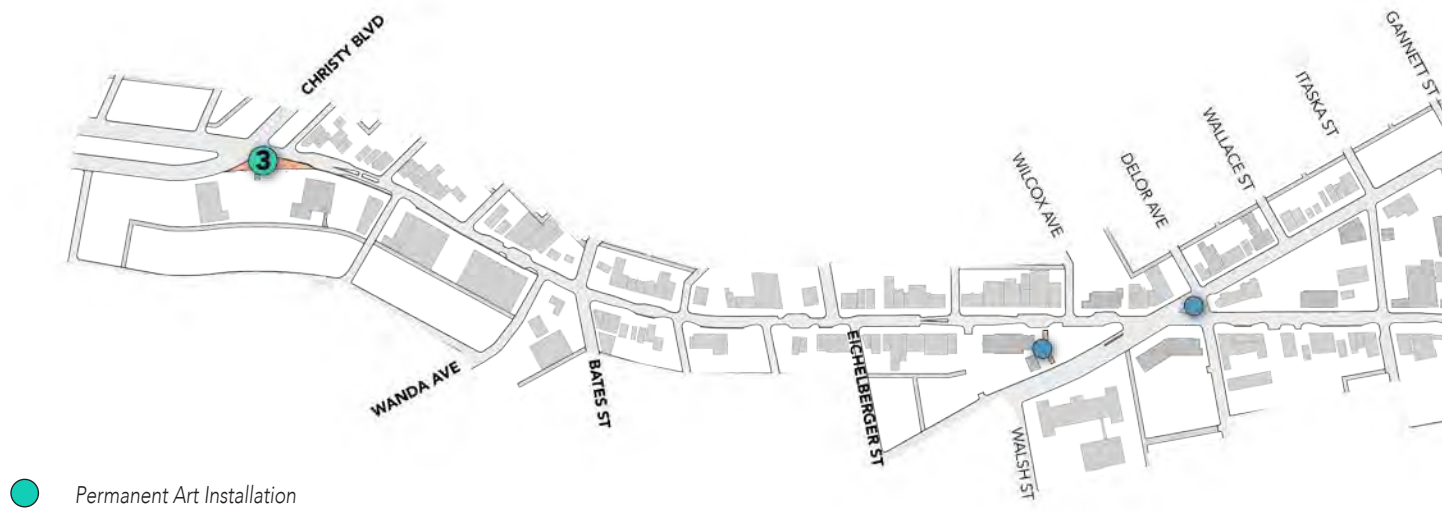
Infrastructure optimized for parking



Infrastructure ready for future development

(Right) Redevelopment-ready parking diagrams showing liner buildings in relation to existing parking lot, photo by Sustainable Nation, Farr; (Center) Directional signage; (Right) Ecopreoria permeable pavers.

INCORPORATING CREATIVE EXPRESSION



Permanent Art Installation

Areas for Temporary Art Installations

Additional Art Projects

Mural

FLAVOR AND SOUL

To keep Bevo creative, culturally vital, and healthy, make places for visual artists, hackers, performers, and unconventional creative spaces.

TEMPORARY ART PADS

Temporary art pads and performance locations provide areas for rotating art and performances. These areas should have access to power and a reinforced base. Such a temporary pad should be considered for the Sebilj Park and Delor St island in the Bowtie, as well as at the Christy trailhead.

PERMANENT ART INSTALLATIONS

More permanent art installations should be installed at the Chippewa intersection, the hillside west of the viaduct, and the Christy Gateway.

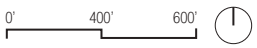
ART ON INFRASTRUCTURE

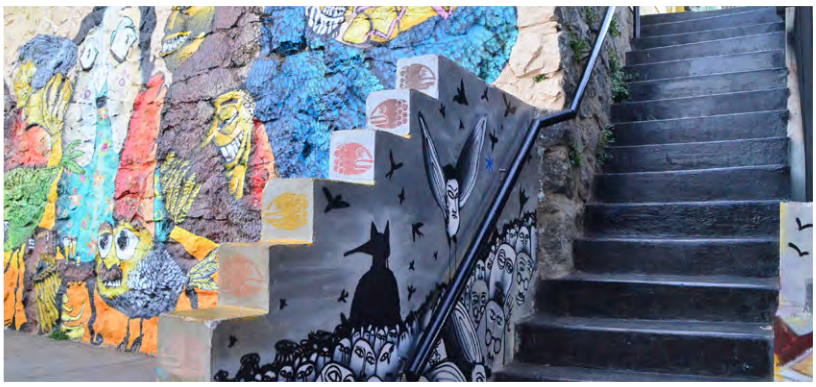
Murals around the Viaduct can go a long way in lightening the heavy infrastructure that currently dominates that subarea.

Additionally, the electrical boxes at Delor St and Gravois Ave can and should be aesthetically improved with a design that is community-focused and reflects the Bevo brand.

COMMUNITY-DRIVEN PROCESS

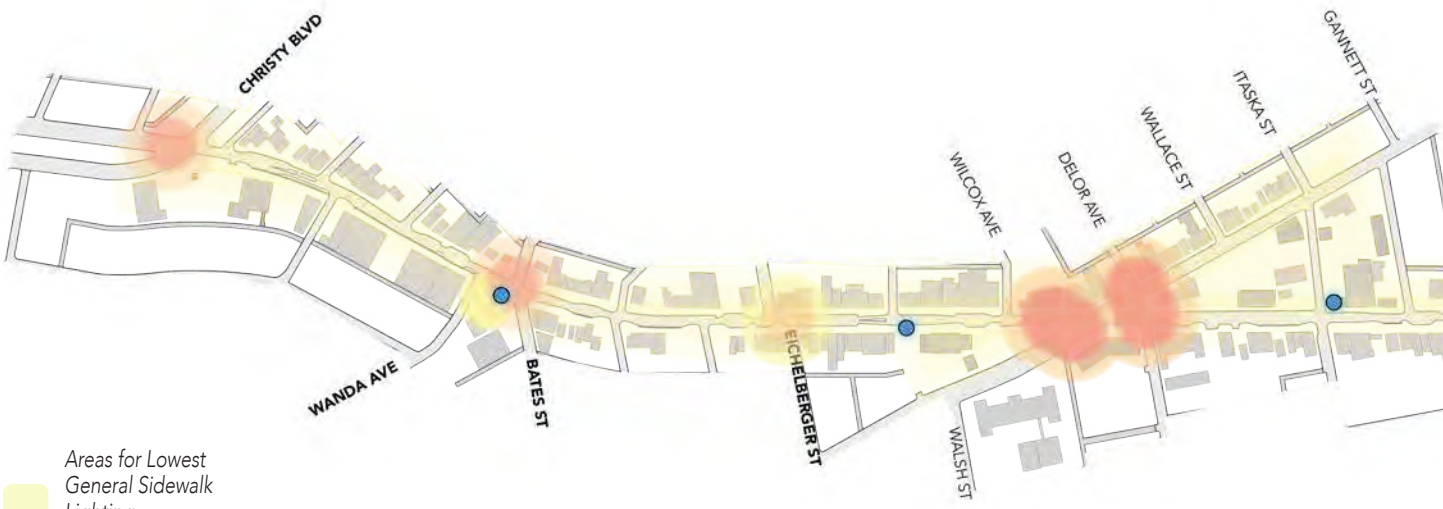
The design, commissioning, and installation of these art pieces should be driven by the local Bevo community (*see Project #9, p 230*). Basic guidelines from the City of St. Louis and the Regional Arts Commission can help Bevo creatively program and share its own artistic passion.





(Top, left) Urban mural, photo by Stephanie Gough; (Top, right) Informal use of a public plaza, copyright Rebecca Ann Photography; (Bottom, left) Photography by Sean Orlando; Copyright Burning Man Staff; (Bottom, right) Painted traffic control boxes, photo by Pinterest.

LAYERING LIGHT ALONG THE CORRIDOR



Areas for Lowest General Sidewalk Lighting (1.2 foot candles)

Areas Where Arterial Collectors Intersect (15 foot candles)

Blue Light Security System

LIGHTING SHOULD BE BEAUTIFUL

Lighting is viewed from many different perspectives—on the street, in an outside café, from a second-story apartment. Often, lighting is designed with only one view in mind: typically, looking straight at a building from the outside. Lighting should be beautiful from all angles and contribute to an enhanced experience for all.

PRACTICES TO MAINTAIN:

- Minimize uplights of all kinds (e.g. sidewalk, spillover light from cobra lights)
- Mount light at the top of façades and aim inward
- Emphasize architectural features such as columns and arches using beam distributions
- Use warm-colored, dim light (minimize blue light)
- Dim lighting during periods of low activity

PRACTICES TO AVOID:

- Use streetlights to light yards and private property
- Overlight
- Use high-glare lights
- Aim across a visual path with a floodlight
- Aim up a façade

MISC. CONSIDERATIONS

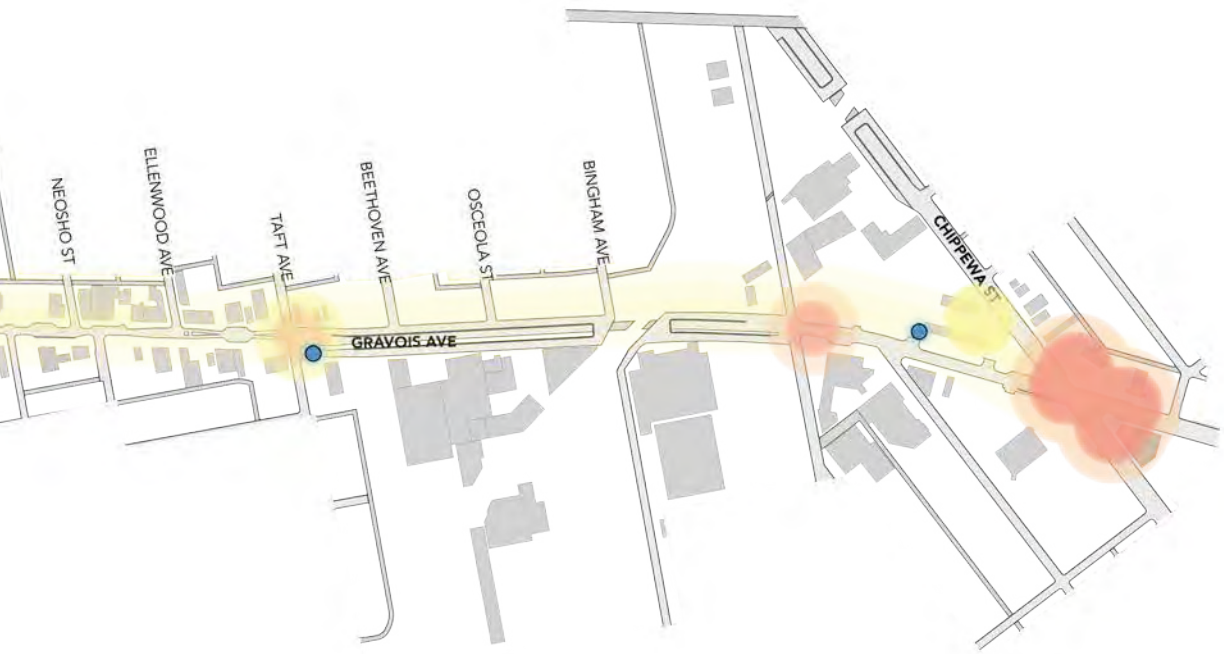
- Parking lots adjacent to Gravois Ave should consider whether additional lighting is necessary beyond street lighting.
- Lighting on stairs should be below eye-level, either integrated into the hand railing or tread lights.
- Follow the lighting zone criteria outlined in the Urban Night Sky Place guidelines and try to use fixtures that are certified as dark-sky friendly.

LIGHTING SHOULD BE SAFE

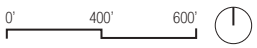
Blue lights are a combined light/call box system that directly connects with local police dispatch. The blue light security system allows for pedestrians to quickly alert police to suspicious activity and provides another layer of safety in the Bevo neighborhood. This plan recommends the installation of these security light/call boxes incrementally along the corridor where high pedestrian traffic already exists.

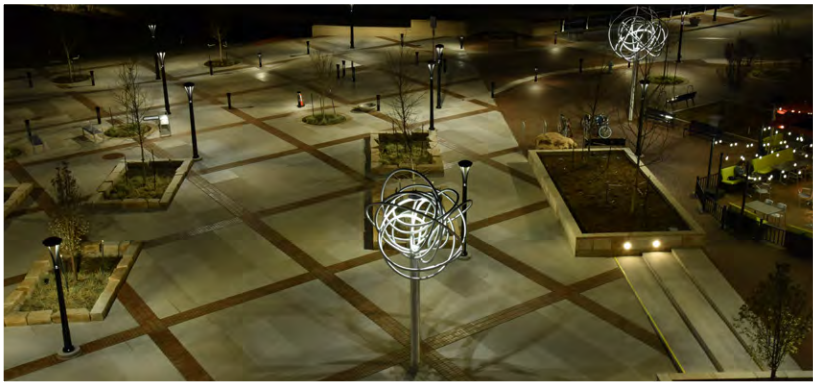
USE STANDARD FIXTURES

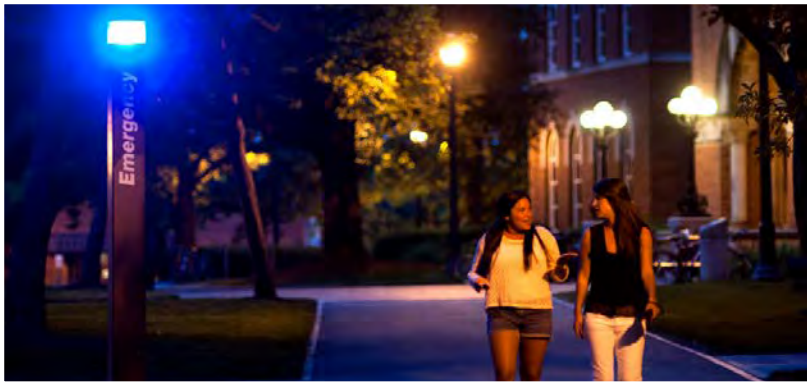
Consider using standard/stocked poles and fixtures in the public ROW that are already approved and available, when possible. Non-City standard lighting would require additional maintenance agreements.



Lighting Location	Recommended Lighting Levels
All exterior improvised areas (except those listed below)	0.06 W/sf (0.64 W/sq. m)
Walkways	0.7 w/lf (2.3 W/m)
Landscaping	0.05 w/sf (0.53 W/sq. m)
Entrance door (per liner foot of door way)	20 w/lf (66 W/m)
Entry canopy	0.25 w/sf (2.7 W/sq. m)
Illuminated building facade	2.5 W/lf (8.2 W/m)







(Top, left) Layered plaza lightings, copyright by Nancy Clanton; (Top, right) Handrail lighting, copyright by Nancy Clanton; (Bottom, left) Low glare pedestrian lighting, photo by Nancy Clanton; (Bottom, right) Security light boxes on college campus , photo by Pinterest.

DELIGHTING PEDESTRIANS

Streetscape furnishings should reflect the traditional yet funky vibe of the community. This spread offers a sampling of types of furnishings that would work well along the redeveloped Gravois.

LIGHTING

Pedestrian-scale lighting should be International Dark Sky Compliant. The lights used in the South Grand neighborhood are an appropriate light to use in the Bevo neighborhood; Bevo should not spend additional funds purchasing specialty lighting if the City already has an acceptable light in their inventory.

WASTE BINS

Simple trash cans should be available throughout the corridor. The Bevo CID should not invest in more, or more expensive, trash cans. A lack of litter on the ground, rather than number or availability of trash cans, is a more important signal to people that littering is not acceptable. As long as trash does not blow out of the bin, the bins that are currently out in Bevo are acceptable.

However, Bevo does not have any recycling bins. Considering how much of the average U.S. waste stream is comprised of disposable beverage containers, a few recycling bins next to gas stations, parks, and schools along the corridor could help reduce waste landfilled.

USE STANDARD FIXTURES

Consider using standard/stocked fixtures in the public ROW that are already approved and available, when possible. Non-City standard elements would require additional maintenance agreements.

1 **PED LIGHTS**
Lights and poles should be selected from the City's existing inventory.

2 **PED LIGHTS**
Smaller bollard-style pedestrian lighting should be sleek and simple.

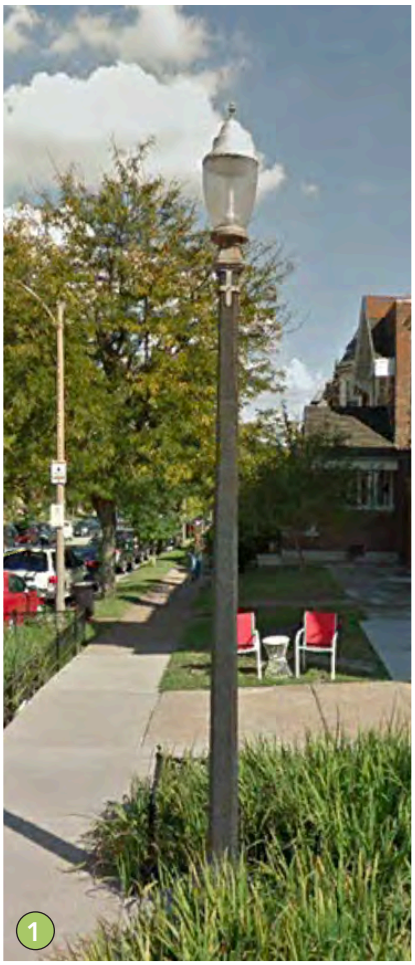
3 **LANDSCAPE GUARDS**
Medium, 12"-24" black fencing guards for planters and screening should be simple with minimal detailing.

4 **WASTE BINS**
Simple waste bins available at bus stops and near corners.

5 **SIDEWALK SEATING**
Dining and parklets have a mix of modern metal and traditional wood

1

3



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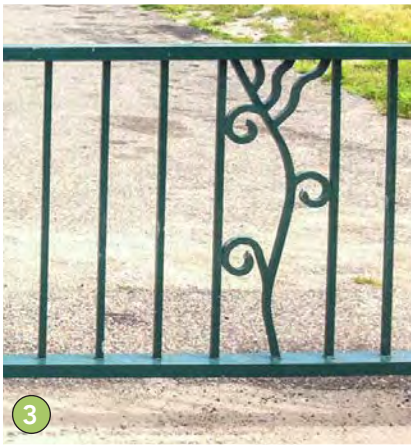

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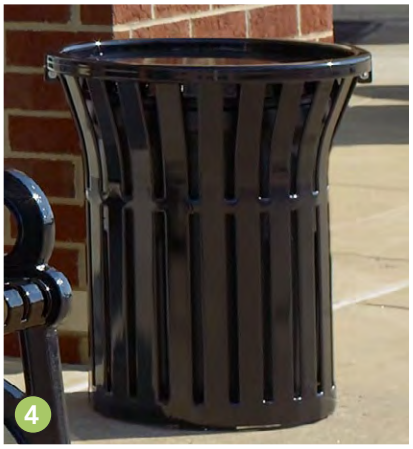


4

GREENING THE GRAVOIS CORRIDOR

HIGHLIGHTING AN ECOLOGICAL TRANSECT

A LANDSCAPE THAT REFLECTS ECOLOGY

The landscaping palette is inspired by the pre-development conditions endemic to this area. The incredible beauty and variety of the Missouri wilderness can guide the selection of hardy species specifically evolved to withstand the local climate conditions.

These plants can do more than just beautify: they are builders. Builders of soil, air quality, biodiversity, and sense of place.

PLANT COMMUNITIES

For the Bevo Study Area, the Design Team proposes the incorporation of four primary plant communities:

Woodland
Riparian corridor characterized by large tree cover and periodically flooded alluvial soils

Wet Savanna
A transition area between woodland and prairie that is

interspersed by trees and very few shrubs with gentle slopes and moderately well-drained soils

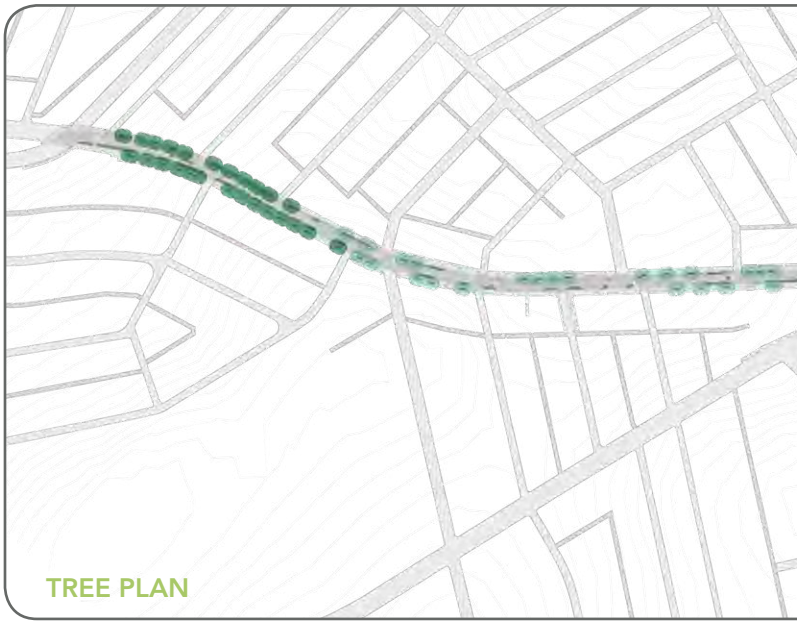
Prairie
Grasslands on slopes or ridgetops with little to no tree cover

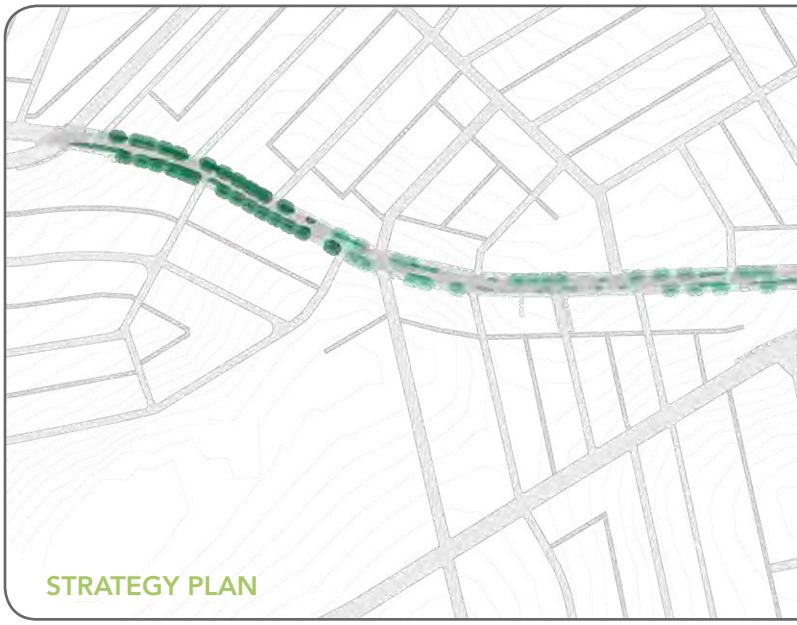
Dry Savanna
A transition area next to prairies that is interspersed by trees and very few shrubs with shallow soil that rapidly drains

A STREETSCAPE TRANSECT

These plant communities are the basis for ecological districts. The 'feel' of these districts aligns with the sub-areas of the corridor. The result is a consistent identity with distinctive sub-districts along the corridor.

LANDSCAPING PLAN





ENVIRONMENT
THE BENEFITS & USE OF PLANTS

USE OF PLANTS

The Gravois Corridor presents distinct opportunities for employment of plants to mitigate lack of shade, intensity of hardscaping and unending pavement. We propose improvements ranging from the immediate improvement residents can take on themselves on DIY budgets to the intense rework of streetscape. These interventions should employ representative species from each of the Environmental Communities as outlined in this section.

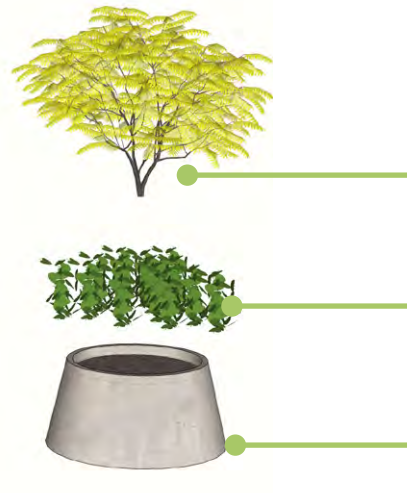
PLANTS ON THE GO

SCULPTURAL EVERGREEN TREES
For form and screening
Use in odd quantities
Look for striking form or unique character

GROUNDCOVER
For texture and interest
Use in even quantities to cover base of planter
Look for contrast to trees in differing shade of green

PLANTERS AND SOIL
Wood planters on casters allow for movable function
Creates buffer for seating areas or screening along a frontage
Emulates campy industrial-meets-modern aesthetic of Das Bevo Biergarten

A "MILL"-ION TREES

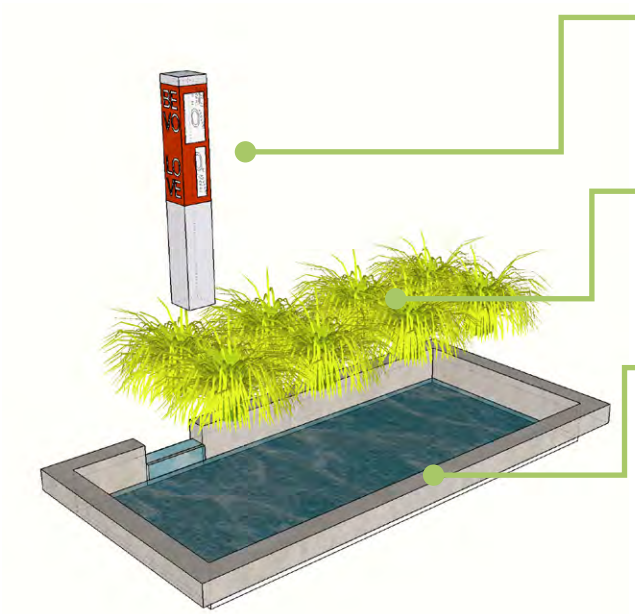


CHARACTER TREE
To accent shade trees and evergreens
Single understory tree
Look for unique, gnarly form

GROUNDCOVER
For texture and interest
Look for trailing or spreading varieties for coverage and overflow
Look for contrast to trees in differing shade of green

PLANTERS AND SOIL
Pre-cast concrete planters
Custom to Bevo - based on the conical form of the Mill
Round form contrasts angular features of streetscape
Could be crash-rated if required/desired

FOLLOW THE STREAM

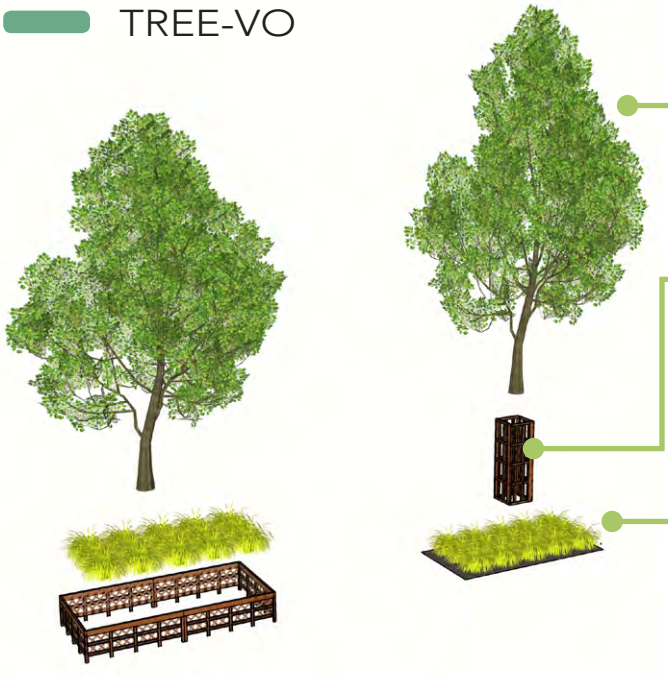


INTERPRETIVE SIGNAGE
For educational impact to passersby
Reinforces Bevo Brand
Adjustable to each subdistrict

WETLAND SPECIES
For filtration and soil development
Natives are adapted to low- and high-water conditions
Should be salt-tolerant for longevity through St. Louis winters

BIORETENTION SOILS
Bioretention soils have larger water storage capacity
Checkdams or aggregate troughs help to slow water upon entry
Soils determined by MSD requirements

TREE-VO

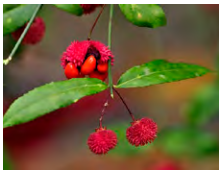


SHADE TREE
For form and screening
Use in pairs as possible
Refer to ecological transect to ensure species diversity

PLANT BED EDGING / TREE GRATE
Inspired by the Bevo Mill windmill lattice work, wood plant bed edging and tree grates area created to help define the vegetated areas

GROUNDCOVER
For texture and interest
Use in even quantities to cover base of planter
Look for contrast to trees in differing shade of green

ENVIRONMENT
THE RIGHT PLANT IN THE RIGHT PLACE

	WOODLAND			WET SAVANNA
SHADE TREE		 *Gymnocladus dioica*	 *Celtis occidentalis*	 *Nyssa slyvatica*	 *Taxodium distichum*
SCULPTURAL EVERGREEN TREES		 *Viburnum rhytidophyllum*	 *Taxus x media 'Flushing'*	 *Chamaecyparis nootkatensis 'Pendula*	 *Pinus thunbergii 'Thunderhead'*
CHARACTER TREE		 *Hamamelis vernalis*	 *Cornus florida*	 *Cercis canadensis*	 *Asimina triloba*
WETLAND SPECIES		 *Euonymus americanus*	 *Lobelia cardinalis*	 *Chasmanthium latifolium*	 *Carex vulpinoidea*
PERENNIALS - GREEN		 *Amsonia illustris*	 *Asarum canadense*	 *Carex pensylvanica*	 *Carex grayii*
PERENNIALS - COLOR		 *Aquilegia canadensis*	 *Polemonium reptans*	 *Spigelia marilandica*	 *Helenium autumnale*
CONTAINER PLANTS		 *Stylophorum diphyllum*	 *Elephantopus carolinianus*	 *Geranium maculatum*	 *Carex albicans*

PRAIRIE

DRY SAVANNA


Quercus phellos


Quercus bicolor


Carpinus carolinia


Gleditsia triacanthos


Liriodendron tulipifera


Cladrastis kentuckea


Chamaecyparis 'Soft Serve Gold'


Chamaecyparis pisifera 'Filifera Aurea'


Ilex crenata 'Sky Pencil'


Juniperus chinensis 'Kaisuka'


Juniperus chinensis


Juniperus scopulorum 'Wichita Blue'


Chionanthus virginicus


Viburnum dentatum


Ceanothus americanus


Crataegus viridis


Amelanchier arborea


Aesculus glabra


Juncus effusus


Iris virginica


Iris fulva


Rudbeckia triloba


Vernonia missurica


Physostegia virginiana


Carex muskingumensis


Calamintha nepeta


Bouteloua Curtipendula


Rhus aromatica


Sporobolus heterolepis


Bouteloua Blond Ambition


Conoclinium coelestinum


Baptisia australis


Dalea purpurea


Liatris spicata


Asclepias tuberosa


Echinacea purpurea


Symphyotrichum novae-angliae


Allium stellatum

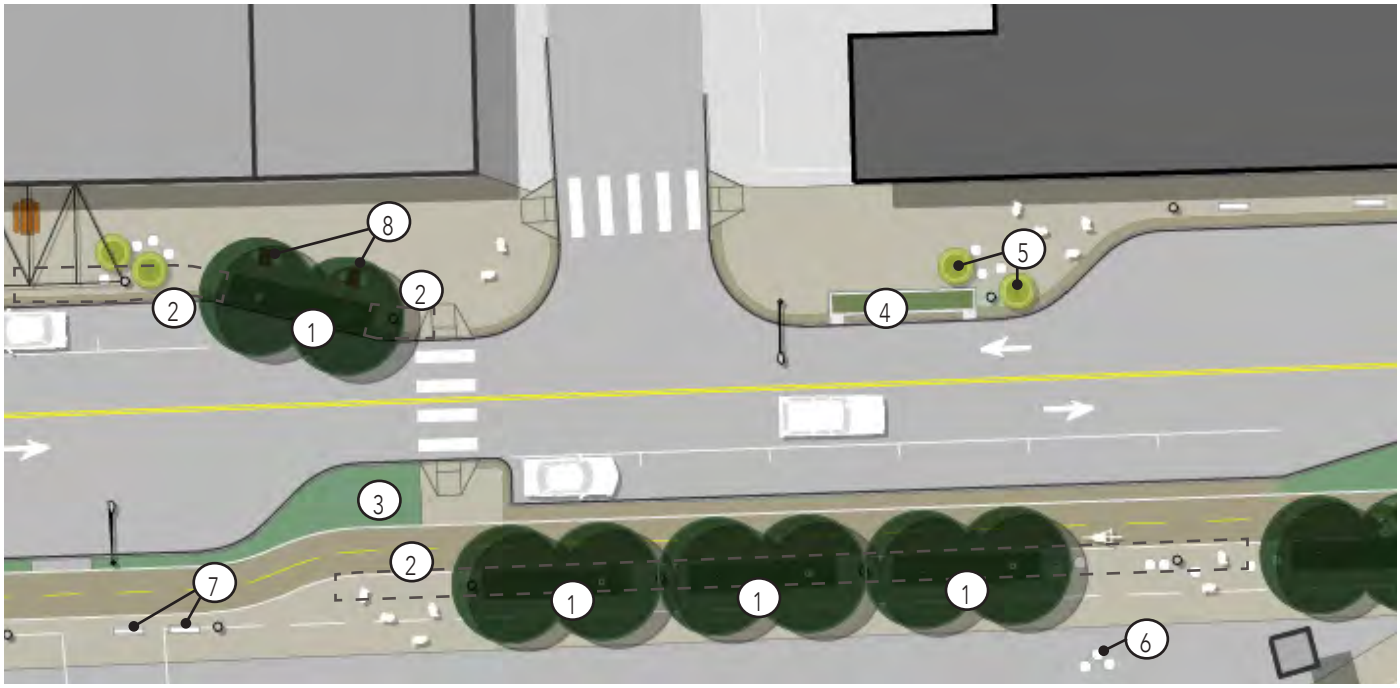

Oenothera macrocarpa


Callirhoe involucrata


Coreopsis lanceolata


Heuchera richardsonii

DESIGNING THE PUBLIC REALM: STREETSCAPE ELEMENTS



The following streetscape guidelines are intended to compliment the illustrative strip map and provide additional detail for the elements located therein. The following pages are not an exhaustive list of all aspects of the plan. This section focuses on key landscape and environmental design components which are critical to achieve a successful implementation..

Each design element is presented as a recommendation of best practices. Exact design and engineering will be required before construction begins in order to consider detailed site-specific conditions which cannot be addressed during the master planning process.

The design guidelines focus on the eight elements listed in the image above.

LEGEND

1. Tree Planter
2. Continuous Root Zone
3. Curb-side Buffer
4. Bioretention
5. Modular Planters
6. Lounge Seating
7. Bench Seating
8. Table Seating


1
2
3


4
5
7
8

STREET TREES

WHERE TO USE

Street trees add to the comfort and success of urban environments where people live, work, shop, share, walk and travel.

Street trees should be prioritized in areas with adjacent on-street parking, in places where pedestrians will be traveling by foot, and as an added filter of sun for nearby buildings. The addition of street trees at the curb of on-street commercial can alleviate the need for shade-providing film on windows, opening views for passersby to active businesses.

In light of planned and inevitable interruptions along the Gravois Corridor, street trees should be doubled-up in tree wells - not consistently placed along the full corridor - so that interruptions are less noticeable and maximum shade can still be realized.

WHERE NOT TO USE

Some locations along the Gravois Corridor may not provide for consistent street tree locations. In segments with several driveway interruptions, significant below-grade utilities, or at active or historic businesses, trees should give way to at-grade planting strategies such as buffer strips or bioretention. Sight triangles should be maintained at all intersections and driveways. Street trees should allow for iconic views, such as the Bevo Mill, to remain.

COORDINATION

Important considerations when deploying street trees along the Gravois corridor include:

- Sight Triangles: Maintain a cone of 30' minimum at intersections for clear visual connection by passing cars
- Utilities: Coordination with existing civic utilities may preclude street trees in specific locations. Where possible, prioritize the consolidation of utilities to maximize a consistent tree spacing and sufficient shade cover for pedestrians.
- Soil Volume: A goal of 600-800 Cubic Feet of soil volume is an ideal situation for long-term health and maximized growth of urban shade canopy trees. In conditions where trees share soil volume, however, that volume per tree can be reduced without noticeable affect to the growth of the canopy. The +/-700 Cubic Feet of soil volume can lead to successful growth of medium-scale trees.
- Size: The City of St. Louis recommends 2-2.5" Caliper tree size (approximately 5-8' tall) for new street trees.
- Planting Period - In the St. Louis region, generally accepted planting times are between September and May.
- Short-term Tree Lawn: Property owners can request a tree for the tree lawns in the city easement adjacent to their property by calling the Citizen's Service Bureau.
- Maintenance: Watering and monitoring for the first 5 years of establishment, trunk protection from bike locks, shovels, and vehicles throughout the life of the tree, and periodic preventative and qualified pruning are recommended to combat the high mortality rate for street trees in urban environments.

BENEFITS OF URBAN STREET TREES

- For a planting cost of $250-600, a single street tree can return over $90,000 of direct benefits (not including aesthetic, social and natural) in the lifetime of the tree.
- Street safety comparisons show reductions of run-off-the-road crashes and overall crash severity when street tree sections are compared with equivalent treeless streets.
- Businesses on treescaped streets show 12% higher income streams, which is often the essential competitive edge needed for main street store success, versus competition from plaza discount store prices.
- Trees absorb the first 30% of most precipitation through their leaf system, allowing evaporation back into the atmosphere.
- Temperature differentials of 5-15 degrees are felt when walking under tree canopied streets.

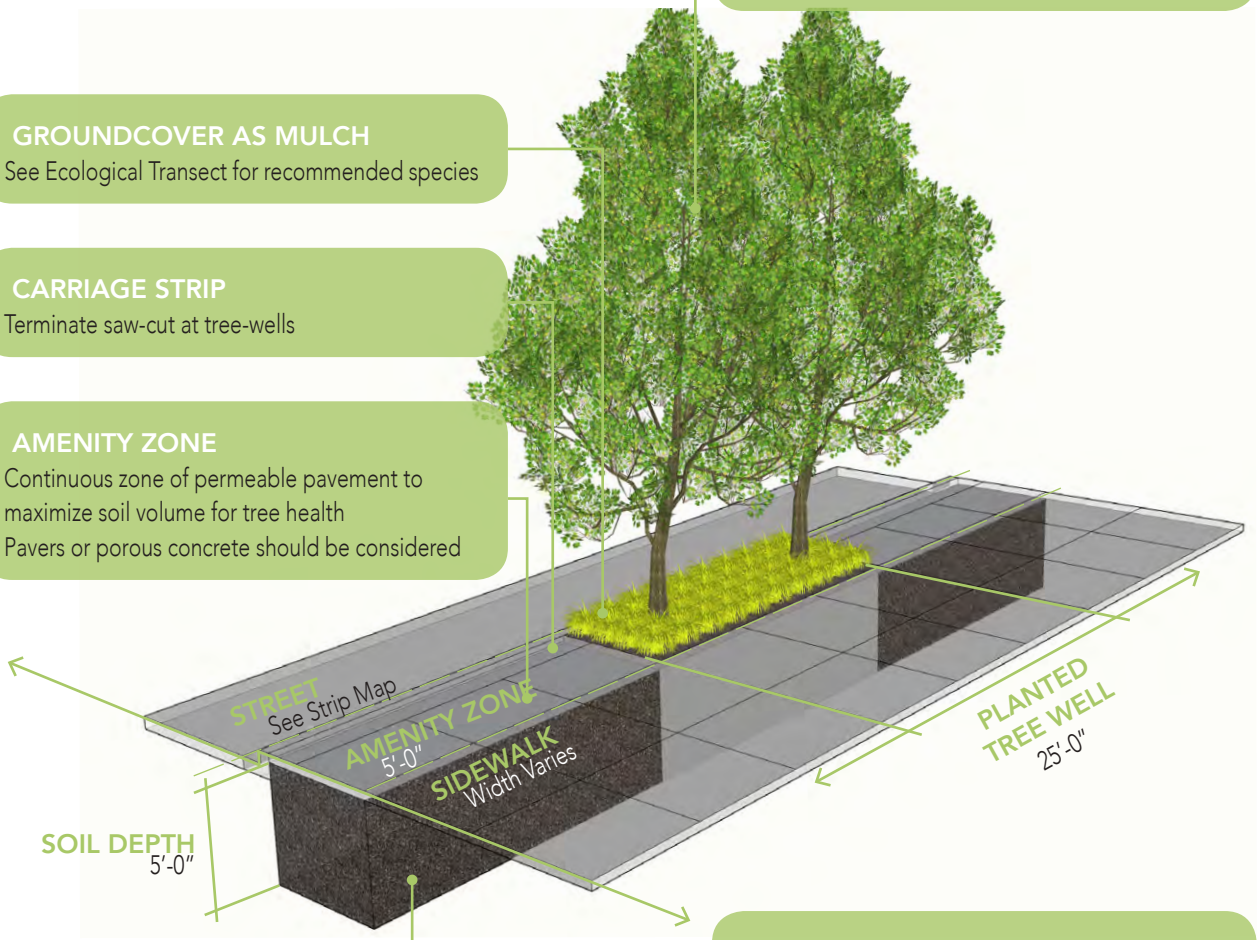
Source: Walkable Communities, Inc, 2006

STREET TREES
Double-up for maximum impact
See Ecological Transect for Recommended Species

GROUNDCOVER AS MULCH
See Ecological Transect for recommended species

CARRIAGE STRIP
Terminate saw-cut at tree-wells

AMENITY ZONE
Continuous zone of permeable pavement to maximize soil volume for tree health
Pavers or porous concrete should be considered



SOIL
Consider Structural Soil or similar to maximize root space and support pavement system above

PROTECTION
Fencing that draws from the character of Bevo can support long-term tree and plant health, especially during establishment. Wood and lattice elements can easily be built by residents or volunteer groups.

BIORETENTION

WHERE TO USE

Bioretention facilities are landscaped depressions designed with soils and a variety of plants to receive and treat stormwater through the use of natural processes. These processes include the uptake of water by plants and transfer of water to the atmosphere; the infiltration of water into the soils where microbial action helps breakdown pollutants; and a recharge of groundwater as gravity pulls water down through the soil layers.

Along the Gravois Corridor, Bioretention areas are intended to mitigate stormwater from adjacent sidewalks and, to some extent, stormwater flows from Gravois Ave. Bioretention should be prioritized along the corridor in areas with sufficient space, low to moderate need for sidewalk pedestrian use, and at locations immediately upstream of street inlets to maximize filtration prior to water flows into inlets. Where possible, bioretention areas should be used in succession for a chained effect .

WHERE NOT TO USE

The Gravois Corridor can benefit from a consistent application of bioretention, but standard tree wells should be prioritized where shade is most needed. Bioretention is not ideal in locations where significant access from the curb edge is required; however lower-frequency on-street parking areas are compatible due to the carriage strip at the inlets.

COORDINATION

Important considerations when deploying bioretention along the Gravois corridor include:

- Utilities: Coordination with existing civic utilities may preclude bioretention in specific locations. Where possible, prioritize the consolidation of utilities to maximize a consistent amenity zone at back of curb.
- Metropolitan Sewer District: Comply with current bioretention details, standards, & best practices.
- Grading: Careful attention to adjacent surface elevations and drainage patterns should be paid in order to collect without washout stormwater into the bioretention basins.
- Safety: Issues relating to ponding depth should be carefully considered, particularly for sites where small children will be proximate to the installation.
- Education: Interpretive signage outlining the benefits of bioretention should be included at bioretention sites to dispel misconceptions.
- Space: For constrained sites, using additional subsurface stone to meet storage volume needs should be considered.

BENEFITS & EFFECTIVENESS

- Studies indicate that bioretention areas can remove 75% of phosphorus and nitrogen; 95% of metals; and 90% of organics, bacteria, and total suspended solids.
- Bioretention areas enhance the landscape in a variety of ways: they improve the appearance of developed sites, provide wind breaks, absorb noise, provide wildlife habitat, and reduce the urban heat island effect.

LIMITATIONS

- Because bioretention areas infiltrate runoff to groundwater, they may be inappropriate for use at stormwater "hotspots" (such as gas stations) with higher potential pollutant loads.
- Premature failure of bioretention areas is a significant issue that results from lack of regular maintenance. Ensuring long-term maintenance involves sustained public education and deed restrictions or covenants for privately-owned cells.
- Bioretention terraces may be required for slopes >20%.
- Ensure vertical separation of at least 2' from the seasonal high water table.

MAINTENANCE

- Bioretention requires careful attention while plants are being established and seasonal landscaping maintenance thereafter. In many cases, maintenance tasks can be completed by a landscaping contractor.
- Inspect pretreatment devices & bioretention cells regularly for sediment build-up, structural damage, & standing water.
- Inspect soil and repair eroded areas and remove litter and debris monthly.
- Treat diseased vegetation as needed. Remove and replace dead vegetation twice per year.
- Proper selection of plant species and support during establishment of vegetation should minimize—if not eliminate—the need for fertilizers and pesticides.
- Replace mulch every two years, in the early spring.
- Upon failure, excavate bioretention area, scarify bottom and sides, replace filter fabric and soil, replant, and mulch.

Source: Metropolitan Area Planning Council

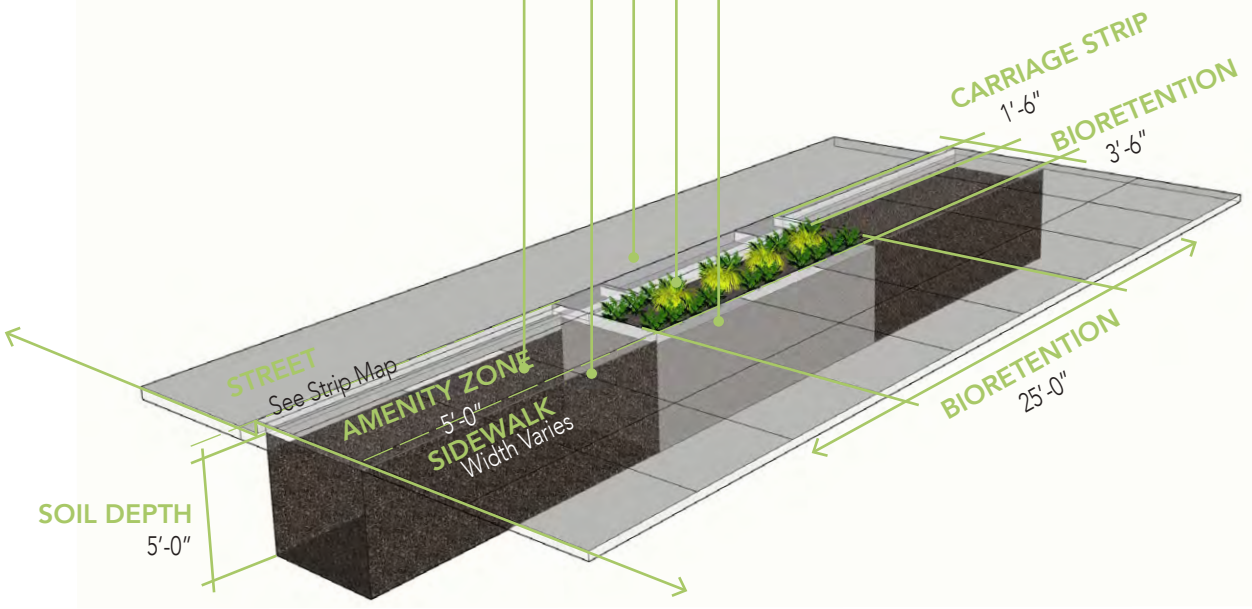
BIORETENTION CARRIAGE STRIP
1'-6" of pavement at back of curb with inlets for stormwater from Gravois. Outlet at low end will prevent overflow in intense storm events.

CHANNELIZED INLET
Allows for stormwater to pass through the bioretention area for filtering and infiltration

AMENITY ZONE
Continuous zone of permeable pavement to maximize soil volume for tree health and stormwater management
Pavers or porous concrete should be considered

BIORETENTION PLANTING
See Ecological Transect for Recommended Species
Planting plan should place 1 gal. size plants at an average of 18" O.C. spacing
At least 3 species per bioretention area should be selected to avoid a monoculture.

BIORETENTION SOIL
Per Current MSD Requirements
Planting soils should be placed in 1'-2' lifts, compacted with minimal pressure, until desired elevation is achieved
Maintain 3" of freeboard to prevent overflow



ST. LOUIS METROPOLITAN SEWER DISTRICT BIORETENTION QUICK FACTS

- Bioretention should fully drain the water quality storage volume within 2 days.
- Storage is considered as the volume provided within and above the bioretention soil. (A porosity of 30 – 35 percent voids is typically used for bioretention soil.)
- The ponding depth (i.e., storage above the soil) should be 6 – 18 inches when bioretention is sized for the storm-water quality volume.
- Routine maintenance activities for bioretention include trash removal, weeding, and plant/tree trimming. Less frequent, but typical maintenance activities include mulch replacement, soil aeration, spot replacement of bioretention soil and possibly some plant replacement.

Note: Current as of Study. Confirm current requirements at time of design, engineering and implementation.

BUFFER PLANTING

WHERE TO USE

Buffer plantings are areas along the curb which buffer pedestrians or cyclists from automobiles traffic. The proposed design along Gravois Ave illustrates two typical applications for this type of planting: a narrow strip along the cycle track and at corners where stormwater management isn't necessary.

These planting areas help pedestrians and cyclists feel safer next to moving vehicular traffic and therefore are most appropriate adjacent to the travel lanes.

WHERE NOT TO USE

Buffer plantings are not appropriate in places that will receive high levels of foot traffic, such as near crosswalks or directly adjacent to parallel parking. In addition, careful consideration should be made for vehicular sight-distance trianges at intersections and driveway entrances to eliminate the risk that these buffer plantings will obscure the vision of drivers and create dangerous conditions.

COORDINATION

Important considerations when deploying buffer plantings along the Gravois corridor include:

- Sight Triangles: Maintain a cone of 30' minimum at intersections for clear visual connection by passing cars
- Utilities: Coordination with existing civic utilities may preclude street trees in specific locations. Where possible, prioritize the consolidation of utilities to maximize a consistent tree spacing and sufficient shade cover for pedestrians.
- Planting Period: In the St. Louis region, generally accepted planting times are between September and May.
- Maintenance: Watering and monitoring for the first year of establishment. Replace perennials lost to foot traffic or salt overspray.
- Seasonal landscaping maintenance required after planting. In many cases, maintenance tasks can be completed by a landscaping contractor working elsewhere on the site.
- Treat diseased vegetation as needed. Remove and replace dead vegetation twice per year.
- Proper selection of plant species and support during establishment of vegetation should minimize—if not eliminate—the need for fertilizers and pesticides.
- Replace mulch every two years, in the early spring.

PLANTING DESIGN

- Select species which are proven to be salt tolerant
- Carefully consider sight-distance-triangles and select plantings of appropriate height (less than 36") at driveway entrances and intersections.
- Minimize the use of dense shrubbery to promote visibility, safety and security.
- Do not select species with thorns or large fruit that will negatively impede pedestrians or cyclists.
- Use native plants where practical.
- Repeat species often to create a sense of intentionality.

BENEFITS TO CYCLISTS

- Buffered bike lanes appeal to a wider cross-section of bicycle users.
- Buffered bike lanes encourage bicycling by contributing to the perception of safety among users of the bicycle network.

BENEFITS TO PEDESTRIANS

- Enhanced aesthetics and seasonal interest
- Potential for more street trees which will add shade, comfort, and character to the pedestrian zone

Source: NACTO

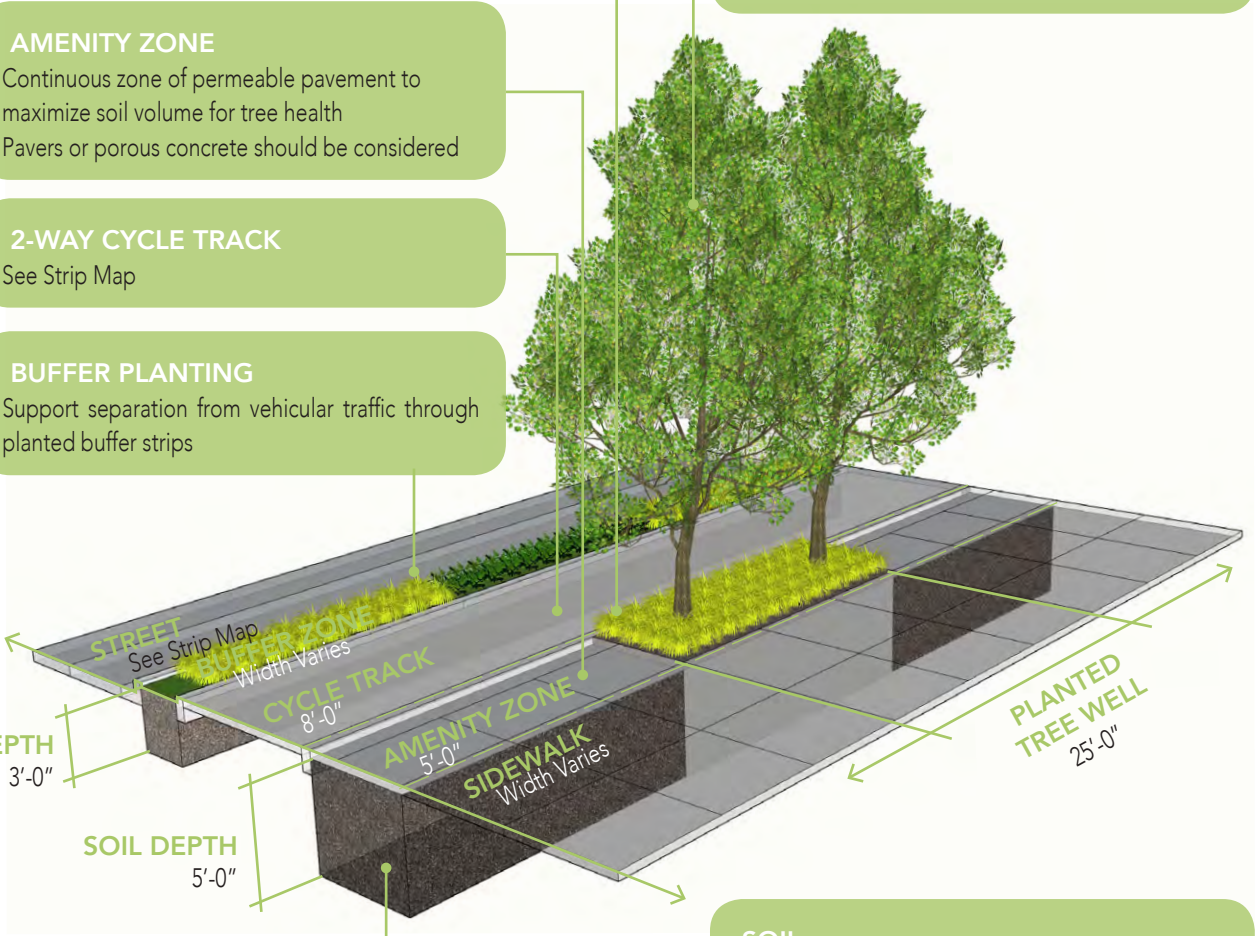
GROUNDCOVER AS MULCH
See Ecological Transect for recommended species

AMENITY ZONE
Continuous zone of permeable pavement to maximize soil volume for tree health
Pavers or porous concrete should be considered

2-WAY CYCLE TRACK
See Strip Map

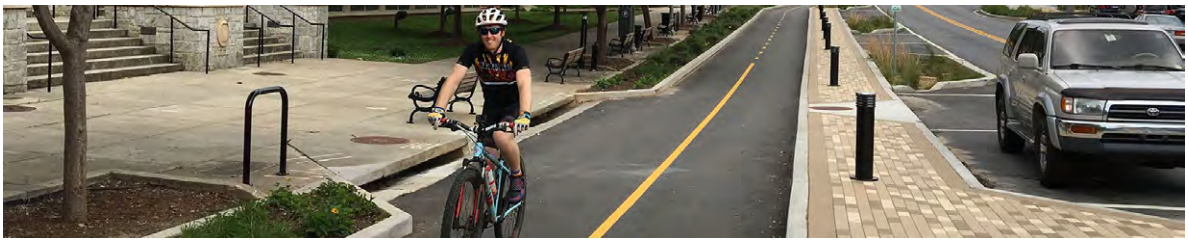
BUFFER PLANTING
Support separation from vehicular traffic through planted buffer strips

STREET TREES
Double-up for maximum impact
See Ecological Transect for Recommended Species



SOIL
Consider Structural Soil or similar to maximize root space and support pavement system above

CASE STUDY
McDonough Street in Decatur, Georgia applies similar buffer strips between roadway and cycle track



MODULAR PLANTERS

WHERE TO USE

Early in the reinvention of the Gravois Corridor there may be situations that would benefit from buffering, boundaries and flexible dividers. In these locations, the use of a movable planter can allow for adjustable and dynamic assets.

These movable planters can divide seating zones from pedestrian sidewalk areas, indicate the edge of individual parcels so that sidewalk-adjacent parking lots do not impede on pedestrian flows, or in areas incompatible with in-ground planting such as above utility corridors or within busy activity zones.

The appropriate question may not be "where to use", but "when to use" when it comes to modular planters. These interventions are intended to be flexible and scalable in order to act as the first phase of an overall street overhaul. With some volunteer hours, moderate investment, or generous donations, these elements could represent and early-win and unify the streetscape prior to major reconfiguration.

WHERE NOT TO USE

The upside of these elements is that they are flexible. As such, if a specific location doesn't work out the elements can be re-positioned to another segment of the streetscape. Ideally, the movable, modular planters would be centralized in the bowtie district and could lessen in frequency of use further out in the study area.

The optimal location for these rolling planters is flat, however, so areas with grade change may not be ideal. Also, these elements should not create barrier, but should flexibly partition unique use zones to reinforce identity.

COORDINATION

Important considerations when deploying these movable, modular planters along the Gravois corridor include:

- Construction - consistent details, fasteners, and parts will help with the long-term maintenance and consistent appearance along the corridor. All specified materials and plant selections are readily available at most hardware or do-it-yourself stores, many of which are known to support community endeavors through materials donations.
- Soil and Drainage - These planters are not water-tight. As such, a sturdy filter fabric, loose-draining aggregates, and healthy planting soil should be employed.
- Visibility - The intent of the planting approach includes sculptural evergreen low-growing tree. As such, these planters can help buffer views from incompatible elements. However, care should be taken so that needed views are maintained.
- Maintenance - Watering will be required throughout the life of the plant materials in these modular planters in times of little rain. Also, if annual species are selected for the groundcover they will require removal at the end of the growing period and replanting following the last frost. Periodic sculptural pruning will be required to maintain the shapely form of foundational plantings.

MATERIALS LIST, EACH

2x2 Ground-Contact Pressure Treated Lumber, Cedar Tone

(8) 18" internal posts
(2) 8' internal braces
(2) 36" internal braces

Approx. Cost: $17.25

1x6 Ground-Contact Pressure Treated Lumber, Cedar Tone

(6) 8' base slats

Approx. Cost: $54.50

1x6 Western Red Cedar

(6) 8' Side Slats
(6) 18" Side Slats

Approx. Cost: $123.25

+/- 300 Stainless Steel Deck Screws

Approx. Cost: $56.50

6 Lockable Casters

Approx. Cost: $105.50

50 Sq Ft Landscape Filter Fabric

Approx. Cost: $6.00

1.5 Cubic Yards of Planting Soil

Approx. Cost: $57.00

Approx. Total Cost: $420.00

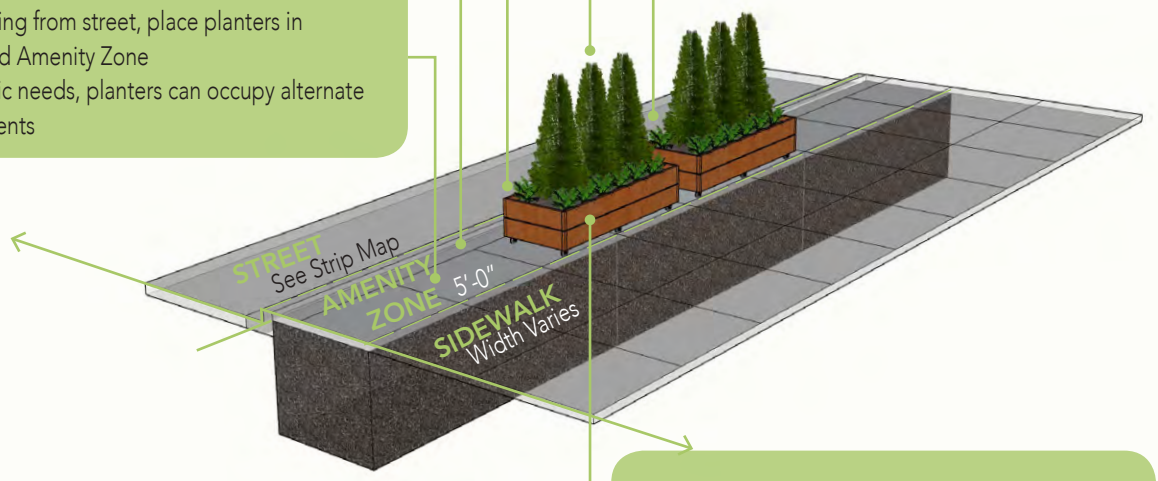
SCULPTURAL EVERGREEN TREES
See Ecological Transect for Recommended Species

GROUNDCOVER
See Ecological Transect for Recommended Species

PLANTER
36"W x 96"L x 24" H movable wood planters on casters - See material list below

CASTERS
Lockable casters allow for mobility, flexibility

AMENITY ZONE
For buffering from street, place planters in designated Amenity Zone
For specific needs, planters can occupy alternate arrangements



SOIL
Planting soil rich in nutrients should be used to maximize growth of evergreen and groundcover plants

COMBINING SPECIES

The intent of these planters is to emulate the industrial/campy/quirky precedent at Das Bevo's Biergarten. The planting approach is further outlined in the Ecological Transect Section of this study, but a few ideal partners for these planters follow:


Chamaecyparis nootkatensis 'Pendula'

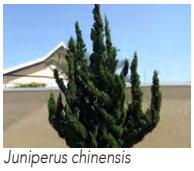

Carex albicans


Pinus thunbergii 'Thunderhead'


Symphyotrichum novae-angliae


Ilex crenata 'Sky Pencil'


Callichoe involucrata


Juniperus chinensis


Heuchera richardsonii

MODULAR PLANTERS & SEATING

WHERE TO USE

Robust streetscapes blend flexible with fixed, hard and soft, open and occupied. As such, another layer of modular planters and seating in precast concrete materials can add to the streetscape environment by offering additional seating and larger-scale planting in modular planters.

These planters and auxiliary seating should be utilized in locations where ingrade planters are not feasible or in places where smaller interventions are necessary. Due to the materiality and size, these planters can double as non-rated crash deterrents and would be beneficial in bump-out corners with larger areas of pavement.

The auxiliary seating can be employed in places where casual collections of people are desired. When supplemented with wood tables, the seating can create seating beyond seasonal use.

WHERE NOT TO USE

Due to the size and material of these elements they should not be deployed in places where it is necessary to move planters or seating elements.

COORDINATION

Important considerations when deploying modular planters and seating along the Gravois corridor include:

- Sight Triangles - maintain a cone of 30' minimum at intersections for clear visual connection by passing cars
- Soil and Drainage - Concrete planters are susceptible to crazing due to freeze-thaw in the St. Louis region. Therefore, it is necessary to provide a drainhole and plug for all planters. With the drain hole, a sturdy filter fabric, loose-draining aggregates, and healthy planting soil should be employed.
- Soil Volume and Plant Size - Planters of this size will hold approximately 1.75 cubic yards of soil. As such, they can accommodate small character trees. These trees should be selected for unique, craggy character and should be approximately 1.5-2" caliper, acheiving an initial height around 5-8" (standing 8-12' above grade in the planter.)
- Planting Period - In the St. Louis region, generally accepted planting times are between September and May.

PRECAST CONCRETE FABRICATORS

Custom Concrete Site Furnishings are outside the realm of do-it-yourselfers. Local precast concrete experts are a natural partner for the production of these custom elements. Local aggregates and river sands will further enhance the connection to local materials and sense of place:

- TrueCrete - Eureka, Missouri
  Specializing in custom projects and furnishings
- Pre-Cast Products, Inc. - St. Ann, Missouri
  Specializes in small-scale statuary and urns
- Champion Precast - Troy, Missouri
  Primarily focused on utility structures, but advertises difficult or complex custom projects

- Maintenance - Concrete planters and seating elements are relatively maintenance-free. Should graffiti become an issue, graffiti-proof coatings can be applied to facilitate cleaning.
- Maintenance - Watering will be required throughout the life of the plant materials in these modular planters in times of little rain. Also, if annual species are selected for the groundcover they will require removal at the end of the growing period and replanting following the last frost. Periodic sculptural pruning will be required to maintain the shapely form of foundational plantings.
- Modular seating - The seating is playful and non-directional. As such, seating can be accessed by various ages, abilities, and for myriad uses. Children and playful adults will likely find they are fine platforms for oration. Non-specific seating such as this will assist in making Bevo a place for all.

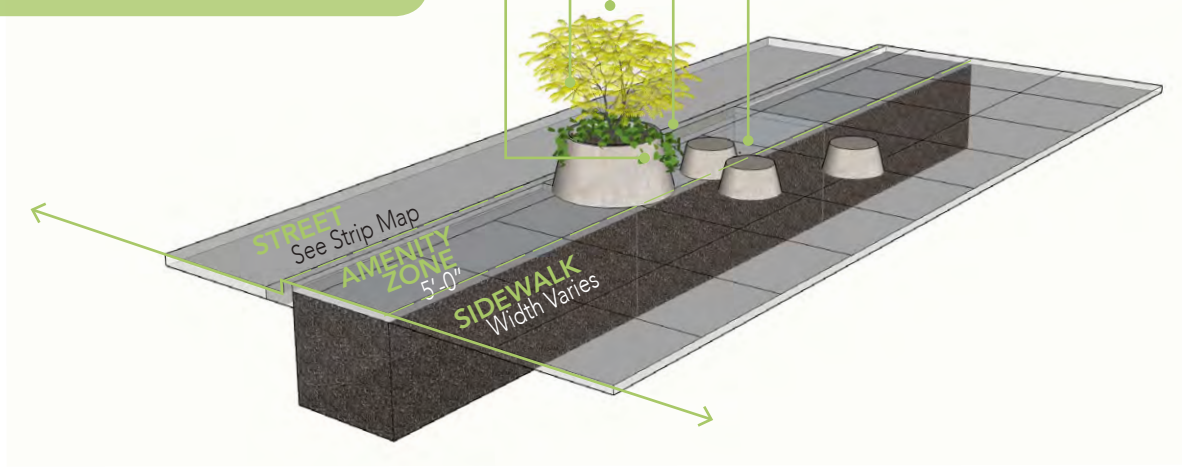
CHARACTER TREE
See Ecological Transect for Recommended Species

GROUNDCOVER
See Ecological Transect for Recommended Species

PLANTER
60" Diameter pre-cast concrete planter

CONCRETE TUFFET
36" Diameter pre-cast concrete tuffet seat

GROUPINGS
Cluster Modular Planters and Modular Seating to create conversation or lounge zones
Planters may be deployed in even numbers, but seating should be used in odd quantities to support conversation and gathering



ALLIED FORM

As referenced in the Architectural Guidelines elsewhere in this document, it is not desirable that other buildings emulate or mimic the iconic and historic Bevo Mill. The form of these planters are not directly representational of the Mill, but their canted conical form certainly draws inspiration from the edifice. When selecting aggregates, river sands, and concrete mix for these elements care should be taken to adhere to the color recommendations set out in the Architectural Guidelines portion of this document to enhance the visual connection.

STREET TABLES

WHERE TO USE

The intent of these various incantations of tables and seating is not to replace outdoor dining and seating for individual dining establishments. These seating elements are of the public domain and are flexible enough to fit at myriad locations along the corridor. Use tables in groups to encourage gathering spaces. Where possible, position tables perpendicular to the street so that all seats address the traffic flow. It is also desirable to place tables under street tree shade canopy as possible and to supplement with umbrellas as needed.

WHERE NOT TO USE

Table seating should not be employed too near to business entries or driveways. Care for sight lines and gatherings away from necessary traffic flows and pedestrian walks should be taken. A minimum of 3'-0" clear walkway is required by the City of St. Louis, but good practice dictates 42" clear for pedestrian traffic flows. A minimum walkway of 32" should be allowed on all sides of tables, benches, modular seats and adjacent fixed site elements.

COORDINATION

Important considerations when deploying these movable, modular tables and seating along the Gravois corridor include:

- Construction - Similar to the movable planters, these tables and benches can be constructed by ambitious neighbors or community groups. As such, consistent details, fasteners, and parts will help with the long-term maintenance and unified appearance along the corridor. All specified materials and plant selections are readily available at most hardware or do-it-yourself stores, many of which are known to support community endeavors through materials donations.

MAINTENANCE OF CEDAR FURNISHINGS

- Hand wash periodically with mild detergent and a soft rag, and rinse with a hose. Do not use a pressure washer, as it may damage the wood.
- For stubborn stains or mildew, apply a mild bleach and water solution, rinse thoroughly, and allow to dry before applying any stain or sealant.
- Unfinished cedar ages naturally to a silver-gray finish with a raised grain. Wood sealer helps preserve the original warm color and protects the wood from moisture and dirt, and it will also keep the grain from rising.
- For a colored finish, apply a transparent or solid stain every couple of years. Breathable stains, available in many colors, are a better alternative to paint, which traps moisture, and blisters and peels.
- Finishing oils should not be used; they will attract dust and grit.
- Check and tighten fastenings each season and, if possible, consider storing cedar furniture in a garage or shed in the winter months.

Source: cabinlife.com

LONG TABLE B
Long wood table, 24"W x 72"L x 28" H. Picnic benches for seating, 12"W x 60"L x 14" H. Umbrella color to match Das Bevo.

LONG TABLE B
Long wood table, 24"W x 72"L x 28" H. Picnic benches for seating, 12"W x 60"L x 14" H.

LONG TABLE C
Long wood table, 24"W x 72"L x 28" H. ADA accessible when using concrete tuffets as seating.

BAR TABLE
Wood bar height table, 24"W x 48"L x 42" H.

CAFE TABLE
Wood cafe table, 24"W x 32"L x 28" H, with chess board pattern on top. Concrete tuffets for seating.

POTENTIAL FUNDING PARTNERS

- Hardware stores such as Home Depot, Lowes, Ace, Menards
- Soil Suppliers such as Kirkwood Material Supply or St. Louis Composting
- Plant Growers such as Bayer's Garden Shop or Fendler's Nursery

WOODWORKING PARTNERS

Ambitious neighbors with moderate know-how can build these fixtures in a matter of hours, but potential build partners could include:

- Scouting Troops
- Church volunteer groups
- St. Louis Woodworkers Guild
- American Woodworking Academy

STORM DESIGN OVERVIEW

DESIGN GUIDELINES

While crowned streets date back to ancient Greece, systems to drain them are a modern invention. With the rapid growth brought about by the industrial revolution, U.S. cities grew rapidly in area, density, and population often without sewer systems. The gutters in major cities became the holding place for human waste, animal waste, rainwater, stormwater and all manner of matter that had no other place to go. Cities began to retrofit sewers to drain all of it away with the predictable result being fouled surface waters. As narrow answers to narrow problems, these early sewers combined stormwater and sewage in one pipe.

Over the last 20 years urban design has embraced the benefits of native plants and hydrology. This native design trend has found application in infrastructure with the green infrastructure movement, rethinking the design of cities and streets to transform them into nature-enhancing facilities: in a phrase — stormwater streets. The re-planning and redesign of Gravois Ave presents a major opportunity to transform it into a storm water street.

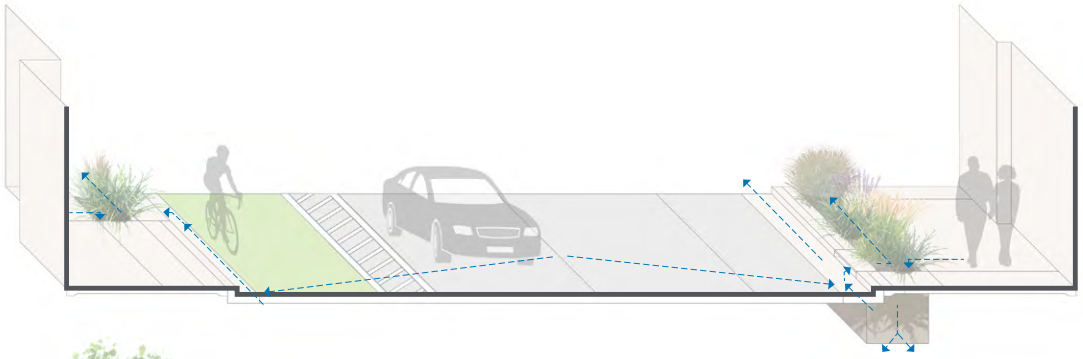
CURBSIDE RAINGARDENS

Facilities along the curb can collect runoff from the street, treating the water and then slowly percolating excess into the water table. The diverted water never enters the sewer system, causing a reduction in overall sewage volume. Due to St. Louis' combined sewer system, heavy storm events cause overflows in the Mississippi—a problem which can be reduced by reducing stormwater drainage into the sewer.

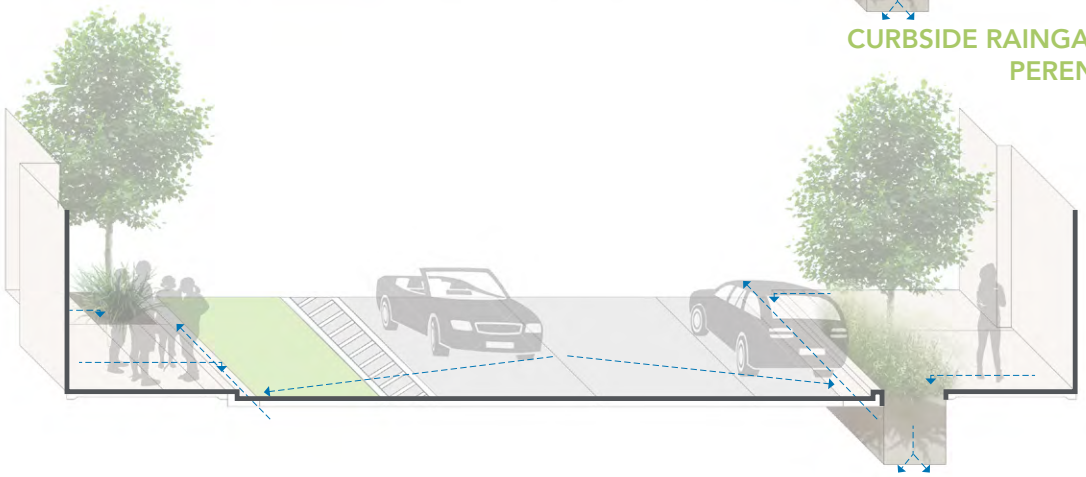
CONDITION AT THE VIADUCT

Like the crown of a street, the pedestrian and bicycle paths would slope into the tree wells at the center of the raised platform. Water in the driving lanes would drain to either side of the roadway. To avoid flooding, drains at the bottom of the viaduct should be well equipped to quickly process water from the viaduct.

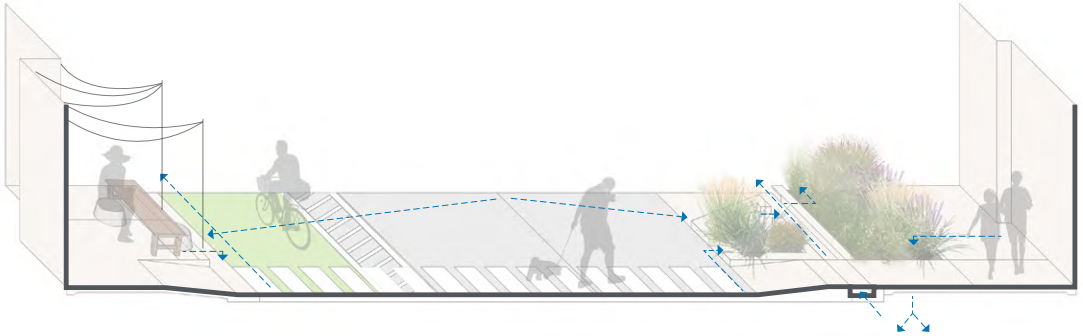
Refer to description on p. 203 for more information on stormwater requirements and potential MSD funding.



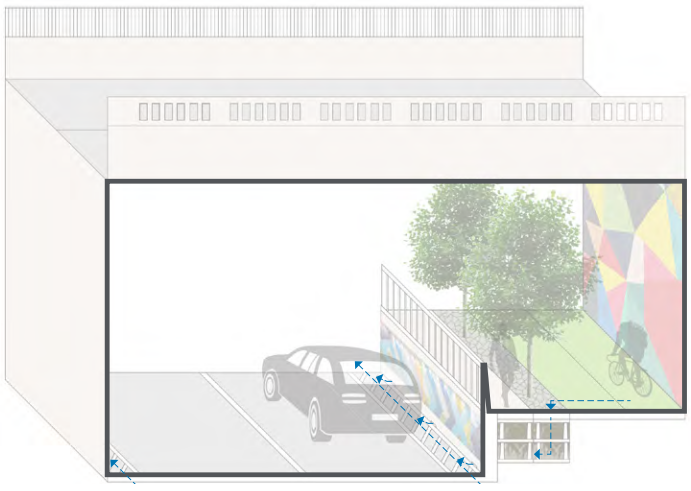
CURBSIDE RAINGARDEN: PERENNIALS



CURBSIDE RAINGARDEN: TREES



CURBSIDE RAINGARDEN & CURBED "ISLANDS"



VIADUCT CONDITION: MODULAR SUSPENDED PAVEMENT SYSTEM

IMPROVING CONNECTION TO NATURAL SPACES

ELIMINATING BEVO'S PARK DESERT

5 MINUTE WALK

In the Bevo Project Study Area, residents have immediate access to five parks, illustrated in Green. Generally, cities across the country aim for a 5-10 minute walk maximum to access recreational facilities such as parks. Studies have shown that access to parks can have myriad benefits for residents, including improved economic status, reduced air pollution, and overall health standards.

The Bevo Area's parks are unique in that many of the typical St. Louis amenities - shelters, bike trails, playgrounds, community gardens - are represented. Most communities only have some of these amenity types. Also accessible to Bevo residents is one of the only Skate Parks in the City.

What is evident, however, is that there is a sizable desert of parks amenities in specific zones of the Study Area. As such, the Design Team recommends the elimination of the Parks Desert through additional resident- or Bevo CID-led parks improvements.

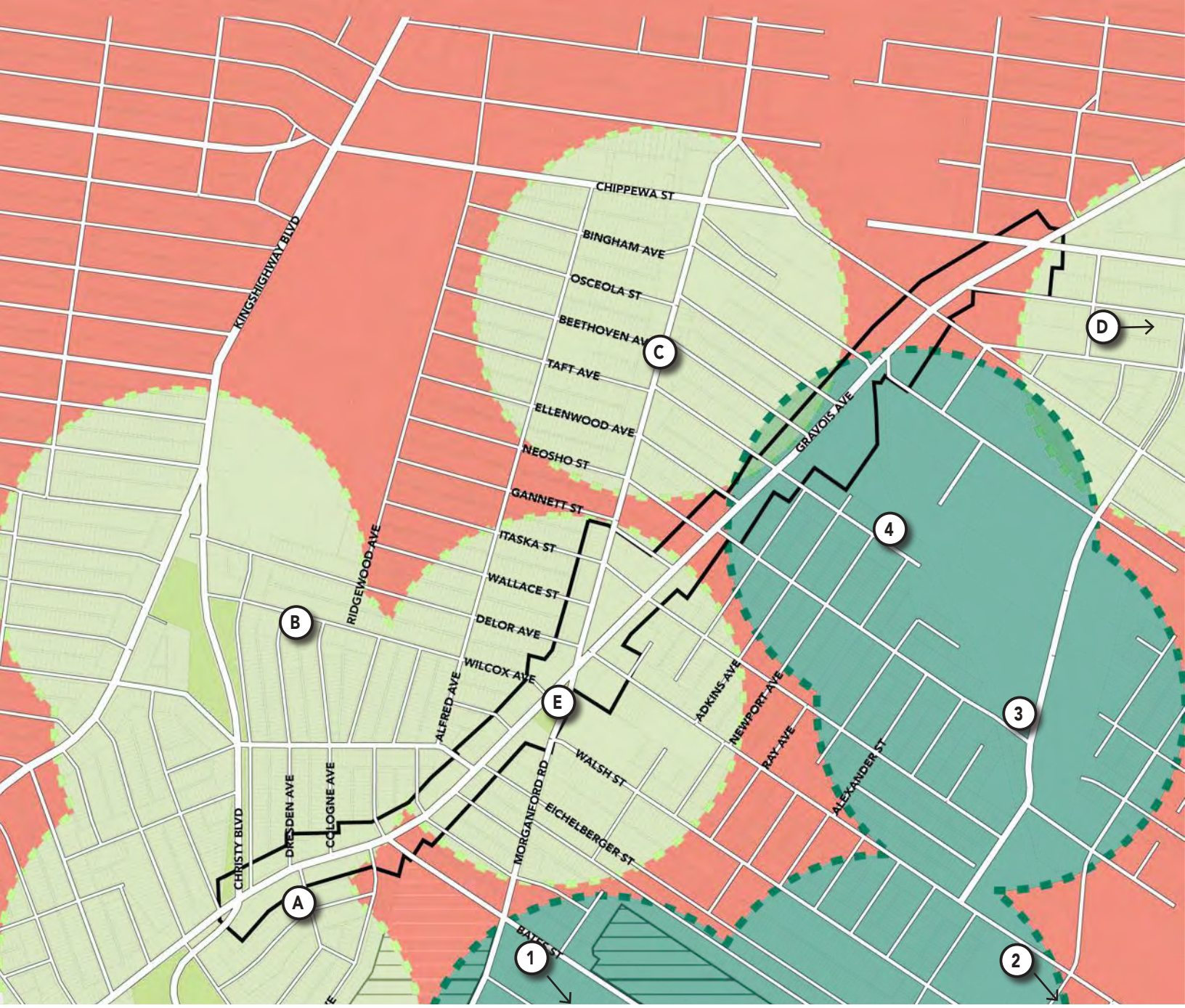
Through thoughtful inclusion of amenities, residents will have access to the full range of park benefits within a walkable distance.

CURRENT PARK AMENITIES

	Bathroom/Utility	Community Garden	Fitness Equipment	Little Free Pantry	On-Street Bike Lanes	Playground	Port-a-Potty	Skatepark	Structure	Sports Fields
Joseph R. Leisure Park	●				●	●				●
Christy Park			●		●	●			●	●
Morganford Skate Garden		●					●	●		
Amberg Park		●				●			●	●
Sebilj Memorial									●	

PROPOSED PARK AMENITIES

	Bathroom/Utility	Community Garden	Fitness Equipment	Little Free Pantry	On-Street Bike Lanes	Playground	Port-a-Potty	Skatepark	Structure	Sports Fields
4075 Concordia Avenue		●								
3909 Eichelberger Street										
3963 Neosho			●			●				
4019 Taft Avenue	●	●				●			●	●



Existing Park & 5-minute Walk Zones

Proposed Parks & 5-minute Walk Zones

Park Desert

EXISTING PARKS

A Joseph R. Leisure Park
B Christy Park
C Morganford Skate Garden
D Amberg Park
E Sebilj Memorial

PROPOSED PARKS

1 4075 Concordia Avenue
2 3909 Eichelberger Street
3 3963 Neosho
4 4019 Taft Avenue

LOCATION OF SELECTED PARCELS

PARCELS TO PARKS

In addition to the Sebilj Memorial at the intersection of Morganford Rd and Gravois Ave, the following four key parcels have been identified for potential consideration of realignment to recreational uses. Note that while these specific parcels are identified here, other similar and nearby parcels could be considered should these be unavailable. *See p. 274 for a full list of parcel implementation concepts* and *Appendix #5: Park Details, pp. 546 - 553.*

4075 CONCORDIA AVENUE

A single-family residence lot, the Concordia Parcel is prime for redevelopment as a low-impact park space for passive use by neighbors. This space is best geared toward temporary or easily-removed improvements should the need for infill housing arise.

3909 EICHELBERGER STREET

The corner lot on Eichelberger St affords residents the capacity for larger-scale neighborhood impact, while taking advantage of the stormwater inlets in this specific location.

3963 NEOSHO STREET

The Neosho St parcel represents a unique opportunity within the study area in that the proximity to residential areas is direct, but the parcel backs up to the rail alignment. The separation, on one side, allows for more active recreational uses for neighbors - creating a wider draw.

4019 TAFT AVENUE

The vacant parcel along Taft Ave presents the opportunity for residents to access, via Taft, an opportunity for large-scale parcel consolidation. The size of the space, along with the border of the rail alignment, provides the chance for active recreation that can bolster the supporting smaller parcels identified herein.

4

Chapter Four:

LAUNCHING A 30-YEAR CAMPAIGN

A STEP-BY-STEP GUIDE TO A GREAT STREET

ROADMAP TO SUCCESS

IMPLEMENTATION & PHASING STRATEGY

PRIVATE BEFORE PUBLIC

The first strategy for implementing the Bevo Great Streets Plan is to first take a DIY, bootstraps approach to show early wins and start seeing incremental change even before a street redesign happens, and about leveraging small funding sources into larger ones. This is primarily the work of local actors, including property owners and local governing bodies.

The second strategy is to bundle larger moves together by really digging into the 'how and when' of the preferred recommendations to find a sweet spot of maximum impact and financial opportunities, at the lowest cost. This is primarily the work of city agencies and partners.

This main framework results in the following phases of implementation for the Bevo Great Streets Plan:

PHASE #1: SETTING THE STAGE

This first phase is all about prepping for long-term improvement. The largest project in this plan is the rebuilding of Gravois Ave to widen sidewalks, remove the center left turn lane, and add a two-way cycle track. This single project will move the needle on all of this project's main project goals: increased pedestrian trips, slower speeds, and reduced vacancies. While this improvement will be transformational for the Bevo community, it will take years before the street sees that level of public investment.

So, this implementation plan identifies what can be done in the meantime to still make progress towards success.

Minor upgrades go a long way in impacting the experience along Gravois Ave. This means the Bevo CID, BBN, and other local stakeholders invest in what's working now, and the affordable and/or tactical marketing, branding, and safety ideas outlined in this chapter, to build capacity and leverage additional funding.

PHASE #2: SHOWTIME ACT I

Focusing on mid-scale projects like facade improvements and policy changes is the next phase of implementation. Importantly, this phase includes the Gravois Ave resurfacing project, which implements the final striping condition along the corridor (but without the curbs moving). This is also a great time to install stormwater islands in partnership with the Metropolitan St. Louis Sewer District.

The City bridges flanking the viaduct are reaching the end of their useful life and are slated for removal and/or rebuilding within the next five to seven years. The City has access to federal funding for such large-scale infrastructure improvements. Since these grants include funding for the approach as well, these grants can fund the redevelopment of the viaduct underpass, including the rebuilding of the City bridges and the two-way cycle track within a reasonable approach of the viaduct on either side.

These two projects - the restriping of Gravois Ave and the rebuilding of the City bridges and viaduct - should happen as close to the same time as possible to ensure a continuous cycle track (since the viaduct rebuilding includes elevating the cycle track).

PHASE #3: SHOWTIME ACT II

The rebuilding of Gravois Ave is a huge investment. This level of intervention triggers a regulatory requirement from the Metropolitan St. Louis Sewer District to treat stormwater on the sidewalks. This plan leverages MSD grants to fund some of the streetscape improvements that have impervious surface implications.

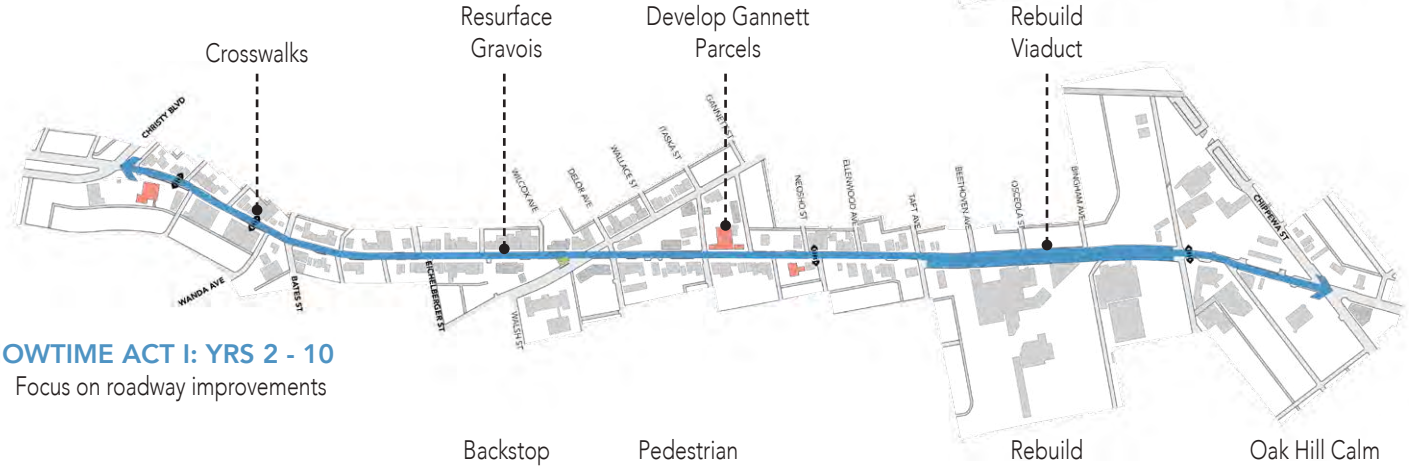
Additionally, this phase includes other redevelopment and new building projects such as the Backstop building that will not be feasible in the short-term but will continue to define the public spaces along Gravois Ave that make it a great street.

PHASE #4: ENCORE

Finally, the last phase includes some nice-to-have improvements to the community. These include some of the more difficult, or long-term, projects like the Frieda Ave raingardens, redevelopment of Gravois Ave near the upper viaduct, and the continuation of the cycle track down Morganford Rd.

SETTING THE STAGE: YRS 0 -2

- ☐ Focus reducing vacancies and exterior improvements in the Bowtie

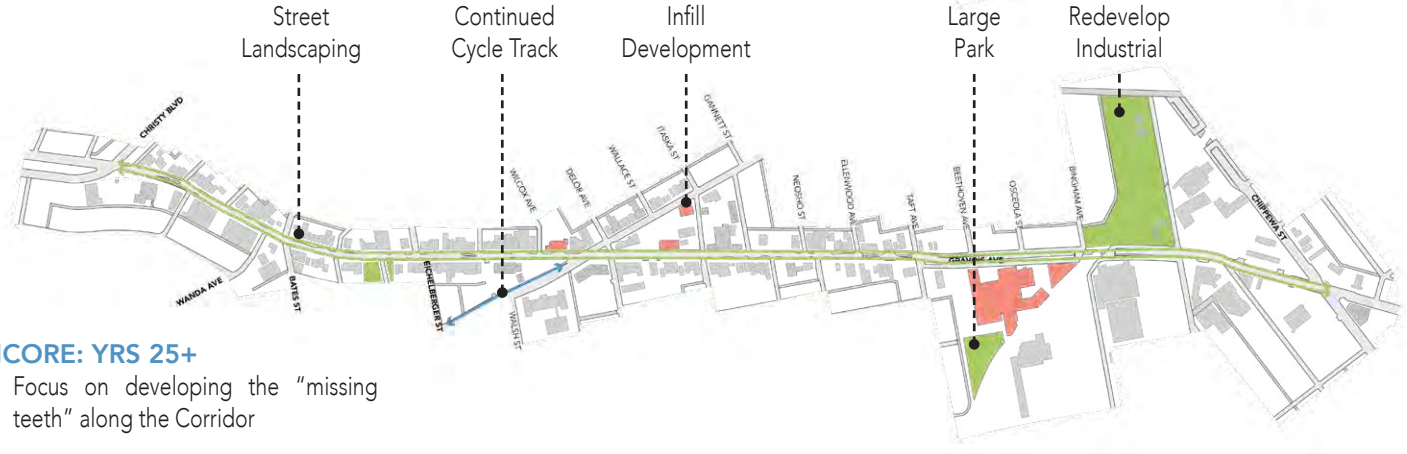


SHOWTIME ACT I: YRS 2 - 10

- ☐ Focus on roadway improvements

SHOWTIME ACT II: YRS 10 - 25

- ☐ Focus on pedestrian streetscape improvements



ENCORE: YRS 25+

- ☐ Focus on developing the "missing teeth" along the Corridor

IMPLEMENTATION STRATEGY & PRIORITIES

KEY PLAYERS TO IMPLEMENTATION

DEVELOPING A LEADERSHIP TEAM

ALDERPERSONS

Alderpersons provide city governance on a local scale, with issues from pot holes to taxes vetted through these elected officials. As of this report, the following Alderpersons are involved in the Study Area improvements: Beth Murphy (Ward 13); Carol Howard (Ward 14); Megan E. Green (Ward 15); and Shane Cohn (Ward 25).

BETTER BEVO NOW & RESIDENTS

The mission of the Better Bevo Now Neighborhood Association (BBN) is "to promote a safe, vibrant neighborhood by facilitating community awareness, involvement, inclusiveness, investment, and sustainability."

The neighborhood follows the Bevo Mill Neighborhood Ownership Model – a resident-driven initiative committed to improving the quality of life in Bevo and surrounding neighborhoods and based on the Neighborhood Ownership Model designed by the City of St. Louis Circuit Attorney's Office. In partnership with BBN, volunteers participate in the following initiatives:

- Block Captain Program
- Neighborhood Watch
- Victim Support
- Court Advocacy
- Community Garden

BEVO COMMUNITY IMPROVEMENT DISTRICT

The Bevo Community Improvement District (CID), a formal self-governance organization formed in 2017, generates revenue from a special property tax assessment on all property owners within the district boundary for a 10-year period. The northern boundary of the Bevo CID extends roughly to Taft Ave and the southern boundary extends to Christy Blvd. The boundary excludes the viaduct and the Chippewa and Gravois intersection, an exclusion that limits redevelopment.

This plan recommends the Bevo CID as the key player to implementation, with steps at the beginning of the planning process to prime the community for improvements and gather support for longer term projects. The Bevo CID should take an proactive role in implementing many of the following proposed projects, and continued maintenance and improvement of the corridor after the plan reaches its livelihood.

BOSNIAN CHAMBER OF COMMERCE

The Bosnian Chamber of Commerce, which existed prior to the formation of the Bevo CID, provides resources and support to local Bosnian-owned businesses in the area. The Chamber owns a property in the Bevo Bowtie, but does not occupy it regularly.

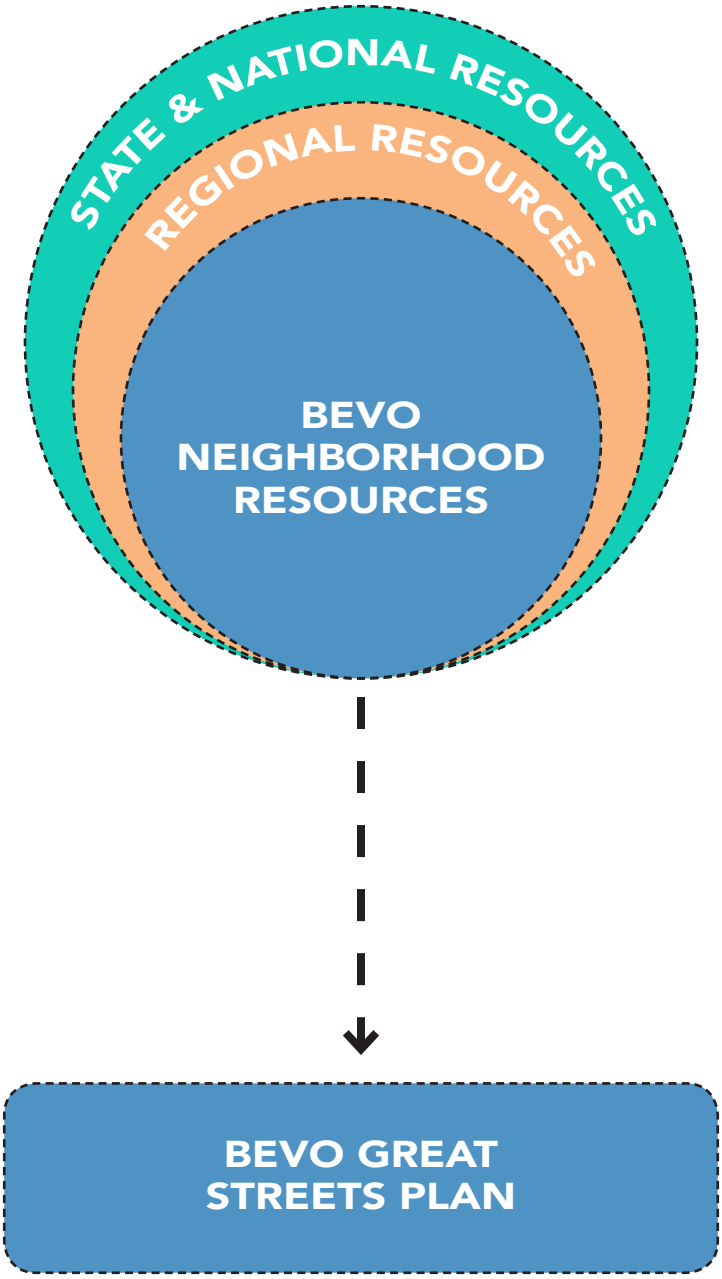
Importantly, the Bosnian Chamber of Commerce rents the surface parking lot behind the Sebilj monuments at Morganford and Gravois from the City of St. Louis in perpetuity.

BUSINESS OWNERS

Locals have had great success at revitalizing the Bevo community and surrounding areas in the last several decades. The community has very few nationally-known retailers and businesses, which speaks to the local grassroots culture of Bevo, but also means that business owners can be independent and unconventional. Business owners may overlap with other groups, like the Bevo CID or the Bosnian Chamber of Commerce, but are listed seperately here as they are independent actors for their individual properties.

PROPERTY OWNERS

Locals have had great success at revitalizing the Bevo community and surrounding areas in the last several decades. There are some active and engaged property owners in the area, but also absentee or derelict landlords. Commercial property owners can apply for permits, and apply for and implement facade improvement grants. Owners of both commercial and residential property can vote for Bevo CID initiatives and participate in Bevo marketing and branding initiatives.


STATE & NATIONAL RESOURCES
REGIONAL RESOURCES
BEVO NEIGHBORHOOD RESOURCES
BEVO GREAT STREETS PLAN

CITY DEPARTMENT RESOURCES & INFLUENCES

The City of St. Louis (the City) is a key stakeholder in the future of Gravois in the Bevo community and is a major supporter of creating a safer, more economically viable corridor that supports the community.

The City's participation in previous EWGCOG Great Streets projects indicates their dedication to creating Great Streets in St. Louis. Specific involvement to-date includes major financial sponsorship, as well as active participation on the Steering Committee from representatives from the Board of Public Service, Planning and Urban Design Agency, and Traffic and Lighting Division. These representatives also participated in a bicycle technical advisory committee to help navigate the Consultant Team through the tricky task of balancing competing interests of a Great Street.

BOARD OF PUBLIC SERVICE

The City's Board of Public Service is responsible for all public works and improvements, including sidewalks, roadways, utilities, and bridges. Coordination of the infrastructure improvement projects outlined in this plan falls within the realm of BPS.

DEPARTMENT OF TRAFFIC

The City, which owns the Gravois right-of-way, has jurisdiction over roadway configurations, as well as changes or additions to traffic control measures including pedestrian crossings. Their support of the Bevo Great Streets Plan is crucial to its successful implementation.

The Missouri Department of Transportation and the City have an agreement on the jurisdiction of Right-of-Way (ROW). The agreement says MoDOT is responsible for any maintenance and reconstruction on Gravois Ave within the public ROW.

The City and MoDOT recently completed a public process related to a resurfacing of Gravois in the Bevo community in 2017. Because the project was a resurfacing project, there was no money to include intersection bumpouts along the corridor, or any treatments that required moving the existing curb.

The City also owns and maintains the two bridges that flank the railroad viaduct at Meramec and Gravois. These bridges are derelict and are due for major repairs.

PLANNING & URBAN DESIGN AGENCY

The City's Planning and Urban Design Agency is in charge of adjusting regulations within the Bevo study area, including codifying zoning and form-based code changes.

REGIONAL RESOURCES & INFLUENCES

METROPOLITAN SEWER DISTRICT

MSD is responsible for the interception, collection, and treatment of wastewater, as well as stormwater management for the City and surrounding counties.

ST. LOUIS DEVELOPMENT CORPORATION

As the economic development arm of the City, SLDC stimulates the market for private investment in real estate and business development by: offering technical assistance, administering grant programs, managing the LRA property program, and issuing development-related RFPs. The following SLDC departments or boards would need to consulted because of a proposal in this plan:

- Neighborhood Business Development
- Major Projects
- Land Reutilization Authority
- Development Incentives
- Tax Increment Financing Commission
- Land Clearance for Redevelopment Authority

BI-STATE DEVELOPMENT & METRO

Bi-State Development includes Metro who oversees and operates both MetroLink and MetroBus. During the final design of both resurfacing and restriping, Metro should be brought in to decide the correct configuration of the bus stops and pullouts.

A partnership with Metro and Bi-State would be beneficial to rebuilding the sidewalk at the stop locations, plus installing bus shelters or other transportation amenities.

REGIONAL ARTS COMMISSION

The Regional Arts Commission of St. Louis (RAC) promotes the development, support, and marketing of arts in the region. RAC funds art programs and artists through four annual grants. They also offer technical assistance and outreach and networking with local artists.

EAST-WEST GATEWAY

East-West Gateway Council of Governments (EWGCOG) is a voluntary association of regional governments in the bi-state area of St. Louis and serves as the metropolitan planning organization for the region. As such, EWGCOG provides technical assistance to local governments, including support, tools, and information. FInancial assistance is also available through EWGCOG.

UTILITIES

Utilities operating in the region, including telecommunications and energy, should also be considereda resource.

STATE & NATIONAL RESOURCES & INFLUENCES

MISSOURI DEPARTMENT OF TRANSPORTATION

MoDOT is responsible for maintenance and reconstruction within the public right-of-way. Maintenance and reconstruction includes: resurfacing, rebuilding, pothole repair, sweeping debris, striping, signalization, and signing. Maintenance and reconstruction does not include: installation, removal or repair of water supply lines, sanitary or storm sewers (except storm sewers constructed by MoDOT to drain the highway), snow removal, sidewalks, curbs and associated appurtenances, parking areas (except for the parking lane), trees or other ornamental vegetations, street lighting systems, pole lines, conduits, or other utilities.

UNION PACIFIC

The Union Pacific operates the Desoto Spur railroad that crosses through the City of St. Louis, and intersects Gravois at a grade separation between Meramec and Taft Avenue.

Now nearing 100 years old, the viaduct no longer serves the purpose to connect neighborhoods. Instead, pedestrians and bikers remain exposed to heavy automobile traffic without a sidewalk or barrier.

Currently the UP railroad has no capacity to participate in a plan for Bevo. The City, which has an agreement with UP, is the actor responsible for viaduct-related issues and can liaise with UP if and when needed.

MEMORANDUM OF UNDERSTANDING

From the beginning, the Bevo Great Streets Project has included leadership as a core element. The Design Team focused on implementation throughout the process, including the formation of a leadership group to discuss the signing of a Memorandum of Understanding (MOU) to collaborate into the future on implementing the Bevo Great Streets Plan.

Local stakeholders, as well as stakeholders from St. Louis-wide agencies, joined in signing an MOU committing to support the implementation of the plan, and participate in projects key to the plan's success. *See Appendix #9: Memorandum of Understanding, pp. 604 - 631, for a signed copy of the MOU.*

WAYS TOWARDS IMPLEMENTATION

RESOURCES FOR CAPACITY BUILDING

RETAIL & INFRASTRUCTURE IMPROVEMENTS

TECHNICAL ASSISTANCE FOR RETAIL

An important first step in supporting businesses and property owners in the Study Area is to maximize the tools and resources that already exist. The City of St. Louis, the State of Missouri, and the Small Business Administration currently make available several loan, grant, and incentives programs designed to serve small businesses. The Bevo CID has the potential to serve as a "navigator" for these business assistance tools by connecting businesses in Bevo directly to providers, hosting informational sessions about available resources, and/or by helping to showcase local successes for businesses that use these tools to expand or improve their businesses. Efforts that extend the reach of these programs into the Bevo community in ways that are locally relevant and useful for Bevo-area businesses would increase the likelihood of their use and impact.

The St. Louis Development Corporation's (SLDC) façade grant program presents important opportunities for Bevo. As demonstrated in other neighborhood districts, façade investments can have a powerful impact on the marketability of a district by making the area more inviting and attractive. The CID should actively market this opportunity to its membership.

In future funding rounds for the façade grant program, the Bevo CID could host informational sessions in the Study Area, including an overview from an SLDC representative, Bevo-area business owners who have participated in the program, and professionals with expertise in designing and/or building high-impact façade improvements. Ideally, these sessions would also inspire and inform façade improvements even by those who do not receive funding through SLDC's grant program.

CITY INFRASTRUCTURE IMPROVEMENTS

The railroad underpass at Meramec and Gravois is comprised of three bridges: two city bridges, one on either side of the railroad bridge. The city bridges are structurally deficient and eligible for federal funding allocated from MoDOT through the Off-System Bridge Maintenance Project. The Off-System Bridge Maintenance Project provides funding to counties for replacement or rehabilitation of deficient bridges.

According to MoDOT, off-system bridges are bridges that are on roads that are functionally classified as a local road or street and rural minor collectors.

ACQUIRING LAND FOR PARKS

One accessible route to increased parks facilities is to consider vacant or under-utilized parcels for transferral to recreational spaces. The LRA offers access to these vacant, City-owned parcels in several ways, some at Market Cost and some through alternative incentive programs. Within the study area, several parcels meet the above criteria. Highlighted in this plan, *pp. 188 - 191* are the four parcels necessary to feasibly eliminate the Parks Desert.

The Parks District currently has no capacity to increase the size of their park portfolio. Development and maintenance of proposed park lands would need to be completed by the neighborhood association, a local non-profit, or community development group.

ROADWAY IMPROVEMENTS

MoDOT's Cost Share Program provides local entities the opportunity to partner with MoDOT on project-related improvements. By implementing their improvements at the same time as MoDOT's project, entities can save on contractor mobilization, etc. In these contexts, MoDOT will then match the local entity investment up to 50% of the total project cost.

In addition to project match funding through MoDOT, East-West Gateway Council of Governments provides a 80% / 20% funding match through the Transportation Alternative Program (TAP) grant. TAP funds can be used on roadway engineering and construction, and may be a good fit for the following projects: *#30 Resurface Gravois*; *#31 Rebuild Viaduct*; *#32 Stormwater Islands*; *#33 Rebuild Gravois*; *#34 Morganford Road Cycle Track*; and #35 Oak Hill Calm Street. *See East-West Gateway's website or more information on this funding source.*

RESIDENTIAL PROPERTIES & HOUSING STOCK

KEEPING HOUSING AFFORDABLE

Maintaining the availability of affordable housing options for current and future residents is a clear priority of the Bevo community, reinforced by conversation at each of the community workshops. Bevo's smaller housing stock is an asset in this respect. Even as values increase, the smaller size of many homes will limit their upward appreciation and help to maintain the availability of relatively affordable housing options. In addition to leveraging this smaller stock, the Bevo community can pursue a number of other strategies for preventing displacement and ensuring that residents of all backgrounds and income levels can afford to live in Bevo.

SUPPORT THE DEVELOPMENT OF MORE AFFORDABLE UNITS

The first, and perhaps most significant strategy in this domain is to continue to support and encourage the creation of new affordable housing in the community. As detailed in the catalyst project section, many of the most appropriate sites for new affordable housing are in the Study Area itself. The development of income-restricted affordable housing for seniors, families, and other households through the Low Income Housing Tax Credit program will help to meet the demand among all of these markets for quality, affordable rental housing and also help to catalyze other investment in the Study Area.

The proposed senior LIHTC project on the Midwest Bank Centre site is a fairly immediate opportunity to provide this type of quality housing on a key site in the Study Area, and at the current time in which market conditions do not support new market-rate residential development.

SUPPORT EXISTING TENANTS TO REMAIN

A second strategy for preventing displacement is to provide residents in the area with services that can help them save to buy a home (and participate in rising property values), understand their rights as renters, reduce their risk of foreclosure or eviction, and/or connect to financial assistance programs. Better Bevo Now or other neighborhood groups can help to inform Bevo residents about resources available through the City, through nearby nonprofits such as The Housing Partnership, Prosperity Connection (just a couple of miles north on Gravois), and local advocacy and legal services groups like the Equal Housing and Opportunity Council (EHOC).

HOME MODIFICATION SERVICES

As discussed in the demographic section of the Existing Conditions Report, the neighborhoods surrounding the Study Area have a growing demographic of older residents. This points to the need for affordable and attractive housing options that support these residents as they enter a new stage of life, and provides them opportunities to "age in place" within the Bevo community.

As discussed in the Market Analysis Report, the area's smaller housing stock is actually an opportunity to retain and support older residents on fixed incomes who want to stay in the neighborhood as they age. Smaller homes can be easier to maintain and have smaller property tax burdens than larger homes. However, smaller homes are not necessarily accessible for individuals with mobility, hearing, or vision challenges. For example, small modifications in stairways, hallways, and bathrooms can help to reduce the risk of falls.

The St. Louis Area Agency on Aging (SLAAA) offers free and reduced-cost home repair services for residents over the age of 60. The Friedman Center for Aging at Washington University's Institute of Public Health also piloted a home modification program designed to reduce risk factors that can lead to falls at home. This group is partnering with SLAAA to implement this program throughout the larger community. Bevo neighborhood leaders could engage with these groups to explore extending this program to residents in their community, and to better connect residents to home modification services.

ADDRESSING RESIDENTIAL VACANT OR BLIGHTED PARCELS

VACANT & PROBLEM PROPERTIES

The first community workshop and subsequent community conversations raised the issue of vacant properties and poorly-managed single-family rental properties, highlighting their emergence as a threat and a public safety concern. While vacant and problem properties are not as prevalent in Bevo as in other St. Louis neighborhoods, focusing on this issue is a key component of a strategy to stabilize the neighborhood and reverse the trend of population decline. The Better Bevo Now Neighborhood Association (BBN) is leading on this issue; in partnership with Legal Services of Eastern Missouri, BBN is taking legal action against owners of problem properties to force them to sell or repair their property.

Neighborhood groups, Neighborhood Improvement Specialists, and the City should continue to partner on initiatives to enforce reasonable property standards and support responsible behavior by property owners. Strategic code enforcement by the City and regular inspections through the Housing Conservation Program can help to ensure that property owners are properly maintaining their property and providing quality housing for their tenants. Landlord training programs, such as those led by Tower Grove CDC, can help to expand the capacity and quality of rental property owners and managers; the City and BBN should encourage landlords in Bevo to participate in these free programs.

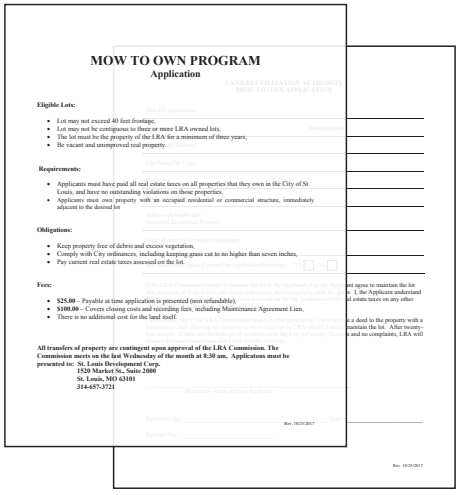
A vacancy strategy can also include efforts to address title and deed transfer issues with current homeowners, ensuring that these properties can be transferred and/or sold in the future, rather than sit vacant. BBN could explore expanding its partnership with Legal Services of Eastern Missouri to connect Bevo residents with their vacancy prevention services, which help low-income residents with title issues and low-income homeowners to create a plan to transfer their homes through beneficiary deeds.

MOW TO OWN

Based on the LRA's current "Mow to Own" programs, the acquisition of LRA-owned parcels can be very simple, and involve little financial investment. According to the City's website, Mow to Own is:

> "...a 'sweat equity' program where residents may take immediate ownership of a vacant lot that is located next to an occupied residential or commercial property that they own, for a nominal fee. Participants must agree to continually maintain the lot, including regular mows and debris removal, for twenty-four months."

To apply for the Mow to Own Program, an applicant must: identify an eligible lot, meet applicant qualifications, and agree to maintenance requirements. While the application is for residents, not organizations, these programs are very successful and are the perfect opportunity for local property owners to acquire land and potentially gift it to BBN or the Bevo CID to turn into an active use such as a pocket park.



MOW TO OWN PROGRAM
Application

Eligible Lots:

- Lot may not exceed 40 feet frontage,
- Lot may not be contiguous to three or more LRA owned lots,
- The lot must be the property of the LRA for a minimum of three years,
- Be vacant and unimproved real property.

Requirements:

- Applicants must have paid all real estate taxes on all properties that they own in the City of St. Louis, and have no outstanding violations on those properties,
- Applicants must own property with an occupied residential or commercial structure, immediately adjacent to the desired lot

Obligations:

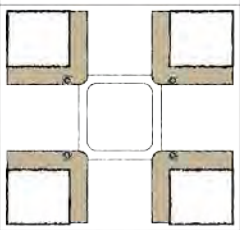
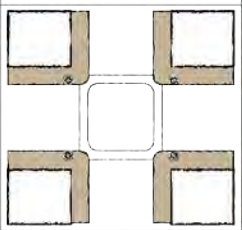
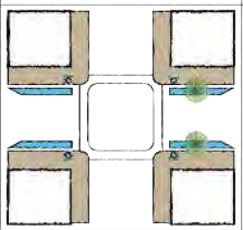
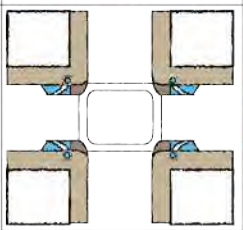
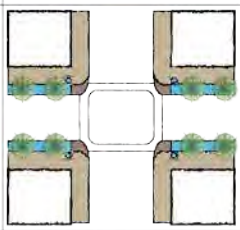
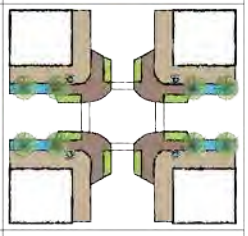
- Keep property free of debris and excess vegetation,
- Comply with City ordinances, including keeping grass cut to no higher than seven inches,
- Pay current real estate taxes assessed on the lot

Fees:

- **$25.00** – Payable at time application is presented (non refundable),
- **$100.00** – Covers closing costs and recording fees, including Maintenance Agreement Lien,
- There is no additional cost for the land itself.

All transfers of property are contingent upon approval of the LRA Commission. The Commission meets on the last Wednesday of the month at 8:30 am. Applications must be presented to: St. Louis Development Corp.
1520 Market St., Suite 2000
St. Louis, MO 63101
314-657-3721

STORMWATER MANAGEMENT

	EXISTING	RESURFACING	TRAFFIC CALMING ISLANDS	TRAFFIC CALMING BUMPOUTS	EXPANDED SIDEWALK	COMPLETE REBUILD
EFFECTED AREA						
MSD REQS	None	None	Disturbance "Areas" account for pre-development hydrology "back to grass"	Less → Same → More		Disturbance equals a change in use & change in flow lines
MSD FUNDING	N/A	N/A	Large grant program ($180k/ acre) w/ annual call for applications ($ unlimited)	←	→	
COST	Low/No	Low	Medium	Medium	High	Highest
NOTES			Maintains flow line along curb	Redirects from curbline into inlet via swale or trough (Ex. South Grand)	Redirects from curbline into inlet via swale or trough (Ex. South Grand)	All inlets rebuilt moved and/or added

Matrix of possible outcomes of stormwater management approaches

OBLIGATED BY A CONSENT DECREE

Compelled to act due to EPA consent decrees, legacy cities such as St. Louis encumbered with combined sewer systems (and resulting cmbined sewer overflows or CSO's) are on the hunt for ways to reduce their runoff. The MSD has dedicated 1%, or $120 million, of its obligated $4.7 billion consent decree to rainscaping investments. Project Clear is an annual grant program where qualifying projects can receive a reimbursement of $180,000 per acre of managed runoff. Projects of this type cannot manage water from private property (i.e. flow from private parking into a streetscape). *See Project Clear's website for more information*.

DISTURBANCE VS. MAINTENANCE

According to MSD requirements, a disturbance (change in use or drainage patterns, including extending the sidewalk) triggers a stormwater volume reduction requirement. It will likely require a pre-development calculation of back to grass. A maintenance (in-kind replacement of materials such as old concrete sidewalk to new concrete sidewalk) do not require new stormwater best management practices (BMPs). Many different approaches may be considered in developing a streetscape plan that finds a sweet spot of maximum eligibility for MSD reimbursable funding, and minimum regulatory requirements.

MANAGING STORMWATER

All infiltration requires a depressed, flat/level surface and has a fixed infiltration rate. This presents a challenge because the streetscape can only accommodate a limited area for treatment relative to the perceived requirements.

Empty parcels are the most effective way to divert, manage, and maintain water from the roadway. Because, empty parcels are larger areas than what is available in the proposed or eixisting streetscape, a neighborhood-scale raingarden will be easier to maintain over time vs small curbside gardens. qualify for "swaps", where the parcel is used to manage a project's required stormwater reduction so long as it is in the same watershed.

COMMUNITY IMPROVEMENT DISTRICT

A PLAN FOR GOVERNANCE OF THE GRAVOIS CORRIDOR

A LEADER IN SELF-GOVERNANCE

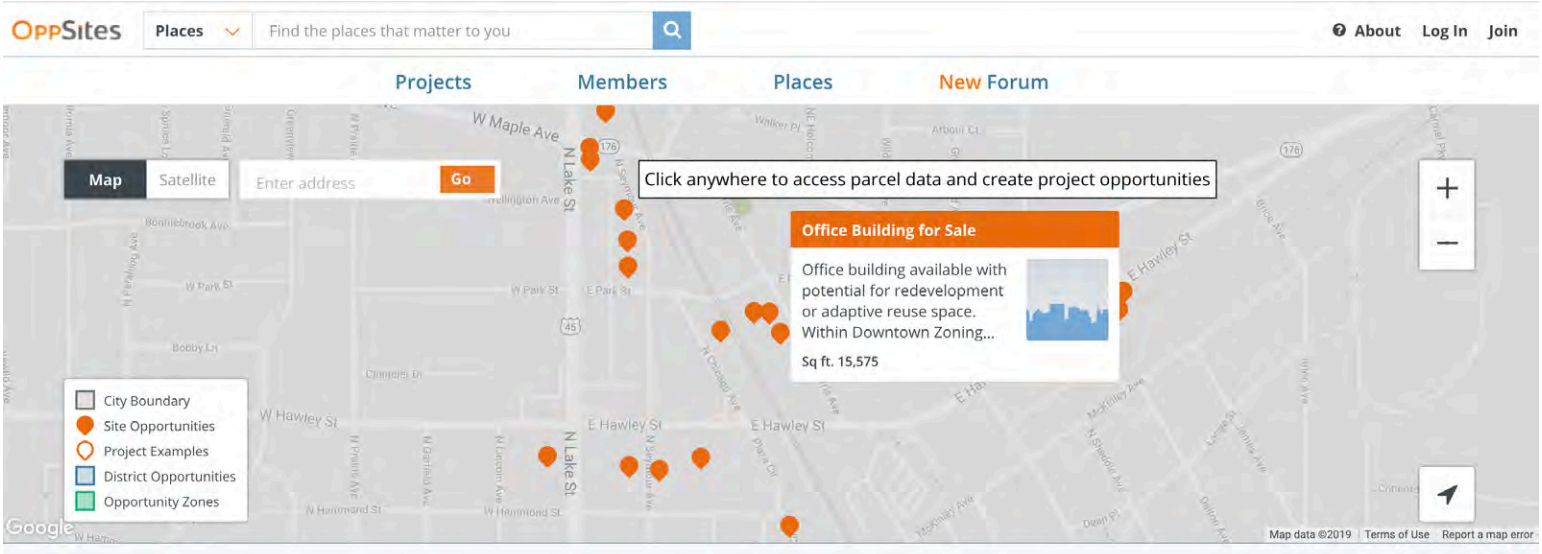
The Bevo Community Improvement District (Bevo CID) has the potential to become the keeper of this Bevo Great Streets plan. While the community has had local governance for a long time, the Bevo CID is a new entity with a new set of local leaders. The Bevo CID needs to recognize that local governance in peer neighborhoods has been established longer than in Bevo.

The Bevo community has the grit to make this happen, with the firm leadership of the Bevo CID. But first, there are some basic steps to be taken to secure the Bevo CID's foundation and to identify, accelerate, and facilitate development along Gravois Ave.

IMMEDIATE ACTION: A PRESENCE ON GRAVOIS

The Bevo CID needs a storefront space along Gravois Ave, preferably within the Bowtie subarea. The Bevo CID should consider partnering with the Bosnian Chamber of Commerce to occupy a portion of their building at 5039 Gravois Ave.

Another initial move for the Bevo CID is to take responsibility for maintaining a local governance structure in Bevo. With the signing of a Memorandum of Understanding (MOU) with a majority of the organizations represented in the Bevo Great Streets Steering Committee, the Bevo CID agrees to convene this group going forward, with a focus on implementing this Plan.



YEAR 1

- ☐ Install cornice lighting on storefronts facing Gravois
- ☐ Install tactical art gateway elements at Taft and Christy
- ☐ Provide technical assistance to property owners
- ☐ Conduct vacancy inventory
- ☐ Facilitate pop-ups in vacant storefronts
- ☐ Begin orderly transition of CID leadership (current DM expected to retire October 2020)
- ☐ Create beautiful, informative website, brochure (See Case Study #9, p. 564)
- ☐ Adopt storefront design guidelines (*pp. 152 - 153*)
- ☐ Adopt the districting strategy from this Plan
- ☐ Pass a 1% sales tax

YEARS 2-4

- ☐ Work with businesses to replace reflective glass with clear glass & awnings
- ☐ Install tactical art in Sebilj park
- ☐ Create a Bevo Public Art committee in collaboration with Better Bevo Now and the St. Louis Regoinal Arts Commission
- ☐ Work with businesses to create shared parking agreements
- ☐ Install shared parking signage
- ☐ Work with businesses to implement parking lot screening guidelines
- ☐ Work with businesses to accept curb cut closures

YEARS 5+

- ☐ Invite an active CDC to become a project developer in the neighborhood
- ☐ Consider expanding the CID boundary to include the Chippewa subarea
- ☐ Curate infill by recruiting businesses that complement neighboring businesses or meet additional Plan goals

CHECKLIST FOR THE BEVO CID

YEAR 1: ORGANIZE & EXCITE THE NEIGHBORHOOD

EARLY STARTS

While the Bevo CID has partners in the implementation of this plan, there are some low-hanging tasks that should be the priority for the next 1 year. The Bevo CID will need to demonstrate successes such as the cornice lights, as well as other small wins including a beautiful and functional website, a full vacancy inventory, and mailing lists for its members, ahead of campaigning for a 1% sales tax.

DO-IT-YOURSELF IMPROVEMENTS

For example, the addition of cornice lighting along buildings facing Gravois Ave, and in the Bowtie subarea in particular, can have an immediate, yet affordable, impact on creating a sense of place. Such a DIY approach is an early success that the Bevo CID can build from. Additionally, the implementation of tactical gateway elements at Taft Ave and Christy Blvd can immediately announce to people that they are entering an "area".

The replacement of reflective glass in retail storefronts with clear glass also has the potential to transform the corridor almost overnight. This change will add eyes on the street, as well as provide pedestrians - potential customers passing in front of the business - with a sense for the activity that is taking place inside.

COORDINATED MARKETING

Once the vacancy inventory is completed, a coordinated marketing and outreach strategy for vacant space can help to raise the profile of the Bevo community and match new businesses with available space. The Bevo CID can help the community more quickly seize opportunities to welcome new businesses and investment in the area by serving as a central point of contact for interest parties.

The CID is actively building the infrastructure for such a strategy by creating informational sheets for available storefront space. In addition to providing basic information about available space, these sheets are an opportunity to share a compelling story about the business district, its history, the vision for its future, and the surrounding community. These informational sheets can highlight programs and incentives available to businesses and developers, and suggest what types of businesses or uses align with the district strategy presented herein.

The CID should continue to maintain this inventory of leasable and for-sale available properties, and use it to help reach out to new and growing businesses in broader St. Louis. This inventory should be made available online as the CID updates its website, and perhaps more immediately, through a series of "boosted" posts on Facebook. See *Case Study #9: Municipal Website.*

RECRUIT BUSINESSES TO OCCUPY VACANT STOREFRONTS

Part of the Bevo CID's ongoing efforts should be to effectively market the properties along the corridor to potential tenants. Building capacity through the facilitation of technical assistance to property owners will help fund many of the property improvements recommended in this Plan.

An important first step in supporting businesses and property owners in the Study Area is to maximize the tools and resources that already exist. The City of St. Louis, the State of Missouri, and the Small Business Administration currently make available several loan, grant, and incentives programs designed to serve small businesses. The Bevo CID has the potential to serve as a "navigator" for these business assistance tools by connecting businesses in Bevo directly to providers, hosting informational sessions about available resources, and/or by helping to showcase local successes for businesses that use these tools to expand or improve their businesses. Efforts that extend the reach of these programs into the Bevo community in ways that are locally relevant and useful for Bevo-area businesses would increase the likelihood of their use and impact.

To develop owner capacity for self-improvements, the Bevo CID could host informational sessions in the Study Area, including an overview of available programs from an SLDC representative, input from Bevo-area business owners who have participated in programs, and guidance from professionals with expertise in designing and/or building improvements.

RENTAL SIGNS SHOULD LOOK PROFESSIONAL

Another opportunity is to use standards for rental signs. The Bevo CID should discourage the use of hand-made and unprofessional looking "for lease" signs on all Bevo CID properties. Signage should be tasteful and market the district in a positive light (*Signage Plan, pp. 154 - 155*).

With the current Bevo CID district manager expected to retire in October 2020, the search for a new leader should begin soon.

PASS THE SALES TAX

The Bevo CID needs to develop a campaign strategy for passing the 1% sales tax. Since this initiative failed once already, the Bevo CID board needs to analyze what went wrong, and understand what is necessary to get the necessary vote. While the Bevo CID is the agency to accomplish this logistically, passage of the sales tax should be a priority for all implementers of the Bevo Great Streets Plan.

YEARS 2-4: COLLABORATE & ACCELERATE

Once the groundwork from Phase 1 has been established, and the current ED has handed the reigns to her successor, the Bevo CID is ready to take on some additional strategies in years 2-4 that can leverage early successes.

COMMUNITY MAINTENANCE PLAN

The Bevo CID needs a detailed Community Maintenance Plan. The Grove spends $33k/year and S. Grand spends $100k/year on maintenance and public services like litter control, landscape maintenance, weed abatement, graffiti removal, snow removal, street sweeping, and sidewalk cleaning. The Bevo CID should create a Community Maintenance Plan which outlines the ways the District should be maintained and appropriate funds accordingly. Picking up trash and sidewalk maintenance would be the best places for the Bevo CID to start.

POP-UPS

Installing temporary or "popup" retailers, restaurants, art studios, and other uses in vacant storefronts can add vitality to an otherwise quiet block, provide property owners a modest source of revenue, and help local entrepreneurs test business concepts that could become permanent fixtures in the future.

Popups complement community events designed to bring visitors to the area for a special experience, such as the tactical event as part of this Great Streets project, or Bevo Days. Visitors that participate in these events will be even more likely to leave with a positive impression of Bevo—and be more likely to return—if they see a district with fewer vacant storefronts and more unique local businesses.

The Bevo CID can facilitate these types of temporary uses—ranging from one weekend to six months—by matching entrepreneurs with willing and interested owners of vacant space, and by developing a framework for these short-term arrangements.

Resources such as a template popup lease could identify and address issues specific to a short-term occupancy, and offer a balanced starting point for negotiation between landlord and tenant. The Bevo CID could also offer small matching grants ($1,000 to $2,000) for modest improvements that make space move-in ready for a temporary use, such as by clearing space, painting walls white, or building simple display cases.

Finally, the Bevo CID can work with the City's Building Division to codify occupancy permit standards appropriate for this special type of short-term use. A "popup toolkit" could outline approvals process, and connect interested parties to key resources.

LOCAL ART

Another accelerant is the installation of a temporary art display at the base of the Sebilj park. A public art addition (illustrated as large L, O, V, and E letters in the plan) can generate excitement for the redevelopment potential of the Bowtie, as well as public art in the area in general. In conjunction with this temporary installation, the Bevo CID should partner with the Better Bevo Now Neighborhood Association, as well as the Regional Arts Commission, to create a Bevo Public Art committee to implement the arts plan outlined in this Plan.

The Bevo CID should work with property owners, including those with car lots around the Gravois and Bates intersections, to implement parking lot screening guidelines to create a more pleasant pedestrian experience.

Additionally, the Bevo CID will need to work with property owners to get their buy-in to the resurfacing of Gravois Ave into a more complete street. With the resurfacing comes the closure of some driveways; we want property owners to be ready for this positive change to Gravois.

YEARS 5+: FACILITATE & EXPAND

PHASE 3: FACILITATE & EXPAND

Once the Bevo CID has several years of success under its belt, the Bevo CID Board should consider expanding and collaborating with other nearby CIDs.

The Bevo CID should explore extending its boundary to include uses in the Chippewa subarea, and potentially all the way to Grand. QuikTrip's convenience store, the auto shops, and other businesses could provide a significant source of revenue to the Bevo CID. While expanding the boundaries would take time and significant effort, the revenue benefit could be great, and create new opportunities for improving this district as well as the rest of the Gravois corridor in the Study Area. Alternatively, stakeholders in this area could establish a separate CID to guide improvements in the area, and create a cooperation agreement with the Bevo CID.

A second, complementary option, would be to consider merging with the South Grand and Cherokee CIDs under one non-for-profit organization to expand the staff capacity for managing these areas. This type of collaboration could also happen in advance of a change to the Bevo CID's boundaries.

THE PROJECTS, PLAYERS, & PHASING

THE WHO, WHAT, & WHEN

SCALE & SCOPE

The following pages organize the recommended Plan projects into four categories based on a combination of scale and agency responsible: Governance; Economy; Community; and Mobility. Each project is accompanied by a set of icons which represent the 12 project metrics outlined during the visioning process and shown in Chapter 2. *See pg. 54 - 55 for more details.*

GOVERNANCE

This category comprises regulatory changes and policy updates.

While this Plan emphasizes a grassroots approach, these city-wide changes have an effect on all Plan goals.

- ☐ #1: Enact a Special Use District in Bevo
- ☐ #2: Adopt a pedestrian-friendly form-based overlay along Gravois Ave.
- ☐ #3: Adopt a city-wide policy on parklets
- ☐ #4: Create a Gravois TIF district to fund improvements
- ☐ Task: Prioritize the return of a police substation at the Bosnian Chamber of Commerce storefront in the Bowtie

GOVERNANCE

ECONOMY

This category comprises projects and tasks mostly related to local governance that the Bevo CID can take leadership on. However, there is action required from property owners, business owners, development corporations, and SLDC. These include projects related to the Plan goals of Prosperity and Leadership.

- ☐ #6: Fill Ground-Floor Vacancies
- ☐ #9: Create A Bevo Public Art Committee
- ☐ Task: Begin search for new District Manager (current ED expected to retire October 2020)
- ☐ Task: Create beautiful, informative website & brochure
- ☐ Task: Provide technical assistance to property owners
- ☐ Task: Conduct vacancy inventory
- ☐ Task: Work with businesses to replace reflective glass with clear glass & awnings
- ☐ Task: Create beautiful, informative website, brochure
- ☐ Adopt storefront design guidelines (*pp. 150 - 153*)
- ☐ Task: Adopt the districting strategy from this Plan
- ☐ Task: Pass a 1% sales tax

ECONOMY

COMMUNITY

This category comprises urban design and public realm improvements on both public and private property.

These include catalyst sites and streetscape improvements that meet the Plan goals of Health & Wellbeing, Living Infrastructure, Resource Regeneration, and Living Infrastructure.

- ☐ #7: Continuous Cornice Facade Lighting
- ☐ #8: Replace Tinted Glass Storefront
- ☐ #17: Gateway Signage at Taft Ave
- ☐ #21: Midwest Bank Building
- ☐ #16: Public Art in the Sebilj Park
- ☐ Task: BBN Anchor House
- ☐ Task: Mow-to-Own Lots
- ☐ #18: Gateway Signage at Christy
- ☐ #26: Create a Tree Nursery
- ☐ #11: Install Parklets along the Corridor
- ☐ #28: Active Recreation on Vacant Parcel
- ☐ #13: Install "Blue Light" Security Boxes
- ☐ #12: Add Pedestrian-Scaled Lighting
- ☐ #14: Install Pedestrian Street Furnishings
- ☐ #27: Stormwater Park
- ☐ #15: Plant Streetscape Landscaping
- ☐ #19: Renovate the Sebilj Park
- ☐ #20: Design the Sebilj Backstop Building
- ☐ #25: Christy Trailhead
- ☐ #23: Redevelop Old QT Site
- ☐ #29: Large Post-Industrial Park
- ☐ #22: Rehab Alligator Clothing Factory
- ☐ #24: Neighborhood Stowrmwater Park

COMMUNITY

MOBILITY

This category comprises tactical and long-term capital improvements to the right-of-way.

These include pedestrian infrastructure, that meet the Plan goals of Health & Wellbeing, Safety, Active Living, Mobility, Connectivity, Living Infrastructure, and Resource Regeneration.

- ☐ #39: Repair Sidewalks
- ☐ #37: Install Crosswalks in Three Phases
- ☐ #40: Sebilj Hairpin
- ☐ #38: Stripe Parallel Crosswalks to Gravois
- ☐ #30: Resurface Gravois
- ☐ #31: Rebuild Viaduct
- ☐ #32: Stormwater Islands
- ☐ #33: Rebuild Gravois
- ☐ #35: Oak Hill Calm Streets
- ☐ #34: Morganford Road Cycle Track
- ☐ #36: New Streets

MOBILITY

PROJECT #	PROJECT NAME & DESCRIPTION	TACTICAL?
PHASE #1: SETTING THE STAGE		
5	Extend the CID Boundary	
6	Fill Ground-Floor Vacancies	Y
7	Install Continuous Cornice Facade Lighting Along Gravois	Y
8	Replace Tinted Glass Storefronts with Clear Glass	
9	Create a Bevo Public Art Committee	
10	Start Sidewalk Dining Today	Y
14.1	Install Pedestrian Streetscape Furnishings	
16.1	Develop Public Art in the Sebilj Park / Parking Lot	Y
17	Install Gateway Signage at Taft Ave	Y
18.1	Install Gateway Signage at Christy Boulevard	Y
21	Support the Midwest Bank Building Reconstruction	
37.1	Install Crosswalks in Three Phases Along Gravois Ave	
39	Fix Gravois Ave Sidewalks & ADA Sidewalk Ramps in Extreme Disrepair	
40.1	Close the Hairpin Turn at Sebilj Park	Y
PHASE #2: SHOWTIME ACT I		
1	Enact a Special Use District in Bevo	
2	Adopt a Pedestrian-Friendly Form-Based Code along Gravois Ave	
3	Adopt a City-wide Policy on Parklet	
4	Create a Gravois Ave TIF District to Fund Improvements	
9	Create a Bevo Public Arts Council	
11	Install Parklets Along the Corridor	Y
12	Add Pedestrian-Scaled Lighting	Y
13	Install "Blue Light" Security Call Boxes	
14.1	Install Pedestrian Streetscape Furnishings	
15.1	Plant Streetscape Landscaping	
26	Create a Tree Nursery on the Vacant Concordia Ave Parcel	Y
27	Install Stormwater Infrastructure on Vacant Eichelberger Parcel	
28	Provide Active Recreation on Vacant Neosho Parcel	Y
30	Resurface Gravois Ave	

PROJECT #	PROJECT NAME & DESCRIPTION	TACTICAL?
31	Rebuild Gravois Ave / Union Pacific Viaduct	
32	Install Stormwater Pedestrian Islands	
37.2	Install Crosswalks in Three Phases Along Gravois Ave	
38	Install Crosswalks Parallel to Gravois Ave	Y
40.2	Close the Hairpin Turn at Sebilj Park	
PHASE #3: SHOWTIME ACT II		
14.2	Install Pedestrian Streetscape Furnishings	
16.2	Develop Public Art in the Sebilj Park / Parking Lot	
18.2	Install Gateway Signage at Christy Boulevard	
19	Renovate the Sebilj Park	
20	Design of the Sebilj Backstop Building	
25	Transform Eastern Corner of Gravois Ave / Christy Blvd into a Trailhead	
33	Rebuild Gravois Ave	
35	Design Oak Hill to be a Calm Street	
37.3	Install Crosswalks in Three Phases Along Gravois Ave	
40.2	Close the Hairpin Turn at Sebilj Park	
41	Modify Phasing for Traffic Signal at Taft Ave	
PHASE #4: ENCORE		
15.2	Plant Streetscape Landscaping	
22	Renovate Vacant Alligator Oil Clothing Company Property	
23	Redevelop Old Quick Trip Site at Wilcox Ave	
24	Redevelop Properties at Gravois Ave / Frieda Ave into Neighborhood Raingardens	
29	Consolidate Vacancies to Develop a Regional Post-Industrial Park	
34	Continue Gravois Ave Cycle Track South on Morganford	
36	Build New Streets on Vacant Bingham St. Industrial Properties	

PROJECT #	PROJECT NAME	BUSINESS OWNERS	PROPERTY OWNERS	CID	BBN	ALDER PERSONS	BPS	TRAFFIC
1	BEVO SUD					●		
2	BEVO FBC					●		
3	PARKLET REG.						●	●
4	TIF DISTRICT			●				
5	CID BOUNDARY	●	●	●		A		
6	FILL VACANCIES	●	●	●				
7	CORNICE LIGHTING	●	●	●				
8	STOREFRONTS	●	●	●				
9	ART COMM.			●	●		●	
10	SIDEWALK DINING	●	●	●				
11	PARKLETS	●	●	●				
12	PED-LIGHTING			●				
13	SECURITY LIGHTING					●	●	
14	STREET FURNISHING			●	●	●	●	
15	LANDSCAPING	●	●	●			●	●
16	PUBLIC ART	●	●	●				
17	TAFT SIGNAGE	●	●	●	●	●	●	●
18	CHRSITY SIGNAGE	●	●	●	●	●	●	●
19	SEBILJ PARK			●	●	●	●	
20	BACKSTOP BLDG.		●	●		●		
21	MIDWEST BANK BLDG.	●	●		A	●		
22	ALLIGATOR					●		
23	OLD QT			●	●			
24	NEIGHBOR. STORMWATER			●	●			
25	TRAILHEAD			●	●			
26	TREE NURSERY				●			
27	STORMWATER PARK				●			
28	ACTIVE RECREATION				●			
29	POST-INDUSTRIAL PARK		●	●		●		
30	RESURFACE GRAVOIS					●	●	●
31	REBUILD VIADUCT				●	●	●	●
32	STORMWATER ISLANDS			●			●	●
33	REBUILD GRAVOIS		●		●		●	●
34	CYCLE TRACK						●	●
35	OAK HILL CALM STREETS						●	●
36	NEW STREETS					●	●	
37	CROSSWALKS			●		●	●	●
38	PARALLEL CROSSWALKS			●		●	●	●
39	REPAIR SIDEWALKS					●		
40	SEBILJ HAIRPIN					●	●	●
41	TAFT SIGNAL						●	●

MATRIX SHOWING PROJECT CHAMPIONS & IMPLEMENTORS

PLANNING	POLICE	PARKS	ARTS COMM.	MSD	SLDC	EWGCOG	MODOT	TRAILNET/ GRG	TGCDC
●									
●									
					●		●		
					●				
					●				
					●				
			●						
					●				
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	●								
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				●		●	●	A	
						●		●	
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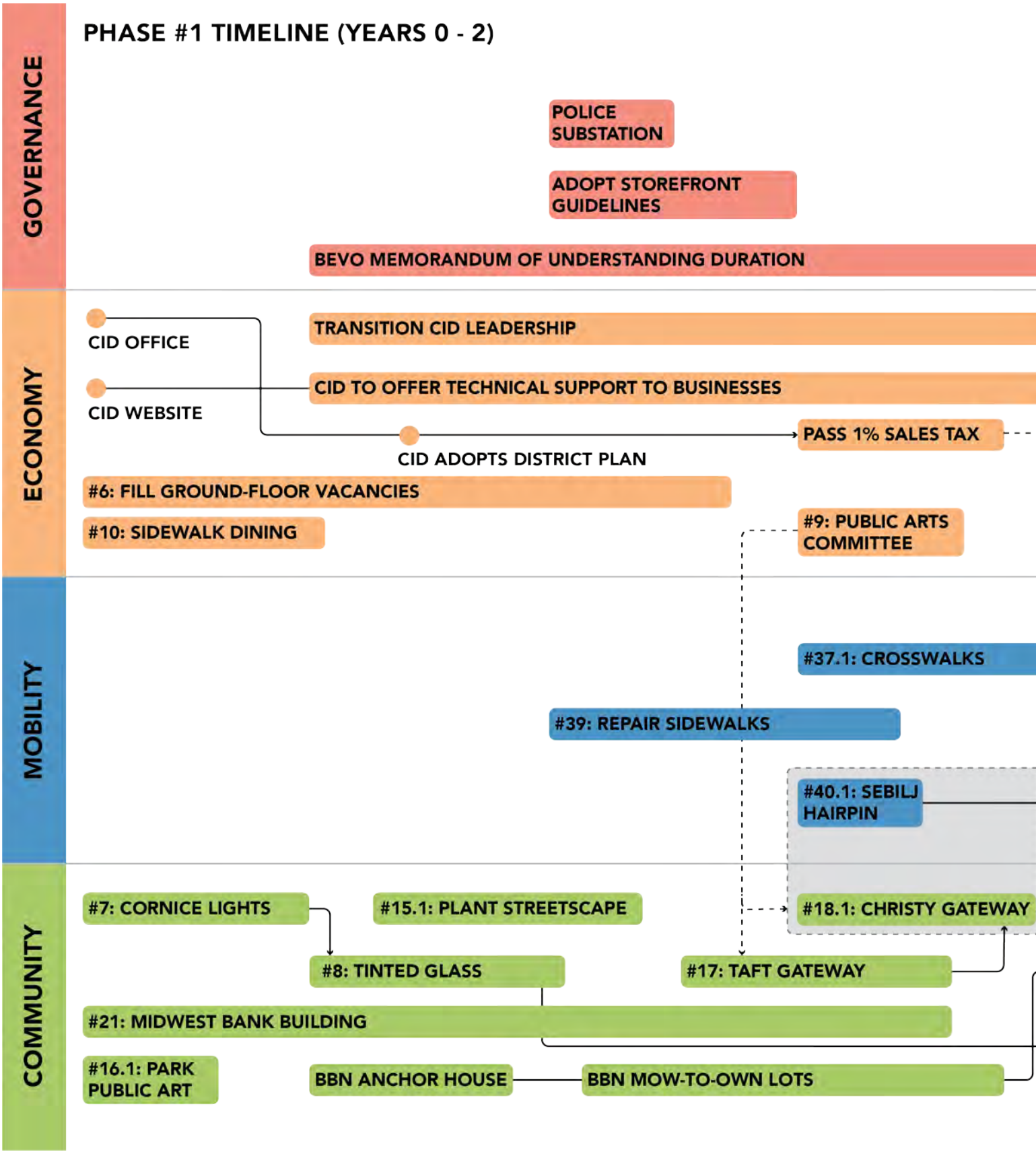
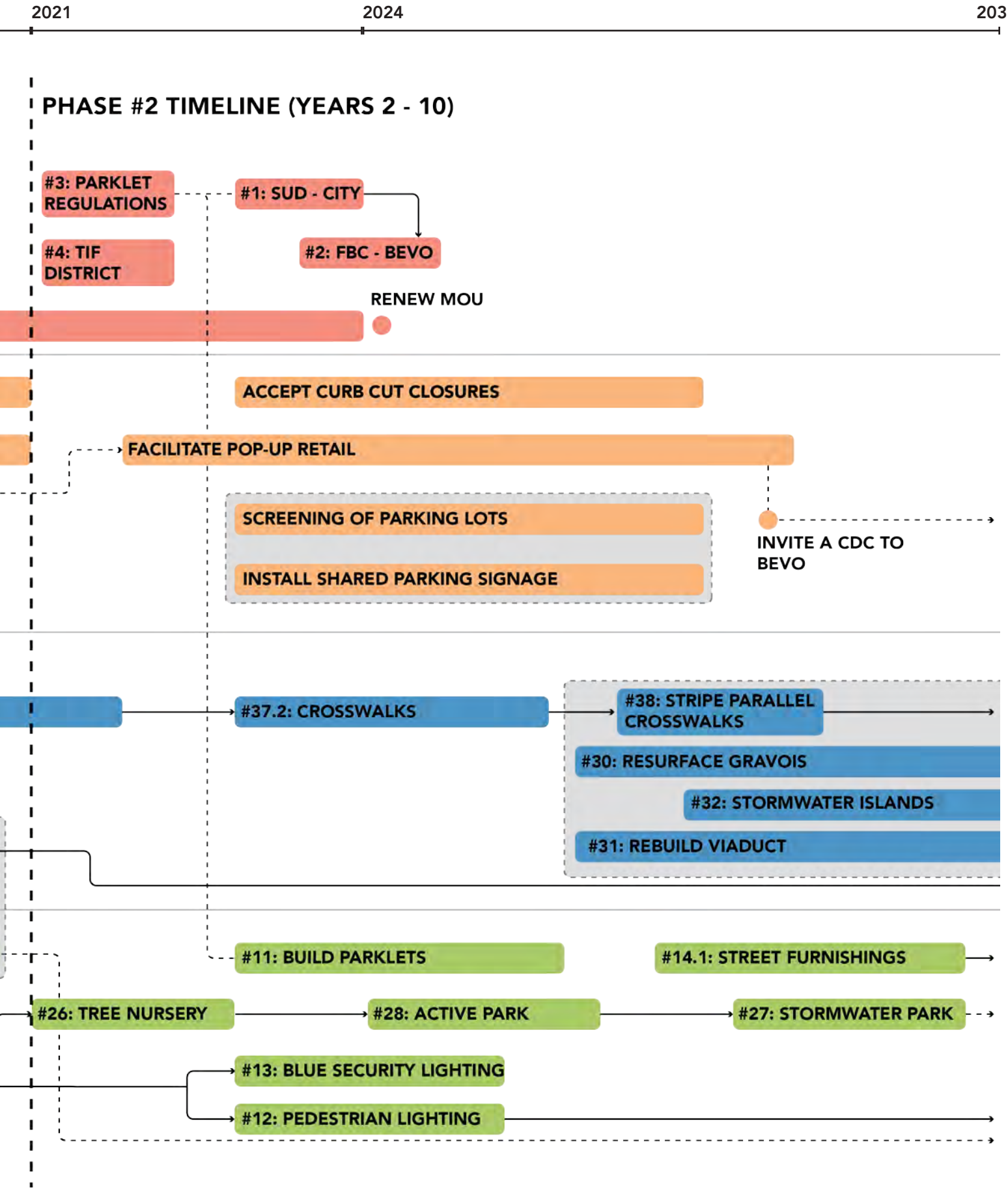
						●			
							●		
						●	●		

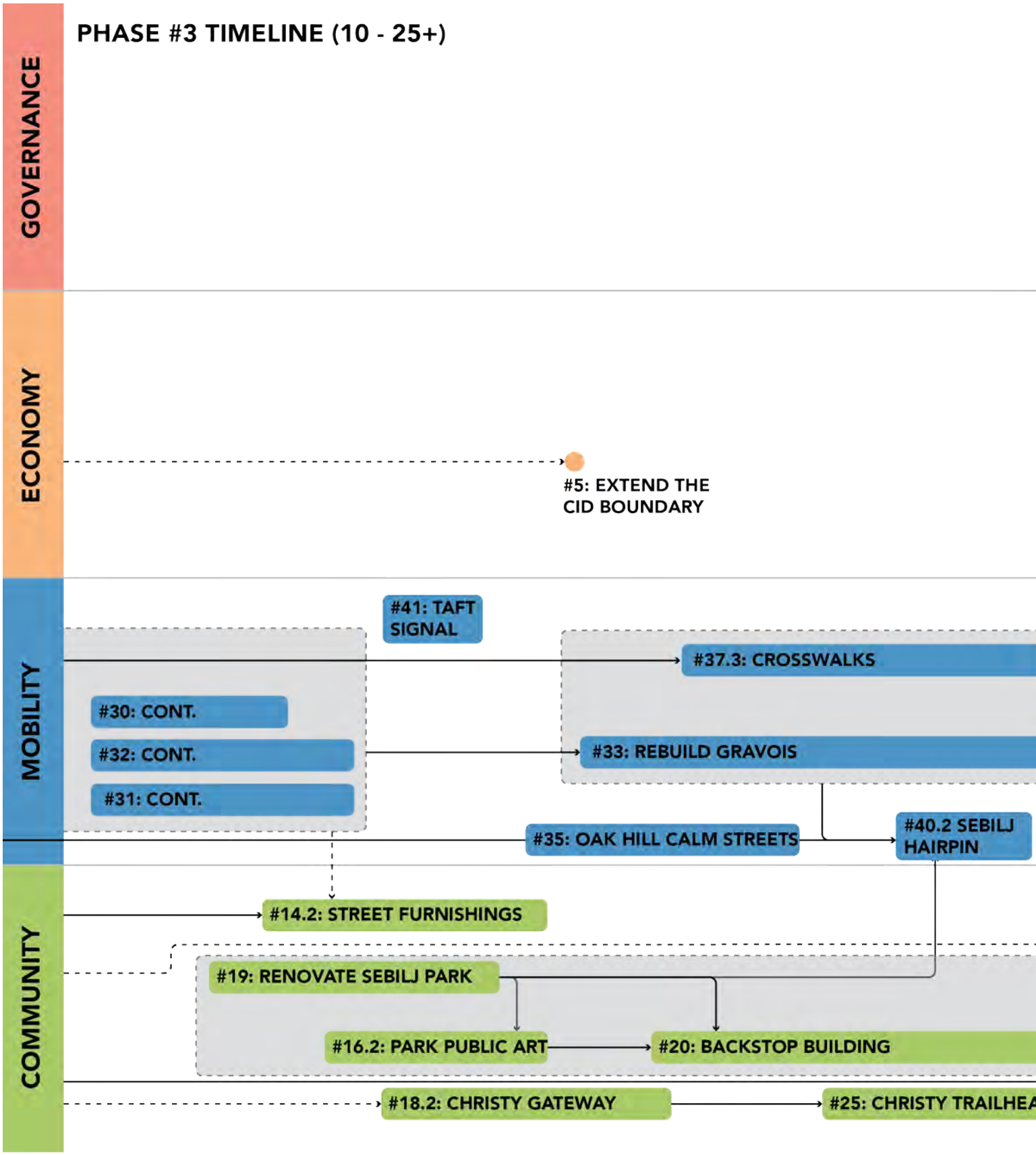
● *Initiator / Champion*

A *Advocate*



TIMELINE OF PROJECTS: PHASE #1 & #2

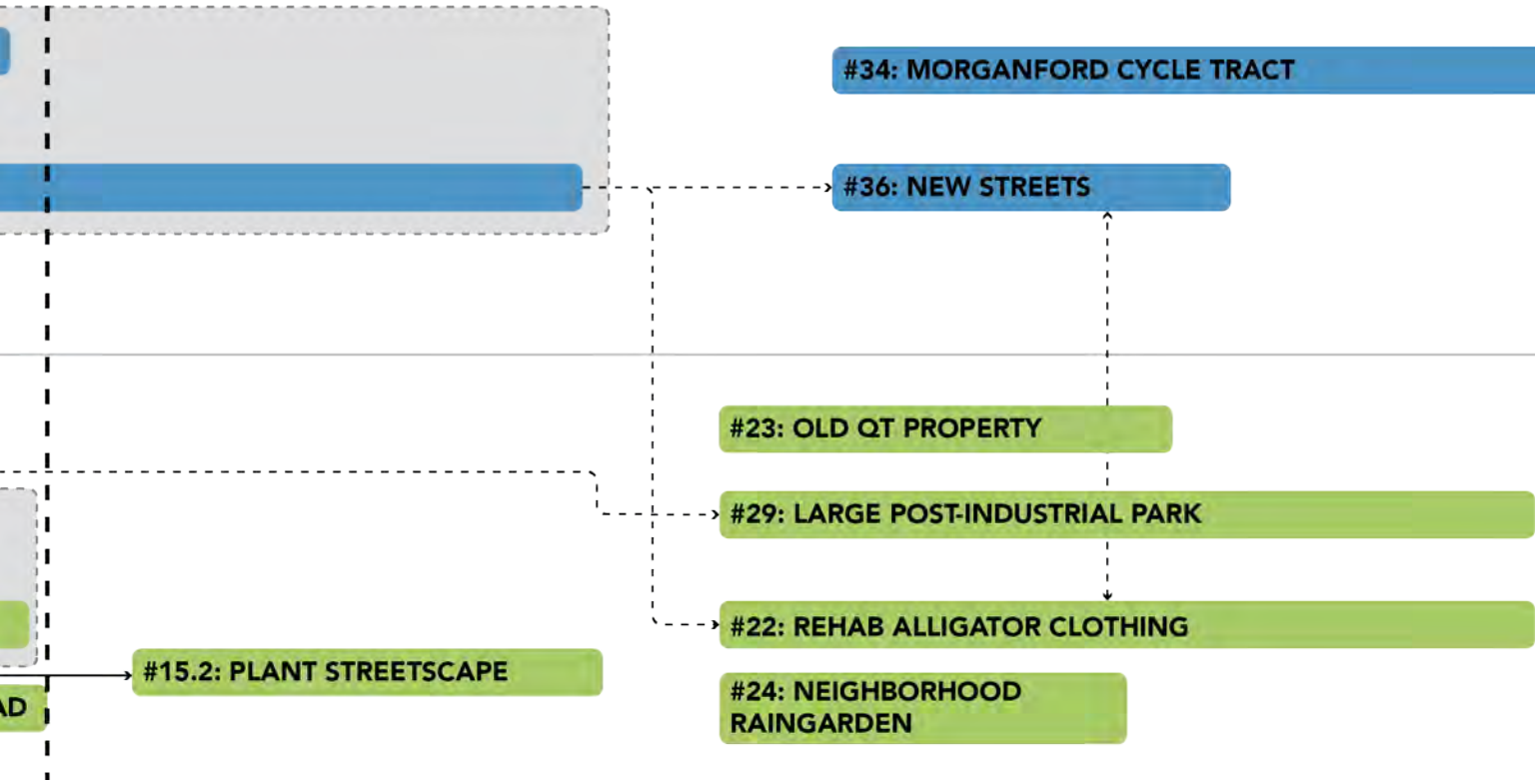

2021
2024
2031
PHASE #2 TIMELINE (YEARS 2 - 10)
#3: PARKLET REGULATIONS
#1: SUD - CITY
#4: TIF DISTRICT
#2: FBC - BEVO
RENEW MOU
ACCEPT CURB CUT CLOSURES
FACILITATE POP-UP RETAIL
SCREENING OF PARKING LOTS
INSTALL SHARED PARKING SIGNAGE
INVITE A CDC TO BEVO
#37.2: CROSSWALKS
#38: STRIPE PARALLEL CROSSWALKS
#30: RESURFACE GRAVOIS
#32: STORMWATER ISLANDS
#31: REBUILD VIADUCT
#11: BUILD PARKLETS
#14.1: STREET FURNISHINGS
#26: TREE NURSERY
#28: ACTIVE PARK
#27: STORMWATER PARK
#13: BLUE SECURITY LIGHTING
#12: PEDESTRIAN LIGHTING



TIMELINE OF PROJECTS: PHASE #3 & #4

2056

PHASE #4 TIMELINE (AS INITIATED)



STREETSCAPE PHASING PRIORITIES

PRIORITIES BASED ON IMPACT

The Bevo neighborhood should prioritize projects which prioritize safety (both from crime and in mobility) and which meet multiples goals. While this plan includes policies, economic jumpstarts, and goals for private developments, the public realm shines after a complete street, with a vibrant pedestrian landscape, is embraced.

Due to the nature of funding street improvements in St. Louis, the reconfiguration and reconstruction of Gravois Ave will take place over time. Since Gravois Ave was resurfaced as recently as 2017 the expectation is that a resurfacing would be justified in five to ten years. A resurfacing would allow the installation of the new lane geometries including the protected cycle track and setbacks from the curbs. A resurfacing does not normally include the installation or movement of any new curbs.

Curbs would be moved during a full rebuilding which happens only rarely due to its great expense. (an informal estimate suggests the rebuilding of Gravois Ave between Christy Blvd and Chippewa St would cost around fifteen million dollars today.) A rebuilding of Gravois Ave is not expected to occur anytime before 2030 and likely much later.

Nonetheless there are opportunities to use smaller funding sources (the Alderpersons, safety grants, stormwater grants, etc.) to make effective incremental improvements. These diagrams suggest the priorities for making those incremental changes.

EXISTING CONDITION

Gravois Ave currently has limited cross points for pedestrian, long wait times at areas where crosswalks already occur, and a litter problem. The Bevo neighborhood holistically also has problems with perception of crime and speeding.

STEP #1: GATEWAY SIGNAGE

Gateway signage allows visitors to know they are entering the Bevo neighborhood and signal a street character change from state highway to neighborhood commercial center. The Taft Ave Gateway sign provides a greater impact because it catches drivers speeding to get out of the viaduct.

The Christy Blvd and Taft Ave intersections offer key opportunities to create gateways into the heart of the Bevo neighborhood. Fortunately closing the Christy Blvd slip lane and a possible curb extension at Taft are changes that can be made permanent as the future reconfiguration of Gravois Ave can accommodate them. This report recommends going forward with a tactical intervention in these two locations and to include the "BElove", or similar, gateways signs in these locations.

STEP #2: PRIORITIZE THE BOWTIE

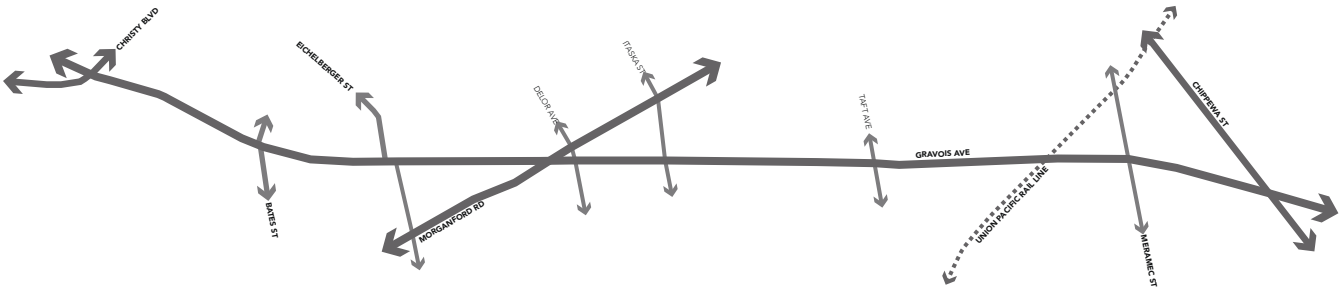
The natural center of the Bevo neighborhood rotates around the Bevo Mill. The area around the Mill, including the development in both public and private spaces, should be prioritized in terms of implementation and budget to drive momentum in the rest of the corridor. The plan suggests building a critical mass at the center of the Bevo neighborhood to excite the residents, gather organizational support, and raise funds, before extending these benefits along the rest of the corridor.

STEP #3: SHORTEN THE CROSS DISTANCE

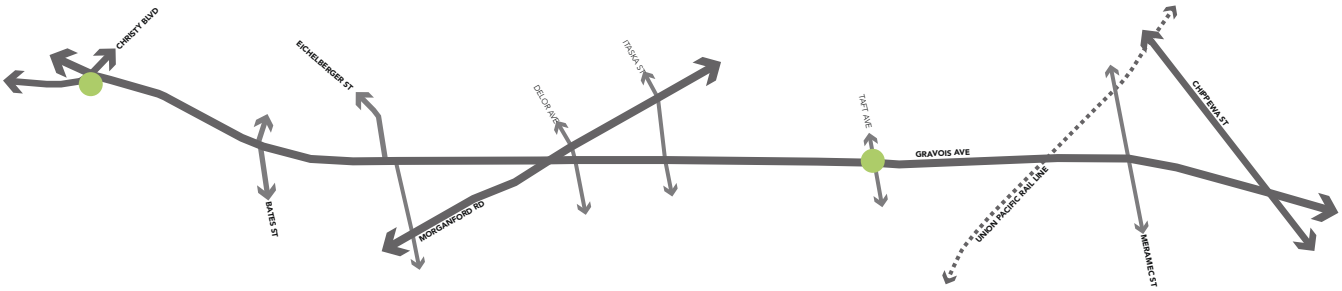
Crosswalks are the lifeblood of any commercial street. On comparable Great Streets around St Louis crosswalks are on average 300' apart while on Gravois they are closer to 1000' on average. Pedestrians need to feel welcome along Gravois to populate the street and wander by the storefronts. Part of this is providing crosswalks at intervals which make it convenient for pedestrians to cross at their will. This step proposes installing crosswalks which half the average.

STEP #4: FINAL BUILD OUT

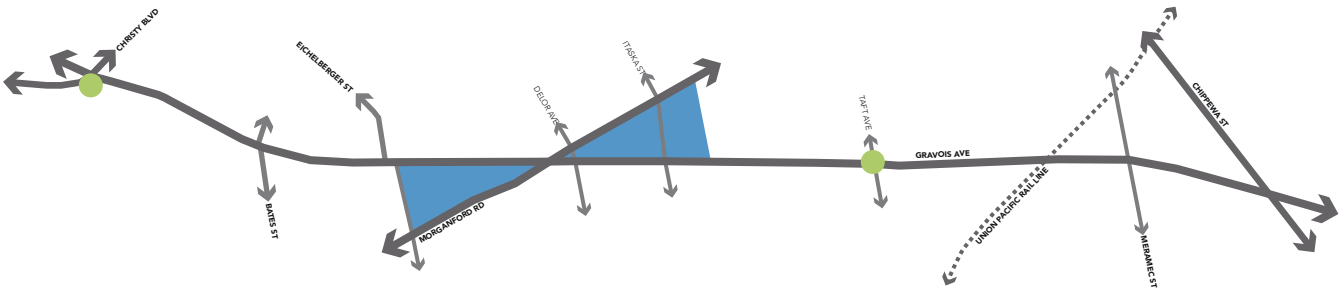
Final build out includes installing the rest of the perpendicular crosswalks, painting parallel crosswalks (*Project #38, p. 270*) on neighborhood streets, and changing the signal timing at Taft Ave (*Project #41, p. 273*).



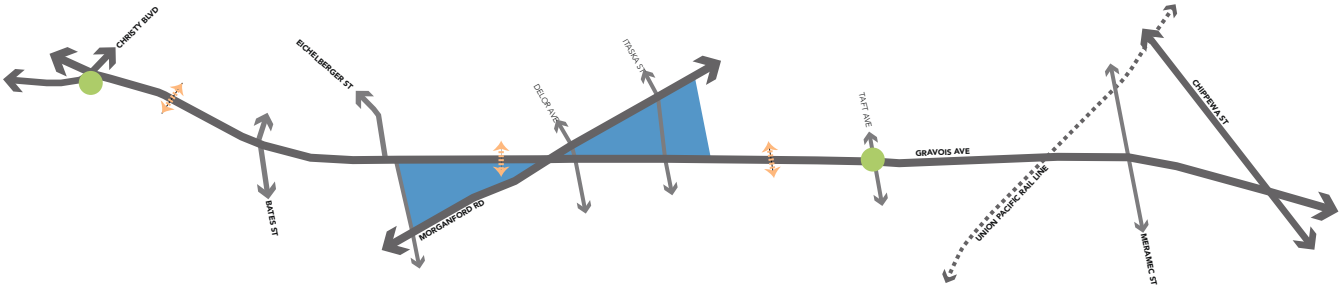
EXISTING CONDITION



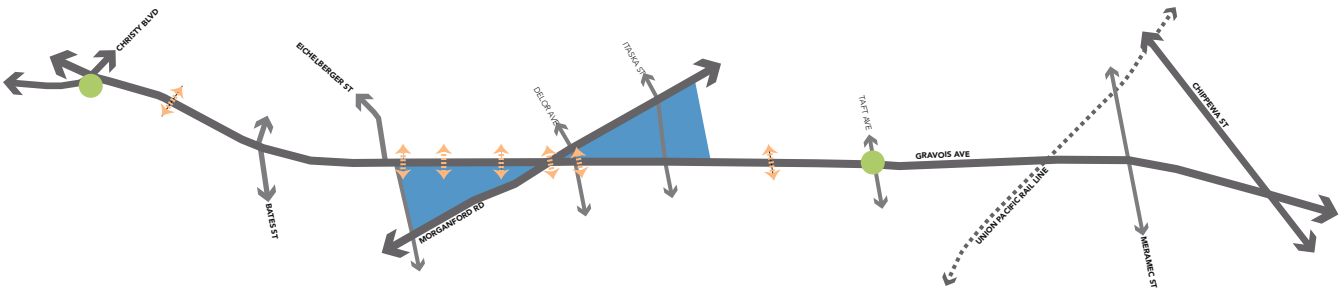
STEP #1: GATEWAY SIGNAGE



STEP #2: PRIORITIZE THE BOWTIE



STEP #3: SHORTEN THE CROSS DISTANCE



STEP #4: FINAL BUILD OUT

THE BEVO PLAYBOOK

BREAKING DOWN THE PLAN INTO IMPLEMENTABLE PIECES

On the following pages, you will see project sheets outlining implementation for different components of the proposed plan. When applicable, the following categories of information are provided to compare projects and quickly find information on each.

PROJECT DESCRIPTION

This includes a short description of the goal of the project, the general outcomes, and any important considerations to keep in mind. In some cases, further description might be provided to understand the pieces of the proposal.

PHASING STRATEGY

A phasing strategy includes related projects to the current one and timing of projects in relation to the current project. Some projects include several phases and a description of those phases would be found here.

FUNDING OPPORTUNITIES

Specific funding opportunities and their requirements are called out in this section.

- ☐ These call out boxes include step-by-step instructions on how to reach different phases of the project.
- ☐ If applicable, optional steps or a reference to related project sequencing is also mentioned.
- ☐ Most project are broken out into phases or a "pre-" and "post-" implementation checklist.
- ☐ Ongoing maintenance may also be described here.

IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

SUB-TOTAL	$0
SOFT COSTS	$0
CONTINGENCY	$0
TOTAL COST	**$0**

PROJECT COSTS

All projects include a cost table with material costs, soft costs, a line item for contingency, and a total estimated cost amount. All costs are for Q2 of 2019. Contingency is calculated at 8%.
The following abbreviations are used in the costs tables:

- LS = Lump Sum
- LF = Linear Feet
- SF = Square Foot
- SY = Square Yards
- CY = Cubic Yards

PROJECT GOALS MET

The twelve indicators outlined in *Chapter 2, pp. 54 - 55*, are shown here as icons for quick reference as to which goals the project support. Some projects are focused on a singular indicator, whereas others meet several.

RELATED PROJECTS

- *## Project Name*
- *## Project Name*
- *## Project Name*
- *## Project Name*

At the bottom of every project sheet are callouts to related projects, for a quick look at what to keep in mind when reading the project sheet.

1: ENACT A SPECIAL USE DISTRICT IN BEVO

SUD BEFORE FBC

While a form-based code may be feasible in the long term, the City should work with the CID in the short-term to enact a Special Use District (SUD). A SUD is intended to assist in the implementation of a plan, and may prohibit the creation or expansion of existing uses, subject uses to a specific list of limitations, and/or give flexibility by allowing prohibited uses as conditional.

CITY PLANNING DEPARTMENT

- ☐ Work with local Alderpersons to draft SUD
- ☐ Acquire legal service to write description for SUD
- ☐ Adopt SUD

1 IMPLEMENTATION CHECKLIST

REGULATING BEYOND USES

The Bevo SUD, which is already in development, should include other criteria including height, parking, vehicular and pedestrian access, and outdoor lighting as well. The Bevo SUD should codify as many of the design guidelines outlined in this plan as possible.

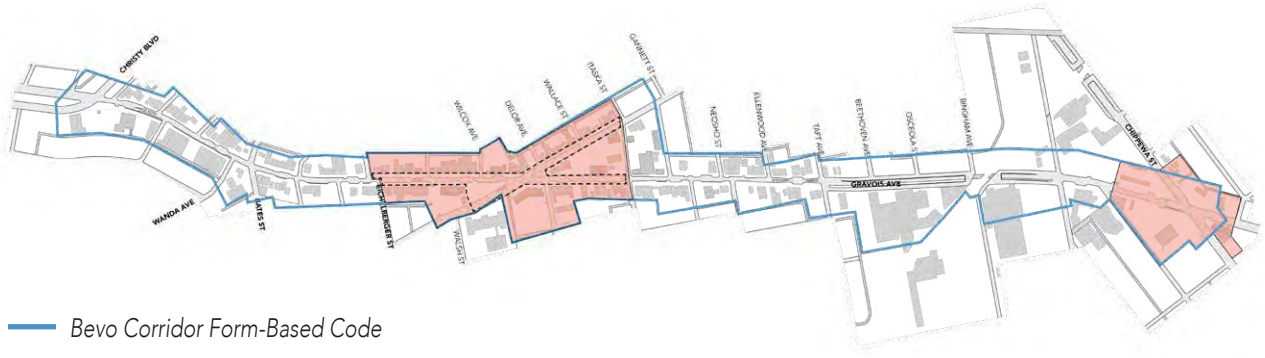
PROJECT ESTIMATED COSTS

LEGAL COSTS	$1,500
STAFF COSTS	$5,000
CONTINGENCY	$520
TOTAL ESTIMATED COST	**$7,020**

PROJECT GOALS MET

▶ #2: Bevo FBC.

2: ADOPT A PEDESTRIAN-FRIENDLY FORM-BASED OVERLAY ALONG GRAVOIS AVE.



Bevo Corridor Form-Based Code

Primary Building Facades

Districts within the Bevo FBC

While the St. Louis form-based code (FBC) template is comprehensive and thoughtful, there are some specifics that are important to include in an FBC for the Bevo study area. The first recommendations apply to the entire proposed FBC district; the later recommendations are specific to some of the subareas outlined in this plan.

PERMIT 1-2 STORY COMMERCIAL

In areas outside the Bowtie, Bevo needs lower building heights than the minimum 3-story heights required by districts currently in the St. Louis FBC template. The Bevo FBC should permit 1-2 story commercial buildings along Gravois.

CODIFY STOREFRONT DESIGN GUIDELINES

The design of a retail storefront is crucial for businesses. A corridor with poorly designed storefronts will continue to underperform, all else created equal. Gravois Ave needs a set of codified storefront design guidelines that ensure the long-term success of businesses along the corridor. *See pp. 152 - 153 for storefront design guidelines.*

Front-Facing Entries

All retail storefronts need a front-facing entry. While a second entry off the back to a parking lot or other accessible feature is permitted, most retailers will want a single entry-exit point; this point should face the primary street.

Recessed Entries

All entries should be recessed from the front facade closest to the street. Recessed entries complement sidewalk dining by providing pedestrians with breathing room along a narrow sidewalk pinched by a building facade on one side and sidewalk dining on the other.

Recess should be a minimum of three (3) feet and a maximum of eight (8) feet deep, measured from the portion of the front facade closest to the street. A minimum door swing of three (3) feet should be provided. When the recess falls behind the front build-to zone, the recess should be no wider than eight (8) feet.

Ground Story Transparency

Storefronts should have a minimum ground story transparency of 80%, as measured between 2' and 8' above grade. Glass in windows and/or doors, including any mullions, should be highly transparent with low reflectance. Tinted or reflective glass should be prohibited, while awnings should be encouraged.

External Power

Buildings fronting Gravois Ave should incorporate an external power source on or accessible from the roof to accommodate cornice lighting.

No Driveways

Wherever possible, driveways should be consolidated or eliminated along Gravois Ave and redirected to side streets.

SCREEN PARKING ALONG GRAVOIS

To lessen the visual impact of parking areas located adjacent to the Gravois Ave right-of-way, the area between street facing property line and vehicular areas shall contain either landscape, patio space, or sidewalk space.

Parking as Primary Use

On properties for which the parking of cars is the primary use (car sales, for example), require low-rise screening (max. 2'. Recommended screening includes a continuous landscape (*refer to streetscape ecologies on pp. 164 - 185*).

Parking as Secondary Use
Where parked cars is not the primary use, require higher screening. Fence, placed 2' from the back of curb of vehicular area, are recommended at a min. 3' and max. 4' height. Please refer to the streetscape palette on pp. 174 - 175 for colors and materials recommendations.

In addition to the preceding corridor-long recommendations, two districts in particular deserve special consideration in the FBC: the Bowtie and Chippewa districts.

BOWTIE DISTRICT CONSIDERATIONS

The St. Louis FBC template includes a "Neighborhood Center Type 1" district. This NC1 district is well suited to the Bowtie area, but with the following tweaks:

- Reduce minimum setback for alleys to 0'
- Eliminate side street block coverage requirement
- Adjust building height min to 3 Stories and 40'
- Adjust building height max to 8 Stories and 90'
- Define the primary building facade as seen in the map above (facing Bevo Mill)
- Adjust permitted building types to include the following:
  - Commercial Block Building
  - Flex Building
  - Live / Work Units
  - Liner Building
  - Civic / Institutional
  - Courtyard Buildings
- Note that sloping sites with driveway access will be subject to negotiation.
- Adjust use requirements to allow ground-floor, rear-facing residential

CHIPPEWA DISTRICT CONSIDERATIONS

The auto-oriented condition in the Chippewa area necessitates a lower block coverage requirement (50%, for example) compared to the 85% requirement common in the FBC code template.

ADDITIONAL CODE SPECIFICITY BY DISTRICT

The Bevo FBC should consider codifying district-specific design guidelines appropriate for the remaining subarea districts outlined in this plan.

CID

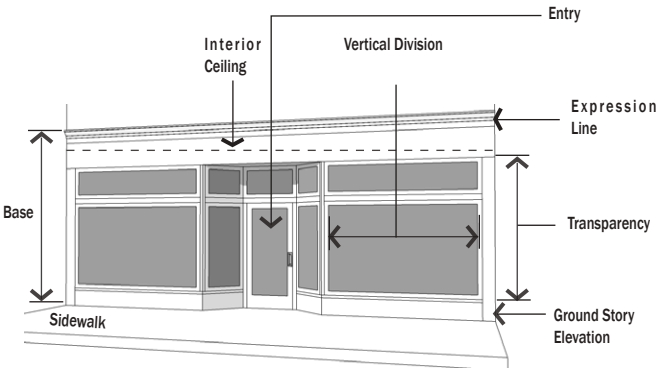
☐ Adopt Storefront Design Guidelines

CITY PLANNING DEPARTMENT

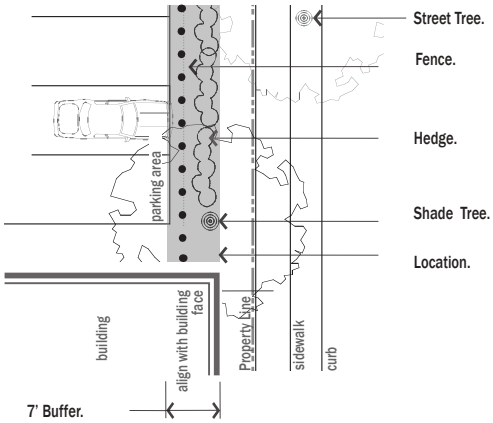
☐ Work with partners to write or hire a consultant to write the Bevo FBC

☐ Adopt FBC

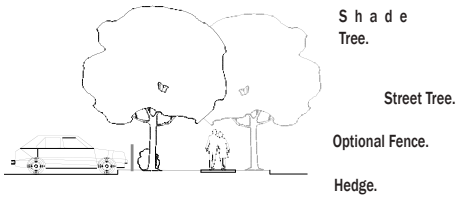
2 IMPLEMENTATION CHECKLIST



Storefront Entrance Type.



Front Buffer Plan.



Front Buffer Section.

PROJECT ESTIMATED COSTS

CONSULTANT FEES	$30,000
STAFF COSTS	$10,000
SUB-TOTAL	$40,000
CONTINGENCY	$3,200
TOTAL COST	**$43,000**
ANNUAL MAINTENANCE	$5,000

PROJECT GOALS MET

▶ #1: SUD St. Louis

#3: ADOPT A CITY-WIDE POLICY ON PARKLETS

PROJECT DESCRIPTION

Parklets - the occupation of a parking spot by people, usually as an enhanced extension of the public realm - can be a great way to activate businesses, slow traffic, and excite pedestrians. In short, they are a tool to reach this Plan's goals.

Many cities around the country have permitting processes in place for parklets; St. Louis should not lag behind. An example is the Pavement to Parks program in San Francisco, which is a multi-departmental permitting process that has been replicated in many cities (*more at https://groundplaysf.org/parklets/).*

A CLEAR CITY PATH FOR REVIEW

The City of St. Louis Board of Public Service and the Street Department should work together to revise the blocking permit to allow for longer-lasting events designed to provide public realm benefits.

PRIVATE APPLICANTS, PUBLIC USE

The applicant (business owner, non-profit, community improvement district, or resident) should be expected to pay for construction costs and agree to daily maintenance (including trash pickup); however, a parklet policy should include keeping the area available for public use; the permit should only allow for temporary occupation.

INSTALLATION

The City should issue a temporary occupancy use permit to install the parklet. The parklet could be a 3-season parklet, with a process in place for annual permit renewal.

Consider permitting temporary parklets on Park(ing) Day, an annual ritual on the third Friday in September, when people are encouraged to take over a parking spot and demonstrate an alternate use to vehicle storage. To alleviate safety concerns, the City could designate zones where day-long parklets are allowed by-right.

DESIGN

Appopriate buffers should be provided between any parklet and the adjacent travel lane. Hedges or plantings should be required design elements. Additional safety elements, for example requiring metal or wooden railings, should be considered.

3 IMPLEMENTATION CHECKLIST

- ☐ Determine applicable street types, length of installation time, and type of equipment which would be appropriate for parklets in St. Louis.
- ☐ Create a permit form and distribute, along with information, publicly.
- ☐ Determine the necessary signage the City would like businesses to display when operating a parklet. This may be similar to regulations governing sidewalk dining.
- ☐ Enforce parklets and police unsafe installations or locations.

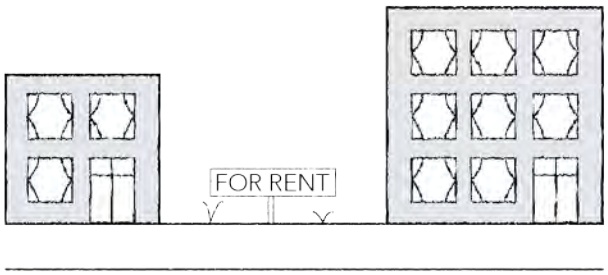
PROJECT ESTIMATED COSTS

STAFF COSTS	$10,000
CONTINGENCY	$800
TOTAL COST	**$10,800**
ANNUAL MAINTENANCE	$5,000

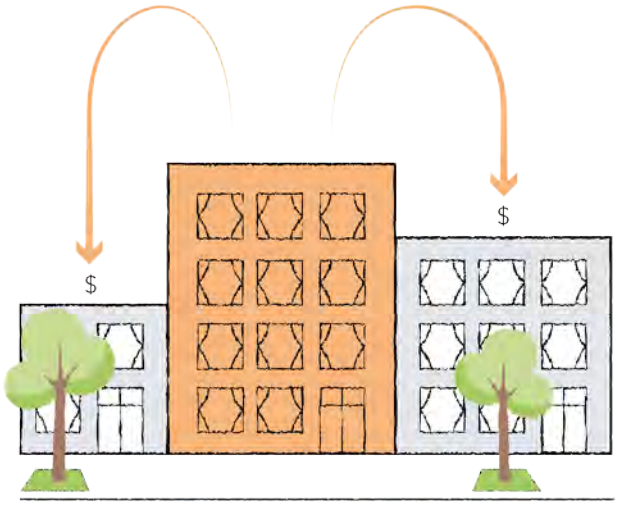
PROJECT GOALS MET

▶ #11: Install Parklets

#4: CREATE A GRAVOIS TIF DISTRICT TO FUND IMPROVEMENTS



VACANT LOT BEFORE



AFTER SHOWING VALUE CAPTURE

TIF AS A REDEVELOPMENT TOOL

TIF as tool is appropriate to discuss in the context of the plan, but it's possible that the costs of setting one up outweigh the benefit. A careful analysis of projected revenues would be needed before deciding to move forward. According to the City of St Louis, "Tax Increment Financing is a development tool designed to help finance certain eligible improvements to property in designated redevelopment areas (TIF Districts) by utilizing the new, or incremental, tax revenues generated by the project after completion." Property taxes within a TIF district are frozen for up to 23 years, with the taxes instead going into a special allocation fund. The special allocation fund is used to reimburse the developer or retire indebtedness.

Bevo, and the Bevo CID, would need to establish a track record of smaller successes before a bond market would seriously consider a TIF district. Smaller successes might come from exploring the full use of CID revenue or transportation development district (TDD) revenue for smaller pay-as-you-go public improvement projects. Bonding CID revenue would be an alternative to creating a TIF which would require much lower setup costs.

FUNDABLE PROJECTS

- Utilities or infrastructure
- Parks
- Parking lots
- Engineering Studies

PROJECT ESTIMATED COSTS

CREATE A REDEVELOPMENT DISTRICT	$50,000
PROGRESS TIF TO BOND	$200,000 - 300,000
CREATE A TIF DISTRICT	$80,000
SUB-TOTAL	$130,000
CONTINGENCY	$10,400
TOTAL COST	**$140,400**
ANNUAL MAINTENANCE	$20,000 - $30,000

PROJECT GOALS MET

- ☐ Adopt a policy to create a TIF
- ☐ Conduct a redevelopment study and blight study to set the stage for a TIF
- ☐ Create the Bevo TIF district
- ☐ Issue bonds against anticipated revenue

4 IMPLEMENTATION CHECKLIST

Graphic showing the mechanics of a TIF District, adopted for use from the International Council of Shopping Centers, 2017.

#5: EXTEND THE CID BOUNDARY

Existing CID Boundary

Extended CID Boundary

EXPAND NORTH TO CHIPPEWA

While the Bevo CID is tasked with being the primary implementer of this plan, the current Bevo CID boundary does not align with the study area. Since it is illegal for the Bevo CID to work outside of its jurisdiction, this plan proposed that the Bevo CID consider expanding its border north to include the Chippewa/Gravois intersection.

OTHER TYPES OF EXPANSION

The Bevo CID might also consider partnering with CID districts from nearby communities, such as South Grand and Cherokee. There may be opportunities to either connect their geographies and/or merge, which could expand the capacity of all CIDs involved.

PHASING STRATEGY

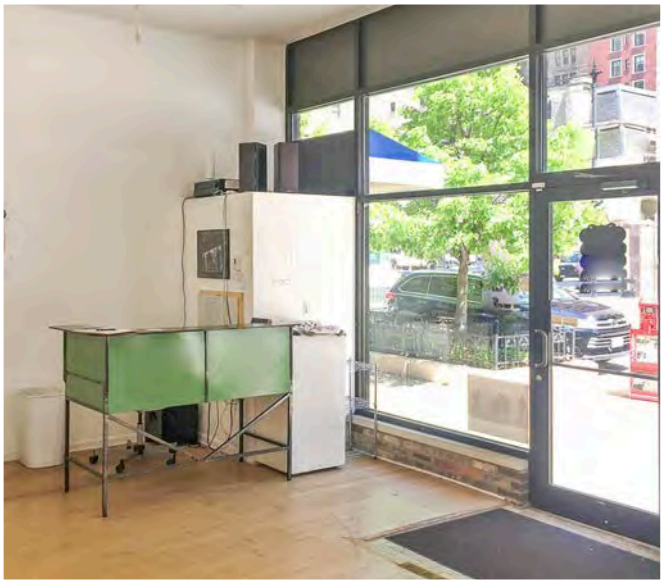
This expansion should only be considered in the future, when the immediate needs of the plan have been met. While the expansion would generate a greater amount of sales revenue for the Bevo CID, it would also be a resource-intensive process to get buy-in and support from some of the larger businesses in that district (including national chains like CVS).

PROJECT ESTIMATED COSTS

STAFF TIME	$20,000
CAMPAIGN SUPPLIES	$10,000
SUB-TOTAL	$30,000
CONTINGENCY	$2,400
TOTAL COST	**$32,400**
ANNUAL MAINTENANCE	$0

PROJECT GOALS MET

#6: FILL GROUND-FLOOR VACANCIES



PROJECT DESCRIPTION

The current ground-floor vacancy rate on Gravois Ave rests around 30%. Inactive or vacant storefronts tell pedestrians this area is somewhere to pass thru, not somewhere to enjoy. The Bevo CID proposed, and this plan supports, filling vacant storefronts with pop-up retail and properly advertising vacant spaces through the CID website. *See the CID Action Plan on pages 204 - 207 for more information on the website.*

PHASING STRATEGY

The Bevo CID already designed and purchased simple "for rent" signs which property owners can display in vacant storefronts. Current practice of raggedy signs in windows does not entice new tenants. These signs are already printed and ready to be used. The Bevo CID Board should prioritize contacting property owners with vacant storefronts to help snaz up their "for rent" signs and offer these as an alternative.

Next, pop-up retail shops can both earn revenue for Bevo residents and property owners, while also attracting visitors for special events. The plan proposes the Bevo CID should contact property owners and using a small amount of Bevo CID funding, tidy up vacant properties in hopes of 1) leasing the space, 2) advertising Bevo as an active neighborhood, and 3) displaying the works of native Bevo residents.

FUNDING OPPORTUNITIES

The banners already exist, with several design options, and copies of each. No additional money would need to be spent as they are made of heavy duty material and can easily be recycled through many different spaces. The Bevo CID should prioritize spaces which may be nearly move-in ready, but require small amounts of TLC to attract a tenant. Cleaning windows, the interiors, and potentially painting the interior walls may be all that's required to bring a space onto the market.

PROJECT ESTIMATED COSTS

"FOR RENT" BANNERS	$0
MISC. CLEANING SUPPLIES	$100
WHITE PAINT (5 GALLONS)	$43
SUB-TOTAL	$143
CONTINGENCY	$12
TOTAL COST	**$155**
ANNUAL MAINTENANCE	NONE

PROJECT GOALS MET

#7: INSTALL CONTINUOUS CORNICE FACADE LIGHTING ALONG GRAVOIS AVE

DELIGHT WITH LIGHT

The installation of charming, matching, continuous lights along the cornices of building frontages can enhance the experience of being in a retail corridor. While the purchasing and installation of lights is the responsibility of the property owner, the Bevo CID can help champion this project right away.

PHASING STRATEGY

This project can and should be done in a 'DIY' fashion right away, where businesses pay for the lights themselves. If desired, the Bevo CID can formalize a process whereby businesses apply for matching funding to install lights on their buildings; however, much can be done right away without a formal process.

FUNDING SOURCES

Funding would most likely come from individual property owners. However, as part of the facade improvement grant offered by SLDC, a business owner may run electricity to their facade. The cost of installing an exterior power outlet for lights is estimated to be about $3,000.

After the initial installation, the largest cost would be in terms of energy costs to the landlord. These costs might be lessened by purchasing solar rechargers for the lights; however, $50/month energy costs are assumed.

IMPLEMENTATION: IMMEDIATELY

- ☐ Select a readily-available light
- ☐ Standardize purchasing/installation criteria (Appendix # 10: Tactical, pp. 650 - 653)
- ☐ CID DM and Board approach businesses

FUTURE EXPANSION

- ☐ Incorporate timer/light sensors
- ☐ CID creates 50/50 funding match program

7 IMPLEMENTATION CHECKLIST

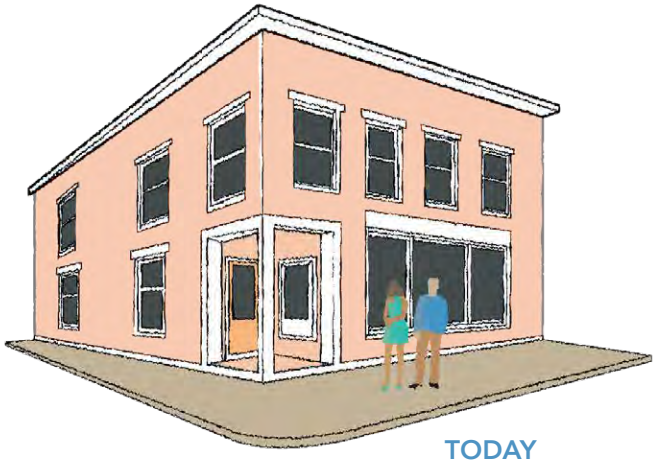
PROJECT ESTIMATED COSTS

INSTALL ELECTRICITY	$3,000 (potential cost)
100 LIGHTS (100')	$159.99
PARAPET CLIP (100)	$33.99
SHINGLE TAB (100)	$30.99
EXTENSION CORD	$25
TOTAL COST	**$250.00 (PER BUSINESS)**
ANNUAL MAINTENANCE	$600 (energy costs)
COST FOR CORRIDOR	$24,500 (98 total storefronts)

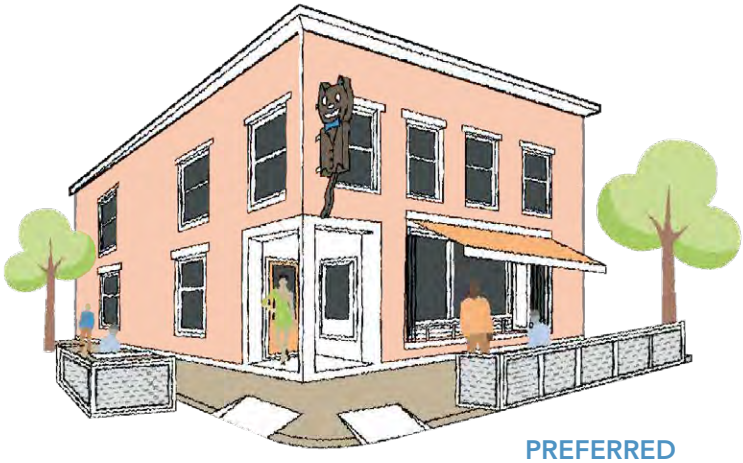
PROJECT GOALS MET

- #8: Replace Tinted Glass
- #13: Blue Security Lighting
- #12: Pedestrian Lighting

#8: REPLACE TINTED GLASS STOREFRONTS WITH CLEAR GLASS



TODAY



PREFERRED

PROJECT DESCRIPTION

Reflective glass, while good for keeping light out, also prohibits a healthy level of 'eyes on the street' and the ability for potential customers to see activity happening within a business. The Bevo CID needs to work with businesses to replace all reflective glass with clear glass throughout the corridor.

PHASING STRATEGY

Target businesses with reflective glass in the Bowtie first. Work with owners to understand the reasons behind the use of reflective glass in the first place, and offer alternative solutions (awnings are great for solar shading; improved lighting or other facade improvements might improve customer experience; etc.).

PROJECT READINESS: IMMEDIATELY

- ☐ Develop list of "tinters"
- ☐ CID DM work with businesses to address underlying reasons for using reflective glass in the first place
- ☐ Facilitate businesses applying for SLDC facade improvement grants

ONGOING

- ☐ Discourage new tinted / mirrored windows through CID meetings and & Design Guidelines

8 IMPLEMENTATION CHECKLIST

FUNDING OPPORTUNITIES

SLDC's facade improvement grant funds storefront renovations and awnings; this project is a particularly good fit for that grant.

PROJECT ESTIMATED COSTS

ALUMINUM STOREFRONT (INCLUDES INSTALLATION)	$25/sf x 75 = $1,875
3' X 7' DOOR (1)	$1,200
SUB-TOTAL	$3,075
CONTINGENCY	$246
TOTAL COST	**$3,321 (PER BUSINESS)**
ANNUAL MAINTENANCE	$600
COST FOR CORRIDOR	$83,000 (assumes 25 storefront replacements)

PROJECT GOALS MET

- #7: Cornice Lighting
- #13: Blue Security Lighting
- #12: Pedestrian Lighting

PROJECT #9: CREATE A BEVO PUBLIC ART COMMITTEE

ART FOR ALL

The Bevo CID, Better Bevo Now, and the Regional Arts Commission (RAC) should partner to create a Public Art Committee to implement the Plan's arts plan (*pp. 188 - 189*).

SEBILJ PARK INSTALLATION

The Bevo CID is encouraged to install temporary public art at the base of Sebilj Park and Bevo gateway signage within the next 2 years (*Project #16*). These temporary installations can raise awareness and excitement for a community-wide engagement process to identify, define, facilitate, install, and maintain art installations throughout Bevo.

INITIAL PROJECTS

After installing the tactical Bevo gateway signage, the Art Committee should initiate a public process to determine what the permanent replacement of that signage should be. Local artists are encouraged to participate. While that process is ongoing, the Committee should consider the following initial projects:

- painting the electrical boxes in front of the Bevo Mill at Gravois Ave and Delor St
- Mural under viaduct
- a rotating art display pad at the base of the Sebilj park (that would replace the temporary art)

ENCOURAGE DIY PROJECTS

The Committee should also embrace short-term, temporary, or DIY art wherever possible. If a community group is interested in installing an art piece (for instance painting a mural under the viaduct), those DIY projects should be shared with and easily approved by the Committee. Consider participatory art wherever possible. Participatory art has the power to connect people to other's humanity, and can offer not just something to witness, but an experience. It can build and strengthen social networks, especially in a diverse community like Bevo. Additionally, it can be a great engagement and economic development tool when it comes to reimagining a vacant parcel or storefront. It can have practical outcomes along the corridor.

PROJECT READINESS: 2 - 4 YEARS

- ☐ Create partnership between Bevo CID and BBN
- ☐ Partner with RAC to receive technical assistance

IMPLEMENTATION: 2 - 4 YEARS

- ☐ Bevo CID submit pre-application in November
- ☐ Submit full application for Program Support grant in February to obtain public engagement support in implementing arts plan

9 IMPLEMENTATION CHECKLIST

FUNDING OPPORTUNITIES

RAC has an annual Program Support grant, which supports ongoing programs that provide access to the arts. Their application process involves a pre-application due in December; full applications are due February, with a grant award period of July 1 - June 30.

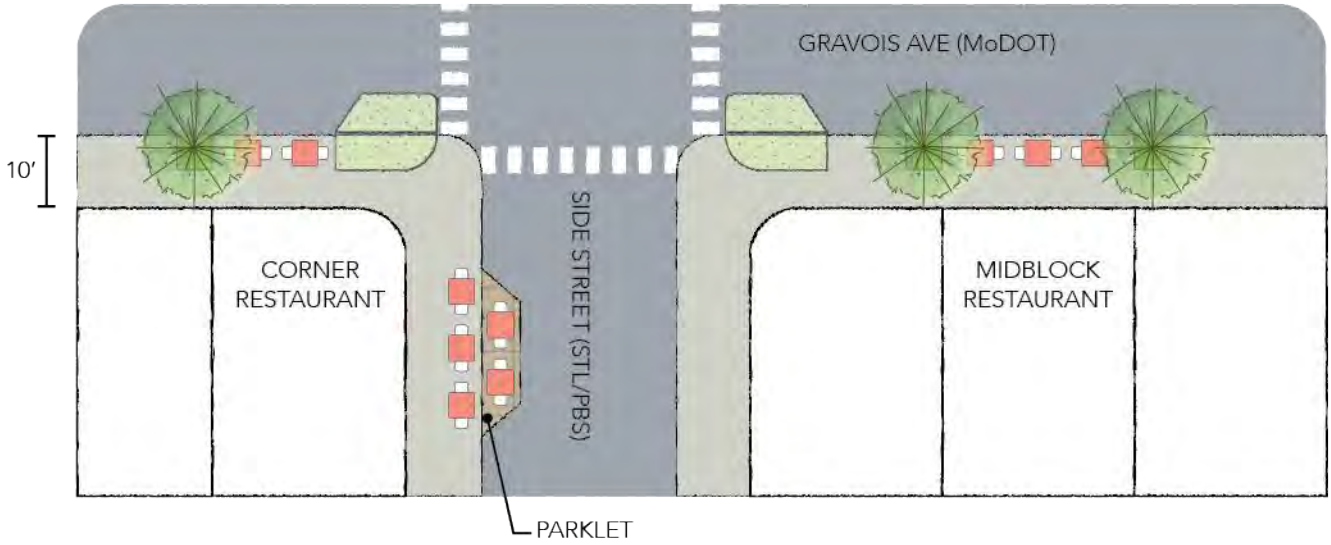
PROJECT ESTIMATED COSTS

TEMPORARY ART	$15,000
INITIAL GRANT APP AMOUNT	$20,000
SUB-TOTAL	$40,000
CONTINGENCY	$3,200
TOTAL COST	**$43,200**
ANNUAL MAINTENANCE	$10,000 - $20,000

PROJECT GOALS MET

- *#16: Park Public Art*
- *#17: Taft Gateway*
- *#18: Christy Gateway*

#10: START SIDEWALK DINING TODAY



EYES ON THE STREET

Sidewalk dining allows for businesses to expand their floor space onto the sidewalk and increase their prosperity. Sidewalk dining accomplishes two positives for the community as well. Great streetscapes not only improve the prosperity of the restaurant, but also the surrounding businesses. Inviting streetscapes provide a 15% premium for businesses over less inviting places. Further, sidewalk dining connects the businesses to pedestrians and the street, providing eyes on the street, and security for an extended period of time. If restaurant owners wanted to further extend their sidewalk dining opportunities, they might consider a parklet as an extension of the existing pavement. *See project #, page237, for more information.*

IMPLEMENTATION: IMMEDIATELY

- ☐ Businesses apply for parklets and sidewalk dining permits, especially on corner properties.
- ☐ Businesses apply for parklet permits, once available from City (see *Project #11*).

10 IMPLEMENTATION CHECKLIST

PHASING STRATEGY

Business owners could chose to put as many or as few tables as the sidewalk allows. At a minimum, two 2-top tables would be recommended, but a corner restaurant may have as many as five - seven tables.

PROJECT ESTIMATED COSTS

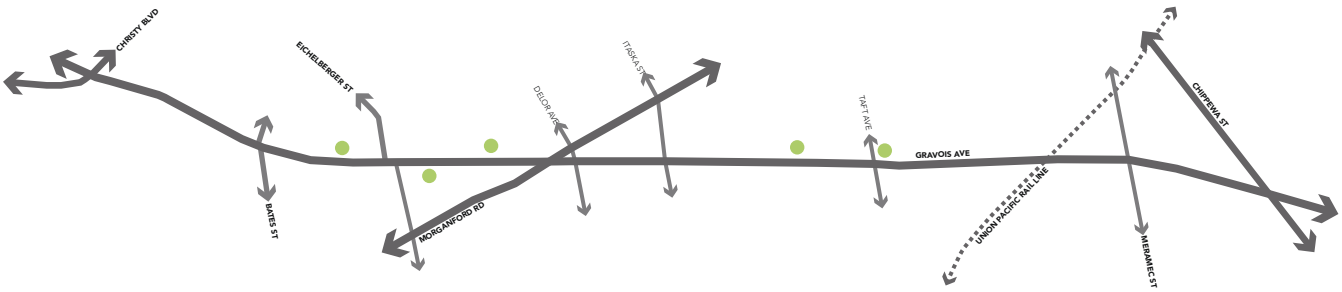
TABLE (1) & CHAIRS (2)	$140/set
UMBRELLA	$50/each
PLANTER	$50/each
SUB-TOTAL	$250
SOFT COSTS	$25
CONTINGENCY	$27
TOTAL COST	**$277/EACH**
ANNUAL MAINTENANCE	$360 (Sidewalk & Health permit)

PROJECT GOALS MET

▶ *#3: Adopt Parklet Policy*

▶ *#11: Install Parklets*

#11: INSTALL PARKLETS ALONG THE CORRIDOR



EXPANDING THE PEDESTRIAN AREA

Parklets continue the sidewalk and expand the pedestrian realm further into the right-of-way. Not only does a parklet visually pinch the driving lanes, drivers, upon seeing pedestrian infrastructure, naturally slow down. Strings of parklets down Gravois Ave would encourage walking between destinations as people see enhanced activity and may even attract new patrons who are specifically looking for a table outside on a nice spring evening. Restaurants need not be the only suppliers of parklets, although their use is most obvious. Non-food establishments might include benches, planters, or scooter/bike parking.

The plan encourages any business owner to apply for and install a parklet; however, calls upon these five locations as community anchors along Gravois to start the process:

- Meli's (recently bought as potential restaurant space)
- Heavy Anchor
- Oasis International
- El Gato
- Taft Bar & Restaurant

PROJECT ESTIMATED COSTS

PERMIT COSTS	$200/parklet (if serving food +$160)
CONSTRUCTION COSTS	$10,000/parklet
SUB-TOTAL	$10,200 ($10,360)
CONTINGENCY	$816
TOTAL COST	**$11,016**
ANNUAL MAINTENANCE	$360 (sidewalk & Health permit)

PROJECT GOALS MET

PROJECT READINESS

- ☐ The City adopts a policy on parklets, *Project #3*

IMPLEMENTATION: IMMEDIATELY

- ☐ CID to approach businesses with information on parklets
- ☐ Business owners to install parklets in front of their business

ONGOING

- ☐ Reapply for permit on an annual basis

11 IMPLEMENTATION CHECKLIST

▶ *#3: Adopt Parklet Policy* ▶ *#10: Sidewalk Dining*

#12: ADD PEDESTRIAN-SCALED LIGHTING

LAYER MINIMAL LIGHT

When implementing streetscape improvements along Gravois Ave, the pedestrian experience is important. With a 15% premium on retail sales associated with walkability and inviting public spaces, lighting can have huge effects on Gravois Ave. It should be one of the first streetscape elements that is redone after the Gravois rebuilding (*Project #33, pp. 264 - 265*).

- *Ambient Lighting:* Add low-glare ambient lighting on pedestrian-scale poles.
- *Destinations:* Light destinations, such as key entries and refuges. This includes illuminating obstacles, such as stairs.
- *Hardscape*: Integrate light into the hardscape including columns, benches, and play areas.
- *Art*: Add interest by lighting art, water features, etc.

PHASING & FUNDING

Pedestrian-scale poles would normally be the first layer of light to add; however, because of the moving of infrastructure associated with the Gravois rebuilding project, it is inefficient to install light poles prior to that.

Therefore, Phase 1 is to light entries and refuges. The Bevo CID should encourage property owners to provide the appropriate amount, and type, of light for their entries. This can be done as businesses are able throughout the corridor. SLDC's small business facade imrpovement grants cover exterior lighting for business entries.

The Bevo Arts Committee should consider illuminating art (or using light as art). RAC grants may be able to cover lighting of art installations as well. This can also be done right away—independent from streetscape infrastructure—and can evolve with art programming.

PROJECT READINESS: 2 - 5 YEARS

- ☐ Work with business owners to add or maintain appropriate entry lighting
- ☐ Add lighting to art installations

IMPLEMENTATION:
10 - 30 YEARS POST-REBUILDING

- ☐ Add pedestrian lighting poles
- ☐ Add lighting to benches and play areas

12 IMPLEMENTATION CHECKLIST

Hardscape lighting improvements need to come after the Gravois Ave rebuilding project, and so are part of Phase 2 along with the permanent pedestrian poles. Poles should be installed as consistently as possible throughout the corridor; if this is not possible, focus pedestrian poles in the Bowtie first.

PROJECT ESTIMATED COSTS

NEW LIGHT POLES W/ FLAG PLANT HOLDER	$1,260/light x 266 = $335,160
INSTALLATION COSTS	$1,000/light x 266 = $266,000
ELECTRICAL TRENCHING & SERVICE	$40/LF x 15,000 = $600,000
CONCRETE PAVING	$10/SF x 75,000 = $750,000
SUB-TOTAL	$1,971,160
CONTINGENCY	$157,700
TOTAL COST	**$2,128,860**
ANNUAL MAINTENANCE	$582,540

PROJECT GOALS MET

▶ *#7: Cornice Lighting*

▶ *#13: Blue Security Lighting*

#13: INSTALL "BLUE LIGHT" SECURITY CALL BOXES

PROJECT DESCRIPTION

"Blue light" security systems have oft been used on college campuses as another layer of security for students who may not have access to a working cell phone. In recent years, these pieces of equipment may seem superfluous as more and more people increasingly have cell phones. However, there are many reasons why a phone may not be working at the time or why a person may not be able to identify their location to a 911 operator. Call boxes provide an automated message--stating the location of the calling box--before patching through for a direct communication with the caller.

Even if the call boxes are rarely used, college campuses and municipalities which already have them keep them installed to strengthen the perception of a safe area. The plan proposes installing five, 36" call stations boxes. The boxes are painted blue with cellular service and a hardwired electrical connection, attached to a pole or mounted to the side of a structure. The lights would be maintained like in the same manner as other city lighting systems.

PHASING STRATEGY

Purchasing the items in bulk may save on material costs, but should this not be possible, the boxes should be installed in the following order for maximum impact:

- Near the Chippewa Intersection, to the South of the QuickTrip, OR East of the CVS
- By the bus stop at Itaska Ave
- At the intersection of Gravois / Bates, by the 7-Eleven
- South of the public parking lot at Gravois / Morganford
- NE corner of the intersection of Taft and Gravois

IMPLEMENTATION: 3 - 4 YEARS

- ☐ Coordinate with businesses for the exact location of installation.
- ☐ Purchase the call boxes and hire a low-voltage contractor for installation.
- ☐ If necessary, train police and 911 operators as to how to receive calls from the boxes.

ONGOING

- ☐ Maintain access and functioning of all boxes. The blue lights should remain illuminated no matter the time of day.

13 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

MATERIAL COSTS	$2,725 x 5 = $13,625
INSTALLATION	$1,250/box x 5 = $6,250
SUB-TOTAL	$19,875
CONTINGENCY	$1,000
TOTAL COST	**$20,875**
ANNUAL MAINTENANCE	$200/ea x 5 = $1,000

PROJECT GOALS MET

▶ #7: Cornice Lighting

▶ #12: Pedestrian Lighting

#14: INSTALL PEDESTRIAN STREETSCAPE FURNISHINGS

PROJECT DESCRIPTION

Consistent, simple, and easy-to-maintain furnishings can activate the pedestrian landscape and provide an opportunity for branding. Street furniture placement should take into account the flow of pedestrian traffic and not obstruct a clear walking path.

PHASING STRATEGY

In the first phase, greening the pedestrian realm with simple planters, maintained by either business owners or the Bevo CID, and installing trash receptacles will show immediate investment in the corridor and hopefully provide a solution to the litter concern. A maintenance plan for trash collection should be established between the Bevo CID and business owners. One solution might be to require business owners to be responsible for trash collection for a receptacle in front of their business during normal business. But during special events, or on weekends, the Bevo CID may contract for trash collection.

The second phase calls for installing 6' benches along either side of the street to give pedestrian places to rest. Benches should be set back from the "walking zone" with enough room for people to pass. Prioritizing bench installation near transit stops would serve a dual purpose of aiding transit riders and Bevo visitors.

In the final phase, permanent planters and concrete tuffets provide a dedicated solution to landscaping the corridor. *See Project #15, pg. 236, for more information on landscaping installation.* These planters would most likely be maintained by the Bevo CID. They should feature local and hearty plants to reduce maintenance costs and provide for a more lush environment. *See the planting plan, pp. 164 - 185, for more information on the types of plants suggested.*

PROJECT READINESS: 1 - 3 YEARS

- ☐ Identify the location of all furniture, coordinating with business owners if required.
- ☐ Determine the maintenance plan for trash collection, plantings, and repairs.

CONSTRUCTION: 2 - 5 YEARS

- ☐ Install furnishings in three phases.

ONGOING

- ☐ Maintain equipment.

14 IMPLEMENTATION CHECKLIST

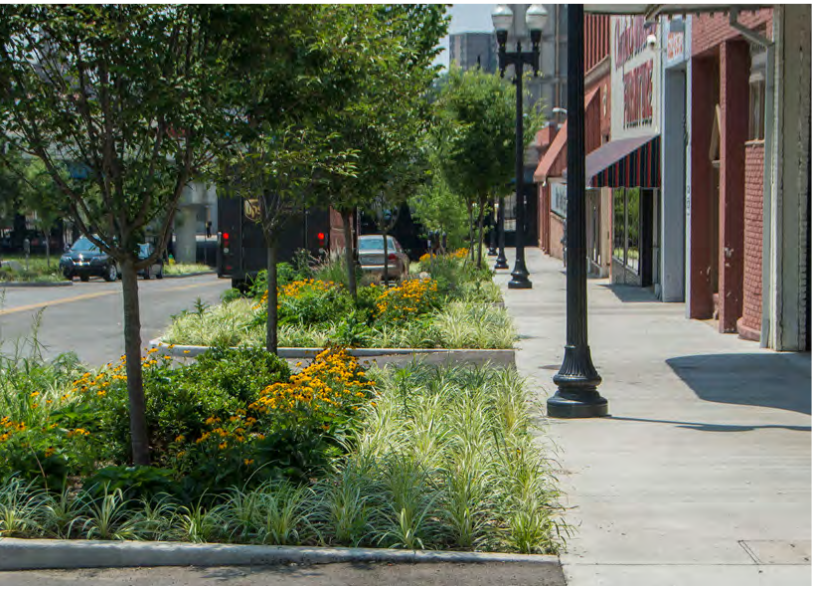
PROJECT ESTIMATED COSTS

4' X 3' X 2' WOOD PLANTER, CASTERS, SOIL, SHRUBS	$250/ea x 21 = $5,250
TRASH RECEPTACLES	$1,500/ea x 48 = $72,000
PHASE #1 SUB-TOTAL	**$77,250**
BENCH	$2,500/ea x 56 = $140,000
PHASE #2 SUB-TOTAL	**$140,000**
CONCRETE PLANTERS	$700/ea x 45 = $31,500
CONCRETE TUFFETS	$500/ea x 112 = $56,000
PHASE #3 SUB-TOTAL	**$87,500**
CONTINGENCY	$24,380
GRAND TOTAL COST	**$329,130**
ANNUAL MAINTENANCE	$30,000

PROJECT GOALS MET

- *#12: Pedestrian Lighting*
- *#13: Blue Security Lighting*
- *#15: Streetscape Landscaping*

#15: PLANT STREETSCAPE LANDSCAPING



PROJECT DESCRIPTION

Street trees and other sidewalk landscaping features can contribute to a great number of community benefits including: cleaning pollutants out of the air, offseting carbon emissions, helping to reduce crime, lowering heat-related illnesses, and reducing stress levels[1]. Currently, Gravois Ave has a spartan landscape with vacant tree wells and little additional green infrastructure.

PHASING STRATEGY

This project comes in two main phases: immediate solutions to be done at any time, the sooner the better; and after the Rebuilding of Gravois Ave. *See Project #33, pg 264*.

Phase #1 proposes filling and maintaining the vacant tree wells which already exist on Gravois Ave. While replacing the trees might be done in partnership with the city, the fastest and least cumbersome solution would be if the Bevo CID purchased and watered the trees.

Phase #2 proposes installing a cohesive system of green infrastructure, as outlined in the Design Guidelines of *Chapter*

#3, pp. 164 - 171. This phase would occur after the rebuilding of Gravois Ave when additional sidewalk space would allow for a more continuous system of tree wells and perennials planters. Even in this phase, street trees might be prioritized first, followed by the perennial plantings.

GREENSCAPING OPPORTUNITIES

Plantings should capture the vision of the ecological transect described in Chapter #3, pp. 164 - 171. The transect and accompany planting plan makes suggestions based on the climate and ecology of the Bevo neighborhood, recommending plants which will thrive with limited maintenance. Planting beds are shown performing double duty; they both green the corridor and provide collection basins for street and sidewalk rainwater runoff. Wherever possible, the plantings should coordinate, both aesthetically as well as ecological, with the surrounding environment, including the nearby street trees, the lighting, sidewalk drainage, and pedestrian furniture.

PROJECT READINESS

- ☐ Determine a selection of plantings from the provided selection in this plan.
- ☐ Coordinate the placement of plantings during the design of the Rebuilding of Gravois, Project #33, pp. 264 - 265.

PHASE #1: INFILL EXISTING TREE WELLS

- ☐ Plant trees in the existing tree wells.
- ☐ Coordinate a tree maintenance plan between the CID and Streets.

PHASE #2: PLANT SIDEWALK LANDSCAPING

- ☐ Install plantings in beds after Gravois rebuilding is complete.
- ☐ Coordinate a plant maintenance plan between the CID and Streets.

ONGOING

- ☐ Maintain plant beds and replace perennials as needed.

15 IMPLEMENTATION CHECKLIST

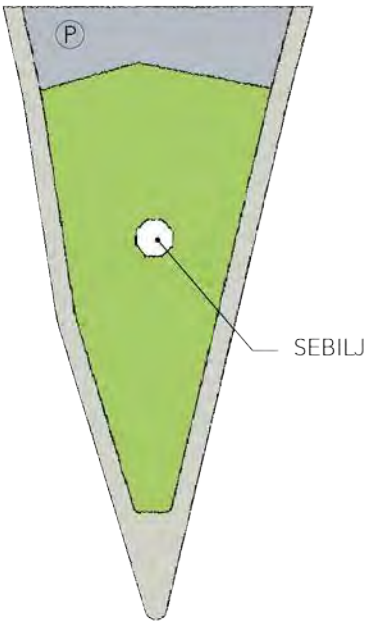
PROJECT ESTIMATED COSTS

TREE: 1" CALIPER	$200/ea x 30 = $6,000
PHASE #1 SUB-TOTAL	**$6,000**
TREE: 3" CALIPER	$600/ea x 235 = $141,000
PERENNIALS	$10/sf x 40,437 =$404,370
MULCH	$30/cy x 1,534 =$46,026
SOIL: 30" BIO	$60/cy x 1,249 =$74,939
SOIL: 12" PLANTING	$40/cy x 285 =$11,408
IRRIGATION	$2/sf x 30,802 =$61,604
PHASE #2 SUB-TOTAL	**$739,347**
CONTINGENCY	$59,150
GRAND TOTAL COST	**$798,497**
ANNUAL MAINTENANCE	$40,000

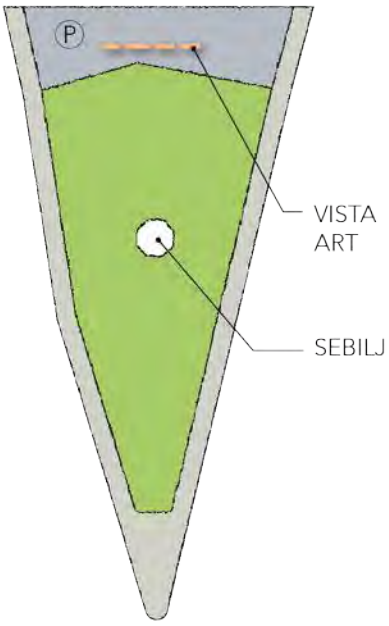
PROJECT GOALS MET

▶ #14: Streetscape Furnishings

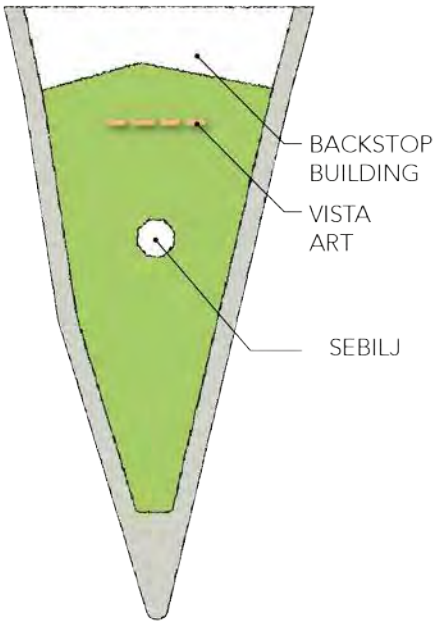
#16: DEVELOP PUBLIC ART IN THE SEBILJ MONUMENT PARK PARKING LOT



EXISTING



TEMPORARY ART IN THE PARKING LOT



PERMANENT ART IN THE PARK

PROJECT DESCRIPTION

Bevo Mill is a globally unique landmark at the intersection of Gravois Ave and Morganford Rd. Likewise, Sebilj Park is an unique cultural asset but does not realize it's full potential in it's current configuration. As part of the art plan (*see pp. 158 - 159*), this project proposes an art installation behind the Sebilj Monument as a first phase to enclosing the Bevo Bowtie. As shown as 16' tall letters spelling the word "LOVE". The scale, simplicity, and modern touch of the letters should provide a counter point to the traditional icons of the Bevo Mill and Sebilj Monument.

PHASE #1: <1 YEAR

- ☐ Determine the construction method and manufacturing type for the letters.
- ☐ Commission a local fabricator to weld pre-fabricated pieces together on site.
- ☐ Install letters onto a concrete foundation and tie back to avoid sway.

ONGOING

- ☐ Promote the new art installation on social media as part of a visit Bevo campaign.

16 IMPLEMENTATION CHECKLIST

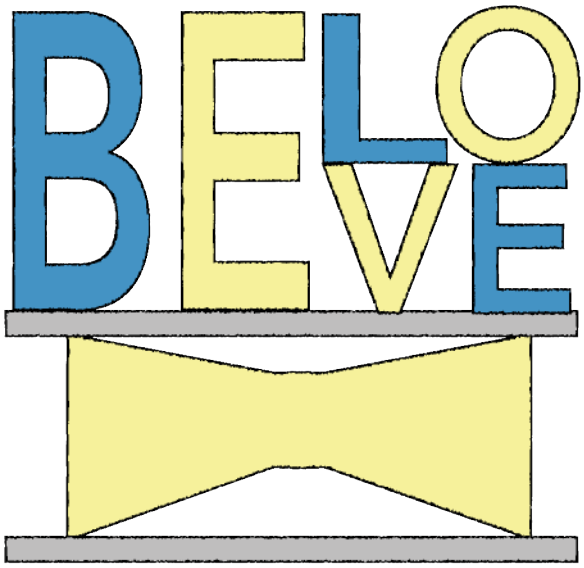
PROJECT ESTIMATED COSTS

MATERIAL COSTS	$10,000
FOUNDATION & SITE WORK	$500
SUB-TOTAL	$7,500
LABOR & INSTALLATION	$3,000
CONTINGENCY	$1,000
TOTAL COST	**$11,500**
ANNUAL MAINTENANCE	$500

PROJECT GOALS MET

▶ *#9: Public Art Committee* ▶ *#19: Renovate Sebilj Park*

#17: INSTALL GATEWAY SIGNAGE AT TAFT AVE



PROJECT DESCRIPTION

The northern most boundary of the Bevo neighborhood occurs after emerging from the underpass at the intersection of Gravois Ave and Taft Ave. Here, commercial development begins with signature Bevo restaurants, and available properties for future staples. The plan proposes gateway signage to signal to visitors their entrance into the Bevo neighborhood, and to provide a narrowing of the road to signal to drivers to slow down. This same signage should also be used at the Christy gateway (*Project #18, p. 242*).

PHASING STRATEGY

In the short term, temporary signage on trailers, parked in parking spots provide the wayfinding element, but not the decrease in traffic speed. The long-term solution should occur in conjunction with the street resurfacing project, or immediately following.

PROJECT READINESS: <1 YEAR

- ☐ CID vote to include the project in their annual plan
- ☐ Install temporary signs on trailers or on the sidewalk for an immediate solution.

IMPLEMENTATION: 1 - 3 YEARS

- ☐ Provide a lighting and power source to the signage.
- ☐ Install permanent solution.

17 IMPLEMENTATION CHECKLIST

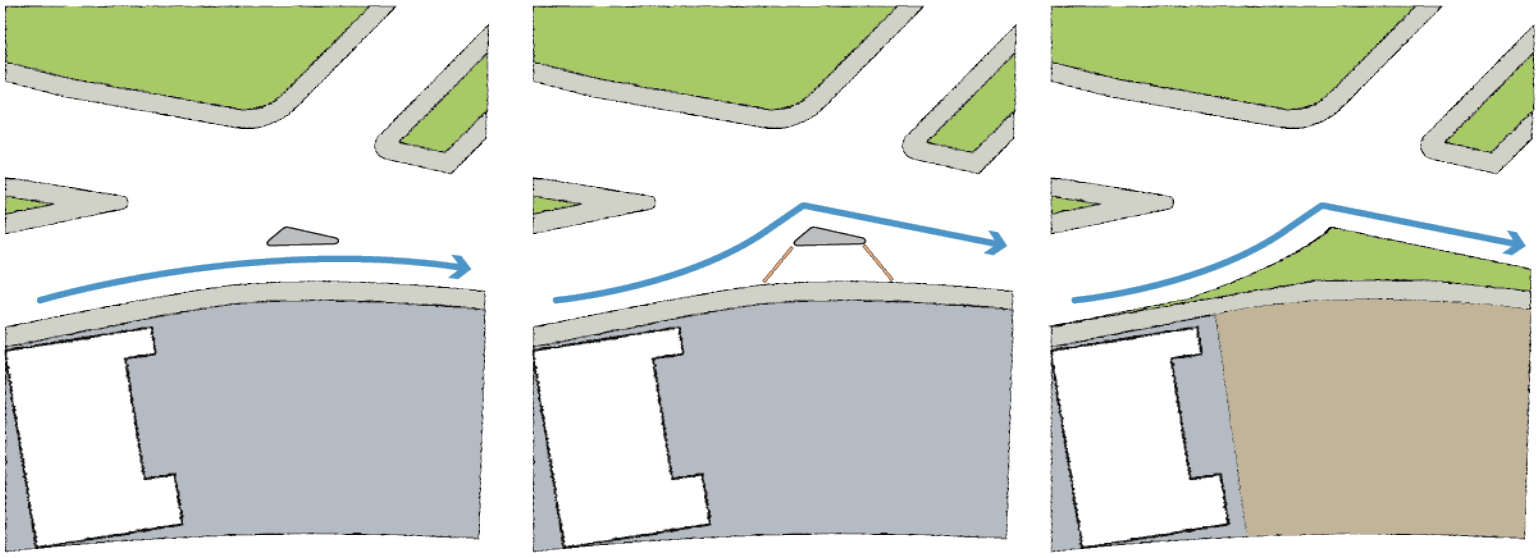
PROJECT ESTIMATED COSTS

TACTICAL SIGNAGE	$500/ea
STREET CLOSURE PERMIT	$250
TACTICAL SUB-TOTAL	$750
PERMANENT INSTALLATION	$70,000
SUB-TOTAL	$70,750
CONTINGENCY	$5,660
TOTAL COST	**$76,410**
ANNUAL MAINTENANCE	$500

PROJECT GOALS MET

- *#9: Public Art Committee*
- *#30: Gravois Resurfacing*
- *#18: Christy Gateway*

#18: INSTALL GATEWAY SIGNAGE AT CHRISTY BLVD



EXISTING CONDITION | TACTICAL SOLUTION | PERMANENT INSTALL

PROJECT DESCRIPTION

The southern most boundary of the Bevo neighborhood occurs near the Great Rivers Greenway extension of the Christy Greenway at the intersection of Gravois Ave and Christy Blvd. The plan proposes eliminating the extra turn lane on northbound Christy Blvd, instructing right-turning drives to wait for the light, and installing a landscaped monument sign to mirror the one at Taft Ave. In addition to the signage, the landscaping should strive to collect water draining down Gravois Ave, activiting the potential for MSD funding for stromwater treatment.

PHASING STRATEGY

In the short term, blocking the turn lane and installing tactical signage and planter boxes would clean up the intersection and prevent drivers from speeding around the corner. Optionally, the space may include bike-infrastructure for those visitors entering and leaving the Christy Greenway. The long-term solution might occur in conjunction with the street resurfacing project, but may take place independently as well.

PHASE #1: 1 - 3 YEARS

- ☐ Close the slip-lane with temporary barriers, and provide outdoor seating.

PHASE #2: 3 - 5 YEARS

- ☐ Install the permanent solution with an emphasis on stormwater treatment and pedestrian green space.

18 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

TACTICAL SIGNAGE	$1,000/ea
BARRIER MATERIAL	$250/barrier x 4 = $1,000
BENCHES	$300/bench x 2 = $600
BIKE PUMP	$650
TACTICAL SUB-TOTAL	$3,250
PERMANENT INSTALLATION	$70,000
CONTINGENCY	$7,000
TOTAL COST	**$80,250**
ANNUAL MAINTENANCE	$1,000

PROJECT GOALS MET

- #9: Public Art Committee
- #17: Taft Gateway
- #25: Christy Trailhead
- #40: Sebilj Hairpin

#19: RENOVATE THE SEBILJ PARK

PROJECT DESCRIPTION

The Sebilj Monument and Park has become a focal point to the Bevo community because of its proximity to the Bevo Mill and the flexible nature of the space. Local organizations, the school, and nearby residents enjoy the connection to an outdoor space. The plan proposes a renovation to the park to facilitate these gatherings, and provide an active and productive park space.

PHASING STRATEGY

Renovations may begin at any time funding becomes available, as the project does not rely on the completion of other projects. However, a renovation of the park should also include the space vacated by the hairpin turn located in the Gravois Ave / Morganford Rd intersection, see *Project #34, p. 266*. For maximum effect, the project might constructed simultaneously with *#16: Park Public Art, p. 240*, and *#20: Backstop Building, pp. 242 - 244*. Should neither of these projects be ready for completion, the renovation should take into account the location of a permanent art installation, as specified by this plan.

FUNDING OPPORTUNITIES

Funding might come from a combination of City sources, and revenue from the Bevo CID sales tax. When the City issues an RFP for the Backstop Building, provisions may be included to support some of the renovations in the park, especially in terms of access and sidewalk landscaping.

PROJECT ESTIMATED COSTS

DEMO	10,000
ENHANCED CONCRETE PAVING	$12/sf x 6,035 = $72,420
SHRUBS & PERENNIALS	$10/sf x 5,610 = $56,100
LAWN	$8/sy x 376 = $3,008
DECOMPOSED GRANITE	$12/sf x 3,894 = $46,728
TREE: 3" CALIPER	$600/ea x 12 = $7,200
ASPHALT PARKING	$12/sf x 23,406 = $280,872
SOIL: 12" PLANTING	$40/cy x 52 = $2,078
MULCH	$30/cy x 52 = $1,558
IRRIGATION	$2/sf x 5,896 = $11,972
LIGHTING	$36,000
SUB-TOTAL	$527,936
CONTINGENCY	$42,234
TOTAL COST	**$570,170**
ANNUAL MAINTENANCE	$6,562

PROJECT GOALS MET

▶ *#16: Park Public Art*

▶ *#20: Backstop Building*

PROJECT READINESS & CONSTRUCTION

- ☐ Determine phasing with suggested complimentary projects.
- ☐ Hire a landscape architect for plan details and stormwater management calculations.
- ☐ Renovate Sebilj Park.
- ☐ Apply to MSD for reimbursement of stormwater drainage.

ONGOING

- ☐ Determine a maintenance schedule and party for the landscaping, programming of the space, and rental of any structures.

19 IMPLEMENTATION CHECKLIST

PROJECT #20: DESIGN OF THE SEBILJ BACKSTOP BUILDING

PROJECT DESCRIPTION

The main purpose of the Backstop Building is to provide enclosure for an outdoor "living room" in the heart of Bevo, while accommodating future development on a public parking lot. The design of this building should be carefully executed to ensure the desired outcomes detailed in the plan.

PHYSICAL DESIGN CONSIDERATIONS

The following recommendations should be highly considered when designing the backstop building. The building's design should:

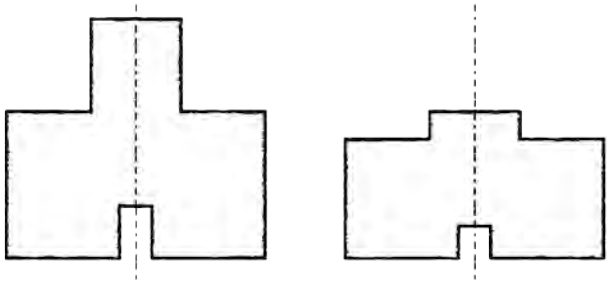
- Hold the Primary Facade Line in the Bevo Form-Based Code
- Include a symmetrical ground-floor, public passage to travel north / south through the site
  - The passage should be a minimum 8' wide and 12' tall clear.
- Be symmetrical to honor and accentuate the Bevo Mill
- Include symmetrical "shoulders" where upper floors have smaller footprints than from the lower floors
- Include accent features (eg. lighting, sculpture, seating plazas) that support festive street level gatherings for special occasions

Ultimately, the building contributes as much to the Sebilj Park it fronts as to the users inside. The community and alderperson should ensure design considerations take the public realm into account with the final design.

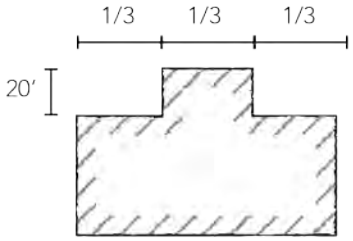
PROGRAMMATIC DESIGN CONSIDERATIONS

Considering the current productive use of this site and its high visibility, this development would be best suited for a market environment supportive of a high design standard—likely a future point in time. The intervention of a high-quality developer to manage a subsidized housing project; or the intervention of a high-quality developer when market asking rates are high enough for new construction would allow for the development of the backstop building. Any future development at this site should happen in coordination with a reconfiguration of the parking of the lot, and improvements to the park space that make it usable for a wide variety of programs including community barbecues (such as those hosted by Oasis International), reading or homework areas for Long Middle School students, outdoor music performances, and more.

In conjunction with the outdoor amenities the site can offer, the program of the building is also critical to activating the Sebilj Park. The developer will ultimately decide the program features; however, a mix of private and public features is essential to the success of the entire park. The plan imagines artist housing, or another affordable housing option (like family housing) which will heavily populate the area. On the ground floor, symbiotic spaces (eg. art galleries, coffee shops, pop-up retail spaces) support residents on the upper floors and provide park activation.



FRONT FACADE:
MANDATORY SYMMETRICAL "SHOULDERS" &
CENTER PASSAGE TO REAR OF PROPERTY



PLAN VIEW:
MINIMUM SETBACK

PHASING STRATEGY

The Backstop Building may come many years after the renovation of the Sebilj Park while Bevo builds market demand for new construction. Or, the building may come sooner and include a partnership to restructure the public parking lot and park during the construction of the building.

FUNDING OPPORTUNITIES

A project of this magnitude most likely requires a seasoned developer who is familiar with mixed-use buildings and confident in leasing to both commercial and residential users. If the City were to pursue development of this site (through sale or long-term ground lease of the property), it should develop a Request for Proposals that balances market and economic realities with guidelines for preferred uses, design standards, public accessibility, parking, and other desired community benefits such as set-asides for affordable housing or community facilities. To the greatest extent possible, parking should remain publicly accessible and visible. Some public money might be available to improve the public parking lot and exterior landscaping.

FEASIBILITY ANALYSIS

A development concept involving 20 apartment units and 8,000 square feet of retail was tested for the public parking lot located between Gravois Avenue and Morganford Road. Given the signature architectural character envisioned for this catalyst project, slightly higher rents were concluded for this site than for the QuikTrip site. Using market-rate assumptions completed, the project would have an estimated total value of $3.6 million. Total development costs were also estimated at $4.6 million, resulting in a $1.0 million shortfall, or gap of about 22 percent. Similar to the other two opportunity sites, public assistance through the New Markets Tax Credit Program and tax abatement will be necessary. The Low Income Housing Tax Credit is also a potential source of gap funding if the residential portion of the project were developed as income-restricted affordable housing, such as the affordable artists housing envisioned within the plan."

Because this site is publicly-owned, the City could consider ground leasing the property or selling it at a reduced rate as an alternative to providing tax abatement or other incentives. Such an agreement would reduce total development costs by as much as $500,000. This agreement could be conditioned upon a development concept satisfying one or more community objectives, such as design quality, the set-aside of affordable residential units, or a lower retail rent

PROJECT READINESS: 2 - 5 YEARS

- ☐ Issue a public RFP to receive developer proposals.
- ☐ Work with the community stakeholders to formulate a sound program.
- ☐ (Optional) The City might consider committing some funds to improving the parking lot and site during construction of the building.

IMPLEMENTATION: 2 YEARS

- ☐ Construct the building, ensuring sitework does not disturb the operation of the Sebilj Park.

ONGOING

- ☐ Work with building owner and adjacent property owners to collectively program Sebilj Park.

20 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

CONSTRUCTION COST	$115/sf
SITE ACQUISITION	$13/sf
SOFT COSTS	20%
SUB-TOTAL	$3.4 Million
CONTINGENCY	$10%
TOTAL COST	**$3.8 MILLION**

PROJECT GOALS MET

▶ #16: Park Public Art

▶ #19: Renovate Sebilj Park

PROJECT #21: SUPPORT MIDWEST BANKCENTRE RECONSTRUCTION

A PLACE TO AGE IN THE NEIGHBORHOOD

The existing Midwest BankCentre building is oversized given the bank's current operations. At three stories, plus a basement, the bank would like to occupy a smaller space on the same site. Tower Grove CDC is working to secure funding for much needed affordable senior housing on this site. The plan proposes a four-story building which maintains the street wall of the Bevo Bowtie.

PHASING STRATEGY

Since this project is already under way by TGCDC, the action for this plan is to support this project and TGCDC's efforts to secure funding. The community is in support of a 4-5 story building with landscaped parking in the back; a shared parking agreement may be considered. This plan recommends that the Alderpersons work with TGCDC to encourage that this project follow the architectural design guidelines outlined in this plan.

This project will be a huge catalyst project in that it will bring increased density and a better-maintained street wall to the Bowtie area.

Note that the final design of this building, particularly the exterior, is forthcoming; it may differ from what is shown in this concept rendering.

PROJECT ESTIMATED COSTS

TOTAL PROJECT COST	**$10-15 MILLION**

IMMEDIATELY

- ☐ Alderpersons, TGCDC to follow design guidelines from this plan

21 IMPLEMENTATION CHECKLIST

PROJECT GOALS MET

▶ #23: Redevelop QuikTrip ▶ #19: Redevelop Sebilj Park

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#22: RENOVATE VACANT ALLIGATOR OIL CLOTHING COMPANY PROPERTY

PROJECT DESCRIPTION

At nearly 5 acres, the property currently has a blighting influence on the neighborhood to its south. Improving this property can create the conditions for addressing vacancies and promoting reinvestment in the housing stock in this area, which is in poor condition in some cases.

Buildings on the site have important historic character, and are on the National Register of Historic Places. Rehabilitation of one or more of these buildings could establish a new anchor within this part of the neighborhood. Improving the appearance of this building—particularly its north-facing façade—could make a positive contribution to the broader goal of creating a positive gateway into the neighborhood.

PHASING STRATEGY

As a first step, a Phase 1 Environmental Study would need to be preformed to understand the cost of remediation on the site. After rehabilitation, the second step might consist of the buildings on the property being converted into loft apartments. Both uses would benefit from a broader plan for the area surrounding Meramec Avenue that addresses vacant properties and improves connectivity to Chippewa St and the Tower Grove South neighborhood to the north. In a later phase, the site's remaining 1.5 acres could be used for the development of infill housing, providing a larger "move-up" housing type as a detached single-family typology, as duplexes, or as townhomes. The owner of the property might partner with a CDC to manage the residential and recruit tenants.

PHASE #1: 10 - 20 YEARS

- ☐ Work with the owner to discuss development options for the site.
- ☐ Explore the blighting nature of this property to determine eligibility for TIF funding.
- ☐ (Optional) Construct new streets, *Project #36, page 268*.
- ☐ Assist the property owners with rehabilitation of the land before habitation.
- ☐ (Optional) Partner with a CDC.

22 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

TOTAL COST	**$10 - 20 MILLION**

PROJECT GOALS MET

▶ *#31: Rebuild Viaduct*

#23: REDEVELOP OLD QUIKTRIP SITE AT WILCOX AVE

PROJECT DESCRIPTION

A development concept involving 16 apartment units and 5,905 square feet of retail was tested for the QuikTrip site in the Bowtie. As completed, the project would have an estimated total value of $2.6 million. Total development costs were also estimated at $3.4 million, resulting in a $850,000 shortfall, or gap of about 25 percent. As with the rehab prototype, some public assistance will be necessary. The combined value of a 10-year tax abatement and equity raised through the New Markets Tax Credit program could be sufficient to close the development gap.

PHASING STRATEGY

After the vacancy rate in the neighborhood decreases below 10%, new building construction should be prioritized in the Bowtie to enclose Bevo's "living room." *Along with this project, see Projects #20 and #21, pp. 242 - 245, for new construction projects in the Bowtie.* Likely, this means the redevelopment of this site with a pedestrian-friendly building pulled up to the sidewalk will not occur for at least another 10 years. However, should a developer wish to construct such a project before, the alderpersons and architect should ensure design continuity, following the Design Guidelines outlined in Chapter 3, with the Bevo Mill and MidWest BankCentre, Project #21, pp. 244 - 245.

FUNDING SOURCES

The Missouri Petroleum Storage Tank Insurance Fund (PSTIF) may be available for cleanup of sites where tanks were used previously - typically old gas stations. EEIRA grants are available to community development corporations and non-profits to evaluate and pay for this sort of cleanup with no out of pocket funds, in addition to PSTIF money for cleanup. *See the PSTIF website for more information*.

CONSTRUCTION READINESS

- ☐ Determine long-term plans of recent purchaser and work to determine site feasibility into the future.
- ☐ Test market viability in years to come.

PROJECT IMPLEMENTATION

- ☐ Construct mixed-use building shown.
- ☐ Demolish the abandoned Quick Trip building.

23 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

MATERIAL COSTS	$115/sf
SITE ACQUISITION	$13/sf
SOFT COSTS / CONTINGENCY	20%
TOTAL COST	**$3.4 M**

PROJECT GOALS MET

▶ #20: Backstop Building ▶ #21: Midwest Bank Building

#24: REDEVELOP PROPERTIES AT GRAVOIS AVE / FRIEDA AVE INTO NEIGHBORHOOD RAINGARDENS

PROJECT DESCRIPTION

Twin properties on either side of Frieda Ave, in the Cars & Bars District of the Study Area, are currently owned by a neighborhood daycare located at the same location. The daycare currently has two parking lots, one off Gravois and one accessed from Gertrude Ave, and an outdoor jungle gym on top of asphalt.

The plan proposes reconfiguring the outdoor spaces of the daycare facility to have a consolidated parking lot accessed from Gertrude Ave and a jungle gym on a poured rubber topper. New community rain gardens would allow for four existing stormwater inlets to be disconnected from the MSD sewer system. Runoff from the street could be held in the rain gardens, percolating rainwater into the water table over time. The garden should be considered a neighborhood amenity with public access when not flooded.

PHASE #1: 3 - 4 YEARS

- ☐ Coordinate with the daycare to turn the front part of their property into a stormwater facility and outdoor classroom.

ONGOING

- ☐ Apply for MSD reimbursement funding from Project Clear for stormwater retention.

24 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

NEIGHBORHOOD SCALE RAIN GARDEN	$300,000/ea x 2 = $600,000
SUB-TOTAL	$600,000
CONTINGENCY	$48,000
TOTAL COST	**$648,000**
ANNUAL MAINTENANCE	$60,000

PROJECT GOALS MET

▶ #27: Stormwater Park

▶ #32: Stormwater Islands

#25: TRANSFORM EASTERN CORNER OF GRAVOIS AVE / CHRISTY BLVD INTO A TRAILHEAD

PROJECT DESCRIPTION

The slip lane connecting the east leg of Christy Blvd with Gravois Ave is an unnecessary remnant of outdated traffic design. By closing off this slip lane, the existing island can be absorbed into the pedestrian realm on the east side of Gravois and turned into a landscape amenity. The plan proposes constructing a trailhead at this location for the Christy Greenway, utilizing the parking of the adjacent properties as shared lots for trail parking.

PHASING STRATEGY

The plan proposes aligning the construction of the trailhead with *Project #18: Install Gateway Signage at Christy Blvd, p. 242*. The trailhead includes an architectural pavilion, with tables and benches, and signage describing the Great Rivers Greenway Trails. Great Rivers Greenway should be the owner and maintained of the trailhead, with potential agreements for assistance with the Bevo CID, adjacent property owners, office of the Treasurer, and the City.

The second part of the trailhead includes making arrangements with the adjacent property owners to coordinate a shared parking lot during off-business times. One of the properties is currently vacant and the other functions as a venue hall known as the Christy. The City and the Office of the Treasurer might approach the owners of the Christy to determine a shared parking agreement which opens their lot to the public for most of the time, only restricting use during scheduled events. The plan shows the parking lot as pervious pavers to compliment the on-site rain garden facility.

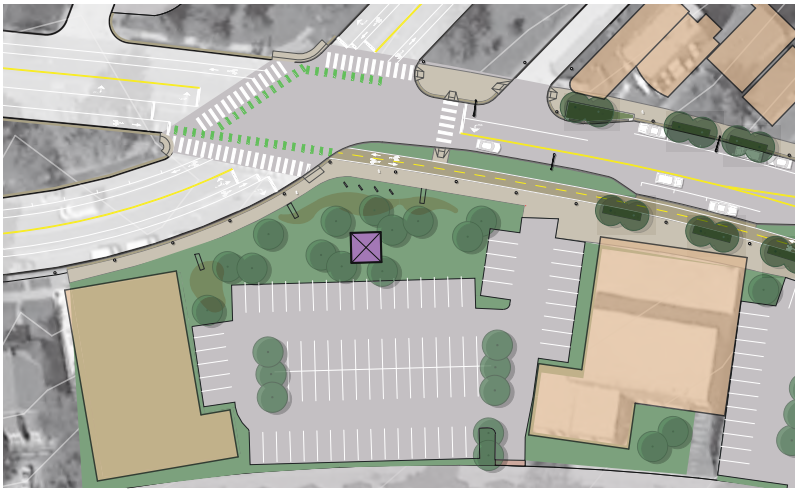
PHASE #1: 3 - 4 YEARS

- ☐ Coordinate with the closure of the slip lane (*Project #18*) to design the trailhead.
- ☐ Determine the applicable facilities, including singage and programming, at the location.
- ☐ Coordinate with the owners of adjacent properties to determine shared parking allowances.

PHASE #2: 4 - 7 YEARS

- ☐ Pave the parking lot with permeable pavers and install shared parking signs.

25 IMPLEMENTATION CHECKLIST



PROJECT ESTIMATED COSTS

NEIGHBORHOOD-SCALE RAIN GARDEN	$300,000
ARCHITECTURAL PAVILION	$60,000
DEMO	$10,000
SHRUBS & PERENNIALS	$10/sf x 1,659 = $16,590
LAWN	$8/sy x 12,564 = $100,512
TREE: 3" CALIPER	$600/ea x 12 = $7,200
ASPHALT PARKING	$12/sf x 2,231 = $326,772
SOIL: 12" PLANTING	$40/cy x 15 = $614
SIGNAGE	$1,000
SEATING / BIKE RACKS	$2,500/ea x 6 = $15,000
SUB-TOTAL	$837,668
CONTINGENCY	$67,014
TOTAL COST	$904,682
ANNUAL MAINTENANCE	$60,000

PROJECT GOALS MET

▶ *#18: Christy Gateway*

#26: CREATE A TREE NURSERY ON THE VACANT CONCORDIA AVE PARCEL

PROJECT DESCRIPTION

The 3,500 sq. ft. residential lot in the middle of Concordia Ave may be vacant now, but the proposed tree nursery would provide an active use for the property. Additionally, the nursery could supply currently vacant tree wells along Gravois Ave. This project serves multiple purposes: utilizes currently vacant land to grow large trees that can then be used to replace street trees along Gravois Ave for a reduced cost over time.

Growing trees require protection from trampling which means the nursery may need to be partially fenced to keep the youngest trees safe. However, screening or designated pathways may be a more inviting option while still protecting young trees.

PHASING STRATEGY

Trees could be planted incrementally, and done when resources —preferably motivated local volunteers—are available. Because any improvements to this lot are a benefit, construction can be done on a flexible timeline. The plan intends for BBN to be the implementor and maintainer of this project.

FUNDING OPPORTUNITY

Motivated neighbors or Better Bevo Now could enact any of these plans with minimal investment or potential donor partners such as Forest ReLeaf. In addition to planting, volunteers can mow weekly or twice monthly in the summer to maintain the appearance of the lot.

PROJECT READINESS: <1 YEAR

- ☐ Acquire land from the LRA
- ☐ Alert neighborhoods about redevelopment of the land into a tree farm.
- ☐ (Optional) Connect with a donor partner, like Forest ReLeaf, to implement the plan.

IMPLEMENTATION: <1 YEAR

- ☐ Purchase a diverse group of street trees from the approved City of St. Louis street tree list.
- ☐ Plant nursery.

ONGOING

- ☐ Water and prune regularly to ensure proper growth and care.

26 IMPLEMENTATION CHECKLIST

(Top) Tree nursery; (Bottom) Picnic Grove

PROJECT ESTIMATED COSTS

LAWN	$8/sy x 477 = $3,816
TREE: 1" CALIPER	$200/tree x 3 = $600
TREE: 2" CALIPER	$600/tree x 8 = $4,800
TREE: 3" CALIPER	$600/tree x 6 = $3,600
SUB-TOTAL	$12,816
INSTALLATION	$0/tree volunteer ($400/tree professional)
CONTINGENCY	$1,025
TOTAL COST	**$13,841 ($20,641)**
ANNUAL MAINTENANCE	$1,750

PROJECT GOALS MET

- #27: Stormwater Park
- #28: Recreation Park
- #29: Post-Industrial Park

#27: INSTALL STORMWATER INFRASTRUCTURE ON VACANT EICHELBERGER PARCEL

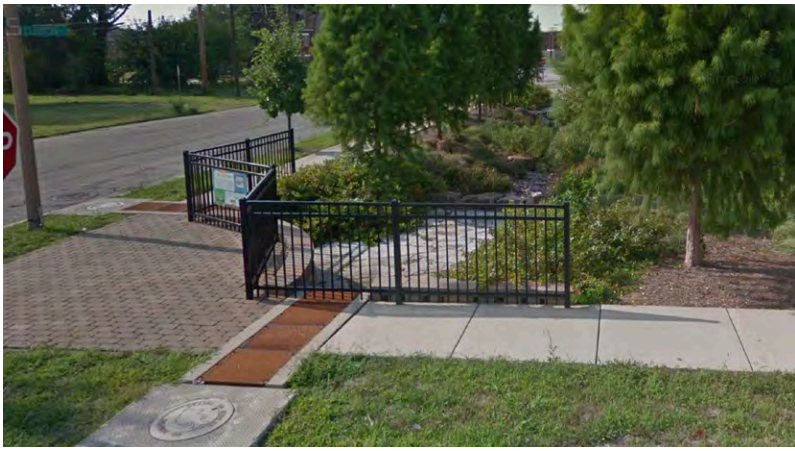
PROJECT DESCRIPTION

This 6,700 square feet LRA parcel has a great location along Eichelberger, and within walking distance to other neighborhood amenities. Additionally, this parcel is at a low point in the Bevo topography making it a desirable location for rainscaping. Stormwater inlets can be bypassed to infiltrate water while naturally filtering with native plant species. Some pathway access for visitors may be included in the design, as well as natural plantings which would act as wildlife habitats.

FUNDING OPPORTUNITY

Projects of this scale will require qualified installers and investment beyond a grassroots effort. Funding for these efforts can be achieved through the MSD Large Grants program or as undertakings by MSD directly. The Bevo CID would be involved in soliciting MSD's interest and partnership.

If this project were to be downsized to just include landscaping (rather than stormwater treatment), it would bring the project cost down to the ~$25,000 range. However, the project would no longer qualify for MSD funding and would not provide any neighborhood stormwater benefits. In it's current configuration the project would receive $27,000 in reimbursements from Project Clear.



(Top) Nature playground; (Bottom) Flood Management

PROJECT READINESS: <1 YEAR

- ☐ Acquire land from the LRA
- ☐ Work with MSD to understand priorities, options for partnership
- ☐ Partner with BBN on a maintenance agreement

IMPLEMENTATION: 1 - 2 YEARS

- ☐ Install rainscaping gardens
- ☐ Install signage to educate neighbors on the purpose of the stormwater park

ONGOING

- ☐ Repair and replant damaged hardscaping or landscaping

27 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

SINGLE-LOT RAIN GARDEN	$150,000
SUB-TOTAL	$150,000
CONTINGENCY	$12,000
TOTAL COST	**$162,000**
ANNUAL MAINTENANCE	$3,350

PROJECT GOALS MET

- #26: Tree Nursery
- #28: Recreation Park
- #29: Post-Industrial Park

#28: PROVIDE ACTIVE RECREATION ON VACANT NEOSHO PARCEL

PROJECT DESCRIPTION

This LRA parcel is approximately 16,900 square feet. The vacant lot is within a 10-minute walk of Gravois Avenue and abuts the rail line. Successful parks must accommodate our youngest citizens but also must cater to those outside the "slide age". Recent improvements in exterior exercise equipment, fitness fixtures and flexible play/stretch equipment can address the needs of a broader constituency.

The plan propose that parcels at the edges such as this serve as neighborhood gems that attract adults, seniors, teens, and, of course, children through fixed elements meant for more than just play. The community also strongly support a dog-park in the neighborhood; an amenity which would serve as a year-round draw.

PHASING STRATEGY

There are many examples of tactical active spaces. BBN and the Bevo CID should work together to encourage the community to acquire this lot, as well as come to an agreement to use the Bevo CID liabilty to cover active play spaces managed by BBN. Signage should be included to show instructions and safety precautions with the equipment.

FUNDING OPPORTUNITY

This sort of a park could be sponsored by larger donors such as KaBoom, Purina, or AARP.

In other parts of the country, a fitness area like this costs approximately $45,000. Costs include six to eight pieces of exercise equipment, installation, and staff time for permitting and agency coordination. Community installation would bring down the costs some.

PROJECT READINESS: 2 - 3 YEARS

- ☐ Acquire land from the LRA
- ☐ Promote the project to a diverse range of users.
- ☐ Purchase materials, potentially storing them with the City until ready for construction.

IMPLEMENTATION: <1 YEAR

- ☐ (Option A) Connect with a donor partner, like KaBoom, Purina, or AARP, to implement the plan.
- ☐ (Option B) Organize a working party to install equipment.

ONGOING

- ☐ Task members of BBN or the neighborhood for regular maintenance.

28 IMPLEMENTATION CHECKLIST

(Left) Street workout, photo by Free Sports Park; (Top) Fitness zone, photo from DTLS; (Bottom) Dog Park, photo from DTLS.

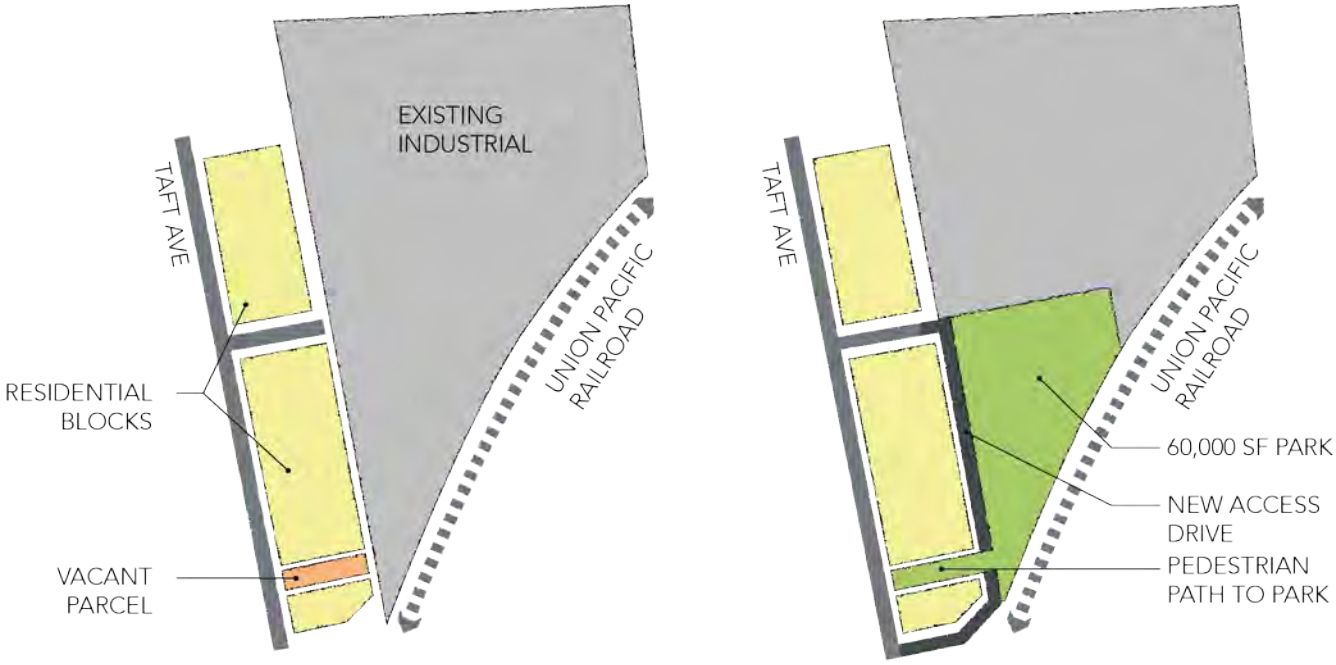
PROJECT ESTIMATED COSTS

LAWN	$8/ sy x 1,200 = $9,600
TREE: 3" CALIPER	$600/tree x 9 = $5,400
TREE: 1" CALIPER	$200/tree x 7 = $1,400
PLAY EQUIPMENT	$10,000
HARDSCAPE	$12/sf x 3,100 = $37,200
FURNISHINGS	$30,000
SUB-TOTAL	$93,600
CONTINGENCY	$7,500
TOTAL COST	**$101,100**
ANNUAL MAINTENANCE	$3,350

PROJECT GOALS MET

- #25: Tree Nursery
- #25: Stormwater Park
- #29: Post-Industrial Park

#29: CONSOLIDATE VACANCIES TO DEVELOP A REGIONAL POST-INDUSTRIAL PARK



PROJECT DESCRIPTION

A consolidated park is possible in the northern portion of the Bevo Study Area, a 5-minute walk from Gravois Ave offering almost 60,000 square feet of land and endless programmatic opportunities. The plan proposes a basketball court, amphitheater, play grounds, and seating. *See pp. 106 - 109 for more on the possibilities of this site.*

PHASING STRATEGY

A park of this size requires a district phasing plan and investment from the City Parks District. Although the Park District does not wish to add any additional parkland to their portfolio at this time, this park looks to a 15 - 20 year plan where a large neighborhood park such as this one becomes financially viable to the City. If couple with redevelopment of adjacent properties, see *Project #36, pp. 268 - 269*, then funding may also stem from private sources.

First, the City or Better Bevo Now should acquire the 4019 Taft Ave LRA property and mothball the land until a park plan can be developed. This ensures that there will be access to the larger park once it is developed. In the time it takes to acquire the larger property, this LRA property could be minimally maintained, or updated by local volunteers to include a prairie, wildflower garden, or community garden.

Next, The City should acquire the large industrial parcel adjacent to the rail line. A park this size would need to be engineered prior to development. The City of St. Louis Parks District is an appropriate partner to work with on installation, liability, and maintenance. If Better Bevo Now acquired the access property at 4019 Taft, they should hand over control to City for a comprehensive park maintenance and construction plan.

FUNDING OPPORTUNITIES

Should the area to the northwest be redeveloped (*Appendix #9: Option Selection, pp. 597*), there is an opportunity to have some of these parks amenities bundled with a development agreement for those nearby parcels. Therefore, funding and implementation plans should be written into development agreements and RFPs.

The primary opportunity for consolidated parkland at Taft Avenue was studied as a part of the proposed parks desert infill. Resident program requests for larger parcels are included here for documentation, and opportunities that arise to deploy these concepts should be sought.

Amphitheater

Outdoor Movies

PHASE #1: 3 - 4 YEARS

- ☐ Acquire land from the LRA.
- ☐ Alert neighborhoods about redevelopment of the land into a garden.
- ☐ Purchase materials, potentially storing them with the City until ready for construction.
- ☐ Form a working group to install and plant the vacant residential parcel.

PHASE #2: 10 - 15 YEARS

- ☐ Enter into discussion with property owners to acquire vacant land.
- ☐ Hire a landscape architect to design the facilities on the larger parcel.
- ☐ Partner with the adjacent parcels during their redevelopment to acquire funding and or labor contributions.
- ☐ Work with the Park's District to implement a long-term maintenance plan of the park.
- ☐ Construct the park as per the specified phasing plan.

29 **IMPLEMENTATION CHECKLIST**

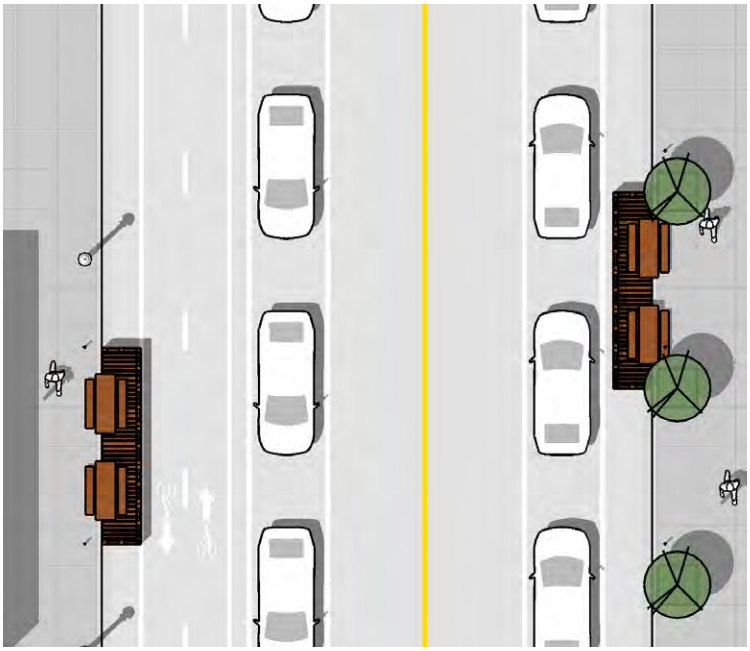
PROJECT ESTIMATED COSTS

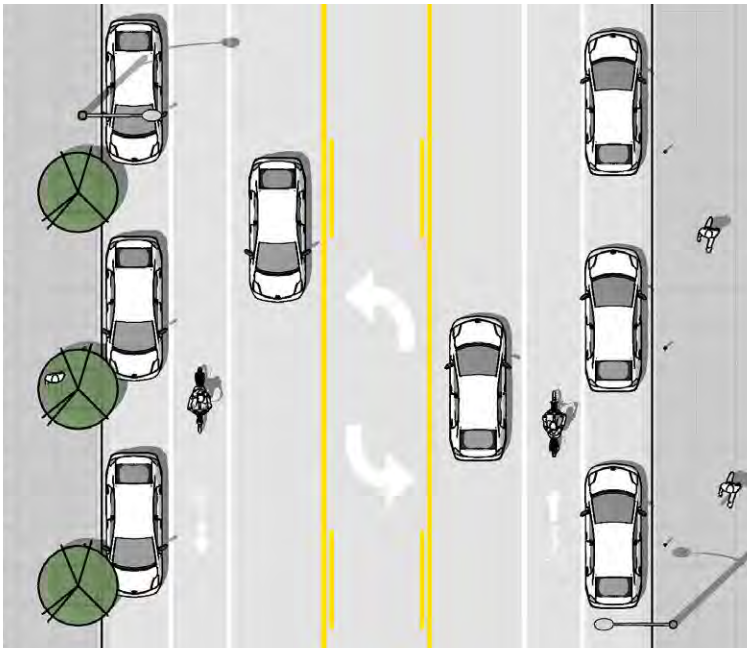
DEMO	$15,000
TREE: 3" CALIPER	$600/ea x 66 = $39,600
BASKETBALL COURT	$75,000
AMPHITHEATER	$50,000
LIGHTING & ELECTRICAL	$50,000
GRADING	$25,000
ASPHALT PARKING	$12/sf x 15,468 = $185,616
STORMWATER BMPS	$100,000/ea x 2 = $200,000
ENHANCED CONCRETE PAVING	$12/sf x 2,671 = $32,052
PLAY AREAS WITH SEATING	$100,000/ea x 2 = $200,000
SUB-TOTAL	$872,268
CONTINGENCY	$69,782
TOTAL COST	**$942,050**
ANNUAL MAINTENANCE	$30,000

PROJECT GOALS MET

- #26: Tree Nursery
- #27: Stormwater Park
- #28: Recreation Park

#30: RESURFACE GRAVOIS AVE





PROJECT DESCRIPTION

Resurfacing Gravois Ave under the current plans hopes to achieve an average driving speed of 30 MPH, the posted speed limit. Considering the lifespan of the average asphalt topping, Gravois Ave should be up for a resurfacing in the next five to ten years. When this project occurs, MoDOT should follow the designs in this plan to reconfigure the roadway into a safer, complete street for all types of travel.

PHASING STRATEGY

To maximize impact, the resurfacing of Gravois Ave should occur in conjunction with other projects. A symbiotic project for the City while restriping occurs would be the installation of the stormwater islands, see *Project #32, pp. 260 - 261*. Additional crosswalks proposed by this plan, but not yet built, could be installed while the re-striping occurs, see *Project #37, pp. 268 - 269*. While the streets are closed, sidewalks parallel to Gravois could be painted by the city, see *Project #38, p. 270*. Finally, if the City requests federal funds for the Union Pacific Viaduct bridge repairs, then the reconstruction of the bridges could occur simultaneously, see *Project #31, pp. 258 - 269*.

Should the reconstruction of the Union Pacific viaduct bridges not occur until later, then an interim pedestrian and bicycle solution needs to occur when re-striping happens. The re-surfacing should maintain the planned, final condition of the proposed cycle track and protect bicyclists and pedestrians with a barrier material until the elevated cycle track can be built.

PHASE #1: 4 - 7 YEARS RESURFACING READINESS

- ☐ The CID should work with businesses to accept curb cut closures. *See CID Implementation checklist, pp. 204 - 207*.
- ☐ The City
- ☐ Engineer drawings for complete build out.
- ☐ Alert the community of the roadway changes, as per this plan.

CONSTRUCTION & ANCILLARY PROJECTS

- ☐ Resurface Gravois Ave in the next 5 - 7 years with the proposed striping.
- ☐ Install bike signage along the length of the cycle track.
- ☐ (Optional) Commission a Bevo artist to paint the temporary barriers underneath the Union Pacific viaduct.

30 IMPLEMENTATION CHECKLIST

FUNDING OPPORTUNITIES

Funding for large infrastructure projects come from all levels of government, which is why it is encouraged that multiple projects be completed at once. Bundling improvements during the same project might reduce costs or provide additional funding outside the City.

The Cost Share program, a financial partnership between the City and MoDOT, allows for additional projects to take place in partner with the redesign this plan proposes when MoDOT makes their usual maintenance improvements to the street. The 50/50 match program is eligible to projects which:

- Serve a transportation need
- Pertain to a state highway or facility, and
- Cost upwards of $200,000

Projects must apply to MoDOT for funding and the City needs to be able to supply funding at the beginning of a project. Funds can be used for all soft costs related to the project, as well as construction costs. The City should begin conversations with MoDOT to determine the project estimated cost match requirement and to alert MoDOT of the desire to preform the upcoming project. *For more information, see the Missouri Department of Transportation's website on "Cost Participation and Cost Share."*

The Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program through the US Department of Transportation may be one route to take to fund the resurfacing / rebuilding of the road under the Union Pacific Viaduct. See *Project #33, pp. 262 - 263.*

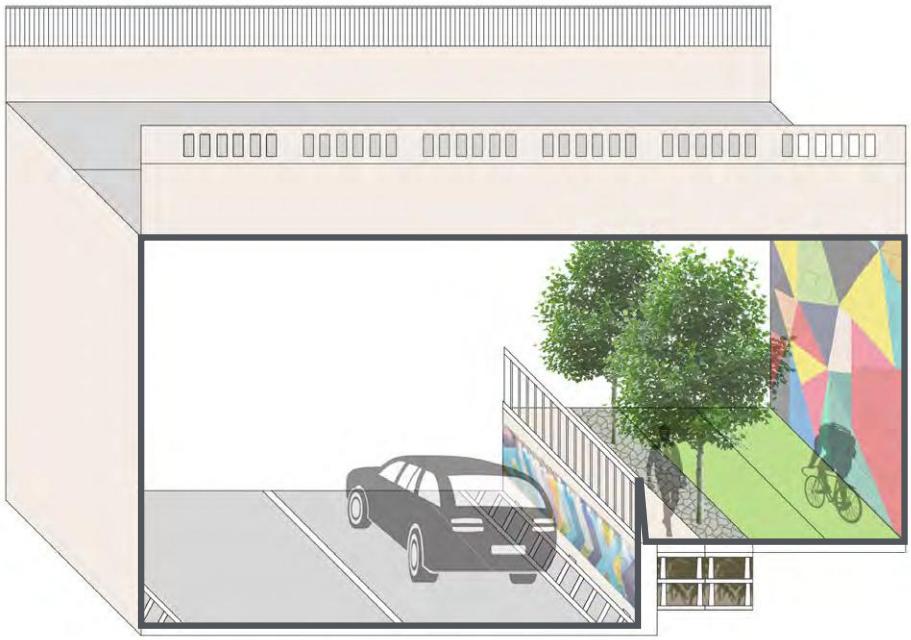
PROJECT ESTIMATED COSTS

DESIGN COSTS	$100,000
STREET CLOSURE COSTS	$20,000
RESURFACING LS	$500/lf x 7,920 = $3,960,000
SUB-TOTAL	$4,080,000
CONTINGENCY	$326,400
TOTAL COST	**$4,406,400**
ANNUAL MAINTENANCE	~$50,000

PROJECT GOALS MET

- *#32: Stormwater Islands*
- *#31: Rebuild Viaduct*
- *#14: Street Furnishings*
- *#38: Parallel Crosswalks*

#31: REBUILD GRAVOIS AVE / UNION PACIFIC VIADUCT



PROPOSED CONDITION

PROJECT DESCRIPTION

After several design iterations, the plan proposes to maintain the City bridges running parallel to the Union Pacific viaduct. However, the aging bridges are rapidly deteriorating and will require replacement in the near future. Their current condition is classified as "structurally deficient."

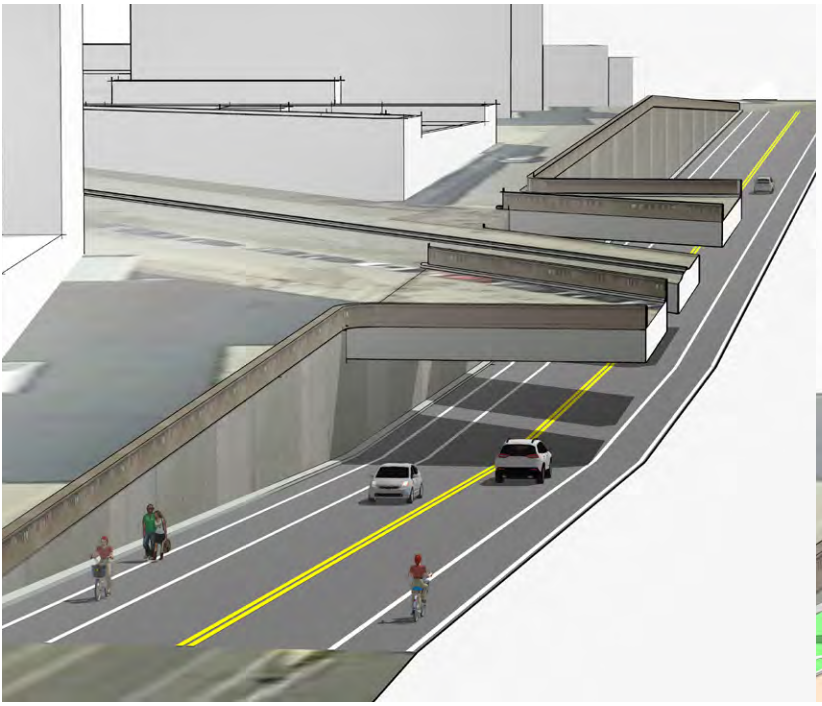
PHASING STRATEGY

If at all possible, the reconstruction of the viaduct should occur simultaneously with the re-striping of the Gravois Ave. Funding opportunities and labor costs might be shared if projects are coupled. The City should coordinate with MoDOT to align these two projects if at all possible. The reconstruction of the bridges would allow the cycle track to exist in the final proposed condition, without an interim solution for several years.

FUNDING OPPORTUNITIES

The Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program through the US Department of Transportation may be one route to take to fund the resurfacing / rebuilding of the road under the Union Pacific Viaduct.

Another funding opportunity is the federal *Off-System Bridge Replacement and Rehabilitation (BRO) program*, available through MoDOT. This program funds the replacement or rehabilitation of deficient bridges.



EXISTING CONDITION

PROPOSED CONDITION

PROJECT ESTIMATED COSTS

BRIDGE DECKS	$150/sf x 6,500 = $ 975,000
BRIDGE WALLS	$50/sf deck x 6,500 = $325,000
BRIDGE SUB-TOTAL (BOTH)	$1.3 million
REBUILDING LS	$1,500/lf x 1,350 = $2,025,000
SUB-TOTAL	$3,325,000
CONTINGENCY	$266,000
TOTAL COST	**$3,591,000**
ANNUAL MAINTENANCE	~$10,000

READINESS

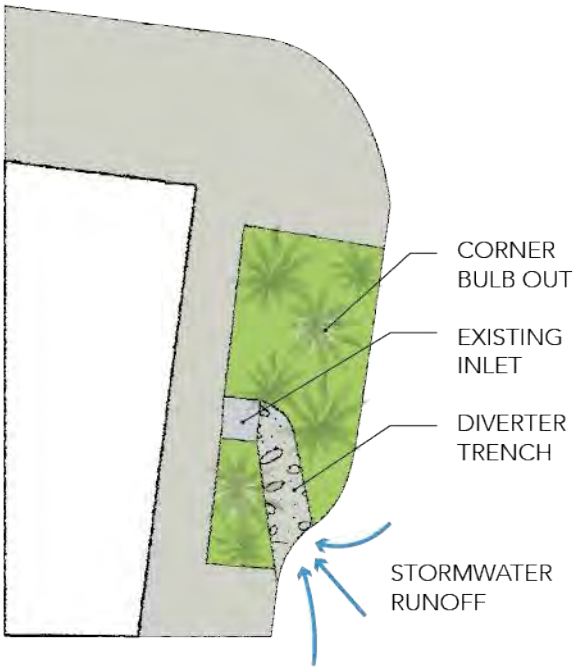
- ☐ Determine bridge priority in applying for federal funding.
- ☐ Create a capital project and budget for all improvements related to the viaduct rebuilding.

31 IMPLEMENTATION CHECKLIST

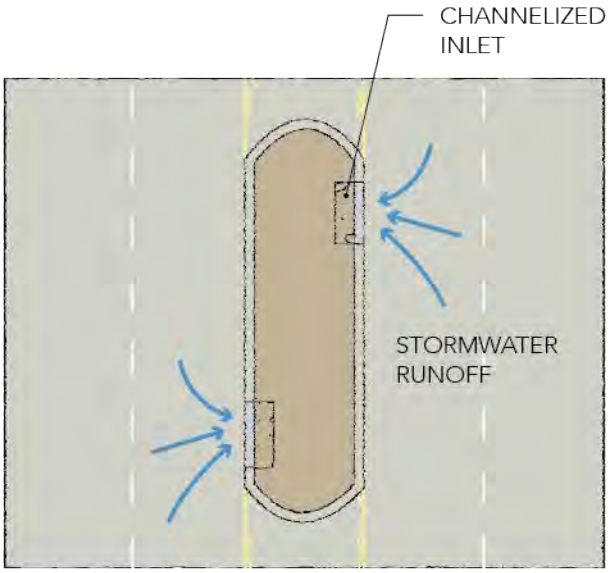
PROJECT GOALS MET

- #32: Stormwater Islands
- #15: Street Landscaping
- #33: Rebuild Gravois
- #14: Street Furniture

#32: INSTALL STORMWATER PEDESTRIAN ISLANDS



BULB OUT LOCATIONS



CENTER ISLAND LOCATIONS

PROJECT DESCRIPTION

The stormwater facilities are designed to drain water from the roadway and provide green facilities along the Gravois Corridor. Some of the facilities exist in the center of the street with permeable pavers instead of landscaping. Maintenance of these facilities should be determined early, as MoDOT has no capacity for maintaining facilities behind the curb (outside of their jurisdiction) or in the center of the street (limited funding). The maintenance might be between the Bevo CID and the City.

At a conceptual level stormwater islands cost roughly $60/sf to build and assuming they only process the water that falls within their own curbs might be reimbursed $6/sf by MSD. The funding gap is in the range of $54/sf. If a facility of the same size were designed instead to process its own water as well as that of the adjacent sidewalks, the construction cost might rise to roughly $80/sf and the MSD reimbursement might raise to $18/sf. The funding gap may increase to $62/sf. If a facility of the same size were designed instead to process its own water as well as that of the adjacent sidewalks and street, the construction cost might rise to roughly $100/sf and the MSD reimbursement might raise to $36/sf. The funding gap may increase to $64/sf.

While this is only a theoretical exercise it demonstrates the difficulty of funding stormwater streets in the St. Louis context. Nonetheless our design guidelines recommend that each sidewalk improvement, island, bulb out, or curb extension do triple duty—traffic calming, introducing landscape and beauty, and processing stormwater.

Pragmatic Recommendation: revisit this issue in the future during engineering.
The design sketches on the opposing page array a spectrum of design choices showing both increased benefits and costs. If the budget supports it the recommendation is to build option six with fully integrated traffic calming and stormwater facilities. Funding is always scarce so this recommendation may be unattainable.

Pragmatically this report recommends that the future design and engineering team be tasked with optimizing construction cost and stormwater benefit as part of their scope. Some years into the future it is possible that the barriers that make it hard to fund stormwater facilities today will improve in the future. Those include:

- The low level of reimbursement from MSD (roughly 10% of the cost)
- The inability of the Bevo CID or any other organization to provide ongoing maintenance
- The lack of policy consensus among MSD, MoDOT, the City of St. Louis, and BPS among others in support of street-installed stormwater facilities.

PROJECT ESTIMATED COSTS

DESIGN COSTS	$800
DEMO	$5,000
8" HIGH VERTICAL CURB	$35/lf x 121.5 = $4,253
SOIL - 30" BIO	$60/cy x 11 = $660
PERENNIALS	$10/sf x 100 = $1,000
MULCH	$30/cy x 1 = $30
CONNECTION TO STORM SEWER	$5,000
SUB-TOTAL	$16,743 (8' x 12.5" or 100sf)
CONTINGENCY	$1,340
TOTAL COST	**$18,083**
ANNUAL MAINTENANCE	$100/EA

PROJECT READINESS

- ☐ Hire a designer for the facilities.
- ☐ Coordinate with Projects #27 and #34 to maximize impact.
- ☐ Work with MSD to qualify for funding.
- ☐ Accommodate existing inlets in the engineering of the facilities.
- ☐ Determine the maintaining party of the gutter behind the system and the landscaping.

32 IMPLEMENTATION CHECKLIST

PROJECT GOALS MET

- #30: Resurface Gravois
- #31: Rebuild Viaduct
- #33: Rebuild Gravois
- #15: Street Landscaping

#33: REBUILD GRAVOIS AVE

PROJECT DESCRIPTION

The resurfacing of Gravois Ave, *Project #30, pp. 256 - 257.*, improves the street infrastructure, but is not the final build out of the corridor. The curbs still need to be extended, crosswalk bulb outs installed, and flexisticks between the cycle track and parked cars included. While the brunt of reducing vehicle speeds may come in the resurfacing project, the placemaking and ecological services of this plan do not arrive until the final build-out of Gravois Ave.

PHASING STRATEGY

Many of these projects can be done on a block-by-block basis as funding becomes available. For example, the 50/50 sidewalk grant might be used as a match with business owners along a block to extend the curb out to the final built condition. With this piecemeal condition in mind, the City should consider the cost saving when coupling with other projects in the same vicinity. The Alderpersons of Bevo should be ready to move on phases of rebuilding Gravois Ave anytime a street closure is on the horizon to capitalize on the expenditures of street closures and the hassle the public feels from construction. Should Bevo find itself with only partial funds to complete the build out, start in the Bowtie and extend out from there.

FUNDING OPPORTUNITIES

The Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program through the US Department of Transportation may be one route to take to fund the resurfacing / rebuilding of the road under the Union Pacific Viaduct.

PROJECT ESTIMATED COSTS

DESIGN COSTS	$200,000
STREET CLOSURE COSTS	$100,000
REBUILDING LS	$1,500/lf x 7,920 = $11,880,000
SUB-TOTAL	$12,180,000
CONTINGENCY	$326,400
TOTAL COST	**$12,180,000**
ANNUAL MAINTENANCE	~$50,000

PROJECT GOALS MET

- #32: Stormwater Islands
- #15: Street Landscaping
- #31: Rebuild Viaduct
- #14: Street Furniture

PHASE #1: 15 - 20 YEARS

- ☐ Partner with any other capital projects along Gravois to take advantage of street closures.
- ☐ Apply for grant funding from state or federal levels, for all of or pieces of the corridor.
- ☐ Rebuild Gravois starting from the Mill, moving outwards.

PHASE #2: POST-CONSTRUCTION

- ☐ (Optional) Install parking meters & signage.

33 IMPLEMENTATION CHECKLIST

#34: CONTINUE GRAVOIS AVE CYCLE TRACK SOUTH ON MORGANFORD AVE

PROJECT DESCRIPTION

As the main thoroughfare through the Bevo community, Gravois Ave was considered the focus of this plan; however, Morganford Rd is also an important connector that travels through the heart of Bevo.

The Bevo Great Streets project resulted in the recommendation to continue the two-way cycle track south on Monrganford Rd to provide additional bike connectivity to Holly Hills Blvd. with the Christy Greenway. However, a public process is needed with the community south of Bevo to be sure they are involved in and agree with that decision. The St. Louis bicycle community should be involved in that process. BPS is likely the implementer, with Trailnet and the City's Streets department also involved.

A SAFER BIKE FACILITY

Keeping in line with Bevo's existing connectivity to St. Louis' bike network, this plan maintains bike facilities throughout the corridor, and improves them along Gravois Ave, Morganford Rd, and Chippewa St.

PHASING

This project can follow most, if not all, other projects because it is not a structural fix to the Bevo community; rather, it is an added benefit. It would improve the existing separated bike lanes on Morganford Rd by putting the two-way cycle track along the north/western side of Morganford Rd. This recommendation is based on there being fewer curb cuts and points of conflict on that side of the street, given a large portion of that stretch of Morganford is adjacent to a cemetery.

PROJECT ESTIMATED COSTS

DESIGN PROCESS	$45,000
ENGINEERING SERVICES	$45,000
LABOR & INSTALLATION COSTS	$12/ft x 9,000 = $108,000
SUB-TOTAL	$198,000
CONTINGENCY	$15,840
TOTAL COST	**$213,840**

PROJECT GOALS MET

PHASE #1: 5 - 7 YEARS

- ☐ Start a planning process with the community
- ☐ Hire an engineer to detail the engineering design of the affected stretch of Morganford Rd.
- ☐ Install the cycle track on Morganford Rd.

34 IMPLEMENTATION CHECKLIST

#35: OAK HILL CALM STREETS PROJECT

PROJECT DESCRIPTION

St. Louis already has a Calm Street - a street with low vehicular traffic and safe walking and biking facilities - along Louisiana Ave from Gravois Ave to Meramec St. A similar street should be considered along Oak Hill Ave from Chippewa ST to Tower Grove Park to better connect south side neighborhoods.

Things to include: speed humps, bumpouts, traffic circles, and other calming features not suitable for a high-traffic Gravois Ave, but perfect for a lesser-traveled neighborhood street.

This Calm Street should be connected to the Gravois Ave cycle track, and clearly indicate the pedestrian connection between Gravois Ave and Oak Hill Ave.

PHASING

Since Oak Hill does not fall within this project's study area, the community most affected by this recommendation were not the focus of the Bevo Great Streets community engagement. Therefore, this recommendation needs to go through a proper public process to gauge community interest and properly vet this strategy within their community.

This plan recommends Trailnet and other bike advocates take the lead in pursuing this recommendation.

FUNDING OPPORTUNITIES

The Louisiana Calm Street design and construction was funded through a $1 million Transportation Alternative Program (TAP) grant from East-West Gateway Council of Governments. A similar project budget and funding source could be considered by local stakeholders should this be a desirable project to fund.

PHASE #1: 5 - 7 YEARS

- ☐ Alderpersons/BPS to apply for TAP funding to design and construct Calm Street

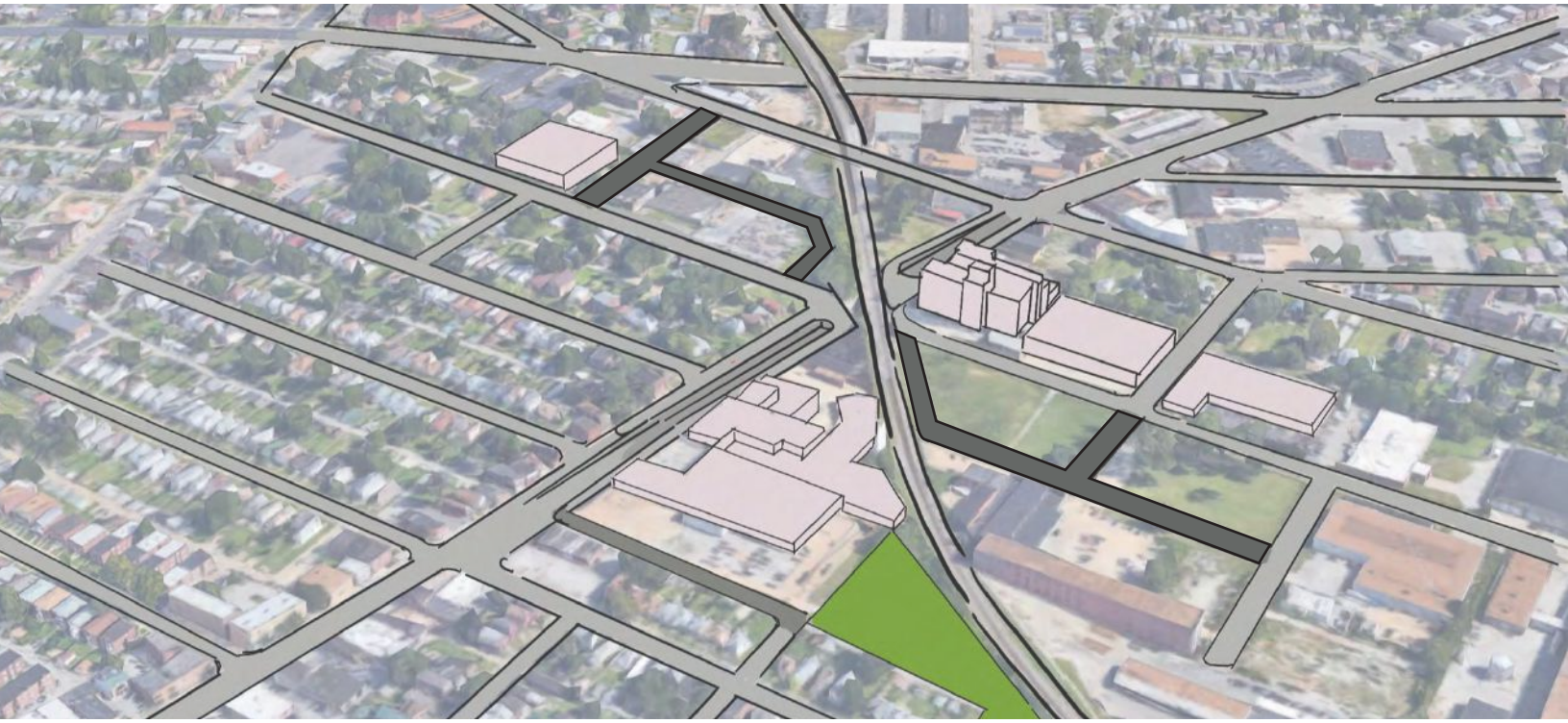
35 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

TOTAL COST	$1 MILLION
ANNUAL MAINTENANCE	~$10,000

PROJECT GOALS MET

#36: BUILD NEW STREETS ON VACANT BINGHAM ST. INDUSTRIAL PROPERTIES



PROJECT DESCRIPTION

Several industrial parcels surrounding the viaduct remain underutilized or vacant. These lands might be redeveloped for a long-term plan to add new development in this area of either light manufacturing or residential use. However, the large scale platts make redevelopment difficult, especially for residential units. Should the use of the land change in the future, the neighborhood grid structure should extend into these industrial sites. The plan proposes building two new right-of-ways:

- On the west side of the viaduct, north of Bingham Ave, through the Alligator Clothing Factory site
- On the east side of the viaduct, south of Bingham, on the property facing the read of the U-Haul property

These streets might be thought of as a larger project in conjunction with the viaduct bridge rebuilding, but are not dependent on the furthering of that project.

PHASING STRATEGY

Building new public infrastructure on private land is a project for the long-term and would involve property owners, City staff, members of the development community, and adjacent property owners potentially impacted by the new easements. However, the potential to redevelop the parcels as a public-private partnership may be sufficient enough of an incentive for a developer looking in south St. Louis. The City should build the streets after the issuance of a RFP, or in partnership with redevelopment, to avoid wasting resources prematurely. Alternatively, the RFP might request the developer to finance , in part or entirely, the construction of the streets.

PHASE #1: 5 - 10 YEARS

- ☐ Approach current land owners to discuss new right-of-way easements.
- ☐ Develop a transfer agreement and determine placement of street facility.
- ☐ (Optional) Re-platt land to allow for smaller parcels.
- ☐ Perform necessary site work to vacate new right-of-way.
- ☐ (Optional) Issue an RFP for the land development and enter into a public-private agreement to finance the project.
- ☐ Engineer utilities and street infrastructure.
- ☐ Build infrastructure.

36 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

TOTAL COST	**$350 LF X 2,160 FT = $756,000**

PROJECT GOALS MET

▶ #22: Alligator Clothing ▶ #31: Rebuild Viaduct

PROJECT #37: INSTALL CROSSWALKS IN THREE PHASES ALONG GRAVOIS AVE

PROJECT DESCRIPTION

A critical component to pedestrian mobility is the ability to conveniently and frequently be able to cross the street. The current spacing of crosswalks along Gravois spans from 600' - 2,000', too long to be a competent pedestrian system, let alone a great street. The plan proposes building crosswalks as a priority. However, should funding be sparse, three phases over several years of Aldermanic investment may be the key to implementation.

PHASING STRATEGY

First, the plan suggests updating the crosswalks at the intersection of Gravois Ave / Morganford Rd / Delor St for ease of crossing with the traffic signals. *See drawing on page 92 for locations*. Adding a crosswalk parallel to the lights, and timing them with the traffic will shorten the wait time for pedestrians at the lights. The crosswalks in the Bowtie are as follows:

- Two new crosswalks at Gravois/Morganford
- Wilcox Ave

Second, the plan proposes crosswalks at locations which would decrease the average length between crosswalks from every 1000' to every 500'. Crosswalks at the following locations would allow such a decrease:

- Neosho Ave
- Eichelberger Ave
- Dresden St

Third, the plan proposes the remaining crosswalks in the final phase to bring the average crossing distance down to 300' feet. Crosswalks at the following locations would allow such a decrease:

- Gannett St
- Ellenwood Ave
- Gertrude Ave

Due to the nature of Gravios Ave (offset streets, curved road geometry, non-square intersections), typical suggestions of placing crosswalks at a specified number of feet do not hold weight. Therefore, when deciding where to put the next crosswalk, the placement should be decided by whichever locations decreases the time to a crosswalk the most dramatically.

FUNDING OPPORTUNITIES

Crosswalks may be funded through Aldermanic monies, allocations from the City, or as part of a larger capital project to resurface Gravois Ave, using MoDOT's Cost Share program. *See Project #30, pp. 256 - 257 for more information*. Crosswalks may also be constructed two ways: tactically or as part of a permanent solution. Crosswalks which include a midblock crossing must

always include the permanent solution for the safety of the pedestrians. Crosswalks may be installed in the tactical manner until resurfacing of Gravois Ave (when locations of lanes would shift, as per this plan), in which they can be installed permanently.

TACTICAL CROSSWALKS

A tactical solution, shown top on the opposite page, allows for an immediate intervention with semi-permanent infrastructure at a lower price point. Installation of this type of solution cannot include a center pedestrian refuge, nor forgo the bump outs on the sides. A typical tactical solution costs roughly $25,000.

PERMANENT CROSSWALKS

A permanent solution, shown bottom on the opposite page, serves a longer-term vision with a higher up-front cost. Pouring concrete curbs provides a stormwater management, landscaping opportunities, and a higher quality pedestrian streetscape. A typical permanent solution costs between $45,000 and $65,000 depending on the complexity of the location.

See checklist below for phasing strategy regarding tactical vs. permanent. In general, do what you can afford: more tactical crosswalks is better than fewer permanent ones, while more permanent ones is better still.

AMENITIES

The strip map in the Detailed Plan chapter shows the recommended locations and curbed features of the crosswalk (whether it gets a bumpout and/or an island refuge); however, all crosswalks have the following baseline level of treatment:

- continental striping
- rectangular rapid flashing beacons (RRFB)

PHASE #1: 1 - 2 YEARS

- ☐ Reserve money from Aldermanic or City budgets to install (at a minimum) one crosswalk per year.
- ☐ In coordination with a re-signaling of the Gravois Ave / Morganford Rd / Delor Ave Intersection, install crosswalks.

PHASE #2: 4 - 7 YEARS

- ☐ Confirm design specifications at desired sidewalk locations.
- ☐ Install three crosswalks.

PHASE #3: 7 - 10 YEARS

- ☐ (Optional) Coordinate project with #27: Resurface Gravois Ave.
- ☐ Confirm design specifications at desired sidewalk locations.
- ☐ Install remaining proposed crosswalks.
- ☐ (Optional) If crosswalks were installed tactically in prior phases, and resurfacing has occurred, install permanent stormwater bulb outs, per project #28.

37 IMPLEMENTATION CHECKLIST

TACTICAL PROJECT ESTIMATED COSTS

PHASE #1	$25,000/crosswalk + $10,000/striping = $45,000
PHASE #2	$25,000/crosswalk x 3 = $75,000
PHASE #3	$25,000/crosswalk x 3 = $75,000
SUB-TOTAL	$195,000
SOFT COSTS	$19,500
CONTINGENCY	$19,500
TOTAL COST	**$234,000**

PROJECT GOALS MET

▶ #30: Resurface Gravois ▶ #32: Stormwater Islands

#38: INSTALL CROSSWALKS PARALLEL TO GRAVOIS AVE

PROJECT DESCRIPTION

Crosswalks parallel to Gravois Ave currently only exist at signalized intersections. However, local streets could benefit from striped crosswalks as well.

The plan proposes painting these crosswalks on a street-by-street basis and, if possible, including the neighbors in the task. While federal guidance suggests the painting of crosswalks with conventional white striping only, cities around the country continue to install unique crosswalks. Should the City of St. Louis allow uniquely painted sidewalks, each street might submit its own designs to be painted by trained volunteers. This would give every block an identity showcasing the multiculturalism and diversity of the Bevo neighborhood.

PHASE #1: 2 - 10 YEARS

- ☐ Receive drawings from blocks as to the designs for their crosswalk.
- ☐ Buy discount paint as it becomes available at wholesale prices.
- ☐ Paint the outline of sidewalks through the City to meet safety requirements.
- ☐ Gather volunteers to finish painting crosswalks, one at a time.

38 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

MATERIAL COSTS	$2,000/crosswalk x 20 = $40,000
SUB-TOTAL	$40,000
INSTALLATION	$0
CONTINGENCY	$400
TOTAL COST	**$40,400**
BI-ANNUAL MAINTENANCE	$10,000

PROJECT GOALS MET

▶ #30: Resurface Gravois

#39: FIX GRAVOIS AVE SIDEWALKS & ADA SIDEWALK RAMPS IN EXTREME DISREPAIR

PROJECT DESCRIPTION

While most of the sidewalks along Gravois Ave are sufficient for pedestrians and meet accessibility requirements, some patches are in desperate need of repair. The following areas should be addressed to brind the pedestrian network up to a minimum standard:

- the intersection of Gravois Ave and Bates Ave
- the SW corner of Gravois Ave and Taft Ave

PHASE #1: 1-2 YEARS

- ☐ Preform a sidewalk evaluation to ensure infrastructure does not require patching and meets requirements for ADA.
- ☐ Prioritize repairs in conjunction with business owners and the 50/50 sidewalk match program.

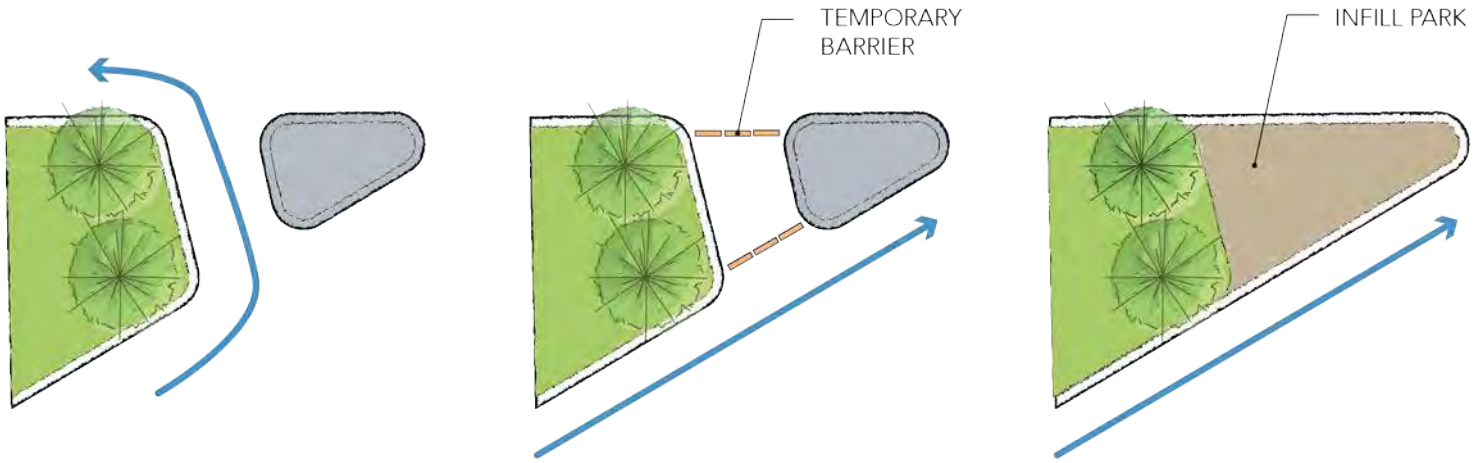
39 IMPLEMENTATION CHECKLIST

PROJECT ESTIMATED COSTS

CONCRETE SIDEWALK (48" WIDE, 3" SLAB W/ REBAR)	$9.50/lf x 400lf = $3,800
LABOR & INSTALLATION	$ $11.50/lf x 400lf = $4,600
SUB-TOTAL	$8,400
CONTINGENCY	$672
TOTAL COST	**$11,072**
ANNUAL MAINTENANCE	$240 (400LF)

PROJECT GOALS MET

#40: CLOSE THE HAIRPIN TURN AT SEBILJ PARK



EXISTING CONDITION | TACTICAL | PERMANENT

PROJECT DESCRIPTION

The traffic island north of the Sebilj Park holds a fountain, not in use, and provides a way for automobiles to turn southbound onto Gravois Ave from northbound Morganford Rd. However, the lightly used facility, weakens the pedestrian space and only serves as a trash collector. Closing the hairpin turn would extend and enhance the core public amenities. There is an option to close the area tactically before building a permanent plaza facing the Bevo Mill.

PHASE #1: 1 YEAR

- ☐ Tactically close the hairpin turn using jersey barriers or planter boxes.
- ☐ Install a sign to the south on Morganford Rd. to alert drivers of an alternative route.

PHASE #1: 5 YEARS

- ☐ Build the permanent closure in coordination with a renovation with the Sebijl Park.
- ☐ Apply for MSD Project Clear grant funding to reimburse for stormwater improvements.

40 IMPLEMENTATION CHECKLIST

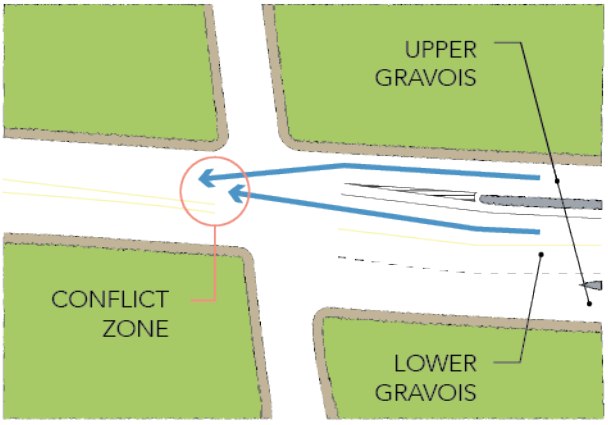
PROJECT ESTIMATED COSTS

TACTICAL SIGNAGE	$1,000/sign
BARRIER MATERIAL	$250/barrier x 4 = $1,000
BENCHES	$300/bench x 2 = $600
TACTICAL SUB-TOTAL	$2,600
PERMANENT INSTALLATION	$40,000
CONTINGENCY	$3,410
TOTAL COST	**$46,010**
ANNUAL MAINTENANCE	$1,000

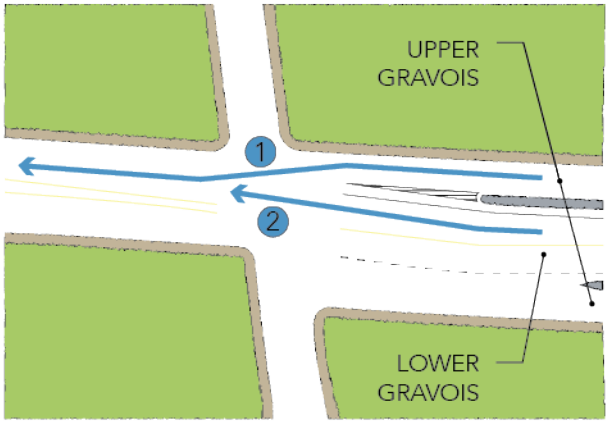
PROJECT GOALS MET

▶ #18: Christy Gateway ▶ #19: Renovate Sebilj Park

#41: MODIFY PHASING FOR TRAFFIC SIGNAL AT TAFT AVE



EXISITNG CONDITION



PROPOSED CONDITION

PROJECT DESCRIPTION

The streets on either side of the automobile underpass can be dangerous when drivers attempt to merge into the main traffic stream on Gravois Ave. On the north side of the viaduct, the light includes a timing signal for the cars to merge safely, while cars coming out of the viaduct. The plan calls for the same timing signal on the south side of the viaduct. Both streets are infrequently used; however, with the developments proposed on either side of the viaduct, traffic may increase and require such safety measures.

PROJECT ESTIMATED COSTS

SYSTEM ENGINEERING	$20,000
CONTINGENCY	$2,000
TOTAL ESTIMATED COST	**$22,000**

IMPLEMENTATION

☐ Hire a traffic engineer to design a programming signal to include a turn for the cars on Upper Gravois.

41 IMPLEMENTATION CHECKLIST

PROJECT GOALS MET

NEIGHBORHOOD PARKS

PARCEL IMPLEMENTATION CONCEPTS

DIY PARKS?

In considering realistic effort to reduce and eliminate the Parks Desert, the design team acknowledges that the wheels of change can turn slowly... kind of like a windmill on a calm day. As such, the design team developed several responses to the most common vacant parcel typologies.

The vacant parcels in the study area fell into three distinct scales:

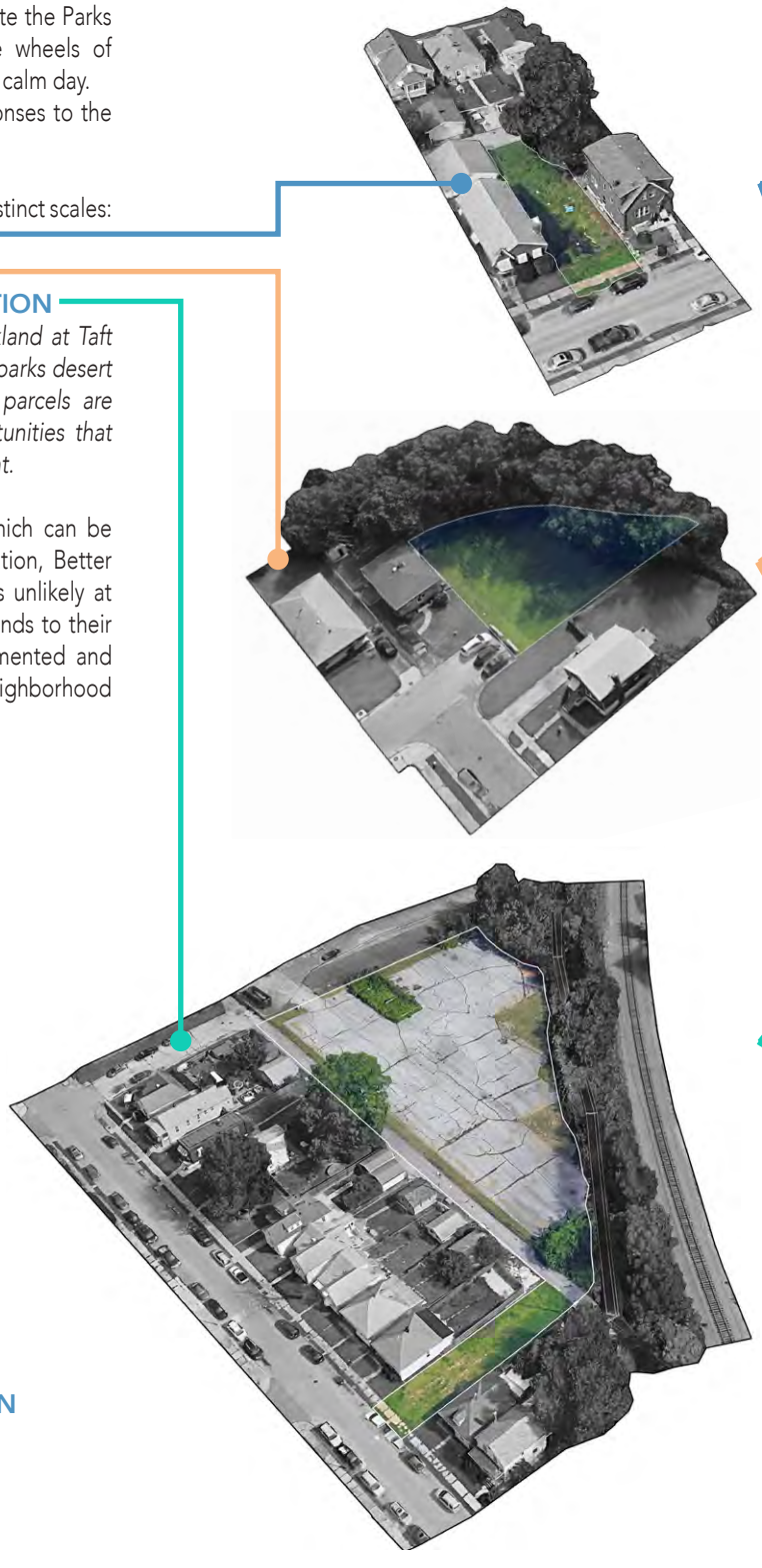
SINGLE RESIDENTIAL PARCELS

MEDIUM / CORNER PARCELS

OPPORTUNITIES FOR CONSOLIDATION

The primary opportunity for consolidated parkland at Taft Avenue was studied as a part of the proposed parks desert infill. Resident program requests for larger parcels are included here for documentation, and opportunities that arise to deploy these concepts should be sought.

The plan prioritizes small to medium size lots which can be constructed *ad hoc* by the neighborhood association, Better Bevo Now, and the residents. The Parks District is unlikely at this time to consider adding any additional park lands to their portfolio. Therefore, parcels which can be implemented and maintained through the sole capacity of the neighborhood association should come first.



SINGLE RESIDENTIAL PARCELS

1 4075 Concordia Avenue
3 3926 Randall Street
5 4531 Varrelmann Avenue
7 4256 Bates Street
9 4009 Delor Street
12 5868 Goener Avenue
15 3975 Randall Street

MEDIUM / CORNER PARCELS

2 4101 Concordia Avenue
6 4747 Adkins Avenue
8 4134 Bingham Avenue
10 4416 Dresden Avenue
11 3909 Eichelberger Street
13 5428 Morganford Road
14 3963 Neosho Street

OPPORTUNITIES FOR CONSOLIDATION

4 4019 Taft Avenue

OTHER RESIDENT REQUESTS

Residents in the Study Area offered many ideas when asked about infill park spaces. From playgrounds to ropes courses, some other ideas that may be appropriate for further study on **VACANT PARCELS** include:

- Basketball
- Chess garden
- Community Garden
- Dog Park / Dog Run
- Fitness Equipment
- Gagaball Pit
- Gathering Mound
- Grilling / Picnic Areas
- Handball
- Outdoor classroom
- Outdoor Movies
- Pavilions for Rent
- Picnic Area
- Playground
- Rain Garden / Rainscaping
- Ropes / Obstacle Course
- Sand Volleyball
- Sculpture Garden
- Skateboarding
- Soccer Fields
- Sprayground Playground
- Tot Lot











Outdoor Movies

Playground

Community Garden

Picnic Grove

Amphitheater

Dance Plaza

Sculpture Park

Nature Playground

Dog Park

GRG Trailhead

Flood Management

Picnic Pavilion