



# An Approach to **COMPLETE STREETS** In Downtown South

December 2018





## **A Collaborative Effort with Representatives of:**

City of Orlando  
Orange County  
Downtown South Neighborhood Improvement District  
Downtown South Main Street  
Community Stakeholders  
Florida Department of Transportation  
Orlando Utilities Commission

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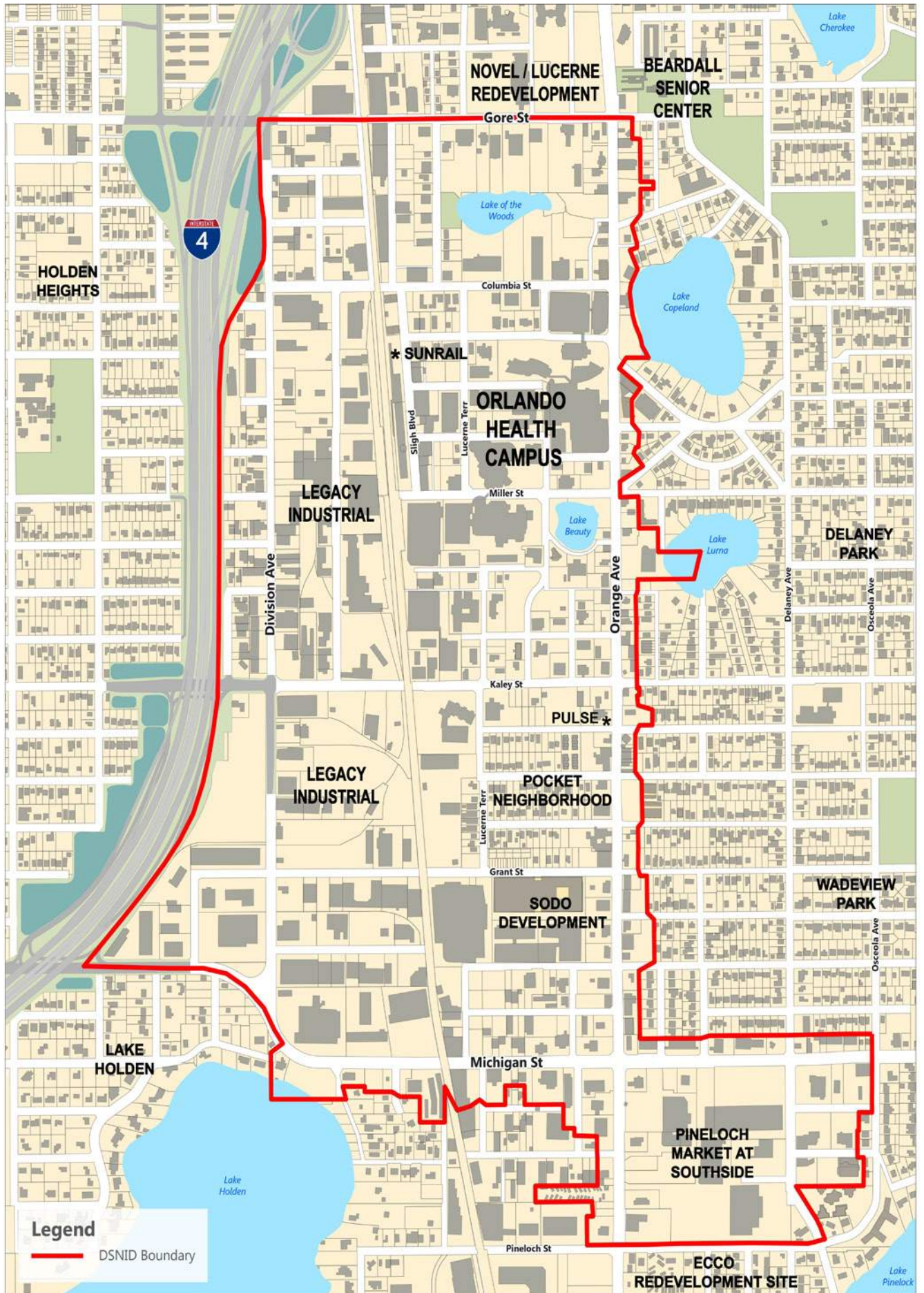
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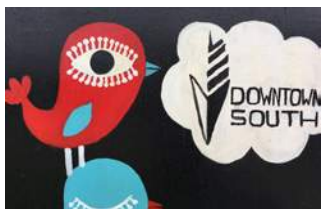
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# SECTION 1 |

## INTRODUCTION + EXECUTIVE SUMMARY



**Downtown South** is one of the most physically, socially and economically diverse areas of Orlando, with burgeoning growth

and reinvestment. This report touches on the evolution of the Downtown South district, the community process, a high level vision framework and detailed chapters regarding the mission of enhancing the streets and guiding development over time. The Mission and Vision is to facilitate the continued economic growth, community character and diverse livability of Orlando's Downtown South.

During the summer of 2017 and through spring of 2018, the Downtown South Neighborhood Improvement District (DSNID) worked to develop a vision for the future of this 720 acre emergent and active community place. The work included five areas of planning focus: **Complete Streets**, **Orange Avenue** opportunities, **Division Avenue** vision, **Policy and Regulation**, and a **Visual Guidebook** of desired outcomes. This report is focused on each of these elements, with some additional introductory information regarding the broader vision aspirations for the overall area.

This planning initiative included broad stakeholder engagement, both on-line and in-person. This includes leadership from DSNID Advisory Council and participation from the City of Orlando, Orlando Health, the SoDo Main Street, and numerous local business and residential representatives through public meetings, presentations and workshops.

The work has also included interactions and information sharing sessions with Orange County, Orlando Utilities Commission, FDOT District 5, Lynx and others. The idea has been to not only identify specific initiatives and opportunities, but to elevate a shared understanding of the DSNID as a special place that has leadership, momentum, vision and goals.

The primary purpose of this design effort has been focused on Complete Streets and the necessary urban development characteristics to support a livable, walkable, multi-modal environment. However, the underlying driver is that these specific ideas align with the broader purpose of supporting quality reinvestment and general enhancement of the area.

To that end, the initial work included a blue sky visioning exercise to articulate key ideas that provide a framework for many DSNID initiatives.

### Guiding Principles for the Downtown South Neighborhood Improvement District



Urban Lab



Character Places



Social Connection



Artistic Expression



Progressive Circulation



Sustainable Infrastructure



Economic Development



Program Implementation



**Vision Sketches:** The outcomes of this plan have been to look at the critical street corridors and adjacent properties, imagining a more livable, beautiful, accessible and vibrant urban environment in Downtown South.

With a vision shared by the property owners, businesses, residents, and City, this plan can provide a framework for future investments in the public realm and a guide and inspiration for the urban places that might be constructed.





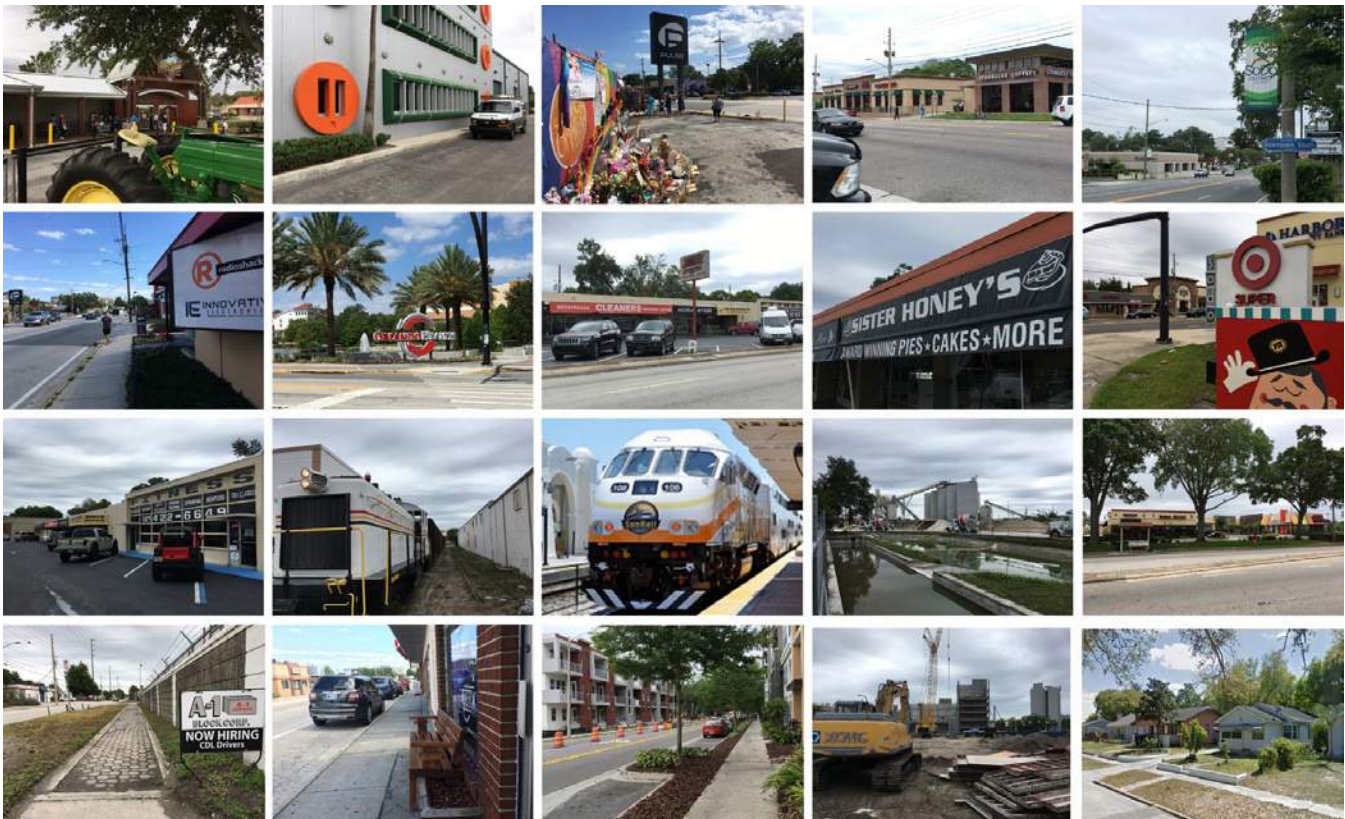
## SECTION 2 | VISIONS OF PLACE IMAGINING OUR DOWNTOWN SOUTH

The 720 acre **Downtown South Neighborhood Improvement District (DSNID)** includes neighborhood uses such as single family residential, townhomes, apartments and condominiums, with significantly more residential in construction. Daily commercial needs include multiple grocery stores, convenience retail, restaurants, and hardware and electronics supplies. Local merchants provide unique offerings, while an 'urban lifestyle center' (SODO) and a regional shopping center provide larger format commercial. The DSNID also includes places of worship and sacred places of honor.

The DSNID is an important place of employment at all pay scales and educational levels. The Orlando Health campus provides a vital community service and thousands of jobs. Legacy industrial uses provide employment, construction materials and services that have been important contributors to the function of the city for decades. Dozens of other small businesses provide weekly uses with familiar employees with sociable customer relationships.

Transit is available in the form of AMTRAK and freight rail, SunRail Commuter Rail, Lynx Bus service and the Orlando Health circulator, with emergent plans for additional special service bus lines (Lymmo) and new regional bike trails in the planning. Orange Avenue and Division Avenue are important commercial and industrial spines (respectively) while east-west streets such as Michigan, Kaley, Columbia and Gore connect neighborhoods to the district, to Interstate 4 and across town.

As a result of this diversity of place, a particular feeling about Downtown South is growing rapidly through the cultural expression of the area and the places of regular neighborhood gathering, whether it be the grocery store, favorite restaurants, local merchants or the social events activities promoted by DSNID and the SoDo Main Street. There is also a very definite growth in economic activity with new businesses, redevelopment sites and investment throughout.





## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2A. EVOLUTION & CREATION OF DISTRICT

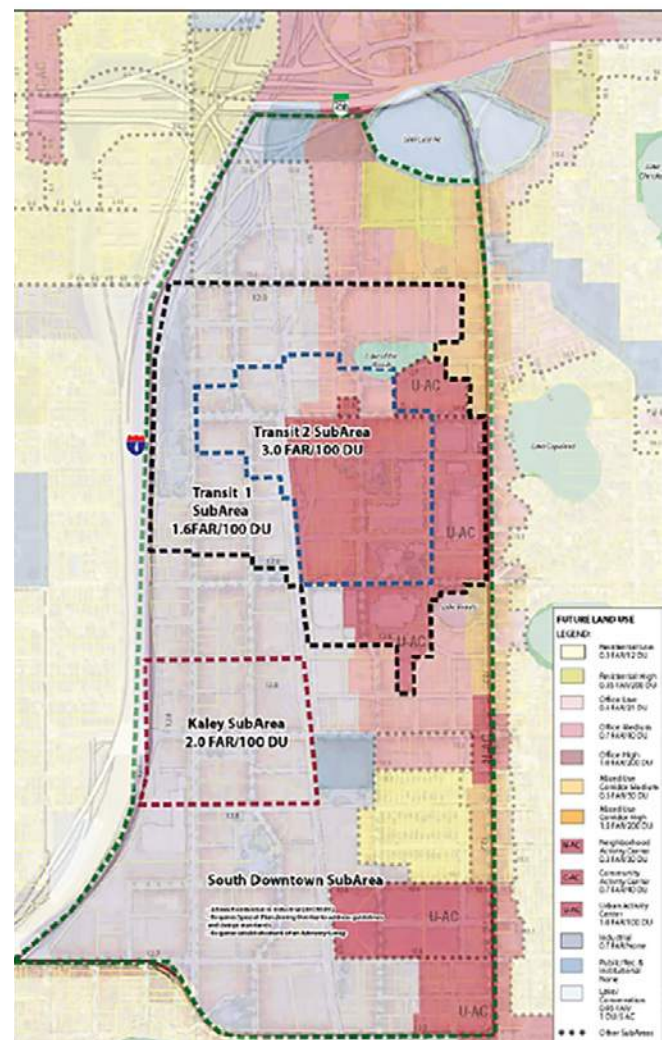
This DSNID has been built upon the foundation of community effort. With the adoption of Growth Management Plan amendments in 2009, the 2014 passage of a local property owner tax referendum, and the creation of the Advisory Council and bylaws, the DSNID is an established special purpose local governmental entity with the singular purpose of “supporting the redevelopment and improvement of the area.” Several parallel initiatives have helped define and advance the momentum of the area, each with input and support from local businesses and residential representatives. Today, the DSNID is a growing social, physical and economic place. Below are snapshots of several benchmark moments in that history and the vibrant opportunities that are now possible.

**2008 Downtown South Vision:** The City of Orlando and Orlando Health partnered to fund the ‘Downtown South Vision’, a high level plan that acknowledged the physical identity of a 500+ acre area, its economic potential and the need for coordinated efforts to address land use, infrastructure and community collaboration efforts to realize the potential.

One outcome from this effort was the 2009 adoption of amendments to the Growth Management Plan, providing a pathway to expanded development opportunities consistent with the community vision. A second outcome was the first articulated vision of new development potential west of the rail and transit-oriented reinvestment around the Orlando Health Sunrail station area.



CITY OF ORLANDO  
SOUTH DOWNTOWN VISION PLAN



## VISIONS OF PLACE *Imagining Our Downtown South*

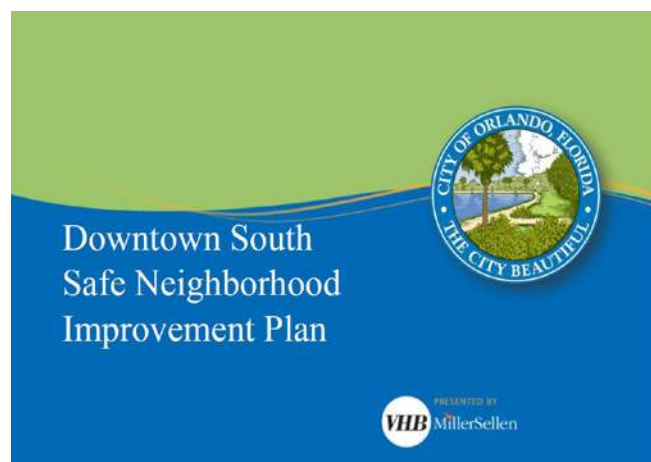
**2008 Downtown South Main Street:** As the Downtown South vision was developed, the City of Orlando facilitated the creation of a Main Street designation for the Orange Avenue corridor. This gave voice, structure and strategy to the independent and small business establishments along the Orange Avenue and Michigan Street commercial corridors. Today, the SoDo Main Street and DSNID are highly aligned, collaborative and mutually supportive. Business, marketing and social activities are growing steadily in Downtown South both on the ground and across a dynamic social media platform.



**2010 Orange-Michigan Vision:** This was a focused look at the physical form of properties along the Orange and Michigan commercial corridors, with an eye toward appropriate redevelopment zoning. One outcome of this study was the establishment of an Overlay District for the corridors that would guide redevelopment to ensure street character, pedestrian form and appropriate scale and context related to the adjacent neighborhoods.



**2013 Safe Neighborhood Improvement Plan:** This expanded the definition of the District, to include areas of the Main Street (along Michigan and the Pineloch Shopping Center) to a total of 720 acres. This grass roots effort also provided the platform to discuss the economic potential of the area in relation to the need for capital investment, garnering support for a special ad valorem property tax to support the area, which was ultimately approved by District property owners through referendum in 2014.





## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

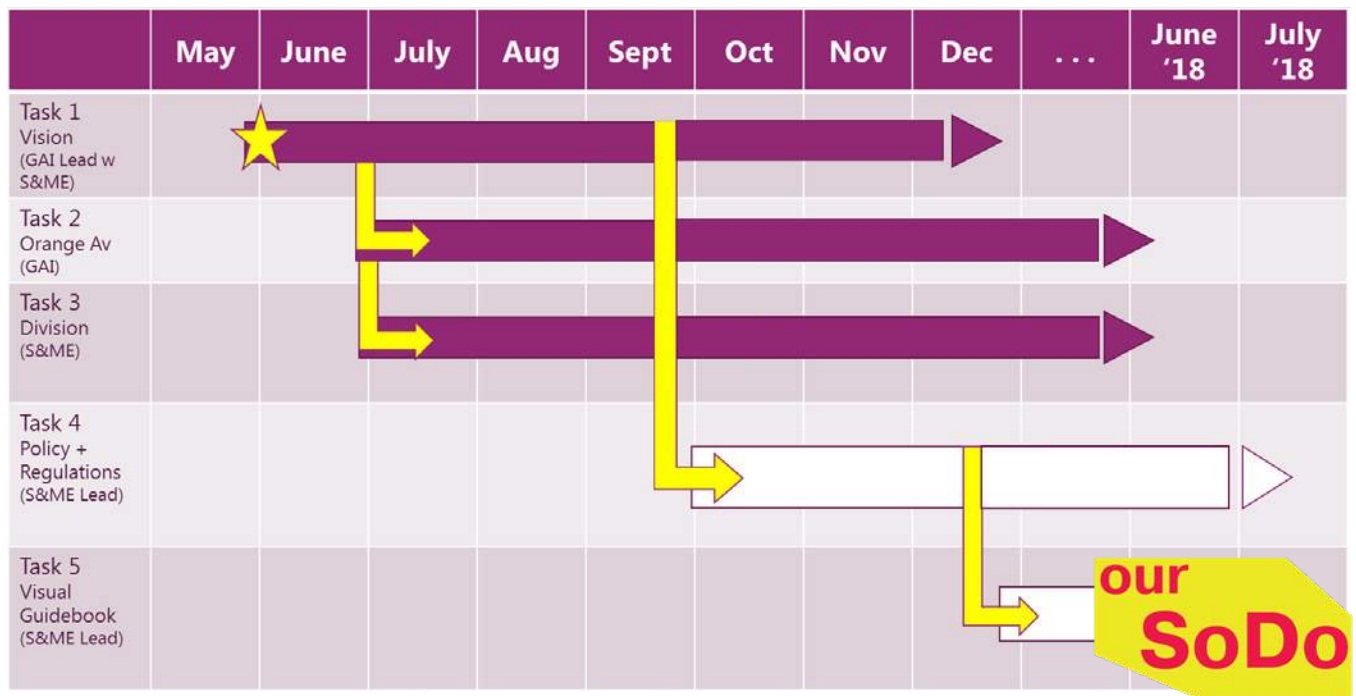
### 2B. IMAGINING THE FUTURE OF DOWNTOWN SOUTH

This DSNID 'Complete Streets' program has focused on how to enhance mobility in the district, creating a place that anticipates a more multi-modal, walkable and friendly place to navigate. Related to this is the configuration of urban development alongside the streets and pathways. The program for this effort, therefore has been to set a platform for an inclusive, and iterative exploration of circulation and land use.

The process included a large Public 3-Day Kickoff workshop in early June 2017 at the Wadeview Park Community Center, followed by regular review presentations at the monthly DSNID Advisory Council

meetings and additional public review meetings in December 2017; January and May 2018 the Beardall Senior Center.

There were also incremental briefings with the SODO Main Street, FDOT, Orange County, Lynx, OUC, Orlando Health and other community partners. These 'layers of activity' have created an integrated conversation and awareness of the larger mission of enhancing the livability of DSNID streets alongside the character of new infill development through refined development standards.



## VISIONS OF PLACE *Imagining Our Downtown South*

One of the functions that this effort has facilitated is increased coordination and mutually supportive collaboration between the 'District' (DSNID) and the SoDo Main Street organization. A DSNID Complete Streets project website and logo was initially created to establish a social media platform for this specific project. This address has since been folded into the City of Orlando's website at <http://www.cityoforlando.net/city-planning/downtown-south-neighborhood-improvement-district/>.

This information runs alongside the grassroots level work of the SODO Main Street on their primary webpage <https://sododistrict.org/> as well as the SODO District Facebook page <https://www.facebook.com/sododistrict/> which has become a unifying vehicle for the community at large, including the businesses and residents within the larger area to be 'plugged in' to activities in Downtown South. Altogether, over 150 people participated in the process online and in person.

The **Downtown South Advisory Council** (summer 2018) is comprised of:

- Harlan Hanson (Chair)
- Adam Freeman
- Zachary Winters
- Charlotte Manley
- Aaron Bottenhorn

The **SoDo Main Street Board of Directors** includes:

- Linnette Boldig (Main Street Director)
- James Krawczyk
- Janelle Hom
- Linda Kennedy-Martin
- Charlotte Manley



In addition, Martin Hudson was hired in 2017 and assigned as the City of Orlando Program Manager specifically dedicated to the coordination of all DSNID efforts and liaison between all organizational, business, resident and agency entities regarding the advancement of Downtown South.





## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2C. GUIDING PRINCIPLES IN DOWNTOWN SOUTH

As part of the general discussion of 'vision' for the area, planning participants expressed several ideas and issues that should be part of the ongoing dialogue for Downtown South.

While some of these topics may not fit specifically under the umbrella of the 'Complete Streets Master Plan' (which was the thrust of the design effort), they do describe the articulated topics and larger goals of the District through expressed aspirations of the project participants, including the Downtown South Advisory Council, City of Orlando representatives and SODO Main Street leadership.

**The DSNID Mission:** The Downtown South Neighborhood Improvement District (the 'DSNID') is a special purpose local government. Its purpose is to support the redevelopment and improvement of the Downtown South neighborhood, an area of approximately 720 acres located south of Downtown Orlando (the 'District').

Therefore, these broad Guiding Principles represent an important organizational structure around which mission driven, specific initiatives and programs can be organized. This structure provides a 'home' for each piece of practical and aspirational input provided during the process; an organizational framework for ongoing exploration of opportunities and actions over time and across the diverse opportunities found in the DSNID.

### Guiding Principles for the Long Term Enhancement of the Downtown South Neighborhood Improvement District



# VISIONS OF PLACE *Imagining Our Downtown South*



The **Downtown South Neighborhood Improvement District** and **Main Street Board of Directors** work collaboratively to achieve the overall goals and objectives of the SODO District. Although the DSNID and SODO Main Street are separate entities

with their own revenue streams, bylaws and leadership, their geographies overlap and many aspects of their respective missions are mutually supportive.

The **SODO Main Street** is focused on the geography of the Orange and Michigan commercial corridors. The **Vision** is a vibrant residential and local business community embracing innovation and our vintage roots. The **Mission** is to improve our community by design, empower local businesses and residents to collaborate, and create a vibrant atmosphere to live, work, and play.

It is important to relate the topics of the Guiding Principles in this plan to the Main Street '4 Point Approach' model. This is the model used by each designated Main Street district in the United States, and has proven to be a useful rubric for local leaders and volunteers to organize themselves and achieve grassroots success that leads to broad change.

The '4 Point Approach' (**Organization, Design, Promotion, Economic Vitality**) aligns with the outcomes identified in the DSNID Guiding Principles. Both models envision enhancements to the physical sense of place (Design), celebrating places and businesses through marketing and events (Promotion), resulting in enhanced environment for business success (Economic Vitality). Both entities focus on their leadership structure and ongoing guidance, community partnerships and political support (Organization).

## National Main Street '4 Point Approach' to program management, committee leadership and local volunteer participation.

Together, DSNID and SODO Main Street support shared goals, using their respective techniques, leadership and resources to achieve mutually supportive outcomes. These ideas are also highly aligned with other City of Orlando programs and objectives, such as Green Works Orlando and the related Smart Cities Initiative.



In truth, each of the eight DSNID Guiding Principles is supportive and strategically applicable to each element of the Main Street 4 Point Approach. However, for simplicity, there are some clear alignments as shown.

<https://www.orlandomainstreets.com/districts/sodo-district/>, <https://sododistrict.org/>, <http://www.cityoforlando.net/greenworks/>, <http://www.cityoforlando.net/greenworks/smart-cities-initiative/>



## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2D. DESCRIBING THE GUIDING PRINCIPLES

#### 1. Orlando's **URBAN LABORATORY** for Ideas *a place of innovation*



**Downtown South** is distinctly positioned to serve as an **Urban Laboratory** of ideas, research, experimentation and development - both intellectually and physically. Because the district is so broad in its land uses, businesses and urban form, a wide range of activities are possible. Downtown South can be a place for everybody and everything, with land and places where new ideas can best tested and developed!

Few places are as physically diverse as Downtown South. Healthcare and bioscience are present at the highest scientific levels while heavy industry such as concrete, welding, custom fabrication and scrap recycling help meet the resource needs of the region. National brand retail provides access to common household staples in large format developments while independent merchants and start-up businesses provide unique offerings with dedicated local followings in commercial strip centers and niche business locations.

Employment and commerce functions are supported by a diverse and growing residential base that includes proximate neighborhoods at different income levels, as well as all different products from single family to duplex, townhome, multifamily in ownership, rental and even some limited subsidized products.

Because the area is so physically and economically diverse, it is also socially diverse. People of all walks of life can be found working, shopping, recreating, living and learning in the areas in and around Downtown South. This fabric makes DSNID an ideal location for new business ideas that can be hi-tech or blue-collar, cultural, culinary, custom or service oriented.

The DSNID understands these qualities of diversity as an ideal setting for new ideas & new investment, and as a result, Downtown South is also an ideal setting for new types of public investments. These may include public art, technology, sustainability incentives, cultural programs, street design and mobility innovations and creative public policy. In fact, the genesis of the original 2008 Downtown South Vision was the partnership and dialogue between the City of Orlando, Orlando Health, several large property owners and the Main Street merchants. Clearly, if there is a place in Orlando to 'try something new' or 'test an idea', Downtown South is an ideal **Urban Laboratory**, rich with diverse places and people to provide a suitable setting within an eclectic, active place.



**Downtown South** is a place of diverse land uses. As such, the SoDo District is also a place that communicates its message, brand and character in a wide variety of techniques!



# VISIONS OF PLACE *Imagining Our Downtown South*

## 2. Character PLACES

*celebrating diverse land uses*



**Downtown South** is comprised a variety of **Character Places** and Place-types rarely found together within one defined area. This is a source of strength to the area. The Planning Principles discussed in this section are mutually supportive and build upon each other. As discussed in the Urban Laboratory section, DSNID contains virtually every conventional land use found in urban neighborhoods, with over 100 years of history, those uses occur in many urban forms, densities and patterns.

In a smaller redevelopment district such as a 5-block 'Main Street', there might be a singular solution to questions of land use, development form, and aesthetic enhancements. In Downtown South, the Guiding Principles and other ideas in this document are intended to provide a unifying framework for the overall area, while remaining flexible and responsive to the particular places and economic activities. The DSNID is more complex than a 5-block 'Main Street'!

The Guiding Principles point toward a notion of 'frameworks for unification', but generally address topics of enhanced livability, mobility, economic development and sustainability in order to enhance the overall sense of place and shared success. However, the tactics to address each Principle can be tailored to meet the specific opportunities and characteristics of places as diverse as healthcare campus, industrial workshop, regional mall, small business retail and neighborhood residential.

Additionally, the project participants engaged in several discussions about a '3rd Place' – a place for the community to come together, both in terms of open space and also in terms of social interaction; a 'Cheers' establishment where 'everybody knows your name'. Surely, the DSNID would be enriched with stronger and more usable public open space venues. And quality neighborhood dining is always a hallmark of successful Main Streets.

However, in an area as diverse as DSNID, there are, in fact, many highly meaningful '3rd Place' opportunities that provide a social platform for community interaction across all demographics and 'character place-types'. The grocery stores, local restaurants, micro-breweries, locally owned retail services, the Beardall Community Center, PULSE Memorial site and the large healthcare & industrial employment populations all provide settings for planned and unplanned interactions.

Indeed, Downtown South contains many places where people who live and work may regularly gather or casually meet in the check-out line. The challenge and opportunity is for each increment of development and public realm investment to contribute to the pattern of places for people.

*In **Downtown South**, diverse land uses allow for varied community Character Places.*





## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2D. DESCRIBING THE GUIDING PRINCIPLES

#### 3. SOCIAL Connection

*daily interaction and special events*



**Downtown South** is a place for **Social Connection** and Interaction. This occurs in many forms that can be cultivated and developed as the area grows. In his book 'Bowling Alone', Dr. Robert Putnam describes two types of 'social capital': Bonding and Bridging. Bonding involves connections between like-minded or otherwise similarly related people. Bridging involves connections between people who may come from different walks of life. Bonding may be said to be more convenient and comfortable. Bridging may require more special types of settings and uses but builds a stronger foundation for the total community. Both forms of connection are important to a healthy, successful and sustainable community district.

With its many businesses and 'Place Types', there are many locations for interaction. Many serve specific cohorts of the community, either through employment, lifestyle or cultural background. However, each subarea should consider the opportunity to enhance interaction not only for their employment base, but also for adjacent populations. There are several businesses that clearly span multiple demographic cohorts within the neighborhood, alive and vibrant with diverse customers on a Friday night, Saturday morning, or Monday at lunch. It is important to cultivate these types of places for social Bridging.

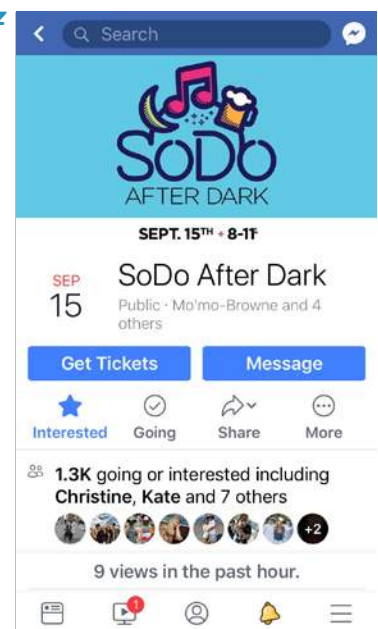
It is also important to cultivate a strong public realm for community interaction and events. There is very little dedicated open space in Downtown South. Opportunities for expanded public or shared public/private open space exist at Lake Beauty and at Lake of the Woods. Some business locations have graciously

opened internal streets or parking lots for community events. Certain side-streets may be candidates for temporary closure for street parties. Future stormwater facilities (associated with redevelopment) may be opportunities for shared use public parks with appropriate design enhancement. These outcomes are difficult because they require multi-party collaboration, but the outcomes are worth the effort in Downtown South.

The promotion of social interaction as a value, as well as the promotion of the businesses as places for connection is important to the overall sense of community, pride and success. This celebration of community is already occurring through the DSNID, Main Street and local business leadership. Local community groups such as Boy/Girl Scouts, School Clubs and other Interest Groups collaborate with small business for parking lot fundraisers.

Organized Main Street marketing and social media presence is growing, and physical evidence of 'branding' has already become an important contributor not only to the sense of place, but also to the economic development of new projects which are now identifying themselves as part of 'Downtown South' or 'SODO'. Together, Downtown South / SODO Main Street represent a marketable real estate address, in part because of diverse business and property offerings, but also because it has become a **place with a name** that people are talking about in-person and on-line. ***There is a buzz and it's time to turn up the volume!***

**Downtown South** is building a strong platform for social connection through planned events and an active social media platform.



# VISIONS OF PLACE *Imagining Our Downtown South*

## 4. ARTISTIC Expression

*an attractive, cultural environment*



**Downtown South** is a place for **Artistic and Cultural Expression**. With the diversity of uses, people and architecture, the DSNID is certainly an eclectic place. With a mix of unique local businesses, special use employment centers and development from many time periods, there is a rich palette of visual imagery to draw upon. However, it is also important to note that circulation through the district is largely defined by large roads which have some constraints upon their ability 'create beauty' as one travels through Downtown South. Therefore, public art, transit stops, street treatments, lighting and interesting architectural colors & finishes provide the opportunity to create visual interest and distinctiveness to both celebrate the District and beautify the experience.

Because Downtown South includes industry, science, modern and 'retro' retail and historic buildings, there are many opportunities for visual interest. The buildings themselves are art opportunities. This may include iconic architecture such as the Winnie Palmer Hospital, building façade graphics and murals, or even lighting effects on commercial buildings or the interesting (and tall) concrete plant structures. There are numerous locations for art and sculpture to be located on private property, in some areas of public right-of-way (which is generally too narrow), or through sidewalk easement at the interface of public and private.

*In **Downtown South**, all forms of artistic expression are possible, from special architectural solutions that respond to unique building types to furnishings, fixtures, murals and street art.*

### THE GIST

## LOVE mural honors Pulse victims, helps community heal

Posted By [Aileen Perilla](#) on Mon, Oct 24, 2016 at 10:35 am



Photo via Aileen Perilla

Although the rights-of-way typically contain some sidewalk space or 'pockets' for art, there is also a substantial opportunity for creative solutions to street design elements. The Main Street has already effectively deployed a utility box art program, which is now extended to drain inlets. Lighting, projection, pavement treatments, banners and transit stops all provide opportunities for both visual interest and use of the SoDo branding without equiring more space.

The Downtown South area also includes cultural offerings, from specialty dining and grocery offerings, to opportunities for music and community gathering and community memorial. These opportunities expand if certain locations just a few blocks outside the formal DSNID boundary are considered. As an eclectic, Urban Lab comprised of many **Places**, valuing **Social Connection**, Downtown South should certainly be viewed as an area to be expressive and celebrate the confluence of so many activities.





## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2D. DESCRIBING THE GUIDING PRINCIPLES

#### 5. Progressive CIRCULATION

*a place of multi-modal access*



**Downtown South** is a place for livable, safe and **Progressive Circulation**. The focus of this Complete Streets Master Plan is clearly on the development of corridors within the DSNID and how the public realm (streets and open space) interacts with adjacent property development. Circulation in the Downtown South area is heavily defined by the automobile. This is due to many factors, including the history of South Orange Ave as a place to 'drive through' and not 'drive to', and the fact that most of the land uses along Orange were strip commercial and hospital with industrial uses along the rail-line. Even the close-in neighborhoods such as Delaney Park were heavily disinvested as recently as the 1990's.

Today, Orange Avenue, the Downtown South area and the nearby neighborhoods are rapidly transforming. The DSNID area has been a prime beneficiary of the larger story of Orlando's rediscovery and reinvestment in its general downtown. However, because of its unique resources and diverse economic engines, the DSNID is enjoying a significant part of Orlando's urban activity. Yet, with that growth, the circulation system that connects Downtown South is relatively the same as it was 30 years ago.

Now it is time to think about the future of circulation in Downtown South in a manner that is aligned with the larger story of economic development, social connection and community livability present in the DSNID (and greater downtown). Downtown South will be well connected for all modes of travel, bringing pedestrian and bicycle movements safer and more comfortable while anticipating the evolution of transit, ride-share, autonomous vehicles and other emergent connective technologies and data sources that will continue to grow within the City.

Progressive Circulation also has a connotation of incremental change over time; a 'progression' of evolutionary investments. It is not feasible or practical for every street to be completely reconfigured all at once. Therefore, it is important to recognize that some investments will be stepping stones toward better service, and a safer, more comfortable and attractive environment - with the long term view in mind. The Complete Streets elements of this report address these topics in detail. The key idea is that each investment in the public right-of-way and the adjacent private development is working to make the circulation corridors of DSNID more functional, multi-modal and attractive places for people.



***Downtown South** will be a multi-modal place that better supports transit, bicycle and pedestrian mobility, while looking forward to progressive innovations in transportation.*



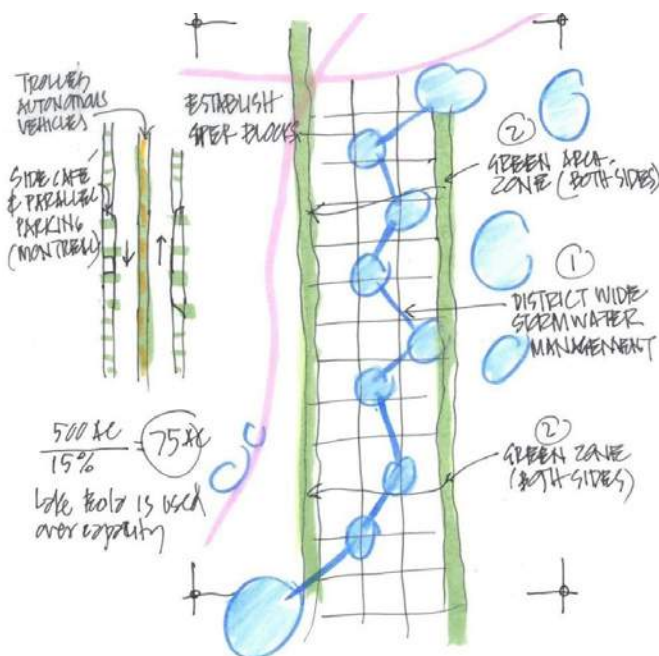
## 6. SUSTAINABLE Infrastructure *forward looking urban stewardship*



**Downtown South** is a place to test, deploy and build upon a **Sustainable Infrastructure**. Many of these ideas are articulated in the Green Works Orlando initiative. This program includes specific programs and goals regarding the use of resources, energy, water, and community livability. <http://www.cityoforlando.net/greenworks/>

Downtown South provides an ideal platform for testing and deploying these ideas. Because of the variety of building types, energy consumption, waste and water are all factors that need to be addressed both in new or high-tech facilities, as well as retrofitting older facilities that still have a sufficient future lifespan (Return on Investment), including incremental enhancements as well as structured certification programs such as LEED designation. Technology also allows for a significantly well-connected, efficient community in Downtown South because there is such a wide range of residential product, broad employment needs, strong schools and community service.

**Downtown South** is a place that will think big about sustainability, connected systems and technology while identifying specific opportunities to deploy actionable ideas.



Public infrastructure will focus on a variety of sustainable infrastructure models. This may include incorporating the trends toward 'smart cities', with connected data across the DSNID, energy efficient LED street lighting and photovoltaic power support. Progressive Circulation and movement towards more complete streets along with infill development will build efficiency in transportation alternatives beyond the single use auto trip.

From an environmental point of view, the DSNID provides the opportunity for substantial gains in environmental quality of this aged commercial/ industrial area. Brownfield sites will be redeveloped (some have already been remediated as part of new development). Water quality can be enhanced as has been done at Lake Beauty within the larger downtown stormwater system. Innovative techniques such as rain gardens have already been implemented on the Orlando Health campus to enhance the pretreatment of stormwater before it migrates to the general drainage system.

Over time, additional stormwater facilities and usable open space will be necessary and these can be done in innovative ways that can be co-located. Places such as Lake of the Woods are an opportunity to reclaim space and provide multiple benefits. Finally, there is an opportunity to increase the urban tree canopy throughout Downtown South. This means street trees, but also private property landscaping that emphasizes canopy or medium size trees (as opposed to palm trees) to create shade, urban habitat and a 'greening' of the urban landscape.





## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2D. DESCRIBING THE GUIDING PRINCIPLES

#### 7. ECONOMIC DEVELOPMENT

*new investment, job growth and opportunity*



**Downtown South** is a place for **Economic Development**, including business and employment growth, as well as residential infill and neighborhood enhancement. As the taxable value, employment base and residential densities increase, new opportunities will continue to grow. The most significant driver is clearly the healthcare industry (anchored by Orlando Health) which brings as many as 10,000 people (employees, patients, families) to the district every day (*source, Orlando Health*). However, the support industry and commercial services of the area are responding not only to the regional growth of downtown Orlando, but also the strength of the resurgent close-in neighborhoods.

This growth is causing emergent change and redevelopment within the DSNID that was only an idea when the 2008 South Downtown Vision Plan took a first look at the area as a defined 'place'. In the last 10 years, the hospital area has expanded and commercial frontage properties on Orange Avenue have been steadily redeveloping, building upon the economic growth of existing industries towards higher forms of investment. These activities are projected to continue.

However, several new types of projects are bringing a new dynamic into the area creating a more fully formed District. The redevelopment of an old shopping center and drive-in movie theater into the mixed-use Lofts at SoDo project was a dramatic signal in the late 2000's that the area was poised to serve a more complex, dense and diverse user group – including modern residential mid-rise apartments. This product is complemented by new infill condominium flats, townhomes, duplex and single family renovation at varied price points.

Looking just beyond the District, the northern and southern gateways, the new Novel at Lucerne and ECCO projects bring hundreds more residential units, in addition to grocery and support retail. This growth will not only support existing businesses, but drive the market to continue to examine the viability of other redevelopment sites. It is notable that, although each of these projects are not technically in the DSNID, they have both included the SODO 'address' as part of their marketing platform and will positively affect the social, physical and economic landscape of Downtown South.

**Downtown South** is not only a place of new business investment, but taglines such as 'LiveSodDo' are becoming market branding techniques. Meanwhile, the broader real estate community is recognizing Downtown South as new development frontier within Orlando's urban center.



## 8. Program IMPLEMENTATION

*leading and administering priorities, policies and partners*



**Downtown South** is a place that will guide the Implementation of the Program. The development of the DSNID has been a 10-year process from 2008 to 2018. Today, the viability of the DSNID is stable with an established leadership structure. Although their respective missions, leadership and funding are different, the DSNID and SODO Main Street are collaboratively aligned, and mutually supportive. The business community understands the objectives and the potential. The neighborhoods recognize SoDo as part of their community. And the real estate community has recognized Downtown South as a marketable address. With the appointment of a dedicated City of Orlando Program Manager, the linkage between community volunteerism, structured organizational leadership and City Management is complete.

Looking forward, the DSNID Advisory Council will continue to work with the business and resident community, Main Street and the City to effectuate positive change through programs, policy and projects. It is important that the DSNID shows progress across multiple fronts according to an ongoing platform of initiatives and actions. This should include an appropriate mix of physical improvements that are visible evidence of change, to compliment other ideas such as job training/placement, development policy or economic partnerships, which are equally important, but harder for the public to easily observe.

Maintaining an organized approach to Program Implementation takes time, energy and effort. It is important that leadership maintains a healthy balance of established participants that provide continuity over time, while new voices are embraced and included to provide new ideas and fresh initiative. The focus of the DSNID may naturally shift to meet evolving community needs and opportunities, while maintaining an eye towards the ideas noted in these Guiding Principles. The establishment of the DSNID, including the approved referendum for millage assessment, gives the District both political and community gravitas that not every area enjoys.

With a strong organizational structure and a committed source of locally provided funding via the 2014 referendum, the DSNID is an important partner for other local government, institutional entities and private investment to align with and leverage in order to build a better Downtown South.

*In **Downtown South**, growth and implementation occur at all scales. Large investments coupled with niche enhancements contribute to the overall sense of place, character and quality.*





## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2E. ENVISIONING THE GUIDING PRINCIPLES

**Orange Avenue** is a mixed-use corridor that is transitioning rapidly. Change is happening in the form of both current and future street improvements by FDOT, the continued growth of Orlando Health, infill/redevelopment, ongoing reinvestment on individual sites, and significant new mixed-use residential development at Gore Street and Pineloch Avenue that will drive further social and economic activity. There are also aspirations for future expanded transit service (including alternate technologies) and continued streetscape improvements beyond the current FDOT resurfacing project.

A ground level sidewalk view on the east side of Orange, south of the intersection with Harding Street, looking north, was selected as the model for the vision. At the time of the photo in fall of 2017, the site was still a greenfield. By summer of 2018 it is under construction as a new commercial building. This view exhibits opportunities typical not only to this site, but to many areas of Orange Avenue.

The current and proposed Development Standards require sidewalk easements that can allow for expanded pedestrian zones with street trees between the walk and the curb, thus defining and protecting the pedestrian walk as well as visually narrowing the

view-shed of the roadway. New buildings include window transparency, active corners, awnings, cornice, water-table foundation, a mix of materials and other details to 'humanize' the building to the pedestrian scale. Active ground floors include opportunities for small pocket plazas at corners where features such as public art, outdoor retailing or dining can take place. The block north of Harding depicts redevelopment through the ongoing investment in the area.

Crape Myrtles can be used in the FDOT right-of-way as large, single trunk (8 foot clear trunk) specimens that will provide visual impact and shade in the warm months while maintaining views to retail windows and signs. These trees can also be used under overhead power lines. Larger canopy trees can be used behind overhead power in larger planter areas. Small planting areas soften building foundations between doorways and at strategic corners and parking areas.

Streetscapes are simple, but consistent. Standard white concrete is used for conventional sidewalks (goal: 8'-10' clear walkway) and special pavement treatments are shown at intersections and at crosswalks. New street lighting, banners, bike racks, seating and planter 'bulb-outs' (wrapping on-street parking) indicate enhanced site furnishings and street treatments.



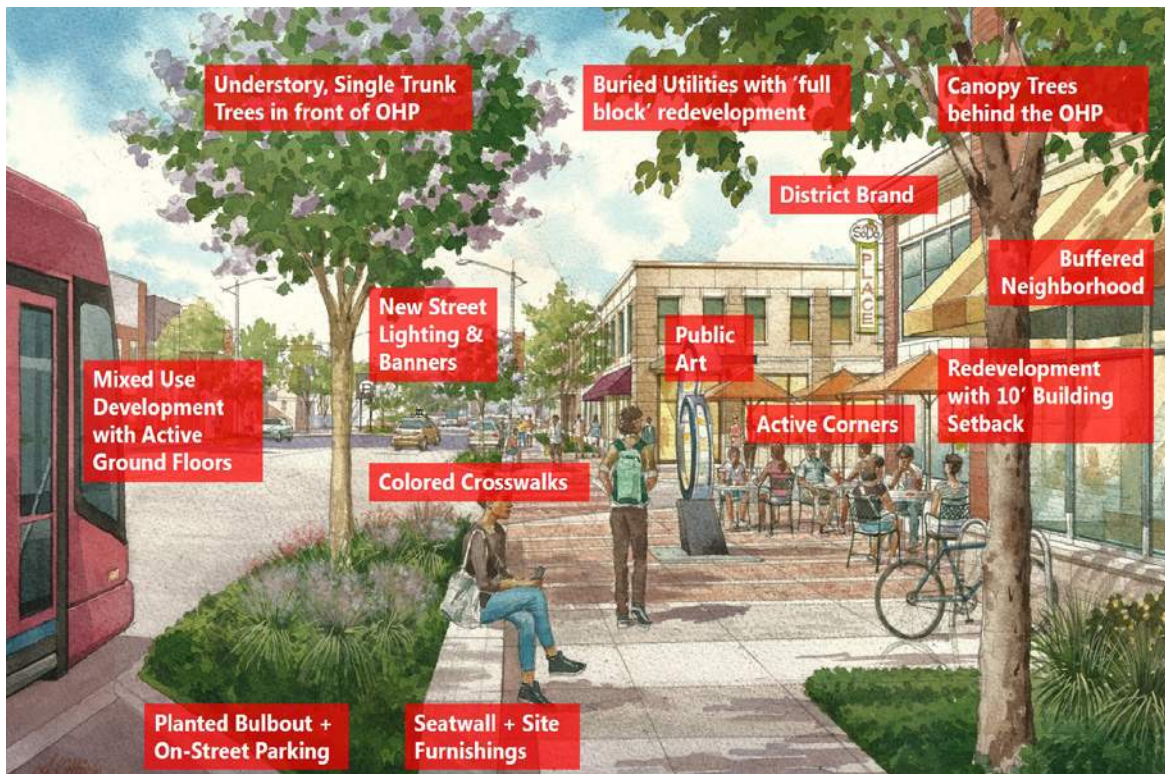


# VISIONS OF PLACE *Imagining Our Downtown South*

## ORANGE AVENUE



**Existing Conditions** include aged buildings, underutilized parcels, narrow FDOT sidewalk, lack of street trees, strong visual presence of overhead power lines and poles and inconsistent lighting.



**Vision Features** include an array of strategies between new public street features and responsive development that is scaled and positioned to make walkable, interesting, shaded urban places.



## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2E. ENVISIONING THE GUIDING PRINCIPLES

**Division Avenue** is a working industrial corridor that is evolving in its function both within Downtown South and within the larger City. The historic use of Division Avenue is as an industrial corridor, parallel to Interstate 4 (with multiple access points), proximate to the Rail and part of the regional Strategic Intermodal System route. Each of these functions continue and will remain into the future. However, Division's importance has diversified as an important intra-city local route; parallel to Orange and Parramore into the heart of new development in Downtown Orlando, including multi-modal features such as the planned & funded extension of the Orlando Urban Trail and planned Lynx service.

Division is also supporting new forms of development, including light industrial, office flex, clean-tech, and distribution. Mixed-use development (including residential) has been discussed for certain properties and has been made possible through a 2009 Growth Management Plan amendment. Finally, with I-4 reconfigurations and general growth of the region, Division is an important gateway into Downtown South.

A ground level sidewalk view was selected for the east side of Division, looking north, just north of Kaley Street. The image shows a 3-lane roadway, with aged sidewalk on the east but ample tree lawn/right-of-way. The properties on the east side of the street are generally larger, with fewer driveway cuts and may be candidates for redevelopment. The west side of the street includes overhead power at this location, with more frequent driveway cuts.

The vision for Division is of a corridor that will maintain its industrial function (including semi-trailer truck access), but will also serve more diverse land uses and become more unified in its appearance. New development/redevelopment will address the street and include sidewalk easements to allow for expanded pedestrian areas, on-street parking and 'pocket' locations for seating, landscape and art. The new Urban Trail extension will support both employment access into the area, as well as regional mobility. Lighting and other streetscape design branding elements will be similar in materials to other areas of the DSNID, but may take on a more rustic/rough character to artfully reflect the industrial roots of the area.



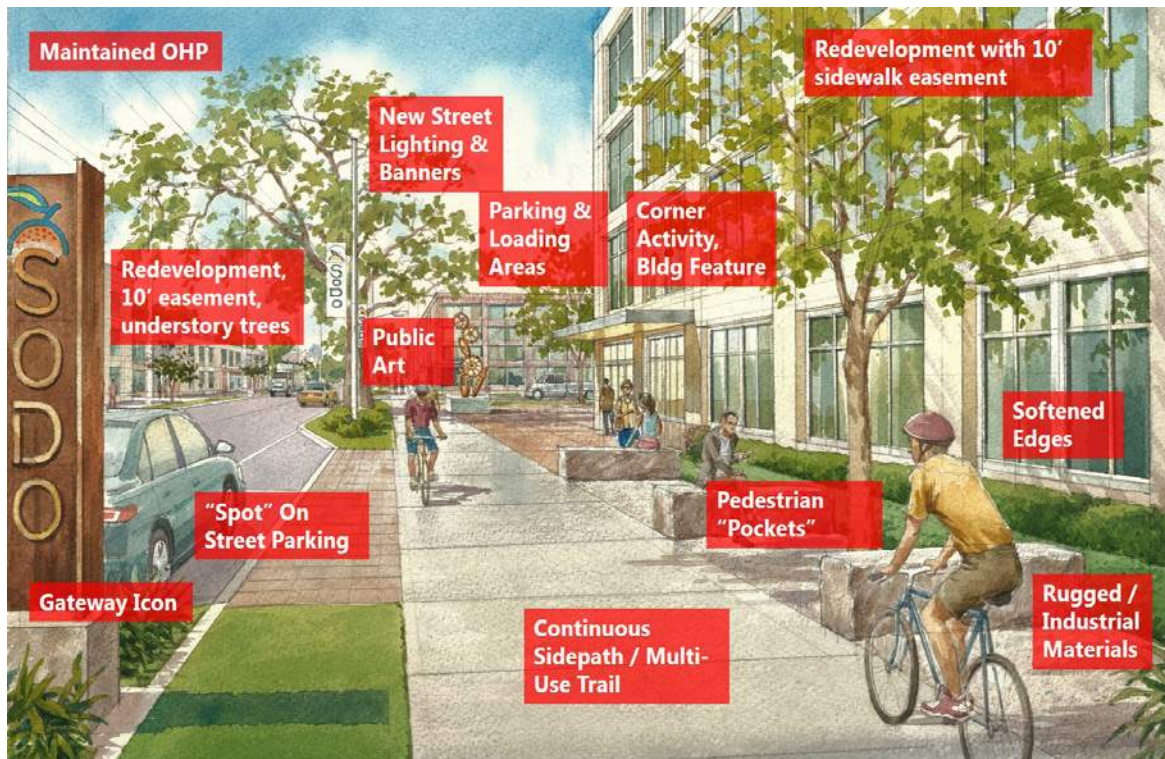


# VISIONS OF PLACE *Imagining Our Downtown South*

## DIVISION AVENUE



**Existing Conditions** include industrial uses, aged buildings, overhead powerlines and frequent driveway aprons. Pedestrian, bicycle and street character elements are minimal.



**Vision Features** include a restructuring of the roadway corridor to continue to support industrial uses, while incorporating features to better support redevelopment, bike & pedestrian access and on-street parking where feasible. Additional limited streetscape treatments (trees, lights, materials) are used to provide a simple, but more consistent and comfortable appearance to the overall corridor.



## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2E. ENVISIONING THE GUIDING PRINCIPLES

**Gore Street** is an important local connector east to west, from Delaney Park across the DSNID to the neighborhoods west of Interstate 4. Gore forms an important DSNID gateway at Division and at Orange, but also is an interesting corridor, primarily populated with healthcare and light industrial uses, some of which are candidate (or active) redevelopment sites. Today, Gore is a 4-lane street with on-street parking and minimal sidewalk infrastructure.

A key facet of Gore, as an east-west 'neighborhood connector', is that it carries less than 12,000 average daily vehicle trips (Orange County data). By comparison, Edgewater Drive in the heart of College Park carries well over 20,000 ADT, operating as a 2-lane street, with center turn lane, on-street parking and bike lanes. This combination of redevelopment sites and a roadway that may have more capacity than needed creates the opportunity for a more livable local connector street.

An eye level view (Google Earth) was selected for the south side of Gore, looking west towards the Rail and the Thomas Lumber site. The size & scale of the roadway is apparent, and lack of pedestrian, bicycle or other street amenities is reflective of the longtime

industrial use of the area. The Lynx Transit stop is marked only with a sign. The accessibility concerns with sidewalks, intersections, utility poles and even the actual Thomas Lumber building are visible. The intersection with Division and I-4 is visible in the distance.

The vision for Gore is as a livable, multi-modal street that includes appropriate lane reduction in order to accommodate dedicated bicycle and sidewalk facilities across the DSNID while maintaining on-street parking. This repositioned east-west corridor can eventually extend beyond the limits of the DSNID to connect neighborhoods and serve as a key intersection with the planned north-south Urban Trail extension on Division. Streetscape features include full transit shelters, with special branding graphics for the area of SODO along with other pavement materials, lighting, furnishings and graphics that tie this area to the rest of the District to the south.

In terms of redevelopment, the Thomas Lumber site and other large industrial sites in the area may be excellent candidates for a loft style mixed-use product, perhaps picking up on some of the brick warehouses immediately north of Gore along the rail line.





# VISIONS OF PLACE *Imagining Our Downtown South*

## GORE STREET



**Existing Conditions** highlight the scale of the road, the lack of auto traffic, minimal pedestrian streetscape elements and large lot light industrial.



**Vision Features** include livable, multi-modal neighborhood connection with new streetscape, bike, auto and transit features, all in place to support quality redevelopment.



## 2 | VISIONS OF PLACE *Imagining Our Downtown South*

### 2E. ENVISIONING THE GUIDING PRINCIPLES

**Michigan Avenue** is an Orange County road that serves as an east-west corridor linking residential uses east of the DSNID, through commercial and industrial uses to Interstate 4 and then continuing towards Holden Heights and Orange Blossom Trail. Because Michigan is a regional corridor, it does include DSNID 'gateway intersections' at Division Ave (industrial/commercial), Orange Ave (commercial) and Delaney Ave (commercial/residential). Within the DSNID, Michigan is a large 4-lane facility with center/left turn lanes and access control medians.

From a land use point of view, Michigan is highly diverse. East of Orange Avenue, Michigan is fronted with narrow commercial strip uses on the north (parking in front, alley behind) and a suburban shopping mall (grocery anchors) to the south. There are opportunities within these two areas for small business reinvestment as well as wholesale redevelopment. As this occurs, it is important to provide visual identity and bicycle and pedestrian safety features as part of the ongoing evolution of the corridor. West of Orange Avenue, Michigan supports industrial uses and crosses the rail. Traffic tends to speed up approaching I-4, which makes bike and pedestrian safety even more challenging.

A birds-eye view (Google Earth) was selected for the east side of the Delaney intersection, looking west on Michigan. The view clearly shows the scale of Michigan's expansive intersection, limited pedestrian facilities (including accessibility issues), strip commercial to the north and large lot shopping center to the south. Street trees and other furnishings are limited or absent, and some parking areas overlap into the right-of-way.

The vision for Michigan is as a largely redeveloped corridor with targeted intersection and streetscape enhancements (including limited sidewalk easements). Over time, the strip commercial may redevelop as is currently happening on Orange. When this occurs, the buildings can be moved toward the street, with parking and alley dimensions consolidated behind the buildings to optimize the limited available property depth. The large shopping center parcel (6+ ac) to the south is a prime location for mid-rise redevelopment, similar to what is currently being constructed at Gore St (Novel Lucerne) at Pineloch (ECCO). The Delaney intersection is rebuilt as a neighborhood gateway, including marked/branded pedestrian and bicycle facilities. The streetscape is enhanced through limited sidewalk easements.





# VISIONS OF PLACE *Imagining Our Downtown South*

## MICHIGAN AVENUE

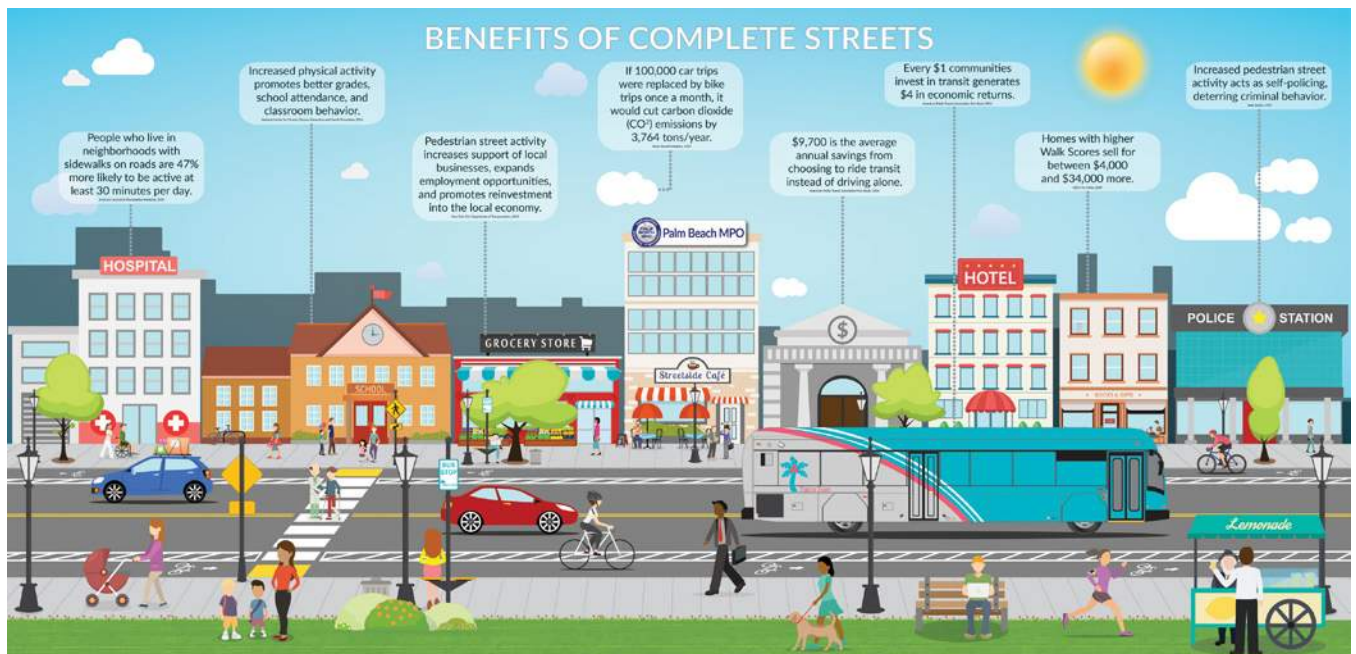


**Existing Conditions** clearly show the different land use types along the expansive Michigan Corridor. The area is highly active with regional and local traffic, as well as significant pedestrian and bicycle activity, some local and some driven by nearby bus transit connections.



**Vision Features** include a structured corridor redevelopment program (similar to Orange) that includes more urban characteristics for new buildings, enhanced streetscape, pedestrian and bicycle elements.





## SECTION 3 | MODELS FOR PROGRESSIVE CIRCULATION

### Progressive as defined in Merriam-Webster.com

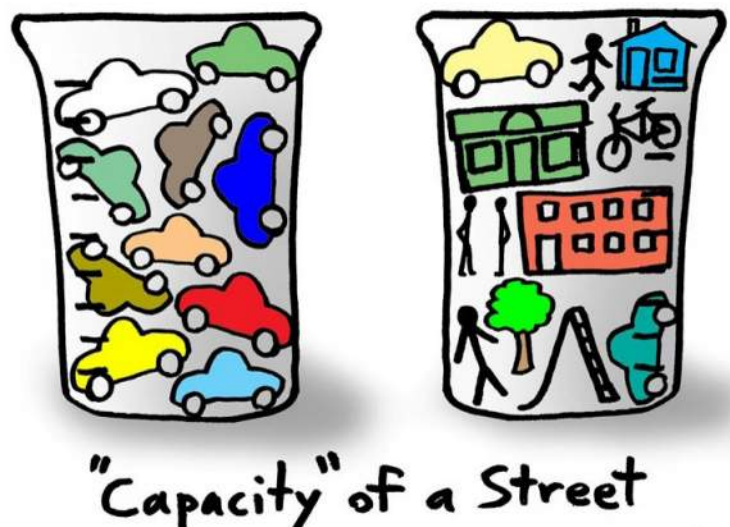
- 1: a. of, relating to, or characterized by **progress**  
b. making use of or interested in **new ideas, findings, or opportunities**
- 2: of, relating to, or characterized by **progression**
- 3: moving forward or onward : **advancing**

The Downtown South Complete Streets effort is designed to advocate and implement improvements to the urban street environment that support quality of life, multi-modal circulation and long term community economic value. What this means to the project stakeholders is taking charge of the streets as part of the **Public Realm** and better balancing vehicular needs with other modes of transportation as well as broader local objectives. The work of the various stakeholders in the June, 2016 workshop, as well as public officials, supports the objective of thinking 'progressively' about the streets in Downtown South.

'Progressive Circulation' is therefore used in several connotations across economic, social and physical topics. Downtown South is interested in the upward mobility of the entire district, and

recognizes the many roles that streets have to play in the overall form and function of the area. Downtown South is interested in opportunities for the street environment to take advantage of new ideas and creative opportunity within District. Downtown South is also aware that the development of streets and adjacent land uses will occur over time, and so it is important that one investment builds upon another such that over time, each corridor will become a more livable place that builds in value and in function.

This section therefore addresses several aspects of Progressive Circulation, including a discussion of **Complete Streets**, considerations of **Emergent Transportation** alternatives and a **Review of Comparables** from locations that have incorporated ideas that may apply to Downtown South (and Orlando's downtown in general).



Graphic credit:  
Ian Lockwood



## 3 | MODELS FOR PROGRESSIVE CIRCULATION

### 3A. COMPLETE STREETS

Streets are a vital part of the public realm and any definition of Complete Streets begins with a discussion of the many roles of the street beyond simply moving automobiles. Progressive ideas about transportation and urban circulation really focus on 4 areas of critical service: **Placemaking** (character and community development), **Multi-modal access** (balanced with automobiles), **Safety and Livability** (calming traffic and protecting all users) and **Environment/Microclimate** (enhancing local urban ecology).

These ideas have been embraced not only by the City of Orlando, but also by FDOT through the forthcoming Context Sensitive Design Manual which has been several years in the making.

Streets have different roles, and it is appropriate to think of 'Complete Streets' in degrees as part of the 'progression' of urban circulation. Certain streets have a more critical regional mobility role, some serve local retailing, some are residential.



  
Economic Growth +  
Development

  
Activate the Public Realm

  
Timeless

  
Beautiful



↑ Bicycle Trips.



↑ Trips by Public Transit.



↑ Walking Trips.

Multiple Modes of Transportation

Connected Network of Streets

Connections to Public Resources + Destinations

# MODELS FOR PROGRESSIVE CIRCULATION

## COMPLETE STREETS

In Downtown South, most of the streets perform a mixture of all these functions (and more), and so it is important to look for balanced solutions that reconcile tradeoffs in ways that provide the correct emphasis without excluding other needs or foreclosing future opportunity. Regardless of the situation, every street can be made 'more complete' and can also be better positioned for subsequent additional investments.

Not every street can perform every function all the time. But every street in Downtown South can, in some way, be made more beautiful, more livable, more walkable & bikeable, more supportive of transit, more sensitive to the neighborhoods and more valuable for local business and property investment. And every street in Downtown South can reflect the local art, industry, business and social fabric in ways that are distinctive and interesting.





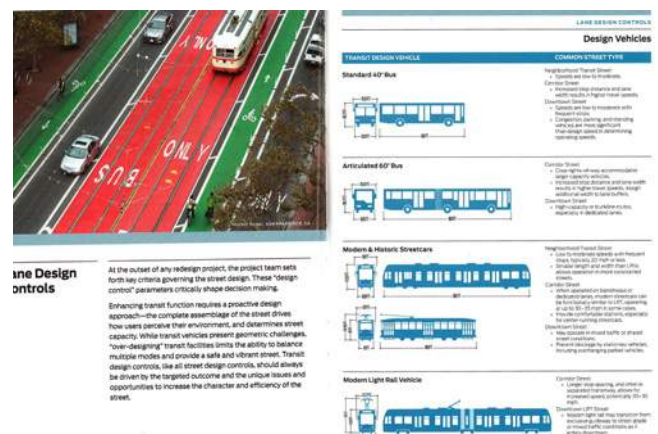
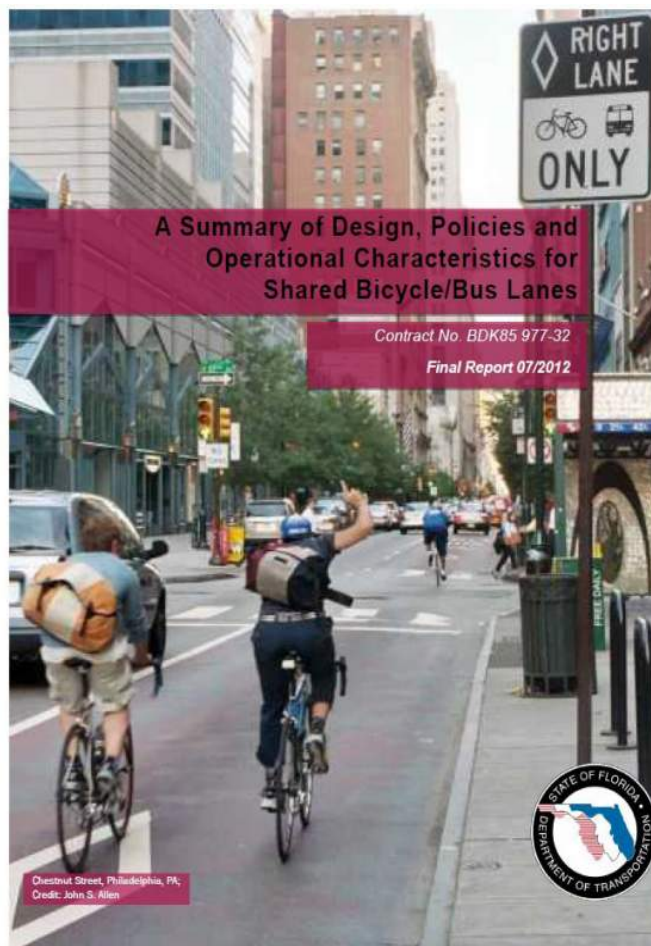
### 3 | MODELS FOR PROGRESSIVE CIRCULATION

#### 3B. EMERGING TRANSIT - TRANSIT AND SHARED LANES

The approach to complete streets in Downtown South includes accommodation of currently available transit, but also long term thinking about how transit and shared lane use may evolve in Orlando's growing downtown. Clearly, as Orlando's downtown region grows, access to transit and walkable/bikeable 'last block' solutions will be part of the urban experience.

While Orange Avenue (in particular) remains an important local north-south commuter corridor, urbanization and redevelopment is taking place in real time with dense mixed-use development, and several similar sites remain available for future investment. This is in addition to the aggregate magnitude of many smaller, infill opportunities.

Taken together, it is reasonable to believe that transit and shared lane use (bikes, cars and bus/rail) may evolve and co-exist as they have in other, older cities where similarly sized rights of way have achieved denser corridor development patterns within vibrant urban districts. It is conceivable that Orange Avenue (for instance) could evolve as a primary transit corridor where the use of vehicular travel lanes is reallocated to accommodate the needs of a changing Downtown South community.



Examples of policy and application of shared use lanes.

# MODELS FOR PROGRESSIVE CIRCULATION

## AUTONOMOUS VEHICLES AND CONNECTED TECHNOLOGY

A key variable for the long range planning of any significant vehicular corridor is the advent of autonomous vehicle technology. Many agencies and institutions (including FDOT) are researching and developing ideas about the potential issues and opportunities associated with both autonomous automobiles, shipping and transit vehicles. Parallel to this is the associated phenomenon of ride share and ride service providers such as Lyft and Uber.

All of these factors, as well as other demographic/lifestyle choices are resulting in trends towards lower ratios of personal vehicle ownership - particularly in millennials who are prone to live in the types of urban mixed-use development found throughout downtown Orlando, and growing in Downtown South.

In practical terms, these trends may likely affect Downtown South in several ways based on the current discussion across the industry:

(1) Some small reduction in total trips and gravitation to transit + walk/bike for 'last block' access. This is in part due to lower car ownership ratios, as well as denser/mixed-use development districts being more supportive of transit.

(2) Enhanced safety and efficiency in traffic movements. Speeding, delayed turning movements and unsafe activities such as texting while driving should all be reduced. This can also assist in the safety factor of shared bus/bike or bike sharrow solutions.

(3) Reduced need for dedicated parking. This can be a material advantage for both surface parked and garage parked projects. Lowered parking ratios necessary to finance and operate projects will reduce overall project costs, while creating opportunities for enhanced outdoor space, additional development and accelerated projects due to the reduction in development costs related to parking requirements.

(4) Increased need for 'drop-off' areas, including potential conversion of some on-street parking to pick-up/drop-off. What riders will increasingly require is the 'service of the ride', not a permanent place to 'store the vehicle' when they are not using it.



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HOME OUR EFFORTS CALENDAR RESOURCES 2016 FAV SUMMIT

**RESEARCH PROJECTS**

Logos: University of Florida, HNTB, Bishop Consulting, etc.

**Research Projects**

- Florida State University - Enhanced Mobility for Aging Population Using Automated Vehicles
- University of Florida - Surveying Florida MPO Readiness to Incorporate Innovative Technologies into LRTs
- Embry-Riddle Aeronautical University - Autonomous Service Vehicle Project
- Florida Atlantic University - Unmanned Surface Vessel (USV) systems for bridge inspection.
- Florida State University - Envisioning Florida's Future: Transportation and Land Use in an Automated Vehicle World
- University of Central Florida - Investigation of Connected Vehicles to Inform

**KEY HIGHLIGHTS**

**FLORIDA LEGISLATURE**

In 2012, Florida was the second state to adopt legislation allowing for automated vehicle testing on public roadways. [Read HB 1207](#)

In 2016, Florida legislation updated the existing laws pertaining to autonomous vehicles. See House Bill 7027 for more information. [Read HB 7027](#)

Autonomous vehicles; operation. [Read F.S. 316.85](#)

Exemption from liability for manufacturer when third party converts vehicle. [Read F.S. 316.86](#)

Assistive truck platooning technology pilot project. [Read F.S. 316.0896](#)



## 3 | MODELS FOR PROGRESSIVE CIRCULATION

### 3C. COMPARABLES

#### NORTH ORANGE AVENUE ORLANDO, FL

Right-of-Way: 80 feet

Type: Three lanes, One way

Max Speed: 25mph

Context: Mixed-Use (Residential/  
Commercial )

Bicycle Infrastructure: On Street  
Lane

#### OVERVIEW

North Orange Avenue supports South bound traffic into downtown Orlando. Within the 80' right-of-way are three travel lanes with parallel parking flanking both sides and an on-street bike lane along the west side of the street. A minimum of 10' sidewalk widths are provided along the eastern mixed-use area with an additional 6' for street trees, pedestrian lighting and planting areas.

The western side has limited dedicated walkway space. The buildings along the eastern edge are also setback from the right-of-way which gives additional space to the pedestrian zone. Often times the additional spaces are utilized for seating areas, outdoor dining or landscape. The streetscape is activated with mixed-use development and provides amenities such as seating and bike share facilities.



*East Side of North Orange Avenue*

ENHANCEMENT TO STREETScape PROVIDES  
OPPORTUNITIES FOR ECONOMIC DEVELOPMENT  
AND GROWTH OVER TIME!

## KEY ELEMENTS

### SCALE + SETBACK

Provide pedestrian and retail space

### BUILDING ARCADES

Outdoor dinning, Amenity to retail, Activates the Street

### BIKE LANE

Creates a bicycle corridor

### ON-STREET PARKING

Access to retail and offices

### UPGRADED STREETSCAPE

Pavers, concrete, planters, bike racks

### CANOPY TREES:

Shade and Scale

## TAKEAWAY

- Buildings set back from the right-of-way can provide opportunities for additional pedestrian environments such as outdoor dining as well as provide additional landscape buffer.
- Wider sidewalks adjacent to tall buildings provide an ideal scale for the pedestrian environment.

## OUTCOMES



### MIXED-USE

Increase in residents and businesses helps establish a neighbourhood.



### LIVE AND PLAY

Increase access to commercial and dinning venues along the street

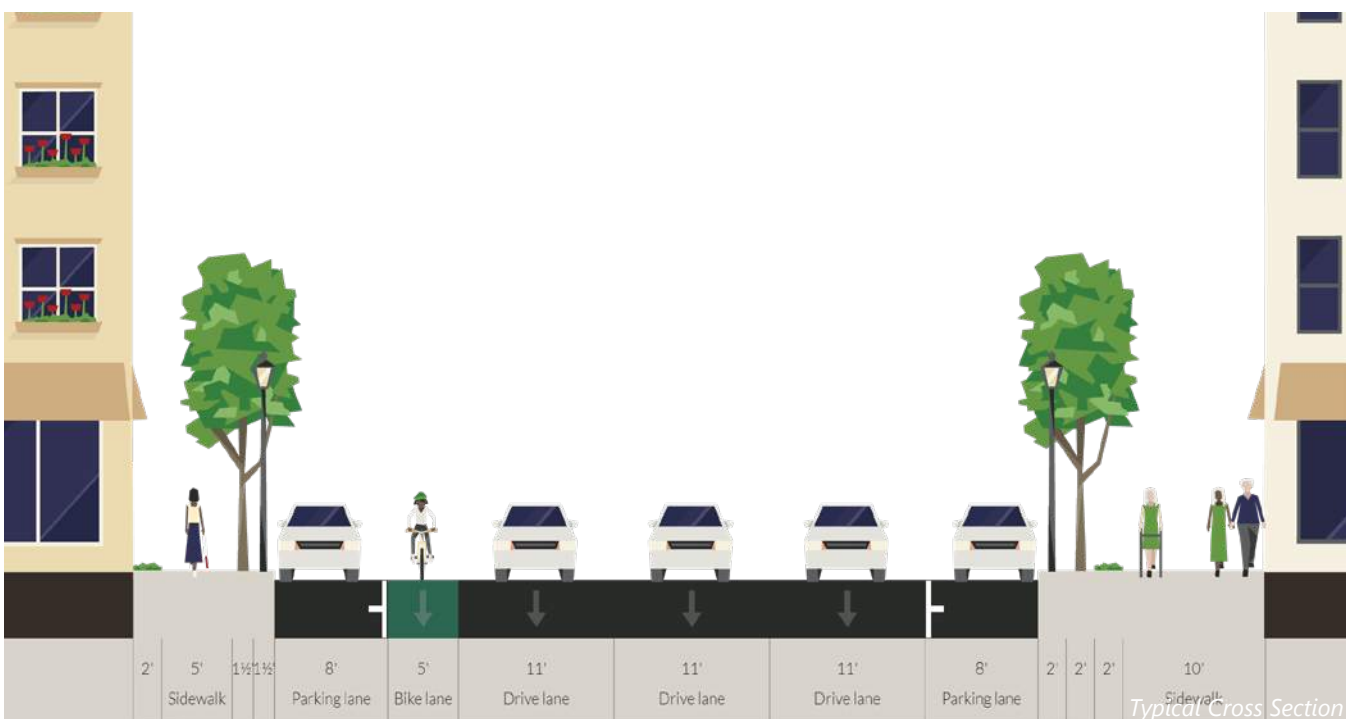


### BIKE SHARE

North Quarter Station has bikes available for rent.



View Looking South on North Orange Avenue



Typical Cross Section



## 3 | MODELS FOR PROGRESSIVE CIRCULATION

### 3C. COMPARABLES

#### NORTH ORANGE AVENUE

WINTER PARK, FL

Right-of-Way: 88 feet

Type: Four lanes, Two way

Max Speed: 30mph

Context: Mixed-Use (Residential/  
Commercial )

Bicycle Infrastructure: None

On-Street Parking: Both Sides

#### OVERVIEW

N. Orange Avenue in Winter Park is a four-lane, two-way road. The streetscape treatment provides curb extensions at various points along the corridor to separate drives and landscape areas and pedestrian spaces at certain key points and intersections.

Although fairly minimalistic, this treatment serves as a cost effective way to visually enhance the corridor and make it more user friendly for pedestrians. Pavers are utilized at the entry drive aprons to provide a visual cue to vehicles and also serve as an aesthetic treatment. Curb extensions with additional landscape and street trees also serve to provide more shade along the corridor and enhance the pedestrian experience.



## KEY ELEMENTS

### ON-STREET PARKING

Access to retail and offices

### UPGRADED STREETScape

Pavers at drive ways, Planter space for shade trees

### CANOPY TREES:

Shade and Scale

### POCKET PARK:

Activates Retail by providing a comfortable place for people to spend time.

### BUS ROUTE:

Bus Stops equipped with bench and litter receptacle

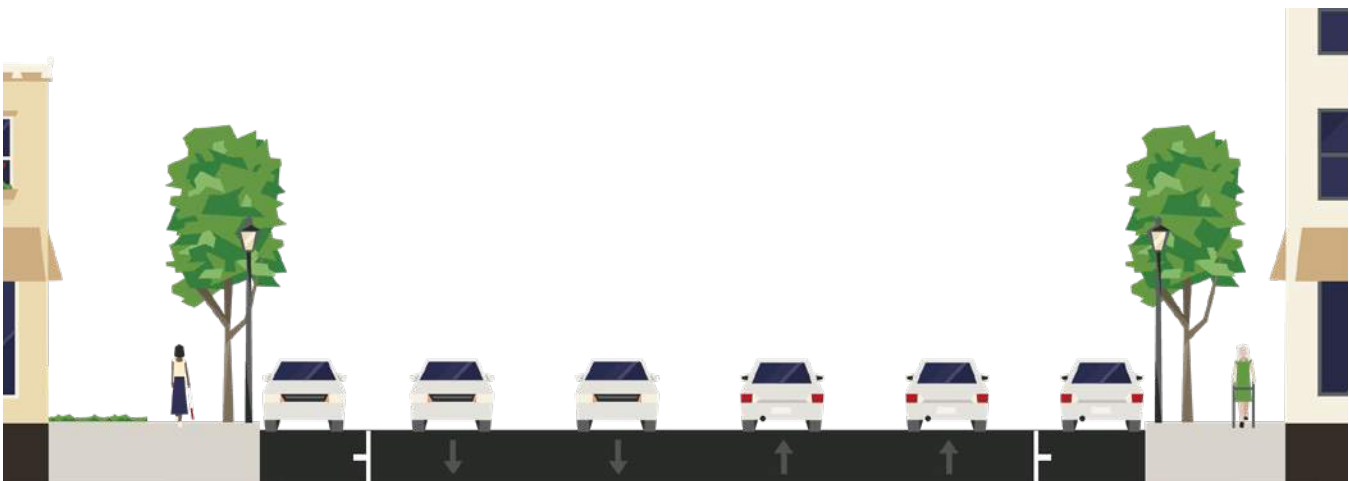
## TAKEAWAY

- Minimal streetscape treatments can enhance the pedestrian and vehicular experience along a corridor

*STREETSCAPES ESTABLISH A UNIFIED  
AESTHETIC AND CONNECT LONG  
STRETCHES OF ROADWAY!*



*View Looking North East on North Orange Avenue*



*Typical Cross Section*



## 3 | MODELS FOR PROGRESSIVE CIRCULATION

### 3C. COMPARABLES

#### BROADWAY & 3RD STREET THE PROMENADE LONG BEACH, CA

Right-of-Way: 78 feet

Type: Two lanes, One way

Max Speed: 25mph

Context: Mixed-Use (Residential/  
Commercial )

Bicycle Infrastructure: Cycle  
Track



The Promenade



### OVERVIEW

Broadway and 3rd Street serve as west-east circulation for downtown Long Beach. The streets were redesigned to each carry two lanes of traffic with parking on both sides and to repurpose one travel lane with a mile of protected bike lanes. The roadway project also modified a total of 23 signals to add bike signals and left-turn signalization.

PROVIDE OPTIONS FOR PEOPLE TO  
GET TO THEIR DESTINATIONS!

### TAKEAWAY

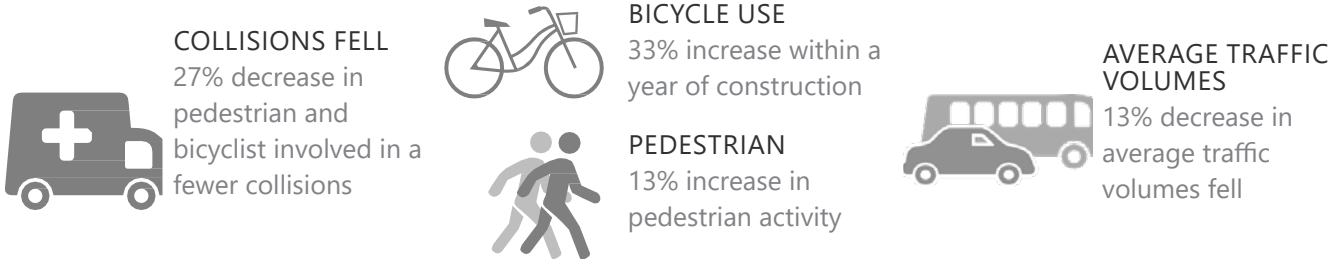
Allow for multiple modes of transportation, including dedicated space for shared bike/pedestrian access.



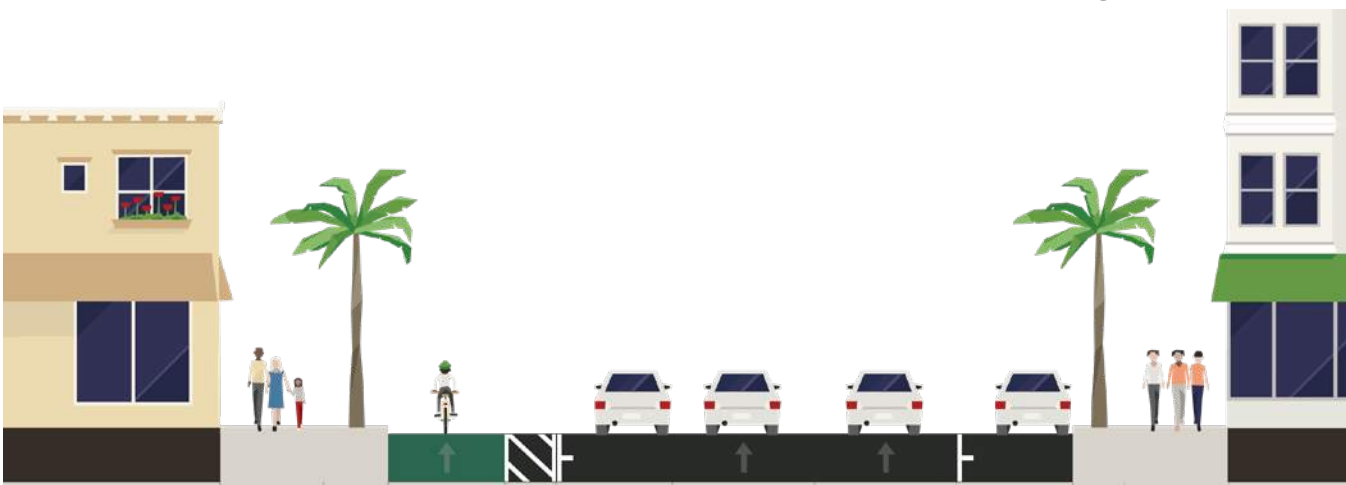


*Typical Cross Section: The Promenade*

## OUTCOMES



*View Looking North on 3rd Street*



*Typical Cross Section: 3rd Street*



## 3 | MODELS FOR PROGRESSIVE CIRCULATION

### 3C. COMPARABLES

#### INDIANAPOLIS CULTURAL TRAIL INDIANAPOLIS, IN

Right-of-Way: Varies

Type: Two lanes, Two way

Max Speed: Varies

Context: Mixed-Use (Residential/  
Commercial )

Bicycle Infrastructure: Shared-  
Use Path

On-Street Parking: None

#### OVERVIEW

The Indianapolis Cultural Trail is an eight-mile, urban pedestrian and bicycle trail in the heart of downtown Indianapolis. It was designed and constructed through a public-private partnership between the City of Indianapolis' Department of Public Works and the Central Indiana Community Foundation. Total phase 1 construction budget was approximately \$63 million, and expansion to new neighborhoods continues today.

#### TAKEAWAY

- At least \$800 million in development has occurred as a result of the \$61 million city, state and federal investment in the canal.
- During design and construction, approximately \$4 million in private funding supported new public art projects along the Trail.



REFLECT THE CULTURE AND  
CHARACTER OF THE DISTRICT



## KEY ELEMENTS

### MULTI-MODAL

Allows walkers, runners, and cyclists to safely move through downtown and connect to all six of Indy's cultural districts.

### PROMENADE

Extends the public space utilizes asphalt pavers for the surface.

### PUBLIC ART

Integrated into the design and serves as interpretive markers for the trail.

### STORMWATER

Alongside the bike path are rain gardens and landscape areas designed to capture and filter storm runoff and to provide greenery and shade.

### FURNISHINGS

Custom-designed benches, light poles, signage and trash receptacles contribute to the overall impression of safety, beauty and quality and also serve as artistic statements along the trail.



*Trail Users*



*Typical Cross Section*



## 3 | MODELS FOR PROGRESSIVE CIRCULATION

### 3C. COMPARABLES

#### PLANT STREET WINTER GARDEN, FL

Right-of-Way: 120 feet

Type: Two lanes

Max Speed: 25mph

Context: Mixed-Use, Historic  
Main Street

Bicycle Infrastructure: Dedicated  
Multi-Use Trail

On-Street Parking: Both Sides;



#### OVERVIEW

The West Orange Trail was proposed 20 years ago as a revitalization project for the City of Winter Garden. At the time 75% of Winter Garden was blighted and 80% of downtown space was unoccupied. Once the trail and feature Plant Street streetscape were built, they served as a catalyst for additional public investment to ignite private investment.

Today, a million people use the Plant Street segment of the West Orange Trail on an annual basis. The land along the trail has almost tripled in value and commercial space is fully occupied. New land uses, such as townhomes, multi-family, apartments and start-up small businesses are now investing in Winter Garden.



*'THE WEST ORANGE TRAIL IS OUR  
MAIN STREET'*

## KEY ELEMENTS

### SHOPS AND RESTAURANTS

Winter Garden has at least two bike shops, several restaurants, and a small but worthwhile history museum

### BUILDING ARCADES

Amenity to retail + Activates the Street

### DEDICATED BIKE TRAIL

Creates a safe bicycle corridor, central to many community events and activities

### ON-STREET PARKING

Access to retail and offices

## TAKEAWAY

- Winter Garden is a prime example of how a well-maintained rail-trail can transform an 'old Florida' downtown. As the focal point for the town, the bike trail has completely revitalized downtown Winter Garden.

## OUTCOMES



Bicycle trail serves as main street



Private investment has increased property values along the trail



Estimated a million visitors annually



*Caption*



*Typical Cross Section*



## 3 | MODELS FOR PROGRESSIVE CIRCULATION

### 3C. COMPARABLES

#### GAINES STREET TALLAHASSEE, FL

Right-of-Way: 69-80 feet

Type: Two lanes, Two way

Max Speed: 25mph

Context: Mixed-Use (Residential/  
Commercial )

Bicycle Infrastructure: On Street  
Lane

On-Street Parking: Both Sides,

#### OVERVIEW

Gaines Street serves as the main corridor connecting Florida State University, Florida A&M University and the city of Tallahassee State Capitol Complex. The project brings together many issues facing urban areas today including revitalization of obsolete industrial areas, preservation of historic resources, creation of liveable downtown urban centers and urban communities and enhancing opportunities for racial and economic diversity in our neighbourhoods.

The redesigned roadway addresses the reuse and revitalization of the corridor for residential, commercial and cultural uses with improved vehicular and pedestrian access throughout the area.



#### KEY ELEMENTS

##### ROUND-A-BOUT

Improved circulation and capacity

##### CROSSWALKS

Mid-block crossings

##### ROADWAY MEDIANS

Provide space for landscape and pedestrian refuge at crosswalks

ACCESS TO RESOURCES, CIVIC  
INSTITUTIONS, AND JOBS WITHIN A  
COMMUNITY SHOULD BE EQUITABLE.

## TAKEAWAY

Revitalization of roadways can address big problems facing urban areas.

Although roadway projects can revitalize an area, it's important to maintain the community. The All Saints District campaigned to 'Keep All Saints Odd' ultimately strengthening the message of the district and leading to a stronger sense of place.



*Caption*



*Typical Cross Section*

## OUTCOMES



Public sector investment in the project has resulted in significant private sector investment and development in the corridor and surrounding areas.



*View Looking East on Gaines Street*



*Typical Cross Section*



## 3 | MODELS FOR PROGRESSIVE CIRCULATION

### 3C. COMPARABLES

#### BELL STREET SEATTLE, WA

Right-of-Way: 65 feet

Type: One lane, One way

Max Speed: 25mph

Context: Mixed-Use (Residential/  
Commercial )

Bicycle Infrastructure: None

On-Street Parking: One Side

#### OVERVIEW

Belltown, the most densely populated neighborhood in Seattle, Washington, links historic Denny Park to Seattle's waterfront and downtown.

Bell Street was a two-lane, one-way road with parking and sidewalks along both sides extending eight blocks.

The 4-block section is the first phase of a long-range plan for a park corridor stretching from South Lake Union to Elliott Bay.



WHEN HIGH LAND VALUES LIMITED THE POTENTIAL FOR PARK ACQUISITION, COMMUNITY LEADERS & CITY DEPARTMENTS TURNED TO THE UNDERUTILIZED PUBLIC RIGHT-OF-WAY TO CREATE A MULTIFUNCTIONAL OPEN SPACE.

## KEY ELEMENTS

### CURBLESS

A subtle topographic shift raises the roadway up to the sidewalk level to create a curbless and continuous shared space surface.

### PAVING

Materials established a human-scale grid of smaller paving blocks (4' x 4') as opposed to the usual 'long' orientation of a straight paved street

### TEXTURE/COLOR

The use of texture and color cues slow traffic while providing visual eddies to delineate meandering activity zones for seating, planters, and art installations.

### TRAVEL LANE

The center mixed lane is 10' wide with light gray paving blocks, with 4' of darker gray flexible space on either side to allow through travel of wider vehicles, especially buses and emergency vehicles. The travel lane also shifts from side to side in a chicane-inspired treatment to calm driving speeds, and provides intermittent parking and loading zones.

## TAKE AWAY

### SHARED STREET

Auto-centric thoroughway into a shared community open space.

### STORMWATER

Treat stormwater through a series of rain gardens, which also add an aesthetic value to the public space.

## OUTCOMES



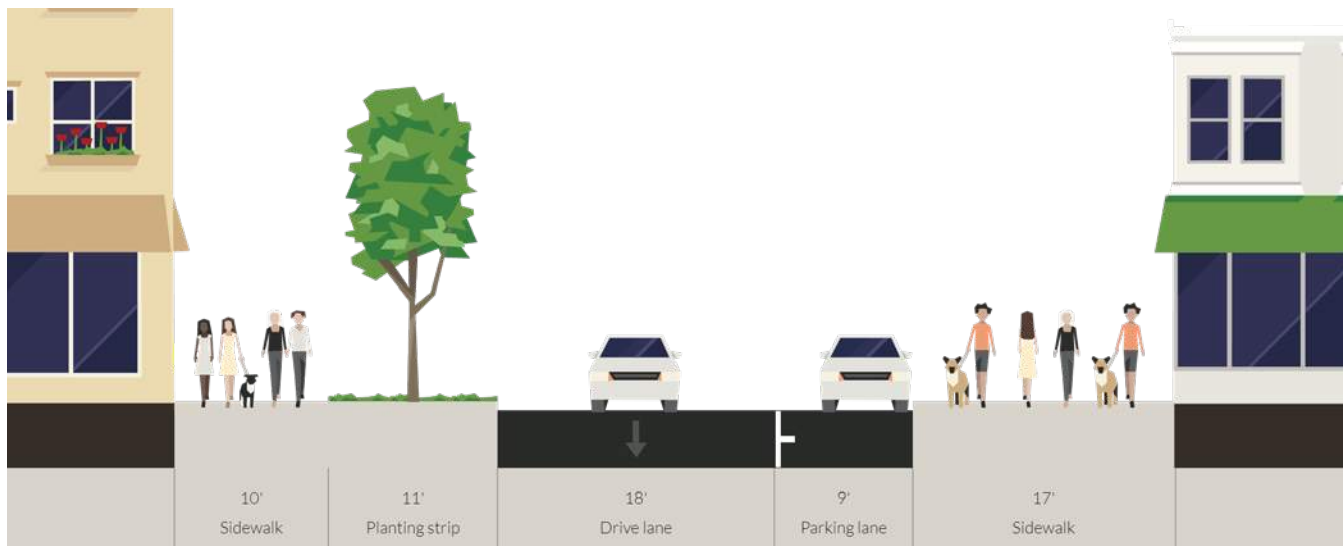
While private vehicles are forced to turn off the street after a block, bus routes are still served by the shared street.



City Parks & Recreation as well as SDOT continue to build off the project's success, through the support of additional transformation of rights-of-ways.



*Caption*



*Typical Cross Section*



## 3 | MODELS FOR PROGRESSIVE CIRCULATION

### 3C. COMPARABLES

#### FIRST STREET NOMA BID WASHINGTON D.C.

Right-of-Way: 105 feet

Type: Three lanes, Two way

Max Speed: 25mph

Context: Mixed-Use (Residential/  
Commercial )

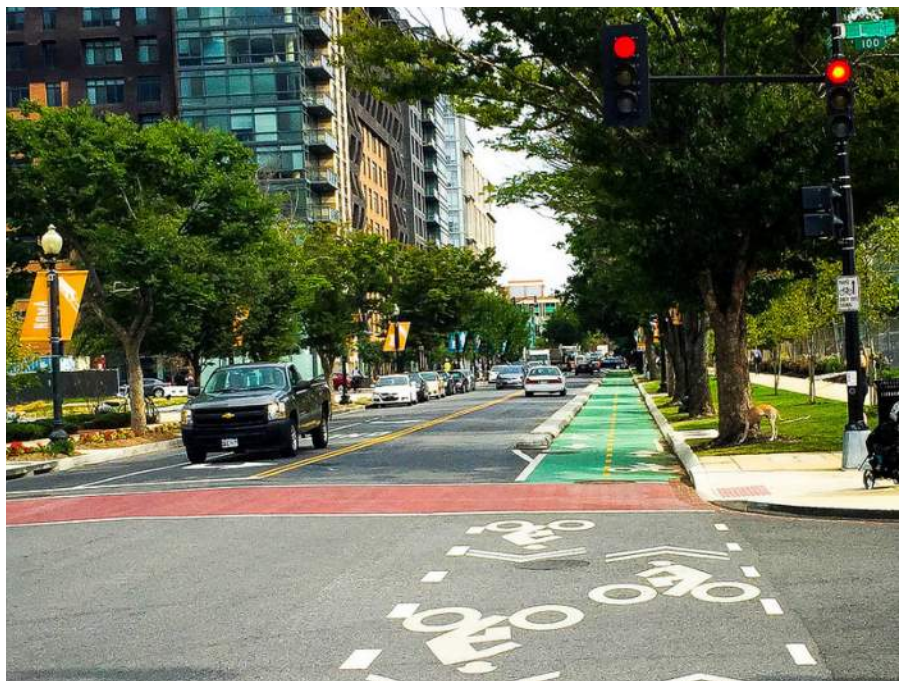
Bicycle Infrastructure: On Street  
Lane

#### OVERVIEW

NoMa was comprised of 6 million square feet of office space and virtually no residential buildings. The objectives for the NoMa Business Improvement District (BID) were to improve the quality of life, and make the District more attractive to businesses and potential residents.

First Street serves as the commercial spine of the NoMa BID. First street from K Street to Florida Avenue is intended to function as a linear park with a variety of seating opportunities, gardens, integrated artwork and commercial amenities at frequent intervals.

The street allows for flexibility between the curbs to configure the roadway for on-street parking and bicycle lanes or a combination of on-street parking and two-way cycle track. The street section is D.C.'s first separated cycle track.



*BRANDED & SIGNED, WITH GRAPHICALLY  
DISTINCT BIKEWAYS, LINEAR PARKS UNIFY THE  
URBAN EXPERIENCE.*

## KEY ELEMENTS

### CYCLE TRACK

Creates a safe bicycle corridor

### RAIN GARDENS

Treat stormwater in urban areas to enhance pedestrian environment by providing a buffer from the travel lanes Increase landscape area for successful tree growth

### SCALE + SETBACK

Provide pedestrian and retail space

## TAKEAWAY

- Using public investment to enhance private development. Creating places that focus on mobility, cyclist, and sustainability creates an environment for investment.

## OUTCOMES



### RESIDENTIAL UNITS

Turned a once stuffy business district into a lively community.



### LIVE AND PLAY

Increased access to commercial and dining venues along the street via a variety of park spaces, seating opportunities, and commercial amenities.



### CYCLE TRACK

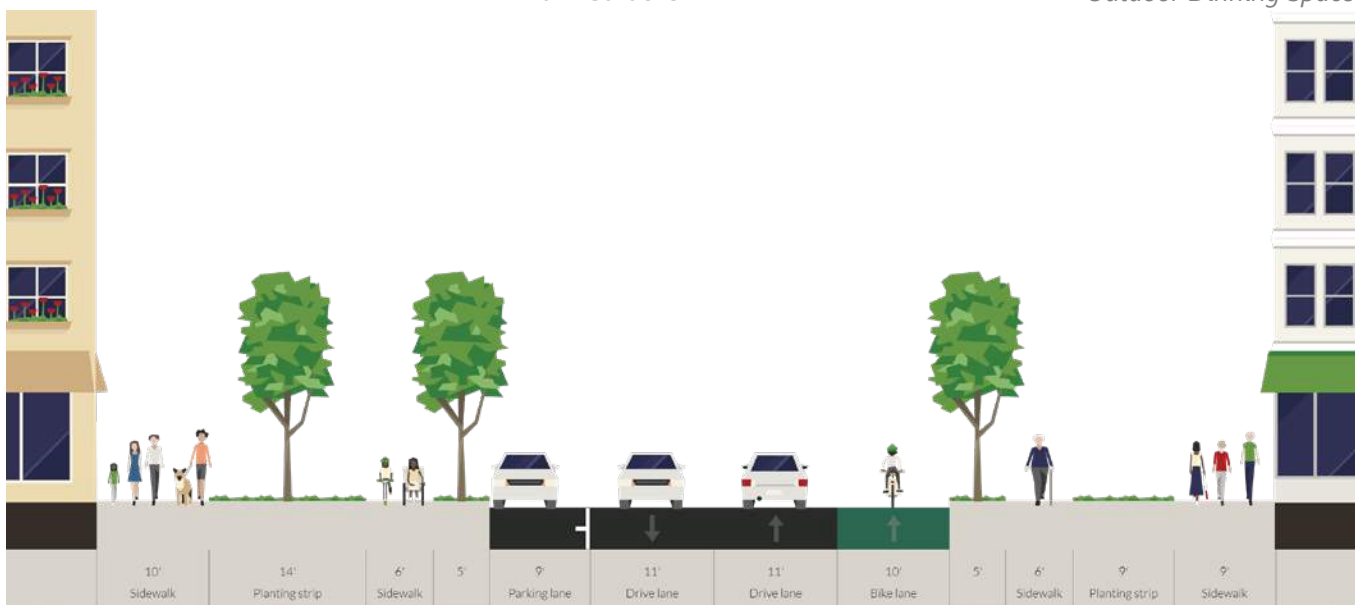
Filling in the missing gaps for the Metropolitan Branch Trail, which will eventually connect Union Station to Silver Spring. The project is a partnership with the city and DDOT.



Rain Gardens

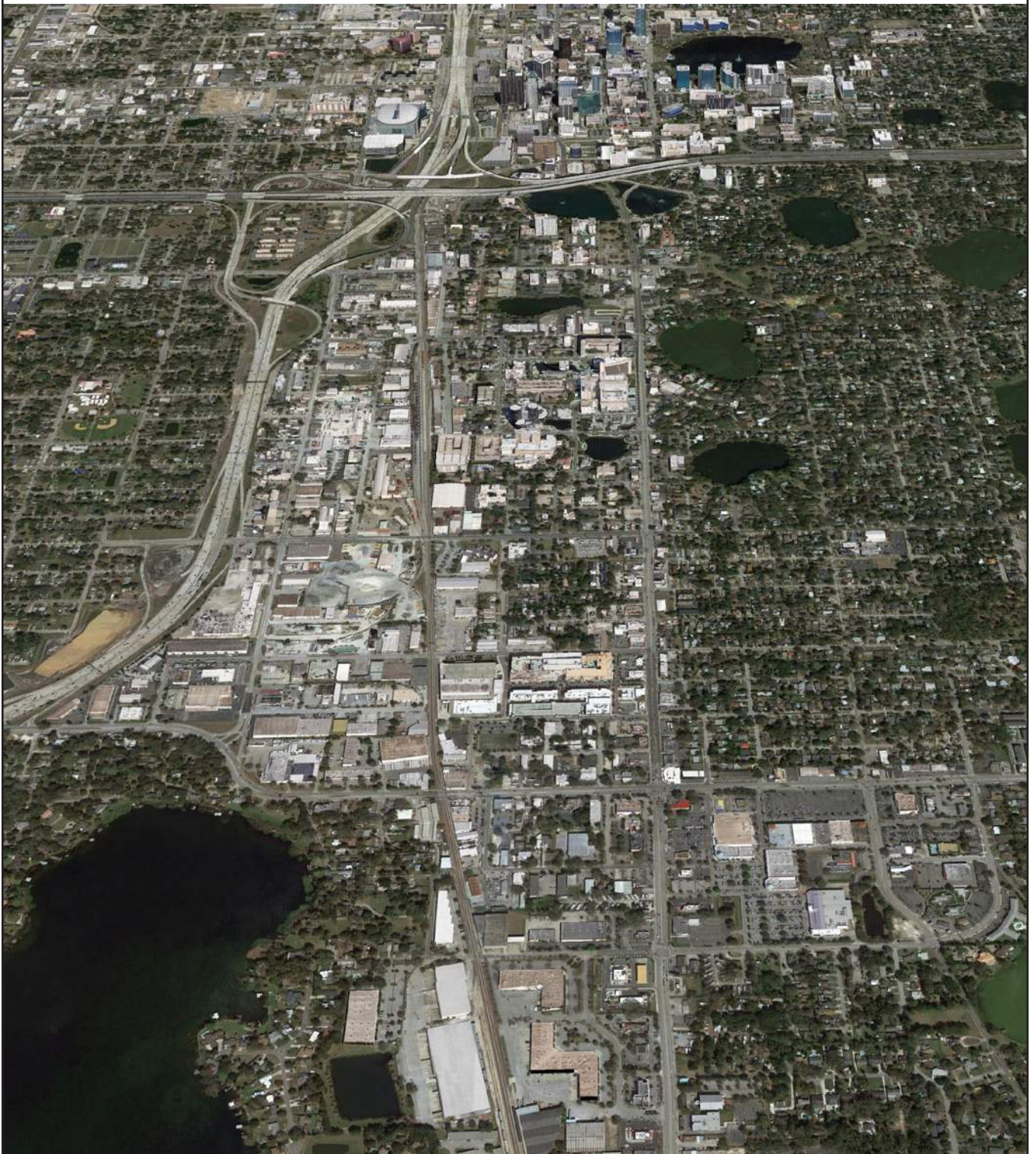


Outdoor Dining Space



Typical Cross Section







## SECTION 4 | ORGANIZING FRAMEWORKS

### FORM AND CIRCULATION IN DOWNTOWN SOUTH

Downtown South is a composite of many types of urban form, land use, circulation and environmental patterns, resulting in diverse social and economic activities. Indeed, the full cross section of community land uses can be found in the DSNID, and as a result, there are many layers of complexity to the consideration of the relationship between urban form and circulation and any consideration of 'Complete Streets' and character based network of circulation for pedestrians, bicycles, vehicles and transit.

The following section of maps and diagrams serves to identify some of the key factors affecting circulation structure as it may affect street design.

These are not necessarily all the layers of the DSNID community. However, they form a starting point for prioritizing streets, modes of travel and the character areas that are served. The Framework Inventory maps also provide many lenses through which to understand the form and function of the area. Following the Inventory, several Proposed Frameworks provide a suggested structure and hierarchy to the circulation system – including new street definitions and locations for increased street network - which inform the street design concepts in Section 5.

*Downtown South has a little bit of everything!*

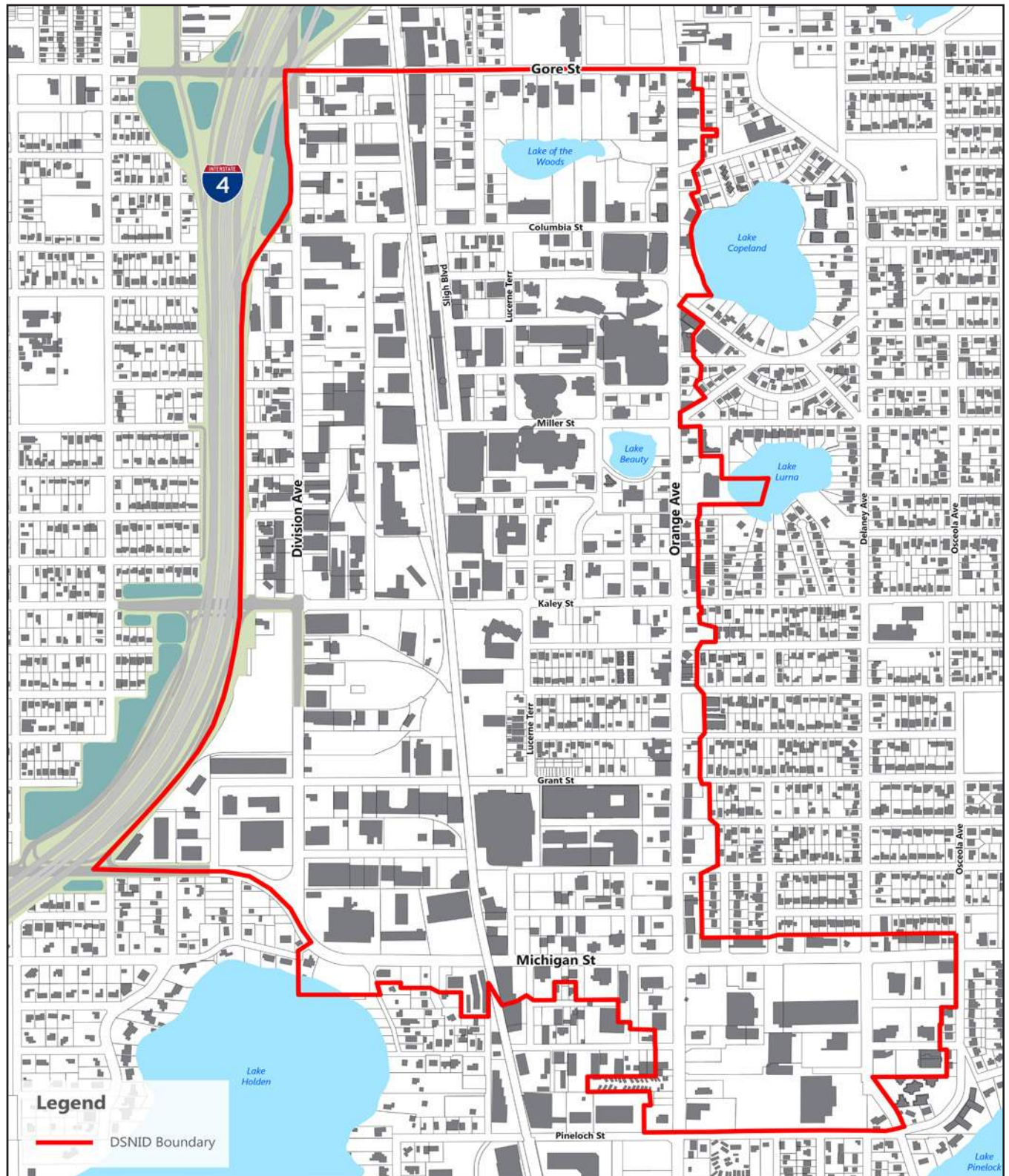




## 4 | ORGANIZING FRAMEWORKS

### 4A. FRAMEWORK INVENTORY | Building Footprints & Pattern

The DSNID area shows a 'grain' of buildings and parcels much larger than the surrounding the residential community. Within the District, the subareas of hospital campus and SODO density, regional shopping center, industrial + yard/shop (with rail spurs), commercial strip and isolated neighborhood all quickly emerge.

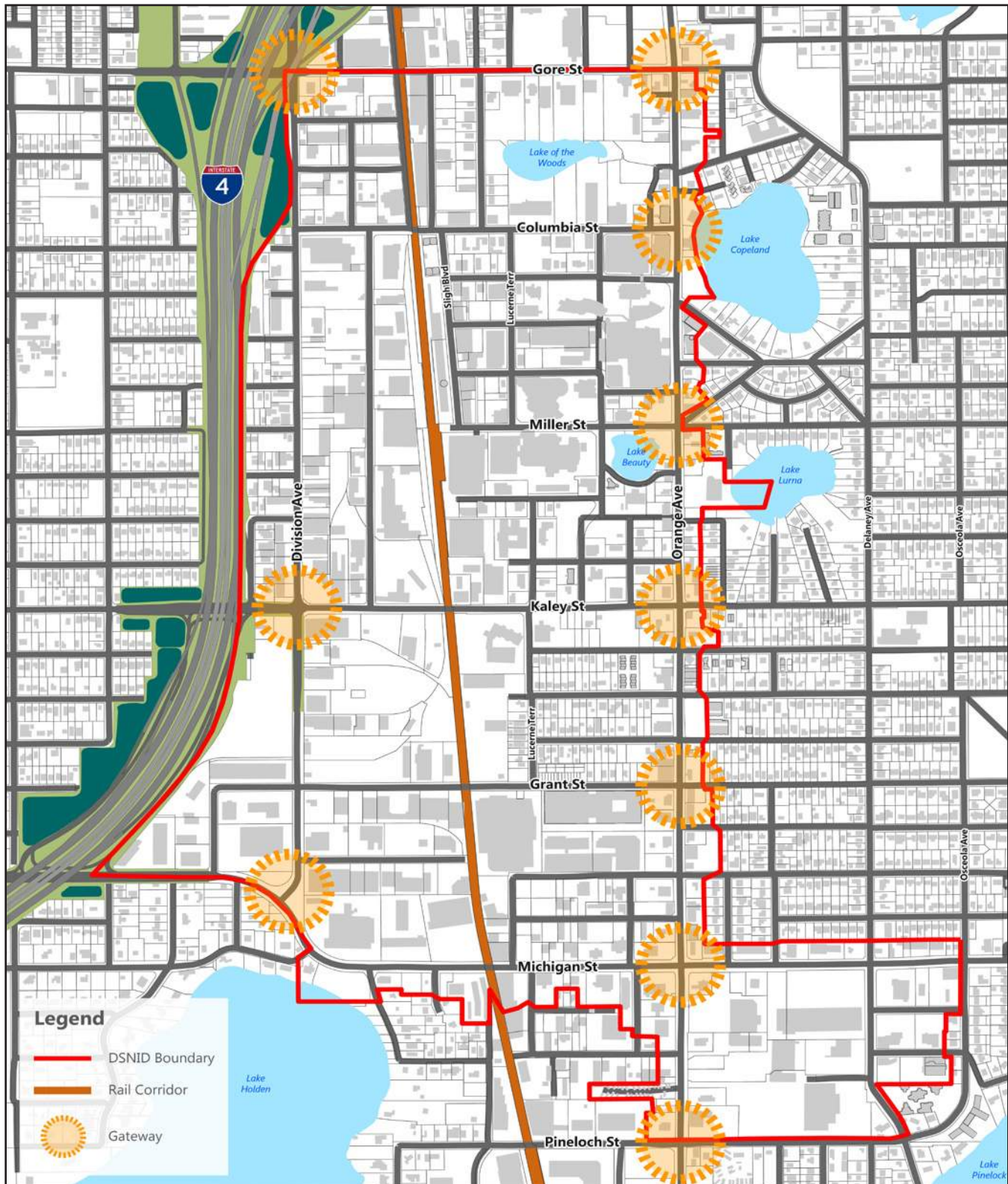




# FORM AND CIRCULATION IN DOWNTOWN SOUTH

## FRAMEWORK INVENTORY | Streets & Gateways

The pattern of streets corresponds to the grain of building areas. The Industrial land uses have historically required only a sparse network of connectivity. This condition is amplified by the rail, which only allows crossings at Michigan, Grant, Kaley, Columbia and Gore – underscoring the importance of those streets as key District Gateways. The suburban shopping center at Orange/Michigan also has sparse network, but could support some connectivity with the urbanization along existing driveway/parcel patterns.

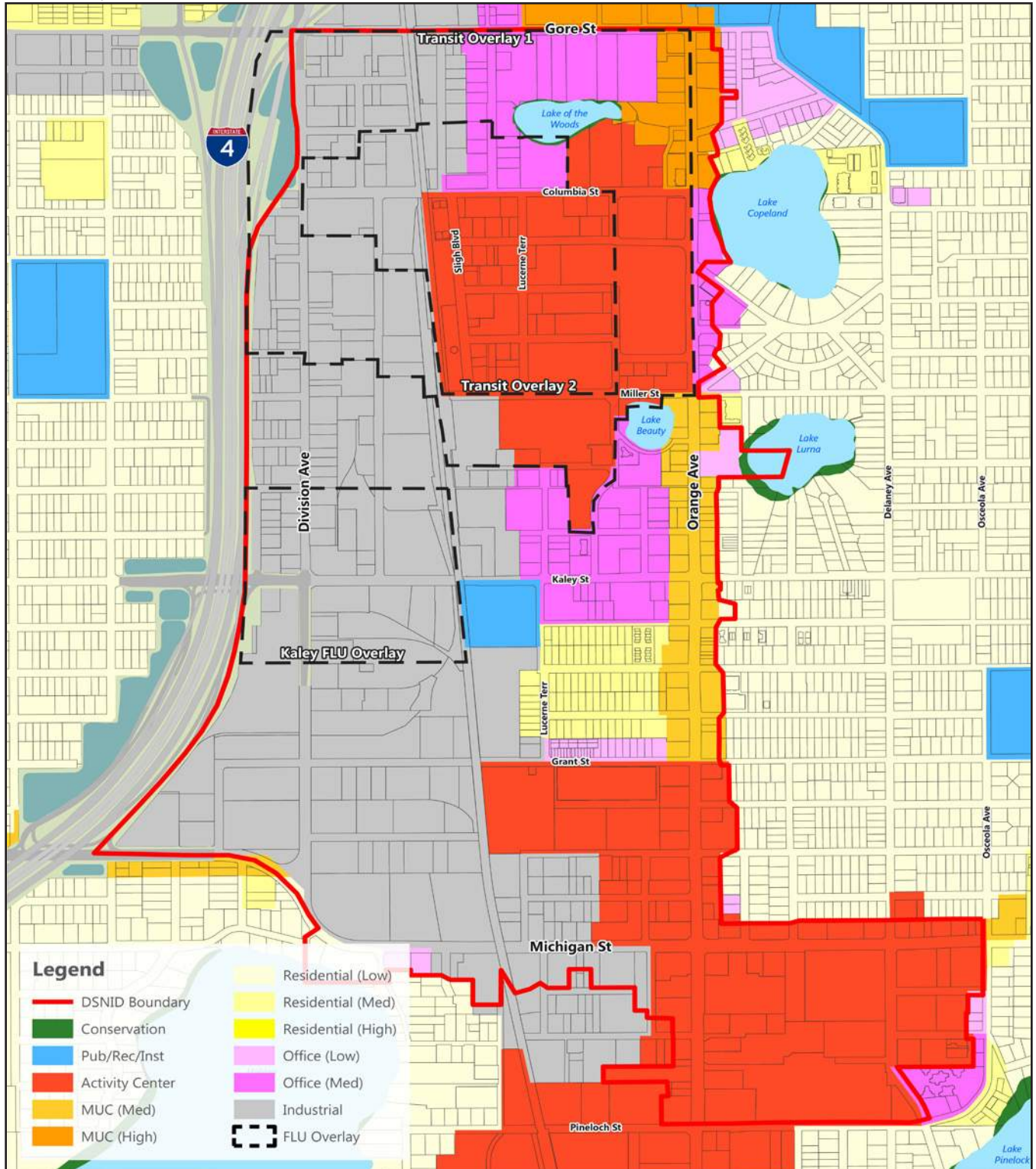




## 4 | ORGANIZING FRAMEWORKS

### 4A. FRAMEWORK INVENTORY | Land Use

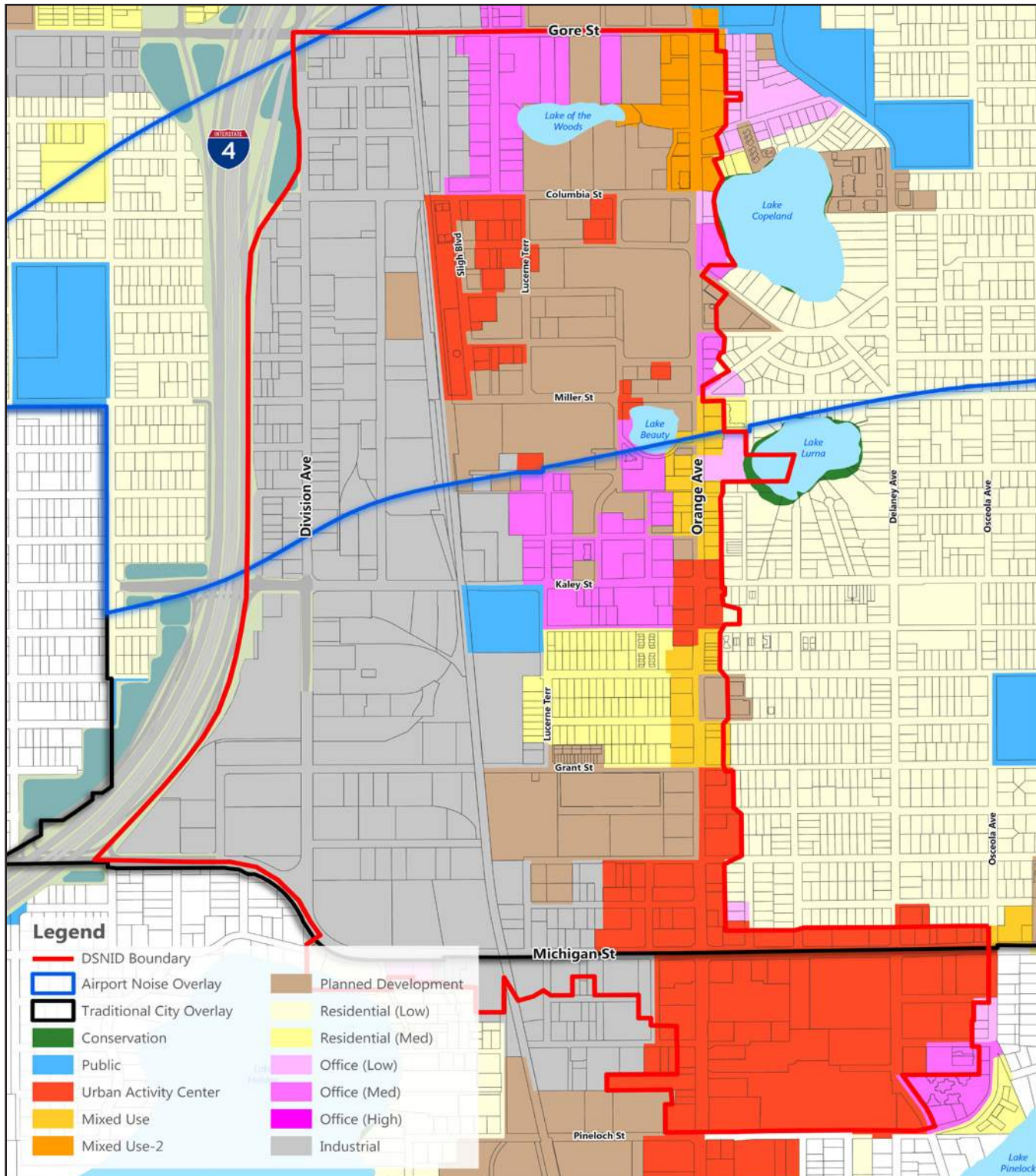
The Future Land Use potential of Downtown South is dynamic. East of the Rail, the City of Orlando has thoughtfully applied Activity Center designations to the Hospital and Regional Shopping Center areas, allowing for intense development. Pockets of Orange Avenue remain as Mixed-use Corridor. Some pockets of single use office zoning remain, but these areas allow for some ancillary uses. Residential areas are protected through a clear 'line' of neighborhood protection. West of the Rail, the Industrial designation prevails, with the exception of the Transit 1, Transit 2 and Kaley overlay areas that allow for significantly increased uses and densities provided certain requirements are met.



# FORM AND CIRCULATION IN DOWNTOWN SOUTH

## FRAMEWORK INVENTORY | Zoning

The Zoning Map provides current entitlements that fit within the umbrella Future Land Use pattern. There are several special Planned Development zoning areas (including SODO and Orlando Health). The Orlando Executive Airport Noise and Height Overlay lines are shown for reference in Blue. All of the DSNID north of Michigan also falls within the Orlando Traditional City designation for special design requirements, which include bringing new buildings closer to the street (parking in back or to side) and providing sidewalk easements to allow for larger pedestrian and streetscape zones.

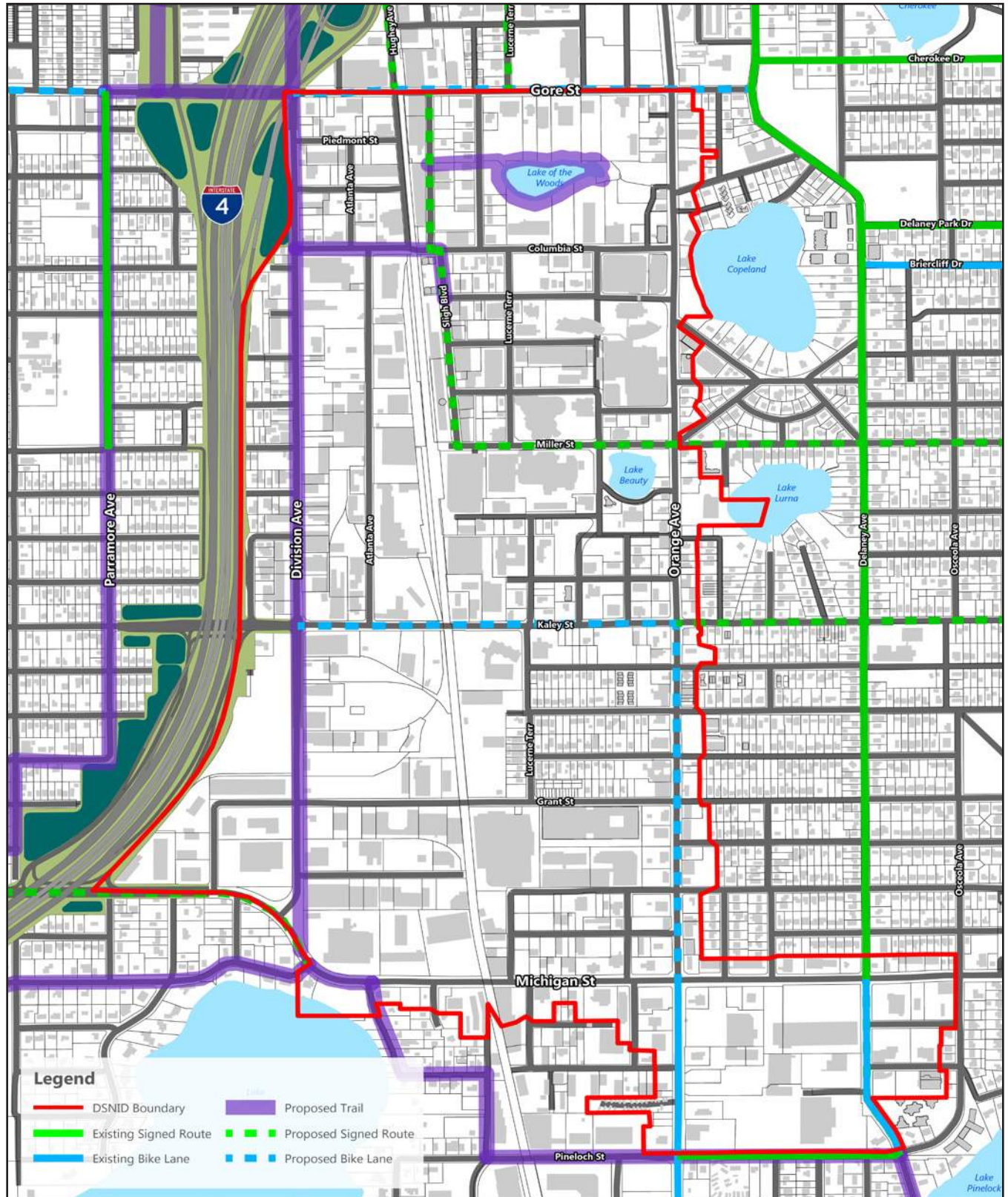




## 4 | ORGANIZING FRAMEWORKS

### 4A. FRAMEWORK INVENTORY | Bicycle Facilities (City Plan)

Today, the DSNID has very few dedicated bicycle facilities, with the signed Trail on Delaney being the primary feature. Planned facilities are envisioned for additional key streets in future, including Division. Increasing options for cyclists is a key objective for the complete streets initiative.

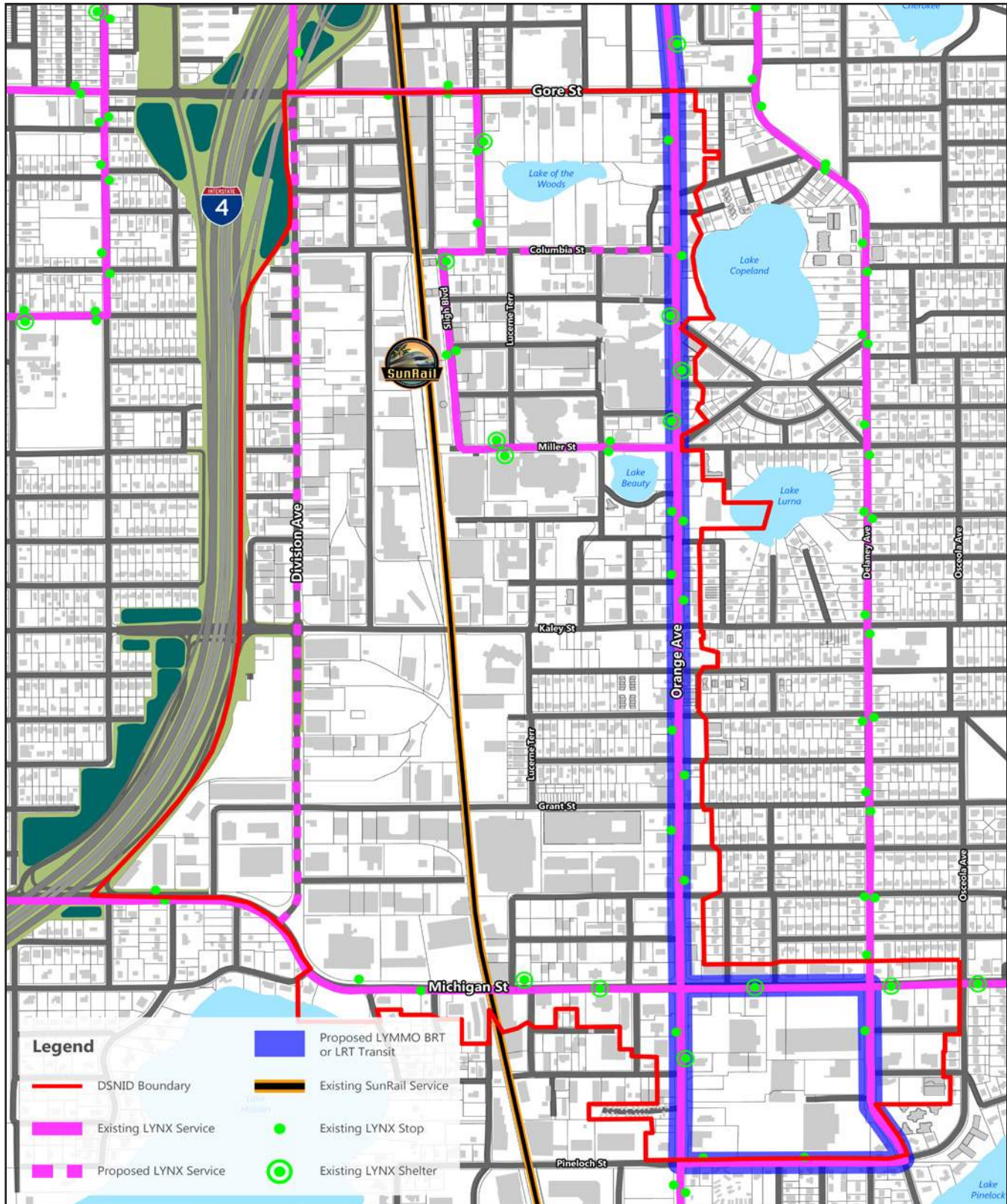




# FORM AND CIRCULATION IN DOWNTOWN SOUTH

## FRAMEWORK INVENTORY | Transit Routes & Plans

Transit service alternatives remain an important area of current and future investment in the downtown Orlando area and Downtown South is a clear focus area. The components include Lynx bus service, expanded Lymmo route, improved access to SunRail and maintaining the future possibility for dedicated BRT or LRT on Orange Avenue. This also includes better walking and bicycle access to improved stops and stations.

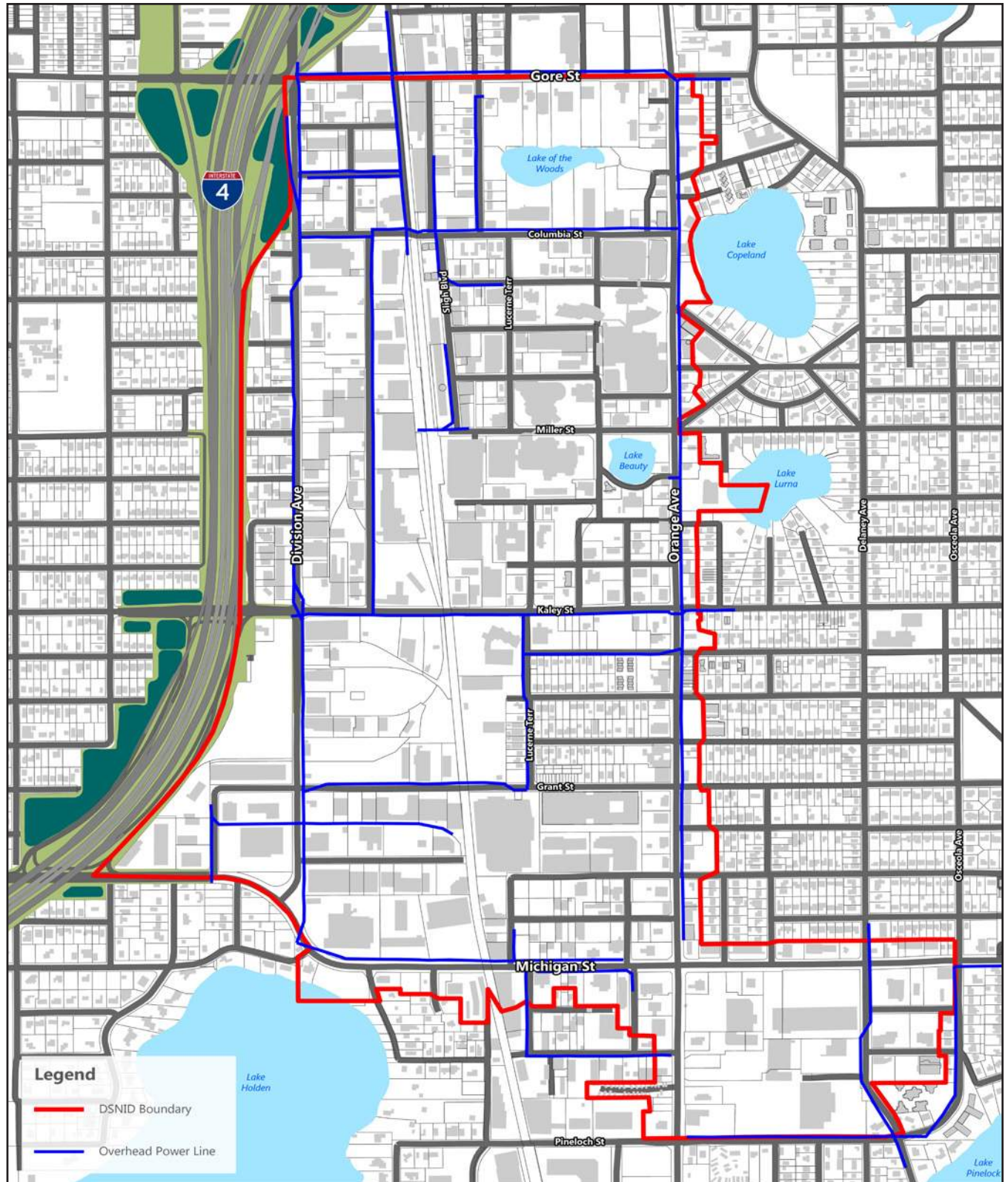




## 4 | ORGANIZING FRAMEWORKS

### 4A. FRAMEWORK INVENTORY | Overhead Utilities

The DSNID area includes several large streets that carry significant overhead power and utility distribution. Because the Complete Streets objectives include modification and beautification to the streets, any reconfiguration will have to take into account the location of overhead lines which affect tree planting strategies, and the location of utility poles and equipment, some of which compromise sidewalks and intersection crossing ramps.

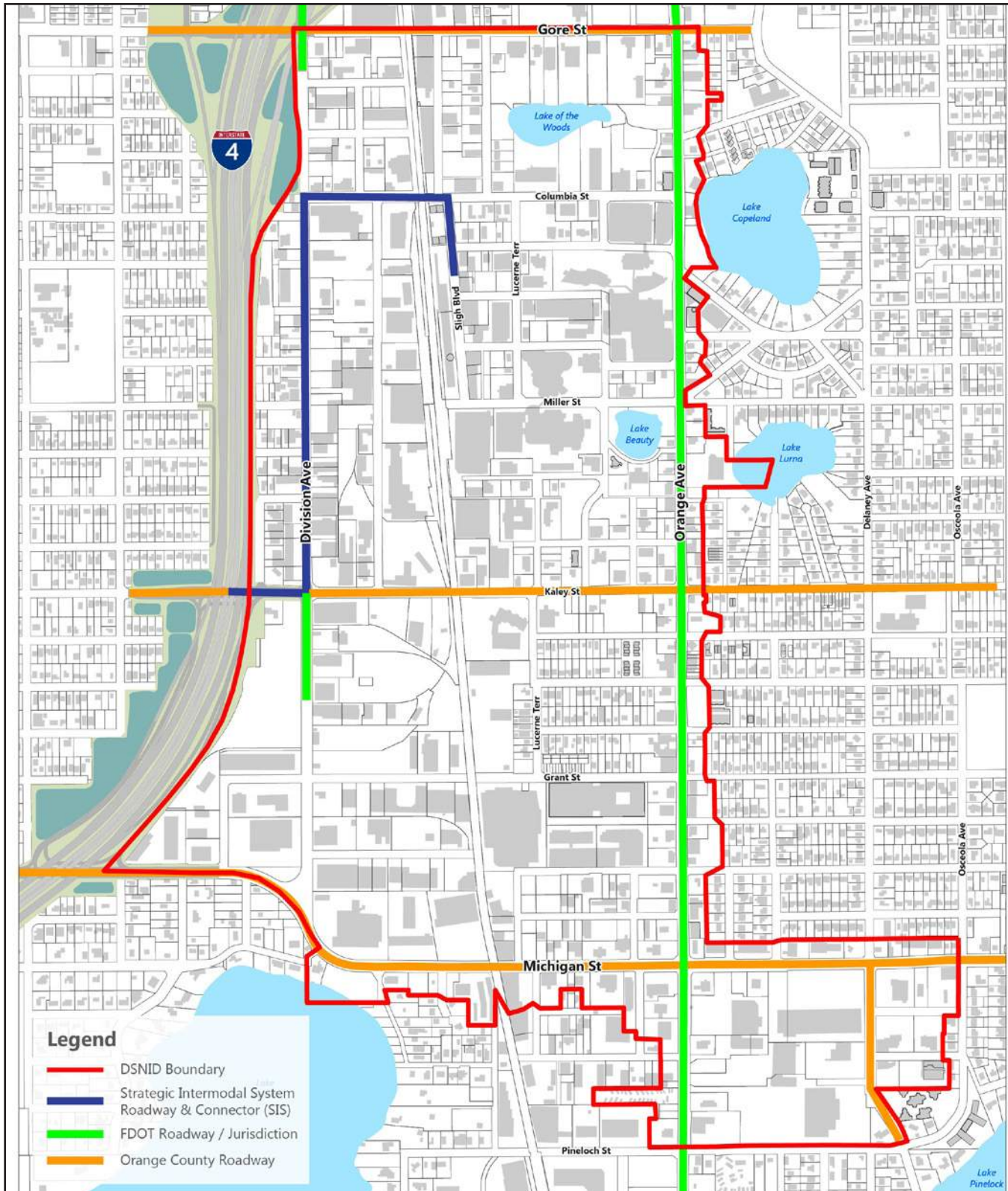




# FORM AND CIRCULATION IN DOWNTOWN SOUTH

## FRAMEWORK INVENTORY | FDOT / I-4 'Ultimate'

The current expansion, retrofits and improvements to Interstate 4 represent a nearly \$3B investment in Central Florida highway access and function. Downtown Orlando is one of the most complex areas of modification due to the many access points within the downtown grid, as well as the improvement to the SR 408 interchange. As a result, access at Kaley and Michigan will be maintained, but revised via a 'Texas Turnaround' and the historic entrance/exits at Gore Street are being removed, save one southbound entrance off Gore, located west of I-4.





## 4 | ORGANIZING FRAMEWORKS

### 4B. PROPOSED CIRCULATION FRAMEWORKS | FDOT's Orange Avenue Resurfacing Project - Southern Section (Phase 1)

FDOT is currently implementing (designing & engineering) a planned "3R" improvement to Orange Avenue. The project is divided into two phases: South and North. South runs from Pineloch Ave to roughly Grant Street. North continues on to Anderson Street at SR 408, the gateway to the Downtown Core. The project is designed to narrow travel lanes, enhance pedestrian crossings, articulate on-street parking and provide 'curb bump outs' (shown in red on the maps) to provide additional sidewalk or grass strip/planting areas. The plans indicate some isolated locations for street trees.

What the plans do not include is specialty streetscape treatments which the DSNID and City of Orlando would like to have as part of the Orange Avenue 'Main Street' Area. This may include special pavement treatments within the roadway, lighting, coordinated landscaping and street trees, special transit shelters, site furnishings, art and other treatments. These elements will have to be 'self-funded' by DSNID, City or other partners to supplement the FDOT project.

**Southern Section** – the phase 1 portion of the Orange Avenue FDOT project includes some distinct intersections and urban conditions. The Pineloch Avenue intersection is the southern DSNID Gateway. The Orange/Michigan intersection is a signature connection regional streets and requires significant aesthetic/image, pedestrian comfort and functional traffic enhancement, which will require (among other things) a southwest corner clip. North of Michigan, buildings get closer to the street and the pedestrian activity increases, with Grant Street being a signature 'neighborhood' crossing intersection, not only to SODO, but all the way to Division.





# FORM AND CIRCULATION IN DOWNTOWN SOUTH

## PROPOSED CIRCULATION FRAMEWORKS | FDOT's Orange Avenue Resurfacing Project - Southern Section



*Orange/Michigan Gateway is Imposing*



*South Gateway Mixed-use Development*



*Orange Avenue Corridor Planning Study - Pineloch Ave to Anderson Street - Southern Section Ultimate Alternative*



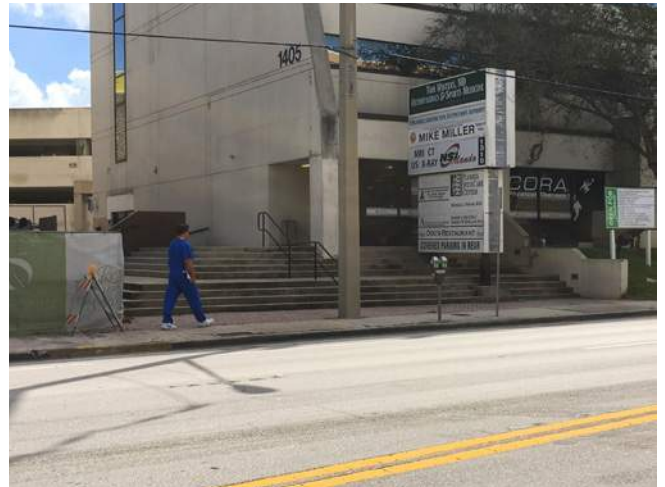
## 4 | ORGANIZING FRAMEWORKS

### 4B. PROPOSED CIRCULATION FRAMEWORKS | FDOT's Orange Avenue Resurfacing Project - Northern Section (Phase 2)

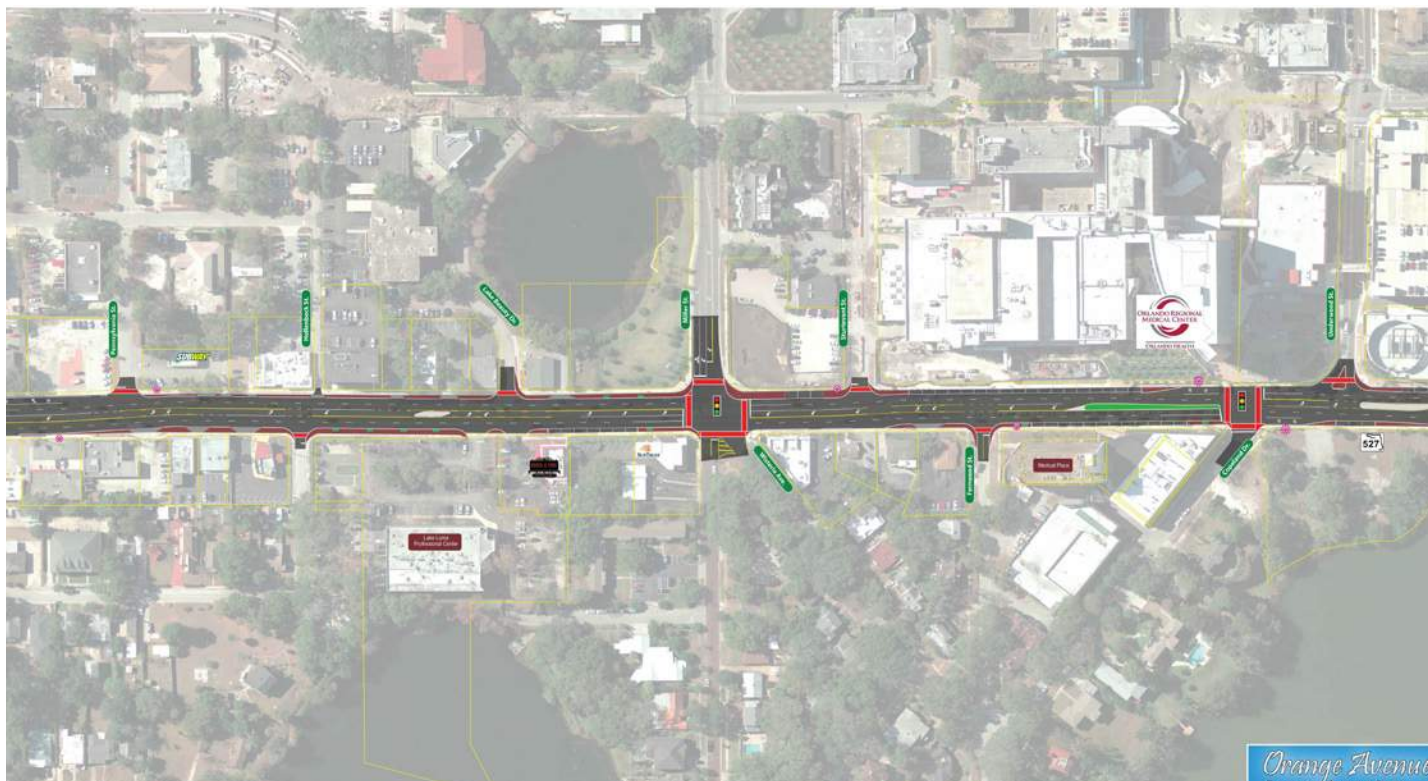
**Northern Section** – the phase 2 portion of the Orange Avenue FDOT project continues the pattern of buildings close to the street, as well as adds some unique features. The Orlando Health campus dominates this area as a land use and as a physical presence. The campus has seen dramatic transformation and sets an attractive edge on the west side. The healthcare uses also drive significant property reinvestment for both medical office, commercial, hotel, and even residential uses.

The hospital district activity will create the economic opportunity for continued urban transformation, as well as ever increasing circulation activity of all modes. While there is very little 'retail' activity in this area of Orange, the metered on-street parking is nearly always full – clear evidence of significant visitation and pedestrian movement. This underscores the importance of pedestrian friendly intersection crossings with branded streetscape elements to both enhance character, as well to calm driving behavior. Locations such as Copeland and Columbia are both opportunities for current or future investment, as well as corridors for significant pedestrian movement to and from the hospitals.

Approaching Gore, further reinvestment is taking place with mixed-use development, including grocery and multi-family residential. This project, similar to the development planned at Pineloch Ave will create positive economic activity and reinvestment nearby. The project will also create new forms of circulation activity, including bicycle & pedestrian traffic, making the Gore/Orange intersection a similarly important aesthetic and functional gateway, enhancing the importance of Gore as a neighborhood connector.



*Medical Personnel walking on Orange*





# FORM AND CIRCULATION IN DOWNTOWN SOUTH

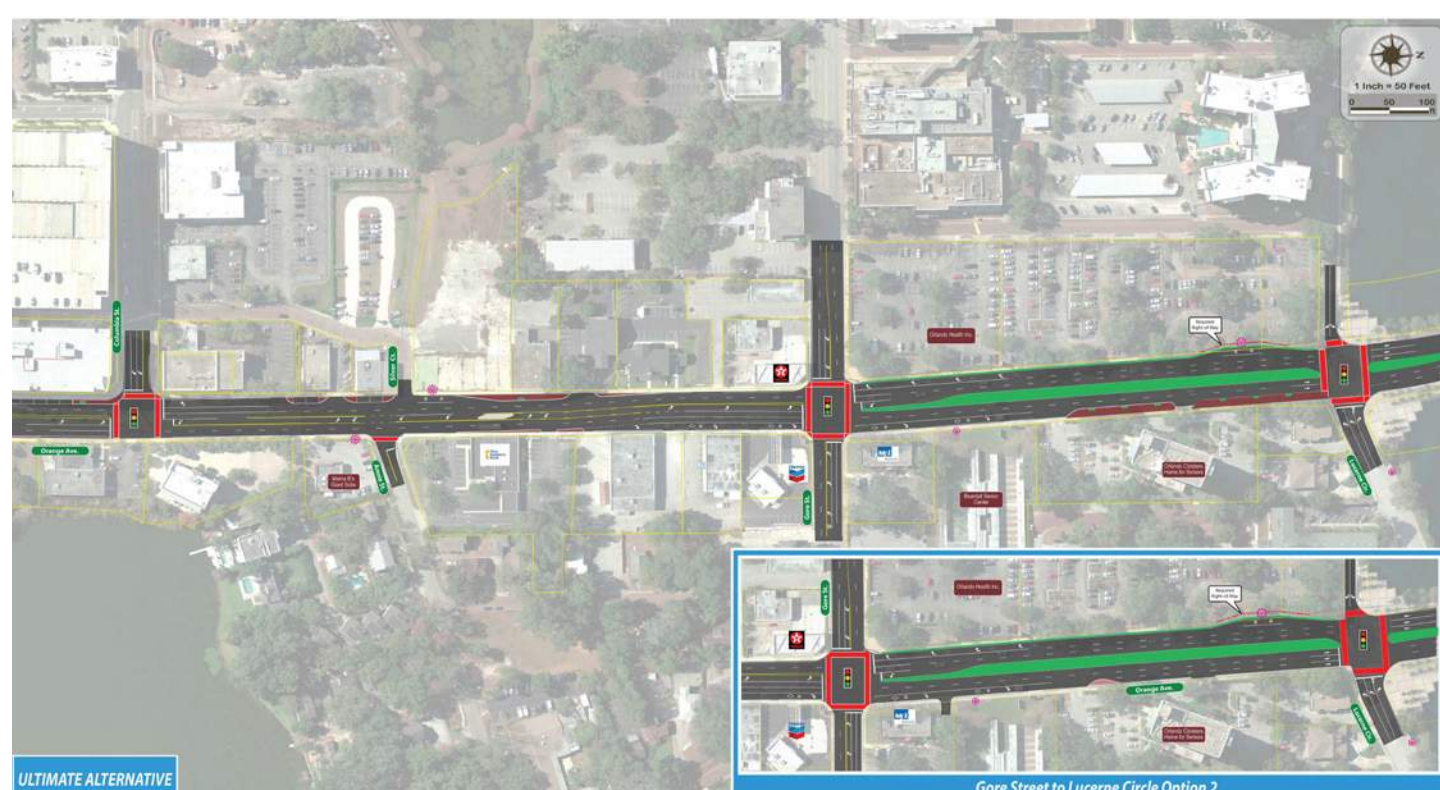
## PROPOSED CIRCULATION FRAMEWORKS | FDOT's Orange Avenue Resurfacing Project - Northern Section



*Commercial Development on Orange*



*North Gateway Development at Gore*

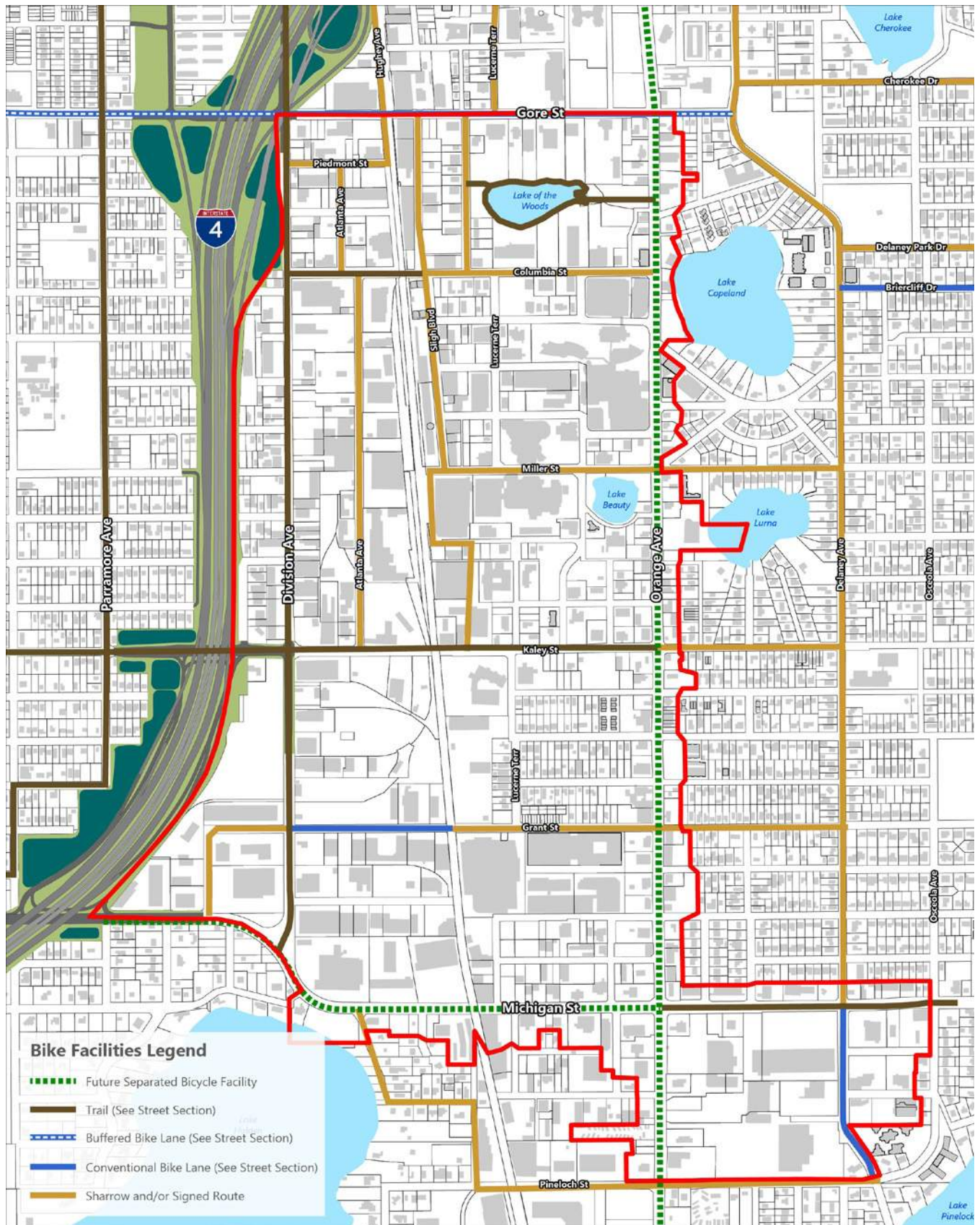


*Orange Avenue Corridor Planning Study - Pineloch Ave to Anderson Street - Northern Section Ultimate Alternative*



## 4 | ORGANIZING FRAMEWORKS

### 4B. PROPOSED CIRCULATION FRAMEWORKS | Bicycle Facilities Network



# FORM AND CIRCULATION IN DOWNTOWN SOUTH

## PROPOSED CIRCULATION FRAMEWORKS | Bicycle Facilities Network

**Bike Facilities.** Within the DSNID, there is an opportunity for a robust network of bicycle facilities. Because of varying right-of-ways and differing contextual conditions adjacent to the street network, a variety of bicycle facility types are required. The proposed typologies, which are based on NACTO's Urban Bikeway Design Guide, are shown as a foundational structure within the boundaries of the DSNID. The finer details of how each typology is applied to given street can be found in the respective street sections.

**Cycle Track.** A cycle track is a separated, exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk. Cycle tracks have different forms but all share common elements—they provide space that is intended to be exclusively or primarily used for bicycles, and are separated from motor vehicle travel lanes, parking lanes, and sidewalks. Cycle tracks may be one-way or two-way, and may be at street level, at sidewalk level, or at an intermediate level. If at sidewalk level, a curb or median separates them from motor traffic, while different pavement color/texture separates the cycle track from the sidewalk. If at street level, they can be separated from motor traffic by raised medians, on-street parking, or bollards. By separating cyclists from motor traffic, cycle tracks can offer a higher level of security than bike lanes and are attractive to a wider spectrum of the public.

**Sidepath.** Physically separated facilities such as sidepaths or shared-use paths provide off-road connections that can be used for recreation and commuting. Along high-speed, high-volume roads, sidepaths might be safer and more desirable than sidewalks or bike lanes. Sidepaths might also be used when existing roads provide the only rights-of-way available. Shared-use paths tend to attract bicyclists with a wide range of skill levels, including young children. A path, even if designed primarily as a bike facility, also likely will attract a mix of other users including pedestrians, in-line skaters and others, depending on location and access.

**Conventional/Buffered Bicycle Lanes.** Bike lanes on streets designate an exclusive space for bicyclists through the use of pavement markings and signage. The bike lane is located adjacent to motor vehicle travel lanes and flows in the same direction as motor vehicle traffic. Bike lanes are typically on the right side of the street, between the adjacent travel lane and curb, road edge, or parking lane. This facility type may be buffered if space permits. Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.

**Sharrow.** Shared Lane Markings (SLMs), or 'sharrows,' are road markings used to indicate a shared lane environment for bicycles and automobiles. Among other benefits, shared lane markings reinforce the legitimacy of bicycle traffic on the street, recommend proper bicyclist positioning, and may be configured to offer directional and wayfinding guidance. The shared lane marking is a pavement marking preferably located in the center of the travel lane with a variety of uses to support a complete bikeway network.

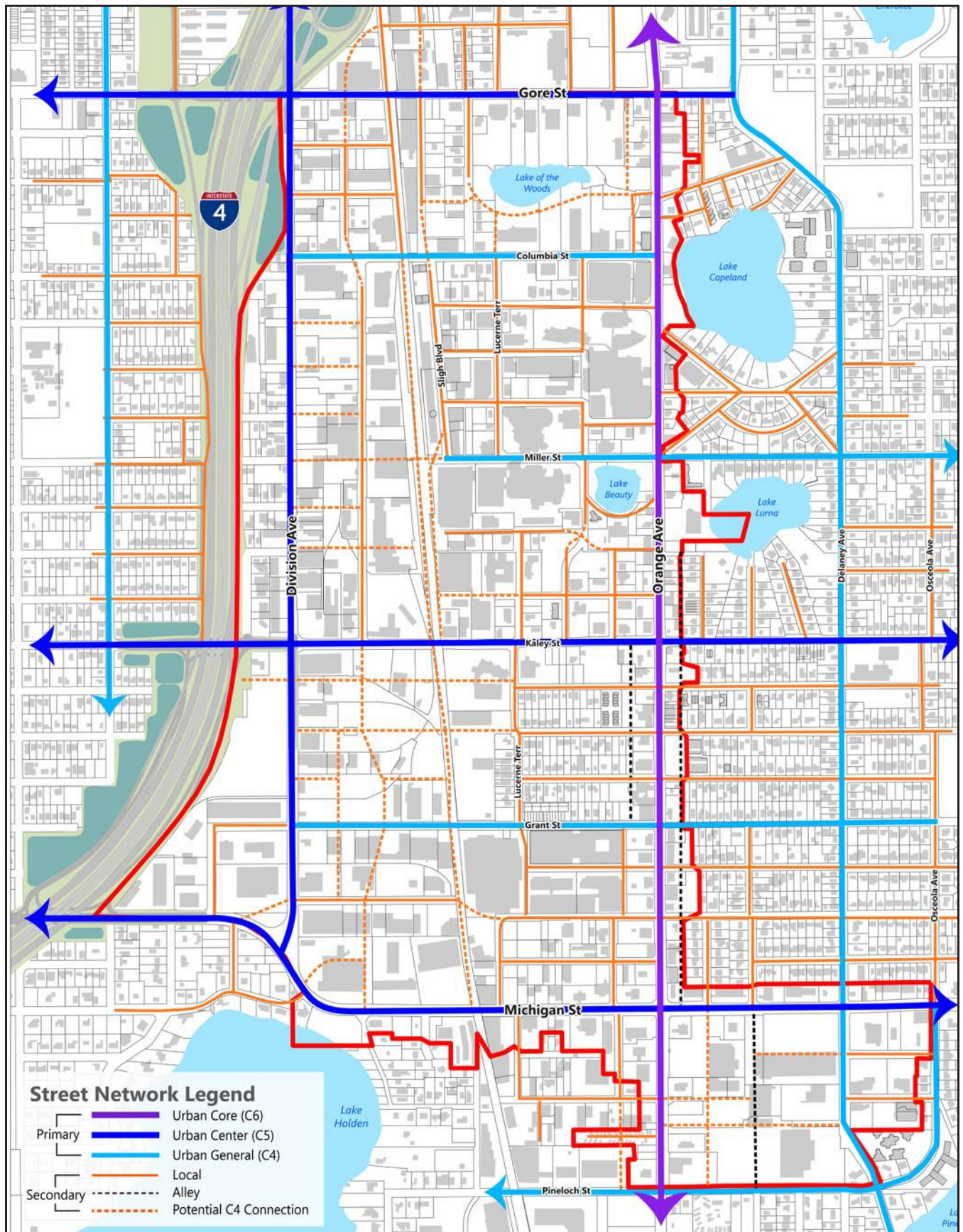


*Neighborhood cyclist uses the wide sidewalk in front of SODO on Orange Avenue as a makeshift 'Sidepath'*



## 4 | ORGANIZING FRAMEWORKS

### 4B. PROPOSED CIRCULATION FRAMEWORKS | Complete Street Network



# FORM AND CIRCULATION IN DOWNTOWN SOUTH

## PROPOSED CIRCULATION FRAMEWORKS | Complete Street Network

**Street Network.** The network of streets in the DSNID is organized according to the context classification system as defined by the Florida Department of Transportation (FDOT) Context Classification Handbook. The context classification system broadly identifies the various built environments existing in Florida, including state roadways. This system describes the general characteristics of both the existing and future land use, development patterns, and roadway connectivity along a roadway, providing cues as to the types of uses and user groups that will utilize the roadway.

The context classification system provides a common language for both the City of Orlando and the FDOT of approaches in planning, design, construction, and maintenance that ensure that streets are supportive of safe and comfortable travel and respond appropriately to their respective contexts and anticipated users. The study area is organized into three (3) context classifications, as shown to the left:

**C6 - Urban Core.** This area has the highest densities and building heights and is typically the 'Main Street' of large urbanized cities. Buildings front the street and have a mix of uses within each building. The streets are within a well-connected roadway network that features the highest amount of bicycle and pedestrian traffic.

**C5 - Urban Center.** This area is characterized by buildings with a mix of uses on small blocks that are part of a well-connected roadway network. These areas are concentrated around a few blocks, or a district area, and are identified as part of a civic or economic center of a community.

**C4 - Urban General.** This area is also characterized by buildings with as a mix of uses on small blocks that are part of a well-connected roadway network. These areas may extend long distances as the road network usually connects residential neighborhoods and other smaller sub-districts together either immediately within the area or behind the uses fronting the roadway.

Additionally, the streets in the DSNID were organized into a matrix of context classification with street usage types. The usage types are as follows:

**Arterial Streets.** These streets connect regional areas together and typically have the highest capacity for vehicles, bicycles, and pedestrian traffic. There is only one arterial in the DSNID, Orange Avenue.

**Collector Streets.** These street's extra space connect local areas, such as residential neighborhoods and small sub-districts to the arterial street. They have low-to-moderate vehicular capacity and support high bicycle and pedestrian capacities.

**Local Streets.** These streets interconnect neighborhoods and sub-districts and provide access from the origin location (of a given trip) to the collector street. They have low vehicular capacity and low-to-moderate bicycle and pedestrian capacities.

**Alleys.** These streets are narrow access ways within residential neighborhoods and smaller sub-districts that provide an alternative access point for parking, infrastructure elements like garbage and utilities, and in some cases pedestrian connectivity.

PRIMARY STREETS			SECONDARY STREETS		
CONTEXT CLASSIFICATION	Arterial	Collector	Local	Alley	Potential Connection
C6 (Urban Core)	Orange	n/a	n/a	n/a	n/a
C5 (Urban Center)	n/a	Michigan, Kaley, Gore, Division	n/a	n/a	n/a
C4 (Urban General)	n/a	Grant, Pineloch, Delaney, Miller, Columbia	All remaining streets	New*	New*

\*Per proposed future framework diagram, page 68.



# A CALL TO ACTION!



## SECTION 5 | CONCEPTUAL DESIGN STUDIES FOR COMPLETE STREETS IN DOWNTOWN SOUTH

**Direction and Intent:** The following pages provide a conceptual approach to the enhancement of many of the streets within the DSNID. The goal is to address opportunities on each street as a discrete right-of-way, but also to suggest a solution appropriate to the role within the larger system as outlined in the Frameworks.

These concepts and observations reflect the input of diverse stakeholders, including the DSNID and Main Street leadership, business and property owners; City, County, FDOT, Lynx/Lymmo and OUC representatives; and the professional collaboration of the interdisciplinary team. Each street has unique factors, including physical conditions, land use character, redevelopment potential, jurisdictional control and transportation function. Therefore, the following concepts are provided as a suggested starting point which is viewed as a rational nexus between 'aspirational and attainable' given many factors.

**Approach to Street Section Design:** All 'proposed street sections' are conceptual and will be refined on a project by project basis. They are designed to provide an understanding of how spatial dimensions can be reallocated within the bounds of two general controls:

**1) maintaining existing curb-to-curb dimensions, without rebuilding the entire road and drainage**

**2) maintaining the existing right-of-way dimension.**

In this way, improvements are shown which can be completed within the bounds of current conditions, which may remain for some time on certain properties. Redevelopment properties shall include new opportunities for enhanced sidewalks and other building features which are shown in more detail in the SoDo District **Development Standards and Design Guidelines**.

**Please Note:** (1) All measurements of existing rights-of-way and features therein are for conceptual planning purposes only. All dimensions acquired through best

available Orange County GIS/property data and field measurements by GAI staff; (2) all noted daily traffic volumes (ADT) are cited from online Orange County Public Works mapping data, and other available data sources available through 2016. Numbers provided are for order of magnitude reference only and do not constitute current traffic count data.

Streets sections studied as part of the conceptual workshop and refinement:

- South Orange Avenue
- Division Avenue
- Michigan Street (east and west)
- West Kaley Street
- Gore Street
- Grant Avenue
- Atlanta Avenue
- Delaney Avenue
- East Pineloch Avenue



For more information, refer to the SoDo District **Development Standards and Design Guidelines** for more detail regarding pedestrian sidewalks and other collateral land development topics.



## 5 | CONCEPTUAL DESIGN STUDIES

### THE PEDESTRIAN STREETScape | COMPLETE SIDEWALKS

**Starting with People.** As part of the following studies for Complete Streets, it is important to discuss the desired environment for pedestrians walking along the street. In Downtown South, each street is different, not only in terms of roadway width, but also in terms of how much space is available between the existing curb and the right-of-way/property line (ROW/PL) to create a walkable sidewalk.

The conditions are highly varied. Many areas provide only 5' of sidewalk behind the back of curb, often with utility poles within the sidewalk area. Some areas include slightly wider 'tree lawn' or grass strips between sidewalk and curb (within the right-of-way); other areas are highly substandard with sidewalks and intersections that do not meet basic ADA requirements. Additionally, in some cases, older buildings are placed very close to the curb (and ROW/PL), and sites have varying depth regarding redevelopment.

Taken together, the pedestrian environment is inconsistent, and this will continue to be the case going forward because all the buildings and all the streets will not be comprehensively redeveloped at one time. Therefore, the objective for this Complete Streets project is to provide guidance regarding how each increment of public and private investment can build toward a better urban environment. This will result in enhanced pedestrian safety, a more consistent District character, and a more attractive setting for economic development.

Making streets more 'complete' starts with the fundamental relationship between the vehicles, pedestrians and buildings – including the usable streetscape between development and roadway.

The SoDo District **Development Standards and Design Guidelines** document details this topic more fully and should be referenced for more specificity. However, it is important here to discuss the basic ideas so that new public and private investments can work toward the Vision.



**Various Existing Sidewalks:** Existing Conditions vary greatly, including non-compliant sidewalks, minimal 5' walks back of curb, to areas with small grass strips between road and sidewalk, to expanded sidewalks with Furnishing and Public Walkway zones (typically at redevelopment sites).



*Not desired: 5' pedestrian sidewalk remains unprotected from Orange Ave. No furnishing zone along curbline.*



*Not desired: Small business walkway does not connect to public sidewalk. No furnishing zone along curbline.*



*Incomplete: Grass strip creates area for furnishing zone, but no street trees. Public walk in place. Bldg setback limited.*



*Close: Furnishing Zone and Public Walkway present. Building setback is minimal, but landscaped.*

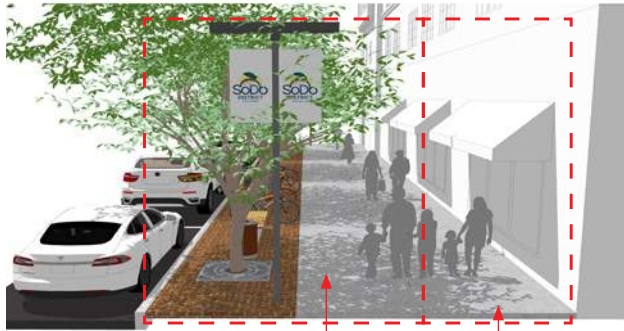
# CONCEPTUAL DESIGN STUDIES

## THE PEDESTRIAN STREETScape | COMPLETE SIDEWALKS

**A Model for Streetscapes.** The vision in Downtown South is to achieve a minimum 13' **Pedestrian Streetscape** plus a Building Setback Zone for all Primary Streets. The 13' Pedestrian Streetscape is meant to include a 7' **Furnishing Zone**, and a clear 6' **Public Sidewalk Zone**. Because sidewalk space is limited in some areas, there will be cases where new/redevelopment sites will be required to provide a 'sidewalk easement' to attain the 13' minimum Pedestrian Streetscape. The easement will not affect the calculation of total property development rights (units/FAR calculations). The amount of easement will vary as needed to meet this minimum standard because the location of the (ROW/PL) is different relative to the roadway back of curb from one site to another.

The purpose of the 7' **Furnishing Zone** is to provide an alignment for street trees, lighting, site furniture, landscaping, and other elements in a clear location that both structures the street while providing a shaded, buffered alignment for the pedestrian. As a result, the 6' **Public Sidewalk** is safely separated from the vehicular roadway environment and shaded with canopy or understory trees according to the materials palette.

Finally, the **Building Setback Zone** is an area of 7-15 feet measured from the back of the Pedestrian Zone. This is an area for hardscape or landscape, providing opportunity for outdoor retailing dining, plaza or art space, or landscape buffering. Because each site development is different, the use and scale of this space may vary, so the dimensions and use are flexible. Building facades and entry ways are meant to include architectural detailing, window transparency and other elements that reinforce a humanized pedestrian experience.\*



**13' Min. Pedestrian Streetscape**  
**7'-15' Building Setback Zone**



*Close: Furnishing Zone (street trees) and Public Walkway present for a 13' min Streetscape. Building setback is minimal.*



*Close: Pedestrian Streetscape does not meet 13' minimum; furnishing zone, street tree & sidewalks present. Outdoor dining at corner building setback.*

\*Refer to the SoDo District **Development Standards and Design Guidelines** for more detail regarding pedestrian sidewalks and other collateral land development topics.



## 5 | Orange Ave | Existing Sections

### The South Orange Avenue Mixed-use Corridor.

Orange Avenue (Orange) is the signature 'address' within the context of Downtown Orlando. As with many significant roadways within urban areas, Orange Avenue must perform many functions. As an FDOT facility, Orange Avenue is an important regional commuter corridor between downtown and the Edgewater/Gatlin /Sand Lake region to the South. Orange is also part of the Strategic Intermodal System route, part of the regional linkage to Interstate 4 and part of Lynx Transit.

Locally, however, Orange Avenue is part of the designated SoDo Main Street - an address for retail and office businesses, emergent multifamily residential and a primary 'connector' within the fabric of Orlando's downtown neighborhoods. As a Main Street, Orange bears a special relationship to the character, livability and real estate value of both adjacent commercial and proximate residential real estate. As a result, it is critically important that Orange is treated with particular attention of the many aspects of Orange Avenue as a mixed-use corridor that must provide a high 'level of service' across many community objectives.

**Character and Configuration.** Today, Orange is primarily defined by its automobile function, carrying over 30,000 cars within a slightly constrained ~80 foot right-of-way. The 'typical section' for Orange is 5 lanes with on street parking on each side, adjusted in key locations to account for special conditions, such as but not limited to left turn lanes, large drive aprons and transit stops. This section leaves very little remaining room within the right-of-way for sidewalks, street trees or other character elements for pedestrians or cyclists.



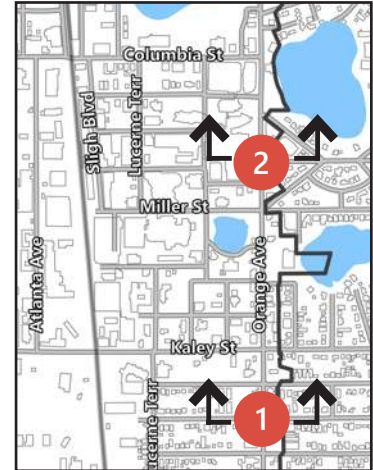
Orange Avenue - Muriel to Harding



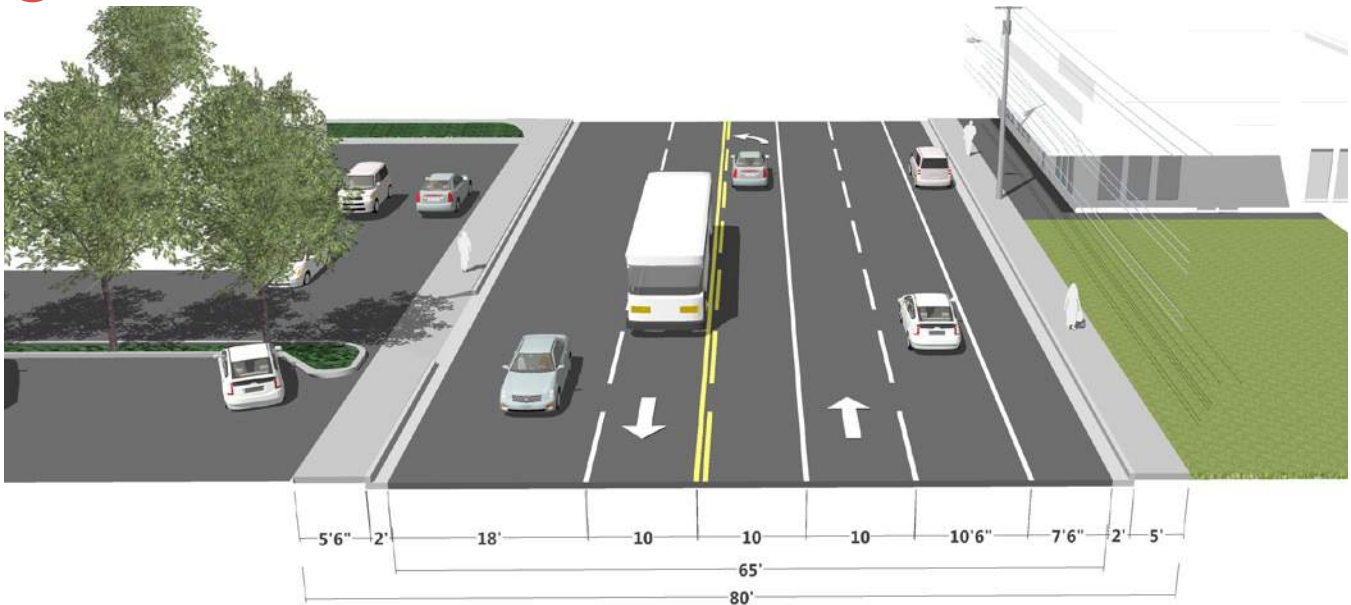
# Orange Ave | Existing Sections

or other character elements for pedestrians or cyclists. Indeed, other than some special materials at Orlando Health, the balance of the street treatments can be described as 'utilitarian', limited in pedestrian space and visually impacted by highly visible overhead power lines and vertical poles along the eastern sidewalk, compromising street trees, and in some cases, comfortable pedestrian movement and ADA access.

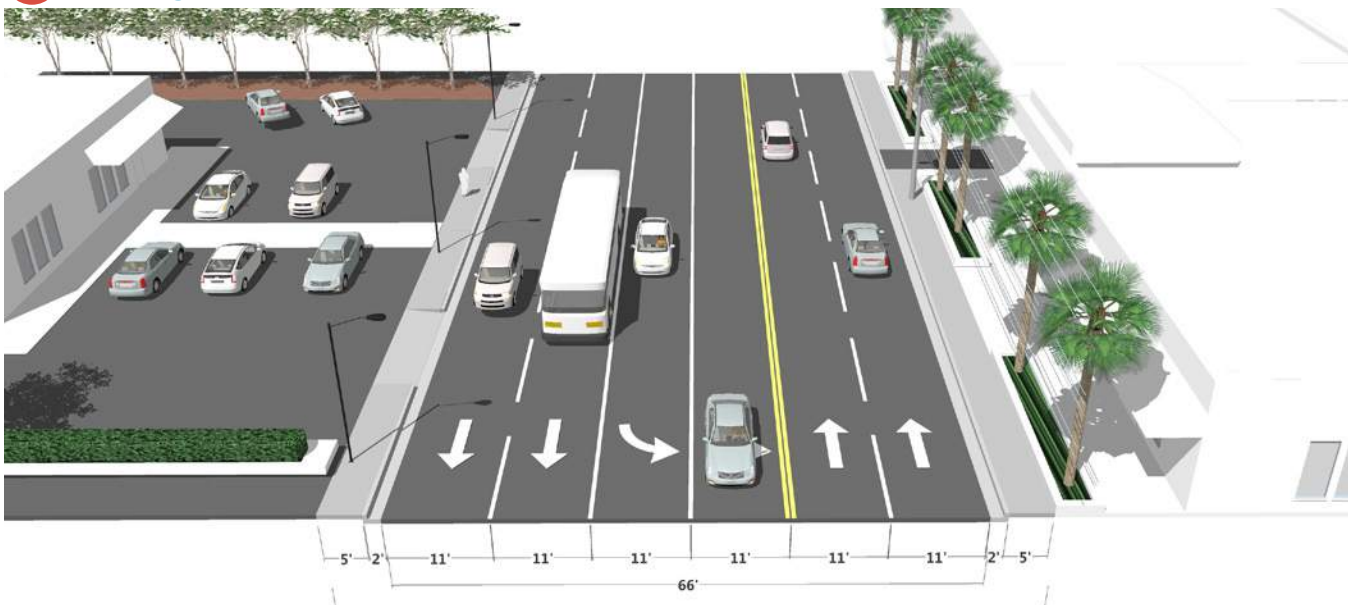
As certain sites along Orange have redeveloped, the City of Orlando has worked with property owners to soften Orange with easements for trees and sidewalk treatments outside the right-of-way line. This has primarily been guided by the increased setback standards envisioned and adopted in prior planning efforts such as the Orange/Michigan plan. However, Orange still struggles to find a consistency in either the roadway configuration or the elements of character and comfort that support pedestrian activity and enhanced value in the "Main Street" address.



## 1 Existing 80' Section: Muriel-Harding Streets



## 2 Existing 80' Section: Columbia Street





## 5 | Orange Ave | Proposed Sections

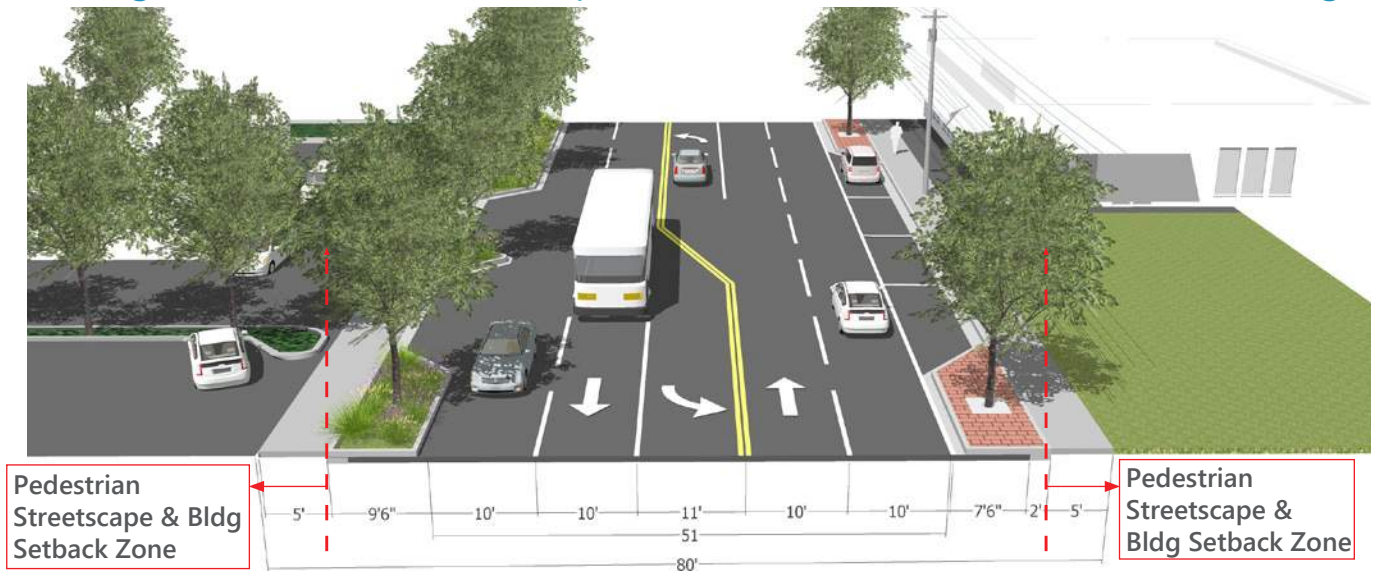
### A Progressive Approach to Orange Avenue.

The 'vision' for the future of Orange should clearly consider the long term redevelopment potential of the corridor, as well as the evolution of transportation in downtown Orlando to include expanded transit, innovations such as autonomous vehicles and data/smart technology, and a stronger emphasis on bike & pedestrian amenities. However, it is also important to recognize the realities of the current corridor today: roadway and the adjacent land uses will change over time, guided by vision and development standards, but perhaps never achieving a perfectly uniform representation of a 'prototype' solution. Change will be incremental, and so solutions must work for today's

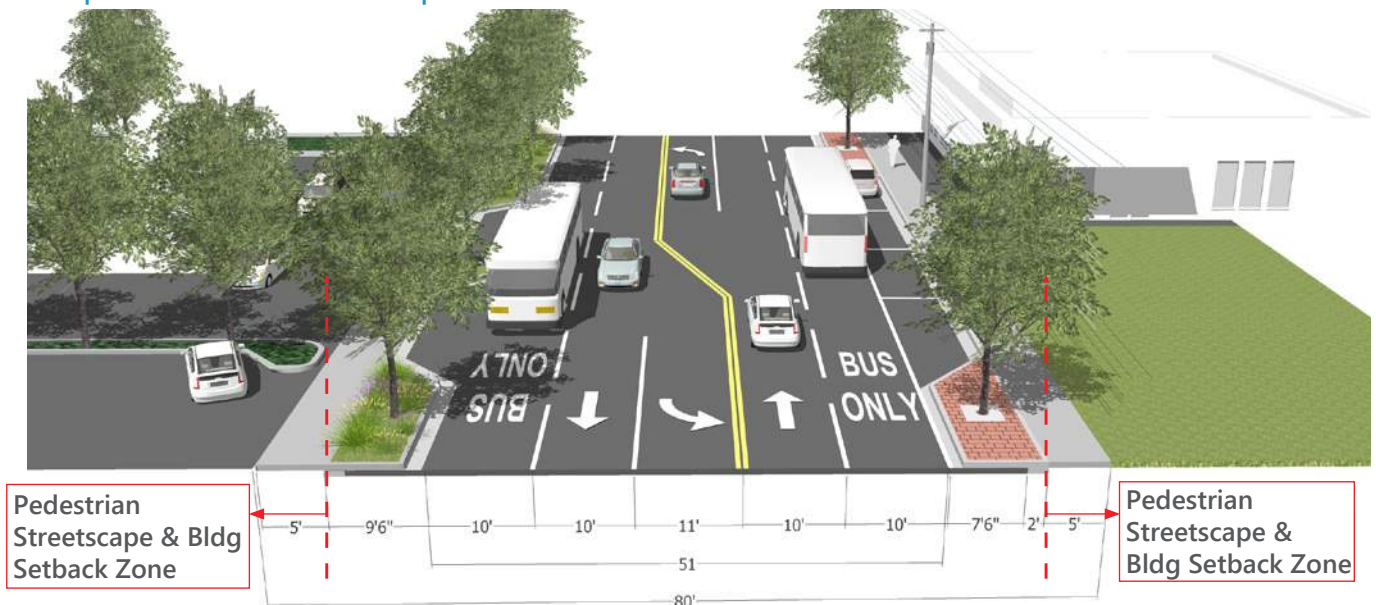
80' right-of-way and existing building locations while creating a direction for the future. This 'progressive implementation' philosophy is designed to enable an 'evolution' in transportation and land use in the mixed-use corridor.

Today, Orange is positioned for an FDOT resurface/repave project which includes narrowed lanes and on-street parking articulated with curb extensions for both street trees and intersection crossings. The DSNID, City and other potential partners anticipate adding funding for 'upgrades' such as enhanced sidewalk and crosswalk paving, additional street trees, stormwater rain gardens, enhanced lighting (with data portals) and

### Existing 80' Section with Initial Improvements (Above Planned FDOT Resurfacing)



### Proposed Future Bus Rapid Transit Lanes



# Orange Ave | Proposed Sections

enhanced transit stops and art opportunities. Special pavement color/texture in the center turn lane can further 'break down' the expansive asphalt appearance to achieve a narrower, slower street perception. Over time, the outside lanes of the new Orange Avenue could accommodate extended, dedicated bus transit lanes. For these solutions, the overhead power lines are anticipated to remain and the existing City setback standards will allow for increased sidewalk widths (through easement) for additional trees.

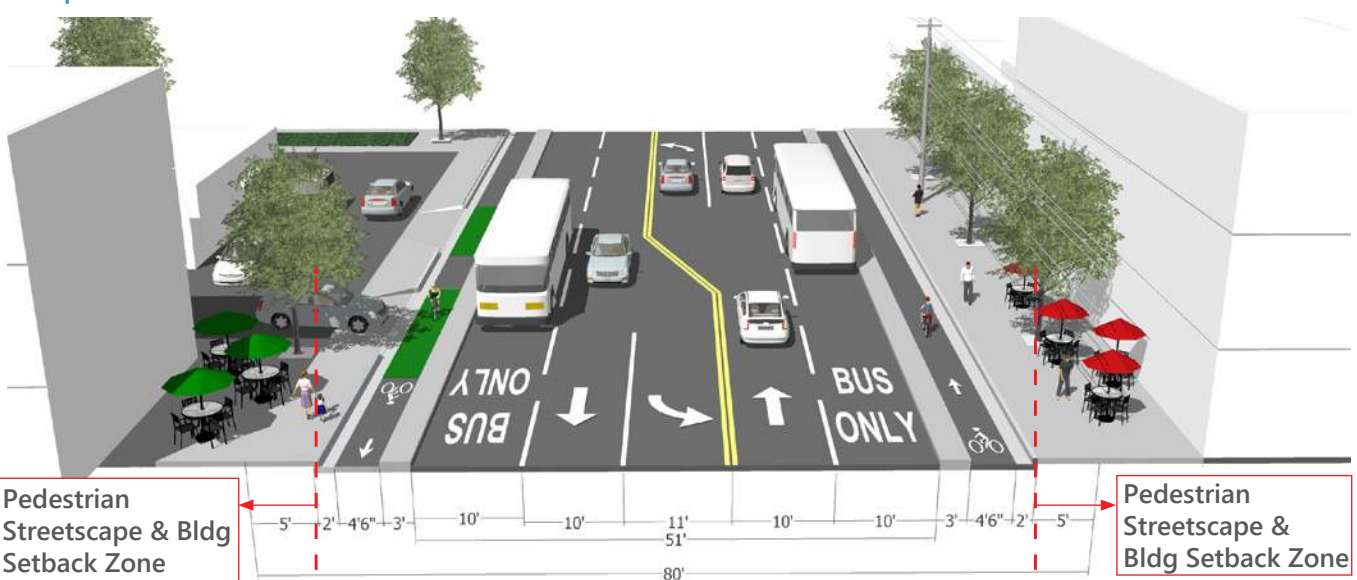
As Orange Avenue (and downtown Orlando) evolves, the dedicated transit lanes may become shared use bus/bike facilities. In the current condition, and in the

southern FDOT phase 1 of the Orange Avenue project, there is not available room within the right-of-way for dedicated bike facilities. Bikes will ride with traffic or take alternate routes on Delaney or Division Avenues. In the future, fundamental changes in transportation and vehicular use may bring much denser development and changes in behaviors conducive to the reallocation of space to the kind of shared use facilities seen in mature cities such as San Francisco, Washington, DC and Philadelphia. The automobile lanes necessary to support Orange actually decreases from 5 to 3 lanes. The advent of autonomous vehicles and ride-share programs may evolve on-street parking into drop off zones, or perhaps even eliminate on-street parking altogether, allowing dedicated bike lanes.

## Proposed Future Bike and Transit Lanes A



## Proposed Future Bike and Transit Lanes B





## 5 | Orange Ave | Proposed Future Evolution

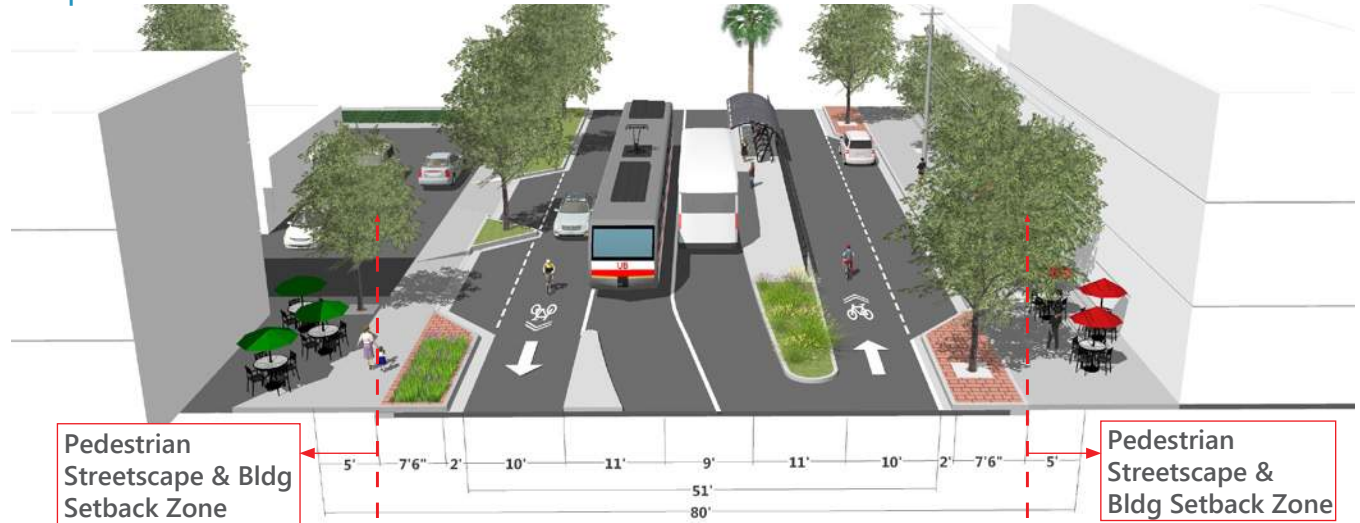
**A Long Term View.** Over time, it is important that 'ultimate/urban' evolutions remain possible for Orange. This means (in part) maintaining a strategy to accommodate significant future transformation such as fixed light rail or streetcar transit, supported by significant redevelopment density. The below section illustrates how the continued respect for the current ~50' curb to curb and ~80' right-of-way does not foreclose the option of a dedicated transit line (LRT or BRT) with shared lanes for bike/ped and available space for on-street parking/drop-off, which also becomes the available space for required turn lanes at key intersections, etc.

The planned sidewalk easements will pay dividends in this future vision, because the availability of this

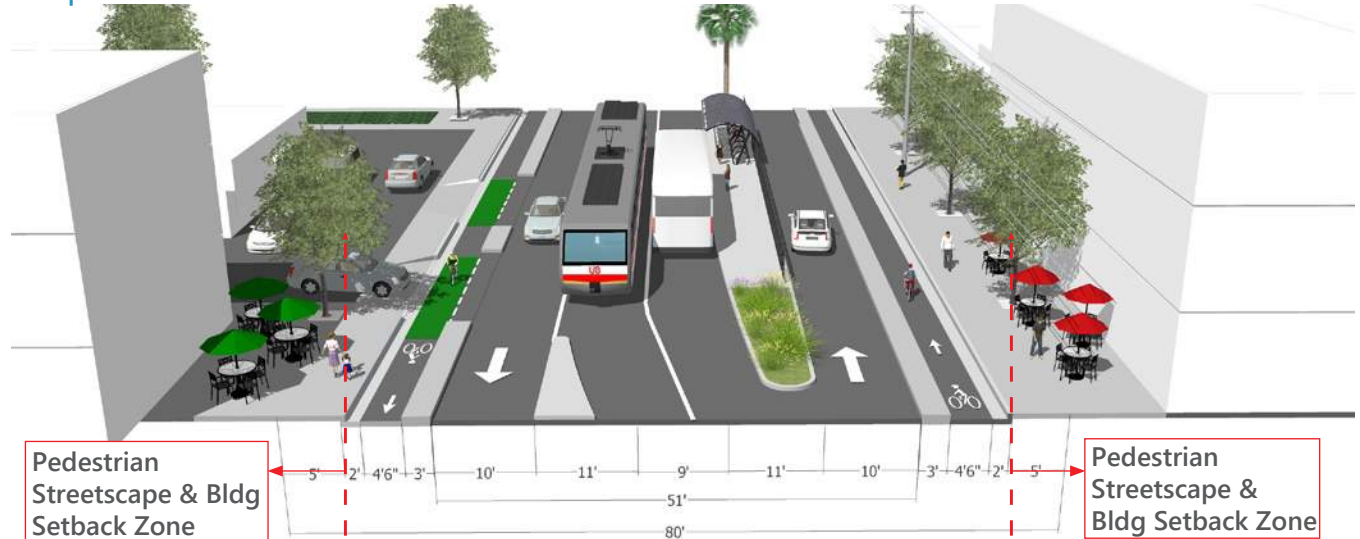
additional area for walking, retailing and trees will be critical within a 'functional' ~100' building face to building face corridor. While this future may seem far away, it is critical to plan for it now, particularly in the placement of redeveloped buildings and ongoing street engineering interventions.

Examples of this evolution for streets with an approximate 100' functional right-of-way are common in larger, older cities. Portions of Orange will maintain smaller buildings as a result of the adjacent neighborhood residential, but there are numerous opportunity areas where commercial property could be assembled for larger, denser mixed-use development forms as is already taking place along Orange at both the Gore Street and Pineloch Avenue gateways.

### Proposed Future Transit Lanes



### Proposed Future Transit Lanes with Buffered Bike Lane



## Orange Ave | Character Studies

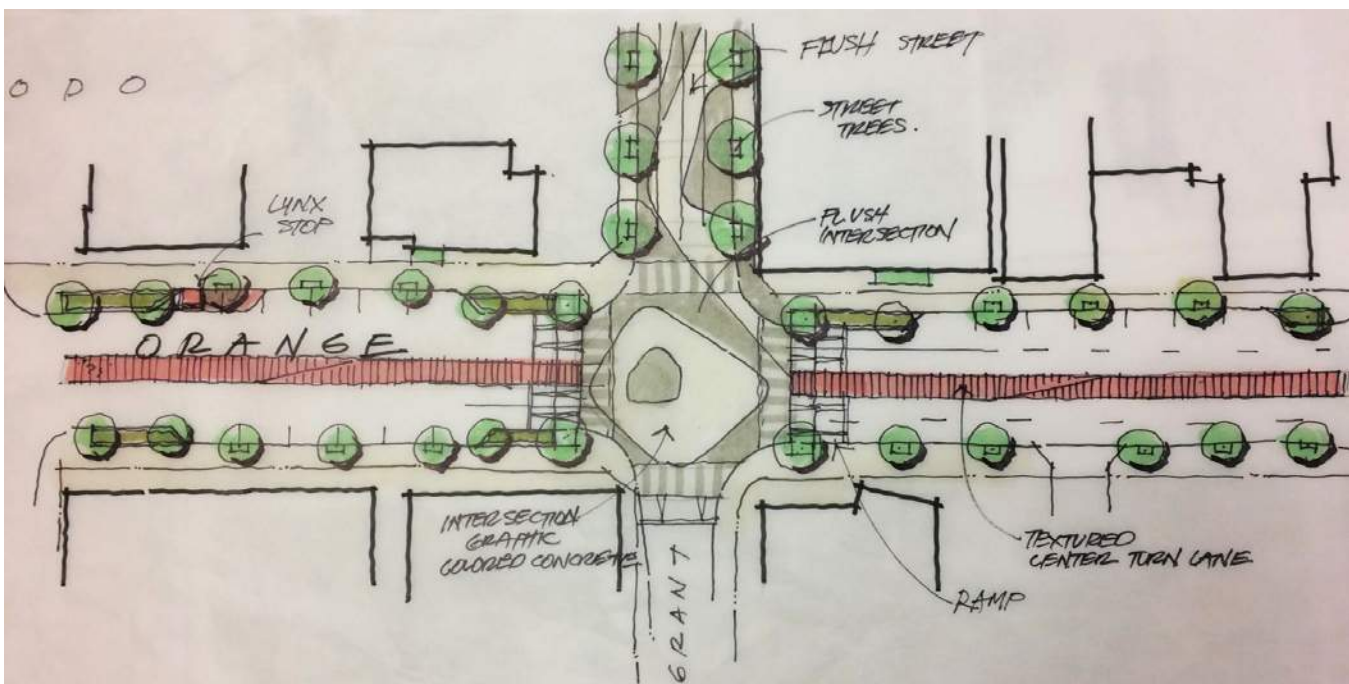
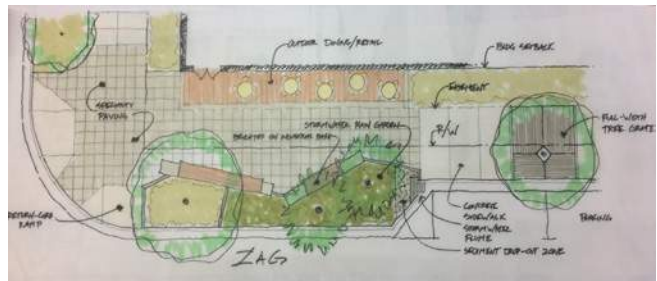
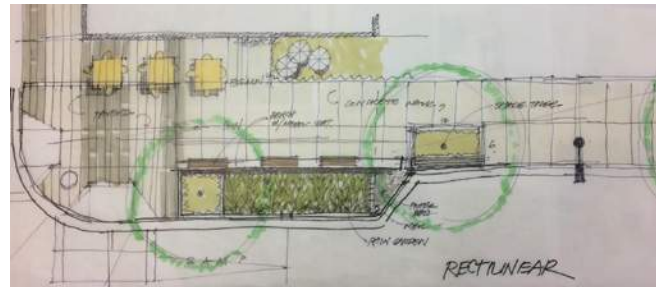
**Intersections and Pedestrian Areas.** While Orange is a constrained environment for pedestrian amenities today, there are clear opportunities to enhance the image, character, comfort and safety – particularly at intersections. Several workshop study sketches illustrate variations on several themes that can be explored as ‘value added upgrades’ to the planned 2018-2020 FDOT resurfacing project.

The alternate studies show the incorporation of these elements within various contemporary design motifs using materials such as standard concrete with special scoring, special/colored concrete, cast concrete pavers, wood, metal and canopy trees in special planters as well as iron tree grates.

## Using the intersection at Grant Street as a template, potential features include:

- Larger pedestrian areas
- Reduced Street crossing distances
- Eliminated right turn lanes
- Special sidewalk and roadway pavements
- Raised Intersections (flush condition)
- ADA compliant ramps
- Textured/colored turn lanes
- Street Trees and Planting areas (rain gardens)
- Seating, Site Furnishings and Art elements
- Lighting, 'smart station' hot spot locations
- Specially treated LYNX transit stops

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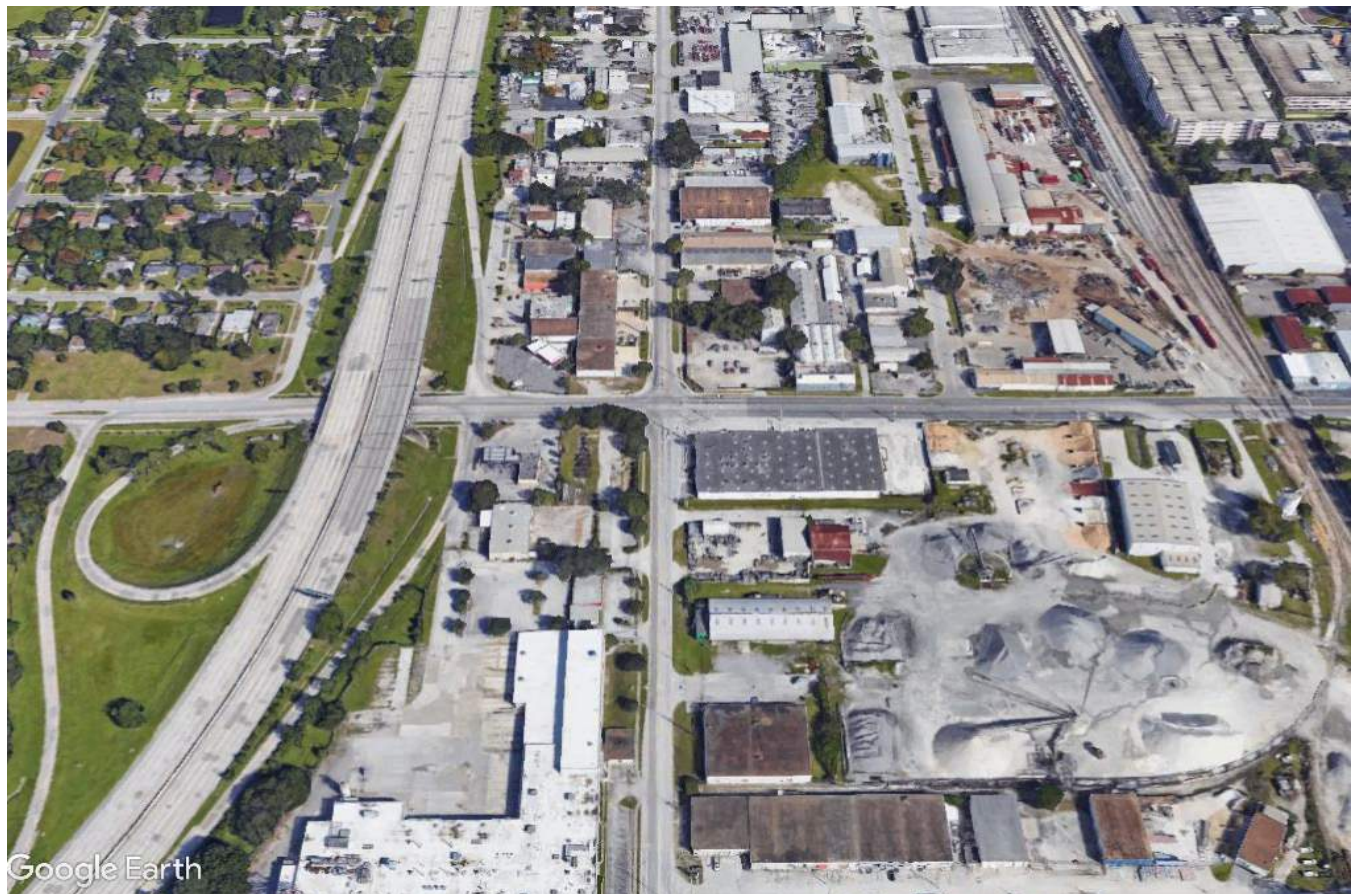


## 5 | Division Ave | Existing Sections

**The Division Avenue Mixed-use Corridor.** Division Avenue (Division) is a critical parallel facility to Orange, focused on serving legacy industrial and emergent flex office and commercial/distribution uses as part of the downtown employment sector. Division is a City street, with portions on FDOT's Strategic Intermodal System (SIS).<sup>\*</sup> Division is also heavily influenced by Interstate 4, including the planned modifications to entry/exit ramps as part of the current construction. Division also forms a highly useful north-south route from Michigan Avenue to downtown as a parallel facility to Orange.

Division is characterized today as a utilitarian corridor supportive of truck access and significant regional electrical transmission lines. While there are continuous sidewalks, this is a fairly 'exposed' environment for pedestrians, with minimal buffering from heavy vehicle traffic, large intersection crossings, extended driveway aprons and very limited shade/street trees, site furnishings or lighting. There are no dedicated bicycle facilities, despite a visible pattern of working class employees accessing some of the industrial sites via bike, transit and on foot. Land use patterns are generally internally focused as typically found with industrial, light manufacturing and office/flex space.

*\*Refer to Florida's Strategic Intermodal System Handbook by FDOT.*

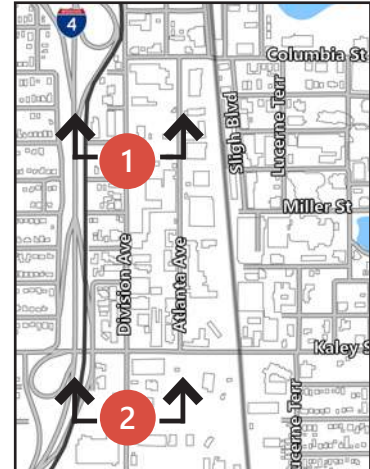


Division Avenue - at Kaley

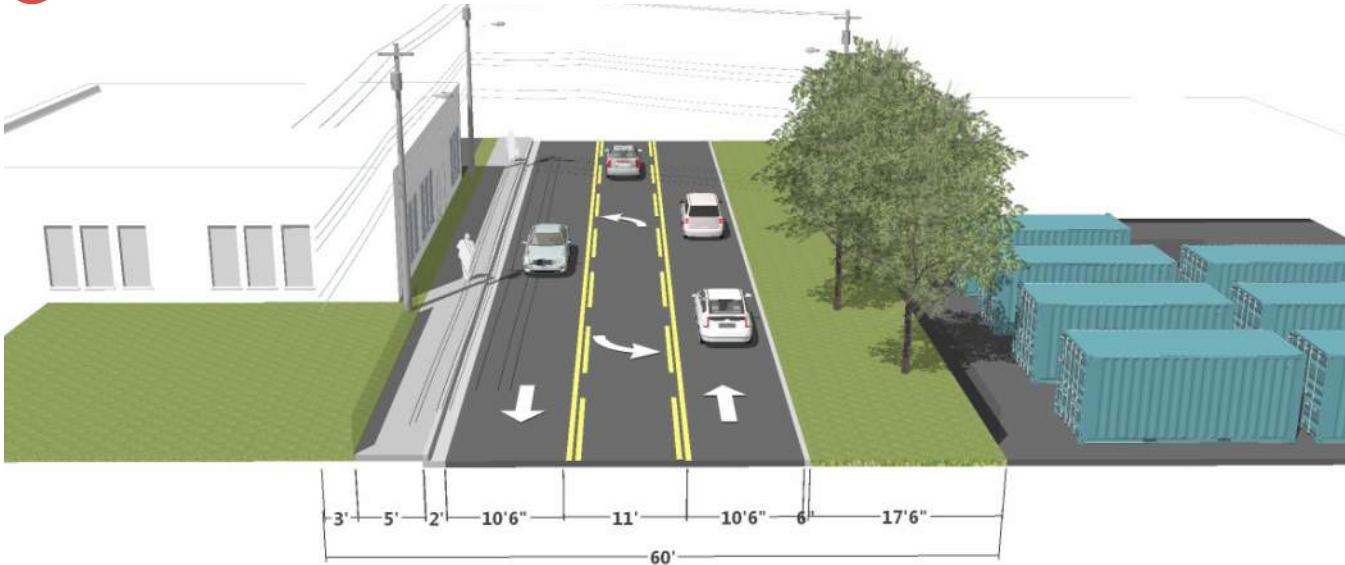
## Division Ave | Existing Sections

**Character and Configuration.** Today, Division is comprised of two distinct typical sections. North of Kaley Street, the roadway is generally 3 lanes (center turn lane) within a 60' right-of-way. Some available green space exists along the east curb line (15'-18'), while the significant overhead power is primarily located on the west curb line.

South of Kaley Street, Division maintains its 3-lane configuration, but adds some on-street parking along the west curb line and includes a larger amount of greenspace (30') along the east curb line within a larger overall right-of-way (~80'). The overhead electrical transmission shifts to the east side of the right-of-way at Kaley, continuing south on this alignment to Michigan Avenue.



### 1 Existing 60' Section: North of Kaley St



### 2 Existing 80' Section: South of Kaley St





## 5 | Division Ave | Proposed Sections

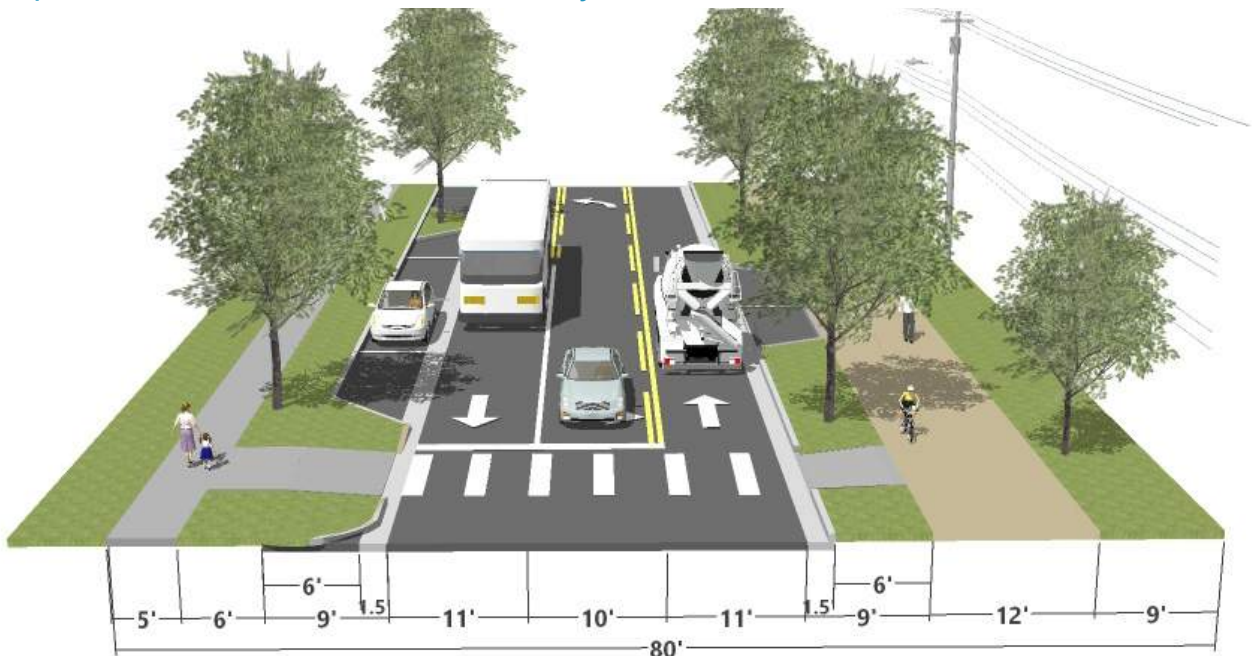
**An Accessible Approach to Division Avenue.** There are several simple opportunities to create a more livable, accessible Division corridor. This begins with the recognition that the supplemental green space within the right-of-way could be utilized to develop a continuous, multi-purpose trail for bikes and pedestrians with canopy shade trees and branded design & art elements. South of Kaley, there is ample space on the east curb line for such a path, including trees that can be adequately offset from the overhead power. On both sides, space is available for conventional 7' on-street parking, tree lawn/bulb outs and street trees as appropriate. Finally, there is an opportunity at the Michigan intersection to develop a feature 'southern gateway' that may include a large ~180' diameter roundabout – all within publically owned land (Orange County + City).

North of Kaley, many of the ideas continue, adapted to the narrowed right-of-way. The signature trail feature continues along the eastern curb line with canopy shade trees as Options A, B & C explore different outcomes. Option A maintains existing buildings and power lines and simply maximizes the available space for sidewalk. Option B keeps the road in its current position but illustrates how a 10' redevelopment setback could create additional sidewalk and street tree space over time. Option C shifts the entire road slightly to the east, allowing for a traditional tree lawn & sidewalks along each curb.



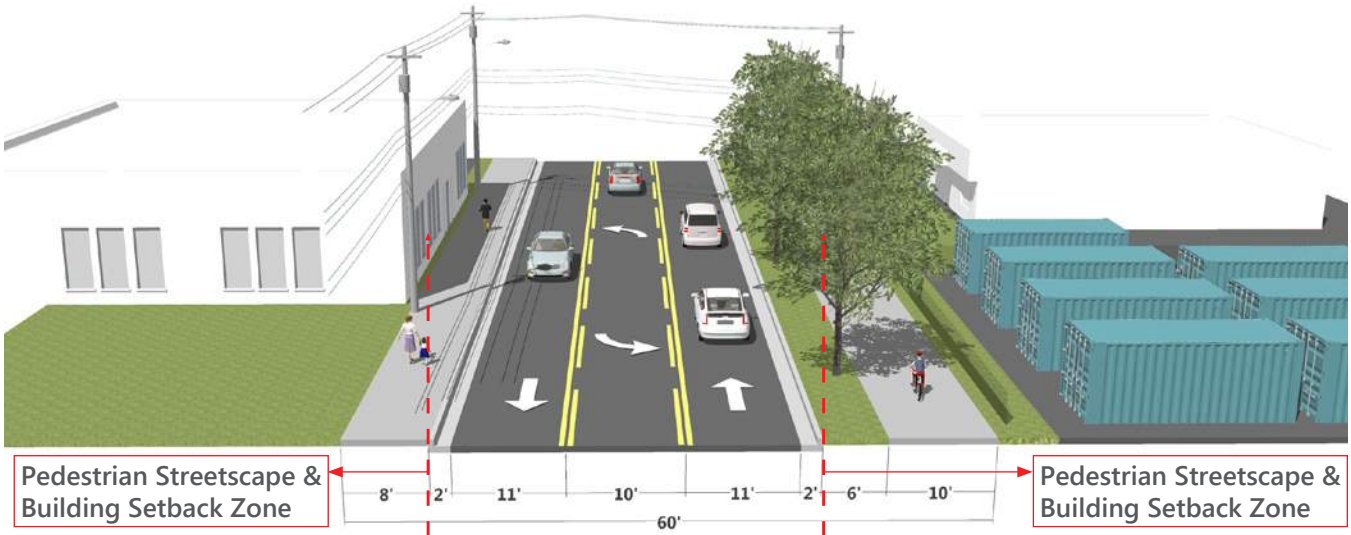
*Gateway Roundabout Opportunity at Division and Michigan*

### Proposed 80' Section - South of Kaley St

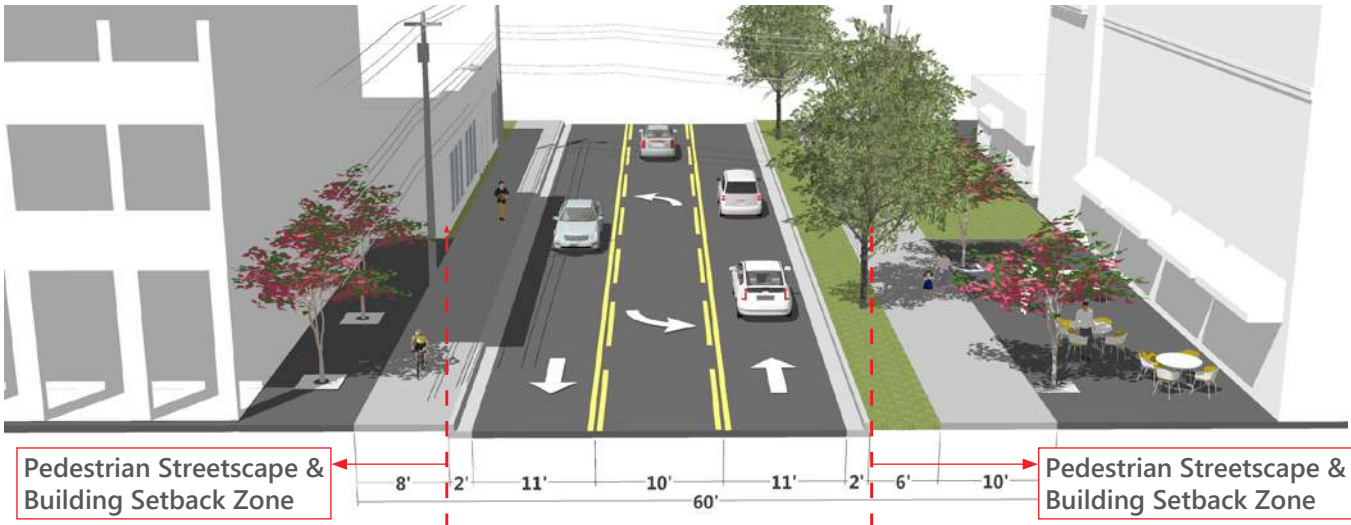


# Division Ave | Proposed Sections

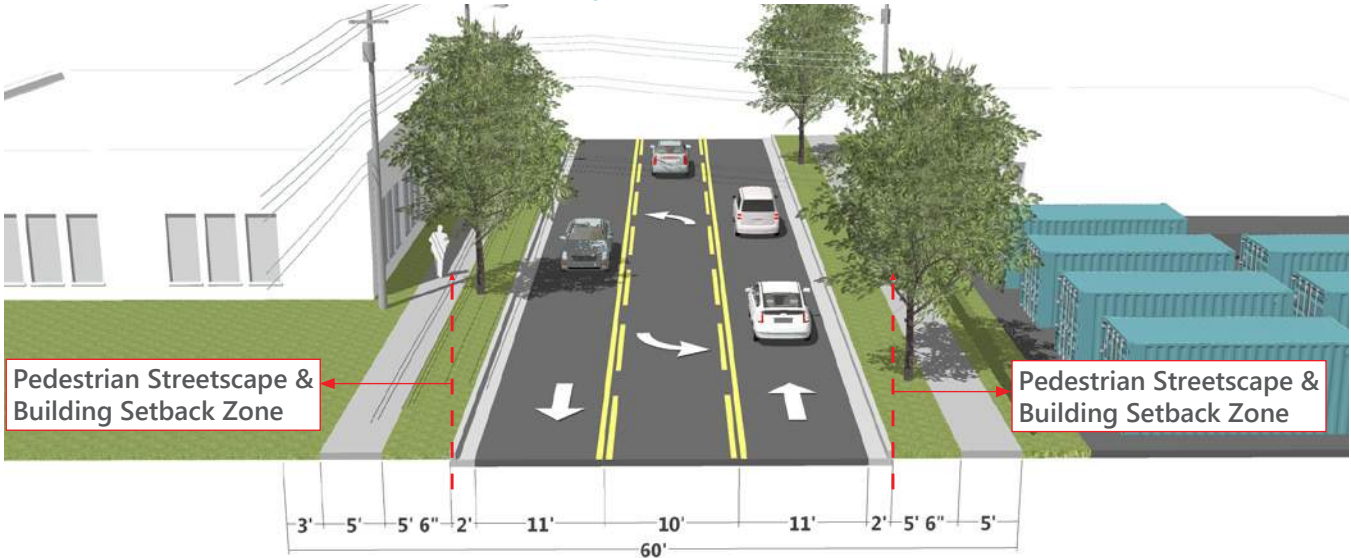
## Proposed 60' Section: North of Kaley St - Option A



## Proposed 60' Section: North of Kaley St - Option B



## Proposed 60' Section: North of Kaley St - Option C





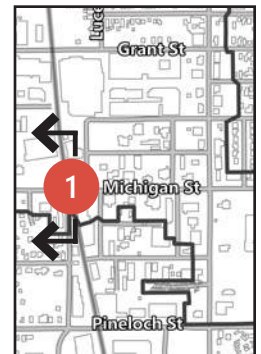
## 5 | West Michigan Street | Existing Section

**The Michigan Street Gateway Corridor.** Michigan Street west of Orange Avenue (West Michigan) is a commercial 'transition area' from the urban center of Downtown South to transitional commercial, warehouse/industrial and the neighborhoods located off of Lake Holden. This area is a significant 'through-route' to connect to the Interstate 4 interchange as well the Holden Heights/Orange Blossom Trail areas to the west.

**Character and Configuration.** West Michigan is bisected by the railroad corridor, but the general section is roughly the same. An ~85' right-of-way is defined by two travel lanes in each direction, a wide (15') center turn lane with intermittent landscape islands with mountable curbs, narrow grass strips and minimal 5' sidewalk. Significant overhead power runs on both sides of the street east of the rail, and on the north side only west of the rail. This limits the options for canopy trees, although the height of the lines should allow for understory trees. Lighting is utilitarian roadway and there are no dedicated bike facilities.

**Proposed Sections – Softening the Edges.** Two potential solutions are identified to enhance Michigan in this area. Option A essentially works with the street in its current configuration. Low, durable shrubs are placed in the grass strip to better buffer pedestrians on the sidewalk, and single trunk understory trees are placed in 5' deep tree grates which overlay the sidewalk by 2', but allow the required ADA walkway clearance. Where possible, canopy trees and additional landscaping is placed in the medians. Crosswalks along Michigan can be treated with colored/textured asphaltic application, and some banner graphics may be possible on the utility poles. Bicycles will ride with traffic, or take alternate routes.

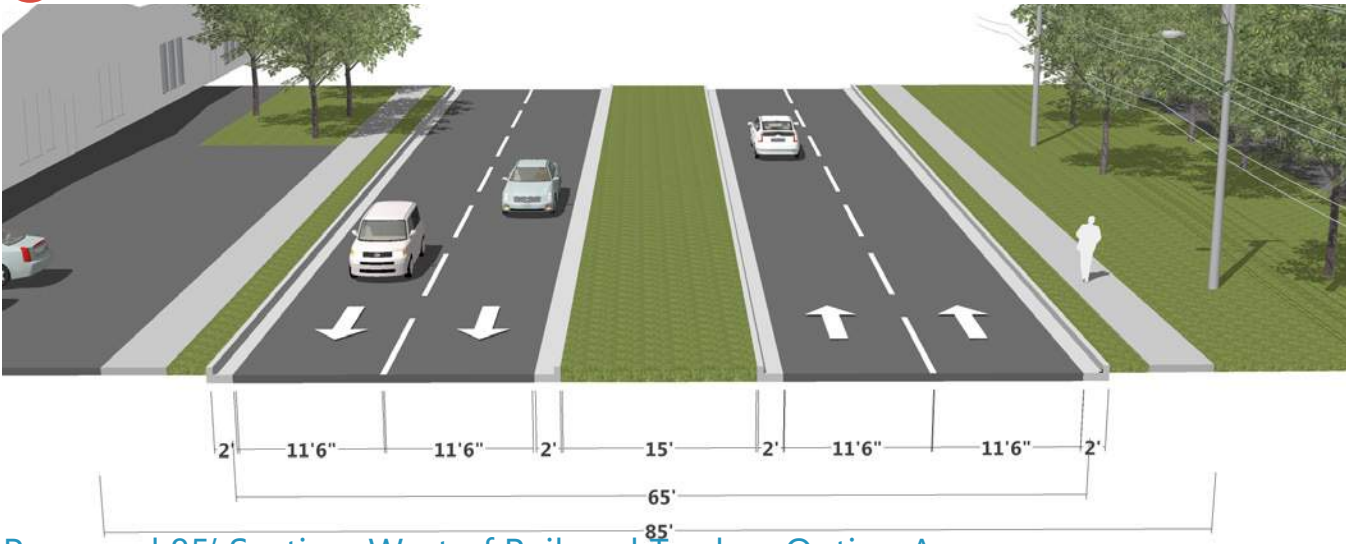
Option B takes a more aggressive approach to create a true 'complete street'. Working within the available ~85' right-of-way, the center median is reduced from 15' to 10' and the curbs are pulled toward the center. This creates additional space behind the curb for a more conventional tree lawn and ample dimension for dedicated bicycle and sidewalk facilities, or a shared 'sidepath' solution on each side of the street.



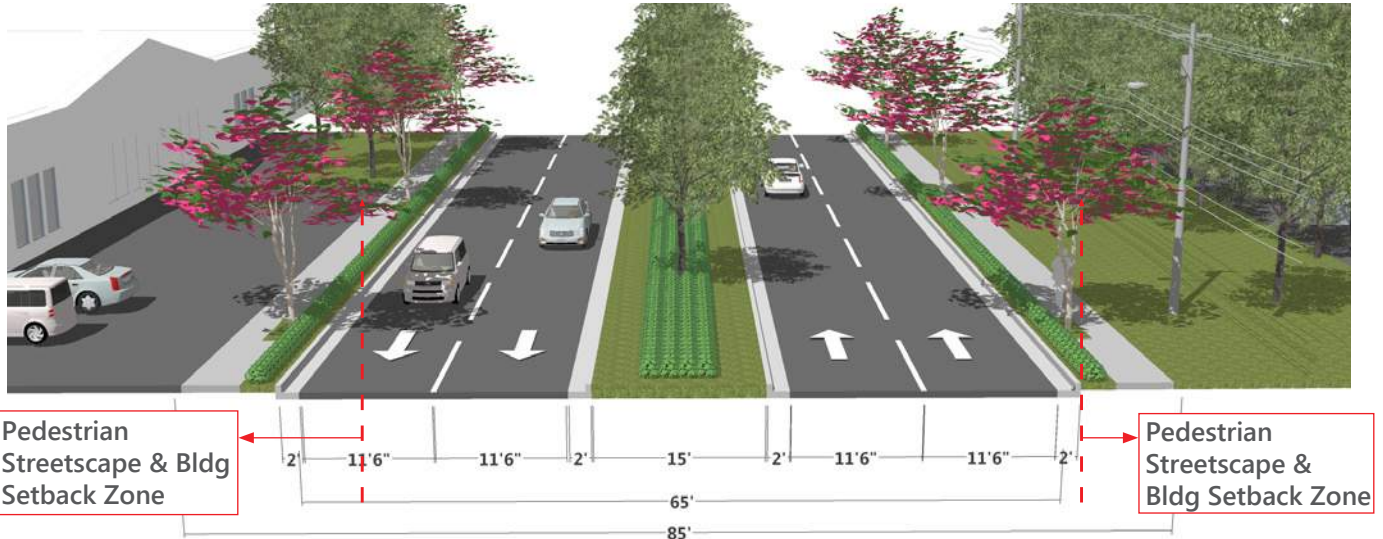
West Michigan Street – at Railroad Tracks

# West Michigan Street | Existing Sections

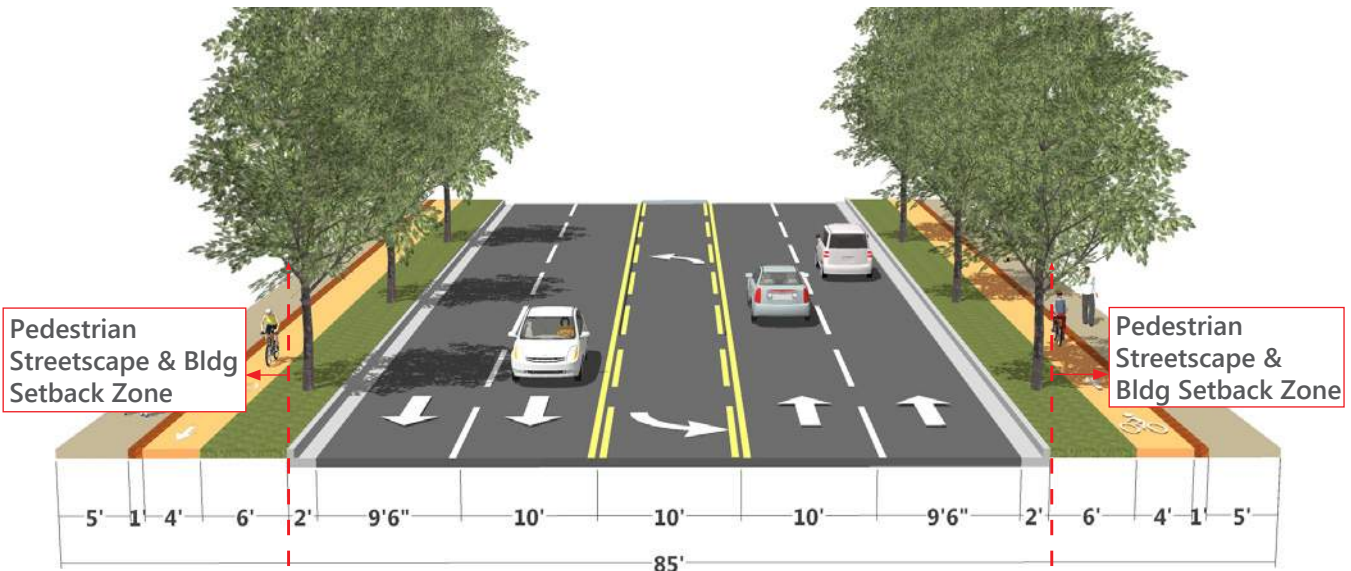
## 1 Existing Section: West of Railroad Tracks



## Proposed 85' Section: West of Railroad Tracks - Option A



## Proposed 85' Section: West of Railroad Tracks - Option B





## 5 | East Michigan Street | Proposed Sections

### **The Michigan Street Commercial Corridor.**

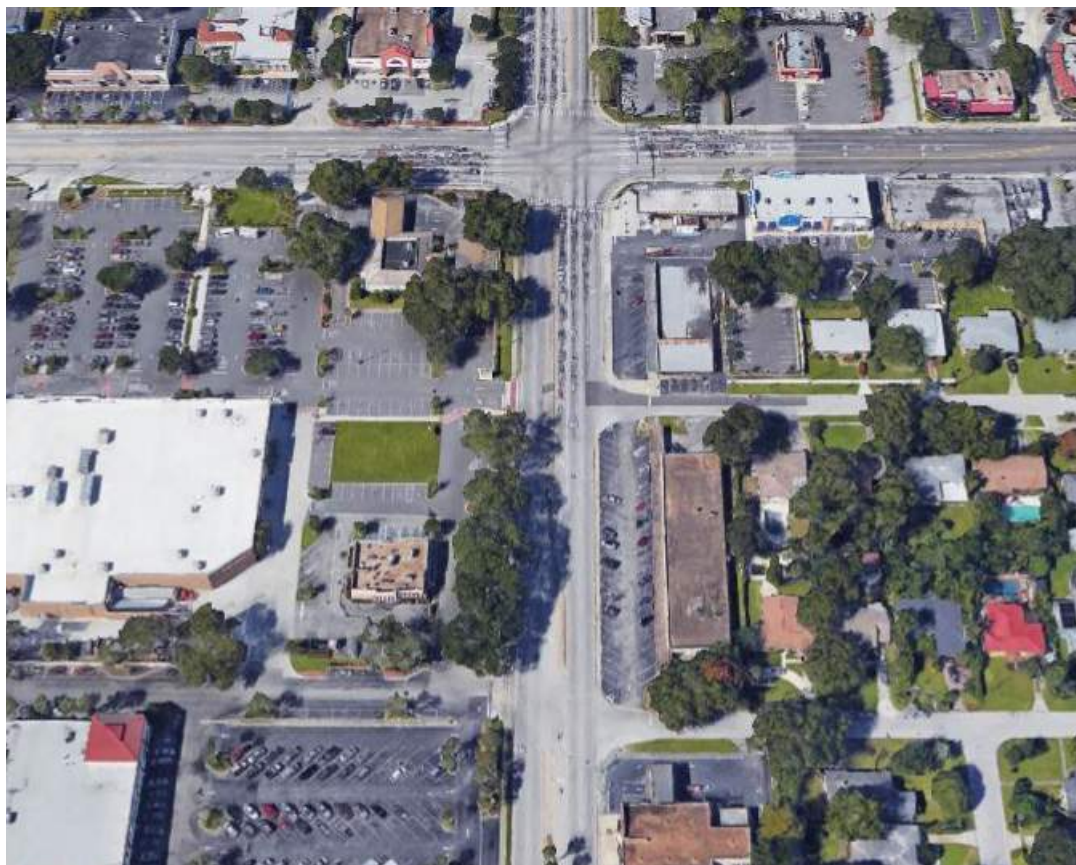
Michigan Street east of Orange Avenue (East Michigan) includes a very unique set of corridor/land use patterns within the District. The north side of East Michigan includes some 1950's style strip commercial on shallow, alley fed lots (120'-140' deep). These properties are generally comprised of a ~60' deep retail building and a single bay of parking in the front. The parcels behind the retail area parallel single family residential, so assembly and redevelopment on a larger lot (as seen on Orange Ave) is not as likely. The south side of East Michigan is defined by a regional shopping center that includes suburban outparcels and at least one large candidate site for redevelopment. When redevelopment occurs, there will be a similar opportunity to work with the property development to secure a ~10' sidewalk easement to bring the pedestrian/streetscape realm more into proportion with the road, similar to the current strategy on Orange.

**Character and Configuration.** The East Michigan right-of-way and physical configuration is dimensionally very similar to West Michigan: 5-lane road (large center turn lane) with additional turn lanes at the Orange intersection, large overhead power lines, minimal pedestrian/streetscape features and no bike facilities. In addition, there are several intersection

corners (such as at Michigan/Delaney) that do not meet ADA requirements and several conditions where parking and utility equipment directly abuts limited sidewalk space with no buffer or protection. However, what is fundamentally different about East Michigan (compared to West) is the apparent amount of local pedestrian and bicycle activity, as well as local 'short trip' auto movements – all in response to residential engagement with the local businesses, grocery and other retail services, not to mention the nearby Blankner/Boone OCPS campus.

### **Proposed Sections – Softening and Reposition.**

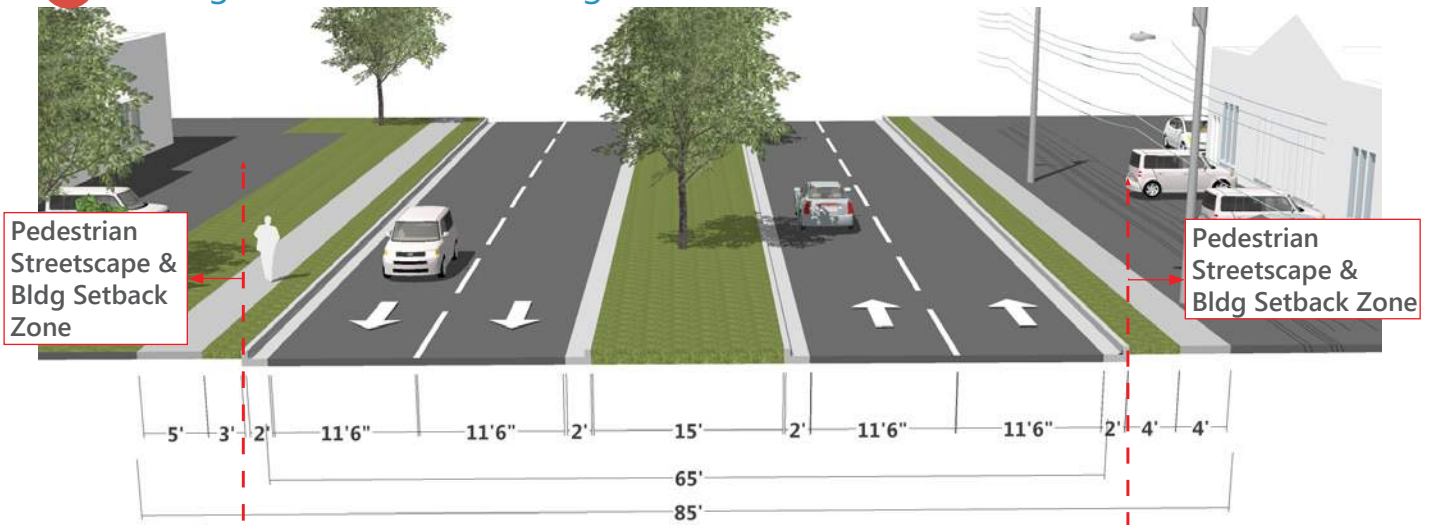
The 'vision' approach to East Michigan is to initially work to soften the edges with similar features as described with West Michigan. Plantings, understory trees and colored/textured crosswalks. Additionally, there are significant intersection ADA challenges that should be addressed as soon as possible, including (if necessary) corner clips at several locations to both expand pedestrian areas, as well as add opportunities for limited landscape and/or urban art or lighting features. Over time, the full redevelopment of the corridor should be considered, recognizing the very different opportunities and challenges associated with the highly diverse parcel patterns and associated redevelopment economics.



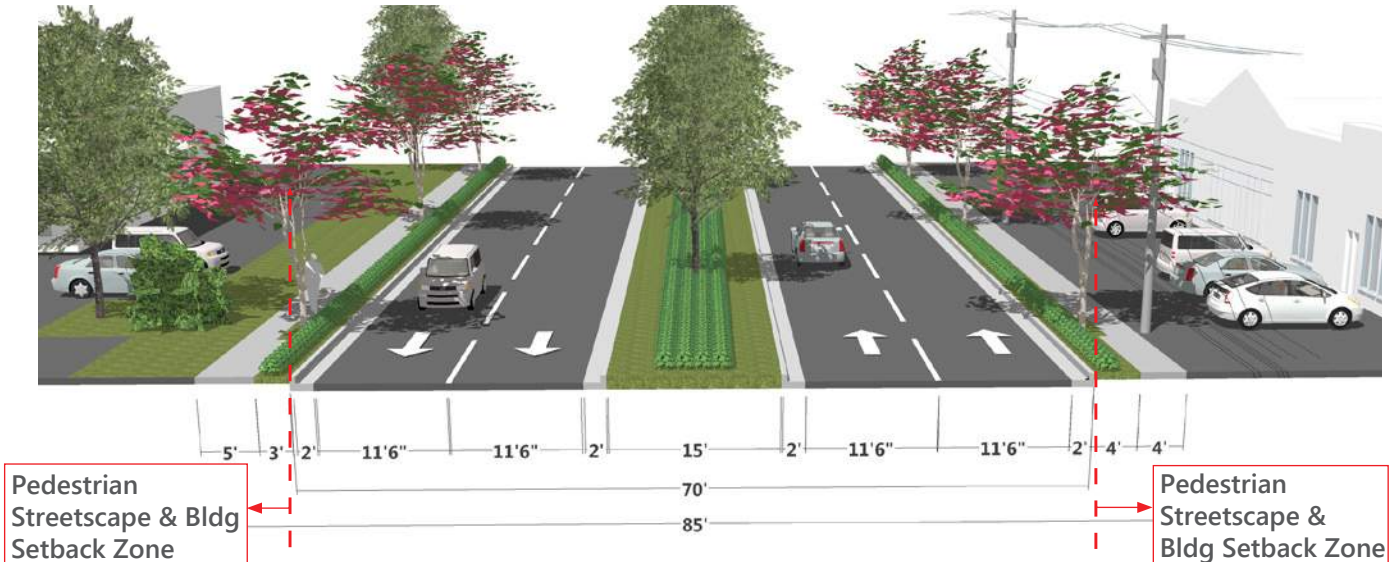
*East Michigan Street - East of Orange Ave*

# East Michigan Street | Proposed Sections

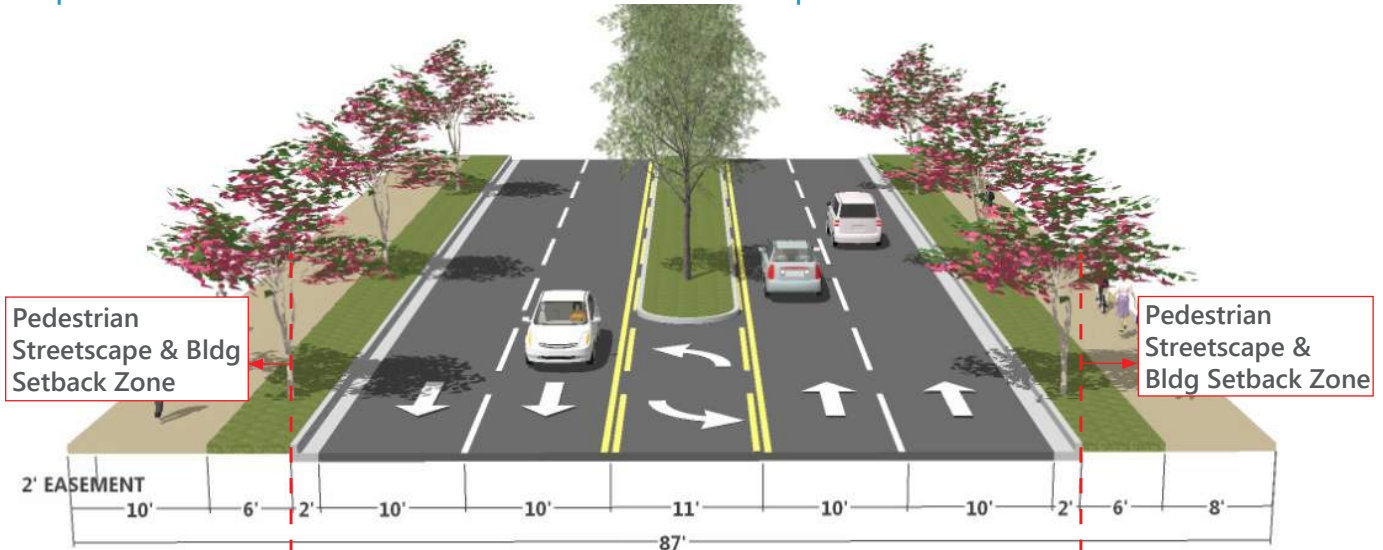
## 2 Existing Section: East of Orange Ave



## Proposed 85' Section: East of Railroad Tracks - Option A



## Proposed 85' Section: East of Railroad Tracks - Option B





## 5 | Kaley Street | Existing Sections

**The Kaley Street Linkage Corridor.** West Kaley Street (Kaley) is a critical community linkage to Interstate 4 for the neighborhoods, as well as the commercial & industrial property within the DSNID. The section of Kaley between Orange and I-4 carries approximately ~21,000 ADT; yet with ~10,000 ADT east of Orange and West of I-4. This underscores the 'confluence' of vehicular movements that are funneling toward the I-4 access ramps, or quickly dispersing into the City grid after exiting I-4. Kaley is a City of Orlando street that very much functions as a connecting corridor, a 'place to drive through not to', yet it serves as a gateway to the DSNID and a linkage to several important north-south streets such as Orange, Kuhl (Orlando Health), Lucerne (SODO), Atlanta and Division, as well as the I-4 access ramps.

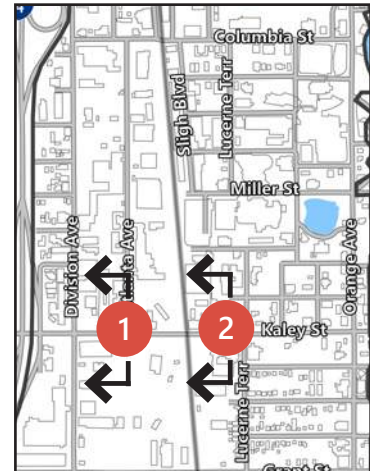
The West Kaley right-of-way varies between ~75' and 80'. It is a 5-lane roadway with minimal pedestrian features, highly inconsistent (often discontinuous) sidewalks and no designated bike facilities. Many of the sidewalks and crossings do not meet ADA requirements. As an anecdotal observation from the planning team (walking audit and bus tour), Kaley is one of the more prevalent streets for high speed driving behavior as vehicles accelerate rapidly between Orange Avenue and the rail line because there is very little driving 'friction'.



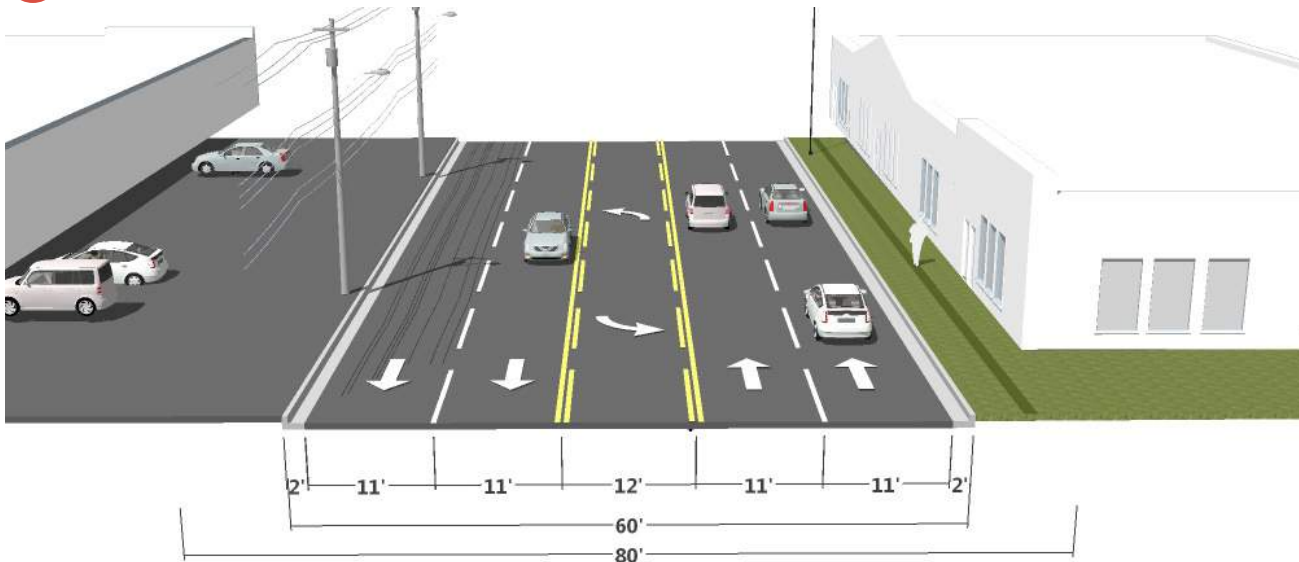
*Kaley Street - Lucerne Terr to Atlanta Ave*

# Kaley Street | Existing Sections

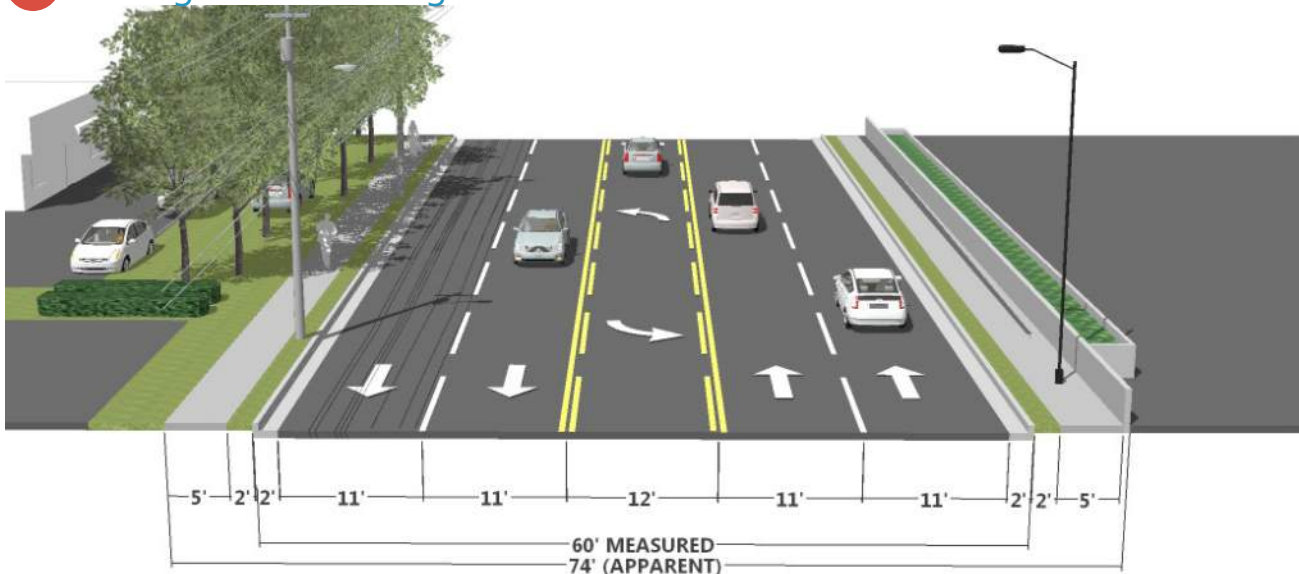
**Character and Configuration.** Kaley is fronted by a loosely organized set of commercial properties (primarily office) as well as the new southern entrance to Orlando Health at Kuhl. Likely redevelopment is anticipated to be slower paced as compared to other corridors and is anticipated to include more ongoing office uses, particularly around the Orlando Health entry. Kaley also includes an electrical substation and Orange County Work Release Center which further limit redevelopment opportunities along the south right-of-way. Kaley includes large overhead power on the south curb. The existing land uses are not geared toward significant retail or residential development. West of the railroad corridor, the land uses become strictly industrial, including some very large driveway cuts and some unattractive 'open views' to yard & shop/materials storage areas. These may provide good opportunities for industrial art and screening walls.



## 1 Existing Section: Railroad Tracks to Division Ave (ROW Varies)



## 2 Existing Section: Orange Ave to Railroad Tracks

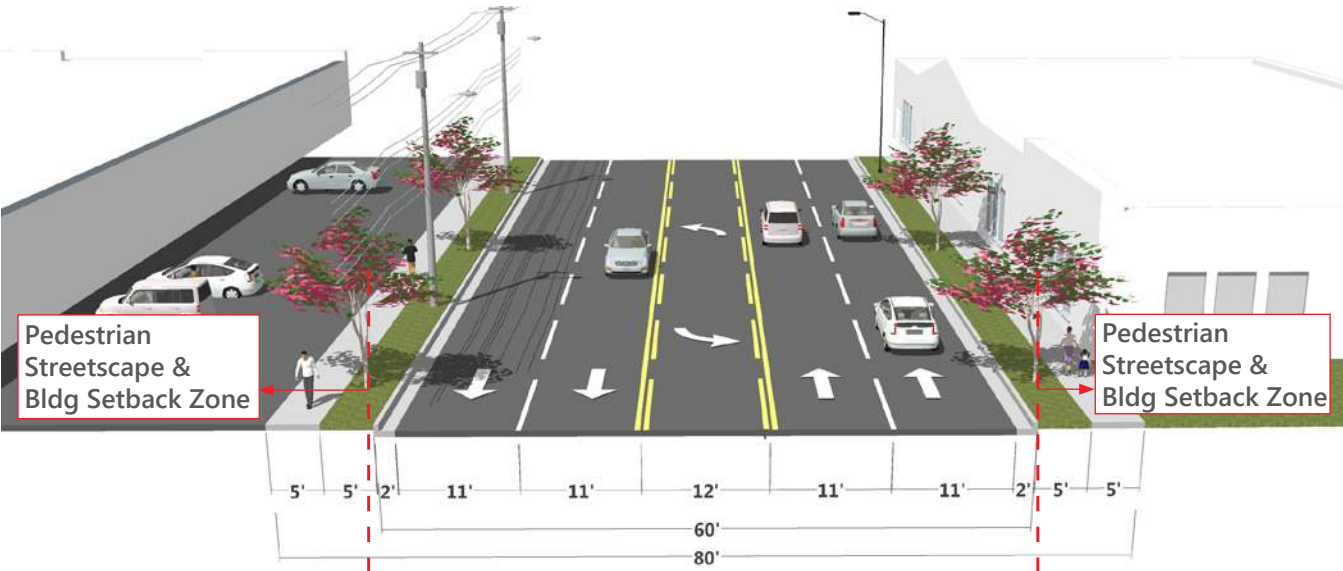




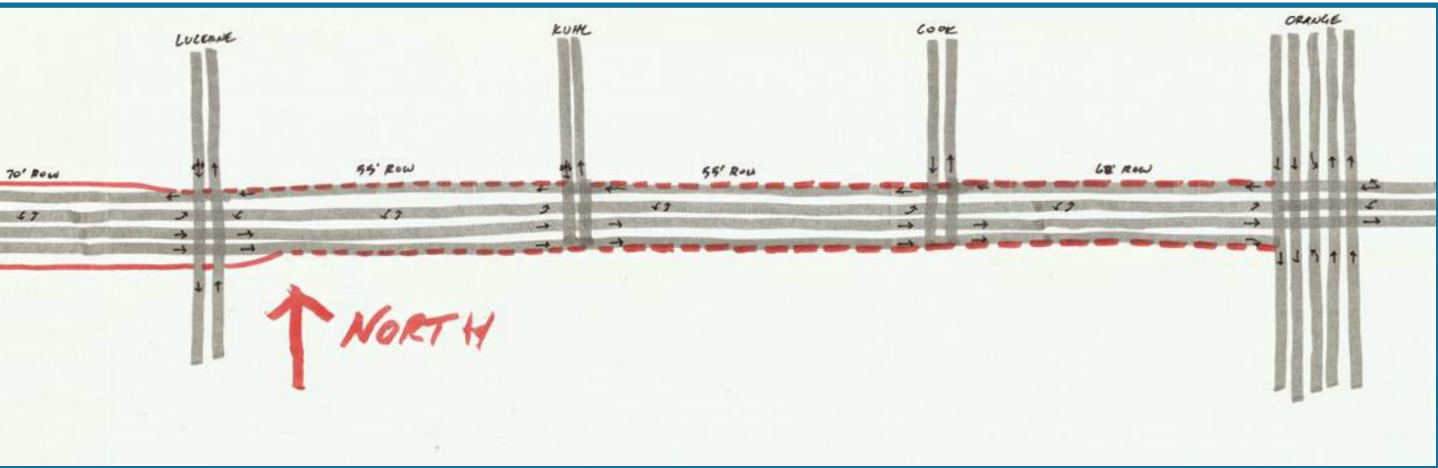
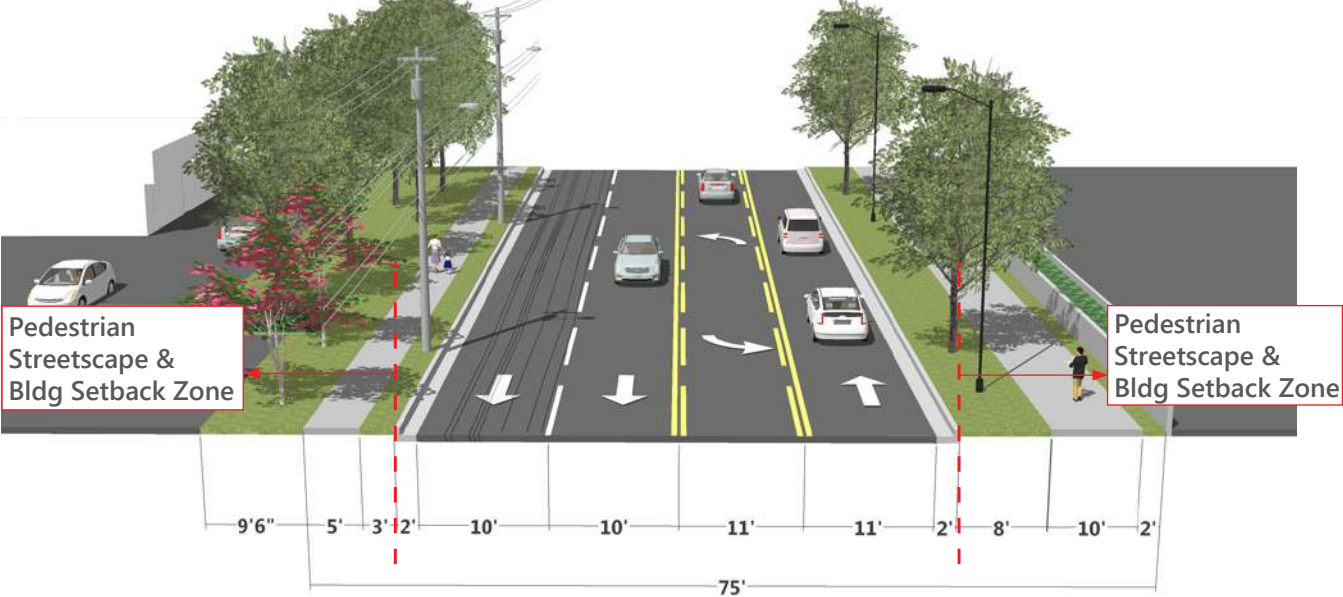


# Kaley Street | Proposed Sections

Proposed Section: Railroad Tracks to Division Ave (ROW Varies)



Proposed Section: Orange Ave to Railroad Tracks





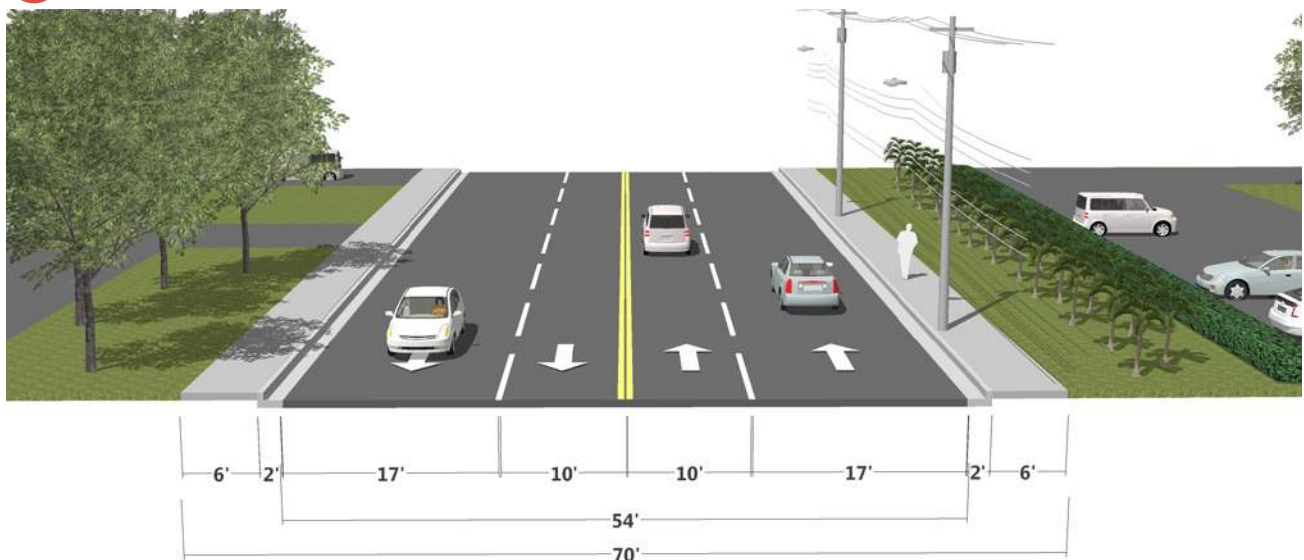
## 5 | Gore Street | Existing Section

**The Gore Street Neighborhood Connector.** Gore Street (Gore) represents a distinct opportunity not only for the DSNID, but also for the larger fabric of downtown Orlando. Gore connects the neighborhoods east and west of I-4 to both the Orange Avenue and Division corridors, linking to Downtown South as well as the downtown core. Mixed land uses along Gore provide diverse opportunities, with a focus on both employment and residential. Office uses (with a strong healthcare influence) are found to the east and several large industrial sites are located between the rail and Division. There are many sites along the corridor (or in the adjacent blocks) that are candidates for economic development. The former Lucerne Hospital is currently being redeveloped as mixed-use residential with grocery, creating a significant 'anchor and gateway' to the north end of the DSNID.

**Character and Configuration.** The role of Gore has changed in the last 10 years. Orange County data indicates a peak ADT of ~16,310 in 2007, which has been consistently dropping annually to ~10,337 in 2016. This low level ADT volumes is perhaps only caveated by certain left turn movements at Orange/ Gore at peak hour. Gore is a 4-lane road with intermittent on-street parking within a 57' curb to curb dimension. Sidewalks are frequently compromised, with many locations that do not meet ADA and other basic streetscape elements such as trees and site furnishings are largely non-existent. Overhead power runs along the north curb line.

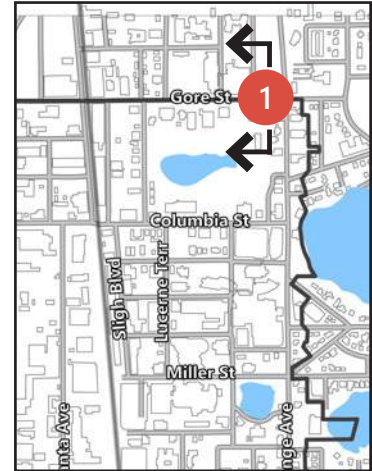


### 1 Existing Section (R.O.W. Varies)

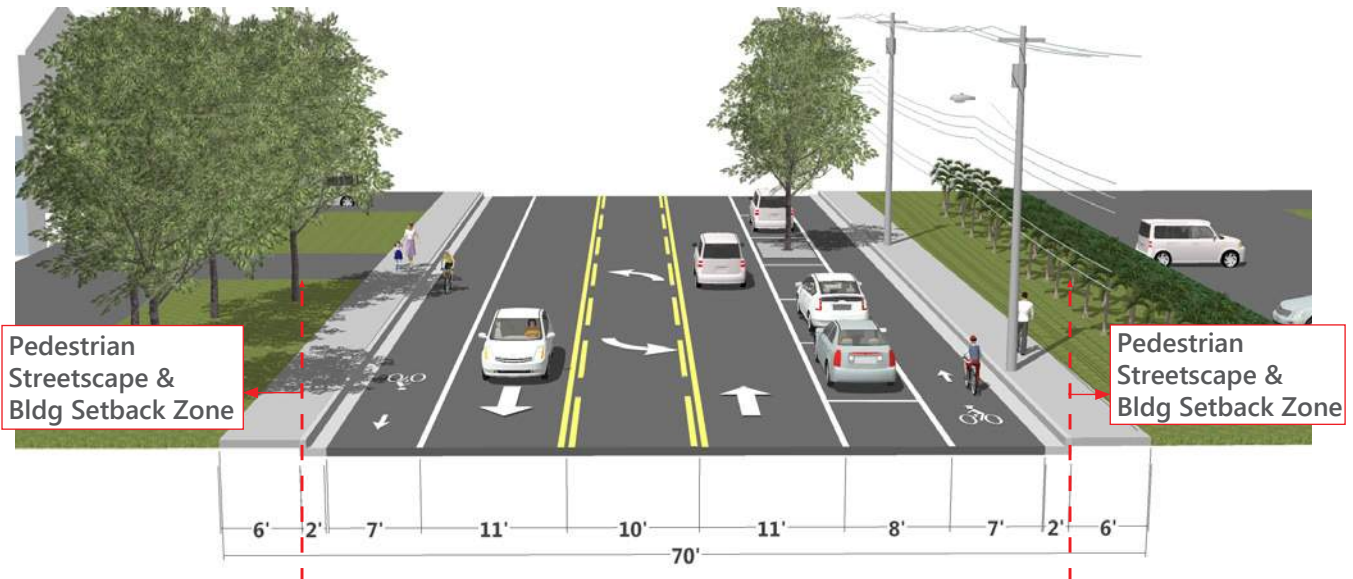


# Gore Street | Proposed Section

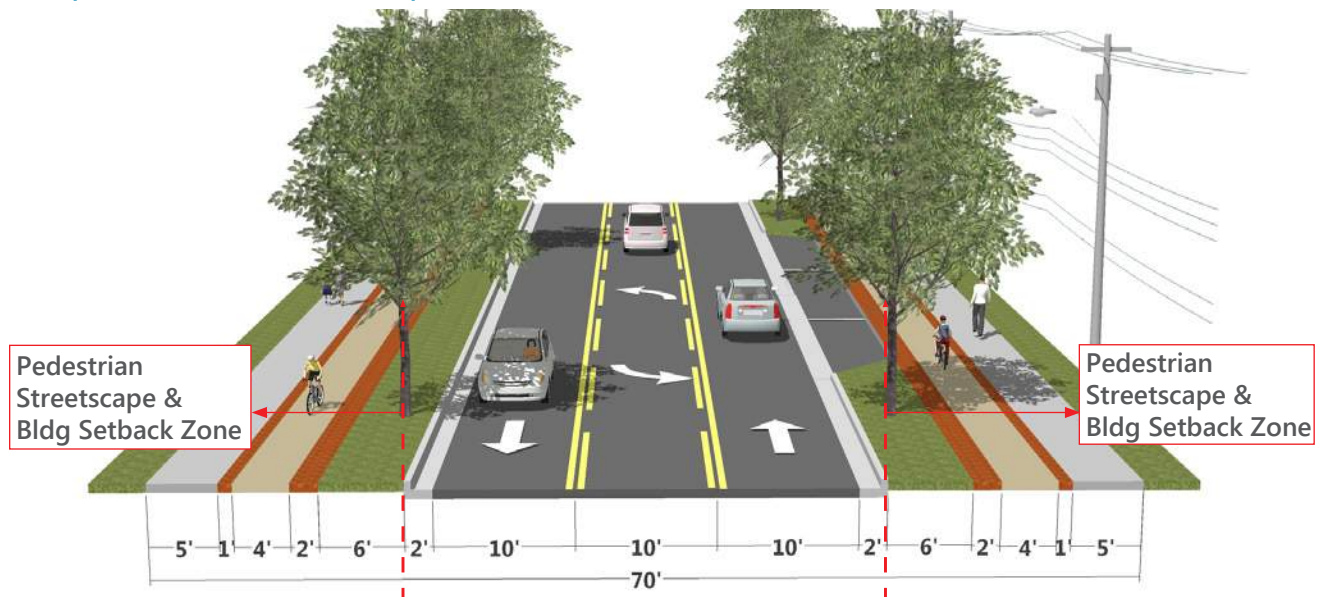
**A Parkway Approach to Gore Street.** Gore Street appears to be an ideal candidate for a complete repositioning as a neighborhood connector that serves the economic potential of the adjacent parcels, while providing a new, downtown trail feature. At ~10,000 ADT, Gore falls well within the volumes accommodated by a 3-lane roadway. A 'rebuild' of Gore would allow for a parkway treatment that could include protected bikeway, street trees, on-street parking and other streetscape features. The resulting 3-lane section maintains capacity for future development as well as regional vehicular movements (see Edgewater Drive/ College Park), while providing a unifying east-west bike linkage – a true 'complete street'. The conceptual section envisions a complete roadway rebuild, including moving the curb lines but not interfacing the overhead power. An alternate solution would maintain the curb lines and place more of the amenities within the current 57' asphalt area, perhaps saving cost, but giving up some aesthetics.



## Proposed 70' Section: Option A



## Proposed 70' Section: Option B

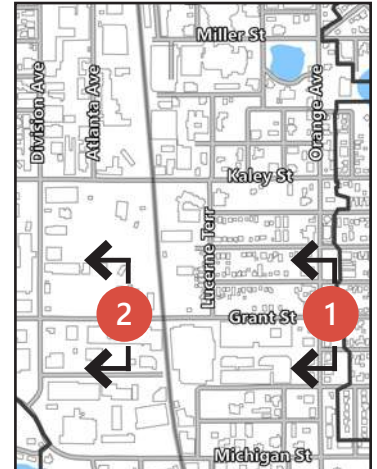




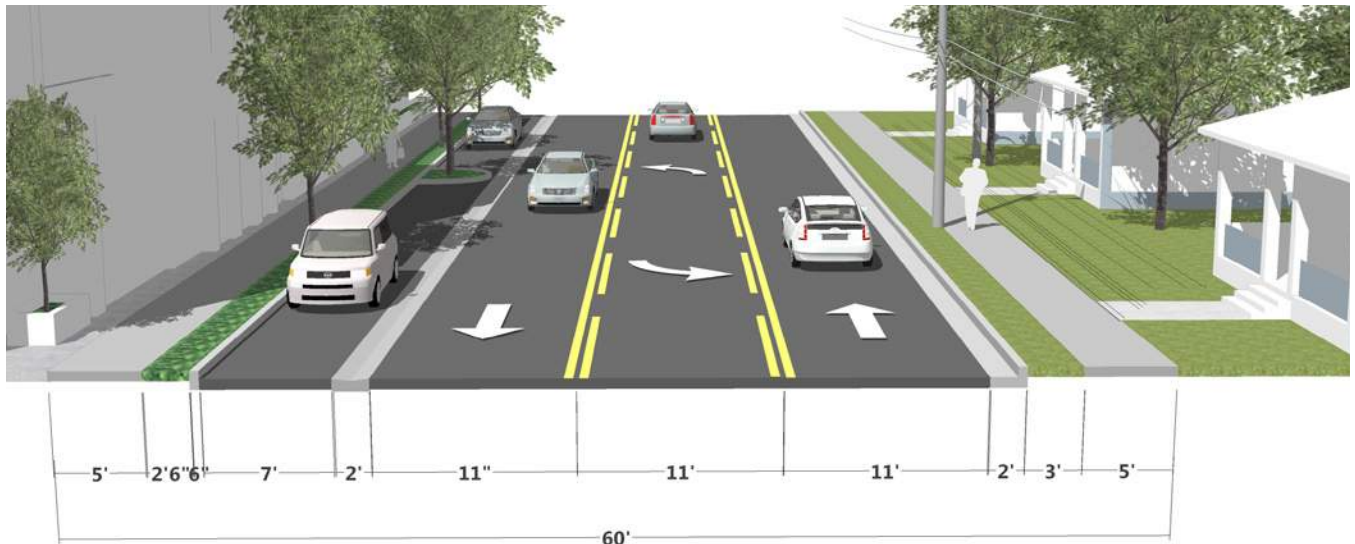
## 5 | Grant Street | Existing Sections

**The Grant Street Neighborhood Link.** Grant Street (Grant) is an important secondary street within the DSNID. To the east, it provides a vital neighborhood linkage to the Orange corridor and popular retail services at the intersection and in the SODO development. To the west, Grant enjoys a rail crossing, and is therefore an important linkage to Division, the area industrial supply users and some emergent artist and home furnishing businesses. Currently, new townhome development is occurring along Grant, partially in response to the success of SODO as well as the gradual stabilization of the residential pocket neighborhood immediately to the north.

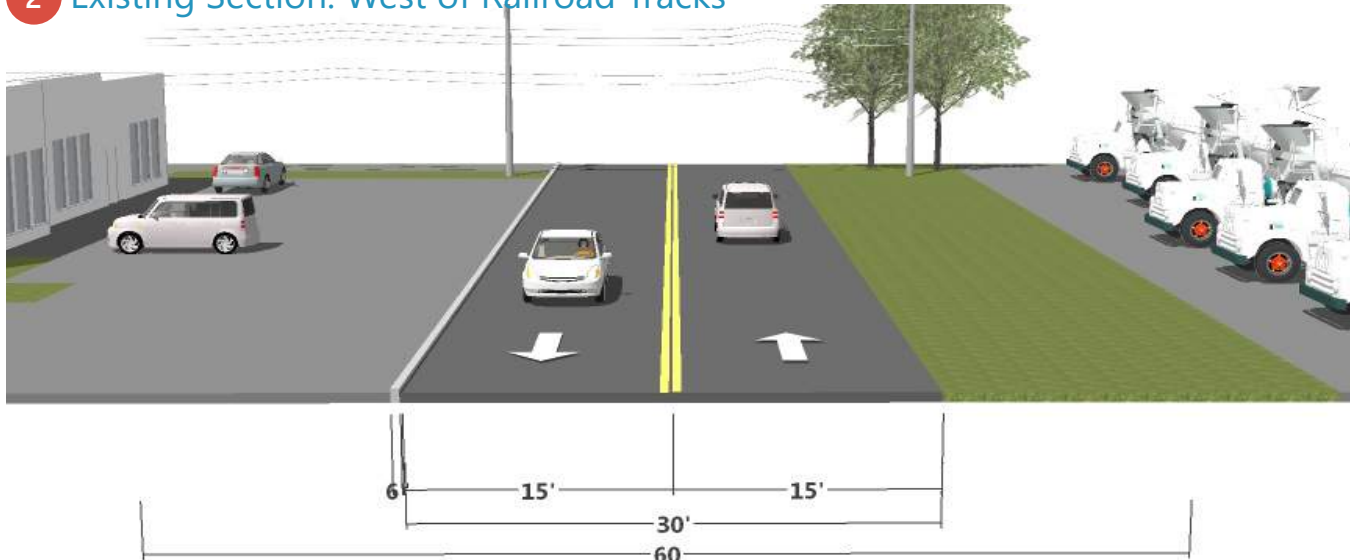
**Character and Configuration.** Grant is a 60' right-of-way - recently enhanced adjacent to SODO and still an unimproved industrial road with extended driveway cuts west of the railway. Overhead power is on the north side of the street.



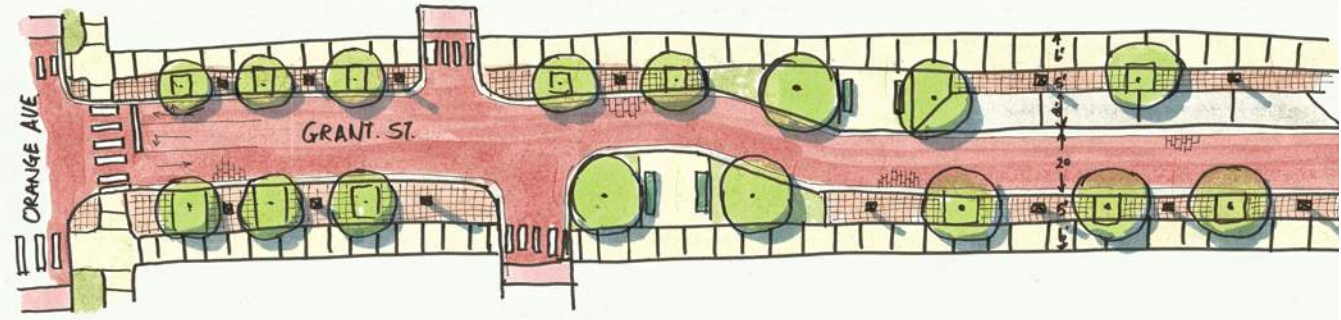
### 1 Existing Section: East of Railroad Tracks



### 2 Existing Section: West of Railroad Tracks

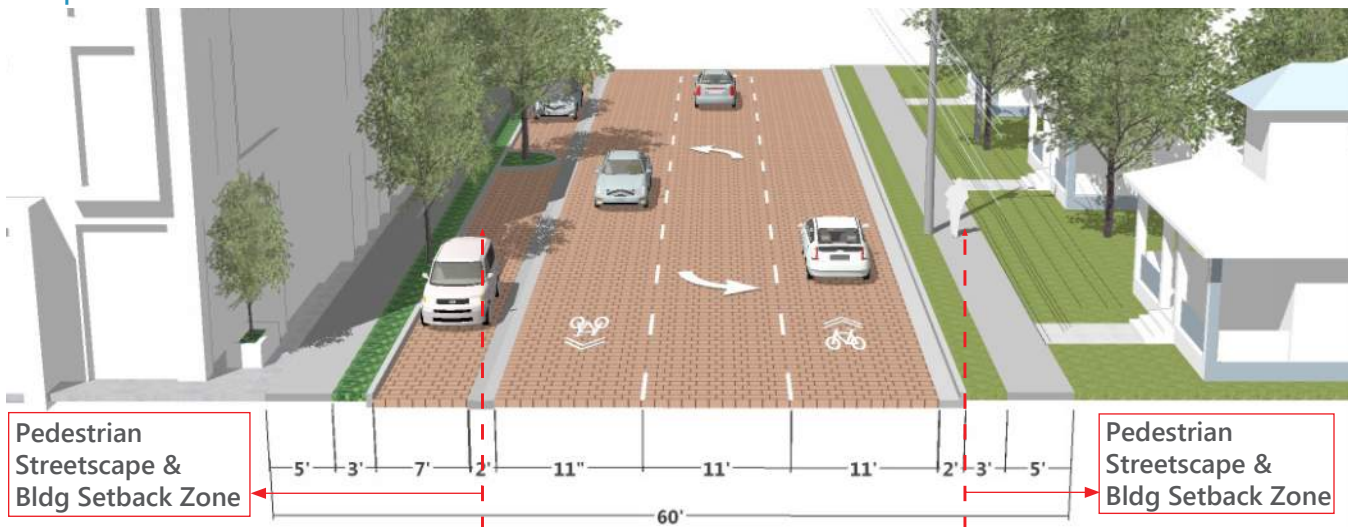


# Grant Street | Proposed Sections

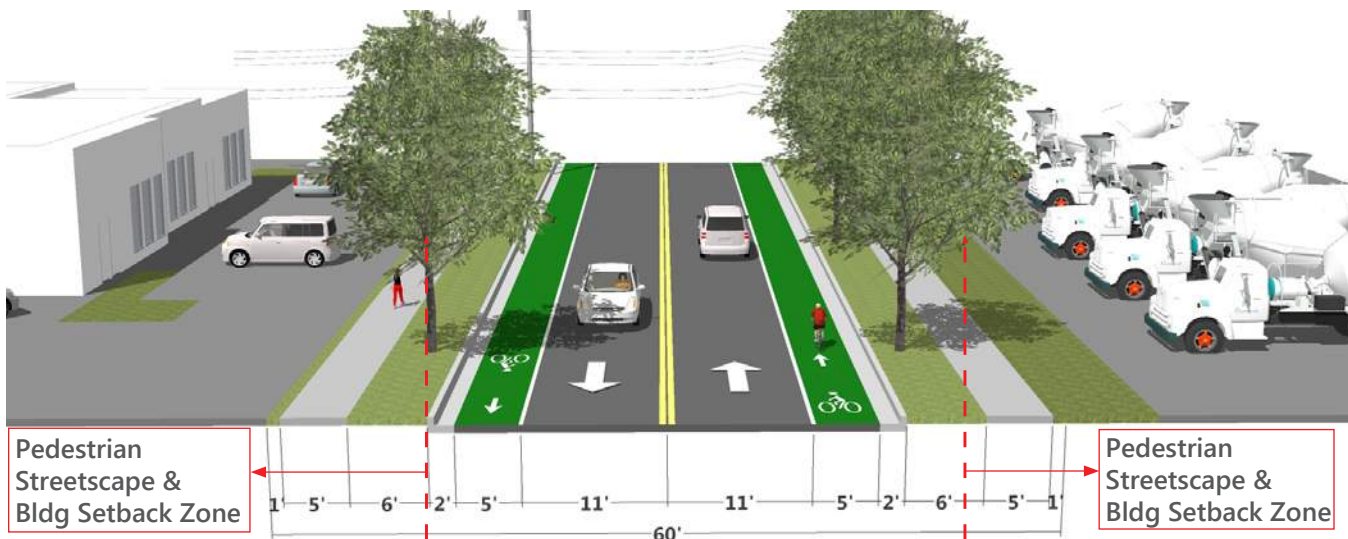


**A Refit for Grant.** One conceptual vision for Grant could be as a shared space/feature street east of the rail. There are some grade issues to address through design as the adjacent properties are much higher than the street. However, a 'special block(s)' street design would allow for the occasional closure of a portion of Grant for community events as one option for a 'pop-up' event space within the DSNID, including small festivals, food trucks and other types of events that could also be coordinated with proximate businesses, such as the ACE Hardware, which often supports community organizations such as Boy/Girl Scouts fundraisers in their parking lot as long as the disturbance to parking/business access is minimal. West of the rail, Grant should eventually be 'finished' as a more complete street, including curb/gutter and continuous bike/ped access.

## Proposed 60' Section: East of Railroad Tracks



## Proposed 60' Section: West of Railroad Tracks





## 5 | Atlanta Avenue | Existing Sections

**The Atlanta Avenue Industrial Road.** Atlanta Avenue (Atlanta) is one of several interior industrial streets that serve the businesses west of the rail, and particularly allow for truck access, materials loading, yard & shop, etc. Atlanta and other similar streets may remain in this function for some time. However, it is reasonable to assume that with regional economic development, the presence of SunRail and other factors associated with certain sites, there will be some redevelopment or repurposing of some properties. For instance, the Orlando Brewery on Atlanta is performing an industrial manufacturing function, but also providing retail services as an ancillary use and creating some local pedestrian traffic. Therefore, it is reasonable to consider that over time, these types of interior streets should become more 'finished' with continuous sidewalks, lighting and some formalized parking.

**Character and Configuration.** Atlanta is a ~66' right-of-way, with a ~40' curb-to-curb dimension. The large asphalt dimension allows for equipment and semi-trailer truck turning movements to comfortably take place within the roadway. There are specific areas that allow for signed on-street parallel parking. Overhead utilities are present on the east curb line, and several properties have large, continuous loading/driveway aprons.



Atlanta Avenue - North of Kaley

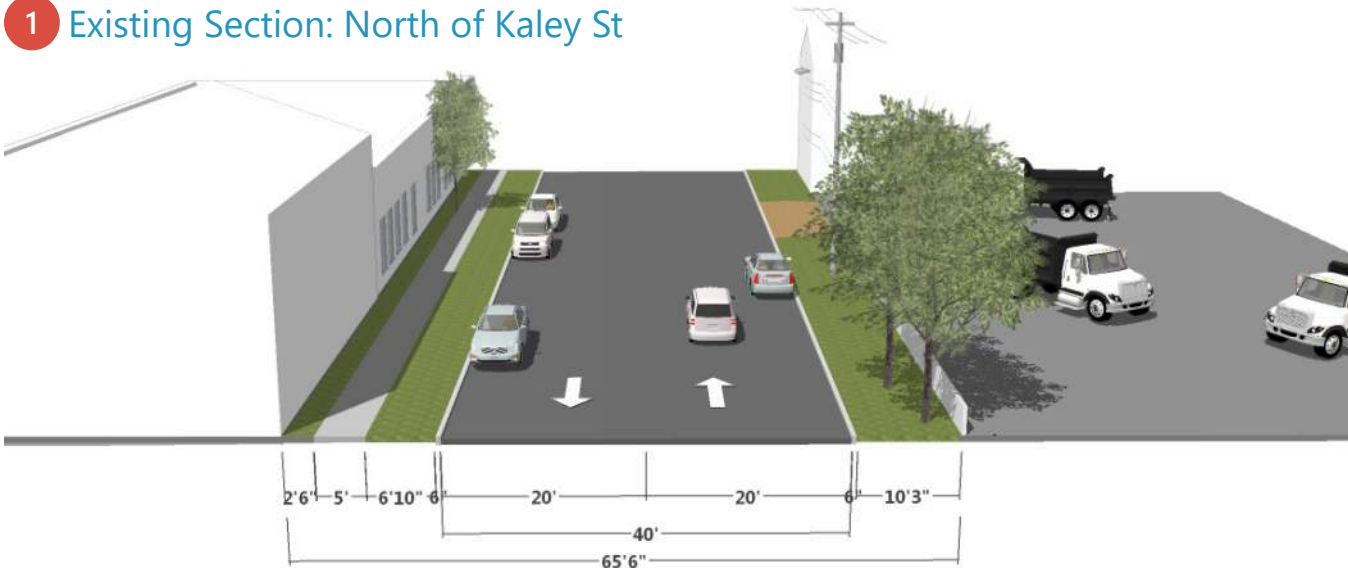
# Atlanta Avenue | Proposed Sections

**Basic Infrastructure for Atlanta.** Over time, when redevelopment opportunities begin to take shape, Atlanta should be considered for a more complete treatment of basic infrastructure of sidewalks, and (where appropriate) striped or signed designations for on-street parking. There is certainly space available today for 5' sidewalks to be completed, and simply striped as pedestrian access alignments across some of the larger driveway aprons. Street lighting may remain fairly utilitarian for some time, but eventually, some uniform lighting and street tree applications will also be warranted, driven by the type of redevelopment that comes to the area. There can also be opportunities for small industrial art opportunities at key entry points (such as at Columbia) to animate and humanize the industrial feel of the area.

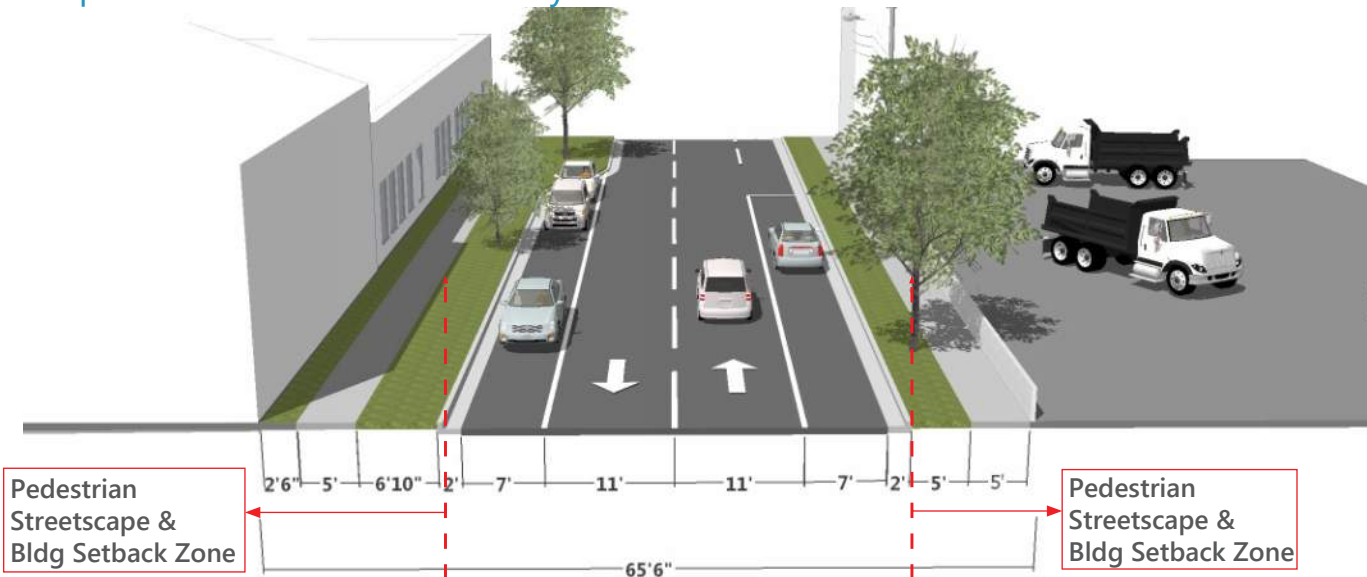
Over the longer arc of time, Atlanta can be an interesting interior street to a high character 'warehouse district' neighborhood that could include continued industry, mixed with some light tech and even loft residential. The street should be positioned for that future.



## 1 Existing Section: North of Kaley St



## Proposed Section: North of Kaley St





## 5 | Delaney Avenue

### The Delaney Avenue Neighborhood Connector.

Delaney Avenue (Delaney) as it occurs in the DSNID runs from Michigan to Pineloch. However, Delaney also operates within a larger context as it continues as a parallel facility to Orange, connecting north (through Wadeview Park and Delaney Park) and south (addressed as Osceola) all the way to Edgewood at Ft Gatlin. Delaney carries less than 10,000 ADT as a neighborhood street, but does carry Lynx transit and is a significant 'back door' into the grocery/shopping center as well as other popular neighborhood destinations such as the medical clinic, local fresh market and drug store.

**Character and Configuration.** Between Michigan and Pineloch, Delaney is a curving, 5-lane road with marked bike lanes, a wide center turn lane and significant stacking at Michigan. Sidewalks are continuous, but there are no street trees or other 'branding or comfort' elements to Delaney. Further, the intersections at Michigan and Pineloch are important neighborhood gateway points for vehicles, bikes and pedestrians, and in many cases, the intersection and associated walks and ramps do not meet ADA.

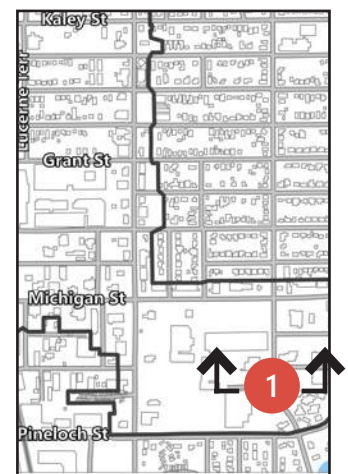


**Enhancing the Neighborhood Connector.** At less than 10,000 ADT, Delaney may be a candidate for a road diet to 3 lanes, however, the value of the investment may be compromised by the fact that the segment is short and there is significant turn lane stacking at Michigan. A more practical, near term approach would be to re-proportion the lane striping to create wider bike lanes, which could be painted, leading to intersections which could be reorganized (perhaps with corner clips) to meet ADA and also be more inviting portals from the neighborhoods and DSNID. Finally, small trees could be added to the grass strips, provided they are 'breakaway': i.e., single trunk crape myrtles, etc. This would frame and soften the street, providing shade and beauty without interfering with the overhead power.

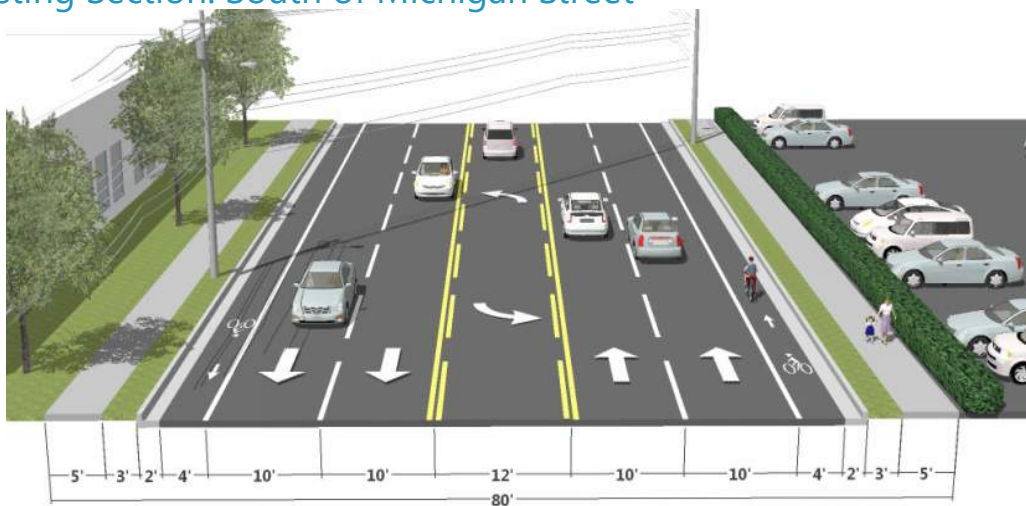


### Additional comments on multi-modal circulation.

There was considerable team and stakeholder discussion about bike facilities on Delaney, which is currently marked as a bike trail. This conversation was often put in context with the fact that in the near term, the planned FDOT project precludes dedicated bicycle facilities on Orange. Therefore, the team talked a lot about the importance of a 'recommitment' to the traffic calming and 'ride-ability' of Delaney as a street. Currently, Delaney has several areas that are pocked with asphalt potholes and severe bumps in brick areas.



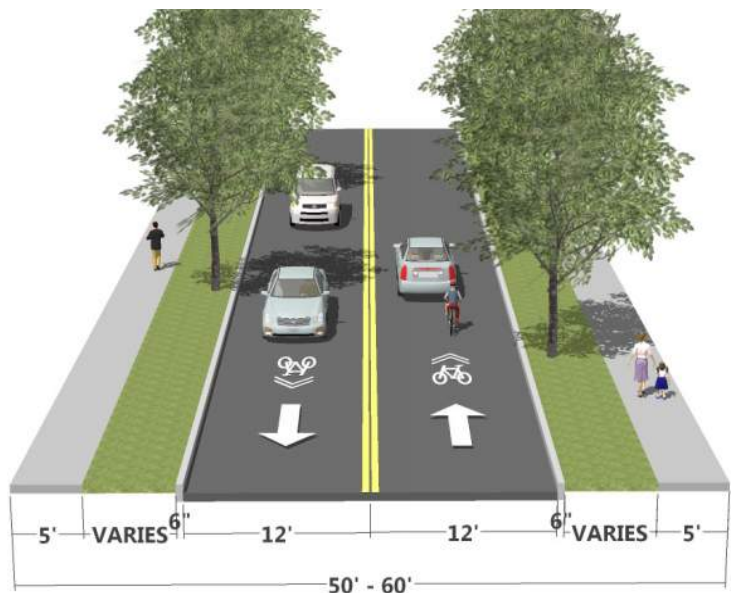
1 Existing Section: South of Michigan Street



Proposed Section: South of Michigan Street



Proposed Section: North of Michigan Street (Residential)





## 5 | Pineloch Avenue

### **The Pineloch Neighborhood Support Street.**

E Pineloch Avenue (Pineloch) is a somewhat unique street in the DSNID, as it forms a convenient alternative access route within the neighborhood network. This can be interpreted as a support street for access to grocery, medical office and other convenience retail. Pineloch also serves the front door of single family residential and multifamily residential.

At the same time, Pineloch connects the Orange and Michigan corridors creating a network opportunity to bypass the congested Orange/Michigan intersection. Yet, this often positions Pineloch as little more than a cut-through route. Pineloch therefore provides an important network function, but has a somewhat ambiguous image and sense of place because of its traffic role and disparate adjacent land uses.

**Character and Configuration.** Pineloch is a 60' right-of-way, configured as a 3-lane street west of Delaney to Orange, transitioning to a 2-lane street with wider tree lawns east of Delaney (approaching Michigan). Overhead power poles run on the north and west sides of the street (the inside of the curving street). Sidewalks are generally present west of Delaney, but become intermittent east of Delaney.

The Pineloch intersection with Delaney/Osceola is an important secondary gateway between the DSNID community retail uses and the residential areas to both the north and south. This route is a commonly used north-south corridor for local residential bike and vehicular traffic as a network alternative to Orange. The Pineloch support corridor for local traffic will become more significant with the planned installation of 300+ multifamily units, grocery and retail at the redevelopment site on the southwest corner of Pineloch and Orange. There is also a redevelopment infill project planned for the northeast corner of Pineloch and Osceola.



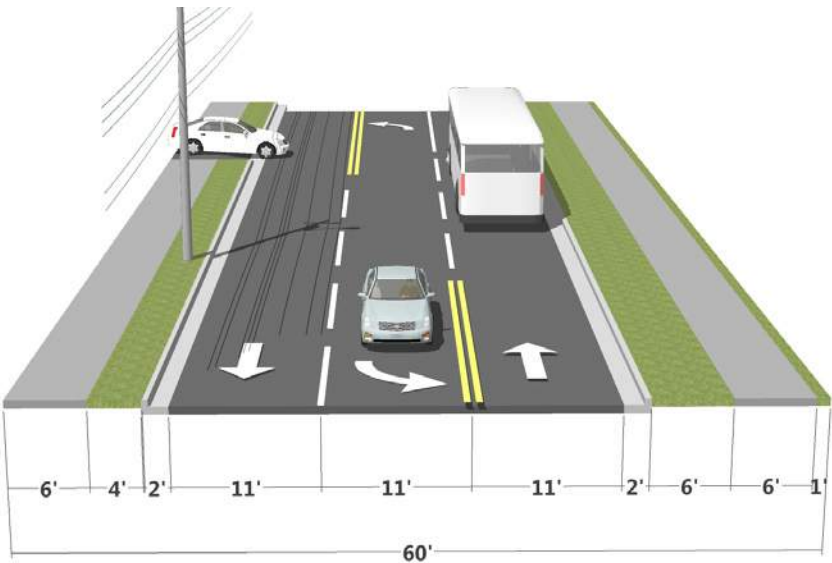
# Pineloch Avenue

**Unifying the Support Street.** Pineloch will undoubtedly take on more vehicular, bicycle and pedestrian traffic as a result of the new mixed-use development at Pineloch/Orange. However, due to land use patterns, it is unlikely that there will be substantial additional redevelopment without currently unforeseen assembly of many additional small sites. A portion of the medical offices east of Osceola are not currently included in the DSNID.

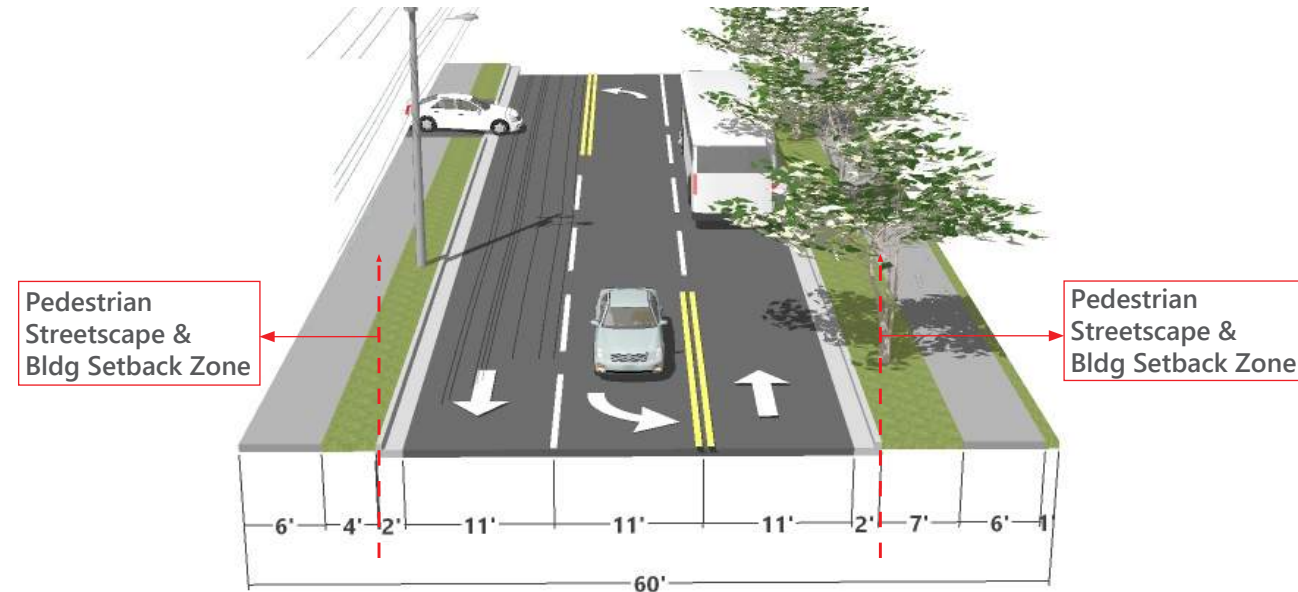
As a result, Pineloch will likely maintain its role as a local support street, but with some increase in local 'cut-through' traffic. This perhaps de-emphasizes Pineloch as a major infrastructure investment corridor, but does warrant near term improvements to sidewalk connectivity and basic image elements such as street trees and colored/textured intersections. Any use of trees will have to be 4' caliper 'breakaway' species such as standard form crape myrtle or elm due to the overhead power and small tree lawns. However, the introduction of trees and colored/branded intersections will humanize the corridor for both people and give attention to sense of place for vehicles.



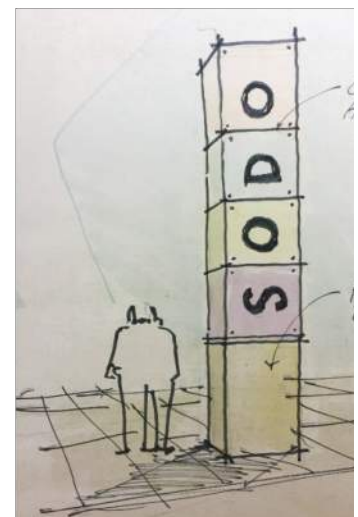
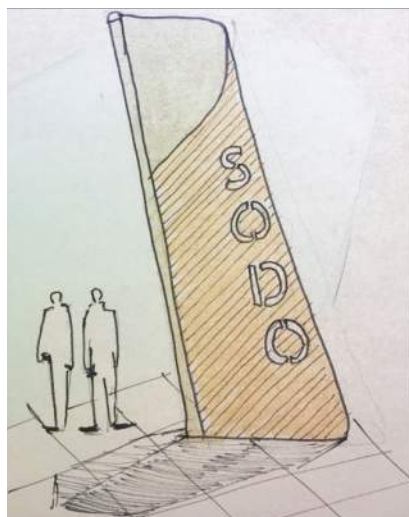
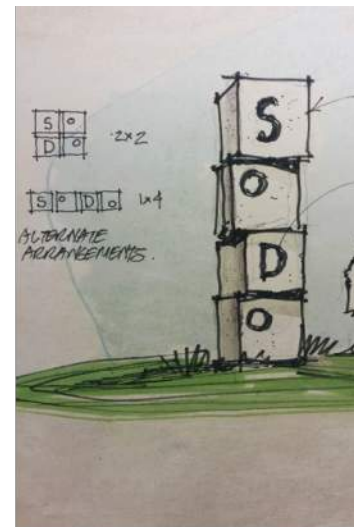
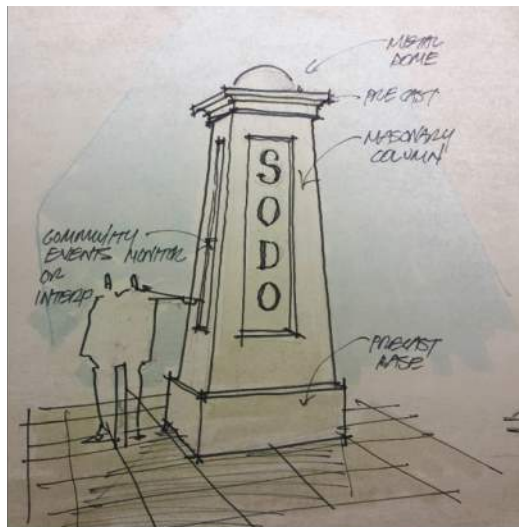
## 1 Existing Section



## Proposed 60' Section







Study sketches of gateway monuments and markers reveal the wide-ranging and rich potential of form, material and style within the Downtown South Neighborhood Improvement District. Industrial and mid-century commercial/modern forms and materials can be positioned in ways that are traditional or contemporary. The opportunity is that timeless, durable and authentic materials such as concrete, steel, stone, wire mesh and landscape can be presented in the industrial areas in formats that are raw, edgy and unfinished; while being presented in the commercial and neighborhood areas in formats that can have 'cleaner lines' and more refined surfaces. A wide open field of design opportunity!

# SECTION 6 | STREETSCAPE MATERIALS AND FURNISINGS

A streetscape consists of a variety of components that when combined properly create a dynamic engaging space. These components consist of the pedestrian and vehicular realm. The pedestrian realm along the sidewalk provides space for live, work, and play including furnishings, lighting, landscape, and street trees. The vehicular realm consists of on-street parking, bicycle lanes, travel lanes, transit and service loading and unloading zones. The two areas and their associated materials and finishes should seamlessly fuse to create a thriving public space.

The following materials and furnishings have been developed with the intent of developing a unified and cohesive area development for the district. Standards include hardscape, site furnishings, stormwater management areas, landscape lighting, art opportunities, and gateways. The materials and site furnishings suggested in this section of the report are recommendations only. The product selections were chosen based on the following criteria: district character, material, form, durability, and value. Other products may also meet these criteria both now and in the future as the District develops. Overall, these material and furnishings selections are meant to convey the design intent of the streetscapes and future development of the District.

## DISTRICT CHARACTER

An expression of the SODO district that celebrates its history, origin, and future.

## MATERIAL

The substance of which things are made or composed that reflects the district character and support contemporary aesthetic.

## FORM

The shape of a design element that reflects the district character and contemporary aesthetic.

## DURABILITY

The ability of a material to withstand wear, pressure, or damage over time such that it requires minimal maintenance and does not need to be replaced often.

## VALUE

A cost benefit analysis to determine options that provide the best approach to achieve durability and design aesthetics while preserving savings.

## VALUE KEY

Located on each furnishing page is a 'Value Key' to determine the value of a material/furnishing in relationship to the City of Orlando.

Measurable

City Standard: Is the selected furnishing a City of Orlando approved furnishing?

Cost Equivalent: Does the selected furnishing cost more than, equal to, or less than the City Standard?

Customizable: Is the selected furnishing able to be modified to suit a particular area or branding need?

Durability: Is the selected furnishing durable in relation to the City Standard?

Symbols

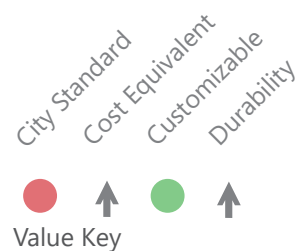
● No

● Yes

↑ More Than

= Equal to

↓ Less Than





## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### STREET PAVING

The majority of streets will be asphalt within the district. There are, however, opportunities to utilize other materials to accent areas along the streetscape. The use of various pavement materials/treatments in the street can designate the path of multi-mode transportation and promote safety by identifying locations where pedestrians and vehicles may encounter each other. The following provides the proposed treatment for various street pavement within the district.



*Intersection at West Copeland Drive and South Lucerne Terrace*



#### CAST STONE UNIT PAVERS

Special pavers, unique to DSNID can be produced to reflect a 'refined' or 'rough' interpretation of concrete production in the area.



#### ROADWAY INTERSECTIONS & CROSSWALKS

Crosswalks should be enhanced with a different material contrasting with the main pavement surface. Preferred treatment includes concrete with a simple grid and banding pattern.

The second enhancement option for crosswalk is to use unit pavers. This provides a historic character and a smooth-to-rough contrast between the driving surface and the crosswalk. Pavers would not typically be promoted in areas maintained by FDOT.



#### STREET BRICK

A number of streets in the district were historically constructed of brick. In fact, some of the streets still contain brick or have been covered by a top layer of asphalt. If the areas can be maintained in brick or successfully rehabilitated, brick would be a preferred option.



# STREETSCAPE MATERIALS AND FURNISHINGS



## EXPOSED AGGREGATE/ WASHED CONCRETE

Exposed aggregate can be used as a contrasting accent between different concrete surfaces.

## COLORED CONCRETE

Color can be added as integral to the concrete or during the curing process. It is important to consider the problem of colored material when future maintenance is required, the new patches may not completely match the original.

## BIKE LANES

On-street bike lanes can be treated as simple striped areas, a separate material, or with a painted durable coating. Colored pavement within a bicycle lane increases the visibility of the facility, identifies areas of conflict, and reinforces priority to bicyclist in conflict areas. It can be utilized either as a treatment along the length of a bike lane or cycle track, as a spot treatment, such as a bike box, conflict area, or intersection crossing marking.



## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### PEDESTRIAN PAVING

Pedestrian paving is the floor of the outdoor environment in which people live, work, and play everyday. The design of walking surfaces is one of the most important elements for setting the initial mood of the space. Even if the outdoor area is accented with trees, lights, benches, and people, the ground plane sets the tone of how the space is to be used and how it feels to the user. The following provides the proposed type, size, and color for the various pavement within the district.



Clean Concrete Sidewalk at Feature SODO Transit Stop  
Provides a Low-maintenance, Clean Environment

### CONCRETE ( BASE TREATMENT)

Sawcut natural concrete would be the dominant pedestrian paving material in the district due to its simplicity and value. Typically concrete surfaces are scored in order to control cracking in the concrete slab. Additional scoring can be added to further break up the concrete surface and to add visual interest. This additional scoring can be either hand tooled during initial installation or saw cut after curing of the concrete.

Special attention should be paid to the design of the concrete scoring. The furnishing zone through the sidewalk should have standard scoring pattern. Variation or customization can take place at the transit stops, street corners and building entries.

### COLORED CONCRETE

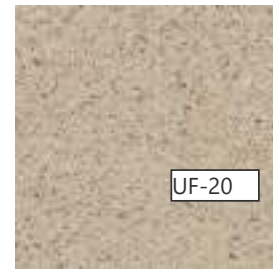
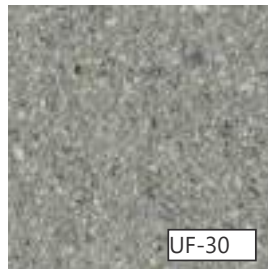
Color can be added as integral to the concrete or during the curing process. It is important to consider the problem of color material when future maintenance is required, the new patches may not completely match the original.



Textured Granite Pavers  
Custom for Amway Centre Orlando FL.

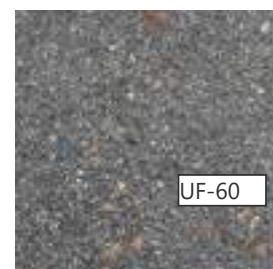
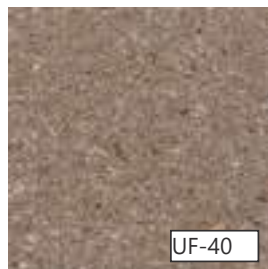
### CONCRETE UNIT PAVER

Unit pavers must be used only as an accent material and not as the main pavement surface. Pavers should be a selection of warm grey and earth tones with a exposed texture.



### CUSTOM PAVER

Pavers developed specifically for this project; earth tones; various sizes with materials and manufacturing locally sourced.



### EXPOSED AGGREGATE CONCRETE

Exposed aggregate can be used to contrast or differentiate concrete surfaces.





## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### STREET BENCH

Seating contributes to making a city enjoyable for pedestrians. Street benches provides seating for waiting, resting, and encourage interaction through conversation and observing the public realm. Street benches should be selected for comfort of the user and stand up to extreme weather and everyday use.

#### MATERIAL

Galvanized or Stainless Steel

#### COLOR

Natural

City Standard  
Cost Equivalent  
Customizable  
Durability

● ↑ ● ↑

#### FORM

Geometric lines with subtle arcs. Slatted panels to provide for water drainage. Backs and armrest for comfort.



Vera by MMCITE

# STREETSCAPE MATERIALS AND FURNISHINGS

## CONCRETE SEAT WALL

Concrete seat walls reflect the district character and provide additional seating along with the street bench. The concrete seat wall is intended to be an edge treatment for rain gardens or used to delineate areas and create courtyards.

### MATERIAL

Concrete

Poured in Place/Precast

### COLOR

Natural

City Standard  
Cost Equivalent  
Customizable  
Durability

FORM

Geometric lines with soft curves



Escofet Milenio, by Landscape Forms



## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### STREET LITTER & RECYCLE BIN

Possibly the most used streetscape element. Should be conveniently located for pedestrian life near benches, bus stops, activity nodes. Post mounted receptacles are encouraged along the rights of ways and should compliment the light fixtures.

City Standard  
Cost Equivalent  
Customizable  
Durability



#### MATERIAL

Galvanized, Stainless Steel or Powdercoated

#### COLOR

Natural

#### FORM

Classic or Contemporary



Pole-Mounted Receptacle



Radium, by MMCITE

# STREETSCAPE MATERIALS AND FURNISHINGS

## STREET BIKE RACK

Encouraging bicycle traffic begins with providing safe corridors to bicycle riders and proper places where bicycles can be safely secured. Bike racks are important amenities that encourage bicycle ridership and promote alternative modes of transportation. Bike racks should be installed in groups of three or more at convenient locations along the streets.

City Standard  
Cost Equivalent  
Customizable  
Durability

● = ● =

### MATERIAL

Galvanized Stainless Steel or Powdercoated

### COLOR

Natural or custom

### FORM

Contemporary or Artistic





## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### STREET TREE GRATES

Cast iron tree grates are an important and necessary component of the urban streetscape. They protect tree root systems while providing air and water, are durable and low maintenance, and can be cast in unique forms where the need arises. The natural patina of cast iron also reflects the 'industrial' roots of the area.

#### MATERIAL

Cast Iron

#### COLOR

Raw

City Standard  
Cost Equivalent  
Customizable  
Durability

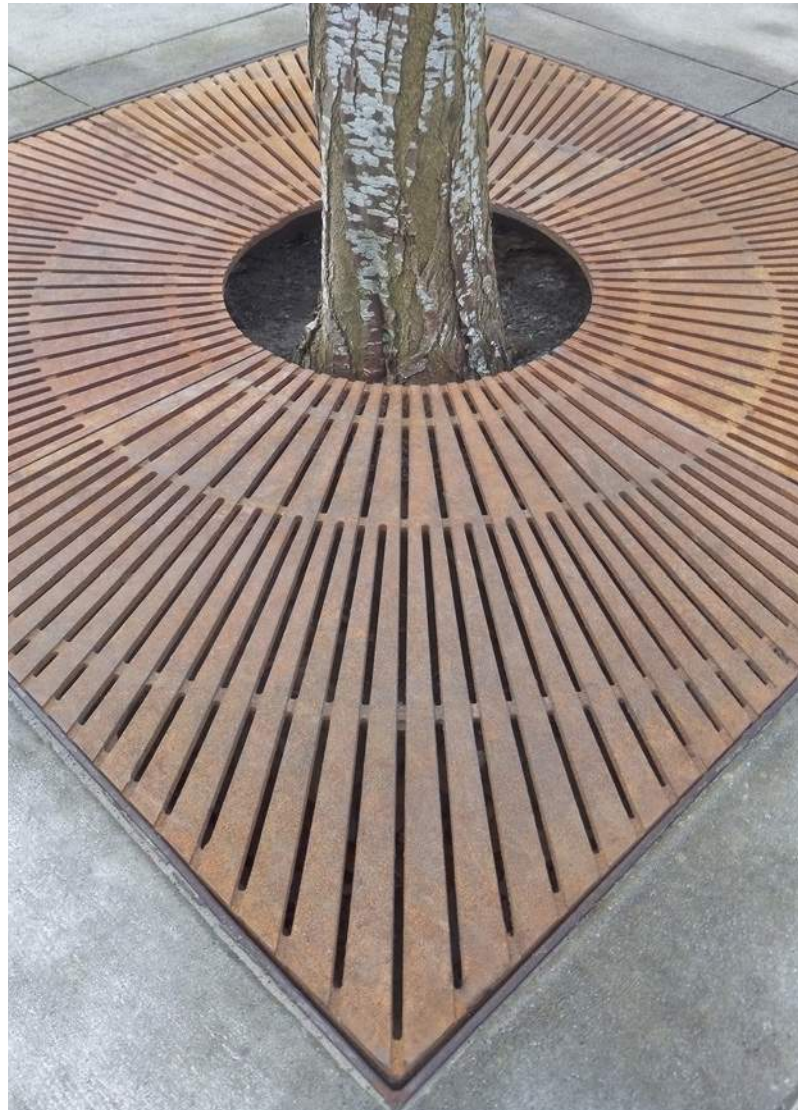


#### FORM

Intermittent breaks in the surface



SODO Site Photo



Corona, by Iron Age Grates

# STREETSCAPE MATERIALS AND FURNISHINGS

## BOLLARDS

City Standard  
Cost Equivalent  
Customizable  
Durability

Bollards separate areas without creating impassible barriers and protect structures and pedestrian areas from vehicles.

### MATERIAL

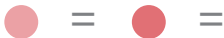
Ductile Iron

### COLOR

Powder Coat Black

### FORM

Tapered with subtle geometric lines



New York Bollard,by Canterbury Designs



## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### TRANSIT SHELTER

Transit shelters contribute to making a city comfortable for transit users and promote a transit friendly district. Shelters provide a place to wait comfortably and rest. They encourage interaction and provide relief from the sun. Transit shelters can also become art on the street, adding design and color to the public realm. The existing LYNX shelters can be customized or upgraded with custom panels or colors. Another option is to establish a program, in partnership with LYNX, to utilize local artist to create one of a kind shelters.

City Standard  
Cost Equivalent  
Customizable  
Durability

● = ● =

#### MATERIAL

Powdercoated aluminum



Existing/Standard LYMMO Bus Shelter by Tolar  
Orlando, Florida

#### COLOR

Black or customized scheme



Customization Option - Altered Perforated Mesh Panels

#### FORM

Intermittent breaks in the linear surface



Customization Option - Laser Cut Metal Panels



# STREETSCAPE MATERIALS AND FURNISHINGS



Indianapolis Cultural Trail Bus Shelter



Old Mill Street, Manchester England



Gaines Street Bus Shelter





## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### SIGNATURE LIGHT ELEMENTS

Lighting design, style and layout can play a unique role in experiencing the district's public realm. Standardized typical street lighting will feature LED technology and will establish the basic palette from which other lighting, street furnishings and public art can express the district's character.

#### OUC PREFERRED ROADWAY FIXTURES FOR PRIMARY STREETS



The Sole City LED Street and Area Luminaire - available at different pole heights and mounting techniques.



The Sole City Luminaire can be bracket-mounted to existing utility poles as shown with this alternate (comparable) fixture on Orange Blossom Trail

#### OUC STANDARD OPTIONS FOR OTHER STREETS



Lantern Fixture at Orlando Health (internal campus streets)



For all other streets, parking and service areas, at minimum, black 'cobrahead' or 'shoebox' LED fixtures, dark sky compliant.

# STREETSCAPE MATERIALS AND FURNISHINGS

## SIGNATURE LIGHT ELEMENTS

In special locations, unique lighting features can add charm and serve as landmarks. Everything from customized off-the-shelf lighting products to one-off works of art should be considered.

### MATERIAL

Galvanized or Stainless Steel,  
Aluminum, Glass/Acrylic

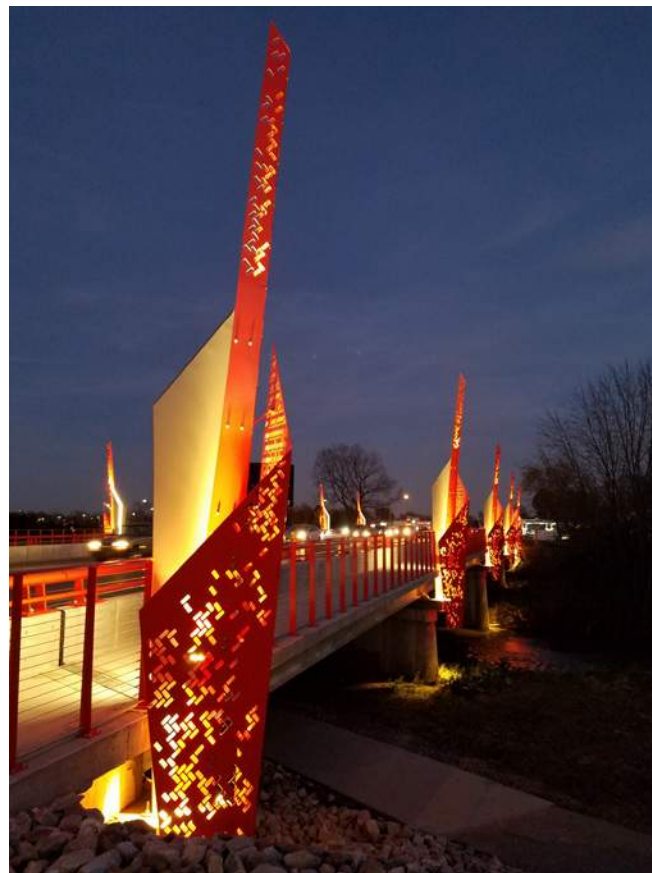


### COLOR

Anything and Everything

### FORM

Contemporary to Wacky





## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### ART OPPORTUNITIES

Making use of Industrial Structures for interim/ permanent art is desired. Embracing the industrial heritage with colorful light installations that can become permanent installations will serve as a catalyst for the redevelopment of the district.

#### MATERIAL

Re-Purposing Industrial Structures

#### COLOR

Bright Colors

#### FORM

Public Art  
Park Space



Existing Industrial Structures, Orlando, Florida

# STREETSCAPE MATERIALS AND FURNISHINGS

## SIGNATURE LIGHT ELEMENTS



Gasworks Park Seattle, Washington  
Landschaftspark Duisburg Germany  
Beacon Lake Nona Town Center Orlando, Florida



## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### STREET TREES

The following example trees have been selected based on their water efficiency, form, and their ability to provide a unified and dependable plant palette for the District. This list includes native and Florida friendly plants and should be arranged in groupings with similar maintenance needs.

### PALM TREES



CABBAGE PALM



CARNARVON GORGE PALM



SYLVESTER DATE PALM



WASHINGTONIA PALM

### PALM TREES



MEDJOOl DATE PALM

### UNDERSTORY TREES



'NATCHEZ' CRAPE MYRTLE,  
SINGLE TRUNK



'MUSKOGEE' CRAPE MYRTLE,  
SINGLE TRUNK

### CANOPY STREET TREES



LIVE OAK CULTIVAR  
'CATHEDRAL' OR 'SKY CLIMBER'



ALLE OR BOSQUE ELM



SHUMARD OAK



# STREETSCAPE MATERIALS AND FURNISHINGS

## SHRUBS AND GROUNDCOVER

The following example shrubs and groundcovers have been selected based on their water efficiency, form, and their ability to provide a unified and dependable plant palette for the District. This list includes native and Florida friendly plants and should be arranged in large, simple groupings of 'same species' beds with similar maintenance needs.



COONTIE



MUHLEY GRASS



DWARF FAKAHATCHEE GRASS



STOKES DWARF HOLLY



PLUMBAGO



BEACH SUNFLOWER



MIMOSA



PERENNIAL PEANUT



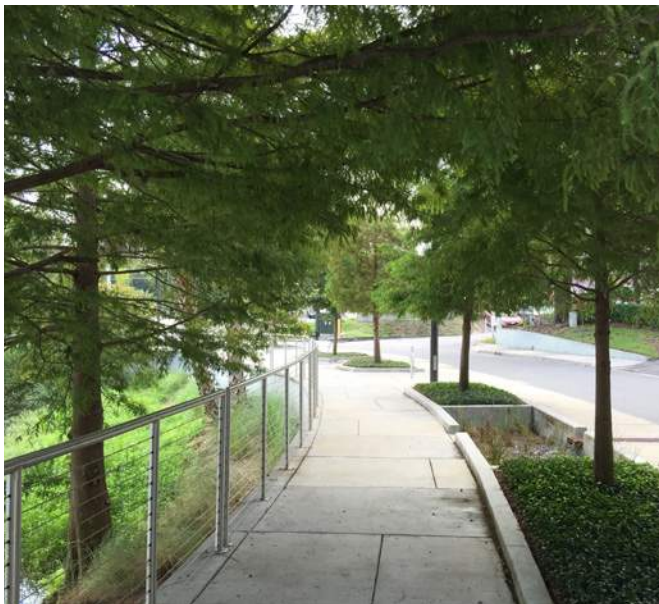
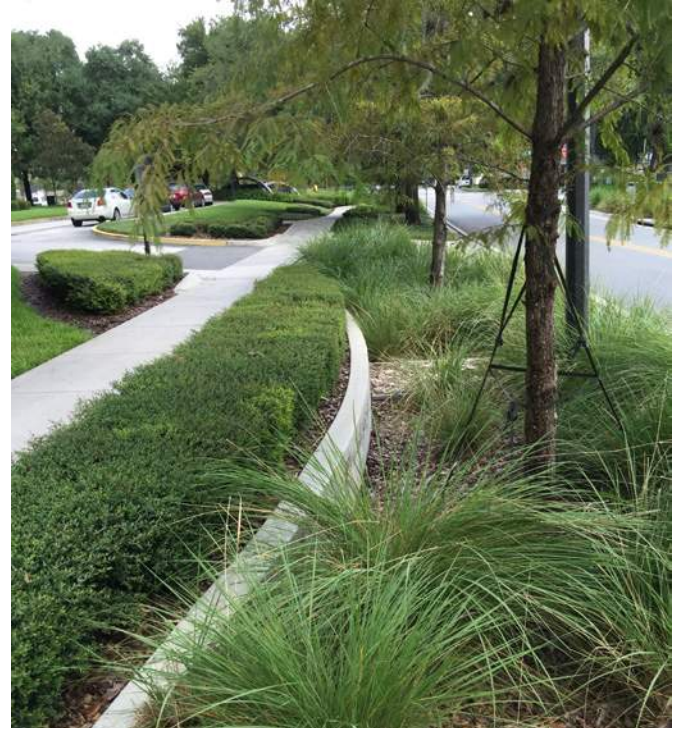
JUNIPER



## 6 | STREETSCAPE MATERIALS AND FURNISHINGS

### STORMWATER MANAGEMENT

The use of rain gardens is encouraged throughout the district in order to treat stormwater as close to the source as possible. The design of these facilities needs to be coordinated with the City's public works department and FDOT where applicable. The intent is to integrate the rain gardens into the streetscape design and provide space that are beautiful and functional.



# STREETSCAPE MATERIALS AND FURNISHINGS

## LANDSCAPE PLANTERS



Provide a visual accent within the pedestrian corridor that complements but does not compete with the remaining streetscape and building architecture. The pots should be arranged in groups with varying sizes to add interest along the sidewalk and intersection corners. Pots should be irrigated and pedestrian traffic level must be taken into account when locating pots.

### MATERIAL

Fiberglass Reinforced Plastic

### COLOR

- MMP Bronze
- MMP Copper
- MMP Iron

### FORM

- Contemporary
- Context Driven



Downtown Collection, Tournesol Siteworks











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