



VIVION ROAD STREETSCAPE PLAN

*“If you plan cities for cars and traffic, you get cars and traffic.
If you plan for people and places, you get people and places.”*

- Fred Kent

ACKNOWLEDGMENTS

NORTHLAND NEIGHBORHOODS, INC.

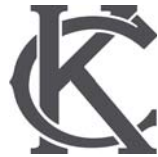
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Dispatch Tribune - December 26, 1979 - FIRST MAJOR GIFT - Jerry James, president of Boatmen's North Hills Bank and new chairman of the Clay County Development Commission, presents \$1,000 check to help build the Northland's first formal fountain to Anita Gorman and (right) John Dillingham, promoters of a fund drive led by Charles Garney. James' gift is the first major donation made since formal announcement this month of plans to build a \$150,000 fountain in a city park to be opened on the southeast corner of Vivion and North Oak Trafficway.

THE VIVION ROAD GANG

On June 21st, 1983 the North Oak Fountain turned on, due to the efforts of the Vivion Road Gang. Determined that Vivion Road remain a roadway to be proud of, property owners—including Gerald and Anita Gorman, Charles and Patty Garney, John and Nancy Billingham, Ray and Linnea Brock, C. Gerald James, Faye Werner, and Homer Williams, among others—joined efforts.

As a proposal for a used car lot came forward on the southeast corner of North Oak Trafficway and Vivion Road, property owners expressed mutual concern, and thus the Vivion Road Gang formed. Over multiple years, the Vivion Road Gang advocated for the residential quality of Vivion Road, and raised funds for a beautification effort—the North Oak Fountain.

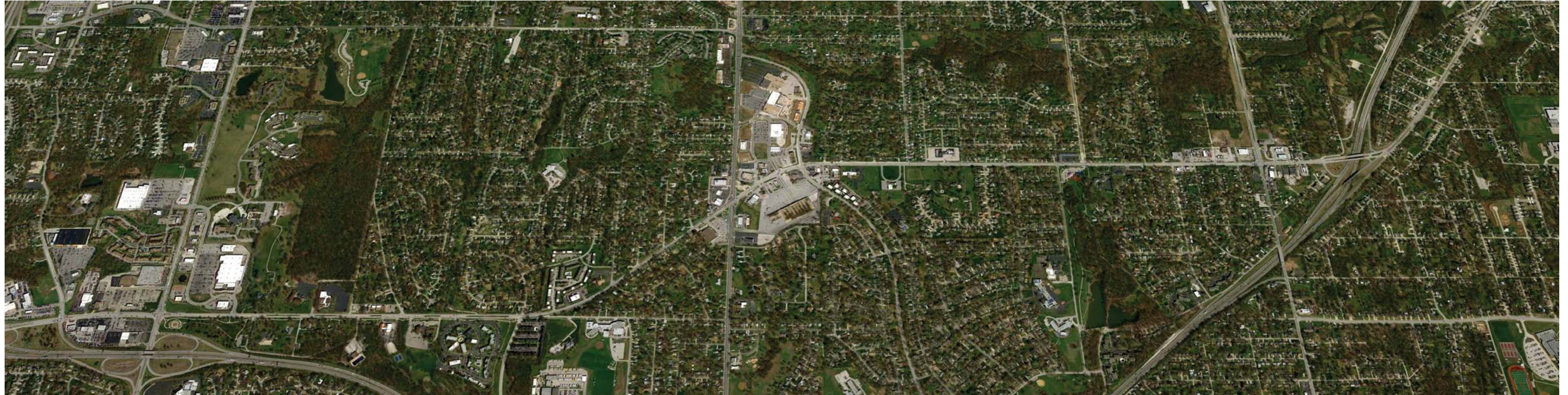
With the help of Milton and Betty Ferguson, the president at the time of the Midwestern Baptist Theological Seminary and Harold Hamil and Sarah Snow, City Council members, land was dedicated at the southeast corner of North Oak Trafficway and Vivion Road for the fountain's installation. During the fountain's installation, Bob Kemp, the City Manager at the time, vowed to protect the residential nature of Vivion Road from North Oak Trafficway to Northeast Antioch Road.

The Vivion Road Gang continued to promote the importance of Vivion Road as an aesthetically pleasing residential corridor for years after the fountain installation. Since that time, Vivion Road has been the focus of multiple planning efforts, the latest of which follows on the coming pages.

Thank you to Anita Gorman for providing this history of the Vivion Road Gang.



1.0 INTRODUCTION



The Vivion Road Streetscape Plan (the Plan) was designed to serve Northland Neighborhoods, Inc., the residential, business, and development community along Vivion Road, and the City of Kansas City, Missouri as a whole. The Plan strives to beautify, increase the functionality of, and ensure the sustainability of the corridor. The Plan was developed through a collaborative planning process and is a representation of the stakeholders' desires for the corridor.

Northland Neighborhoods, Inc., community members, and the City recognize the need to develop a modern plan for Vivion Road. This document serves as a response and solution to the factors threatening the corridor's long-term value.

BACKGROUND

CORRIDOR HISTORY AND PLANNING CONTEXT

Vivion Road, constructed as part of U.S. 69 Highway, serves as a primary east-west corridor through the Northland, providing access to both Interstates 35 and 29. It lies within a first ring suburb, and the prominent style of development is of another era. Despite the widespread desire and formal planning efforts over past decades to upgrade the corridor to have the appeal of a parkway or boulevard, Vivion Road faces aging infrastructure, poor pedestrian and bicyclist connectivity, and a dated aesthetic.

During the corridor's initial development, little consideration was given to typical arterial infrastructure, including curbs and sidewalks. Unfortunately, without the basic roadway and infrastructure improvements in place, investment in the form of modern styles of commercial and residential development, such as walkable lifestyle centers, will be limited. As the community now seeks to transition the corridor from a solely automobile-focused thoroughfare to an aesthetically pleasing, multimodal urban street, the dated style of development must be overcome and a clear sense of place must be established. The corridor has the potential to serve as a welcoming gateway to Kansas City—demonstrated through visible enhancements to the streetscape.

PREVIOUS STUDIES AND PLANS

Vivion Road has long been noted as a corridor in need of improvement. In order to more fully understand the context in which this Plan will work, the planning team reviewed the most relevant plans and studies. It should be noted that many plans exist, but only one plan—the Vivion Road Corridor Study—solely focuses on Vivion Road. Each plan and study is outlined with a focus on recommendations, goals, and findings specifically related to Vivion Road. Following the overview is a summary of common themes found throughout.

Vivion Road Corridor Study (1999)

As a joint effort between the Missouri Department of Transportation (MoDOT), Northland Neighborhoods, Inc., the Conservation Department, Parks and Recreation, city planning departments, and other state and local agencies, the Vivion Road Corridor Study was completed. The study was initiated, in part, to transition Vivion Road into a locally operated roadway, instead of a highway under the jurisdiction of MoDOT. The overarching goal of the study was to enhance the commercial and residential viability, add public amenities, and spur development and redevelopment along the corridor.

Many physical infrastructure and streetscape improvements were proposed, including: bike lanes, trails, curbs, gutters, lighting, street furnishings, gateways, traffic signals (both vehicular and pedestrian), as well as landscaping and street trees. The study specifically recommended the use of one typical street section, providing for two lanes in each direction with a curb and gutter, sidewalks, and a delineated median. Targeted intersection improvements, such as striped pedestrian crossings, traffic calming measures, road realignment, and access drive consolidation, were recommended at the North Oak Trafficway and I-29 interchange, North Antioch Road and Chouteau Trafficway area, and at North Brighton Avenue intersection.

In order to see these improvements through installation, the planning team developed guiding strategies. These strategies focused on creating a pedestrian and bicycle friendly corridor, while also improving vehicular traffic flow. Additionally, the study provided strategies for gateways, signage, fountains, and other markers that work to establish a sense of place. The first phase was completed in 2008 from North Oak Trafficway to Highland Drive and the desire to continue this transformation remains to this day.

Briarcliff-Winnwood Area Plan (2009)

This plan was completed in order to guide the future of the Briarcliff-Winnwood area in regards to land use and zoning, neighborhood and housing revitalization, public infrastructure and transportation investments, and urban design guidelines. The plan sought to achieve a balanced and energy efficient transportation system that serves all users, increase connectivity to key neighborhood destinations along aging corridors, and update aging infrastructure using a whole-systems approach. While Vivion Road is only part of the Briarcliff-Winnwood Area Plan, it is subject to a series of recommendations as follows.

Eight Priority Zones for Revitalization and Reinvestment were identified by the planning participants. Each zone was to be the subject of detailed planning studies, strategic partnerships, upgraded infrastructure, multimodal transportation, and the integration of green infrastructure. Three of the eight zones lie along Vivion Road, including:

- *Antioch Shopping Center and Surrounding Area* (also identified as a Demonstration Project Area)
 - Envisioned to be a large-scale high density mixed use (commercial, office, and residential) community with a strong multimodal design, community gathering places, and various streetscape and gateway enhancements
- *North Oak Corridor* (Vivion Road / I-29 Interchange Area)
 - Envisioned to set the standard for streetscape improvements and be “parkway-like” with higher intensity commercial and office uses and multimodal infrastructure and facilities
- *Vivion Road* (West of I-35)
 - Envisioned to be a neighborhood mixed use area with seamless transitions between land uses, streetscape enhancements, and nodal mixed use development in close proximity to the I-35 interchange

Primary gateways were proposed at the I-29 interchange, I-35 interchange, and Gladstone boundary, and secondary gateways at the Claycomo boundary, North Brighton Avenue, North Chouteau Trafficway, and North Antioch Road intersections.

Vivion Road was also identified as a Primary Image/ Great Pedestrian Street, as the intended role of the corridor was to provide a positive first impression to Kansas City. With this designation, Vivion was to receive the highest level of pedestrian improvements and amenities, including wider sidewalks and crosswalks.

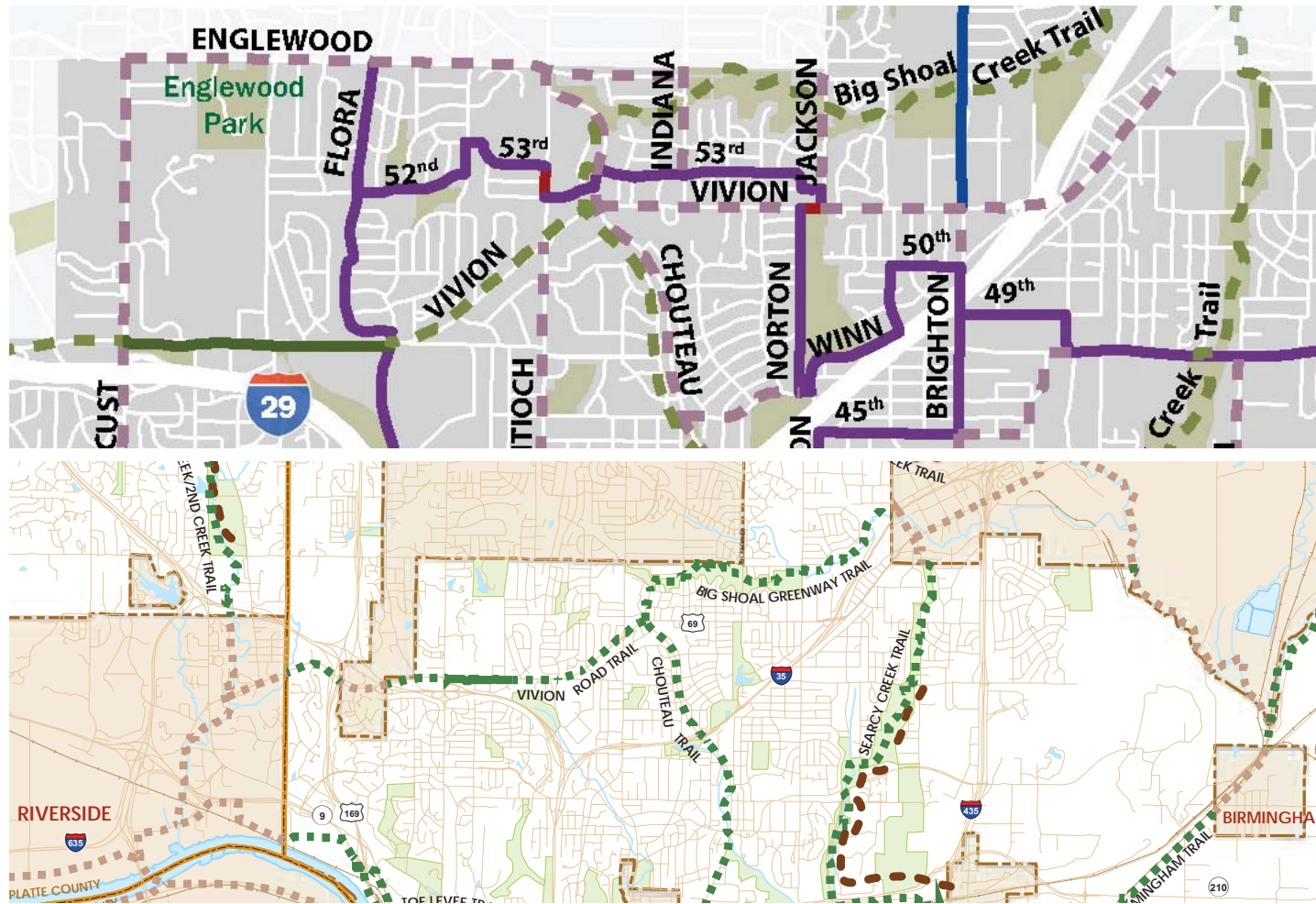
It is important to note that sustainability, and fostering a “green” community, was a driving motivation behind the majority of the plan’s recommendations.

Kansas City’s Major Street Plan (2011)

Kansas City’s Major Street Plan defines the municipal arterial network and right-of-way needed to support that network, in an effort to support orderly development and other modes of transportation (bicycling, walking, and public transit). In this way, the plan seeks to increase the economic and social activity of the City. This document, while established with a technical underpinning, can be updated to address changing capacities and contexts.

The plan currently designates Vivion Road as a Thoroughfare with 100 feet of right-of-way and four through lanes (two each direction); the primary emphasis is on the vehicle. This designation is typical of commercial corridors defined by small strip centers and pad sites with large setbacks and parking that fronts the roadway. While this designation is not inherently troublesome, the desired vision for Vivion Road does not align wholly with this classification. It is also important to note that much of the Vivion Road Corridor is fronted by residences, or uses that do not completely align with the commercial description. The commercial uses are primarily concentrated in nodes at major intersections along the corridor.

INTRODUCTION



The top image is a snapshot of the Bike KC Map, showing existing trail along Vivion Road in solid green, future trail in dashed green, and future bike facilities in dashed purple. The bottom image shows a similar map from the Trails KC Plan; the green dashed line designates future trails and the solid green line designates existing trails.

Trails KC Plan (2008) and Bike KC Map

The Trails KC Plan is the comprehensive guide to shared-use trail development, seeking to increase transportation alternatives, promote economic development, and increase recreational, healthy lifestyle, and conservation opportunities. It includes key trails development components: (1) design and construction standards and criteria; (2) funding and maintenance options; (3) institutional processes needed to manage trail planning and construction; (4) policy recommendations; and (5) a five-year plan of priority projects. A key recommendation of the plan is to adopt a “complete streets” policy directive that all infrastructure projects integrate bicycle and pedestrian accommodations. As its goal, the plan envisions a 230-mile interconnected, regional system of trails that is integrated with the City’s on-street bike facilities.

Vivion Road, from the Gladstone Boundary to Chouteau Trafficway, is designated as a citywide trail (a mixture of proposed and future). A citywide trail is defined as a 10 to 12 foot, public, non-motorized, paved shared-use trail facility that serves as a primary or regional trail. This classification has the highest level of accessibility, and is to be distinguished from a widened sidewalk. As Vivion Road is developed, this section of trail requires an eight-foot minimum separation between the roadway and trail edge.

Currently, the only existing portion of the trail is from North Oak Trafficway to Northeast Davidson Road. Once constructed, the Vivion Road Trail will connect with both the Big Shoal Greenway Trail and Chouteau Trail at Chouteau Trafficway. This future planned extension will tie Vivion Road into the greater trail network.

The Bike KC Map is integrated with the Trails KC Plan in that the existing and future bike citywide trails are shared-use, and also classified as Class One Bikeways. The Bike KC Plan describes a 600-mile network of on-street bike facilities, both existing and planned. Design standards and an implementation plan are in progress to guide development of the extensive bike network. With regard to Vivion Road, a future bike facility is planned from Chouteau Trafficway to the Claycomo boundary.

It is important to note that the City is currently updating the bike plan, with an expected completion date of April 2018. Any future/potential bike lanes or trail installations should be in line with the City’s updated bike plan.

North Oak Corridor Land Use and Development Plan (2006)

The North Oak Corridor Land Use and Development Plan focuses on land use, economic development, public improvements, housing, and implementation strategies to improve the North Oak commercial corridor, though significant portion of the plan is dedicated to the community’s vision for the intersection of North Oak Trafficway and Vivion Road. Overall, the plan recommends mixed use development that is large-scale and automobile-oriented, with strong accessibility to public transit, trails, and sidewalks.

Concern was expressed throughout the plan for pedestrian, bicyclist, and vehicular safety at the Vivion Road/North Oak Trafficway intersection. The plan referenced the Northland Downtown Major Investment Study’s recommendation to close the I-29/Vivion Road interchange and replace the I-29/North Oak Trafficway interchanges with a single point diamond.

The plan recommended both aesthetic and functional enhancements to the Vivion Road/North Oak Trafficway intersection, including corridor identity features on all four corners, additional sidewalks and improvements to pedestrian crossings, variable width median, and relocation of the intersection further north to allow for better traffic stacking of vehicles exiting I-29.

North Oak Corridor Streetscape Master Plan (2011)

The North Oak Corridor Streetscape Master Plan serves as the guide for functionally and aesthetically improving the North Oak Trafficway from 32nd Avenue to Englewood Road by establishing streetscape design standards. For planning purposes, the corridor was divided into different segments with specific design themes. The intersection of North Oak Trafficway and Vivion Road lies within planning segment A: North of Interstate 29. The recommended design theme for this segment is more contemporary, realized through stone markers with smooth dimensional stone and contemporary iconic elements at the gateways and nodes.

The general area including the intersection of North Oak Trafficway and Vivion Road and I-29 is identified as a gateway/node, referred to as the Interstate 29 Highway Gateway (Proposed Roundabout). This node is seen to be a stimulus for future growth and increased connectivity, enhanced with iconic sculptural accents and lighting. Recommended nodal improvements include:

- Roundabout to improve vehicular connection to and from I-29
- Sculptural feature in roundabout
- Safe pedestrian access under I-29 bridge (via multi-use trail and sidewalk)
- Removal of ramps on east side of North Oak Trafficway
- Specialty lighting on roundabout
- Bridge and highway interchange enhancements

With regard to connectivity, the plan notes the existing four-foot sidewalks along Vivion Road with the corresponding ADA accessibility requirements of a five-foot passing zone every two hundred feet for sidewalks less than five feet wide. The plan recommends any future sidewalks to be at least five feet wide..

Additional improvements are recommended for the Vivion Road and North Oak Trafficway intersection, including landscaping and decorative paving in the medians, a new curb and gutter alignment to accommodate five-foot bike lanes on both sides of the North Oak Trafficway, over story trees, streetlights, pedestrian light fixtures, and a 10-foot multi-use trail from 46th Street to Anita B. Gorman Park.

North Oak Corridor Study (2013)

The North Oak Corridor Study was completed in an effort to understand how transit can be a catalyst for and support sustainable development along the North Oak corridor. The study identified opportunities to enhance transit service along the corridor, as well as support sustainable development practices that would increase the demand for higher-level transit service. Three transit modes were evaluated, including baseline transit service, bus rapid transit, and a streetcar.

Specific to this Plan, Vivion Road was identified as a potential location for higher-level transit stops or stations through a series of nodal improvements, including increases in bike and pedestrian connectivity and higher density development. Though, without significant increases in transit demand, the North Oak corridor is likely to be adequately served by enhancements to the base transit system. Substantial growth in existing population and employment would be needed to support higher-level transit services.

To this end, the study recommends enhancements to the existing transit service, or incremental steps toward the future development of higher-level transit services. The baseline enhancements will require additional resources; therefore, the development of funding strategies to support these enhancements is recommended. Importantly, the study identifies key improvements to the bicycle and sidewalk network to support connectivity and safe and pleasant access to potential transit stops and stations, such as Vivion Road.

Kansas City Area Transportation Authority (KCATA) Stop Optimization Analysis

A Stop Optimization Analysis is in progress, analyzing each bus route within the entire KCATA transit system. The goal of this analysis is to improve transit quality, efficiency, and safety overall, increase accessibility to each stop, and ensure necessary and appropriate transit amenities. As each route is analyzed, stops along those routes may be eliminated, merged, relocated, or enhanced with concrete improvements or amenity additions.

The majority of the improvements have been achieved by relocating stops, largely from the nearside of intersections to the farside. Through these relocation efforts, approximately 100 stops have seen improved accessibility with a minimal cost. The following standards for minimum average weekday boardings are in place:

AMENITY PLACEMENT STANDARDS		
AMENITY	LOCAL ROUTE	COMMUTER ROUTE
Bench	25	10
Trash/Recycling Bin	25	25
Shelter	50	25

AMENITY REMOVAL STANDARDS		
AMENITY	LOCAL ROUTE	COMMUTER ROUTE
Bench	Less than 10	Less than 5
Trash/Recycling Bin	Less than 10	Less than 10
Shelter	Less than 25	Less than 15

Common Themes

from past planning studies

Past planning efforts are generally analogous in thought and build upon each other's recommendations. An overarching desire to modernize Vivion Road into a sustainable urban thoroughfare to facilitate private reinvestment is apparent. Given this shared desire to improve Vivion Road (and the connecting corridors), it is ever more important to dictate a clear vision for Vivion Road. The following list of characteristics and improvements to the corridor highlights the commonalities between previously completed plans, and serves as a reference point and key resource for the recommendations of this plan.

- Mixed use, higher-density, and well-connected commercial nodes along the corridor
- Aesthetic streetscape improvements including landscaping, street trees, wayfinding, gateway monumentation, lighting, street furnishings, signage, fountains, and enhanced green space
- Functional streetscape improvements including enlarged sidewalks, bike lanes, trails, curbs, gutters, striped crosswalks, traffic calming measures, road/intersection realignment, and access drive consolidations
- Specific investment in the Vivion Road/North Oak Trafficway/Interstate 29 node to improve vehicular flow and address safety and connectivity concerns

Figure 1.1 Common Themes from Past Planning Studies

PURPOSE

Why develop a streetscape plan?

A detailed plan outlining a unified vision, guiding principles, improvement opportunities, and implementation strategies is vital to encourage complementary and consistent future enhancements within the corridor. Without an overarching plan in place, the health of the corridor will continue to decline.

The purpose of this Plan is to inventory the existing streetscape conditions, gather public input, and identify a set of preferred design and practical improvements and treatments that can be implemented in conjunction with new development, or through direct public or private capital investment.

PLAN OBJECTIVES

The intent of the Vivion Road Streetscape Plan is to guide reinvestment along Vivion Road and craft a vision of a healthier commercial corridor. Increased vibrancy, modernity, and functionality in public amenities, traffic flow, and streetscape features are desired. To this end, the objectives of this planning process include:

- **Review** and build on past plans, such as the Vivion Road Corridor Study completed in 1999
- **Engage** community members with a stake in the revitalization of Vivion Road
- **Identify** general, specific, and prioritized improvement areas and design solutions along the corridor
- **Determine and recommend** efficient implementation strategies to be used by the City of Kansas City and Northland Neighborhoods, Inc., outlining funding sources and phasing possibilities.

CONTENT

The Vivion Road Streetscape Plan contains the following sections:

SECTION 1: INTRODUCTION

The Introduction serves as an overview of the structure and purpose of the Vivion Road Streetscape Plan, providing a summary of Vivion Road's history, past planning efforts, and the purpose of this plan.

SECTION 2: DISCOVERY

The Existing Conditions section analyzes and synthesizes the current status of the corridor, as well as possible detriments to its future success. Specifically outlined are land use and zoning, places of interest, the transportation and mobility network, topography, utilities and infrastructure, and aesthetics.

SECTION 3: COMMUNITY ENGAGEMENT

This section acknowledges the integral role of community and stakeholder engagement in the planning process. A summary of all engagement events and activities is provided. Common themes that arose from this step in the planning process are included as well. Importantly, key issues and priorities are identified and described, which guide the recommendations of the Plan.

SECTION 4: STREETScape PLAN AND RECOMMENDATIONS

This section begins by outlining the vision and guiding principles for the Plan, which were developed based on the critical issues identified during the community engagement and analysis phases of the planning project. Subsequently, this section provides aesthetic and functional recommendations for addressing those issues. A combination of concept plans, diagrams, 3D illustrations, and supporting imagery is provided to help visualize the recommendations of the plan.

SECTION 5: IMPLEMENTATION

Vital to the success of the plan, the implementation section summarizes and organizes the recommendations presented throughout the document into a comprehensive list of actions necessary to see sustained improvement of Vivion Road. This section identifies City policy and plan change recommendations, as well as prioritized projects to ensure ongoing successes. Potential economic development resources and funding opportunities are also outlined.

USING AND MAINTAINING THE PLAN

While the Vivion Road Streetscape Plan is a reflection of the existing conditions and stakeholders' interest in the corridor at the time it was developed, the Plan will have important implications on future public and private improvements. As such, the Plan should be reviewed every three to five years for relevancy, to document any successes, and adjust implementation strategies if activity nodes or potential areas of development or redevelopment change.

To ensure the Plan's relevance and usability, it is important to revisit the recommendations and the context on which the recommendations were based. By revisiting the Plan periodically and modifying it as necessary, the overarching vision will continue to be carried out, in light of changing (and improving) circumstances.





INTRODUCTION

Vivion Road has been the subject (or at least in part) of a series of planning studies. Similar issues have been noted throughout these past planning processes. *Section 2.0 Discovery* explores the existing state of Vivion Road, focusing primarily issues related to the streetscape. By analyzing this information, the planning team can then produce well-informed recommendations and implementation strategies that properly respond to the current realities of the corridor. This information was gathered from the following resources:

- Field surveys by the planning team
- Community engagement activities, as detailed in *Section 3.0 Community Engagement*
- Google Earth Pro and Google Maps
- City-provided GIS data
- 2000 and 2010 U.S. Census data
- 2010-2014 American Community Survey 5-year data estimates
- MySidewalk online mapping data (www.mysidewalk.com)
- City of Kansas City, Missouri website (www.kcmo.gov)
- Kansas City Area Transportation Authority website (www.kcata.org)
- Missouri Department of Transportation traffic count data
- Past plans and documents related to Vivion Road, including:
 - Vivion Road Corridor Study (1999)
 - Briarcliff-Winnwood Area Plan (2009)
 - Kansas City's Major Street Plan (2011)
 - Trails KC Plan (2008) and Bike KC Map
 - North Oak Corridor Land Use and Development Plan (2006)
 - North Oak Corridor Streetscape Master Plan (2011)
 - North Oak Corridor Study (2013)

Once collected, the information was analyzed and used to develop maps, diagrams, a community profile, and streetscape enhancement concepts. What follows is an objective summary of the existing streetscape conditions, as well as the area population; this is the planning context.

It is important to note that the data analyzed and the stated conditions represent a moment in time, and may contain unavoidable inaccuracies related to ongoing public and private reinvestment along the corridor. To address these inevitable inaccuracies, it is recommended that the Plan be reviewed regularly throughout its use for accuracy, relevancy, and usability.

PLAN BOUNDARY

The subject of this study was Vivion Road in Kansas City, Missouri. The specific section of Vivion Road studied spanned from the Gladstone city limits to the west to the Claycomo, Missouri city limits to the east. The limits of the Plan are shown in Figure 2.1 Plan Boundary.

All properties directly adjacent to the Vivion Road corridor were considered to be part of the study, but discussions of connectivity and land use often extend beyond this loose boundary in order to properly respond to the context of the surrounding area.

While the Plan area is mostly focused on public right-of-way, it includes considerations for reconfiguring public right-of-way and private property for mutual benefit.

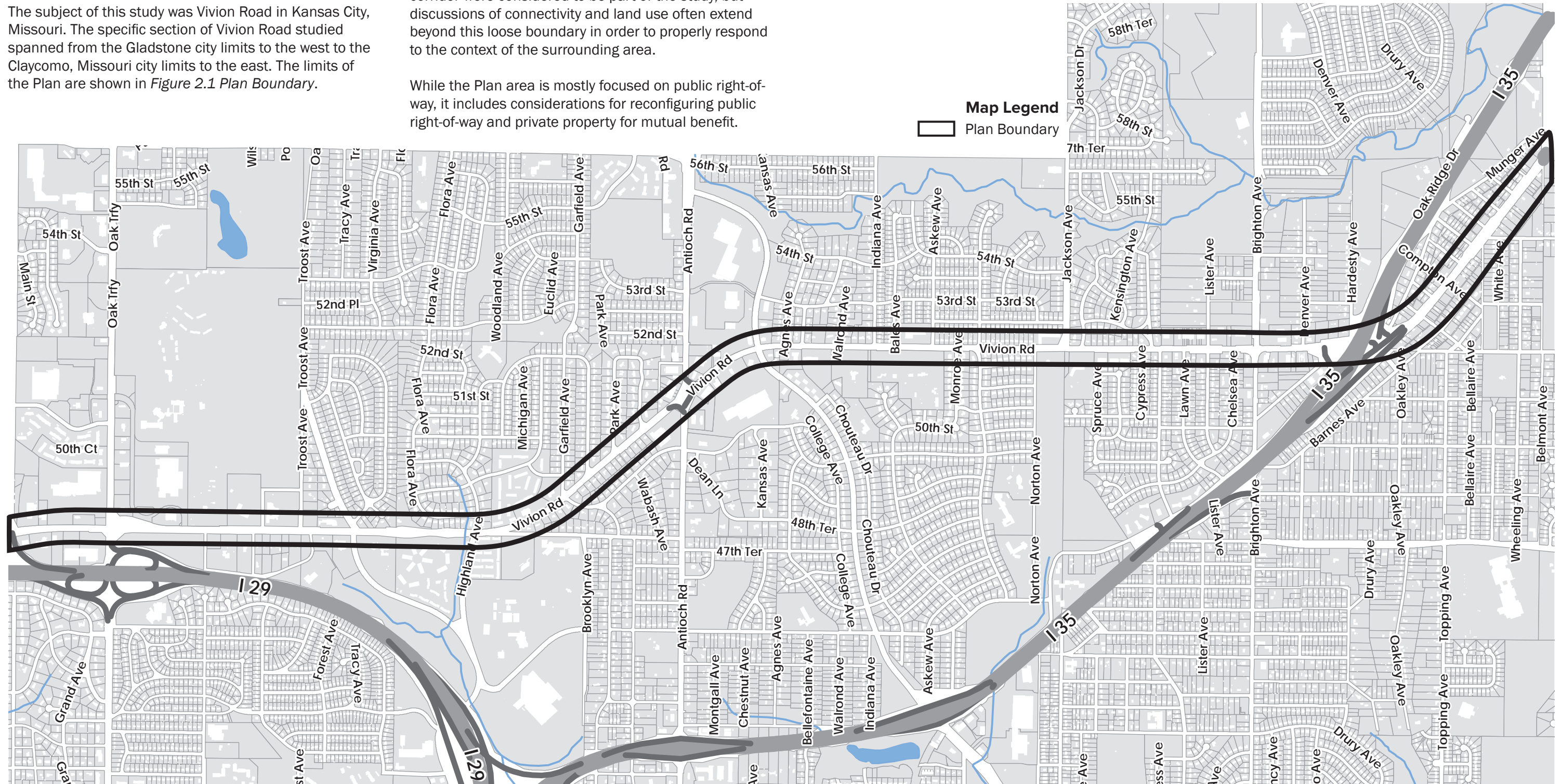
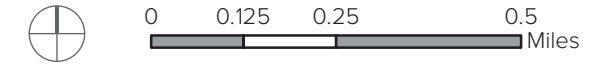


FIGURE 2.1 PLAN BOUNDARY



COMMUNITY PROFILE

To determine the proper location and level of streetscape enhancements, it is important to understand the potential users—both their needs and travel patterns. To do this, demographic data was gathered from the U.S. Census (2000) and the American Community Survey (2010-2014 estimates). The general demographic characteristics for the proximate population follow, and are detailed in *Figure 2.2 Community Profile Summary*.

For the purposes of this study, the demographic characteristics are summarized from census tracts 202.01, 202.02, 203, 204, 206.03, 206.04, 209.01, 209.02. To be clear, these tracts encompass the entire Plan area, but also include surrounding neighborhoods. Note that these census tract boundaries did not change from the 2000 Census to 2010 Census; therefore they are comparable.

Though census data can be broken down into smaller areas called census blocks, it is the planning team’s experience that this level of data collection can be inaccurate. With that in mind, the following data is not a representation of solely the Plan area, but a larger planning context that shares similar characteristics.

GENERAL DEMOGRAPHIC CHARACTERISTICS

While the total population of Kansas City, Missouri has increased by one percent from 2000 to 2014, the population within the Plan boundary has increased by three percent. This increase in population has moved the median age to approximately 38, compared to 35 for the entire City.

The population immediately surrounding Vivion Road is predominately white in their racial makeup, but the area has seen a decrease in the percent of population that identifies as white, and increase in those who identify as black, Asian, and Hawaiian from 2000 to 2014. Compared to the City as a whole, the population that identifies as white is significantly higher.

The majority of the population has at least a high school diploma or some college. The wage of the workers is reflected in this fact; as low wage workers make up the smallest proportion of the work force in the Plan area.

The median household income is also estimated at \$54,368, above the City’s median at \$45,376. It is important to note that the Plan area’s median household income has significantly decreased over the past 14 years. Diving deeper into the data, it is clear that this average significant decrease is not characteristic of all the census tracts within the study area. For example, tract 206.04 saw no significant change in its real income over this time period, whereas tract 202.02 witnessed a 33 percent decrease in median household income. Therefore, changes in median household income in the plan area are specific to the neighborhood level. Though, none of the eight tracts within the plan area saw increases in real median household income over the 14 years.

Generally, these changes may be a result of an aging population, as yearly income often decreases after retirement, but it may also be caused in part by inaccuracies through small American Community Survey sampling size.

FIGURE 2.2 COMMUNITY PROFILE SUMMARY

	2000	2014	CHANGE 2000 - 2014	PERCENT CHANGE
TOTAL POPULATION	32,560	33,537	977	3%
TOTAL HOUSEHOLDS	13,742	13,921	179	1%
MEDIAN AGE (YEARS)	36.00	37.55	1.55	4%
MEDIAN HOUSEHOLD INCOME	\$67,306*	\$54,368	-\$12,937	-17%

*The median household income in 2000 was adjusted for inflation and is now shown in 2014 dollars. A 2.27% inflation rate was assumed between the years of 2000 and 2014.

HOUSING AND HOUSEHOLD CHARACTERISTICS

Within the Plan area, there are approximately 13,921 households and 15,316 housing units. As such, most households only consist of one person (31 percent) or two people (34 percent). Of these households, the large majority have lived in the same house over the past year; many households moved into their current home within the last two decades.

The majority of these housing units are owner-occupied, detached single family homes, several of which front Vivion Road. The highest proportion of homes within the Plan area—4,138—were built from 1950 to 1959, compared to only 210 that were built in 2010 or later, as shown in *Figure 2.3*. As would be expected, the highest percentage of home values fall into the \$100,000 to \$149,999 category; the second highest percentage range from \$50,000 to \$99,999.

COMMUTING TYPES AND TIMES

As *Figure 2.4* shows, the large majority—87 percent—of Plan area residents drive alone to their place of employment, while only eight percent carpool. Surprisingly, there are zero reports of bicycles as the daily mode of transportation to work. This is not unlike the City as a whole, as 80 and nine percent of Kansas Citians drive alone or carpool to work, respectively. The highest proportion of Plan area residents spend 15 to 24 minutes commuting to work.

FIGURE 2.3 AGE OF HOUSING

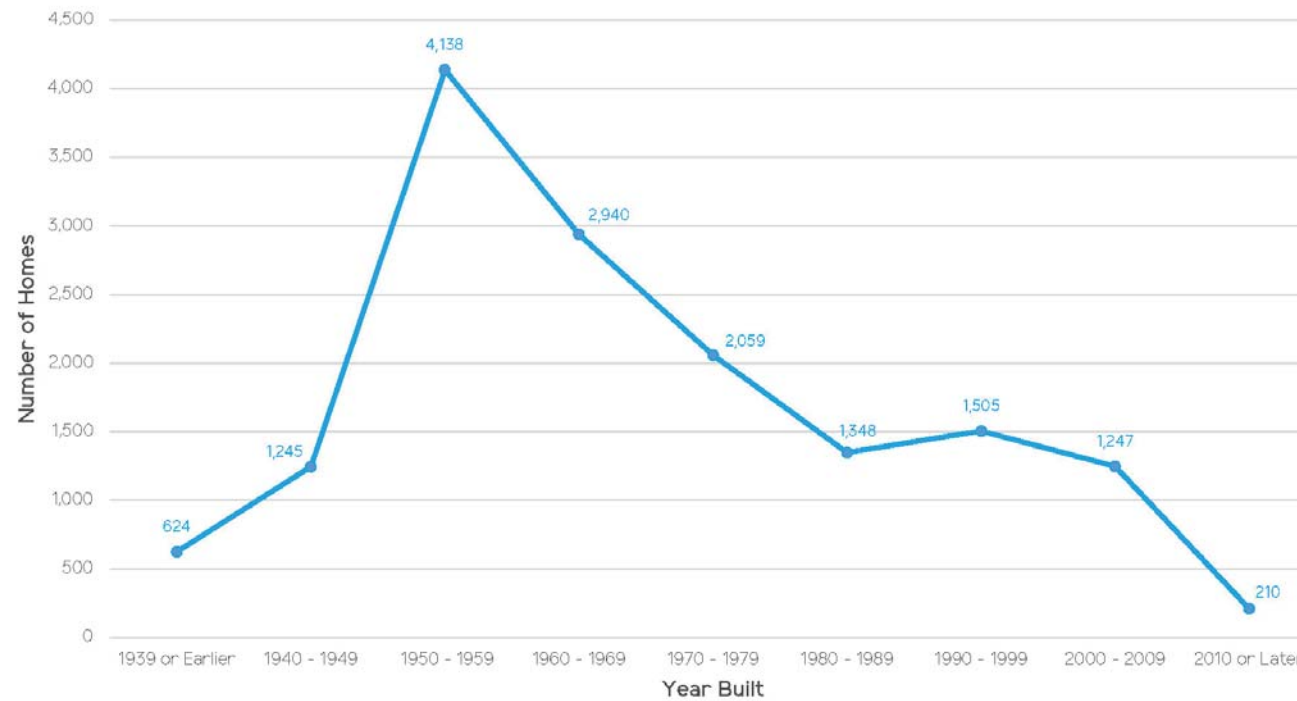
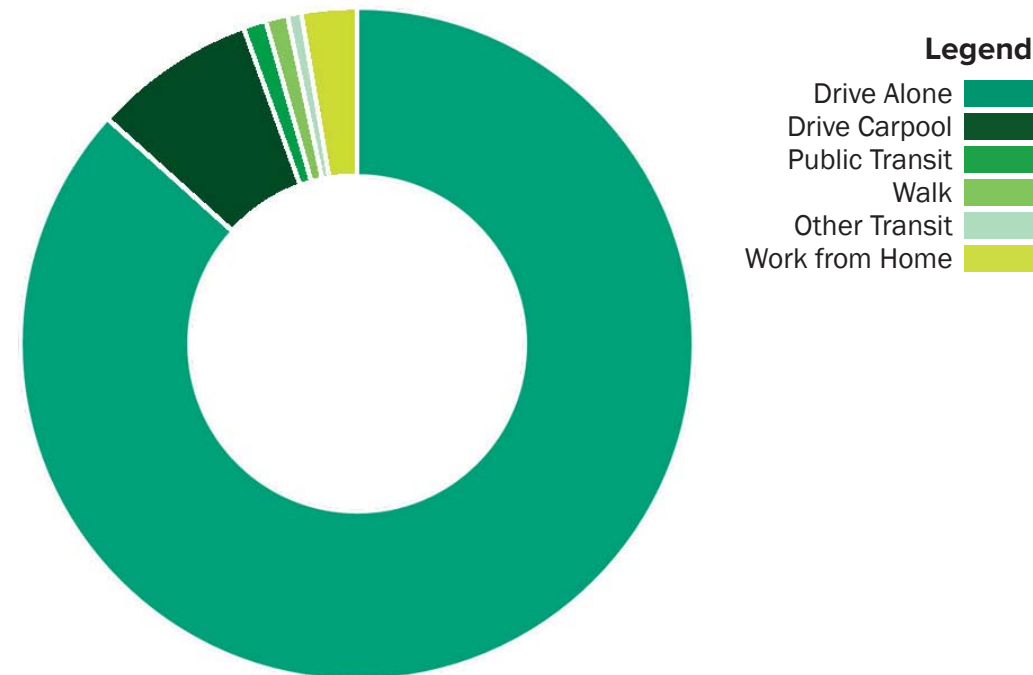


FIGURE 2.4 COMMUTING TYPES



LAND USE & ZONING

As Figure 2.5 Existing Land Use demonstrates, the Vivion Road corridor is primarily fronted and surrounded by residential uses, with distinct commercial nodes at North Oak Trafficway, Northeast Antioch Road/Chouateau Trafficway, and North Brighton Avenue.

Small pockets of commercial are also scattered along the corridor, but much of the corridor is fronted by residences, which is an outmoded style of development.

Green space fronts the corridor at the southeast corner of the North Oak Trafficway intersection (Anita B. Gorman Park), at Northeast 47th Street (Northgate Park), and at North Norton Avenue (Penguin Park). While these are significant assets, generally, green, public space along the corridor is limited.

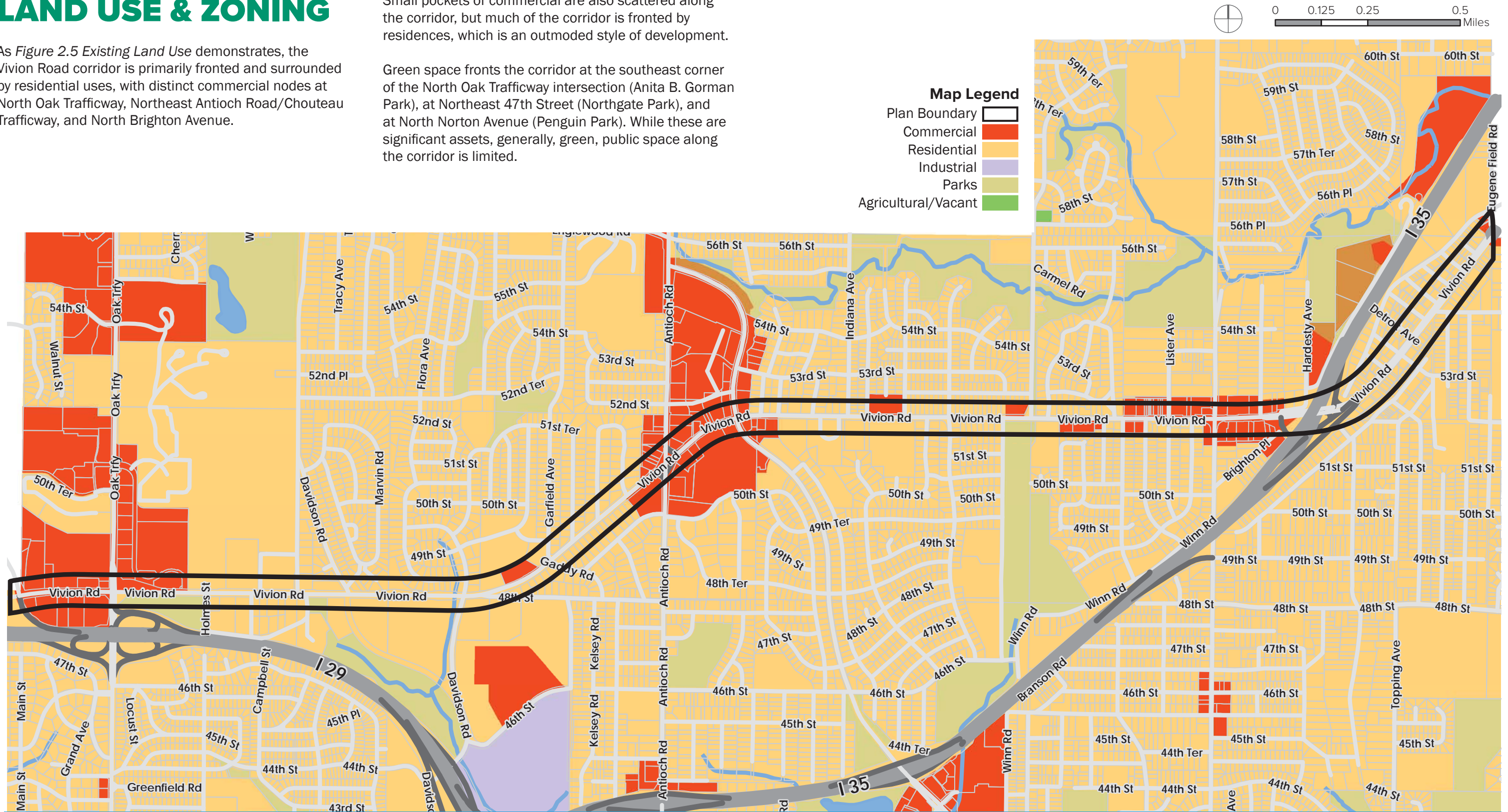


FIGURE 2.5 EXISTING LAND USE

Correlating with the land use characteristics, the zoning classifications along the corridor are primarily single family residential, as shown in *Figure 2.6 Existing Zoning*. Pockets of multi-family residential zoning exist closer to the commercial nodes, with the exception of the apartments at North Highland Avenue.

Between Chouteau Trafficway and North Brighton Avenue, the corridor is bordered by a mixture of neighborhood business and single family residential zoning districts. Within the commercial nodes, zoning varies. For example, at the North Oak Trafficway node, B-2 (Neighborhood Business), B-3 (Community Business), R-1.5 (Multi-Family Residential), UR (Urban Redevelopment) each exist. Despite this variation in zoning, the uses are typical of suburban retail development.

Map Legend

Plan Boundary		O-2	
B1-1		R-0.5	
B2-1		R-1.5	
B2-2		R-2.5	
B3-2		R-5	
B4-2		R-6	
B4-5		R-7.5	
M1-5		R-80	
M3-5			
UR			
MPD			

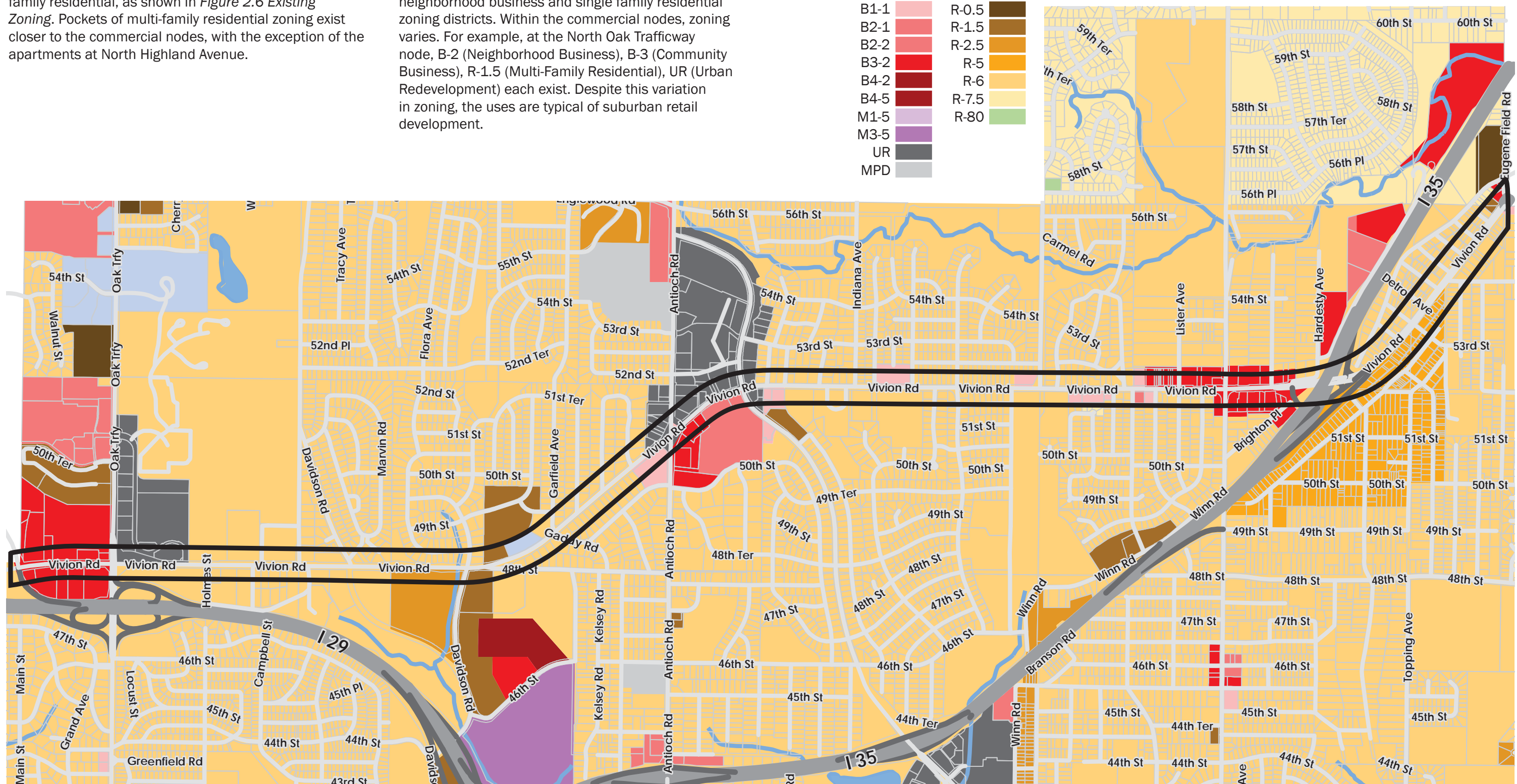
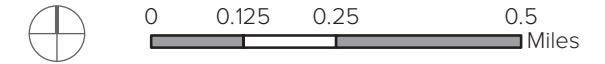


FIGURE 2.6 EXISTING ZONING

The fairly homogenous land use patterns can also be seen in *Figure 2.7 Points of Interest*. Six churches front the corridor, while a multitude of others are located within one-half mile. It is important to note that little to no “entertainment” points of interest are shown on the map, which may play a role in the corridor’s lack of vibrancy. On the other hand, a series of schools are located within close proximity to the corridor, which further imports the corridor’s connectivity.

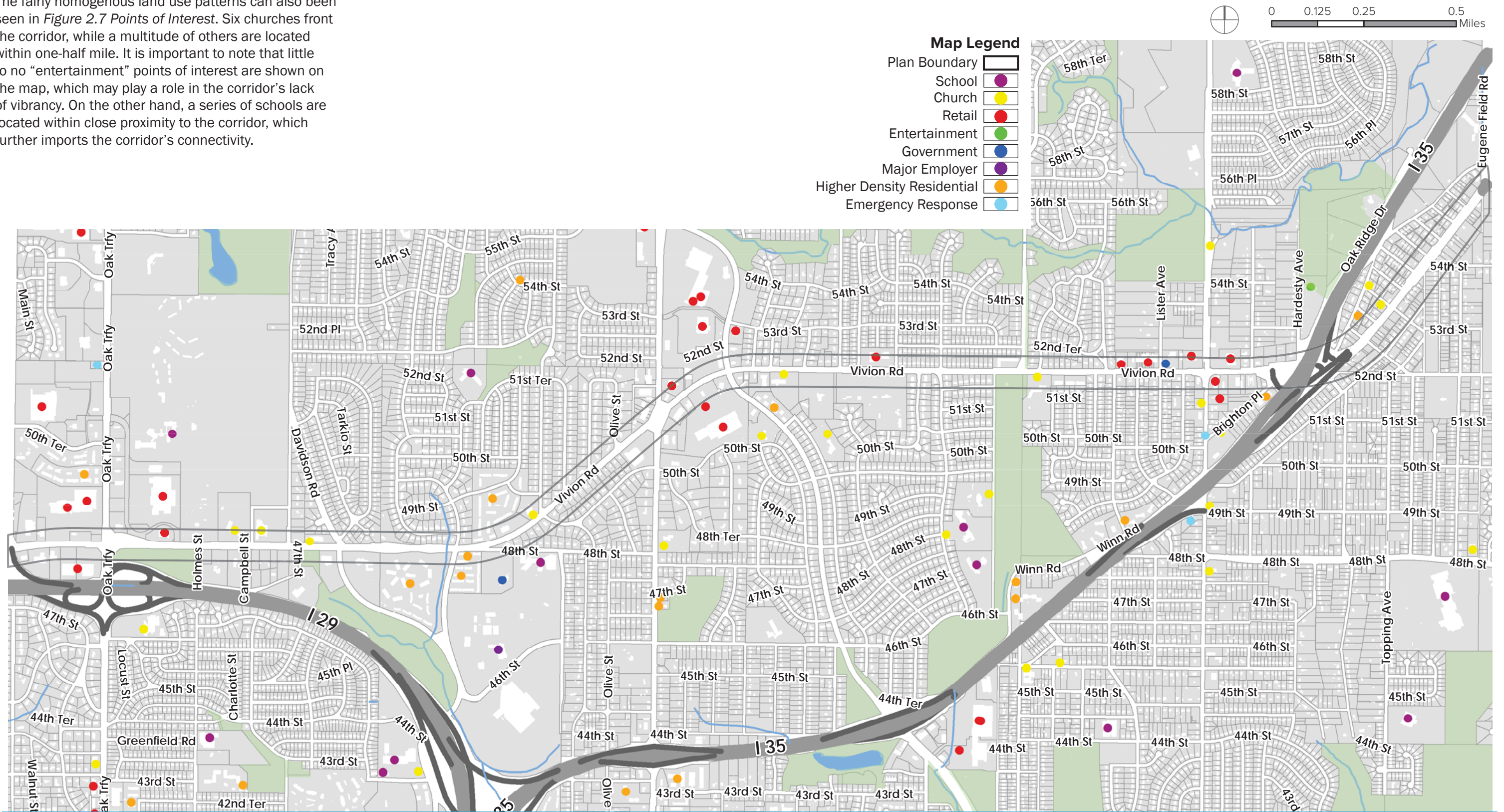


FIGURE 2.7 POINTS OF INTEREST

Figure 2.8 Area Neighborhoods shows the distribution of neighborhoods along the corridor. Neighborhood groups and associations can play a key role in corridor revitalization through property and public space clean-up, as well as advocacy efforts. Additionally, streetscape enhancements may include neighborhood markers that provide an identity to each specific neighborhood.

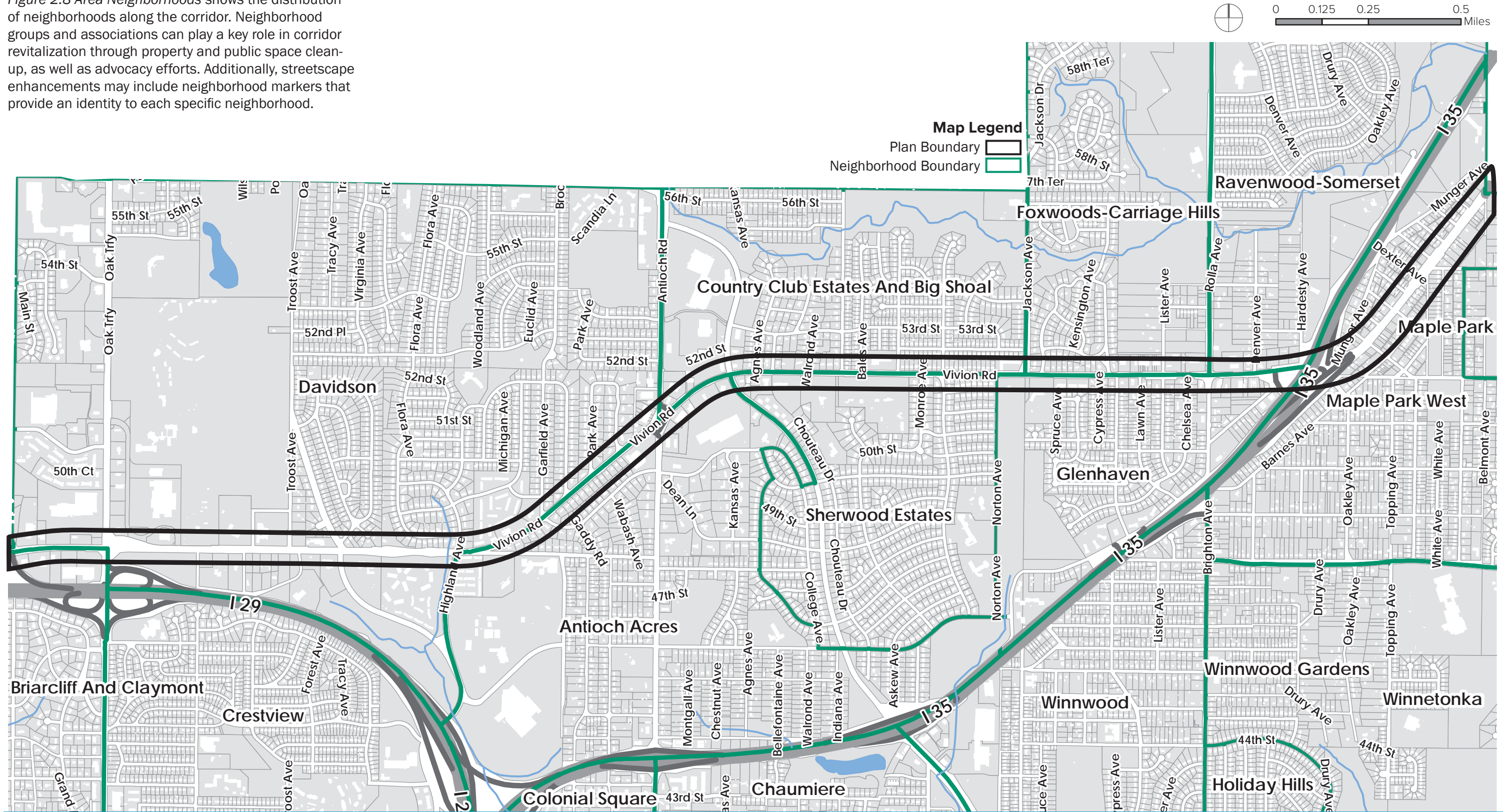


FIGURE 2.8 AREA NEIGHBORHOODS

TRANSPORTATION AND MOBILITY NETWORKS

VEHICULAR NETWORK

Given its location and historical development within the greater Kansas City metropolitan area, vehicular circulation patterns along Vivion Road (US 69 Highway) are dependent on other major four-lane traffic corridors' traffic flow, including North Oak Trafficway, Chouteau Trafficway, and North Brighton Avenue. These major intersections serve as key entry points to the corridor and provide an opportunity for gateways, wayfinding signage, and branding elements. Of these other major corridors, North Oak Trafficway and North Brighton Avenue are classified as thoroughfares, while Chouteau Trafficway is designated as a boulevard. Vivion Road is similarly classified as a thoroughfare because of its surrounding commercial uses. The typical context for this classification is “a commercial area with many small strip centers and pad sites with buildings typically set back behind front parking lots” (Kansas City’s Major Street Plan, p. 5). An emphasis is placed on “through” traffic, unlike the boulevard classification that aims to provide a pleasant drive where vehicles and pedestrians can peacefully coexist.

Antioch Road (MO-1), while not classified as a major street, is also important to consider. During the community engagement process, as summarized in *Section 3.0 Community Engagement*, several stakeholders noted the importance and potential of the Vivion/Antioch intersection, despite the skewed layout of the intersection. Gateway and public amenity designs were explored to enhance this intersection, and prime it for reinvestment.

Northeast 48th Street was noted as a necessary area of improvement due to its alignment. As it does not meet Vivion Road at a 90-degree angle, visibility is a concern. The angle also presents a pedestrian connectivity issue, forcing pedestrians to cross an excessively wide intersection. Realignment concepts to improve the intersection’s functionality were discussed, as described in *Section 3.0* and *Section 4.0*.

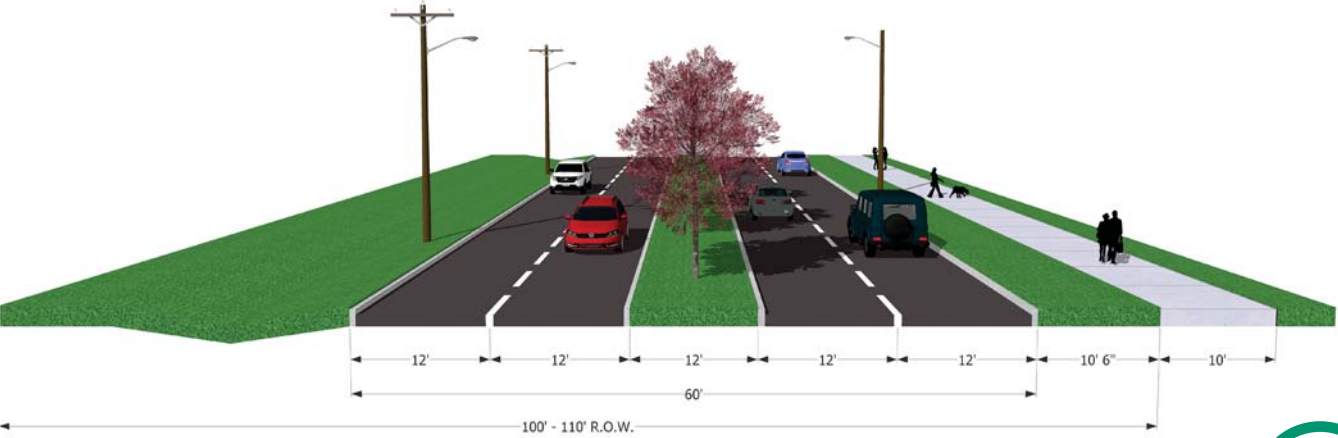
Vivion Road also connects to I-29 and I-35 on either end of the corridor, which provides a source of incoming traffic throughout the day. These “bookends” serve to establish Vivion Road as a means to get to an interstate, instead of a destination in itself. In between the interstates, the typical road profile consists of four through lanes, two going each direction. Moving from west to east, five slightly different road profiles are utilized, as shown in *Figure 2.9 Existing Road Profiles*, and described as follows:

- **Typical Road Profile #1** From North Oak Trafficway to North Highland Avenue, the typical road profile consists of four traffic lanes with a center, often landscaped median. A 10-foot wide shared-use trail runs along the south side of the majority of this section, with a 10.5-foot green buffer from the back of curb to the edge of the trail.
- **Typical Road Profile #2** From North Highland Avenue until Olive Street, the typical road profile consists of four 11-foot traffic lanes with shoulders on either side and no median separation. Sidewalks and curbs are primarily nonexistent.
- **Typical Road Profile #3** From Chouteau Trafficway to North Cleveland Avenue, the typical road profile consists of five traffic lanes, with a middle two-way left turn lane and raised shoulders on either side of the road.
- **Typical Road Profile #4** From slightly east of North Cleveland Avenue to North Brighton Avenue, the typical road profile consists of five traffic lanes, with a middle two-way left turn lane. Sidewalks do not typically exist in this section.
- **Typical Road Profile #5** East of I-35 to the Claycomo city limit, the typical road profile consists of four traffic lanes with a center median and shoulders on either side of the road. Sidewalks do not typically exist in this section.

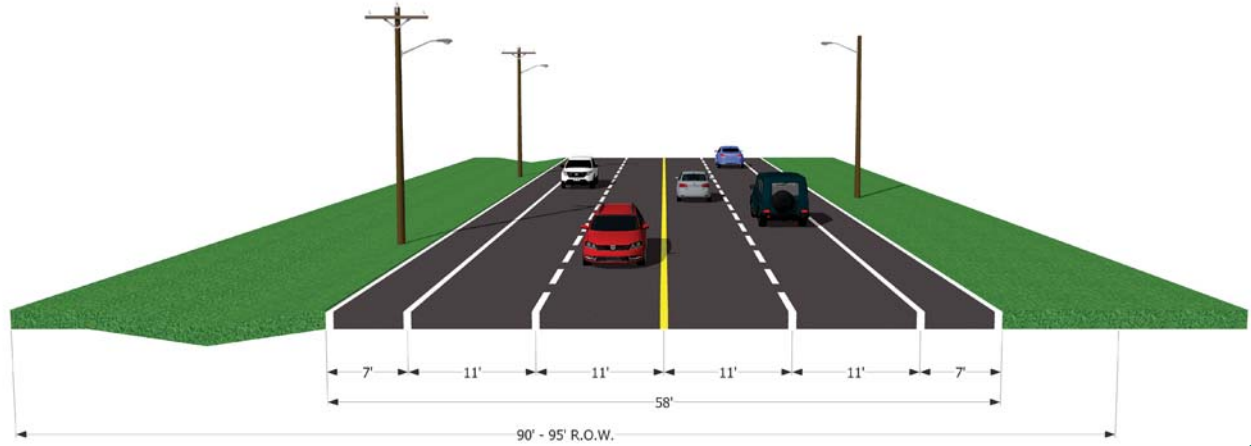


The top image shows the current layout of the 48th Street intersection. The middle image shows the Typical Road Profile #3, with the raised shoulders. The bottom image shows Typical Road Profile #4.

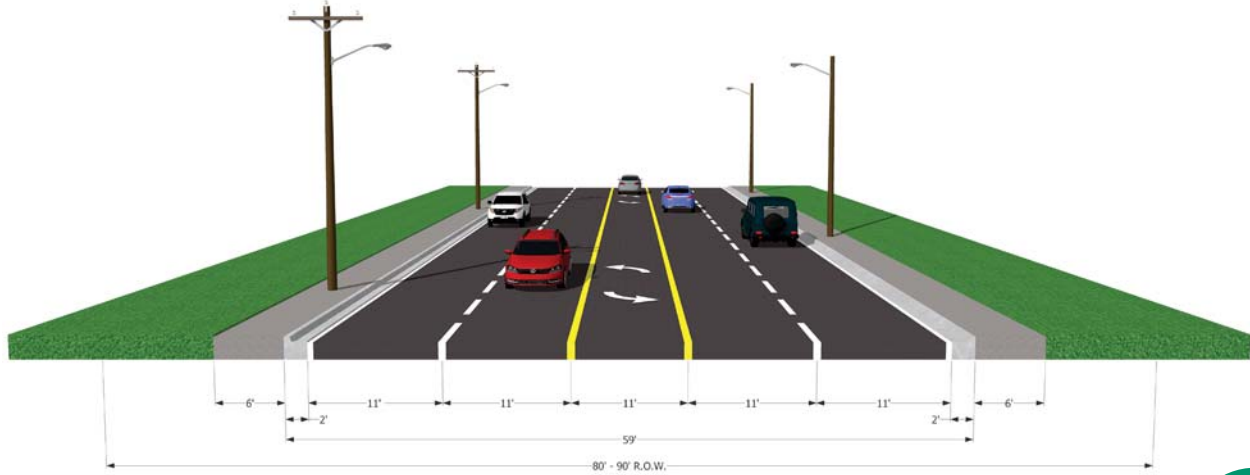
Figure 2.9 Existing Road Profiles



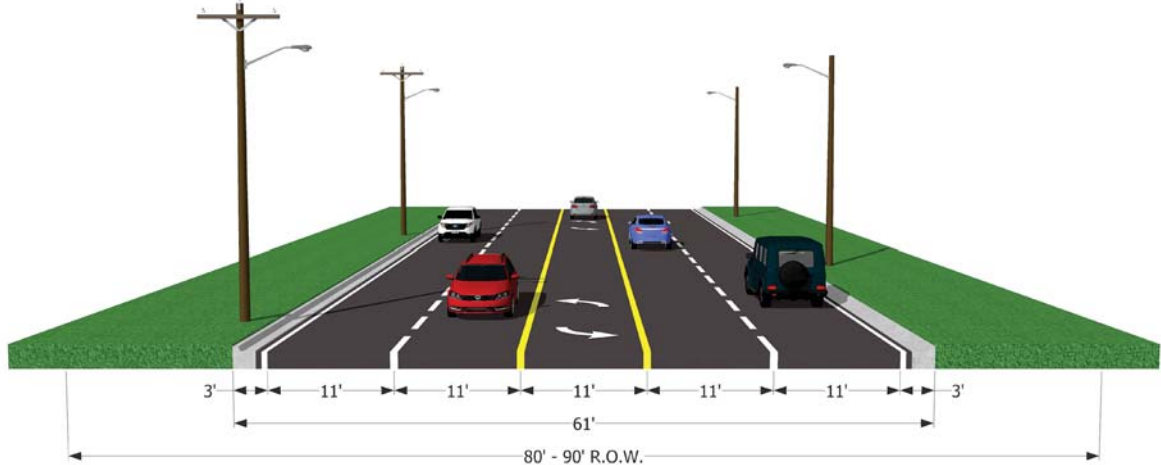
4 LANES WITH CENTER MEDIAN / WEST OF HIGHLAND AVE. 1



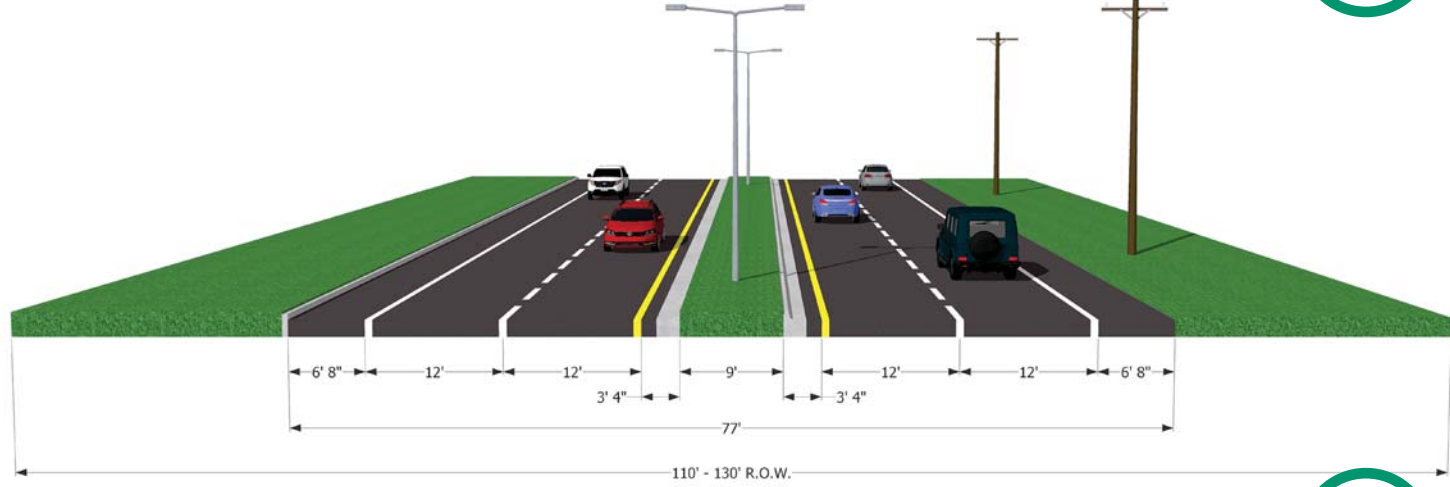
4 LANES WITH SHOULDER / HIGHLAND AVE. TO OLIVE ST. 2



5 LANES WITH RAISED SHOULDER / CHOUTEAU TO CLEVELAND 3



5 LANES / CLEVELAND AVE. TO BRIGHTON AVE. 4



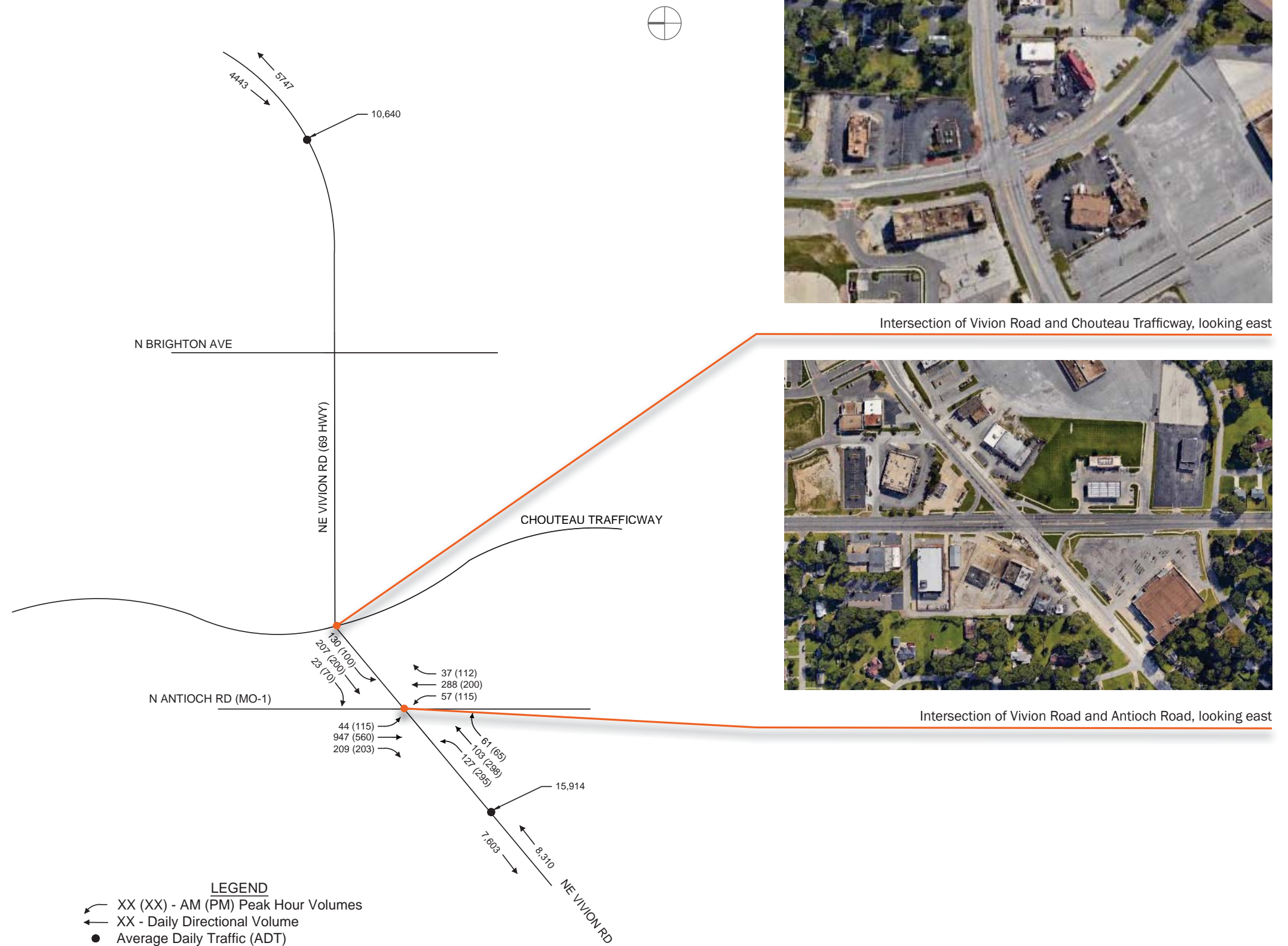
4 LANES WITH CENTER MEDIAN AND SHOULDER / EAST OF I-35 5

Commercial access drives and residential driveways are key factors in Vivion's streetscape. The number of residential driveways connected to Vivion Road (US 69 Highway) is alarming. The corridor's speed limit is too high to safely accommodate traffic backing out onto the road, and this obsolete style of development is difficult to overcome. Similarly, the Antioch Road (MO-1) intersection suffers from an abundance of commercial access drives, instead of a consolidated flow of traffic from each corner.

The traffic patterns and flow along Vivion Road are in general working order for a dated commercial corridor. As a measure of the traffic flow, traffic counts, in the form of Average Daily Traffic (ADT) and Annual Average Daily Traffic (AADT), were supplied by MoDOT and analyzed. Through this analysis it became clear that the Antioch Road intersection is heavily traversed, with peak traffic times of 7:00 a.m., 12:30 p.m., and 4:45 p.m. *Figure 2.10 Existing Traffic Volumes* shows slightly under 16,000 ADT near the Antioch Road intersection. Moving to the east, traffic levels recede; approximately 10,600 ADT are measured just east of the Brighton Avenue intersection. A slight increase of approximately 2,400 AADT, equalling 13,556 AADT, is measured east of I-35 to the I-435 interchange, outside of the study area.

While vehicular traffic patterns and flow are adequate for motorists, not all user types are provided with convenient, safe access to destinations. In fact, the top issue identified throughout the community engagement process was increased connectivity through the use of sidewalk infill, crosswalks, bike lanes, and pedestrian activated signals.

Figure 2.10 Existing Traffic Volumes



Intersection of Vivion Road and Chouteau Trafficway, looking east



Intersection of Vivion Road and Antioch Road, looking east

TRANSIT NETWORK

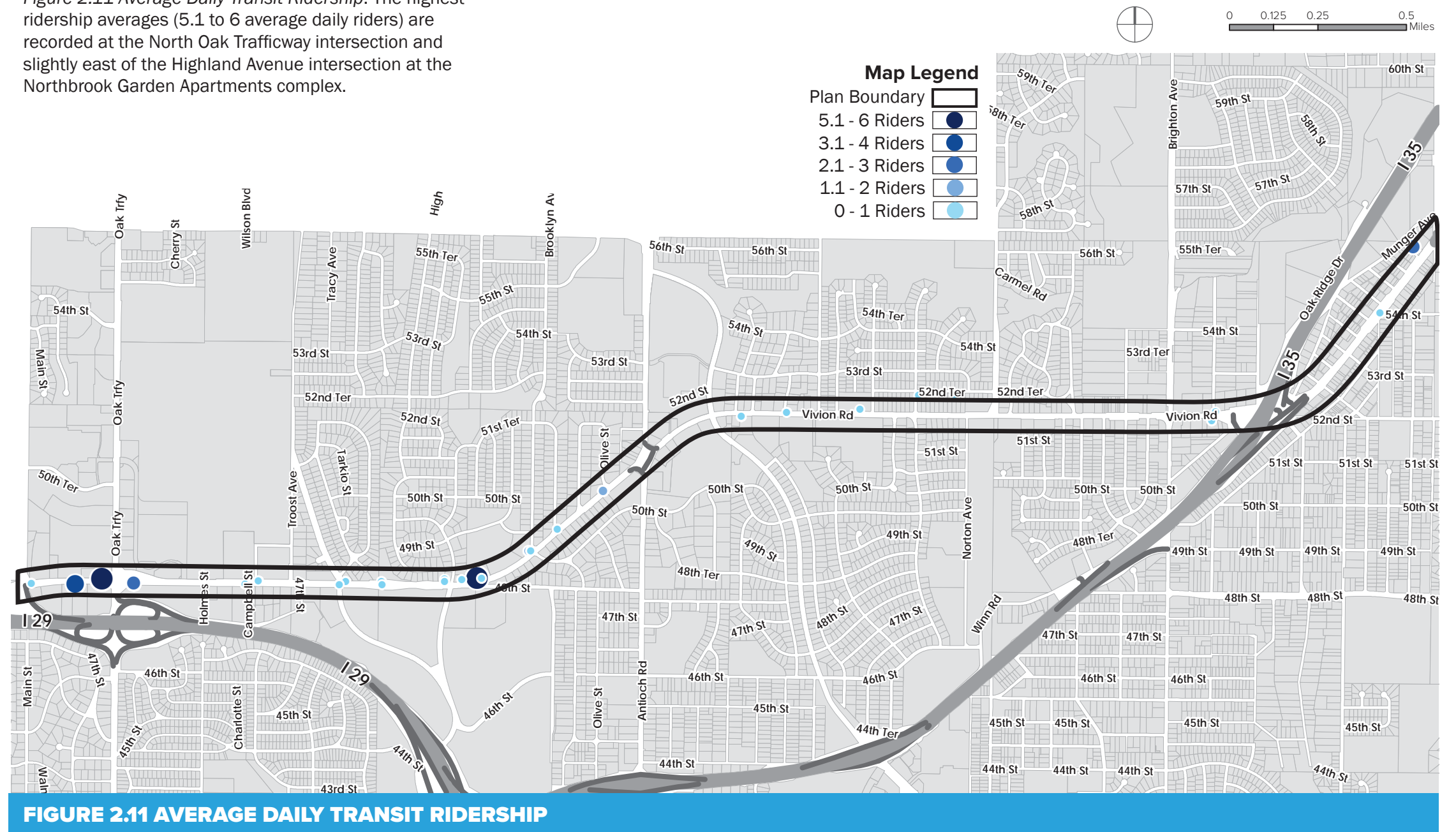
Source - www.kcata.org

The Kansas City Area Transportation Authority (KCATA) provides regional transit service to the entire Kansas City metropolitan area through 65 Metro bus routes and Main Street MAX and Troost MAX Bus Rapid Transit. KCATA also provides paratransit and vanpool services. The following list of transit routes serve Vivion Road in some fashion, but not all travel along Vivion Road. It is important to note that the descriptions of the routes are not representative of their entire course; instead, only the section serving Vivion Road is described.

- **Route #135 Winnwood-69 Highway** reaches Vivion Road at Brighton Avenue from the south and travels along Vivion Road until reaching the Claycomo City limits. Weekday service only.
- **Route #38 Meadowbrook** reaches Vivion Road at Highland Avenue, heads east until Antioch Road, circles at the Antioch park-and-ride and continues along Antioch Road. Weekday and Saturday service.
- **Route #133 Vivion/Antioch** reaches Vivion Road at Antioch Road, circles around Antioch park-and-ride and heads south. Weekday service only.
- **Route #136 Boardwalk/Antioch** reaches Vivion Road from the north, circles at Antioch park-and-ride, heads east along Vivion Road, turns north at Jackson Avenue, west at 52nd Terrace, south at Cleveland Avenue, and back west along Vivion Road until reaching Antioch Road. Weekday service only.
- **Route #142 North Oak** passes Vivion Road at the North Oak Trafficway intersection, but does not travel along Vivion Road. Weekday and weekend service.
- **Route #237 Gladstone/Antioch MetroFlex** services Vivion Road from Troost Avenue to Brighton Avenue.
- **Route #243 Riverside/Antioch** services Vivion Road between North Oak Trafficway and Antioch Road. Weekday service only.

A free park-and-ride is available at the northeast corner of the Vivion Road and Antioch Road intersection.

While transit services are offered at various points along the corridor, transit ridership is relatively low, as *Figure 2.11 Average Daily Transit Ridership*. The highest ridership averages (5.1 to 6 average daily riders) are recorded at the North Oak Trafficway intersection and slightly east of the Highland Avenue intersection at the Northbrook Garden Apartments complex.



PEDESTRIAN NETWORK

A complete pedestrian network includes well-maintained, well-located, and accessible sidewalks, trails, crosswalks, and pedestrian activated signals. Currently, Vivion Road does not meet this standard; suitable sidewalk widths are very rare along the corridor, primarily due to grading inadequacies and the location of utility poles. Additionally, a significant stretch of the corridor utilizes drainage ditches on one or both sides of the road; therefore, pedestrians are either forced to walk on the grass or cross the street. This antiquated development style limits the corridor’s connectivity and will impact the viability of sidewalk installations in some areas due to the high cost of appropriate grading solutions.

Certain sections of the road have raised shoulders that practically function as a sidewalk, the larger section of which lies between North Bellefontaine Avenue to approximately North Cleveland Avenue along Vivion Road, but these typically abut the back of curb, instead of providing a buffer space between the road and sidewalk. Additionally, existing crosswalks are in need of repainting, and often only provide east-west connections, as shown in *Figure 2.12 Pedestrian/Bicyclist Transportation Network*. Both issues present pedestrian safety concerns.

Community engagement exercises revealed the need to improve pedestrian connectivity at all major intersections along Vivion Road, as crosswalks do not exist in all directions at each intersection and ADA accessibility is not ensured. The major intersections are typically commercial in nature; this use generates higher activity, further increasing the need for sidewalks on both sides of the road and safe connections to cross the street. Fortunately, within the commercial nodes, sidewalks have been installed in some areas, but the network is spotty at best.

The I-35 overpass in particular presents special connectivity and circulation concerns. As it currently exists, it acts as a barrier between the neighborhoods to the east of the overpass and the commercial area to the west.

Much of the residential sections of the corridor do not have sidewalks on either side of the road. While this is a factor of the style of development—driveways abutting the main commercial road—residential areas must be connected to the greater system in order to access destinations without a vehicle. This may require eliminating driveways along the corridor, relocating power poles, and addressing grading concerns.

The existing and proposed trail network does provide a level of connectivity, but it must be integrated into current sidewalk networks, transit service areas, and other typical pedestrian infrastructure to create a well-connected and reliable system. Presently, there is an existing 10-foot trail from North Oak Trafficway to North Highland Avenue. Future plans for the Vivion Road Trail show it connecting with the Big Shoal Greenway Trail and Chouteau Trail at Chouteau Trafficway.

BICYCLE NETWORK

Currently, Vivion Road does not have any on-street bike lanes and has a posted speed limit of 40 miles per hour. Both factors may work to limit corridor bicycle traffic.

Bike traffic is served within the Plan area from the trail stretching from North Oak Trafficway to North Highland Avenue. This Citywide Trail, as designated in the Trails KC Plan, is a shared-use path, but is typically seen as a recreational opportunity, rather than a viable means of daily transportation. On-street bike lanes are planned for Vivion Road from Chouteau Trafficway to the Claycomo city limit, as shown in *Figure 2.12 Pedestrian/Bicyclist Transportation Network*.

Due to the lack of current facilities and connectivity between the neighborhoods, places of employment, and recreational opportunities, bike traffic is limited along the corridor.



The top image demonstrates the widespread lack of sidewalks along the corridor, specifically within commercial nodes. The bottom image shows the extent of the bike network along Vivion Road: the Vivion Trail.

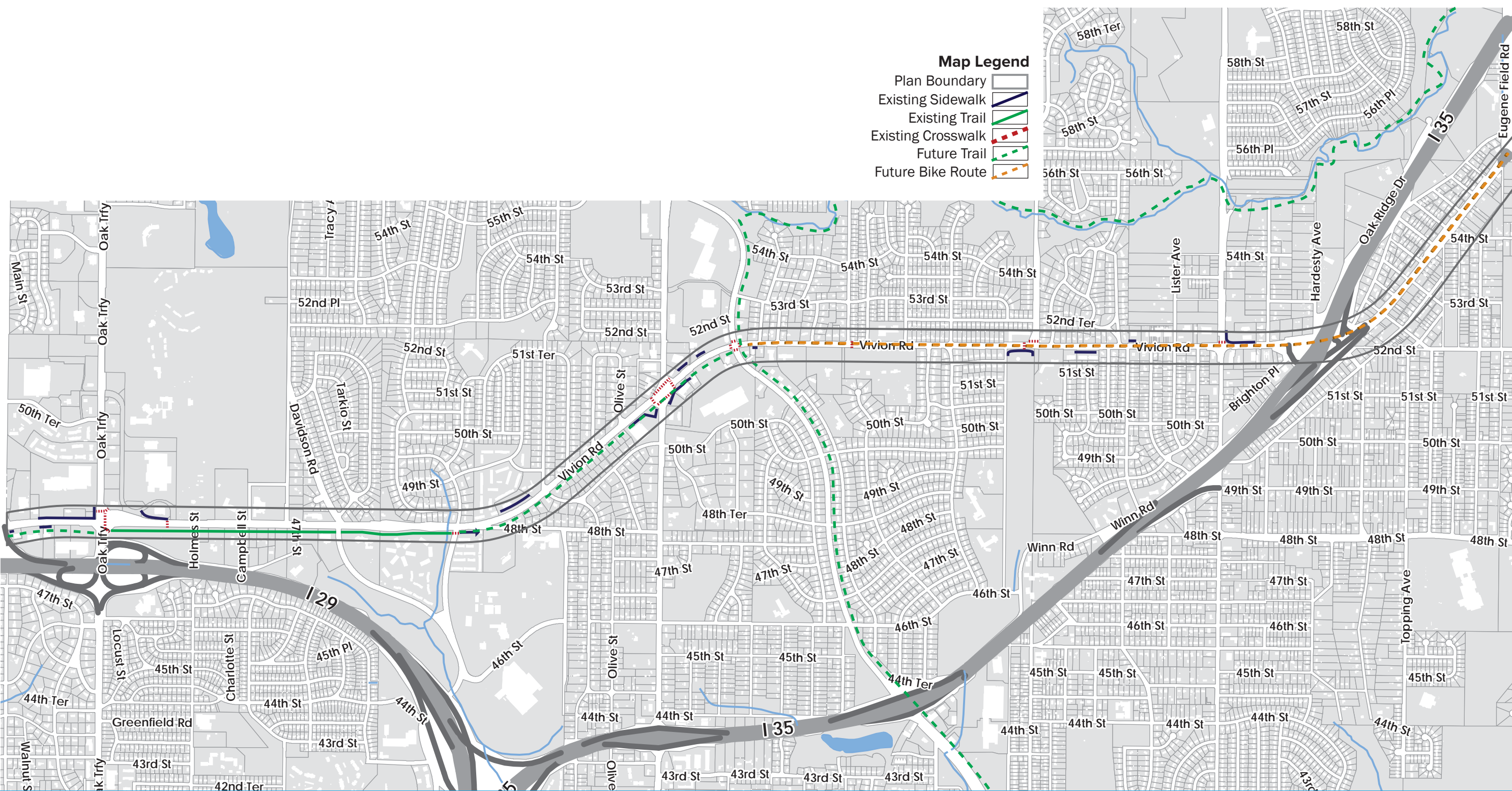
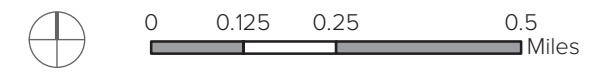


FIGURE 2.12 PEDESTRIAN/BICYCLIST TRANSPORTATION NETWORK



The left image demonstrates the way in which the power poles obstruct the potential placement of sidewalks. The right images show the different functionalities of drainage ditches along the corridor.



UTILITIES INFRASTRUCTURE

The infrastructure of Vivion Road is typical of a dated commercial corridor. A series of major infrastructure updates is necessary to realize the vision of a modern urban roadway. Issues are primarily instigated by the current placement of the power poles and lack of curbs.

The wide use of shoulders and drainage ditches on one or both sides of the road often do not contribute to a positive aesthetic, as they can be overgrown or cause spot flooding. Additionally, the sloping required for a proper drainage ditch limits the viability of sidewalks and other pedestrian amenities, such as enhanced transit stops. Combined with the power poles, streetscape enhancements—such as shrubbery and street trees—are also difficult to locate. Additionally, the cost to bury the power lines is very high and requires much coordination with Kansas City Power and Light and the City.

STORM WATER, SANITARY SEWER, AND WATER

Kansas City Water Services provides water, wastewater, and storm water services to Vivion Road. The current sewer system is aging. Water Services has improved the waterline along Vivion Road in various locations; as these improvements continue, projects related to this Plan should be coordinated with such improvements. Additionally, Water Services is completing an inflow and infiltration reduction project for Line Creek/Rock Creek Basin Area 2 to determine the location of necessary sewer repairs, reduce the risk and frequency of sanitary sewer overflows, and to rehabilitate the sewer system. Construction for the project is set to occur between January 2017 and February 2018. Vivion Road, from North Oak Trafficway to North Brooklyn Avenue, is a part of the study.

ELECTRICAL

Kansas City Power and Light has overhead powerlines along the corridor that adequately provides electric service to the existing developments. While entirely functional, the placement of the power poles, as previously mentioned, limits the viability of sidewalks and other public right-of-way enhancements.

TOPOGRAPHY

Elevation throughout the Plan area varies. The highest elevation is 940 feet above sea level, occurring generally from North Garfield Avenue to I-35. In turn, the lowest elevation is 840 feet above sea level, located primarily at the eastern most portion of the Plan boundary. This change in topography across the site—combined with the winding layout of the road—contributes to the scenic potential of the corridor, allowing for the framing of desirable view at key locations.

Starting at the western end of the plan boundary, there is a gradual increase in grade moving towards the commercial node at North Oak Trafficway. From North Holmes Street—slightly east of the node—the grade gradually declines to Northeast 47th Street, setting up nice views of the roadway ahead. Small, but steady increases in grade follow, until decreasing minimally at Highland Avenue intersection. The roadway progressively increases in grade once more until North Brooklyn Avenue. There are minimal grade changes until North Bales Avenue; a more significant increase in grade follows until North Monroe Avenue. At Northeast Jackson Avenue, a moderate increase in grade follows until North Cypress Avenue. Only shallow changes in grade exist until Brighton Avenue. The roadway inclines until reaching North Denver Avenue, remains fairly level, and declines once more at Compton Road. Gradual declines in elevation exist until reaching the Claycomo city limits.

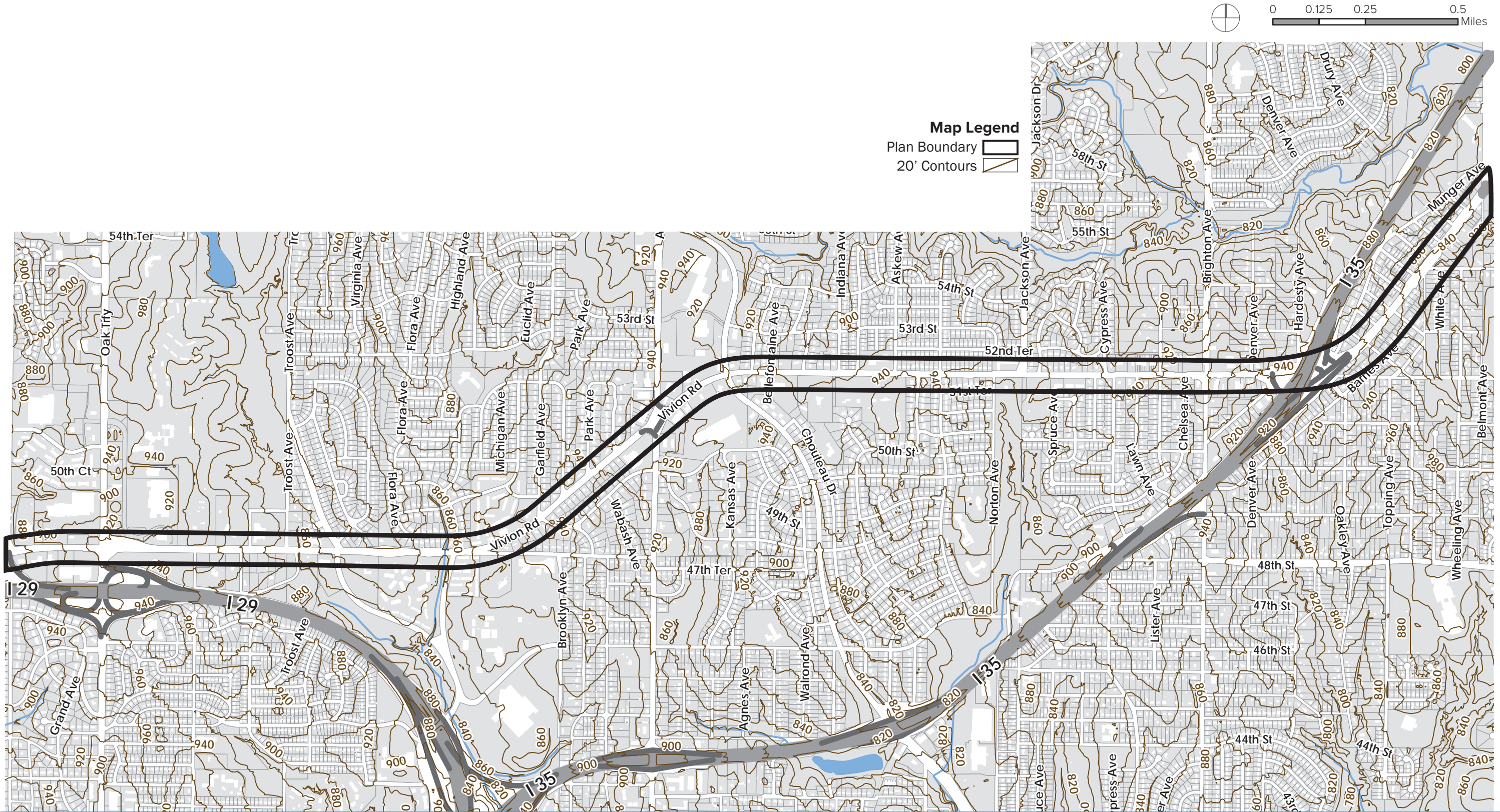


FIGURE 2.13 TOPOGRAHY

STREETSCAPE CONDITIONS AND CHARACTER

Much of the Vivion Road streetscape is plagued by outdated development styles and lacks modern amenities that make for an attractive urban roadway. The following subsections, while previously described in *Transportation and Mobility Networks or Utilities Infrastructure*, play a defining role in the aesthetic appeal of the Vivion Road streetscape. Each subsection details the current character and condition of the streetscape and begins to identify the issues this Plan aims to resolve.

ROADWAYS

Vivion Road is in relatively good condition. It typically consists of four through lanes of traffic, two lanes each direction, but the use of landscaped or paved medians or two-way left turn lanes varies along the corridor, as shown in *Figure 2.9 Existing Road Profiles*. For example, the intersection of Antioch Road and Vivion Road has small runs of medians in each direction, while the section of the corridor from I-29 to North Highland Avenue has a center, often landscaped median.

In terms of aesthetics, the current roadway, and specifically the undivided and two-way turn lane sections, create a bleak environment where traffic moves through the area quickly, rather than encouraging slower speeds that are conducive to a pedestrian-friendly environment.

CURBS AND GUTTERS

Curbs and gutters do not exist along the entire corridor. Instead, a combination of shoulders and drainage ditches provide stormwater management along certain sections of the roadway, as is seen east of North Highland Avenue to North Olive Street. The lack of storm inlets and curbs dates the corridor, and is seemingly rural in nature.

SIDEWALKS AND TRAILS

Sidewalks should provide a continuous system of safe and accessible pedestrian pathways. This continuous system has not yet been realized along Vivion Road, as sidewalks are extremely limited. It is important to note that the current low levels of pedestrian activity do not necessarily indicate low pedestrian demand. Rather, without a complete system of pathways, it is nearly impossible to estimate pedestrian demand, as individuals tend to walk in locations where those continuous connections are provided.

Without these connections, Vivion Road will continue to act as an urban thoroughfare, focused solely on the vehicle. When sidewalks are provided, they are only on one side of the roadway. The road section west of North Highland Avenue features a sidewalk on the north side of the roadway. This walkway is in good condition, runs parallel to the roadway, is typically 10-foot wide, and has a 10.5-foot turf buffer separating the sidewalk from the curb. Certain road sections, such as east of Chouteau Trafficway until North Cleveland Avenue, feature raised shoulders. In the absence of actual sidewalks, the shoulders function as pedestrian pathways of sorts, but they lack a buffer from oncoming vehicular traffic and are not ADA accessible or otherwise accommodating to pedestrian activity.

Figure 2.12 Pedestrian/Bicyclist Transportation Network shows the existing sidewalk and trail network, as well as the proposed future trail and bike facilities.

STREET LIGHTING

The light poles along Vivion Road have a very utilitarian aesthetic, but do provide adequate light for the corridor at night. Spacing on both the north and south side of the corridor is approximately 150-225 feet between poles. As shown in *Figure 2.9 Existing Road Profiles*, the street lights are primarily affixed to the power poles, while some feature a freestanding single-arm design. While functional, the street lights attached to the power poles add no detail, and likely detract, from the streetscape.

The typical road profile east of I-35 to the Claycomo city limit has double-armed street lights in the center of landscaped median, spaced approximately 210 feet apart. The light poles do not have any banners or signage.



The top image shows a well-maintained sidewalk; the sidewalks that do exist along Vivion Road are generally in good condition. The bottom left image shows the lack of curbs and gutters, though the bottom right image depicts a recent curb and gutter installation at Antioch Road, as well as other infrastructure improvements.



The top image shows the widespread lack of and poorly maintained landscaping along Vivion Road, specifically within the public right-of-way. The bottom image demonstrates the all too frequent commercial parking lots that front the roadway with no interior landscaping and minimal screening. The bottom image also shows an outdated pylon sign. While not a frequent occurrence, such signs date the corridor and may provide inaccurate information.

LANDSCAPING

Landscaping along Vivion Road, in both the commercial and residential areas is underwhelming. Street trees are limited and parking lots are not entirely screened. It is clear, though, that the Vivion Road community has placed an emphasis on landscaping in the past. The northwest and southeast corners of the North Oak Trafficway/Vivion Road intersection both feature a mixture of annuals, flowering shrubs, and overstory plantings, outlined by circuitous walking paths. Both corners add visual interest to the intersection. Similarly, newer developments, such as Lowe’s (4811 North Oak Trafficway) and Walmart Neighborhood Market (5261 NE Antioch Rd) have been developed with landscaping in mind, through the use of landscaped medians in the parking lots. As additional development changes the appearance of Vivion Road, the focus on landscaping will greatly improve the aesthetic of the corridor.

Though new developments are typically focused more on aesthetics, the public streetscape must be improved in order to combat the existing and older development awash in asphalt. In particular, the screening requirements for parking lots are most applicable to the public streetscape and must be rigorously enforced as properties are redeveloped or enhanced. Per the Zoning and Development Code, the requirement is as follows:

Excerpt from 1.8.5.1 88-425-05 Perimeter Landscaping of Vehicular Use Areas

“Perimeter landscaping adjacent to street rights-of-way must be provided in the form of a perimeter landscape buffer strip located between the vehicular use area and the street right-of-way...the landscape buffer strip must be at least 10 feet in width and be planted with at least one tree per 30 linear feet of landscape strip and enough evergreen shrubs to form a continuous visual screen at least 3 feet in height after the first growing season.”

When implemented and enforced regularly, the overstory requirement of one tree per 30 feet and a continuous three-foot visual screen of understory plantings is more than sufficient, but unsurprisingly, this regulation has not been realized along the entirety of the corridor’s commercial properties.

ACCESS

The nature of aged commercial corridors is to provide an overabundance of commercial access drives. This lack of access drive consolidation has a negative impact on traffic flow as vehicles are entering and exiting the corridor in multiple locations. For example, the intersection of Chouteau Trafficway and Vivion Road has not been reinvested in as of late. As such, the southwest corner of this intersection hosts a small development, but has four access drives.

Much of the corridor is fronted by residential properties; therefore, a large number of driveways are connected to Vivion Road. This style of development creates a safety hazard, as the homeowners backing out must navigate traffic moving at a fast pace. Additionally, when homes front street, much of the streetscape’s appeal relies on the individual homeowner to properly maintain and enhance their property.

GATEWAYS

Gateways monuments and features are often utilized by communities, districts, or neighborhoods to define area boundaries, mark an entry point into that area, and/or establish a brand or identity.

Typically, gateways are developed as a “family,” providing a hierarchy to mark primary, secondary, and tertiary entry points or locations within the defined area. Gateways are integral to successful streetscape projects. Vivion Road currently has some semblance of a gateway at the North Oak Trafficway intersection through the use of a water features, winding trails, and landscaping, but other prominent gateways must be identified, marked, and enhanced.

SIGNAGE

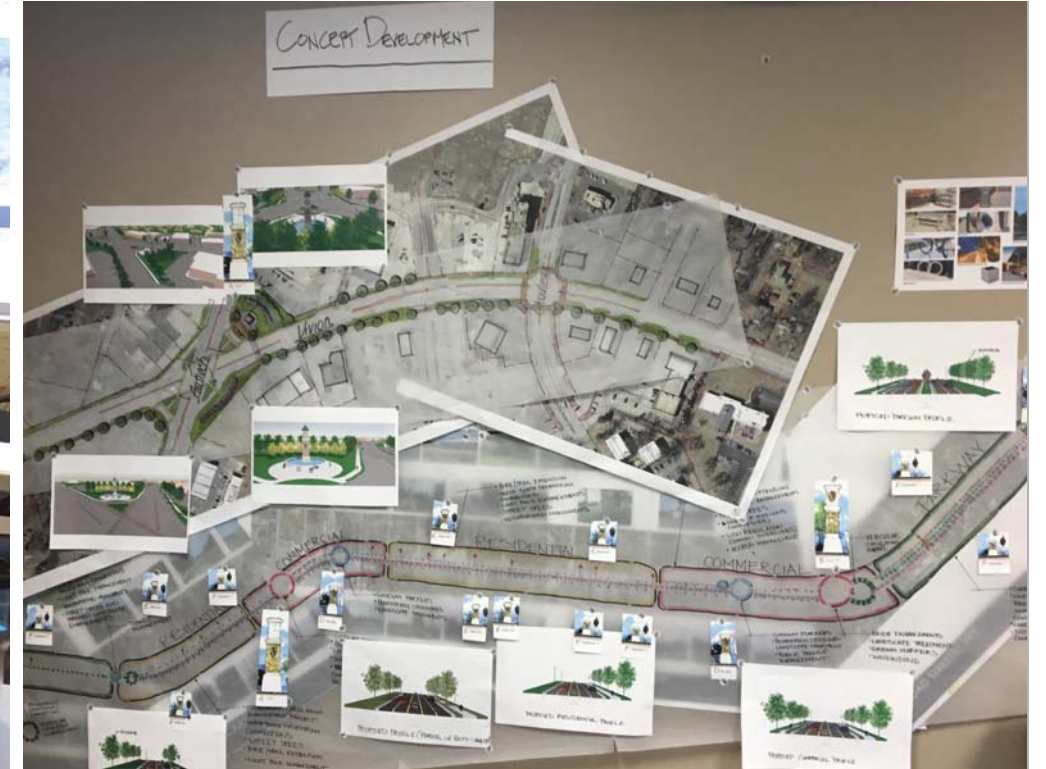
As is common in corridors of this age, Vivion Road’s commercial nodes feature a noticeably high number of pole signs and signs with incorrect business identifications. The smaller pockets of commercial uses adjacent to residences also often utilize pole signs with little to no landscaping around the base. Fortunately, an increasing amount of newer developments, largely concentrated at the North Oak Trafficway intersection, are utilizing monument signs or more decorative pylon signs, but very few have masonry bases. As a positive example, the North Oak Village Development—home to Lowe’s—has a masonry pylon sign.

This mixture of sign heights, materials, and ages suggest that City staff and some newer (and often larger) tenants are interested in lower impact, higher quality signage. This sentiment must be codified in the Zoning and Development Code.





3.0 COMMUNITY ENGAGEMENT



Quick Facts

1 VISIONING WORKSHOP

- When:** July 13, 2016
- Where:** Northland Neighborhoods, Inc. (4420 Chouteau Tfwy.)
- What:** Presentation + Programming Sessions + Exercises
- Who:** Approximately 20 stakeholders

2 DESIGN CHARRETTE

- When:** August 9 - 11, 2016
- Where:** Northland Neighborhoods, Inc. (4420 Chouteau Tfwy.)
- What:** 3 Stakeholder Sessions + 1 Board Meeting + 1 Public Open House
- Who:** Approximately 60 attendees

3 TECHNICAL/STEERING COMMITTEE MEETINGS

- When:** Regularly scheduled throughout planning process
- Where:** Northland Neighborhoods, Inc. (4420 Chouteau Tfwy.)
- What:** Presentation + Committee Discussion
- Who:** Technical/Steering Committee Members

4 PLAN REVIEW SESSION

- When:** October 19, 2016
- Where:** Northland Neighborhoods, Inc. (4420 Chouteau Tfwy.)
- What:** Presentation + Committee Discussion
- Who:** Steering Committee Members

INTRODUCTION

As the blueprint for the future of Vivion Road, it was critical that surrounding community members and key stakeholders were invited into the conversation to develop the Plan. An extensive, multi-phased outreach effort was conducted in order to blend the planning team’s technical knowledge with the community members’ on-the-ground knowledge. This assortment of information was gathered through a collaborative, engaging, and personal community engagement process, as the planning team recognizes that a proper plan is developed with the community, and not just for it.

Each engagement session provided attendees with the opportunity to share their ideas for the future of the corridor. The input and feedback received through a series of workshops, meetings, and charrettes, ultimately crafted a corridor vision, along with specific guiding principles that will direct Vivion Road’s future. After each session, the planning team analyzed the comments and graphics and documented the formal and informal conversations that took place. Engagement was then used to generate potential solutions, designs, and strategies to improve the areas of need along the corridor. Ultimately, this engagement information shaped and reshaped the Plan’s priorities and recommendations. The following section summarizes this participatory process and its outcomes; the entire community engagement process is detailed in *Appendix A. Complete Community Engagement Process.*

VISIONING SESSION

PURPOSE

As the first step in the community engagement process of the Plan, the Visioning Workshop sought to: (1) identify the needs, desires, opportunities, and constraints for the corridor; (2) prioritize the most important elements or issues to be addressed; and (3) begin to build consensus around a Vision of the corridor. Through the programming session, prioritization session, and “three words” exercise, the planning team was able to make progress toward these goals and move forward into the preliminary design phase.

SUMMARY OF ISSUES AND OPPORTUNITIES

Stakeholders identified the existing trail, stretches of quality utility and roadway infrastructure, and scattered visible signs of private reinvestment as positives. On the other hand, increased vacancy, deteriorating neighborhoods, and the overall poor aesthetic were mentioned as key issues. Additionally, inadequate transit service, an incomplete sidewalk network, and various traffic flow concerns at certain intersections create an inconvenient streetscape, with fleeting functionality. The stakeholders noted that with a lack of revenue sources for reinvestment, major improvements are limited.

Stakeholders were quick to mention the corridor’s location as an opportunity to set the stage for the entire Northland experience and were willing to explore special funding sources to make this a reality. The high cost of installing (and, importantly, maintaining) streetscape improvements was widely acknowledged, but the stakeholders exhibited much readiness to work through federal, state, and local requirements related to the streetscape improvements.

DESIGN CHARRETTE

PURPOSE

As step two in the community engagement portion of the planning process, a design charrette provided time for the planning team to meet with members of the public and the stakeholders in order to gather any additional issues and opportunities information, as well as input on preliminary designs. A charrette results in a deeper level of understanding of the corridor and its issues for both the planning team and community members. Between each stakeholder and public session and individual interview, the planning team was able to digest, summarize, and alter preliminary recommendations according to the feedback received. At the end, the planning team had a community-backed list of key issues, as well as support for and direction on preliminary design concepts.

The charrette included three stakeholder sessions, a NNI Board meeting, and a public open house over a three-day period. To encourage widespread participation, members of the community were invited to the public open house through the following marketing techniques:

- Electronic flyer distribution on Facebook and Constant Contact to reach over 1,000 residents.
- Paper flyer distribution to all operating businesses within the target area, including bulletin posts at the Post Office, CVS, Ace Hardware, The Clay County Annex, and Big Burger.
- Invitations and reminders to Focus Vivion Road Committee to encourage their participation and for them to market the public meeting to their circles of contacts.

The general outcomes, list of key issues, and preferred concepts that arose out of these sessions are summarized as follows.

DISCOVERY & ANALYSIS

1

Seek to understand the corridor’s successes, barriers to success, and the desires of stakeholders by completing:

- Data gathering
- Site surveys
- Stakeholder meetings and interviews
- Existing conditions analysis

CONCEPT DEVELOPMENT & ENGAGEMENT

2

Conduct a Design Charrette aimed at developing concepts and preliminary recommendations to address transportation, aesthetics, utilities, and identity.

Community engagement activities—stakeholder/committee meetings, interviews, and open houses with public participation activities—are integral to the charrette process.

STREETSCAPE PLAN & RECOMMENDATIONS

3

Incorporate community and stakeholder feedback received from the charrette and refine concepts, resulting in a Streetscape Plan with associated recommendations.

Continue the community engagement process with the following activities:

- Public presentation and open house
- Stakeholder review

FINAL PLAN

4

Incorporate community and stakeholder feedback received from the STREETSCAPE PLAN & RECOMMENDATIONS phase. Develop a Final Plan to be distributed to the stakeholders.

The final plan includes:

- Discovery Summary
- Community Engagement Summary
- Final Recommendations
- Implementation Plan

Figure 3.1 Integration of Community Engagement in the Planning Process

CHARRETTE OUTCOMES

General Responses

The general responses were gathered and synthesized by asking six questions, three of which are documented through the use of word clouds, shown in Figures 3.2, 3.3, and 3.4. In short, the most common responses can be boiled down to the following 8 points:

- The corridor should be divided into three district types, including: (1) Parkway Districts; (2) Residential Districts; and (3) Commercial Districts.
- Primary gateways should be located at North Oak Trafficway, Antioch Road, and Interstate 35. Secondary gateways should be located at Chouteau Trafficway and North Brighton Avenue. Corridor entry markers should be added to the eastern and western boundaries; neighborhoods should also be identified by markers.
- North Oak Trafficway, Highland Avenue, Antioch Road, and North Brighton Avenue should be considered for transit enhancements, such as shelters.
- Remove the existing shoulders and/or reduce traffic lane widths where possible to provide additional right-of-way for sidewalk, trail, and bike lane expansion. The Antioch Road intersection, Interstate 35 overpass, and 48th Street intersection need to receive targeted circulation improvements.
- Standard sidewalks are very rare along the corridor because of grade issues and the presence of drainage ditches. Consider the issues and determine the best location for sidewalk infill. Consider reducing the speed limit to 35 miles per hour to encourage more bike traffic. Coordinate with the Trails KC and Bike KC plan for trail/bike lane additions. All gateway intersections (listed above) need crosswalks in all directions.
- Enhance the streetscape through the use of street trees, banners, site furnishings, new lights and/or light poles, and gateway monuments.
- Burying the power lines is highly costly, yet should be explored due to its transformative effect.
- Consider the cost of acquiring and demolishing the homes fronting Vivion Road to reduce safety hazards and increase the amount of corridor green space.



FIG. 3.2 WHAT WOULD YOU CHANGE ABOUT VIVION RD.?



FIG. 3.3 HOW DO YOU DESCRIBE VIVION RD.?



FIG. 3.4 WHAT DO YOU LOVE ABOUT VIVION RD.?

Key Issues and Preferred Concepts

During the final stakeholder session, the planning team discussed the general responses that were gathered through the other stakeholder session and public open house. From there, the team presented the finalized the key issues to be addressed and the preferred concepts through a discussion format. The key issues included the following:

- Connectivity
- Power lines
- Houses fronting Vivion Road
- I-35 and Vivion Road intersection
- Utilizing YMCA as a destination
- Making old Shell Station a major corridor feature
- Pedestrian safety
- Streetscape beautification

Lastly, multiple concepts were reviewed for each of the following areas along the corridor:

- 48th Street Realignment
- Family of Gateways
- I-35 Interchange
- Antioch Road/Vivion Road Beautification + Tower Feature

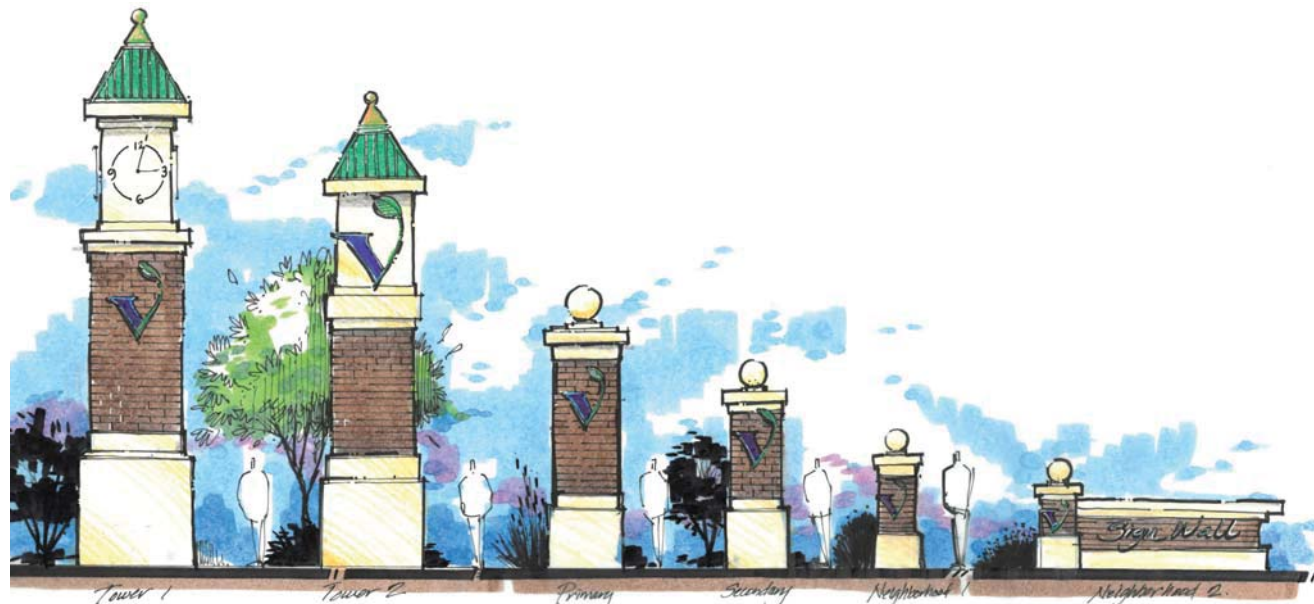
The preferred concepts are shown to the right. Other considered concepts are shown on the following page.



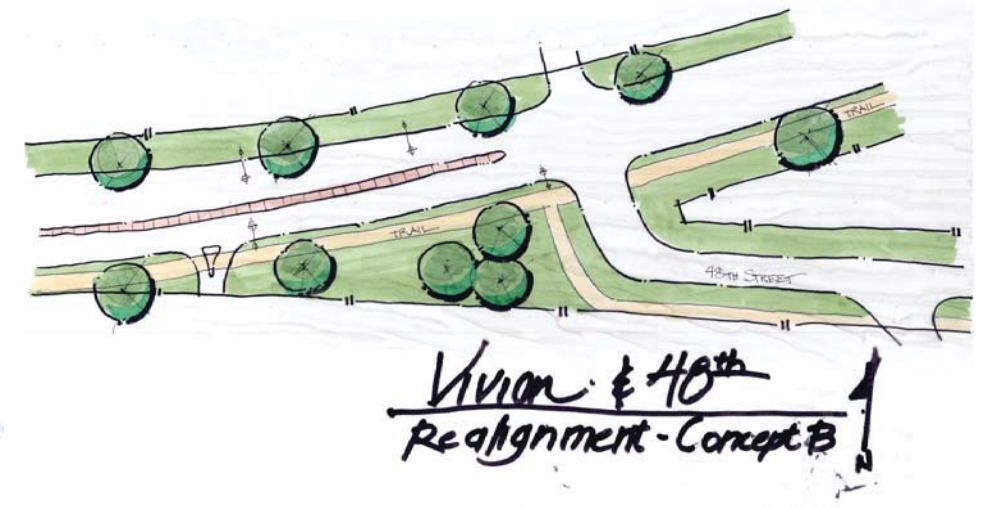
ANTIOCH ROAD INTERSECTION - PREFERRED CONCEPT



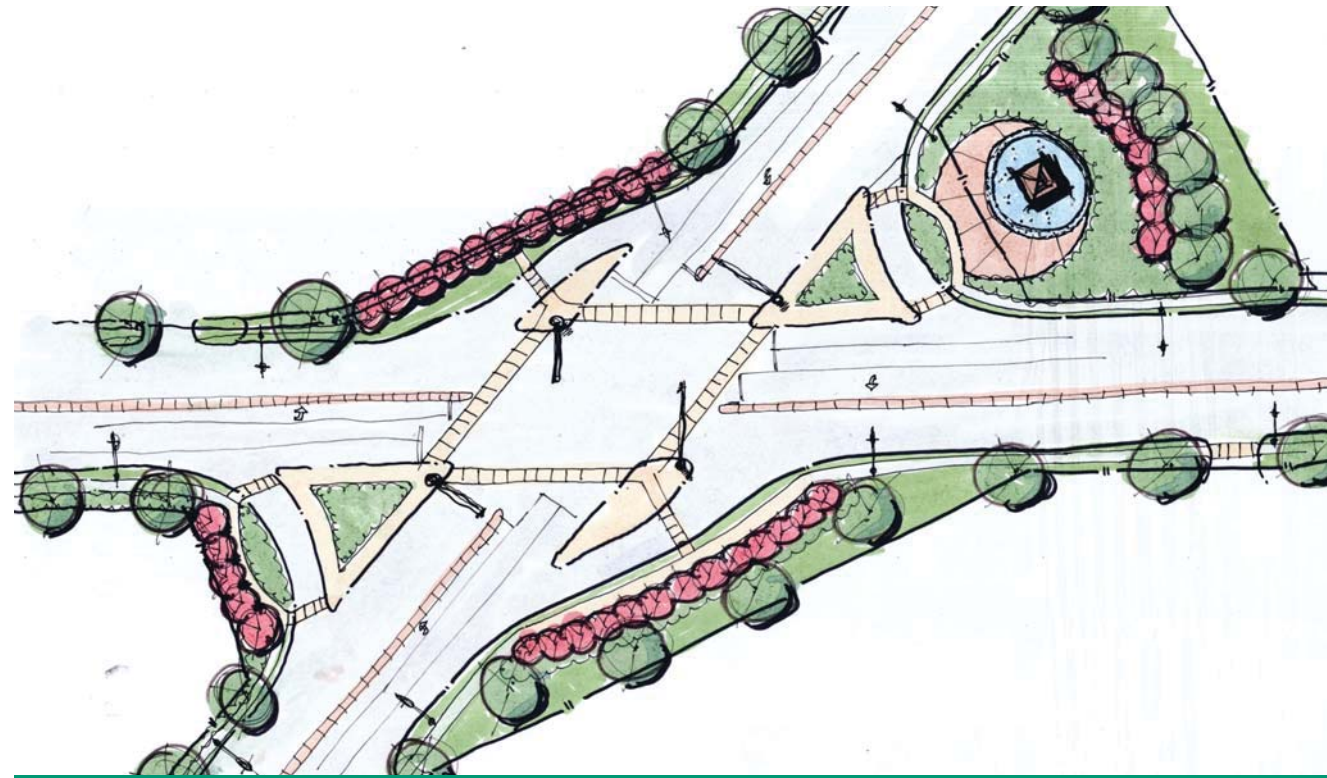
I-35 INTERCHANGE - PREFERRED CONCEPT



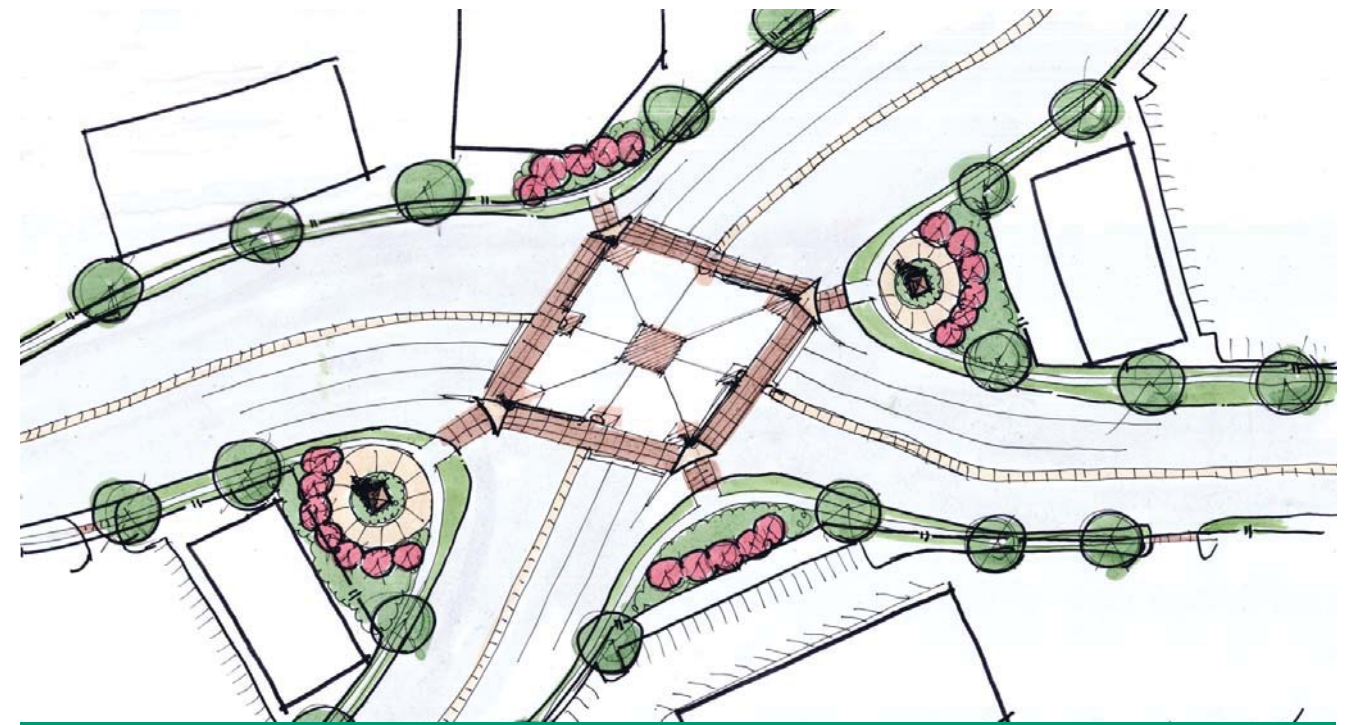
FAMILY OF GATEWAYS - PREFERRED CONCEPT



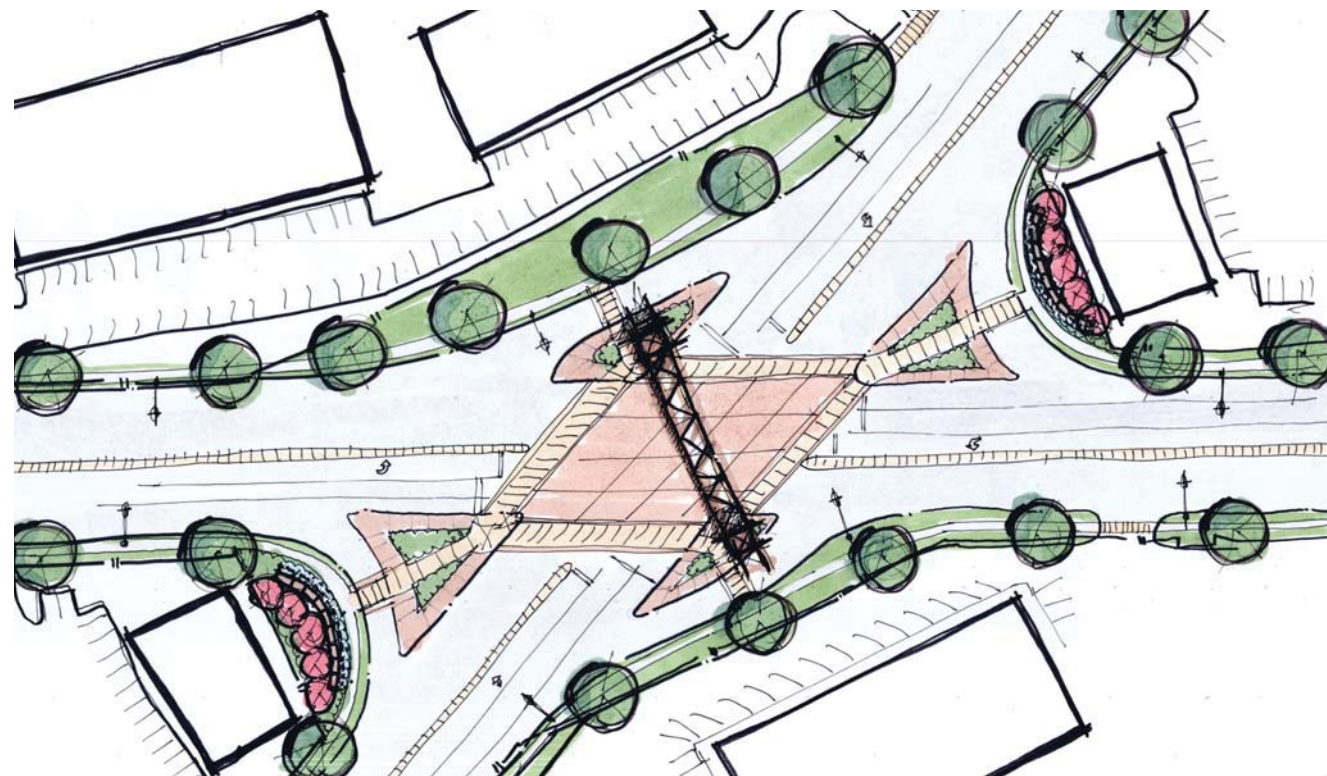
48TH STREET REALIGNMENT - PREFERRED CONCEPT



ANTIOCH ROAD INTERSECTION - ADDITIONAL CONCEPT



ANTIOCH ROAD INTERSECTION - ADDITIONAL CONCEPT



ANTIOCH ROAD INTERSECTION - ADDITIONAL CONCEPT



FAMILY OF GATEWAYS - ADDITIONAL CONCEPT

STREETSCAPE PLAN REVIEW SESSION

PURPOSE

As the final step in the community engagement portion of the planning process, the planning team presented the preliminary plan page by page, highlighting the plan's key elements that had been refined over the planning process. The primary purpose of this review session was to garner stakeholder feedback in order to finalize the plan's recommendations. At the end of the session, the planning team was able to complete the recommendations and develop an implementation plan.

RESPONSE

The issues that had been refined over the planning process are detailed as follows.

- **Lane Configuration.** Although the stakeholders would like to see increased bike and pedestrian activity along the corridor, it was determined that the future redevelopment of the commercial nodes along Vivion Road may not allow for this increased activity. Instead, it was determined that bike and pedestrian activity should be concentrated off the roadway.
- **Logo Preference.** Stakeholders determined that a largely traditional logo design would best suit the desired aesthetic of the corridor.
- **Antioch Road Intersection Alternatives.** Given the reality of a gasoline station redevelopment at the northeast corner, it was determined that a tall column gateway feature and large green space was unlikely. Instead, a waterwall feature with smaller green spaces was preferred.
- **Intersection Realignments.** During the review session the issue of misaligned intersections was discussed, including Highland Avenue. These intersections were identified by the planning team so as roadway improvements are completed, these problematic intersections can be improved.
- **Power Lines.** KCPL provided cost estimates for addressing the overhead power lines by relocation, cabinets, and vaults. Stakeholders indicated that it was critical to minimize visual clutter along the corridor; therefore, burying the power lines through the use of vaults was the preferred solution.

SUMMARY OF COMMON THEMES

The Visioning Session, Design Charrette, and Streetscape Plan Review Session each unveiled a slightly different, yet complementary, vision for the corridor. As information was gathered, and understanding of the corridor deepened by all parties, certain issues became less important, while others gained ground. The commonalities between each community engagement session will guide, in part, the recommendations of the Plan.

The lack of connectivity for pedestrian, bicyclists, and transit riders was widely noted as the top issue facing the corridor. The corridor's style of development, with residences fronting the main roadway and dated utility infrastructure, is largely to blame, but also difficult to overcome. The second largest issue was the need for streetscape beautification. While this beautification may come in the form of lighting, pedestrian site furniture, landscaping, monuments, or other enhancements, the sentiment to upgrade the corridor's aesthetic was widely held, as stakeholders and community members repeatedly described the corridor as dated and unattractive.

While many areas of opportunity were discussed to address the abovementioned issues, the realities facing the corridor were used to develop a manageable list of topics to be covered in the Plan, including:

- Design and development of a family of gateways to be concentrated at prominent corridor nodes
- Design and development of a new pedestrian amenity space, including a public plaza and new greenspace feature, at the Antioch Road intersection
- Realignment of the 48th street intersection to improve connectivity
- Realignment, redesign, and/or enhancement of the I-35 overpass area, including the bridge
- Development of an overall streetscape plan, including road profile adjustments
- Development of design guidelines and/or toolkit for streetscape enhancements to the corridor







INTRODUCTION

In order to make sense of the collected information and preliminary analysis of Vivion Road in previous sections, it is necessary to consolidate the issues by category: mobility; utility infrastructure; and aesthetics. With the critical issues in mind, the strategic visioning process can begin, which starts to answer the “what;” *Section 4.0 Streetscape Plan and Recommendations* answers the “where, why, and how.” These solutions—or recommendations—are based on the corridor’s needs, community input, and technical planning knowledge and should be used as the guide for future revitalization or enhancement efforts along the corridor.

VISION AND GUIDING PRINCIPLES

Given the complexities of the corridor, past planning efforts, and multiple stakeholders, it is necessary to define a unified, and motivational vision that vividly describes a rejuvenated Vivion Road. A vision is a statement of future aspirations; it must be direct, yet flexible, acknowledging that Vivion Road is a unique place deserving of attention.

After collaborating with the community and the City and conducting field inventories, the planning team was able to develop a vision statement capable of directing this collective revitalization effort. The following vision statement serves as the basis for the recommendations of this Plan, but importantly, all corridor revitalization efforts to come. The vision reads as follows:

VISION STATEMENT

The enhancement of Vivion Road shall focus on establishing a **welcoming, vibrant streetscape that connects** residents, businesses and the surrounding community to the many assets that make Vivion Road special. Additionally, these enhancements should serve to foster the **private reinvestment** needed to achieve true, **sustainable revitalization.**

In order to balance the multiple interests that play a role in the planning process, the following guiding principles have been developed to embody the vision, and to outline the purposes of the recommendations that follow. *Figure 4.1 Guiding Principles* demonstrate the interconnectivity of the guiding principles and the vision statement.

OVERVIEW

For purposes of clarity, the recommendations have been categorized into four sections: (1) Mobility; (2) Utility Infrastructure; (3) Aesthetics; and (4) Improvement Plans. The first three recommendation sections outline the key issues to be addressed, then provide general recommendations specific to the issues at hand. Character images are provided to illustrate the recommendations. Importantly, a matrix that illustrates the connections between the recommendations and guiding principles is included for each of the three sections.

The final section, Improvement Plans, divides the corridor into 10 sections and details the specific location and design of each of the recommendations as they relate to that section. A series of maps and graphics are provided as a visualization aid.

Though the recommendations have been divided into categories, overlap will certainly exist due to the interconnectivity of the issues. Each general recommendation category will be discussed separately, but must be considered as one, cohesive streetscape plan for the vision to be realized. The improvement plans will display this interconnectivity as specific improvements will work to advance multiple guiding principles simultaneously.



Figure 4.1 Guiding Principles

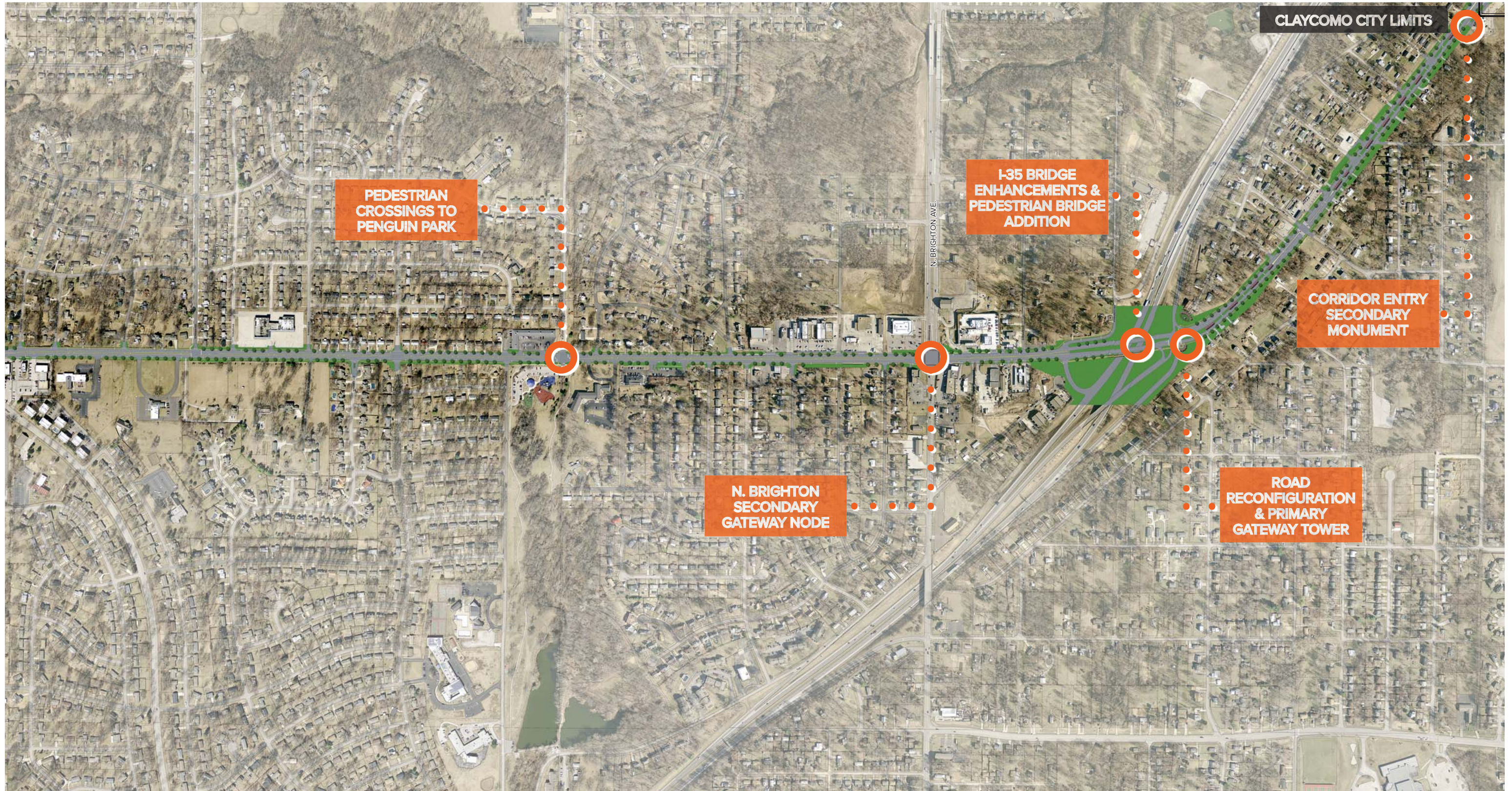
STREETSCAPE PLAN & RECOMMENDATIONS

VIVION ROAD STREETSCAPE PLAN

The overall plan for Vivion Road, as shown in *Figure 4.2*, is a visual representation of the Plan's recommendations for proposed streetscape improvements within the right-of-way. As an illustrative plan of this nature cannot properly capture the full breadth of the recommendations that define the Plan, *Figure 4.2* should be viewed as a supplement to the recommendations that follow. A full picture of the future corridor is painted when the plan is referenced in context with the recommendation text and supplemental graphics.



Figure 4.2 Vivion Road Streetscape Plan





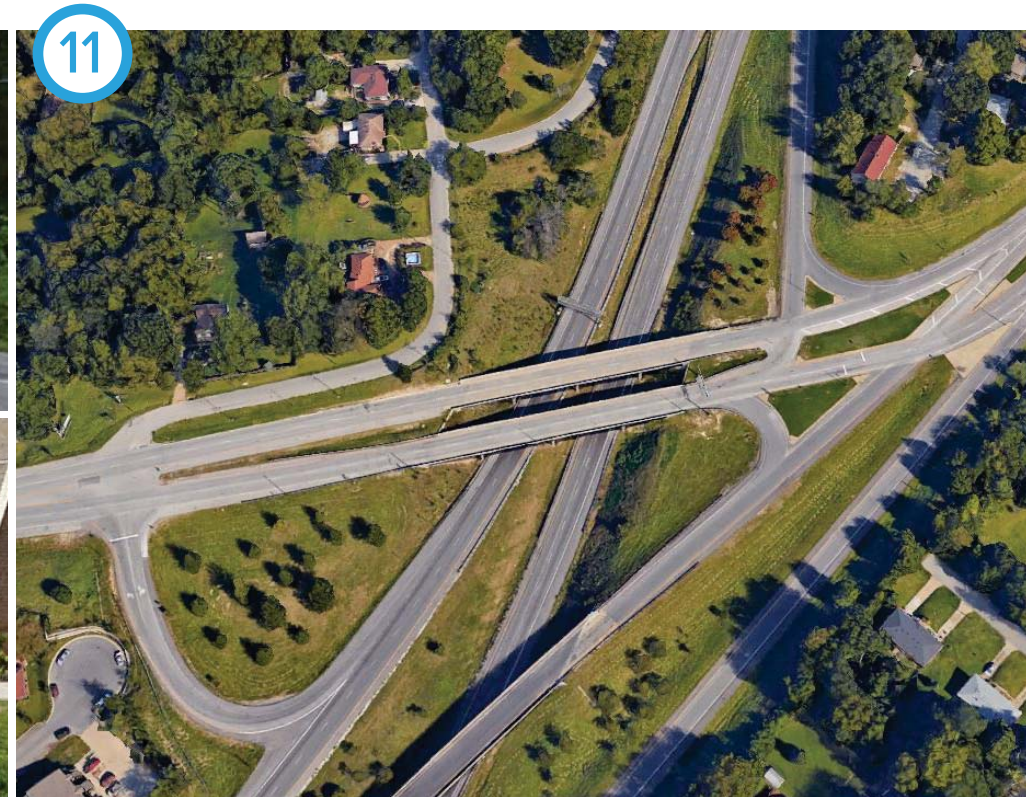
MOBILITY

A proper travel corridor requires a coordinated, efficient, and dependable transportation system. For such a system to be actualized requires collaborative planning, conversations with its users, and innovation. Planning appropriately can ensure that traffic flow is smooth, users have a choice of mode, and various neighborhood and regional destinations are well-connected. Importantly, the efficiency and access that a transportation system provides is a factor that many people consider when choosing where to live. In fact, a well-integrated transportation network often increases the residents' quality of and private investment potential of a corridor.

Vivion Road has historically been viewed as primary east-west vehicular corridor through the Northland. It is clear that the vision for Vivion Road is changing; it is no longer envisioned solely as a thoroughfare, but a place—a destination—in itself. While Vivion Road's strengths, including its location and access to the interstate highway system, cannot be ignored, the issues that inhibit its overall connectivity and continued growth must be acknowledged. The following section provides a general roadmap to overcoming the corridor's mobility obstacles. By following the recommendations outlined in this section, Vivion Road can become a sustainable, modern, and safe transportation corridor that provides for the needs of its community and accommodates pedestrians, bicyclists, and automobile drivers.

ISSUES

1. While the existing sidewalks are in good condition, significant gaps in the sidewalk network render it virtually useless and limit the corridor's walkability.
 - Vivion Road's residential districts largely do not have sidewalks on either side of the corridor.
 - Vivion Road's commercial districts—nodes of higher activity—have a spotty sidewalk network; the sidewalks that do exist were mainly installed around and within new developments or redevelopments, but the entire commercial node is not well-connected.
2. The installation of shared-use trails along Vivion Road, as detailed in the Trails KC Plan, is an important substitute for sidewalks along the corridor, but does not provide a pedestrian and bicyclist network on both sides of the roadway, further inhibiting corridor-wide connectivity.
3. Three intersections, including North Oak Trafficway, Highland Avenue, and Brighton Avenue, do not provide crosswalks in all directions, forcing pedestrians to cross the roadway without adequate infrastructure, creating safety hazards. Existing crosswalks require repainting to be clearly visible to automobile drivers. Similarly, the residential sections along the corridor lack crosswalks almost entirely, which places a large limitation on residents' safe connection to the commercial nodes and other major destinations along the corridor.
4. The Interstate 35 overpass does not provide pedestrian and bicyclist infrastructure, effectively blocking pedestrian and bicyclist traffic from residential area to the east from the commercial area to the west.
5. ADA accessible crosswalks and sidewalks are highly limited along Vivion Road.



- 6.** The posted speed limit of 40 miles per hour is too high to encourage bike and pedestrian traffic along the roadway; pedestrian fatalities significantly increase at impact speeds of 40 miles per hour, rather than 20 to 30 miles per hour.¹
- 7.** Low reports of biking and walking to places of employment are not representative of community desires, but rather a lack of adequate, safe, and well-connected pedestrian and bicycle infrastructure.
- 8.** Bicycle facilities (bike lanes, shared lane markings, or bike routes) are planned for the eastern half of the corridor, but funding has not been secured.

- 9.** Public transit stops along the corridor are difficult to locate and lack the typical amenities expected by modern transit users. While current population densities do not justify higher capacity transit investment, transit infrastructure enhancements may be considered. The intersections with the highest ridership averages, including North Oak Trafficway and Highland Avenue, are only marked by signage; waiting riders are not welcomed through the use of shelters or benches.
- 10.** The current road profiles emphasize “through” traffic, creating a roadway where multiple modes of transportation cannot peacefully coexist.

- 11.** Community engagement revealed that specific intersections along Vivion Road are inadequately serving the current traffic flow, including:
 - **Northeast 48th Street and Vivion Road.** The angle and width of this intersection creates visibility concerns for vehicles, pedestrians, and bicyclists.
 - **Antioch Road and Vivion Road.** This intersection is unnecessarily skewed, causing user confusion and poor vehicular traffic flow.
 - **Interstate 35 and Vivion Road.** This interchange lacks proper pedestrian and bicyclist connectivity, is viewed as a source of a higher number of vehicular accidents, and is difficult to navigate for new users.
 - **Highland Avenue and Vivion Road.** This intersection is misaligned, causing safety and traffic flow concerns.

- 12.** The large number of residential driveways connected to Vivion Road creates a safety hazard for residents backing out onto the roadway, increasing the potential points of conflict along the corridor.

¹ Federal Highway Administration Pedestrian Safety Strategic Plan: Background Report, May 2010

FIGURE 4.3 MOBILITY RECOMMENDATIONS MATRIX

RECOMMENDATIONS	GUIDING PRINCIPLES					
	ECONOMIC DEVELOPMENT	CHARACTER & IDENTITY	MOBILITY & CONNECTIVITY	USES & AMENITIES	SUSTAINABILITY	UTILITIES & INFRASTRUCTURE
1. MAKE VIVION ROAD A "GREAT PEDESTRIAN STREET."	■	■	■	■	■	■
2. SUPPORT BICYCLISTS USING THE TRAIL; TRACK TRAFFIC COUNTS TO DECIDE NEED FOR BIKE LANES.	■	■	■	■	■	■
3. DECREASE SPEED LIMIT FROM 40 MPH TO 35 MPH.			■			
4. CREATE A COMPREHENSIVE NETWORK OF SAFETY AND WAYFINDING SIGNAGE.		■	■			
5. ADDRESS PROBLEMATIC INTERSECTIONS THROUGH FUNCTIONAL AND AESTHETIC IMPROVEMENTS.	■	■	■		■	■
6. ENHANCE EXISTING PUBLIC TRANSIT STOPS.		■	■	■	■	
7. UTILIZE COMMERCIAL ACCESS MANAGEMENT PRACTICES.		■	■			
8. DECREASE THE NUMBER OF RESIDENTIAL DRIVEWAYS ALONG VIVION ROAD.		■	■			■
9. ALTER THE TYPICAL ROAD PROFILES TO BETTER SERVE ALL USERS.		■	■		■	■

RECOMMENDATIONS

The following recommendations seek to create a safe, multimodal corridor that properly addresses the corridor’s outmoded style of development and lack of connectivity. They are as follows:

1. Make Vivion Road a “Great Pedestrian Street,” as recommended in the Briarcliff-Winnwood Area Plan, by maintaining, growing, and enhancing the current sidewalk and trail network to better accommodate all users, increase connections between neighborhoods and primary destinations, encourage healthy lifestyles, and enliven the streetscape. Specific tools include:

- Five-foot-wide sidewalks with landscaped buffer zones along the entire corridor on both sides of the street (except where ten-foot-wide trails are recommended);
- High visibility crosswalks (new installations and maintenance of existing);
- Accessible ADA curb ramps;
- Pedestrian hybrid traffic control signals and associated crosswalk at unsignalized intersections;
- Pedestrian activated signals at signalized crosswalks;
- Leading pedestrian intervals at signalized crosswalks;
- Pedestrian refuge islands/medians;
- Pedestrian-scale lighting along sidewalks and trails; and
- Trail infill, in line with the Trails KC Plan.

Though sidewalk installations may prove difficult in certain locations along Vivion Road due to limited right-of-way, the establishment of a consistent sidewalk network is vital to the success of this Plan. As improvements move into the design phase, it will be necessary to have accurate base information to determine the extent of the right-of-way issue. In trouble areas, negotiations may need to take place with property owners.

2. Encourage bike traffic along the corridor primarily through the use of the Vivion Trail, as it continues to be constructed. Secondly, continually monitor vehicular traffic counts along the corridor until the capacity has been studied to determine the need and safety of potential future bike lane installations. Any future, potential “road diet,” with a goal to incorporate bike lanes should be further analyzed with the City and MoDOT. Lastly, install bicycle storage at key destinations, including:

- Commercial nodes (North Oak Trafficway, Antioch Road, Chouteau Trafficway, and North Brighton Avenue)
- Former YMCA likely to be reopened under City ownership (1101 Northeast 47th Street);
- Antioch Metro Park-and-Ride (5119 Northeast Antioch Road);
- Northgate Middle School (2117 Northeast 48th Street);
- Davidson Elementary School (5100 Highland Avenue – north of Plan area);
- Anita B. Gorman Park (southeast intersection of North Oak Trafficway and Vivion Road);
- Penguin Park (southeast intersection of North Norton Avenue and Vivion Road)

Consider adjusting existing vehicular detectors to better detect bicyclists at signalized intersections from Chouteau Trafficway east if bicycle ridership increases in the future.

3. Consider a reduction of the speed limit along Vivion Road in order to (1) practically increase pedestrian and bicyclist safety and (2) change the perception of Vivion Road from a “through” traffic corridor to a pedestrian-friendly district. Any reduction in the speed limit is contingent on the results of a traffic and speed study.

4. Create a comprehensive network of safety and wayfinding signage to benefit all users, including:

- Appropriate bicycle, pedestrian, and vehicular warning signage at trail and sidewalk roadway crossings and along on-street bicycle lanes; and
- Consistent and clear pedestrian- and vehicular-scale wayfinding signage that identifies routes and highlights key destinations.



Top: VS Engineering; middle left: Olathe, KS; middle: Buchheit Concrete; middle right: Olathe, KS; bottom left: Bloomington, IN; and bottom right: Vivion Trail, Kansas City, MO

STREETSCAPE PLAN & RECOMMENDATIONS

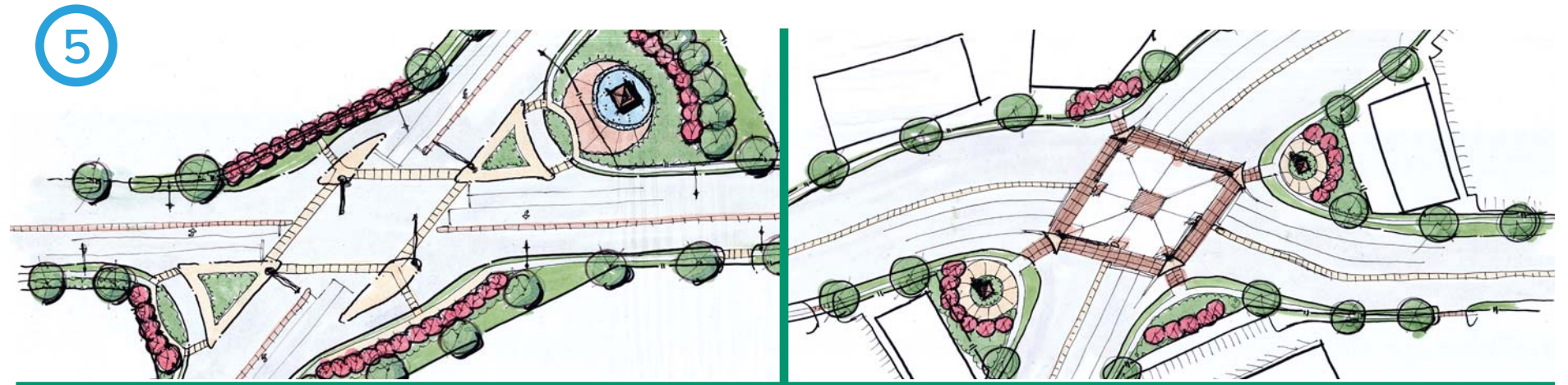
5. Address stakeholder-identified problematic intersections through aesthetic and functional improvements; these intersections include:

- Antioch Road and Vivion Road;
- Northeast 48th Street and Vivion Road;
- Interstate 35 and Vivion Road; and
- Highland Avenue and Vivion Road

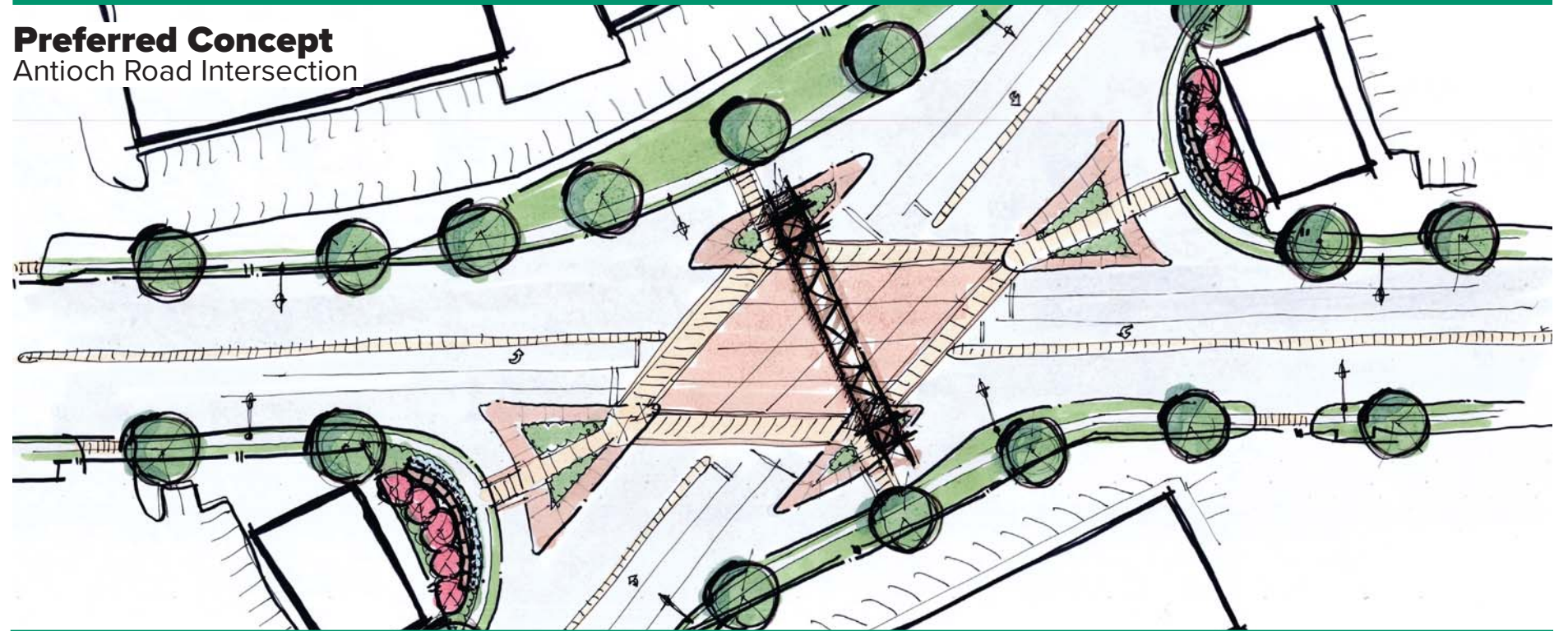
To directly address pedestrian and bicyclist connectivity issues at the I-35 interchange, construct a pedestrian bridge to increase active transportation options along the corridor.

6. Enhance existing public transit stops to include highly visible signage, concrete pads, site furniture, and/or shelters. The addition of shelters should be in line with the requirements set forth by KCATA stop optimization standards; local service routes should have average daily ridership levels of 50 riders, while commuter service routes should have average daily ridership levels of 25 riders.

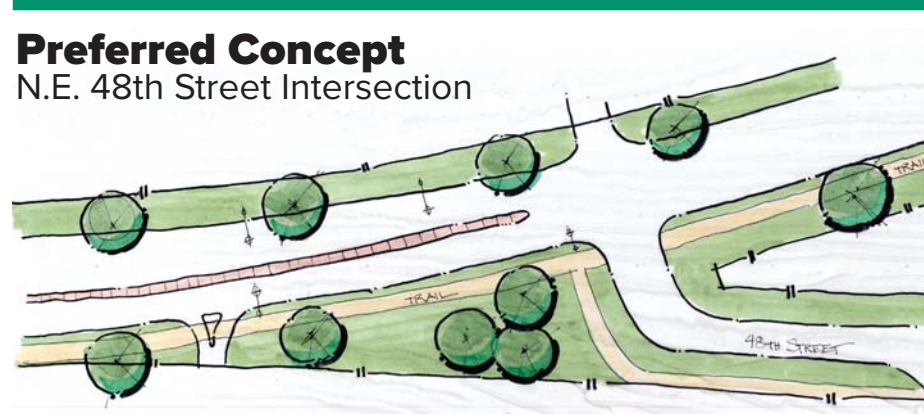
Specific to Vivion Road, enhancements should be prioritized for stops with the highest ridership levels, including the intersection of (1) North Oak Trafficway and (2) slightly east of Highland Avenue (to serve the concentration of multi-family residences). Ridership levels should be monitored, in complete coordination with KCATA, to ensure appropriate and efficient location of and accessibility to transit stops, with an eye to major nodes and multi-family developments.



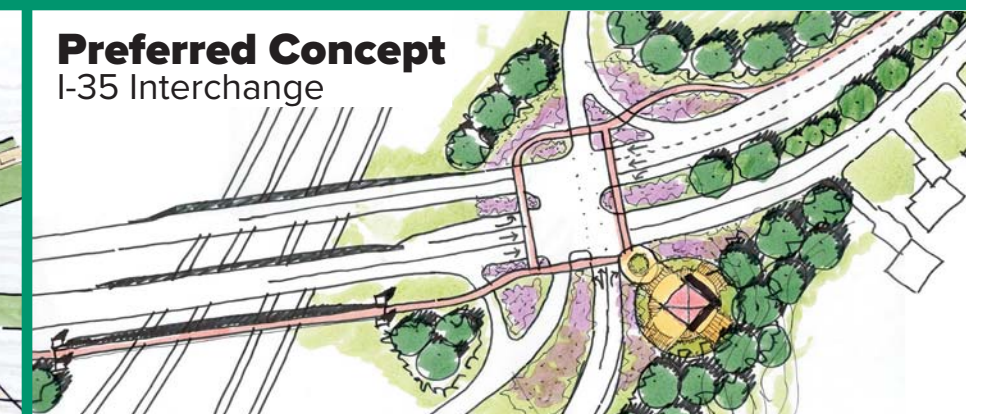
Preferred Concept
Antioch Road Intersection



Preferred Concept
N.E. 48th Street Intersection



Preferred Concept
I-35 Interchange



The top images show other conceptual layouts of the Antioch Road intersection, but the preferred layout and enhancements, including a pedestrian plaza and tower feature on the northeast corner, are shown in the middle image. The bottom left image is the preferred realignment of the 48th Street intersection, and the bottom right image shows the proposed improved traffic flow by the I-35 on and exit ramps.

7. Utilize commercial access management practices to reduce the number of commercial access drives along Vivion Road and to encourage side street access, shared access drives, and cross-access between properties. Targeted access improvements should be implemented in the following areas:

- Antioch Road and Vivion Road intersection
- Chouteau Trafficway and Vivion Road intersection

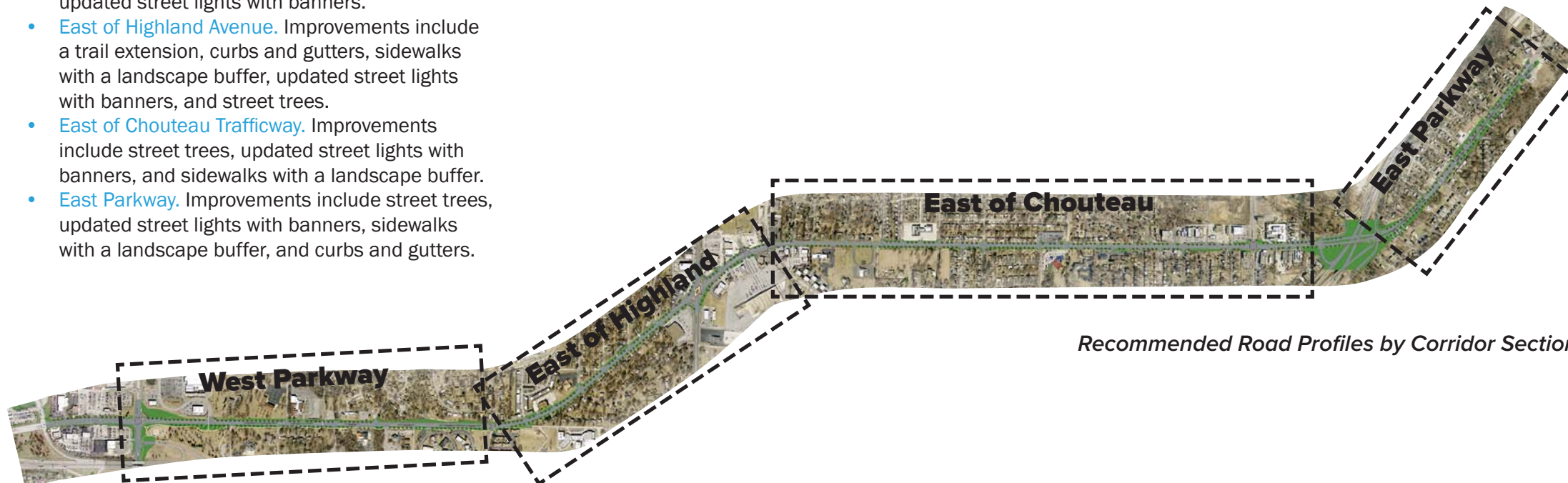
8. Decrease the number of residential driveways along Vivion Road to, thereby, reduce the number of vehicular conflict points. Reducing the corridor's speed limit will serve to decrease the hazard level associated with these conflict points, but strategies designed to remove the conflict point in its entirety must also be considered. In the long-term, residences that front Vivion Road should be acquired, demolished, and redeveloped or kept as greenspace, dependent upon the character of the roadway section.

9. Alter the typical road layouts to better serve all users, as shown in *Figure 4.4 Recommended Road Profiles*, and detailed as follows:

- **West Parkway.** Improvements include street trees, sidewalks with a landscape buffer, and updated street lights with banners.
- **East of Highland Avenue.** Improvements include a trail extension, curbs and gutters, sidewalks with a landscape buffer, updated street lights with banners, and street trees.
- **East of Chouteau Trafficway.** Improvements include street trees, updated street lights with banners, and sidewalks with a landscape buffer.
- **East Parkway.** Improvements include street trees, updated street lights with banners, sidewalks with a landscape buffer, and curbs and gutters.



To improve traffic flow and reduce conflict points along the corridor, as many as five access points should be eliminated near the intersection of Antioch Road and Vivion Road. Similarly, two access points should be removed at the southeast corner of the Vivion Road and Chouteau Trafficway intersection.



Planning for Active Commuting



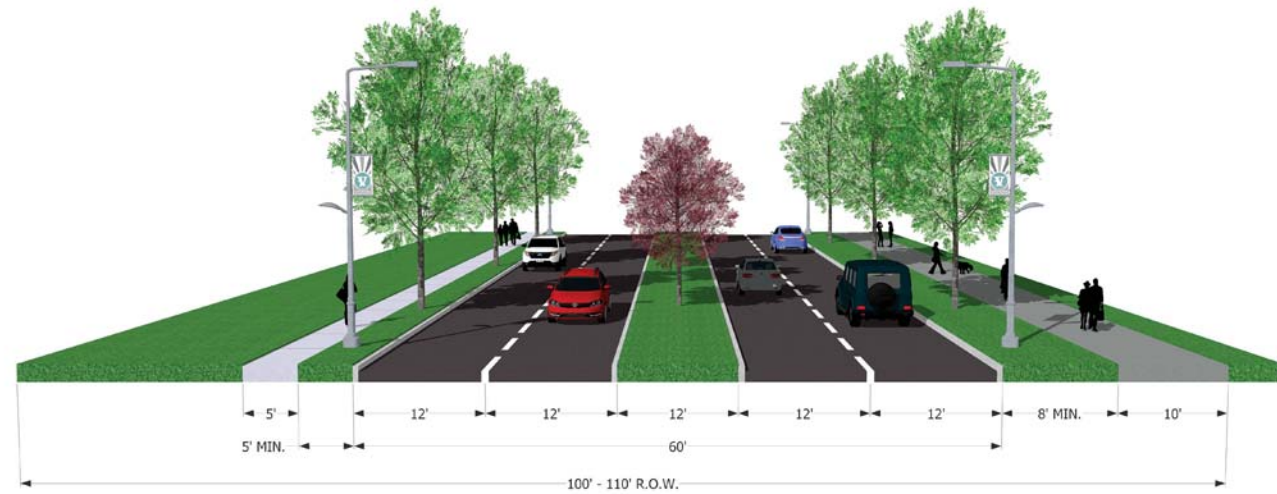
Switching your daily mode of transportation from driving to walking or biking has long pointed to significant health benefits. In fact, those who walk or bike to work, rather than drive, tend to have:

- A lower BMI and body fat percentage;
- A lower chance of high blood pressure or diabetes; and
- Less irritability caused by traffic delays.

Recent studies recommend that the active commuting definition be expanded to include public transportation, as the walking required to utilize public transportation is often comparable to the distance that daily walkers commute to work. Regardless, with rising average commute times and increased traffic congestion, active commuting proponents are gaining widespread traction.

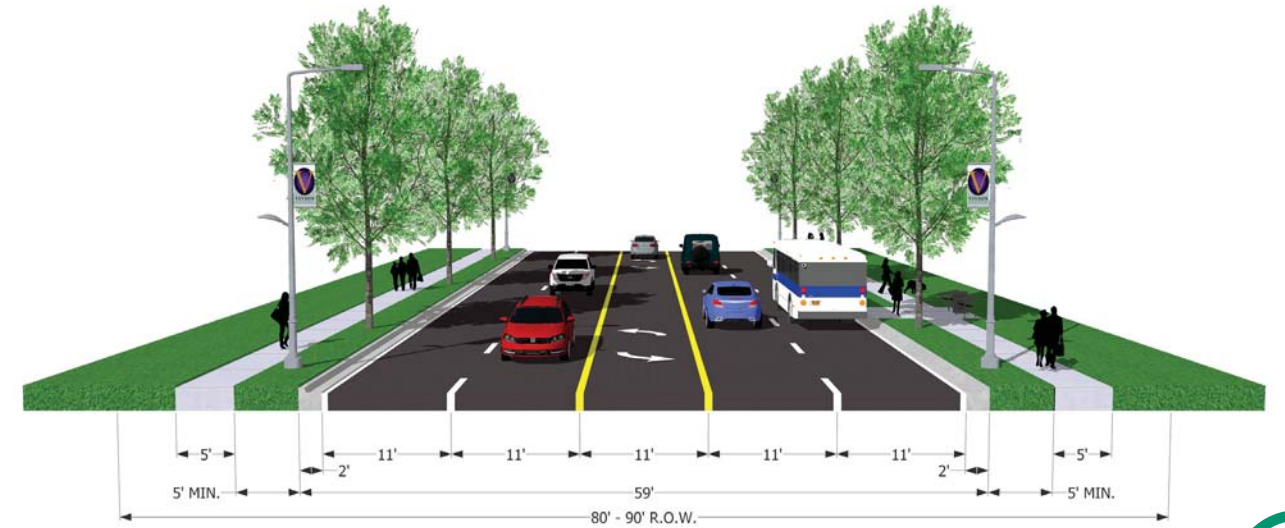
Though, without proper and well-connected infrastructure, the likelihood of one choosing to actively commute is low. This includes a safe sidewalk/trail/bicycle network connected to major employers and destinations. It is also important to consider destination-specific improvements, such as secure bike storage and showers that increase the convenience level of active commuting.

STREETSCAPE PLAN & RECOMMENDATIONS



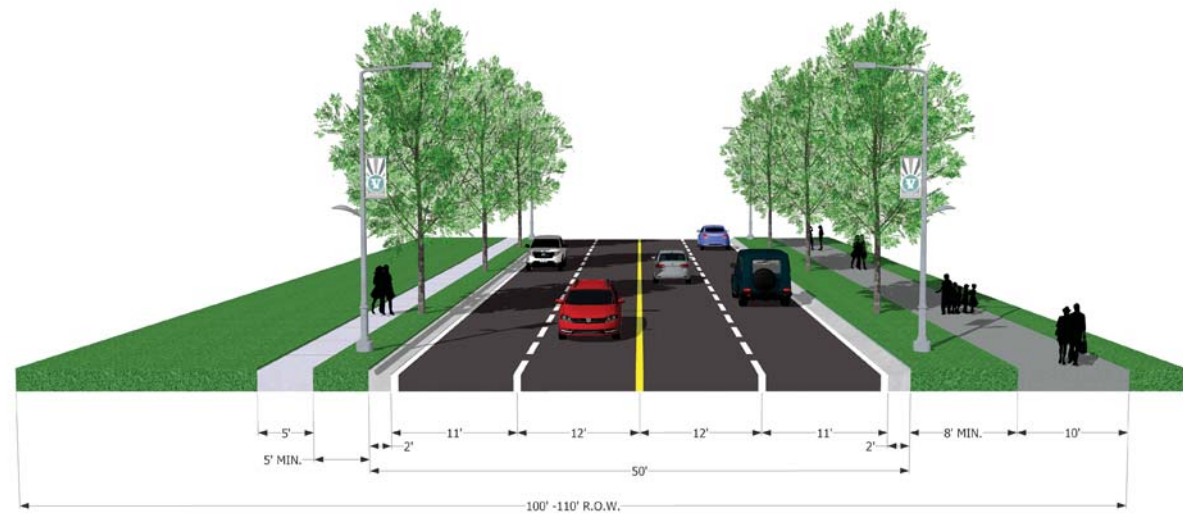
WEST PARKWAY (WEST OF HIGHLAND AVE.)

1



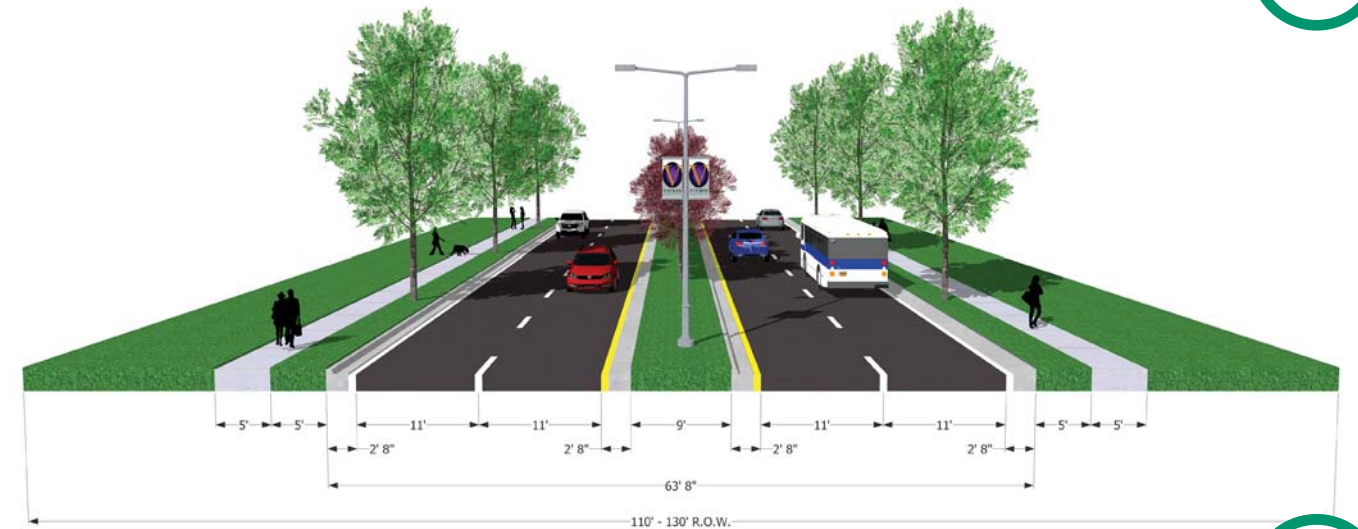
EAST OF CHOUTEAU TRAFFICWAY

3



EAST OF HIGHLAND AVENUE

2



EAST PARKWAY (EAST OF I-35)

4

ROAD PROFILE CHANGES KEY

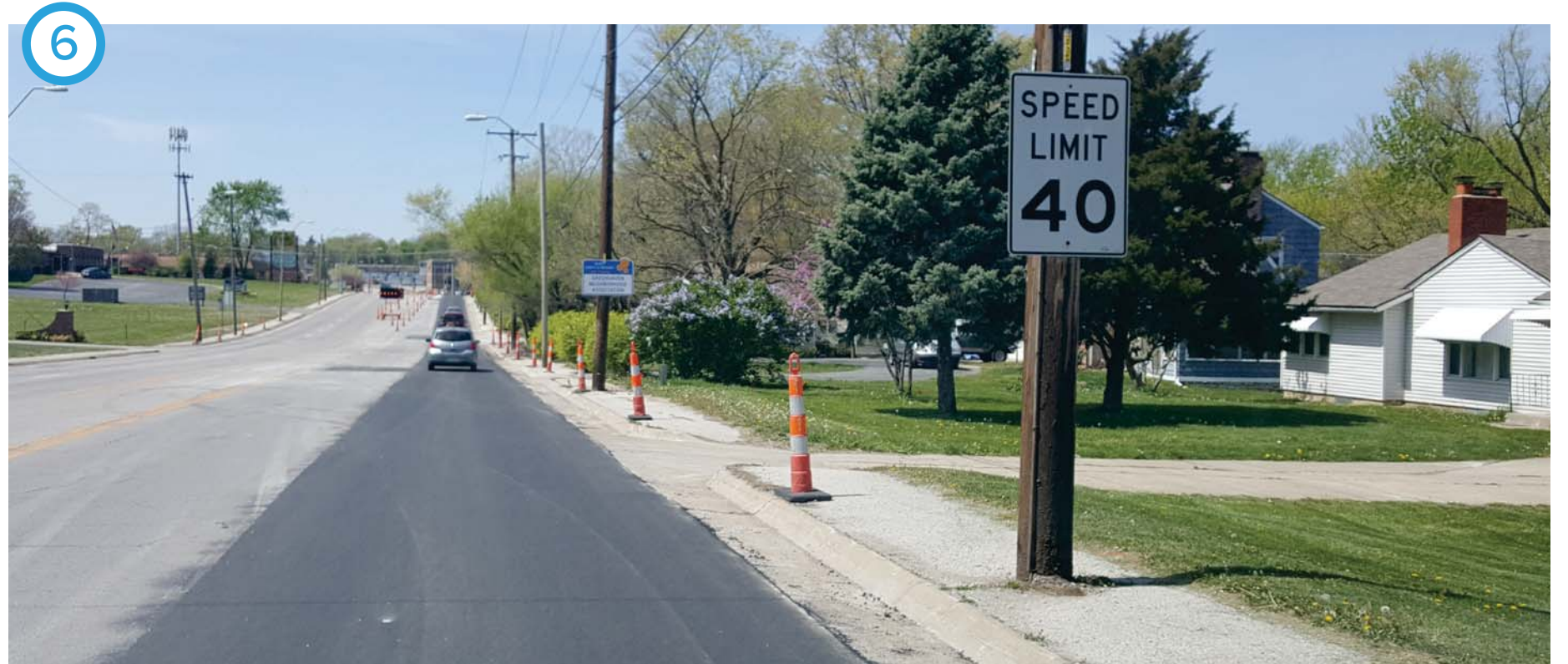
EXISTING ROAD PROFILE*	RECOMMENDED ROAD PROFILE
#1 West of Highland Ave.	#1 West Parkway (West of Highland Ave.)
#2 Highland Ave. to Olive St.	#2 East of Highland Ave.
#3 Chouteau Tfwy. to Cleveland Ave.	#3 East of Chouteau Trfy.
#4 Cleveland Avenue to Brighton Ave.	#3 East of Chouteau Trfy.
#5 East of I-35	#4 East Parkway (East of I-35)

*The Existing Road Profiles are detailed in Section 2.0 Discovery.

Figure 4.4 Recommended Road Profiles

COMPLETE STREETS APPROACH

Though the recommendations of this plan integrate elements of the Complete Streets framework, its full integration was ultimately left for future consideration. A summary has been provided on Page 84, detailing the basics of such an approach, and how it might be further explored.



UTILITY INFRASTRUCTURE

Arguably more than ever, an efficient, reliable, and modern utility infrastructure system that meets the needs of residents and businesses and supports private investment is necessary for a corridor to thrive. With a dated system, new development or reinvestment is unlikely, causing a corridor’s growth to stall or even reverse. Vivion Road’s existing reality is that of an infrastructure network that does not realize—and is not capable of realizing—the vision for the corridor. Open drainage ditches, overhead power lines, raised shoulders, and a lack of consistent curbs and gutters are not representative of the urban roadway Vivion Road is to become.

The following section provides recommendations related to upgrading utility infrastructure along the corridor, and thereby modernizing Vivion Road’s appearance. By following these recommendations, the corridor can develop a system of infrastructure that will ensure a higher quality of life for its residents, a heightened fiscal stability of the corridor, and prime the planning area for private reinvestment.

ISSUES

1. The lack of curbs and gutters for long stretches of the corridor creates a poorly defined streetscape and limits the amount separation between vehicular traveled and untraveled surfaces.
2. Without proper and timely maintenance, the drainage ditches can be overgrown or be a source of spot flooding.
3. The grading necessary for drainage ditches limits the space left within the public right-of-way for a complete sidewalk network.
4. The placement of the power poles restricts the available right-of-way for a complete sidewalk network, other pedestrian or bicyclist amenities, such as enhanced transit stops, bike racks, and site furniture, and the full growth of a tree canopy.

5. The cost of relocating or burying the power lines is a highly expensive endeavor, and may limit the probability of other, equally transformative improvement projects.
6. The use of raised shoulders, as shown in road profile three in *Figure 4.4 Typical Road Profiles*, restricts the addition of street trees and other landscaping that can subtly soften the hardscape.

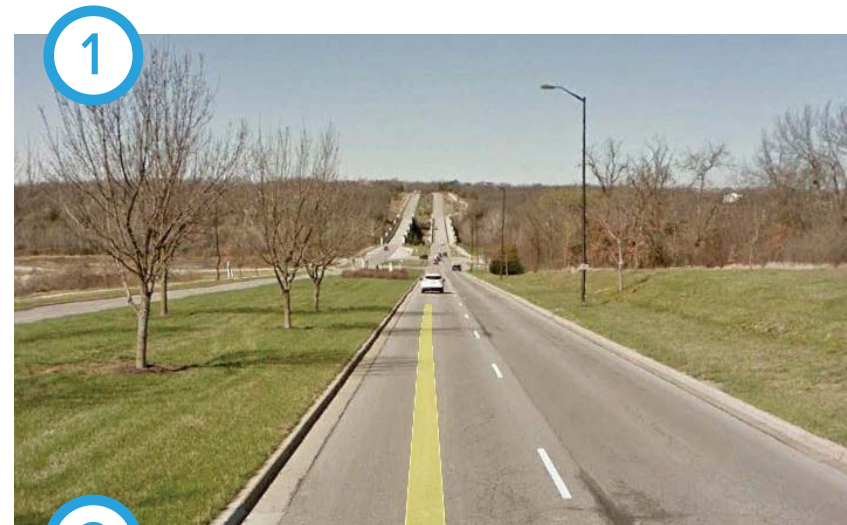
FIGURE 4.5 UTILITY INFRASTRUCTURE RECOMMENDATIONS MATRIX

RECOMMENDATIONS	GUIDING PRINCIPLES					
	ECONOMIC DEVELOPMENT	CHARACTER & IDENTITY	MOBILITY & CONNECTIVITY	USES & AMENITIES	SUSTAINABILITY	UTILITIES & INFRASTRUCTURE
1. UNDERGROUND POWER LINES ALONG ENTIRE CORRIDOR.	■	■	■	■	■	■
2. INSTALL CURBS AND GUTTERS WHERE FEASIBLE.		■				■
3. COORDINATE WITH CITY TO IMPROVE DRAINAGE DITCHES WHERE SIDEWALKS ARE NOT FEASIBLE.		■	■	■		■
4. CREATE A UTILITY INFRASTRUCTURE IMPROVEMENT PLAN.	■		■		■	■
5. PARTNER WITH THE CITY TO INCORPORATE GREEN INFRASTRUCTURE PILOT PROJECTS.*	■	■			■	■

*The City's *Overflow Control Plan* promotes green solutions to protecting its water; the Plan dedicates \$28 million to large scale green infrastructure pilot projects in the combined sewer system basins. The first pilot project was the Middle Blue River Basin: <http://kcmo.gov/wp-content/uploads/2016/02/MiddleBlueRiverFinalReportExecSummary030514FINAL.pdf>.

RECOMMENDATIONS

1. Coordinate with Kansas City Power & Light and the City to underground power lines (with vaults) along the entire corridor in a phased approach or move the power lines to a different location. Practical benefits include a lower likelihood of failure and increased space within the right-of-way for infrastructure improvements such as sidewalks and site furnishings. Aesthetic benefits include a reduction in visual distractions and a modernized streetscape.
2. Install curbs and gutters where feasible to clearly define the roadway and the adjacent right-of-way. Incorporate flumes into the curb design to allow for proper stormwater drainage. This should occur at the following locations:
 - East of I-35
 - Highland Avenue to Antioch Road
3. To minimize pedestrian connectivity constraints, coordinate with the City and MODOT to improve the existing stormwater drainage ditches where they currently limit the placement of sidewalks.
4. Create a Utility Infrastructure Improvements Plan, in coordination with the City, to properly phase and coordinate utility improvements along Vivion Road. The aging storm and sanitary sewer system are each limiting factors in Vivion Road's revitalization. The Plan should guide improvements and ensure adequate and appropriate utility improvements and updates as the corridor redevelops. Such improvements should be coordinated with development, redevelopment, and capital improvement projects to minimize traffic disturbances.
5. Partner with the City to incorporate green infrastructure to increase stormwater infiltration, including permeable pavers, porous sidewalks, rain gardens, and bioswales along the corridor in the following locations:
 - Antioch Road Intersection public plaza (rain gardens and permeable pavers)
 - West of Highland Avenue (porous sidewalk and bioswales)

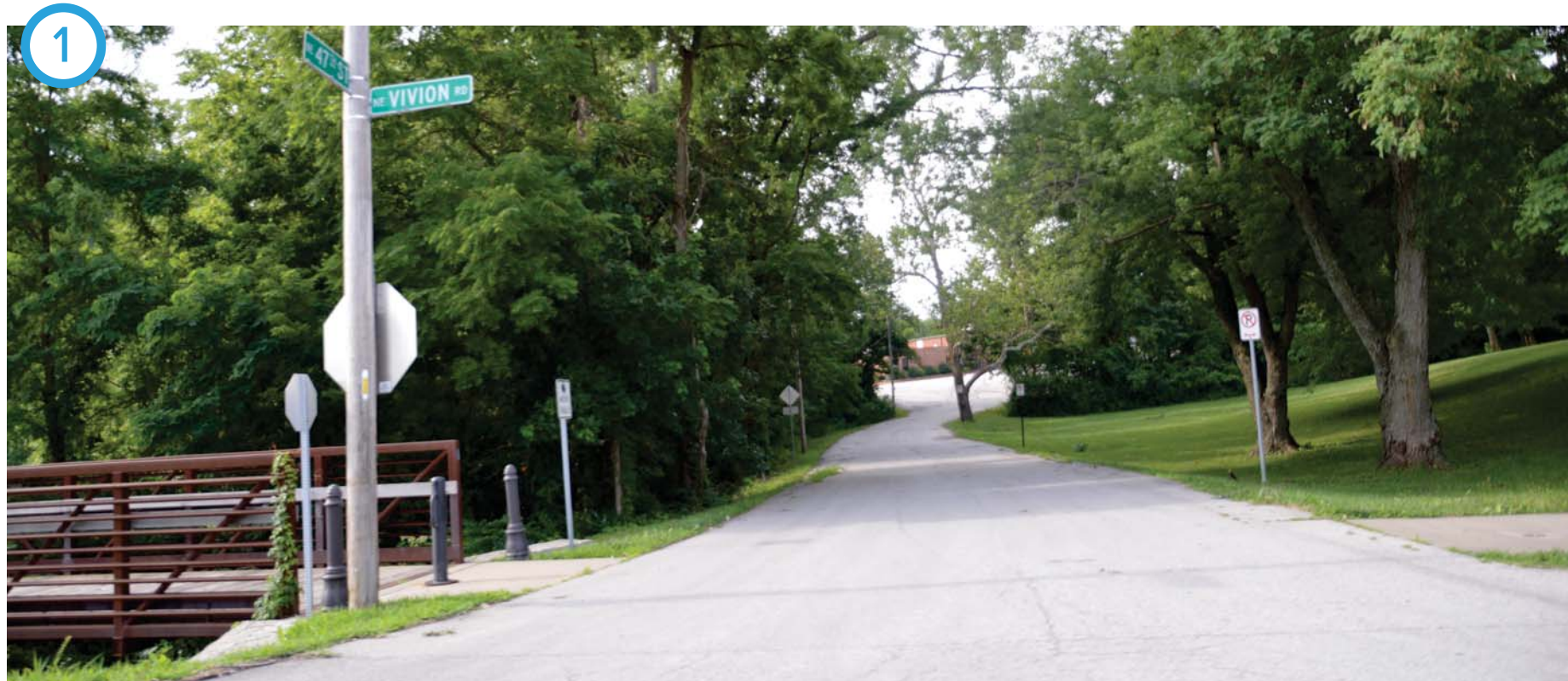


Planning for Stewardship



“Going green” has become a popular term to describe the challenging, but fruitful task of creating sustainable places that embrace our environment’s natural resources and energy systems. This plan recognizes the importance of environmental sustainability and understands that “greening” a corridor’s infrastructure is often one of the most visible ways to integrate green practices into a streetscape. To gain a better understanding of how green practices can be integrated into Vivion Road, various tools in the “green” toolkit have been identified.

An environmentally conscious streetscape would include pedestrian and bicycle networks, energy efficient infills and retrofits that front the corridor, low-maintenance landscaping, shade-generating street trees, rainwater collection systems, recycling receptacles, bike racks, plazas built with pervious pavement, and more. These tools are widely used, and increasing in popularity. A concerted effort to continue the greening of Vivion Road could have long-reaching impacts on the character, quality of life, and economic viability of the corridor—and could create a truly economic, environmental, and socially sustainable place.



AESTHETICS

Calls for beautification overwhelmed much of the community engagement process, communicating clearly that *appearance matters*. In fact, a well-designed and aesthetically-pleasing public realm sends a signal of valued investment and community pride. Unfortunately, the corridor's current appearance, that established by minimal landscaping, a lack of sidewalks, and dated infrastructure, is an atmosphere that new businesses, residents, and general investment tend to elude.

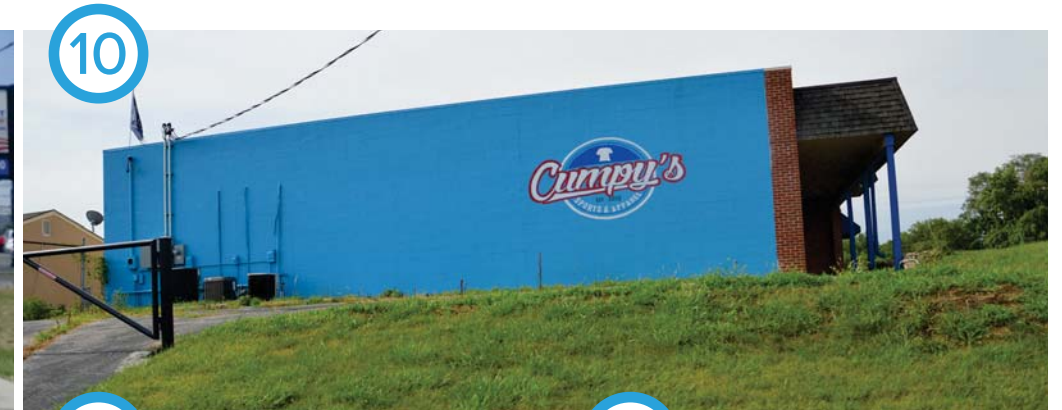
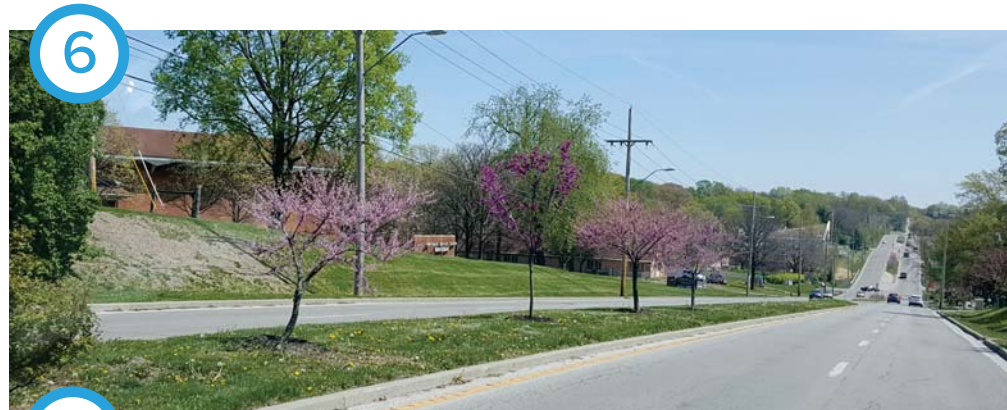
In order to achieve the desired vibrancy envisioned by the community, public investment must first take place in the form of high-quality, cohesive streetscaping. Elements of an attractive streetscape include landscaping, street furnishings, pedestrian and vehicular lighting, gateways, decorative signage and wayfinding, and branding within the public right-of-way. These aesthetic treatments will work to redefine Vivion Road's future, as the treatments demonstrate that the public is arranged to match and support private investment along the corridor.

The following section provides broad recommendations and strategies to improve the corridor's appearance. The Vivion Streetscape Design Toolkit is provided, as well, which details the recommended streetscape materials. Before specifying the recommendations, it is necessary to establish the key aesthetic-related issues to be addressed; they are as follows:

ISSUES

1. Vivion Road's streetscape leaves much to be desired and lacks the level of improvements and amenities expected for a modern, urban roadway. The corridor is seemingly rural in nature.
2. In many locations along the corridor the placement of raised shoulders, utility poles, and drainage ditches and the current grading limit the feasibility of sidewalks, further negating the corridor's appearance as a pedestrian-friendly atmosphere.
3. The cost of burying power lines is high, but the appearance of overhead power lines denotes a dated corridor, not likely to be the recipient of private investment.

4. Public transit stops along the corridor lack the typical amenities expected by modern transit users. The intersections with the highest ridership averages, including North Oak Trafficway and Highland Avenue, are only marked by signage; waiting riders are not welcomed through the use of shelters or benches. As transit demand increases along Vivion Road, this insufficiency will continue to stunt the corridor's connectivity.
5. Landscaping along the corridor is primarily concentrated at the southeast corner of North Oak Trafficway within Anita B. Gorman Park and Vivion Road and Antioch Road at the Antioch Crossing development, but does not extend throughout the older commercial and residential sections of the corridor. While a fair amount of street trees exists along the corridor, landscaping is largely absent from the commercial nodes, leaving parking lots unscreened.



- 6. The presence of landscaped medians, primarily west of Highland Avenue, helps to soften the roadway, but the current plantings provide little in terms of visual interest, creating a missed opportunity.
- 7. The surplus of commercial access drives within the commercial nodes and large number of residential driveways connected to Vivion Road makes it challenging to establish an effective streetscape rhythm.

- 8. The current roadway, and specifically the undivided and two-way turn lane sections, create an austere environment emphasizing “through” traffic, rather than encouraging slower speeds and increased pedestrian and bicyclist activity.
- 9. The corridor’s identity is ill-defined, as gateways, branding, and wayfinding elements are absent from the streetscape.
- 10. Dated and inaccurate signs—primarily worn pylon signs with no architectural detailing—are sprinkled along the corridor, creating visual clutter that detracts from the corridor’s positive features. Though, an increasing amount of new developments are utilizing monument signs or more decorative pylon signs, some with masonry bases.

- 11. Maintenance, particularly as it relates to the proposed corridor streetscape improvements, is a priority. The long-term success of future improvements, regardless of their initial impact, will be dependent upon their ability to be effectively maintained.
- 12. The existing light poles along the corridor, while functional, have a very utilitarian aesthetic.

FIGURE 4.6 AESTHETICS RECOMMENDATIONS MATRIX

RECOMMENDATIONS	GUIDING PRINCIPLES					
	ECONOMIC DEVELOPMENT	CHARACTER & IDENTITY	MOBILITY & CONNECTIVITY	USES & AMENITIES	SUSTAINABILITY	UTILITIES & INFRASTRUCTURE
1. DESIGN AND CONSTRUCT A FAMILY OF GATEWAYS.		■		■		
2. DEVELOP, APPROVE, AND ENFORCE NEW DEVELOPMENT AND DESIGN STANDARDS.	■	■	■	■	■	■
3. PROPERLY LANDSCAPE AND SCREEN COMMERCIAL USES, AND SPECIFICALLY THE PARKING LOTS.		■				
4. STANDARDIZE STREETSCAPE IMPROVEMENTS WITH THE VIVION STREETSCAPE DESIGN TOOLKIT.	■	■		■		■
5. IMPROVE PROMINENT INTERSECTIONS THROUGH A SERIES OF AESTHETIC ENHANCEMENTS.	■	■		■		■
6. ENHANCE THE I-35 BRIDGE WITH ARCHITECTURAL UPGRADES.	■	■	■			■
7. ENHANCE PUBLIC TRANSIT STOPS.	■	■	■	■	■	
8. INTEGRATE NEW AND ENHANCED GREENSPACE ALONG THE CORRIDOR.		■		■	■	
9. MAINTAIN EXISTING LANDSCAPED/PAVED MEDIANS. ENHANCE WITH PLANTINGS WHERE POSSIBLE.		■			■	
10. DESIGN/CONSTRUCT IMPROVEMENTS TO ROAD PROFILES TO ENHANCE THE USER EXPERIENCE.		■	■	■	■	■
11. BURY POWER LINES.		■				
12. DEVELOP, FUND, AND EXECUTE A MAINTENANCE, OPERATIONS, AND SUSTAINABILITY PLAN.	■	■				

RECOMMENDATIONS

1. Design and construct a family of gateways at primary locations, secondary locations, and neighborhood entry points along the corridor in an effort to establish a clear identity and positive first impression to corridor visitors. Coordinate with MoDOT to determine allowable gateway locations and procure necessary maintenance agreements between MoDOT and KCMO/NNI.
 - Tower or primary gateways should be located at North Oak Trafficway, Northeast Antioch Road, and Interstate 35.
 - Secondary gateways should be located at North Highland Avenue, Northeast Chouteau Trafficway, and North Brighton Avenue, as well as the eastern and western limits of the corridor.
 - Neighborhood entry markers should be located at cross streets that serve as major entry points to the residential neighborhoods.

2. Develop, approve, and enforce new development and design standards for the public streetscape and commercial nodes that realize the desired vision for the corridor, as it relates to aesthetics and character. The standards should aim to create a well-connected corridor that considers all users, while normalizing the expectation of quality private development. The standards should coordinate with the guidelines set forth in the North Oak Corridor Streetscape Master Plan and the Vivion Streetscape Design Toolkit through the use of similar materials and colors and complementary improvements to the Vivion Road/North Oak Trafficway intersection.

3. Properly landscape and screen retail and commercial uses, and specifically the associated parking lots, through the use of low-profile decorative fencing and landscaping. Plantings should include a mixture of ground cover, native grasses, deciduous shrubs, perennial flowers, shade trees, and evergreens. Green space buffers adjacent to parking lots should serve a dual purpose as a bioretention system to improve water quality and reduce stormwater runoff.



- Standardize streetscape improvements through the use of the Vivion Road Streetscape Design Toolkit in order to modernize and enhance the appearance and functionality of the public right-of-way. Ensure that the materials used are sustainable, energy efficient, and easy to maintain. The Vivion Road Streetscape Design Toolkit, *Figure 4.7*, that follows outlines the recommended materials that, when used in concert with each other, will redefine the corridor.

FIGURE 4.7 VIVION ROAD STREETSCAPE DESIGN TOOLKIT



STREET TREES AND LANDSCAPING

Landscaping is an essential component of any successful streetscape treatment, adding texture, rhythm, and seasonal color that serves to soften and enhance the surrounding built environment. While specific species are detailed in the softscape palette provided, general landscape improvements should include the following:

- **Street trees** – With the proper species selection and spacing, street trees will provide structure and aesthetic value to the streetscape without sacrificing the visual access to developments and signage that business owners demand. Street tree locations should be coordinated with MoDOT.
- **Understory landscape beds** – Landscape beds should be used to screen parking lots, soften pedestrian plazas, and accentuate gateways, monuments, and public art. Species should be selected for their beauty and form, but also for their ability to thrive within a limited maintenance approach.
- **Landscaped medians** – Existing and proposed medians, which would be installed in targeted locations, should be planted with a combination of understory plantings and small, ornamental trees. Plants should be carefully selected to ensure that they do not block views or cause safety issues for drivers or pedestrians.



SIDEWALKS, TRAILS, BIKE LANES, AND CROSSWALKS

Developing a complete network of accessible sidewalks, trails, bike lanes, and crosswalks is a critical step in establishing a more pedestrian-friendly corridor. Sidewalk connections are currently largely limited; bike lanes are non-existent, and the trail only serves one side of one portion of the roadway. Sidewalks and crosswalks within and adjacent to the commercial nodes should receive a higher level of treatment than those in the less traveled residential areas. Walks should be wider and finishes should be of a higher order, incorporating decorative paving. The trail system should continue to be developed as 10-foot wide paths with a landscape buffer, according to the Trails KC Plan. On-street bike lanes should be buffered by a small painted section whenever possible to increase the perception of safety and visibility of the lanes.



PUBLIC ART

While public art is not widely integrated into the current streetscape, it should play a role in enhancing the overall corridor experience. As new streetscape improvements are made, careful consideration should be given to determining the best way to effectively plan for both permanent and temporary art installations, particularly within pedestrian plazas and larger developments.



STREET LIGHTING

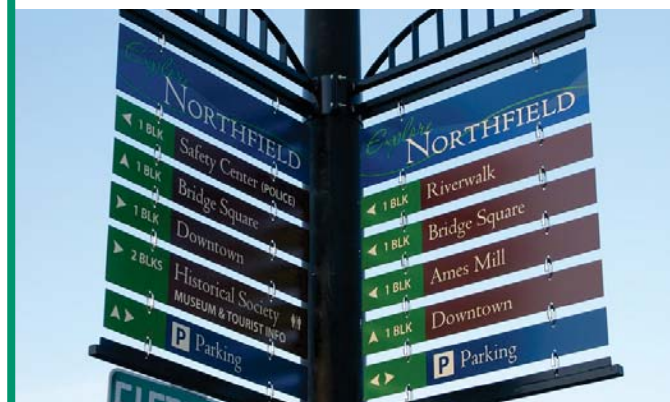
Effective lighting serves to provide access and safety, but can also be a defining characteristic of the streetscape rhythm. The current street lights along Vivion Road are primarily attached to the utility poles, likely detracting from any appealing visual characteristics of the corridor. Future streetscape efforts should include the installation of street lights that complement the proposed site furnishings, establish a modern aesthetic, and meet MoDOT standards. With the proposed undergrounding of power lines, the installation of street lights will become a priority.



GATEWAYS

Gateways, which are shown in Recommendation #2, should be located at the primary and secondary intersections. They should complement the neighborhood markers and corridor markers placed at the eastern and western ends of the Vivion Road corridor. The gateways should serve as a visual cue to let visitors know that they are entering the corridor. The style of the gateways should portray the desired vision of Vivion Road—one of vibrancy and modernity.

The hardscape palette that is provided details the expected quality and color of the materials to be used in gateways.



WAYFINDING

As its name suggests, wayfinding enhances the user experience by informing visitors of the attractions and services that a place has to offer. While vehicular wayfinding should address local attractions, amenities, and places of significance, pedestrian wayfinding should focus more on walkable attractions and businesses along the corridor, and specifically within the commercial nodes. Pedestrian-level kiosks or directories, located in the nodes, and likely by the transit shelters, can be helpful and will often encourage people to park their cars and walk from one destination to another.



BRANDING

Branding is a valuable tool for a corridor looking to establish or reestablish an identity within a community. Vivion Road's message should reflect both its history and its vision of a pedestrian-friendly, modern corridor. Streetscape elements that may be designed to contribute to branding efforts include gateways, banners (affixed to street lights), customized site furnishings, and wayfinding. The top image above shows potential logo concepts that can be integrated into the streetscape features.

FIGURE 4.7 VIVION ROAD STREETSCAPE DESIGN TOOLKIT (CONT.)



SITE FURNISHINGS

True walkability requires more than a complete sidewalks and crosswalk network. A truly inviting pedestrian corridor should incorporate site furnishings and amenities. Such essentials include benches, trash receptacles, bike racks, and bus shelters. These amenities should be primarily concentrated in the commercial nodes and near transit stops to ensure an elevated level of pedestrian convenience in these high activity areas. The furnishings must not be placed in areas that would impede pedestrian flow.

The following detailed site furnishings should guide the expected quality and style of site furnishings along Vivion Road. The proposed furnishings are modern, yet timeless. To assist with the selection process, the manufacturer and collection name of the furnishing has been provided in the bottom left hand corner of the images, where applicable.

SITE FURNISHINGS



Melville / Landscapeforms



MLB1400 / Maglin

BENCHES

Benches are critical in a pedestrian environment. For maximum usability, their placement must be carefully considered. As previously mentioned, benches should be available in high traffic areas, near transit shelters, within pedestrian plazas, and along the trail. Often, benches are highly prized features within commercial developments; they encourage patrons to sit and enjoy the atmosphere; therefore, commercial developments or redevelopments along the corridor should be encouraged to incorporate similar furnishings to establish a consistent look.



Contempra / Barkman



Sorella / Landscapeforms

LANDSCAPE PLANTERS

Landscape planters provide the variation in height and flexibility in placement necessary for a vibrant streetscape. Where landscape beds are not feasible, a planter can add color and visual interest to a smaller area, such as a transit shelter. The planters should be of the same or a similar collection and should vary in height. Pedestrian plazas are the prime location for such planters, but similar to benches, they can also be incorporated into adjacent commercial developments in an effort to establish a consistent identity. Specifically, planters can be used to emphasize entries and significant site features.



MBR150 / Maglin



SCBR1600 / Maglin

BIKE RACKS

By providing bike racks, a business or travel corridor sends the message that they are bicycle-friendly. Additionally, the level of convenience for bike riders increases, encouraging higher amounts of bike traffic along the roadway. The placement of bike racks should be within pedestrian plazas, near transit shelters, and within and adjacent to commercial nodes. The bike racks to be integrated into the Vivion Road streetscape must be surface-mounted, complement other site furnishings, and be of a high quality to ensure a long lifetime and low maintenance expenses.



MLWR200-32 Series / Maglin



Scarborough / Landscapeforms

TRASH/RECYCLING RECEPTACLES

The widespread placement of trash and recycling receptacles increases the level of convenience for patrons within developments and pedestrians and bicyclists traveling along the roadway. With highly visible and well-placed receptacles, the likelihood of littering decreases. The trash and recycling receptacles should be grouped together, in an effort to encourage more recycling.



LIGHT POLE ENHANCEMENTS

While the current street lights are affixed to the power poles, the opportunity for upgraded light fixtures will present itself if the utility lines are buried. Generally, a modern, streamlined design for street lights is preferred for the Vivion Road right-of-way, but specific enhancements, such as masonry bases or decorative medallions that further brand the corridor, are recommended within the commercial nodes and the adjacent commercial developments. Though, masonry bases and decorative medallions are not recommended within MoDOT right-of-way.



SCTB1600 / Maglin



Light Column Bollard / FORMS+SURFACES

BOLLARDS

As pedestrian-friendly space increases along the corridor, the need for bollards will increase. The current bollards used in trail construction, as detailed in the Trails KC Plan, should continue to be used at each trail and roadway crossing. Different, yet complementary, bollards should be used as an accent in the pedestrian plazas to further define the space.



35 Signal / Landscapeforms



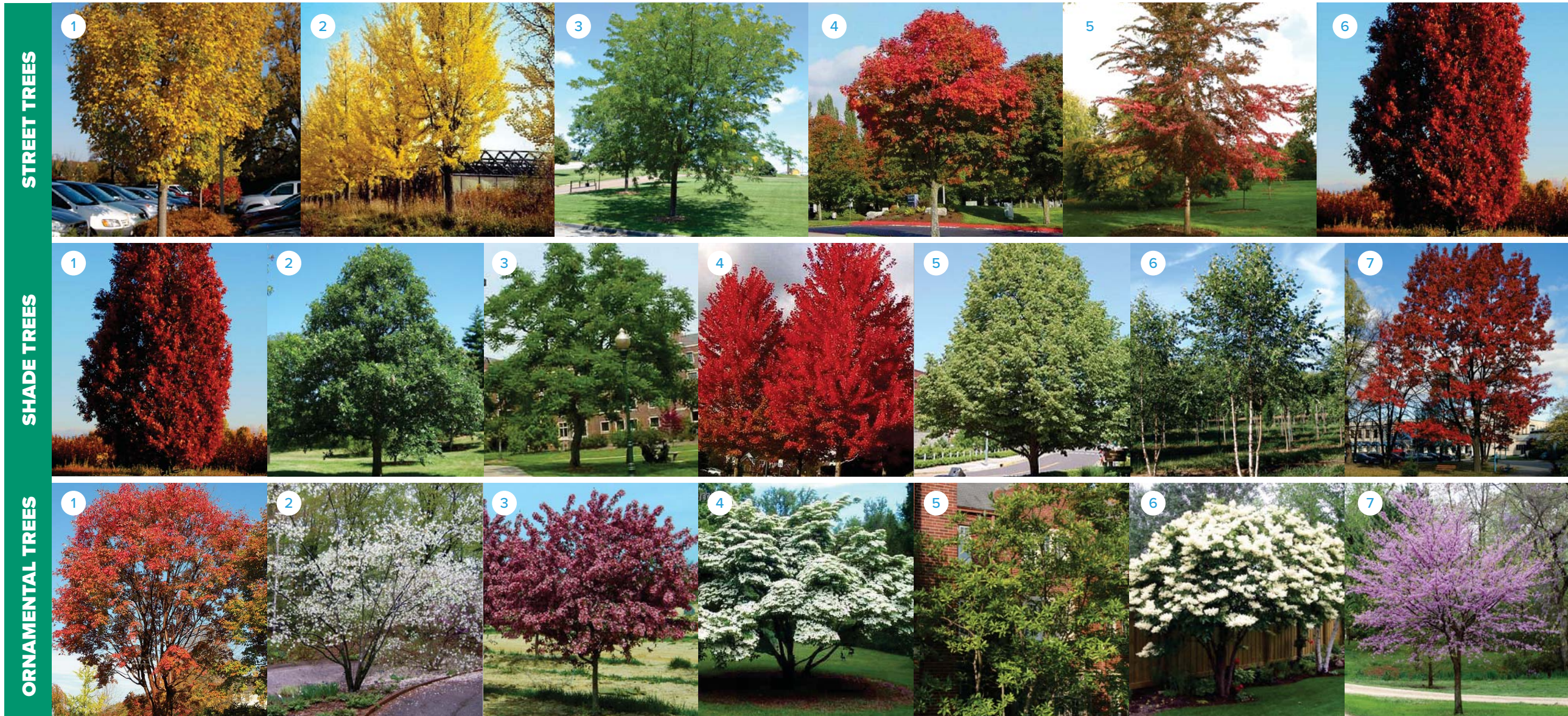
Alcott / Landscapeforms

PEDESTRIAN-SCALE LIGHTING

Pedestrian-scale lighting is important in areas in which people will walk during evening and nighttime hours. Such lighting addresses safety concerns—both personal safety and traffic safety—as pedestrians become more visible to passing vehicular traffic. Pedestrian-scale lighting is closer to the ground, and should be located to provide an even distribution of light along the sidewalk. White light, rather than a yellow light, is more inviting to pedestrians and should be used within pedestrian plazas, within parking lots, and along the trail and sidewalk network.

SOFTSCAPE PALETTE

Figure 4.8 Softscape Palette



Legend

Street Trees

1. State Street Maple
2. Princeton Sentry Ginkgo
3. Skyline Honeylocust
4. Pacific Sunset Maple
5. Frontier Elm
6. Columnar English Oak

Shade Trees

1. Columnar English Oak
2. Swamp White Oak
3. Kentucky Coffeetree
4. American Splendor Maple
5. Legend Linden
6. River Birch
7. Red Oak

Ornamental Trees

1. Paperbark Maple
2. Serviceberry
3. Crapapple sp.
4. Kousa Dogwood
5. Sweetbay Magnolia
6. Japanese Lilac
7. Eastern Redbud

SOFTSCAPE PALETTE (CONT.)

Figure 4.8 Softscape Palette (Cont.)



Legend

Deciduous Shrubs

1. Little Henry Sweetspire
2. Homerun Rose
3. Nearly Wild Rose
4. Compact Koreanspice Viburnum
5. Kelsey's Red Twig Dogwood
6. Yellow Twig Dogwood
7. Butterfly Bush
8. Winterberry
9. Sunburst St. John's Wort

Evergreen Shrubs

1. Arcadia Juniper
2. Hughes Juniper
3. China Girl/China Boy Holly
4. Girard's Rose Azalea
5. Wintergreen Korean Boxwood
6. Green Gem Boxwood
7. Yew

Ornamental Grasses

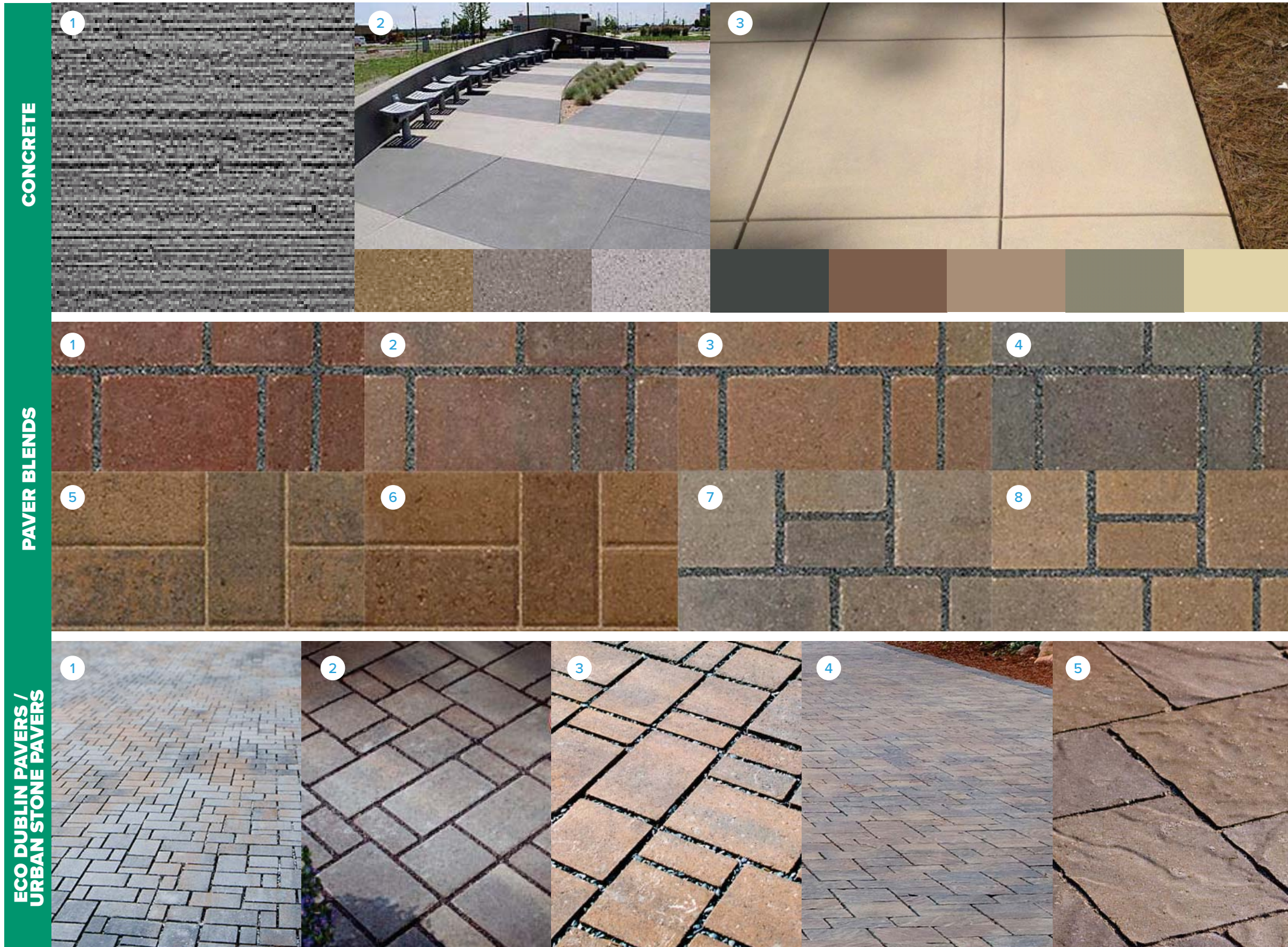
1. KF Feather Reed
2. Little Bluestem
3. Blue Oat
4. Hameln Dwarf Fountain Grass
5. Prairie Dropseed
6. Heavy Metal Switchgrass

Perennials and Groundcovers

1. Autumn Joy Sedum
2. Salvia May Night
3. Mercury Rising Coreopsis
4. Zagreb Coreopsis
5. Purple Phlox
6. Moonshine Yarrow
7. Bee Balm
8. Black Eyed Susan
9. Butterfly Milkweed
10. Shasta Daisy
11. Purple Coneflower
12. Blanket Flower
13. Blazing Star Liatris
14. Happy Returns Daylily
15. Paprika Daylily
16. Russian Sage

HARDSCAPE PALETTE

Figure 4.9 Hardscape Palette



Legend

Concrete

1. Grey Concrete, Broom Finish
2. Sandstone Exposed Aggregate (Bomanite)
(colors listed from left to right)
 - Goldenrod
 - BC 61
 - White Cement
3. Integral Colored Concrete (Bomanite)
(colors listed from left to right)
 - Coal Gray
 - Autumn Brown
 - Gobi Desert
 - Mossrock
 - Beech

Paver Blends

1. Ashbury Haze
2. Bannockburn Red
3. Bristol Beige
4. Brookstone Slate
5. Burnt Amber
6. Burnt Walnut
7. Cotswold Mist
8. Gascony Tan

Eco Dublin Pavers / Urban Stone Pavers

1. Eco Dublin Permeable Pavers (Belgard)
1. Eco Dublin Permeable Pavers (Belgard)
1. Eco Dublin Permeable Pavers (Belgard)
2. Urban Stone Pavers (Belgard)
3. Urban Stone Pavers (Belgard)

HARDSCAPE PALETTE (CONT.)

Figure 4.9 Hardscape Palette (Cont.)



RETAINING WALLS

CROSSWALKS

Legend

Retaining Walls

- 1. Dimensional, Split Face Limestone, high density and low absorption percentages

Crosswalks

- 1. Integral Colored Concrete
- 2. Painted Crosswalk, Type: Standard
- 3. Painted Crosswalk, Type: Ladder

LOGO ALTERNATIVES

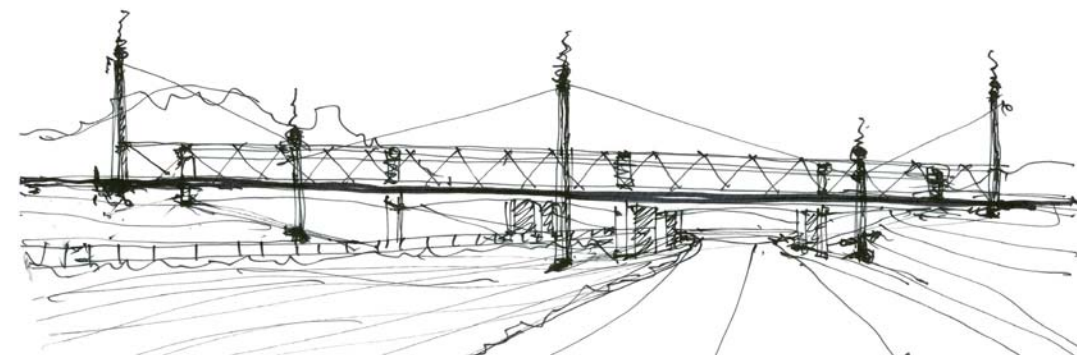
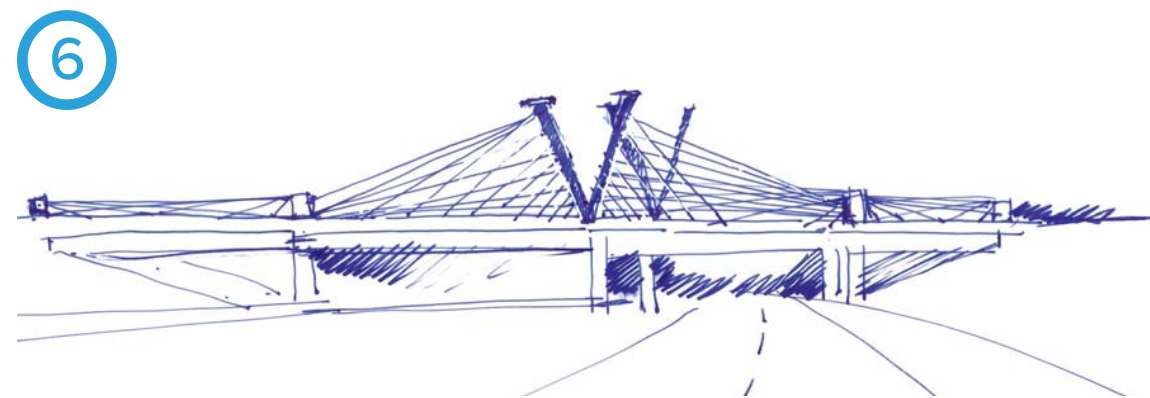
Figure 4.10 Logo Alternatives



Preferred Logo
(left design)



5. Improve prominent intersections through the use of wide, decorative and/or more highly visible crosswalks, accessible ADA ramps, pedestrian-activated signals, curb extensions, landscaping, masonry planters, and decorative traffic signals. Five intersections have been identified as highly visible, prominent, and deserving of such improvements: North Oak Trafficway, Antioch Road, Chouteau Trafficway, North Brighton Avenue, and the Interstate 35 interchange. Coordination and/or partnerships with the Missouri Department of Transportation (MoDOT) and the City will be required if additional right-of-way must be acquired to install the recommended improvements.
6. Enhance the I-35 bridge with architectural upgrades to the parapet and wall surfaces and landscaping improvements around the new gateway monument, approaches and embankments, and on- and off-ramps. Vehicular and pedestrian lighting should be included, in line with the proposed bridge bicyclist and pedestrian pathways as noted in *Mobility*.
7. Enhance public transit stops at North Oak Trafficway, Highland Avenue, and Brighton Avenue through the use of landscaping, concrete pads, signage (to include route and time information), wayfinding, site furnishings, and/or shelters with the intent to make the corridor more transit-friendly. Transit amenities such as these create a more comfortable environment for riders and encourage increased ridership.



Planning for Public Spaces



“When you focus on place, you do everything differently.”

- Fred Kent, *Project for Public Spaces*

The power of public spaces is quickly being realized by communities around the country. Places that strengthen connections between neighbors create a shared value for all to enjoy. Well-designed and planned public spaces pay attention to the physical, cultural, and social identities of an area. The Project for Public Spaces finds that (1) sociability, (2) a wide range of uses and activities, (3) access and linkages, and (4) comfort and image each must be present to create a great public place.

Streets and the places located along them must be reenvisioned; streets are not just a thoroughfare, but serve to strengthen and support the destinations they serve. Vivion Road can become a place in itself through infrastructure that actively supports multiple modes of transportation, pathways that connect to key destinations, and the provision of site amenities. Gateways and aesthetic enhancements will further define this character and identity, which will entice both future residents and businesses.

STREETSCAPE PLAN & RECOMMENDATIONS

8. Integrate new and enhanced green space along the corridor in the form of public plazas, heightened streetscape landscaping, or dedicated open spaces. Ensure that the functionality of these new green spaces adds value to residents' lives and visitors' experience. As a key corridor improvement, public plazas, varying in magnitude, should be constructed at each of the three primary gateway nodes. The I-35 Interchange plaza, for example, should include a welcoming gateway feature, site furnishings, and vivid landscaping.

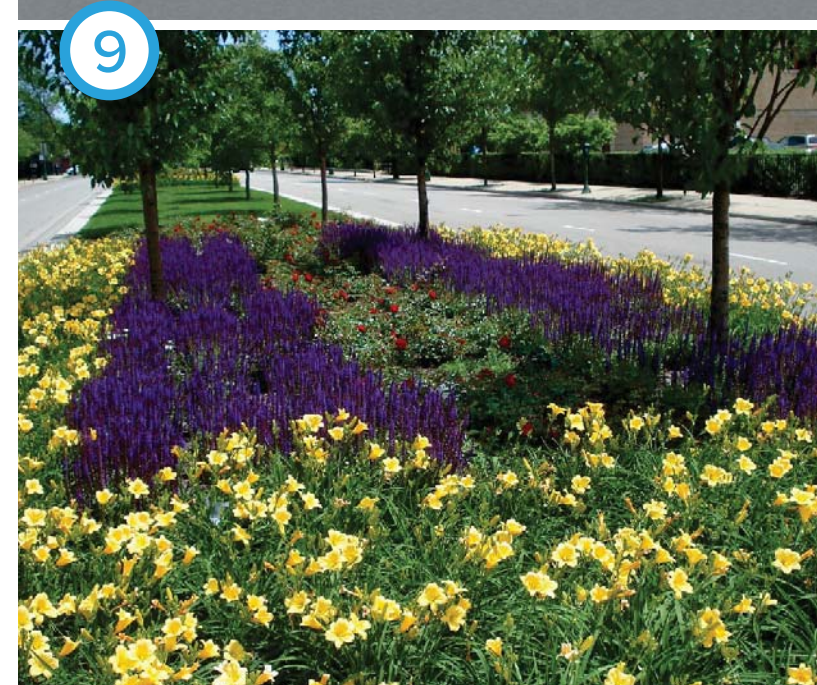
9. Maintain the existing landscaped and paved medians within the corridor, and enhance with additional landscape planting where room allows. Enhancements should include low-profile masonry planters, native grasses, and ornamental trees, specifically when approaching major intersections. In particular, the existing medians east of I-35 should be prioritized for landscape enhancements.

10. Design and construct typical road profiles that effectively define districts along the corridor and set the standard amenities for all users. These profiles are shown in *Figure 4.4 Recommended Road Profiles*.

11. Understand the aesthetic and functional benefits of burying power lines; benefits include (1) reduced barriers to sidewalk infill; (2) less visual clutter; and (3) an opportunity to cultivate a tree canopy. The primary options to address the power lines include burying through the use of vaults or moving the lines to an alternate, less visual location. Though both options are expensive, this improvement will allow for the implementation of several other transformative recommendations.

12. Develop, fund, and execute an appropriate maintenance, operations, and sustainability plan to ensure public improvements provide long-term benefits. The maintenance plan should provide strategies for the following:

- Irrigation, using drip irrigation systems with rain sensors, and maintenance of street trees and understory, drought-tolerant landscape material;
- Regularly scheduled cleaning of gateways;
- Regular rotation and replacement of streetlight banners;
- Repair or replacement of damaged site furnishings and amenities;
- Repair or replacement of damaged sidewalks;
- Emptying of trash receptacles;
- Collection of other trash and debris; and
- Removal of graffiti.





IMPROVEMENT PLANS

While the general recommendations provided an overview of the improvements to be integrated throughout the corridor, the following pages take an in-depth look at the proposed improvements along each stretch of the corridor. The first three improvement plans shown detail the proposed improvements for each of the primary gateways/nodes. The roadway sections follow and are shown from west to east, separated into nine sections.

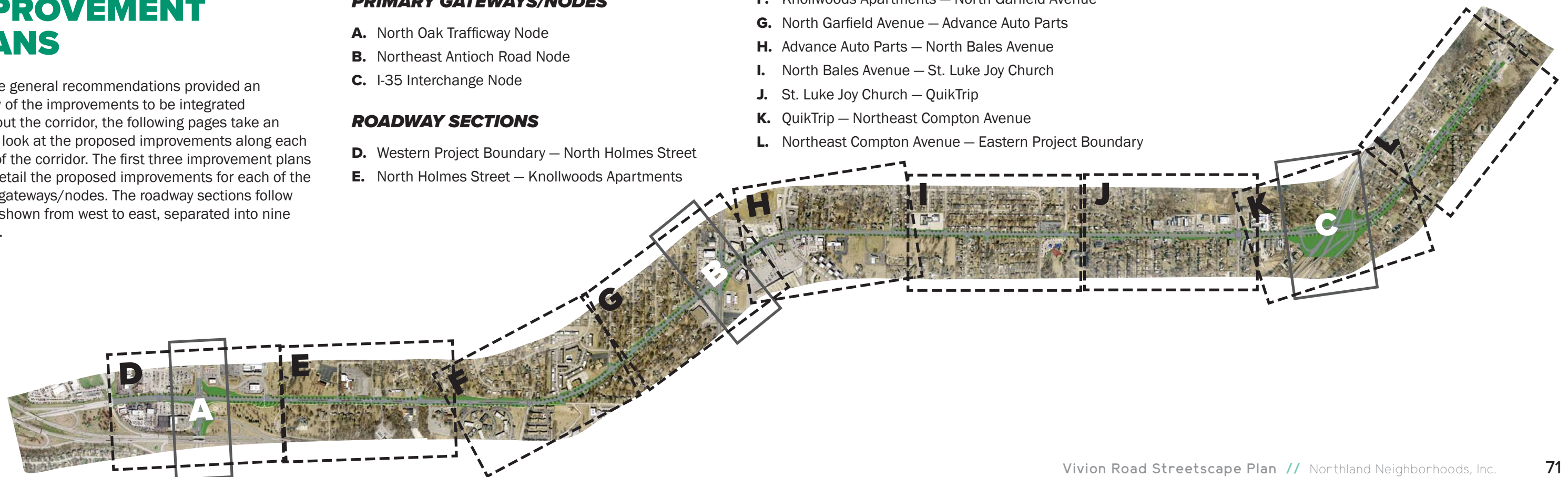
PRIMARY GATEWAYS/NODES

- A.** North Oak Trafficway Node
- B.** Northeast Antioch Road Node
- C.** I-35 Interchange Node

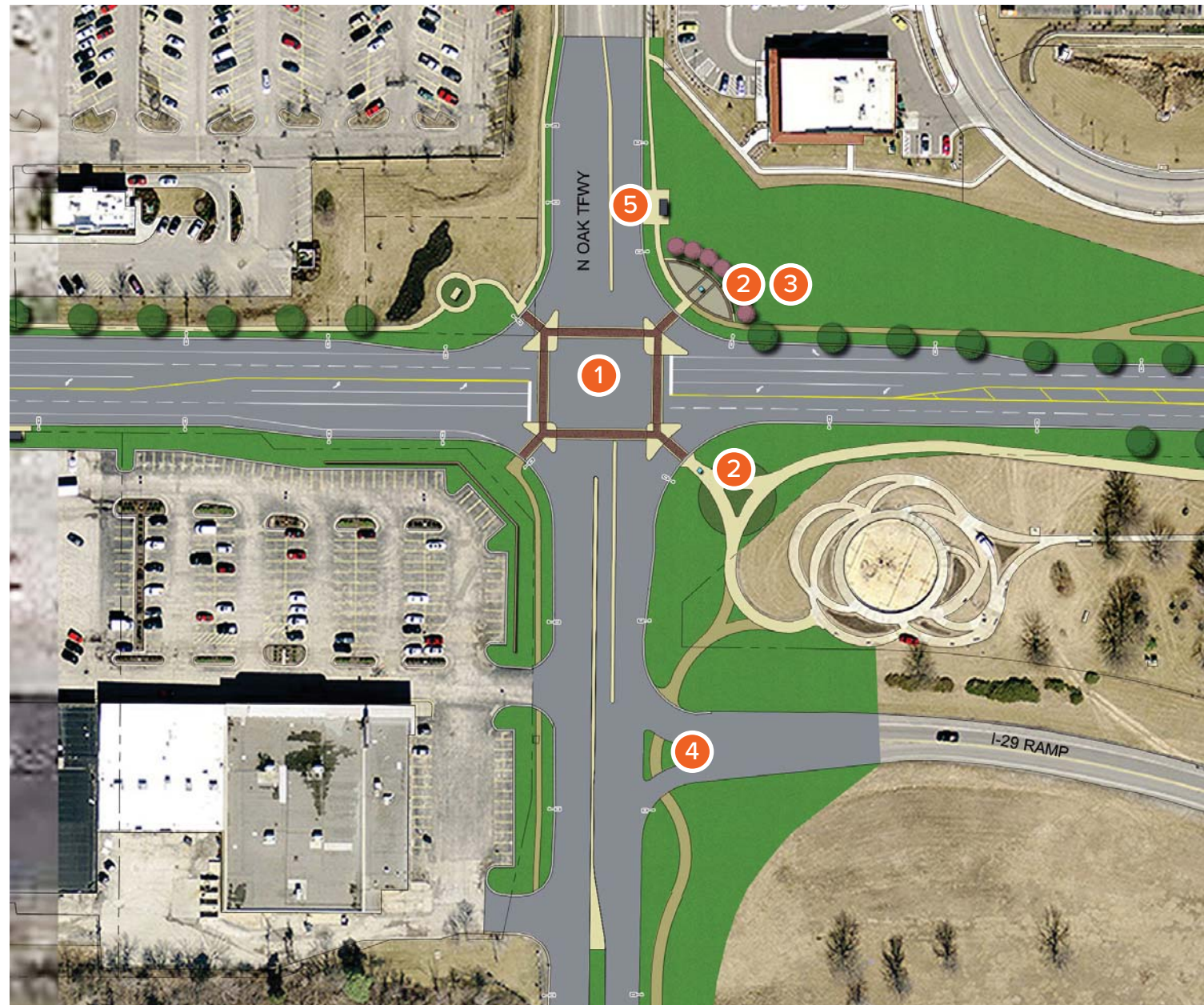
ROADWAY SECTIONS

- D.** Western Project Boundary – North Holmes Street
- E.** North Holmes Street – Knollwoods Apartments

- F.** Knollwoods Apartments – North Garfield Avenue
- G.** North Garfield Avenue – Advance Auto Parts
- H.** Advance Auto Parts – North Bales Avenue
- I.** North Bales Avenue – St. Luke Joy Church
- J.** St. Luke Joy Church – QuikTrip
- K.** QuikTrip – Northeast Compton Avenue
- L.** Northeast Compton Avenue – Eastern Project Boundary



A. NORTH OAK TRAFFICWAY NODE



While North Oak Trafficway is certainly a critical, well traveled intersection along the Vivion Road Corridor, the truth is that the improvements necessary to enhance this node are less substantial than the those recommended for the Antioch or I-35 nodes. This is largely due to the fact that the intersection is already anchored by the Anita B. Gorman Park and the iconic Northland Fountain at the southeast corner. Nonetheless, it would still benefit greatly from enhanced crosswalks, added sidewalks and plazas, and signalization improvements that contribute to a better pedestrian experience. Further, attractive gateway columns should be located on each side of Vivion – preferably east of North Oak Trafficway due to space and topographic constraints – welcoming visitors to the corridor.

-  RIGHT-OF-WAY LINE
-  PROPOSED SIDEWALKS/TRAILS
-  EXISTING SIDEWALKS/TRAILS
-  STREET LIGHTS
-  STREET TREES
-  ORNAMENTAL TREES

1 Enhanced Pedestrian Intersection
Integral colored concrete crosswalks with refuge islands, crossing signals, and ADA accessible ramps at all corners

2 Primary Gateway Monument
Pair of large stone columns that establish an identity and define this key node along Vivion Road

3 Pedestrian Plaza
Small plaza with a low seat wall, site furnishings, and colorful landscaping,

4 Reconfigured On-Ramp
Interstate on-ramp reconfiguration to accommodate extension of multi-use trail; review and approval by MoDOT and FHWA required (See the *North Oak Corridor Streetscape Plan*)

5 Enhanced Transit Stop
Bus shelter with site furnishings and bus route data

B. NORTHEAST ANTIOCH ROAD NODE



Located in the heart of the corridor and surrounded by large lot retail, the Antioch Road intersection would benefit greatly from the same pedestrian connectivity improvements proposed for the North Oak Trafficway node. Beyond those improvements, the northeast and southwest corners of the intersection offer the opportunity to integrate amenities aimed at enhancing the aesthetic of the corridor and further improving the pedestrian experience. As illustrated in the conceptual rendering above, water walls could provide such an amenity while also allowing for additional branding opportunities. And speaking of branding, the intersection could be anchored and framed by a overhead gateway structure that travelers along Vivion Road and Antioch Road would pass under.

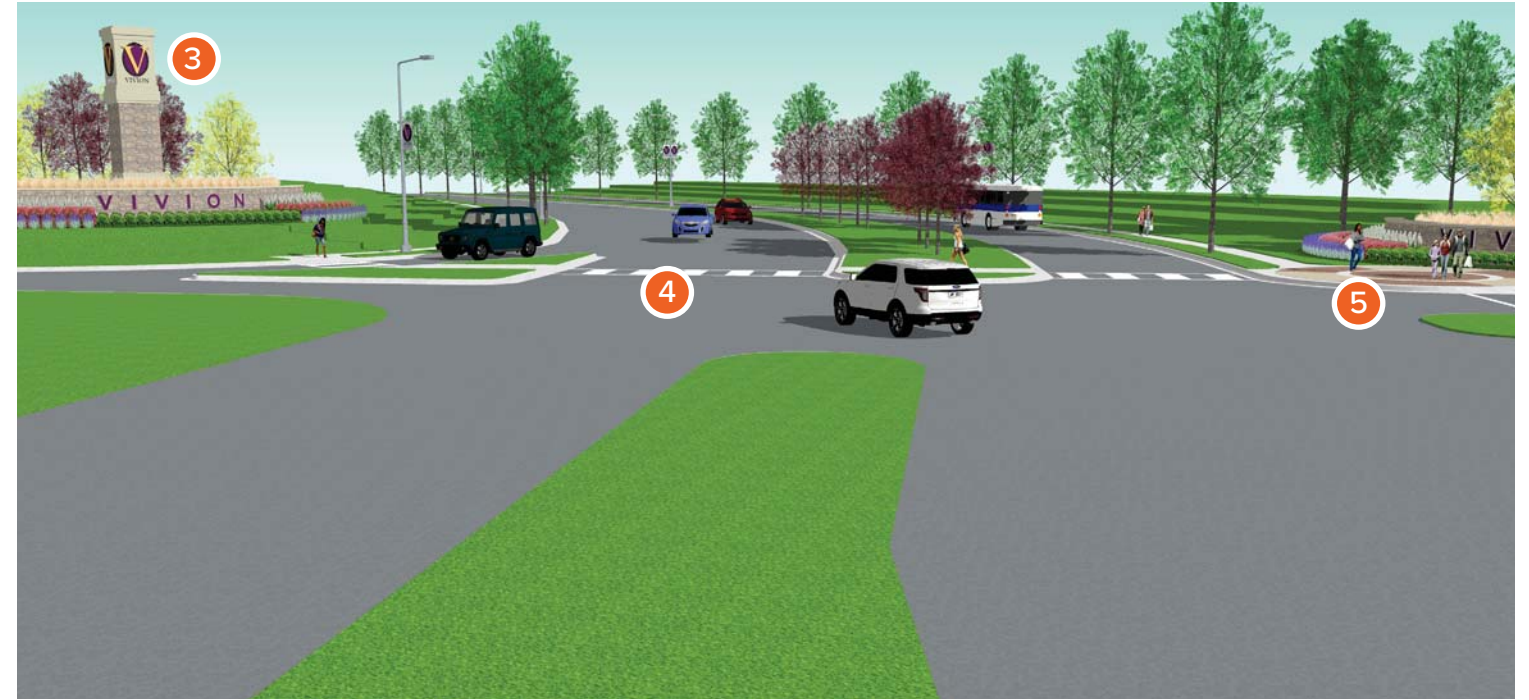
-  RIGHT-OF-WAY LINE
-  PROPOSED SIDEWALKS/TRAILS
-  EXISTING SIDEWALKS/TRAILS
-  STREET LIGHTS
-  STREET TREES
-  ORNAMENTAL TREES

1 Enhanced Pedestrian Intersection
Integral colored concrete crosswalks with refuge islands, crossing signals, and ADA accessible ramps at all corners

2 Primary Gateway Overhead Structure
Overhead structure spanning Vivion Road and Antioch Road, serving as a primary gateway for the corridor

3 Water Wall (or Another Significant Amenity)
Water wall — or another significant amenity — with Vivion Road branding, framed by ornamental trees and colorful understory landscaping

C. I-35 INTERCHANGE NODE



Throughout the stakeholder process, the I-35 Interchange was a point of frustration amongst participants. Though most pointed to driver safety concerns, others complained about its lack of aesthetic appeal and pedestrian connectivity. Addressing these concerns, the proposed redesign of this node includes realigned on- and off-ramps, bridge enhancements, improved pedestrian pathways, and a tower gateway structure. Combined, the improvements will serve to enhance user safety, increase connectivity for residents of the corridor, and welcome visitors to Vivion Road. Though the associated price tag is not insignificant, the positive impact of said improvements will be felt in both the short and long term by changing the perception of the corridor and spurring additional reinvestment.

-  RIGHT-OF-WAY LINE
-  PROPOSED SIDEWALKS/TRAILS
-  EXISTING SIDEWALKS/TRAILS
-  STREET LIGHTS
-  STREET TREES
-  ORNAMENTAL TREES

1 Pedestrian Bridge
Pedestrian bridge structure spanning I-35 in order to improve non-vehicular connectivity in this area

2 Bridge Enhancement
Enhancements that improve the aesthetic quality of the bridge along Vivion Road and from I-35

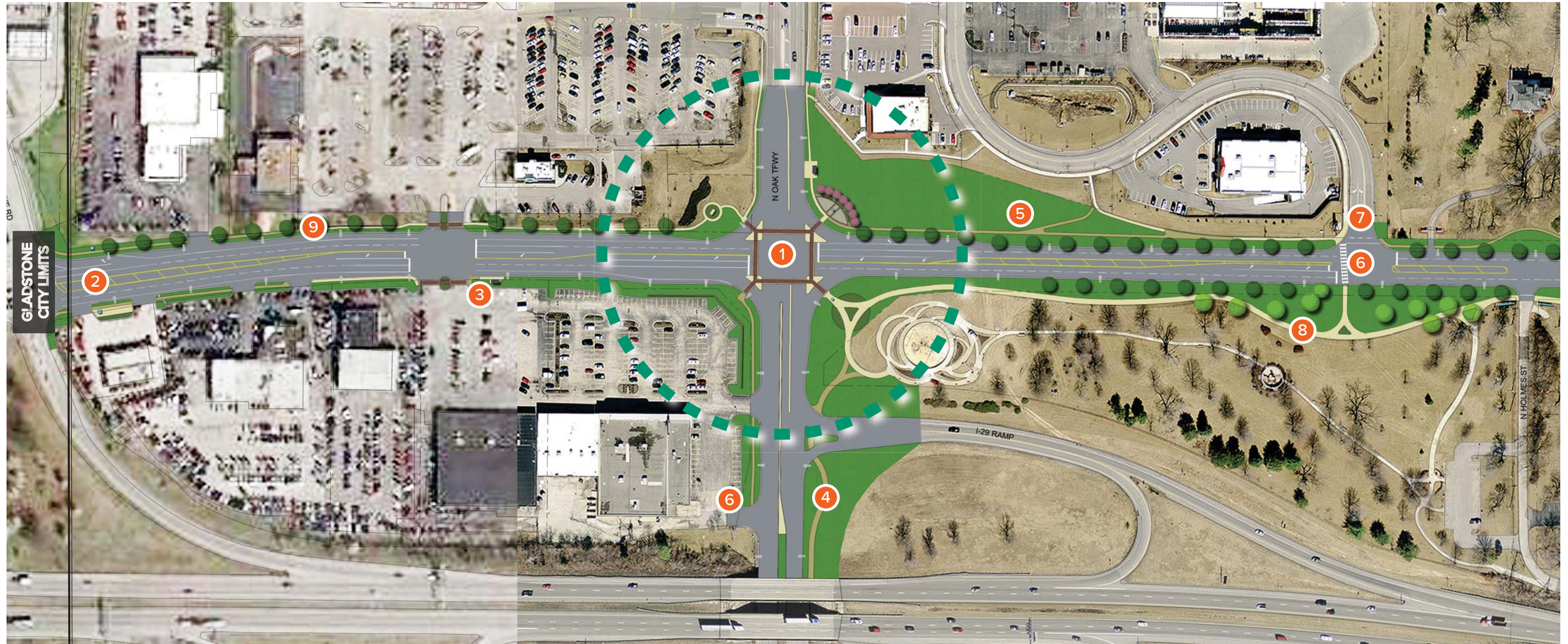
3 Primary Gateway Tower
Gateway tower located east of the bridge and built into the hillside to maximize visibility from all directions

4 Reconfigured Intersection
Interstate on-ramp reconfiguration with the goal of improving safety for all modes of transportation; review and approval by MoDOT and FHWA required

5 Pedestrian Plaza
Small plaza with site furnishings and colorful landscaping, located to accommodate pedestrian traffic across Vivion Road

6 Road Profile Improvements
Improvements to include shoulder removal, continuous sidewalks, street trees, and enhanced median landscaping

D. WESTERN PROJECT BOUNDARY – NORTH HOLMES STREET



RIGHT-OF-WAY LINE
 PROPOSED SIDEWALKS/TRAILS
 EXISTING SIDEWALKS/TRAILS
 STREET LIGHTS
 STREET TREES
 ORNAMENTAL TREES

- 1** North Oak Trafficway Node (See Page 72)
- 2** Corridor Entry Monuments (Secondary Gateways)
- 3** Enhanced Transit Stop
- 4** Reconfigured On-Ramp and Trail Extension
- 5** Sidewalk and Street Tree Infill
- 6** Repainted Crosswalk, Type: Ladder
- 7** Repainted Crosswalk, Type: Standard
- 8** Anita B. Gorman Park and Vivion Trail
- 9** Consider Future Trail Extension on North Side of Vivion Road, from North Oak Trafficway to Belleview Avenue

E. NORTH HOLMES STREET – KNOLLWOODS APARTMENTS



RIGHT-OF-WAY LINE
 PROPOSED SIDEWALKS/TRAILS
 EXISTING SIDEWALKS/TRAILS
 STREET LIGHTS
 STREET TREES
 ORNAMENTAL TREES

- 1 Existing Landscaped Medians
- 2 Painted Crosswalk, Type: Standard
- 3 Sidewalk and Street Tree Infill
- 4 Vivion Trail
- 5 Hawk Signal & Painted Crosswalk, Type: Ladder
- 6 Neighborhood Entry Markers

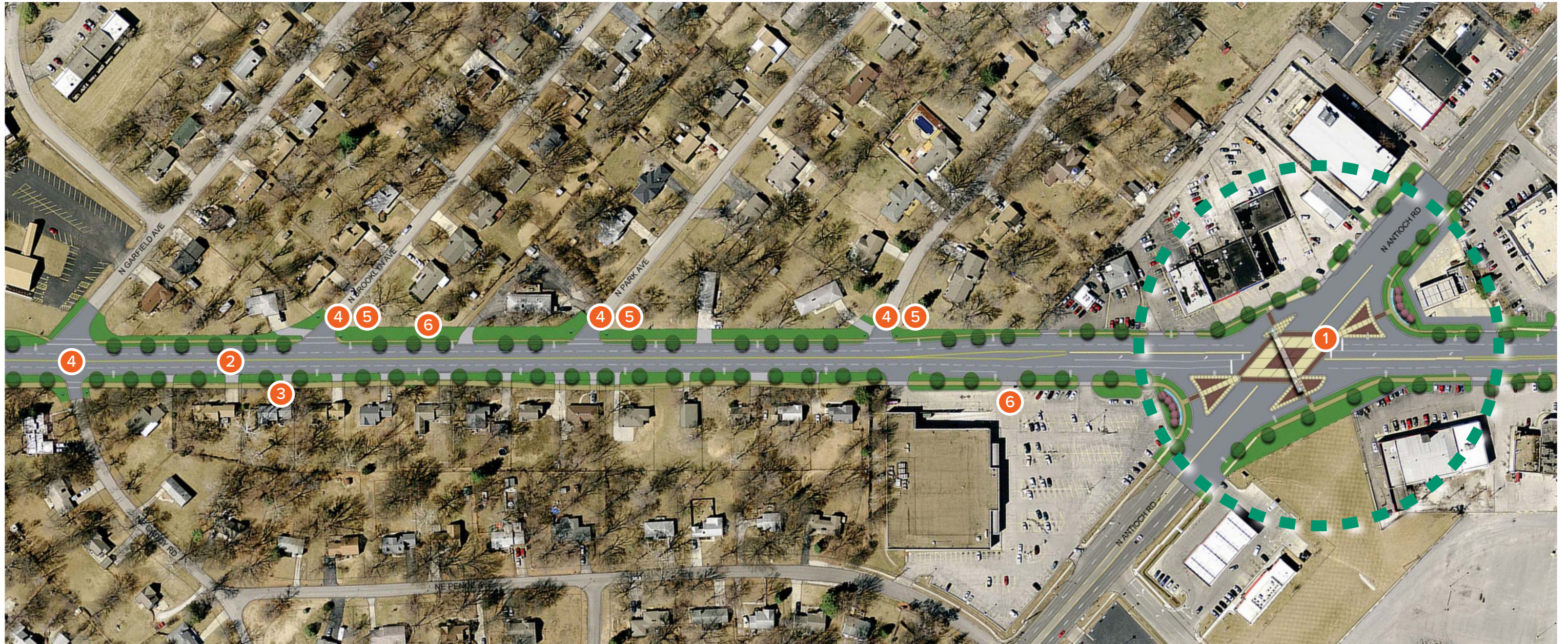
F. KNOLLWOODS APARTMENTS – NORTH GARFIELD AVENUE



RIGHT-OF-WAY LINE
 PROPOSED SIDEWALKS/TRAILS
 EXISTING SIDEWALKS/TRAILS
 STREET LIGHTS
 STREET TREES
 ORNAMENTAL TREES

- 1** Existing Landscaped Medians
- 2** Vivion Trail
- 3** Highland Ave. Intersection Enhancements & Realignment
- 4** Neighborhood Entry Markers
- 5** Secondary Gateway Monuments
- 6** Enhanced Transit Stop
- 7** Sidewalk and Street Tree Infill
- 8** Vivion Trail Extension
- 9** Painted Crosswalk, Type: Standard
- 10** 48th Street Reconfiguration
48th Street reconfigured to establish a safer intersection, lining up with the access drive to the north. Center median along Vivion to be extended to the east to accommodate the reconfiguration.

G. NORTH GARFIELD AVENUE – ADVANCE AUTO PARTS



- | | |
|--|--|
| 1 Northeast Antioch Road Node (See Page 73) | 5 Neighborhood Entry Markers |
| 2 Reduced Road Width (See Road Profile 2 in Figure 4.4) | 6 Sidewalk “Ribbons” at Commercial Access Drives |
| 3 Vivion Trail Extension | 7 Sidewalk and Street Tree Infill
<i>Reduced sidewalk and buffer in limited locations along the north side due to topographical challenges</i> |
| 4 Painted Crosswalk, Type: Standard | |

H. ADVANCE AUTO PARTS – NORTH BALES AVENUE



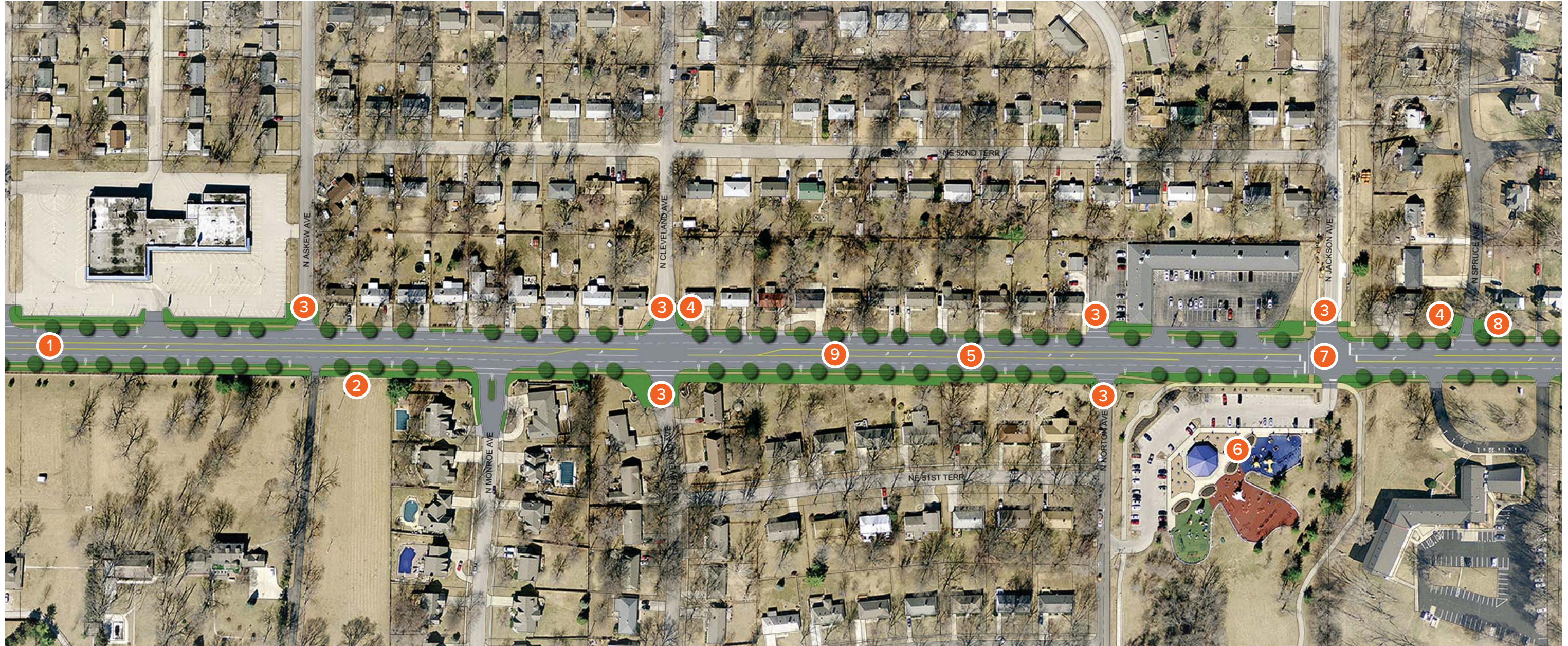
RIGHT-OF-WAY LINE
 PROPOSED SIDEWALKS/TRAILS
 EXISTING SIDEWALKS/TRAILS
 STREET LIGHTS
 STREET TREES
 ORNAMENTAL TREES

- 1** Sidewalk “Ribbons” at Commercial Access Drives
- 2** Vivion Trail Extension
- 3** Chouteau Trafficway Intersection Enhancements
- 4** Secondary Gateway Monuments

- 5** Painted Crosswalk, Type: Standard
- 6** Neighborhood Entry Markers
- 7** Raised Shoulder Removal (See Road Profile 3 in Figure 4.4)
- 8** Sidewalk and Street Tree Infill

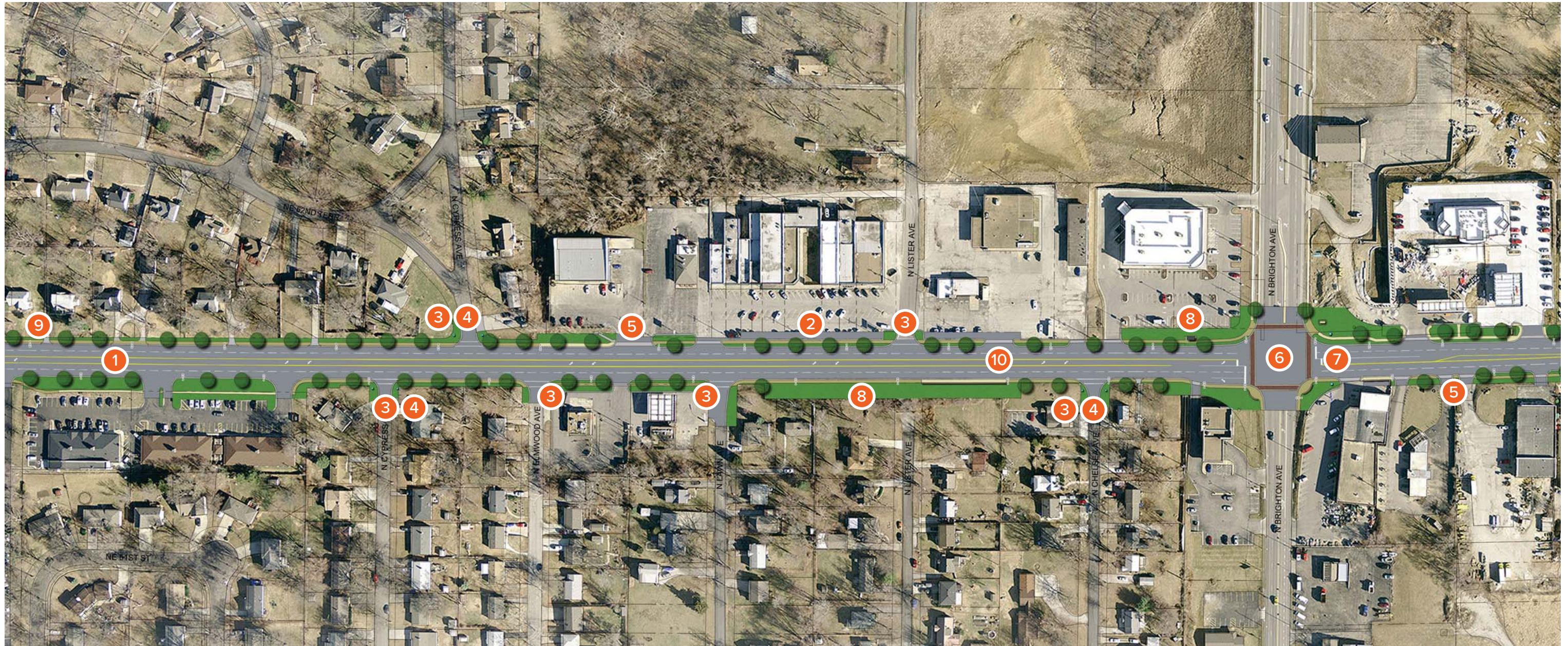
- 9** Sidewalk Infill
New sidewalk adjacent to back-of-curb along the north side in limited locations due to topographical challenges
- 10** Potential On-Street Bike Lanes in the Future

I. NORTH BALES AVENUE – ST. LUKE JOY CHURCH



- 1** Raised Shoulder Removal (See Road Profile 3 in Figure 4.4)
- 2** Sidewalk and Street Tree Infill
- 3** Painted Crosswalk, Type: Standard
- 4** Neighborhood Entry Markers
- 5** Enhanced Road Layout (See Road Profile 3 in Figure 4.4)
- 6** Penguin Park
- 7** Painted Crosswalk, Type: Ladder
- 8** Sidewalk Infill
New sidewalk adjacent to back-of-curb along the north side in limited locations to due to topographical challenges
- 9** Potential On-Street Bike Lanes in the Future

J. ST. LUKE JOY CHURCH – QUIKTRIP



RIGHT-OF-WAY LINE
 PROPOSED SIDEWALKS/TRAILS
 EXISTING SIDEWALKS/TRAILS
 STREET LIGHTS
 STREET TREES
 ORNAMENTAL TREES

- 1** Enhanced Road Layout (See Road Profile 3 in Figure 4.4)
- 2** Sidewalk and Street Tree Infill
- 3** Painted Crosswalk, Type: Standard
- 4** Neighborhood Entry Markers
- 5** Sidewalk “Ribbons” at Commercial Access Drives
- 6** Brighton Intersection Enhancements
- 7** Secondary Gateway Monuments
- 8** Enhanced Transit Stop
- 9** Sidewalk Infill
New sidewalk adjacent to back-of-curb along the north side in limited locations to due to topographical challenges
- 10** Potential On-Street Bike Lanes in the Future

K. QUIKTRIP – NORTHEAST COMPTON AVENUE



1 I-35 Interchange Node (See Page 74)

2 Pedestrian Bridge

3 Painted Crosswalk, Type: Standard

4 Sidewalk "Ribbons" at Commercial Access Drives

5 Sidewalk and Street Tree Infill

6 Bridge Enhancements and Lane Reduction

7 Enhanced Landscaped Medians

8 Reduced Road Width (See Road Profile 4 in Figure 4.4)

9 Potential On-Street Bike Lanes in the Future

L. NORTHEAST COMPTON AVENUE – EASTERN PROJECT BOUNDARY



/ RIGHT-OF-WAY LINE
 PROPOSED SIDEWALKS/TRAILS
 EXISTING SIDEWALKS/TRAILS
 □ STREET LIGHTS
 STREET TREES
 ORNAMENTAL TREES

- 1 Corridor Entry Monuments (Secondary Gateways)
- 2 Painted Crosswalk with Refuge Island, Type: Ladder
- 3 Painted Crosswalk, Type: Standard
- 4 Sidewalk “Ribbons” at Commercial Access Drives
- 5 Sidewalk and Street Tree Infill
- 6 Reduced Road Width (See Road Profile 4 in Figure 4.4)
- 7 Enhanced Landscaped Medians
- 8 Potential On-Street Bike Lanes in the Future

COMPLETE STREETS APPROACH

Per Smart Growth America, Complete Streets can be described as follows:

Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.

While this description focuses on the users, there are other environmentally sustainable components – like storm water management practices – that can be integrated into Complete Streets as well. As societal expectations for streets and neighborhoods continue to

evolve, the consideration of such an approach becomes increasingly relevant. Though the recommendations of this plan integrate parts of the Complete Streets framework, its full integration was ultimately left for future consideration.

The key difference between the recommendations of this plan and a full Complete Streets approach is the handling of bicycle traffic. While the plan recommends the extension of the existing trail network, Complete Streets typically include dedicated, on-street bike lanes. The consideration of on-street bicycle traffic has become a priority for the City of Kansas City in recent years, and so it would be short-sighted to ignore this issue as it relates to Vivion Road.

Further, the City Council recently passed Resolution 170215 (Sub.), “Expressing the City Council’s commitment and support for a comprehensive plan to ensure that capital improvements maximize neighborhood livability, safety, and economic development in Kansas City; and directing the City

Manager to develop and implement the plan.” Included in that resolution was the following directive:

Development of a “Complete Streets” policy that will ensure the design and operation of all city street projects includes safe access for all users.

With that in mind, this page and its focus on Complete Streets is intended to serve as a reminder that forward-thinking approaches to multi-modal access along Vivion Road should continue to be explored. While a traffic study is a likely first step in better understanding what is possible, continued dialogue and analysis will need to be conducted. And though *Figure 4.11* illustrates one example of what an alternative approach might look like, the truth is that preferred models for multi-modal access – particularly as it relates to bike traffic – are ever-evolving. Ultimately, the ideal solution is that which best meets the needs of the community, making Vivion Road “a welcoming, vibrant streetscape that connects residents, businesses and the surrounding community to the many assets that make Vivion Road special.”

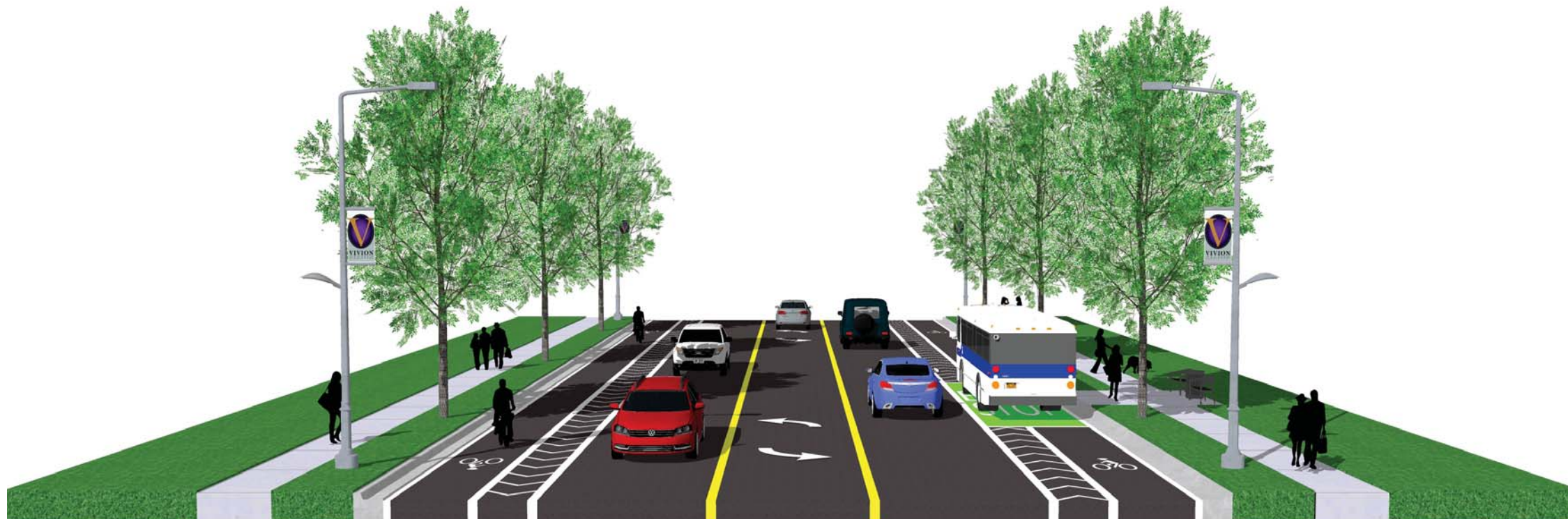


FIGURE 4.11 ALTERNATIVE COMPLETE STREETS ROAD PROFILE

The above images highlight just a few examples of the establishment of Complete Streets principles, such as continuous pedestrian pathways with landscape buffers, safe street crossings, dedicated bike lanes, and convenient public transit stops.





INTRODUCTION

The following section presents an implementation framework that Northland Neighborhoods, Inc., the City, and MoDOT can use to initiate and undertake the key recommendations provided in the Vivion Road Streetscape Plan. The actions and strategies identified in this section set forth the “next steps” to be taken in order to continue enhancement of the corridor.

For the implementation plan to be successful, a high level of trust, cooperation, and focused attention must be established between Northland Neighborhoods, Inc., elected officials, MoDOT, City staff, area businesses, community organizations, property owners, and importantly, the private sector. Northland Neighborhoods, Inc. should be the leader in promoting cooperation and collaboration with these and other community stakeholders to implement the Plan.

Integral to each implementation step are the following principal elements:

- **Partner with City Hall.** City-level support is critical to the realization of the vision for Vivion Road. City departments and the City Council should coordinate and align with streetscape enhancement efforts.
- **Begin with Policy.** Establishing policy creates the essential framework for future implementation of the Plan. Oftentimes, policy changes can be made quickly and for a minimal cost.
- **Be Bold and Visible.** Early “wins” and visible projects help garner public support and can gain the attention of the development community. Early successes must be marketed to gain support for long-term ventures.
- **Identify and Bolster Plan Champions.** Those persons involved in the planning process must continue to champion the Plan over time to maximize its success.
- **Communicate Regularly.** Implementation of the Plan will require the support and extensive participation of the community; therefore, regular communication with the City, local residents, and business and property owners is key.

NEXT STEPS

Three general steps should be taken, and started immediately, to achieve visible gains and create a strong atmosphere capable of fostering private reinvestment and community support. The steps are as follows:

1. Policy and Regulation Alignment
2. Proactive Plan Advancement
3. Project Prioritization and Completion

POLICY AND REGULATION ALIGNMENT

Adopt the Vivion Road Streetscape Plan

The Vivion Road Streetscape Plan should become the City's official policy guide for transportation, aesthetic, and utility infrastructure improvements along Vivion Road. It is essential that the Plan be used by City staff and Northland Neighborhoods, Inc. consistently as projects are funded. City staff in the City Planning and Development, Public Works, Water Services, Parks and Recreation, and Neighborhoods and Housing Services Departments specifically should be aware of the recommendations set forth in this Plan. To further educate the surrounding neighborhoods and larger community about the Plan, the City should:

- Provide copies of the Plan at City Hall and on the City's website for free download;
- Offer assistance to the public in explaining the purposes of the Plan and its relationship to their personal area of concern by providing a primary Plan contact person and their contact information;
- Communicate regularly with Northland Neighborhoods, Inc. in an effort to maintain a list of possible amendments or issues with *Section 5.0 Implementation*.

Update the Capital Improvements Program (CIP)

The City's Public Improvements Advisory Committee (PIAC) recommends capital improvement project expenditures for both the citywide and neighborhood portions of the City's capital budget. Neighborhoods and associations must submit project funding requests for eligible improvement project types, including: stormwater drainage, streets/roadways, public property, community centers, street lighting/traffic lights, curbs and gutters, monuments/fountains, and park facilities.

As such, Northland Neighborhoods, Inc. should play an active role in this process by prioritizing their City funding requests and actively participating in the series of public hearings.

PROACTIVE PLAN ADVANCEMENT

The full revitalization of Vivion Road will be a lengthy process, largely constrained by limited funding. Simply relying on City or grant dollars does not guarantee a timely implementation process, though these important funding sources should not be overlooked. *Funding and Economic Development* details the wide assortment of potential funding sources that should be explored and utilized. As funding has been of primary concern throughout the planning process, possible solutions have been discussed, including the formation of a Community Improvement District (CID). The establishment of a CID would represent the first proactive step towards improvement, but more must be done. Northland Neighborhoods, Inc. should have the following responsibilities:

- Seek supplemental funding for projects;
- Identify, hire, and manage consultants to assist in implementation efforts;
- Track the progress of improvement efforts;
- Implement recommendations, keenly leveraging potential CID dollars; and
- Maintain regular communication with the appropriate City departments to ensure Vivion Road's import.

Community Improvement District Overview and Structure

Community Improvement Districts are designed to better specific areas within a community, and eventually attract new growth and investment. Community safety, beautification, and capital improvements—all of which this Plan seeks to achieve—are all domains in which CIDs can assist. To create a CID, all property owners must be involved within the preferred district boundary. A request petition must be submitted to the City for authorizing ordinance, signed by property owners owning a minimum of 50 percent of the assessed value of the real property and over 50 percent per capita of all owners of real property within the proposed CID boundary. Within the request petition, the following must also be provided:

- Five-year plan detailing the purpose of the CID, the proposed services, and the proposed improvements (including the cost);
- Maximum sales tax and special assessment to be imposed within the CID; and
- Organizational and governing structure.

During primary investigations into the feasibility of a CID, the City used a combination of funding types: sales tax and special assessments. The following information details preliminary estimates of CID revenue generation.

- The special assessment was computed using tax year 2015 Clay County assessment data; the following assessment rates were used:
 - Residential and Agricultural Uses - \$0.70 / \$100 of assessed value
 - Commercial Uses - \$0.48 / \$100 of assessed value
 - Non-profit Uses - \$0.40 / \$100 of exempt assessed value
- The one percent CID sales tax calculation used 2015 sales tax data.

It is approximated that the CID could produce between \$1.25 and \$1.75 million dollars of revenue per year. Given these results, it is recommended that a CID be formed along Vivion Road to finance applicable recommendations in this Plan. As previously mentioned, a CID requires a specific governing structure, recommended to be detailed as follows:

Board of Directors

A Board of Directors should be formed with representation from key citizens and stakeholders. Due to the existing leadership and dedication within Northland Neighborhoods, Inc., the Board would benefit from integration with NNI. The Board should be charged with developing a long-term strategy—including budget—and for securing financial support for implementation from participating entities and other sources.

The Board of Directors should be comprised of individuals capable of ensuring the Plan's success. It should provide corporate governance, oversight, marketing and resource identification, as well as guidance and oversight to potential office staff. Multi-year commitments from the initial Board of Directors are recommended to ensure continuity and focus for the start-up and initial operations of the Board.

Advisory Committee

In order to facilitate broad-based participation in plan implementation, it is recommended that the Board of Directors engage a committee of Advisors for information exchange and discussion of policy alternatives for the Plan. The membership should include representatives of community and business groups interested in the revitalization of Vivion Road, as well as residents of the surrounding neighborhoods.

Executive Director

An Executive Director should be hired to run the organizational operations, and whose primary responsibility is to advance the Plan's recommendations. The Executive Director should have significant economic development and organizational leadership experience. The Executive Director will take direction from the Board of Directors, and also present updates, budgets, and ongoing projects at the Board of Directors meeting. This position should be housed within NNI, as it is recommended that the CID governing structure and NNI be integrated for maximum efficiency.

Short-Term Advancement

This initial stage provides the necessary steps to move the Plan quickly into implementation and lays the groundwork for developing and retaining the necessary cooperation and communication lines between NNI, the potential CID, MoDOT, and the City. Vital issues to address in this stage are as follows:

1. Address policy adoption issues.
 - Work with the City toward adoption of the Vivion Road Streetscape Plan as the guiding document for all improvements along the corridor.
2. Complete recommended complementary plans, guidelines, and studies as resources and funding becomes available. Important tasks include:
 - **Funding Strategy.** Funding is essential to the successful implementation and long-term maintenance of streetscape improvements on Vivion Road. While the creation of a CID should be a major component of any funding strategy, the overall approach should be comprehensive in nature, capitalizing on and layering a number of available resources. Some of these opportunities are identified on Page 92.
 - **Traffic Study.** A full Traffic Study should be completed to better understand traffic patterns along Vivion Road so that future consideration of speed reductions, road diets, and multi-modal access can be planned with the demands of the vehicular network in mind.
 - **Development Design Standards.** As public investment in the form of streetscape enhancements will work to initiate sustained private investment, it is important that new developments and redevelopments are held to a high standard of quality. Without the proper standards in place, the surrounding built environment may limit the level of overall success of the corridor, eventually devaluing the public's investment in the streetscape. Development Design Standards will guide the expected building and site design of properties along Vivion Road.

- **Commercial Access Management Program.** Dated commercial corridors often feature an overabundance of access drives, which create traffic flow and vehicular and pedestrian safety concerns. A targeted commercial access management plan should be created to primarily address the North Antioch Road and Chouteau Trafficway intersections. The plan should detail: (1) the issues caused by an overabundance of access drives; (2) specific properties and property owners to coordinate with; (3) a clear process for coming to consensus with those property owners; and (4) alternative access management solutions.
- **Gateways and Wayfinding Plan.** A fully integrated Gateways and Wayfinding Plan should be developed for Vivion Road. The wayfinding signs should indicate directional and location information in a simple and easily readable format, for both pedestrian and vehicular users. All sizes of gateways should use complementary materials and reflect the enhanced, yet timeless vision of Vivion Road held by the stakeholders. Any informational kiosks and history and interpretive elements should also be incorporated into the overall plan and design.
- **Streetscape Construction Documents.** Final design and engineering plans should be created for the proposed streetscape improvements. Infrastructure and utility changes necessary for these streetscape improvements should be coordinated with the larger-scale projects. A phased approach will be necessary, depending on the funding availability and allocation. Limited local, state, and federal funding sources should be explored to offset the cost of large-scale projects.

Mid-Term Advancement

While the planning and design efforts identified under Short-Term Advancement should be pursued as soon as funds become available, the following items can be delayed until a more significant funding source – like a Community Improvement District – has been established.

- **Utility Infrastructure Improvements Plan.** Utility improvements, while costly, can dramatically alter the functionality and physical characteristics of an area. The outdated storm and sanitary sewer system and overhead utility lines are limiting factors in Vivion's full revitalization. A Utility Infrastructure Improvements Plan should be developed in order to guide such improvements; this plan should prioritize projects and provide a phasing timeline, cost estimates, and a comprehensive list of potential project partners. These utility improvements should be coordinated with the any development, redevelopment, or other capital improvement projects as they are undertaken to limit disturbances along the corridor.
- **Maintenance, Operations, and Sustainability Plan.** A Maintenance, Operations, and Sustainability Plan should be developed to ensure regular and sustainable maintenance practices of the proposed streetscape improvements. It should be noted that decorative or non-standard enhancements must either be maintained by NNI or the City, as this does not fall under the jurisdiction of MoDOT. Any pedestrian/bike or bus stop enhancements would require maintenance agreements with MoDOT.

Without scheduled, ongoing maintenance, large public investments will not maintain their value. This maintenance must be adequately funded, sustainable in nature, and managed either by the CID or Northland Neighborhoods, Inc. Items to be included in this plan include:

- Regularly scheduled cleaning of litter and debris from public plazas and gateways;
- Drip irrigation and maintenance of all drought tolerant landscape material;
- Regular rotation and replacement of streetlight banners;
- Repair or replacement of damaged site furnishings and amenities;
- Repair or replacement of sidewalks;
- Repair or restoration of all public art sculpture and sculpture bases;
- Emptying of trash and recycling receptacles;
- Identification of poorly lit pedestrian spaces and a plan for reliving trouble areas via the installation of pedestrian-scale light fixtures;
- Hiring of or contracting with attendant to perform the abovementioned maintenance.

Long-Term Advancement

As previously stated, full implementation is a lengthy process; implementation requires clear processes and procedures to be in place that clarify the roles and responsibilities of parties to be involved. In order to ensure the long-term success of the Vivion Road Streetscape, it is vital that the Plan be revisited frequently and that success is measured, marketed, and capitalized on.

Monitor

As a foundational document, the Plan contains recommendations that were made at the time of its creation based upon existing conditions, market analysis, and stakeholder input. This process has set a clear direction for Vivion Road. While there are strong recommendations in the Plan for achieving the vision, the needs and desires of the surrounding neighborhoods and specifically NNI may change over time. The Plan should be nimble and able to react to those changes. Therefore, a full review of the Plan and its recommendations should be conducted by NNI every three years. Necessary changes should be noted, and should be vetted as described in *Update*.

Additionally, NNI must remain observant of new cost-sharing partnerships, grant opportunities, or available land for purchase that would play an important role in the implementation of a project(s).

Update

Significant changes should only be made after careful consideration and discussion with stakeholders, and specifically the City; this will ensure that the changes are properly vetted. These changes may include amendments or needs which may be added, revised, or removed from Plan. When necessary, a consultant should advise on recommended technical changes.

Prepare

NNI—or the CID Executive Director—should prepare a five-year action plan to prioritize objectives for the future and list accomplishments of the past year. This five-year action plan should be revisited and reviewed every year in preparation of a presentation about the Plan’s successes to the NNI Board or CID Board of Directors.

PROJECT PRIORITIZATION AND COMPLETION

Section 5.0 Implementation utilizes an implementation matrix, which identifies the cost estimate, participants, level of alignment with the Plan’s guiding principles, the level of risk, and the score for each prioritized project. In general, functional improvements should be prioritized over aesthetic improvements to ensure improved safety and/or traffic flow of the roadway. These categories are described as follows:

- **Participants.** Northland Neighborhoods, Inc. should assume lead responsibility for all strategies, overseeing and facilitating the completion of each task. The task participants are those groups or organizations that Northland Neighborhoods, Inc. should team or coordinate with to complete each task.
- **Cost Estimate.** A cost estimate is provided as a supplement to the project prioritizations, which factors in a contingency, design and construction management fees, and other applicable factors. The cost estimate is not factored into each project’s score due to its quantitative nature, but it should be weighed heavily.
- **Guiding Principles Analysis.** Largely pulled from *Section 4.0 Streetscape Plan and Recommendations*, this column analyzes if the project in question achieves, advances, or does not achieve each guiding principle. If a project “achieves” the guiding principle, it is awarded one point. Similarly, if the project “advances,” but does not fully achieve the guiding principle, it is awarded one-half of a point. Finally, if the project “does not achieve” the guiding principle, no points are awarded.
- **Risk Analysis.** Four categories of risk were determined to be factors in the ease of implementation of the recommended projects. The categories are as follows:
 - **Right-of-Way Acquisition Need.** If the project requires excessive right-of-way for full implementation, it is considered “high risk,” due to the cost and time requirements for right-of-way acquisition.

FIGURE 5.1 PRIORITIZED PROJECTS

PRIORITY	PROJECT	SCORE
1	Antioch Road Intersection Improvements + Aesthetic Enhancements + Gateway Monumentation	8
1	Streetscape Enhancements	8
1	Trail Extension	8
2	North Oak Trafficway Intersection Improvements + Aesthetic Enhancements + Gateway Monumentation	7.5
2	Road Alterations	7.5
3	Interstate 35 Interchange Improvements + Bridge Enhancement + Gateway Monumentation + Pedestrian Bridge	7
3	Address Overhead Power Lines	7
3	Public Transit Stop Enhancements	7
4	Northeast 48th Street Intersection Realignment	5
4	Vehicular and Wayfinding Signage	5
4	Phased Acquisition of Residential Properties Fronting Vivion Road	5

- **Permitting Requirements.** Certain projects may require permits or state approval, increasing the project’s risk if the permits are not granted.
- **Cost-Sharing Potential.** Based on the type and location of a project, cost-sharing partnerships may be established on the federal, state, or local level.
- **Phasing Ability.** As the financial capacity of NNI or the City may not be able to cover the entire cost of the project at one time, the ability to phase a project decreases the financial risk.
- **Score.** The score is the sum of the Guiding Principles Analysis and Risk Analysis columns for each project. The higher the score, the higher priority is assigned to that project. The highest possible score is 10.

FIGURE 5.2 IMPLEMENTATION PRIORITIZATION MATRIX

PROJECT	PARTICIPANTS	COST ESTIMATE	GUIDING PRINCIPLES ANALYSIS						RISK ANALYSIS				SCORE
			ECONOMIC DEVELOPMENT	CHARACTER & IDENTITY	MOBILITY & CONNECTIVITY	USES & AMENITIES	SUSTAINABILITY	UTILITIES & INFRASTRUCTURE	RIGHT-OF-WAY ACQUISITION NEED	PERMITTING REQUIREMENTS	COST-SHARING POTENTIAL	PHASING ABILITY	
Antioch Road Intersection Improvements + Aesthetic Enhancements + Gateway Monumentation <i>(includes decorative crosswalks)</i>	<ul style="list-style-type: none"> Public Works City Planning & Development Water Services MoDOT Consultant 	\$4,475,000											8
Streetscape Enhancements <i>(sidewalk infill, including curb ramps and any necessary improvements to stormwater drainage ditches where they limit sidewalk placement, crosswalk striping, street trees, additional landscaping, banners, site furnishings, bike racks, pedestrian-scale lighting, retaining walls to address grade changes, and secondary gateway aesthetic enhancements)</i>	<ul style="list-style-type: none"> Public Works City Planning & Development Water Services MoDOT Consultant 	\$7,230,000											8
Trail Extension <i>(separate project due to possible easement acquisition)</i>	<ul style="list-style-type: none"> Public Works City Planning & Development Parks & Recreation Consultant 	\$987,000											8
North Oak Trafficway Intersection Improvements + Aesthetic Enhancements + Gateway Monumentation <i>(includes decorative crosswalks)</i>	<ul style="list-style-type: none"> Public Works City Planning & Development Water Services MoDOT Consultant 	\$356,000											7.5
Road Alterations <i>(includes curb/gutter/flume installations [East of Highland Ave. and East Pkwy. roadway section] and a speed limit decrease)</i>	<ul style="list-style-type: none"> Public Works Water Services City Planning & Development MoDOT MARC Consultant 	\$1,527,000											7.5

FIGURE 5.2 IMPLEMENTATION PRIORITIZATION MATRIX (CONTINUED)

PROJECT	PARTICIPANTS	COST ESTIMATE	GUIDING PRINCIPLES ANALYSIS						RISK ANALYSIS				SCORE
			ECONOMIC DEVELOPMENT	CHARACTER & IDENTITY	MOBILITY & CONNECTIVITY	USES & AMENITIES	SUSTAINABILITY	UTILITIES & INFRASTRUCTURE	RIGHT-OF-WAY ACQUISITION NEED	PERMITTING REQUIREMENTS	COST-SHARING POTENTIAL	PHASING ABILITY	
Interstate 35 Interchange Improvements + Bridge Enhancement + Gateway Monumentation + Pedestrian Bridge	<ul style="list-style-type: none"> Public Works City Planning & Development Water Services MoDOT Consultant 	\$5,396,000	■	■	■	■□	■□	■	■□	□	■	■□	7
Address Overhead Power Lines <i>(either by moving overhead power lines to new locations or burying power lines with use of vaults)</i>	<ul style="list-style-type: none"> Public Works KCPL 	\$3,0 Million (relocating) - \$8.4 Million (burying with vaults)	■	■	■	■	■□	■	■□	□	□	■	7
Public Transit Stop Enhancements <i>(North Oak Trafficway, East of Highland Avenue, and Brighton Avenue)</i>	<ul style="list-style-type: none"> Public Works City Planning & Development KCATA Consultant 	\$158,000	■□	■□	■	■	■	□	■□	■	■□	■	7
Northeast 48th Street Intersection Realignment	<ul style="list-style-type: none"> Public Works City Planning & Development Water Services MoDOT Consultant 	\$241,000	■	■	■	■□	■□	□	□	■□	■□	□	5
Vehicular and Pedestrian Wayfinding Signage	<ul style="list-style-type: none"> Public Works City Planning & Development MoDOT Consultant 	\$566,000	□	■	■	□	■□	□	■	■□	□	■	5
Phased Acquisition of Residential Properties Fronting Vivion Road	<ul style="list-style-type: none"> City Planning & Development 	\$6,000,000	□	■	■	■□	■□	■	□	□	□	■	5

IMPLEMENTATION PRIORITIZATION KEY

GUIDING PRINCIPLES ANALYSIS

- Achieves (+1)
- Advances (+0.5)
- Does not Achieve (+0)

RISK ANALYSIS

- Low Risk (+1)
- Moderate Risk (+0.5)
- High Risk (+0)

FUNDING AND ECONOMIC DEVELOPMENT

While a CID would provide a reliable revenue stream that could be directly allocated to specific capital improvements along Vivion Road, there are many supplemental funding tools available. The various funding alternatives should be used to further leverage the City’s resources and the potential CID revenue. Many of the funding tools described can be used in combination with each other, providing the diverse financial capacity that projects of this scale require.

The following funding alternatives, as detailed in *Figure 5.3*, have been compiled as they apply to projects proposed along Vivion Road; they come in several different forms: districts, bonds, regulatory, taxes, and state and federal resources.

It is important to note that the objective of securing funding is to pay for improvements that would not otherwise have a secure source of funding. This public investment will, in turn, provide encouragement for private investment to occur along the corridor. Though, there will never be enough public monies to complete the recommendations of this Plan. Therefore, the investment and leverage of private dollars on private property—outside of the right-of-way—along Vivion Road is crucial to the complete revitalization of the Vivion corridor.

Mid-America Regional Council (MARC), in its role as the metropolitan planning organization for Clay County, as well as other counties in the Kansas City metropolitan area, solicits applications for transportation funding programs. Applications are evaluated based on how closely they align with the policy goals in the Transportation Outlook 2040 Programming Policy Statement, which is the guide for regional transportation investments. MARC is currently encouraging projects that address public transit and other alternative modes of transportation, rather than only traditional roadway improvement projects. Each program listed in *State/Federal Resources* is a reimbursement program.

FIGURE 5.3 ECONOMIC DEVELOPMENT RESOURCES AND INCENTIVES

NAME	APPLICABILITY
DISTRICTS	
Special Assessment District	Best used for smaller projects the City can afford to finance up front.
Community Improvement District	Best used for multiple public facilities, improvements, or services over a larger geographical area. A CID is a separate political subdivision with the ability to govern itself and impose and collect special assessments and additional property and sales taxes.
Neighborhood Improvement District	Best used for single public infrastructure, facilities, or other improvement projects within a fairly narrow geographical area. This is normally a residential area.
Transportation Development District	Best used for projects that involve promote, design, construct, improve, or operate any of the state’s highways or transportation systems. A TDD project is a separate political subdivision of the state. The funding is through an additional sales or property tax or real property special assessments.
Tax Increment Financing District	Best used to encourage redevelopment of blighted areas, oftentimes used for retail development or for-sale residential development.
BONDS	
General Obligation Bonds	Bonds issued with the City’s full faith and credit and paid by a dedicated amount of property tax. Often used for improvements in areas where travel is not limited to the adjacent property owners.
General Revenue Bonds	Bonds issued to finance facilities with a definable user or revenue base. Citizens using the services pay for the financing through rates or fees. Often used for improvements in areas where travel is not limited to the adjacent property owners.
REGULATORY	
Impact Fees	The development applicant pays a fee as a condition of the City’s approval of the development. This funding source relies on future development.
TAXES	
Excise Tax	A tax levied on a particular activity, measured by the amount of business done or income received. This tax is very broad usability, but it must be approved by voters.
Economic Development Tax	A tax levied on all retail sales for the purpose of specifically funding infrastructure and operating expenses within a certain parameter, but also most economic development activities. The revenues cannot be used on retail projects.
Capital Improvements Tax	A tax levied on all retail sales for the purpose of funding capital improvements.
Transportation Sales Tax	A sales tax on all retail sales to generate revenue for transportation purpose.
Storm Water Control and Local Parks Sales Tax	A sales tax on all retail sales in order to provide funds specifically for storm water control or parks, or both.
STATE / FEDERAL RESOURCES	
Surface Transportation Program	Flexible funding program, intended to fund a wide variety of projects that address multiple modes of transportation.
Surface Transportation Program Set-Aside	Program intended to create safe, accessible, and environmentally-sensitive communities by providing funding for a variety of active transportation projects that were previously funded through the Transportation Enhancements, Safe Routes to School, and Recreational Trails Program.
Congestion Mitigation and Air Quality Improvements	Federally-funded program intended for surface transportation projects designed to reduce traffic congestion and improve air quality.
Transportation Investment Generating Economic Recovery	Federally-funded program intended for capital improvements that generate economic development and improve access to reliable, safe, and affordable transportation. Eligible projects oftentimes are highway, bridge, and railway projects, yet bicycle and pedestrian-related improvements also qualify.
Planning Sustainable Places Program (PSP)	MARC’s PSP Program serves to advance local planning and project development activities that further the creation of vibrant places that offer a mix of options for housing, jobs, services and recreation; connected places with a variety of transportation options; and green places that support healthy living and a healthy natural environment.

ROLES AND RESPONSIBILITIES

THE CITY

Northland Neighborhoods, Inc. and the City should be in regular communication, as monetary investment and staff time by the City will be critical to the success of the project. With regular communication, NNI and the City will be able to foresee potential barriers to specific projects or make each other aware of supplemental funding sources. Oftentimes grant monies require city sponsors; establishing this relationship and support prior to a grant application is beneficial. Specific city departments to be in regular communication with, dependent on the project, include:

- City Manager's Office
- City Planning and Development
- Finance
- Public Works
- Parks and Recreation
- Water Services
- Neighborhoods and Housing Services

MODOT AND MID-AMERICA REGIONAL COUNCIL

Due to Vivion Road's classification as U.S. Route 69, as well as the I-35 and I-29 interchanges and Missouri Route 1 (Antioch Road) intersection, Vivion Road's future traffic levels, classification, and aesthetic are dependent upon MoDOT and its future improvement plans. Of specific concern are the proposed typical road profiles and intersection enhancements, which should be aligned with MoDOT's future plans and reviewed and approved by MoDOT and, when necessary, the Federal Highway Administration. In regard to funding, MoDOT reimplemented their cost share program in 2017, and will be making a first call for projects in the coming months. This program will take place over the next five years, through 2022. As a reference, MoDOT maintains a Statewide Transportation Improvement Program here: http://www.modot.org/plansandprojects/construction_program/STIP2017-2021/documents/Sec0403KansasCityTMA.pdf.

MARC, the metropolitan planning organization for the bi-state Kansas City region, should also be considered a partner in the improvement of Vivion Road. MARC, in cooperation with MoDOT and KDOT, local governments, and public transportation agencies, must maintain a five-year Transportation Improvement Program (TIP) that details the planned transportation improvements and their respective funding sources and partners within the region. The sub-allocated programs and their associated funding, including the Surface Transportation Program, Congestion Mitigation/Air Quality Program, Transportation Alternatives Program, and FTA Section 5310 are the primary funding sources listed within the TIP. The process for including a project in the TIP depends on the type of proposed funding for the project.

For example, if NNI—partnering with the City—was seeking funding through the Transportation Alternatives Program for aesthetic enhancements to Vivion Road's transportation network, they would be subject to a competitive programming process directed by MARC. Therefore, dependent on the identified and/or sought after funding source, cooperation with MoDOT and likely MARC will be vital.

PRIVATE SECTOR

The role of the private sector in Vivion Road's eventual enhancement is critical. The private sector must be invited into and engaged in the planning process and aware of the vision for the corridor. Investing in a corridor that has seen significant disinvestment is notoriously risky. But, without this significant private investment, true transformation may be limited.

Therefore, the significant public investments that are planned for Vivion Road must be widely advertised. Public infrastructure and programs can guide private investment. To this end, Northland Neighborhoods, Inc. should develop communication inroads to the development community and provide regular updates on planned, in-progress, and completed projects. Practically, NNI should invite the development community to their regular meetings and keep their website up-to-date.

Additionally, NNI should continue to coordinate with the City and work to identify potential development incentives that would incentivize private development along Vivion Road, such as tax-increment financing and tax abatement.

CLOSING

Since 1996, NNI has been working to better and revitalize Northland housing stock, neighborhoods, and communities as a whole. Vivion Road, a main corridor through the Northland, has been one of the recent focuses of NNI. As such, Vivion Road is unique in the amount of time and effort and that has already been invested in the corridor.

Without a doubt, Vivion Road—regardless of having an improvement plan in place—will continue to face challenges and roadblocks. This is why implementation is arguably the most important step in the planning process; this chapter puts a plan into place to work to overcome those challenges. Responsibility has been assigned, funding sources identified, and next steps outlined. With Plan in hand, NNI is ready to continue championing Vivion's eventual success.