

ACKNOWLEDGEMENTS

The Natural Bridge Great Street Initiative planning document is the result of a cooperative effort between multiple stakeholders. The East-West Gateway Council of Governments, through the American Recovery and Reinvestment Act (ARRA), provided funding for development of the Plan and played a key role in coordinating and reviewing the development of the document.

The agencies and organizations listed below comprised the Advisory Committee. Working in partnership with this committees; the Core Stakeholder Group in the corridor, North County Incorporated, City of Normandy and University of Missouri St. Louis, provided guidance and support for the development of the Plan and the programs and policies that are instrumental for successful implementation of the Natural Bridge Great Street Initiative Plan.

Natural Bridge Great Street Initiative Advisory

Ann Knapp, **Village of Bellerive Acres**
 Betty Van Um, **University of Missouri St. Louis**
 Don Morice, **Village of Bellerive Acres**
 Jennifer Ash, **Metro**
 Jim McLaughlin, **City of Pasadena Hills**
 Kevin Buchek, **Village of Bel Nor**
 Larry Welty, **Missouri Department of Transportation**
 Leon Fisher, **Normandy School District**
 Maggie Hales, **East West Gateway**
 Mark Phillips, **Metro**
 Patrick Green, **City of Normandy**
 Rebecca Zoll, **North County Incorporated**
 Rob Stewart, **Glen Echo Country Club**
 Scott Livingston, **City of Pasadena Hills**
 Stephanie Streeter, **St. Louis County**
 Terry Gannon, **Re Max Cornerstone Realty**
 Wayne Goode, **University of Missouri St. Louis**
 Wilma Abernathy, **Village of Bel Ridge**

Core Stakeholders

Betty Van Um, **University of Missouri St. Louis**
 Patrick Green, **City of Normandy**
 Rebecca Zoll, **North County Incorporated**

East West Gateway Council of Governments Staff

Ed Hillhouse, **Executive Director**

Les Serman, **Past Executive Director**

Maggie Hales, **Deputy Executive Director**

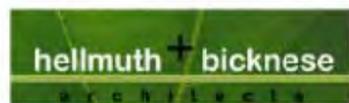
Jerry Blair, **Director of Transportation Planning**

Mary Grace Lewandowski, **Project Manager**

Terry Freeland, **Project Manager (no longer with EWGCOG)**

Paul Hubbman, **Project Manager**

Project Consultants:



Meeting Space

Thank you to the following for providing meeting space to engage the community throughout the project.

City of Normandy

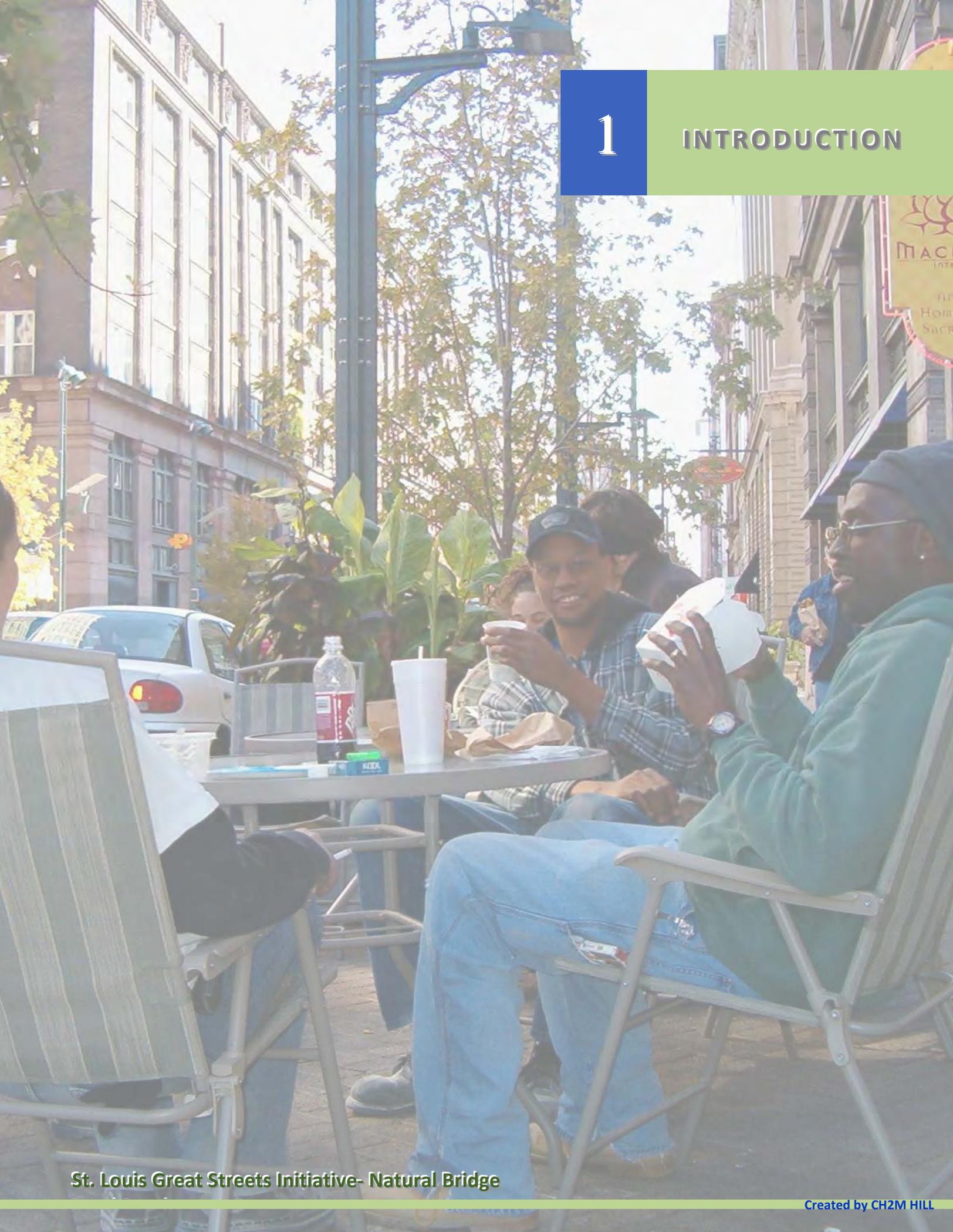
University of Missouri-St. Louis

Oscar's

St. Louis County Library -Normandy Branch

1

INTRODUCTION



Purpose of the Study..... 1.3

Framing The Natural Bridge Study Area..... 1.6

 Primary Study Area:1.7

 Secondary Study Area:.....1.8

 Area of Influence1.9

Summary of Past Studies..... 1.10

 Normandy Center (The Wedge) Revitalization Study:1.10

 Regional Transportation Plan 2040 (East West Gateway Council of Governments):1.11

 Natural Bridge Road: A New Life in North County, Pilot Project1.12

 University of Missouri – St. Louis Master Plan Update, 2009.....1.15

Summary 1.18

CHAPTER-1: INTRODUCTION

Purpose of the Study

The East West Gateway Council of Governments initiated the concept of making our streets and communities better called the Great Streets Initiative. In order to go beyond just making streets like Natural Bridge look better, there are several elements key to the Great Streets Initiative:

Great Streets are representative of their places. A Great Street reflects the neighborhood through which it passes and has a scale and design appropriate to the character of the abutting properties and land uses.

Great Streets allow people to walk comfortably and safely. The pedestrian environment on, along and near the street is well-designed and well-furnished. The relationship between the street and its adjacent buildings is organic, conducive to walking, and inviting to people.

Great Streets contribute to the economic vitality of the area. Great Streets facilitate the interaction of people and the promotion of commerce. They serve as destinations, not just transportation channels. They are good commercial addresses and provide location value to businesses that power the local economy.

Great Streets are functionally complete. Great Streets support balanced mobility with appropriate provision for safe and convenient travel by all of the ground transportation modes: transit, walking, bicycling, personal motor vehicles and freight movement.

Great Streets provide mobility. Great Streets strike an appropriate balance among the three elements of modern mobility: through travel, local circulation and access. The right balance varies with the function of the street and the character of its neighborhoods and abutting properties.

Great Streets facilitate placemaking. Great Streets incorporate within them places that are memorable and interesting. These may include plazas, pocket parks, attractive intersections and corners, or simply wide sidewalks fostering an active street life.

Great Streets are green. Great Streets provide an attractive and refreshing environment by working with natural systems. They incorporate environmentally sensitive design standards and green development techniques, including generous provision of street trees and other plantings and application of modern storm water management practices.

The goal of the Great Streets is to change the way the St. Louis Region plans and designs community streets. The past practice of merely dressing up a roadway with typical enhancements projects that include landscaping, brick banding, sidewalks, crosswalks, public street furnishings and lighting improvements, a streetscape project does not necessarily bring the economic development. The Great Street is envisioned to be supported by infrastructure improvements, but goes beyond just infrastructure. By linking of land-use with transportation, as well as defining land use relationship to the street, the street will meet the needs of the adjacent land use and support the connections that will provide the catalyst for bringing economic revitalization, growth and sustainability.

The initial pilot project for Natural Bridge was chosen from several inner ring suburb corridors to demonstrate concepts included in the Great Streets Initiative web guide (<http://www.greatstreetsstlouis.net/>), hosted by the East West Gateway Council of Governments. The core partnership of the East West Gateway Council of Governments, North County Incorporated, the City of Normandy, and the University of St. Louis and MoDOT provides the core partners that make Natural Bridge Road a great place to use the concepts in the web guide. This pilot project provided the initial corridor concepts that generated the support of the North County area for the project, leading to the further planning and design that will transform Natural Bridge in St. Louis County from Lucas and Hunt Road to I-170 into a vibrant community that embraces the past and sustains social and economic health into the future.

The segment of Natural Bridge that is the subject of the Great Street Initiative project was defined as being between Lucas and Hunt Road and Hanley, which was eventually refined to just west of the Clearview Drive/West Drive intersection. This segment is identified as the “primary study area”. This segment will provide a focused area for the initiative that will lead to improvements embraced and initiated by adjacent communities. This primary study area is indicated by the blue line on Map1.1.

In order to effectively initiate change in the corridor, a “secondary study area” was also discussed by the core partners and is included in the initial land-use planning process; however, it would not include the street design that was planned in the primary study area. This decision was made in order to concentrate design efforts and offer a manageable project that can be implemented in a reasonable timeframe. This secondary study area is shown in red on Map 1.1 that extends from west of the Clearview/West Drive intersection to I-170. While not the primary focus of the Natural Bridge Great Street Initiative, this secondary study area is very important to the entire corridor in providing the gateway into the primary study area from the west. Throughout the planning document for Natural Bridge, the secondary study area will be discussed at the end of each element of the plan in order to maintain its’ connection to the corridor.

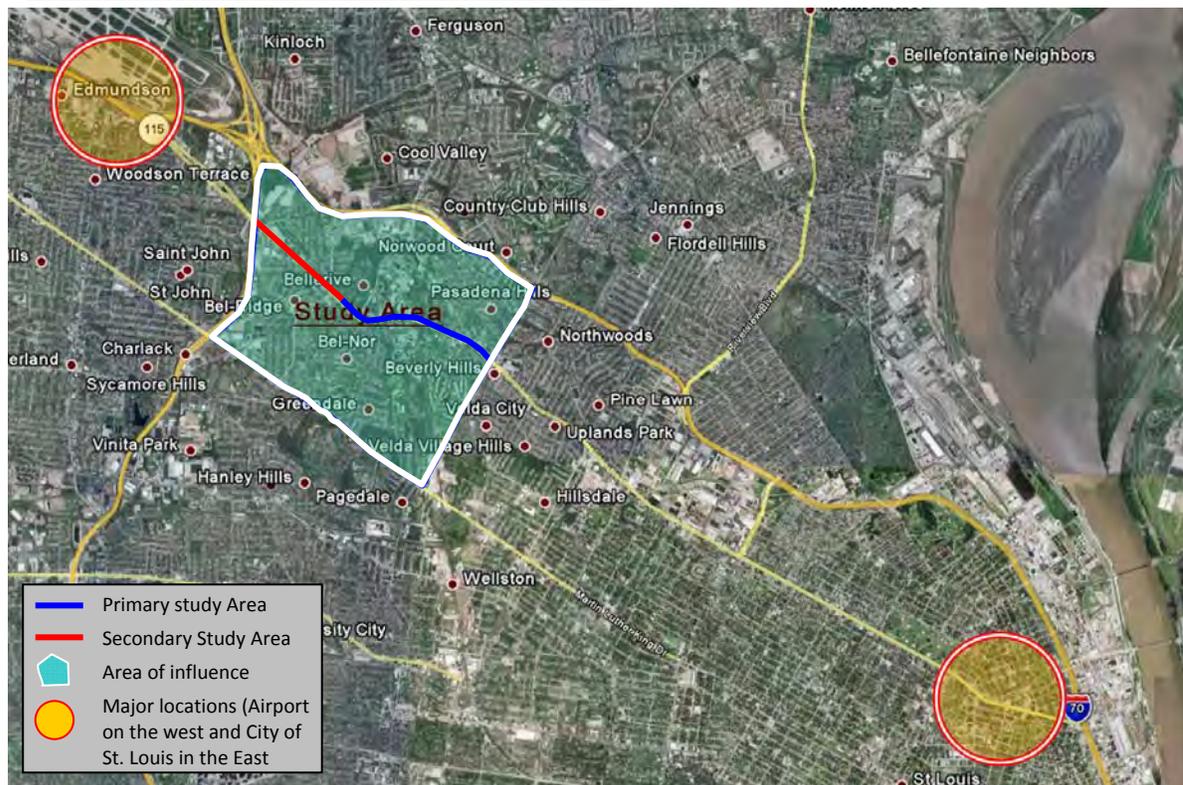
In this planning document for the Natural Bridge Great Street Initiative, the East West Gateway Council of Governments and its community partners will provide the land-use plan for the primary and secondary study area, plus alternative analysis and design guidelines for infrastructure improvements in the primary study area that facilitate economic development strategies along Natural Bridge Road.

Framing The Natural Bridge Study Area

The Natural Bridge Road corridor is a principle arterial roadway running in a general east/west direction through St. Louis County and the City of St. Louis, just south of I-70. The route is identified as State Route 115 (See Exhibit 1.1).

The overall characteristics in the study area of the corridor range from dense, pre- World War II housing and subdivisions, to commercial, industrial, and institutional land-uses. The area has

EXHIBIT 1.1: LOCATION OF STUDY AREA IN REGIONAL CONTEXT



Source: Google Earth

historically included an economically diverse population. The primary study area from the western limits to Lucas & Hunt Road was initially populated by an upper-middle class community including major metropolitan business owners and professionals. The presence of several, once exclusive, golf clubs, major private institutions, and upscale housing are legacies of the area. The population in the secondary study area was primarily working class families and housing. This diverse economic mix of families attended the same schools, either parochial or public, and creating a sense of the overall “Normandy” community, a socially healthy and prosperous community.

The overall area that is influenced by the Natural Bridge Great Street Initiative project, has ranged from a state of maintaining residential appeal in some areas, to decline in others for many years. Due to its “built-out” condition coupled with suburban sprawl and movement of residential and commercial populations to the west, the effective reuse of some of these areas has not seen revitalization. The area is in need of new investment and thoughtful implementation.

As mentioned previously, the area impacted by this Great Streets Initiative project extends along Natural Bridge Road from Lucas and Hunt Road to west of the Clearview/West Drive intersection referenced as the “primary study area”, while the area from west of the Clearview/West Drive intersection to I-170 is known as the “secondary study area”.

The “primary study area” was selected as the major area of focus due to numerous potential redevelopment options and the number of stakeholders continually reinforcing the area’s economic stability via financial, social, and cultural contributions. The “secondary study area” is critical for its’ economic potential related to its’ gateway from I-170 status, land-use impacts for the success of the primary study area, as well as a wide range of future development options. Characteristics of each study area are described in more detail below.

Primary Study Area:

Natural Bridge Road between Lucas and Hunt Road and West Drive (See Map 1-1 Study Area Extents)

The primary study area has seen considerable investment over the past decade through both infrastructure improvements north of the campus and within the UMSL campus (the interior campus circulation system) as well as small commercial investments that have bolstered and improved the general market area. The recent relocation of Express Scripts International Corporate Headquarters onto the UMSL campus provides a strong addition of an anticipated 3500 new employees to the daytime population’s economic capacity. The continued development of North Park just north of I-70 should also contribute to increased commercial viability in the corridor.

The condition of institutional property is excellent and well maintained. Commercial property, substantially brick one to three story buildings facing Natural Bridge Road are, for the most part in fair to good condition.

Parking is not adequate around the multi-story brick structures while newer retail development of box stores clustered around the Lucas and Hunt Road and Natural Bridge Road intersection has ample parking space to serve under-utilized commercial developments. Unmanaged parking comingled with poor access management along the corridor causes traffic flow issues.

At a time when institutional and commercial development has continued to positively alter the economics of the primary study area, residential values have continued a steady decline and in some cases, homes are showing the strain of these economic conditions physically as well. Also, residential structures facing the Natural Bridge Road corridor have experienced a conversion from residential to commercial land uses with modifications to the property in many instances that include the addition of small paved parking areas and other commercial amenities such as lighting and signage as part of the conversion process. The process of converting residential to commercial property is an indicator of changing economic patterns along Natural Bridge Road and the slow and steady decline of traditionally residential property. It is possible that this conversion is also a sign of demand for small commercial office space that is not being satisfied.

This study will rely on prior studies for background and information pertaining to the history and development thought process over time. New material will be created associated with infrastructure; market driven economic development options; and possibilities for financing of future infrastructure development.

Secondary Study Area:

Natural Bridge Road between West Drive to I-170 (See Map 1-1 Study Area Extents)

The secondary study area includes Natural Bridge Road between West Drive on the east and I-170 on the west as mentioned above. This section of the Natural Bridge Road corridor is fronted by older residential homes and some retail and commercial areas at Hanley Road and at I-170 on the north east quadrant. For the most part, this stretch of Natural Bridge Road is in decline and although some commercial investment, such as the Housing and Urban Development (HUD) offices for St. Louis County has located here, for the most part, little investment has taken place for several years.

The composition of the adjacent community consists of multiple land uses including residential homes and multi-family units immediately adjacent to commercial and retail development, that are conflicting in their existing orientation. The following is a description of the land uses beginning at the intersection of Natural Bridge and Hanley Roads and moving westward to I-170. The following descriptions include a brief overview of access issues and topographic conditions:

- Small commercial property with parking facing Natural Bridge Road – access to these properties creates convoluted access to both Natural Bridge Road and Hanley Road at these locations
- There is a vacant box store at or near 8638 Natural Bridge Road on the south side of the street
- Auto repair and small chain restaurants each with separate access points onto Natural Bridge Road aligning with internal circulation on each site
- Residences immediately adjacent to commercial uses
- Housing stock is a combination of brick homes, primarily on the south side of the street and frame construction primarily on the north side of the street
- All homes have driveway access to Natural Bridge Road and utilize the shoulder for on-street parking
- Multi-family residential units
- Auto repair and tire store interrupts residential patterns on the south side of the street
- The south side of Natural Bridge Road is terraced, with some homes constructed with long, exterior stairs leading from the street and sidewalk to the residences
- A depressed grass median begins around 8904 Natural Bridge Road in the area of the HUD office building and extends to the I-170 interchange at Springdale Avenue
- An aging and under-utilized retail strip center located on the northeast quadrant of Natural Bridge Road and I-170 including small shops, a Hood's store and a QT fuel and convenience store
- A new long term parking structure constructed on the southeast quadrant of Natural Bridge Road and I-170 serving airport parking needs

- High voltage lines running parallel to I-170 on a north/south axis

* The secondary study area terminates at the east side of I-170 and Natural Bridge Road. This report does not describe or take into consideration market conditions west of this location including quadrant development at this intersection.

Area of Influence

Neighboring Municipalities & Unincorporated St. Louis County (See Map 1-1 Study Area Extents)

In addition to the physical and market conditions impacting the study areas along the Natural Bridge Road corridor, there are municipal boundaries that play a role in the short and long term planning and implementation of economic changes possible in the area. Each municipality has the power to participate or decline to participate in the planning process and may either adopt or reject planning recommendations to proposed infrastructure and economic enhancements discussed in this document. The number of municipalities influencing this area and their interest in the long term planning is a critical factor in facilitating change in the corridor.

An area map of the primary and secondary study areas illustrates the number of communities the Natural Bridge Road corridor serves. Within the primary study area the following communities are impacted:

- Village of Bellerive Acres
- Village of Bel Nor
- City of Normandy
- City of Pasadena Hills

In addition to the immediate impact communities, there are near by areas that, although not physically touching the corridor, are impacted by the roadway and are served directly by Natural Bridge Road. These areas include:

- Several areas within Unincorporated St. Louis County
- Village of Pasadena Park
- City of Greendale
- Village of Glen Echo Park

Within the secondary study area, the following communities are served by the Natural Bridge Road corridor:

- Village of Bel Ridge
- Unincorporated St. Louis County (Carsonville)

Summary of Past Studies

Normandy Center (The Wedge) Revitalization Study:

Sasaki, 2002

The City of Normandy and the University Missouri-St. Louis have common goals for the Normandy Center a.k.a. “The Wedge” (located at the intersection of Natural Bridge and Florissant Roads). The City of Normandy would like to generate new tax revenues, promote economic revitalization and preserve existing residential neighborhoods. The University of Missouri-St. Louis would like to create a service, restaurant, and entertainment destination near the campus, provide more student housing, ensure the long-term quality of adjacent uses, and enhance the image of the campus edges.

In order to make these goals a reality, “The Wedge” must be revitalized. This will also stabilize the city. New commercial development is needed to stimulate further investment in the core, without undermining the existing businesses. Existing institutional uses on Natural Bridge Road need to contribute to the community. A coordinated effort between businesses, local governments, and stakeholders can make this a reality.

Existing conditions reflect economic decline. This is seen from the marginal businesses and abandoned properties, inhospitable pedestrian environments, large surface parking lots along Natural Bridge Road, inconsistent building setbacks from the road with little connectivity between them, and wide pavement widths. The existing conditions also possess many assets. There are architecturally interesting buildings and structures, re-usable buildings with adjacent open space, stable residential areas, and the UMSL transient market population. UMSL also plays a large role in “The Wedge” development. Inside the UMSL “Master Plan” there is encouragement to develop a “college town” near “The Wedge”. The campus also plans to construct a 1500 bed student housing facility, which would attract more people in the area. The university may be interested in participating with the city to establish the quality and character for new development in the area if given the opportunity.

Revitalization Strategy

The overall vision for “The Wedge” is for a pedestrian-oriented mixed-use town center that serves the needs of the community and the University. Successful revitalization means concentrating on new commercial development, key stakeholder coordination, allowing viable institutions to remain, encouraging second floor office uses, developing housing around the MetroLink station, accommodating the mix of new uses, enhancing pedestrian connections, providing on-and-off street parking to support new development, and preserving existing structures.

Urban Character

The character of “The Wedge” will be a reflection of existing elements such as buildings size, scale and density. Streets, land uses, imagery, and parking may also emulate the existing and future uses and scale of buildings. Additionally, any new development at this location will be the result of market driven demand and the ability to finance new development within the existing stakeholder market place.

EXHIBIT 1.2: PROPOSED PLAN FOR "THE WEDGE"

Source: Normandy Center "The Wedge" Revitalization Study, Sasaki Associates

Regional Transportation Plan 2040 (East West Gateway Council of Governments):

The East-West Gateway Council of Government's (EWGCOG's) *Regional Transportation Plan 2040* is a long-range vision for development of the region and surface transportation system within the seven-county St. Louis region over the next 25 years. In 2009 the Council conducted an initiative called Renewing the Region (RTR). This initiative assessed the economic and social health of the region and explored ways to enhance planning and facilitate action. The result of the initiative was the development of 10 principles that would be used to guide long-range transportation planning. The challenge was to think beyond just transportation and to make the connection between transportation and the broader society. The RTP 2040 was approved by the Council in June 2011.

- Preserve and Maintain the Existing System
- Support Public Transportation
- Support Neighborhoods and Communities Through the Region
- Foster a Vibrant Downtown
- Provide More Transportation Choices
- Promote Safety and Security
- Support Quality Job Development

- Strengthen Intermodal Connections
- Support a Diverse Economy Through the Region
- Link Transportation Planning to Housing, Environment, Education and Energy

A major component of RTP 2040 is the planning, design, and development of the region's transportation system in relation to land use, with the goal of improving mobility and safety while increasing travel choices. Similarly, the RTP calls for a Complete Streets approach by making routine accommodations for other modes when developing or designing a transportation project in order to allow for a safe, convenient, and efficient transportation system accessible to all users.

St. Louis Regional Bicycling and Walking Transportation Plan (East West Gateway Council of Governments):

EWGCOG's *St. Louis Regional Bicycling and Walking Transportation Plan* was developed in 2005 as a result of the region's transportation plan, Legacy 2030. It departs from conventional master plans, which often focus on the development of priority corridors for bicycling and walking improvements, and instead places emphasis on defining the nature of bicycling and walking environments and providing guidance on the elements common to model bicycling and walking facilities. Rather than specify where facilities should be located, the plan serves as a "how-to and when-to" resource document for communities and agencies developing facilities. The Plan provides more specificity in terms of improving existing bicycle facilities, designing, prioritizing, and placing new facilities, and addressing opportunities and constraints within the greater St. Louis region.

Natural Bridge Road: A New Life in North County, Pilot Project

CH2M HILL, 2008

The East-West Gateway Council of Governments helps communities in the St. Louis region to focus on the importance of streets as centers of community life. Great Streets can be defined as making our public spaces and streets more attractive, sustainable, and "friendly" for all users. This pilot study emulates the Great Streets concept planning for Natural Bridge Road between Lucas and Hunt Road and University Lane at University of Missouri, St. Louis (UMSL).

In working closely with the city leaders, local businesses and residents, the study team gathered information and identified the following problems for the corridor:

- Excess Capacity
- Wide, Pedestrian-Unfriendly "Wedge"
- Pedestrian Realm Lacks Definition and Character
- Poor Connectivity Across the Corridor
- Existing Land Uses are "Tired"
- North Residential Area May Limit Uses

After identifying the key problem elements, the project team set out to develop concepts to achieve the aspirations for future growth and health along the corridor.

- Concept One: Parking and Bicycle Lane (Exhibit 1-4)

The least “invasive” concept requires the re-striping of the roadway from five lanes to three lanes, by adding parallel parking and bicycle lanes.

- Concept Two: The Parkway (Exhibit 1-5)

EXHIBIT 1.5: PROPOSED THE PARKWAY CONCEPT



Source: Natural Bridge Road: A New Life in North County, Pilot Project, CH2M HILL

Narrows the existing five driving lanes to three lanes providing parallel parking and a bicycle lane only on one side of Natural Bridge Road, and it creates a “pedestrian parkway” on one side of the

EXHIBIT 1.4: PROPOSED PARKING AND BICYCLE LANE CONCEPT



Source: Natural Bridge Road: A New Life in North County, Pilot Project, CH2M HILL

existing street

- Concept Three: The Multi-way (Exhibit 1-6)

EXHIBIT 1.6: PROPOSED THE MULTI-WAY CONCEPT



Source: Natural Bridge Road: A New Life in North County, Pilot Project, CH2M HILL

This concept reduces Natural Bridge Road from five driving lanes to two lanes, eliminating a center turn lane. However, it creates a separate outside lane on one side of the street, which separates vehicular traffic moving through the corridor from vehicles accessing the businesses along the corridor. The access lane would be separated from the thoroughfare by a narrow planted median. Vehicles enter and exit the access lane via median openings at strategically spaced locations.

On May 15, 2008, the project team conducted a stakeholder workshop to present the concepts and to discuss reactions to those concepts. The Parkway concept appeared to be the clear favorite and preferred concept.

With the City of Normandy and University Missouri, St. Louis working together with North County Inc., as local champions to organize and mobilize the local stakeholder group, there are two key factors for future success:

- Flexibility in planning and design
- Long-term partnerships.

It was determined that both of these key factors will lead to successful design and sustained project implementation.

University of Missouri – St. Louis Master Plan Update, 2009

Sasaki Associates, 2009

Founded in 1963 on the grounds of a former country club, University of Missouri-St. Louis (UMSL) today is spread across 350 acres in the Village of Bellerive Acres and City of Normandy. The student population of UMSL for the year 2009 was 15,800. A few years ago UMSL initiated a strategic plan called “Gateway for Greatness”. Of the five strategic priorities that were identified in the plan, one focused on redevelopment of the region.

Strategic Priority: Enhance civic engagement for economic and social benefit of the region.

“We are a University committed to being unsurpassed in all our community engagement activities. We are well known for our engagement in the region, the nation and internationally. We intend to work collaboratively with our partners to develop programs which are sustainable and benefit society. “

As a subsequent step to the “Gateway for Greatness” plan, a campus master plan was created by Sasaki Associates. Below are the highlights of the plan that can impact the Natural Bridge Great Streets Project

Land Use Strategy

The master Plan organizes the campus into several districts. The districts closer to Natural Bridge Road are the Academic Core District, Student Life Center and Beffa Special Use District in the North and Professional Schools District in the South. Several new buildings and renovations are planned in the future and their architecture and use will have a direct impact on the Natural Bridge Road. Below is a list of proposed buildings and the districts to which they belong.

EXHIBIT 1.7: UMSL - CAMPUS PLANNING DISTRICTS

| District | Building | A/R/N | Cost | Year |
|-------------------------------|---------------------------------------|---------------------|--------------|------|
| Academic Core District | Benton Stadler: Phase A | Addition/Renovation | \$28,500,000 | 2010 |
| | Benton Stadler: Phase B&C | Renovation | \$24,253,000 | 2012 |
| | Research Building | Renovation | \$28,278,000 | 2015 |
| | JC Penney/Student Center | Renovation | \$20,930,000 | 2013 |
| | Thomas Jefferson / Mercantile Library | Addition | \$24,744,000 | 2013 |
| | Social Sciences and Business Building | Renovation | \$27,318,000 | 2016 |
| | College of Business Administration | New | \$32,354,000 | 2012 |
| Student Life District | Wellness Center | New | \$28,267,000 | TBD |
| Professional Schools District | Optometry and Nursing Complex | New | \$78,872,000 | 2011 |
| | Wellness Center | New | \$28,267,000 | TBD |
| | Athletics Field | New | \$6,786,000 | TBD |

Source: University of Missouri – St. Louis Master Plan Update, 2009, Sasaki Associates

Regional Trail System

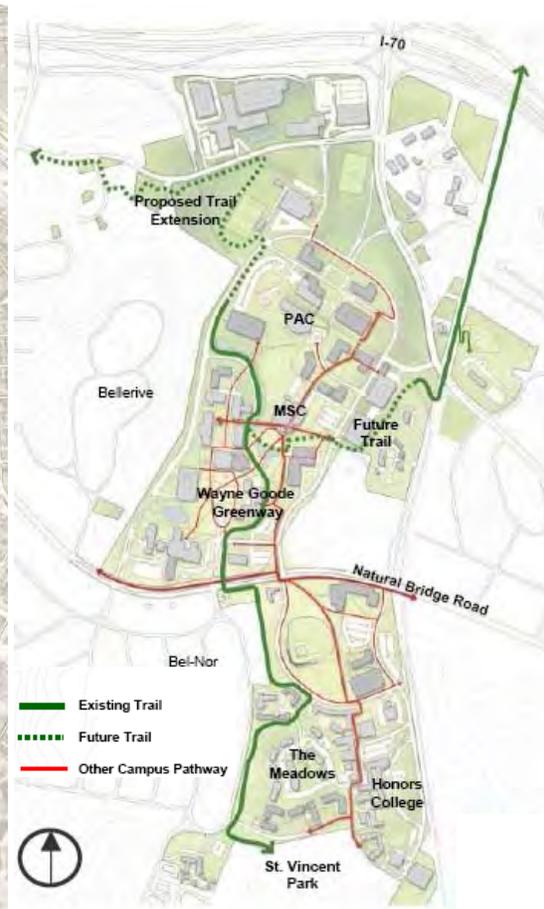
The regional trail system throughout UMSL currently links the campus to a broader regional greenway system (exhibit 1-9). Funded by Great Rivers Greenway (GRG), the trails connect the north and south campus. The master plan shows two proposed GRG additions to the existing trail system;

- St. Vincent Greenway extension on the north to connect to North Hanley Road
- A cross campus trail extension linking the Ted Jones North County Bike Trail to Ferguson

EXHIBIT 1.8: CAMPUS MASTER PLAN- OLD AND NEW



EXHIBIT 1.9: CAMPUS MASTER PLAN- TRAIL SYSTEM



Source: University of Missouri – St. Louis Master Plan Update, 2009 , Sasaki Associates

Future Development

The Master Plan identifies areas to consolidate landholdings (Mansion Hill Condos, Normandy Apartments, and Vacant Metro Lots) and outlines potential areas of interest (Residential Area, MoDOT Property, Normandy Golf Course and Glen Echo Country Club)

Sustainability Goals

One of the goals listed in the UMSL sustainability goals is to promote transportation options. This would be directly related to the Great Streets Program.

Campus Planning Districts

UMSL has eight campus planning districts which provide direction for land uses, building placement, and place making. Two of these districts are of interest to the Great Streets Program due to their close proximity to Natural Bridge Road. The Science complex, located on the north side of Natural Bridge Road in the far southwest corner of the north campus, will be an issue due to possible increase in student activity. Also, the College of Optometry and the College of Nursing are planned as new structures south of Natural Bridge Road adjacent to the existing MetroLink station. Development of these structures will increase pedestrian activity, and provide an additional 200 car parking lot.

Transportation

UMSL is planning a future realignment and extension of Grobman Drive, which crosses Natural Bridge Road. The project aims to reconfigure the North campus entrance on Natural Bridge Road to align with Grobman Drive. This will allow UMSL to better link the north and south campuses.

MetroLink Stations

Metro has two station stops that directly serve the UMSL campus. The stop to the south of Natural Bridge Road has the greatest impact on the planning of enhancements and future planning along Natural Bridge Road.

Summary

This plan document will identify economic and infrastructure related issues that impact market conditions using the original, proposed changes to Natural Bridge as a guide to future investment for the area. The Great Streets Program is defining new attitudes toward the relationship between infrastructure, land-use and economic development, is ideally suited for the Natural Bridge Road corridor. The pilot project, conducted by CH2M HILL has laid the foundation for critical relationships within the area and among stakeholders, as well as the identification of roadway design issues that addresses the environment, travel in and through the area and safety.

With the background, definition of study areas, and the history of phase one activities defined in order to understand fully the results of this report, the following chapters will assess critical planning elements of the physical, market, and land related aspects of the corridor. This will support the mission of the Great Streets Initiative on Natural Bridge Road and to establish an implementation plan and finance strategy to facilitate development in the area.

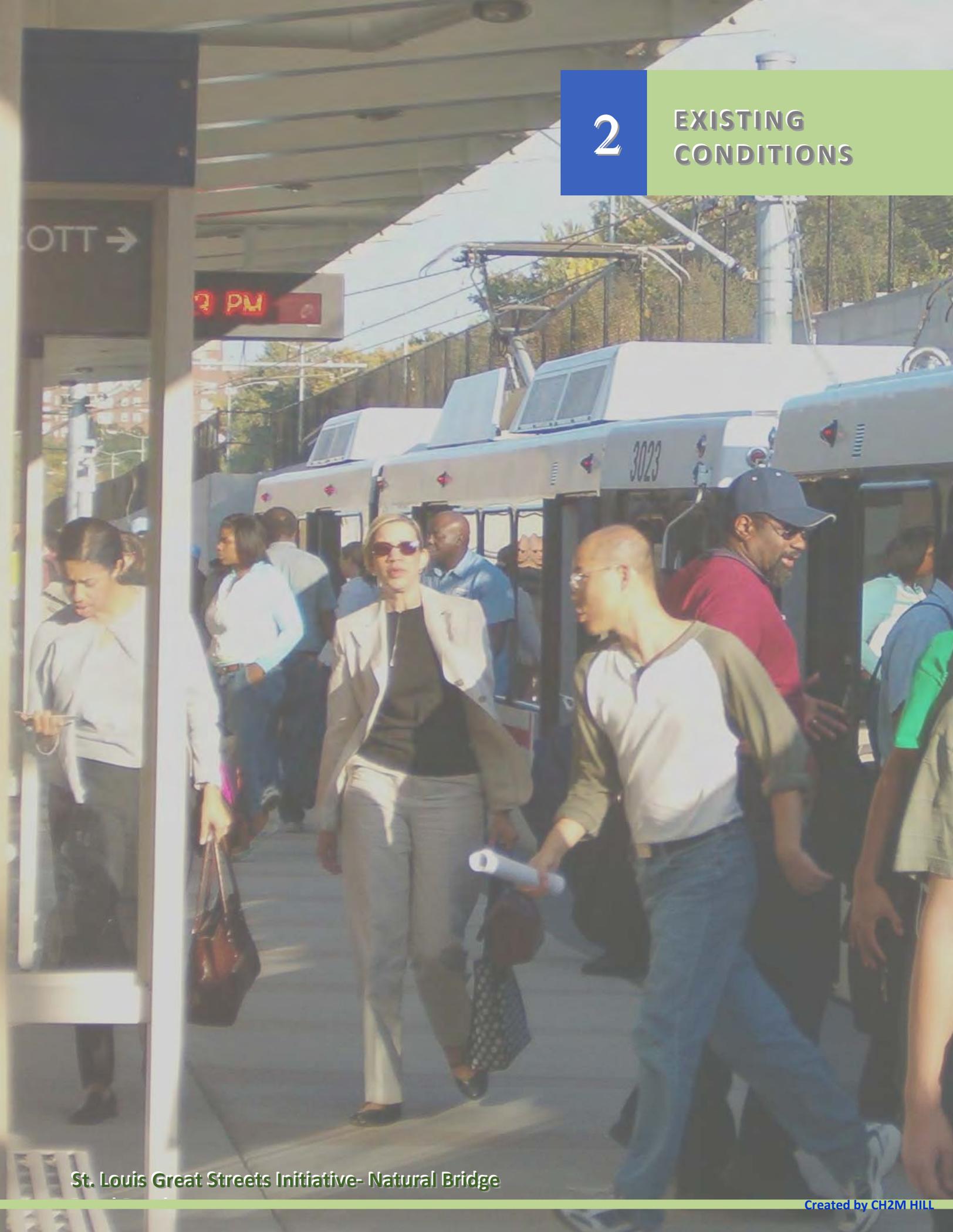
The chapters that follow include:

- Chapter 2 - Existing Conditions
- Chapter 3 - Existing Conditions Influencing Future Land Use
- Chapter 4 - Future Infrastructure and Amenities
- Chapter 5 - Future Land Use Plan
- Chapter 6 - Implementation Planning and Finance Strategies
- Chapter 7 - Performance Measures and Evaluation of Alternatives
- Chapter 8 - Design Guidelines
- Chapter 9 - Public Participation

The Chapters listed above and subsequent appendixes comprise the Plan and provide the tools and measures for the Natural Bridge Great Street Initiative and make the study area a great place to live and invest in the future.

2

EXISTING
CONDITIONS



Existing Social and Economic Conditions 2.3
 Demographics Profile2.3
 Economic Profile:2.5
 Housing Characteristics2.6
 Crime Statistics2.9
 Transportation2.10

Existing Zoning & Overlay Districts 2.11

Existing Land Uses 2.14
 Existing Land Uses in the Primary Study Area:2.14

Existing Historic Properties: 2.22

Existing Infrastructure and Facilities 2.24
 Study Area:2.24
 Alignment Conditions:2.24
 Alignment Amenities Features:2.24
 Utility Corridors:2.25
 Existing Natural Bridge Road MetroLink Station:2.25
 Existing Park and Conservation Areas:2.26

Existing Access and Parking 2.28
 Access Conditions:2.28
 Existing Right of Way Conditions2.32
 Existing Parking Conditions.....2.33

Existing Market Conditions 2.34
 Residential Neighborhoods.....2.34
 Commercial Development2.34
 Institutional Development.....2.35
 Changing Market Dynamics:2.35

Challenges and Opportunities 2.37
 Challenges:.....2.37
 Opportunities:.....2.37

Secondary Study Area Overview 2.39
 Existing Conditions.....2.39
 Constraints and Opportunities2.41

Potential Redevelopment Areas 2.42

Summary 2.43

CHAPTER-2: EXISTING CONDITIONS

Any planning process requires the review, analysis, and documentation of existing conditions in order to understand the real potential of a defined area. Therefore, documentation of existing physical, infrastructure, municipal, and market conditions that may impact future development are analyzed and taken into consideration when making final recommendations within this document. Understanding existing conditions facilitates planning for proposed revitalization; design and implementation strategies for new infrastructure; and sparks reinvestment strategies needed to realize real economic investment and revitalization within older sectors of the city.

Existing Social and Economic Conditions

Understanding socio-economic conditions are an important step in planning future development. The analysis of market trends help developers and business owners make decisions on the type of investments that will be most successful within various market conditions before investment takes place. The social and economic conditions documented in this section refer to the area that abuts Natural Bridge Road between Lucas and Hunt Road to I-170. This includes City of Normandy, Village of Bellerive Acres, the Village of Bel-Nor, the City of Pasadena Hills and the Village of Bel-Ridge. This area will be referred to as “immediate area of influence” in this section. The unincorporated St. Louis County area, the Village of Glen Echo Park, the Village of Pasadena Park, and the City of Greendale are not included in the study of social and economic conditions.

Demographics Profile

Based on Census 2000, 11,234 people lived in the area of influence (Normandy, Bel-Nor, Bel-Ridge, Bellerive Acres and Pasadena Hills) at that the time of the census. The estimated population for the year 2008 was 10,622 a decline in population of 5.8%. Exhibit 1.3 shows the breakdown of population by city. In comparison to the area of influence, the population of St. Louis County grew by 2.5 percent between 2000 to 2008, while growth in the State of Missouri was a 5.7 percent growth for the same time period.

Exhibit 2.1: Population Change (2000-2008)

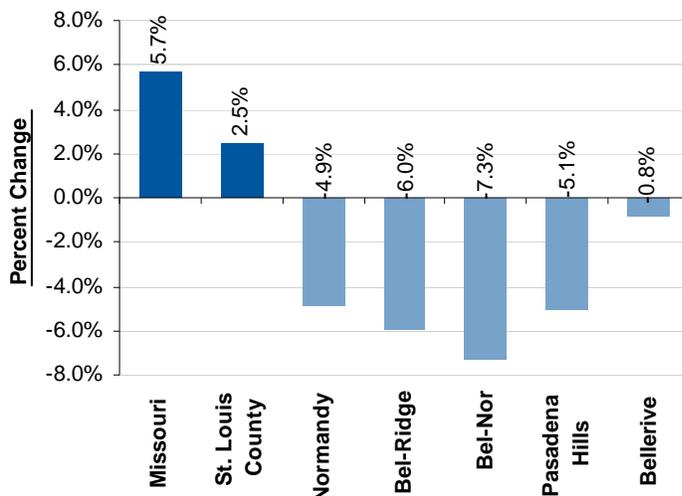
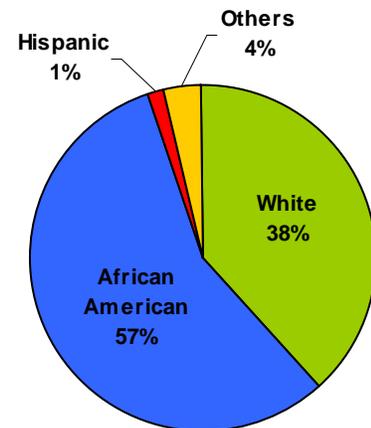


Exhibit 2.2: Racial Composition (2008)



Source: <http://www.city-data.com/> & <http://www.census.gov/main/www/cen2000.html> Accessed 20 Dec, 2009

EXHIBIT 2.3 : POPULATION CHANGE (2000-2008)

| Area | 2000 | 2008 | Percent Change |
|------------------|-----------|-----------|----------------|
| Missouri | 5,595,211 | 5,911,605 | 5.7% |
| St. Louis County | 991,830 | 1,016,315 | 2.5% |
| Normandy | 5,153 | 4,902 | -4.9% |
| Bel-Ridge | 3,082 | 2,898 | -6.0% |
| Bel-Nor | 1,598 | 1,481 | -7.3% |
| Pasadena Hills | 1,147 | 1,089 | -5.1% |
| Bellerive Acres | 254 | 252 | -0.8% |

Source: <http://www.city-data.com/>, Accessed Dec 15, 2009

The population density and median age along with the total population paint a demographic profile of the area that can help communities and developers make preliminary decisions on the type of businesses and housing that can be successful for the area.

Population density in the immediate area of influence is greater than the St. Louis County (Refer Exhibit 2.4). While Pasadena Hills has the highest density of all the municipalities analyzed in this section, it also has a higher median resident age (Ref Exhibit 2.5) and less population compared to other communities in the area of influence. Normandy and Bel-Ridge on the other hand have higher population densities and lower median age groups resulting in this area being made up of a largely younger population. Assuming that most of the students attending to the university fall in 20-24 years age group it is likely that a good proportion of that population lives near the university thus lowering the median age of population in Normandy and Bel-Ridge. Bellerive Acres has the lowest population density of all the communities in the area of influence area due to large portions of land occupied by the University.

Exhibit 2.4: Population Density Per Square Mile (2008)

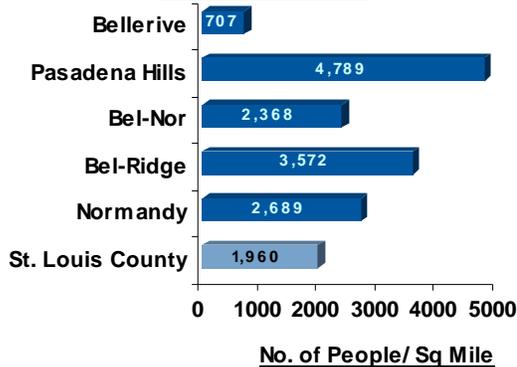
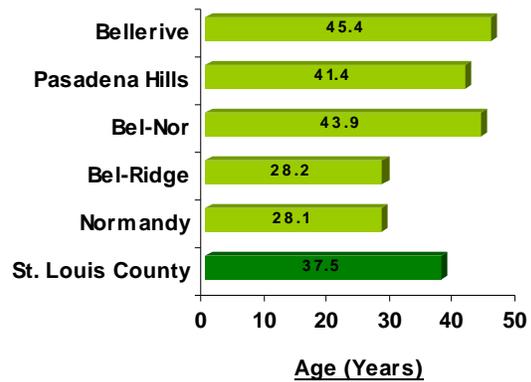


Exhibit 2.5: Median Resident Age- 2007



Source: <http://www.city-data.com/> & <http://www.census.gov/main/www/cen2000.html> Accessed 20 Dec, 2009

Based on the Census 2000, the average household size in the area of influence ranges between 2.3 to 2.6 individuals while in comparison, the average Household size in Missouri and St. Louis County was 2.5 individuals.

Economic Profile:

The median household income in the area of influence varies vastly from one municipality to another as does the number of people living below the poverty level. One assumption that can be made for lower household income in the communities of Normandy and Bel-Ridge is a disproportionately large student population in these communities. There are around 15,000 students attending UMSL. Assuming that most of the students attending to the university fall in 20-24 years age group it is likely that a goodly proportion of that population lives near the university. This circumstance may skew the household income statistics in the area (Refer Exhibits 2.6 and 2.7).

Similarly, the poverty level in the area is vastly varied (Ref Exhibit 2.8). However, the cost of living index in the area is less than US average (100) ranging from 78 to 82 in range. (Refer Exhibit 2.9).

Exhibit 2.6: Median House Hold Income (2000-2007)

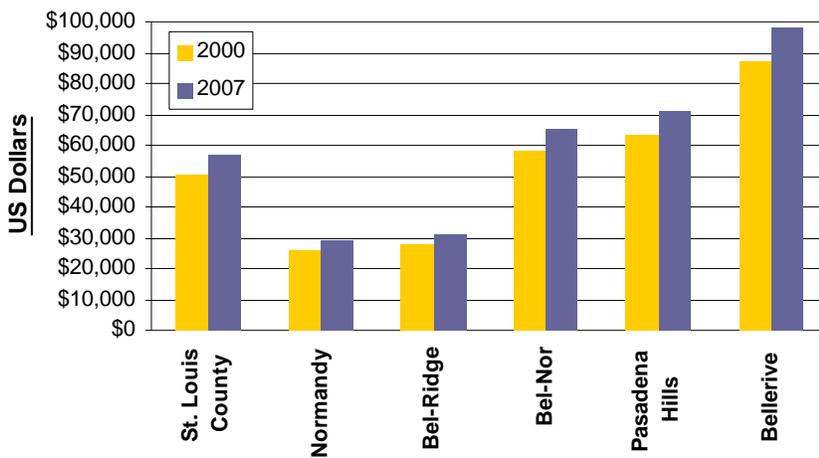
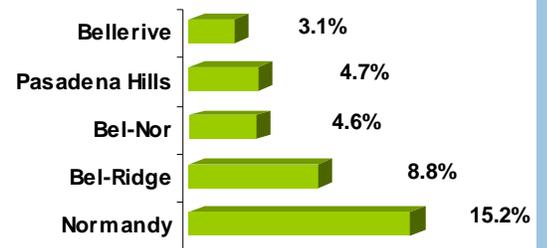


Exhibit 2.7: Population Distribution (20-24 year age group)



Source: <http://www.city-data.com/> & <http://www.census.gov/main/www/cen2000.html> Accessed 20 Dec, 2009

Exhibit 2.8: Residents With Income Below Poverty Level (2007)

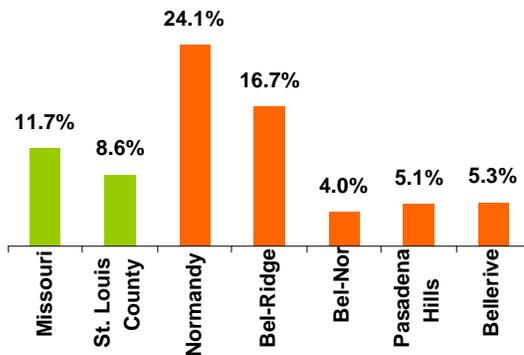
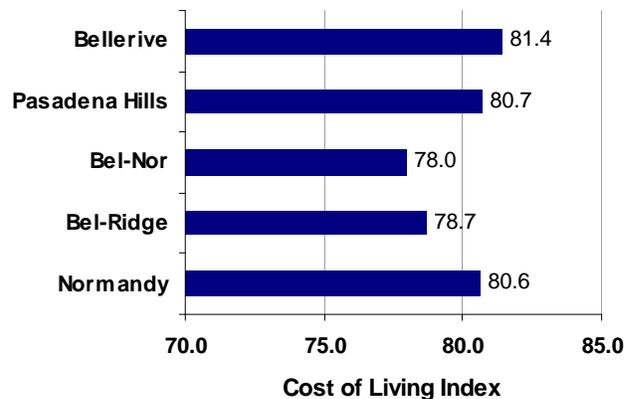


Exhibit 2.9: Cost of Living Index- 2008



Source: <http://www.city-data.com/> & <http://www.census.gov/main/www/cen2000.html> Accessed 20 Dec, 2009

Some of the most common industries providing income to the subject population include:

- Educational services
- Construction
- Health care
- Accommodation and food services
- Material recording, scheduling, dispatching, and distributing workers
- Professional, scientific, and technical services
- Public administration

Most common occupations vary within the communities studied. Higher paying jobs are more common in Pasadena Hills, Bellerive Acres and Bel-Nor while the typical occupations in Normandy and Bel-Ridge are lower paying jobs. Appendix 2.1 gives a snapshot of common occupations by the community.

Housing Characteristics

There were 4,938 houses existing in the year 2000 in the five city area of influence. Of these, 2,663 were owner occupied and 1,963 were renter occupied. Around 312 units were vacant at that time. At that time, Bel-Nor had the highest percentage of owner occupied housing. Normandy was the only city in the five city area of influence that had more renter occupied housing compared to owner occupied housing. It can be assumed that this may be due to a large student population in Normandy. Map 2.1 shows the owner occupied housing versus the renter occupied housing in the area of influence.

The median value of houses and condominiums is shown in Exhibit 2.11. The exhibit shows the highest values were reported in the Village of Bellerive Acres (\$288,220). Median Real-Estate Property Tax per 2000 data was 1.3% in Normandy, 1.4% in Bel-Ridge, Bellerive Acres and Pasadena Hill and 1.6% in Bel-Nor. Map 2.2 gives a snapshot of taxable versus non-taxable properties in the area of influence.

An analysis of building permit data reveals that this area hasn't seen any major construction activity since 2000. Exhibit 2.12 shows the building permits granted since the year 2000.

Exhibit 2.10: Housing Tenure 2000

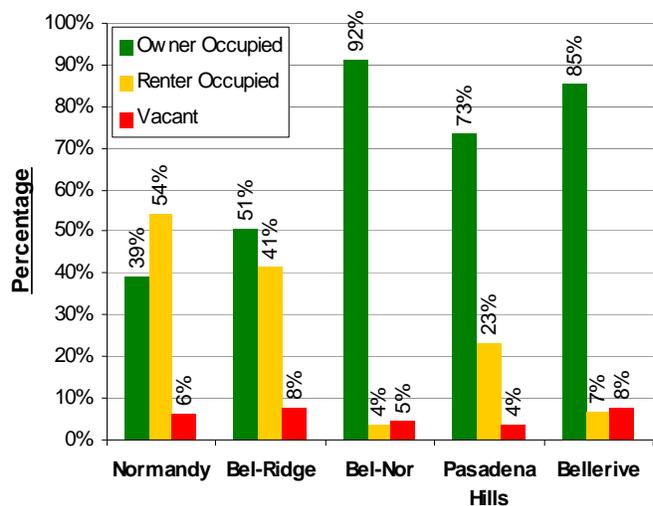
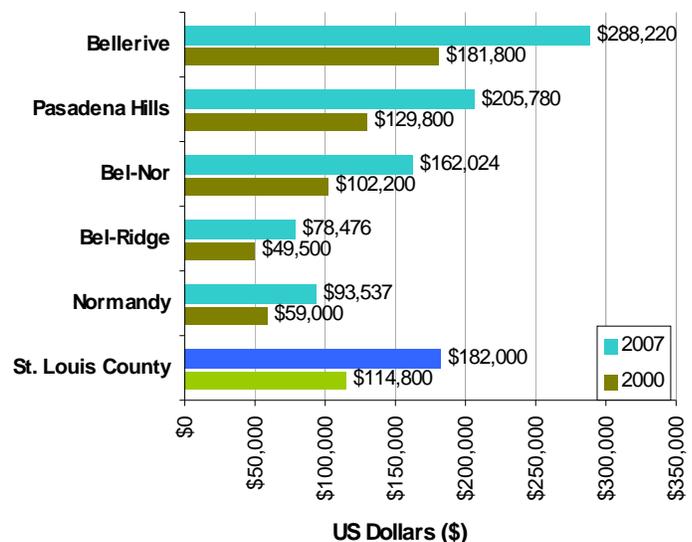


Exhibit 2.11: Median House or Condo Value (2000-2007)



Source: <http://www.city-data.com/> & <http://www.census.gov/main/www/cen2000.html> Accessed 20 Dec, 2009

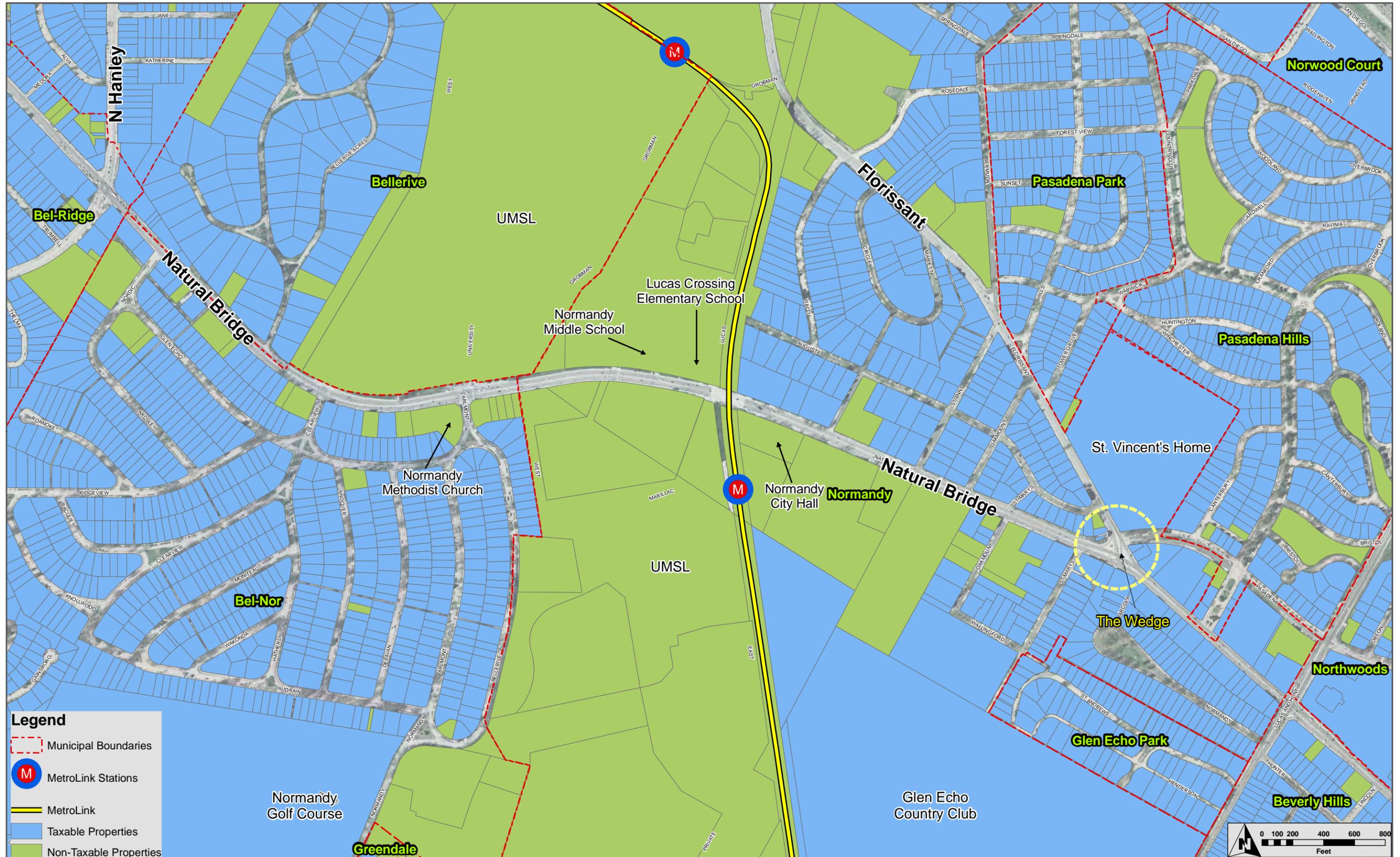


Legend

- Municipal Boundaries
- M MetroLink Stations
- MetroLink
- Renter Occupied Residential
- Owner Occupied Residential
- Other Land Uses
- Vacant



MAP 2.1: EXISTING RESIDENTIAL OWNERSHIP



Legend

- Municipal Boundaries
- MetroLink Stations
- MetroLink
- Taxable Properties
- Non-Taxable Properties

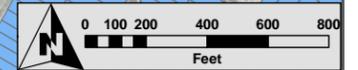
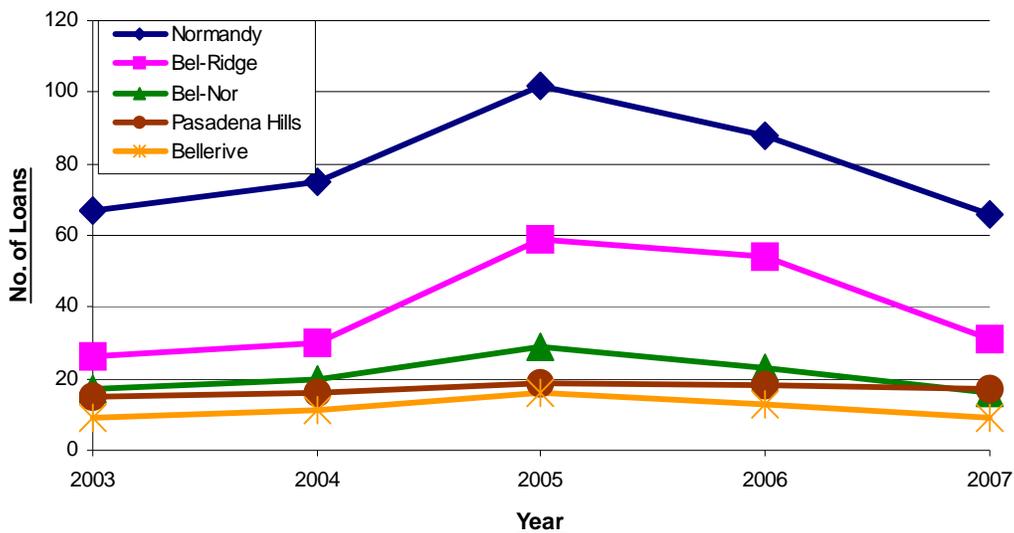


EXHIBIT 2.12 : BUILDING PERMITS

| Area | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|----------------|------|------|------|------|------|------|------|------|------|
| Normandy | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Bel-Ridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bel-Nor | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | NA |
| Pasadena Hills | NA | NA | NA | 0 | 0 | 0 | 0 | 0 | 0 |
| Bellerive | NA | NA | NA | 0 | 0 | 0 | 0 | 0 | 0 |

Source: <http://censtats.census.gov/bldg/bldgprmt.shtml> Accessed Dec 20, 2009

Exhibit 2.13 : HMDA & PMIC Home Mortgage Loans (2003 - 2007)



NOTES:

The loans data is based on Census tracts and might not match exactly with municipal boundaries.

Normandy- Tract 2123, 2124, 2137; Bel-Ridge- Tract 2136; Bel-Nor Tract 2137; Pasadena Hills- Tract 2123, Bellerive- Tract 2137

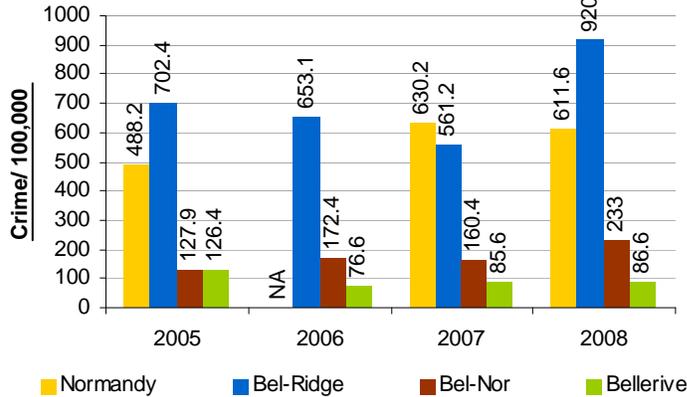
Source: <http://www.city-data.com/> & <http://www.census.gov/main/www/cen2000.html> Accessed 20 Dec, 2009

However, home sales have been significant between 2003 and 2007. Home sales increased from 2003 to 2005, and then have declined thereafter. Exhibit 2.13 reveals that more homes have been purchased in Normandy and Bel-Ridge, compared to other communities in the area of influence.

Crime Statistics

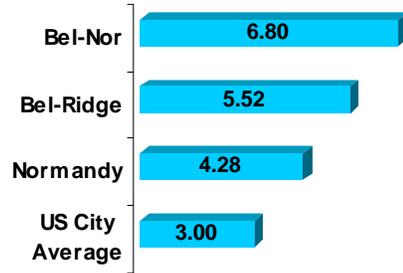
Exhibit 2.14 shows crime statistics in the area. Crime includes murders, rapes, robberies, assaults burglaries, thefts, auto thefts and arson. Crime statistics have been on the rise since 2005, but has marginally decreased in the City of Normandy from 2007 to 2008. Exhibit 2.15. is a 2006 indicator of law enforcement officers per 1000 residents compared to the U S Average. There are more law enforcement officers per 1000 residents than the national average.

Exhibit 2.14: Crime / 100,000 (2005- 2008)



- 2) U.S. average = 320.9, Higher means more crime
- 3) Crime includes Murders, Rapes, Robberies, Assaults, Burglaries, Thefts, Auto thefts and Arson

Exhibit 2.15: Full Time Law Enforcement Employees per 1,000 Residents (2006)

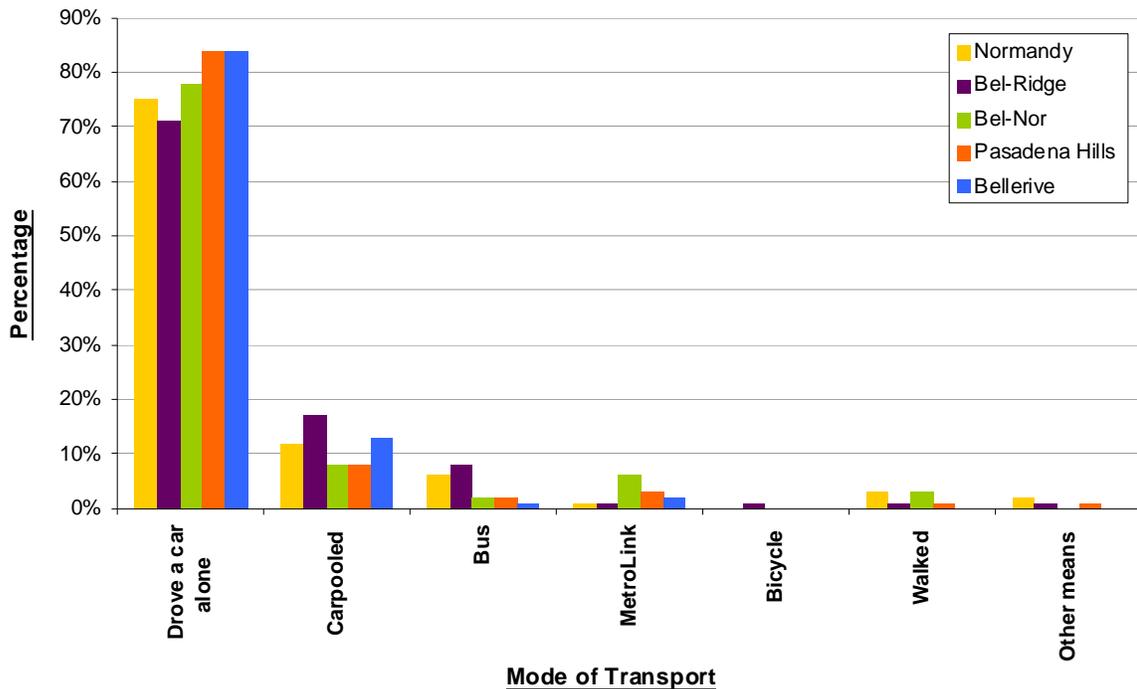


- Notes:
- 1) Crime statistics are not available for Bellerive & Pasadena Hills

Transportation

Based on the 2000 Census most people drove cars to work followed by car pooling and then buses. Very few people used other modes of transportation such as MetroLink, bicycling and walking (See Exhibit 2.16).

Exhibit 2.16: Means of Transportation



Existing Zoning & Overlay Districts

Below is a snapshot description of each of the zoning districts that affect the primary and secondary study areas districts. Zoning plays an important role in deciding the land uses in the study area. Based on the recommendations for the future land uses in the area zoning changes might be recommended to be consistent with the land uses.

The Village of Bel-Ridge:

- A – Single Family 7,500 Sq Ft
 - No building shall exceed 2½ stories or 35 feet
 - Lot area of not less than 7,500 square feet*
- B – Single Family 6,000 Sq Ft
 - No building shall exceed 2½ stories or 35 feet
 - Lot area of not less than 6,000 square feet*
- C – Two Family
 - No building shall exceed 2½ stories or 35 feet
 - Lot area of not less than 3,750 square feet per family*
- D – Multiple Dwelling
 - No building shall exceed 3 stories or 45 feet
 - Lot area, regardless of use, of not less than 8,000 square feet provided that:
 - i) Lot area, containing a two-family dwelling, of not less than 4,000 square feet per family
 - ii) Lot area, containing a multiple dwelling, of not less than 2,000 square feet per dwelling unit
 - iii) No multiple dwelling shall cover more than 30% of the total lot area
- E – Local Business
 - No building shall exceed 2½ stories or 35 feet
 - No structure shall be erected within 30 feet of a street line
- F – Business
 - No building shall exceed 3 stories or 45 feet
 - No structure shall be erected within 30 feet of a street line
- G – Light Industrial
 - No building shall exceed 3 stories or 45 feet**
 - No structure shall be erected within 30 feet of a street line
 - Performance standards apply (see zoning code)

* Unless recorded on or before December 9, 1993

** Exceptions to height requirements see zoning code

City of Normandy:

- A – Single Family 10,000 Sq Ft
 - No building shall exceed 2½ stories or 35 feet
 - Lot area of not less than 10,000 square feet*
 - Lot width not less than 70 feet*
- B – Single Family 7,500 Sq Ft

- No building shall exceed 2½ stories or 35 feet
 - Lot area of not less than 7,500 square feet*
 - Lot width not less than 55 feet*
- C – Two Family
 - No building shall exceed 2½ stories or 35 feet
 - Lot area of not less than 8,000 square feet
 - Lot area of not less than 4,000 square feet per family
- D – Multiple Family
 - No building shall exceed 3 stories or 45 feet
 - Lot area not less than 12,000 square feet
 - Lot area, for single family dwelling, of not less than 7,500 square feet
 - Lot area, two family dwelling, of not less than 4,000 square feet per family
 - Lot area, multiple family dwelling, of not less than 3,000 square feet per family
 - Lot area, ranchette construction, of not less than 3,500 square feet per family
- E – Neighborhood Shopping
 - 1 parking space per 300 square feet of floor space (review zoning code for exceptions)
 - No building shall exceed 3 stories or 45 feet
- F – Commercial
 - 1 parking space per 300 square feet of floor space (review zoning code for exceptions)
 - No building shall exceed 3 stories or 45 feet
- G – Light Industrial
 - 1 parking space per 300 square feet of floor space (review zoning code for exceptions)
 - No building shall exceed 8 stories or 100 feet (review zoning code for exceptions)

* Unless recorded on or before February 10, 1969

Village of Bel-Nor:

- R-1 Single Family
 - No building is to exceed 2 stories or 30 feet
 - Minimum lot area of 7,500 square feet
 - Minimum floor area of 1,100 per dwelling unit
- R-2 Single Family
 - No building is to exceed 2 stories or 25 feet
 - Minimum lot area of 5,000 square feet
 - Minimum floor area of 1,100 per dwelling unit
- R-3 Non-Urban
 - No building is to exceed 2 stories or 30 feet
 - No building is to fall below 1½ stories
 - Minimum lot area of ½ acre
 - Minimum floor area of 1,900 square feet
- C-1 General Commercial District
 - No building is to exceed 40 feet in height
 - No building is to fall below 15 feet in height

- Minimum lot area of 7,500 square feet
- Minimum floor area of 1,300 square feet
- E-1 Institutional District
 - No building is to exceed 30 feet in height
 - No building is to fall below 15 feet in height
 - Minimum lot area of 7,500 square feet
 - Minimum floor area of 1,300 square feet for Residential
 - Minimum floor area shall not exceed 45% of ground coverage for other uses

Village of Bellerive Acres:

- R Residential
 - No building is to exceed 2 stories or 25 feet
 - No building is to fall below 1½ stories
 - Minimum lot area of 1/3 of an acre
 - Minimum floor area of 2,800 square feet for 1½-story dwelling
 - Minimum floor area of 3,000 square feet for 2-story dwelling
 - 4 off-street parking spaces for each dwelling unit
- C-1 Neighborhood Commercial District
 - No building is to exceed 25 feet
 - Minimum lot area of 7,500 square feet
 - 1 off-street parking space for every 300 square feet in area
 - 1 off-street parking for every 2 persons with regular occupancy.
- C-2 Business Commercial District
 - No building is to exceed 50 feet
 - Minimum lot area of 20,000 square feet
 - Telecommunications tower cannot exceed 90 feet in height
 - Parking same as C-1
- C-1 & C-2 Overlay – Mixed Use District

University of Missouri at St. Louis (UMSL)

UMSL, as a state entity, is not subject to municipal zoning for buildings built on property that the University owns.

Existing Land Uses

The Existing Land Use Map 2.3, for the area of influence, illustrates the general location of various land use categories within the study area. Land uses within the area of influence are complex, including conflicting commercial and industrial uses adjacent to residential development and there are several low density commercial developments on large, underutilized sites. Generally, land use in this area follows typical city patterns. For instance, commercial and industrial uses are located around highways and major secondary corridor frontage while residential development is situated near secondary and tertiary streets. These patterns enhance redevelopment opportunities without excessive disruption to existing land and street patterns due to existing parcel sizes and infrastructure serving various locations appropriate to the various uses mentioned.

The Existing Land Use Map 2.3 is intended to categorize all development within the area of influence into specific land use types. The existing land uses include:

- Single family
- Duplex
- Multi Family
- Commercial
- Institutional
- Parks
- Recreational
- Industrial
- Vacant/ Agricultural

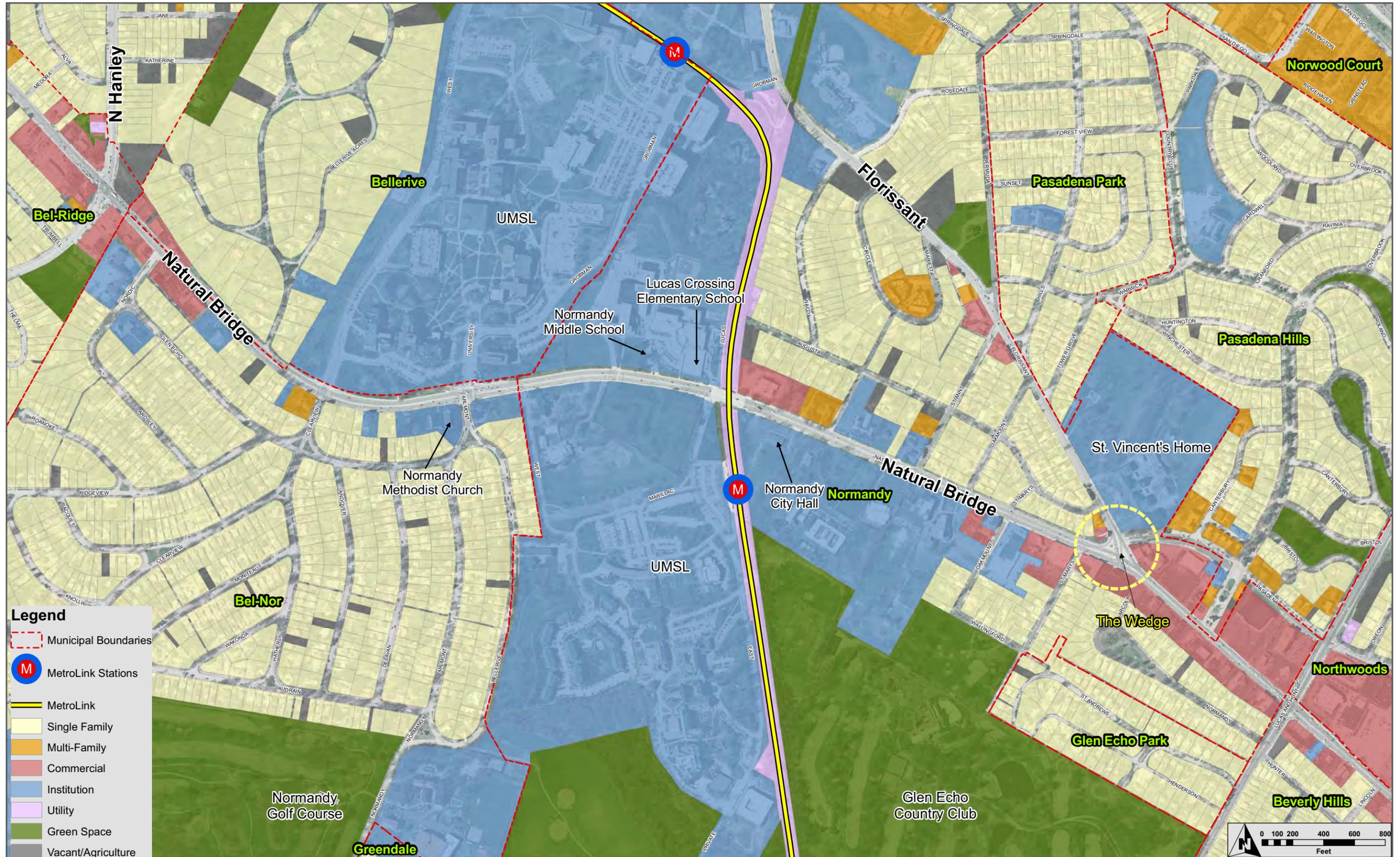
Existing Land Uses in the Primary Study Area:

This section deals with the description of land uses in the primary study area that extends from Lucas and Hunt Road to Clearview Drive/West Drive, one parcel depth on north and south of Natural Bridge Road (Refer Map 2.3).

Residential Land Uses:

The primary study area portion of the Natural Bridge Road corridor is complex and the land uses diverse. In some cases the uses conflict and the positioning of structures on the sites impact access, function, and overall viability of the corridor as an urban connector.

The Natural Bridge Road corridor serves many residential areas ranging from planned urban communities to individual homes and vintage 1950's subdivisions. Due to these historic residential development patterns and the reuse of certain parcels of land along Natural Bridge road over time, many homes fronting on Natural Bridge Road are either incorporated into adjacent commercial and retail land uses or residences have been converted into office or commercial space.



Legend

- Municipal Boundaries
- MetroLink Stations
- MetroLink
- Single Family
- Multi-Family
- Commercial
- Institution
- Utility
- Green Space
- Vacant/Agriculture



MAP 2.3: EXISTING LAND USE

EXHIBIT 2.17: PICTURES OF RESIDENTIAL LAND USES IN PRIMARY STUDY AREA

Residential property co-existing with changing market needs and complex market conditions become opportunities for expansion and conversion to commercial development due to the reduced value of the structures and opportunities associated with the assembly of multiple properties adjacent and developed in low density residential uses. The conversion from residential to commercial uses is reinforced by the fact that there are properties within this corridor that may have outlived their existing land use designation and may be more appropriately considered for acquisition and redevelopment. The continued decline in residential values and the influence UMSL and other institutions have had upon this economic market adds emphasis to the concept of effective reuse of property.

The property shown in example P2.2 illustrates of the evolutionary patterns occurring along Natural Bridge Road at this time. This former residence has been converted to office use with parking added at the rear of the structure to accommodate city parking and variance requirements. The property is located immediately adjacent to commercially zoned property and is a prime candidate for purchase, tear down, and conversion to commercial land use as the overall commercial market is revitalized. This conversion process is indicative of existing land use patterns responding to emerging and changing market demands.

The image P2.3 shows reuse of residential property by the University as an Alumni center. In the short term, the acquisition and renovation/upgrade of homes is a cost effective way to provide space for expansion. As seen in the example P2.3, residential land converted to institutional use has physically improved the property including the addition of signage, parking, exterior lighting, and landscaping appropriate for the new.



Source: CH2M HILL

Commercial Land Uses:

Commercial land uses along the Natural Bridge Road corridor in the primary study area are varied, and exemplifies emerging market shifts, including:

- Residential structures converted to commercial and institutional uses
- Small commercial structures developed for specific and free standing uses
- Small commercial structures that include multi-story architecture with mixed-use options (retail/commercial on the first floor and office/residential above)
- Small strip commercial structures with mixed-use tenancy
- Larger strip commercial structures with mixed-use tenancy
- Box store retail

EXHIBIT 2.18 EXAMPLES OF COMMERCIAL LAND USES



Source: Google Earth Pro

Small strip centers are located adjacent to the Natural Bridge Road and the Florissant Road intersection and are exemplary development patterns of commercial buildings ranging in age from the 1960's to the 1980's. These properties contain small, individual stores and in some cases office and medical spaces characteristics of strip center development adjacent to the larger stores. Parking is at the store fronts and extends to the street with little or no landscaping. There is some parking also available behind the businesses as well. Signage is varied and not consistent with the various sites or the streetscape. Access to Natural Bridge and Lucas and Hunt Roads is controlled through designated curb cuts and in many cases, visitors to the site are required to back into oncoming traffic in order to exit parking spaces.

Free standing, small box stores are located at the same intersection on the south side and extend eastward to the Natural Bridge and Lucas and Hunt Roads intersection. These stores are typical chain restaurants and small, single tenant stores each with buildings located at the rear of the parcel and include ratio based parking at the front and sides of the buildings. Access is controlled by

designated curb cuts resulting in multiple access points that add to congestion along Natural Bridge Road. Although many of these stores are contiguous, there has been no attempt to redesign parking and access points on a reciprocal or shared basis.

Larger box stores and free standing retail has developed on the north side of Natural Bridge and Lucas and Hunt Roads intersection. These are developed with loading dock areas facing the residential areas of Pasadena Hills. These retail locations are defined by larger buildings set back from the right of way with parking at the front and sides of the building. In general, these large box stores are not landscaped and have few public amenities. Each building has its own access onto major secondary roads with loading dock areas located at the rear of the buildings.

Institutional Land Uses:

Natural Bridge Road is home to many institutions, all in operation and all contributing transient market to the area by way of visitors, invitees, and staff working in support of the institutions. Those accessing the area each work day are an asset to the market and the supply of goods and services to accommodate this market group is essential to the long term sustainability of the area. Facilitating the growth of this market group is also essential to the long term sustainability of the area. Therefore, creating safe places, mobility, multi-modal access, and growth potential to support the institutions will be essential to any planning programs designed to enhance this area.

The following exhibits illustrate the general locations of the subject institutions:

University of Missouri

St. Louis Campus (UMSL)

Founded in 1963 at its present location and occupying 350 acres of land, this State of Missouri operated university campus serves 15,500 students, 1,200 of which live on campus. Students are served by 1,400 full and part time teaching and research faculty. The campus occupies a major part of the primary study area frontage and making the campus one of the most important land uses in the area.

EXHIBIT 2.19: UNIVERSITY OF MISSOURI



Source: Google Earth Pro

Normandy City Hall

7700 Natural Bridge Road

The Normandy City Hall occupies a triangular land configuration immediately adjacent to the MetroLink tracks on the west side of the property and is bounded by an open tributary and greenway on the east side of the property. The City Hall structure faces Natural Bridge Road and is served by parking lots at the front of the building and on the west side of the building.

St. Ann Church and School

7530 Natural Bridge Road

Founded in 1855 the property has continually served the community to present day. In 1997 an early childhood center was established in the old convent building. This institution serves the educational and cultural needs of the community.

EXHIBIT 2.20: VARIOUS INSTITUTIONAL LAND

Source: Google Earth Pro

Normandy Middle School and Lucas Crossing Grade School

7855 Natural Bridge Road

The Normandy Middle School (formerly Normandy Junior High School) was constructed in the late 1940s. Originally this thirty-six room building was opened to seventh, eighth, and ninth graders for a potential enrollment of 1,260 students. In 1993, the junior high was renamed Normandy Middle School. Today Normandy Middle School houses approximately 700 seventh and eighth grader students. Lucas Crossing Grade School is a new structure including a kindergarten through sixth grade school with a student population of approximately 890 students.

Normandy School District

3855 Lucas and Hunt Road

The Normandy School District services several communities in the area including Normandy, and Pine Lawn. This building is used as an administrations facility serving the entire school district. The building is occupied by the school districts however, there are other tenants in the building as well.

St. Vincent Germanic Home

7401 Florissant Road

This home and school facility was founded in 1850 to service the community after a cholera epidemic that killed 4,000 citizens. Children left as orphans after this disaster found a home and education at this location. The facility has remained in operation to the present and continues to

EXHIBIT 2.21: VARIOUS INSTITUTIONAL LAND USES



Source: Google Earth Pro

serve as a school and housing for children.

Normandy United Methodist Church

8000 Natural Bridge Road

Located at the intersection of Natural Bridge Road and Bellerive Drive, this stately stone church has been a landmark in the Normandy community for many years. Its towering steeple and landscaped grounds are distinction and the church provides cultural benefit to the community. The building is served by a parking lots around the building with pedestrian access off Natural Bridge Road and Bellerive Drive.

EXHIBIT 2.22: NORMANDY UNITED METHODIST



Source: Google Earth Pro

St. Louis County Library

7606 Natural Bridge Road

The Natural Bridge Road branch of the St. Louis County Library System opened at 6814 Natural Bridge Road as a full-service branch as well as Library headquarters. In 1960, this Library moved its headquarters to its present location at 1640 South Lindbergh Boulevard. The building was then used as the Natural Bridge Branch until 1992.

In May, 1992 construction began on a new building on property purchased from the Sisters of the Good Shepard. The building was designed by Manske Corporation and constructed by J.E. Novack. The new Natural Bridge Branch opened to the public on Monday, May 24, 1993.

The branch is 15,733 square feet with a glassed-in main room, and houses a 60,000 items owned by the library. Natural Bridge is a true neighborhood branch and community center. Residents check out materials, use computers and attend meetings in the library's facilities.

U.S. Post Office Facility

7450 Natural Bridge Road

This full service post office is located at the Natural Bridge Road and Oakmount Avenue intersection. The public is served by a parking lot on the west side of the structure.

Sisters of the Good Sheppard (Land owned by Oblate Sisters of the Providence)

7530 Natural Bridge Road

A significant brick structure with adjacent, smaller buildings including a convent, a 34-room retirement home for elderly sisters and a transitional house for chemically dependent women. The property is located immediately adjacent to the Normandy City Hall and is bounded by an open tributary and greenway on the west side of the property.

EXHIBIT 2.23: ST. LOUIS COUNTY**EXHIBIT 2.24: U.S. POST OFFICE FACILITY****EXHIBIT 2.25: SISTERS OF THE GOOD SHEPPARD**

Source: Google Earth Pro

Existing Historic Properties:

Normandy, Missouri is an historical city with development roots reaching back to 1811. Since its founding many structures were built and remain today as a reminder of this rich history, not only of Normandy but of the entire St. Louis region. By 1885 most land had been developed in the city and due to expansion of the City of St. Louis, Normandy became one of the first suburbs of the city.

The St. Louis Streetcar Company served the City of Normandy for many years helping to sustain the cities shopping and residential areas. The city was officially incorporated in 1945 and in 1977 the city was designated as a third class city under State of Missouri Statutes.

Normandy has a long and productive history that is an integral part of the existing culture and adds to the desirability of the area and planning for the future. As new investment prompts revisions to existing land uses and infrastructure configurations, a respect for the history and cultural contributions made by the city over time is to be respected and appreciated.

The historic properties in the primary study area are documented below:

The Hunt House

7717 Natural Bridge Road

A 1904 Colonial Revival house built for Wilson Price Hunt, grandson of one of the founders of the City of Normandy. A property presently on the U.S. National Register*, the property is currently used as an office building for a real estate firm.

*The U.S. National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archeological resources.

St. Vincent Germanic Home

7401 Florissant Road

St. Vincent Home for Children was founded in 1850 following a cholera epidemic which left many St. Louis children orphaned. The Sisters of St. Joseph took charge of the home in 1851. In 1888, the Sisters of Christian Charity assumed the duties of the home.

EXHIBIT 2.26: THE HUNT HOUSE



EXHIBIT 2.27: ST. VINCENT GERMANIC HOME



City of Pasadena Hills Gateway

The entrance structure shown here is the official portal to the City of Pasadena Hills, MO a neighborhood that has been designated historic by the State of Missouri and the National Register. The community is a planned urban community with about fifteen acres of land devoted to green space and park areas and is one of the oldest and most established neighborhoods in St. Louis County. Any future planning that impacts this community must consider its total history designation and the restrictions imposed pursuant to the statutes of the State of Missouri.

Other historic properties in the Area of Influence and secondary study area includes

- Hardy House (415 Bermuda Road)
- Pasadena Hills Historic District
- Glen Echo Historic District

EXHIBIT 2.28: CITY OF PASADENA HILLS GATEWAY



Existing Infrastructure and Facilities

Study Area:

At the onset of this project, a field survey was performed by ABNA Engineering. The results of their observations and documentation of existing physical conditions were recorded as part of the walk through process. Photographs shown here were taken as part of the physical documentation of the area. These images provide a photographic record of the following elements of the existing corridor:

Alignment Conditions:

Alignment conditions from Lucas and Hunt Road to west of Hanley Road includes four lanes of traffic and one center turn lane. From east of Hanley Road to I-170 the roadway is comprised of four travel lanes, two in each direction of travel.

The Natural Bridge Road corridor throughout the study area experiences between 14,000 and 16,000 average annual cars per day for a majority of the corridor, to approximately 22,000 average annual cars per day at Natural Bridge Road at Florissant Road. The existing alignment is more than adequate to serve the amount of traffic and the vehicular transactions that occur within a twenty four hour time period.

This pavement is owned and maintained by the Missouri Department of Transportation (MoDOT) and is generally in good condition and well maintained. Natural Bridge Road does serve as an alternative route to I-70 when traffic incidents close lanes on I-70. During these incidents the traffic volumes increase above average volumes.

Alignment Amenities Features:

The traffic movement on Natural Bridge Road, for most part is unobstructed except at signalized intersections and median locations at specific locations within the corridor. The intersections at Lucas and Hunt Road and at Clearview Drive/West Drive are regulated with median structures that guide traffic movement into high traffic area turning motions. The median at Lucas and Hunt Road, a more dense commercial area, does restrict ingress and egress at certain retail locations.

EXHIBIT 2.29: ALIGNMENT



EXHIBIT 2.30: PAVEMENT CONDITION



Source CH2M HILL

Utility Corridors:

Above ground utility services is generally located on both sides of the Natural Bridge Road corridor and serve development from both the north and south sides of the alignment. These services create a visual impediment to the corridor generally and their physical presence obstructs visibility along the travel way. Placing these services underground would have a positive visual impact on the corridor and provide a safer environment for pedestrians and drivers. Utility locations in retail/commercial developed parcels around Florissant Road and the Lucas and Hunt Road area have utilities located at the rear of the buildings along Pasadena Boulevard as well.

Other utilities such as gas and water are located in the curb lane or along the curb lines of the existing travel way. The existing facilities are adequate for current development but will need to be assessed for ability to serve changes in land use.

Existing Natural Bridge Road MetroLink Station:

The University of Missouri is served by two MetroLink Stations within the campus boundaries, one on the east side of the north campus and the other located at Natural Bridge Road serving the south campus (See Exhibit 2.31). Campus parking lots are built adjacent to these two stations and except for this academic investment; no economic benefit is derived for MetroLink at this time. Bus service links the community to the station and serves the communities around the station and the campus. The south MetroLink station at Natural Bridge Road is a significant part of the existing transit infrastructure serving the Natural Bridge Road corridor. Normandy City Hall is located on the west side of the MetroLink station location and benefits from its adjacency to the station.

The MetroLink station located adjacent to the south campus is not landscaped and although the amenities look new and are in good condition, creating green space at this location will enhance rider experience and blend this station into the adjacent land uses. Presently, MetroLink riders wishing to access the station from the east cut through the City Hall parking lot demonstrating a need for pedestrian access at this location.

EXHIBIT 2.31: SOUTH METROLINK STATION LOCATION



Source Google Earth Pro

EXHIBIT 2.32: SOUTH METROLINK STATION



Source CH2M HILL

Existing Park and Conservation Areas:

There are no existing parks adjacent to the Natural Bridge Road corridor within the study area. There are however several locations of green space which offer an opportunity to develop “people places” or “gathering places” in association with proposed street improvements and amenity updates. These green areas are identified here:

Natural Bridge Road at Clearview Drive/West Drive:

Open land defines the entrance to the north campus of the University of Missouri site. Portions of this land are used for retention of water. The area south of the Science Complex has been planned by the University for major redevelopment. However, low impact development techniques can be applied in this area to effectively deal with storm water issues and may supply green space in the area. Review of land use in this area also allows for the creative reuse of land on adjacent parking lots and will improve pedestrian movement in the area.

EXHIBIT 2.33: NATURAL BRIDGE ROAD AT CLEARVIEW DRIVE



Source Google Earth Pro

EXHIBIT 2.34: NATURAL GREENWAY AT NATURAL BRIDGE ROAD



Source Google Earth Pro

Natural Greenway at Natural Bridge Road and MetroLink Station:

The Bellerive community established and manages an approximate 20 acre bird sanctuary. This natural area is comprised of a heavily wooded landscape and wildlife haven surrounding the northern part of the Bellerive community and extending southward through the neighborhood providing a beautiful landscaped and secure environment for both the property owners and the flora and fauna populating the sanctuary.

Natural Bridge Road at Florissant Road (the Wedge):

The existing wedge area is a typical concrete curb, pavement and median design without any consideration given to landscaping or aesthetics. This site is an excellent opportunity to add green

space to soften the surrounding structures and to provide a safe haven for pedestrians crossing at this location. If this location is designed as a roundabout location or as a “T” intersection; landscaping and public amenities can make this area more safe and pleasing to all.

EXHIBIT 2.35: NATURAL BRIDGE ROAD AT FLORISSANT ROAD



Source Google Earth Pro

Existing Access and Parking

Access Conditions:

Existing land uses conditions influence access and overall driving conditions along the corridor. It is common in this market for residential housing with driveways at the curb to be located immediately adjacent to commercial or institutional uses with heavier ingress and egress demands. These land use conditions influence the number of access points present along the corridor and influence traffic flow. In addition, each commercial property, although many are contiguous, have been developed with their own access points and no consideration has been given to reciprocal ingress and egress or the consolidation of access points along Natural Bridge Road. By cooperatively controlling ingress and egress internally on development sites it is possible to improve site circulation and reduce access points along Natural Bridge Road.

The Exhibits 2.36, 37 & 38 emphasizes the need for land use driven assessment and problem solving discussions related to existing access points and the impact new right of way conditions being proposed along the Natural Bridge Road corridor will have upon all market sectors in the area. Ingress and egress from multiple parcels of land will influence the effective reuse of land and optimize land usage and value along the corridor. Land that will result from reducing pavement width will need to address access as a critical element of the overall road functions in the area.

Natural Bridge Road existing access conditions from Lucas and Hunt Road to Clearview Drive/West Drive are complex and varied. Access to the roadway is unrestricted at this time resulting in numerous access points along the frontage of each parcel facing the corridor. Land uses dictate the amount of traffic generated at each property including retail, institutional, academic, and residential needs all requiring access.

Natural Bridge Road between Clearview Drive/West Drive and the MetroLink Tracks

This section of the study area is substantially developed with residential homes and institutional property including a few residential homes that have been converted to institutional uses. The former residential parcels have been purchased, updated, and for the most part the existing structures and land configuration remains the same including the location of access points that once served residential needs. This effective reuse of existing land uses; however, the result is different uses of the access points that what was originally intended along this section of the corridor.

Natural Bridge Road between the MetroLink Tracks and Florissant Road:

Development in this area consists of institutional and commercial access on the south side of Natural Bridge Road and a mix of commercial and residential access points located on the north side of the street, west of St. Ann's Lane. While there are a few clusters of access points that can be combined, the area for the most part has well controlled access.

Natural Bridge Road between Florissant Road and Lucas and Hunt Road:

Access in this area is primarily related to commercial needs including automobile and truck access onto Natural Bridge Road. In this area there are several commercial developments have parking in front of the property requiring access that impacts traffic flow on Natural Bridge Road. Larger, box

EXHIBIT 2.36: CLEARVIEW DRIVE/WEST DRIVE AND THE METROLINK TRACKS

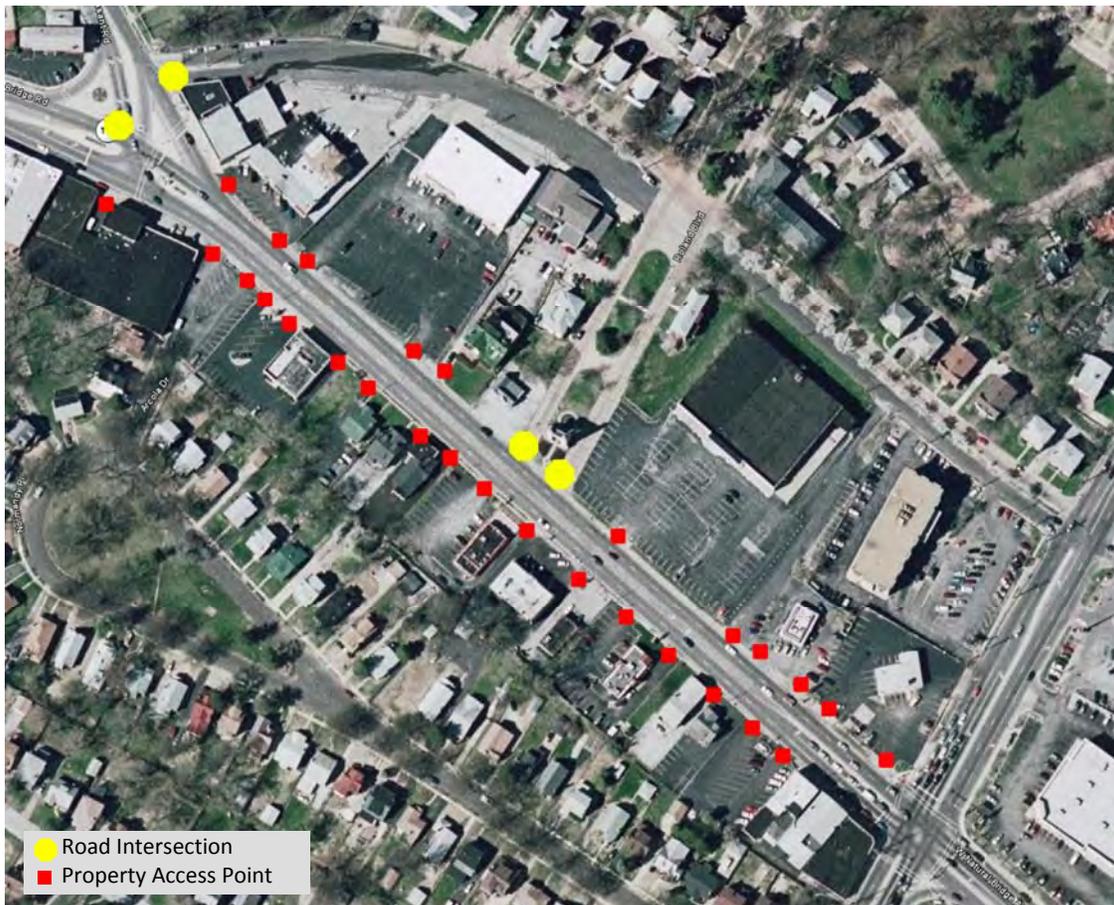


Source Google Earth Pro

EXHIBIT 2.37: METROLINK TRACKS AND FLORISSANT ROAD



Source Google Earth Pro

EXHIBIT 2.38: FLORISSANT ROAD AND LUCAS AND HUNT ROAD

Source Google Earth Pro

stores have developed on the north side of the road. There are several curb cuts that impact the road due to development occurring as separate parcels over time. Elevations in the area have also dictated where entrances were located toward Lucas and Hunt Road. Many of the access points are confusing. On the south side of natural bridge, the mixed of buildings and reuse of buildings has resulted in multiple access points that impact Natural Bridge traffic flow, as well as safe pedestrian movements.

Natural Bridge Road existing access conditions from Lucas and Hunt Road to Clearview Drive/West Drive are complex and varied. Access to the roadway is unrestricted at this time resulting in numerous access points along the frontage of each parcel facing the corridor. Land uses dictate the amount of traffic generated at each property including retail, institutional, academic, and residential needs all requiring access.

Commercial Access

All commercial uses have one or more access points making it difficult for ongoing traffic to flow smoothly and reducing pedestrian safety along the Natural Bridge Road. For instance, exhibit 2.39 shows the area south of the Florissant Road and Natural Bridge Road intersection illustrating a continuous access at retail locations complicating corridor traffic flow at the location of customer parking immediately adjacent to the traffic. Depending upon the amount of ingress and egress created by such retail location, the main traffic flow movements along the main corridor may be impacted.

EXHIBIT 2.39: EXAMPLE OF COMMERCIAL ACCESS POINT



Source CH2M HILL

Residential Access

Residential neighborhoods are composed primarily of pre-World War II construction. Some neighborhoods are developed as planned communities with wide boulevard entrances and well landscaped corridors throughout the development. The overall layout of these subdivisions included cul-de-sac street design resulting in funneled ingress and egress to main corridors such as Natural Bridge Road. This interior subdivision road layout clearly impacts access points within the study area at residential location.

EXHIBIT 2.40: EXAMPLE OF RESIDENTIAL ACCESS POINT



Source CH2M HILL

EXHIBIT 2.41: EXAMPLE OF INSTITUTIONAL ACCESS POINT

Institutional Access

Institutional development along Natural Bridge Road is significant and varied depending on the uses of the site and the population accessing the areas. Institutions included:

- St. Vincent's Germanic Home at Natural Bridge and Florissant Roads
- St. Ann's School and Church Grounds on the south side of Natural Bridge Road



Source CH2M HILL

- Normandy School on the north side of Natural Bridge Road
- University of Missouri located both north and south of Natural Bridge Road
- Normandy City Hall on the south side of Natural Bridge Road
- Post Office on the south side of Natural Bridge Road, east of Oakmont
- The St. Louis County Library Normandy Branch on the south side of Natural Bridge Road
- Sisters of the Good Shepherd complex on the South side of Natural Bridge Road
- United Methodist Church

Each of these institutions generates significant traffic and impact vehicular traffic movements in the corridor. At the main intersection to the UMSL campus on the north side of Natural Bridge Road merges with church and residential traffic on the south side of the corridor. Due to the complex land uses along Natural Bridge Road, such traffic combinations are typical.

Existing Right of Way Conditions

Within the existing corridor, between Lucas and Hunt Road and Clearview Drive/West Drive, right of way conditions on the north side of Natural Bridge tend to be terraced adjacent to the roadway alignment. At the intersection of Lucas and Hunt Road (northwest side) grade changes occur which have resulted in retaining wall structures and uneven access points between parcels of land. These grade differences continue from Lucas and Hunt westward to near the Florissant Road intersection, where the topography becomes less sloped.

EXHIBIT 2.42: TOPOGRAPHY



Source CH2M HILL

Exhibit 2.42 shows the example of residential areas on the north side of Natural Bridge Road near Oakmount Avenue, are at a higher elevation than the area adjacent to Natural Bridge Road. Pedestrian access has been

provided by concrete stairs that terminate at the top of the sloped area. These stairs make it convenient for pedestrians to move from street elevation to the residential neighborhood, however, these stair structures are not legally accessible pursuant to current design standards according to ADA. Clarification of maintenance will need to be defined and spelled out for these access points in the future.

Fences have been constructed in various residential locations along the corridor and appear to be on private property although survey of this area may indicate some encroachments which will need to be address during the redesign of Natural Bridge Road.

Elevations on the south side of Natural Bridge Road tend to be move level with few grade changes requiring retaining wall structures. This condition remains throughout the corridor for the most part. The only serious grade change on the south side of the street occurs at the Normandy City Hall site just east of the MetroLink station. The City Hall building and parking sit lower than the Natural Bridge Road elevation and appears to have been excavated during construction.

Existing Parking Conditions

Parking availability is limited primarily to private property. Each commercial and institutional site contains parking ratio spaces based on the square footage of the buildings pursuant to village, city or St. Louis County parking requirements. Many commercial buildings, especially located on the south side of Natural Bridge Road, are situated very close to the right of way and parking in front of these buildings cause unsafe ingress and egress issues as shown in the Exhibit 2.43. In this example, additional parking is provided at the rear of the building allowing for deliveries and employees to park in designated locations.

EXHIBIT 2.43: EXAMPLE OF COMMERCIAL PARKING



Source CH2M HILL

Existing Market Conditions

The Natural Bridge Road corridor within the stated study area and the general market area around the study area is changing in land use and values on a steady and continuous basis. These changes will impact the area in the future and will dominate public and private interest in investment. The market being discussed here is the “immediate” market locations that are within the general vicinity of the subject corridor.

The market composition with the immediate market locations include a complex array of land uses including:

Residential Neighborhoods

Residential Neighborhoods are composed primarily of pre-World War II construction. These residential neighborhoods range from planned suburban environments with tree lined streets, landscaped entrances, public art, and grand portal structures to small ranch homes. All residential property is aging and is subject to the downturn in residential property prevalent at this time. At the present time there is little vacancy although residential property facing Natural Bridge Road is subject to land use and zoning variances converting former residential property to office/commercial uses. UMSL too, has assembled some residential property along the frontage facing the north campus and those former residences are being used for office and administrative buildings. Due to the internal street design of most neighborhoods in this area, large tracts of housing have limited access points along Natural Bridge Road. When originally designed, the street layout was planned for privacy and security purposes, now these interior streets are subject to maintenance and upkeep costs that may not be easily achieved. In some instances, the maintenance of the infrastructure, landscaping, and other amenities created for planned communities will devalue land values if not property maintained.

Commercial Development

Commercial uses are composed primarily of small, clustered neighborhood shopping areas. These commercial areas are aging and in some locations are experiencing vacancies and high maintenance costs. In all cases the commercial shopping areas within the immediate market area are 1950 to 1970 vintage and in need of redevelopment and releasing. Overall, the decline in business is due to:

- Wide market demographic conditions
- Age of structures
- Distribution of traffic and easy access to older market areas
- Lack of tenant mix analyses and determination of what consumers want
- Perception of safety
- Alternative choices for shopping
- Inconvenient parking and access to commercial shopping area
- Lack of immediate highway access and visibility

Any of these conditions can impact consumer confidence in shopping locations in the immediate market area and all of these conditions apply to the available shopping in the area.

Institutional Development

Institutional development within the immediate study area includes UMSL, St. Ann's Church and School, St. Vincent Germanic Home, Post Office, St. Louis County Library, Sisters of the Good Shepherd and the City of Normandy. These institutions have a positive impact on the area and are significantly responsible for the stability in the area. Each institution is responsible for bringing transient markets to the area by attracting students, parishioners, and those supplying goods and services to the various locations. Each person accessing these institutions that does not live within the immediate market area is important to the long term sustainability of the area. Because these institutions are located midway between Lucas and Hunt Road and Clearview Drive/West Drive, the movement of consumers within the corridor is of great importance as well as parking, pedestrian and bike access, and safety.

Changing Market Dynamics:

There are four major market dynamics that have a great influence on the immediate market area and have generated the security and investment potential now taking place within the area. These forces include:

- **University of Missouri** – the investment and political influence of the university cannot be understated as this institution continues to grow and invest at this location, enhance facilities, and provide services to students and the community
- **MetroLink** – a major regional investment in infrastructure that remains an important market growth element providing linkage to the airport, downtown, and Clayton that otherwise would not be provided to the immediate market area. MetroLink provides transit market capacity to the immediate market area
- **New Investment** – the financial commitment of Express Scripts and other new and planned commercial development is an indication of land availability and access to I-70 and MetroLink as strong market indicators in the immediate market area. Planned and ongoing investment and development of commercial property strengthens the immediate market area and adds stability to the area
- **Availability of Land** – an essential element in any redevelopment area, large tracts of land such as the Express Script site are available due to the effective reuse of property such as the various country club grounds that are scattered within the immediate market area. These land assets provide strategic locations for reinvestment and market growth

As the University grows and new development continues to occur, the market will strengthen. The challenge will be the effective movement and direction of transient markets to the commercial and retail areas within the immediate market area that will benefit from and be sustained by the addition of people and expendable income. Providing a means to direct consumers to specific locations and the ability to provide the goods and services required by those peoples are the planning and implementation challenges for the area.

This challenge, as identified, is classical within emerging markets and the more creative the solutions, the more successful the redevelopment options. Those elements that make a difference in market penetration in the immediate market area include:

- MetroLink – capable of bringing people from the airport, downtown, Clayton, and South County

- Opportunity: create a dense area of shopping and dining that has unique characteristics and promotional merit that is oriented around the MetroLink Station south of Natural Bridge Road along the south side of Natural Bridge Road to Lucas and Hunt Road
- Great Streets Initiative – capable of creating a market driven major corridor environment that encourages alternative transportation choices and an environment that facilitates investment
- Opportunity: create a walkable community environment supported by safe and sufficient parking to support market resources that rely on highway and street access.

City support provides interaction with state and federal entities capable of funding additional infrastructure in the immediate market area. Cities in the area have the ability to enter into intergovernmental agreements that can master plan the area and coordinate redevelopment opportunities consistent with market demand and available funding resources across village and municipal boundaries.

Challenges and Opportunities

Challenges:

Based on existing conditions within the primary study area, there are many important features that can stimulate ongoing growth and market strengthening in this market area. In order to assess those opportunities it is important to understand challenges as well and to plan for certain conditions that may result in obstacles to be overcome. The following list of challenges is intended to prompt an understanding of their impact and potential for impeding progress as well as stimulate discussion about these issues that may be dealt with within an implementation plan:

- Global and national market conditions that impact the value of money in the world market and affect investment overall
- Availability of federal funds to support infrastructure and redevelopment
- Interest in enhanced infrastructure and economic development at a State of Missouri level
- Ability of various agencies, such as Metro, to attract funding for projects including station planning and TOD development opportunities
- Participation and cooperative planning of multiple communities and St. Louis County
- The ability of owners and stakeholders within the market place to come together in an overall plan for the area that includes infrastructure enhancement and development concepts that will facilitate new investment and improve economic conditions
- Buy in and cooperation among land owners to facilitate the redevelopment of land
- Stability of the housing market regionally

Opportunities:

To date, much has been accomplished to stabilize and sustain investment, within this market area. The accomplishments have included extensive effort by UMSL to not only plan but implement their land related plans based on the needs of the university and its long term investment in the community. These efforts alone have brought great stability to the market place and have extended beyond the campus boundaries to include private development opportunities such as the Express Scripts development.

Religious institutions have an historic presence in this market that remains strong and committed to this day. Reaching back to the early 1800's these institutions have remained involved in the community in many ways and their land holdings and social assets add value to the overall corridor environment.

The City of Normandy and other adjacent communities participating in this effort have remained involved and interested in improving the market area and has worked to that end through their efforts to attract and retain commercial development. The city's interest in new ideas and participation in future planning and implementation strategies for projects such as the Great Streets Initiative will go a long way to preserve and sustain the best of the community. Specific opportunities that exist in the market place today include:

- Existing and ongoing investment by the University of Missouri

- Private developer interest in the area and committed financing in building and improving prioritized development sites
- Great Streets Initiative
- Availability of land
- A community desire to make things better
- Investment in enhancements of the public space and infrastructure by villages and municipalities

At the present time there is great opportunity in those conditions that exist today. Conditions that can negatively impact the market area, such as decreasing residential land value, can overall be solved without disrupting the entire basis for redevelopment.

Secondary Study Area Overview

The secondary study area extends along Natural Bridge Road between Hanley Road on the east and I-170 on the west (Refer Map 1.1 Study Area extents). This area is composed of a collection of land uses including residential; retail; commercial; and government buildings.

The purpose of this section is to provide an overview of the area described above due to its market relevance and immediate adjacency to the primary study area. The descriptions described below are based on site observations while driving Natural Bridge Road in this area, market research, and stakeholder interviews.

Existing Conditions

Observations:

Unlike the primary study area, this portion of Natural Bridge Road has several areas of significant grade change on the south side of the road impacting the overall development patterns and access in the area. The development patterns have further been impacted by the placement of a Tax Increment Finance (TIF) District at the west end of the corridor which has not resulted in the redevelopment of the area (during a stakeholder interview it was mentioned that this TIF district is approximately 10 years old which greatly diminishes the value of the TIF). Originally, this TIF district facilitated the acquisition and demolition of several structures which remain open and unimproved property at this time. Due to the age of the TIF, any redevelopment opportunities that may occur here will require revisiting the district boundaries and bond repayment periods.

Overall, predictable development patterns have occurred at the I-170 interchange including office warehouse, airport parking facilities, and an aging retail shopping center. Power lines and other utility structures are also located in this area running parallel to the I-170 corridor.

Pavement design along this portion of Natural Bridge Road varies with the intersection at Hanley Road being approximately 65 feet in width. The western sector of the road includes a median running for approximately 2,300 feet from Lada Avenue on the east to Springdale Avenue on the west. The median pavement width varies from approximately 62 feet at Lada Avenue to 95 feet at Springdale Avenue. The median structure, for the most part, is located along the retail shopping center frontage providing access management in this area as well as a grassed lawn between lanes. On-street signage in this area includes state and local traffic management and private property identification.

Market Research and Stakeholder Interviews:

Since the 2000 census there has been an approximate 6% decline in population in Bel-Ridge impacting quality of life for residential neighborhoods in the city. And, although some homes seem to be solid brick structures, the general appearance of the city is one of declining residential values. The population density in the city is 3,572 people per square mile indicating that the development of small homes clustered around narrow streetscapes typical of pre-World War II development dominates the residential land use patterns. The homes are not well maintained for the most part and the area appears to be in need of assistance to upgrade and maintain the structures.

Approximately half of the residences in Bel-Ridge are tenant occupied while one fourth of the structures are vacant consistent with the loss of population and overall decline in property maintenance in the area. Redevelopment of all or a portion of these neighborhoods would require extensive acquisition and relocation efforts in order for updated land use and for redevelopment to occur.

Commercial development within this study area is small and supported by access, parking and signage on each parcel of land. The development of retail along this corridor has been impacted to some extent by the shallow depths of property sites created by residential neighborhoods located on or very close to the Natural Bridge Road right of way. The placement of multiple commercial establishments close together but each located on separate parcels has created numerous access points along the corridor and adds to the cluttered look of the street overall.

A larger strip center is located on the northeast quadrant of the I-170 and Natural Bridge Road intersection (Exhibit 2.44). Due to grade changes this long narrow series of contiguous structures (Hood's is free standing and not physically connected to the strip center structures) sits partially below grade on the east end of the property. In view of the construction materials used, the property appears to be around 35-40 years old and is experiencing high vacancy at this time. The development is anchored on the west end by a free standing Hood's store and a service station. Multi-family housing has been located immediately to the north of the center buffering the single family housing around the shopping center. The center is in need of redevelopment and releasing activities in order to sustain its presence in the market place.

EXHIBIT 2.44: STRIP CENTER



Source Google Earth Pro

The St. Louis County Housing and Urban Development (HUD) offices are located on the north side of Natural Bridge just east of the shopping center. This multi-story office building is served by a surface parking lot facing Natural Bridge Road. Due to the nature of services provided at this location, a significant amount of traffic is generated on a daily basis.

Constraints and Opportunities

Constraints within the secondary study area include the following elements:

- Convoluted Land Use patterns
- Lack of master planning
- Residential areas close to the secondary corridor limiting commercial expansion without acquisition and relocation of residential property
- Declining market base
- Aging structures
- Grade changes that impact development (south side)
- High tenant occupied residences
- Numerous small residential and commercial parcels lacking upkeep and long term maintenance
- Design obsolete residential and commercial structures

Opportunities within the secondary study area include the following elements:

- Well maintained Natural Bridge corridor intersecting with I-170
- City interest in improving
- St. Louis County HUD office building located in the area
- Regional interest by adjacent municipalities and stakeholders to work together to improve the area

The possibilities for redevelopment of this area are complicated and will require years of strategic implementation planning. Investor markets are not ideal at this time and the added burden of assembling residential neighborhoods as well as old and potentially contaminated commercial properties in order to invest in the area makes this area questionable for immediate redevelopment. The assembly process is further complicated by the number of properties needed to assemble acreages due to the configuration, depth and size of lots, both residential and commercial.

The Bel-Ridge community does enjoy the benefit of a major highway interchange at I-170 and Natural Bridge Road. Additionally, the city and its neighboring municipalities are interested in improving the status and quality of life at this location and with thoughtful, marketing driven planning, it is possible to identify those areas within the Natural Bridge Road corridor that can be planned and advanced in the market place for redevelopment. This planning process provides an opportunity to fully understand market demand and to prioritize redevelopment sectors that will appeal to investors while creating future opportunities for additional redevelopment in Bel-Ridge.

Potential Redevelopment Areas

Primary and Secondary Study Areas

In preparing the existing conditions analyses, certain areas stand out as potential redevelopment areas based on the relationship of residential, commercial, and institutional land uses in the area. These areas are identified here generally and do not assume to be more than indicators of potential investment areas as they sit within the market place today. This summary of potential redevelopment areas, as shown in Exhibit 2.45, do not anticipate acquisition issues, additional land, infrastructure needs, or any other development needs.

EXHIBIT 2.45: POTENTIAL REDEVELOPMENT AREAS



Source Google Earth Pro

Summary

Natural Bridge Road is a wide, under-utilized corridor serving a diverse mix of residential, commercial, and institutional traffic. Given its width and lane configuration the 10,000 to 20,000 cars per day traffic count exemplifies the roads over built condition. The street is also served by a MetroLink Station located approximately midway between Lucas and Hunt Road and Clearview Drive/West Drive, the study area for this report.

Generally, the study area has few parks and green spaces except for a bird sanctuary in the Bellerive neighborhood. Therefore, a review of possible green space along the Natural Bridge Road corridor suggests that as design is considered for this right of way, there are locations along the road that may allow for green spaces that will enhance the alignment's physical environment.

Access is an important issue for the Natural Bridge Road corridor and due to the complex markets being serviced by the road, access to residential, commercial, and institutional properties will need to be carefully assessed. The possibility of combining access points and providing for access agreements between two more commercial properties for instance, may be needed in order to maximize road function and increase commercial activity.

Parking is limited to private property due to the status of Natural Bridge Road which restricts street parking along the corridor. As with access, a review of the existing parking patterns analyzed along with market demand for parking will be required in order to understand creative ways through parking management to provide parking and enhance the overall market conditions.

Land use in this area is dominated by institutional purposes and their land uses will continue to grow and influence the market area. Any redesign of right of way characteristics will require an understanding of present as well as future institutional and commercial needs and function and the way these elements of the right of way impact design overall. Careful attention to the preservation of historic land uses and the need to incorporate these structures into any design concepts for the corridor is essential.

Overall, market shifts in the area and the strong influence the university, commercial, and religious institutions have on the area cannot be over stated. Large portions of land in this area is projected to remain in present owner control on a protracted basis and except for any residential fluctuations that may occur related to value and availability of property, the Natural Bridge Road corridor will become a steadfast market place for public and private investment consideration.