

DESIGNWORKSHOP

DORSETT ROAD GREAT STREETS PLAN

Maryland Heights, Missouri | June 30, 2013



Acknowledgements

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- City of Maryland Heights
- St. Louis County Department of Highways and Traffic
- Missouri Department of Transportation
- Metropolitan St. Louis Transit Agency
- Maryland Heights Chamber of Commerce

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How to use this Document

The Dorsett Road Master Plan captures a community vision for the Dorsett Road corridor over the next twenty years. Developed through a collaborative design process, led by Design Workshop, Inc. and their subconsultants, this document outlines the improvements the City of Maryland Heights could make to strengthen the economic vitality of the Dorsett Road corridor, enhance the visual and functional qualities of the road, improve environmental conditions and stormwater management practices and create a true multi-modal district within Maryland Heights. This plan serves as a roadmap to help the community transform Dorsett Road into a Great Street that will serve as a central point of pride in Maryland Heights for future generations.

This document is intended for client use in presenting the Master Plan vision to municipal officials for approvals and in attracting the interest of investors to the corridor. It will serve as the foundation for land use development, roadway and streetscape improvements, and design decisions as Maryland Heights continues to evolve in the 21st Century.

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PROJECT INTRODUCTION

Project Background

In 2006, the East-West Gateway Council of Governments launched the St. Louis Great Streets Initiative to expand the way people and cities think about their streets. The Initiative helps communities envision and plan for interesting, lively, and attractive streets that serve the interests of motor vehicle drivers, transit riders, bicyclists and pedestrians. The development of a Great Street not only brings interest and activity to a roadway but it often has the potential to ignite positive economic and social activity within the community.

Dorsett Road, in Maryland Heights, Missouri was selected in August 2012 for funding in the Initiative's second round of demonstration projects. A little over three miles long, Dorsett Road serves as the "Main Street" for Maryland Heights residents, workers, and visitors. While creating a street that supports and promotes all modes of travel, this project expands the vision for Dorsett Road outside the right-of-way to consider how street design choices can impact surrounding land uses and development opportunities. Making Dorsett Road a Great Street requires careful and intentional planning to support a fully functional multi-modal suburban environment that sets a framework for future development in the corridor.

Dorsett Road Great Streets Master Plan Scope

- Transportation and transit planning
- Improving pedestrian and bicycle accommodations
- Identifying opportunities for open space, parks and trails networks
- Outlining aesthetic improvements that create destinations within the corridor
- The creation of community gathering places and assets
- Economic development and land use planning

What are Great Streets?

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 City. 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 locational value to businesses that power the local economy.

Great Streets are functionally complete. Great Streets support balanced mobility with an 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: travel, local circulation and access. The right balance varies with the function of the street and the character of its neighborhoods and surrounding 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.

DW Legacy® Design

Design Workshop's DW Legacy Design® process emphasizes a deliberate approach to sustainable design solutions that is comprehensive of four Legacy categories: Environment, Community, Art and Economics. All aspects of the design process and foundational thinking for the project are captured in this document. Issues associated with the project and our client's *Critical Success Factors* are defined at the outset. The design team and client defined a project *vision*, a problem statement called a *dilemma* and a design solution called a *thesis*. These steps are intended to build a strong foundational story for the project that aligns the design team and client with the same principles and goals. DW Legacy Design® metrics are employed to ensure that the project is accountable to the comprehensive Legacy goals determined at the beginning of the process.

Vision

Dorsett Road enhances Maryland Heights' position as a competitive suburb in the St. Louis metro area by attracting business, patronage, and residents who desire walkable local destinations, transit options, easy access to the St. Louis metro region, and inviting streets.

Critical Success Factors

The Design Workshop consultant team identified and confirmed the following Critical Success Factors for the Dorsett Road Great Streets Plan with the City of Maryland Heights and East-West Gateway Council of Governments. These factors outline the results that should occur for the community to consider this planning project a success.

- Community input and property-owner contributions are incorporated into the plan to create a realistic and satisfying Great Street.
- Comprehensive coordination and communication among consultants, the City of Maryland Heights, and St. Louis County produces a pre-approved plan that is ready for implementation within the next two to five years.
- The redesign of Dorsett Road reinforces the strength of businesses within the corridor and contributes to re-positioning Maryland Heights as a leading community in the St. Louis metro region.
- The Dorsett Road Great Streets Plan creates a streetscape that allows pedestrians, bicyclists, transit riders and motor vehicle drivers to feel safe, welcome, and supported as they travel through the corridor.
- The Dorsett Road Great Streets Plan serves as a model of a "Great Street" and an example of creating successful mixed-use corridors in suburban environments.

Project Dilemma

The Dorsett Road corridor represents a typical auto-oriented suburban commercial corridor, and like many developed during the same time period, it is in a relative state of aesthetic and economic decline. The corridor suffers from vacancies, aging building facades and a generally unattractive visual environment, unsafe pedestrian conditions and underutilized parcels. Maryland Heights is in competition with surrounding St. Louis suburbs for business, residents and revenue. The area lacks a real destination to attract investors and the corridor does not allow current residents to engage with Dorsett Road in a meaningful and memorable way.

Thesis

To improve the position of Maryland Heights in the St. Louis region, appeal to investors, and retain existing residents and businesses, the City should pursue the development of Dorsett Road as a Great Street in Maryland Heights. Streetscape design and amenities must be integrated with a community and stakeholder-supported vision for changes in zoning and land use within the corridor and amongst the corridor's surrounding properties to create a Great Street and great places in Maryland Heights.



Looking west on Dorsett Road.

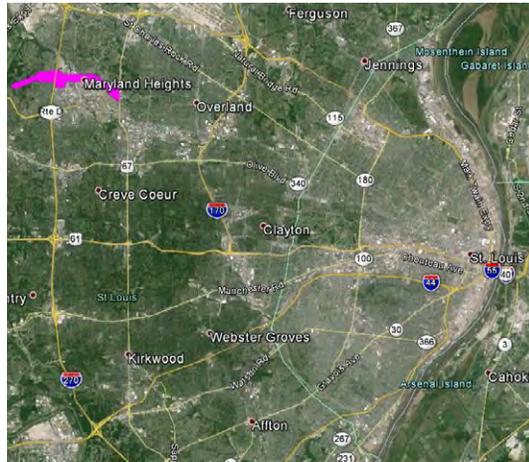
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EXISTING CONDITIONS ANALYSIS

Historical and Regional Context

Dorsett Road has been central to the story of Maryland Heights since the 1860's when the community began to take shape at what is now the intersection of Dorsett and Fee Fee Roads, around the shop of blacksmith George T. Moke. The settlement continued to grow as it went through a number of name changes until finally settling on Maryland Heights when the land was subdivided by a real estate company in 1914. With the presence of the St. Louis, Kansas City and Colorado Railroad and the addition of an electric trolley line, Maryland Heights became a well-travelled area for commuters going to and from St. Louis. The population of the city grew steadily during the first half of the 20th Century and then, like many other American suburbs, experienced a boom in construction, infrastructure and investment after World War II. Throughout the 1960s and 1970s Maryland Heights was one of the major growth areas for the St. Louis metro region. More recently, competition among regional suburbs for investment has been tough and metropolitan growth has shifted to other parts of the region, most notably, the Chesterfield and Creve Coeur areas of St. Louis County, as well as St. Charles and Jefferson counties and portions of Metro East (Illinois). Investment in a Great Street on Dorsett Road in conjunction with Maryland Heights' location within the St. Louis metro area will position the city to regain its competitive edge to attract investment and revenue in Maryland Heights.

The corridor study area includes the entire length of Dorsett Road from Marine Avenue to Lindbergh Boulevard and surrounding properties approximately one quarter mile to the north and south of the road. This site is strategically located between the northern and central travel corridors of the region.



Maryland Heights is a northwestern suburb of St. Louis.

By car, the corridor is eight minutes from Lambert International Airport and only fifteen minutes from St. Louis attractions like the St. Louis Zoo, Science Center, Art Museum and the Missouri History Museum. The Dorsett Road right-of-way is defined and owned by St. Louis County.

Population

Nine and a half percent of Maryland Heights' 27,499 residents live within the Dorsett Road corridor study area. The city is relatively diverse with 73.2 percent of the population

being White, and 26.8 percent composed of African-American, Asian and Hispanic populations. The median age within the corridor is 34 years old, which is slightly younger than the average age for St. Louis County (40 years old). The median income in the corridor is approximately \$50,000. This is similar to statistics for Maryland Heights and St. Louis County but is well below other nearby cities in the surrounding region.

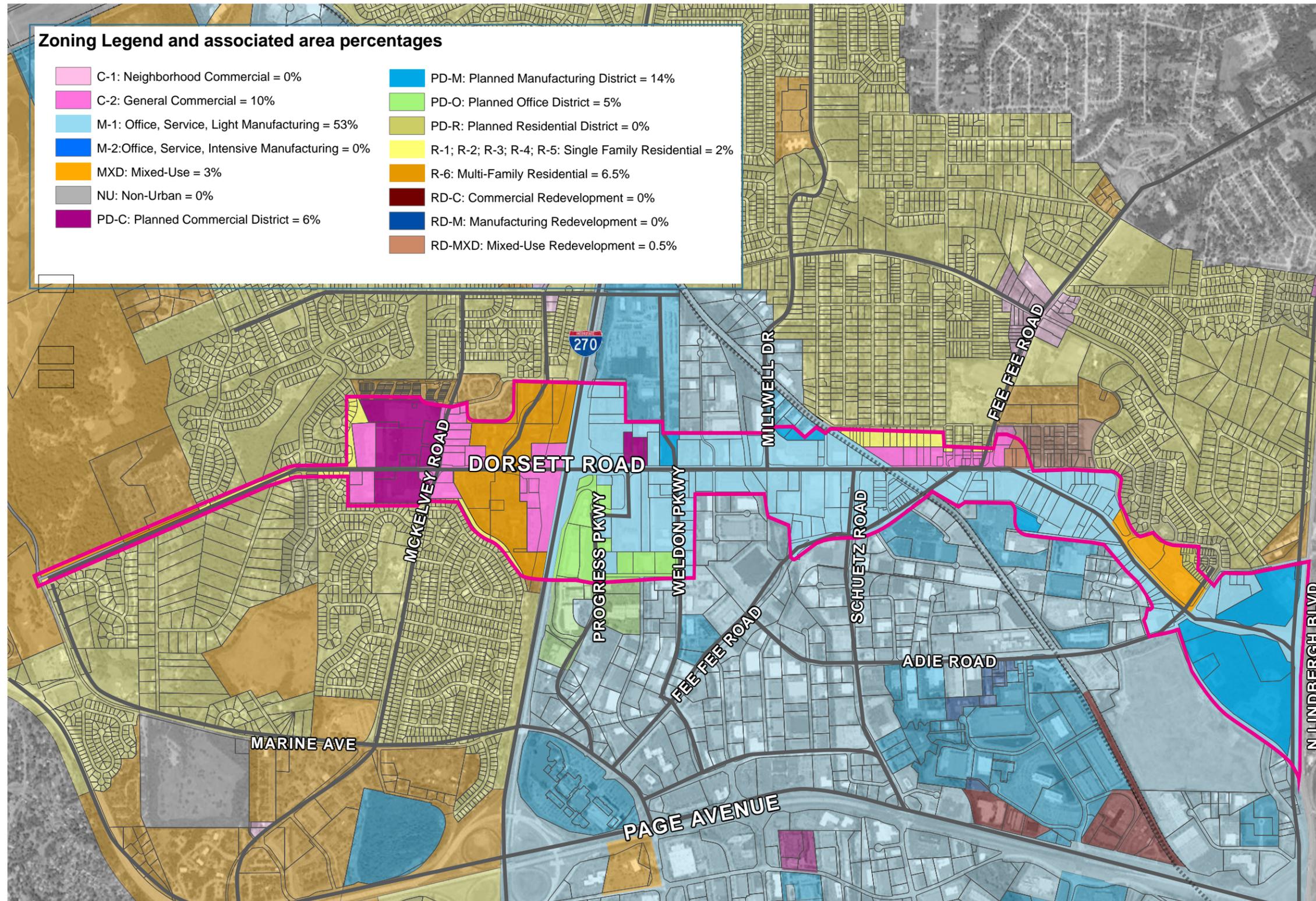
Jobs and Housing

Maryland Heights is a jobs-rich community supporting a 5-1 jobs to housing ratio (5 jobs for every household). While this is excellent for employment and income conditions, it creates an unusual balance of corridor activity throughout the day. After working hours, corridor workers choose to leave Dorsett Road and spend their time and money in other locations with better amenities, more housing options and unique destinations. Creating an environment along Dorsett Road that encourages people to stay in the corridor, enjoy Maryland Heights and contribute to businesses and revenue is a guiding principle of this plan.

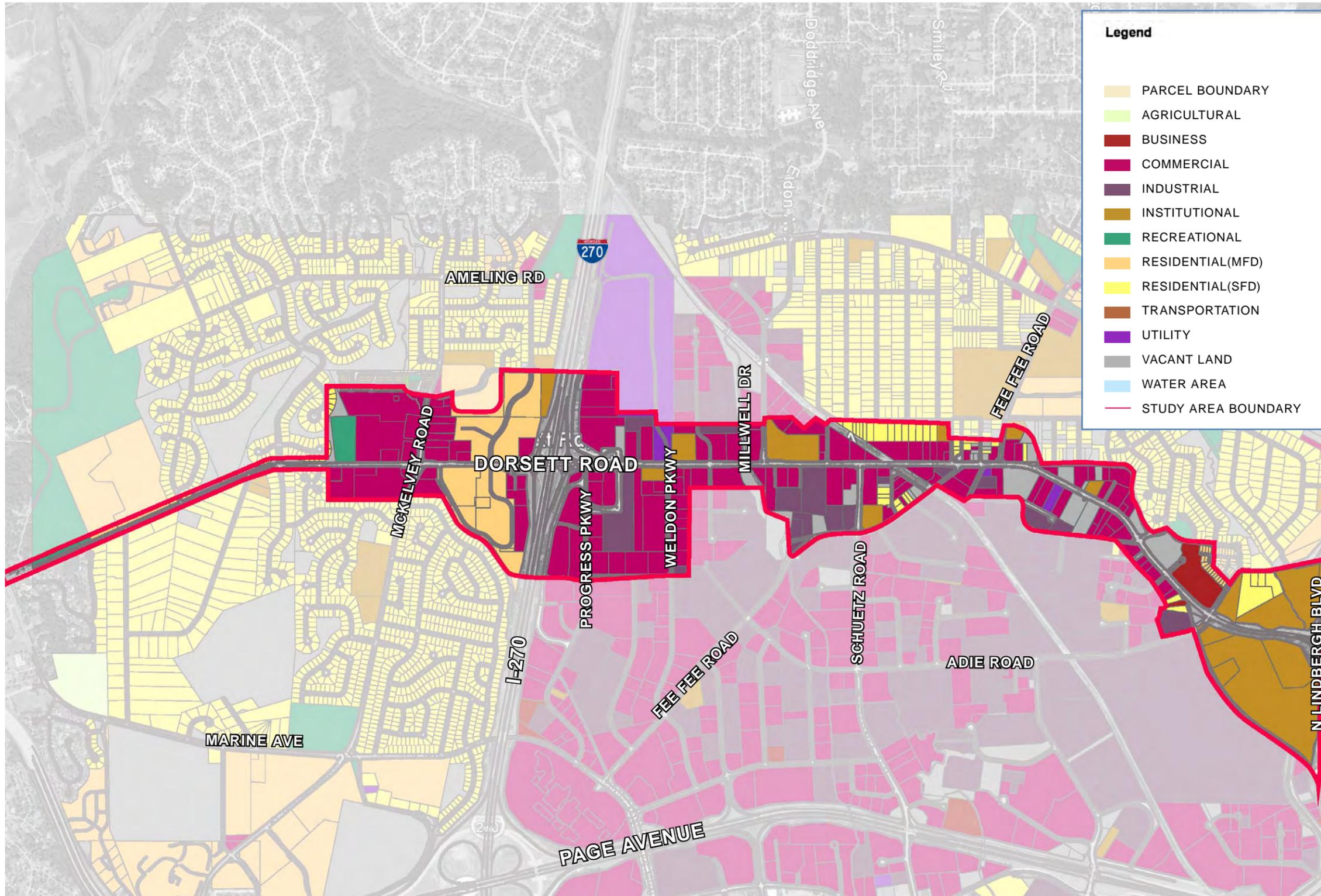
Land Use and Zoning

This study considers the corridor as split into two major land use and zoning areas by Interstate Highway 270 (I-270). The western third is composed of mainly residential and commercial land uses and is zoned to support this. The eastern portion of the corridor is almost entirely zoned for office, service and light manufacturing (M-1 Zoning). Despite the zoning regulations, there are a number of commercial and retail businesses within this section of the corridor that have obtained a conditional use permit to allow for a business' intended land use to occur in its desired location.

Zoning regulates and controls the types of buildings and land use within the city. Municipal zoning codes can determine how a neighborhood or district is perceived and experienced by residents and visitors in the area, as it determines density of development and provides standards for parking, lighting, landscape, building aesthetics and signage. Because the current zoning conditions east of I-270 are limited to office, service and light manufacturing, the businesses, activities and experiences in this section of the corridor are also limited. Additionally, current zoning conditions confine redevelopment and investment of vacant properties within the corridor to these land uses, possibly reducing the number of potential investors to the area.



Existing zoning in the Dorsett Road corridor



The pattern of current land use in the corridor is not only inconsistent with the zoning but it has created areas with poor aesthetic quality, large swaths of under-utilized surface parking, inconsistent building character and a lack of destinations. These factors stand in the way of unifying the corridor to allow for a sense of place or identity.

Existing land use in the Dorsett Road corridor.

Aesthetics

Throughout the public engagement process, community members consistently raised the aesthetic quality of Dorsett Road as a key area of concern. Aesthetic quality is evaluated and discussed using three attributes: visual character, visual quality, and viewer response. Visual character describes the key features of the landscape and how these features relate to one another in terms of scale, diversity and continuity. Currently, the scale of corridor elements does not relate to pedestrians, bicyclists, or drivers, and the diversity of elements does not work cohesively in the corridor to support an attractive environment. There are no continuous features in the corridor that define a character or identity that would allow residents and visitors to recognize the Dorsett Road corridor as a real “place.”



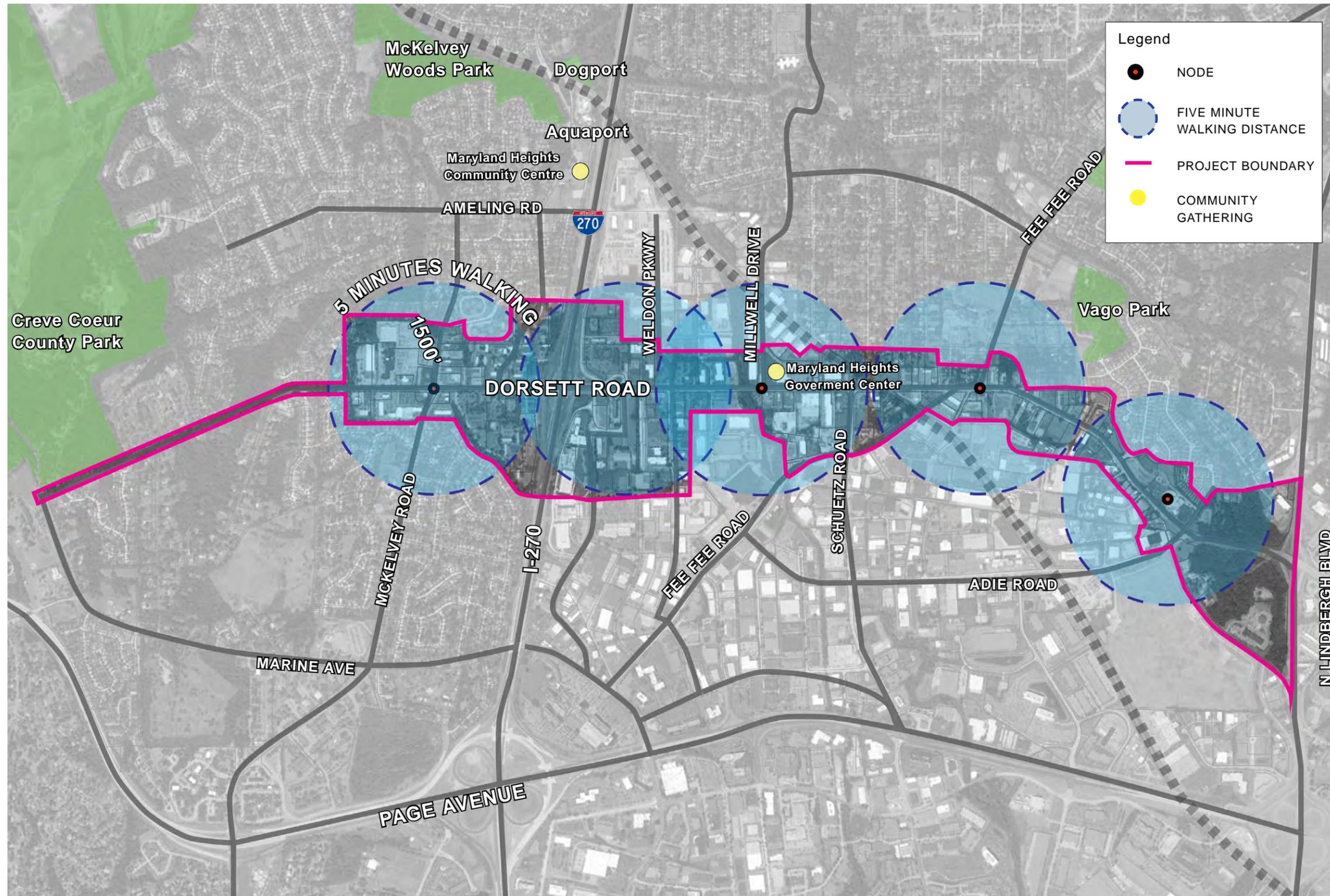
Looking eastbound on Dorsett Road towards McKelvey Road

Visual quality describes the value of the visual experience and poses the question “Is this space ordinary, spectacular, or somewhere in between?” As the main street of Maryland Heights, the current look and character of the corridor does not present an inviting profile of the community. Aging building facades, small, unkempt and cracking sidewalks, and the lack of greenery and overhead utility lines all contribute to the poor visual experience felt by residents and corridor visitors.

The project team polled community members to determine the visual response to three segments of the corridor. In-person and online responses were averaged to conclude that:

- 39 percent of respondents find the appearance of the Dorsett Road corridor near Creve Coeur Park Park to be poor or very poor.
- 63 percent of respondents find the appearance of the Dorsett Road corridor between I-270 and Fee Fee Road to be poor or very poor.
- 32.5 percent of respondents find the appearance of the Dorsett Road corridor between Fee Fee Road and Lindbergh to be poor or very poor.

Small and large improvements to the aesthetic quality of the corridor will contribute to creating a Great Street that engages Dorsett Road visitors and gives them a sense of the place that is Maryland Heights.



Community Assesses and Walking Distances

Community Gathering Spaces

Maryland Heights has a number of quality gathering spaces in the city. The Maryland Heights Community Centre, Maryland Heights Government Center, McKelvey Woods Park, Aquaport, Dogport, and Creve Coeur Park all provide great opportunities for residents and visitors to gather in Maryland Heights. Unfortunately, only two of these spaces (Creve Coeur Park and Maryland Heights Government Center) are within a five minute walking distance (.25 miles) of the study area. For the Dorsett Road corridor to become a truly active and engaging area within the city, new amenities for community gathering and social interaction need to be accommodated.

Open Space, Parks and Trails

The corridor's proximity to Creve Coeur Park, Creve Coeur Lake and the Missouri River Greenway is a great asset to the community. In 2013, Phase II of construction began on the McKelvey Woods Trail, a bike trail that will link Aquaport, McKelvey Woods Park, and Creve Coeur Park. These resources attract visitors, bicyclists, and many of the community's residents to enjoy the outdoors in Maryland Heights. While these assets are convenient for surrounding residents living north of the corridor, they are not safely or comfortably accessible by bicycle or by foot, to or from the core of the Dorsett Road corridor.

Surface Parking Area
2430510 Square Feet
55 Acres

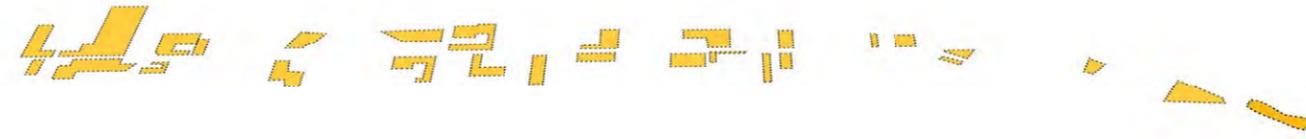
Surface Parking Lots =
10% of total area

Environmental Integrity

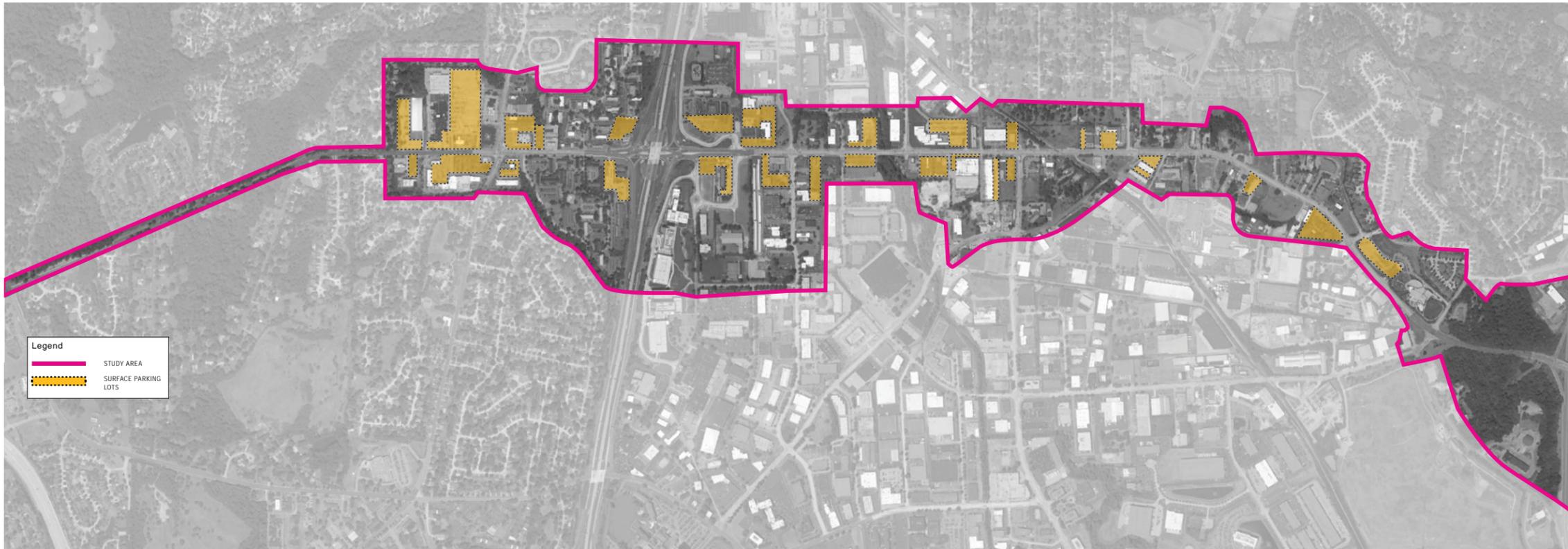
Employing stormwater best management practices, controlling air quality and heat island effects, and integrating native plant species in suburban communities can have significant impacts on regional air and water quality. Improving these conditions and taking advantage of natural systems not only provides environmental benefits to communities, but can also have positive fiscal impacts to residents, businesses and municipalities.

For example, the Dorsett Road corridor is largely composed of impervious surfaces that absorb heat and prevent water from percolating into the ground, inhibiting the natural water cycle. According to the USGS, an impervious, man-made surface will generate two to six times more runoff than a natural surface. Ten percent of the 587 acre study area is dedicated to surface parking alone. These parking lots have been built to channel stormwater into receiving water bodies as quickly as possible via gutters, drains and pipes. As a result, runoff that is contaminated with numerous pollutants, such as oil, petroleum residues, and other contaminants from vehicles, animal feces, sediment, pesticides, heavy metals, and bacteria enters receiving waters at an unnaturally high rate and volume, negatively impacting the surrounding ecosystem on its path to drainage sites and local stormwater facilities. These kinds of parking lots are degrading water quality, straining stormwater management systems, and consuming a significant portion of land and resources in the Dorsett Road corridor. As Maryland Heights looks for ways to improve its environmental integrity, managing the size of surface parking lots represents a great place to start.

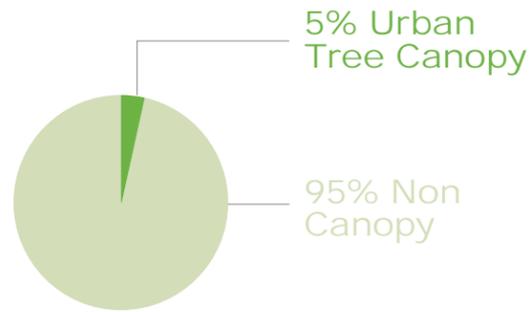
Site Study Area
25570672 Square Feet
587 Acres



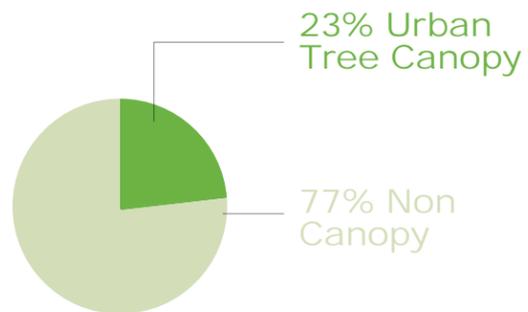
Dorsett Road Surface Parking Lots



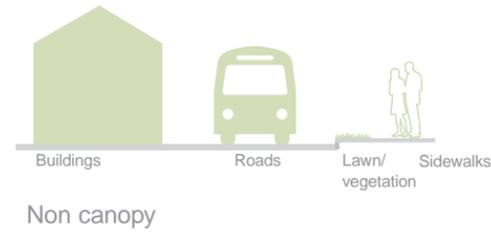
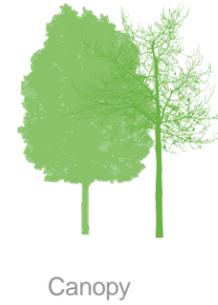
Dorsett Road has 5% of tree canopy cover and 95% of non tree cover.



Dorsett Road study area has 23% of tree canopy cover and 77% of non tree cover.



What's being calculated?



Benefits of an Urban Canopy:

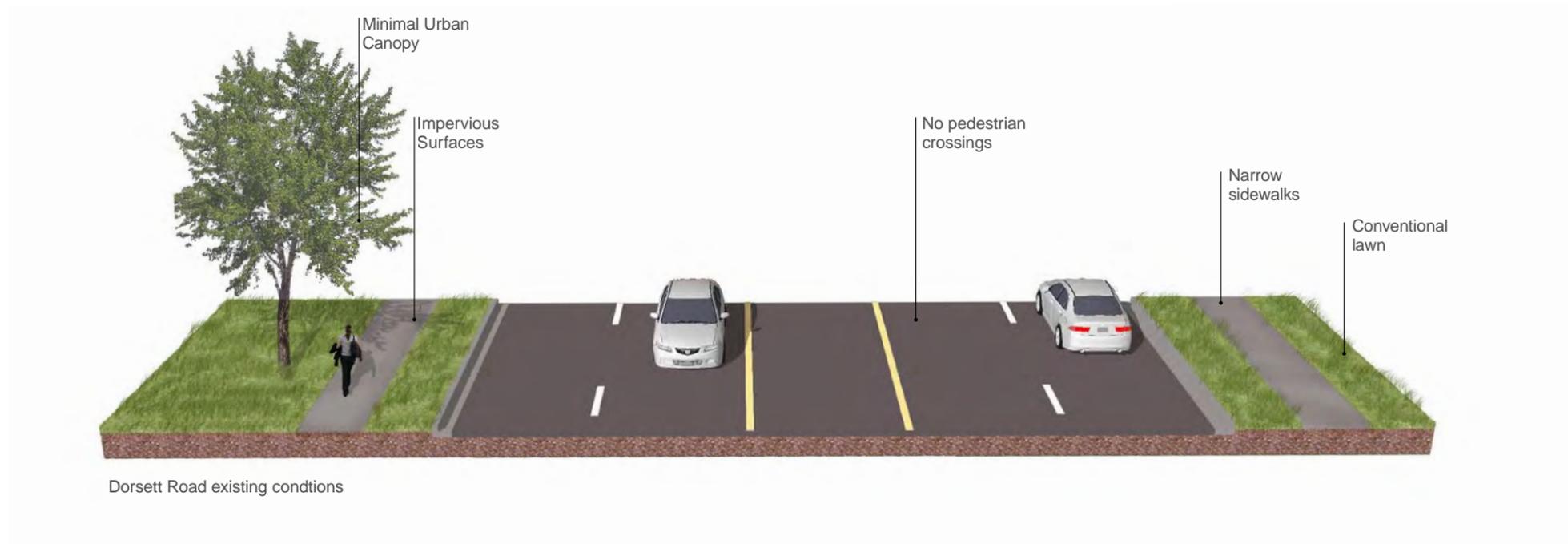
- Increased Property Value
- Cleaner Air
- Less Storm Water Runoff
- Increased Human Comfort

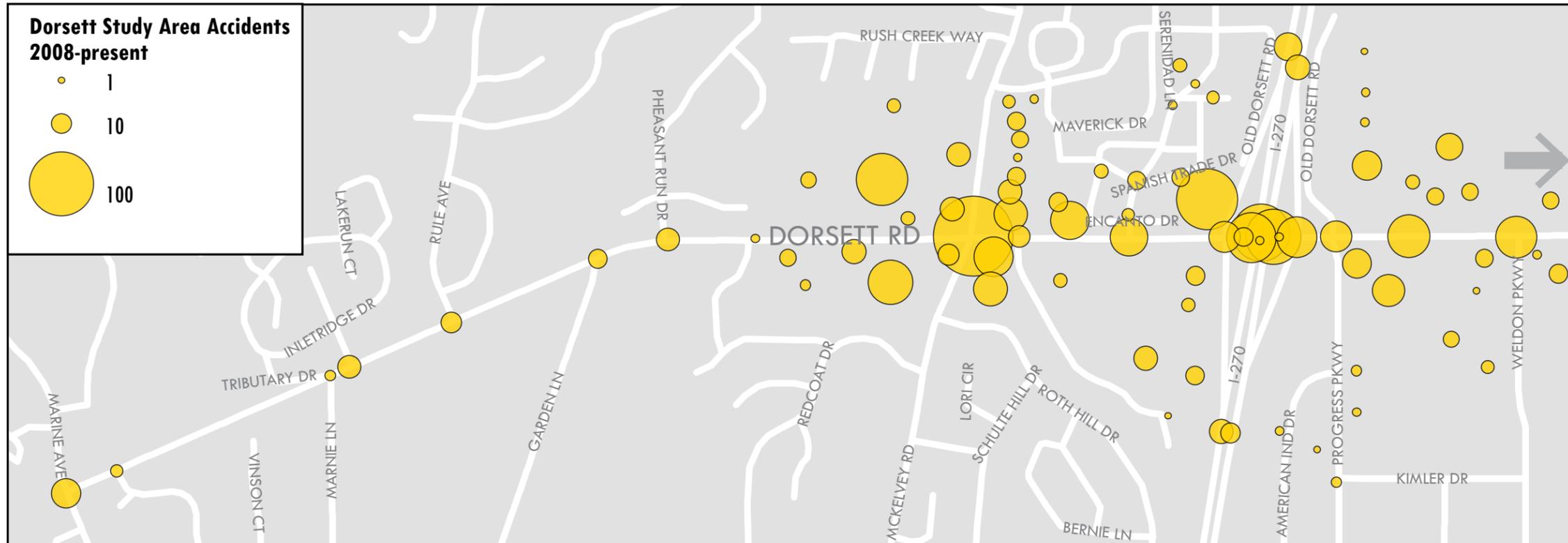
Canopy Cover

Another major factor that plays a role in aesthetics, environmental integrity, and local economics is the presence, or lack of, urban tree canopy. Within the Dorsett Road right-of-way only 5 percent of the study area has any kind of canopy cover. Canopy coverage in the entire corridor is 23 percent; however, this number is heavily skewed by the inclusion of the large wooded area at the eastern end of the corridor. The Davey Resource Group recommends minimum canopy coverage of 15 percent of all land area in business districts. The United States Forest Service recommends canopy coverage of 30 percent for urban areas. There has been extensive research conducted across the country on the many benefits that a healthy urban tree canopy can bring to urban environments. Some of these benefits include:

- Moderated air temperatures
- Increased oxygen levels
- Interception and capture of particulate matter air pollution and absorption of gaseous pollutants
- Noise level reduction
- Increased property values
- Reduced building energy use and associated costs
- Positive public perception
- Consumer willingness to spend more

Typical Dorsett Road urban canopy cover



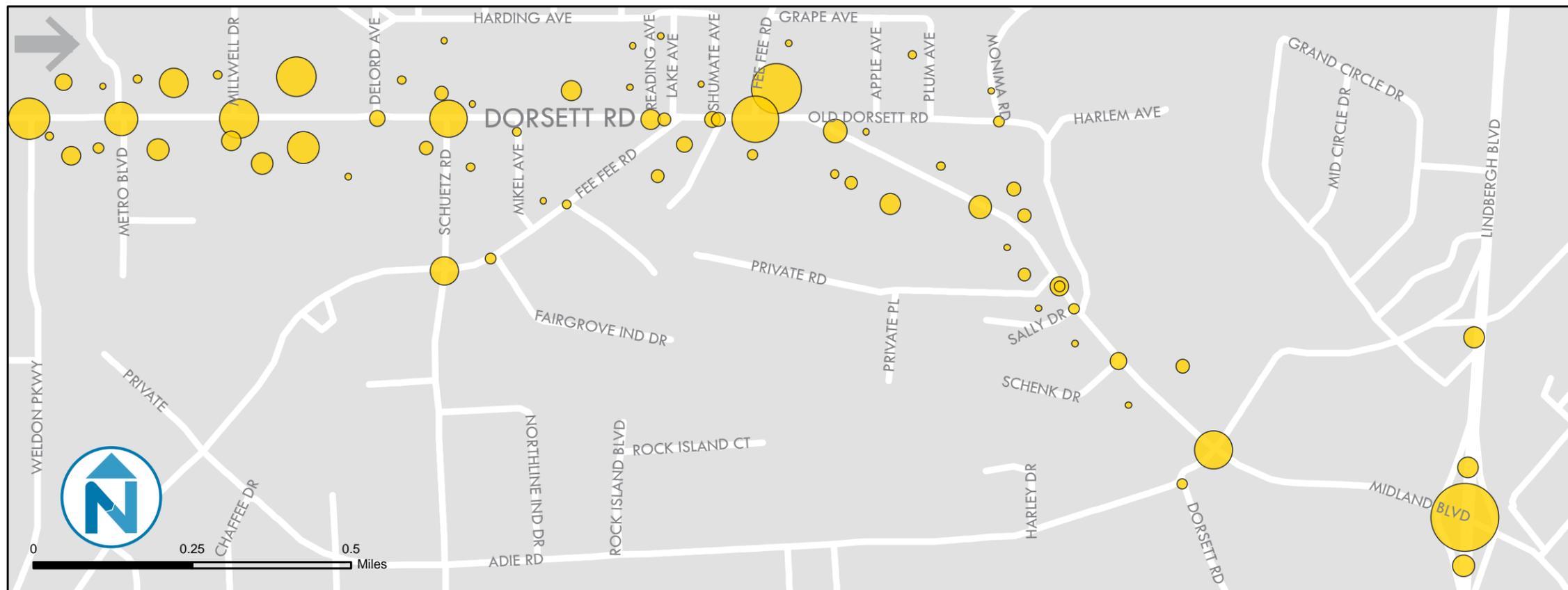


Transportation Trends

The predominant mode of travel to, from, and through the corridor is the automobile. Nearly 90 percent of residents living in Maryland Heights drive to work, 6.5 percent carpool, nearly two percent walk, and less than one percent take public transit. The travel patterns of those working in Maryland Heights are very similar with nearly 90 percent driving alone, 8.6 percent carpooling, and one percent using public transportation. The average travel time of these workers is 28 minutes, with workers who drive alone traveling slightly less time and workers traveling by bus traveling for significantly longer (66 minutes, on average).

Collisions

Automobile collisions are concentrated where traffic volumes are highest, especially between McKelvey Road and Metro Boulevard. While data indicating the types of accidents are not available, since 2008, there have been almost 2,200 accidents along Dorsett Road between Marine Drive and Lindbergh Boulevard, according to data supplied by the City of Maryland Heights. In the past five years the I-270 and Dorsett Road interchange has witnessed more than 500 crashes, followed by the intersection of McKelvey Road and Dorsett Road with 155 accidents.



Level of Service

Location along Dorsett Road	ADT (2007)	PM Peak Hour Traffic Volume (2008)	
	Vehicles	Vehicles	Pedestrians
Marine Drive to McKelvey Road	14,675	3,346	20
McKelvey Road to Metro Boulevard	38,105	1,942	1
Metro Boulevard to Fee Fee Road	29,130	2,253	0
Fee Fee Road to Adie Road	21,970	1,889	1
Adie Road to Lindbergh Boulevard	21,950	2,328	0

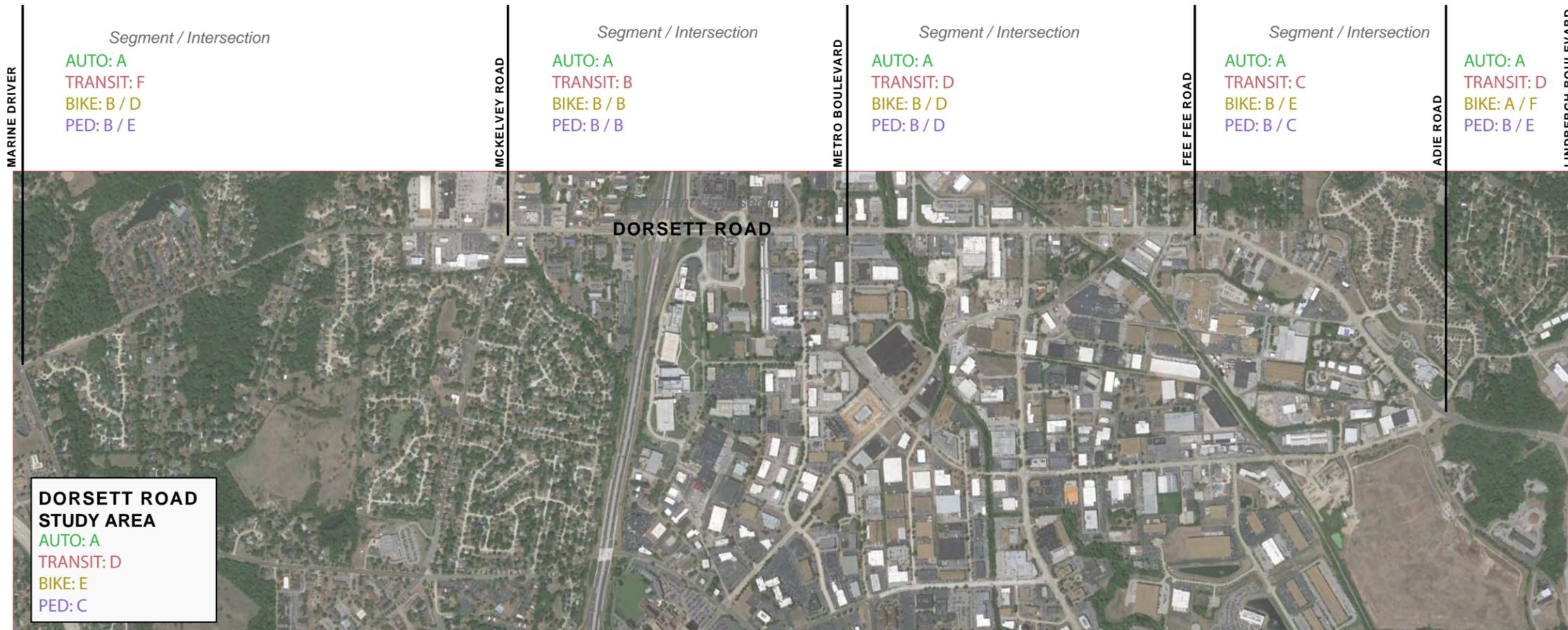
Source: St. Louis County

Level of Service (LOS) is traditionally a term used to indicate the quality of service provided by a facility under a certain set of operating conditions including speed, travel time, traffic interruptions, freedom to maneuver, safety, travel comfort and convenience, and operating costs. Six Vehicular LOS levels, represented by letters A through F, indicate the average delay experienced by drivers traveling through an intersection. A represents the best operating conditions and F the worst. Recently, cities have been recognizing the importance of pedestrian, bicycle, and transit rider experience to the economies and environments of their streets.

The most recent Highway Capacity Manual (HCM) has incorporated these notions into recent studies that evaluate multimodal levels of service (MMLOS). To evaluate the interactions among transportation modes, the project team evaluated MMLOS across the corridor. The MMLOS model estimates the perceptions of car drivers, bus riders, bicyclists, and pedestrians concerning the quality of service and roadway environment together to show how these modes interact. This allows people to understand how changes in the quality of service of one mode can positively or negatively influence the quality of service of the other modes.

The MMLOS model computes a single average level of service for each of the four modes, not one single, combined score. The scores for street segments and intersections are "A-F," using the standard levels established in the HCM, where "A" is free flowing traffic operations and "F" is completely congested. The MMLOS score for each mode is the average degree of satisfaction with the street and intersection (for bicyclists and pedestrians). MMLOS is most revealing when used to compare the multimodal impacts of various street improvements. This chapter summarizes existing MMLOS by mode. A complete review of the MMLOS model's strengths and weaknesses, data inputs, methodology, and comprehensive results can be found in Appendix B. Data for this analysis was provided by St. Louis Metro Transit, St. Louis County, and field observations.

Auto Level of Service



Dorsett Road ranges from a two lane, tree-lined road without curbs and gutters on the western end of the corridor to a five lane suburban arterial on the eastern end. The posted speed limit across the entire corridor is 35 miles per hour, but the existing traffic volumes, or traffic flows, vary greatly down the 3.8 mile road. Traffic volumes are highest between McKelvey Road and Metro Boulevard. Within this segment, I-270 bridges Dorsett Road with a six lane, diverging diamond interchange funneling traffic to and from Dorsett Road.

Using the MMLOS approach, Dorsett Road serves auto drivers well. Based on traffic volumes, vehicle speed and delay, signal timing, and existing roadway characteristics and capacity, automobile level of service across the corridor is consistently very good. Even during the PM peak hour, traffic flows slightly below the posted speed limit with few delays and no prolonged "stop-and-go" congestion.

* To track the progress of this project, it will be essential that the City begin to acquire detailed traffic analysis and accident (including accident type) data on an annual basis.

Auto Level of Service



Free-flow operations. Traffic flows at or above the posted speed limit and all motorists have complete mobility between lanes. The average spacing between vehicles is about 550 ft(167m) or 27 car lengths. Motorist have a high level of physical and psychological comfort. The effects of incidents or point breakdowns are easily absorbed. An example of LOS A occurs late at night in urban areas, frequently in rural areas, and generally in car advertisements.



Reasonable free-flow operations. Free-flow (LOS A) speeds are maintained, maneuverability within the traffic stream is slightly restricted. The lowest average vehicle spacing is about 330 ft(100m) or 16 car lengths. Motorist still have a high level of physical and psychological comfort.



At or near free-flow operations. Ability to maneuver through lanes is noticeably restricted and lane changes require more driver awareness. Minimum vehicle spacing is about 220 ft(67m) or 11 car lengths. At LOS C most experienced drivers are comfortable, roads remain safely below but efficiently close to capacity, and posted speed is maintained. Minor incidents may still have no effect but localized service will have noticeable effects and traffic delays will form behind the incident. This is the targeted LOS for some urban and most rural highways.



Decreasing free-flow levels. Speeds slightly decrease as the traffic volume slightly increase. Freedom to maneuver within the traffic stream is much more limited and driver comfort levels decrease. Vehicles are spaced about 160 ft(50m) or 8 car lengths. Minor incidents are expected to create delays. Example of LOS D is perhaps the level of service of a busy shopping corridor in the middle of a weekday, or a functional urban highway during commuting hours. It is a common goal for urban streets during peak hours, as attaining LOS C would require a prohibitive cost and societal impact in bypass roads and lane additions.



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Breakdown in vehicular flow. Flow is forced; every vehicle moves in lockstep with the vehicle in front of it, with frequent slowing required. Technically, a road in a constant traffic jam would be at LOS F. This is because LOS does not describe an instant state, but rather an average or typical service. For example, a highway might operate at LOS D for the AM peak hour, but have traffic consistent with LOS C some days, LOS E or F others, and come to a halt once every few weeks. However, LOS F describes a road for which the travel time cannot be predicted. Facilities operating at LOS F generally have more demand than capacity.

Transit Level of Service



- Frequent service, passengers do not need schedules
- Night or “owl” service is provided
- Virtually all major origins and destinations are served



- Frequent service but passengers consult schedules
- Late evening service provided
- Most major origins and destinations are served



- Maximum desirable time to wait if bus/train is missed
- Early evening service provided
- About 3/4 of higher-density areas provided



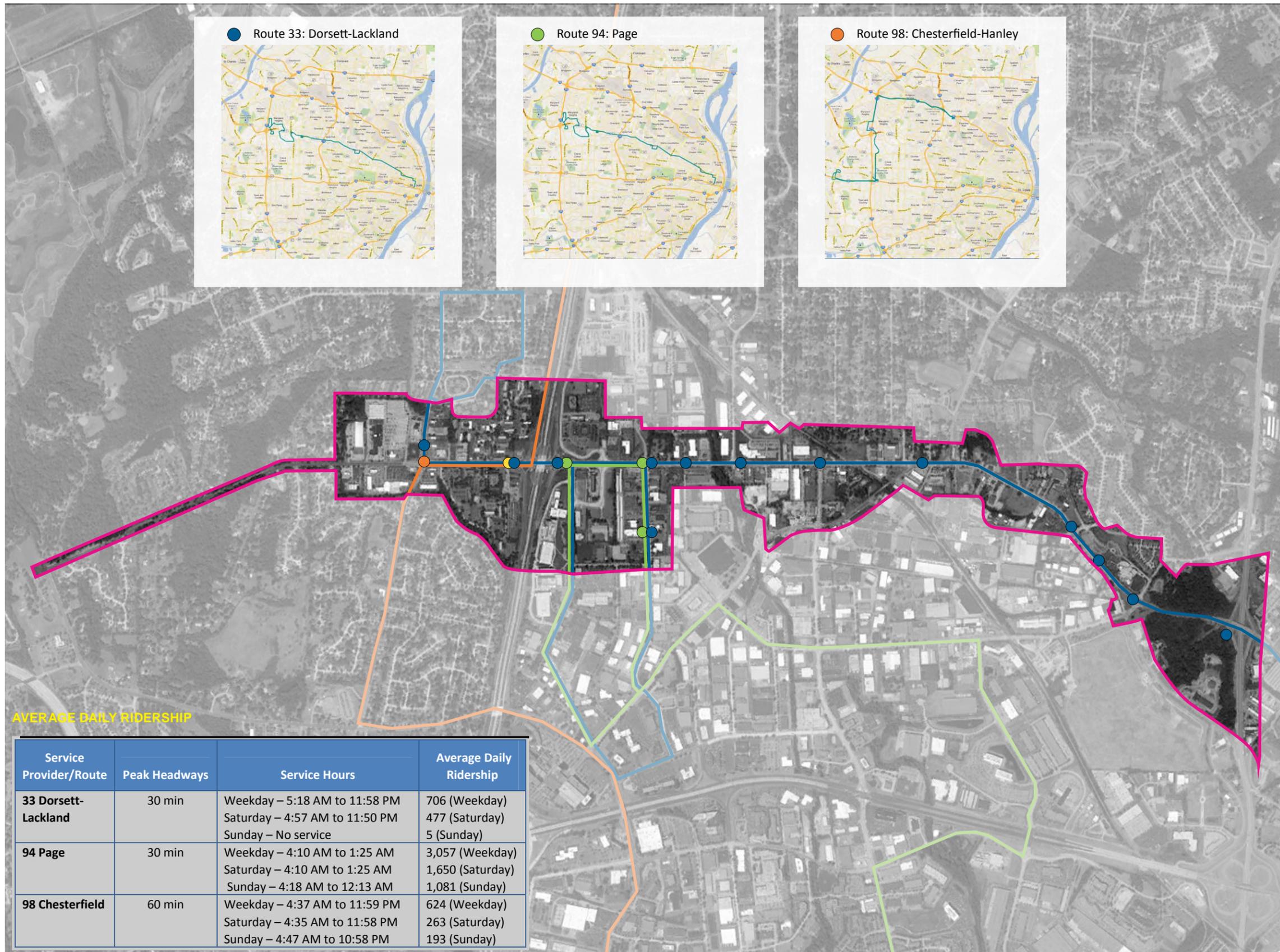
- Service unattractive to choice riders
- Only daytime service provided
- About 2/3 of higher-density areas served



- Service available during the hour
- Peak hour service only or limited midday service
- At least 1/2 of the higher-density areas served



- Service unattractive to all riders
- Very limited or no service
- Less than 1/2 of higher-density areas served



Service Provider/Route	Peak Headways	Service Hours	Average Daily Ridership
33 Dorsett-Lackland	30 min	Weekday – 5:18 AM to 11:58 PM Saturday – 4:57 AM to 11:50 PM Sunday – No service	706 (Weekday) 477 (Saturday) 5 (Sunday)
94 Page	30 min	Weekday – 4:10 AM to 1:25 AM Saturday – 4:10 AM to 1:25 AM Sunday – 4:18 AM to 12:13 AM	3,057 (Weekday) 1,650 (Saturday) 1,081 (Sunday)
98 Chesterfield	60 min	Weekday – 4:37 AM to 11:59 PM Saturday – 4:35 AM to 11:58 PM Sunday – 4:47 AM to 10:58 PM	624 (Weekday) 263 (Saturday) 193 (Sunday)

Transit Level of Service

Metro Transit provides transit service in the St. Louis metro area, including Maryland Heights. Four bus routes traverse or use Dorsett Road; however, none of these serve the entirety of the corridor. Route 33 operates along the corridor east of McKelvey Road. The remaining two routes, 94 and 98, operate along Dorsett Road for a few blocks east or west of I-270. In general, transit stops throughout the corridor are identified with signage, but lack protected shelters and other facilities. Some mid-block transit stops lack crosswalks, complicating pedestrian access to the bus stop.

While Metro currently has no planned bus transit service improvements within the study area, Metro's Long Range Transportation Plan envisions light rail connecting Maryland Heights and downtown St. Louis, along the Rock Island Railroad right-of-way and Terminal Railroad Association tracks. The line is proposed to terminate at Westport Plaza, one mile south of Dorsett Road. Presumably bus service between Dorsett Road and Westport would be increased.

To evaluate transit service along the corridor, transit LOS reflects the availability of transit, along with the comfort and convenience of the service provided to passengers. Variables impacting the former include service characteristics, such as, the number of routes and stops along the corridor, transit frequency, vehicle overcrowding, and schedule speed. Variables affecting the passenger experience captured in the transit LOS model include transit on-time performance, passenger wait time, vehicle overcrowding, the quality of the bus stops, and pedestrian LOS.

Transit level of service is very poor along Dorsett Road. Route 33 operates within four of the five segments modeled, but even for this route, bus stops lack shelters and other facilities, and buses operate on 30 minute headways. Because no transit operates between Marine Drive and McKelvey Road, transit LOS for this segment is rated F. Only the segment between McKelvey Road and Metro Boulevard has more robust transit service, as reflected by a rating of B in the transit LOS model.

Pedestrian Level of Service

The Maryland Heights Comprehensive Plan (updated in 2011) Open Space, Parks & Recreation Element identifies Dorsett Road as a major barrier to pedestrian circulation; however, the pedestrian environment within the study area varies greatly upon location, landscape, built form, and the density of driveways. Continuous sidewalks are present along both sides of Dorsett Road throughout most of the corridor. On the west end of the corridor between Marine Drive and Pheasant Run Drive, sidewalks alternate between the north side and the south side of Dorsett Road, with no designated and/or protected crossings at intersections. Nevertheless, this segment of the corridor is lined with dense street trees and lower traffic volumes. Sidewalks are not present between Adie Road and Lindbergh Boulevard, the eastern boundary of the study area. The area between McKelvey and I-270 presents a number of pedestrian problems. Jay-walking is a common practice in this area as people come and go from the apartments surrounding McKelvey Hill Drive to bus stops, employment centers and local retail.

In the central section of the corridor, there are generally sidewalks along both sides of the street, most of which are a standard five foot width. Due to the number of driveways and intersections in this section, the sidewalk tends to be interrupted frequently. Sidewalks generally immediately front the roadway, with no buffer between pedestrians and automobiles.

Fully designated (marked on all four legs of an intersection) crossings of Dorsett Road are restricted to 4 of the 11 signalized intersections, most of which have standard parallel crosswalks, with no high-visibility markings, center medians or pedestrian refuges. Major intersections (including at McKelvey Road, I-270, Weldon Parkway, Fee Fee Road, Adie Road, and Lindbergh Boulevard) all include channelized turn lanes where people have to cross free-flow traffic. Pedestrian amenities, including benches, street trees, pedestrian scale lighting, and transit shelters are absent in the bulk of the corridor, reducing the comfort level for pedestrians.

On the other hand, streets south of Dorsett Road surrounding the Edward Jones campus



Progress Parkway provides a relatively friendly environment for pedestrians.

feature many of the qualities that make streets attractive for pedestrians. These shared streets lack sidewalks, but low traffic speeds and few vehicles, narrow roadway width, and mature street trees make these streets relatively walkable.

Pedestrian Level of Service



These roadways are highly pedestrian oriented and will tend to attract pedestrian trips. The roadways will be characterized by ample sidewalk space, pedestrian-friendly intersection designs, low-speed or low-volume motor-vehicle traffic, and plentiful amenities (e.g., shade, benches, and so forth). The roadway and sidewalk features will be designed at human scale for maximum pedestrian comfort. Roadways with this level of pedestrian accommodation may be expected in central-city, tourist, and college campus locations. Pedestrians can anticipate a low level of interaction with motor vehicles.



These roadways provide many pedestrian safety and comfort features that can attract pedestrian trips. These roadways will have many of the characteristics of an LOS A pedestrian facility, but there may be somewhat fewer amenities or pedestrian-friendly design elements. Pedestrians can anticipate a low to moderate level of interaction with motor vehicles.



These roadways are adequate for pedestrian use, but may not necessarily attract pedestrian trips. These roadways will provide a standard sidewalk, but will likely have some deficiencies in maintenance or intersection design, may be located on roadways with high-speed, high-volume motor-vehicle traffic, or may provide a sidewalk on one side of the street only. Pedestrians can anticipate moderate interaction with motor vehicles on these roadways.



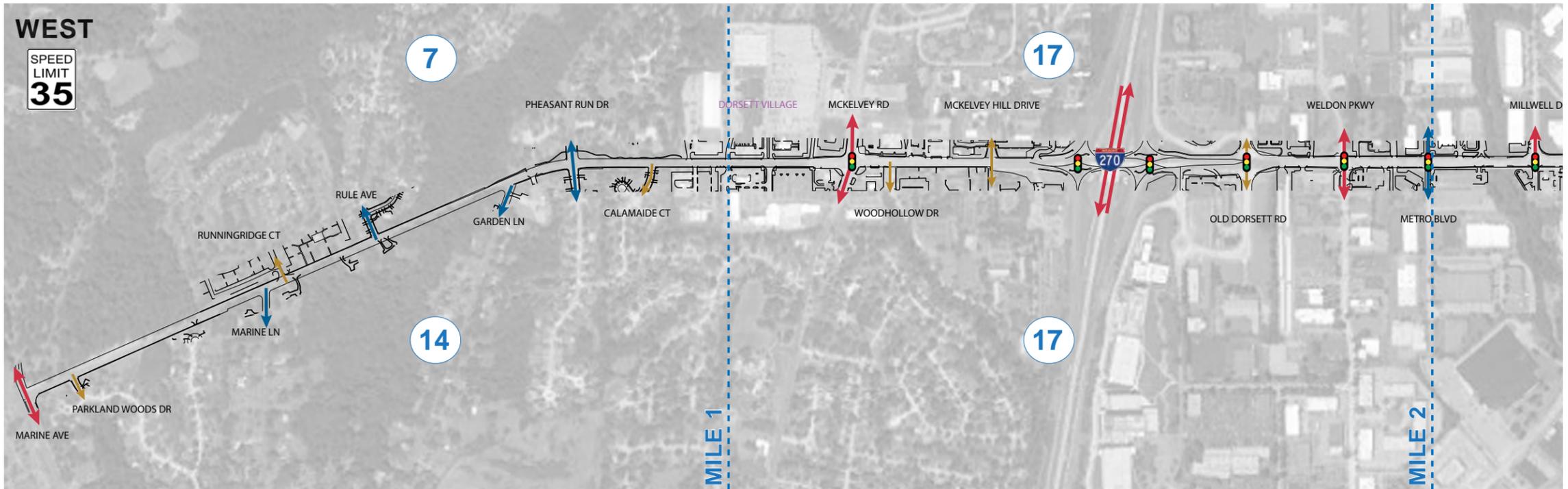
These roadways are adequate for pedestrian use, but will not attract pedestrian trips. These roadways will have more frequent deficiencies in pedestrian safety and comfort features and are more likely to violate ADA requirements for width and clearance. Gaps in the sidewalk system may occur within this roadway corridor. Intersection crossings are likely to be more frequent and more difficult. Pedestrians can anticipate moderate to high levels of interaction with motor vehicles.



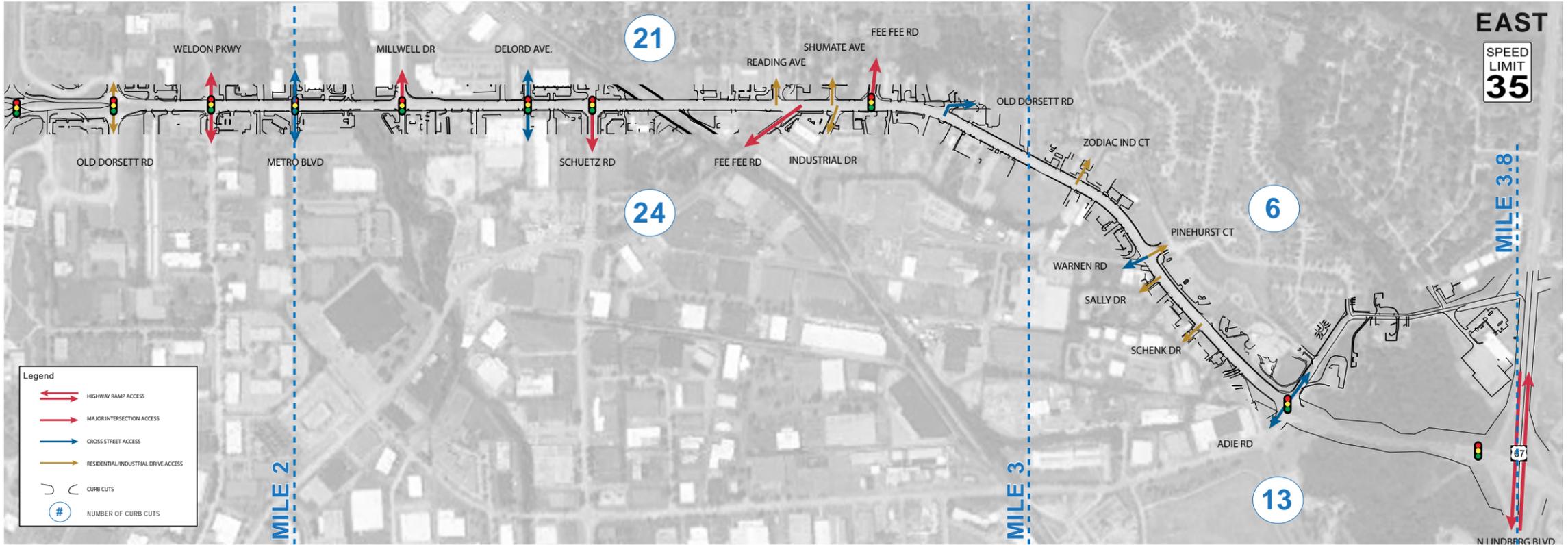
These roadways are inadequate for pedestrian use. These roadways may or may not provide a pedestrian facility. Even where a sidewalk is provided these roadways will not meet ADA requirements and will have frequent deficiencies in sidewalk width, clearance, continuity, and intersection design. Roadways in this category that do not provide a pedestrian facility may be characterized as urban fringe, rural section roadways with moderate motor-vehicle traffic. Pedestrians can anticipate a high level of interaction with motor vehicles.



These roadways are inadequate for pedestrian use. These roadways do not provide any continuous pedestrian facilities and are characterized by high levels of motor-vehicle use and automobile-oriented development. These roadways are designed primarily for high-volume motor-vehicle traffic with frequent turning conflicts and high speeds.



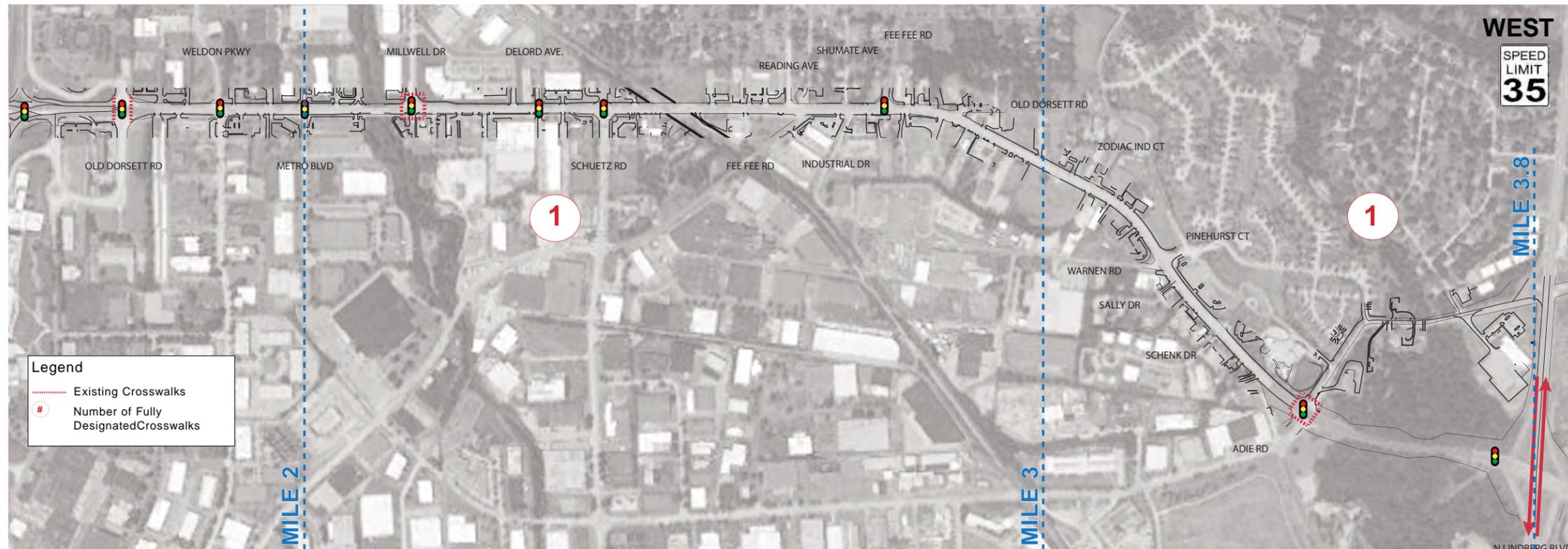
Pedestrian level of service includes measures of delay and sidewalk capacity, as well as non-traditional quality of service metrics that reflect perceptions of comfort and safety. Quality of service incorporates automobile traffic volumes, traffic speeds, lane width, number of travel lanes, and the quality and type of buffer between the sidewalk and automobile travel lanes. The MMLOS model generates two outputs to gauge conditions walking along the corridor and crossing the street: segment level of service and intersection level of service, respectively. In general, variables that increase pedestrian perceptions of comfort and safety (buffers, sidewalk width, and crosswalks) increase the pedestrian LOS score, while high vehicle speeds and volumes, long pedestrian wait times at intersections, and greater roadway width decrease the pedestrian LOS score.



Number of existing curb cuts per mile along the Dorsett Road corridor



Segment LOS remains consistent along the corridor, while intersection LOS varies markedly. The MMLOS model generated a relatively high ranking for pedestrian segment LOS B throughout, likely the result of no pedestrian congestion, relatively low traffic speeds (32-34 mph), and the presence of a sidewalk throughout most of the corridor. Intersection LOS varies dramatically across the corridor depending on the cross street speed and average pedestrian wait times at signals. In addition, roadway attributes and vehicle circulation patterns which increase the potential for motor vehicle / pedestrian conflicts, including vehicle turning volumes at intersections and the number of right turn channel islands also reduces intersection LOS.



Number and locations of existing cross walks along Dorsett Road

Bicycle Level of Service

Cyclists are few and far between on Dorsett Road, due to, among other things, the absence of on- and off-street cycling facilities, the volume of motor vehicles at key points, numerous driveways, relatively wide lane widths, and the diverging diamond freeway interchange at I-270. A shared-use path at Creve Coeur Park provides 7.7 miles of paved path around Creve Coeur Lake, connects to a bike path parallel to Page Avenue (Hwy 364), and leads to the Katy Trail across the Missouri River. There is no immediate connection between this path and Dorsett Road, although one can ride via the road to the Creve Coeur Lake Upper Ball Field.

The St. Louis Gateway Bike Plan (2011) sets forth a vision for the St. Louis metropolitan region that will support and encourage bicycling as a viable mode of transportation. The document provides design guidelines for on- and off-street bicycle lanes to create conditions where all levels of bicycle riders will have a safe and comfortable biking option. This Plan recommends a shared-use path along Dorsett Road between Marine Drive and McKelvey Road connecting the Creve Coeur Park shared-use path with Dorsett Village. The Gateway Bike Plan also identifies existing wide outside lanes that may be appropriate for shared bike use along Dorsett east of Schuetz Road to Lindbergh Boulevard. The project team disagrees with the inclusion of wide outside lanes along the 5-lane section of Dorsett Road, as it would do little to encourage additional cycling along the corridor.

Like pedestrian LOS, bicycle level of service reflects bicyclists' experience—specifically their perceived comfort and exposure to traffic—at signalized intersections (intersection LOS) and on-street segments between signalized intersections (Segment LOS). Factors contributing adversely to bicycle segment LOS include high traffic volumes and speeds; a greater proportion of trucks and buses; the presence of on-street parking; and many curb cuts, unsignalized intersections, and vehicle through lanes within the segment. Striped bicycle lanes and roadway shoulders add to the perceived sense of traffic separation and improve bicycle segment LOS. High quality pavement also improves bicycle segment LOS. Determinates of intersection LOS include long intersection crossing distances, vehicular right turn channels, traffic signal phasing, and cross street traffic speed and volume.



A bicyclist riding east on Dorsett Road

Along Dorsett Road, bicycle LOS is currently poor at intersections and relatively better within segments, similar to pedestrian LOS. Segment LOS is fairly good due to traffic speeds, good pavement ratings, and lack of on-street parking. The shoulder width between Adie Road and Lindbergh Road bumps this segment LOS score to A. However, the overall study area LOS score is an E.

Bicycle Level of Service

A

These roadways are generally safe and attractive to all bicyclists. Unsupervised child riders should be anticipated because they will typically feel comfortable on these facilities. Bicyclists can anticipate a low level of interaction with motor vehicles. These roadways will provide both on- and off-street bicycle facilities.

B

These roadways are adequate for all bicyclists. Unsupervised child riders should be anticipated because they will typically feel comfortable on these facilities. Bicyclists can anticipate a low level of interaction with motor vehicles. These roadways may have either on- or off-street facilities. However, those without on-street facilities will have characteristics that dictate a low level of interaction with motor vehicles in the roadway, such as low-speed, low-volume motor-vehicle traffic, infrequent conflicts, and good surface conditions.

C

These roadways are adequate for most bicyclists. Bicyclists can anticipate a moderate level of interaction with motor vehicles. These roadways will typically have an on-street facility (bicycle lane or wide curb lane) dedicated for bicyclists. The roadway will generally be characterized by a combination of low-speed, low-volume motor-vehicle traffic, infrequent conflicts, and good surface conditions, although minor deficiencies in two or more of these areas will be present. An off-street bicycle facility may be present along this corridor when on-street conditions are less bicycle friendly.

D

These roadways are adequate for highly experienced riders. Bicyclists can anticipate a moderate to high level of interaction with motor vehicles. These roadways may or may not provide an on-street bicycle facility. When a bicycle facility is provided on an LOS D roadway its characteristics of high-volume, high-speed motor-vehicle traffic and frequent conflicts will make this roadway inadequate for most moderate and beginner riders. An off-street bicycle facility may be present along this corridor when on-street conditions are less bicycle friendly.

E

These roadways require cautious use by highly experienced riders. Bicyclists can anticipate a high level of interaction with motor vehicles. These roadways may or may not provide an on-street bicycle facility. When a bicycle facility is provided on this roadway its characteristics of high-volume, high-speed motor-vehicle traffic and frequent conflicts will make this roadway highly inadequate for moderate-level riders. An off-street bicycle facility may be present along this corridor when on-street conditions are less bicycle friendly.

F

These roadways do not provide any bicycle facilities. Due to the high level of motor-vehicle use and automobile-oriented development on these roadways bicyclists are greatly discouraged or even put at risk when using these roadways.

Refer to Appendix C to see how Bicycle LOS was incorporated into the MMLOS analysis.

Transportation Issues

Various issues and opportunities exist along the corridor in terms of existing transportation conditions. The issues predominately arise from the prevalence of the corridor's general orientation towards the automobile. These issues include the following:

Auto-oriented nature of the corridor

- Current mode splits show that the automobile is by and large the most popular form of travel to, from, and through the corridor.
- Current right-of-way allocation prioritizes space for the automobile, with over 85 percent dedicated to automobile travel ways.
- Pedestrian facilities are often subpar, especially at transit stops.
- No major bicycle infrastructure or amenities are present along the corridor.
- Transit service traversing most of the corridor operates every 30 minutes; no line serves the western end of the corridor; and the roadway width hinders transit access.

Access to the corridor by alternative modes of transportation

- If investment is made in the corridor and development occurs, there is a need to develop connections to the corridor itself from the surrounding area within Maryland Heights, including Westport Plaza (connecting bicycle/pedestrian infrastructure and transit); adjacent suburbs, and other parts of the St. Louis region.

ADA Compatibility

Current county guidelines require that all sidewalks and curb ramps within the St. Louis County right-of-way or easements should be constructed in accordance with the current approved ADA Accessibility Guidelines. The Department of Justice revised its design guideline regulations of the Americans with Disabilities Act of 1990 (ADA) in 2010.

According to city data, none of the intersections or curb cuts along Dorsett Road provide ADA curb ramps. Site visits found that the intersection of Dorsett Road and Old Dorsett Road (west), near the I-270 interchange, does meet recent guidelines.

To meet ADA standards, the county requires sidewalks maintain a minimum width of five feet on arterial roads and a minimum width of six feet when sidewalks are adjacent to curbs. Site analysis found that a number of segments do not meet these standards.

Stormwater Drainage

The stormwater along the Dorsett Road corridor flows to the following locations:

- The western portion of Dorsett Road (approximately 1,600 feet from Marine Avenue to west of Marine Lane) drains to Louiselle Creek.
- The remainder of Dorsett Road drains to Fee Fee Creek and tributaries of Fee Fee Creek.
- Louiselle Creek and Fee Fee Creek join downstream (north of Dorsett Road), before they connect to Creve Coeur Creek between Creve Coeur Lake and the Missouri River.

Currently, there are generally no water quality systems in place for stormwater drainage in the Dorsett Road right-of-way.

Any improvements along the corridor – either along the right-of-way or on private property on a parcel by parcel basis – will need to be designed per MSD’s Rules and Regulations and Engineering Design Requirements for Sanitary Sewer and Stormwater Drainage Facilities. The stormwater requirements include conveyance, quantity and quality.

Conveyance

There are existing storm sewers and structures along Dorsett Road. These sewer systems convey the stormwater from Dorsett Road to Fee Fee and Louiselle creeks. Improvements along Dorsett Road or on private property can connect to these systems, however modifications may be required to accommodate the changed condition resulting from the improvements.



Stormwater in the Dorsett Road corridor drains to Fee Fee Creek and tributaries of Fee Fee Creek.

Quantity

Stormwater quantity management is required if the differential runoff between the existing and proposed conditions results in an increase of 2 cubic feet per second or greater during a high intensity, 20 minute long rain event that normally occurs in the area only once every 15 years. The stormwater quantity along the Dorsett Road right-of-way should not increase if the pavement width is reduced and the new paths are constructed of a permeable pavement, therefore no stormwater detention should be required for the Dorsett Road improvements. If the paths are to be constructed of impervious pavement then stormwater detention may be required. The stormwater quantity management requirements on private property will depend on the differential runoff resulting from the proposed improvements and will need to be calculated and evaluated on a site by site basis as property owners redevelop their properties.

Quality

Water quality management is required if an acre or more is disturbed. A multi-use path of 12 feet in width, at a length of 3,630 feet, would represent a total surface area of one acre. As outlined in the upcoming recommendations section, the Dorsett Road Great Streets Plan calls for a 12 foot wide multi-use path along the entire three mile length of

the corridor. Therefore, assuming the city goes forward with this plan, it along with St. Louis County will have to plan for water quality provisions in future design and engineering processes. The combination of pervious pavement and rain gardens will satisfy most of the water quality requirement. If these strategies are not able to fully meet the requirements then a proprietary Best Management Practice (“BMP”) device such as a hydrodynamic separator could be used to meet the remainder of the requirement. The stormwater quality management requirements on private property will depend on the size of the disturbed area and the projected percentage of the total land area that will be covered by impervious surfaces, following the completion of proposed improvements. These metrics, per MSD guidance, will need to be evaluated on a site by site basis as individual property owners along the corridor redevelop properties. According to the BMP Toolbox on MSD’s website as well as conversations with MSD, the acceptable Urban BMP Options that can be used to meet the water quality volume criteria include bioretention, permeable pavement, amended soils disconnection, rainwater harvesting, sheet flow to buffer, sand filters, stormwater ponds and wetlands, proprietary BMP’s, open channel use, and dry detention basins.

Storm Sewer

The Dorsett Road corridor has open drainage at the east and west ends, and enclosed drainage in between. The storm sewers generally run along one side of the road, and are typically located along the north side behind the curb.

Sanitary Sewer

The sanitary sewers along the Dorsett Road corridor are generally along the south side of the road from Pheasant Run Drive to Schuetz Road, and on either side of Sally Drive.

Power and Communication

The power lines along Dorsett Road are generally inside the existing right-of-way and overhead, however there are two areas with extensive underground conduit. The first area is between I-270 and Progress Parkway, and the second area is near Industrial Drive and Fee Fee Road (South). In addition, Ameren Missouri has plans to rebuild the electric substation currently located at 11670 Dorsett Road on a property purchased for this purpose at 11520 Dorsett Road sometime in the next few years, dependent on budget considerations. This project will require altering the facilities along Dorsett Road near the new substation. Ameren Missouri does not have specifics on the design at this time, but typically circuits exit the substation in an underground duct bank and transition to overhead circuits. The overhead power lines are along one side of Dorsett Road, however they do switch back and forth from south to north along the corridor as follows:

- West of I-270 the power poles are on the north side of Dorsett Road from Marine Lane to Pheasant Run Drive, and from McKelvey Hills Drive to I-270, otherwise they are on the south side of the road. The poles are within two to eight feet of the pavement except for the area west of Marine Lane.
- East of I-270 the power poles are typically between the existing sidewalk and Dorsett Road, on the south side from Progress Parkway to Schuetz Road, and on the north side from Schuetz Road to Adie Road . Power poles do not follow Dorsett Road at all from Adie Road east to Lindbergh.

The communication lines are in underground conduits along the Dorsett Road corridor.

Previous Studies

Maryland Heights Comprehensive Plan (adopted 1987, revisions and amendments in 2001, 2005, 2007, 2008, and 2011)

The Maryland Heights Comprehensive Plan identifies Dorsett Road as the principal arterial road within the city and the closest road the city has to a Main Street. The road links two of the city's major planning districts: Westport Industrial Planning District to the east and the West Residential Planning District. Comprehensive plan recommendations for the Westport Industrial Planning District include the following guidelines for "Smart Growth" in the corridor:

- Mix of land uses
- Take advantage of compact building design
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, farmland, natural beauty, and critical environmental areas
- Strengthen and direct development towards existing communities
- Provide a variety of transportation choices
- Make development decisions predictable, fair, and cost effective
- Encourage community and stakeholder collaboration in development decisions

Other previous studies that informed this project include:

- McKelvey Woods Phase II: Project Alignment
- Maryland Heights Citizen Survey: 2013
- St. Louis County Bicycle Facilities Plan
- Gateway Bike Plan: Regional Routes to Sustainability
- Building the River Ring: A Citizen Driven Regional Plan

3

THE MARKET STUDY

The project team conducted a market and economic analysis at the outset of the project in order to determine the current market conditions for a variety of land uses along the Dorsett Road corridor (including retail, residential, office, and industrial) and the potential market for these various land uses along the corridor over the next twenty years. The conclusions of this analysis helped the project team develop preliminary and final concepts for future land uses along the corridor as part of the planning process. The complete market study report for Dorsett Road is included as an appendix to this document, and this section summarizes the main takeaways from the analysis.

Corridor Overview

Dorsett Road enjoys good east-west connectivity within Maryland Heights and very strong north-south connectivity via Interstate 270 to the entire metropolitan area. The current land use mix within the corridor includes commercial / industrial / flex space (57 percent), office (26 percent) and 17 percent retail. The corridor boasts a number of key assets that may support further growth and economic development, including the Maryland Heights Government Center, Edward Jones, Ranken Jordan Hospital, and the new interchange with Interstate 270. The area to the west of I-270 has more of a residential and local retail orientation, while the majority of the area to the east of 270 has a business park or light industrial orientation.

CORRIDOR STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
<p>Transportation/Access</p> <ul style="list-style-type: none"> • Key regional North – South connections at Lindbergh Boulevard and I-270 • Approximately a 10 minute drive from the Lambert-St. Louis International Airport • Central location within the region 	<p>Transportation/Access</p> <ul style="list-style-type: none"> • Pedestrian connections across Dorsett present challenges, creating barriers to local residents wishing to access local retail offerings • The overall street network in Maryland Heights has weaker north-south connections, further limiting the viability of neighborhood retail and restaurant uses along Dorsett.
<p>Connection to Current Demand Sources</p> <ul style="list-style-type: none"> • Strong daytime population • Located next to significant regional employers (Edward Jones and Ranken Jordan) 	<p>Placemaking vs. Demand</p> <ul style="list-style-type: none"> • Typically viewed as less prestigious than other east-west corridors in West County (including Olive and Manchester) • Currently lacks places or destinations along the corridor that would inherently attract people due to a “sense of place”

Demographic Summary

The St Louis metropolitan area, as of spring 2012, is at last emerging from the shadows of the Great Recession, with business activity returning to more sustainable levels. Yet, underlying demographic forces limit the upside potential for various real estate uses, not only along Dorsett but along most corridors in the region. The metro area has been growing at less than one percent per year for the last two decades, a rate of population growth around half that of its Midwest competitors, Kansas City and Minneapolis. The majority of new population growth has occurred in outlying counties such as St Charles, Jefferson, and Warren counties in Missouri and eastern St. Clair County in Illinois. Suburban St. Louis County, after decades of growth, has largely “built out” its developable areas, and demographers anticipate at most a few thousand additional households added to the county

over the next twenty years. Maryland Heights, similarly, is a largely built-out suburban community and like many in the region, has a rapidly aging population as well, with a significant pool of residents age 55 or older. However, a significant pool of younger families do live along the corridor, translating into a younger median age for the corridor than the overall city of Maryland Heights.

The Dorsett Road corridor represents one of the key areas of rental homes in the city, with rental units comprising 50 percent of the total number of housing units in the corridor study area. In contrast, only 39 percent of all households in the City live in rental units. The median income of residents along the corridor, around \$50,000, remained below the median household income for St Louis County overall in 2012 (\$55,000).

Retail Market

The U.S. retail market has recovered from the depths of the Great Recession, but the real estate industry has remained cautious with regard to new development. Internet sales of products has permanently removed at least a portion of total retail potential sales in every market as customers use stores as “show rooms” and then purchase products online. Customers have remained somewhat frugal over the last couple years, with memories of the Great Recession fresh in their minds. Developers throughout the country, and particularly in the conservative St Louis market, have held off on launching new retail developments until they have tenants committed and financing in place. Speculative development will likely remain very rare in almost every market both locally and nationally.

The Dorsett Road retail market remains primarily neighborhood oriented, and thus largely serves the residents of the surrounding areas of Maryland Heights as opposed to regional markets for goods and services. Typical tenants in the corridor include fast food outlets, drug stores, dry cleaners, and similar businesses catering to the everyday needs of local residents. Most of the retail centers along Dorsett are of smaller size, typically including 40,000 square feet or less in leaseable space. In general, the retail uses to the west of 270 are performing better than those to the east of 270. The Schnuck's at Dorsett and McKelvey essentially has a firm grasp on the local market, as it is the only grocery store serving the western portion of Maryland Heights directly. Many of the other tenants in the shopping centers west of 270 have firmly established markets with local consumers and represent the only store or businesses of their kind in the local market. For example, the McDonald's and Imo's businesses near Dorsett and McKelvey are the only outlets for these franchises in the western part of Maryland Heights. Again, although 270 provides regional connectivity, very few of the retailers or restaurants draw from markets outside of Maryland Heights. The Bandana's BBQ and the Syberg's at 270 and Dorsett are perhaps the notable exceptions, in that they draw from other nearby communities and traffic from I-270.

Observations of other corridors that intersect Interstate 270 in St Louis County suggest that opportunities may exist for local property owners to create retail or restaurant concepts that would garner a larger share of the regional market, given the good access to the interstate and the community's central location in the region.

The corridor has the potential to add from 42,000 to 124,000 square feet of new retail space between now and 2030. The range of potential square footage reflects different assumptions regarding the capture rates the corridor could achieve of the regional pool of retail demand. Achieving the upper end of the potential retail square footage would likely require

developing an entirely new retail center or two along the corridor. The lower end of the spectrum could be achieved by rebuilding or adding on to an existing center along the corridor.

Opportunities for Retail

Data from the market analysis indicate that the corridor is leaking retail demand to nearby corridors. Updating some of the older retail centers and properties along Dorsett Road could help the corridor recapture a larger share of the local market in the near term. Over the long term, the corridor could enhance its competitive position by consolidating retail into key nodes or projects at key intersections. Better integrating retail uses along with restaurants and even residential or office properties could create demand above and beyond single user developments. Given the suburban nature of the area, mixed-use projects along Dorsett would likely involve horizontal (on the same site, but not stacked above each other) rather than vertical mixed use (such as the development of residential land uses above retail).

RETAIL STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
Strong traffic counts, including average daily vehicle counts of 17,000 west of 270, 28,000 on Dorsett east of 270, and over 150,000 per day along I-270 at the Dorsett interchange	The lack of available parcels or frontage along Dorsett to utilize for redevelopment or repurposing retail projects
The area has a stable and large population (including over 76,000 households within five miles of Dorsett and I-270)	Retailers along Dorsett, in general, are not doing poorly enough to justify replacement, but also not doing well enough to justify construction of additional, new retail
Local retail rental rates are projected to increase through 2015 and vacancies should continue to decrease	Slow growth in population and households in the local area
The presence of significant employment centers nearby, between Dorsett and Page and east of I-270	

Office Market

The office market locally and nationally has stabilized over the last few years, but will remain much more conservative going forward. The most likely sources of additional demand for office in the Maryland Heights area and throughout the metro will likely concern medical office uses that serve the surging population of aging Baby Boomers. While the presence of Worldwide Technology and the Edward Jones campus has an overall positive influence on the local office market, the trend of companies to have more workers use less space or to work remotely on occasion will dampen overall demand for office in the future, compared to previous real estate cycles.

The market study projects total demand for additional office space within the Dorsett corridor of 70,000 to 264,000 square feet between now and 2030. Office vacancies near the corridor are fairly high and space along Dorsett is largely outdated and therefore less competitive in attracting new tenants. There is an opportunity to redevelop older office or industrial properties along the corridor into new spaces that would attract better tenants and elevate the overall corridor market position.

OFFICE STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
Strong office anchor in Edward Jones, with potential to expand in the future	Dorsett is not considered a typical location for Class A office. Rather, most of the space is Class C and constructed in the 1970s and 1980s
The overall Olive / Westport submarket achieves higher average rents than the overall metropolitan market.	Generally operates at a competitive disadvantage compared to the “favored” Olive corridor
Central location in the St Louis market	

Industrial Market

The flex and research and development (R&D) industrial properties that predominate along the east end of Dorsett, and to the south toward Page Avenue, tend to be older and smaller in size than comparable properties elsewhere in St Louis County and the region. As a result, industrial properties along Dorsett Road tend to have higher vacancy rates and lower rental rates than the overall market, with a reported vacancy rate of 36 percent and rents of only \$6 per square foot. Warehouse and distribution properties near the corridor are somewhat larger, at an average of 45,000 square feet, but report a fairly high vacancy rate of 34 percent and average rents of only \$4 per square foot.

In general, many of the industrial properties along and near Dorsett Road, particularly closer to I-270, represent good candidates for redevelopment, into either new industrial or flex space or into mixed use configurations including a mixture of office, retail, or general commercial uses.

INDUSTRIAL STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
A well-known industrial zone in the region	The corridor and the surrounding submarket have among the highest vacancy rates in the region and many properties are totally vacant or on the market for sale
The local market is improving, with anticipated improved fundamentals for vacancy and rental rates through 2017	Industrial growth in the St Louis market has tended to focus on other areas around the region, rather than this part of St Louis County

Apartment Market

As increasing numbers of households have shied away from purchasing homes or have been unable to, the apartment markets both in St Louis and nationally have enjoyed solid performance the last few years. Observers anticipate the completion of 400 new apartment units in the St Louis market in 2013 and another 800 units in 2014. The area along Dorsett Road reports lower vacancies and higher rents on average compared to the overall metropolitan market. Maryland Heights is considered a strong market for apartment uses, given the strong market fundamentals and the presence of several larger employers such as Edward Jones that stimulate demand for apartment units. Opportunities likely exist in the local market to either reconfigure existing apartment projects in order to command higher rents, or to build new communities. As with retail, the issue facing the Dorsett Road area is the lack of available building areas, as the area is already built-out. Developers could construct additional apartment units along or near the corridor as part of mixed-use projects including apartments as well as retail or restaurant uses.

APARTMENT STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
Good access to employment	Lack of developable spaces for new apartment construction
Apartment projects in Maryland Heights enjoy a 25 to 30 percent rent premium over the average for the local area	Considered a less “favored” apartment market compared to the Olive corridor in West County
The two apartment complexes directly on Dorsett Road report vacancies of only 2 to 5 percent.	
Potential demand over the long term for additional apartment units, given the aging population in the area and the significant workforce employed in the local area.	

For-Sale Residential Market

The local for-sale residential market has stabilized and is starting to show signs of life following the housing crash and resulting Great Recession. However, given the built-out nature of the corridor, the City has experienced very little in the way of single family residential construction for several years. Despite this trend, the potential exists to attract, with the right product, additional for-sale residential demand in the local corridor, given the area’s central location and adjacency to various amenities. Likely product types would include condominiums, townhomes or small tri-plex units that would attract empty nesters or younger professionals interested in living closer to work. The following reflects overall strengths and weaknesses in the local for-sale market.

FOR-SALE RESIDENTIAL STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
An aging population that would more likely live in townhomes or similar products that could be integrated into the corridor study area	The presence of more prestigious and recognized markets in West County and nearby St Charles County
Virtually no new condominium or townhome inventory exists in the local study area	With existing single family detached products already fairly affordable, single family detached projects cannot compete on price
Close to employment	The presence of industrial or business park users near Dorsett can create a perception of lower quality

Conclusion and Recommendations

Many market opportunities exist within the corridor for redevelopment; however, due to the current economic climate and mix of land uses, the revitalization will take time. Leading investment in the corridor is likely to focus on updating aging industrial properties within the corridor. Other strong short-term uses include rental apartments. There are short-term opportunities for smaller-scale commercial uses. These types of opportunities require the correct sites to be identified. There is the potential to create larger-scale projects once a critical mass is created within the corridor, and if a site could be assembled. One of the main challenges in the corridor will be identifying sites large enough to create a catalyst for redevelopment. There needs to be a sense of place and a definable core.

After completing the analysis of each of the land uses within the corridor, RCLCO identified the best short- and long-term opportunities based upon current and future conditions, the outlook for each land use, and an understanding of how the corridor is likely to function in the future.

MARKET OPPORTUNITY BY COMMERCIAL LAND USE			
	Retail	Office	Industrial
Short-term Opportunity	Opportunistic – high vacancies and limited land availability	Opportunistic – high vacancies and rents still low for speculative building	Limited – loss of jobs in industrial uses & conversion of properties in area to office
Longer-term Opportunity	Moderate – opportunity to consolidate existing & create new “town center” environment	Strong – need to create location, sense of place, and plan to redevelop industrial area	Limited – industrial industries losing jobs & those growing not moving to rehabilitated space
Demand Potential to 2030	42,000 to 120,000 SF	71,000 to 264,000 SF	Demand suggests 0 SF, yet likely to have turnover in market
Number of Projects	1 center	1-5, 50,000 SF buildings	Redevelopment
Key Tenants/ Buyers	Neighborhood serving/ Town Center	Professional services, Medical	Mixture

MARKET OPPORTUNITY BY RESIDENTIAL LAND USE			
	For-Rent Residential	For-Sale Residential	Senior Housing
Short-term Opportunity	Strong – vacancy low, limited new product	Limited – market for attached for-sale weak	Moderate – demand fundamentals are strong, lack of appropriate site
Longer-term Opportunity	Moderate – challenged by site availability and overall demand	Moderate – with the right site and market recovery	Strong – growing number of senior households
Demand Potential to 2030	120-240 units	65-130 units	100-200 units
Number of Projects	1 project	1 larger or 2-4 smaller	1 project
Key Tenants/ Buyers	Young professionals, empty nesters, immigrants	Young professionals, young families, empty nesters	Seniors

Critical Success Factors for Redevelopment

In order to facilitate redevelopment in the Dorsett Corridor, the City and other interested stakeholders should focus on the following critical success factors:

- Need to create value and facilitate connections—much of the property along the corridor is lower value. In order to increase the value of the land, it will be necessary to identify other, non-retail uses for parcels between the key intersections. These uses need to be connected to each other.
- The market alone won't likely turn the corner for high-value employment opportunities—it will be necessary to start with key parcels, and to help migrate the current uses to high-value employment. The City can help by identifying parcels, working with owners to zone them properly, and in certain cases, assemble key pieces.
- Create focal points in the corridor—key nodes and intersections need to be created. Where there are opportunities to create mixed-use, walkable environments, they should be encouraged.
- Help assemble the land—identify landowners willing to participate, and work with them to put together parcels big enough to attract larger users.
- As sites are identified, work with developers to maximize potential by considering density, market, connections, and amenities—be creative in the use of zoning to ensure the City's vision is executable.
- The corridor has distinct zones and areas that should be explored separately (e.g. east and west of I-270).
- The Dorsett Road corridor contains a unique and interesting collection of businesses (from Gateway Big Dog Motorcycles and R&S Pool & Spa to Arizon Structures and many others). They should join forces to create an identity and name/brand for the area(s)—a further study would be to catalogue and group all of the businesses in the area to look for trends and key “sparks.”
- Showcase the existing businesses—The city should make a point of helping them thrive, not just survive. Look for ways to help small businesses grow by promoting them to St. Louis residents and in the media.
- The city has an interesting opportunity to create a long-term cool vision. After understanding the full make-up of the corridor businesses, determine what the angle in promoting this vision should be.
- Create a marketing and branding campaign—With a name, an effective marketing slogan and a branding campaign, organizers could attract more commerce to the area, supporting the local businesses as well as the city as a whole.
- Create a business incubator atmosphere—Dorsett Road is a unique place in St. Louis where businesses can get affordable rents with good transportation access. The city should use this advantage to draw emerging businesses, from restaurants to hair salons to internet start-ups to creative users.

4

COMMUNITY ENGAGEMENT

The project team developed a public engagement plan (refer to Appendix A) to guide implementation of a comprehensive and transparent engagement process with citizens and key stakeholders in Maryland Heights. The plan describes in detail the targeted audiences, engagement strategies and outreach methods to support the planning effort.

The overall goals of public engagement for the Dorsett Road Great Streets Plan were identified as:

1. Help the community visualize what is possible in the long and short-term to transform Dorsett Road (from Lindbergh Boulevard to Marine Avenue) into a Great Street.
2. Educate the community about the planning elements that will make the vision a reality – including design elements, access management, and designing for multi-modal transit.
3. Build consensus on a master plan for the Dorsett Road corridor.

Steering Committee and Stakeholder Meetings

In order to engage businesses and investors in the Dorsett Road corridor, the project team worked with representatives from East-West Gateway, the City of Maryland Heights' City Administrator, and the City of Maryland Heights Planning Department to form a Steering Committee. The Steering Committee was a leadership group comprised of key stakeholders, such as local business owners, representatives from St. Louis County, the City of Maryland Heights, Maryland Heights Chamber of Commerce, Maryland Heights City Council and East-West Gateway who served as champions for Dorsett Road Great Streets Plan and served to represent interest groups and associated constituents in the planning and design process. At regular meetings throughout the evolution of the plan, this committee helped guide the project and advised the team on the interests of property owners and investors in the corridor, as well as foreseeable problems with project costs and implementation. Steering Committee input was used to help define the project's critical success factors, identify design needs, and address investment possibilities and concerns.

In addition, the Steering Committee served as an agent to introduce project stakeholders to the project team and facilitate relationships among those interested parties in order to gain as much investment, usage and implementation feedback as possible. During the winter and spring of 2013, the project team met regularly with property owners, business owners, area developers, elected officials and city staff in Maryland Heights. The team also reached out to representatives and staff from St. Louis County, the Metropolitan Sewer District, the Missouri Department of Transportation, the Maryland Heights Chamber of Commerce and the general public. The key issues in the planning process included 1) development of design alternatives that meet the needs of current property owners and the community's vision for Dorsett Road as a Great Street and 2) identification of projects that can be implemented in the short-term, including projects that support the revision and update to the Weldon Progress Corridor and other areas along Dorsett Road.

Tools and Strategies

The project team utilized a variety of tools to ensure participation by a broad cross-section of the community including public meetings, individual meetings and online tools. Property owners and renters in the study area received mailed invitations to participate as well as study updates. A stakeholder list of almost 400 individuals received the same information electronically. The community was interested in this project as indicated by the attendance at public meetings and participation in on-line forums.

Additional methods of outreach included:

- Notes in the City Newsletter, City Planner Report, East-West Gateway Local Government Briefings, and the Maryland Heights Chamber of Commerce newsletter
- Media outreach to the Maryland Heights Patch, Suburban Journal West County, St. Louis Post Dispatch, KMOV, KMOX, KSDK, KTVI and KWMU
- Online social media including the project website, mentions on the City of Maryland Heights website, Twitter and Facebook
- City of Maryland Heights Community Centre Outdoor and Indoor signs
- St. Louis County Variable Message Signs on Dorsett Road
- Metro Bus – Rider Alerts on the #33 Dorsett-Lackland bus
- Poster distribution to local municipal buildings, businesses, and residential areas

COMMUNITY PARTICIPATION	*
Attendance, Public Meeting #1, March 27	52
Attendance, Public Meeting #2, April 24	130
Attendance, Public Meeting #3, June 12	95
Surveys Completed On-Line	177

** Number of participants collected by Shockey Consulting.*

January-February 2013 - Initial Stakeholder Outreach.

Stakeholder interviews were conducted to discuss site specific issues and opportunities with property owners and agency personnel. Interviews were conducted with key city staff and elected officials in Maryland Heights, St. Louis County, the business community and developers. These conversations were often technical in nature and designed to “test the waters” for potential improvements and pave the way for implementation.



Community members attend the first public meeting at the Maryland Heights Community Centre.

March 27, 2013 – Public Meeting #1

The first public meeting was held at 6:30pm at the Maryland Heights Community Centre. Fifty-two attendees were introduced to the project during a 30 minute presentation. The presentation reviewed the Great Streets Initiative, existing conditions within the Dorsett Road corridor, and the opportunities and constraints for future land use planning and streetscape design. Following the meeting, the community members participated in a keypad polling session to gauge community interests in a variety of possibilities for the corridor. The public also helped to identify key issues and areas for improvement within the corridor. Questions from this polling session were made available online after the meeting to allow residents and other interested parties to weigh in on corridor topics, despite their absence from the public meeting.

Attendees were then invited to play “The Chip Game.” The Chip Game allows community members to contribute to the design process by presenting their desired land use patterns and siting locations where they would like to see changes in the corridor. Results from this game, the keypad polling session, and online survey results were analyzed by the project team to create preferred land use alternatives for the corridor.

April 24, 2013 – Public Meeting #2

The second public meeting, also held at the community center, almost tripled in attendance from the first meeting. The project team presented preferred land use alternatives, more specific ideas for new development along the corridor, and possible access management strategies. The public again provided feedback on these ideas through keypad polling, online surveys and a Question and Answer session.

Following the meeting, attendees were invited to take part in a visual preference survey. Eighty-five images in ten different categories were presented on tables to survey participants. Using red and green dots, community members voted on different styles, materials, and types of aesthetic qualities they would like to see or not see in the Dorsett Road corridor. The project team tabulated the results and included the most preferred styles and materials in their recommendations for this project.

June 12, 2013 – Public Meeting #3

A third public meeting was held at the Maryland Heights Senior Centre. The meeting was well-attended (approximately 90 people in attendance) as the project team presented the preferred land use plan and recommended streetscape improvements. To evaluate public support of these recommendations, the project team conducted a keypad polling session. After the session, meeting attendees enjoyed free ice cream. The project team



Students from Pattonville High School play a chip game.

was then available for a Question and Answer session to address community concerns and respond to public feedback.

Chip Games

In addition to the first public meeting, chip games were played with two other groups in the corridor. On April 18th, project team members met with the Maryland Heights Chamber of Commerce to discuss the best options for the land use in the corridor. Ten participants contributed their thoughts about changing land uses along Dorsett Road. On May 15th, 20 students from Pattonville High School played the chip game during a government class. The project team learned that in its existing condition, Dorsett Road is not a destination for students. Most of the participants were familiar with Dorsett but do not seek it out as a destination. To attract younger groups to the corridor, the students requested more shopping, restaurants and entertainment venues along Dorsett Road.

Project Website: Dorsett Road Great Streets

To further engage community members and provide the public with the latest studies and analyses taking place in the corridor, the project team developed the Dorsett Road Great Streets project website. From February through June 2013, the site had 1,142 visits. The public was able to access the website through links on the City of Maryland Heights webpage, Facebook and Mindmixer. The project team analyzed visits to determine that 49 people accessed the site directly by entering the address in the web bar, 338 used the link provided on the Maryland Heights webpage, and 105 accessing it by conducting a bing! or google search. The number of visitors accessing the project website via Facebook (58) and MindMixer (61) was less significant in relation to overall traffic.

**Dorsett Road
GREAT STREETS**

Welcome

The City of Maryland Heights, along with East-West Gateway Council of Governments, is conducting a community-wide planning effort to develop a vision and plan for the future of Dorsett Road as a Great Street in the community. Dorsett Road runs from Lindbergh Boulevard to Creve Coeur Park and serves as one of the "Main Streets" in Maryland Heights. The project team is working with the community to identify how this important corridor can be improved in terms of economic development, planning for all modes of travel (including vehicular, as well as transit, walking, and biking), public art and aesthetics, parks and open space, and providing for community gathering places and facilities.

We need you!

Tell us your ideas for Dorsett Road. Public input is critical to the success of this study. There are several ways for you to participate:

Mindmixer

MindMixer is an on-line community conversation organized by planning ideas or concepts. **Jump right in and comment** on someone's idea or generate one of your own. Come back often to see what is new.

Online Public Survey

Didn't make it to our public meeting? No problem. You can **answer the same questions** posed to the audience on June 12th.

Documents

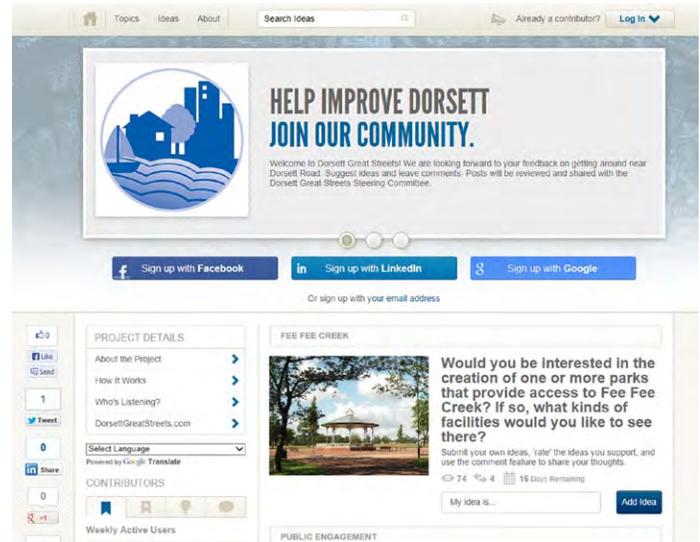
LINKS

- City of Maryland Heights
- East West Gateway

MindMixer

MindMixer is an online community engagement tool that allows the public to offer opinions, suggestions, and comments on specific topics related to the project. The project team created a Dorsett Great Streets MindMixer website to garner additional public feedback and ensure that the design process remained transparent and collaborative. After presenting the Dorsett Great Streets MindMixer website to users at the first public meeting, the site was open for public comment. Those not available to attend the meeting were encouraged by local newsletters, post cards, and other media outlets to participate online through the Dorsett Great Streets website. During the design process, the project team posted topics and surveys. Topics included:

- Getting From Here to There
- Building Community
- Parks and Open Space
- Public Art
- Dorsett Road Transit
- Walking and Biking
- Visioning Dorsett Road
- The Feel of Dorsett
- Outreach Process
- Public Engagement
- Public Meetings
- Fee Fee Creek
- Crossing Dorsett
- Retail
- Downtown Maryland Heights



All community comments were collected and disseminated to the project team in order to ensure that community voices were heard and implemented into the plan for the Dorsett Road corridor. The Dorsett Great Streets MindMixer page benefited from 61 active participants, 194 visitors and 2,215 page views. See Appendix B for a full capture of comments.

Online Surveys

All three surveys conducted during public meetings through keypad polling were made available online to those unable to attend, through an online application called Survey Monkey. The surveys contained the same number of questions and images and allowed at-home participants to provide comments and feedback on a number of questions (an option not available through the keypad polling). Each survey was available online for three weeks after the associated public meeting. Results from both the previous polling session and online surveys were presented to the public during the subsequent meeting.

Evaluation

This project significantly benefited from a very engaged community whose interest in the project garnered regional attention. High attendance at community meetings, participation in online surveys and MindMixer comments received throughout the design process all helped to guide the project team and deliver a plan that incorporates the highest rated community wants and needs.

During the final public meeting, participants were asked to evaluate the public engagement process that took place during this project. Sixty- five percent of respondents positively favored this process and found the project to be inclusive of their input.

5

RECOMMENDATIONS AND CONCEPT PLAN

Dorsett Road Great Streets Plan Concept

Dorsett Road has the potential, capacity, and community support to become a truly Great Street. Over the next twenty years, small interventions and significant developments throughout the corridor will help to build an identity, attract new investors and visitors, and create not only a Great Street but also Great Places in Maryland Heights. Interventions along **THE STREET** will set the framework for new **OPPORTUNITIES** to take place along Dorsett Road, bringing business, patrons, and revenue to Maryland Heights. As the City continues to work with developers and plan for the future, larger **PROJECTS** will create places and form **DISTRICTS** that enhance community investment and pride, and build on established relationships in the St. Louis region.



*Conceptual drawing of Dorsett Road improvements.
This image does not represent specific materials or design standards.*

THE STREET

To create a Great Street, improving the face, function, and friendliness of Dorsett Road is essential to the future of Maryland Heights' businesses, property values, development and revenue. Creating a street that not only looks better but also becomes a functional asset for all modes of travel will finally fulfill Dorsett Road's reputation as Maryland Heights' "Main Street." To create a Great Street, the project team has set forth three top priorities for improving Dorsett Road.

Priority: Improve pedestrian, bicyclist, driver, and transit rider safety through crosswalk improvements, bus stop consolidation and the addition of mid-block crossings and pedestrian refuge islands.

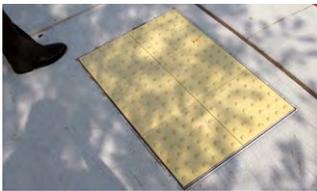
Crosswalk Improvements

Crosswalk improvements were identified by both the public and project team as a top priority for the Dorsett Road corridor. Existing defined crosswalks lack sufficient visibility, the majority do not meet ADA standards, and crosswalks "feel unsafe" for pedestrians. While all improvements must be approved by St. Louis County, the project team recommends that all crosswalks at major intersections with traffic lights should include the following provisions:



Crosswalk Markings

Mark crosswalks on all approaches (i.e. legs of the intersection) using high visibility markings.



Vision Impairment Accessibility

Ensure that all crossings will be detectable by and accessible to pedestrians with vision impairments, following ADA standards.



ADA Compatible Curb Ramps

Curb ramps must be placed to enable a person with a mobility disability to travel from a sidewalk on one side of the street, over or through any curbs or traffic islands, to the sidewalk on the other side of the street. This not only will make Dorsett Road a more responsible and respectful street for disabled parties, but it also prepares the street to support an aging community and attract revenue from shopping seniors.

Pedestrian Push Buttons

Pedestrian push buttons should be well-marked, visible, and accessible to all from a flat surface consistent with the recommendations from the U.S. Department of Transportation's *Manual of Traffic Control Devices* (MUTCD).

Crosswalk Timing

Currently, the average pedestrian signal timing for crossing Dorsett Road at signalized intersections is 3.5 feet per second. The target crossing speed for visually impaired and elderly individuals is 2.5 feet per second. At any new or existing county maintained signalized crossings, the St. Louis County Department of Highways and Traffic should have the proper pedestrian timing programmed.

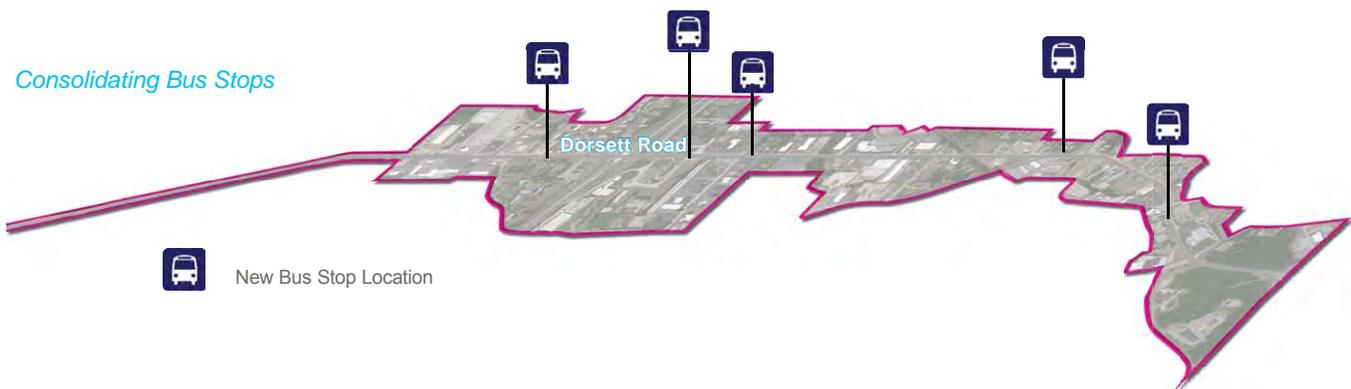
Bus Stop Consolidation and Addition of Mid-Block Crossings

The existing bus stop locations along Dorsett Road do not allow transit riders to easily cross the street or transfer from east-bound to west-bound routes. The lack of mid-block crosswalks along Dorsett Road has resulted in the occurrence of jaywalking, positioning pedestrians and cars at unprotected and potentially dangerous junctures with one another. In order to improve pedestrian and transit rider safety, relieve liability concerns surrounding transit stops, and channel jaywalkers to suitable crossing locations, the project team has identified seven locations to consolidate bus stops and add mid-block crosswalks.

- East of Calamaide Drive: Add one mid-block crosswalk with pedestrian signal.
- Between McKelvey and McKelvey Hill Drive: Add one-block crosswalk combined with a pedestrian signal and a pedestrian refuge island.
- Metro Boulevard: Move the existing east-bound bus stop to the east side of the intersection (far side) and West-bound bus stop to the west side; add crosswalks. The county has approved crosswalks for the east side of the intersection only.
- Schuetz Road: Add crosswalks to the intersection and ensure proper crossing time. The county has approved crosswalks on the east side of the intersection only.
- Fee Fee Road, north of Dorsett Road: move bus stops at Fee Fee Road (south) of Dorsett and at Old Dorsett Road to this intersection (Fee Fee Rd north of Dorsett). Add crosswalks to the intersection. The county has approved crosswalks on the west side only.

As development occurs along Dorsett Road over the next 20 years, the project team recommends consolidating bus stops at the following locations as directed by St. Louis County in conjunction with this plan. The project team recommends consolidating bus stops at select locations along the corridor in order to align the maximum amount of transit activity, and resulting crossings of the street, with the locations of the median pedestrian refuges and enhanced crosswalk facilities.

- Near Sally Drive: Consolidate bus stops at Schenk Drive and Warnen Road / Pinehurst Court to this location; add a pedestrian signal
- Near Zodiac Industrial Court: add midblock crosswalk and pedestrian signal.



Refer to page 25 to see all existing bus stop locations.

Pedestrian Refuge Islands

Refuge islands at mid-block crossings allow pedestrians and bicyclists crossing Dorsett Road a safe haven during long crossings. The plan recommends that these islands serve not only a safety and comfort function, but also should be planted with attractive native species to assist in stormwater management and offer a contribution to the aesthetic improvement of the corridor. Located in the center shared left turn lane at crossings, pedestrian refuge islands should be considered for the following two locations:

- East of Calamaide Drive
- At a consolidated bus stop between McKelvey Road and McKelvey Hill Drive

As development occurs along Dorsett Road over the next 20 years, the project team recommends considering planted refuge islands at the following four locations as directed by St. Louis County in conjunction with this plan.

- West of Pheasant Run Drive
- At the intersection of Fee Fee Road (north) and Dorsett Road
- Near Zodiac Industrial Court
- Near Sally Drive

Supporting the Transit Rider Experience

A Great Street commits to supporting transit riders and encouraging alternative transportation modes. Public transportation provides people with mobility and access to employment, community resources, medical care, and recreational opportunities in communities across America. It benefits those who choose to ride, as well as those who have no other choice: over 90 percent of public assistance recipients do not own a car and must rely on public transportation. Additionally, public transportation also helps to reduce road congestion and travel times, air pollution, and energy and oil consumption, all of which benefit both riders and non-riders alike.

The City of Maryland Heights should work to improve its engagement with transit riders and strengthen transit ridership in the corridor by implementing the following bus stop and transit improvements along Dorsett Road:

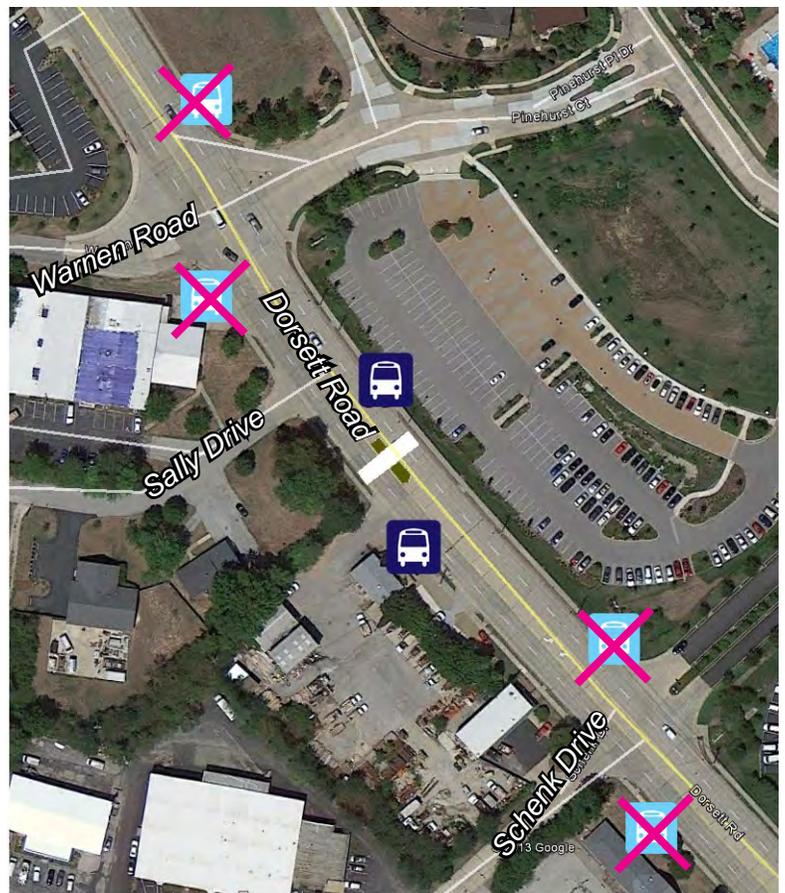
- Install bus shelters to protect transit riders from weather elements and cars. Bus shelter locations that affect county right-of-way should be placed beyond the right-of-way or as determined by St. Louis County and coordinated with Metro.
- Provide benches to allow riders to rest while waiting for buses and to keep passengers from lingering on private property. Bench locations that affect county right-of-way should be placed beyond the right-of-way or as determined by St. Louis County in coordination with Metro.
- Provide trash and recycling receptacles to reduce debris at bus stops and adjacent properties.
- Provide digital signage to inform riders of bus schedules and real-time waits.
- Enhance the current system to include more frequent service on existing routes.
- Improve 94 and 98 bus connections from Dorsett Road to a future light rail stop at Westport.
- Plan for an express bus to the North Hanley or Clayton MetroLink stations

Bus Stop Consolidation Sites





 Existing Bus Stop Location
 New Bus Stop Location
 New Crosswalk
 Pedestrian Refuge Island



Priority: Improve accessibility, safety and the visual interest of Dorsett Road by increasing sidewalk widths and installing plantings that will provide year-round seasonal interest.

Improving sidewalks and increasing sidewalk width was a consistent request from the public through the evolution of this project. When asked about preferred options for bike travel, the majority of community members requested an off-road, separated bike path. The existing sidewalks along Dorsett Road are narrow without sufficient buffers between pedestrians and moving traffic. The experience of walking along Dorsett Road is noisy due to the close proximity of travel lanes to sidewalks. The visual experience of walking along Dorsett Road is unappealing and lacks a consistent visual character that differentiates it from other commercial roads in the region. To improve these conditions, the project team created a concept for the Dorsett Road streetscape that will allow for an eight foot to 12 foot wide multi-use path, on one side of the road. This path will be sufficiently separated from travel lanes by a 3.5 foot wide planting area. This distance is the minimum buffer requirement for a pedestrian LOS A-rated street.

Multi-Use Path

The multi-use path designed for the Dorsett Road corridor will run the length of Dorsett Road from Marine Avenue to Lindbergh Boulevard and accommodate both pedestrians and bicyclists. Due to topographic restraints and the locations of existing utilities and retaining walls, the multi-use path will run along the north side of Dorsett Road from Marine Avenue to McKelvey Road. At McKelvey Road the multi-use path will switch to the south side of the street where it can better accommodate intended uses. The multi-use path will follow the south side of the street along the remainder of the corridor, from McKelvey east to Lindbergh.

Ten feet is the minimal width recommended by Great Rivers Greenway for a multi-use path. Twelve feet is an ideal width. To create this path within the existing right-of-way the project team developed a streetscape concept that allows for a minimal ten foot path inside the right-of-way, in almost all locations. To create this path, vehicle travel lane widths were reduced to 11 feet (with a 12 foot center turn lane), the recommended width to accommodate vehicles travelling 35 mph on an arterial road. The extra right-of-way gained from lane-width reduction was shifted to the north side of Dorsett Road, west of McKelvey Road and to the south side, east of McKelvey Road. The number of travel lanes on Dorsett Road would not decrease as a result of the implementation of this plan. Sidewalks on Dorsett Road located opposite the multi-use path will remain in place, however, it is recommended that all sidewalks are improved to meet ADA standards. Additionally, it would benefit the corridor to enhance the material and aesthetic quality of these sidewalks, and create opportunities for the side of Dorsett Road (opposite to the side containing the multi-use path) to benefit from stormwater management best practices as the corridor develops over the next 20 years.

In a few locations along Dorsett Road, there is not enough room within the right-of-way to provide a sufficiently wide multi-use path. It is the recommendation of the project team that in these cases, St. Louis County work with the City of Maryland Heights to acquire landscape easements from property owners in order to provide sufficient space in order to establish the path.

The proposed multi-use path will not only improve conditions for pedestrians and bicyclists, but will also impact the environmental quality of the Dorsett Road corridor and its local water resources. It is recommended that the multi-use path be constructed of permeable concrete. Permeable concrete is a porous paving material that captures stormwater and allows it to seep into the ground, recharging groundwater sources, reducing stormwater runoff, and meeting best management practices endorsed by the U.S. Environmental Protection Agency (EPA) stormwater regulations.

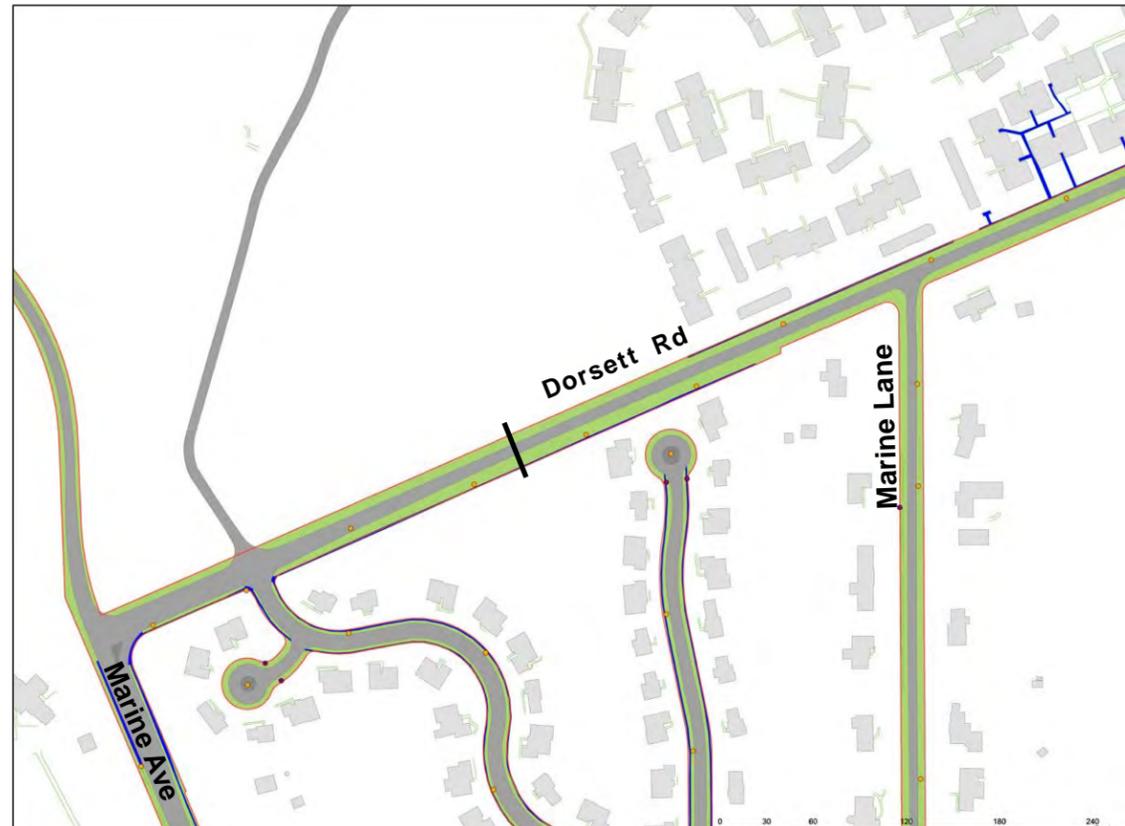
The recommended path is a non-standard feature for St. Louis County. This type of feature within the right-of-way will require a maintenance agreement between the City of Maryland Heights and St. Louis County.



Conceptual drawing of Dorsett Road improvements. This image does not represent specific materials or design standards.

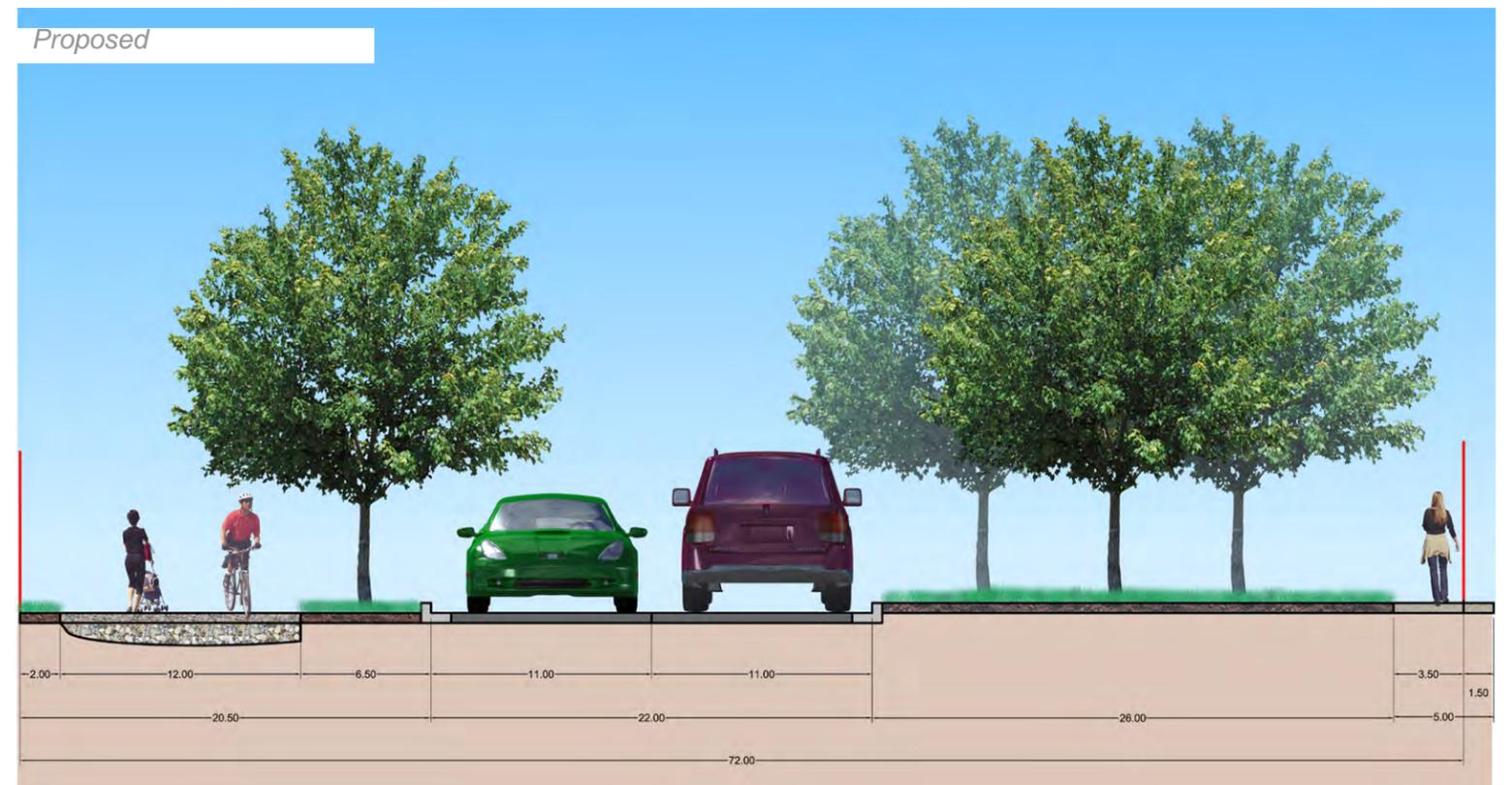
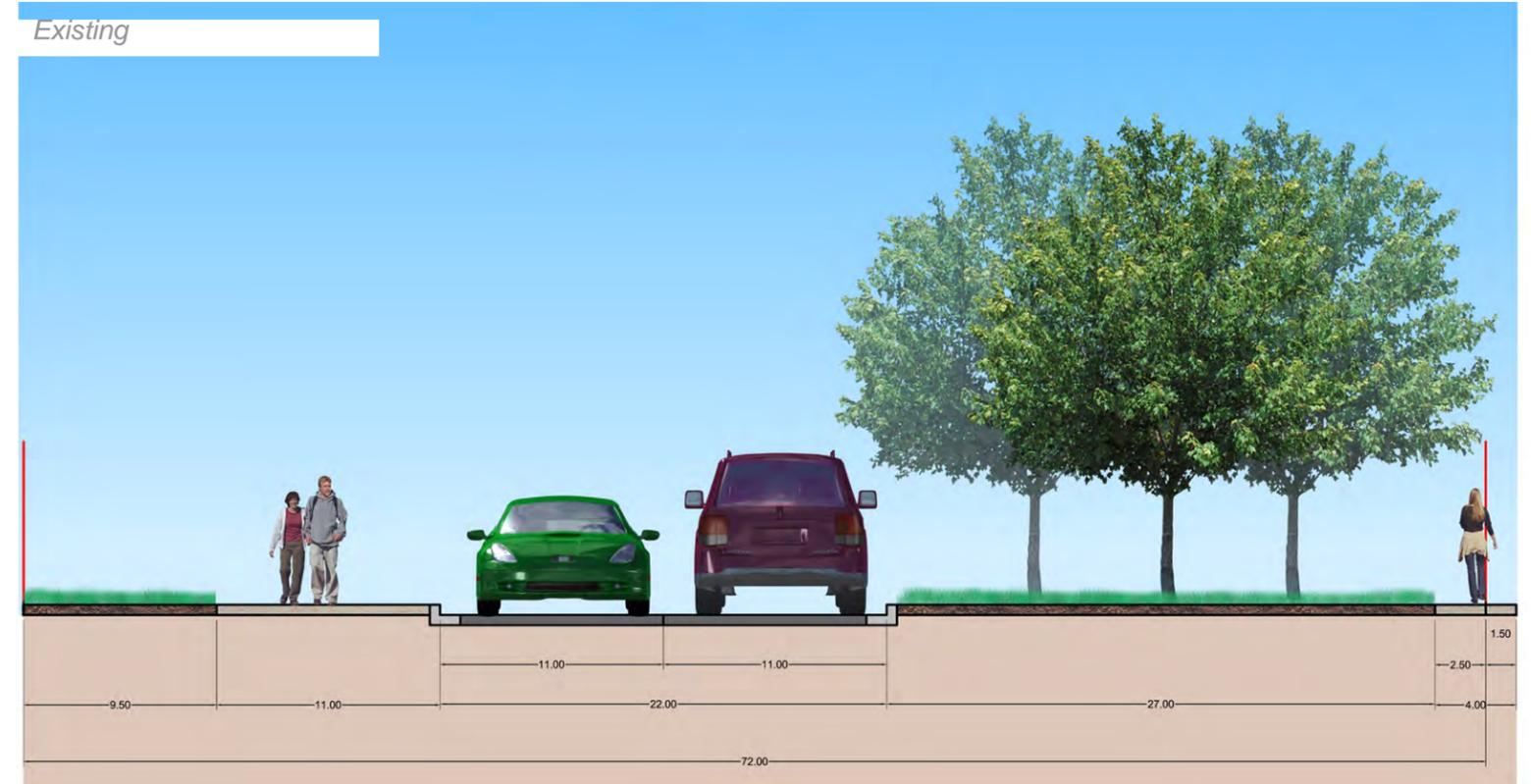
Revising the Dorsett Road Streetscape

The following eight pages demonstrate how alterations to current lane widths will allow for a multi-use path and landscape buffer within the right-of-way on Dorsett Road.



Existing Conditions Plan View

A. Marine Avenue to Marine Lane

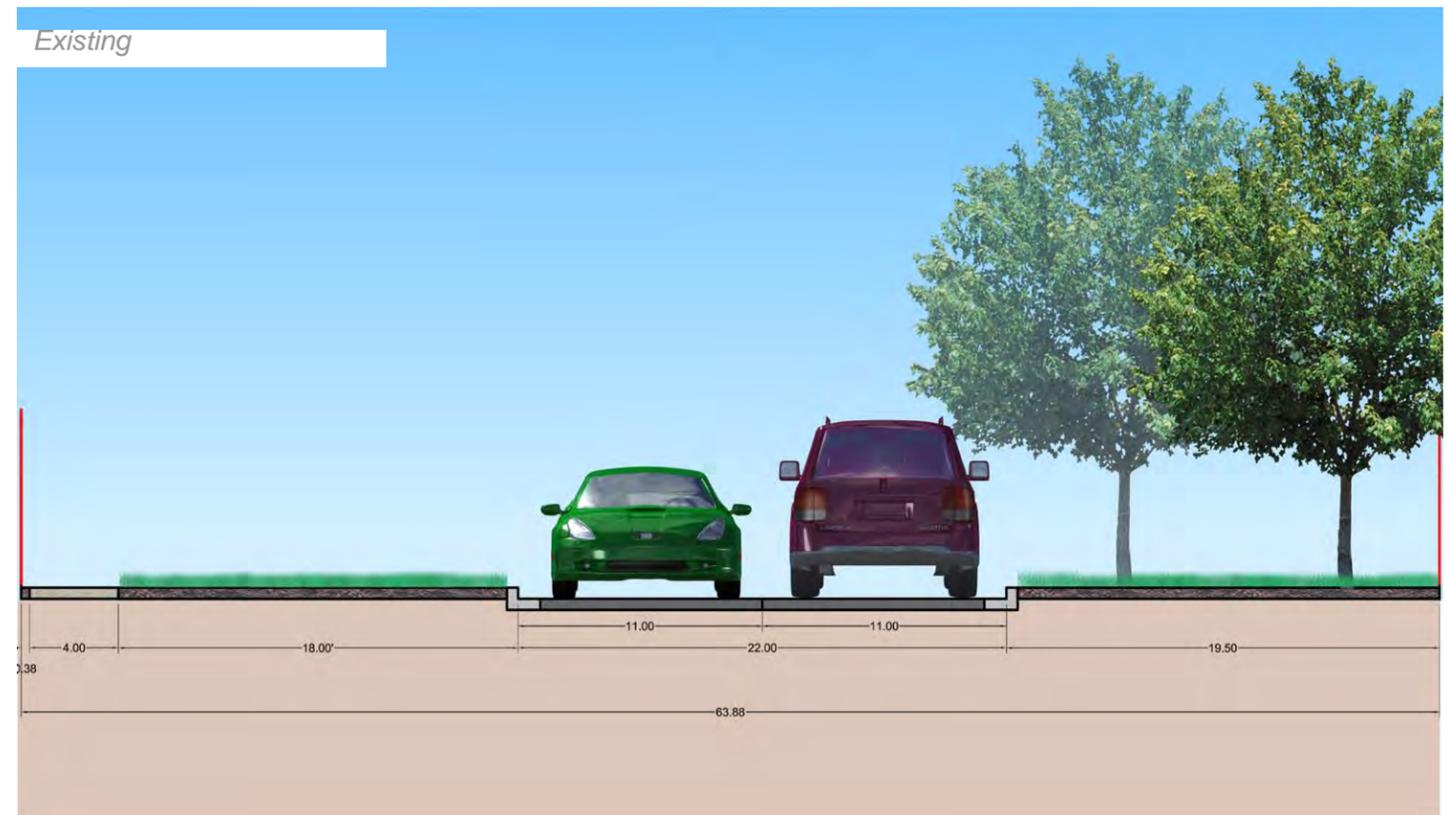


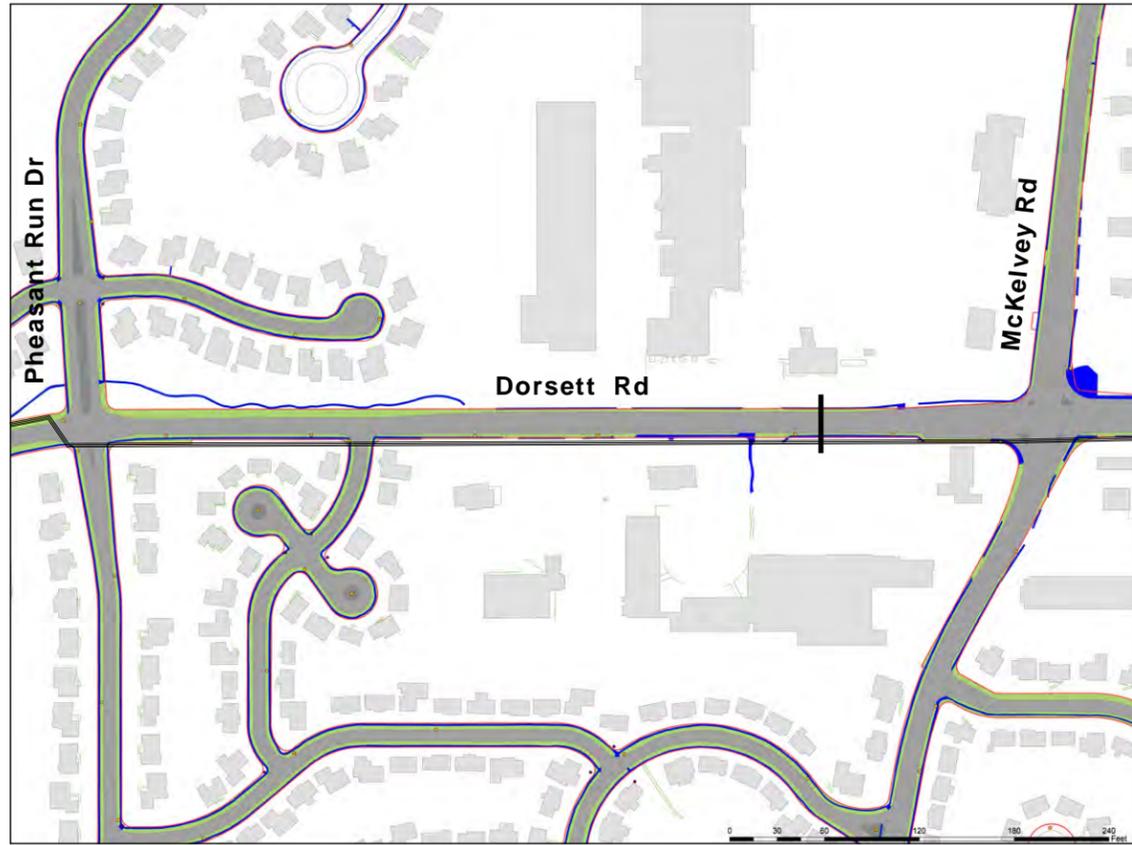


Existing Conditions Plan View

- PAVED ROAD
- SIDEWALK
- LAND OUTSIDE THE ROADWAY
- BUILDING
- RIGHT-OF-WAY BOUNDARY
- OVERHEAD UTILITY LINE
- EXISTING STREET LIGHT
- EXISTING ADA RAMP

B. Marine Lane to Pheasant Run Drive

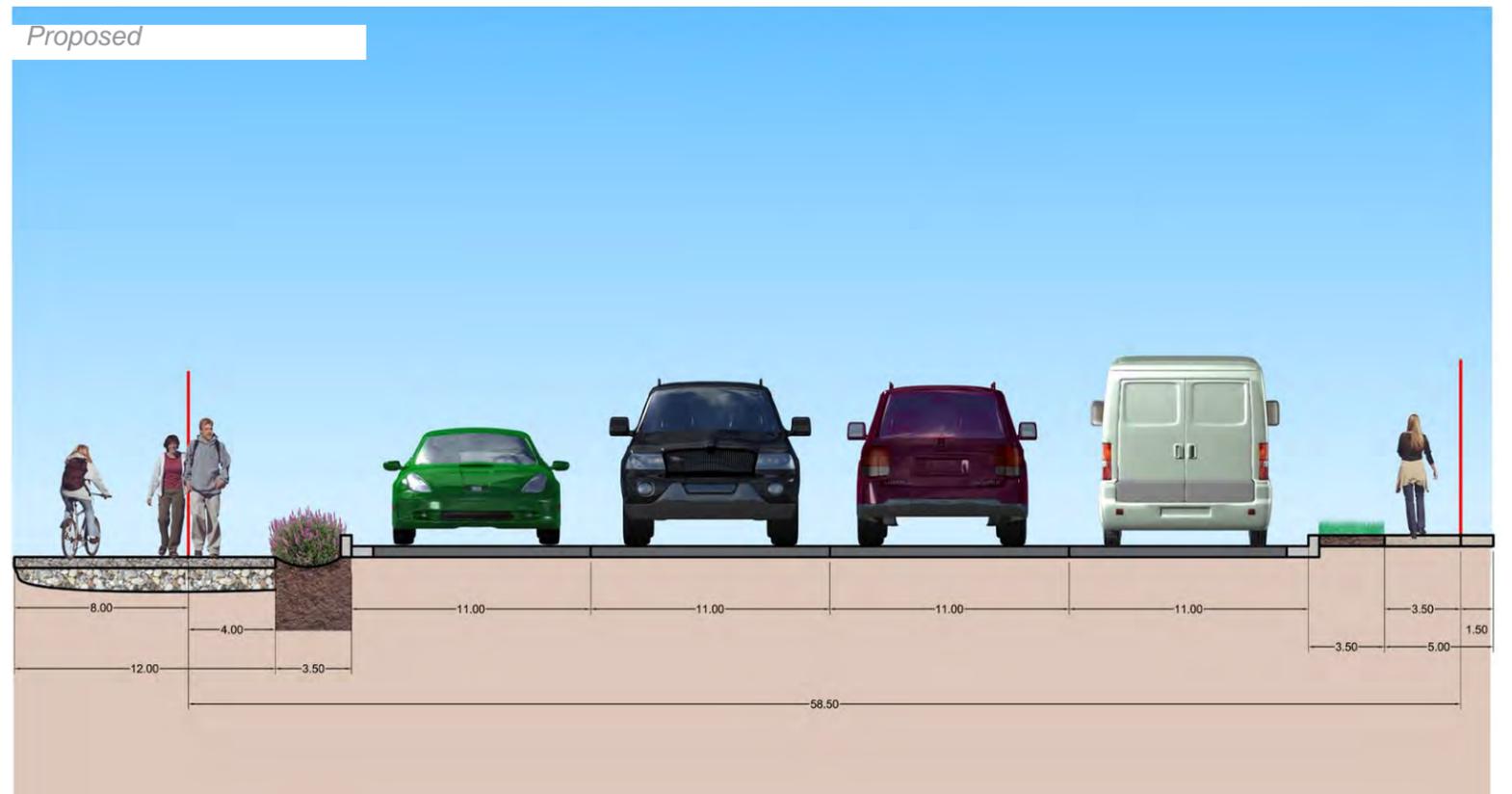


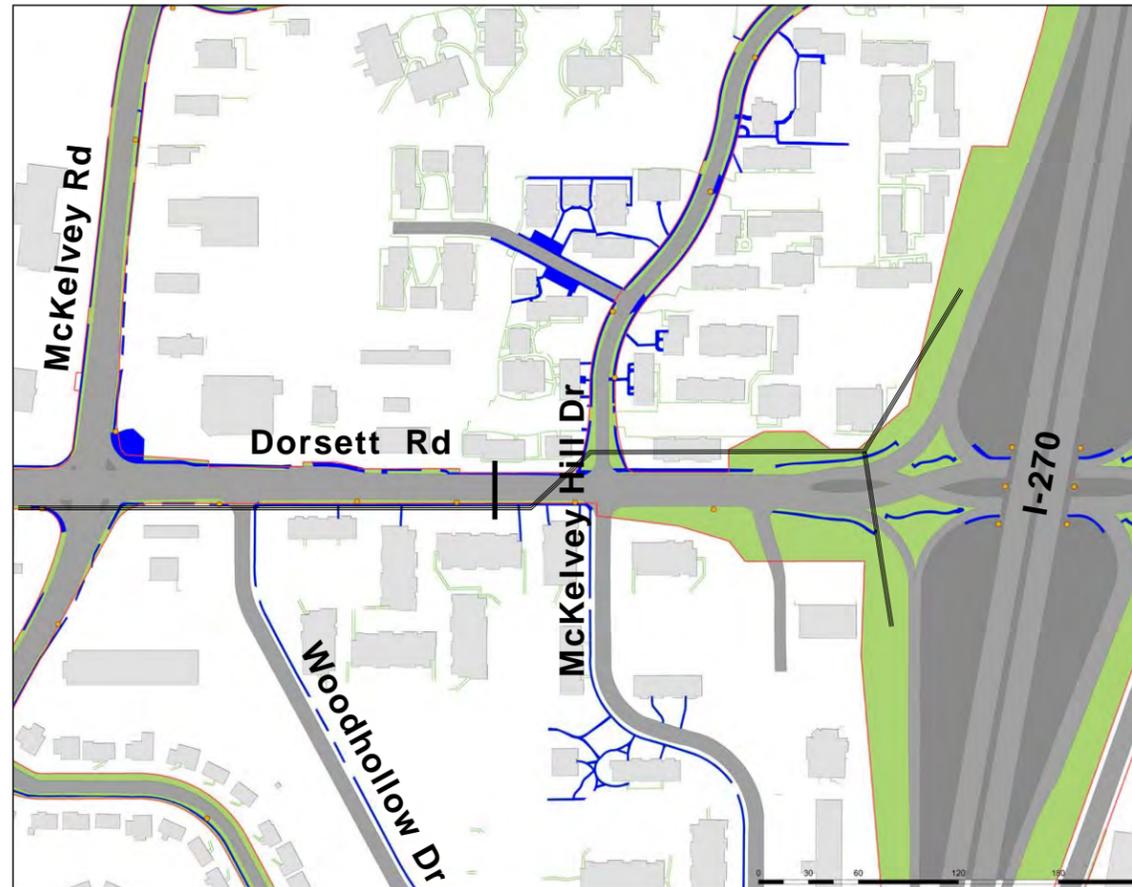


Existing Conditions Plan View

- PAVED ROAD
- SIDEWALK
- LAND OUTSIDE THE ROADWAY
- BUILDING
- RIGHT-OF-WAY BOUNDARY
- OVERHEAD UTILITY LINE
- EXISTING STREET LIGHT
- EXISTING ADA RAMP

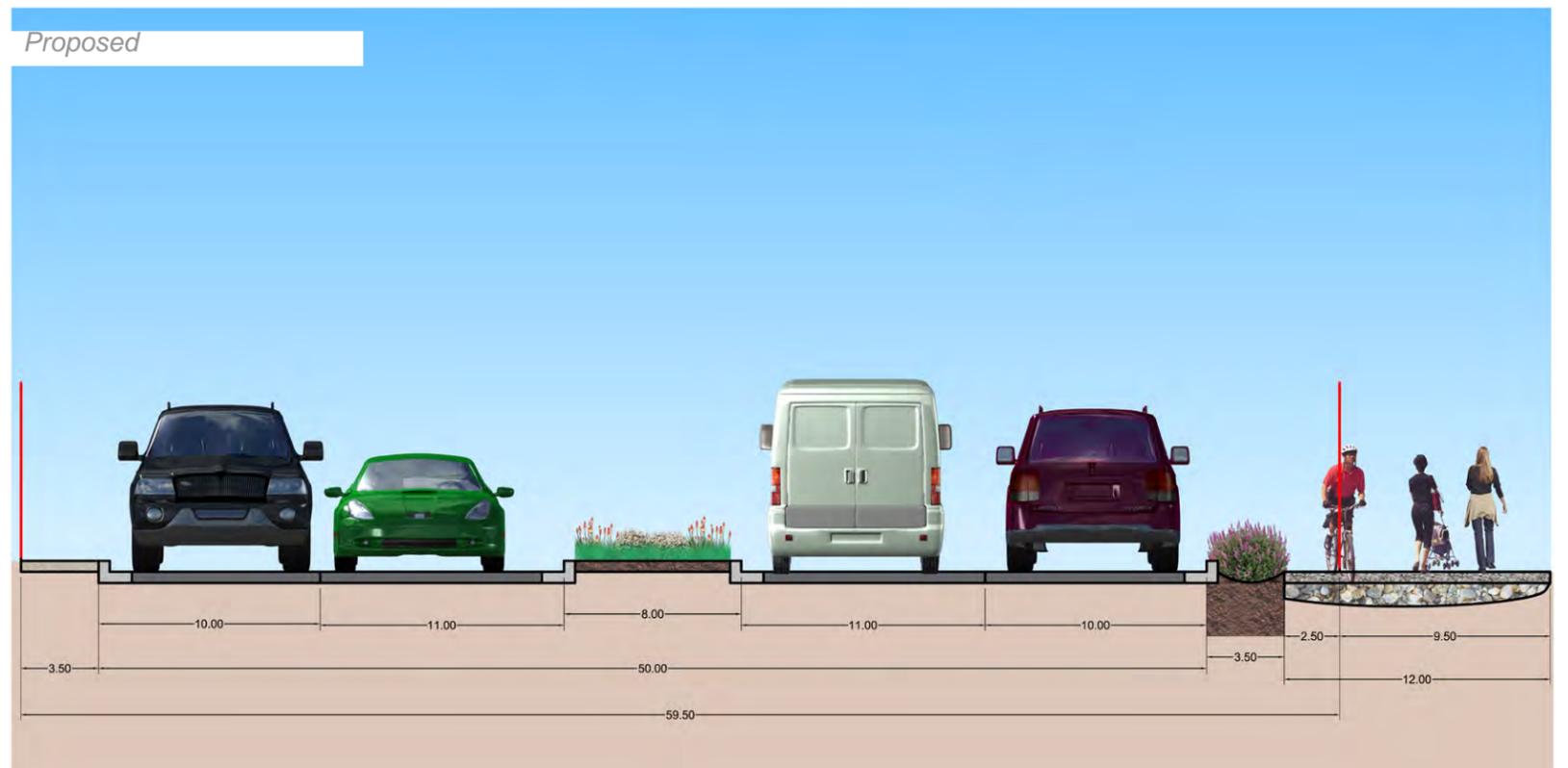
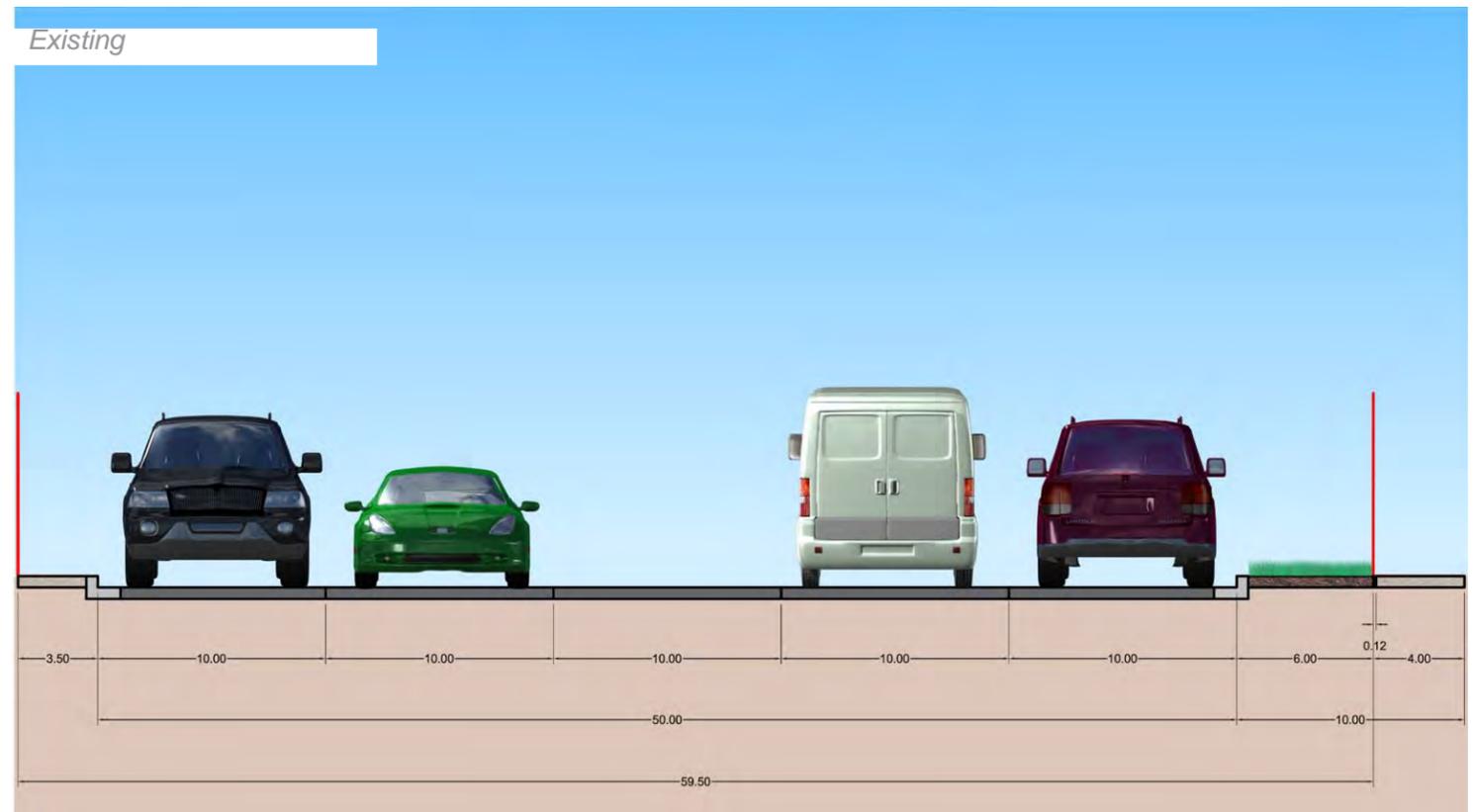
C. Pheasant Run Drive to McKelvey Road

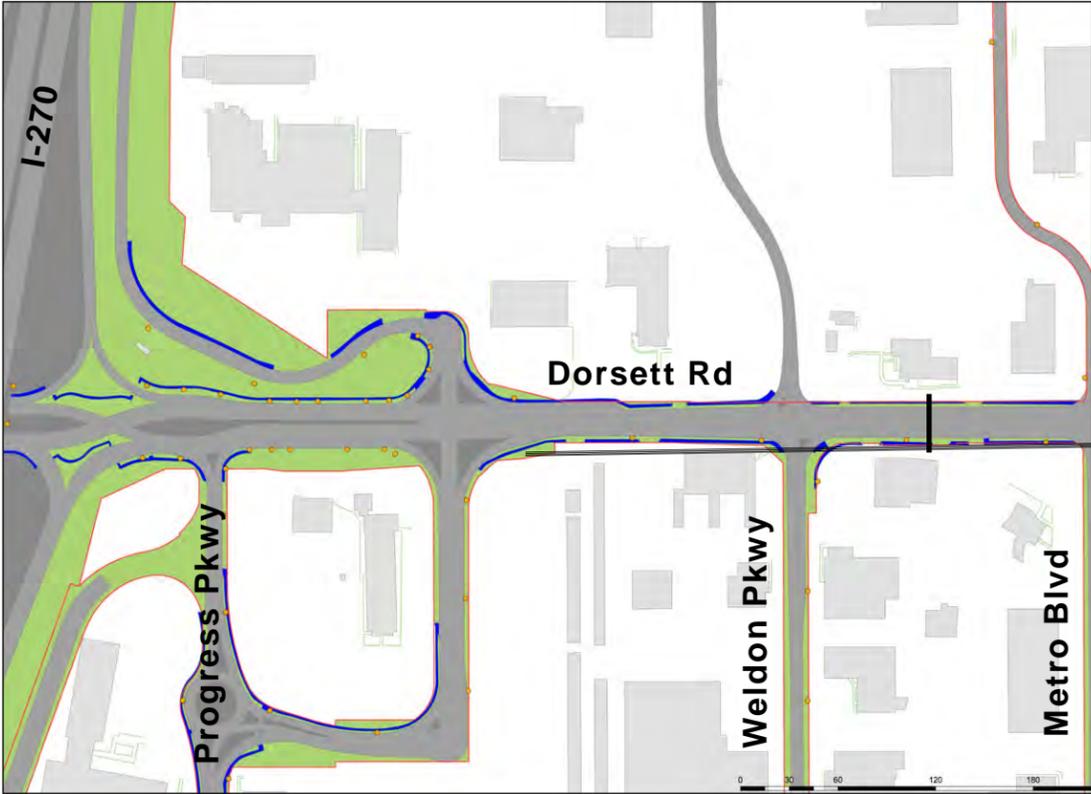




Existing Conditions Plan View

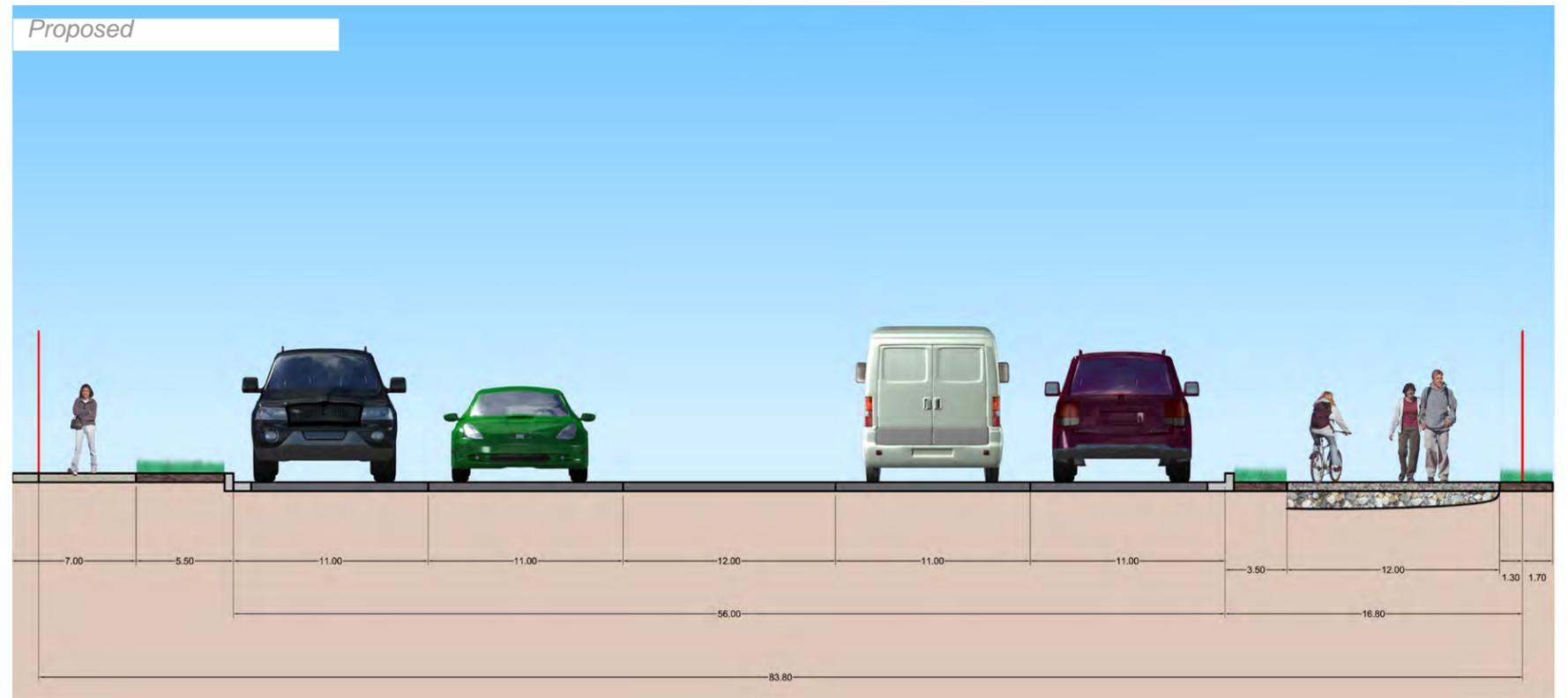
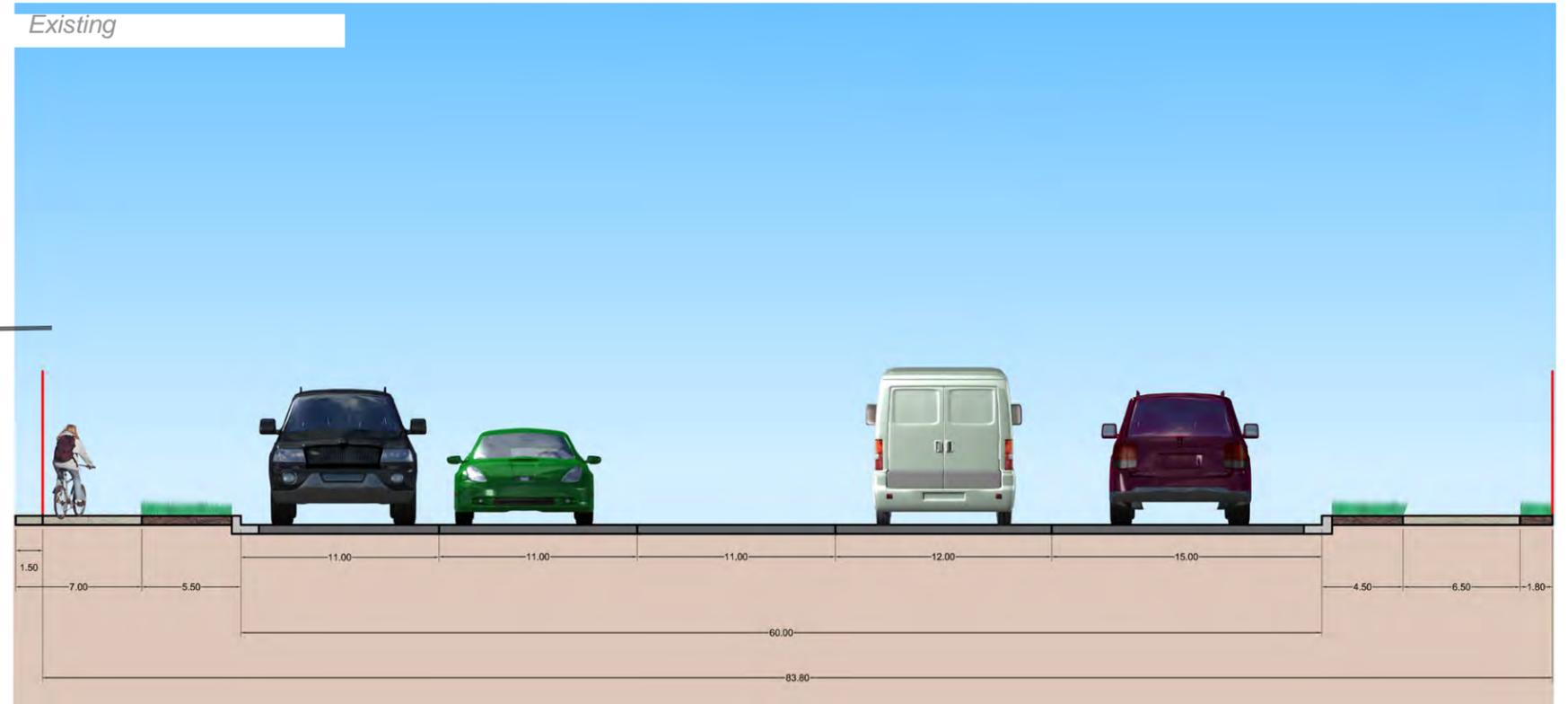
D. McKelvey Road to I-270

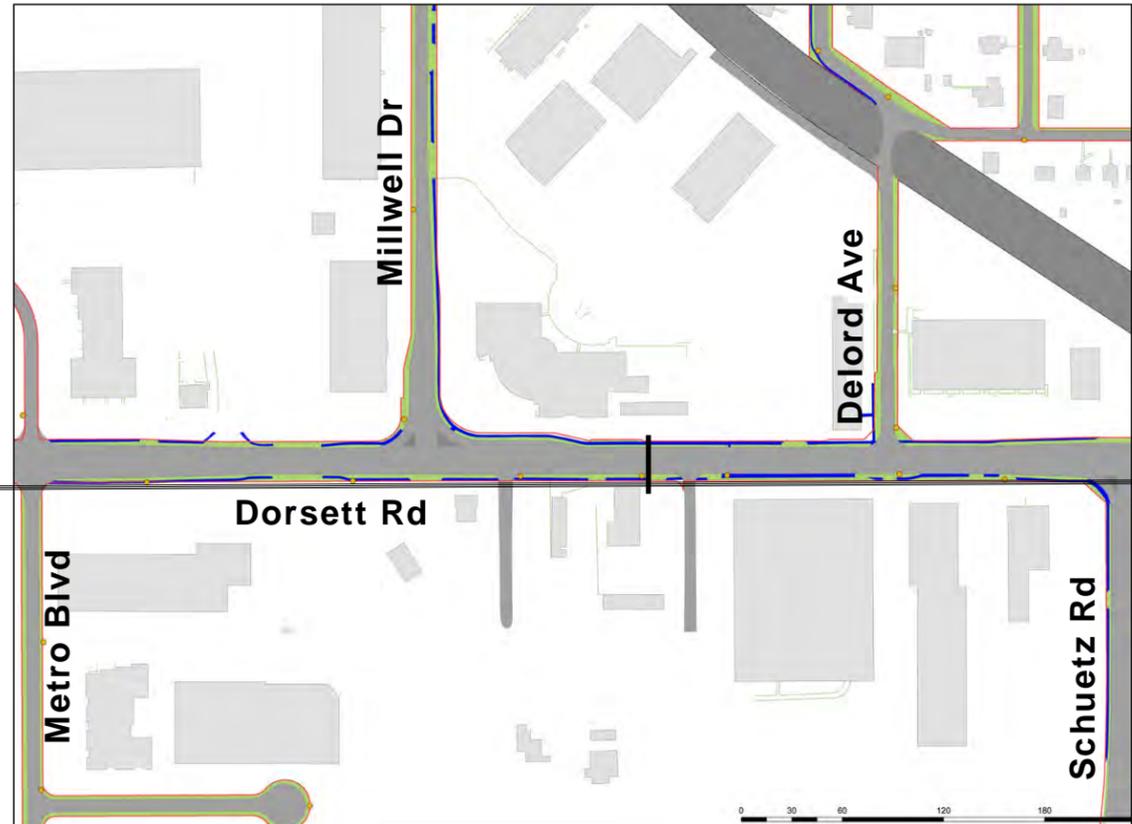




Existing Conditions Plan View

E. I-270 to Metro Boulevard

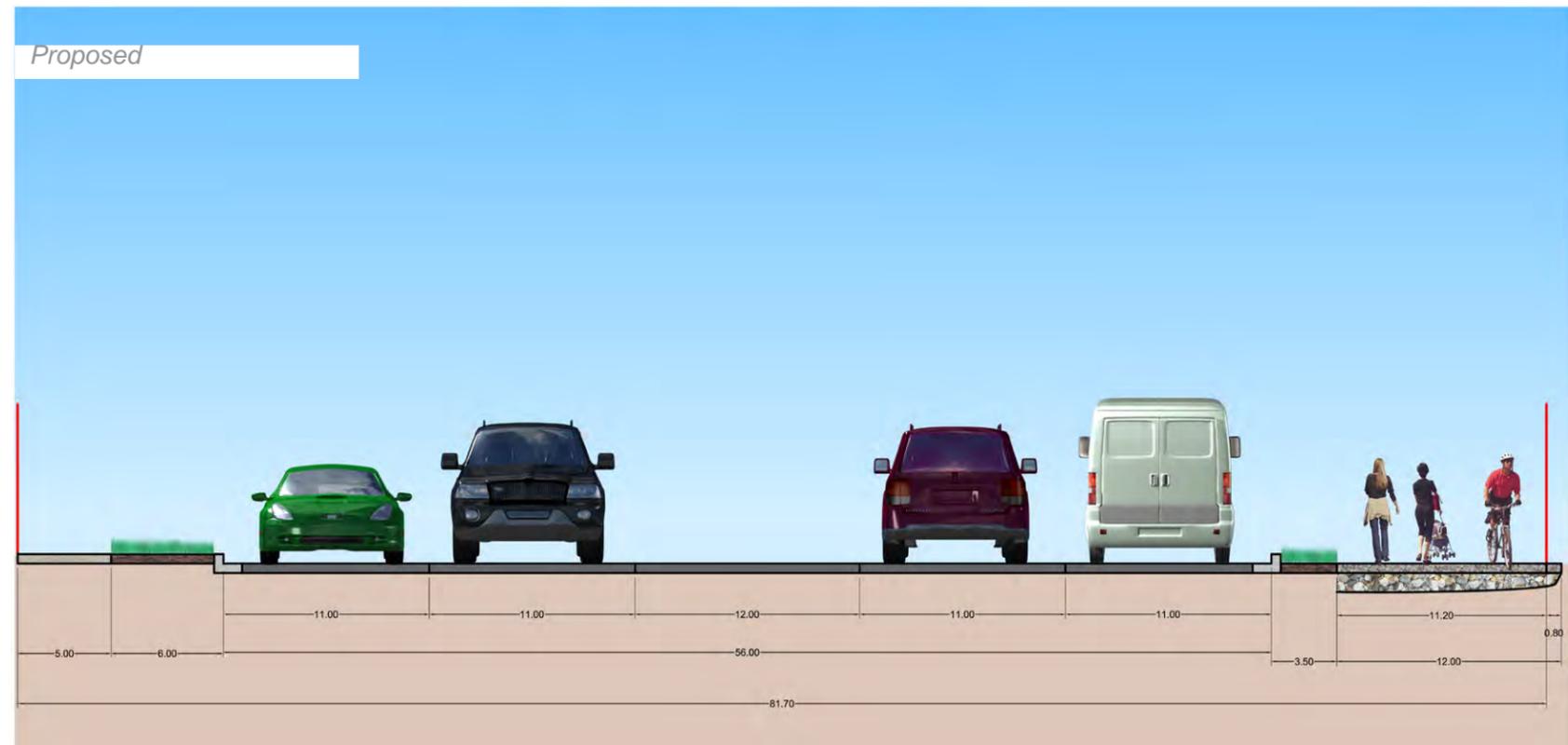
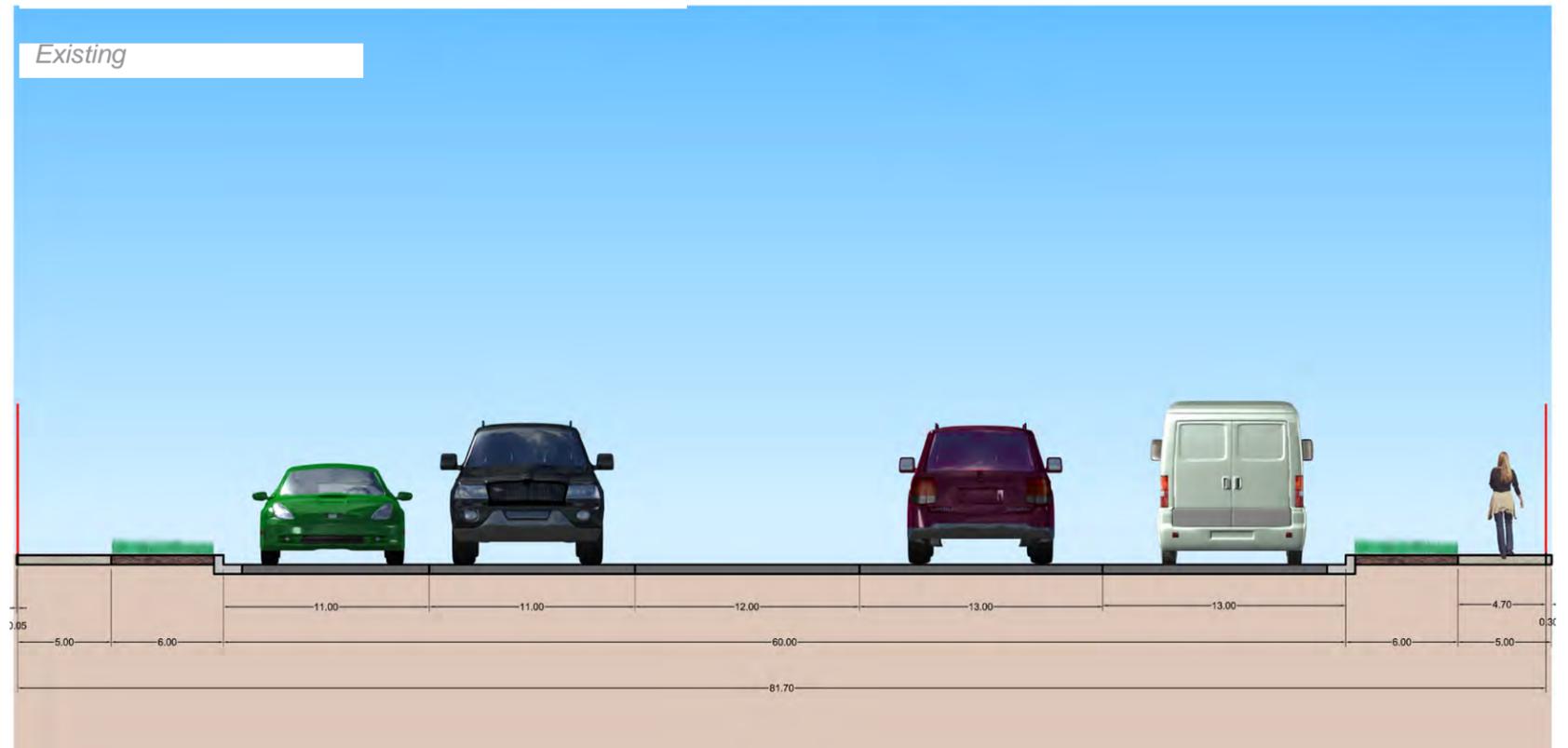


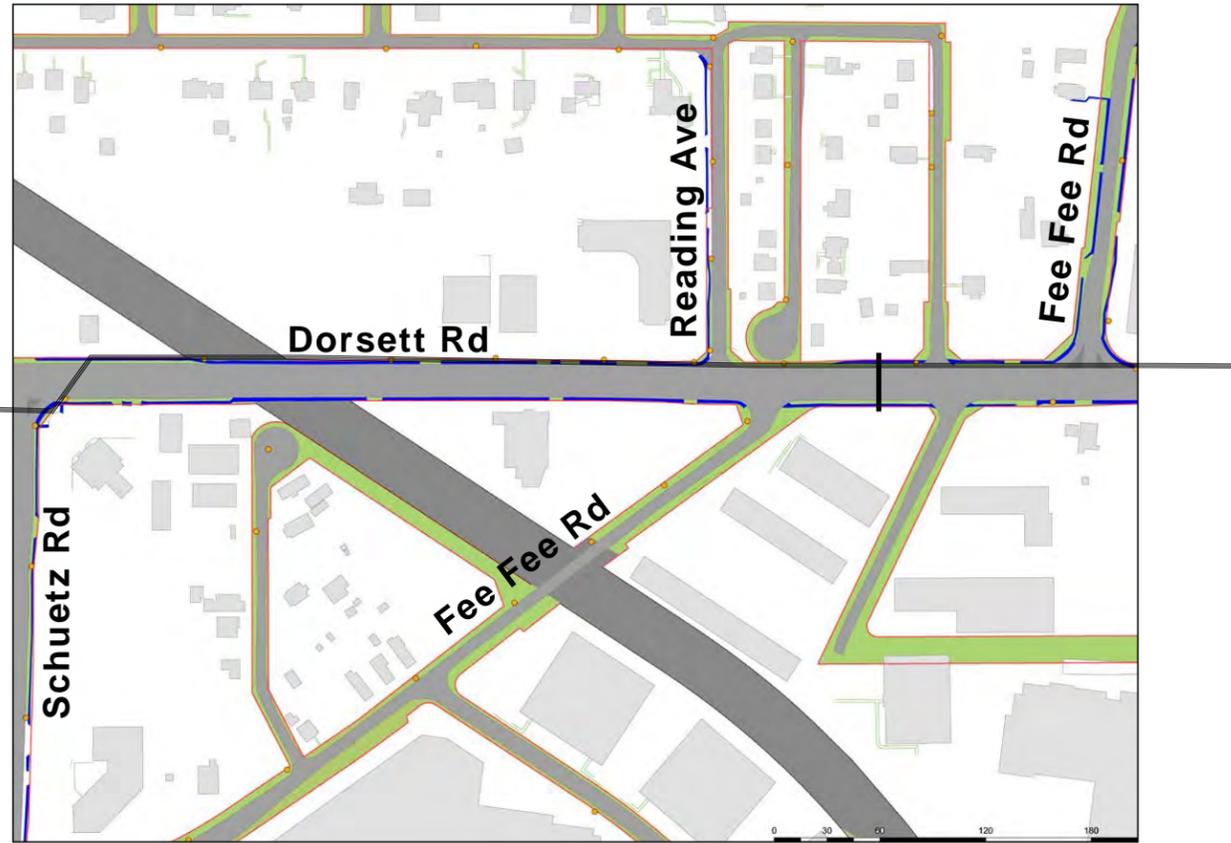


Existing Conditions Plan View

- PAVED ROAD
- SIDEWALK
- LAND OUTSIDE THE ROADWAY
- BUILDING
- RIGHT-OF-WAY BOUNDARY
- OVERHEAD UTILITY LINE
- EXISTING STREET LIGHT
- EXISTING ADA RAMP

F. Metro Boulevard to Schuetz Road

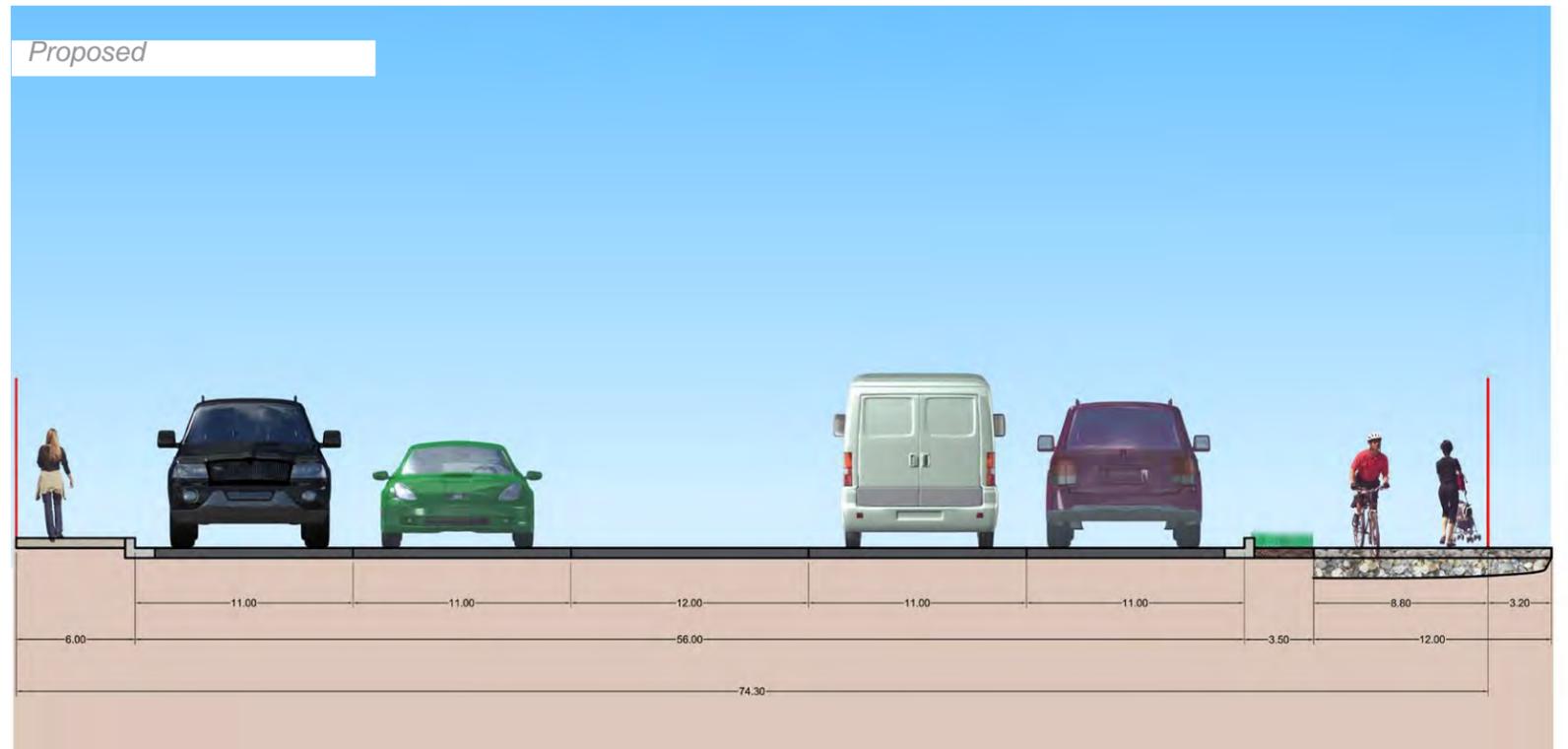
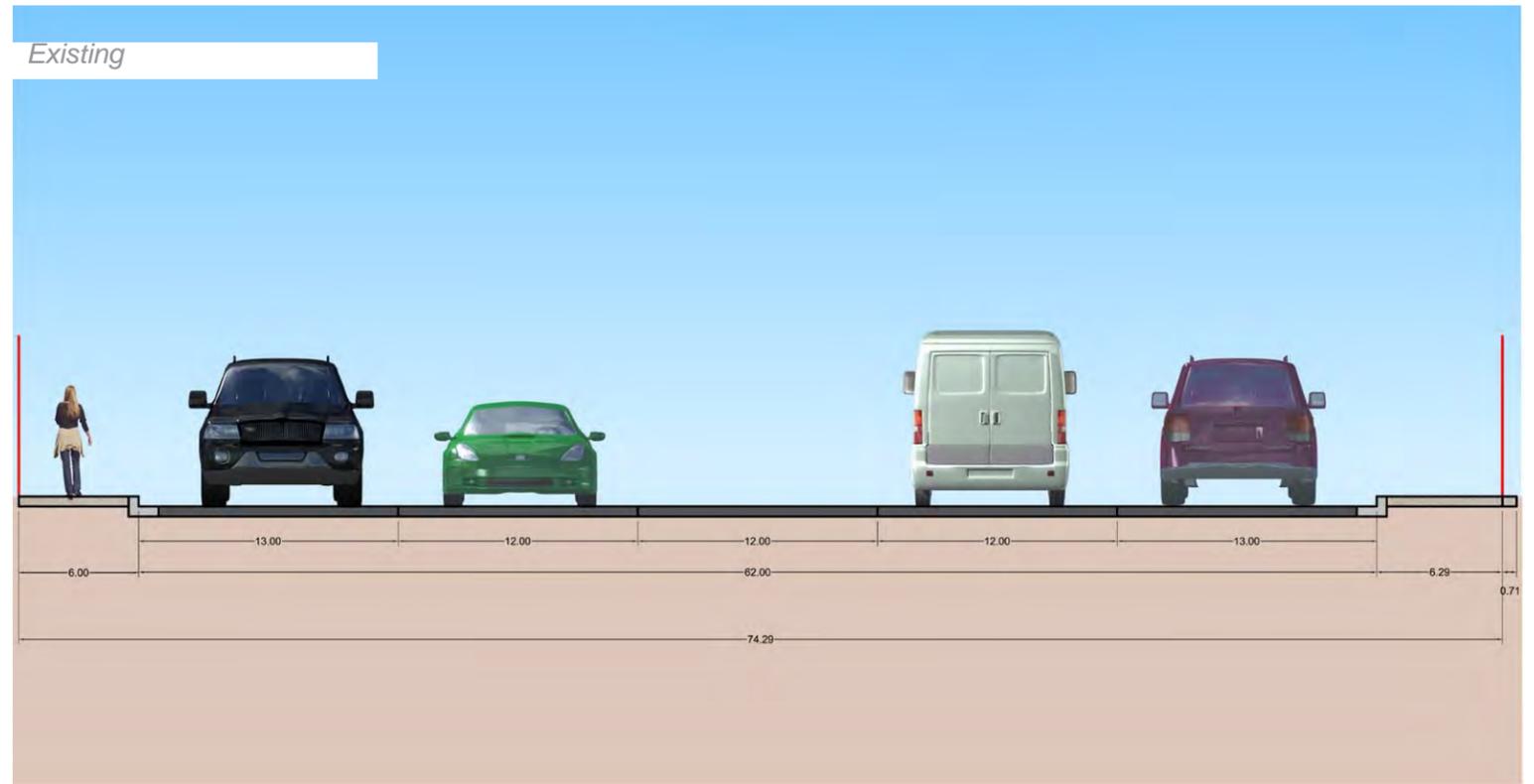


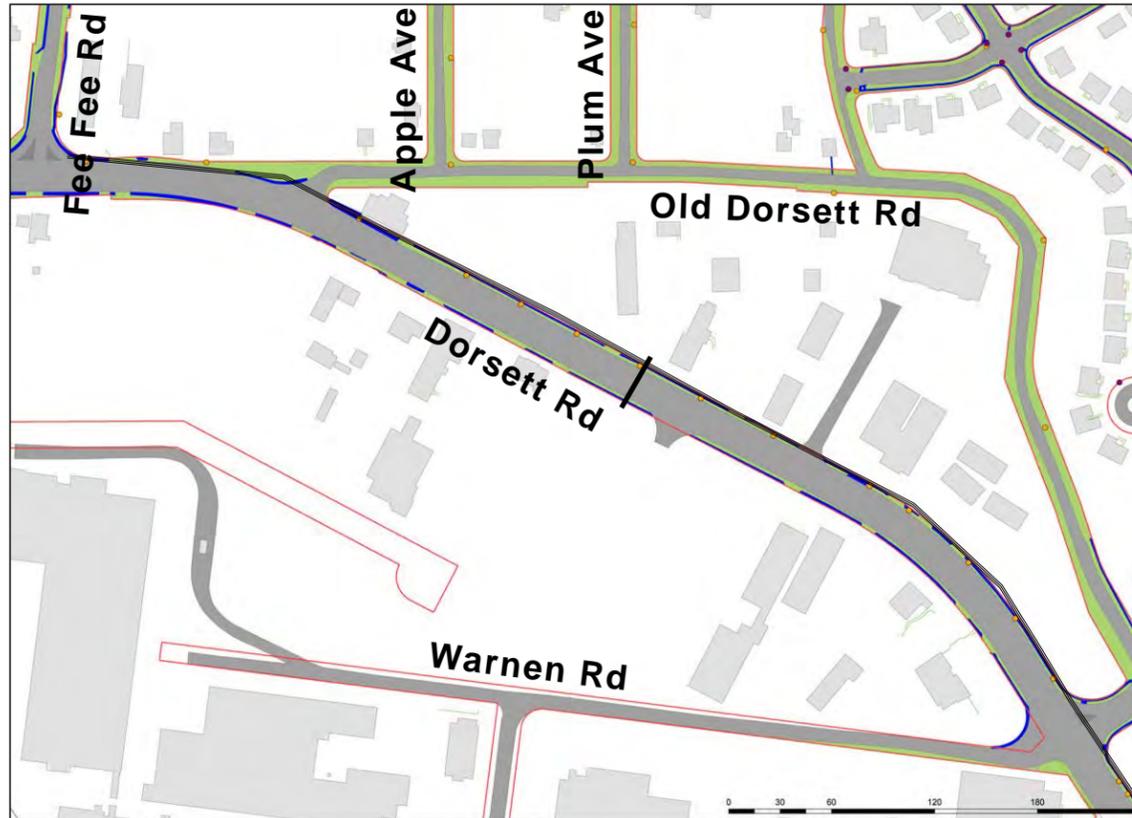


Existing Conditions Plan View

- PAVED ROAD
- SIDEWALK
- LAND OUTSIDE THE ROADWAY
- BUILDING
- RIGHT-OF-WAY BOUNDARY
- OVERHEAD UTILITY LINE
- EXISTING STREET LIGHT
- EXISTING ADA RAMP

G. Schuetz Road to Fee Fee Road

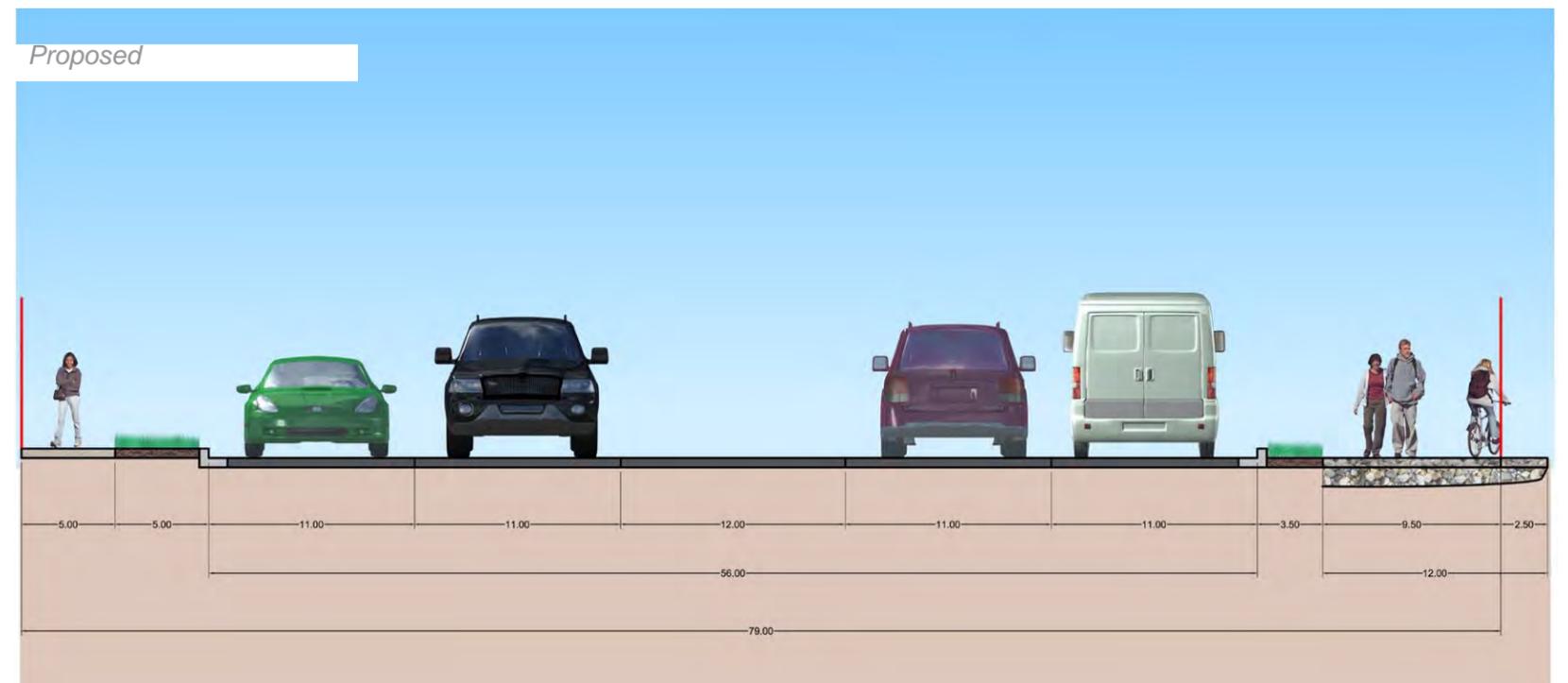




Existing Conditions Plan View

- PAVED ROAD
- SIDEWALK
- LAND OUTSIDE THE ROADWAY
- BUILDING
- RIGHT-OF-WAY BOUNDARY
- OVERHEAD UTILITY LINE
- EXISTING STREET LIGHT
- EXISTING ADA RAMP

H. Fee Fee Road to Warnen Road

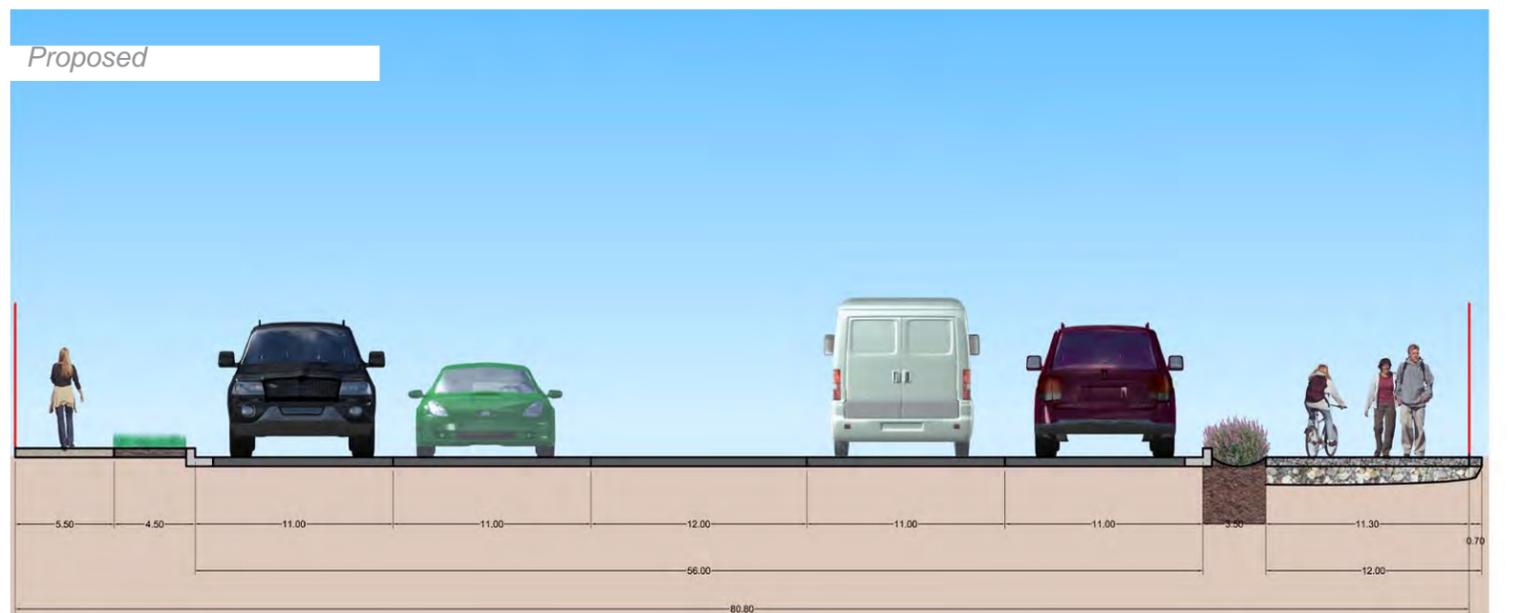
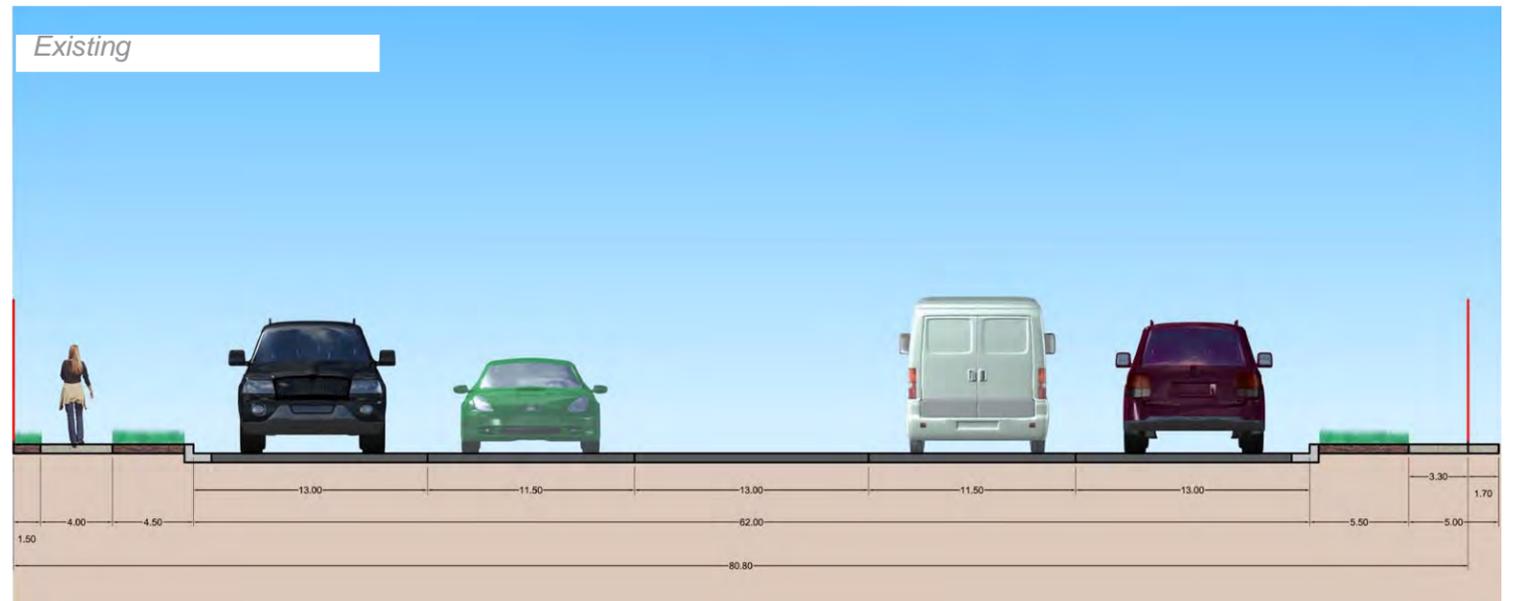




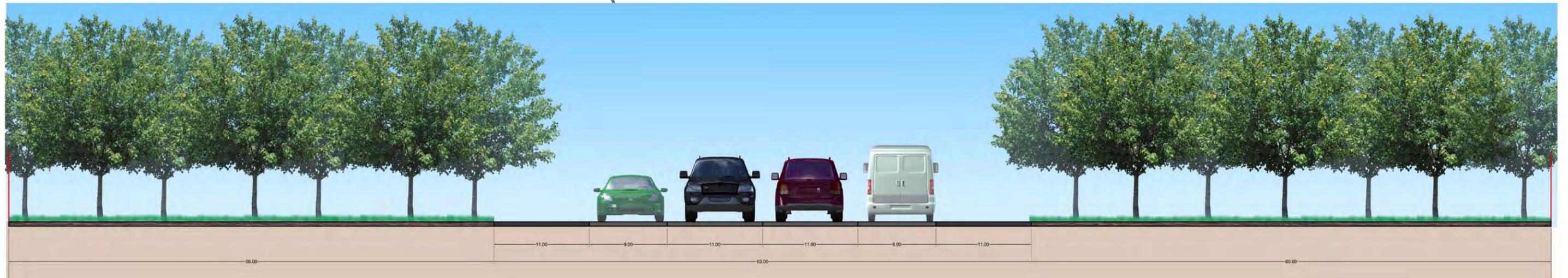
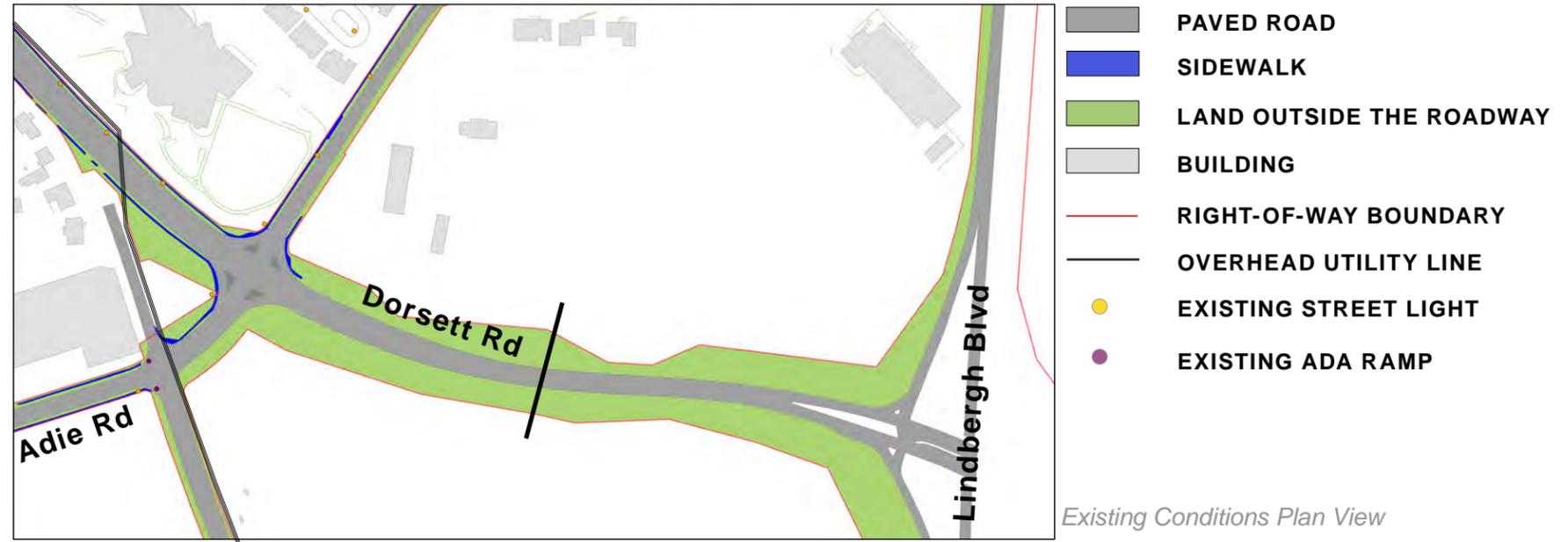
Existing Conditions Plan View

- PAVED ROAD
- SIDEWALK
- LAND OUTSIDE THE ROADWAY
- BUILDING
- RIGHT-OF-WAY BOUNDARY
- OVERHEAD UTILITY LINE
- EXISTING STREET LIGHT
- EXISTING ADA RAMP

I. Warnen Road to Adie Road



J. Adie Road to Lindbergh Boulevard



Planted Buffers: Landscape and Rain Gardens

An important element in the recommended plan is the provision of a continuous landscape buffer. Providing a buffer between the multi-use path and traveling vehicles adds to real and perceived safety levels for those using the path as well as drivers. It also increases level of service for pedestrians and bicyclists, and adds visual interest to the street by creating a visual break between the hard surfaces of the path and the road.

Choosing plants with structural, seasonal and colorful characteristics can help define districts within the corridor while maintaining an overall corridor-wide identity that is unique to Dorsett Road. The project team recommends that all planting materials in the landscape buffer be native to the Missouri landscape. The Maryland Heights Landscaping Design Standards document provides resources for native grasses, perennials and shrubs.

The project team has identified locations along the corridor where the topography of Dorsett Road is suitable for rain garden amenities within the landscape buffer. A rain garden is a sunken garden contained by curbs that allows runoff from the road to enter through a cut out or inlet. Check dams made of gravel should be provided to control water flow and encourage filtration. Perforated pipes should be included in rain gardens to capture emergency overflow.

These rain gardens will collaborate with the permeable multi-use path to capture stormwater and provide on-site treatment of runoff. Captured surface and stormwater runoff will infiltrate through the soil where pollutants are removed through a variety of mechanisms like adsorption, plant uptake, microbial activity and filtration. Water that is not absorbed by rain garden plants or infiltrated into the ground will be held in the system temporarily and then slowly returned to the storm drain system.

The following plants are recommended for these conditions by the Metropolitan St. Louis Sewer District and the Missouri Botanic Gardens.

Grasses/Sedges



Andropogon virginica
Broomsedge



Carex vulpinoidea
Fox sedge



Sporobolus heterdepis
Prairie dropseed

Forbs



Asclepias tuberosa
Butterfly milkweed



Echinacea purpurea
Purple coneflower



Lobelia cardinalis
Cardinal flower

The city and county should coordinate with the Metropolitan Sewer District on rain garden design and implementation.

Street Trees

Other plantings called for by this plan include a series of street trees along Dorsett Road to enhance the visual experience of travelling through the corridor, define different districts within Maryland Heights, and create comfortable, shady conditions for pedestrians, transit riders and bicyclists.

Street trees play an important role in the life of both urban and suburban environments. Some of the benefits trees contribute to communities across the nation include:

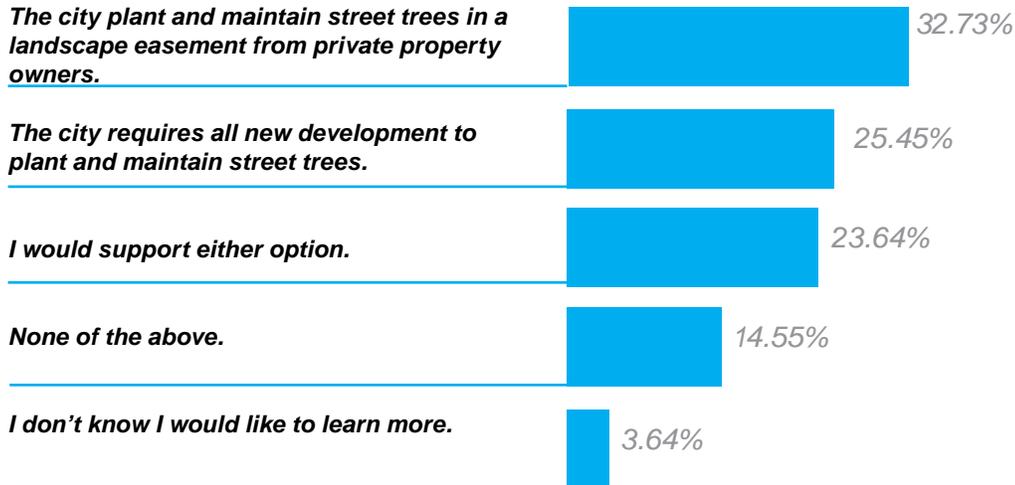
1. *Reduce the number of auto-related crashes and create safer walking environments.*
Urban street trees create a frame for streets, that provide a defined edge, helping motorists guide their movement and assess their speed. Street safety studies show that the presence of trees reduces the number of run-off-the-road crashes and crash severity, compared to tree-less streets.
2. *Increase security.*
Trees create pleasant walking environments which in turn increase neighborhood activity, rates of home ownership and care of place. Street trees have been linked to safer homes, blocks, neighborhoods, plazas, businesses and civic spaces.
3. *Increase revenues.*
Businesses on tree-lined streets on average report 12 percent higher income streams, which is often the essential competitive edge needed for Main Street store success, in competition with discount store outlets.
4. *Gas transformation efficiency.*
Trees in proximity to streets absorb nine times more pollutants than more distant trees, converting harmful gasses back into oxygen and other useful and natural gasses.
5. *Add value to adjacent homes, businesses and tax base.*
Realtors in national studies report premiums in assessed values of \$15,000 to \$25,000 for homes or businesses located adjacent to tree-lined streets, versus non-tree-lined streets. This often adds to the tax base and operations budgets of a city allowing for additional street maintenance funding. Future economic analysis may determine that this is a break-even for city maintenance budgets.
6. *Extend pavement life.*
Studies conducted in a variety of environments show that the shade of urban street trees can add from 40- 60 percent more life to costly pavement. This factor is based on the reduced daily heating and cooling (expansion/ contraction) of asphalt.



Sparse planting on Dorsett Road gives the corridor an unwelcoming look.

During the final public meeting, community members were posed the following question:

To include street trees along Dorsett Road, I would most support the following option:



With over 80 percent of community respondents voicing an interest in street trees, the project team recommends that the City of Maryland Heights work with local property owners to establish new tree plantings along Dorsett Road, following the Maryland Heights Landscaping Design Standards. Any trees planted within the right-of-way should adhere to the St. Louis County approved species list to minimize sidewalk safety concerns. The City of Maryland Heights and St. Louis County will work together to agree on maintenance for any non-standard plants or features located within the right-of-way and repair of any damaged infrastructure caused by non-standard features.

Newly planted trees along Dorsett Road should meet the following guidelines:

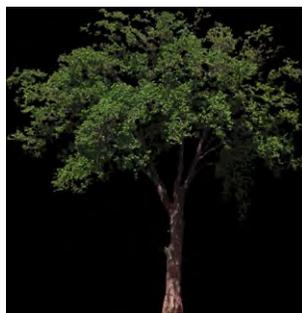
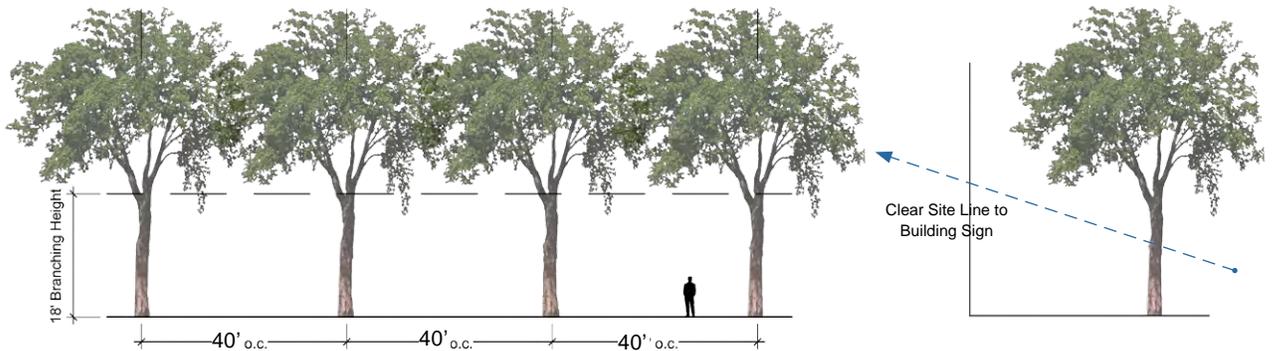
- **Avoiding Entrances:** Trees should not be placed directly in front of building entrances or exits.
- **Avoiding Intersections:** Trees should not be planted within 30 feet of a stop sign or stop light.
- **Avoiding Overhead Utilities:** Smaller trees should be utilized when overhead utility distribution lines are present.
- **Working with Business and Building owners:** The partnership with business owners is imperative when planting trees along Dorsett Road. Engaging business and building owners to assist in placement of the tree in front of their business or building is highly recommended, as this can alleviate any issues concerning the potential blocking of commercial signs along the corridor. Additionally, it is recommended that the business and/or building owner assist in the selection of a tree from a city recommended tree list. This engagement would help to build a base of business and building owners that have a vested interest in the tree near their business, which often leads to these business interests in turn assisting with the general care of the tree.

Recommended Tree Species

Planting trees in an urban street corridor can be both tricky and transformative. Most successful neighborhood places have a healthy presence of tree canopy. Current trends in design focus on the technical benefits of understory plant material, including reductions in ambient air temperature and the reduction and treatment of urban water runoff. To provide variety and continuity along the entire length of the project, the Dorsett Road Great Streets plan recommends consistent tree planting along the length of the corridor.

In general, large stately trees are preferred over small ornamental trees in order to give the corridor a more distinctive and solid quality. Species have been recommended based on their quality to perform in urban environments, structure, character, and fall color. Additionally, considerations in branching height for sight distances and retail signage have been incorporated into these recommendations. All recommended tree species are native to the Missouri landscape, or are cultivars of native species.

Tree Planting in Dorsett Retail Environments



Ulmus 'Frontier'
Frontier elm



Tilia americana
American linden



Platanus x acerifolia
London planetree

Special height considerations are given for trees located under overhead utility lines. In these conditions the project team recommends the following species.



Acer x freemanii
Autumn blaze maple



Caprinus caroliniana
American hornbeam



Celtis occidentalis
Common hackberry

Recommended Tree Soil Volume

In urban environments, tree soil volume is most commonly the deciding factor for street tree health. The recommendation of the project team is that all street trees be planted with a minimum of 500 cubic feet of soil and a goal of 1,000 cubic feet of soil. Soil that may be counted in this calculation includes un-compacted soil with an organic matter percentage of at least three percent.



This illustrative plan shows street trees located outside the yellow right-of-way line at Fee Fee Road and Dorsett Road.

Priority: Improve night-time safety for pedestrians, bicyclists and transit riders by installing new street lights.

The public noted in initial surveys and feedback that the Dorsett Road corridor currently feels very dimly lit in most places. The existing street lights are unattractive, inefficient and focused mainly on lighting the road. Street lighting can have a number of significant impacts on suburban corridors:

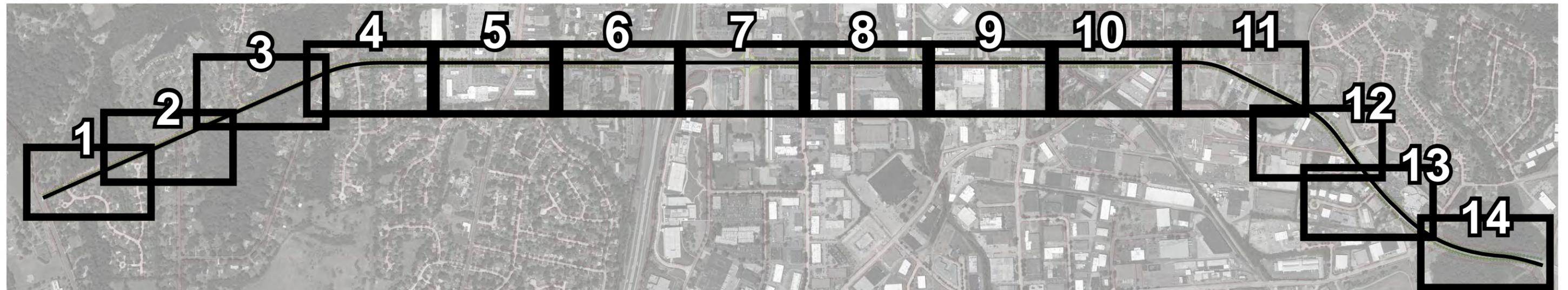
- Street lights increase safety both along the streetscape and in areas that people frequent, such as doorways and bus stops.
- Lights aid in geographic orientation, as people can use well-lit focal points (buildings, overpasses, public art, etc.) as landmarks to help them find their way.
- Street lights can highlight the identity of a corridor or district, because well-lit details will draw attention to the uniqueness of an area.

The project team recommends that the city work with St. Louis County to pursue the installation of new pedestrian-level, dark-sky compliant, LED street lights adjacent to the multi-use path along Dorsett Road. Any non-standard features explored by the city will require a maintenance agreement between the City of Maryland Heights and St. Louis County. The style of street lighting that is implemented should be compatible with the other recommended street elements, such as benches, bus stops, and waste receptacles, to reflect the quality of the street, and potentially enable the off-street area (sidewalks, plazas, pocket parks) to be more conducive to pedestrian and merchant activities.

Additionally, the city should work with St. Louis County to explore the replacement or modification of existing, aging road-oriented street lights. More efficient and attractive lights would benefit the community and help to create an identity for Dorsett Road.

THE STREET

The following 14 pages contain the **illustrative plan** for the Dorsett Road Great Streets street improvements recommended by the project team.



The improvements along Dorsett Road will require the design of a system that will account for MSD's stormwater requirements, including conveyance, quantity, and quality.

- The existing storm sewers and structures along Dorsett Road should serve to adequately convey the stormwater by designing modifications to the inlet locations relative to the proposed improvements. If the curb line is moved then the curb inlets should be adjusted along stretches of Dorsett Road in order to ensure the adequate drainage of the street.
- The stormwater volume should not increase if the pavement width along Dorsett is reduced and the new paths along the side of the road are constructed of a permeable pavement. Therefore, in aggregate, the recommended improvements along Dorsett Road should not require the construction of any additional stormwater detention capacity along the corridor. If the pavement material for the paths changes from pervious to impervious pavement then stormwater detention may be required.
- Water quality management is required if an acre or more is disturbed. A 3,630 ft long, 12'W path is one acre, and the Dorsett Road corridor is over three miles long, therefore water quality will be required for improvements along Dorsett Road. The combination of pervious pavement and rain gardens will satisfy most of the water quality requirement, if these are not able to fully meet the requirements within each drainage area then a proprietary BMP device such as a hydrodynamic separator could be used to meet the remainder of the requirement.

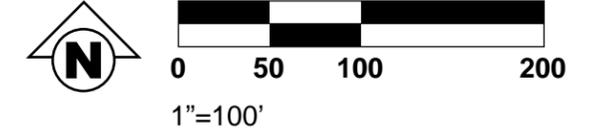


-  Landscape Buffer
-  Rain Garden
-  Multi-Use Path
-  Right of Way (ROW)
-  15' Planting Zone



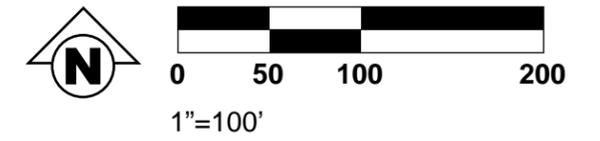


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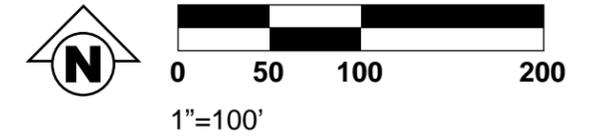


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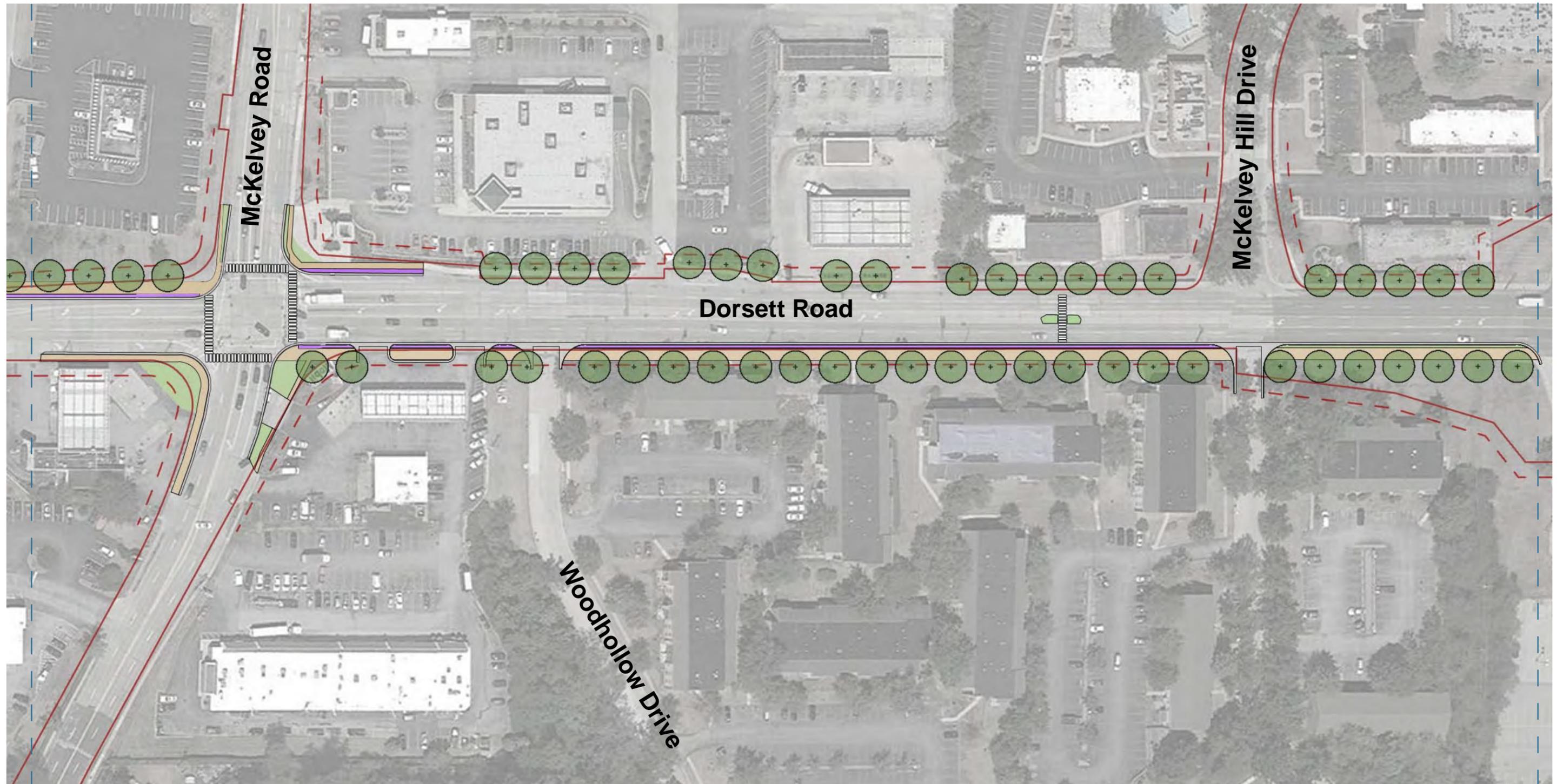
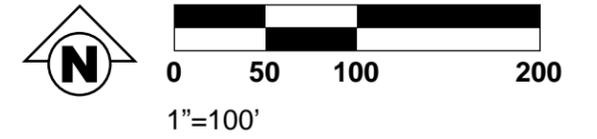


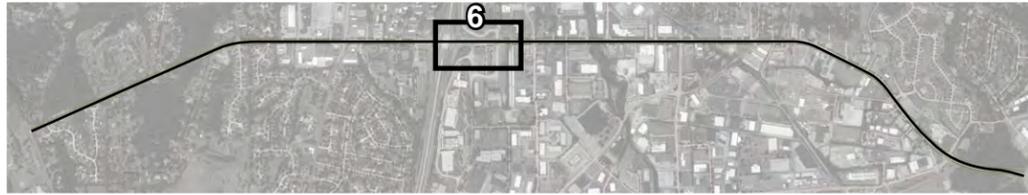
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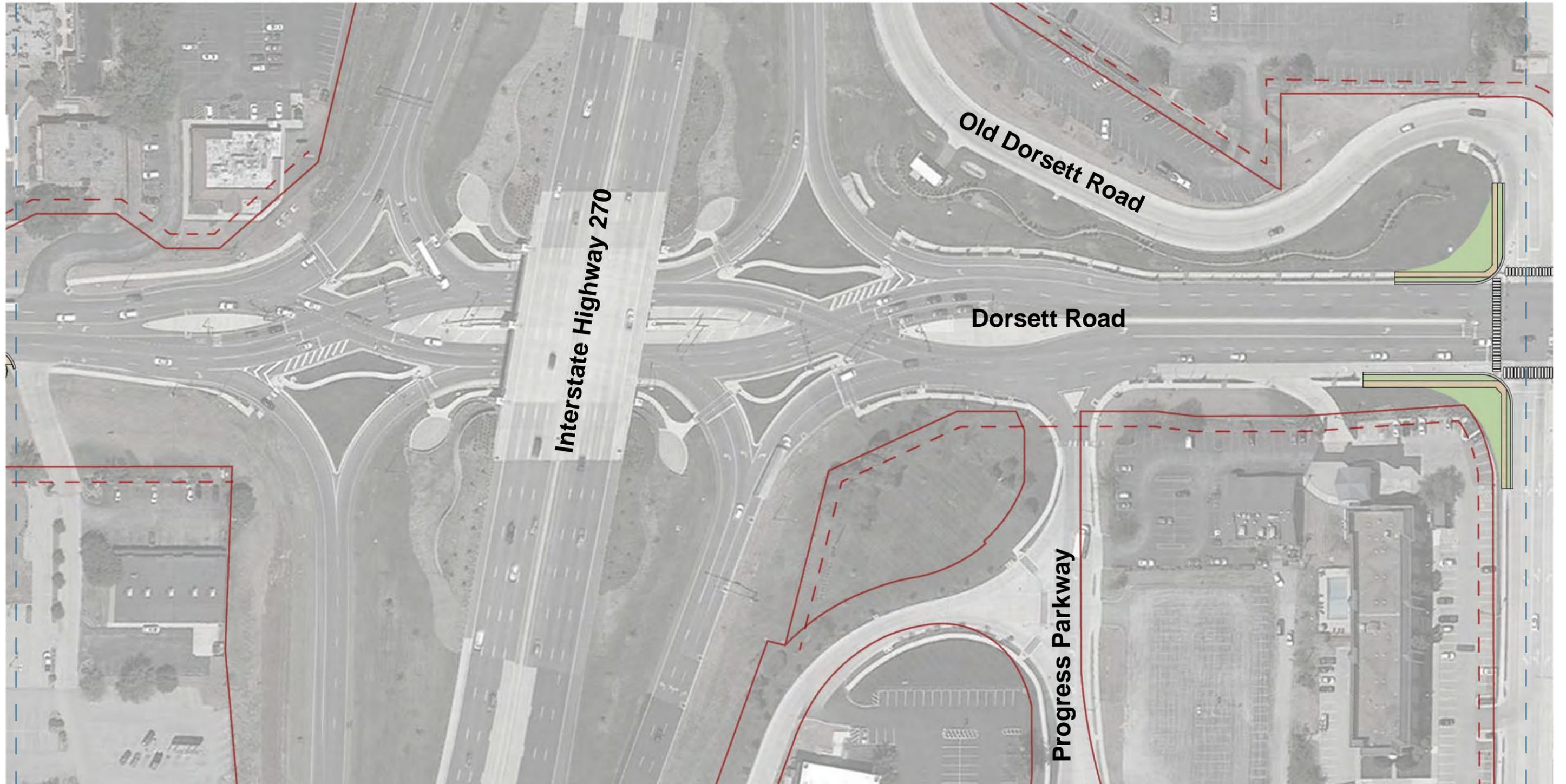
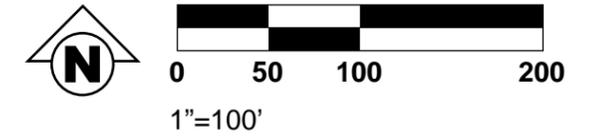


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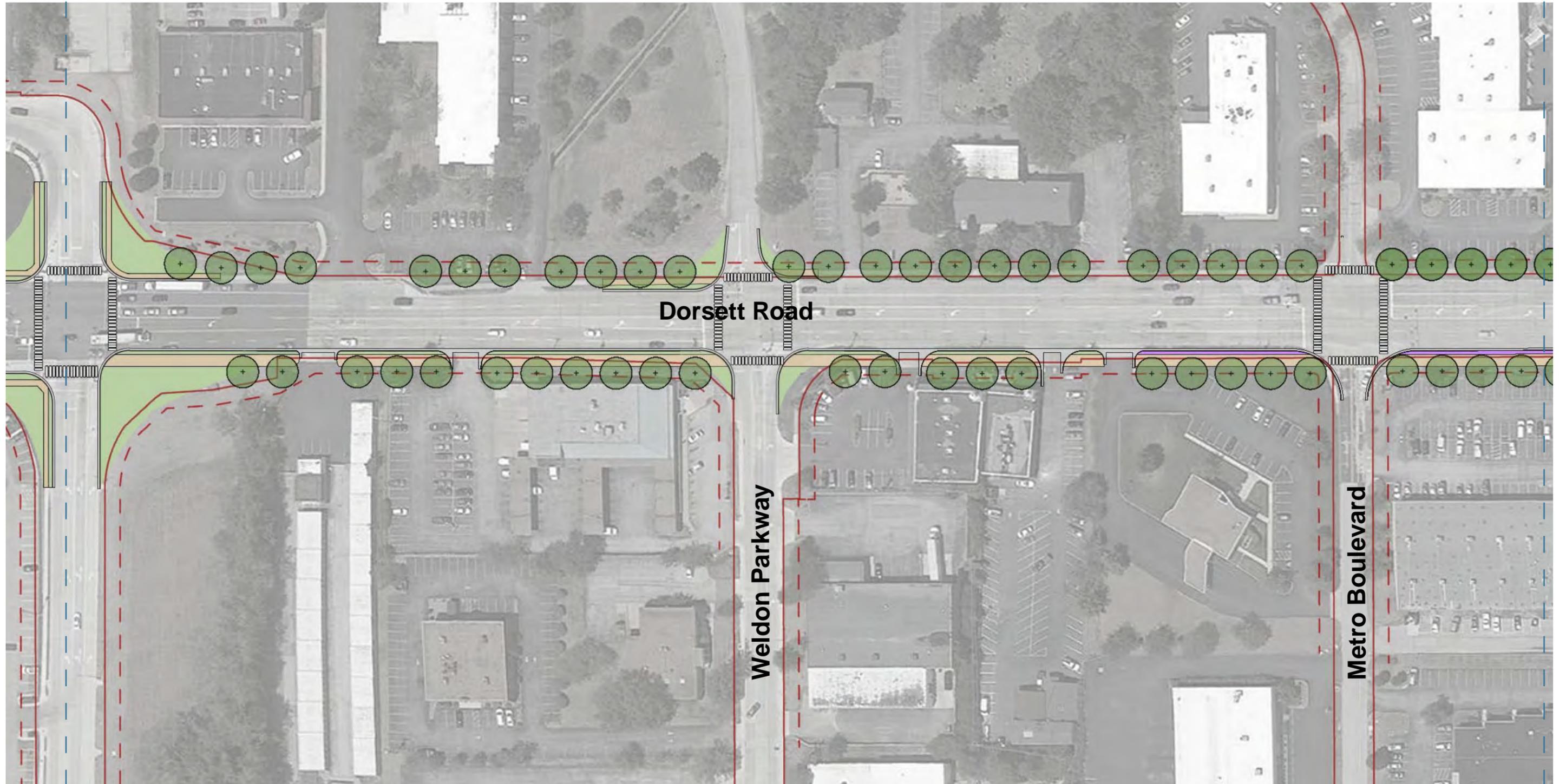
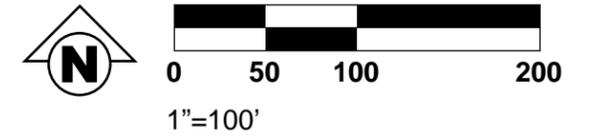


- Landscape Buffer
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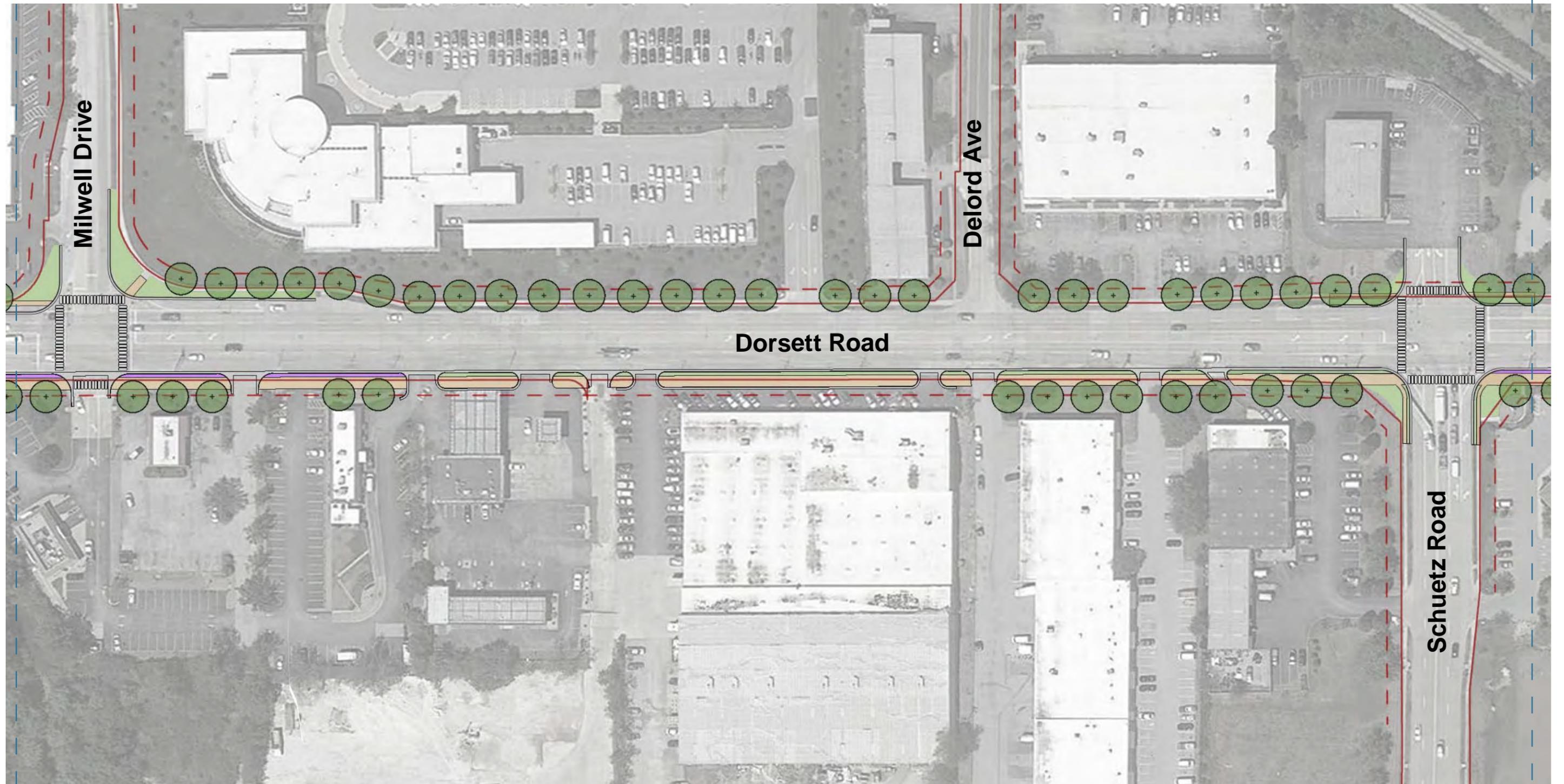
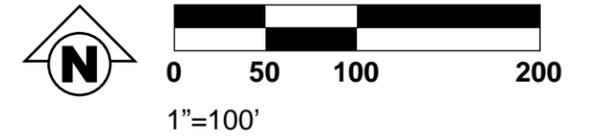


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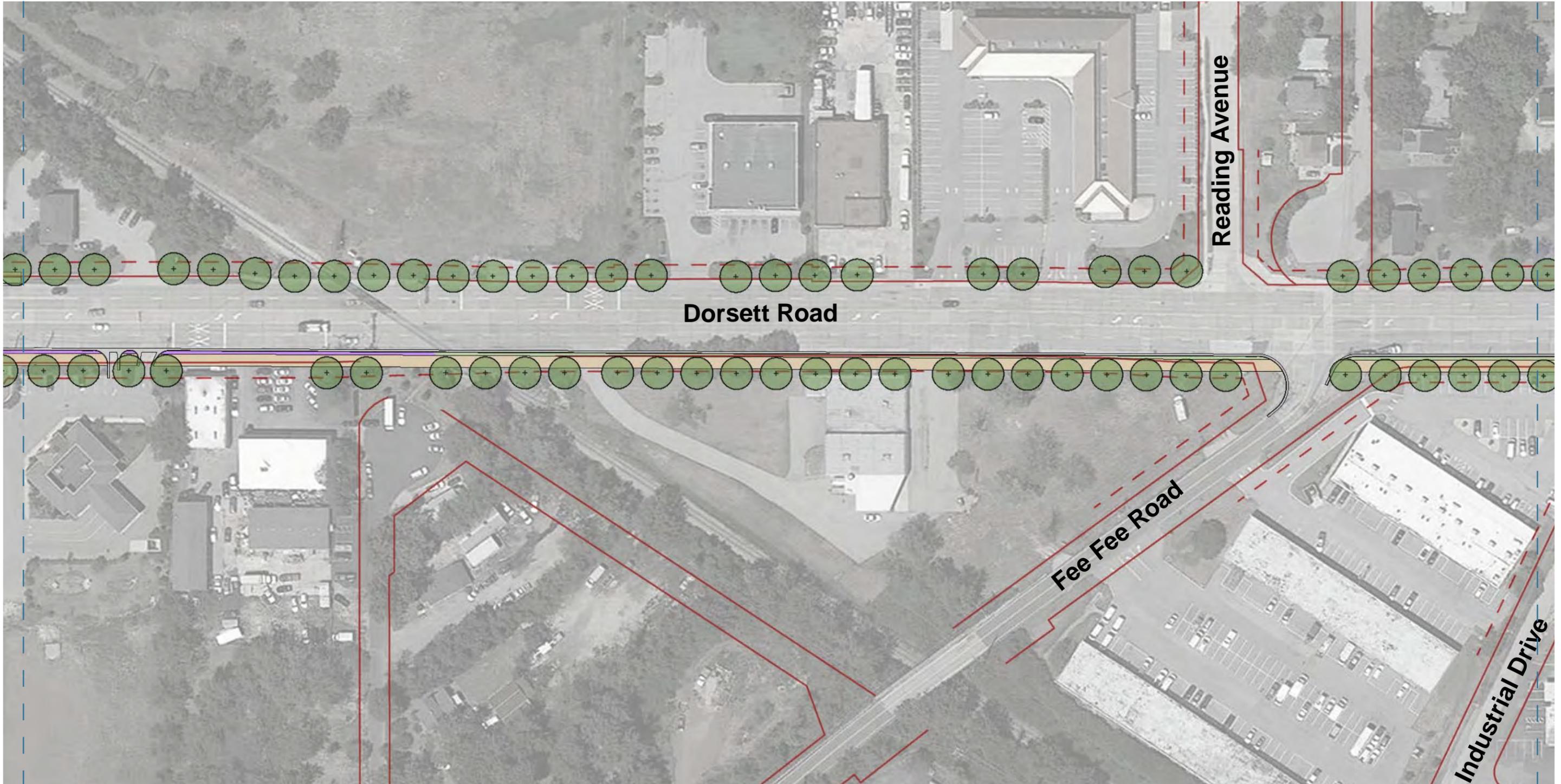
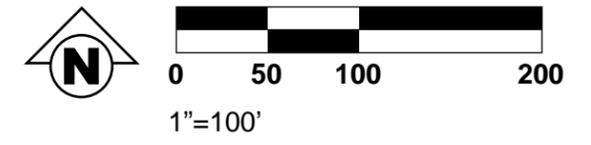


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-  Right of Way (ROW)
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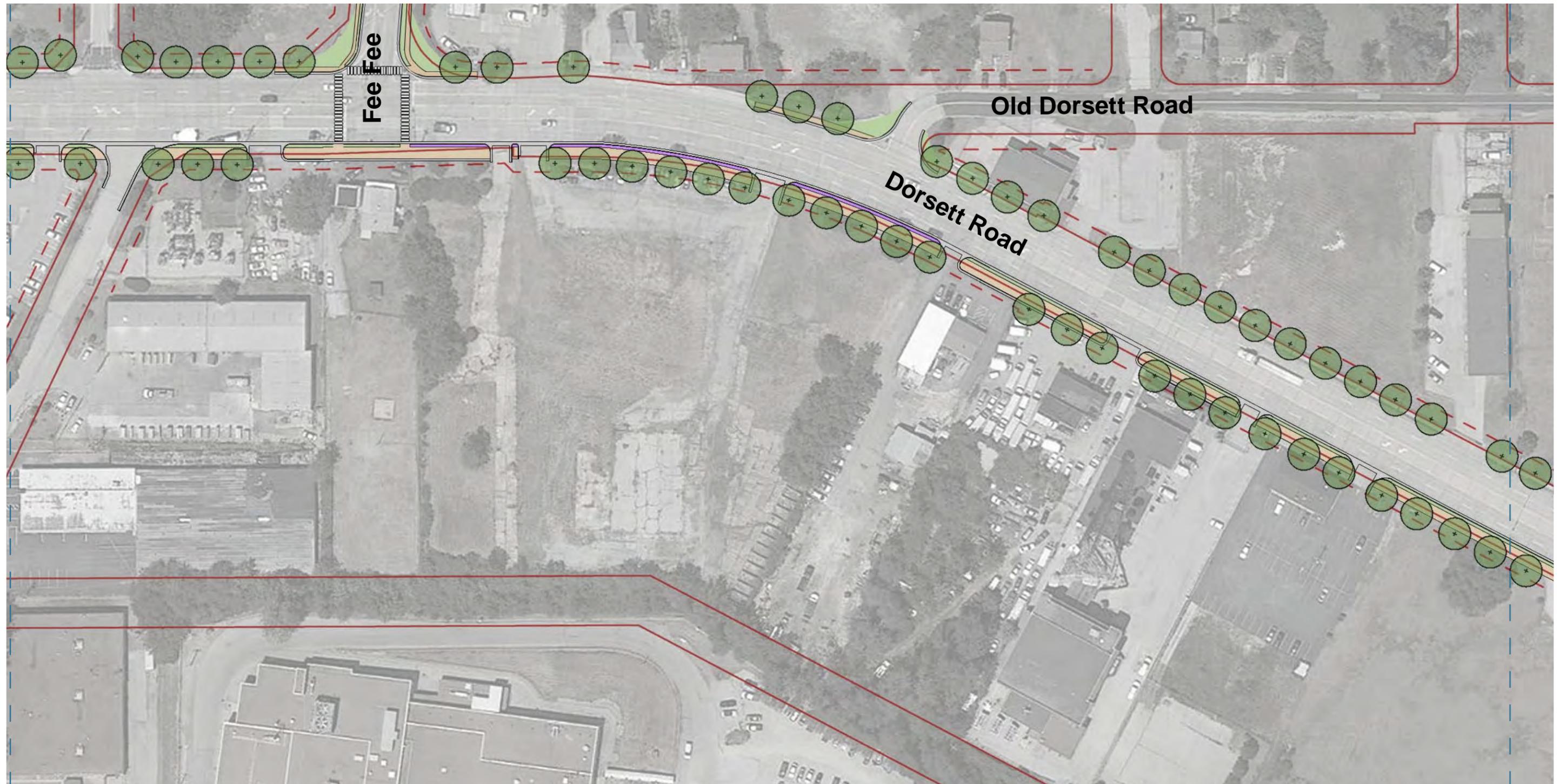


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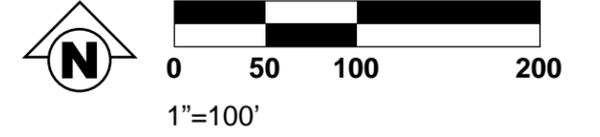


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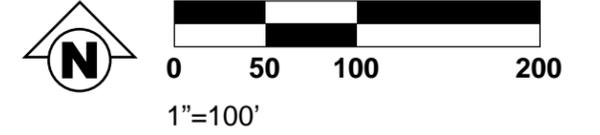


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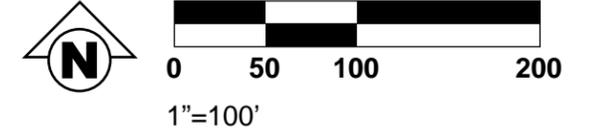


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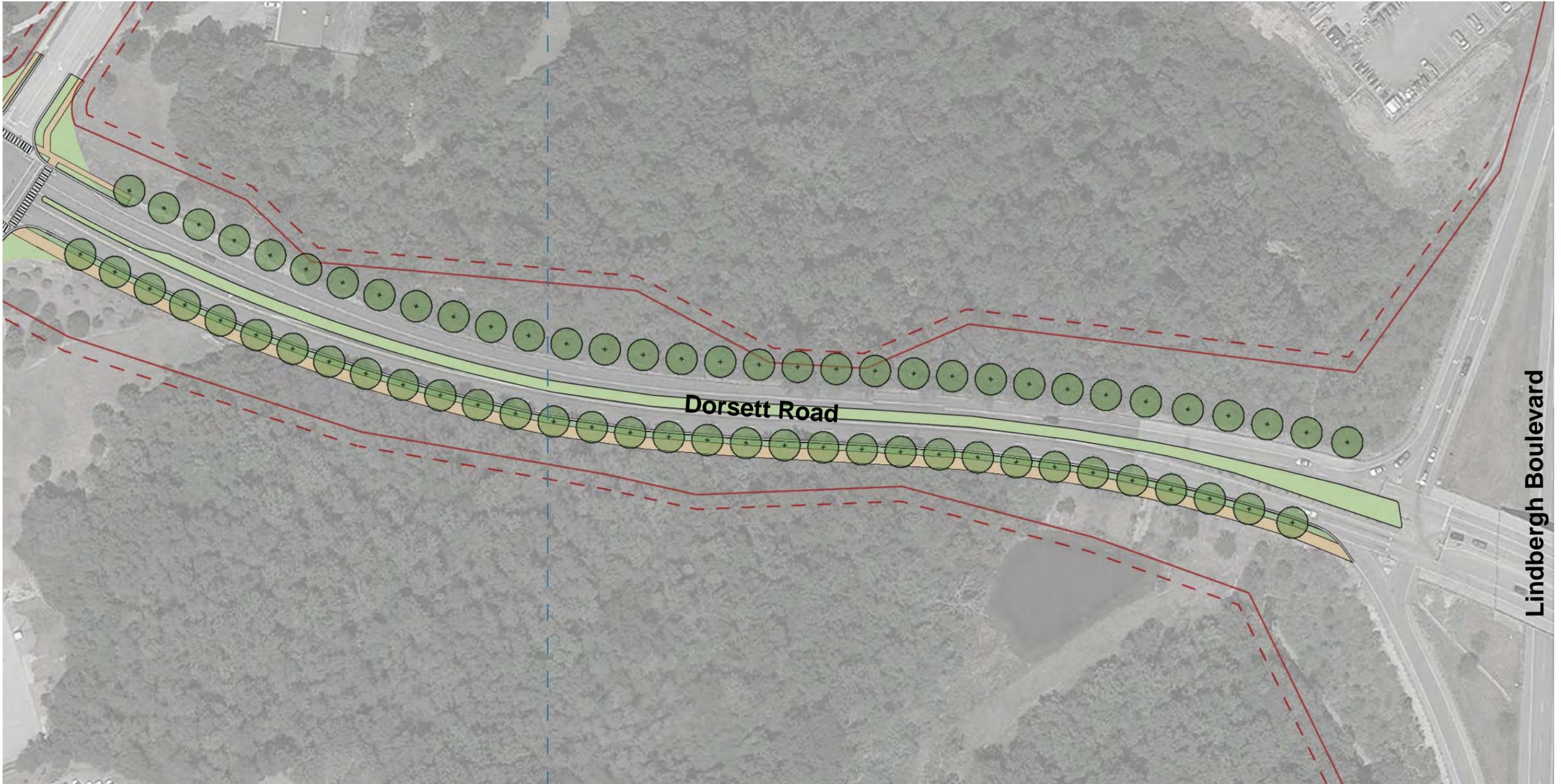
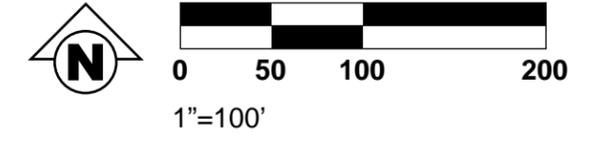


-  Landscape Buffer
-  Rain Garden
-  Multi-Use Path
-  Right of Way (ROW)
-  15' Planting Zone





- Planting Strip
- Rain Garden
- Multi-Use Path
- Right of Way (ROW)
- 15' Landscape Buffer



OPPORTUNITIES

Improvements to **THE STREET** will go a long way to enhance the corridor's accessibility, improve its aesthetic value and create an identity for Dorsett Road and Maryland Heights. Looking outside the right-of-way, there are a number of **OPPORTUNITIES** within the study area that may be suitable for redevelopment in the coming years that can both benefit from and add to the recommended street enhancements. Taking advantage of these opportunities will help the city, local developers and property owners further solidify Dorsett Road as a Great Street in Maryland Heights.

Parcels identified for short-term redevelopment

A number of key parcels along the corridor are currently available for occupancy and may represent short-term opportunities for redevelopment and revitalization along the corridor. The conversion of these properties to different uses, or improved aesthetic conditions, would help set the stage for later, larger scale redevelopments along Dorsett Road. Investment in these properties would also help to improve the overall condition of the corridor in the near term, with limited involvement from the city. The project team has identified some of the key parcels suitable for near-term revitalization or conversion as the Dorsett Road Great Streets Plan moves forward.

Blast Fitness building

Located west of the McKelvey Road and Dorsett Road intersection at 12703 Dorsett Road

The former Blast Fitness building is located on a ridge to the west of the Schnucks grocery store in the northwest quadrant of the intersection. The existing building has presented issues in terms of code violations and economic vitality over the past several years. In the short-term, this building could be converted to other retail uses. In the long-term, the site could be redeveloped into a mixed-use area that might include a mixture of stores, restaurants, and a residential or senior housing component (particularly on the west and north edges). This would help buffer existing residents from the retail land uses in the McKelvey / Dorsett vicinity.

Ryce Oriental Buffet property

Located south of Dorsett Road and West of McKelvey Road at 12710 Dorsett

Community members voiced interest in the conversion of the Ryce Oriental Buffet property. This site could be redeveloped in the very near term into a variety of retail options, including quick casual restaurants such as St. Louis Bread Co. or Chipotle. The relatively large space might also be revitalized as a fine dining restaurant. Conversion to neighborhood retail and service uses such as a dry cleaner, pharmacy, or similar options is also a possibility.

Quality Inn (including Syberg's)

Located at the northeast corner of I-270 and Dorsett Road at 2434 Old Dorsett Road

The hotel on this property has existed for several decades. According to a number of sources in the real estate field in St Louis, it is a likely target for redevelopment given its age and current condition. This property has the potential to be redeveloped into a newer hotel or a signature restaurant location coupled with in-line retail that would have the opportunity to take advantage of the property's adjacency to I-270. This property enjoys the best sight lines onto I-270 in Maryland Heights, and therefore the city should work with property owners to maximize the potential benefits resulting from redevelopment of this key parcel.

PROJECTS

As Dorsett Road continues to evolve over the next thirty years, there are a number of **PROJECTS** that the city should explore with community input and participation. These projects will build off improvements made to the corridor and help to build a sense of place in Maryland Heights.

Public Art

Public art is an important component to creating Great Streets. Art can draw out and highlight the qualities that make a place special. It can make cities welcoming to inhabit, comfortable to walk in, and interesting to explore. Art can support economic vitality, by helping to strengthen the identity and attractiveness of a place, and therefore making it more attractive to businesses and consumers.

Public Art Project Recommendations

Public art will help make Dorsett Road a functional, attractive, and vital corridor that is at the heart of Maryland Heights. The following offers different approaches and options for public art projects within the study area. Any piece of public art in Maryland Heights must be located outside the county right-of-way and not cause sight distance restrictions for motorists, pedestrians or bicyclists. Any artwork contemplated within the right-of-way requires approval by the St. Louis County Highways and Traffic Department in addition to a maintenance agreement between city and county.



1. Dorsett / McKelvey Community Marker Today, this intersection supports a busy retail environment. As development continues to occur, this area would be a prime location for artwork that would act as a community landmark.



2. Progress Parkway Roundabout This is a great location for a sculptural work of art. This piece would serve as a gateway to the Weldon Progress Corridor. The scale of the piece should be so that it can be appreciated by passengers in moving vehicles, as well as pedestrians walking down the street.



3. Private Development Artwork As new private development occurs in various locations along the corridor, developers can be encouraged to incorporate the work of artists in their design. Artists could be commissioned to integrate works of art that enhance these facilities and create a sense of place. Projects could range from works integrated into the entry or façade

of the facility, artistic wayfinding/building numbers, and, if the developer is creating public amenities for a campus-like development, sculpture or functional artworks that encourage walking and lingering.



4. Fee Fee Creek A park along Fee Fee Creek could be an ideal location for a work of art that addresses the flow of stormwater into the creek and serves as an aesthetically pleasing and educational amenity. An artist could be commissioned to create a stormwater garden, or work with park designers to develop other stormwater facilities such as cisterns or bioswales in the park.

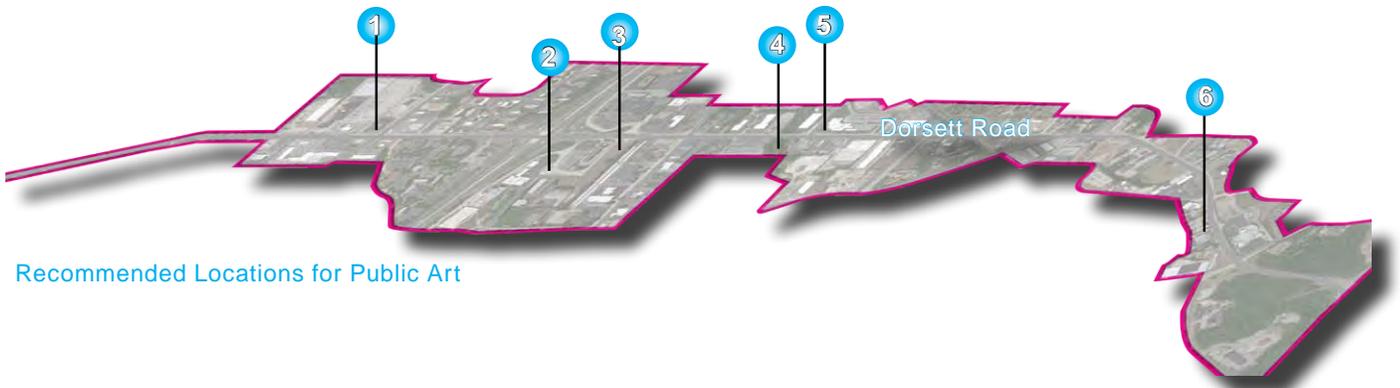


5. Maryland Heights Government Center

A work of art on Dorsett Road in front of the Government Center could elevate the visibility and civic importance of this facility, and further enhance the experience of driving down Dorsett. The entry to the Government Center from the parking area on the north side of the building could also be enhanced with public art. One approach

might be to retrofit the existing fountains with mosaic work or to integrate sculpture into the fountains. Since the Government Center shares a building with the Maryland Heights Police Department, art that acknowledges civic contribution could help to define a site for holding outdoor civic ceremonies or create a small plaza space.

6. Eastern Gateway As you drive west along Dorsett from Lindbergh Boulevard, you emerge from a wooded area at Adie Road. This area, across from Ranken Jordan and heading west for about one-quarter to one-half mile, could be a place for a signature architectural or artistic landmark that welcomes people to Maryland Heights and becomes an emblem for the community. This could be accomplished through new development in this zone creating an architectural statement that addresses the street.



Recommended Locations for Public Art

Planning for Public Art

Public art as part of the Dorsett Road Great Streets Plan will support goals developed by the Maryland Heights Cultural Arts Commission to provide public art of exceptional quality and diversity that adds to the community’s vibrancy and identity. To support its new art initiative, the City of Maryland Heights may wish to create a citywide public art master plan. A master plan is a document that asks and answers the “who, what, where, when, why and how” questions of the public art initiative. The Cultural Arts Commission has begun the process of answering these questions in the Maryland Heights Public Art Policy (2013). With the city’s guidance, a public art master plan to move this policy forward should focus on developing an action plan for the proactive commissioning and acquisition of public art.

VISION: A PUBLIC ART MASTER PLAN OFTEN BEGINS WITH A VISION – A BIG PICTURE VIEW OF A COMMUNITY’S ASPIRATIONS FOR ITSELF AND FOR THE PUBLIC ART INITIATIVE.	
Why?	What can public art bring to Maryland Heights? What impact can it have in the community?
PROJECTS PLAN: A public art master plan can articulate a priority list of public art opportunities for the community.	
Where?	What are the most important places for commissioning public art in Maryland Heights?
What?	What are the goals for public art at these locations? What opportunities are there for educational programs to be developed around projects?
When?	What are the highest priority opportunities? What other projects happening in the city impact the time frame? What is the time line for completing them?
How?	How will works of art be commissioned? How will they be funded?
Who?	Who will be responsible for implementation? How are artists selected? Who is involved in making the decision? Who is accountable? What are the roles for key stakeholder groups? What partnership opportunities exist?

Artist Selection and Design Review

The Maryland Heights Public Art Policy provides guidelines for the acquisition of public art, as well as the review of gifts, loans, and memorials. For many of the opportunities outlined above, artists would be commissioned through a competitive process to create work specifically for the project and the community. Artist selection, design review and project oversight should follow established best practices in the field.

Funding Options

As part of the master planning process, different types of funding options should be explored for public art. Some options for consideration might include:

Percent for Art Percent for art is a public art funding mechanism in which a set percent (generally .5 to 2 %) of capital project funds are set aside for the commissioning of public art. Of the 400-plus public art programs in the US, a majority are funded through this type of mechanism. These funding mechanisms are usually established by Ordinance.

Annual Allocation Some public agencies have avoided or moved away from percent for art in order to have a more flexible and stable source of funding for public art. A simple way to do this is an annual allocation. An amount deemed appropriate to help forward the

objectives of the plan would be identified and would be a part of the City's operating or capital budget.

Grants The City can continue to seek grants to support its public art initiative. There are limited opportunities, and these grants are highly competitive. However, there may be one or two projects from the Dorsett Road corridor that lend themselves well to a major grant.

Local Fund-raising The City may have success in raising funds through asks to individuals and businesses in the community. To give the fund-raising some focus, there could be an annual signature event that brings in sponsors as well as individual donations.

Gifts and Loans Many communities have been successful in building a public art collection through gifts of artwork or long-term loans. The gift or loan may or may not include costs related to installation, de-installation, lighting, conservation, insurance, etc.

Developer Contributions Some communities have had success in supporting public art through new private development. Public art in private development programs can work in different ways.

- All developers (generally in a specific part of the city, of a certain type of zoning, of a certain size, etc.) are required to provide public art in their development or make a contribution to a public art fund.
- Developers can provide public art or contribute to a public art fund as part of a negotiated re-zoning or in exchange for a benefit they are receiving from the City (density, parking exemptions, etc.).
- Developers who are responding to a City-issued Request for Proposal (RFP) are requested to include public art as part of their development proposal.
- Developers who are building an asset that will become City property (i.e. a park or trail), are required to incorporate public art.

Open Space, Parks and Trails

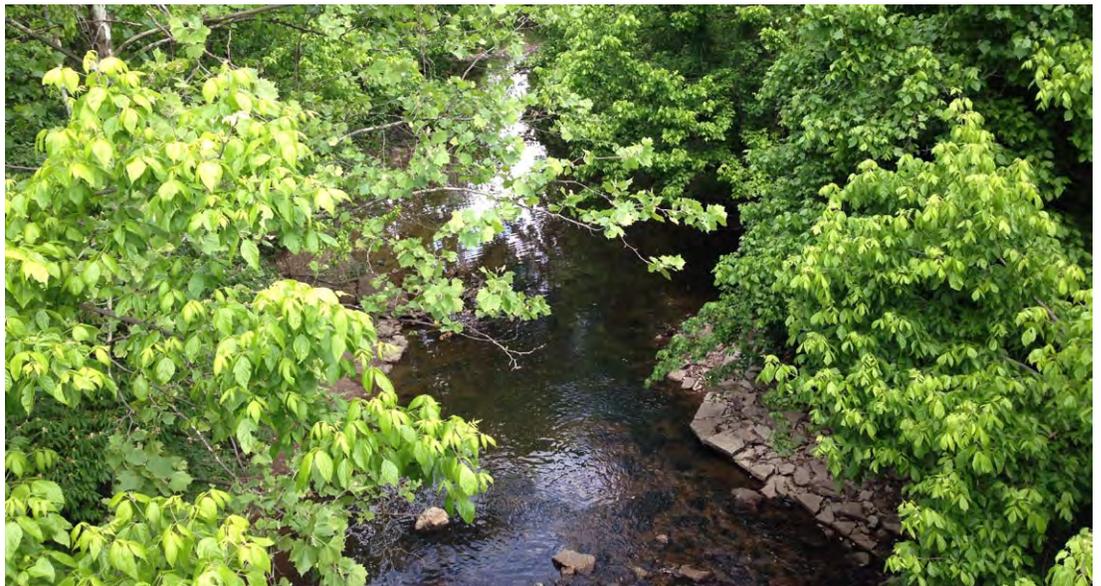
Open space, parks and trails provide many environmental, economic, aesthetic and recreational benefits to cities. They enhance property values, increase municipal revenue, bring in home buyers and workers, and attract retirees to settle in areas within walking distance of these assets. The City of Maryland Heights has a great asset in Creve Coeur Park. Other parks in close proximity, such as McKelvey Woods Park, Dogport Dog Park and Vago Park provide excellent recreational opportunities for Maryland Heights residents and visitors. However, there are currently few connections (in terms of trails, bike routes, and greenways) between these places and the Dorsett Road corridor. As Maryland Heights develops Dorsett Road to function as a Great Street and begins to create unique community spaces within the corridor, it will be important that the city builds on its existing parks, trails and open space systems.

Parks

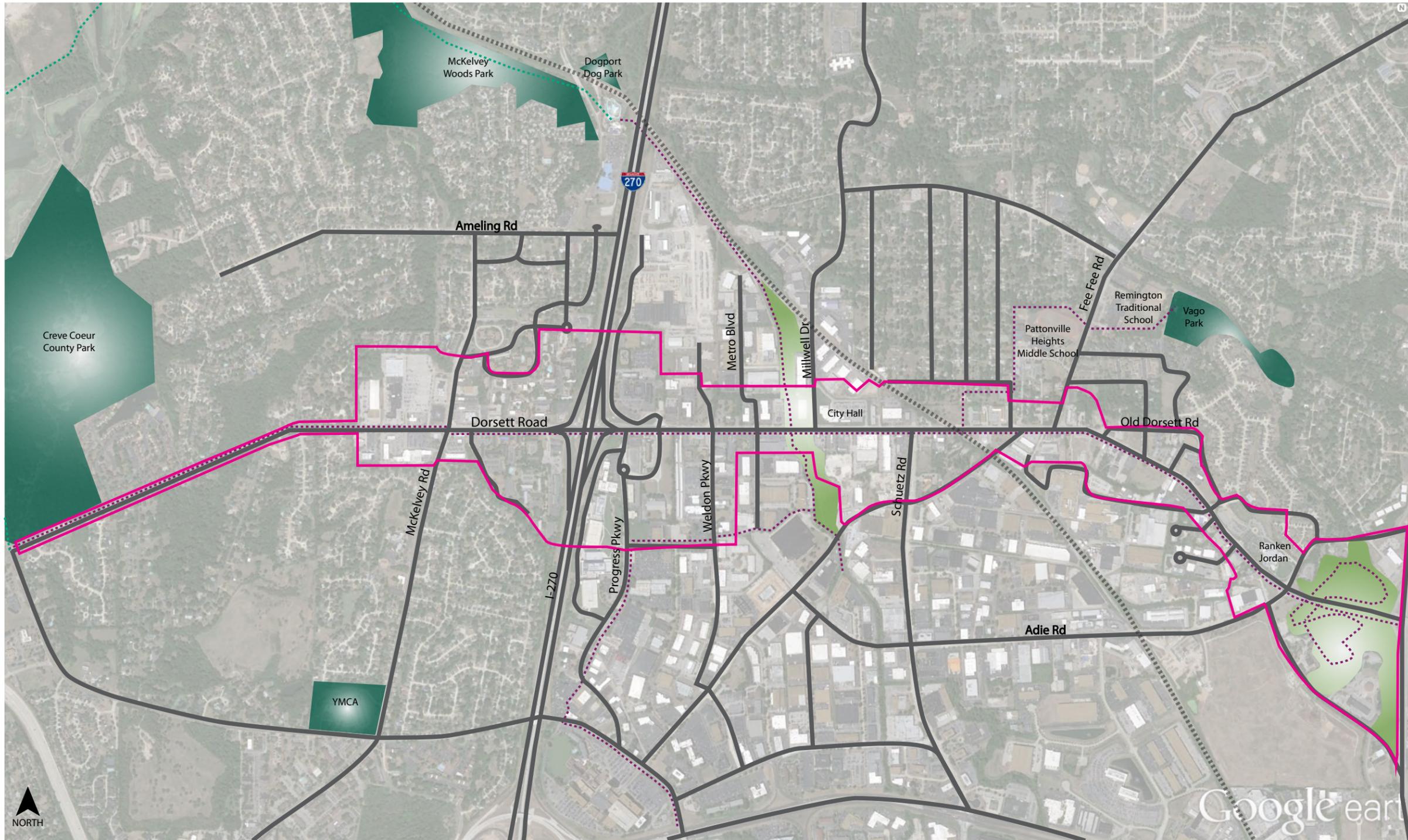
Maryland Heights has some great parks that are well valued by the community. What is missing from the city's current park system is a Main Street anchor - a park that is central to the city, can serve the area's daytime population, and acts as a community gathering space within the Dorsett Road Corridor.

The Fee Fee Greenway

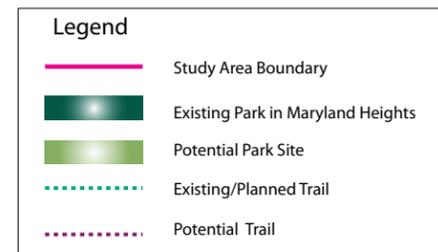
Fee Fee Creek is a tributary to the Creve Coeur Creek, which in turn flows into the Missouri River. The once meandering stream suffered significant entrenchment and erosion during the commercial and industrial development surrounding the creek in the 1960s and 1970s. In 2008, the City of Maryland Heights enacted stream buffer protection regulations, to protect both the natural ecosystem of the creek and ensure that properties do not suffer from flooding. Land development activity must maintain a 50 foot "primary" buffer of undisturbed natural vegetative water area around streams, as measured horizontally from each stream bank, surrounded by another 25 foot "peripheral" buffer that prohibits impervious surfaces. Currently, several parcels surrounding Fee Fee Creek are encroaching on this buffer zone.



Fee Fee Creek north of Dorsett Road.



Parks, Trails and Open Space Recommendations for the Dorsett Road corridor.





Greenways help preserve natural water systems and create great community spaces.

A way to both protect this valuable resource and attract residents to the center of the city would be creating a “greenway” along Fee Fee Creek. A greenway is a linear park that is usually accompanied by trails. At Fee Fee Creek, this greenway would help to define and protect the creek and its fragile banks, bring attention to this great water source in the middle of the city and give residents and visitors to Maryland Heights a place to meet, gather, recreate and enjoy the outdoors. This project would require significant commitment from the city and the community, however the benefits of transforming this currently degraded and unused space into a greenway with trails would be considerable:

- A city-central linear park with recreational opportunities would serve Maryland Heights residents, but would also help to attract more businesses and employers. Modern employers look to sites that will keep their employees happy by offering amenities including near-by parks and recreation opportunities.
- The installation of parks has been shown to increase property values. Current vacancies in the Fee Fee/Schuetz area would benefit from the boost in value brought on by the park. This could help to spur redevelopment and bring more investment to the center of Maryland Heights.
- A trail along Fee Fee Creek would help to foster a city-wide trail network and could link the Dorsett Road corridor to the McKelvey Woods Trail, currently under construction.

Lindbergh Open Space

The eastern end of Dorsett Road concludes in a heavily wooded area at Lindbergh Boulevard. Mostly owned by the county, this space presents an excellent opportunity to both preserve a woodland community for the area and develop trails that allow residents and visitors to Maryland Heights to explore a wooded Missouri ecosystem. In collaboration with St. Louis County, the city could petition to designate this area as open space and develop a trail system that would be unique to Maryland Heights and give patients, staff and visitors at Ranken Jordan a space close to the hospital where they can take a break to enjoy the outdoors.

Trails

In addition to creating a multi-use path along Dorsett Road, the project team has identified a number of opportunities in or near the study area, where the city could enhance and connect their trail system to create a “green network.” This network of trails links the Westport Plaza area to the Dorsett Road Corridor and Creve Coeur Park. Building this

network does not merely provide Maryland Heights more opportunities for recreation. Creating a network of walkable and bikeable trails throughout the city will help to draw new customers, patrons, and possibly investors to parts of the city they may not have seen or experienced previously.

The following recommendations will help the City of Maryland Heights to create a successful trail system:

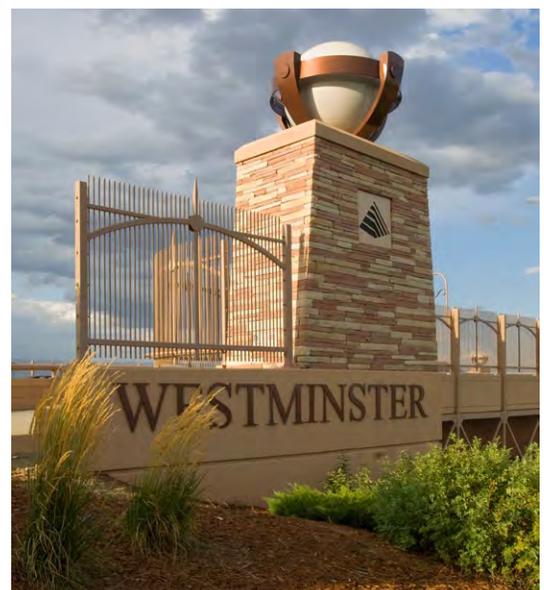
- The city should work to provide trailheads in or close to city destinations (such as the Maryland Heights Government Center, Community Centre, and Westport Plaza) in order to enhance connections between these community gathering places and major parks.
- Trailheads should feature prominent signage to guide visitors and residents to trails and destinations in the area as well as restroom facilities and shaded areas for drop-off and pick-up. Communities around the country have also begun to install bike locker facilities at trailhead locations that provide space for residents to temporarily store bicycles or personal possessions as part of their visit to a greenway or trail area.

Signage & Wayfinding

Strategies to improve the quality and clarity of signs throughout the corridor help to reduce confusion for drivers, bicyclists, and pedestrians and can improve the overall appearance. Public feedback has helped to identify wayfinding and signage as a subject for improvement in the corridor. Wayfinding signs in a given area of Maryland Heights, or applied to the entire city, could provide a system that helps guide visitors and residents to key destinations, including parks, government centers and other tourist attractions.

Wayfinding encompasses all of the ways in which people orient themselves in unfamiliar or new surroundings and “find their way” from place to place. Programs generally consist of signs, symbols, colors, messages and images. People find their way around a complex or unknown environment by a process known as cognitive mapping — creating a mental image of a place which improves over time. The wayfinding program should be intuitive, easy to grasp quickly and able to cross cultural and language barriers. The outcome of a successful wayfinding sign program enables visitors to easily determine their own experiences by empowering them to make their way through the area with comfort and clarity and without confusion. Future gateway programs should be consistent with the city’s other monument projects. Statistics show that people make their opinions of places in as little as 15 seconds, so a negative first impression can be difficult to repair.

Wayfinding can be part of the backbone of the community’s identity. The visual representation of that identity is the thread



Community Gateways can serve as both a wayfinding device and a form of public art.

of continuity from gateways to corridors to commercial centers to neighborhoods. A successfully designed sign program is not only functional and memorable; it also extends a welcoming gesture to visitors and residents. It reflects the community's values that they care for everyone's comfort and experience.

Wayfinding signs should not advertise specific businesses unless on a business focused directory or smart phone application. They should not add clutter to local streets but instead should reduce clutter and help to consolidate information. Wayfinding signs are not designed just for visitors but instead identify areas of interest to locals and visitors alike.

Gateways

Community Gateways come in many varied forms such as vehicular bridges, overpasses, portals, sculptures, traditional monument signs and pedestrian district markers. They provide a strong sense of arrival and should reflect the inherent character of the place. Gateways can extend the community branding and messaging to be an integral part of a wayfinding system. They are most successful when integrated into the environment and landscape, and when they are coordinated with other gateway and monument projects. Correct scale, placement and lighting are important for optimal impact, visibility and legibility.

Community Logo:

Instead of designing a logo specifically for the corridor, the Maryland Heights logo can be extended throughout the corridor in a variety of applications such as streetlight banners, benches, bus shelters and trash receptacles to reinforce the image of Maryland Heights as a destination and create a system for visual recognition of Maryland Heights.

Digital Wayfinding

Recent developments in technology have transformed the mainstream process of navigation. Digital wayfinding is an excellent means of enhancing the physical environment and informing the public about the unique characteristics and destinations located within cities and their specific districts. Smart phones allow users to interface simultaneously with the digital and physical worlds through the use of mobile wayfinding applications, websites and Google Earth. Local venues, businesses and events can all advertise on the map site, creating a platform to generate buzz about the place. Links to the maps can be placed in advertisements, press releases or as QR codes integrated into the site signs or features. Utilizing the integrated digital maps enhances ease of use, project awareness, and educational opportunities while providing the potential for increased pedestrian traffic, web traffic, active community participation and revenue growth.

General Design Notes

All signage and street graphics are expected to be compatible with, and an enhancement of the character of the Dorsett Road corridor and the architecture of adjacent buildings. Signage and graphics should also integrate with adjacent architecture in terms of placement, design, scale, color, materials and lighting both related to brightness and type of illumination.

- All signage and street graphics should be appropriate to and expressive of the business or activity for which they have been designed.
- All signage and street graphics are expected to be creative and innovative in the use of form, graphic design, dimensionality, scale and iconographic representation. Signage that exhibits high levels of these qualities, executed with high levels of craft and materials, are encouraged.

- All signage and street graphics must be installed according to Code requirements and the expectation is that signage in the corridor will be designed with ease of service and maintenance to ensure longevity and a quality presentation over time.
- Tenants and landlords are encouraged to retain professional assistance in the planning and design of their signage.

Visibility and Legibility Day and Night

A sign can certainly be expressive and artistic, but if it cannot be seen or read by passersby, it will have little positive or material impact on the business it is intended to promote. Poor or illegible typography, dimensional letters where the return is the same color as the face, and the use of highly reflective materials all can degrade a sign's function.

Placement

They should not add clutter to local streets but instead should reduce clutter and help to consolidate information. Wayfinding signs are not designed just for visitors but instead identify areas of interest to locals and visitors alike.

Signage/Building Relationships

Signage should relate in some way to the host building. Signage should be installed in locations or on placements that appear to have been designed to receive signage. By seeking alignments with architectural features or surfaces, the sign is more likely to “nest” in an appropriate fashion within its architectural context. The line between communicating a sense of Vitality versus Chaos is often the result of how well or badly this principle is understood.

General Design Review Notes

- Quality signage is in general characterized by simplicity rather than complexity. When trying to visually communicate quickly as a sign must do the principle of “less is more” should apply.
- Large letters on a small field do not communicate as well visually as letters sized properly to allow for enough “white space” facilitating legibility.
- Good signage conveys purpose and personality. Great signage strikes a balance in how well it communicates both the character and personality of the business or land it is intended to promote.
- Temporary signage of all types must be managed carefully. This includes window banners, sidewalk sandwich boards, building mounted banners and other temporary interventions. Although temporary signage is occasionally required, mismanagement of this type of signage can result in damages to adjacent property values and the overall viability of the corridor. It is essential that temporary signage (not associated with leasing or the sale of the premises) be managed from a time, scale and placement standpoint, in that order.
- Perpendicular signage adds a layer of richness to the shopping environment and should be encouraged. Perpendicular signs (any sign or banner that projects at either 45 or 90 degrees from the building plane) represent an excellent opportunity to add another point of illumination to the street that is highly visible to the both motorists and pedestrians.
- Awning signage must be managed to ensure appropriate scale. Letter graphics should be restricted to the valence or side panels of the awning. Large letters on the sloped surface of the awning project a downmarket strip mall character, the impression of which is detrimental to the character the corridor seeks to create.

Dorsett Road Identity and Branding

A brand is what people think of you, not what you say you are. It is a perception or the “feeling” a potential visitor has about you. A brand should evoke emotion or an image. Logos and slogans are not a brand. A brand is a marketing tool and the goal is to bring more cash into the community. Residents of any community on occasion spend more money in other jurisdictions than in their own city or town. The most successful communities import more cash than they export, usually through tourism. Competition is fierce, as every community is trying to import new cash. But, to become a true destination, Maryland Heights must offer something the visitor cannot get closer to home; something that helps the city and the corridor stand out from all other competing communities. This is where branding comes into play.

To be more successful, the corridor must set itself apart from the many other communities and areas that offer similar activities and attractions. The art of differentiation helps create a unique image in the minds of visitors creating a more attractive and desirable place to visit. People want activities that are unique. Finding a niche, developing it, and promoting it, are the keys to a successful corridor.

Access Management Plan

An access management plan for any corridor helps to determine the number of access points, and the design of access points, along a given roadway in order to provide for efficient and safe movement of traffic and to minimize the number of accidents involving vehicles, pedestrians, or bicycles.

Because Dorsett Road is controlled by St Louis County, the access management plan for the Dorsett Road corridor draws directly from the county's own standards for access management. This plan emphasizes that by following the standards already established for major arterials in the county, such as Dorsett, the city can help plan for the future of the corridor in order to provide for the safest access management possible. The following outlines the key recommendations pertaining to the recommended design for Dorsett.

This section assumes that Dorsett would retain a design that includes five lanes, with two lanes in each direction and an unimpeded center turn lane (except for the few locations along the corridor where a median refuge may be installed for pedestrian movement). If the city or the county were to introduce a median along the length or even significant portions of the corridor, the city would need to re-examine the access management plan for Dorsett, drawing from the county's overall access management guidelines.

Intersection Spacing

Beyond county standards, the Dorsett Road Great Streets Plan calls for intersection spacing of 330 feet for un-signalized intersections and 1,320 feet between signalized intersections in order to maintain efficient travel operations and minimization of accidents and conflict points.

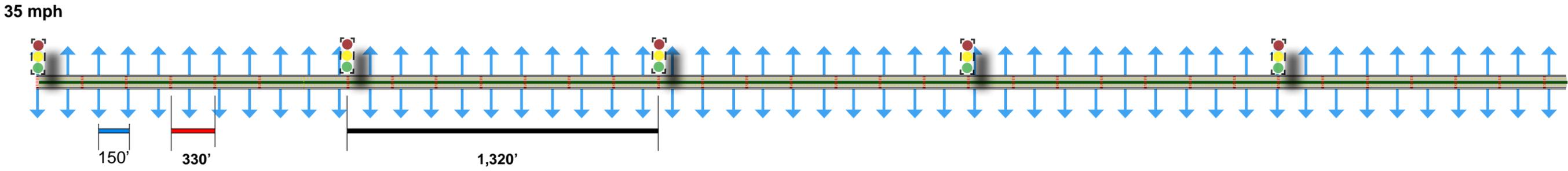
Driveway Spacing

Driveways along a principal arterial with a 35 mile per hour speed limit such as Dorsett Road should be spaced at least 150 feet apart to preserve traffic flow. The county notes that ideally, direct access to individual properties fronting principal arterials would be moved to frontage and backage roads (running parallel to the main road) or provided through joint access or cross access agreements between parcels. The city may also wish to allow for "shared" driveways that serve more than one business or property at the same time. Of note, access to corner properties should be moved to side streets wherever possible.

Frontage and Backage Roads

These "parallel routes" provide alternative access to properties and help remove turning traffic from the through traffic on a mainline route. A frontage road provides alternative access in the front of a business while a backage road provides access at the rear of businesses or properties. Frontage and backage roads should be placed approximately 360 feet or more from the mainline route.

Recommended Spacing Versus Speed for Dorsett Road



The blue arrows above represent locations of driveways.

How this Access Management Strategy Guides Dorsett Going Forward

The existing access management situation along Dorsett Road developed over many years, as the road evolved from a two lane country blacktop to a city street, to a major arterial in the overall county. Therefore, many of the existing curb cut frequencies and spacings between intersections do not match the county's overall guidelines. It would be impractical and very costly to try to retrofit the entire corridor to match the county's access management guidelines from the outset. Instead, the City should use the standards articulated in county documents and this plan to improve access management along Dorsett over time, as particular properties redevelop. The following outlines some of the key recommendations:

- Seize opportunities to consolidate or eliminate unnecessary curb cuts: As particular parcels or sets of parcels redevelop, the city should work during the site planning process to eliminate extra curb cuts that only increase the risks of accidents and conflicts. For example, the redevelopment of a fast food restaurant parcel that currently has two driveways within 50 feet of each other may involve a requirement that the new project only have one curb cut along Dorsett.
- Introduction of Frontage and Backage Roads over time: As various properties redevelop over time, the City may wish to take advantage of the opportunity to designate parallel streets to serve particular developments, particularly larger scale developments involving more than one or two parcels fronting Dorsett Road. Over time, the city could work to establish a small network of front or back streets to improve the overall accessibility to local businesses and to streamline traffic flow along Dorsett Road itself.
- Maintaining of Appropriate Intersection spacing: Similarly, as various chunks of the corridor redevelop, the city may wish to align cross streets to provide appropriate spacing between intersections going forward.

As the city moves forward with road improvements over the next two decades, it may benefit Maryland Heights to assume ownership of Dorsett Road from the county. The decision to transfer ownership from the county to the city would be based upon a cost benefit analysis for both parties. The city may wish to assume ownership in order to have more direct and final authority over urban design and streetscape improvements in the future that would influence the overall character of the corridor.

Parking Regulations and Strategy for Dorsett Road

The existing parking regulations for the City of Maryland Heights outline very explicit and detailed parking standards and requirements for a myriad of zoning categories and for different uses, city-wide. Following these parking regulations can require a good deal of compliance costs and can confuse the development community, in contrast to communities that may offer more streamlined and easy to follow regulations. Furthermore, the general standards of the city's parking regulations encourages or requires the provision of excess parking and helps to encourage the development of projects that feature oversized parking lots that diminish the visual quality of a corridor.

Parking Maximums, not Parking Minimums

The City of Maryland Heights generally requires a minimum of four to five spaces for every 1,000 square feet of usable area for commercial uses throughout the community. Studies of parking patterns from around the country have revealed that these standards provide unnecessary extra parking, except perhaps on the very highest peak days of the year (such as Black Friday).

In contrast, the Dorsett Road Great Streets Plan recommends that, for non-residential areas, the city require a minimum of 3.5 spaces per 1,000 square feet of non residential Gross Floor Area (GFA). The plan further requires that a maximum of 5 spaces per 1,000 square feet of non-residential GFA or two spaces per residential unit may be provided for Reserved Parking.

Shared Parking



Unused parking at the northwest corner of McKelvey and Dorsett could be put to better use.

Perhaps most importantly, the Dorsett Road Plan recommends that the city work to encourage and implement shared parking provisions along the corridor and around the city. Under shared parking arrangements or requirements, adjacent property owners share their parking lots and reduce the aggregate number of parking spaces that each would provide on their individual properties. Shared parking has been utilized extensively in traditional neighborhood commercial nodes and downtown settings for decades. In these locations, people often park in one location and then travel by foot to additional locations during the same visit to the particular district. Shared parking works especially well in situations where adjacent or nearby land uses have peak parking times at different periods during the day (for example, an office building could allow

an adjacent theater or restaurant to use its parking after 5PM, during the prime time for theaters and restaurants). Shared parking can reduce the total amount of land used for parking, creating opportunities for more compact development, more space for pedestrian circulation, and more open space and landscaping.

Communities may implement shared parking through either 1) facilitating contractual agreements between different land uses or 2) creating parking management districts in various areas. Under a contractual agreement, two adjacent property owners outline explicitly in a contract the circumstances under which parking spaces may be shared. In a parking district, all of the uses in the district may have access to all available parking spaces at any given time.

Shared Parking Tips for Maryland Heights (Contractual Arrangements)

- Shared parking contractual arrangements would work best in mixed-use commercial areas that have somewhat dissimilar land uses in relative proximity (for example, an office building and a theater). The mix of land uses must be varied enough to generate different peak times of demand.
- The city should retain the “sum” clause, in which the total parking requirement for a given area must equal the sum of the parking required for each separate use. This provision is intended to ensure that, when two similar uses are located side by side (such as two restaurants that would not logically share parking) the overall area would have sufficient parking levels.
- The City may wish to provide zoning incentives that would encourage a reduction in the size of parking lots.
- The City should ensure that any shared parking lots in the Dorsett Road area should be located within a reasonable walking distance of all of the destinations they are intended to service.
- The City should identify available pooled liability protection programs or insurance policies whereby owners of different parking facilities can pool resources and purchase a joint replacement policy. This type of policy would provide for public access across multiple parking lots at lower insurance rates compared to existing policies.

Shared Parking Tips for Maryland Heights (Parking Management Districts)

In a parking management district, each property is levied a fee that is used to provide for parking related maintenance, security, taxes, enforcement, utilities, signage, and other aspects of parking. Parking districts help to construct and oversee joint parking lots in a given district. The following keys to success should guide Maryland Heights going forward.

- Parking management districts would be particularly well suited for locations with multiple small property owners located in compact, pedestrian-oriented settings. The parking district would allow for businesses to share the same pool of parking, a desirable outcome in locations where parking is in short supply.
- Parking management districts should, where possible, help to redesign the parking lots serving a given district. The district should focus on providing for better landscaped lots that have good pedestrian circulation and lighting.

Additional Parking Considerations

Parking space design

In order to minimize the amount of land needed to provide for additional parking spaces, the City should explore implementing different parking space standards across the corridor. On-street parking spaces should be designed to be at least 8 feet wide and 22 feet long. For each parallel parking space, the adjacent drive lane must be at least 10 feet wide and must provide for at least 20 feet of clear maneuvering area in front of the space, in the drive land adjacent to the space. If striping is not required, the 8 feet width would still be applicable.

Easements

The city should explore requirements for property owners to provide connections or grant easements for connections to adjacent parking lots on neighboring properties.

The City of Maryland Heights should furthermore consider requiring investment in design, landscaping, and multi-modal improvements associated with surface lots that may not attract redevelopment prospects for some time. These investments may include:

- Adding green space and porosity to pavement surfaces in order to improve aesthetics and reduce rainwater runoff from existing lots. These strategies may also include the installation of perimeter landscaping, pocket parks and gardens, and bioswales.
- Improving pedestrian connectivity between destinations in order to generate foot traffic and support the sharing of parking between properties. Quality pedestrian through-paths across parking lots would shorten walking distances, provide direct connections between multiple uses, and improve overall safety.
- Adding bike parking to existing parking lots to encourage additional bike travel in the corridor area.

DISTRICTS

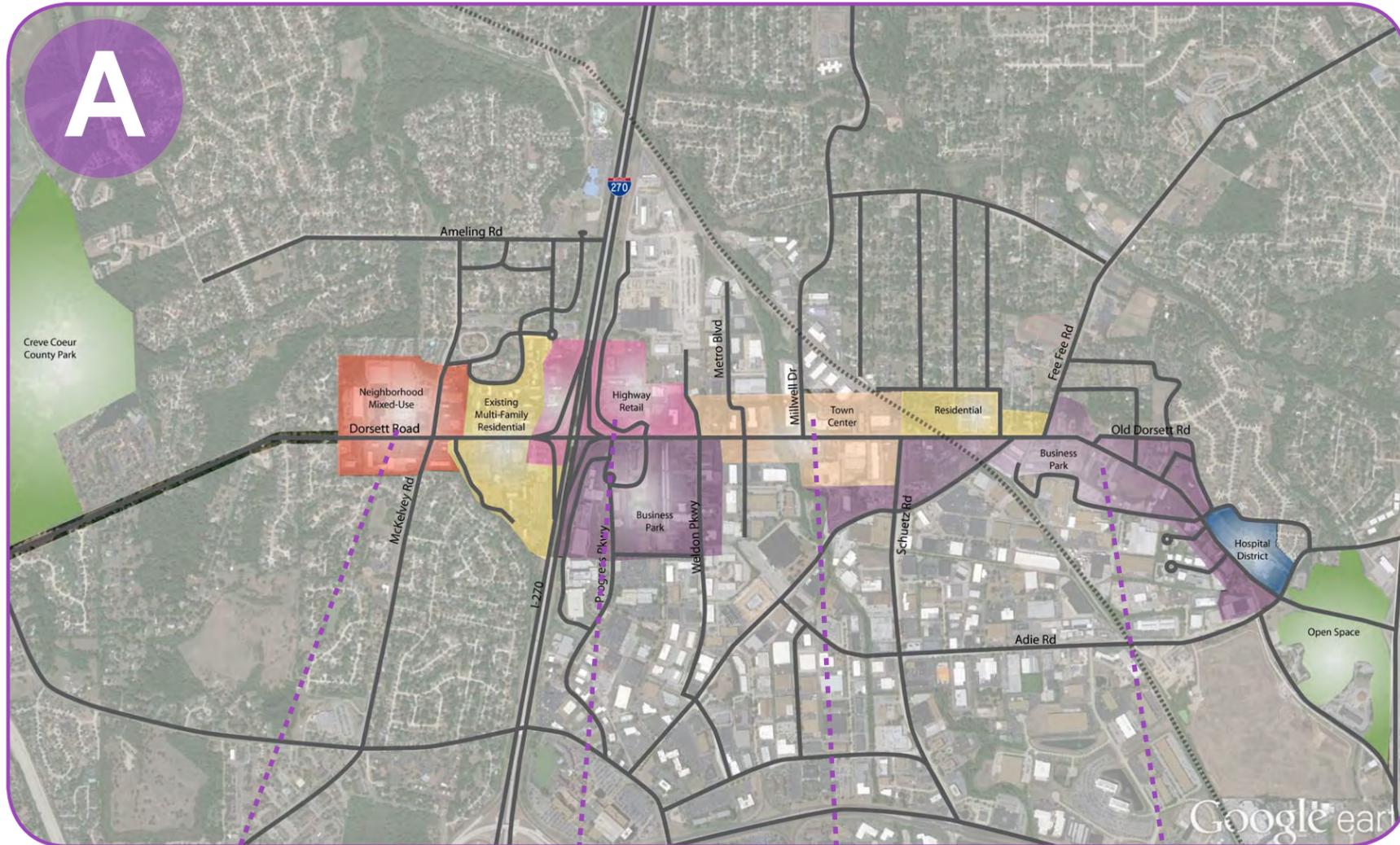
An essential aspect to the Dorsett Road Great Streets Plan involves expanding the study area of Dorsett Road beyond the right-of-way to surrounding properties. Creating a symbiotic relationship between land use and streetscape is what will allow Dorsett Road to achieve its full potential as a Great Street and create a true place in Maryland Heights. This relationship will respond to **DISTRICTS** along the corridor. Creating districts can help the corridor to define densities, building massing, architectural characteristics, streetscape elements and community gathering spaces. The identification of these districts will help the city make decisions about future land use and development options in the Dorsett Road corridor over the next twenty years.

Land Use

At the second public meeting on April 24th, 2013, community members were presented three alternatives for land use in the corridor. The alternatives were created by the project team, drawing from responses provided by the community during chip games. These alternatives gave the public options for siting different land uses and creating new districts along Dorsett Road. After the presentation, the public voted for their preferred land use alternative.



Community members vote for a preferred land use option during the second public meeting on April 24, 2013 at the Maryland Heights Community Centre



Neighborhood Ingredients



Town Center



Neighborhood Mixed-Use



Business Park



Highway Retail



Open Space



Improved Transit

8%

Option A received eight percent of the public's votes.

Neighborhood Mixed-Use located at McKelvey Road and Dorsett Road offers shopping, dining, and live-work opportunities

Highway Retail offers dining options and draws people to Dorsett from I-270

A potential **Town Center** focused at Millwell Drive and Dorsett Road could serve as the **central hub** of the community

Existing and potential new Office and **Business Park** uses along Dorsett to the east of Fee Fee would continue to draw business and **employment** to Maryland Heights

It would be nice to have a place that can support a weekend farmer's market. The area can then be used for other activities when farmer's market is closed. Possibilities could include a place for volunteers to do car washes or girl scouts to sell their cookies.



- Comment from Mindmixer Participant
<http://engage.dorsettgreatstreets.com/>

23%

Option B received twenty-three percent of the public's votes.

Neighborhood Ingredients



Town Center



Neighborhood Mixed-Use



Business Park



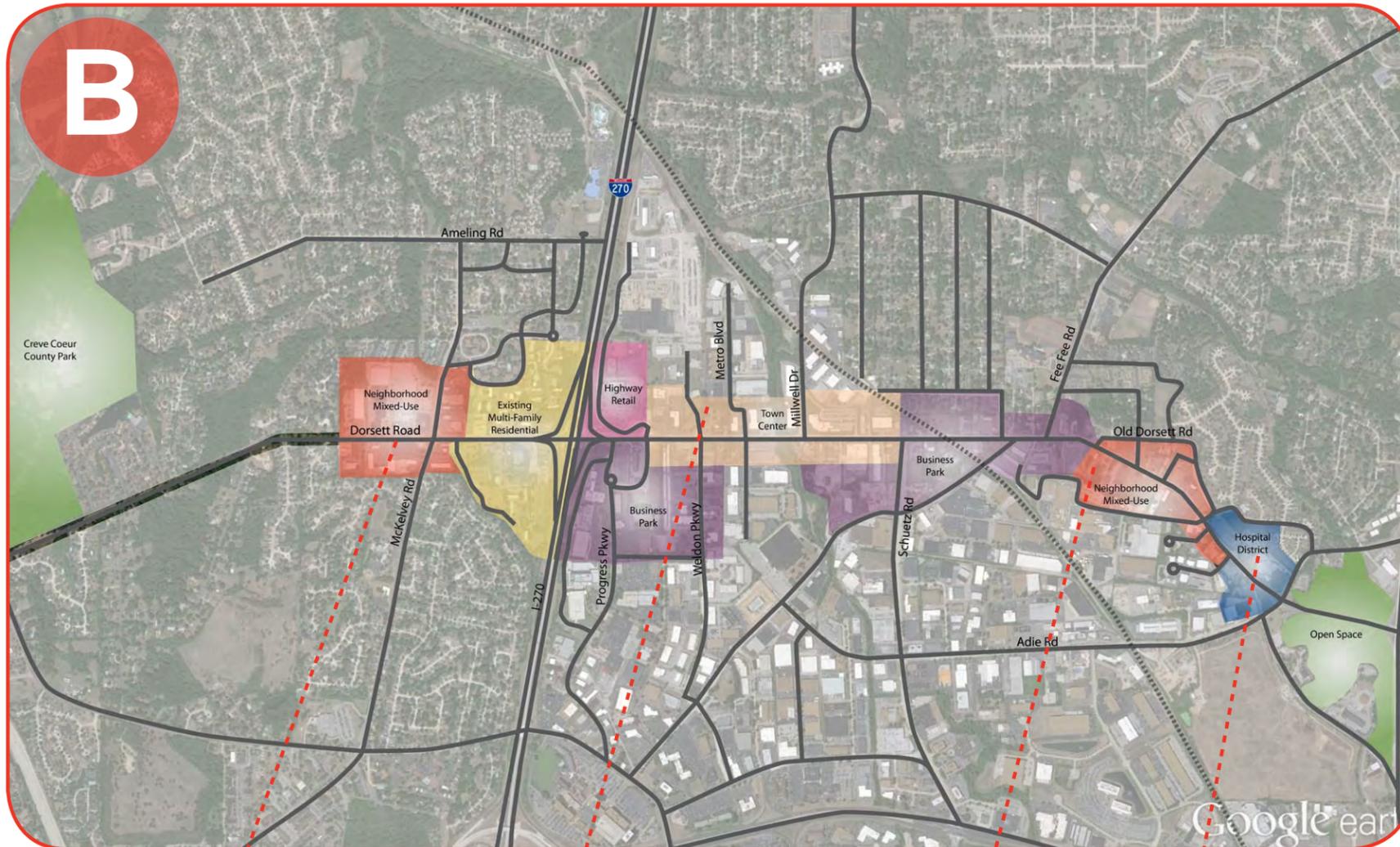
Hospital District



Open Space



Improved Transit



Neighborhood Mixed-Use located at McKelvey Road and Dorsett Road could offer shopping, dining, and live-work opportunities.

A potential **Town Center** that extends west from the Dorsett/Millwell area could serve as a focal point for retail and residential land uses and provide **dining and retail** options for employees from adjacent Business Parks.

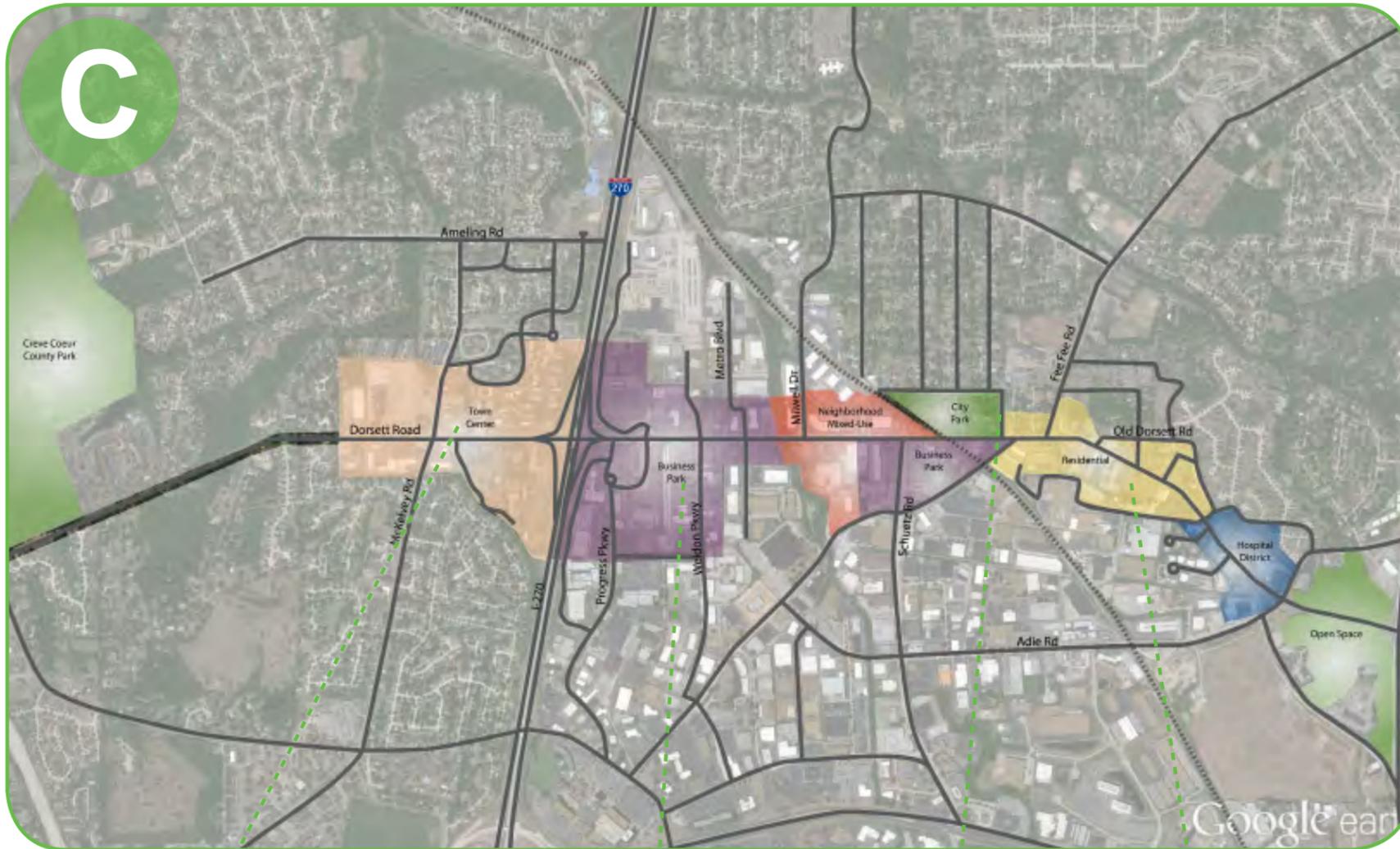
A **Neighborhood Mixed-Use** area could include a mixture of office and retail land uses to support the needs of surrounding Maryland Heights and Ranken Jordan.

A potential **Hospital District** could include additional medical offices, rehabilitation programs and services for hospital employees and patients

It would be nice to find evening destinations on Dorsett Rd, rather than in distant communities, more often than we currently do.



- Comment from Mindmixer Participant
<http://engage.dorsettgreatstreets.com/>



Neighborhood Ingredients



Town Center



Neighborhood Mixed-Use



Business Park



Hospital District



City Park



Improved Transit

42%

Option C received forty-two percent of the public's votes.

A **Town Center** surrounding Dorsett and McKelvey could include existing apartment complexes and land uses to create a **destination** for Maryland Heights residents, draw people from I-270, and provide the adjacent Business Park tenants with opportunities for dining, shopping, and other services

Existing and future **Business Park** uses would benefit from access to I-270 and close proximity to shops and services offered in the potential Town Center

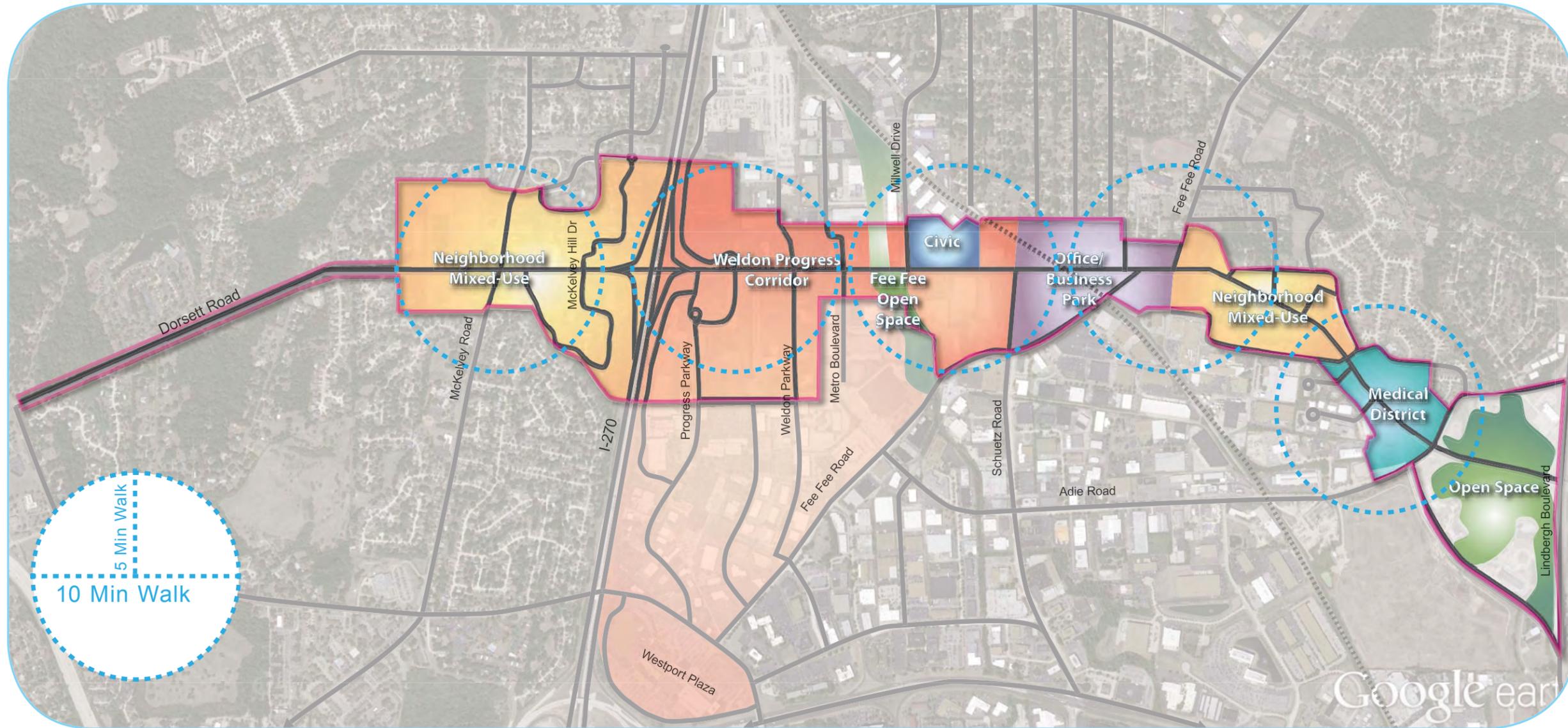
A potential **City Park** could provide **community gathering** space for Maryland Heights and serves as a central hub for residents and visitors

Possible expansion of Ranken Jordan could provide **residential opportunities** for hospital employees and give families visiting patients options for housing

It would be great to have some type of central plaza area preferably near Dorsett & McKelvey, but near the Government Center would work too. Some combination of downtown plaza and park would be best.



- Comment from Mindmixer Participant <http://engage.dorsettgreatstreets.com/>



Preferred Land Use

Public feedback was integrated with existing conditions analysis, stakeholder reactions, and city staff comments to develop the Preferred Land Use Plan. This plan provides the basis for the corridor to develop and maintain a series of districts.

Neighborhood Mixed-Use

- Will support mix of residential, retail, service, entertainment, and office uses
- Primarily serves a local market within Maryland Heights

Civic

- Central location to serve the corridor
- Includes the Maryland Heights Government Center

Weldon Progress Corridor

- Mixture of retail, restaurants, housing, entertainment
- Serves the employment base from Dorsett to Westport Plaza
- Creates a major destination along the corridor

Office/Business Park

- Can evolve to represent one or more key destinations for the broader Maryland Heights community

Open Space

- Walking and biking trails for the community and visitors to Maryland Heights
- Serve as destination sites within the corridor
- Creates new opportunities for recreation within walking distance of residents and workers

Medical District

- Medical offices and services focused in this area
- Ranken Jordan serves as the center of this district

Districts

Neighborhood Mixed-Use

The areas around McKelvey and Dorsett will logically evolve into a neighborhood center that includes neighborhood oriented retail and office uses (including grocery, small restaurants, dry cleaners, bank, etc.). Over time, as property owners logically consider options to reposition their properties, the existing shopping centers around the area may reorient entirely (including full reconstruction or rebuilding). At this point in the development cycle, opportunities may arise to reorient and site plan retail and other land uses in a way to create a small neighborhood district that includes the attributes of mixed use walkable development discussed as part of the Dorsett Road planning effort. For example, in-line retailers could orient around a central spine that could connect to Dorsett Road in a perpendicular fashion or run parallel to Dorsett Road. A new neighborhood development at Dorsett and McKelvey could also include some residential uses including townhomes or patio homes, most likely arranged in order to buffer surrounding and existing residential neighborhoods from retail and other land uses in the core area at McKelvey and Dorsett.

This section addresses urban design and density considerations for the neighborhood mixed-use areas along Dorsett Road, including the areas around Dorsett and McKelvey and the neighborhood mixed-use district around and to the east of the Fee Fee Road and Dorsett Road intersection.

Density and Building Height

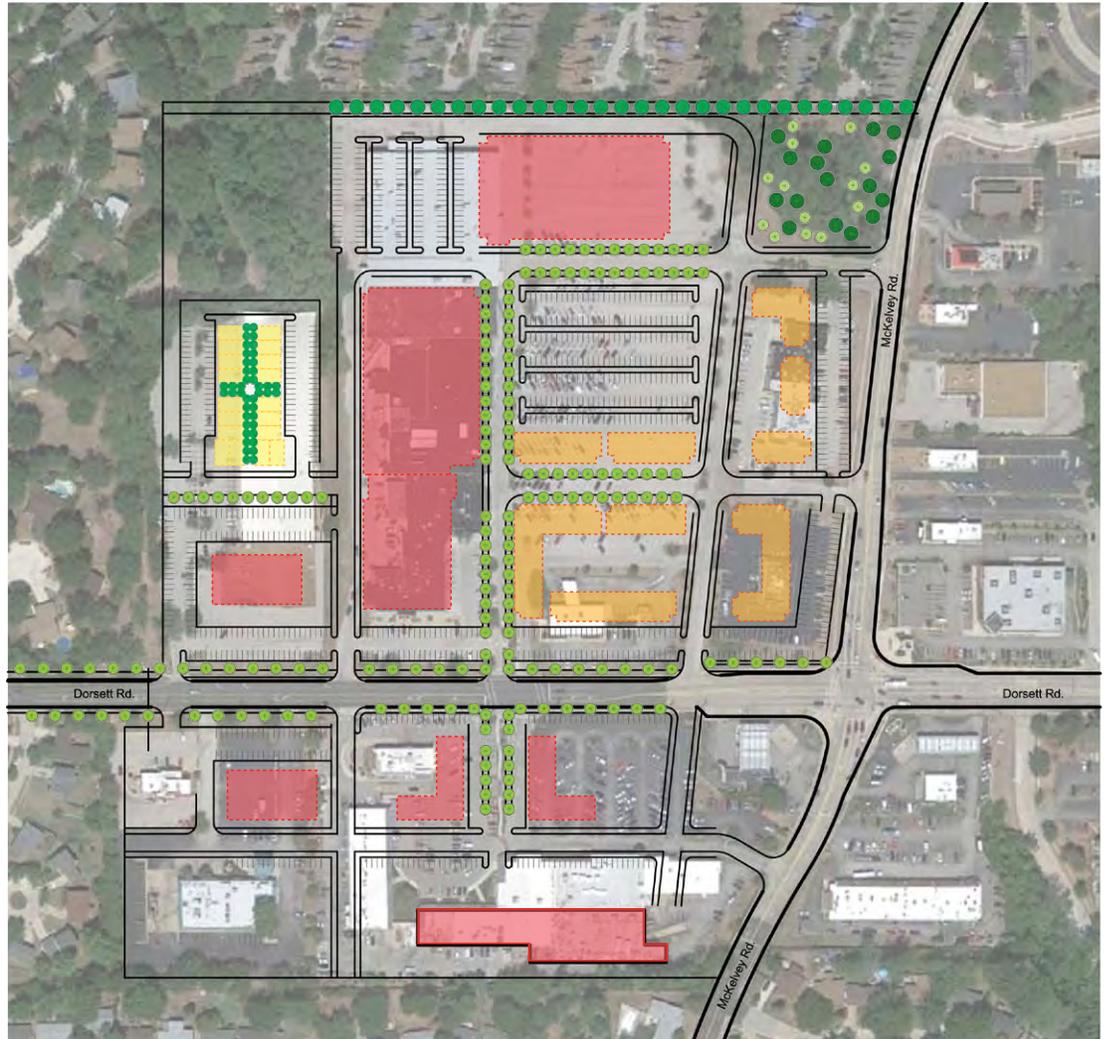
In keeping with the neighborhood orientation of these areas, the districts around McKelvey and Fee Fee are more likely to develop at lower densities and building heights than the more significant Weldon Progress Corridor district. Buildings and projects in these areas should more appropriately match the expectations of neighbors and the community concerning density and building height. The master plan recommends that residential land uses in the neighborhood mixed-use areas develop at a density of 8 to 12 units per acre and buildings could reach as high as three stories. However, projects could be developed at lower densities and even include single story buildings and still carry forward the vision of the community for mixed-use and community oriented development at these locations. New projects could serve the walkability and pedestrian oriented goals of mixed use development at lower densities by ensuring that buildings and public spaces are correctly oriented in order to create better community gathering spaces and an improved sense of place.

Building Massing and Relationship to the Street

When possible, buildings (including mixed use buildings as well as in-line retail properties) should orient to the street. Given the somewhat lower density and neighborhood orientation of these areas, however, some of these buildings could include one or two rows of “teaser” parking between the buildings and the main thoroughfares in the area (in this case, Dorsett Road, Fee Fee or McKelvey). The actual buildings should include windows as much as possible at ground level to encourage greater pedestrian activity and enhance the sense of place.

Architectural Character

The architectural palette for the neighborhood centers, even more so than at Weldon Progress, will depend on the concepts and visions of particular developers. This master plan does not recommend a particular architectural theme for these neighborhood mixed use areas. However, potential developers or builders should meet with nearby stakeholders, property owners, and residents to review architectural concepts and ensure that the architectural style appropriately interacts with the style of surrounding areas.



The diagram shown is a conceptual diagram illustrating one potential longer term development scenario for the areas around Dorsett and McKelvey. While owners of the properties in the area could replace or redevelop individual pad sites along the outsides of the shopping centers and along Dorsett and McKelvey, one at a time, eventually the property owners will likely wish to redevelop their entire shopping center. This diagram shows how the shopping centers on the northwest and southwest quadrants of the intersection could redevelop eventually. Key anchors such as Schnucks or a hardware store could orient along the western and northern edges of the shopping center on the northwest corner. In-line retailers, service uses, and restaurants could be aligned along a one to two block long "Main Street" that could orient either east-west (from McKelvey) or north-south (from Dorsett) into the heart of the shopping center. On the southwestern quadrant of the intersection, the property owner could construct a "main street" running east-west and parallel to Dorsett and align future buildings along this street over time. In addition, residential uses such as patio homes or townhomes could orient between commercial uses along Dorsett and existing residential neighborhoods to the north and west.

Medical District

A medical district around the Ranken Jordan campus over time may include a mixture of small medical office uses along and near Dorsett Road, coupled with small residential units (townhomes, apartments, etc) that could serve the needs of families visiting the area on a short term basis while their children are treated at Ranken Jordan. This medical district may also include a small retail or restaurant component to service the Ranken Jordan campus and traffic accessing the medical office land uses nearby.

The following articulates the general urban design concepts behind the Medical District around the Ranken Jordan Hospital.

Density and Building Height

Building heights for medical office or other office or retail properties around Ranken Jordan should most likely not exceed three stories in height. Constructing a ten story building next to Ranken Jordan, for example, would make the particular project seem out of scale compared to the hospital complex and surrounding neighborhoods. For any residential uses in the medical district, a density of 8 to 12 units per acre appears appropriate.

Building Massing and Relationship to the Street

When possible, developers should orient buildings in the Medical District to the main road, Dorsett. However, potential developments may include a row or two of “teaser” parking between the buildings and Dorsett in order to facilitate day to day business. It is possible that some of the buildings may more appropriate front on to a parallel street such as Old Dorsett Road as well. When possible, multiple buildings in the same project should cluster together in order to form a more consolidated and quality urban design look and feel to the street.

Architectural Character

Again, this master plan is not recommending formal architectural styles for this or other districts along Dorsett Road. However, potential developers may wish to create buildings that mirror or draw from the architectural styles in the area. The Ranken Jordan Hospital building has a very contemporary and somewhat eclectic look and feel. Future developments in the medical district could include more unusual or cutting edge designs to fit with the look and feel of the hospital and create more of a unique character for this area.

Fee Fee / Dorsett Road Area

The area around Fee Fee Road and Dorsett Road in the eastern part of the corridor emerged as one of the first areas of development in the history of the area. The intersection served as a junction of two county roads in then-rural St Louis County and served as the home of a few small stores and residences in the early 20th century. Today, it includes a variety of service businesses, a few restaurants, a convenience store, and a variety of vacant parcels along and near Dorsett Road.

The Dorsett Road Great Streets Master Plan recommends that the city work with property owners and other stakeholders to help redevelop portions of this area over time, using the following general design and development principles:

- Buildings along the Dorsett Road corridor should in the future ideally front toward Dorsett Road, rather than orient far from the street frontage.
- New developments along Dorsett Road should ideally include a row or two of “teaser” parking along the street in order to entice customers to visit and to provide sufficient parking for current and future businesses.
- The city should work with property owners to ensure that future redevelopment allows for cross-access from one parking lot to another along the corridor, in order to improve the overall access management in this part of the corridor.
- Future redevelopment efforts involving larger acreages along Dorsett should explore the creation of buildings that “wrap” around common parking areas (either surface parking or structured) that would serve a variety of land uses and tenants.

The area around Fee Fee and Dorsett Road could develop with a mixture of retail, commercial, and a small amount of residential land uses, organized to create a “village crossroads” at this key junction in the eastern part of the city. Residential land uses may more logically orient to the north and east of Fee Fee and Dorsett, toward existing neighborhoods, or toward the Ranken Jordan area. Commercial, live/work, and retail uses may more logically orient around the Fee Fee and Dorsett intersection and in areas toward the west. To the west of Fee Fee and Dorsett, developers could construct (in an infill fashion) commercial buildings on vacant lots or underutilized lots.

Just as the Fee Fee and Dorsett junction at one time served as the historical heart of the Maryland Heights community, going forward this area can include a variety of smaller land uses organized to create a small neighborhood or village node along this portion of the Dorsett Road corridor.

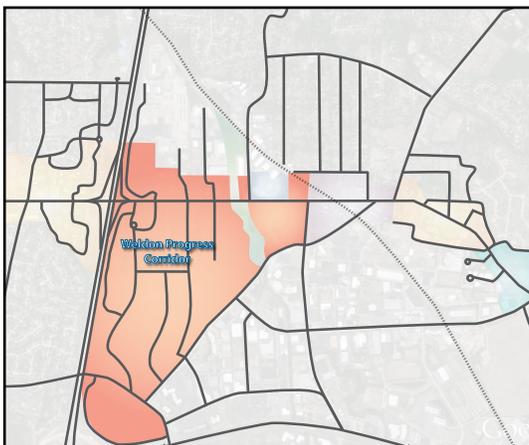
A Vision for the Future of the Weldon Progress District

The Weldon Progress district offers great promise for the City of Maryland Heights. Although much of this district does not border Dorsett Road directly, it nonetheless will have a profound impact on the economic health of the corridor. Workers, residents, and guests

in the Weldon Progress corridor will provide much of the market for businesses that border Dorsett Road. The success of the district and the revitalization of Dorsett Road are interlinked.



Existing boundary for the Weldon Progress Corridor



Revised boundary for the Weldon Progress Corridor

The City of Maryland Heights created the Westport Planning Framework plan as an amendment to the Maryland Heights Comprehensive Plan to provide a direction for economically viable growth in the area just east of I-270. Within the Westport Planning Area, the city identifies the Weldon Progress Corridor as a location that could strengthen Maryland Heights' position as a desirable residential community, a major commercial center and as the hospitality center of the region. The Dorsett Road Great Streets plan revises the boundaries of this district to include areas to the east, extending to Schuetz Road. Expanding the Weldon Progress Corridor to the east allows more properties and vacant parcels along Dorsett Road and near Fee Fee Creek to participate in concentrated revitalization efforts centered on the district. In addition, the new boundary gives the Maryland Heights Government Center an interface with this developing area and provides the city with an opportunity to create a true civic center in Maryland Heights, around and to the south of the Government Center.

At present vacancy rates within the Weldon Progress corridor are high, suggesting that market demand for strictly industrial or business park spaces is not sufficient to fill the available inventory. There are a number of vacant sites within the district that might be utilized for alternative forms of development. Despite these vacancy rates, Edward Jones continues to expand its campus. World Wide Technology has also recently built its corporate headquarters within the district, suggesting that there is market demand for space geared to knowledge workers within the area. The city should continue to look at how the Weldon Progress Corridor can support knowledge-based industries and emerge as an attractive location for these types of companies. These knowledge workers are typically highly educated, own their own homes, and engaged in management, business, and financial operations. They can be a tremendous addition to the Maryland Heights community. Designing the Weldon Progress District and the adjacent Dorsett Road corridor to serve the needs of these employees and other industrial workers who are an important part of

the community, can be a key strategy for the economic development of Maryland Heights. Enabling knowledge-oriented industries and associated kinds of building uses to expand in the corridor should remain a top priority of the City's economic development plan.

With this in mind, it is recommended that the zoning for the area be allowed to accommodate a wider range of land uses including industrial and office but also retail and housing. Research has shown that knowledge workers demand mixed use environments where one can live, work, and play within a walkable and compact district. Companies increasingly desire properties that are located in walkable and mixed-use districts as well. In order to continue to attract employers looking for new space, Maryland Heights should work to transform the Weldon Progress Corridor and the surrounding area around Dorsett Road from an office and manufacturing-oriented district to a mixed-use district that has walkable and desirable destinations, retail, service uses, and residential units. The Domain project in Austin, Texas, Bishop Ranch Business Park in San Ramon, California, and the Hacienda Business Park in Pleasanton, California are but a few examples of traditional office/industrial parks that are reinventing and repositioning in this way. Research from the Urban Land Institute suggests that these mixed use office clusters command higher rent and sales premiums than single-use office developments.



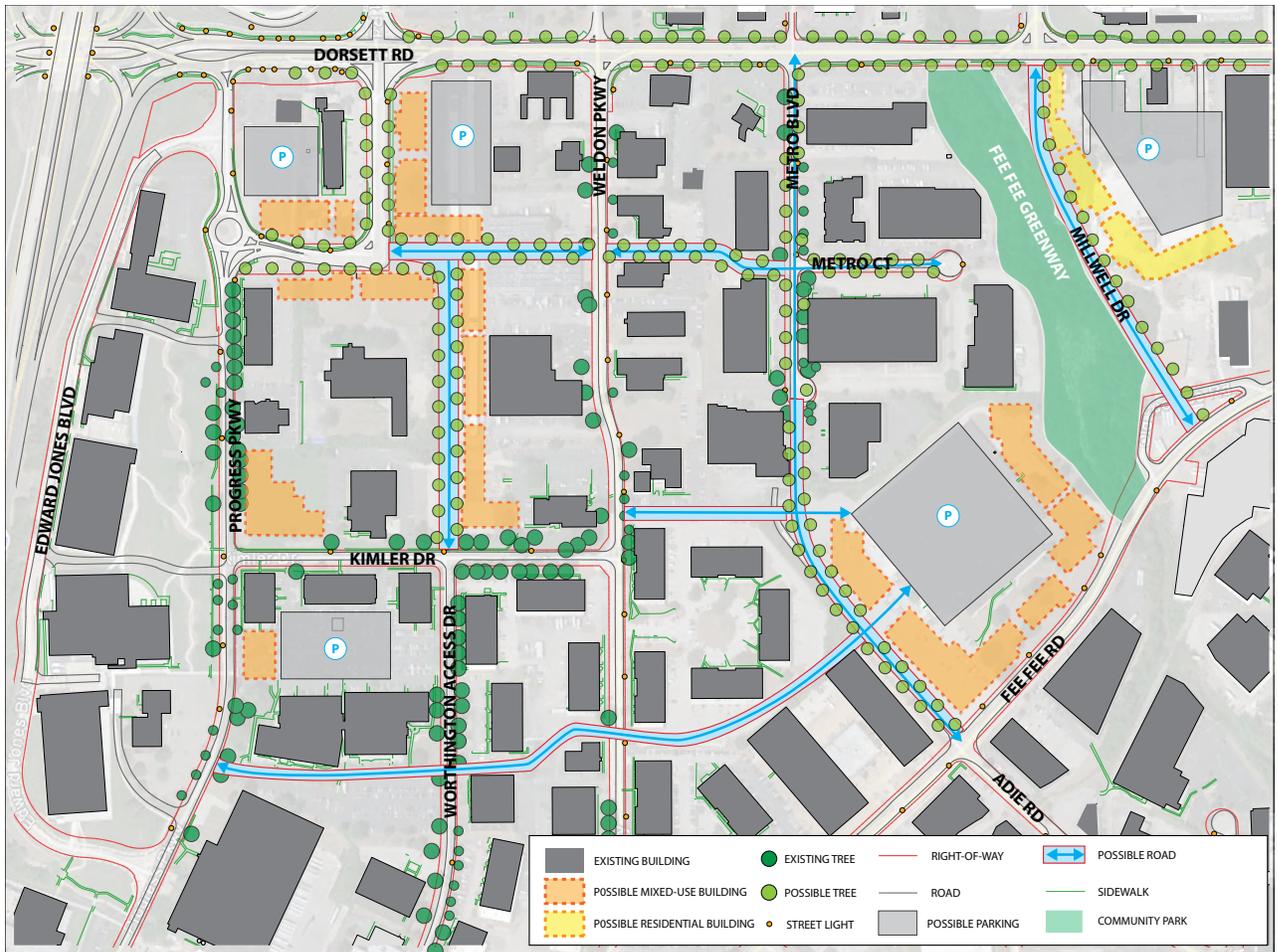
Transit Supportive Population and Employment Densities
 Source: Composite data compiled by Nelson/Nygaard.

The various forms of new generation office parks are often served by light rail and other forms of transit. Maryland Heights' form developed during the 1960s and 1970s when the automobile was the primary transportation mode and regional investments throughout St. Louis reinforced the concept of auto-centric growth. Today, transportation remains one of the strongest tools to shape future development and economic growth continues to depend on accessibility and good transportation. As Metro continues to consider expansion options in the St. Louis region, a potential light rail stop at Westport Plaza could significantly impact development of, and interest in, the Weldon Progress corridor. Furthermore, creating a bus or shuttle connection within the city to connect areas along Dorsett Road with a light rail station at Westport Plaza could help attract more businesses and employees to Maryland Heights overall.

To attract and retain knowledge-based workers a vibrant mixed use environment is required. The first step in this evolution is to provide zoning that allows for a full range of land uses including industrial, office, retail and residential. A form based code should be considered to ensure the desired urban form. The second step in this evolution is to enhance the public realm within the district through the provision of street trees, sidewalks, and lighting, as well as the provision of on-street bike facilities. A third step in the evolution of the district would involve the formation of a business association and an active marketing program for the district. This business association could help organize or fund a private shuttle that would connect to public transit along Dorsett and Page and to a future light rail station at Westport Plaza. Another key step is the provision of the types of facilities such as retail and day care that a major workforce requires. Knowledge workers are very health conscious and would also benefit from the creation of a park along Fee Fee Creek. Not only will this park help to address stormwater and water quality issues in the area, but the construction of trails and other park facilities will be a positive addition to the emerging mixed use district. The Weldon Progress corridor business association should in turn consider membership in the Best Workplace for Commuters program, a voluntary membership organization with the potential to provide national recognition for innovative efforts to provide a productive and healthy work environment

Density and Building Height

In order to fully leverage the presence of significant employment centers in the area such as Edward Jones and World Wide Technology, as well as additional employers who may move into the area in the future, mixed-use developments along Dorsett or elsewhere in the district should maximize building density and work to create an urban design for key streets that encourages true walkability. At the initial public meeting for the Dorsett Road plan, 44 percent of participants favored building heights of three or four stories on average. The Dorsett Road Master Plan, in turn, suggests building heights of at least two stories, and as high as four stories, for the main retail streets in the district. These streets would feature retail or restaurant uses on the ground floor and residential or office uses on upper floors. While the public at the initial public meeting generally expressed residential densities of below 20 dwelling units per acre on average, the master plan suggests that the core mixed-use streets in the Weldon Progress Corridor move forward with residential densities of 20 to 24 units per acre. This level of density (in terms of condominiums or apartments) is necessary to provide additional demand for retail and restaurant uses, to provide the population basis for urban vitality on the key streets in the district, and in order to provide sufficient return on investment for potential developers considering mixed-use development strategies in the area. This level of density and building height will be particularly appropriate for the "main" retail street that may extend 600 to 900 feet to the south and perpendicular to Dorsett Road. Residential densities and building heights on the outer



The diagram illustrates one conceptual idea for how the area to the south of Dorsett Road within the Weldon Progress Corridor could redevelop over time. The city should work with private property owners to extend several of the various side streets in the area to the east and south from the Progress Parkway and Dorsett Road area in order to provide additional east-west connectivity along “backage” roads and to improve north-south connectivity from Dorsett Road to various mixed-use properties stretching to the south, toward Westport Plaza. Future redevelopments of mixed-use projects could orient along north-south streets extending off of Dorsett Road and into the district. For example, the extension of Progress Parkway to the south from Dorsett Road (straight south) could include the development of restaurants, in-line retail, and residential units along this primary street. Other areas, to the east toward Fee Fee Creek, could include a mixture of residential units (apartments, condominiums, and townhomes) as well as a variety of mixed-use buildings including office as well as residential uses.

portions of the district, to the south and east, may average in the eight to 16 dwelling units per acre range and include buildings of only two or three stories. A hotel or office tower use in the Weldon Progress Corridor could have building heights of well over ten stories, in keeping with the existing building heights of the Edward Jones campus and the Westport Plaza development.

Building Massing and Relationship to the Street

In order to create a true urban and active mixed-use district that would effectively leverage the employment centers in the area, the key retail or “main” streets in the district should include appropriate urban design frameworks. The street sections should include sidewalks of at least nine feet in width, in order to accommodate outdoor dining, and should also

include a planting or landscape zone of at least six feet in width, in order to provide sufficient space for landscape plantings and healthy trees to grow to their full potential heights. Buildings should front directly on the sidewalks, with parking located behind, either in structures or on surface parking lots. The buildings should orient side by side in a nearly continuous fashion in order to create a true “Main Street,” with openings between buildings to allow for pass-throughs to parking or civic space areas, or to accommodate outdoor patios and other forms of outdoor dining.

To create the kind of walkable mixed use environment desired by the citizens of Maryland Heights, 600 to 900 feet of a retail/mixed use street is needed in one or more locations along Dorsett. Given the nature of existing businesses, the width of the roadway, and the traffic speeds and volumes, it is unlikely that this environment can be created directly along Dorsett. The nature of existing businesses generally requires one or more bays of “teaser” parking along the fronts. Given the size and configuration of some of these parcels this may be all the parking available to the business.

However, as shown in these diagrams it is possible to create a walkable environment on a street parallel or perpendicular to Dorsett. A street perpendicular would be most desirable for such a development because the businesses would still be visible to the high volume of motorists and passersby on Dorsett. This pedestrian street could contain angled parking on both sides and wide sidewalks for outdoor dining. As suggested in this diagram of the Dorsett/McKelvey intersection, this development could be organized in such a way that it is visible from both Dorsett and McKelvey. Over time, as redevelopment occurs, buildings could also front more clearly on Dorsett with a row of teaser parking along the street. Such an arrangement has the potential to provide a mixed use walkable district in close proximity to the majority of housing within Maryland Heights.

A similar district might also be formed in the area between Dorsett Road and Westport Plaza. In this area, retail and mixed use buildings, perhaps integrated with an existing hotel, would provide for walkable dining, entertainment, and residential areas that would leverage the proximity to Edward Jones, Worldwide Technology, and other prominent existing and future office or business park users.

Architectural Character

This plan does not address or prescribe a particular architectural character for the various districts along Dorsett Road. Instead, the master plan suggests that the architectural character chosen for a particular street or development within the Weldon Progress Corridor should interact and mesh appropriately with the general theme of buildings in the immediate area. The new Edward Jones campus on Progress Parkway has a fairly contemporary architectural character. Assuming that Edward Jones expands to some extent in the immediate area, the company is likely to continue its existing architectural style for additional buildings. Therefore, this pattern suggests, but does not mandate, that retail and other side streets in the Weldon Progress Corridor should emphasize more contemporary or modern architectural styles going forward. Building designs, then, would logically include more contemporary elements to match the themes of the office buildings in the area. Questions for form and material will logically be addressed in the creation of a form based code for the district. St. Louis County has recently engaged a consultant to prepare a model form based code for the county. The City could fairly easily adapt this code to the needs of Dorsett Road.



Architectural rendering of the future appearance of Progress Parkway, to the south of Dorsett Road, following the completion of various improvements in the Weldon Progress corridor area..

6

IMPLEMENTATION

The success of the City of Maryland Heights in creating meaningful improvements and improved economic performance along the Dorsett Road corridor will depend on the ability of the city, working with the private sector, in implementing the recommendations outlined in this master plan document. Civic leaders within the community must work with various government partners as well as the private sector to execute public improvements and to encourage private development that matches the vision articulated by the community during the Dorsett Road Great Streets planning effort. The City of Maryland Heights, along with other parties, should proceed with the following steps to initiate and continue improvements to the Dorsett Road corridor over the short term, as well as the long term.

Comprehensive Plan Updates

The City of Maryland Heights should begin the implementation of the Dorsett Road plan within the next several months by including the key recommendations in the overall Comprehensive Plan of the city. These plans articulate the long range land use vision for the community, and including the updates from the Dorsett Road effort will, for the first time, attach the recommendations of this master plan to official community planning documents. The conversion of the areas along Dorsett Road from single-use zoning (in most cases, commercial or industrial) to a mixed-use orientation should, based upon discussion and interactions the project team conducted during the project with the private and public sector, meet with agreement from the community. This change presents property owners with additional options for their land (including residential and office uses, as well as retail) and therefore should increase the value proposition for individuals and property owners along the corridor. The comprehensive plan update should also include text and graphics that depict the locations of future park and open space connections and future civic spaces.

Collaborating Efforts to Create Unified Development

To continue to push the vision of the Dorsett Road Great Streets Plan forward and coordinate development efforts between the community, property owners, and the city, ongoing implementation and economic development of the Dorsett Road corridor would significantly benefit from the formation of a business association. This group would include Dorsett Road merchants and property owners, as well as interested parties located within the Weldon Progress corridor stretching from Dorsett Road south to Westport Plaza. Business associations around the country typically work to develop the brand image, advertising campaigns and promotions for a given retail or commercial district. They also work with local governments to coordinate maintenance, to attract new businesses, to help oversee or monitor public improvement projects, and to provide overall leadership for a given district. Business associations help a given district speak as a collective voice and therefore more clearly articulate the viewpoints of members and secure support from the larger community. In terms of promotions, a business association along Dorsett Road could help coordinate events such as farmers markets or festivals to bring more people into the district. A business association would help the business community along Dorsett Road speak collectively concerning the revitalization and ongoing operation of the corridor over the next few decades.

The city may wish to encourage the creation of a business association that would include members from throughout the Weldon Progress Corridor, from Dorsett down to Westport Plaza, in particular, in order to help energize this key area within Maryland Heights. The entire Weldon Progress corridor area shares a similar business composition, in terms of having a mix of local and national employers, and working together, the association

could help position the area for additional development over time and help to leverage the connections between Westport and the Dorsett Road corridor.

Business owners, given the difference in context between areas to the west of I-270 and areas to the east toward Lindbergh Boulevard, may wish to organize into more than one business association. This strategy may make sense given the significant difference in business base and economic orientation between the east and west ends of the corridor. However, elected and appointed officials in Maryland Heights should work to create connections and common ground between different business associations along Dorsett Road in order to ensure that the overall corridor continues to evolve in a consistent manner in terms of branding, signage, and similar themes.

The City should work with property owners to help create a unified appearance and “feel” for different potential districts along the corridor as properties redevelop. City staff could use a Form Based Code to articulate the desired styles of development for different areas. The area around the Weldon Progress Corridor, for example, could gain more of a modern or contemporary look and feel over time, in keeping with recent development projects at the Edward Jones campus along I-270. In contrast, the area around McKelvey Road may take on more of a historical or lower key feel and look in order to emphasize the nature of this part of the corridor as more of a neighborhood destination.

Form Based Code

The adoption of a unified Form Based Code (FBC) for the corridor would outline the relationship between particular buildings and adjacent streets and open space areas for various districts along the corridor. FBCs do not specify particular land uses for various buildings, but instead articulate how setbacks, architectural standards, and site plan layouts should create a sense of place for various types of districts. Over time, land uses (such as retail and residential) may change, but the form of buildings and streets should remain the same.

Initial Cost Estimate

Based upon the final illustrative plan (refer to page 87) for the corridor, recommendations for transportation and utility improvements within the study area, and assumptions for unit costs developed through discussions with local officials and experience with other projects around the St. Louis region, the project team outlined an initial cost estimate for the public improvements necessary over the next 20 years to bring the corridor plan to fruition.

Using an assumption of 20 percent for contingency and a 15 percent allowance for design and permits, the project team determined that public improvements, including funds for the multi-use path, mid-block crosswalks, lighting, signage, trees, landscaping, and other elements illustrated in this plan, would total to \$12.8 million along the length of the corridor, from Lindbergh Boulevard to Marine Avenue.

The following outlines anticipated total costs by segment along Dorsett Road.

Segment (Limits)	Subtotal	Contingency	Design and	Total
			permits	
		20%	15%	
Section A (Marine Avenue to Marine Lane)	\$ 320,000	\$ 70,000	\$ 50,000	\$ 440,000
Section B (Marine Lane to Pheasant Run Drive)	\$ 830,000	\$ 170,000	\$ 130,000	\$ 1,130,000
Section C (Pheasant Run Drive to McKelvey Road)	\$ 1,080,000	\$ 220,000	\$ 170,000	\$ 1,470,000
Section D (McKelvey Road to I-270)	\$ 860,000	\$ 180,000	\$ 130,000	\$ 1,170,000
Section E (I-270 to Metro Boulevard)	\$ 1,060,000	\$ 220,000	\$ 160,000	\$ 1,440,000
Section F (Metro Boulevard to Schuetz Road)	\$ 1,220,000	\$ 250,000	\$ 190,000	\$ 1,660,000
Section G (Schuetz Road to Fee Fee Road North)	\$ 1,260,000	\$ 260,000	\$ 190,000	\$ 1,710,000
Section H (Fee Fee Road North to Pinehurst Place Drive)	\$ 1,510,000	\$ 310,000	\$ 230,000	\$ 2,050,000
Section I (Pinehurst Place Drive to Adie Road)	\$ 980,000	\$ 200,000	\$ 150,000	\$ 1,330,000
Section J (Adie Road to Lindbergh Boulevard)	\$ 520,000	\$ 110,000	\$ 80,000	\$ 710,000
Total	\$ 9,640,000	\$ 1,990,000	\$ 1,480,000	\$ 13,110,000

In addition, the following table illustrates the break out by major funding category for improvements to the length of Dorsett Road.

Permeable Paths (Multi-Use Path Along Corridor)	\$2,341,600
Curb Ramps	\$101,000
Curb and Gutter	\$859,620
Storm Sewer Adjustments	\$465,600
Bio-Swales	\$525,000
Water Quality Improvements	\$280,000
Utility Adjustments	\$1,850,000
Landscaping	\$184,019
Trees	\$78,200
Pedestrian Lights	\$1,830,000
Bus Stops	\$120,000
Mid-block Pedestrian Signals	\$210,000
Traffic Signals	\$720,000
Total --->	\$9,565,039

As articulated by St. Louis County during the course of the project, the City of Maryland Heights would have the responsibility for funding these additional public improvements and their maintenance over time. Additional sources of funding may include Great Rivers Greenway, Trailnet, or MSD. The City may be able to obtain funding from a variety of state or federal sources, depending on the nature of the recommended improvement in a particular segment along Dorsett.

Phasing

The Dorsett Road planning effort did not arrive at a fixed phasing plan for the corridor in terms of defined prioritization and phasing of improvements for particular segments along Dorsett Road over time. However, discussions with elected leaders and city officials revealed the following conclusions that will help to guide the completion of the Dorsett Road plan in phases over time, over the next two decades.

Enhanced crosswalks

The public indicated that providing for safer crossings along the corridor ranked as one of the top priorities for the overall planning effort. City staff noted that safety is a very real and immediate concern for people crossing Dorsett just to the west of 270, near the two apartment complexes in the area. As an initial and immediate improvement, the City should work with the county to upgrade existing crosswalks along the corridor and to install the mid-block crosswalks in conjunction with relocated Metro stops, as outlined in this plan. The city could also fairly quickly modify the crosswalk timings along the corridor to allow for additional crossing time at intersections along Dorsett.

Multi-use path

The city should work to complete the multi-use path as part of an initial phase of improvements along the length of the corridor. Furthermore, the city should implement the multi-use path all at once, rather than in segments over time. Completing only part of the multi-use trail would create unconnected segments or runs the risk of not completing (over the long haul) a full connection from the east at Lindbergh Boulevard all the way to Marine Avenue. Creating the community wide connections from neighborhoods and businesses in Maryland Heights to the Creve Coeur Park area is one of the main ideas behind the multi-use path, and therefore the city should work to ensure that the trail would be completed all at once and not in separate segments. The City of Maryland Heights would need to acquire very small areas of right-of-way along various stretches of the Dorsett Road corridor in order to fully complete the multi-use path at the desired width. In most cases this would involve acquiring one or two feet of additional right-of-way. The City may acquire this additional right of way (ROW) through easements or outright property purchases.

Since many of the existing uses along the corridor will remain for a number of years before undergoing redevelopment, the significant number of existing driveways along Dorsett Road will conflict with the efficient flow of pedestrian and bicycle traffic along the multi-use path in the near term. While the St. Louis County access management standards outline general spacing for driveways, experience from similar corridors around the country indicates that driveways on a 35 mile per hour road such as Dorsett Road should have driveways spaced 150 feet or more apart, in order to allow for safer passage of people walking or bicycling along the right-of-way. On many stretches of Dorsett Road, driveways are located within 50 feet or less apart, meaning that the ideal movement of bicyclists and pedestrians along the multi-use path would be interrupted, given current conditions. Over time, as properties redevelop along Dorsett Road, the city and county should work together to remove or consolidate many of the existing driveways along the corridor to provide a more ideal access management plan as it relates to people walking or bicycling along Dorsett Road in the future.

The recommendations outlined in the Dorsett plan would allow for the city to complete the entire length of the multi-use path without using eminent domain on any properties. There are some stretches of the corridor, however, in which the right of way is narrower, and using only the land available in the right of way would result in the creation of a narrower

path (less than 12 feet in width). In order to provide for the wider multi-use path in these sections, the city would need to acquire a few feet of additional right of way or easements from adjacent property owners.

Signage and Lighting

Beyond the multi-use path, the city could complete signage and lighting across the entire corridor at a lower cost relative to other improvements. In particular, signage upgrades would help benefit the overall corridor from the outset and help to establish an improved brand identity for the area, at a relatively low cost.

Completion of additional elements

The city should explore the completion of the remaining elements outlined for the Dorsett Road Great Streets plan (including street trees, plazas, and public art) in segments. The city may wish to determine prioritization for these additional elements based upon the degree to which redevelopment is occurring in a particular segment, with the thought that it would make sense to prioritize improvements adjacent to properties that are in the process of renovating or reconfiguration. This document does not articulate a preferred geography for improvements. However, improving segments closer to I-270 obviously would create the biggest change in the minds of people in the region concerning the “front door” to Maryland Heights along Dorsett Road. . For example, completing all of the improvements outlined in this master plan for the portion of the corridor from McKelvey to Metro would cost around \$2.5 million, an amount below the \$3 million the city initially has earmarked for Dorsett improvements.

Funding Sources

The City of Maryland Heights may pursue a variety of funding sources and strategies to bridge the gap between the \$3 million already earmarked for Dorsett Road improvements and the overall \$12 million price tag for all improvements along the length of the corridor. City leaders and city staff should examine these potential tools and determine the viability of each in helping to provide additional funds for Dorsett Road improvements in the future.

In addition to the funding categories identified below, the City of Maryland Heights may explore a variety of funding sources at the federal or state level in order to provide resources to complete various improvements along Dorsett Road over time. The Transportation Improvement Program (TIP) provides a variety of funding for streetscape and transportation projects through the resources of East West Gateway Council of Governments. The CMAQ and recently created Transportation Alternatives Program (TAP) is another likely source of funding for corridor improvements. The potential to secure funding through these resources is dependant on a variety of factors, including the pool of available money, and the funding formulas used to rank applications made by local jurisdictions. In addition, the federal TIGER program has provided for a variety of streetscape and transportation improvements in the St Louis area and represents another potential source of funding for Dorsett Road improvements.

Transportation Development District (TDD)

A transportation development district (TDD) provides another tool that the public and private sectors in Missouri may use, either separately or in conjunction with other economic development tools, to support economic growth in local communities. State statutes provide a great deal of flexibility with regard to TDD formation and execution, and therefore

local communities across the state have pursued TDDs as a popular economic development tool over the last twenty-plus years.

The state's TDD Act, enacted in 1990, allows for the formation of local transportation development districts (or "TDDs") to fund, promote, plan, design, construct, improve, maintain, and operate one or more transportation projects within the district's boundaries. Eligible projects may include bridges, streets, highways, interchanges, intersections, signage, signalization, parking lots, bus stops, stations, garages, terminals, hangars, shelters, rest areas, docks, wharves, lake or river ports, airports, railroads, light rail, or other mass transit and any similar or related improvements or infrastructure. A District may be formed through a petition of local residents, the consent of all property owners in the designated area, or by a local governing body or transit agency. Before the construction or funding of any projects within the TDD, the District must submit project information and budgets to the Missouri Highways and Transportation Commission for approval. In cases where the proposed improvements will not fall under the jurisdiction of the state Commission (MoDOT), the local jurisdiction must review and approve project information and budgets.

Similar to TIF, in the case of TDDs the property owner / developer pays nothing for the publicly financed improvements funded by the TDD, but is ultimately responsible to bondholders if the tax revenue generated by the improvements is insufficient to make the payments.

TDDs raise revenues within the boundaries of the district through the following types of mechanisms:

Bonds, notes, and other obligations: The TDD may issue obligations in order to raise money to finance transportation improvements in the district.

Sales Tax: A TDD may impose a district sales tax, in increments of one-eighth of one percent up to a maximum of one percent, on the receipts from all retail sales made in the district. Retailers in the district must prominently display the rate of the sales tax imposed or increased as a result of the TDD sales tax, in the cash register area.

Alternate Sales Tax: In cases where a TDD district encompasses an entire city or county, the relevant governing bodies (with voter approval) may impose an Alternate TDD Sales Tax on all retail sales made in the District. The Alternate TDD Sales Tax may be imposed at a rate of one-eighth of one percent, one-fourth of one percent, three-eighths of one percent, one-half of one percent, or one percent and must be uniform across the District.

Property Tax: Assuming approval by at least four-sevenths of the qualified voters in the TDD District, the TDD District may impose a property tax in the amount not to exceed the annual rate of ten cents on each one hundred dollars of assessed valuation.

Special Assessments: The TDD District may assess one or more special assessments for specially designated project improvements if approved by the majority of qualified voters or the owners of record of all of the real property located in the district who sign a special assessment petition.

Toll Roads: The TDD District may charge and collect tolls or fees for the use of a transportation project. In order to do this, the District may relocate an existing state

highway, subject to approval by the Commission, or an existing local public street or road, subject to approval by the local governmental body with jurisdiction over the road.

TDDs, in contrast to Tax Increment Financing, raise their own taxes and do not simply divert tax revenues from another political entity (such as a school district or local city or town). In addition, TDDs have emerged as a good complement to an existing or new TIF district, especially in cases where the TDD can pay for a portion of transportation improvements and thereby allow the TIF to fund other public improvements, such as utilities, streetscape, or other infrastructure. Given the political controversy that has surrounded the use of TIF in recent years, the TDD concept has a fairly bright future across Missouri in helping to promote and support local economic development efforts.

Community Improvement District (CID)

In contrast to Transportation Development Districts, that are only able to fund transportation-related improvements, a CID can finance a wide array of public improvements and services that can enhance the district. A CID can be established by a government entity or a non-profit and requires the approval of a petition signed by either the property owners that collectively own at least 50 percent of the assessed value in the proposed district, or a total of more than 50 per capita of all owners of real property within the proposed district. The petition must outline a five year plan that describes the purposes of the proposed district, the services it will provide, the improvements it will make and an estimate of the costs of the project. Once the petition is filed, the governing body of the particular municipality in question must hold a public hearing and approve the creation of the proposed district by ordinance. In contrast to a Neighborhood Improvement District, a CID is a separate legal entity, and operates distinct and apart from the municipality that creates the district.

The CID may finance improvements through the imposition of 1) special assessments for those improvements that specifically benefit the properties within the district, 2) property taxes, or 3) a sales tax up to a maximum of one percent. A CID may finance the costs of a project through the charging of fees, rents, and charges for district property or services, or grants, gifts, and donations. A CID may also issue bonds, notes, and other obligations in order to fund improvements.

A CID may finance the following types of improvements within its boundaries:

- Pedestrian or shopping malls and plazas
- Parks, lawns, trees, and any other landscape
- Convention centers, arenas, aquariums, aviaries and meeting facilities
- Sidewalks, streets, alleys, bridges, ramps, tunnels, overpasses and underpasses, traffic signs and signals, utilities, drainage, water, storm and sewer systems and other site improvements
- Streetscape, lighting, benches or other seating furniture, trash receptacles, marquees, awnings, canopies, walls and barriers
- Telephone and information booths, bus stop and other shelters, rest rooms and kiosks
- Music, news and child care facilities
- Lakes, dams and waterways
- Paintings, murals, display cases, sculptures and fountains
- Parking lots, garages or other facilities

A CID may also provide a variety of public services, including the following:

- With the municipality’s consent, prohibiting or restricting vehicular and pedestrian traffic and vendors on streets
- Operating or contracting for the provision of music, news, child-care or parking facilities, and buses, mini-buses or other modes of transportation
- Leasing space for sidewalk café tables and chairs
- Providing or contracting for the provision of security personnel, equipment or facilities for the protection of property and persons
- Promoting business activity, development and retention
- Providing or contracting for cleaning, maintenance and other services to public and private property and persons
- Promoting tourism, recreational or cultural activities or special events
- Providing refuse collection and disposal services
- Contracting for or conducting economic, planning, marketing or other studies

Neighborhood Improvement District (NID)

A Neighborhood Improvement District is a geographically bounded area within which certain public improvements are financed by a city through the issuance of notes or bonds, which are in turn repaid by levying assessments against the property within a NID. NIDs offer distinct advantages in executing economic development for a city and a particular District. Because the city in question issues general obligation bonds, the public improvements associated with the NID can be financed at lower interest rates. Second, a NID can be established and an assessment imposed without a city-wide election. Third, a city may group two or more NID projects together into one bond issue in order to further reduce financing and project costs. Finally, the NID Act in Missouri allows for a fairly broad range of public improvements to be financed without a requirement that the area be considered to be “blighted” in order to be included in a NID designation.

Eligible Improvements and Costs

Under the Missouri NID Act, eligible improvements and costs may include streets, lighting, parks and recreational facilities, sidewalks, utility service connections, sewer and storm water systems, flood control works, off-street parking structures, bridges, overpasses, tunnels, and “any other public facilities or improvements deemed necessary by the governing body of the city or county”. The NID Act also allows for certain incidental costs to be financed, such as land acquisition and engineering, legal, and financing fees and costs. The act also carries provisions for maintenance of the public improvements during the term of the bonds or notes pertaining to the improvements.

NIDs can be established by either 1) a petition of at least two-thirds of the owners of record of all of the real property located within the proposed NID district, or 2) by the City submitting a question to all qualified voters residing within the proposed NID at a general or special election called for the purpose of approving bonds associated with the NID.

NIDs carry some distinct advantages compared to TIF in Missouri. Whereas TIF is financed by limited obligation bonds, the general obligation bonds issued as part of NID deals allow for lower interest rates. Whereas TIF requires a blight designation for the affected district or area, NIDs do not carry such requirements. Another distinction between NID and TIF is that, in the case of TIF, property owners or developers do not pay anything initially for the publicly financed improvements but are ultimately responsible to the bondholders if the tax revenue generated by the improvements is insufficient to make the payments. In contrast,

under NID, property owners pay upfront for public improvements through assessments over and above any property or sales taxes they already pay, but the municipality is ultimately responsible to the bondholders if property owners are unable to make the necessary payments.

Enhanced Enterprise Zones (EEZs)

The Enhanced Enterprise Zone Tax Benefit Program, sponsored by the Missouri Department of Economic Development, provides various tax credits to new or expanding businesses in a Missouri Enhanced Enterprise Zone. These zones are specific geographic areas designated by local governments that must be certified by the Department of Economic Development. The program offers state tax credits, accompanied by local real property tax abatements, to eligible businesses in the EEZ. To receive the tax credits, a business facility must provide for two new employees and \$100,000 in new investments (in the case of a new or expanded business facility), or two new employees and \$1 million in new investment (in the case of a replacement business facility). Companies receiving EEZ tax credits must provide health insurance to all full time employees in Missouri in order to qualify for the program. Eligible investment expenditures include the original cost of machinery, equipment, furniture, fixtures, land and buildings, and or eight times the annual rental rate paid for these items. Ineligible businesses for the EEZ program include gambling establishments, retail trade entities, educational services entities, religious organizations, public administration entities (governments), and food and drinking places.

Tax Increment Financing (TIF)

TIF allows the use of a portion of local property and sales taxes to assist in the funding of redevelopment of certain designated areas in a community. Areas identified for TIF must be deemed to be part of a “blighted,” “conservation” or an “economic development” area. TIF essentially uses the additional sales tax revenue that is generated above and beyond the current level of revenue, as a result of a redevelopment, in order to fund a variety of project costs. Eligible project cost categories include professional services, land acquisition, rehabilitation of buildings, new infrastructure, and relocation of existing businesses or residents.

Chapter 353 Tax Abatement

The State of Missouri offers a Chapter 353 Tax Abatement as an incentive that can be used by cities to encourage the redevelopment of blighted areas by providing real property tax abatements. Under this program, an “Urban Redevelopment Corporation” must be organized pursuant to the Urban Redevelopment Corporations Law in the state of Missouri and the area designated for tax abatements must be deemed a “blighted area” under state law. Under the program, tax abatements are available for up to 25 years. During the first 10 years, the property is not subject to real property taxes except in the amount of real property taxes assessed on the land, exclusive of improvements. During the next 15 years, the real property may be assessed up to 50 percent of its true value. Payments in lieu of taxes (PILOTs) may be imposed on the Urban Redevelopment Corporation by contract with the city. PILOTs are paid on an annual basis to replace all or part of the real estate taxes that are abated.

In areas that are challenged by economic decline or blight, the Chapter 353 provisions provide an additional tool for local governments to provide incentives for economic redevelopment.

Sales Tax Reimbursement Agreements

The State of Missouri allows Sales Tax Reimbursement agreements as a funding mechanism to fund infrastructure associated with new developments. Under these agreements, municipalities have the ability to annually appropriate the increase in sales taxes created by new private capital investment to offset a portion of project investment costs. Under this type of agreement, a portion of City sales taxes captured from the increased sales generated by the project would be reimbursed to the developer or company for eligible expenses. This provision, then, helps to provide an incentive for redevelopment or new development along corridors such as Dorsett.

The state has laid out a number of criteria that must be followed or satisfied in order to allow for a Sales Tax Reimbursement Agreement.

- The applicant must demonstrate that the project would prevent a significant loss in existing sales tax revenue or make a significant contribution to the overall health and well-being of the local economy.
- The project must show a clear demonstration of the public purpose and the economic benefit provided through the agreement and how the agreement would further the city's economic development goals.
- The application must show that the project would not occur "but for" the incentives offered. The incentive should make a difference in determining the decision of the particular business to expand or remain in the city and it must be proven that this would not have otherwise occurred without the availability of the sales tax reimbursement.
- The firm that would benefit from the sales tax reimbursement must show its financial stability and capacity to complete the project.
- The application must ensure that the city or any other taxing jurisdiction affected by the incentive is not receiving less total sales tax revenue from the property than was received prior to the granting of the sales tax reimbursement provision.
- The sales tax reimbursement is generally not allowed to extend for greater than ten years.

Additional Funding Sources for Greenways

In addition to the normal tools in Missouri such as NIDs, CIDs, TDDs, and TIFs, the City of Maryland Heights may wish to consider additional funding strategies identified to provide for greenway enhancements (such as a potential greenway improvement along Fee Fee Creek as discussed in this document). These additional strategies may include but not be limited to the following:

Bond Referendums for Greenways

Communities across the nation have successfully placed on local ballots propositions to support greenway development, ranging from small towns to larger cities. For example, a few years ago residents in Casper, Wyoming passed a greenway bond referendum to provide for the first three miles of a local greenway.

Greenway Trust Fund Many communities around the country have created trust funds for land acquisition and facility development. A trust fund may help in acquiring parcels that would otherwise be lost if not acquired by private sector initiative.

Community Development Block Grants (CDBG)

The US Department of Housing and Urban Development provides states with annual direct grants that are then awarded to local communities in part for park and greenway projects.

Development Strategies

The City of Maryland Heights may wish to stimulate redevelopment of particular parcels or focus areas along the corridor through one of the following strategies:

Joint Public / Private Development Opportunities

The City could contribute any publicly owned parcels along the corridor to a joint development deal with one or more private landowners in order to assemble and launch a redevelopment project at a particular location along the corridor. The city could also contribute equity in the form of cash to a joint public private partnership to promote redevelopment along Dorsett Road.

Public Investment

Beyond the overall cost of public improvements along Dorsett Road per se, the City may wish to facilitate development on parcels by providing for additional capital projects (such as streetscape improvements, parks and other community facilities) for areas or parcels along Dorsett Road. The city may also assist private development projects by providing for the operations or maintenance of various improvements (such as streetscape features).

Property Assembly

The city could help the private sector overcome one of the biggest hurdles to redevelopment on any corridor – property assembly. By either quietly or proactively buying key parcels along Dorsett Road and then helping to facilitate redevelopment deals that involve these particular parcels, the city can help to jump start redevelopment at various locations along the corridor.

Regulatory Changes

The city could help to facilitate redevelopment by helping to alter or streamline regulations such as zoning, design guidelines, parking ratios, and other regulations.

Note Concerning Eminent Domain

The recommendations outlined in the Dorsett plan would allow for the city to complete the entire length of the multi-use path without using eminent domain on any properties. There are some stretches of the corridor, however, in which the right of way is narrower, and using only the land available in the right of way would result in the creation of a narrower path (less than 12 feet in width). In order to provide for the wider multi-use path in these sections, the city would need to acquire a few feet of additional right of way or easements from adjacent property owners.

Next Steps:

The City of Maryland Heights should chart its own course in executing the Dorsett Road plan. However, the consultant team suggests that the city move forward with next steps of action in the following order:

1. Signing a Memorandum of Understanding between the City of Maryland Heights and St Louis County agreeing to the general principles outlined in this plan and to the improvements within the roadway articulated in the Dorsett Road Great Streets Plan.
2. Adoption of master plan recommendations into the comprehensive plan for Maryland Heights.
3. Adoption of a Form Based Code for the corridor, and adoption of updated development codes (for parking, signage, zoning, etc.) for the corridor based upon the goals and strategies articulated in the Dorsett Road Great Streets document.
4. Identification of first and second phase public improvements along the corridor.

METRICS

Will Dorsett Road be a Great Street?

Metrics are a discovery-oriented tool to shape a collective point of view about a project's aspirations. They help to develop more thorough design solutions by setting goals, integrating strategies from the four DW Legacy Design® circles (Economics, Environment, Community, and Art) and measuring outcomes. Metrics help clients understand how DW Legacy Design® will positively impact their project.

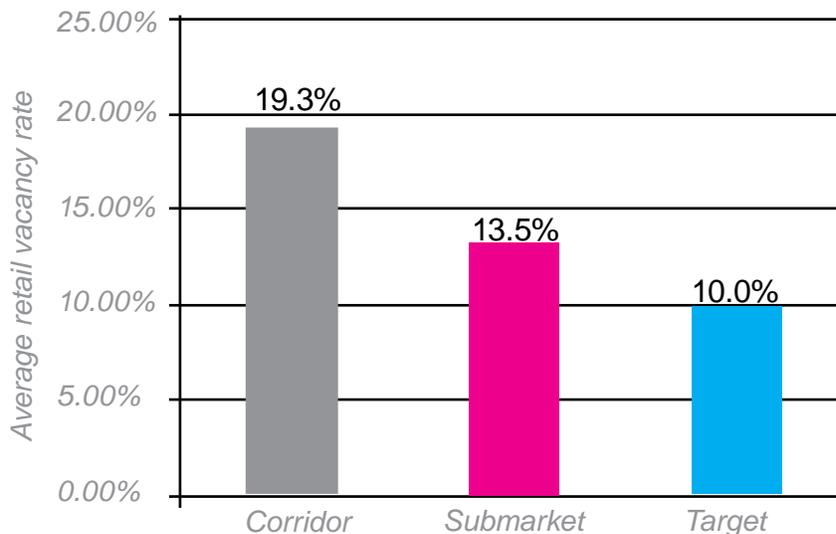
At the outset of the design process the project team set out to answer the question “Will Dorsett Road be a Great Street?” The key characteristics of a Great Street guided project development and helped to ensure that this final product optimizes benefits for the environment, economics, art, and community of Maryland Heights.

ECONOMICS

Great Streets contribute to the economic vitality of the City.

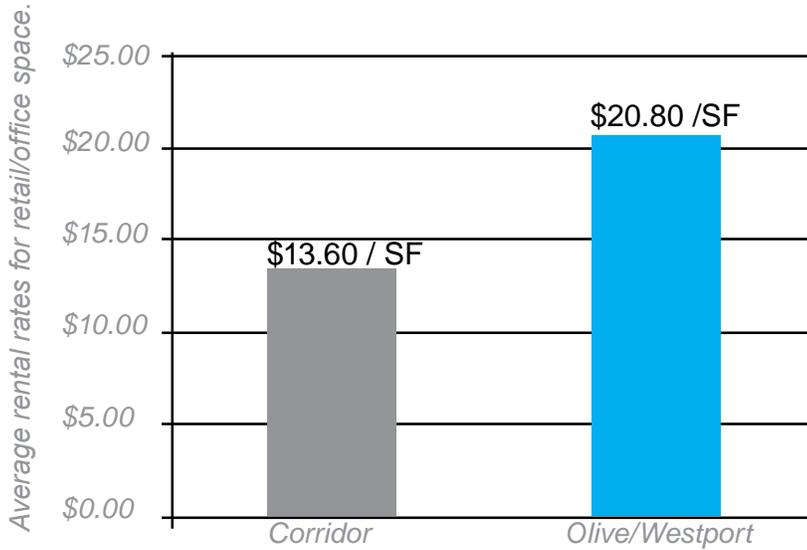
Reduce retail vacancy.

To create an active and vibrant street, it is essential that the city look towards current vacancies in the corridor as opportunities to attract investment. In particular, community members voiced complaints about the number of retail vacancies along Dorsett Road. In similar suburban environments, the target vacancy rate for retail should waver between eight and ten percent. Maryland Heights should look to this number as goal for retail vacancy in the corridor.



Increase office/retail rental rates.

Rental rates can reflect both property value and neighborhood popularity within the market. Looking at office and retail spaces within the corridor helps to determine how these types of properties are valued and to what degree they are desirable to potential businesses and investors. The recommendations outlined in the Dorsett Road Great Streets Plan will help to create an environment that will attract businesses and investors and thereby increase property owner returns.



ENVIRONMENT

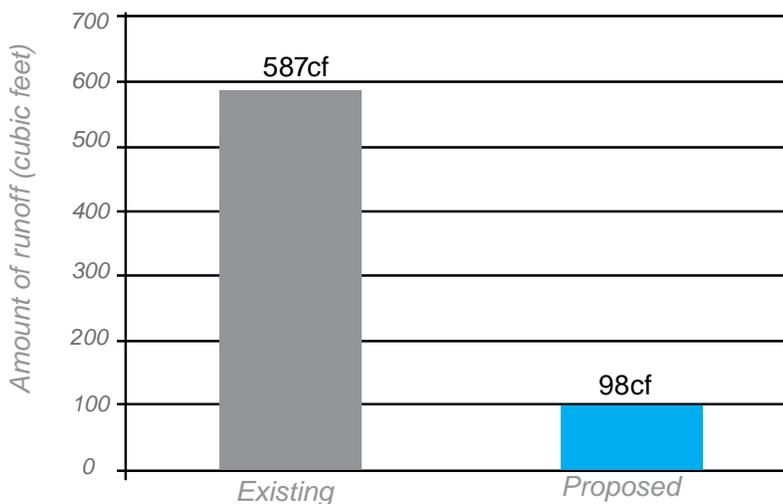
Great Streets are green.

Reduce stormwater runoff and increase pervious surfaces.

Impervious surfaces (such as concrete and asphalt currently used for corridor sidewalks and parking lots) can have a major impact on stormwater management, regional water quality and urban heat island effects. To create opportunities to better manage stormwater and reduce the negative effects of urban heat islands, this plan recommends a number of strategies including:

- Conversion of surface parking lots to pervious surfaces.
- Construct recommended multi-use path using permeable concrete.
- Construct raingardens in recommended locations along Dorsett Road.

The average rainfall in Maryland Heights is 30.07 inches. During a 90 percent storm event, a surface parking lot constructed of permeable asphalt would reduce the amount of stormwater runoff by 83 percent. A 90 percent storm event represents a rain event that can be expected to occur with a 90 percent probability within a given year.

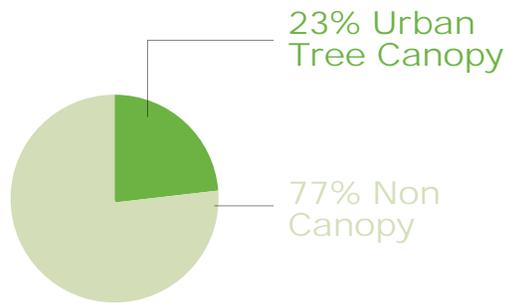


Increase the number of street trees along Dorsett Road.

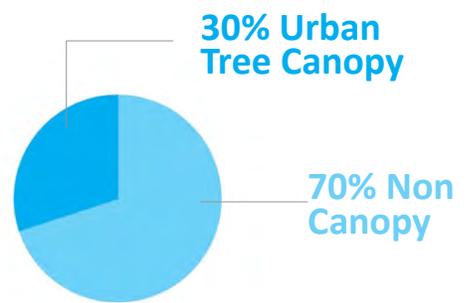
The value that street trees can bring to environments like the Dorsett Road corridor cannot be stressed enough. In addition to the benefits listed on page 82, tree planting can also provide the following environmental benefits:

- Reduce stormwater runoff
- Increase groundwater recharge
- Reduce energy use
- Improve air quality and reduce atmospheric CO₂
- Reduce urban heat island and heat-related illness and fatalities
- Improve native habitat
- Provide environmental education opportunities

Existing Conditions



Proposed Conditions

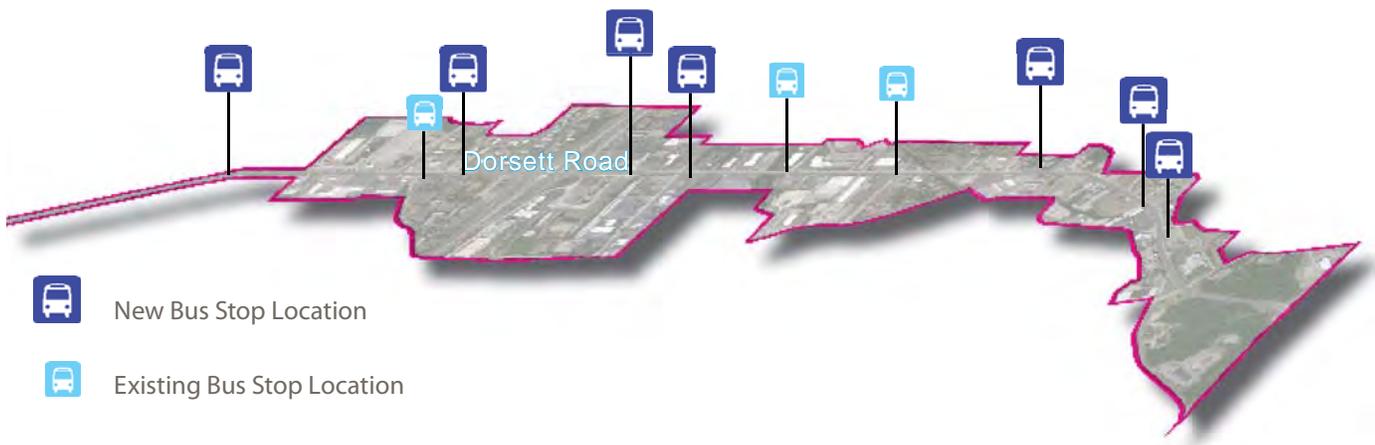


COMMUNITY

Great Streets provide mobility.

Consolidate bus stops.

To facilitate more efficient travel and create safer conditions for transit riders and drivers, the project team has outlined a number of locations where bus stops can be consolidated and in some cases, moved.



Great Streets allow people to walk comfortably and safely.

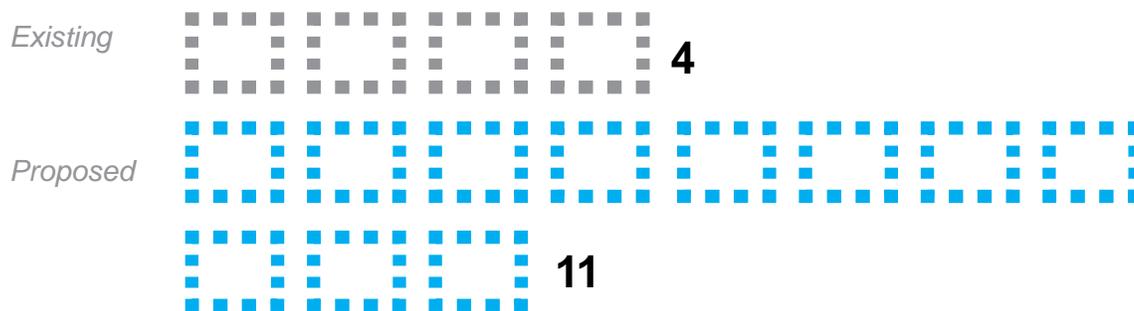
Increase sidewalk width.

Improving conditions for pedestrians in the Dorsett Road corridor is a key factor to the success of this project. In order to accomplish this, one significant recommendation is to create a 12 foot wide multi-use path along the length of the road from Marine Avenue to Lindbergh Boulevard. Increasing sidewalk widths give pedestrians more space to maneuver the road, stop and pause, or take a moment to chat with a fellow pedestrian. Additionally, increased sidewalk widths help improve safety conditions by creating more distance between travelling cars and people walking on the sidewalk.



Increase number of crosswalks.

Through site visits and public input, the project team quickly discovered that the lack of crosswalks along Dorsett Road has left many pedestrians feeling and being unsafe. For example, between McKelvey Road and I-270, there are currently no crosswalks for pedestrians to safely cross Dorsett Road, despite the heavy traffic coming from I-270, the significant number of residential apartments in the area, a major bus stop, and the nearby presence of major employers. To address this problem, this document recommends increasing the number of crosswalks along Dorsett Road. These crosswalks are identified in the illustrative master plan (refer to pages 87 through 115).



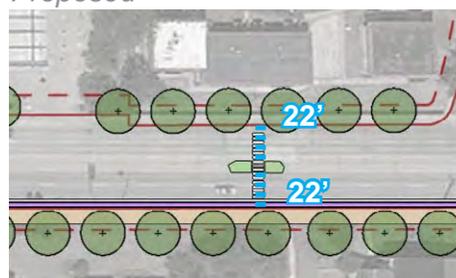
Decrease crosswalk distance.

Shorter crosswalk distances correspond with an increase in pedestrian safety by minimizing conflicts between pedestrians and cars at intersections throughout the corridor. With the addition of new pedestrian refuge islands, walking distances would decrease from 60 feet to approximately 22 feet. The walking distance of 22 feet represents the distance from one side of the street to the median refuge in the middle.

Existing Conditions at McKelvey Hill Drive



Proposed

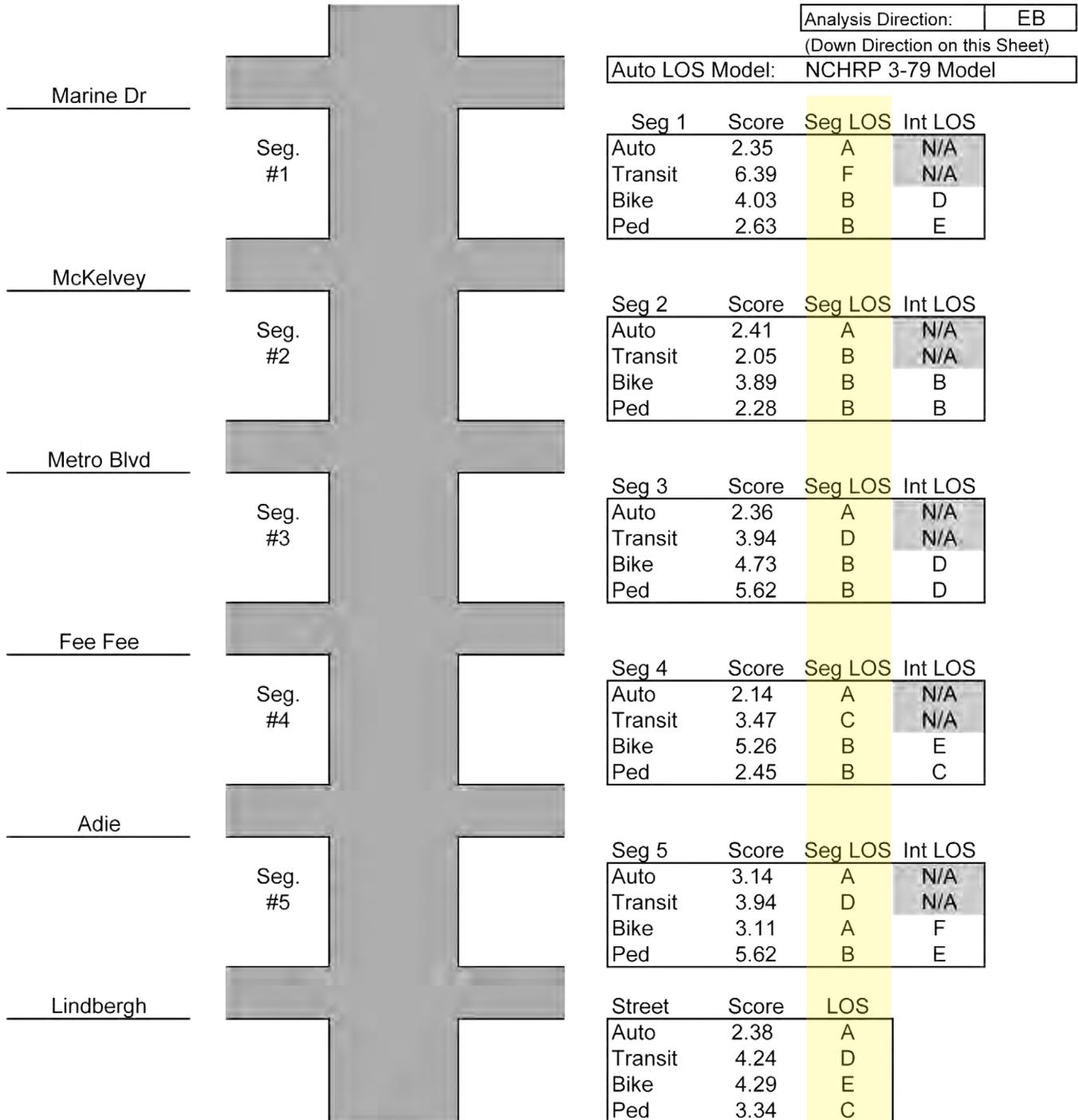


Great Streets are functionally complete.

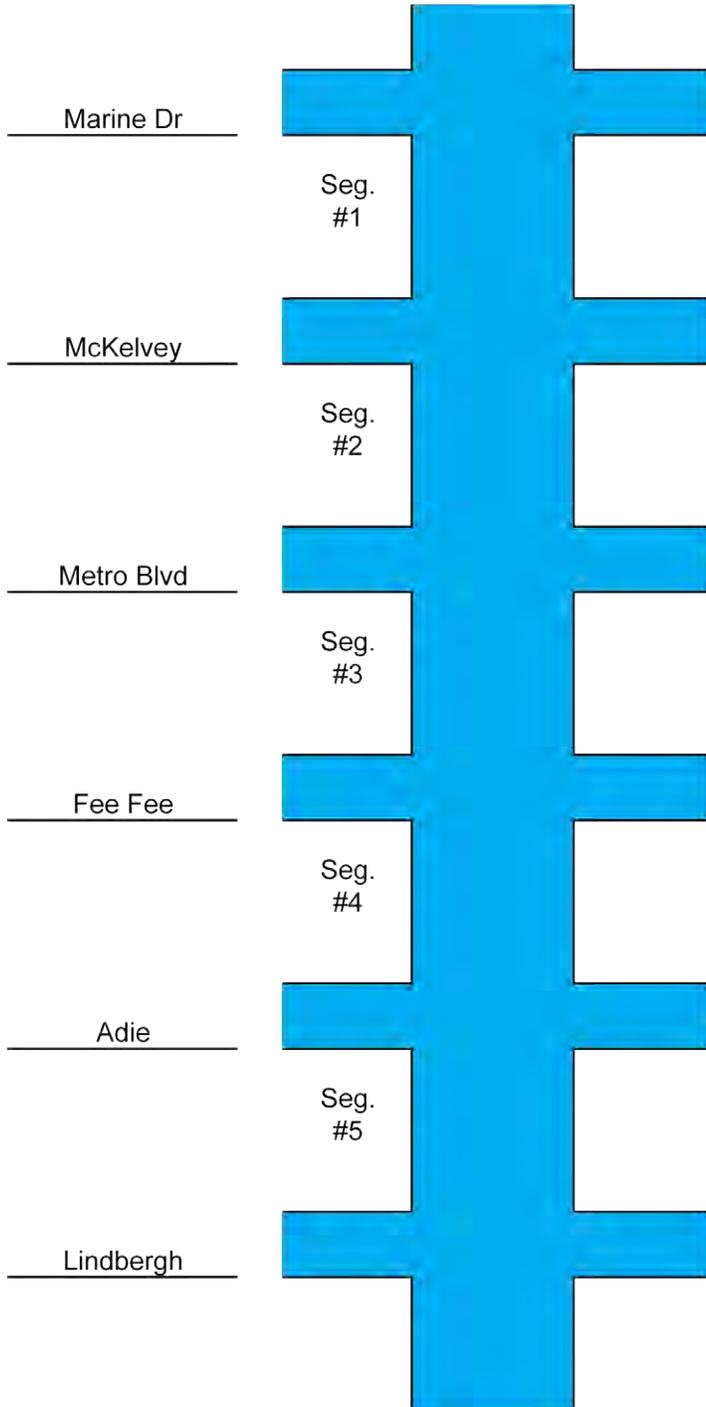
Improve MMLOS score for all segments of the corridor.

A driving force behind this project has been the study of auto, transit, bicycle and pedestrian levels of service in order to recommend improvements that would create the optimal condition for all modes of transit on Dorsett Road. By following the recommendations outlined in the Dorsett Road Great Streets Plan, MMLOS conditions are predicted to improve across the board.

LOS Under Existing Conditions



LOS Under Proposed Conditions



Analysis Direction: EB
(Down Direction on this Sheet)

Auto LOS Model: NCHRP 3-79 Model

Seg 1	Score	Seg LOS	Int LOS
Auto	2.35	A	N/A
Transit	2.82	C	N/A
Bike	2.91	A	B
Ped	3.08	A	D

Seg 2	Score	Seg LOS	Int LOS
Auto	2.41	A	N/A
Transit	0.50	A	N/A
Bike	3.72	A	A
Ped	2.83	B	B

Seg 3	Score	Seg LOS	Int LOS
Auto	2.36	A	N/A
Transit	0.99	A	N/A
Bike	1.90	A	A
Ped	2.92	A	D

Seg 4	Score	Seg LOS	Int LOS
Auto	2.14	A	N/A
Transit	0.97	A	N/A
Bike	4.35	A	A
Ped	2.79	A	B

Seg 5	Score	Seg LOS	Int LOS
Auto	3.14	A	N/A
Transit	2.91	C	N/A
Bike	3.13	A	B
Ped	3.03	A	D

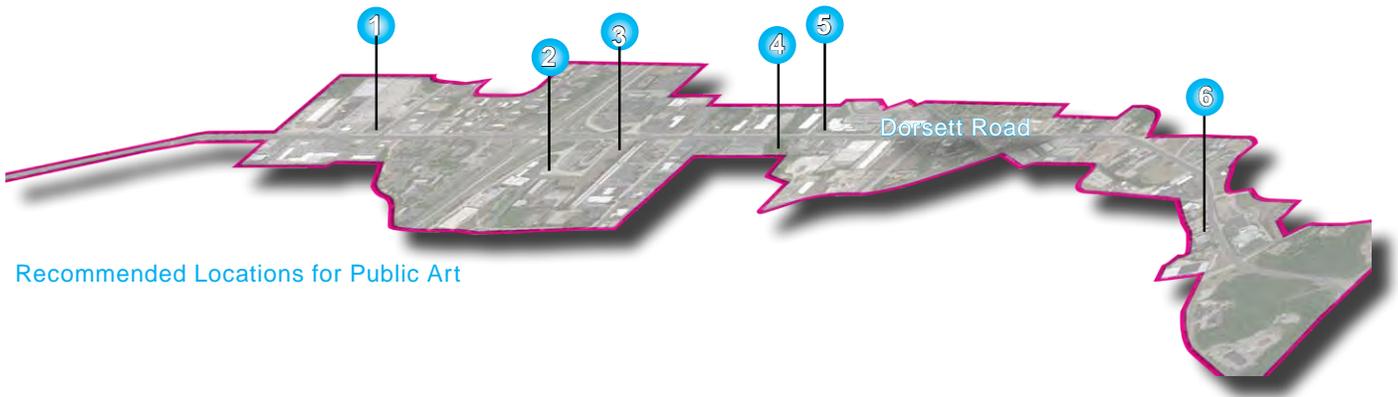
Street	Score	LOS
Auto	2.38	A
Transit	1.64	A
Bike	3.18	C
Ped	2.94	C

ART

Great Streets are representative of their places.

Increase the presence of public art.

A recent study conducted by the Knight Foundation found that there is a higher correlation between community attachment and aesthetics (public art, parks, landscape) than community attachment and economics or housing. Creating opportunities to house these aesthetic elements in the Dorsett Road corridor and making these elements a priority over the next 20 years will help Maryland Heights create a true identity for the corridor that is reflective of the community. The Dorsett Road corridor does not currently include any pieces of public art.



Recommended Locations for Public Art

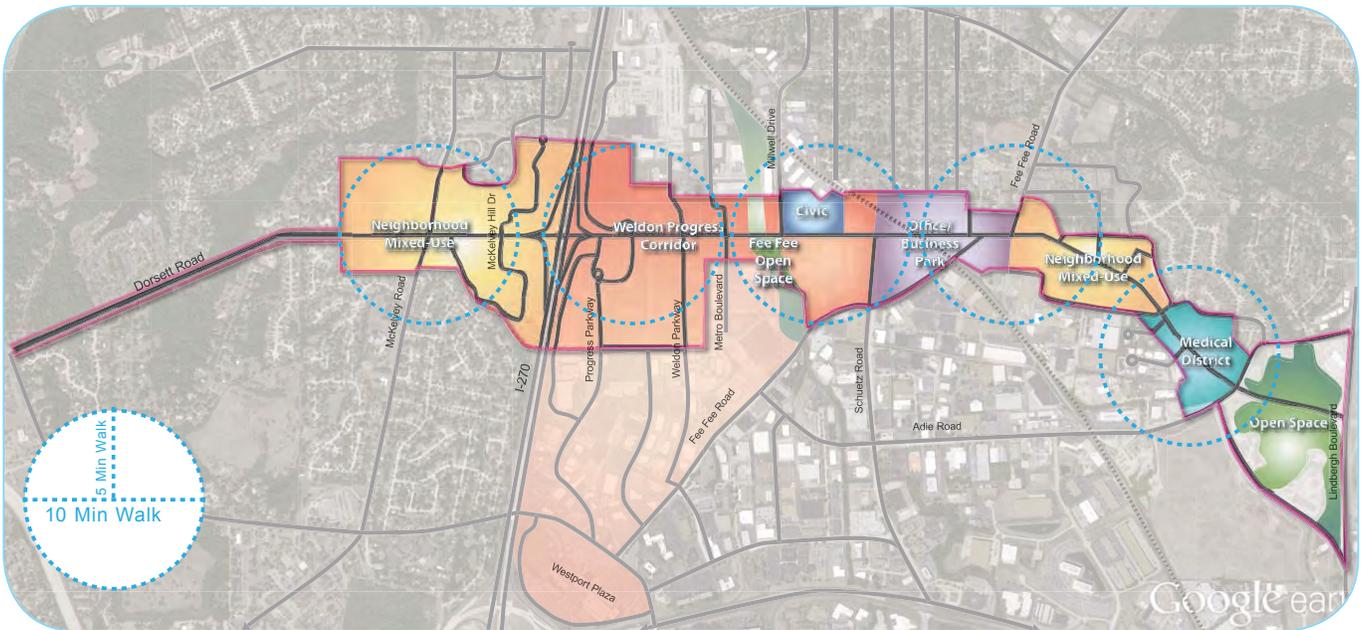
Recommended Public Art Locations:

1. Dorsett/McKelvey community marker
2. Progress Parkway roundabout
3. Private development in the Weldon Progress Corridor
4. Fee Fee Creek
5. Maryland Heights Government Center
6. Eastern Gateway near Ranken Jordan

Great Streets facilitate placemaking.

Increase the number of park and open space within the corridor.

Parks are some of the most memorable places in cities. They allow the community to gather, recreate and enjoy the beauty of local landscapes. The Dorsett Road Great Streets Plan recommends the two potential open spaces within the corridor (around Fee Fee Creek, and in the wooded area between Adie and Lindbergh) be developed and made accessible to all community members.



Metrics Conclusion

The City of Maryland Heights and the various stakeholders should use the metrics information, including goals, in order to help guide the ongoing design and implementation of the Dorsett Road plan. The metrics will help the community to be able to monitor its progress in meeting the goals articulated as part of this effort, over time, as improvements are made and completed. The particular goals and targets may change over time, but this framework will help the community in making sure that the overall goals of this Great Streets effort are met over the short term and the long term.



APPENDIX: Public Involvement Plan

Dorsett Road Great Streets: Public Involvement Plan

Purpose of the Public Involvement Plan

The purpose of a public involvement plan is to organize the public involvement effort in a transparent, efficient and deliberative manner. The goals of public involvement for this project are to:

- Help the community visualize what is possible in the long and short-term to transform Dorsett Road (from Lindbergh to Creve Coeur Park) into a Great Street.
- Educate the community about the planning elements that will make the vision a reality – including design standards, access management, and designing for multi-modal transit.
- Build consensus on a master plan for the Dorsett Road corridor.

This document includes the following elements:

- Project Overview
- Key Messages
- Targeted Audiences
- Public Involvement Topics
- Outreach Methods
- Schedule of Public Involvement Activities

Project Overview

The Dorsett Road corridor as it exists today is a loose mix of suburban residential, industrial, and commercial land uses bisected by the Interstate 270 interchange. Over the long-term, Dorsett Road has the potential to become Maryland Heights' Main Street, a community asset that brings people together, enhances the local economy and establishes a unique sense of place for the city. As envisioned by the City of Maryland Heights, the Dorsett Road plan will support the creation of unique spaces along the corridor that become destinations to attract visitors and businesses, while encouraging new growth and economic development opportunities.

Within five years, the City of Maryland Heights intends to allocate resources to implement community supported projects identified in this plan.

Key issues to work on during the planning process include:

- Development of design alternatives that meet the needs of current property owners *and* the community's vision for Dorsett Road as a Great Street;
- Identification of projects that can be implemented in the short-term including projects that support a designated "downtown" along the corridor

Key Messages

A primary component of our approach is to craft consistent messages to educate and inform stakeholders throughout the course of the process.

Over the long-term, Dorsett Road has the potential to become Maryland Heights' Main Street, a community asset that brings people together, enhances the local economy and offers a unique sense of place.

The Dorsett Road plan will incorporate the community's vision for the area over the next few decades, but it must create a viable action plan for implementation and actual development within the next five years.

The Dorsett Road plan will build upon the successful businesses and institutions in the corridor today, ensuring their strength now and in the future.

The corridor will provide balanced mobility that supports the safe and convenient travel of all modes of transportation.

The master plan will work with natural systems to better manage stormwater, reduce negative impacts to the environment and enhance the overall appearance of the corridor.

To be successful, the master plan must reflect significant community outreach and buy-in of participants.

Targeted Audiences

The following is a comprehensive list of specific project stakeholders which represent audiences for communication and involvement.

Project Partnership Team

The Project Partnership Team includes the City of Maryland Heights and East West Gateway Council of Governments. This technical team will meet with the consultant team on a weekly basis and provide overall coordinating guidance on the study.

Steering Committee

The Steering Committee will help manage the public process, develop and review alternatives for consideration by the community and help guide the creation of the overall master plan document and implementation strategies. The Steering Committee will include representatives from the East West Gateway Council of Governments, St. Louis County, retail property owners, institutional property owners, the Maryland Heights Chamber of Commerce and elected officials as well as city staff from the City of Maryland Heights.

Transportation agencies

Several transportation agencies have influence in the Dorsett corridor and are important stakeholders. St. Louis County, who maintains the Dorsett corridor, will be represented on the Steering Committee and involved throughout the planning process. MoDOT owns and manages the 270 interchange and will be consulted on developments relevant to that portion of the corridor. Finally, Bi-State Development Agency (Metro) has a bus line that runs along the corridor and will be involved as appropriate. Transportation agency representatives will be invited to all public meetings.

Elected Officials/City Staff, City of Maryland Heights

The City Council will be represented on the Steering Committee. The City Council as a whole will also be briefed so they can be informed about the project and provide input to the project team. The Planning Commission will be updated on an ongoing basis during the study and may be briefed as well. Additionally, leadership and staff members from the police, fire, public works, planning, and economic development departments may be consulted by the Project Partnership Team upon request or as needed to address specific key issues such as coordination with other ongoing policy and infrastructure initiatives.

Adjacent property owners along the corridor

Property owners along corridor have a stake in the outcome of the Dorsett Road plan. Property owners adjacent to the corridor will be invited to all public meetings.

Residents/General Public

Any interested party should have the opportunity to become informed about the corridor plan and provide input into the decisions. Public notices of meetings will be included in the Maryland Heights Patch (an on-line newspaper). Existing channels of communication used by the City of Maryland Heights will be used to notify the general public about the project and encourage participation. Channels of communication include the City's website, Twitter, Facebook, city newsletter, and message boards at parks and city hall. The citizen group, Citizens for Responsible Growth, will be invited to all public meetings and receive all project communications. Additional efforts to engage the general public include public meeting announcements in Local Government Briefings, East West Gateway's weekly newsletter and advertisements on St. Louis County's roadside notification signs.

Senior and Youth Populations

Many public involvement efforts in suburban communities such as Maryland Heights result in turnout from a narrow set of demographic groups and senior citizen populations and youth (under age 30) tend to turn out for meetings at a lower rate compared to the general population. The project team will work with local high schools, middle schools, 4H groups and scout troops to increase turnout from the community's youth (encouraging them to attend public meetings and make suggestion using Mindmixer) in order to gain input from the next generation of residents in the local community. The project team will work with local senior organizations in order to publicize the corridor planning effort with local senior activity groups, at senior communities in the area, and with local senior service agencies.

Economically and Socially Disadvantaged Populations

Special outreach methods will be used to engage those groups typically under represented but impacted by transportation related decisions (socially, environmentally and economically), consistent with Title VI of the Civil Rights Act of 1964. Maryland Heights is home to a small but growing population of Asian-Indians, many of whom reside at apartment buildings at the intersection of 270 and Dorsett Road. Efforts to encourage participation among this population will include posting flyers in central gathering spots such as laundry areas and "club houses" and providing notice of public meetings in the apartment newsletter.

The project planning team will use the information gleaned during the ongoing discovery process to identify languages for which translation of documents are appropriate, and will use the channels and relationships developed during the stakeholder interview process along with existing knowledge among city staff to disseminate information as needed.

Public Involvement Topics

Input from the public is critical to the success of the study. Our approach is to collect input in a targeted and timely way so it can work in tandem with technical data collection and corridor design work. Due to the compressed timeframe for this study, the initial phase of public input will include a conversation about goals for the project as well as preliminary design alternatives.

Public Involvement Topics

Goals/Purpose, February-March

- How is the corridor used today?
- What issues or problems exist in the corridor?
- What opportunities are there for improvement?

Review of Preliminary Design Alternatives and Initial Strategies, February – March

- How do the initial design concepts address issues and opportunities identified?
- Are the districts identified by the design team the right way to think about the corridor?
- Are the nodes identified as potential areas of investment the best locations for initial investment?
- Are the Great Street criteria, as defined by the project team, an acceptable way to evaluate alternatives?

Review of Preferred Design Alternatives, April

- What is acceptable/unacceptable about the preferred design solutions?
- Do the preferred design solutions help the Dorsett Road corridor meet the criteria of a Great Street?
- Was feedback from the public reflected in the alternatives?

Review of Final Design Alternatives, May

- Was feedback from the public reflected in the alternatives?
- What are the priorities for implementation?

Outreach Methods

The core communications methods to be employed will include both one-way and two-way communication opportunities. Two-way communication methods will allow for stakeholders to provide input. With one-way communication methods, information will be provided with the purpose of informing.

One-Way Communication

Project Website

Two-Way Communication

Mindmixer Website

Stakeholder Interviews

Elected Official Briefings

Public Meetings

Project Website

A project website will be used to communicate overall project messages, to host overall documents concerning project background and our findings on particular topics related to Great Streets, and to host links to online surveys.

Mindmixer Website

We plan on using the Mindmixer website, primarily during the initial two months of the project, in order to solicit ideas from the community for the future of the corridor. The Mindmixer website involves the organization and input of ideas from the community based upon a series of “topics” identified by the project team. Potential topic areas may include economic development, biking and walking improvements, aesthetic improvements, and additional topics identified during the project.

Stakeholder Interviews

We anticipate facilitating one on one interviews and focus groups with various groupings of stakeholders in order to learn more about how previous efforts to create economic development, placemaking, and revitalization in general along Dorsett have or have not worked in the past, the key goals for the effort, and the ideas the different groups have for improvements along the corridor.

Elected Official Briefings

Maryland Heights elected officials will be provided with updates during the project to keep them informed regarding key findings from technical data collection, to review and gain input concerning upcoming public involvement activities and to review and gain input on key elements of alternatives being considered.

Public Meetings

Public open houses will explore the key issues with the public as identified in Table 1, discuss key findings from existing conditions analysis, and review and gain input concerning some key alternatives for the future evolution of the corridor, at various locations. We will use keypad polling (and an online version of the questions as well) to help gain specific guidance from the public and stakeholders concerning the key issues and ideas for alternatives for the corridor.

Schedule of Public Involvement Activities

The table facing includes the process steps along with public involvement topics and communication tools.

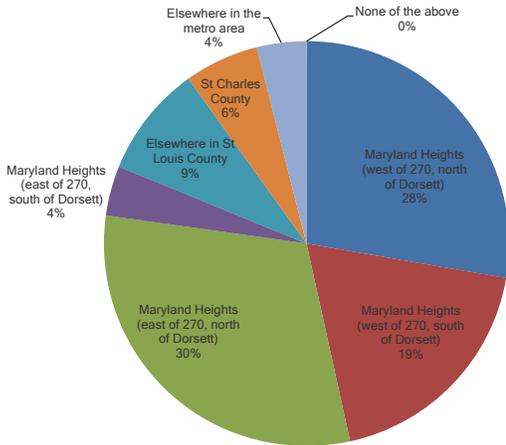
ESTIMATED TIMELINE	PROCESS STEP	PUBLIC INVOLVEMENT TOPICS	TOOLS
February – March	Defining goals and purpose Preliminary design alternatives and initial strategies	<ul style="list-style-type: none"> • Current use of the corridor • Issues/Problems • Opportunities for improvement • Confirm suggested Dorsett Road “districts” • Confirm suggested nodes for targeted investment • Confirm suggested criteria for evaluating projects 	<ul style="list-style-type: none"> • One-Way Communication: Project Website • Two Way Communication: Stakeholder Interviews • Elected Official Briefing #1 • Open House #1 • Project Planning Team/Steering Committee: meetings ongoing.
April-May	Preferred Design and Recommended Strategies	<ul style="list-style-type: none"> • Evaluate preferred design alternatives • Evaluate recommended strategies • Prioritize projects for initial investment 	<ul style="list-style-type: none"> • One-Way Communication: Website update • Two Way Communication: Elected Official Briefing #2 • Open House #2 • Project Planning Team/Steering Committee: meetings ongoing.
June	Final Design and Recommended Strategies	<ul style="list-style-type: none"> • Evaluate final design alternatives 	<ul style="list-style-type: none"> • One-Way Communication: Website update • Two Way Communication: Open House #3 • Project Partnership Team/Steering Committee: meetings ongoing

B

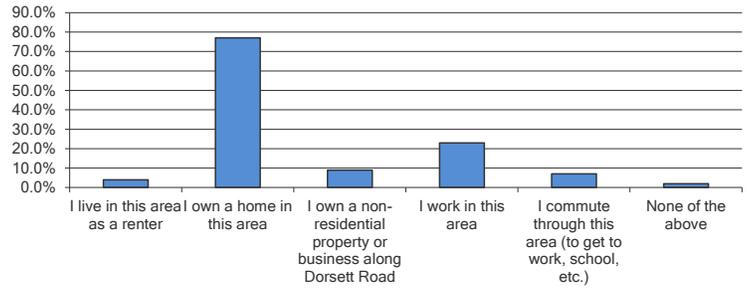
APPENDIX: Public Input Summary

Who Responded Via Keypad Polling

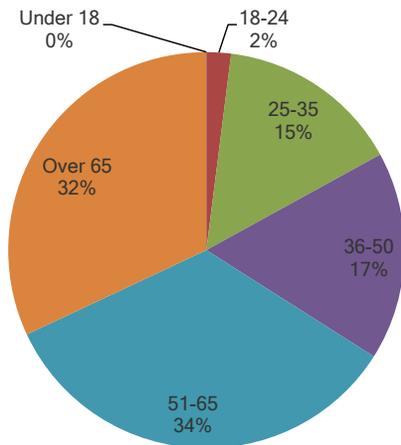
I am from the following area... (select 1)



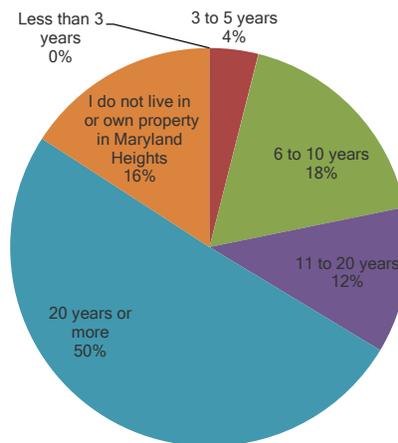
My association with the Dorsett Road Corridor is ... (select all that apply)



My current age is... (select 1)

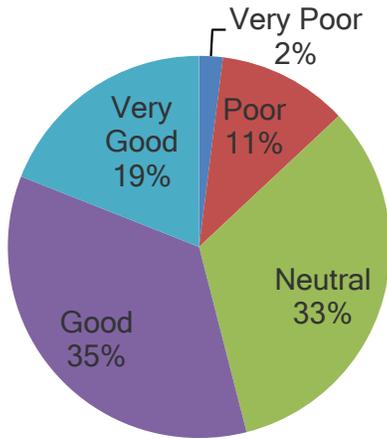


I have lived in or owned property in Maryland Heights for ... (select 1)

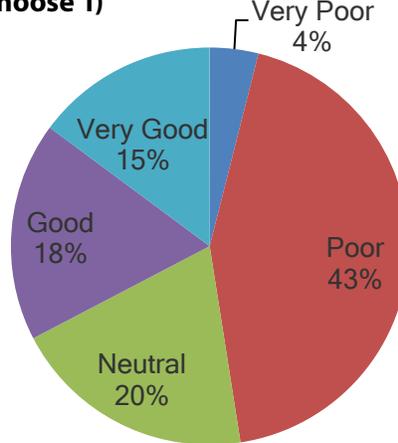


What you had to say about existing conditions:

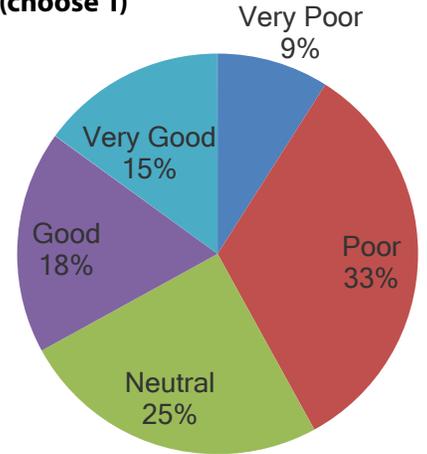
How would you rate the current appearance of Dorsett Road near Creve Coeur Park? (choose 1)



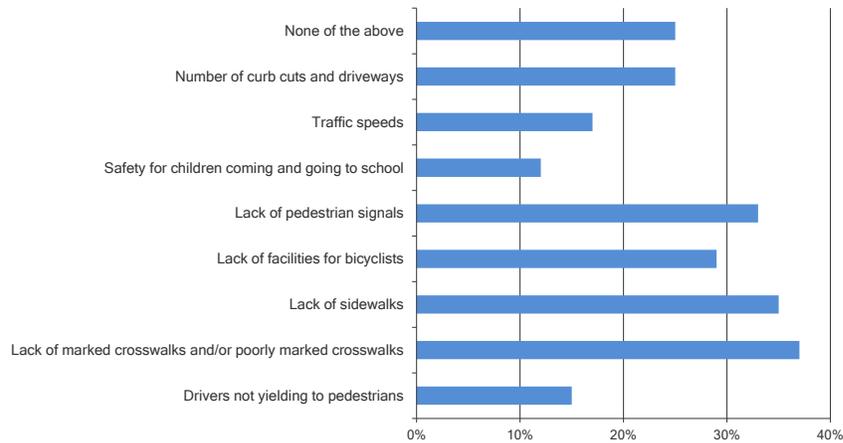
How would you rate the current appearance of Dorsett Road between I-270 and Fee Fee Road? (choose 1)



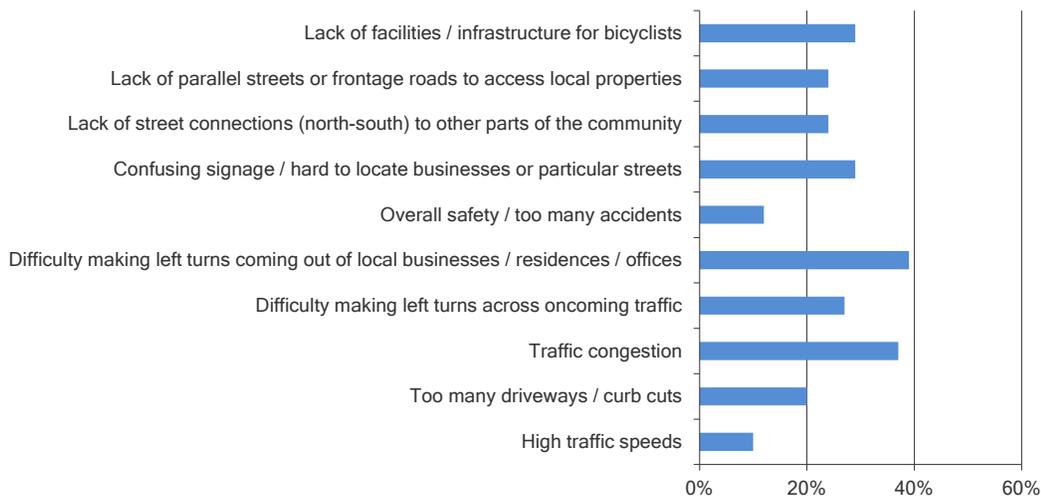
How would you rate the current appearance of Dorsett Road between Fee Fee to Lindbergh? (choose 1)



Which safety issues concern you most along the Dorsett Road corridor? (select your top 3)

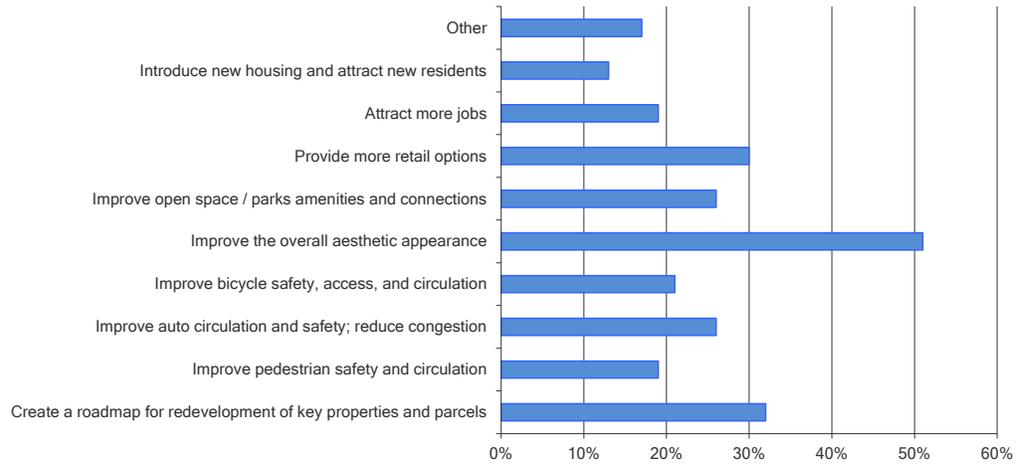


Which transportation issues concern you most along Dorsett Road corridor? (choose your top 3)

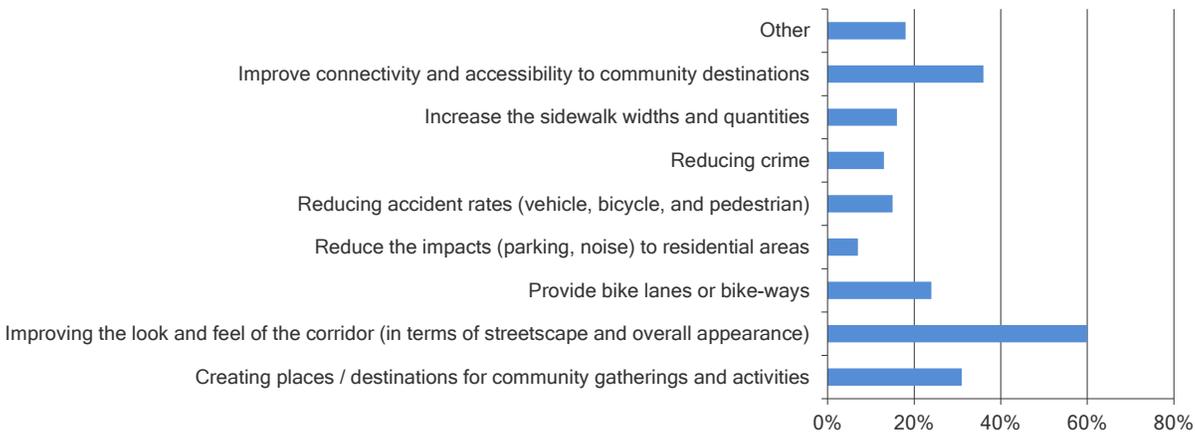


Weighing in on the Future of Dorsett:

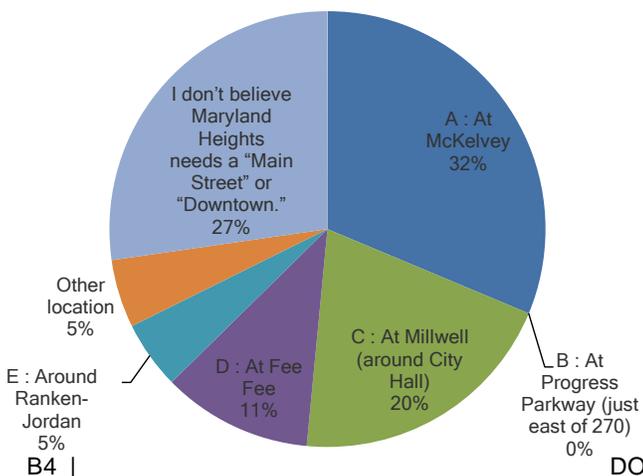
Which of the following objectives would you consider the most important for this planning effort? (choose your top 3)



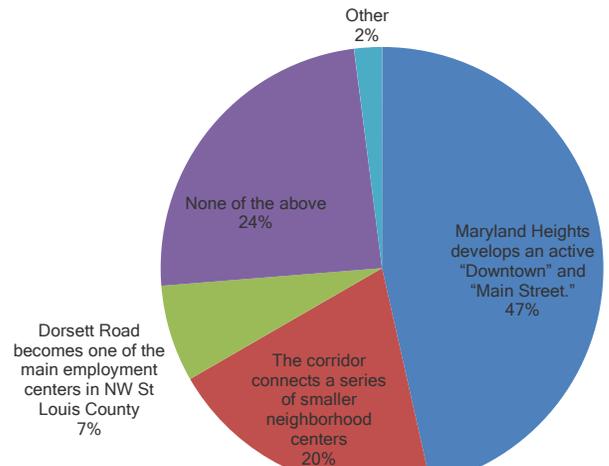
Which of these community considerations is most important to the design and future planning of the Dorsett Road corridor? (select 3)



Where do you feel Maryland Heights "Main Street" or "Downtown" could be located, along Dorsett Road? (choose 1)

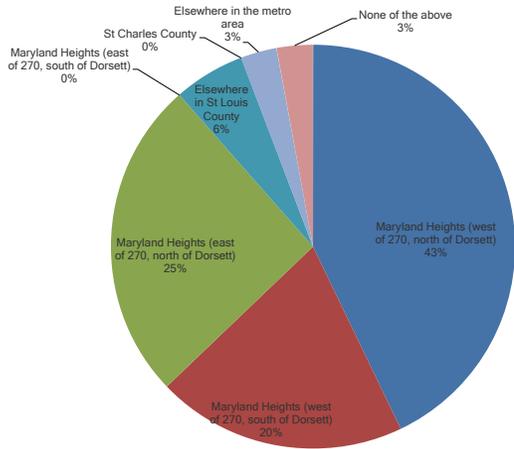


Which of the following statements best represents your vision for the future of Dorsett Road? (choose 1)

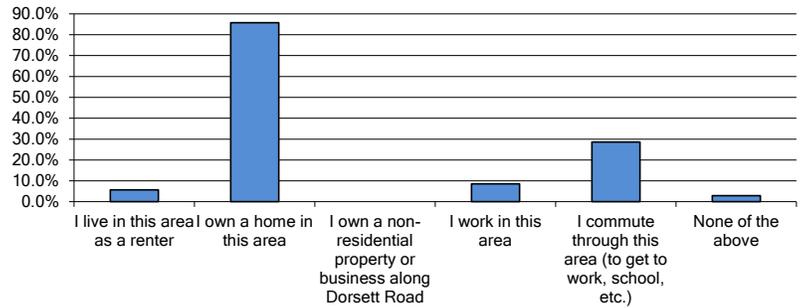


Who Responded to the Online Poll (March 2013 - April 2013)

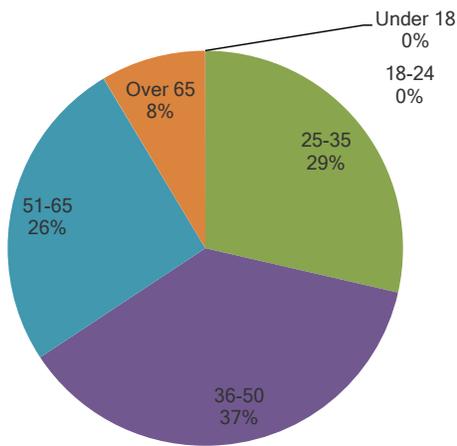
I am from the following area... (select 1)



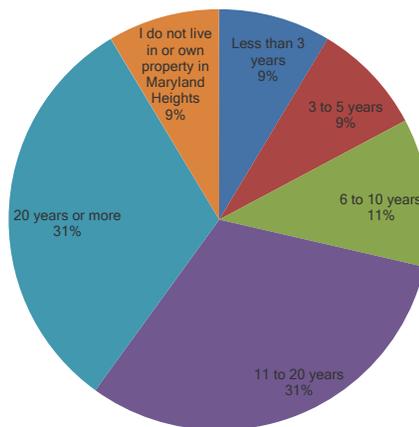
My association with the Dorsett Road Corridor is ... (select all that apply)



My current age is... (select 1)

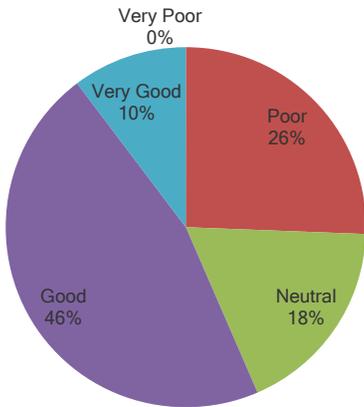


I have lived in or owned property in Maryland Heights for ... (select 1)

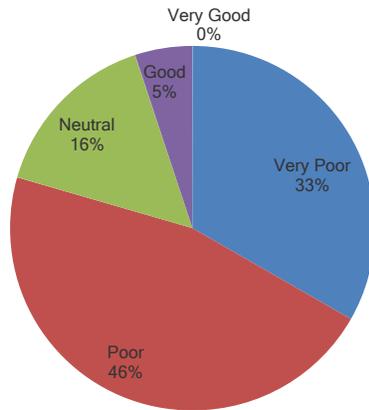


What you had to say about existing conditions:

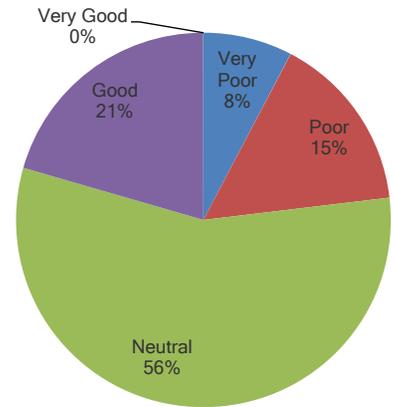
How would you rate the current appearance of Dorsett Road near Creve Coeur Park? (choose 1)



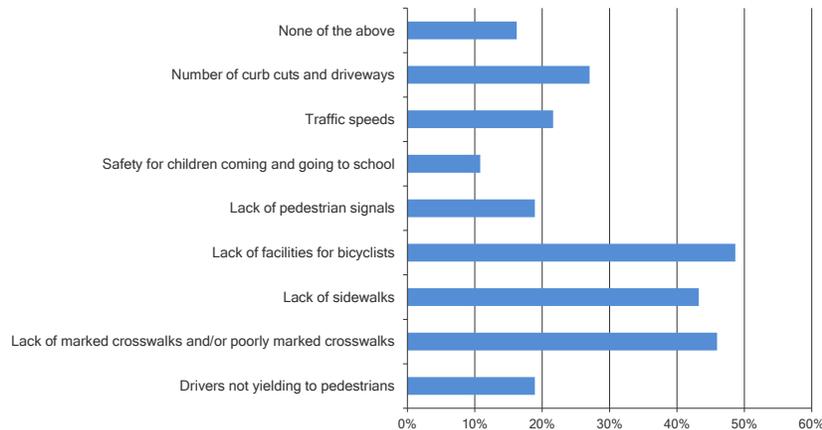
How would you rate the current appearance of Dorsett Road between I-270 and Fee Fee Road? (choose 1)



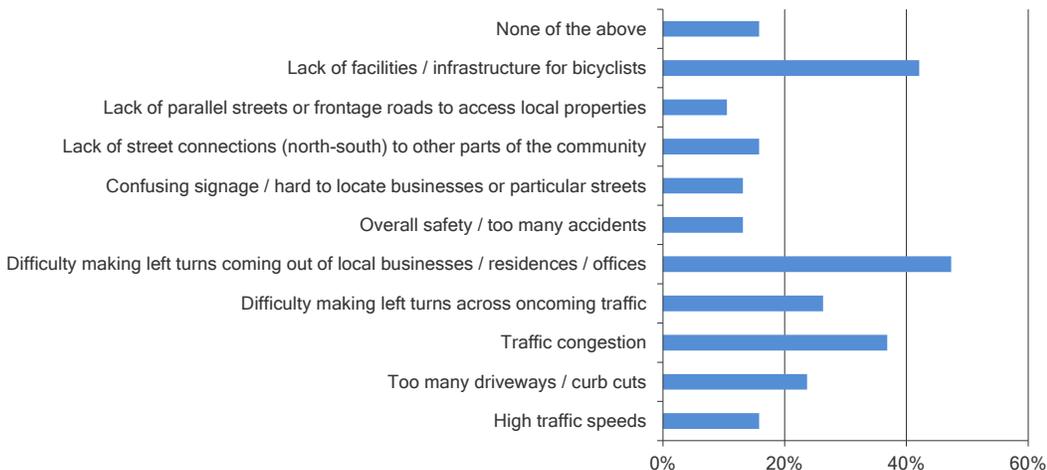
How would you rate the current appearance of Dorsett Road between Fee Fee to Lindbergh? (choose 1)



Which safety issues concern you most along the Dorsett Road corridor? (select your top 3)

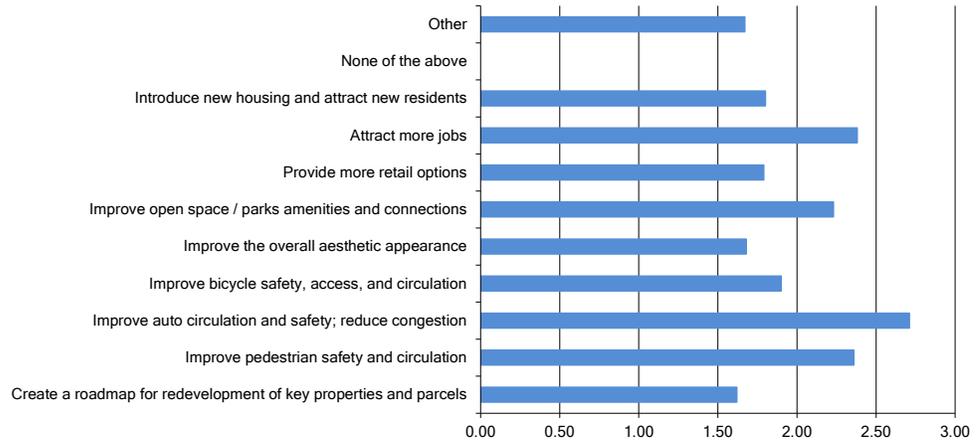


Which transportation issues concern you most along Dorsett Road corridor? (choose your top 3)

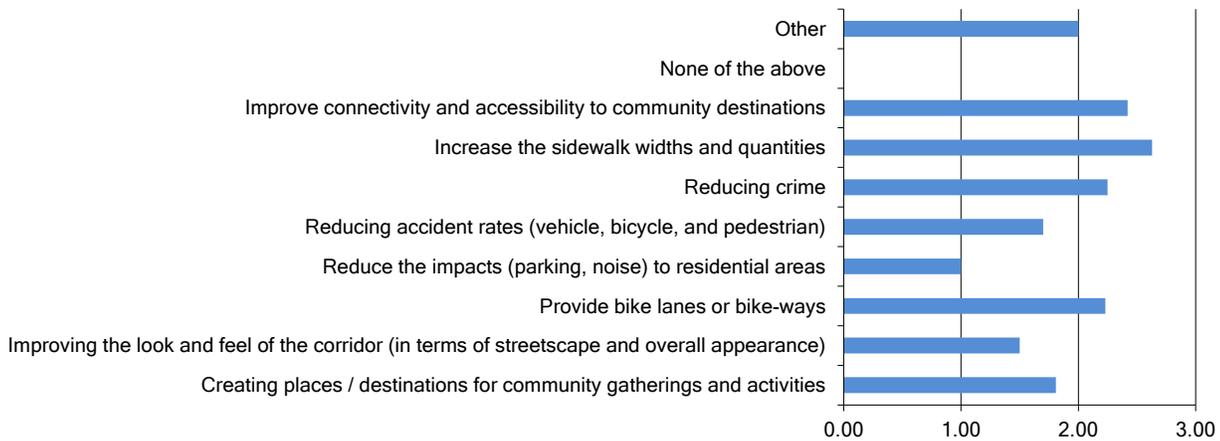


Weighing in on the Future of Dorsett:

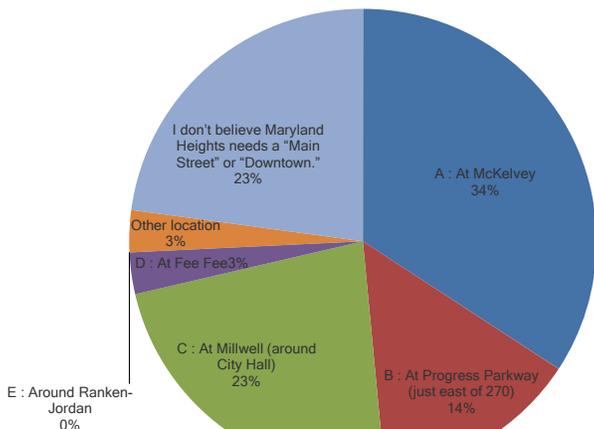
Which of the following objectives would you consider the most important for this planning effort? (choose your top 3)



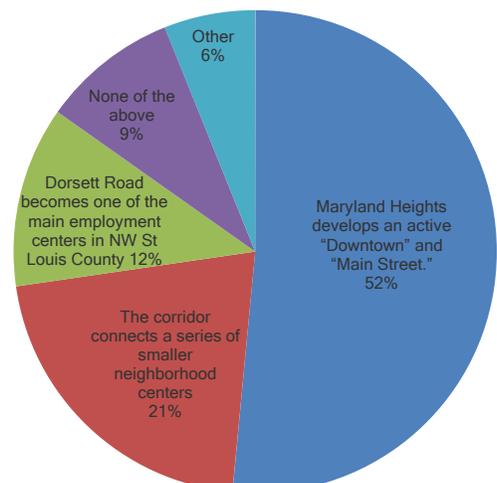
Which of these community considerations is most important to the design and future planning of the Dorsett Road corridor? (select 3)



Where do you feel Maryland Heights "Main Street" or "Downtown" could be located, along Dorsett Road? (choose 1)



Which of the following statements best represents your vision for the future of Dorsett Road? (choose 1)



VISUAL PREFERENCE SURVEY - What we heard you say at the April 24, 2013 Public Meeting

HOUSING TYPE	OFFICE TYPES	RETAIL TYPE	NEIGHBORHOOD CENTER	TOWN CENTER
+  +31 -3 = +28	+  +25 -0 = +25	+  +35 -2 = +33	+  +38 -1 = +37	+  +19 -1 = +18
 +12 -5 = +7	 +16 -2 = +14	 +23 -0 = +23	 +25 -2 = +23	 +19 -3 = +16
 +7 -2 = +5	 +10 -3 = +7	 +14 -4 = +10	 +23 -0 = +23	 +15 -2 = +13
 +9 -6 = +3	 +7 -4 = +3	 +11 -4 = +7	 +22 -0 = +22	 +10 -6 = +4
 +4 -6 = -2	 +7 -8 = -1	 +11 -5 = +6	 +20 -0 = +20	 +8 -5 = +3
 +4 -6 = -2	 +7 -8 = -1	 +1 -7 = -6	 +16 -1 = +15	-  +2 -10 = -8
 +3 -5 = -2	 +3 -10 = -7	 +2 -20 = -18	 +8 -3 = +5	
 +1 -8 = -7	 +4 -15 = -11	 +1 -27 = -26	 +0 -33 = -33	
 +4 -15 = -9	 +3 -16 = -13	 +0 -36 = -36	 +0 -41 = -41	
-  +0 -29 = -29	 +0 -24 = -24	 +0 -36 = -36	 +0 -44 = -44	

Note: + Votes For - Votes Against = Final Score

STREETSCAPES

STREET FURNITURE

TRANSIT STOPS

BIKE RACKS

PUBLIC ART

+



$+39 - 0 = +39$



$+30 - 1 = +29$



$+23 - 0 = +23$



$+24 - 2 = +22$



$+15 - 2 = +13$



$+13 - 3 = +10$



$+9 - 3 = +6$

-



$+0 - 18 = -18$



$+1 - 21 = -20$



$+0 - 25 = -25$

+



$+33 - 0 = +33$



$+28 - 0 = +28$



$+22 - 0 = +22$



$+25 - 8 = +17$



$+16 - 1 = +15$



$+10 - 3 = +7$



$+7 - 5 = +2$



$+6 - 9 = -3$



$+0 - 15 = -15$



$+3 - 26 = -23$

-

+



$+29 - 5 = +24$



$+28 - 5 = +23$



$+21 - 2 = +19$



$+2 - 10 = -8$



$+0 - 19 = -19$

-

+



$+18 - 6 = +12$



$+9 - 6 = +3$



$+9 - 9 = 0$



$+2 - 4 = -2$



$+6 - 13 = -7$

-

+



$+35 - 2 = +33$



$+25 - 3 = +22$



$+16 - 8 = +8$



$+8 - 10 = -2$



$+6 - 9 = -3$



$+8 - 15 = -7$



$+7 - 16 = -9$



$+5 - 18 = -13$



$+1 - 20 = -19$

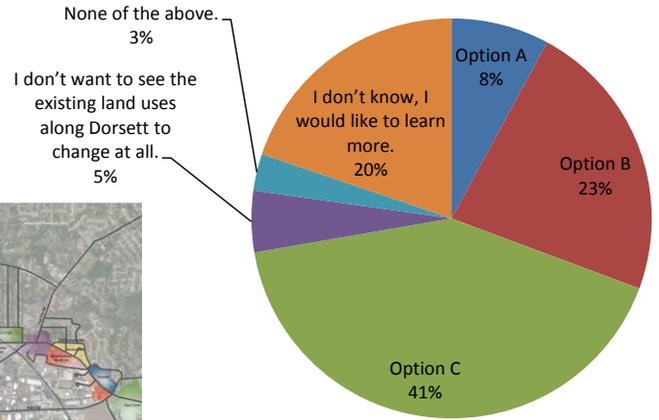


$+3 - 24 = -21$

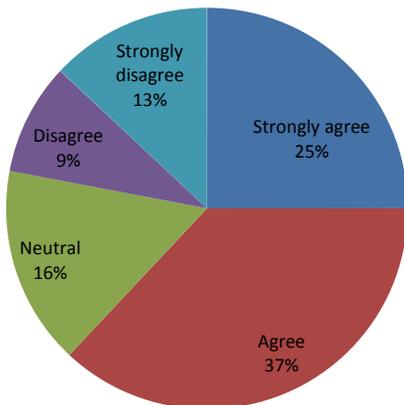
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KEYPAD POLLING RESULTS - What we heard you say at the April 24, 2013 Public Meeting:

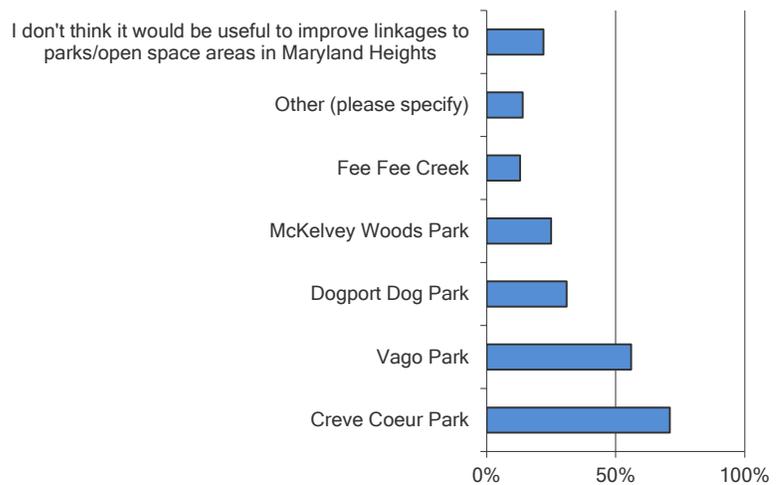
1. I would be most in favor of which of the following land use options depicted for the Dorsett Road corridor (Choose One)



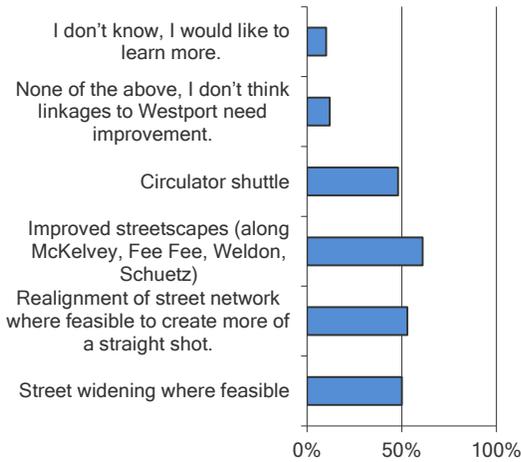
2. I would be in favor of exploring a planted median along the middle of Dorsett Road. (Choose one)



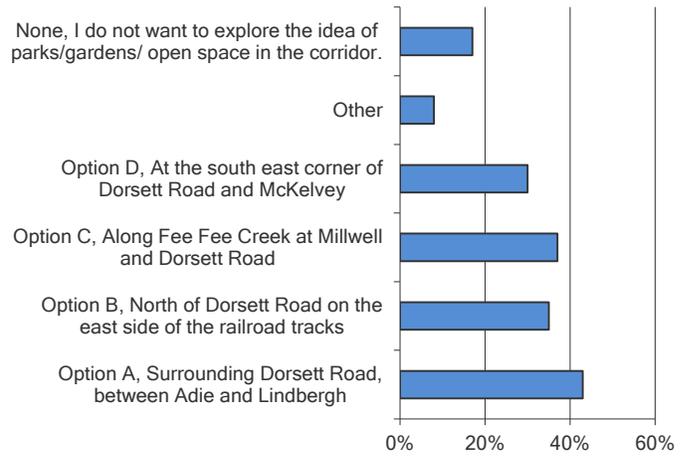
3. I think it would be particularly useful to improve linkages from Dorsett to the following parks / open space areas (Rank your top three)



4. I would be in favor of exploring the following to improve linkages from Dorsett to/from the Westport area. (Rank the top 3)



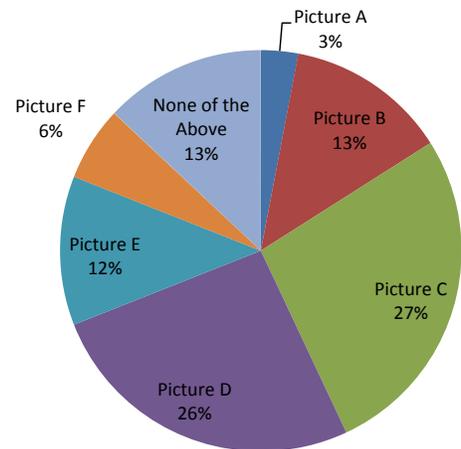
5. I would most like to explore the idea of a park / garden / open space in the following location within the Dorsett Road corridor... (Select two)



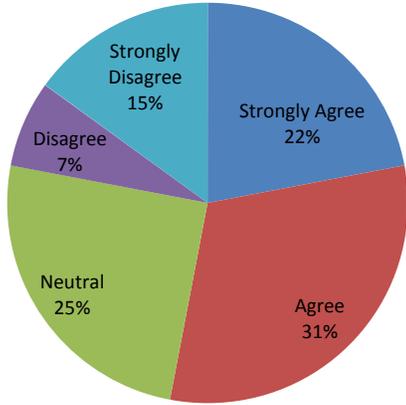
6. I would like to explore the improvement of community connections via the following trails. (Select all that apply)



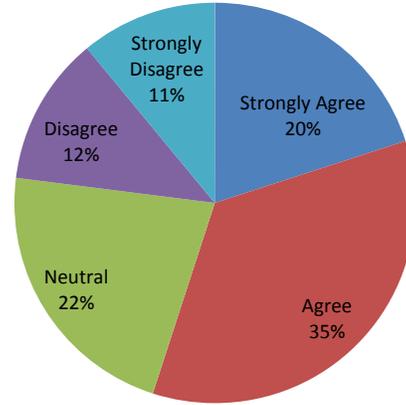
7. I favor the following kind of development character and quality. (Choose one)



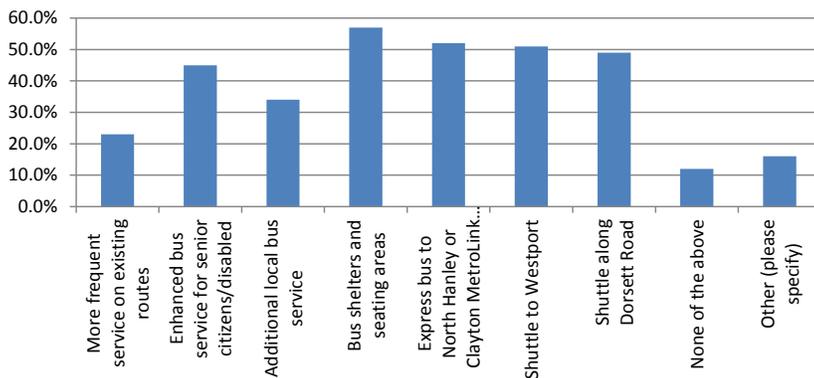
8. I am interested in exploring possible new streets to support development west of I-270. (Choose One)



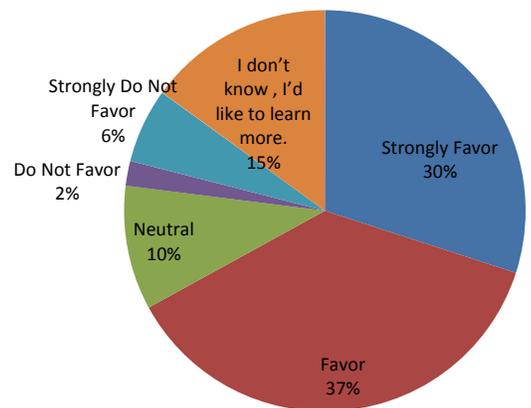
9. I am interested in exploring possible new streets to support development east of I-270. (Choose one)



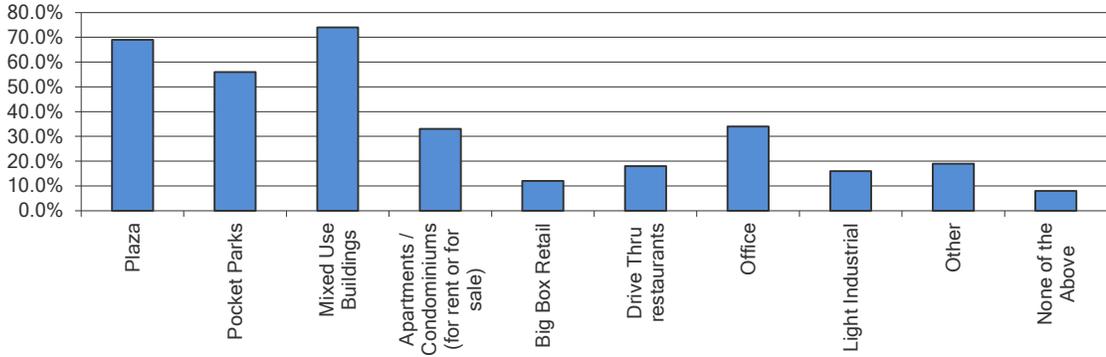
10. I would be in favor of Dorsett Road eventually including the following type of transit improvements (Select all that apply)



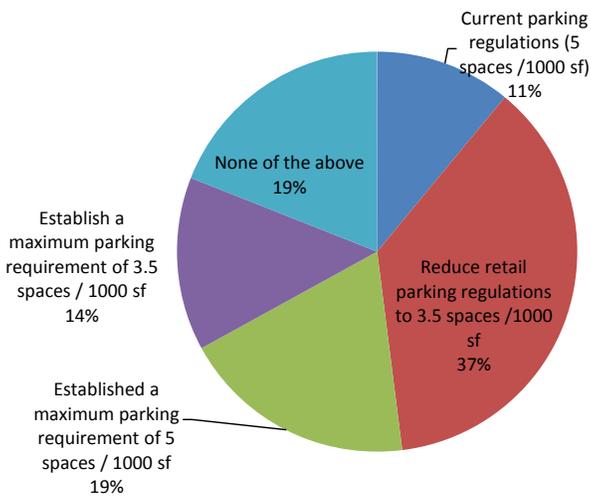
11. Would you be in favor of rezoning the corridor if this would help to encourage redevelopment? (Choose one)



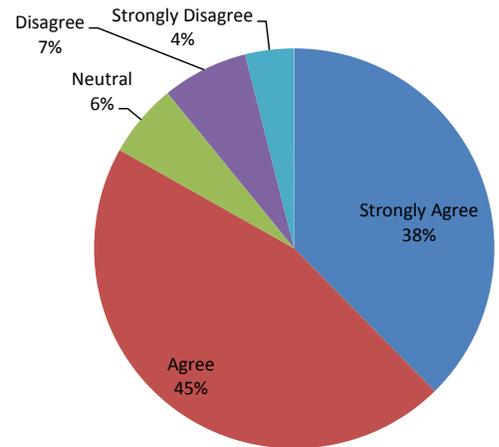
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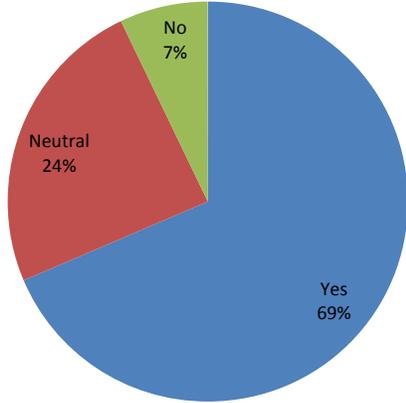
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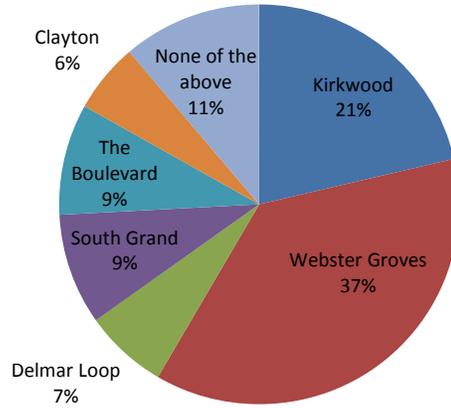
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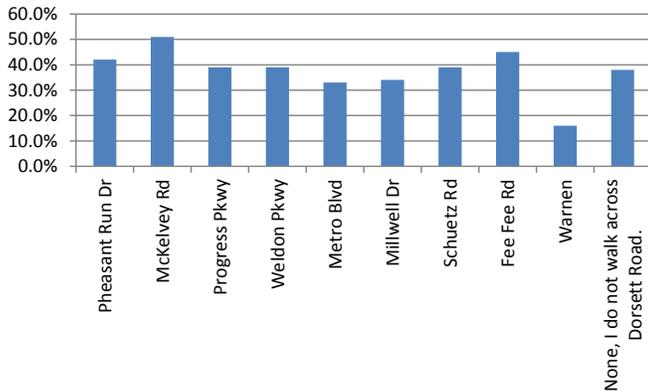
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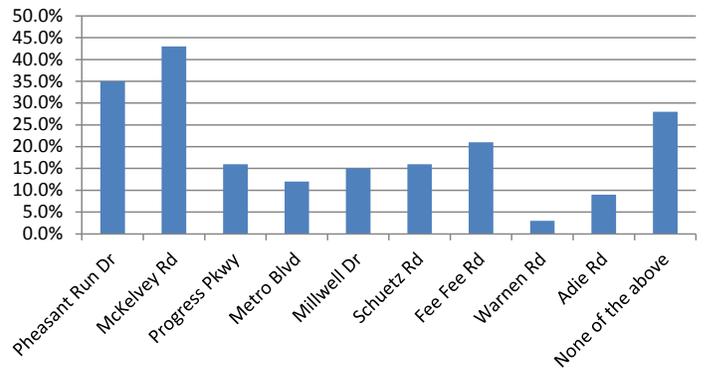
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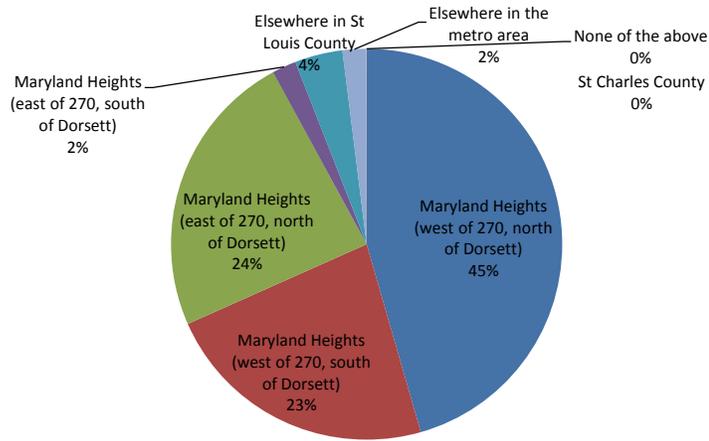
17. Where do you have trouble walking across Dorsett Road? (Select all that apply)



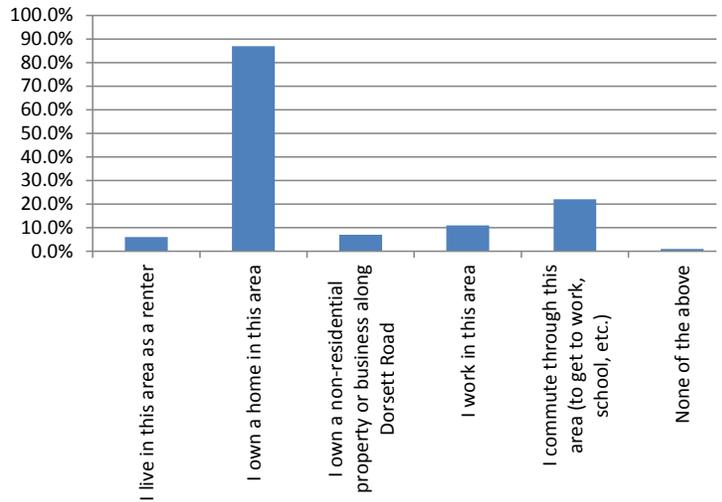
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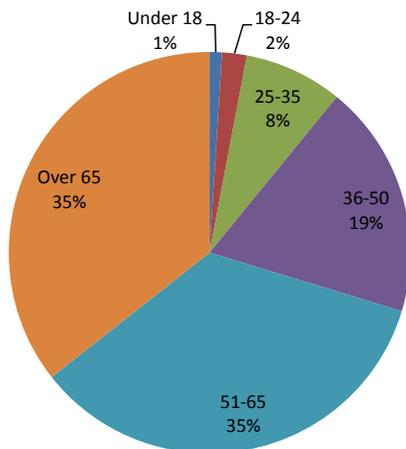
19. I am from the following area...(select one)



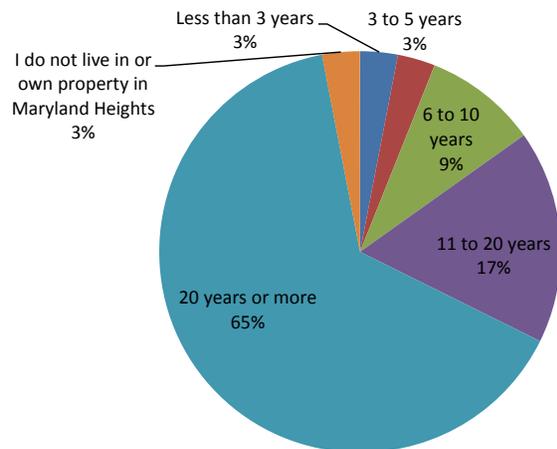
20. My association with the Dorsett Road corridor is... (select all that apply)



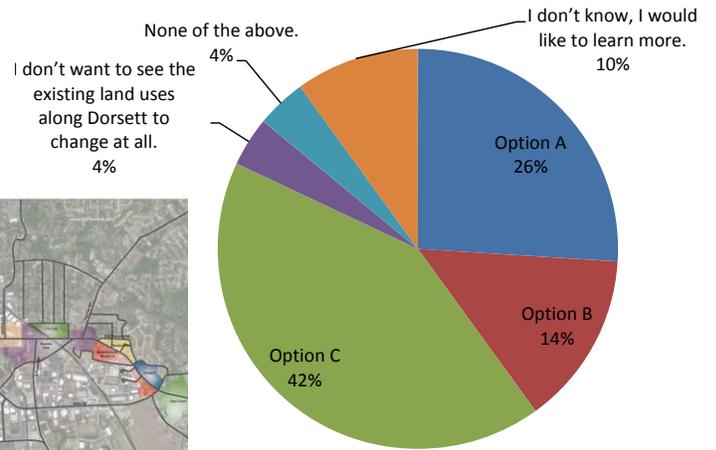
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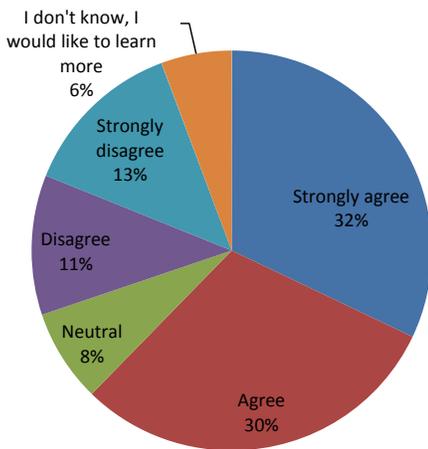
22. I have lived in or owned property in Maryland Heights for...



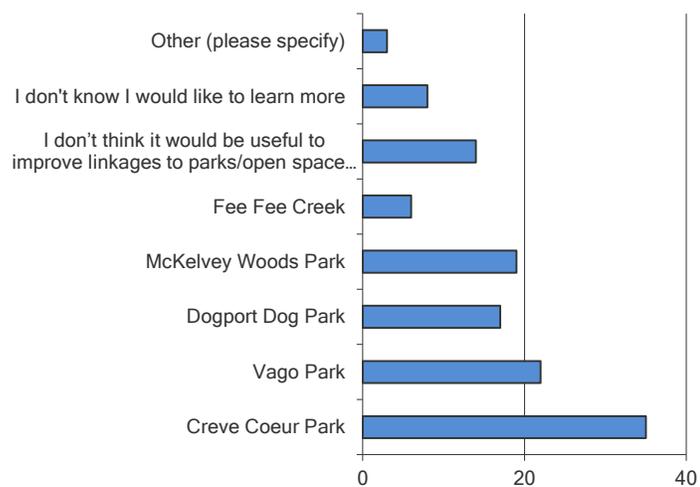
1. I would be most in favor of which of the following land use options depicted for the Dorsett Road corridor (Choose One)



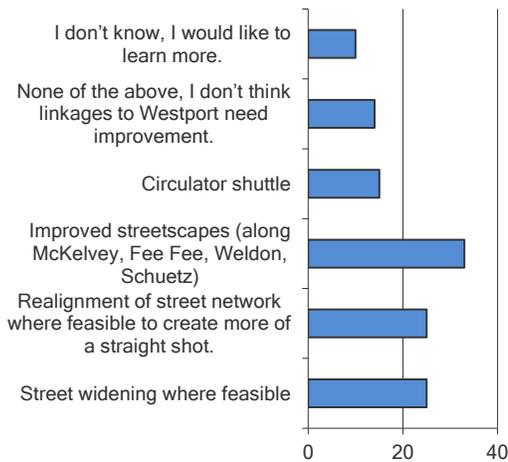
2. I would be in favor of exploring a planted median along the middle of Dorsett Road. (Choose one)



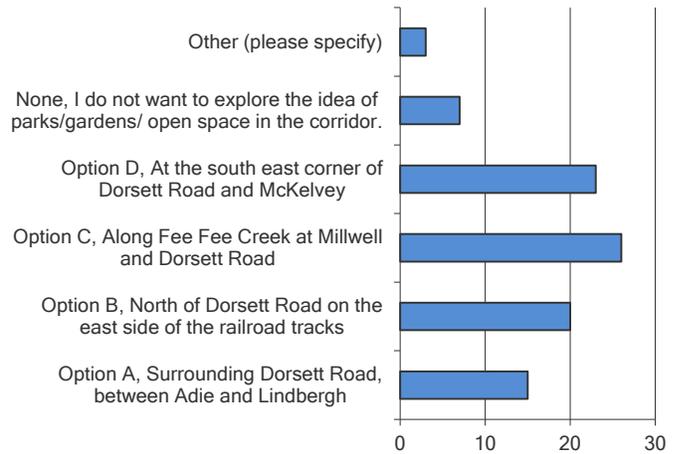
3. I think it would be particularly useful to improve linkages from Dorsett to the following parks / open space areas (Rank your top three)



4. I would be in favor of exploring the following to improve linkages from Dorsett to/from the Westport area. (Rank the top 3)



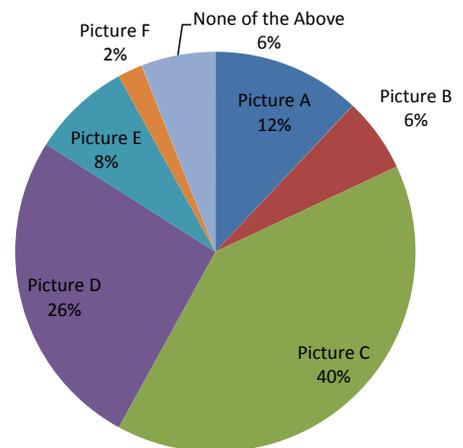
5. I would most like to explore the idea of a park / garden / open space in the following location within the Dorsett Road corridor... (Select two)



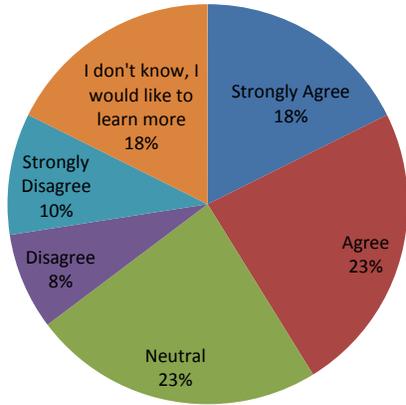
6. I would like to explore the improvement of community connections via the following trails. (Select all that apply)



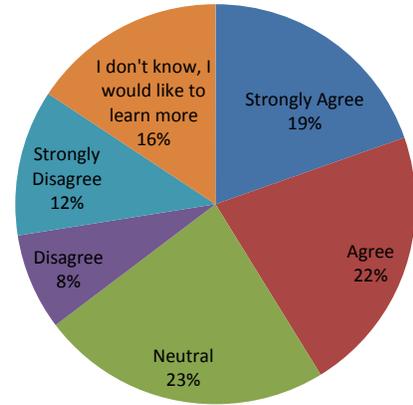
7. I favor the following kind of development character and quality. (Choose one)



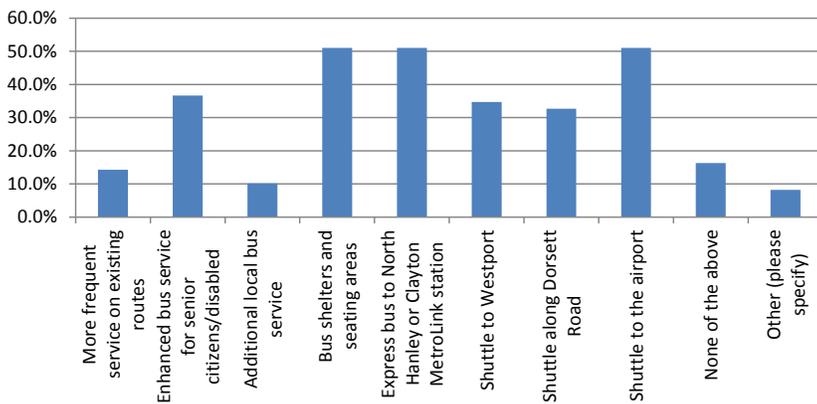
8. I am interested in exploring possible new streets to support development west of I-270. (Choose One)



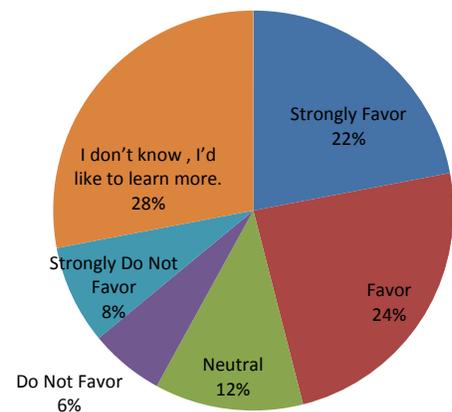
9. I am interested in exploring possible new streets to support development east of I-270. (Choose one)



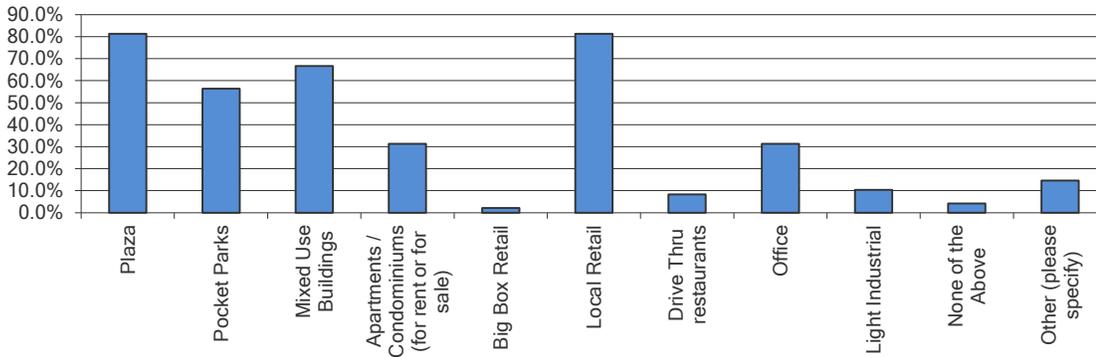
10. I would be in favor of Dorsett Road eventually including the following type of transit improvements (Select all that apply)



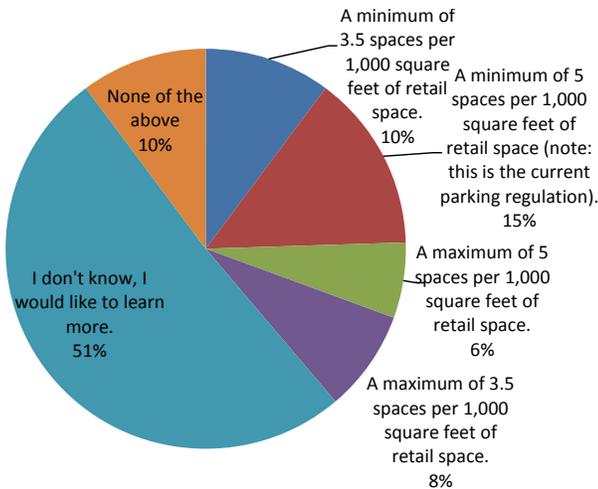
11. Would you be in favor of rezoning the corridor if this would help to encourage redevelopment? (Choose one)



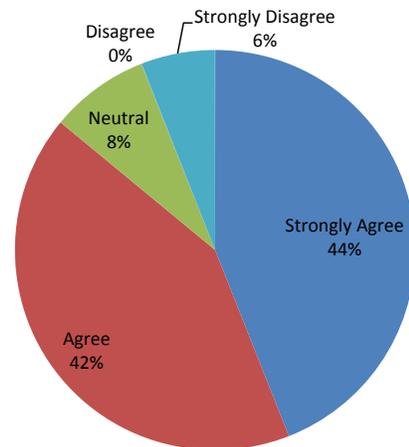
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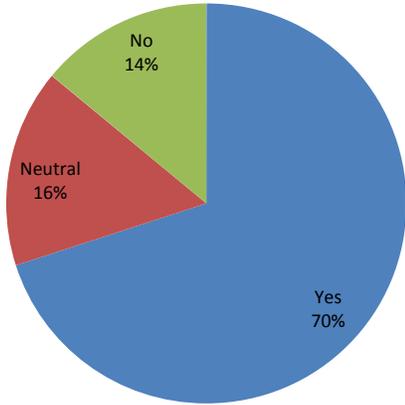
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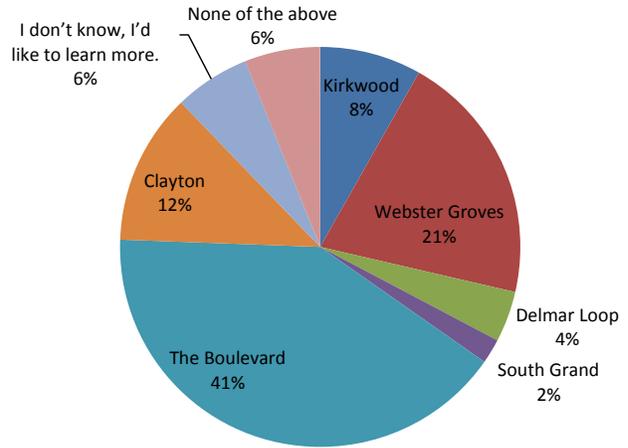
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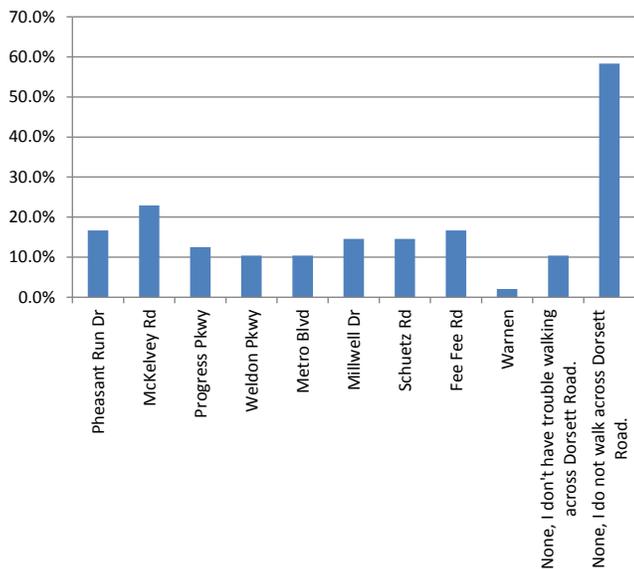
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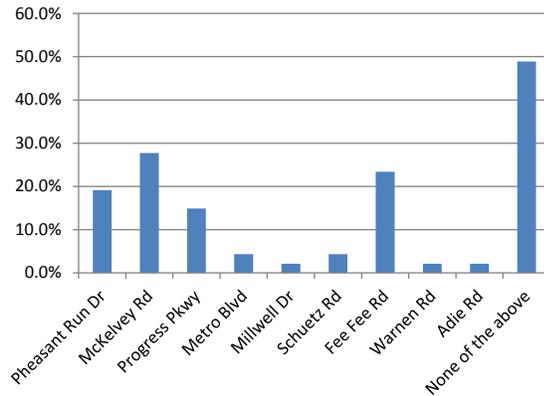
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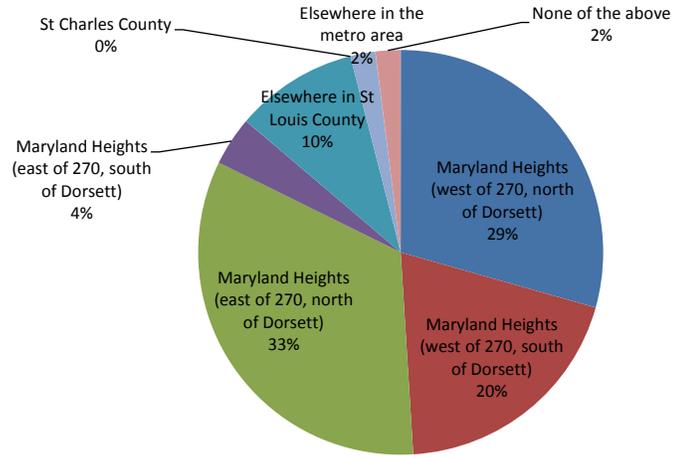
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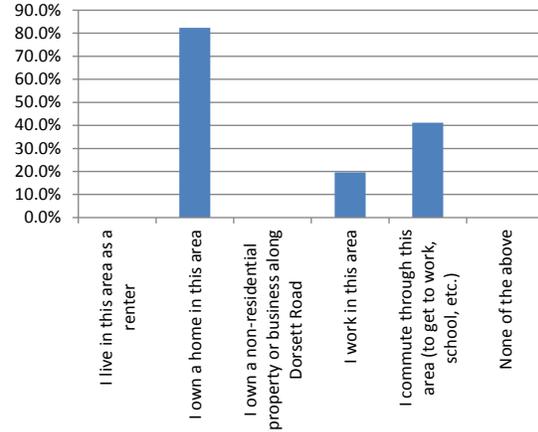
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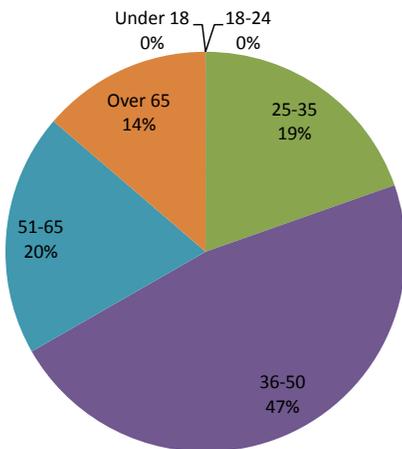
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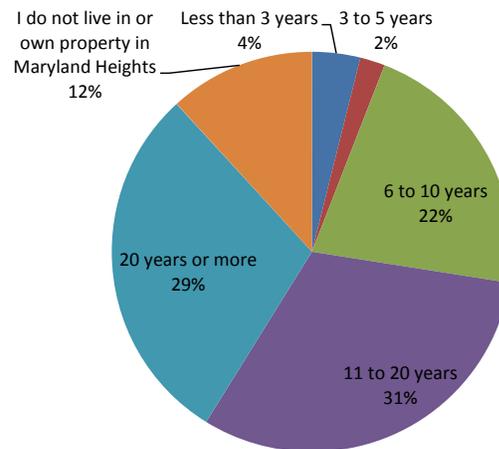
20. My association with the Dorsett Road corridor is... (select all that apply)



21. My current age is...



22. I have lived in or owned property in Maryland Heights for...

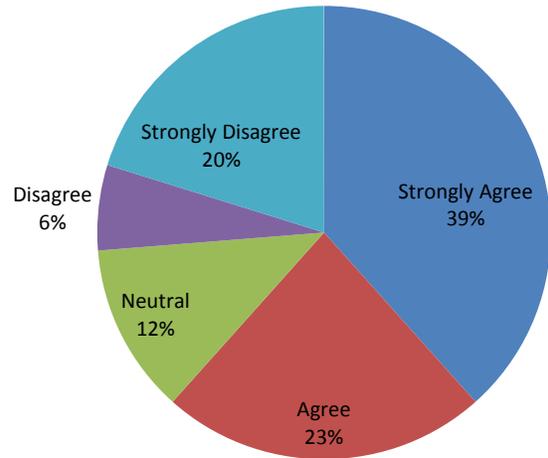


KEYPAD POLLING RESULTS - What we heard you say at the June 12, 2013 Public Meeting:

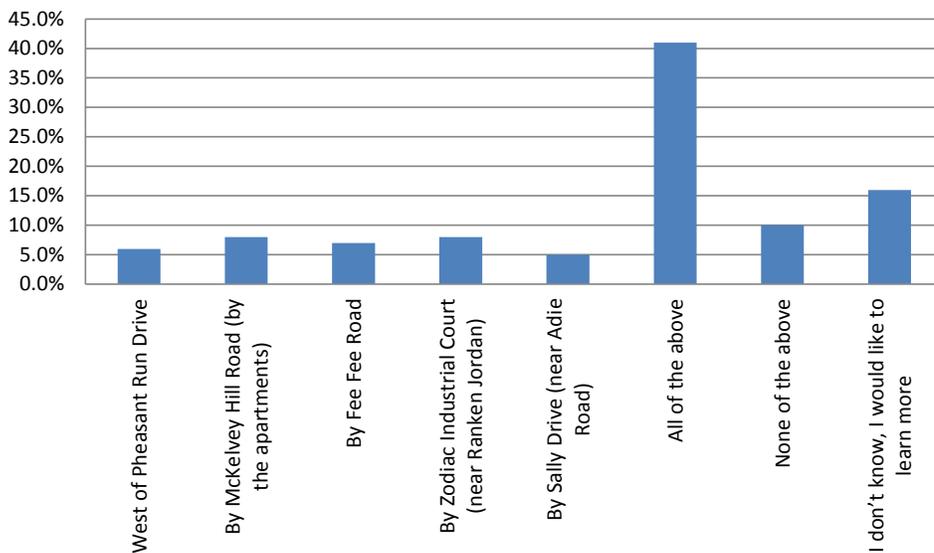
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No data.

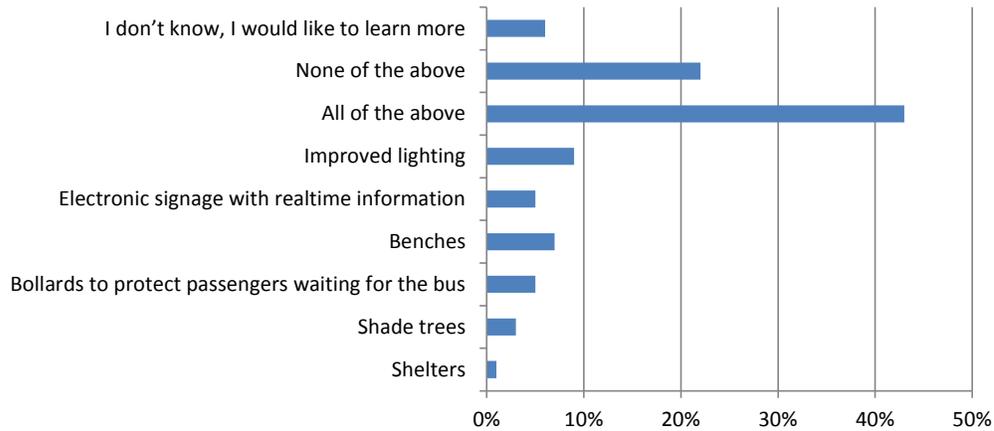
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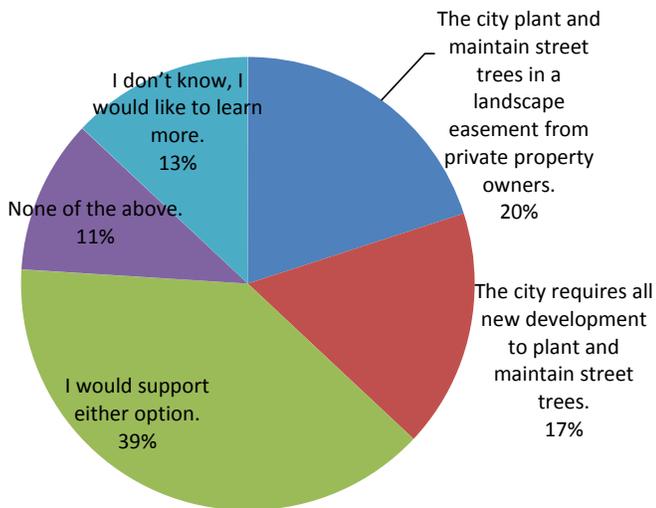
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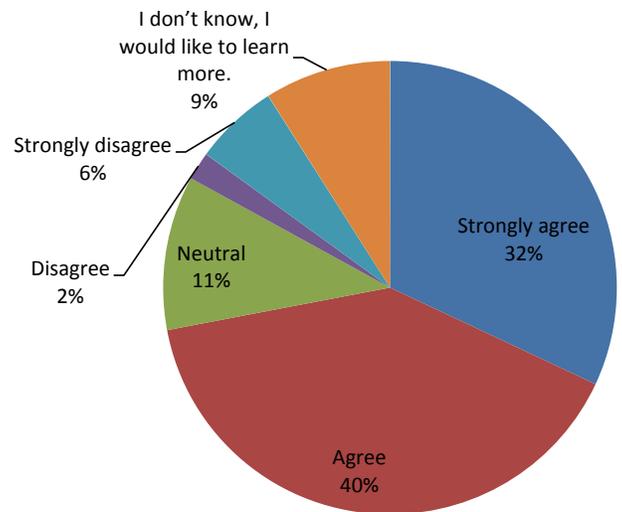
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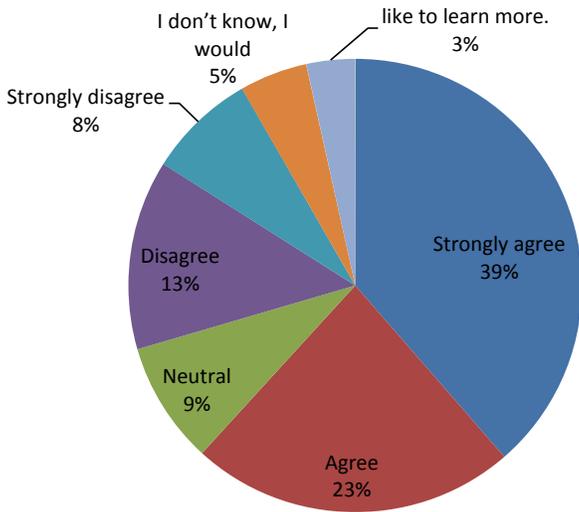
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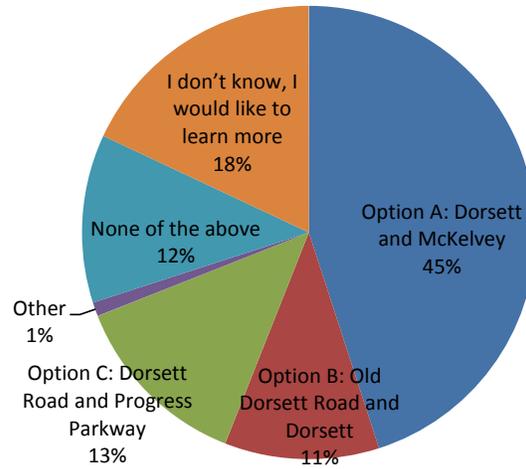
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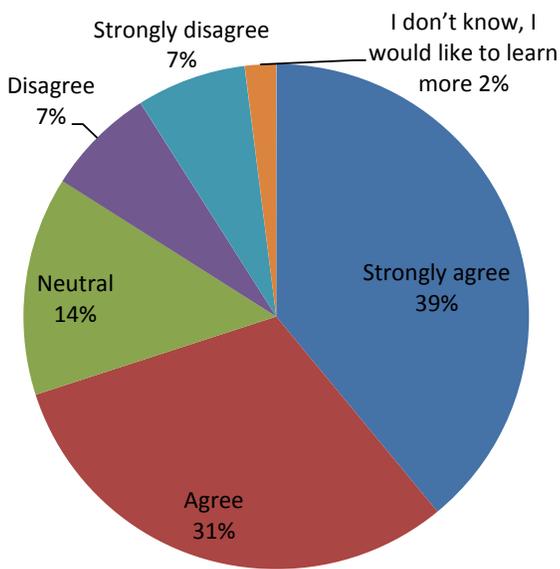
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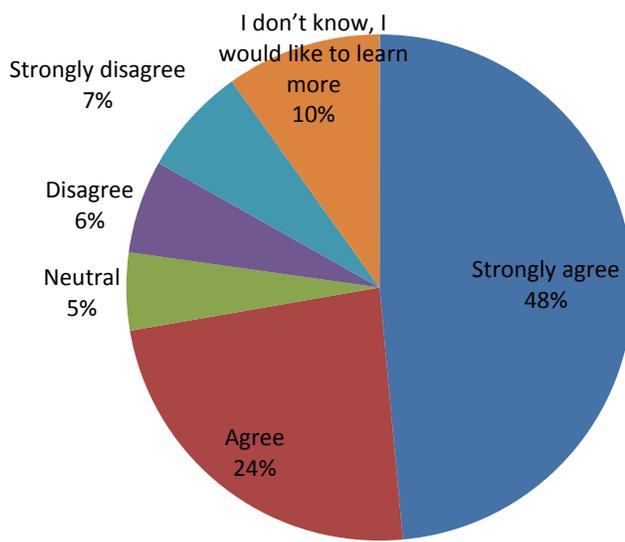
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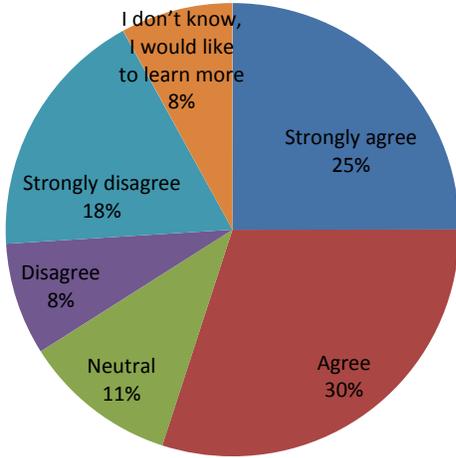
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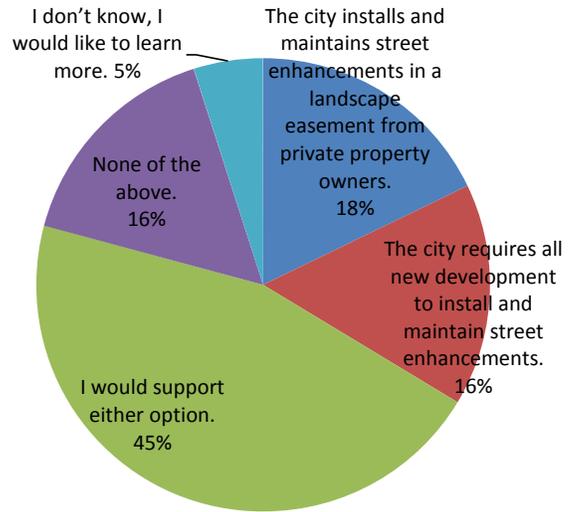
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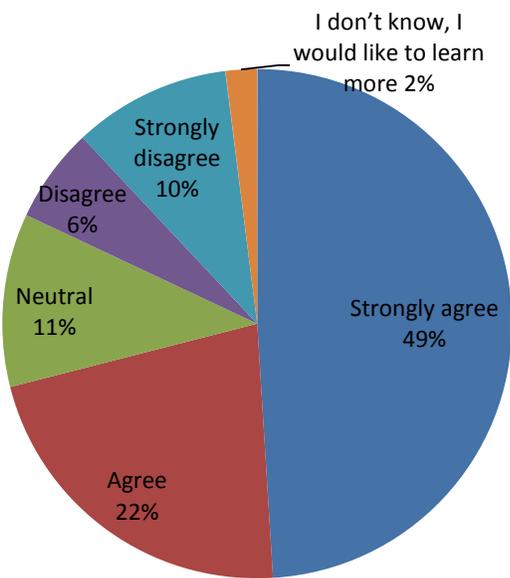
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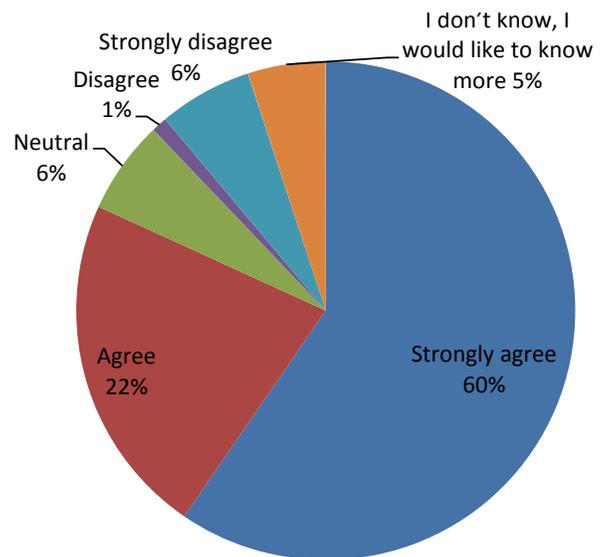
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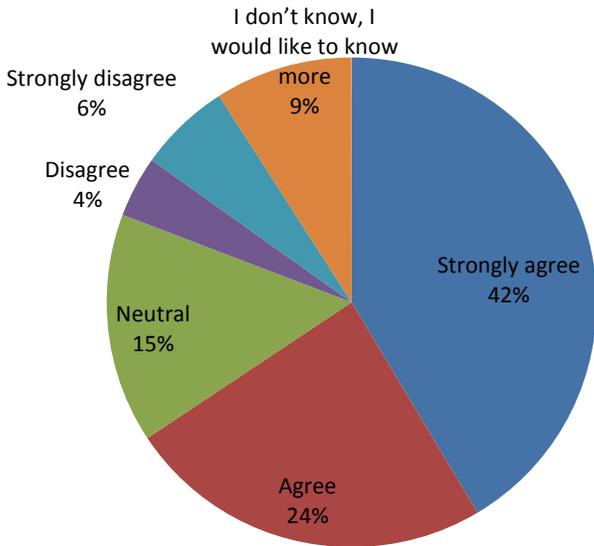
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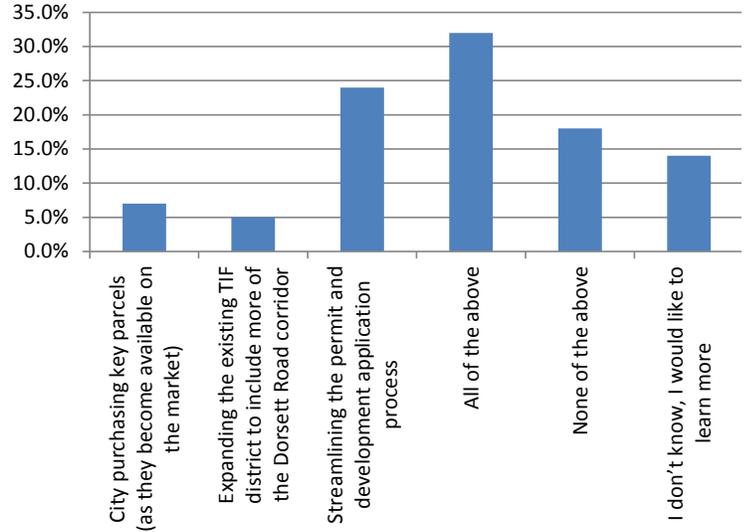
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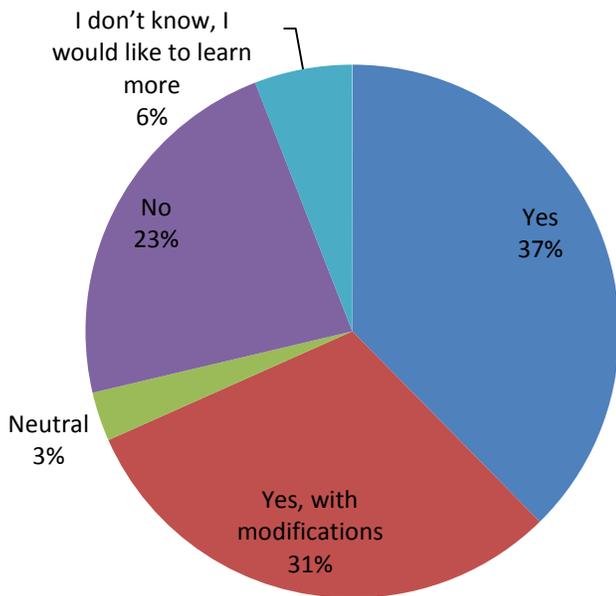
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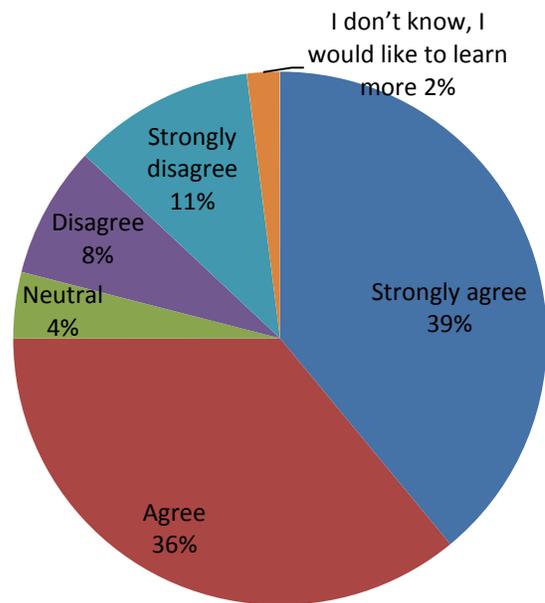
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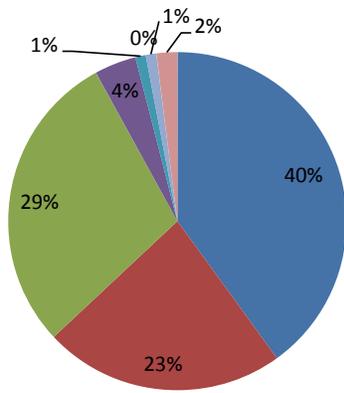
17. I would be in favor of the City Council adopting the Dorsett Road plan as illustrated tonight (choose one)



18. I have found the public engagement process used for this project to be useful and informative (choose one)

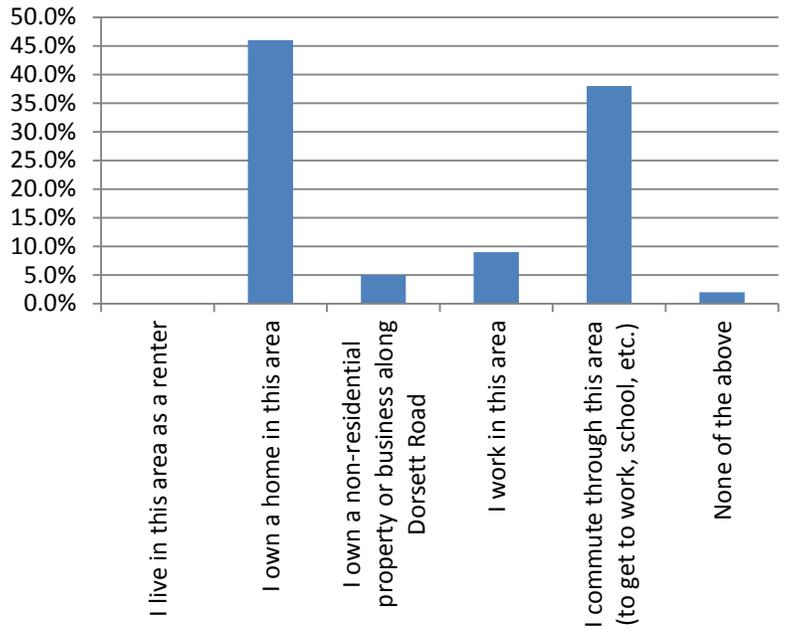


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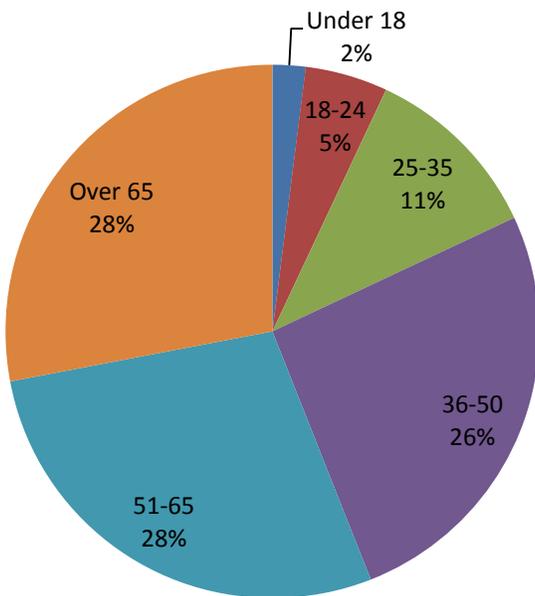


- Maryland Heights (west of 270, north of Dorsett)
- Maryland Heights (west of 270, south of Dorsett)
- Maryland Heights (east of 270, north of Dorsett)
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- Elsewhere in St Louis County
- St Charles County
- Elsewhere in the metro area
- None of the above

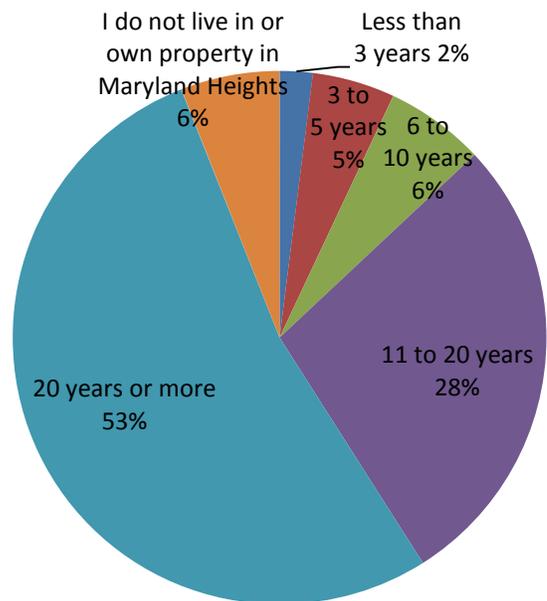
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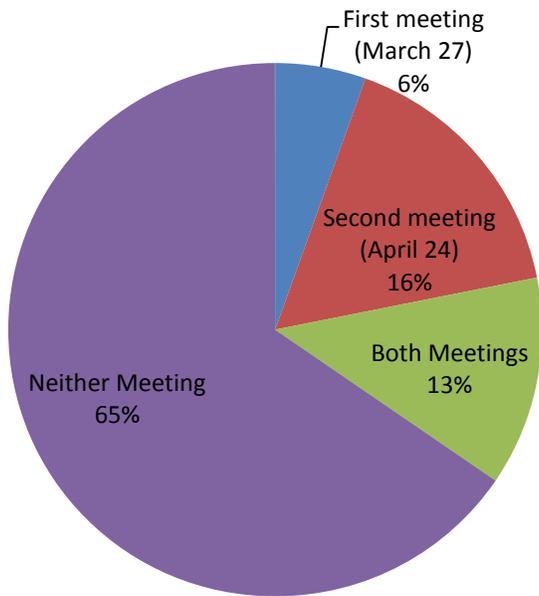
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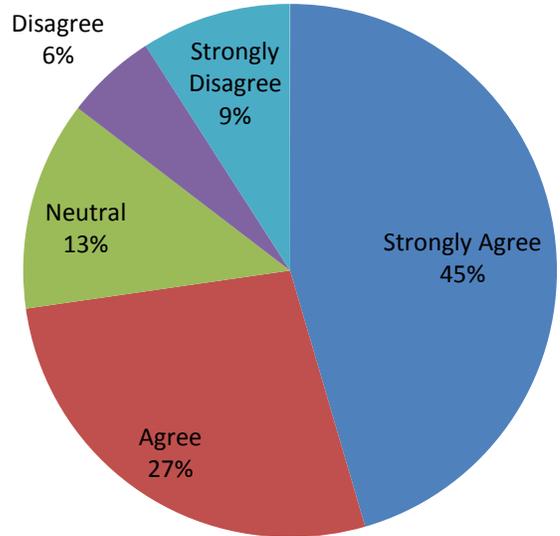
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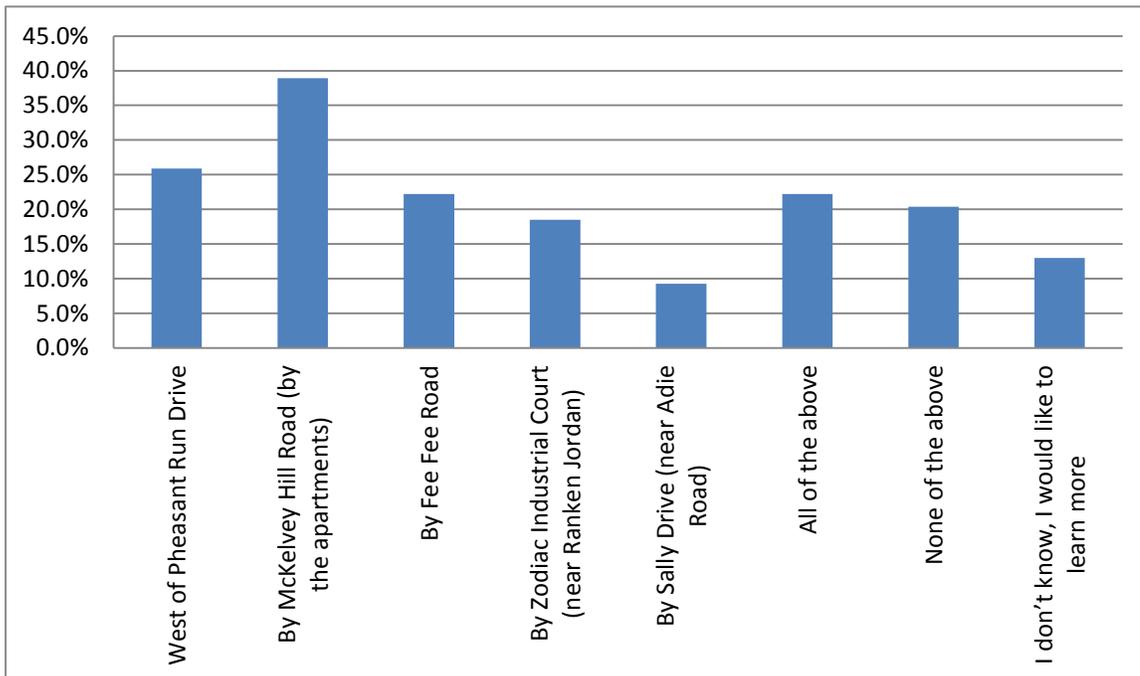
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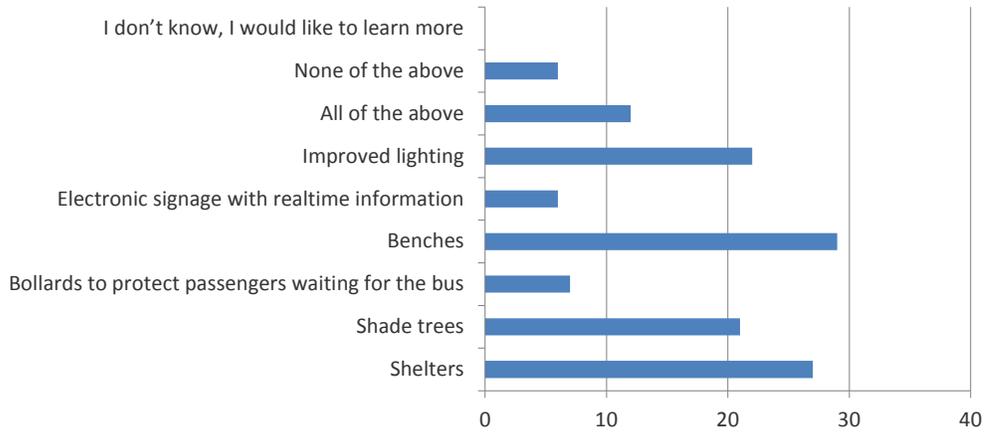
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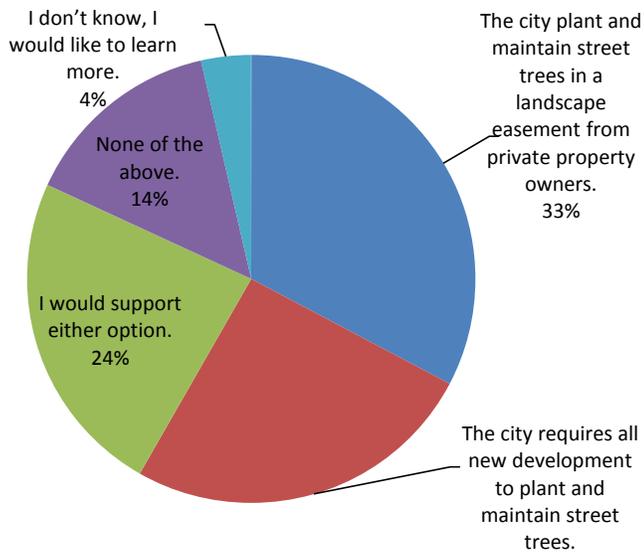
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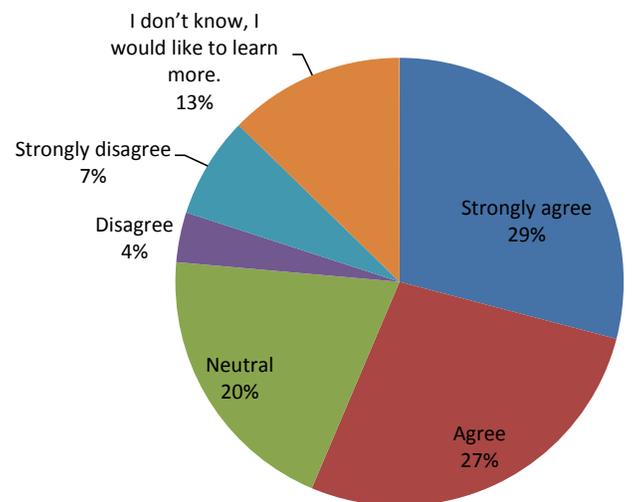
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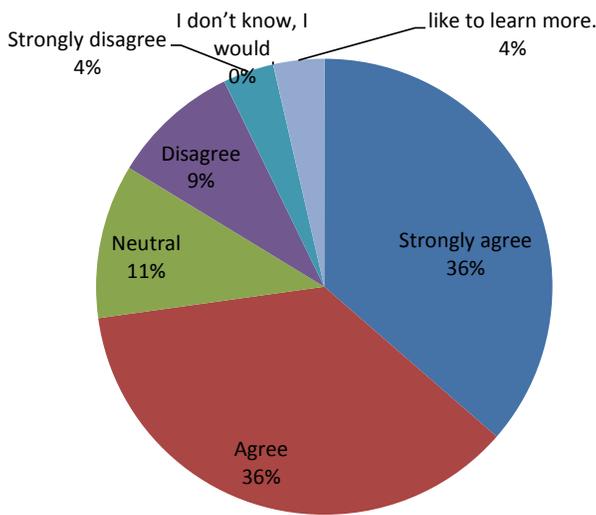
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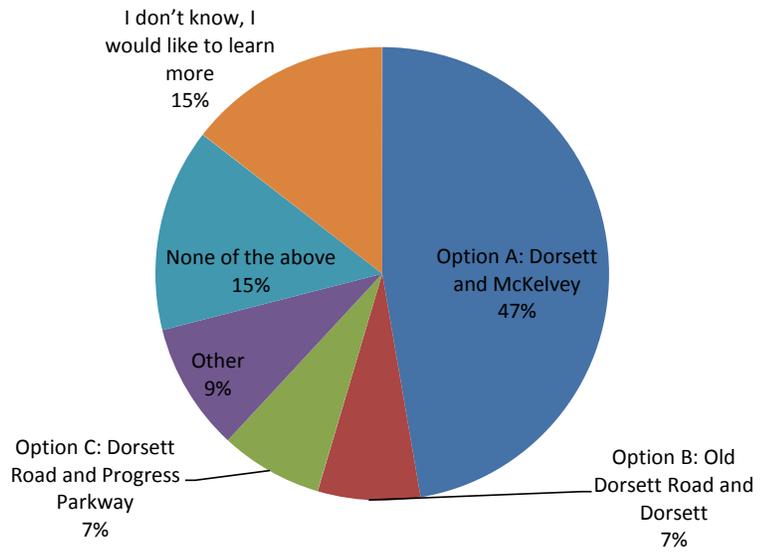
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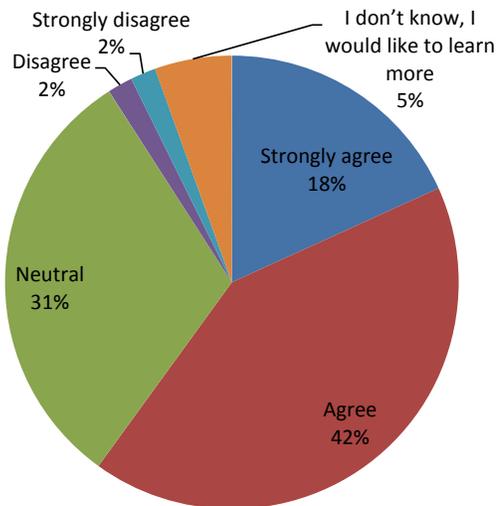
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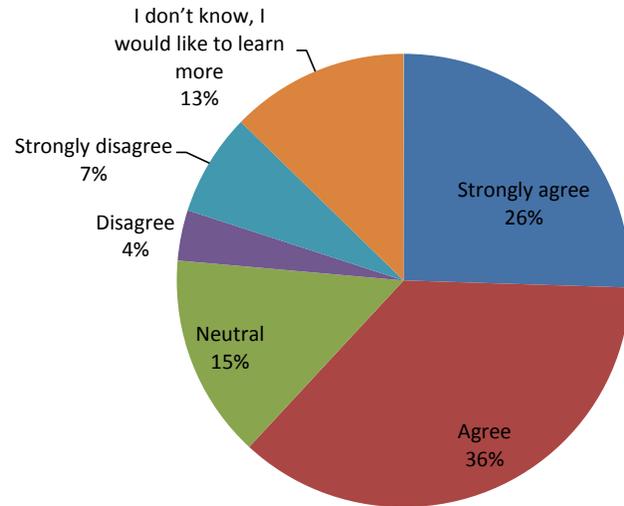
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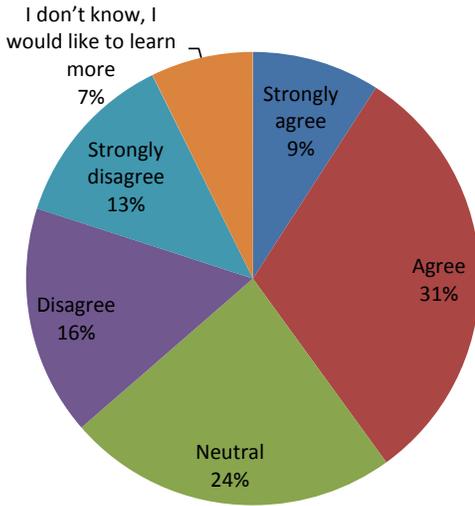
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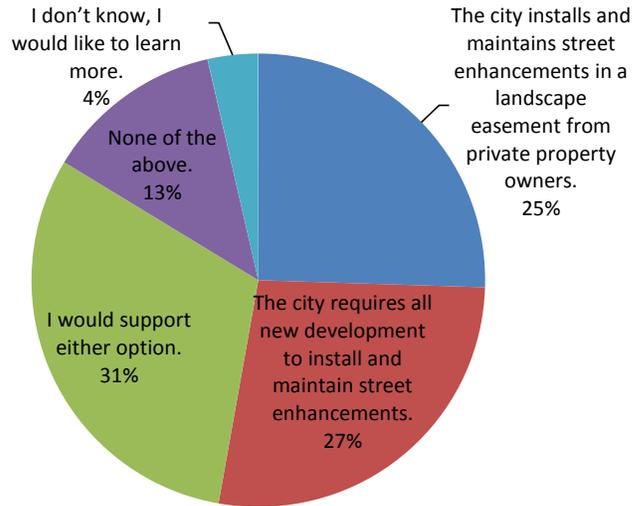
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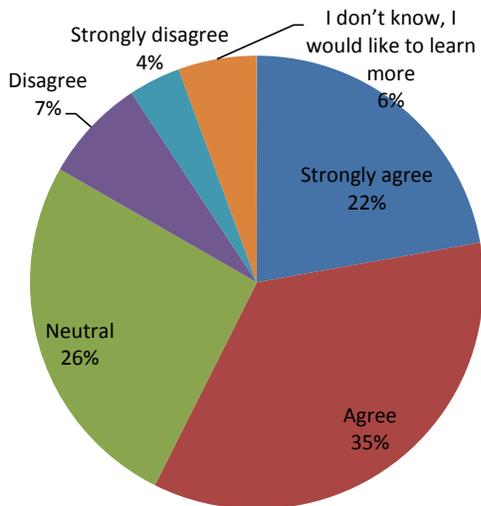
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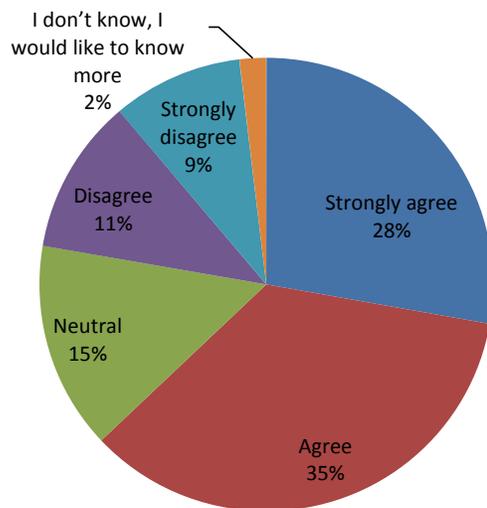
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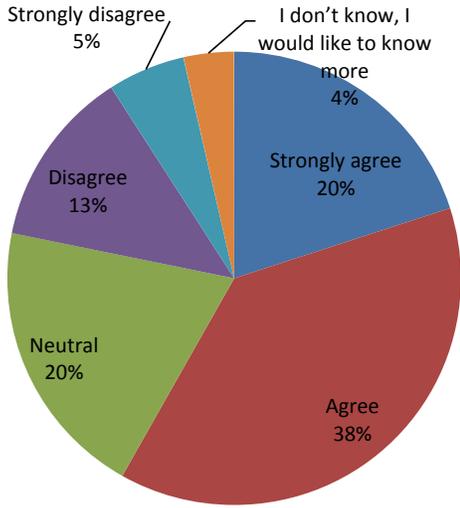
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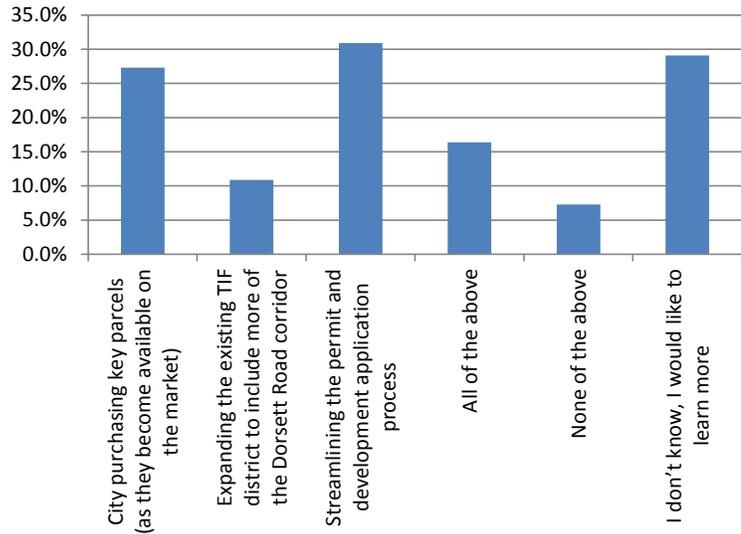
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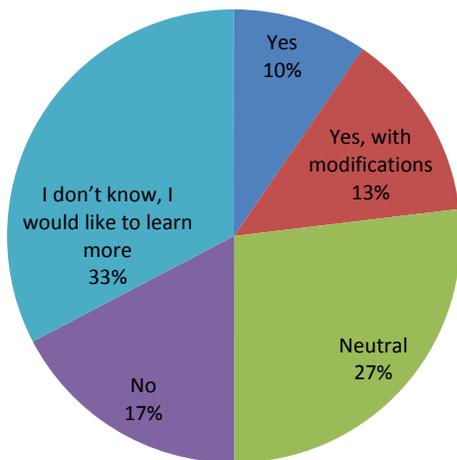
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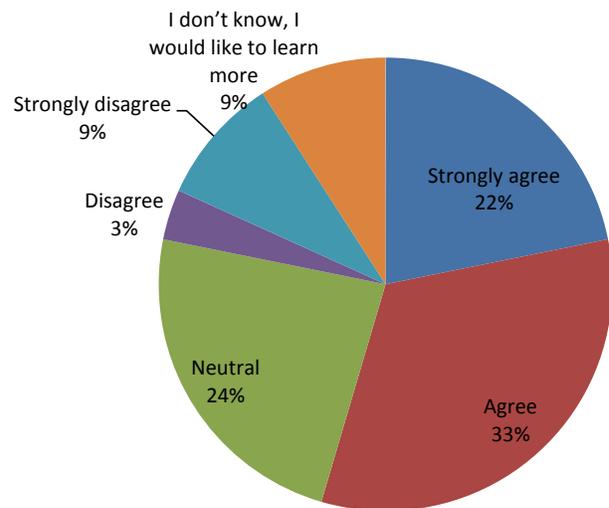
16. I would be in favor of the city pursuing the following strategies to promote redevelopment of key parcels along and near Dorsett over time (choose all that apply)



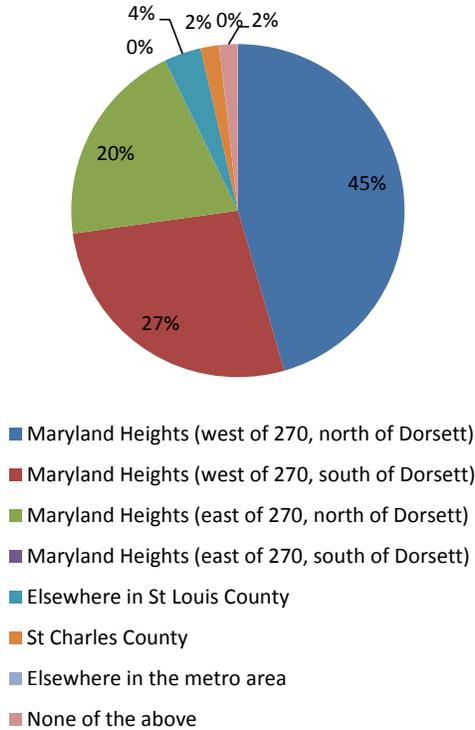
17. I would be in favor of the City Council adopting the Dorsett Road plan as illustrated tonight (choose one)



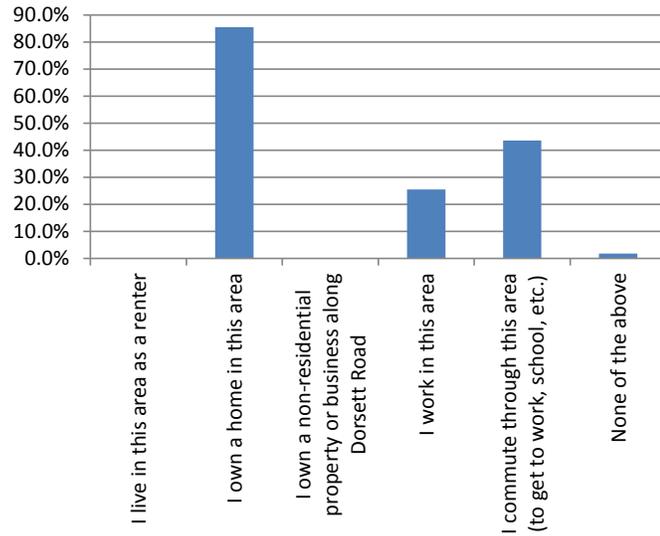
18. I have found the public engagement process used for this project to be useful and informative (choose one)



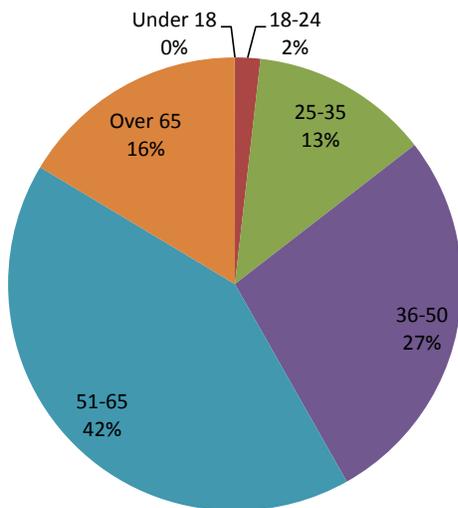
19. I am from the following area...(select one)



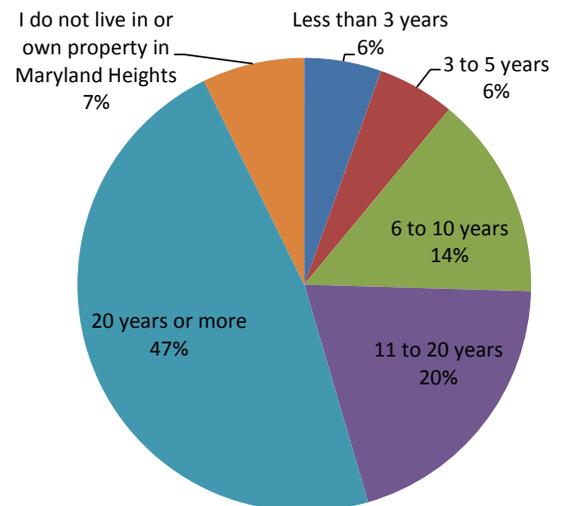
20. My association with the Dorsett Road corridor is... (select all that apply)



21. My current age is...



22. I have lived in or owned property in Maryland Heights for...





Topic Name: Building Community

Idea Title: Farmer's Market

Idea Detail: It would be nice to have a place that can support a weekend farmer's market. The area can then be used for other activities when farmer's market is closed. Possibilities could include a place for volunteers to do car washes or girl scouts to sell their cookies.

Idea Author: Bethany A

Number of Seconds 0

Number of Points 68

Number of Comments 7

Comment 1: I agree that a farmers market would be a big boon to our neighborhood. If opened up to local crafts also, it would be a diverse way to keep the community involved also. My daughter and I go to farmers markets every Saturday morning. It would be nice to give my money to MY community instead of another. I love to go to Theiss, but it would be nice to also see crafts from the area residents. I used to make jewelry. I'm sure there are others that sew for fun or make jewelry or knit. It would be nice to be able to support them. I like the feeling of investing in your community. I think this initiative should encompass that. As our citizens grow and prosper so does our city. | By Jennifer B

Comment 2: A Farmer's Market is a great idea for the area! I think a community vegetable garden would be nice too! | By S K

Comment 3: This would be great for our community. I always go to different communities for their farmer's markets and it would be nice to walk or bike to one nearby. | By Sarah S

Comment 4: A good Farmers Market along Dorsett would intice me to come there. | By Dean F

Comment 5: I think that the Farmer's Market would be a great idea and the space could also be used for a "Maryland Heights Days" once a year. | By Donny C

Comment 6: I love the idea of a farmer's market and using the space for "Maryland Heights Days". I find myself often longing for a farmer's market nearby. The addition of a farmer's market can add more of a sense of community, and promote walking/biking in our city. | By Jennifer W



Comment 7: Another possibility might be a neighborhood flea market. Residents could reserve a space from time to time to sell their used household items. | By DeAnne B

Idea Title: Complete a loop to includes the Community Cntr and Gov't Cntr

Idea Detail: Although ever controversial, East and West Maryland Heights will remain bi-sected by the Hwy unless we close the loop by adding a crossing over/under 270 north of Dorsett. If only pedestrian/bicycle access north of the railway/creek at the end of Midvale was added it would greatly improve proximity to the businesses near the strip mall at McKelvey & Ameling, as well as, connect the Community Center, Vago, McKelvey Woods Park, Aquaport and the Gov't Center. The crossing in the divergent diamond has MUCH improved east/west connection in Maryland Heights; although, a circular route provides easier access and more choices to all parties situated nearby. The access Marine provides near Westport ushers through many visitors and I imagine the same would hold true for this crossing, too. As a resident in NE Maryland Heights and a pedestrian I feel safer getting to Westport than to Walgreens/Schnucks/Creve Coeur Park.

Idea Author: Julie D

Number of Seconds 0

Number of Points 32

Number of Comments 3

Comment 1: I agree; the locals should be able to get across an interstate easily without having to use the crossing at the interchange. This is a little outside the apparent scope, but an important point. | By Dean F

Comment 2: Anything that can be used to help cut down on the vehicle traffic on Dorsett i think will help improve pedestrian traffic. | By Donny C

Comment 3: This seems like a good idea to me. Especially when/if a larger community center is built at the current location. | By Keith W

Idea Title: Westport Plaza Ideas...

Idea Detail: More restaurants, bars, retail shops, etc. to fill the empty spots in Westport Plaza could help to revive the area. Also more Westport-wide events with live music would be great. In addition, perhaps hosting an anual craft fair there would be fun and beneficial. Think St. Charles' Festival of the Little Hills, but on a smaller scale.



Idea Author: Bridget R

Number of Seconds 0

Number of Points 8

Number of Comments 2

Comment 1: I'm all for improving Westport but I think our main concern should be the Great Streets initiative of Dorsett Road. We need more family friendly stores, restaurants, theatres etc. within walking/biking distance of all the neighborhoods along Dorsett. | By Craig C

Comment 2: Have some family friendly stores. Ones with toys, maybe an arcade. My favorite thing to do there when I was little was play skee ball and get baskin robins and see the ducks at the lake. I would love to be able to do that with my kids. In the "mall" area. Maybe a small movie theater that has a screen that hangs above the stage. Do family movie nights. More family oriented . | By Martina S

Idea Title: Allow the free market to decide. Say no to federal funds.

Idea Detail: Federal Funds always come with string attached. Keep Federal Funds out of our community. Allow the free market (private property owners) to decide what to do with their own property.

Idea Author: Duane W

Number of Seconds 0

Number of Points 6

Number of Comments 5

Comment 1: Of course the Federal funds come with strings attached; there are only about 300 million people they might have to give an answer to for how their taxes were spent. If the government wants to do something with your property, they have to pay for it. But if you want the free market to dictate everything, I guess we could turn the public streets over to private toll road companies. Personally, even though I think government has its shortcomings, there are some things I like about it. Do you have any ideas that would make your drive down Dorsett easier, that will not require more right-of-way? | By Dean F



Comment 2: Also as a property owner on Dorsett, I don't want the city telling me I have to change my business and property because it doesn't fit their new plan. | By L M

Comment 3: As long as you are not being dangerous in the use of your property, there is nothing the city can do to make you change your business or property without paying you first. And why is it their plan? Can it not be your plan? Are you so certain you will be ignored? Are there not some things that can be done in the public right-of-way that would benefit your business? How about telling us what those things are. | By Dean F

Comment 4: As long as you are not being dangerous in the use of your property, there is nothing the city can do to make you change your business or property without paying you first. And why is it their plan? Can it not be your plan? Are you so certain you will be ignored? Are there not some things that can be done in the public right-of-way that would benefit your business? How about telling us what those things are. We might like them. | By Dean F

Comment 5: Are federal funds even proposed for this project? If so, can you give examples of "strings"? Thanks.

As a private property owner along Dorsett, I think I would like to see federal funds, casino funds, general revenue funds, or any other funds, spent to make my neighborhood better and to increase my property values. | By Keith W

Idea Title: Close the Street Vehiles on Sundays from Noon to 4 pm

Idea Detail: Hold a festival every Sunday allow bikes and pedestrians to walk the streets invite Food Trucks; invite an aerobics class; dance class; musicians artisans and more. Also known as "Cyclovia"

Idea Author: Patrick O

Number of Seconds 0

Number of Comments 0



Topic Name: The Feel Of Dorsett

Idea Title: Outdoor patio seating for restaurants.

Idea Detail: They would also need some area for plants/trees and narrow lattice privacy fence for vines to grow up to create a patio atmosphere.

Idea Author: Bethany A

Number of Seconds 0

Number of Points 52

Number of Comments 2

Comment 1: We really need this! | By Sarah S

Comment 2: This would be nice. On this street, there should be no need to use/block the public right-of-way for a patio; all the buildings are set back a little farther than that and it should remain so a patio can be built between the building and the public walkway. | By Dean F

Idea Title: underground power lines and telephone lines

Idea Detail: .

Idea Author: Bethany A

Number of Seconds 0

Number of Points 50

Number of Comments 3

Comment 1: I think this would definitely help our community. I have had more power outages since I moved here from St Louis City, than my entire life time. I know it would be costly, but I think it would be a good investment, if we took it slowly. | By Jennifer B

Comment 2: The only drawback is they are not as easy to find if you must dig something else up. | By Dean F



Comment 3: Besides being a visual improvement, the lines would be protected from storm damage. | By DeAnne B

Idea Title: tree lined streets

Idea Detail: as well as planter areas.

Idea Author: Bethany A

Number of Seconds 0

Number of Points 46

Number of Comments 2

Comment 1: Also, make sure the branches don't block the view of drivers. | By Leslie C

Comment 2: Just make sure the trees are well trimmed so a tall blind person does not find them the hard way. | By Dean F

Idea Title: Public gathering space

Idea Detail: It would be great to have some type of central plaza area preferably near Dorsett & McKelvey, but near the Government Center would work too. Some combination of downtown plaza and park would be best.

Idea Author: Kimberly C

Number of Seconds 0

Number of Points 39

Number of Comments 1

Comment 1: Yes, instead of a large, mostly unused, parking lot. Add some trees, benches, a fountain. It could go between the Schnucks side and the Steak n' Shake/Thai Kitchen side, and Commerce Bank. The stores and bank would surround it on three sides. | By DeAnne B

Idea Title: Lampposts/lighting



Idea Detail: More attractive lighting features make a street more comfortable and add character - such as the Central West End and the Loop. Add this with greenery - trees, hanging plant baskets and larger sidewalks - Dorsett could be a good street for pedestrians.

Idea Author: Mary S

Number of Seconds 0

Number of Points 27

Number of Comments 3

Comment 1: Am I right that the technology exists to put up lights whose colors can be changed at the flip of a switch? This could be very nice during the holidays and for special events, like Work Zone Awareness Week (having worked on highways). | By Dean F

Comment 2: Another example of nice lamp posts can be seen on Lindbergh in Hazelwood/Florissant. Nice banners accompany them, saying things like "Welcome to Hazelwood," or change with the themes of the four seasons, etc. | By Bridget R

Comment 3: Similar to the banner idea, Overland puts up holiday lights across their major streets every year. Sometimes the small touches like that are what make a neighborhood special. | By Jennifer W

Idea Title: parking garages hidden behind or underneath buildings

Idea Detail: In Concord NH they have these as well as on street parking. I'm not suggesting the paid parking, just the type of structure. Most blend in with the buildings and have similar facades so they aren't so ugly and gets rid of the acres of parking lots.

Idea Author: Kimberly C

Number of Seconds 0

Number of Points 26

Number of Comments 3

Comment 1: It helps a street to be more pedestrian friendly if the buildings are closer to the street and more of the parking is obviously to the side or behind. There is a parking garage in



Kansas City on Main Street that does not look very much like one, and the drug store on the bottom floor helps with that impression. There is no reason why a parking garage cannot contain some retail or office space. | By Dean F

Comment 2: I also feel that it is important that parking either be behind the restaurants and shops and or in a garage structure that is architecturally blended with the buildings. Nobody wants to drive down Dorsett and look at parking lots. | By Craig C

Comment 3: Parking should be located behind buildings so that pedestrians can access buildings from sidewalks without crossing through parking traffic. | By Adam S

Idea Title: More art/sculptures

Idea Detail: More art/sculptures along Dorsett. Would be even better if they were from local artists that currently live in MH, have lived in MH at some point, or have some kind of community tie.

Idea Author: Bridget R

Number of Seconds 0

Number of Points 25

Number of Comments 2

Comment 1: Great idea! I think making our city more beautiful will make people want to go out and enjoy our city even more. | By Jennifer W

Comment 2: I think sculptures would be a great added feature.
| By Martina S

Idea Title: faux brick crosswalks

Idea Detail: All crosswalks should be faux brick along Dorsett. Will look better than stripes on asphalt/concrete and usually help slow traffic.

Idea Author: Kimberly C

Number of Seconds 0

Number of Points 24



Number of Comments 2

Comment 1: I like the brick walk ways that were put in on Bennington recently. I think they really look nice. I think that would look good on Dorsett. I also think it looks like we care about the streetscape. We need visitors to know we care. | By Jennifer B

Comment 2: My impression of materials is that real brick is better, imbedded in concrete, like on Riverview between I-70 and Halls Ferry Circle. And take a good long look at what drivers can see from behind the stop bar and what will grow into that space. | By Dean F

Idea Title: Ways to improve Dorsett

Idea Detail: Phase out/redevelop/remove eyesores along Dorsett such as old repair garages, shops with cars at the street waiting for repair, vacant lots that have concrete walls from past businesses, empty shell strip malls that only have 1 or 2 businesses, neon lights on bldgs and just simply worn-out old bldgs that are plain and aesthetically unappealing. Consider the look and feel of Central West End streets, Kirkwood Rd in front of their City Hall etc. Provide non-utilitarian street lights, trees along street, wide sidewalks, benches, bike lanes. I would like to see a St Louis Bread Co on Dorsett and an ice cream/custard type shop would be nice to have such as Kirkwood's and Ferguson's train station ice cream shops, not a big chain ice cream place. Perhaps a mixed use development with businesses and residential combined.

Idea Author: Keith W

Number of Seconds 0

Number of Points 23

Number of Comments 2

Comment 1: If you want to get rid of the cars at the front of the building, how about providing some incentive to get them to build an area out back to put the cars. I don't think displacing businesses that have made their livelihood here for a long time is a good practice. If we want improvements, we need to figure out ways to HELP them make the improvements needed to progress with the neighborhood. We want Maryland Heights to be a sought after small business destination. You can't be sought after if you don't take care of your small business citizens. | By Jennifer B

Comment 2: Some of these things will not be done without the exercise of eminent domain. I believe there are government and non-profit programs available to help with repairs that some



may not know about, or they can be created. There was one thing that sounded like an enforcement issue. Otherwise, a nice idea of what it could look like. | By Dean F

Idea Title: Take a trip west on Olive.

Idea Detail: The center lanes not being used as a turning lane are filled in with trees and bushes. Adds a personal touch to the street.

Idea Author: Leo H

Number of Seconds 0

Number of Points 21

Number of Comments 3

Comment 1: I like this idea. We will need to decide who will be responsible doing and paying for the continuing care: the street department, the parks department, a volunteer group, a corporate sponsor, or some combination. | By Dean F

Comment 2: I think having wider sidewalks with trees and flowers (or hanging flowers - like the Loop) would encourage more walking and would be better for businesses. | By Mary S

Comment 3: Maybe add some art, too--not too tall as to obstruct vision. | By DeAnne B

Idea Title: A nice fountain feature

Idea Detail: Everyone likes a fountain. Simply put.

Idea Author: Bridget R

Number of Seconds 0

Number of Points 21

Number of Comments 3

Comment 1: If a roundabout is built at McKelvey and Dorsett, like suggested elsewhere on this site, that would be another good place for a fountain. | By Dean F

Comment 2: Simply put, but very true! It's just another way to spruce up our community, and if



placed in a common area with seating, could provide a great meeting place and encourage the community to get out and about in our own neighborhood instead of traveling to surrounding areas. | By Jennifer W

Comment 3: I think that the newly improved intersection of Dorsett and 270 needs some water features. They really did a nice job on that intersection but it seems like there is a perfect spot for a small fountain in the middle of the patio like area on all four corners. A nice fountain with a bench or two would be nice. Eventually hopefully there will be more people walking along Dorsett. | By Craig C

Idea Title: Pedestrian crossings immediately E & W of 270 over Dorsett

Idea Detail: for safe access to residents concentrated in the apartment complexes adjacent to the road commuting to and from work either by mass transit, bicycling, or walking to Ed Jones and other commercial businesses

Idea Author: Julie D

Number of Seconds 0

Number of Points 20

Number of Comments 3

Comment 1: i would love to see this happen. But I think this was addressed in the last meeting and they said there wasn't enough room to do it on either side of Dorsett. I think this is the SAFEST way, but if we can't do this for our citizens then we will need to come up with something else. We need to take care of our citizens in these areas. It is very dangerous for them to cross the street at the times they Have to do it! | By Jennifer B

Comment 2: Most DDI's have the pedestrian walkways in the middle where the pedestrians can make use of the signals instead of having them walk in front of yielding traffic as at Dorsett. How they had to use barrier to protect the bridge columns from being hit is the only reason I see that this would be done, but I would like a confirmation. This would have helped with safe access, though maybe not completely resolved it. | By Dean F

Comment 3: Most DDI's have the pedestrian walkways in the middle where the pedestrians can make use of the signals instead of having them walk in front of yielding traffic as a Dorsett. How they had to use barrier to protect the bridge columns from being hit is the only reason I see that this would be done, but I would like a confirmation. | By Dean F



Idea Title: Transform train track from liability to asset.

Idea Detail: The train track crossing over east Dorsett is currently a liability. It doesn't look good.

Develop, or encourage development of, currently empty land on north east corner of the crossing. Perhaps a train themed retail space and Maryland Heights museum. Future residents don't have to know there was never a train station there. :-)

Example: Areas adjacent to Lindbergh-RD/Kirkwood-RD train crossing seem very nice/vibrant.

Idea Author: Keith W

Number of Seconds 0

Number of Points 17

Number of Comments 1

Comment 1: I like this idea. The museum would make a unique event space too. | By Kimberly C

Idea Title: Mural on concrete retaining wall (Dorsett West, past Denny's)

Idea Detail: There is a blank concrete retaining wall along the sidewalk, westbound on Dorsett, past Denny's and before Walgreens. I've always thought this would be a perfect place for a mural.

Idea Author: Bridget R

Number of Seconds 0

Number of Points 15

Number of Comments 1

Comment 1: I agree; I think that about a lot of concrete walls. | By Dean F

Idea Title: improve the intersection for pedestrian traffic.

Idea Detail: I'd like to see more foot traffic, but the Dorsett/McKelvey intersection does more to



block it than encourage it. Maybe the crossing lights could be speeded up. Definitely more trees to provide shade. Maybe some art along the sidewalks to add interest.

Idea Author: DeAnne B

Number of Seconds 0

Number of Points 14

Number of Comments 2

Comment 1: Speeding up the lights might work if the traffic is light enough, but it would mean more yellow time, thus less green time, overall. If the traffic is light enough for this suggestion, reducing the roads from four to three lanes should be looked at. A roundabout may work well for encouraging pedestrian traffic through this intersection. | By Dean F

Comment 2: All good points. I think it's important to include someplace to walk to... more retail, dining, gathering places. | By Jennifer W

Idea Title: Urban Streetscape w/ wider sidewalks/retail/green space

Idea Detail: Urban Streetscape w/ wider sidewalks for pedestrian usage, selective restaurants/retail, green space, modern architectural details (NOT the blue waves theme along new diverging diamond interchange- suggest replacing that with something more modern), street lamps, hanging baskets/holiday lights, a modern metal sculpture would look nice centered in front of City Hall, the list goes on...

Idea Author: Emily L

Number of Seconds 0

Number of Points 11

Number of Comments 0

Idea Title: Keep Federal Govt money out of our community!

Idea Detail: Most property along Dorsett is privately owned. Govt, including all levels, has no business telling private property owners what they can and can not do with their private property. Allow private property owners to decide what to do with their own property. Keep the Fed Govt out of our community!



Idea Author: Duane W

Number of Seconds 0

Number of Points 9

Number of Comments 5

Comment 1: I'd like to keep Tea Party and Libertarian style shallow thinking out of this. I live here and I like the idea of a better community over poorly thought out ideological rants. | By Jason B

Comment 2: This is a city government study. Though they have the authority to zone the land, they cannot tell someone to replace an existing use. There are only two ways that the government is going to tell you how to use your property, if your neighbors complain that you are a nuisance or hazard (which still has to be proven in court), or if they buy it (then it is no longer your property). Most of the money that will be spent on this project will go into already existing city/public right-of-way. But you have a right to speak your mind about what you think ought to be done with public property. If the majority of people agree with you and no one suffers an undue loss as a result (such as denied access), that is what will be done. By the way, the Feds paid for 90% of the new Dorsett interchange. How many of your neighbors want to pay the Feds back for that interchange? Nevertheless, we would like to hear what you think would make the Dorsett public right-of-way better and more useful. | By Dean F

Comment 3: I agree it should be up to the property owners and not anyone else as to what is done. At the last meeting there were several people against doing anything on Dorsett and they were told it's going to happen whether people want it or not. | By L M

Comment 4: It seems like this is a project to increase the value of said private property. The "govt", local anyway, is elected by, and consists of, the private property owners in question. Regarding "Fed Govt money", I don't see that being specifically proposed here-- but it would be nice if some portion of the large amount of tax we pay the federal government each year could be spent in our community. | By Keith W

Comment 5: It seems like this is a project TO INCREASE THE VALUE of said private property. The "govt", local anyway, is elected by, and consists of, the private property owners in question. Regarding "Fed Govt money", I don't see that being specifically proposed here-- but it would be nice if some portion of the large amount of tax we pay the federal government each year could be spend in our community. | By Keith W



Idea Title: Invest in our citizens/community

Idea Detail: I like the feeling of investing in your community. I think this initiative should encompass that. As our citizens grow and prosper so does our city.

We can do this by supporting small businesses and encouraging our citizens to sell their creative items at local bazaars or fairs. A yearly Maryland Heights Days celebration would be ideal. A place to come together and get to know the local business & home owners. To mix/mingle and network.

Idea Author: Jennifer B

Number of Seconds 0

Number of Points 5

Number of Comments 0

Idea Title: No chain restaurants!

Idea Detail: I know you can't legally bar them, but I'd like to see incentives given to small operations that can bring some diversity. Ethnic foods, microbreweries, home cooked -- It's all good. But you don't have to drive very far to find an AppleTGIFihans or a LongStar or whatever. We really don't need more of that.

Idea Author: Jason B

Number of Seconds 0

Number of Points 5

Number of Comments 0



Topic Name: Parks And Open Spaces

Idea Title: Corner Park/Plaza areas

Idea Detail: Welcoming pocket/corner parks that could also function as small gathering spaces. Could double as bus or metro link stops and would encourage more people to walk & bike by providing a more scenic walk.

Idea Author: Kimberly C

Number of Seconds 0

Number of Points 43

Number of Comments 1

Comment 1: Such a park by the Municipal Building could be used for public outdoor political debates. | By Dean F

Idea Title: Add a Fenced Dog Park

Idea Detail: Other towns have resident-only dog parks with a fee. Provide an area for dogs to play off-leash, perhaps with a small pond, shade trees, benches and washing station

Idea Author: Carolyn M

Number of Seconds 0

Number of Points 13

Number of Comments 2

Comment 1: If we can be known as "dog friendly" it will draw a lot of people to the area. A public-use (no fee!) dog park is a great idea, especially one closer to the "downtown" area we create. Dogport is nice, but it's out of the way and inconvenient. | By Jason B

Comment 2: We currently have the Dogport located behind the Aquaport. Though, I'm sure residents of Maryland Heights would like to have another location. | By Jennifer W

Idea Title: Lack of Tennis Courts in Maryland Heights



Idea Detail: I would like to see tennis courts at a Maryland Heights park and maintained/operated by Maryland Heights. The 2 courts in Creve Coeur park are dilapidated and hard to get to and 2 isn't enough. The nearest courts are at Parkway North but that is out of the way too for citizens of Maryland Heights. We should have a minimum of 8 courts installed at a park for good public use.

Idea Author: Keith W

Number of Seconds 0

Number of Points 8

Number of Comments 1

Comment 1: I agree that our citizens need a place to come for outdoor activity. Some can use Pattonville High School's courts, but those are often in use by the school and there is no way to know that from the street, because they built on a hill. Nice location, but not all citizens can get there. As a community, I think it would pay off to care about our citizen's health. We now only have one gym that services those who work early in the morning or late into the evening. MH Center isn't open early on the weekends at all. A public access place where families can get exercise at most hours of the day and evening would be welcome. Our neighborhoods don't have sidewalks to walk on, so when we go for a walk we have to do it in the street. For the most part, in the small subdivisions, this isn't much of a problem. But it isn't very encouraging. I tried to jog in my neighborhood once. The dog that took after me taught me never to do that again. | By Jennifer B



Topic Name: Visioning Dorsett Road

Idea Title: Yes, a "Main Street"

Idea Detail: It would be nice to find evening destinations on Dorsett RD, rather than in distant communities, more often than we currently do.

Idea Author: Keith W

Number of Seconds 0

Number of Points 38

Number of Comments 2

Comment 1: A main street with little shops and restaurants and bars and small park areas would be quite welcome. I'd love to invite friends and family to spend a day walking and shopping and eating in my town. I second the Micro-brewery/restaurant idea. They are next Big thing, and we should have one!!! | By Jennifer B

Comment 2: I completely agree! I can never get my friends to come and hang out here because there are not very many options for restaurants or bars (especially non-smoking). Other communities have nice Main Street/downtown areas where you could have dinner and then walk around to little stores, ice cream/yogurt stores, music venues, art shops, bars or little parks to enjoy the community as a whole. It would be nice to have a central square for art fairs, community events, etc. I would love a micro-brewery/restaurant to open up around us! | By Sarah S

Idea Title: Eliminate large billboard signs

Idea Detail: Remove the current large billboard signs and do not allow new signs.

Idea Author: Keith W

Number of Seconds 0

Number of Points 15

Number of Comments 1

Comment 1: Removing the signs could require the use of eminent domain. The money paid



would also have to cover the reasonable income the the owner could have received. Not allowing them is a matter of passing the appropriate legislation. | By Dean F

Idea Title: To annex the St Louis County Unincorporated area into Maryland H

Idea Detail: Midland Blvd and Link Ave area could be incorporated into Maryland Heights. Think of the tax revnue?

Idea Author: Mag A

Number of Seconds 0

Number of Points 7

Number of Comments 1

Comment 1: And weigh the tax revenue against the needed expenditures for expanded city services. Besides, the people living there would have to also vote for it. Do you think there may be a reason Overland and Saint Ann have not annexed the area? | By Dean F

Idea Title: Market to Small businesses

Idea Detail: I see Maryland Heights as being a place to start a homespun small retail business. Boutiques. Local Restaurateurs and desert shops. Small business friendly will bring the walking shoppers.

Idea Author: Jennifer B

Number of Seconds 0

Number of Points 5

Number of Comments 1

Comment 1: A Smoke Free Microbrewery would be welcome by many of My neighbors. | By Jennifer B

Idea Title: Let the free market decide what Dorsett Road will look like

Idea Detail: Don't accept Federal Govt Money. It always comes with strings attached (more govt control over our private property.)



Idea Author: Duane W

Number of Seconds 0

Number of Points 4

Number of Comments 5

Comment 1: Focusing attention on trying to bring in New Small businesses would be good for commerce and good for residents. Having a place to spend time in Maryland Heights that isn't a big chain drive thru restaurant would be a nice perk to living here. At this time, for the most part, my husband and I have to leave Maryland Heights to have a decent meal in a bar without smoke in the evening. The only other sit-down restaurant to get a drink in that isn't smoky is Thai Kitchen. While we do go there at least once a week, if we want a drink and good food, we can't go there daily. | By Jennifer B

Comment 2: If there is rezoning it should be to expand not to restrict so much that it is too expensive for businesses to comply. I also don't want to see current businesses run out of town to make room for the changes. The changes should work with the current community and make it better for the businesses.
| By Leslie C

Comment 3: Updating the zoning should be looked at. That does not happen without hearings which have to be publicly announced, which almost no one goes to because they are busy with something else. The Federal Government gets some of their money from me. I will look at the strings and see if they are acceptable, if they are not, I can write my congressperson and tell them how I vote. | By Dean F

Comment 4: Dorsett Road is already great for businesses. Leave it alone! | By L M

Comment 5: Areas need to be rezoned to help increase the free market. This project is also looking to expand zoning to help the market. | By Bethany A

Idea Title: Yes, a "Main Street" please.

Idea Detail: Would be nice to find evening destinations on Dorset RD, rather than distant communities, more often than we do currently do.

Idea Author: Keith W



Number of Seconds 0

Number of Comments 0

Idea Title: Food Trucks

Idea Detail: Food Trucks are the Newest Hottest thing! They are a way to support small businesses and bring out the community. I think we should try to get Food Trucks to visit Maryland Heights during the week. Some trucks actually come over to the Riverport area, but Dorsett is under served by them. There are a lot of businesses who's employees might like the diversity a food truck brings to the area. We need to encourage entrepreneurial spirit if our community is to grow. Start with an evening festival that has food trucks. I'd be there!

Idea Author: Jennifer B

Number of Seconds 0

Number of Comments 0



Topic Name: Getting From Here To There

Idea Title: Construct Bike Lanes

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 38

Number of Comments 2

Comment 1: A little outside the scope of this study, but a comprehensive bicycle plan would be a good idea. Some would only require signing to implement. But bike lanes along Dorsett and where it connects to other routes, now or in the future, is a part of this study. | By Dean F

Comment 2: I am all for bike lanes and signage. Maryland Heights is making great strides to make the city more accessible to Creve Coeur Lake and the Katy Trail, would like to see the city get more bike friendly. | By John P

Idea Title: Better Pedestrian/Bike Path Between Westport and Dorsett

Idea Detail: By connecting Westport to the "Main Street" of Dorsett, we can attract more business from visitors. A walking/bicycling path or a short bus route can accomplish this.

Idea Author: Carolyn M

Number of Seconds 0

Number of Points 32

Number of Comments 1

Comment 1: Maybe a trolley like the one downtown or in Forest Park might be utilized for festivals. | By DeAnne B

Idea Title: Provide Better Sidewalk Access



Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 23

Number of Comments 1

Comment 1: Interconnecting walkways throughout the city would not be a bad idea. | By Dean F

Idea Title: How about Sidewalks on Glengrove Dr.

Idea Detail: Side walks on Glengrove Dr from Bennington to Rose Acres way over due. .

Idea Author: Floyd B

Number of Seconds 0

Number of Points 11

Number of Comments 0

Idea Title: Reduce Speed Limits

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 10

Number of Comments 1

Comment 1: I like the current speed of traffic. | By Bethany A



Idea Title: Roundabout at McKelvey & Dorsett

Idea Detail: I wonder if it would work

Idea Author: Julie D

Number of Seconds 0

Number of Points 7

Number of Comments 6

Comment 1: A two lane roundabout could work very well at this location. The work necessary to confirm it should be done. This would also provide an opportunity to make this intersection look a lot better. | By Dean F

Comment 2: I don't like this - I think it would make traffic a little more congested. | By Mary S

Comment 3: I agree, Mary. I think the traffic lights allow traffic to flow fairly quickly through the intersection as it is right now. I never have to wait long at a red light. I think adding a roundabout might cause more accidents. | By Jennifer W

Comment 4: Maybe. The purpose of using a modern roundabout is to reduce the effect of the left hand turn on the traffic flow by requiring traffic to make a right turn into the roundabout and then make a right turn out of the roundabout. It takes a lot of traffic to gum one of these up. I have only heard of one location that changed from a roundabout to a standard intersection; fortunately it was still in the planning stages and it was because they learned a company was moving in that would greatly increase truck traffic. They are safer; the vehicles need to slow down, which gives the drivers a better opportunity to look, and the accidents that do happen are not the head on and right angle ones that cause the severest injuries. | By Dean F

Comment 5: Would the pedestrian crossings be circular, too? That might be unique. | By DeAnne B

Comment 6: Yes, the walkways would be circular, but maybe not so unique; it would be similar to most curved streets with sidewalks. The islands that direct traffic to the right as they approach the roundabout (splitter islands) can be used by pedestrians so they only worry about one direction of traffic at a time. | By Dean F



Idea Title: Road Diet

Idea Detail: There appears to be some locations where a five lane road is justified, but I am not convinced that it is so for most of the road. The road could be reconfigured for three lanes with the outside lane striped for bike lanes and buffers. This would greatly reduce new construction in these areas. That leaves more money for robust bike lanes in areas where a five lane roadway is justified. There should also be no need to build bus turnouts. If the remaining auto lanes are striped a foot or two wider, this should help trucks use the road more easily.

Idea Author: Dean F

Number of Seconds 0

Number of Points 5

Number of Comments 0

Idea Title: Ameling-Midland

Idea Detail: From looking at a map, it looks like a lot of people would be pleased if there was a connection between the east end of Ameling and the west end of Midland. It would not be cheap, but it would get used.

Idea Author: Dean F

Number of Seconds 0

Number of Points 5

Number of Comments 0

Idea Title: Better roads or traffic flow on McKelvey/Bennington

Idea Detail: I wish there was better access to the community center area from Dorsett. Also, the road conditions are not great on McKelvey south of Dorsett. The road needs to be widened and re-paved if we look to increase traffic to the Dorsett Rd.

Idea Author: Sarah S

Number of Seconds 0



Number of Points 5

Number of Comments 0

Idea Title: Add More Traffic Lanes

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 3

Number of Comments 3

Comment 1: Does not MoDOT pretty much have a policy of not using center turn lanes with more than four through lanes? Seems to me that says a lot. At what point does it become better to eliminate left turns and provide for u-turns? When is Dorsett crowded as it is? Maybe small parts of it, and I think that is because of several traffic lights where the configuration of the roadway seems to vary a fair bit in a short distance, and the grades make it a little hard to see well. Not to mention that the striping does not match the pavement joints in those areas. | By Dean F

Comment 2: I don't like this - it would make Dorsett less attractive and less pedestrian friendly. I also don't think it's necessary. | By Mary S

Comment 3: No, we don't want Dorsett to turn into a Manchester. | By Keith W



Topic Name: Walking And Biking

Idea Title: Bicycle Lanes

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 35

Number of Comments 1

Comment 1: With good bicycle parking and good connections to the residential areas, this would make an excellent asset to the community. | By Dean F

Idea Title: Wide Pavement Shoulders

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 30

Number of Comments 1

Comment 1: I question there is a need for a five lane street in some areas of this road. An unneeded lane can provide a wide shoulder. | By Dean F

Idea Title: Wider Sidewalks

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0



Number of Points 30

Number of Comments 1

Comment 1: The sidewalks need to be wide enough to handle the expected foot traffic to the surrounding buildings. | By Dean F

Idea Title: Bicycle Parking

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 29

Number of Comments 1

Comment 1: If there is no place to park and lock a bicycle, why would people ride them to visit a business? | By Dean F

Idea Title: Signage

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 29

Number of Comments 3

Comment 1: There is nothing worse than driving down a street and not being able to find the address you are looking for because the city won't allow a sign on the street that can be seen over traffic. I "get" the whole less signage movement, but there has to be a middle ground. | By Lesley A

Comment 2: It may be good to put some regulatory signs on overhead trusses, maybe a few well placed dynamic message signs. Guidelines could be made for business signs with a case



by case examination of exceptions. | By Dean F

Comment 3: Somehow coordinate the business signs. It looks so busy. | By DeAnne B

Idea Title: Better Pavement And Sidewalk Maintenance

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 26

Number of Comments 1

Comment 1: Needed, especially if you intend to have more people using the sidewalks. As bad as potholes are for cars, they are worst for bicycles and wheelchairs. | By Dean F

Idea Title: More Crosswalks

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 25

Number of Comments 0

Idea Title: Better Lighting

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 22



Number of Comments 1

Comment 1: Especially since lighting is getting better with less power. | By Dean F

Idea Title: Keep the speed limit the same.

Idea Detail: instant polling

Idea Author: Bethany A

Number of Seconds 0

Number of Points 15

Number of Comments 0

Idea Title: Longer Crossing Time At Signals

Idea Detail: instant poll idea

Idea Author: Don B

Number of Seconds 0

Number of Points 12

Number of Comments 2

Comment 1: There may be places where median pedestrian refuges in the medians could be helpful, but that will not be at every intersection. | By Dean F

Comment 2: I like the crosswalks that give a person a countdown of how many more seconds they have to cross. It makes it a lot safer for the slower walkers. | By Craig C

Idea Title: Reduced Speed Limits

Idea Detail: instant poll idea

Idea Author: Don B



Number of Seconds 0

Number of Points 5

Number of Comments 2

Comment 1: Maybe some traffic calming techniques, but not a reduction in the speed limit. | By Dean F

Comment 2: The current speed limit is nice. Too slow is painful. Ferguson is an example of areas that have 25-30 miles/hour and it takes forever to go from point A to point B. | By Bethany A



Topic Name: Dorsett Road Transit

Idea Title: Metro Link

Idea Detail: A Metro Link station would open up better commute/transportation to and from the city (easier to get to Cardinal games or work) as well as to Lambert Airport.

Idea Author: Bethany A

Number of Seconds 0

Number of Points 34

Number of Comments 2

Comment 1: Yes, a Park-n-Ride somewhere closer to Maryland Heights than the N. Hanley station would be nice to have when the metro link expands. | By Keith W

Comment 2: I would like to see a Metro Link station at West Port. | By DeAnne B

Idea Title: better bus stops

Idea Detail: Areas along street where bus can pull out of the way of moving traffic.

Idea Author: Kimberly C

Number of Seconds 0

Number of Points 29

Number of Comments 3

Comment 1: There could also be better, more attractive overhangs and benches for busriders. | By Mary S

Comment 2: We can do better than a single 6" by 10" "bus stop" sign by the side of the road. | By Keith W

Comment 3: This should have been done long ago. | By Leo H



Idea Title: Streetcar as the loop is doing with modern energy keep history

Idea Detail: Since streetcar road has history bring back feel of that as thd delmar loop is doing.

Idea Author: Laura D

Number of Seconds 0

Number of Points 13

Number of Comments 1

Comment 1: The Delmar Loop has a lot more going for it than Dorsett at the current time. Buses would be better until Dorsett catches up. | By Dean F

Idea Title: Keep speed limits the same.

Idea Detail: instant poll idea

Idea Author: Bethany A

Number of Seconds 0

Number of Points 9

Number of Comments 0

Idea Title: MH Bus System

Idea Detail: Maryland Heights should look into operating their own bus system to do things the Metro is not doing in Maryland Heights. You can choose buses that would be more fitting to the image you want to display and you can provide connecting service to Metro, but the point is still to help your own business community most. Build better bus shelters and a few transit stations.

Idea Author: Dean F

Number of Seconds 0

Number of Points 6



Number of Comments 1

Comment 1: It might be nice to have something that would connect Earth City and Westport workers to the Metrolink. I would like to see a private business take up this idea so our tax dollars aren't used. | By Leslie C



Topic Name: RETAIL

Idea Title: Local/Small Retail shops with off street parking

Idea Detail: I would like to see parking areas behind the shops, so that people are not fighting for street parking and slowing down traffic to get into the street parking

Idea Author: Jennifer B

Number of Seconds 0

Number of Points 12

Number of Comments 0

Idea Title: Grocery Store East of 270

Idea Detail: It would be nice to have some kind of Grocery retail similar to the IGA we used to have East of 270.

Idea Author: Leah W

Number of Seconds 0

Number of Points 8

Number of Comments 0



Topic Name: CROSSING DORSETT

Idea Title: Dorsett & Shutez

Idea Detail: Crosswalk at Drosett & Shutez leading to the bank and Northwest Tire & Auto.

Idea Author: Leah W

Number of Seconds 0

Number of Points 11

Number of Comments 0

Idea Title: Apartment Dweller Crosswalk

Idea Detail: The apartments are used by many citizens that take public transportation. There should be a crosswalk and center islands for their safe crossing, at the very least. The area is busy enough to warrant a traffic light on a sensor (so that it doesn't change when no one is waiting to cross).

Idea Author: Jennifer B

Number of Seconds 0

Number of Points 5

Number of Comments 1

Comment 1: I have since been by this intersection with a watchful eye to the surrounding area. I think there is ample room to build a crossover. This would be the safest way to take care of the citizens that need to be crossing that road at rush hour. If possible, we should pursue this line of thinking until it is proven to not be cost effective or if there is another Good reason not to do it. | By Jennifer B



Topic Name: FEE FEE CREEK

Idea Title: Signage and walking path to open green space

Idea Detail: I've lived in MH of 11 years. Didn't know this creek was here. Signage would help. and an open walking path down to a nice open green space to enjoy the beauty of the location.

Idea Author: Jennifer B

Number of Seconds 0

Number of Points 9

Number of Comments 0

Idea Title: The more parks we have, the better!

Idea Detail: I'd like to see more year round restroom facilities. There could be environmental facilities to avoid plumbing.

Idea Author: DeAnne B

Number of Seconds 0

Number of Points 6

Number of Comments 0



Topic Name: DOWNTOWN MARYLAND HEIGHTS

Idea Title: I think a "Downtown" Maryland Heights is a great Idea

Idea Detail: It should be filled with small Mom & Pop stores. Local small businesses. Boutiques, food, misc items. We should definitely host unique food vendors. Brick & Mortar or Food Trucks. No chains allowed. At least at first. We need to provide parking also. I hate going to Kirkwood and CWE because there is no easy parking. The Loop and St Charles Main Street have parking behind the shops and that helps a lot. We should do this also.

Idea Author: Jennifer B

Number of Seconds 0

Number of Points 8

Number of Comments 0

Idea Title: Westport Area Should be Maryland Height's Downtown

Idea Detail: Conversion of the Westport area into the downtown for Maryland Heights would enable the city to take advantage of quick and easy access to I-270 and MO-364, the largest concentration of jobs in the local region, and the end of a potential Daniel Boone MetroLink line. Mixing residential buildings into the downtown area would reduce the average commuting distance to work thereby reducing the amount of traffic on the cities roads.

Idea Author: Herbie M

Number of Seconds 0

Number of Points 2

Number of Comments 0

Idea Title: Love the idea, About time.

Idea Detail: Stop wasting money and get to it. Sure we need better streets (get off the Dorsit thing) and side walks But as we are, What city. as any form of village were are a mess.

Idea Author: Floyd B



Number of Seconds 0

Number of Comments 0



Topic Name: PUBLIC MEETINGS

Idea Title: I made it to the LAST Meeting

Idea Detail: I think, how this information is disseminated through out the community should be discussed in the future. If this project taught you anything, maybe that is it. Better communication. I don't think you did a bad job. Just that it is something that can be worked on in the future. There are low cost ways to get the word out. You might need to employ Guerrilla Advertising tactics in the future. But the best part of those tactics are that they are cheap and they work.

Idea Author: Jennifer B

Number of Seconds 0

Number of Points 3

Number of Comments 0



Topic Name: PUBLIC ENGAGEMENT

Idea Title: This program definitely invites participation by the community.

Idea Detail: Dorsett Great Streets has been fully participatory, allowing the community to provide ideas and comments on street improvements.

Idea Author: DeAnne B

Number of Seconds 0

Number of Points 3

Number of Comments 0

Idea Title: I made it to the LAST meeting...

Idea Detail: But that was my own fault. I saw the notice in the newsletter. It just didn't register as anything important at the time.

I think, how this information is disseminated through out the community should be discussed in the future. If this project taught you anything, maybe that is it. Better communication. I don't think you did a bad job. Just that it is something that can be worked on in the future. There are low cost ways to get the word out. You might need to employ Guerrilla Advertising tactics in the future. But the best part of those tactics are that they are cheap and they work.

Idea Author: Jennifer B

Number of Seconds 0

Number of Points 3

Number of Comments 1

Comment 1: I know they can not be stopped, but those few people that so obviously had an agenda, were stopping the conversation rather than helping it. I wish they understood human nature and the way to get a point across without completely ruining the moment. | By Jennifer B



APPENDIX: Multi-Modal Level of Service Analysis

Multimodal Level of Service Model

Vehicular Level of Service (VLOS) standards have traditionally been used to evaluate the capacity of roadways and intersections. VLOS is an alphabetical grading system that provides a measure of automobile delay and congestion. Because the VLOS classification system focuses solely on auto delay times along segments or at intersections, these standards undermine the value of bicycle, pedestrian, and transit trips. Non-motorized facility improvements (such as widening sidewalks by reducing travel lane width) may reduce VLOS though significantly increase access by other modes.

Pivoting from scholarly research developing multimodal level of service (MMLOS) standards,^{1,2} the most recent Highway Capacity Manual (HCM) has made significant changes from previous editions. The 2010 HCM, 2008 NCHRP Report 616/3-70 and 2008 NCHRP Report 3-79 provide a multimodal approach, with a chapter dedicated to urban street facilities that couples level of service standards for automobiles, pedestrians, bicycles and transit users.

Based on this framework, the MMLOS model used by Nelson\Nygaard estimates the car driver, bus rider, bicyclist and pedestrian's perception of the quality of service and roadway environment together to show how these modes interact. This allows people to understand how changes in the quality of service of one mode can positively or negatively influence the quality of service of the other modes. This MMLOS model allows planners to analyze how a street segment and intersection perform based on the interactions of all modes – walking, bicycling, driving, and bus riding.

The MMLOS model computes a single average level of service for each of the four modes, not one single, combined score. The scores for street segments and intersections are “A-F,” using the standard levels established in the HCM, where “A” is free flowing traffic operations and “F” is completely congested. The MMLOS score for each mode is the average degree of satisfaction with the street.

The model used by Nelson\Nygaard was developed using video footage and field surveys to understand peoples' perceptions of the quality of service of each mode, as well as data inputs commonly required to compute LOS. There are a total of 37 variables used to predict perceived degree of satisfaction that fall into four main types of inputs:

- Facility design
- Facility control
- Transit service characteristics
- Volume of vehicle traffic on the facility

The MMLOS model is developed around a system of spreadsheets that analyzes each roadway segment, with up to six intersections included in each analysis. Each segment must begin and end with a signalized intersection.

¹ National Cooperative Highway Research Program, NCHRP Report 616 / 3-70 Multimodal Level of Service Analysis for Urban Streets. Transportation Research Board, 2008.

² National Cooperative Highway Research Program, NCHRP Report 3-79 Measuring and Predicting Performance of Automobile Traffic on Urban Streets. Transportation Research Board, 2008.

Strengths

- Shows interactions between modes
- User-friendly design of data entry sheets

Weaknesses

- Designed for urban, signalized network
- Does not calculate auto or transit intersection LOS
- Each segment analyzed must have a signal at each end. No LOS at unsignalized intersections.
- Requires extensive data collection plus some traffic modeling information (e.g. average stops per mile, through adjusted saturated flow rate)
- Small but important changes like curb extensions cannot be analyzed - only big changes (adding a bike lane, building a new sidewalk) result in changes in LOS from the existing to proposed condition
- MMLOS uses a regression model, thus the developers created a baseline “good” LOS and the model then analyzes how far a project segment or intersection deviates from the “good” level. Thus it is difficult to achieve a significant change in LOS from existing to proposed due to the regression formulas.
- There is no ability to calculate an LOS for shared use paths. As many places have existing shared use paths, or propose paths as part of infrastructure improvements, a separate calculation is needed to include these facilities.
- Environmental factors such as land uses and scenery are not part of the LOS methodology, but do play a role in roadway safety, particularly for pedestrians in terms of access management.

Data

Data for this analysis were provided by Metro, St. Louis County, and field observations. Fieldwork was conducted in April and May 2013.

MMLOS Data Inputs

The MMLOS model requires detailed data on road geometry, traffic conditions, and transit statistics. This figure lists all the data inputs, as well as the source the data was retrieved from.

MMLOS data inputs

Data input	Source	Notes
Basic Information		
Street segment length	Google Earth	
Cross street segment width	Google Earth	
Intersection control (signal, stop, none)	PB	
Cross street number of lanes	Google Earth	In one direction - e.g. if segment is SB, count # of EB cross street lanes
Cross street speed	St. Louis County	
Cross street vph/lane	St. Louis County	
Right turn islands?	Google Earth	
Street Geometry		
Number of trees within segment	Fieldwork / Google Earth	
Parking occupancy	NA	No on-street parking
Pavement condition	Fieldwork / Google Earth	
Widths of: shoulder/parking, bike lane, travel lane, median	Google Earth	
Widths of: Sidewalk, Buffer	Fieldwork / Google Earth	
Pedestrian volumes (pph)	Fieldwork	
Traffic Data		
Speed limit	Fieldwork	
Median type	Fieldwork	Median = 0 if None, 1 if one-way st., 2 if Painted or TWLTL, 3 if Raised
Left turn pocket? (YES or NO)	Google Earth	
Driveways on right side - number	Google Earth	Driveways count as entrances to private buildings
Unsignalized intersections?	Google Earth	Unsignalized intersections count as public roads
Annual Daily Traffic	St. Louis County	
Heavy vehicle % - buses, trucks, recreation	Industry Default	If unavailable, default = 3.5%
RTOR + permanent left vph	Industry Default	Conservative estimate used
Left & Right turn percentage	St. Louis County	
Peak Hour Factor	PB / NN	
K & D values	Industry Default	HMC default K = .09, D = .55

Existing MMLOS DATA SHEETS

Multimodal Level of Service for Urban Streets

Diagram of Urban Street

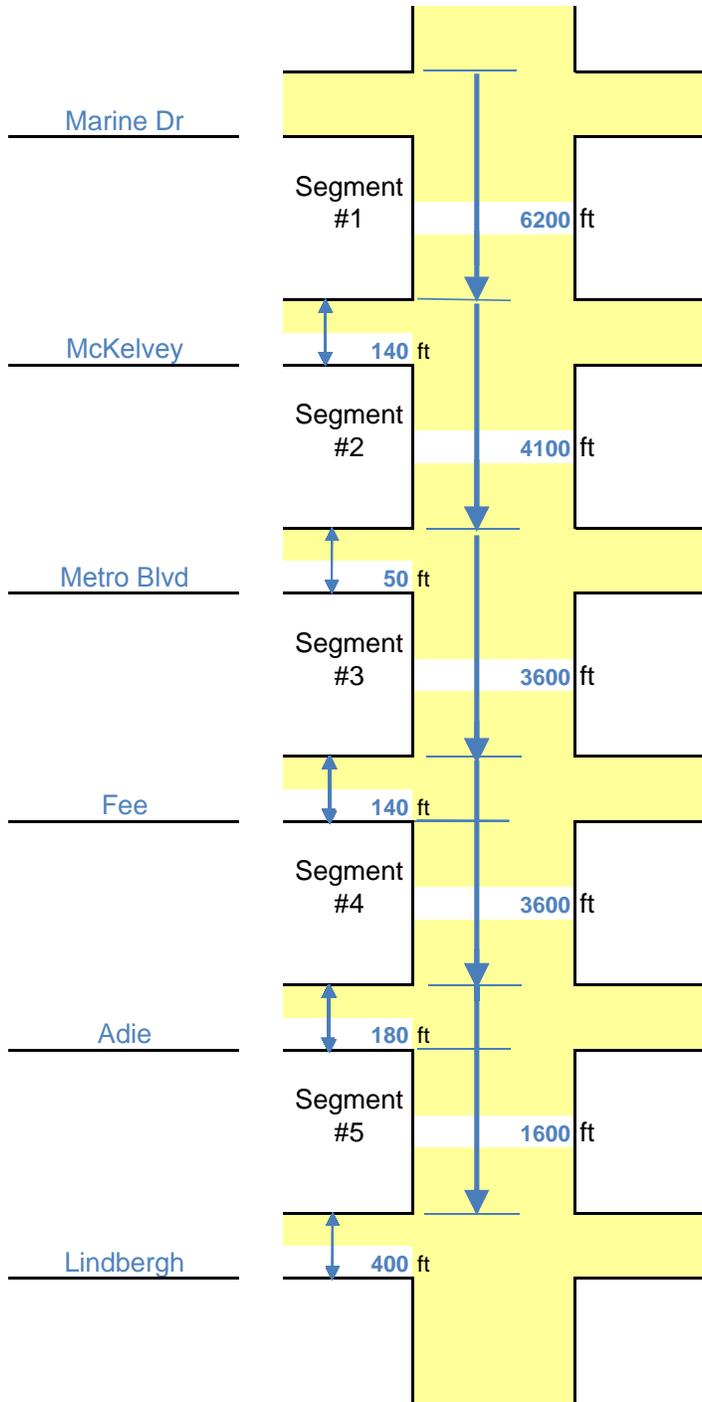
Street: Dorsett Road, Maryland Heights

Date: 5/21/2013

Limits: from Marine Dr. to Lindberg Blvd

Observer: Ehlers

Analysis Direction: EB
(Down Direction on this Sheet)



Intersect. Control	X-Street Lanes	X-Street Speed	X-St.App Vph/Ln	Right Turn Isl.
SIGNAL	7	35	1200	4

Intersect. Control	X-Street Lanes	X-Street Speed	X-St.App Vph/Ln	Right Turn Isl.
SIGNAL	2	25	500	0

Intersect. Control	X-Street Lanes	X-Street Speed	X-St.App Vph/Ln	Right Turn Isl.
SIGNAL	2	35	1200	2

Intersect. Control	X-Street Lanes	X-Street Speed	X-St.App Vph/Ln	Right Turn Isl.
SIGNAL	5	30	500	4

Intersect. Control	X-Street Lanes	X-Street Speed	X-St.App Vph/Ln	Right Turn Isl.
SIGNAL	4	35	1200	4

Urban Street Multimodal Level of Service
Data Collection Sheet - Transit

Direction: **EB**

Street: Dorsett Road, Maryland Heights

Date: 21-May-13

Limits: from Marine Dr. to Lindberg Blvd

Observer: King / Ehlers

Field Survey

Segment			Bus Stop (#)	Shelters (% stops)	Benches (% stops)	CBD (yes/no)
	From	To				
1	Marine Dr	McKelvey	0	0%	0%	NO
2	McKelvey	Metro Blvd	3	0%	0%	NO
3	Metro Blvd	Fee	3	0%	0%	NO
4	Fee	Adie	4	0%	0%	NO
5	Adie	Lindbergh	1	0%	0%	NO

Transit Performance Data

Segment			Route #s	Frequency (bus/hr)	Load Factor (pas/seat)	On-Time Perform. (%)	Schedule Speed (mph)
	From	To					
1	Marine Dr	McKelvey		0.1	0%	0%	0.1
2	McKelvey	Metro Blvd	33	2	80%	75%	18.4
			98	1	80%	75%	15
			94	2	80%	75%	15
3	Metro Blvd	Fee	33	2	80%	75%	18.4
4	Fee	Adie	33	2	80%	75%	18.4
5	Adie	Lindbergh	33	2	80%	75%	18.4

Urban Street Multimodal Level of Service
Data Collection Sheet - Vehicle Traffic

Direction: **EB**

Street: Dorsett Road, Maryland Heights

Date: 21-May-13

Limits: from Marine Dr. to Lindberg Blvd

Observer: King / Ehlers

Field Survey

Segment And Downstream Signal			Speed Limit (mph)	Median Type (0-3)	Left Turn Pocket (y/n)	Driveways Rightside (#)	Unsig. Intersects (#)
From	To						
1	Marine Dr	McKelvey	35	0	YES	7	5
2	McKelvey	Metro Blvd	35	2	YES	9	4
3	Metro Blvd	Fee	35	2	YES	17	4
4	Fee	Adie	35	2	YES	22	2
5	Adie	Lindbergh	35	0	YES	0	0

Traffic Counts

K: 10%

D: 55.00

(enter 100 for 100%)

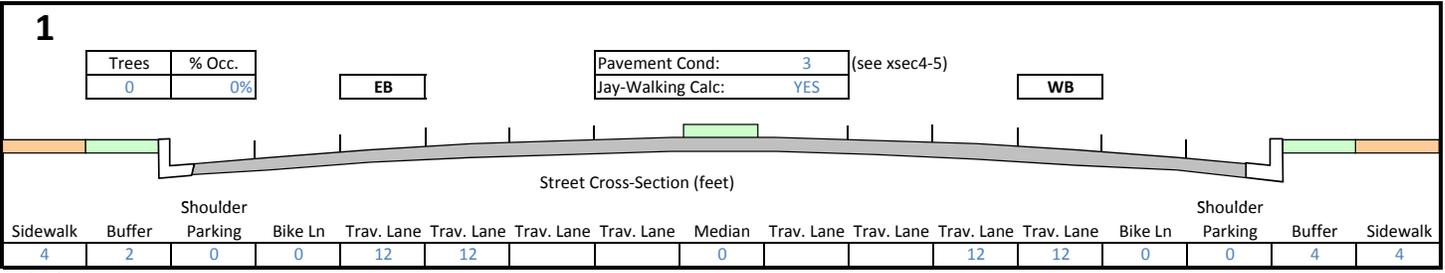
Segment And Downstream Signal			ADT or 2-wy vph	Heavy Vehicle (%)	RTOR+ PermLeft vph	Left/Right Turns %	Thru Adj. Sat. (vphgl)	PHF
From	To							
1	Marine Dr	McKelvey	14675	3.5%	0	54%	1800	0.924
2	McKelvey	Metro Blvd	38105	3.5%	0	17%	1800	0.888
3	Metro Blvd	Fee	29130	3.5%	0	33%	1800	0.884
4	Fee	Adie	21970	3.5%	0	30%	1800	0.784
5	Adie	Lindbergh	21950	3.5%	0	38%	1800	0.912

Arterial Traffic Performance & Signal Timing

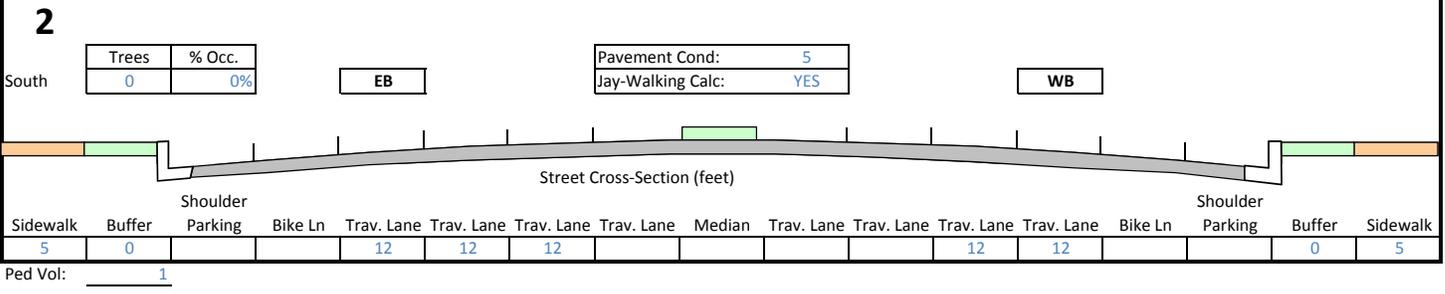
Segment And Downstream Signal			Field Survey		Signal Timing Data			
			Mean Speed (mph)	Average Stops (#/veh)	Cycle Length (secs)	Grn/Cycle for Thru (%)	Ped Walk (sec/cyc)	Xing Ped Walk (sec/cyc)
From	To							
1	Marine Dr	McKelvey	32.0	1.6	107	84%	25	24
2	McKelvey	Metro Blvd	33.0	1.4	98	83%	19.5	24
3	Metro Blvd	Fee	33.0	1.0	98	83%	17.5	24
4	Fee	Adie	34.0	0.0	98	83%	20	26
5	Adie	Lindbergh	33.0	1.8	88	82%	14.5	22.7

Cross-Section #1
From: Marine Dr To: McKelvey

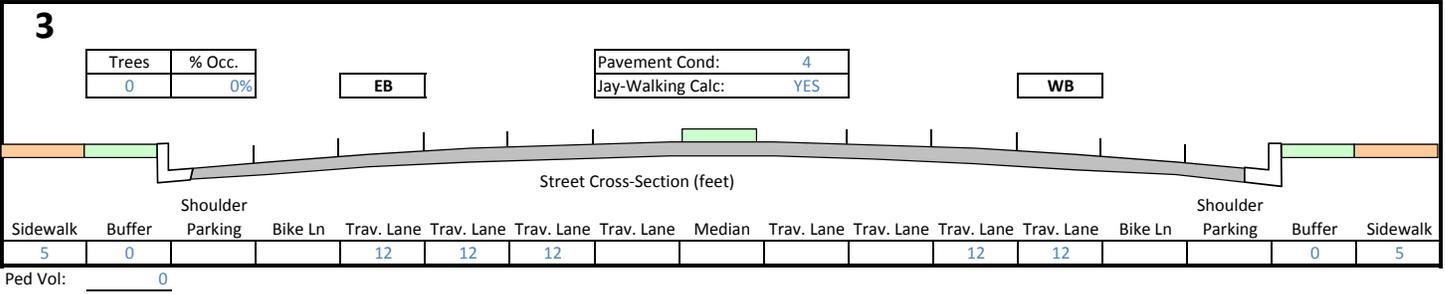
Observer: King / Ehlers Date: 21-May-13



Cross-Section #2
From: McKelvey To: Metro Blvd



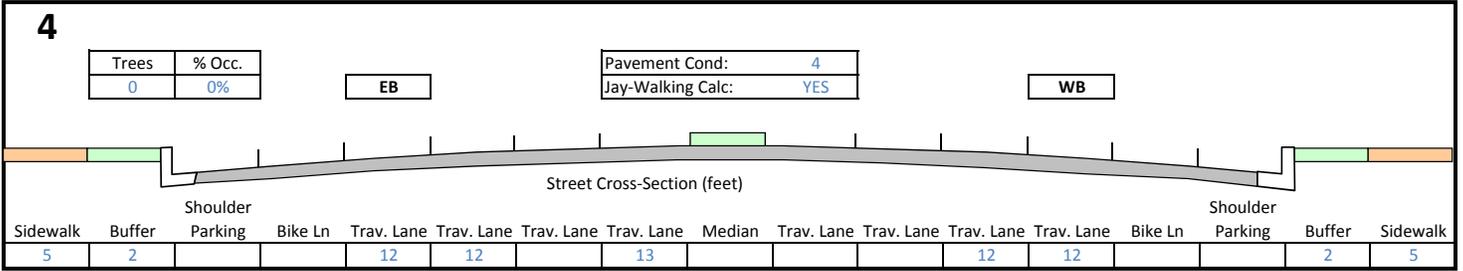
Cross-Section #3
From: Metro Blvd To: Fee



Cross-Section #4

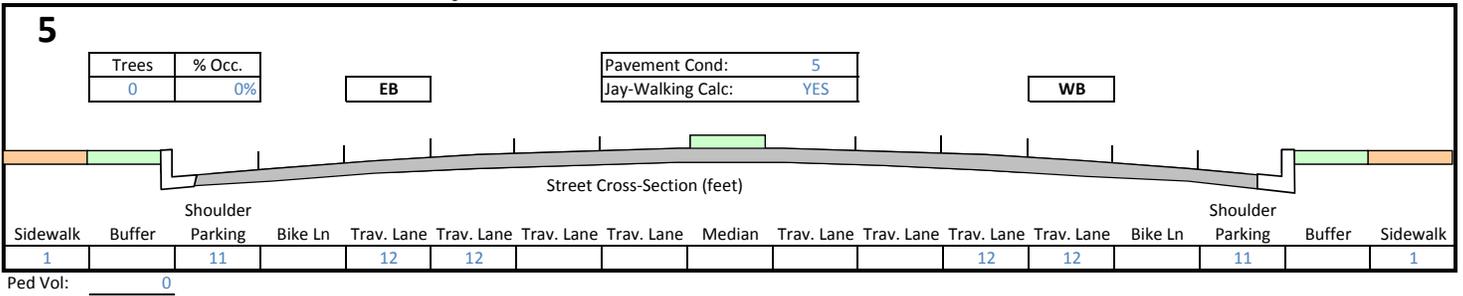
From: Fee To: Adie

Observer: King / Ehlers Date: 21-May-13



Cross-Section #5

From: Adie To: Lindbergh



Existing Conditions RESULTS

Multimodal Level of Service for Urban Streets

Results

Street: Dorsett Road, Maryland Heights

Date: 5/21/2013

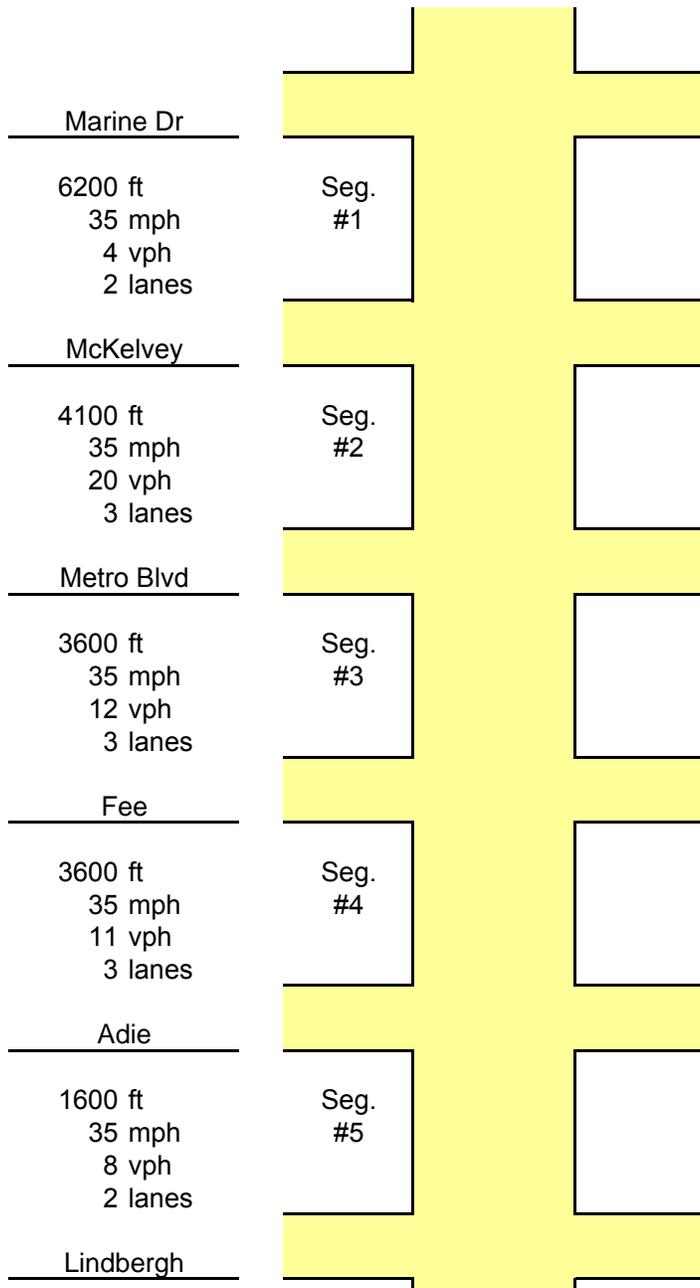
Limits: from Marine Dr. to Lindberg Blvd

Observer: Ehlers

Analysis Direction: EB

(Down Direction on this Sheet)

Auto LOS Model: NCHRP 3-79 Model



Seg 1	Score	Seg LOS	Int LOS
Auto	2.35	A	N/A
Transit	6.39	F	N/A
Bike	4.03	B	D
Ped	2.63	B	E

Seg 2	Score	Seg LOS	Int LOS
Auto	2.41	A	N/A
Transit	2.05	B	N/A
Bike	3.89	B	B
Ped	2.28	B	B

Seg 3	Score	Seg LOS	Int LOS
Auto	2.36	A	N/A
Transit	3.94	D	N/A
Bike	4.73	B	D
Ped	5.62	B	D

Seg 4	Score	Seg LOS	Int LOS
Auto	2.14	A	N/A
Transit	3.47	C	N/A
Bike	5.26	B	E
Ped	2.45	B	C

Seg 5	Score	Seg LOS	Int LOS
Auto	3.14	A	N/A
Transit	3.94	D	N/A
Bike	3.11	A	F
Ped	5.62	B	E

Proposed Conditions RESULTS

Multimodal Level of Service for Urban Streets

Results

Street: Proposed Dorsett Road, Maryland Heights

Date: 6/18/2013

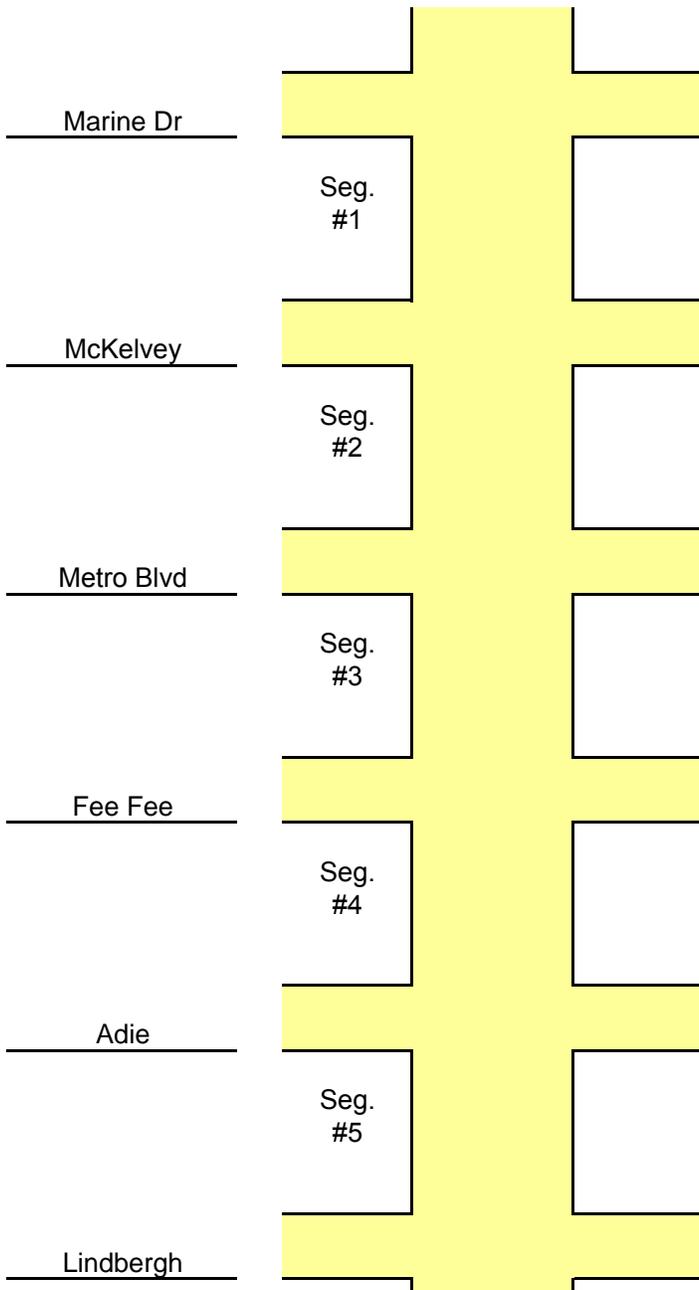
Limits: from Marine Dr. to Lindberg Blvd

Observer: Ehlers

Analysis Direction: EB

(Down Direction on this Sheet)

Auto LOS Model: NCHRP 3-79 Model



Seg 1	Score	Seg LOS	Int LOS
Auto	2.35	A	N/A
Transit	2.82	C	N/A
Bike	2.91	A	B
Ped	3.08	A	D

Seg 2	Score	Seg LOS	Int LOS
Auto	2.41	A	N/A
Transit	0.50	A	N/A
Bike	3.72	A	A
Ped	2.83	B	B

Seg 3	Score	Seg LOS	Int LOS
Auto	2.36	A	N/A
Transit	0.99	A	N/A
Bike	1.90	A	A
Ped	2.92	A	D

Seg 4	Score	Seg LOS	Int LOS
Auto	2.14	A	N/A
Transit	0.97	A	N/A
Bike	4.35	A	A
Ped	2.79	A	B

Seg 5	Score	Seg LOS	Int LOS
Auto	3.14	A	N/A
Transit	2.91	C	N/A
Bike	3.13	A	B
Ped	3.03	A	D

Assumptions regarding transit, auto volumes, turning movements, left turns and corridor speeds are identical to assumptions used for the existing conditions analysis. However, it is likely that these conditions would change as a result of the recommendations outlined in the Dorsett Road Master Plan

Proposed Conditions Data Sheet

Urban Street Multimodal Level of Service
Data Collection Sheet - Vehicle Traffic

Direction: **EB**

Street: Proposed Dorsett Road, Maryland Heights

Date: 18-Jun-13

Limits: from Marine Dr. to Lindbergh Blvd

Observer: King / Ehlers

Field Survey

	Segment And Downstream Signal		Speed Limit (mph)	Median Type (0-3)	Left Turn Pocket (y/n)	Driveways Rightside (#)	Unsig. Intersects (#)
	From	To					
1	Marine Dr	McKelvey	35	3	YES	7	5
2	McKelvey	Metro Blvd	35	3	YES	9	4
3	Metro Blvd	Fee Fee	35	3	YES	17	4
4	Fee Fee	Adie	35	3	YES	22	2
5	Adie	Lindbergh	35	3	YES	0	0

Traffic Counts

K: 10%

D: 55.00

(enter 100 for 100%)

	Segment And Downstream Signal		ADT or 2-wy vph	Heavy Vehicle (%)	RTOR+ PermLeft vph	Left/Right Turns %	Thru Adj. Sat. (vphgl)	PHF
	From	To						
1	Marine Dr	McKelvey	14675	3.5%	0	54%	1800	0.924
2	McKelvey	Metro Blvd	38105	3.5%	0	17%	1800	0.888
3	Metro Blvd	Fee Fee	29130	3.5%	0	33%	1800	0.884
4	Fee Fee	Adie	21970	3.5%	0	30%	1800	0.784
5	Adie	Lindbergh	21950	3.5%	0	38%	1800	0.912

Arterial Traffic Performance & Signal Timing

	Segment And Downstream Signal		Field Survey		Signal Timing Data			
			Mean Speed (mph)	Average Stops (#/veh)	Cycle Length (secs)	Grn/Cycle for Thru (%)	Ped Walk (sec/cyc)	Xing Ped Walk (sec/cyc)
	From	To						
1	Marine Dr	McKelvey	32.0	1.6	107	84%	25	24
2	McKelvey	Metro Blvd	33.0	1.4	98	83%	19.5	24
3	Metro Blvd	Fee Fee	33.0	1.0	98	83%	17.5	24
4	Fee Fee	Adie	34.0	0.0	98	83%	20	26
5	Adie	Lindbergh	33.0	1.8	88	82%	14.5	22.7

Proposed Conditions Data Sheet

Urban Street Multimodal Level of Service
Data Collection Sheet - Transit

Direction: **EB**

Street: Proposed Dorsett Road, Maryland Heights

Date: 18-Jun-13

Limits: from Marine Dr. to Lindberg Blvd

Observer: King / Ehlers

Field Survey

Segment			Bus Stop (#)	Shelters (% stops)	Benches (% stops)	CBD (yes/no)
	From	To				
1	Marine Dr	McKelvey	0	0%	0%	NO
2	McKelvey	Metro Blvd	3	100%	100%	YES
3	Metro Blvd	Fee Fee	3	100%	100%	YES
4	Fee Fee	Adie	4	100%	100%	YES
5	Adie	Lindbergh	1	100%	100%	YES

Transit Performance Data

Segment			Route #s	Frequency (bus/hr)	Load Factor (pas/seat)	On-Time Perform. (%)	Schedule Speed (mph)
	From	To					
1	Marine Dr	McKelvey		0.1	0%	0%	0.1
			VESTPOR	3	80%	75%	18.4
2	McKelvey	Metro Blvd	33	2	80%	75%	18.4
			98	1	80%	75%	15
			94	2	80%	75%	15
			VESTPOR	3	80%	75%	18.4
3	Metro Blvd	Fee Fee	33	2	80%	75%	18.4
			VESTPOR	3	80%	75%	18.4
4	Fee Fee	Adie	33	2	80%	75%	18.4
			VESTPOR	3	80%	75%	18.4
5	Adie	Lindbergh	33	2	80%	75%	18.4

Proposed Conditions Data Sheet

Urban Street Multimodal Level of Service
Data Collection Sheet - Transit

Direction: **EB**

Street: Proposed Dorsett Road, Maryland Heights

Date: 18-Jun-13

Limits: from Marine Dr. to Lindberg Blvd

Observer: King / Ehlers

Field Survey

Segment			Bus Stop (#)	Shelters (% stops)	Benches (% stops)	CBD (yes/no)
	From	To				
1	Marine Dr	McKelvey	0	0%	0%	NO
2	McKelvey	Metro Blvd	3	100%	100%	YES
3	Metro Blvd	Fee Fee	3	100%	100%	YES
4	Fee Fee	Adie	4	100%	100%	YES
5	Adie	Lindbergh	1	100%	100%	YES

Transit Performance Data

Segment			Route #s	Frequency (bus/hr)	Load Factor (pas/seat)	On-Time Perform. (%)	Schedule Speed (mph)
	From	To					
1	Marine Dr	McKelvey		0.1	0%	0%	0.1
			VESTPOR	3	80%	75%	18.4
2	McKelvey	Metro Blvd	33	2	80%	75%	18.4
			98	1	80%	75%	15
			94	2	80%	75%	15
			VESTPOR	3	80%	75%	18.4
3	Metro Blvd	Fee Fee	33	2	80%	75%	18.4
			VESTPOR	3	80%	75%	18.4
4	Fee Fee	Adie	33	2	80%	75%	18.4
			VESTPOR	3	80%	75%	18.4
5	Adie	Lindbergh	33	2	80%	75%	18.4

Proposed Conditions Data Sheet

Multimodal Level of Service for Urban Streets
Street Cross-Section Data

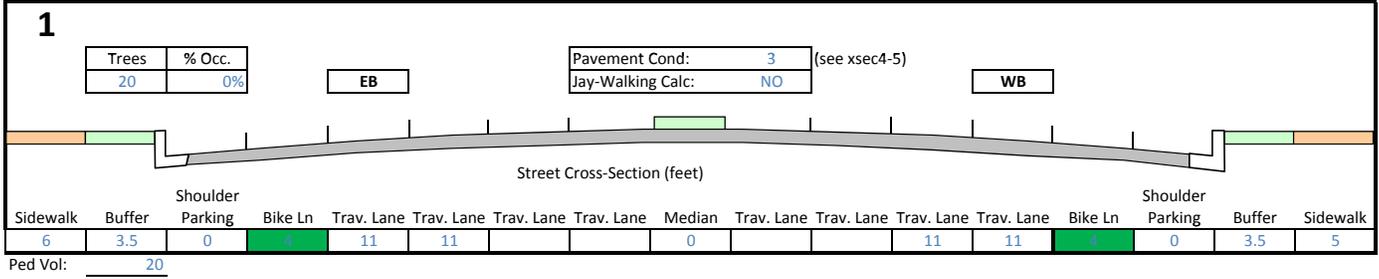
Street: Proposed Dorsett Road, Maryland Heigh

Limits: from Marine Dr. to Lindberg Blvd

Cross-Section #1

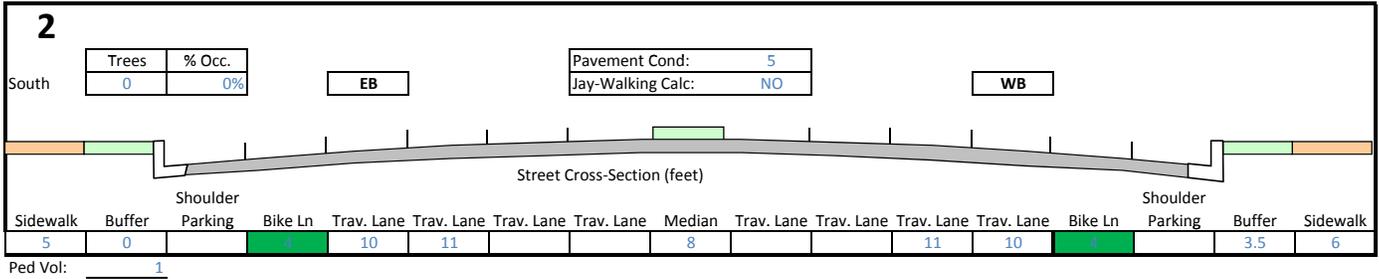
Observer: King / Ehlers Date: 18-Jun-13

From: Marine Dr To: McKelvey



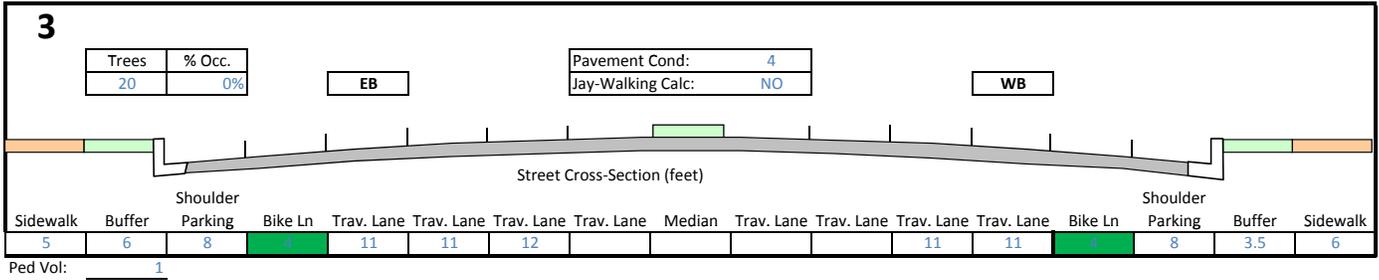
Cross-Section #2

From: McKelvey To: Metro Blvd



Cross-Section #3

From: Metro Blvd To: Fee Fee

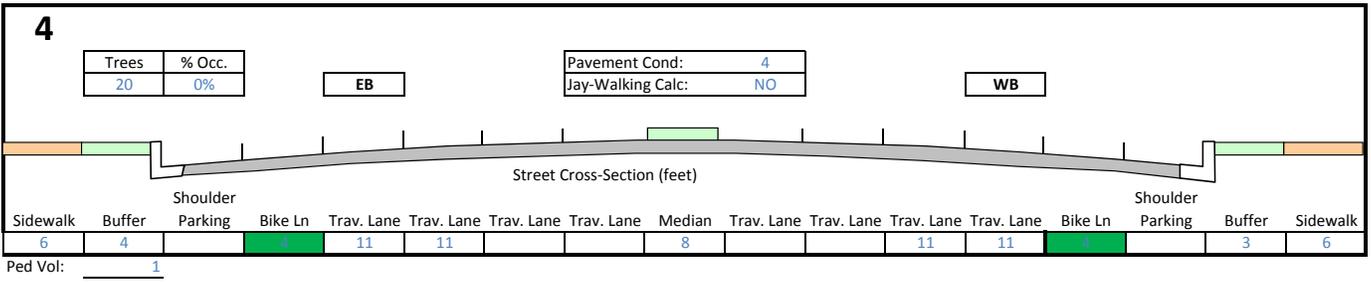


 Bike Lane + Sidewalk dimensions = SUP off-street bike facility (bidirectional)

Cross-Section #4

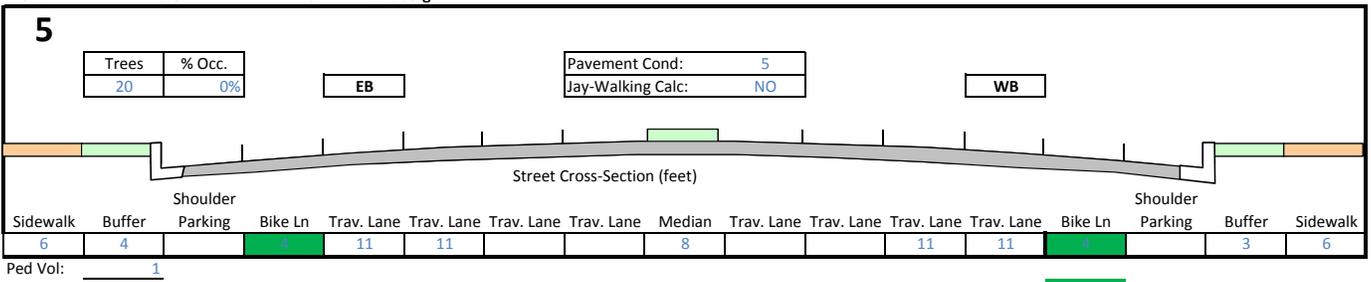
From: Fee Fee To: Adie

Observer: King / Ehlers Date: 18-Jun-13



Cross-Section #5

From: Adie To: Lindbergh



 Bike Lane + Sidewalk dimensions = SUP off-street bike facility (bidirectional)

D

APPENDIX: Market Study

BACKGROUND AND OBJECTIVES

In January 2013 East-West Gateway Council of Governments engaged Robert Charles Lesser & Co., LLC (RCLCO) as a part of an interdisciplinary team led by Design Workshop, Inc. to perform planning services and create a master plan for the Dorsett Road corridor, located in the City of Maryland Heights, Missouri. RCLCO's role was to provide the market assessment for the Dorsett Corridor. The market analysis was to ascertain the quantitative and qualitative aspects of demand for current and future land uses that might be appropriate for future development in the study area and to quantify the potential scale and timing of these uses. The corridor is characterized by some office development, a large amount of industrial development, strip retail development, and a variety of residential uses. The corridor has a predominantly industrial feel east of I-270, while west of I-270 it is more residential and commercial in nature.

The key objectives of this engagement were to prepare a market analysis for the corridor and recommend its optimal potential in the competitive market, in the context of current and anticipated future market conditions.

CORRIDOR ANALYSIS

Corridor Description

The corridor is well-located relative to sources of demand and is located at a strong north/south and east/west crossroad in the county. The corridor is predominantly industrial in nature with 57 percent of the commercial space industrial/flex, 26 percent office, and 17 percent retail. The Dorsett Corridor is relatively attractive, and has many potential opportunities to build from such as the Maryland Heights Government Center, Edward Jones, Ranken Jordan, and the new investment in the I-270 interchange. In addition, unlike many other corridors in the country of the same age, it has little of the typical aging strip center retail, which is a positive for the corridor. The character of the corridor leads to a stronger residential and retail opportunity on the west side of I-270, and more office, and potentially industrial on the east side. The corridor is incredibly jobs-rich. There are approximately five jobs for every household in the corridor, suggesting an opportunity to add residential, even in slow growth areas. In 2010 there were 1,231 households and 5,950 jobs. The table provided lists strengths and challenges in the corridor.

CORRIDOR STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
<ul style="list-style-type: none"> • Transportation/Access • Key regional North – South connections at Lindbergh and I-270 • Approximately a 10 minute drive from the Lambert-St. Louis International Airport • Central location within the region 	Transportation/Access <ul style="list-style-type: none"> • Pedestrian and cross connections not strong—therefore, even with existing retail, hard for households and tenants to access them
Connection to Current Demand Sources <ul style="list-style-type: none"> • Over 76,000 households within 5 miles from the intersection of Dorsett and I-270 • Strong daytime population 	Placemaking vs. Demand <ul style="list-style-type: none"> • Creating places that the population wants to go visit and spend time • Competes with more prestigious corridors in the County and region
Opportunity to be something different than the overall region	Market Economics <ul style="list-style-type: none"> • Overall slow lack of new demand • Limited residential as a current land use

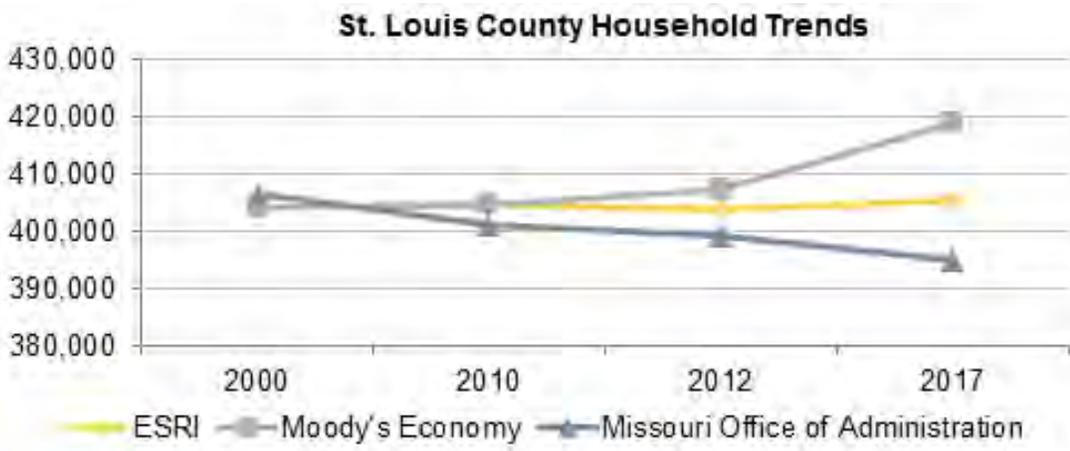
MARKET OVERVIEW

Regional Economic Overview

There are many unique attributes and characteristics that distinguish one metropolitan area from another, yet there are striking similarities between most North American metropolitan areas in terms of how they develop, at least from a real estate perspective. This observation enabled RCLCO in the 1990s to initially identify and catalogue certain rules governing the way metropolitan areas evolve over time. Despite differences in metropolitan growth rates and size, as well as geographic peculiarities, most major metropolitan areas were evolving with surprising similarity. Economic growth had generally focused in the “favored quarter” of metropolitan areas, which is almost always in the immediate proximity of upper-middle and upper-end executive housing and influenced by the configuration of the region’s limited access highway systems. The “favored quarter” is typically drawn from the original downtown to where the majority of new housing is located, where the vast majority of new spending on infrastructure and new roads occurs, and where much of the commercial real estate and job growth has occurred. The Dorsett Corridor is located within the favored quarter of growth in the region.

Demographic and Economic Analysis

The City of Maryland Heights and the Dorsett Corridor are located in St. Louis County which is part of the St. Louis, MO-IL Metropolitan Statistical Area (St. Louis MSA). The St. Louis MSA and St. Louis County are projected to have stable, yet slow growth, and City of Maryland Heights and the corridor itself are projected to remain stable. Therefore, in order to create demand for new land uses, Maryland Heights needs to develop an environment that will attract new users to the corridor. The growth is not projected to happen on its own. For the County, ESRI projects a slight increase in households, and Moody’s Economy.com is more optimistic—they project St. Louis County will grow by approximately 1,400 households per year through 2030. The Missouri Office of Administration has the lowest projections (see projections graph provided). Maryland Heights is projected to have a slight increase in households, while the corridor is projected to decrease very slightly. However, 55+ households are an exception to the overall negative and slow growth story—this age bracket is expected to increase even in pessimistic scenarios. They are an important source of demand for future land uses in the corridor.



In 2012, according to the Bureau of Labor Statistics, there were approximately 1.3 million jobs in the St. Louis MSA. The St. Louis MSA is anticipated to see an uptick in employ-

ment growth between 2013 and 2016, making up for jobs lost during the recession. After 2016, the MSA is expected to grow by approximately 7,600 jobs per year through 2030. The economy is driven primarily by Trade, Transportation & Utilities, Professional & Business Services, and Education & Health Services. Not surprisingly, job losses from 2000 to 2010 were most significant in Manufacturing. From 2013 to 2030, the sectors anticipated to see the greatest amount of growth are Education & Health Services, Professional & Business Services, and Leisure & Hospitality.

The majority of employees in the Dorsett Road corridor work in Manufacturing, Retail Trade, and Wholesale Trade.

Key observations include the following:

- While households aged 55+ are growing in all geographies, the corridor overall has a younger population than the city or the county (in 2010, the median age was 40 in the County, 35 in the City, and 34 in the corridor).
- There are a large number of renters in the corridor (rental housing makes up ~50 percent of total housing units), compared to 26 percent in the county and 39 percent in the city.
- People are moving to St. Louis County from surrounding Missouri, Illinois, and other Midwest counties.
- People are leaving St. Louis County for counties immediately to the West in Missouri and for warmer climates and job locations.
- Incomes along the corridor are on par with the median in the city and county, but well below those found in Nearby St. Louis suburbs to the south. The median income of residents in the corridor was \$50,000 in 2012, and in the county overall it was approximately \$55,000.
- The corridor is more ethnically diverse than the county or the city. 70 percent of county residents are white, while 63 percent of corridor residents are white.
- The corridor is jobs rich with a jobs to housing ratio of 5:1 (5 jobs for every household).

Retail Market

U.S. retail sales have improved from their lows in 2009, helping to spur national improvements in retail real estate performance and fundamentals. Solid consumer spending, supported by households dipping into their savings in order to buy necessity items—and, increasingly, discretionary ones—has maintained above-average performance for grocery-anchored strip centers even during the recession and is driving the early retail recovery across other property types. Vacancy rates have peaked and are beginning to fall as demand is gently rising, though rents have not yet increased across the board. True recovery of retail real estate will depend upon stronger wage growth, job growth, and economic expansion to drive sustained consumer spending. The general lack of new retail deliveries throughout the downturn should assist as well, as existing vacancies are absorbed with limited new competition.

Transformative changes to retail have ramifications for all but the most well-positioned assets. Internet sales increasingly steal market share away from stick-and-brick retail, causing shops to morph into smaller showroom spaces that complement e-commerce. Retail is experiencing a wide performance gap between best-in-class assets in wealthy areas where spending has remained strong during the downturn and “other” assets which have suffered due to a reduced need for space and general consumer frugality. Vendors are shifting to

smaller footprints and consolidating locations, further reducing demand at non-Class A retail across sub-types and increasing the risk of failure in all but the wealthiest locations.

Changing demographics are also affecting long-term demand for retail, bringing additional format change to the sector. The best enclosed shopping malls and lifestyle centers are top assets, followed by grocery-anchored neighborhood and community centers that offer necessity goods. Power centers, typically including big box stores, were hit hardest during the recession overall, yet the best of these assets (those that have retained the dominant remaining retailers) should have upside potential when spending increases for discretionary goods.

The St. Louis MSA retail market suffered during the economic downturn. There was negative absorption, high vacancies, declining rents, and limited new construction. However, there has been recent better news similar to the rest of the nation. 2012 was a strong year with total net absorption at 151,000 square feet, compared to -25,000 in 2011. In addition, vacancy was 12.7 percent at year end 2012, slightly down from 13.2 percent at year end 2011. Similar to many areas in the U.S., rents have just started to begin to stabilize. The St. Louis market overall for community and neighborhood retail was at \$14.69 per square foot asking rents at year end 2012, while the St. Louis Central submarket, where the corridor is located, was \$17.61 per square foot. These higher rents are primarily due to the Nearby St. Louis suburbs and Creve Coeur areas within the submarket. While secondary data is not available for the corridor as a whole, an average of the retail centers we identified is \$12.82 per square foot, below the average for both the MSA and submarket.

Local Competitive Market

The St. Louis Central Submarket is projected to hold a stable to slightly increasing share of the metro area's occupied retail stock (currently approximately 30 percent of the total metropolitan area, rising to 33 percent) and a decreasing share of the vacant stock. By 2017 the occupied community and neighborhood retail stock in the St. Louis Central Submarket is expected to surpass eight million square feet.

Within the corridor, the majority of the retail centers are small, with less than 40,000 square feet per center. The vacancy rate ranges from 0 percent vacant at Dorsett Square (with the Ace Hardware and Gold's Gym) to 77 percent vacant at Maryland Plaza that was opened in 1960. The retail west of I-270 is performing better than the retail to the east of I-270 overall. Retail in the corridor tends to be neighborhood oriented, meaning it supports the people who live and work in the corridor. Typical tenants include fast food, drug store, dry cleaners, etc. The corridor does have a high share of certain businesses compared to its residents including Sport Goods, Hobby, Book & Music Stores as well as Motor Vehicle & Parts Dealers. This suggests that while the majority of businesses are targeting local residents and workers, there are some niche sub-regional retail opportunities that could be fulfilled in the corridor.

Demand Analysis

To assess the demand opportunity for new retail in the county and the corridor, RCLCO utilized a variety of demand sources to understand the future potential within the corridor. The sources of demand included the following:

- The first source of demand was leakage from existing households in the City of Maryland Heights. Based upon ESRI data, there is currently a large amount of shopping

that residents do outside of the city. Part of this spending can be captured in the corridor.

- A second source of demand is from future household growth within the City of Maryland Heights. In order to understand what the potential might be, we utilized St. Louis County projections, and assumed 3 percent of growth would occur in Maryland Heights (which is the current capture). Future household growth was multiplied by spending per household to understand future spending power of Maryland Heights' residents. Part of this spending can be captured in the corridor.
- A third source was employees. We estimated the amount that employees in the corridor would spend while working in the corridor.
- The final source would be others from outside of the sources listed above (such as tourists and regional shoppers). We estimated this to be 15 percent of the total demand.

POTENTIAL RETAIL DEMAND	
Type of Store	Total Retail Supported SF
Grocery	0K-40K SF
Specialty Food	8K-16K SF
Apparel	10K-21K SF
Shoes & Accessories	4K-8K SF
Eating Places	13K-25K SF
Other (Home Furnishing, Electronics, Gifts, Office)	7K-14K SF
Total	42K-124K SF

Based upon this analysis, there is the potential for 42,000-124,000 square feet of new retail square feet in the corridor by 2030. This does not take into account any specific project for which the numbers could be higher or lower based upon a site-specific market study. The demand for the corridor is based upon the corridor's overall potential. The range supported represents different capture rates of future demand within the corridor. The higher number would suggest a brand new retail center, while the lower number would suggest rebuilding and adding on to an existing center. See the Potential Retail Demand Table shown here.

Summary of Retail in Corridor

There is limited short-term opportunity for retail in the study area. While vacancies have begun to decrease, they are still too high to justify new construction except at the most ideal locations. Rents have also yet to begin to recover from their lows. However, the demand indicated that retail is leaking out of the area, and some of the older retail could be updated, presenting a relatively short-term opportunity. The corridor competes with better located retail to the south.

The core retail strategy is to consolidate retail into nodes at key intersections. This will allow the strongest retail locations to flourish and command higher rents, while allowing marginal retail locations to transition into more appropriate land uses. There is also an opportunity in the future to create better destinations and mixed-use projects within the corridor. Likely, projects would be mixed horizontally (e.g., on the same site, but not stacked over each other) rather than vertically (e.g., residential over retail). The right site would be necessary to create this type of development, but there is mid-term to long term market demand for it. The Retail Strengths and Challenges Table shown here outlines the retail strengths and weaknesses in the corridor.

RETAIL STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
Traffic Counts of 17,000 on Dorsett west of I-270, 28,000 on Dorsett east of I-270, with potential connection to over 150,000 on I-270	Lack of connection of retail to surrounding neighborhoods and lack of available prime Dorsett frontage
Large population base to draw from—over 76,000 households within 5 miles from the intersection of Dorsett and I-270	Retailers on Dorsett are not doing poorly enough to justify removing them, but also not doing well enough to justify new construction in most cases
The retail rental rate in the Central St. Louis Submarket has been dropping after a 2008 high, but is projected to increase beyond 2008 rates by 2015	Creating a place that is catalytic enough to capture more traffic off of I-270
Vacancy projected to decrease	Slow growth in households

Office Market

The U.S. office sector has achieved a modest rebound since the worst of the recession in 2009. The global economy is improving, with job growth in select domestic markets leading to vacancy reductions and effective rent growth, albeit at a slow pace. Office demand should continue to be driven by traditional factors such as global economic growth and employment growth in key office-using industries. However, recent office market performance has been largely uneven, with certain “pockets of excellence” in markets experiencing strong growth in the technology and energy sectors, compared to underperforming markets plagued by pre-recession overbuilding and weak employment growth. Although the office outlook for 2013 and beyond remains cautiously optimistic, the trend toward less office space per employee represents a major threat to current office owners and developers throughout the country.

Growth in elderly populations and continued employment growth in the healthcare sector should drive medical office demand over the long-term. Domestic markets experiencing growth in aging populations should see increased demand for revamped medical office space to accommodate both the growing population as well as new technologies and services.

Given these macroeconomic and demographic trends, the most attractive national office opportunities will be focused on Class A properties in central business districts, along with well-located medical office properties. Significant development of new space appears to be far off (into the next real estate up-cycle, most likely) as domestic markets continue to work through existing inventories. While the worst of the office market’s recent troubles appear to be behind us, improvement will continue at a slow, methodical pace as growing business confidence leads to steady absorption of global office space.

Similar to retail, the St. Louis MSA office market suffered during the downturn. It appears to have hit bottom, but has of yet shown few signs of making a strong or quick recovery. In 2012, there was 19,000 square feet of positive net absorption. However, vacancy rates still are over 18 percent, and rental rates have remained steady around \$20 per square foot in asking rent.

Local Competitive Market

The corridor is located between two submarkets, Olive/Westport and North/St. Charles. The majority of the corridor is located within the smaller, and closer-in Olive/Westport submarket. It has approximately 7 million square feet of office space at a vacancy of 20.5 percent, slightly higher than the MSA overall. Rental rates are similar to the MSA overall at approximately \$20.8 per square foot.

The few office buildings large enough to be tracked within the corridor are well-occupied and, on average, tend to be smaller than the average office building in the submarket. Owner-occupied space (such as for Edward Jones and/or the city buildings) would not be counted within the secondary data. The Edward Jones headquarters near the intersection of Dorsett Road and I-270 is a strong, positive influence on the office in the area.

Demand Analysis

To assess the demand opportunity for new office in the corridor, RCLCO utilized Moody's economy.com St. Louis MSA employment projections to determine annual employment change. We compared the office employment to the square feet of office in the MSA to determine the total square feet of office space required per employee. We utilized future office employment projections and the space per employee to determine future office needs at the MSA level. To determine the capture in the corridor, RCLCO utilized the Olive/Westport Submarket share of the MSA, and then the corridor share of the submarket based upon total square feet of office currently in each. Based upon this analysis, there is a potential of 4,000 to 15,000 new square feet of office per year in the corridor for a total of 70,000 to 264,000 square feet within the corridor by 2030. The average demand is 10,000 square feet per year, for a total of 180,000 square feet over the next 18 years. This does not take into account any specific project for which the numbers could be higher or lower based upon a site-specific market study. The demand for the corridor is based upon the corridor's overall potential.

Summary of Office in the Corridor

The market for office in the corridor, as with many places in the U.S., is currently weak, except for opportunistic projects. Office vacancies are very high, and the space in the corridor is typically outdated, with the exception of build-to-suit offices such as the government center and Edward Jones. In addition, the corridor is perceived as more of an industrial location, and therefore it may be harder to attract office tenants to the area. The exception to this would be to attract office users who would be interested in lower-priced and/or off-beat space.

There is potential for redevelopment of older industrial buildings into office and the opportunity to create new buildings, if the new space better meets tenant preferences. The strongest first opportunity is to focus on the types of office-using businesses that are currently located in corridor (e.g., services, FIRE, health care), and build upon those. There is also an opportunity to create a mixed-use environment with the correct project. The Office Strengths and Challenges Table shown here lists the office strengths and challenges in the corridor.

OFFICE STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
Strong office user in Edward Jones and fair regional access to potential employees and businesses	Not a typical Class A office location, most office is Class C and was built in the 1970s/80s
Despite increasing vacancies post-2008, they appear to have peaked in 2012 and are projected to improve through 2017	The Olive/Westport Submarket has slightly higher than average vacancy
The Olive/Westport submarket achieves higher rents on average than the MSA. Average asking rents are projected to continue growing upwards of \$22 in the submarket and the MSA, the highest in over two decades	Despite increasing rents, they are still not at a level in the corridor that would justify Class A construction. The exception in the submarket may be the "favored" Olive Road Corridor

Industrial Market

After record availability rates led to a steep erosion of values during the recession, industrial real estate transitioned into recovery during the second half of 2010. The steady resurgence in global consumption and trade has stimulated manufacturing, inventory restocking, and export volumes driving the rebound in industrial. The pace of this recovery, however, has been uneven as demand drivers such as job growth and retail spending continue to ebb and flow on a quarterly basis; a confluence of limited pricing power, low wage growth, and an idle housing market may temper the near-term upside for industrial properties. In addition, further growth in manufacturing, construction, and consumer spending are needed to cement the gains from 2011 and forward. Aging highway, tunnel, and bridge infrastructure will eventually increase logistics costs, and should key better returns in markets with the best connectivity and rail access.

Industrial properties support global consumption, either through housing manufacturing processes or through the distribution and storage of goods. The industrial sector's specific demand drivers are relatively complex, including trade flows (which in turn are driven by labor costs and availability, fuel costs, political and military situations, etc.), consumer spending, retail performance, distribution/logistics needs, and transportation infrastructure. In the United States, logistics/distribution users, rather than manufacturers, are the predominant industrial users, as imports require more space than exports. These broad-based metrics impact long-term industry performance globally, but also specific markets, submarkets, and assets. Domestic exterior ports that are proximate to markets experiencing higher than average employment growth have the strongest fundamentals, and warehouse demand should steadily rise in line with job attainment in these markets. In other interior markets, losses in manufacturing employment have outstripped increases in warehousing, often leading to negative demand for industrial uses.

The overall industrial market in St. Louis has a low vacancy rate at 7.6 percent at the end of 2012. The Warehouse/Distribution market had a higher vacancy rate at 13.6 percent. Similar to the U.S., St. Louis experienced negative absorption in 2009 and 2010, and saw almost 2 million square feet of absorption in 2011. 2012 has been an equally strong year with 1.8 million square feet of absorption. The industrial market overall adds approximately 1.3 million square feet of industrial space per year. The Warehouse/Distribution market has been relatively quiet for the last few years, but is anticipated to pick up 2013 and beyond.

Local Competitive Market

The corridor is located between two submarkets, Mid County and West Southwest County. Mid County has approximately 18 million square feet of Warehouse/Distribution space at 16.2 percent vacancy. The West Southwest County is the smallest Warehouse/Distribution market with approximately 9 million square feet of space at 15.4 percent vacancy. Mid County captures approximately 0.4 percent of MSA demand annually, and is projected to remain relatively flat in the next few years.

The flex/R&D industrial buildings in and near the corridor tend to be smaller with an average size of 30,000 square feet. They also have a higher vacancy rate and lower rental rate than the submarket and MSA overall at an average 34 percent vacancy rate and \$6 per square foot rental rate. The space tends to be older and outdated. The Warehouse/Distribution buildings in the area tend to be slightly larger at an average of 45,000 square feet. They are also approximately 34 percent vacant and rents average \$4 per square foot.

Demand Analysis

To assess the demand opportunity for new industrial in the corridor, RCLCO utilized Moody's economy.com for St. Louis MSA industrial employment projections to determine annual employment change. We compared the industrial employment to the square feet of industrial in the MSA to determine the total square feet of industrial space required per employee. We utilized future industrial job projections and the space per employee to determine future industrial needs at the MSA level. Unfortunately, while short-term projections for industrial employment are positive, they peak in 2016 at 152,000 jobs, and are projected to decrease to 141,000 jobs by 2030. Therefore, the overall demand for industrial space in the market is negative. New space demand will need to be based upon replacing obsolete space, and capturing niche markets. We believe the industrial space in the corridor will regenerate overtime into more flexible space that accommodates a variety of uses.

Summary of Industrial in the Corridor

Due to the age of the industrial buildings in the corridor, many of them would be good candidates for redevelopment if the right user was located.

INDUSTRIAL STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
Projected decreasing vacancy and increasing rental rates through 2017	The Mid County submarket has one of the highest vacancy rates in the MSA and some properties in the corridor have a reported 100% vacancy rate
In the near-term, industrial jobs are projected to slightly increase	Decreasing projections for industrial employment across the board, especially when looking out to 2030, industrial does not look like a prudent investment
A known industrial area in the region	Mid County absorption was only 0.4% of the MSA from 2010-2012

Apartment Market

Although the recent recession had a significant negative impact on all asset types, the national apartment sector has experienced a robust recovery, supported by broad economic and demographic trends that suggest significant pent up demand for rental housing. The major drivers for the recovery are robust job recovery in some markets that generates new household growth and release of pent-up demand, a demographic wave of young households in prime renter age groups entering the market, and continued declines in home-ownership due to foreclosures and other distress that may potentially change preferences.

Although these trends may be cyclical in nature, the near-term growth in demand for rental housing appears to be the most certain trend in real estate. There is discussion of an “apartment bubble” in certain markets, but this does not appear to be an issue currently in the St. Louis market.

The St. Louis MSA apartment market has been in recovery similar to the U.S. Based upon an increase in demand, development and investor activity has been strong. In 2012, approximately 1,600 units were absorbed, with few market-rate apartments being delivered, helping to decrease vacancy. REIS reports that year end 2012 vacancy was only 5.5 percent. Approximately 400 units are projected to be completed in 2013 and another 800+ units in 2014. Rents have been increasing and the average asking monthly rent was \$760 per month at year end 2012.

Local Competitive Market

Dorsett Road is located in the Maryland Heights submarket. The Maryland Heights Submarket is performing better than the market overall. As of year end 2012, vacancy was at 3.6 percent with an average asking rent of \$854. RCLCO considered 30 different rental properties close to and within the corridor study area. Of this set, the average rent was \$0.96 per square foot, beneath the amount typically needed to build new apartments. However, the highest rent in the area was \$1.23 at Bonhomme Village Apartments, suggesting that rents are likely high enough to build walk-up, garden-style apartments. The oldest apartments in the area we considered were built in the 1960s. The newest apartments were built in 2006.

Demand Analysis

To assess the demand opportunity for new rental apartments in the county and the corridor, RCLCO utilized Moody’s economy.com for St. Louis County, and then identified those households that are likely to become and remain renters, based on historical and recent trends on homeownership. To determine the capture in the corridor, RCLCO utilized the number of renters in the city and corridor versus the county overall. One of the challenges for determining the demand for new housing units is that very limited new household growth is projected in the area. In addition, RCLCO determined an upside potential based upon the corridor capturing a higher number of renters based upon offering new product and redevelopment. Based upon this analysis, there are a potential 2 to 25 new rental units per year in the corridor for a potential total of 150 to 240 new units within the corridor by 2030. This does not take into account any specific project for which the numbers could be higher or lower based upon a site-specific market study. The demand for the corridor is based upon the corridor’s overall potential.

Summary of For-Rent Residential in the Corridor

The demand in the area is relatively strong for rental product. There are low vacancies, and apartment developers throughout the metro area are looking for locations to construct new apartments. The highest rents in the area average \$1.23 per square foot, high enough to justify new construction. Overall rents average almost \$1.00 per square foot. In addition, there is a lot of employment in the area that is attractive to new rental housing.

As with the other land uses, the correct site needs to be located for the development of rental apartments. They would likely be walk-up, garden-style apartments given rents in the area. In addition, apartments would be a good use in a mixed-use project. They would likely be integrated into the project with good walking connections, but without a vertical integration of land uses. The strengths and challenges of rental apartments are laid out in more detail in the table shown here.

APARTMENT STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
Good access to employment	Most of the study area is not achieving a high \$/SF
Well executed projects in Maryland Heights achieve a 25-30%+ premium over the average in the area	Finding a piece of land large enough to allow a developer to create a good size project (250+/- units)
Low existing product vacancy, overall submarket is at 3.6%, the second lowest of any St. Louis submarket, the two projects directly in the corridor have 2-5% vacancy	Not the “favored” apartment area, most apartments are along Olive Road—however, the complex achieving the highest rents, Boulder Springs, is at Page Road and I-270
Draw from both workforce population and 55+ population depending on product type positioning	

For-Sale Residential Market

The national for-sale residential market is beginning to pick up slowly following one of the largest housing market crashes in U.S. history. In many markets, lots are in low supply as builders scramble to keep up with the pace of demand. With that said, sales are still down significantly from the peak. In addition, the recent decline in the rate of homeownership in the U.S. represents a correction to the excesses of the boom period, rather than a new trend line; homeownership in the U. S., including for single-family homes, continues to have appeal, and is primarily waiting for broader recovery to strengthen.

According to the State of the Cities Data Systems (SOCDS) Building Permits Database, permits in the St. Louis MSA peaked in 2004 with approximately 13,500 single-family permits pulled, far above the average annual from 1990 to 2010 which was approximately 9,500 permits. Permits bottomed out in 2011 at approximately 3,300 and rose to 4,200 in 2012. St. Louis County followed a similar trajectory with the largest number of permits being pulled in 2005 at 2,155. However, as the area is nearing build-out, permits were higher in the 1990s with an average of almost 3,000 permits per year. Permits dropped to just over 500 in 2009. In the City of Maryland Heights, 159 multifamily units were permitted in 1999, and none have been permitted since that time. The number of single-family detached permits has been under 100 per year, with no permits being pulled in the last few years.

Local Competitive Market

There are no new for-sale products in the area. Therefore, RCLCO examined re-sale data at a variety of condominium projects in the area. The majority of projects were built in the 1980s and they sell, on average for \$88 per square foot. The highest sell for just over \$100 per square foot. The median condo price in Maryland Heights in January/February 2013 was \$89,000, with the lowest selling for \$37,000 and the highest selling for \$130,000. The median price for a single-family detached home in the same period was \$120,000.

Demand Analysis

To assess the demand opportunity for new for-sale homes in the county and the corridor, RCLCO utilized Moody’s economy.com for St. Louis County, and then identified those households that are likely to become and remain owners, based on historical and recent trends on homeownership. To determine the capture in the corridor, RCLCO utilized the number of owners in the city and corridor versus the county overall. One of the challenges for determining the demand for new housing units is that very limited new household growth is projected in the area. In addition, RCLCO determined an upside potential based upon the corridor capturing a higher number of owners based upon offering new product and

redevelopment. Based upon this analysis, there are a potential 2 to 25 new owner units per year in the corridor for a potential total of 117 to 240 new units within the corridor by 2030. This does not take into account any specific project for which the numbers could be higher or lower based upon a site-specific market study. The demand for the corridor is based upon the corridor's overall potential. In addition, we examined the potential demand for senior housing in the corridor, specially looking at the growth in households aged 65. This represents the strongest short-term opportunity for housing as there should be demand for between 100 and 200 units by 2017 in the corridor.

Summary of For-Sale Residential in the Corridor

The opportunity for attached and detached for-sale housing in the corridor is constrained by the lack of future household growth projected in the area. However, with the right product, there would be the opportunity to attract new buyers to the area. These would likely be people who work in the area, people who would like to buy a new home, and older households looking for a different lifestyle. The specific product for for-sale residential would depend upon the identified site, but would likely include some type of attached product such as townhomes, plex products, and condominiums. The strengths and challenges associated with for-sale residential are listed in the table provided.

FOR-SALE RESIDENTIAL STRENGTHS AND CHALLENGES	
STRENGTHS	CHALLENGES
An increasing 55+ population in the MSA and the county	Most of the for-sale product in the area was built in the 1970s and 1980s and is relatively affordable
Virtually no new condo/townhome inventory in the study area or surrounding area	Currently competing with areas that are higher-end
Close to employment	Attached product is typically a value alternative to single-family detached—with the SFD product relatively affordable, will be hard to compete with new attached product
	Industrial uses can create a perception of lower quality

CONCLUSIONS AND RECOMMENDATIONS

Many market opportunities exist within the corridor for redevelopment; however, due to the current economic climate and mix of land uses, the revitalization will take time. Leading investment in the corridor is likely to focus on updating aging industrial properties within the corridor. Other strong short-term uses include rental apartments. There are short-term opportunities for smaller-scale commercial uses. These types of opportunities require the correct sites to be identified. There is the potential to create larger-scale projects once a critical mass is created within the corridor, and if a site could be assembled. One of the main challenges in the corridor will be identifying sites large enough to create a catalyst for redevelopment. There needs to be a sense of place and a definable core.

After completing the analysis of each of the land uses within the corridor, RCLCO identified which represented the best short- and long-term opportunities based upon current and future conditions, the outlook for each land use, and our understanding of how the corridor is likely to function in the future. The table provided summarizes our recommendations by land use.

MARKET OPPORTUNITY BY COMMERCIAL LAND USE			
	Retail	Office	Industrial
Short-term Opportunity	Opportunistic – high vacancies and limited land availability	Opportunistic – high vacancies and rents still low for speculative building	Limited – loss of jobs in industrial uses & conversion of properties in area to office
Longer-term Opportunity	Moderate – opportunity to consolidate existing & create new “town center” environment	Strong – need to create location, sense of place, and plan to redevelop industrial area	Limited – industrial industries losing jobs & those growing not moving to rehabilitated space
Demand Potential to 2030	42,000 to 120,000 SF	71,000 to 264,000 SF	Demand suggests 0 SF, yet likely to have turnover in market
Number of Projects	1 center	1-5, 50,000 SF buildings	Redevelopment
Key Tenants/ Buyers	Neighborhood serving/ Town Center	Professional services, Medical	Mixture

MARKET OPPORTUNITY BY RESIDENTIAL LAND USE			
	For-Rent Residential	For-Sale Residential	Senior Housing
Short-term Opportunity	Strong – vacancy low, limited new product	Limited – market for attached for-sale weak	Moderate – demand fundamentals are strong, lack of appropriate site
Longer-term Opportunity	Moderate – challenged by site availability and overall demand	Moderate – with the right site and market recovery	Strong – growing number of senior households
Demand Potential to 2030	120-240 units	65-130 units	100-200 units
Number of Projects	1 project	1 larger or 2-4 smaller	1 project
Key Tenants/ Buyers	Young professionals, empty nesters, immigrants	Young professionals, young families, empty nesters	Seniors

Critical Success Factors

In order to facilitate redevelopment in the Dorsett Corridor, the City and other interested stakeholders should focus on the following critical success factors:

- Need to create value and facilitate connections—much of the property along the corridor is lower value. In order to increase the value of the land, it will be necessary to identify other, non-retail uses for parcels between the key intersections. These uses need to be connected to each other.
- Market alone won't likely turn the corner for high-value employment opportunities—it will be necessary to start with key parcels, and to help migrate the current uses to high-value employment. The City can help by identifying parcels, working with owners to zone them properly, and in certain cases, assemble key pieces.
- Create focal points in the corridor—key nodes and intersections need to be created. Where there are opportunities to create mixed-use, walkable environments, they should be encouraged.
- Help assemble the land—identify landowners willing to participate, and work with them to put together parcels big enough to attract larger users.

- As sites are identified, work with developers to maximize potential by considering density, market, connections, and amenities—be creative in the use of zoning to ensure the City’s vision is executable.
- The corridor has distinct zones and areas that should be explored separately (e.g. east and west of I-270).
- The Dorsett Road corridor contains a unique and interesting collection of businesses (from Gateway Big Dog Motorcycles and R&S Pool and Spa, to Arizon Structures and many others). They should join forces to create an identity and name/brand for the area(s)—a further study would be to catalogue and group all of the businesses in the area to look for trends and key “sparks”.
- Showcase the existing businesses—The city should make a point of helping them thrive, not just survive. Look for ways to help small businesses grow by promoting them to St. Louis residents and in the media.
- The city has an interesting opportunity to create a long-term cool vision. After understanding the full make-up of the corridor businesses, determine what the angle should be.
- Create a marketing and branding campaign—With a name, an effective marketing slogan and a branding campaign, organizers could attract more commerce to the area, supporting the local businesses as well as the city as a whole.
- Create a business incubator atmosphere—Dorsett Road is a unique place in St. Louis where businesses can get affordable rents with good transportation access. Use that to draw emerging businesses, from restaurants to hair salons to internet start-ups to creative users.

Potential Locations Throughout the Corridor

Based upon our market study, we have identified the following potential nodes within the corridor. The strategy is to concentrate land uses near existing, successful similar land uses, create mixed-use opportunities as appropriate, and create a “sense of place” within projects and orient the projects to Dorsett Road.

CRITICAL ASSUMPTIONS

Our conclusions are based on our analysis of the information available from our own sources and from the client as of the date of this report. We assume that the information is correct, complete, and reliable.

We made certain assumptions about the future performance of the global, national, and local economy and real estate market, and on other factors similarly outside either our control or that of the client. We analyzed trends and the information available to us in drawing these conclusions. However, given the fluid and dynamic nature of the economy and real estate markets, as well as the uncertainty surrounding particularly the near-term future, it is critical to monitor the economy and markets continuously and to revisit the aforementioned conclusions periodically to ensure that they stand the test of time.

We assume that the economy and real estate markets are close to bottoming out for the current cycle, and that they will grow at a stable and moderate rate starting in 2011, more or less in a straight line on average for the duration of the analysis period (to 2020 and beyond). However, history tells us that stable and moderate growth patterns are not sustainable over extended periods of time, and that the economy is cyclical and that the real estate markets are typically highly sensitive to business cycles. Further, it is very difficult to predict

when the current economic and real estate downturns will end, and what will be the shape and pace of growth once they are recovered.

With the above in mind, we assume that the long term average absorption rates and price changes will be as projected, realizing that most of the time performance will be either above or below said average rates.

Our analysis does not take into account the potential impact of future economic shocks on the national and/or local economy, and does not necessarily account for the potential benefits from major “booms,” if and when they occur. Similarly, the analysis does not necessarily reflect the residual impact on the real estate market and the competitive environment of such a shock or boom. Also, it is important to note that it is difficult to predict changing consumer and market psychology.

For all the reasons outlined, we recommend the close monitoring of the economy and the marketplace, and updating this analysis as appropriate.

Further, the project and investment economics should be “stress tested” to ensure that potential fluctuations in revenue and cost assumptions resulting from alternative scenarios regarding the economy and real estate market conditions will not cause failure.

In addition, we assume that once the current cycle is over, the following will occur in accordance with current expectations:

- Economic, employment, and household growth.
- Other forecasts of trends and demographic and economic patterns, including consumer confidence levels.
- The cost of development and construction.
- Tax laws (i.e., property and income tax rates, deductibility of mortgage interest, and so forth).
- The availability and cost of capital and mortgage financing for real estate developers, owners and buyers, at levels present in the market before the most recent run up (i.e., early 2000s levels).
- Competitive projects will be developed as planned (active and future) and that a reasonable stream of supply offerings will satisfy real estate demand.
- Major public works projects occur and are completed as planned.

Should any of the above change, this analysis should probably be updated, with the conclusions reviewed accordingly (and possibly revised).

GENERAL LIMITING CONDITIONS

Reasonable efforts have been made to ensure that the data contained in this study reflect accurate and timely information and are believed to be reliable. This study is based on estimates, assumptions, and other information developed by RCLCO from its independent research effort, general knowledge of the industry, and consultations with the client and its representatives. No responsibility is assumed for inaccuracies in reporting by the client, its agent, and representatives or in any other data source used in preparing or presenting this study. This report is based on information that to our knowledge was current as of the date of this report, and RCLCO has not undertaken any update of its research effort since such date.

Our report may contain prospective financial information, estimates, or opinions that represent our view of reasonable expectations at a particular time, but such information, estimates, or opinions are not offered as predictions or assurances that a particular level of income or profit will be achieved, that particular events will occur, or that a particular price will be offered or accepted. Actual results achieved during the period covered by our prospective financial analysis may vary from those described in our report, and the variations may be material. Therefore, no warranty or representation is made by RCLCO that any of the projected values or results contained in this study will be achieved.

Possession of this study does not carry with it the right of publication thereof or to use the name of "Robert Charles Lesser & Co." or "RCLCO" in any manner without first obtaining the prior written consent of RCLCO. No abstracting, excerpting, or summarization of this study may be made without first obtaining the prior written consent of RCLCO. This report is not to be used in conjunction with any public or private offering of securities or other similar purpose where it may be relied upon to any degree by any person other than the client without first obtaining the prior written consent of RCLCO. This study may not be used for any purpose other than that for which it is prepared or for which prior written consent has first been obtained from RCLCO.

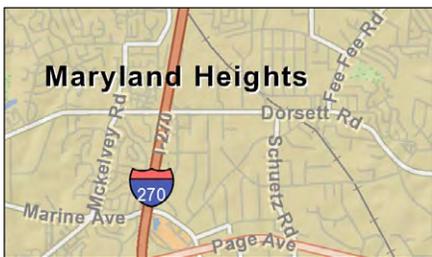
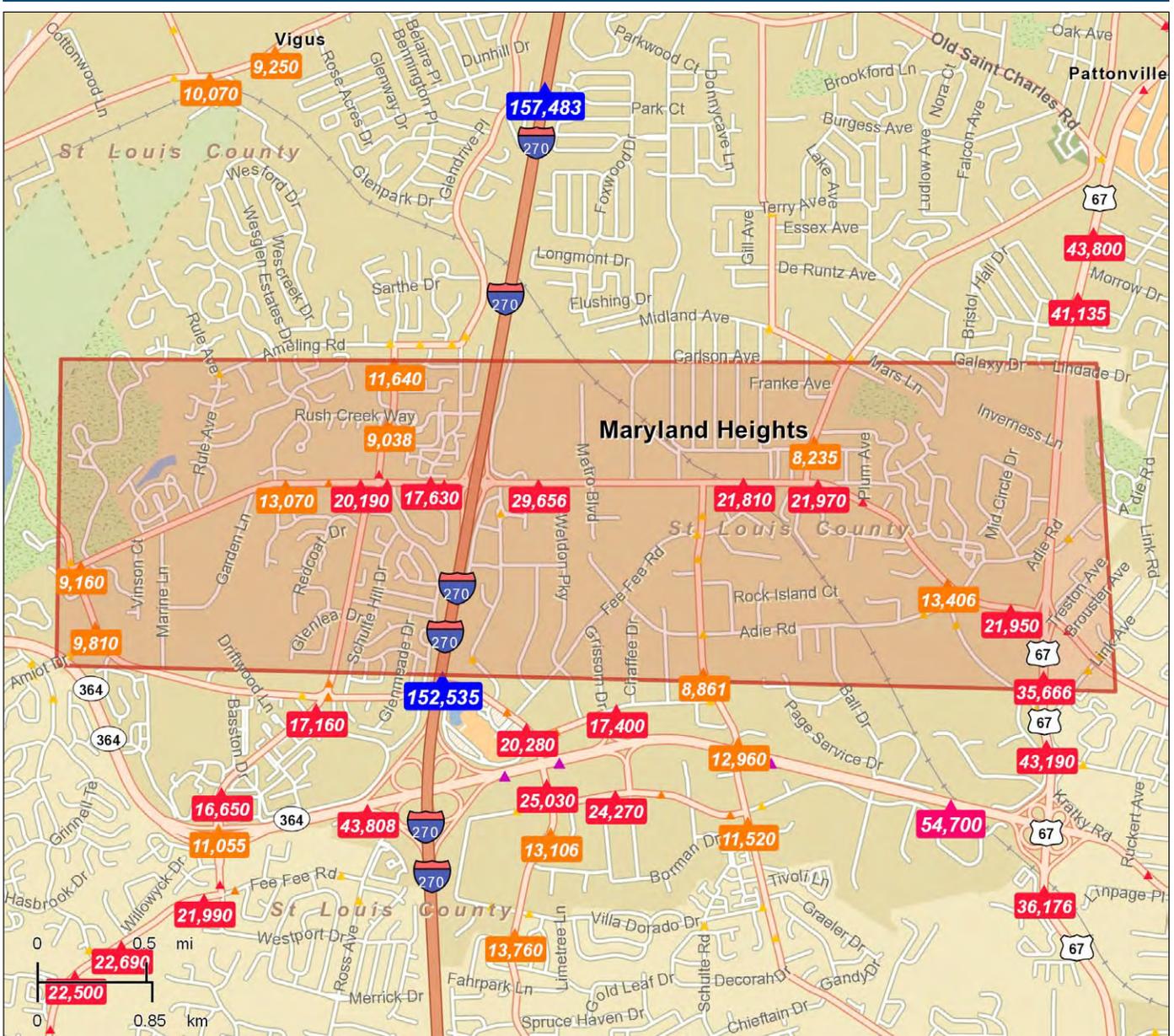
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APPENDIX ADDITIONAL DATA



Traffic Count Map

Polygon_75
Area: 4.42 Square Miles



- Average Daily Traffic Volume**
- ▲ Up to 6,000 vehicles per day
 - ▲ 6,001 - 15,000
 - ▲ 15,001 - 30,000
 - ▲ 30,001 - 50,000
 - ▲ 50,001 - 100,000
 - ▲ More than 100,000 per day

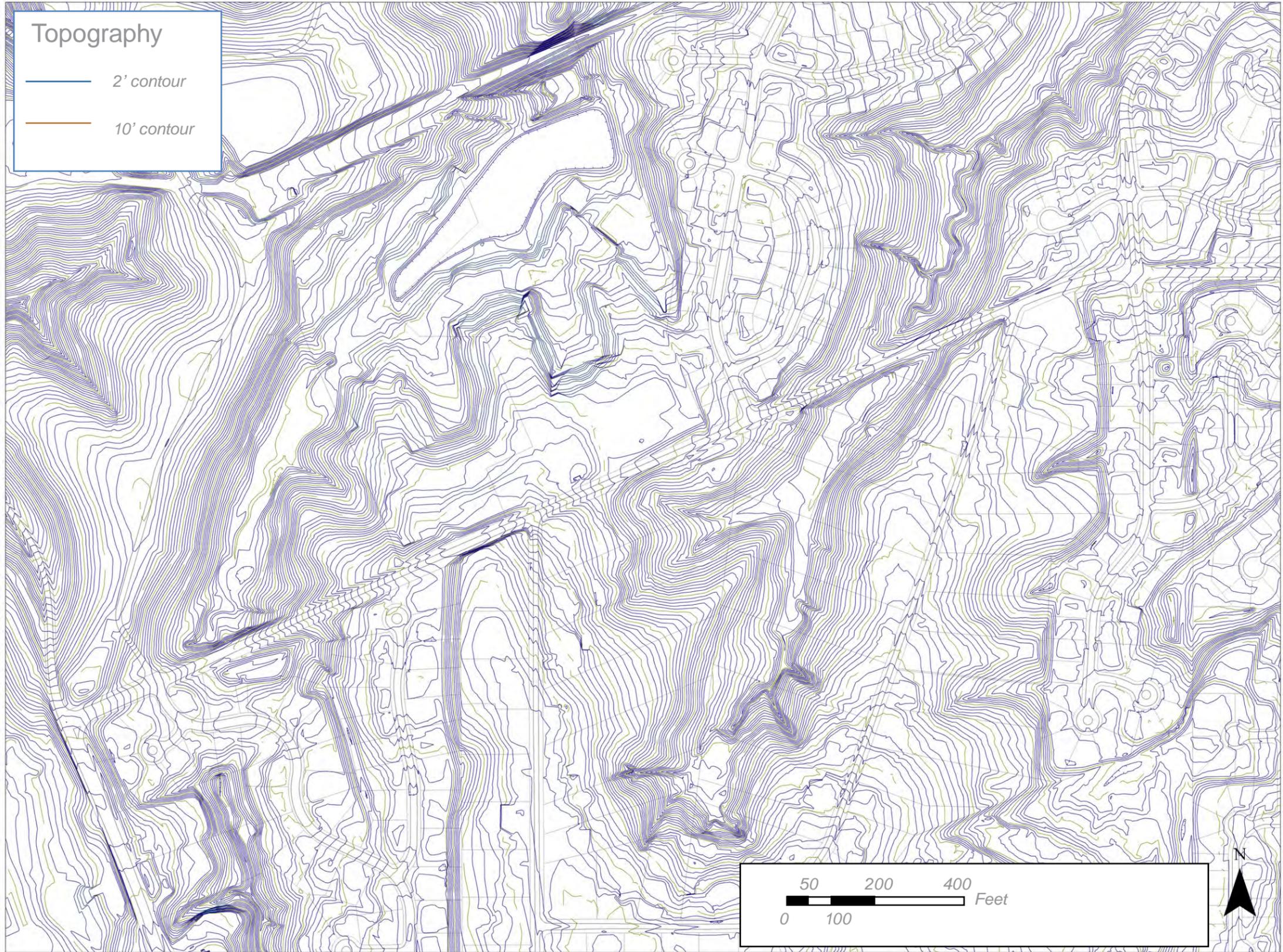


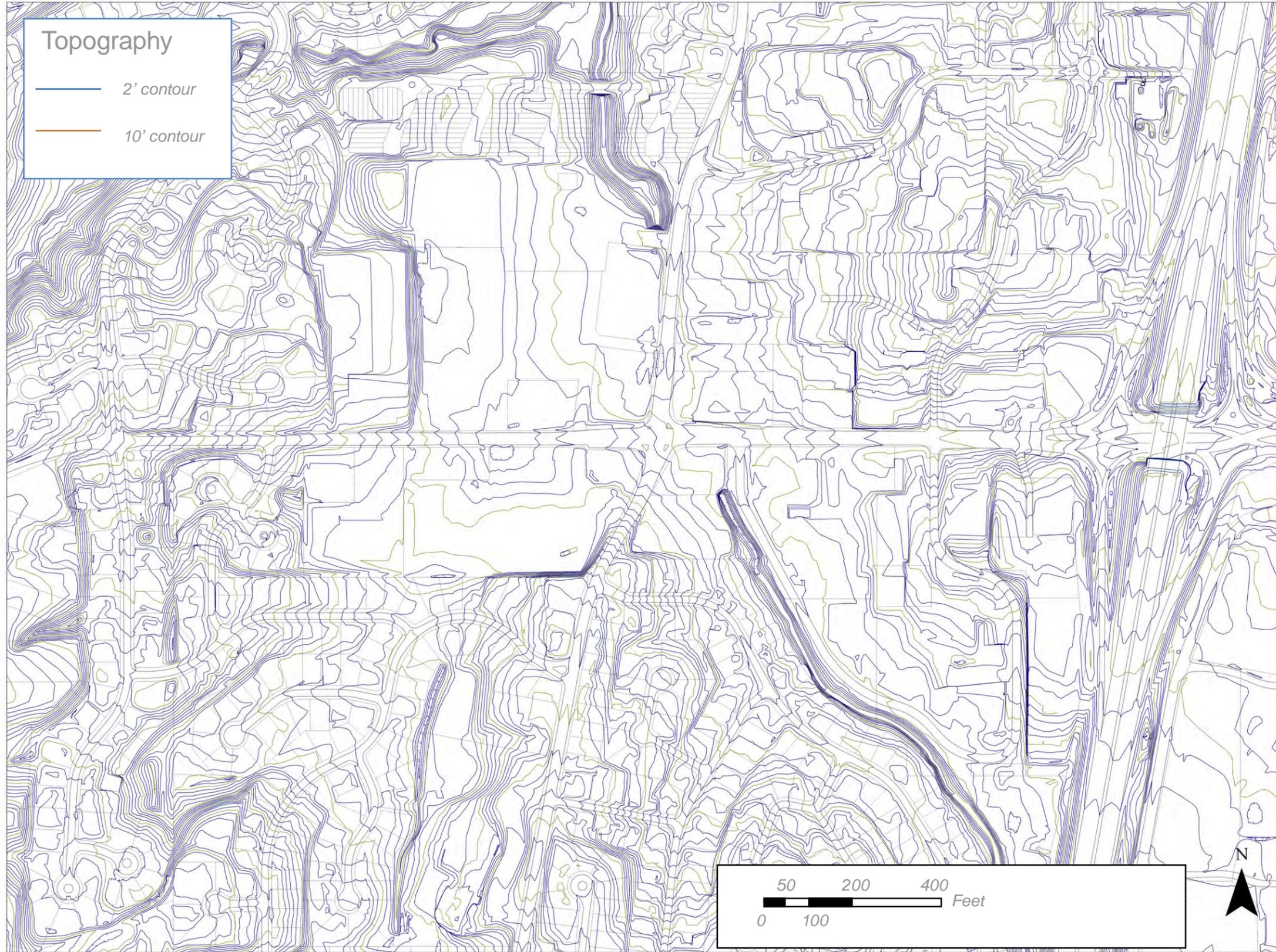
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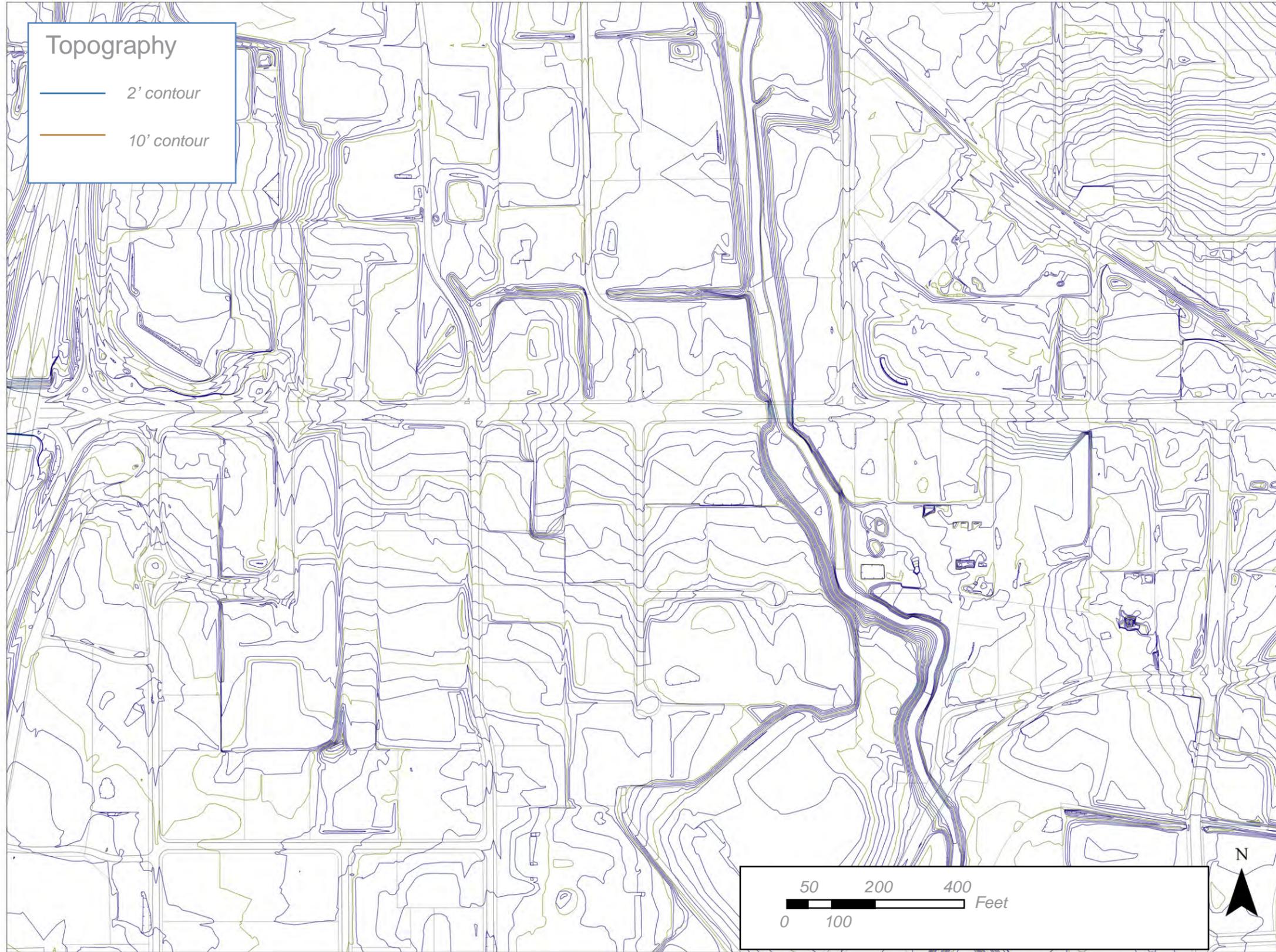
July 03, 2013

Speed Limits and Average Stops

	Dorsett (@McKelvey)	Dorsett (@Metro)	Dorsett (@Fee Fee)	Dorsett (@Adie)	Dorsett (@Lindberg)	Notes
Mean Speed (mph)	32mph	33mph	33mph	34mph	33mph	Traffic was traveling at or near the speed limit of 35 mph
Average stops (#/vehicle)	1.6	1.4	1.0	0	1.8	These values are for the eastbound direction (the westbound drive had lower values so I am giving you the "worst case" scenario).

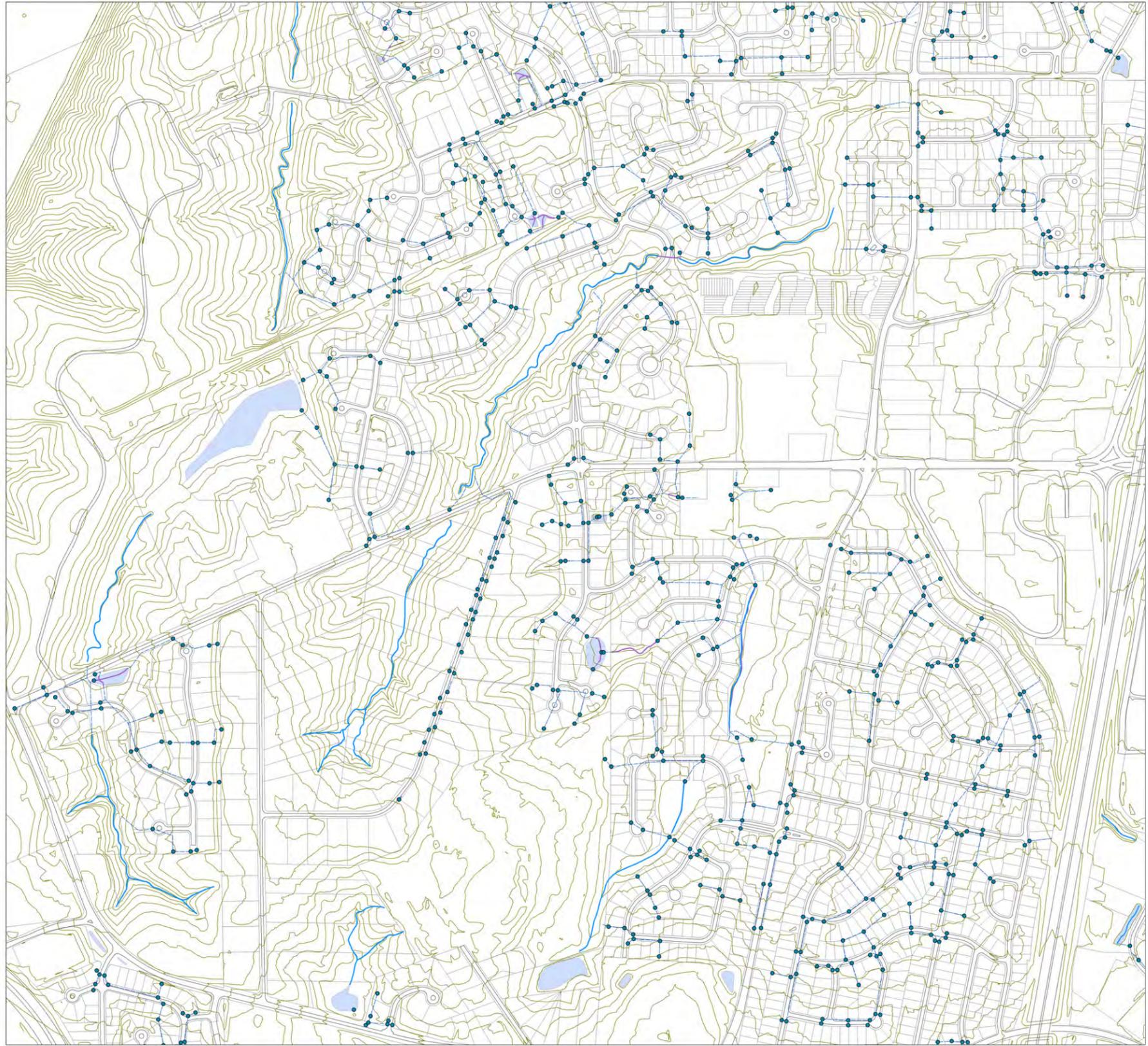






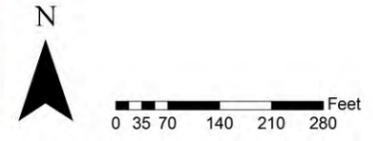


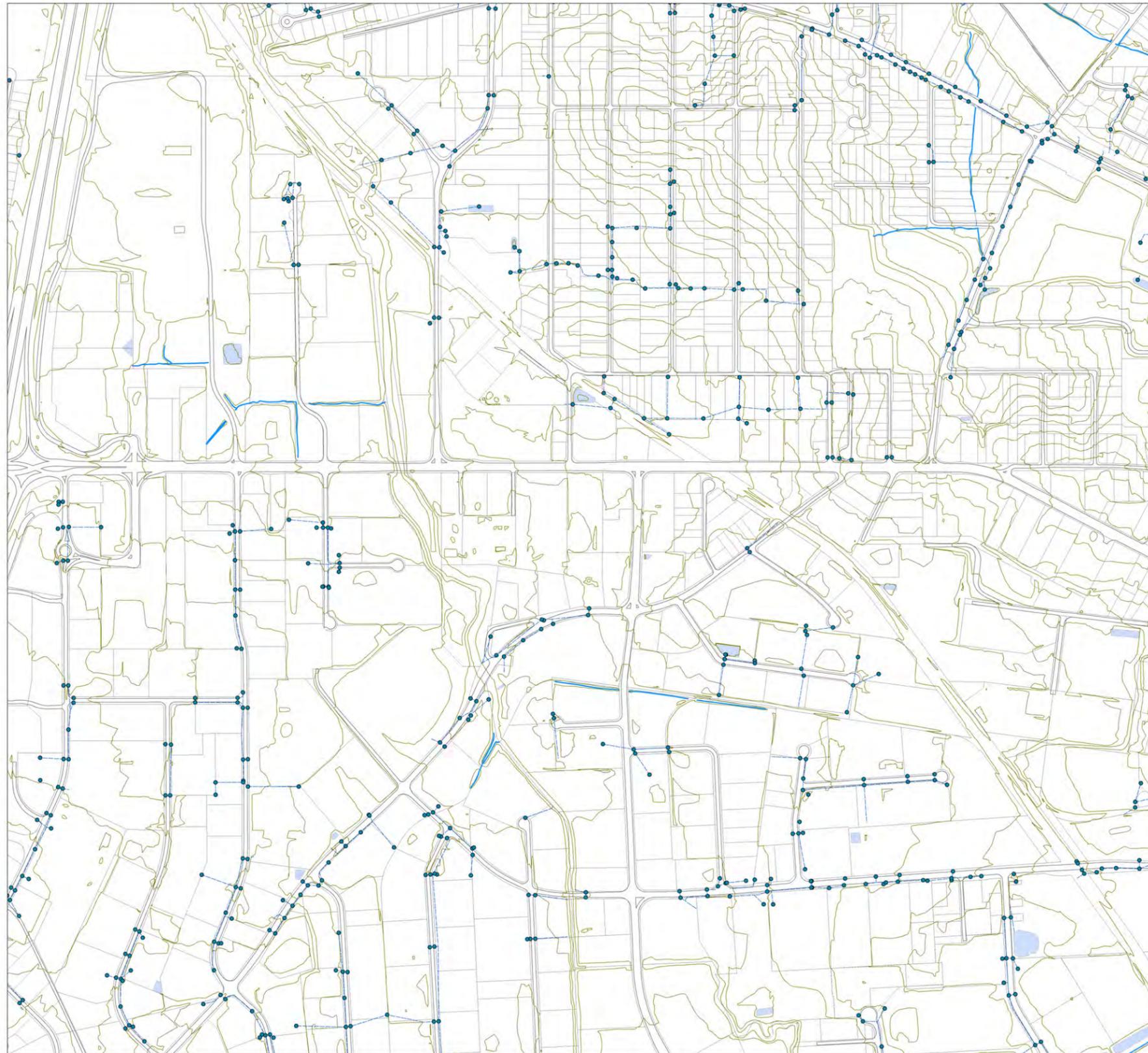




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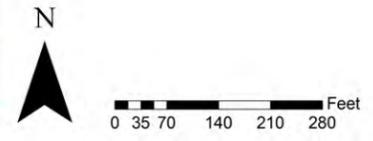
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- CNTR_INDX_HDN_2011
- CNTR_INDX_2011
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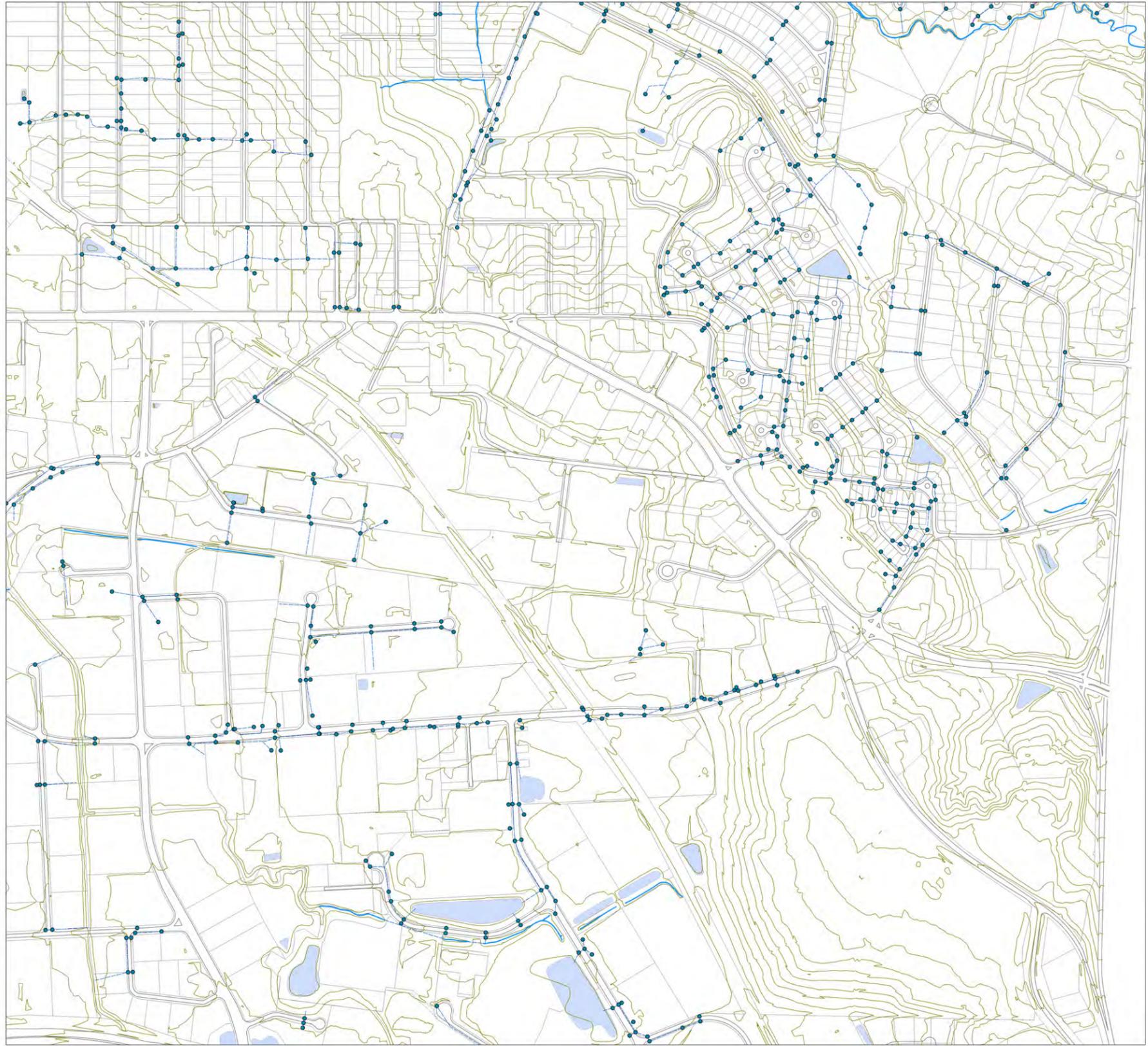




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- STORM_STORAGE_BASIN





Legend

- STORM_INLET
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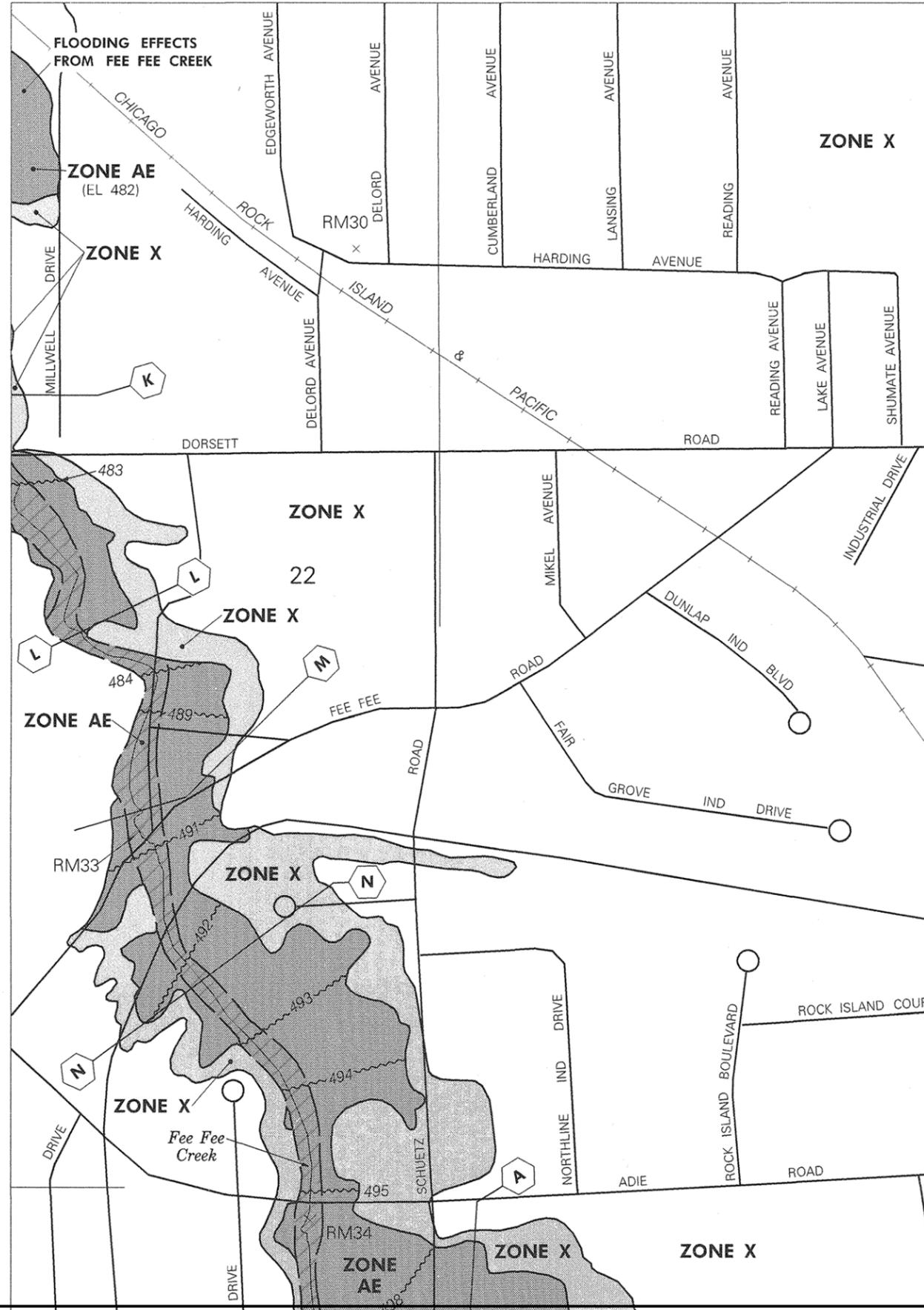
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0 35 70 140 210 280 Feet

ELEVATION REFERENCE MARKS
REFERENCE ELEVATION
MARK (FEET NGVD) DESCRIPTION OF LOCATION

RM30	509.60	182 feet northwest of Delord Avenue and Harding Avenue intersection. Standard tablet stamped "36-75 AA S.L.C." set in concrete base of power pole.
RM31	553.53	Chiseled square on top of west end of south curb of entrance to Pattonville Heights High School approximately 0.1 mile north of Dorsett Road on Fee Fee Road.
RM32	613.71	Top of aluminum cap on 5/8 inch rebar approximately 2 feet east of utility pole and 15 feet west of Lindbergh Boulevard, approximately 50 feet north of centerline of 4 Star Motel (east side of Lindbergh Boulevard) and approximately 200 feet north of Inverness Lane.
RM33	486.69	Chiseled square on top of northwest wingwall at west end of north parapet wall at northwest corner of Fee Fee Road bridge over Fee Fee Creek.
RM34	489.98	Chiseled "L" on top of southeast corner of north curb of Adie Road bridge over Fee Fee Creek.
RM35	554.56	"O" in OPEN on top of fire hydrant at northeast corner of the intersection of Adie Road and Lindbergh Boulevard.
RM78	511.74	Approximately 1.9 miles north of Olive Boulevard near intersection of Page Boulevard and Schuetz Road in foundation at northwest corner of 2222 Schuetz Road, standard tablet stamped "15 GEU 1974."
RM80	544.10	Chiseled square on top of curb on west side of traffic island at junction of Schuetz Road and Tivoli Lane.

90°26'15"
 38°43'07"



APPROXIMATE SCALE IN FEET
 500 0 500

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS

PANEL 158 OF 420
 (SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MARYLAND HEIGHTS, CITY OF	290889	0158	H
ST. LOUIS COUNTY, UNINCORPORATED AREAS	290327	0158	H

MAP NUMBER
29189C0158 H

EFFECTIVE DATE:
AUGUST 2, 1995



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



APPROXIMATE SCALE IN FEET
500 0 500

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM
FLOOD INSURANCE RATE MAP**

**ST. LOUIS COUNTY,
MISSOURI AND
INCORPORATED AREAS**

PANEL 154 OF 420
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MARYLAND HEIGHTS, CITY OF	290689	0154	H
ST. LOUIS COUNTY, UNINCORPORATED AREAS	290327	0154	H

**MAP NUMBER
29189C0154 H**

**EFFECTIVE DATE:
AUGUST 2, 1995**



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

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