

TECHNICAL MEMO Land Use Report

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Prepared For

RTC

Prepared By





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INTRODUCTION

Plan Purpose

The South Virginia Street Transit Oriented Development Study's (South Virginia TOD) purpose is to analyze the need for future transit service in the South Virginia Street corridor (Corridor) from Meadowood Mall to Mt. Rose Highway based on regional demand, and current and future growth. The South Virginia TOD will also analyze the land use planning tools that will encourage a walkable, transit-supportive development pattern that meets the growth and development needs of the region.

The purpose of this Land Use Technical Memorandum is to provide an overview of existing land use, development patterns, and future growth scenarios and how they may influence transit service in the Corridor.

Project Goals

The goals of the South Virginia TOD are to:

- Promote multimodal transportation within the corridor
- Create continuity throughout the corridor
- Allow for the safe movement of all forms of transportation
- Improve transit service
- Encourage mixed use development

This memo focuses on the analysis and recommendations that would support the goals related to improving transit service and multimodal transportation options.

TOD Guiding Principles

- ✓ WALK /CYCLE- Provide infrastructure improvements along Virginia Street to improve the nonmotorized transportation networks in the corridor.
- ✓ CONNECT Locate future transit stops in areas that promote walking and cycling to access transit and maximize corridor connectivity.
- ✓ TRANSIT Expand transit service to better serve existing and future residents and employees along South Virginia Street.
- ✓ MIX Encourage economic development and plan for mixed uses, income, and demographics.
- ✓ **DENSIFY** Optimize density on vacant and infill properties and encourage redevelopment opportunities to support transit in the corridor.
- ✓ **COMPACT** Optimize transit service in the corridor to improve ridership.
- ✓ **SHIFT** Transform South Virginia Street to accommodate all users and increase safe non-auto mobility in the corridor.

RTP 2050 Transit Vision:

"Extend Virginia Line RAPID to
Mt. Rose Highway – Providing
transit connectivity to
employment, education,
commercial, and residential
centers in South Reno would
improve access to
opportunities, expand travel
options, and encourage transit
supportive development along
South Virginia Street."







STUDY AREA

The Corridor begins at its intersection with S. McCarran Blvd at Meadowood Mall and extends ± 6 miles south to the Mount Rose Highway (SR 431) intersection. In addition to the Corridor, the Damonte Ranch Parkway and Wedge Parkway corridors are also included as these areas have seen recent multifamily development as well as current planned developments that have the potential to be transit supportive. The general study area follows these corridors and includes a walking distance of up to 1/2-mile as depicted in **Figure 1** below.

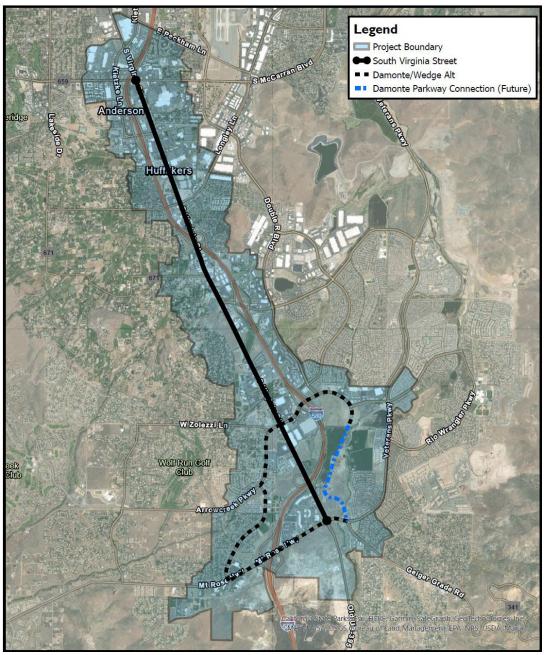


Figure 1: Study Area







Existing Transit in the Corridor

Transit services in south Reno, south of Meadowood Mall, are very limited compared to services along north Virginia, north of Meadowood Mall. RTC operates the existing Virginia Line Bus Rapid Transit (BRT) from the University of Nevada, Reno to the Meadowood Mall transfer center on 10-minute service intervals between 6 am to 1 am, and there are several connecting routes as well. Looking at South Virginia Street, RTC has limited service (**Figure 2** below) via Route 56 which deviates from South Virginia Street, and the RTC Regional Connector which is focused only on morning and afternoon commuters between Reno and Carson. Route 56 provides 30 min service from 5:30 am to 4:30 pm and hourly service from 5 pm to 10 pm.

South Reno continues to grow and transit service has not expanded to match that growth. It was noted during the initial project visioning public workshops that a few of the employers in South Reno struggled to retain employees as the lack of timely transit has created conflicts for employee schedules.

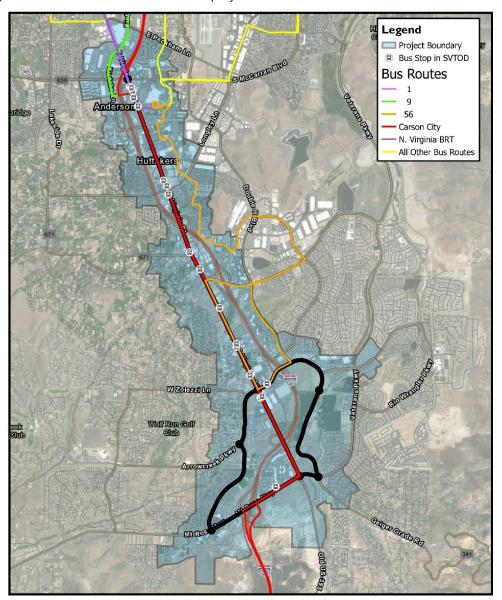


Figure 2: Existing Conditions







Existing Land Use and Historical Growth

Over the past three decades and post the completion of Interstate 580 (I-580), the stretch of South Virginia Street extending from S. McCarran Boulevard to the Mount Rose Highway (SR 431) has transformed from a rural highway linking Reno and Carson City into a suburban arterial connecting nodes of development. This transition has resulted in a diverse mix of land uses and outdated infrastructure that has not kept up with the regional changes. Over the past thirty years, from 1990 to 2020, the population in the study area exploded from a population of $\pm 1,500$ to $\pm 43,000$ people (US Census).

Pre 1990s the corridor was rural with limited development, some low-density large lot residential under Washoe County jurisdiction, and large ranch land. By 2000, the extension of US 395 (I-580 today) was under construction, planned developments in the South Meadows area were underway with planning of Damonte Ranch in process transforming the land use from rural to a typical suburb of Reno. The following decade, between 2000 and 2010 major master planned developments including Damonte Ranch, Curti Ranch, and Carmella Ranch began to take shape, along with the completion of the US 395 extension to Mt Rose Highway, changing South Reno into a very desirable community in the region.

Development hit a slowdown following the Great Recession but has largely recovered over the past decade as development in South Reno has exploded. Primarily fueled by the region's growth in employment from Tesla and the Tahoe Reno Industrial Center (TRIC). The surge in development and population over the last decade has transitioned development patterns to higher density including smaller lots and an increase in single family attached and multifamily, a trend that is continuing for South Reno. **Figure 3** below provides a comparison of population and development patterns within the project study area over the past 30 years.



Population: ±1,500 Land Use: Suburban/Rural • South Meadows Business Park

(1992)
 Double Diamond PUD (1995)
 Corridor: US 395 to Patriot
 Blvd

2000

Population: ±3,000 Land Use: Suburban/Rural

SVTOD (2006)

Damonte Ranch PUD (2000)

Curti Ranch PUD (2004)
Pioneer Parkway PUD (2008)

Carmella Ranch PUD (2009)
 Corridor: Freeway to Mt Rose



Population: ±20,000 Land Use: SVTOD Corridor Corridor: SVTOD Corridor End (2018) change to MS



Population: ±43,000 Land Use: Mixed Use Suburban (MS)

Corridor: 940 acres Vacant Land (372 Ac. in PUD 530 Ac.

in MS)

Figure 3: Corridor Population







Past Planning Efforts for South Reno

To keep up with development patterns, the City of Reno adopted a Transit Oriented Development (TOD) Plan for South Virginia Street in 2006 which changed the zoning along South Virginia Street to mixed-use to intensify development to support transit. Following the Great Recession, the market conditions led the City of Reno to rethink a variety of past planning efforts leading to the adoption of the 2017 Reimagine Reno Master Plan. As a result of the Reimagine Reno Plan, the 2006 South Virginia Street TOD Plan was removed and the TOD overlay zoning along the Corridor was converted to a zoning designation of Suburban Mixed Use. The zoning change was meant to keep, in theory, a transit supportive mixed-use zoning without needing an overlay with unlimited density and commercial floor area. However, the zoning change did remove the minimum density and commercial floor area requirements essentially opening the door for a broader range of uses including less transit supportive, low intense development. Master Planned Developments in South Reno remained as part of the Reimagine Reno Plan which have seen higher density (both single and multifamily units) completed or under construction the past several years in Damonte Ranch. The first mixed-use type development was recently announced for Damonte Ranch identified as 'Downtown Damonte". The proposed mixed-use district will include retail, shops, restaurants, office space, and residential apartments (www.downtowndamonte.com). The Pioneer Parkway Master Planned Community south of Downtown Damonte on the future extension of Damonte Ranch Parkway has not yet started and would allow for additional high density or mixed-use development.

Reno's Projected Growth and Land Use Policy Environment for South Virginia Street

Reno is a fast-growing city within the booming Truckee Meadows region of Northern Nevada, which is expected to continue to grow as a result of the employment boom triggered by Tesla and TRIC east of Reno and Sparks. According to the Truckee Meadows Regional Planning Agency (TMRPA) the region is expected to grow by 100,000 people and over 80,000 jobs in the next 20 years. That growth will continue to influence the Corridor. As Reno continues to grow, regional planning efforts by TMRPA and the City of Reno continue to emphasize more sustainable development patterns (Reimagine Reno Guiding Principle 2-Respsonible and Well Managed Growth) including focusing on infill and mixed-use development (Reimagine Reno Guiding Principle 4-Vibrant Neighborhoods & Centers) and improving multimodal connectivity (Reimagine Reno Guiding Principle 5-Well-Connected City & Region). City and regional planning efforts are further analyzed in the following sections as these documents specifically relate to encouraging TOD for South Virginia Street.

South Virginia Street's Role Within the Reimagine Reno Master Plan

Reno's master plan, Reimagine Reno identifies regional centers, corridors, and nodes that will support regional growth. Within that framework, planning for the Study Area is, wholly or in part, influenced and guided by multiple classifications. These classifications each have an Area Specific Policy related to each. The Area Specific Policies related to the Study Area:

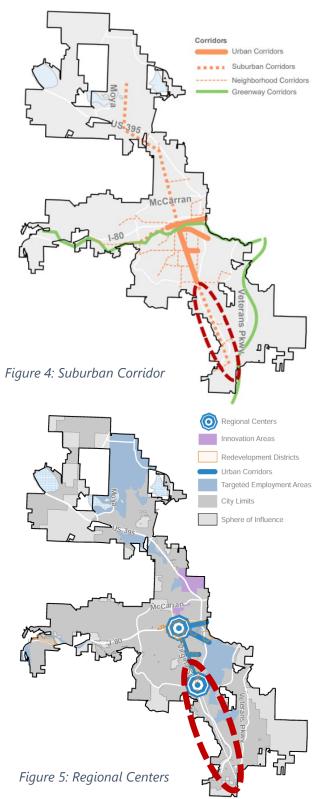
- Is identified as a Suburban Corridor providing connectivity to a growing South Reno,
- Identifies the Meadowood Mall area as a connecting Regional Center,
- Provides connectivity to four Community/Neighborhood Center hubs,
- Connects two Industrial/Logistics or Employment Areas, and
- Connects Outer Neighborhood areas offset from the corridor itself.

Each of these Area-Specific Policies in the *Reimagine Reno Master Plan* includes descriptions of desired character, along with policy guidance for development density and land use typologies, which are discussed below.









Area Specific Policy: Suburban Corridor

The Corridor is identified as a Suburban corridor (**Figure 4**). Suburban corridors are auto oriented in character and serve areas generally outside the McCarran loop. A mix of higher density residential, retail, commercial, and other employment- and service-oriented uses is encouraged along suburban corridors. Although the corridor is classified as suburban, the Area Specific Policies that follow below support the gradual transition of the city's suburban corridors over time by providing a greater degree of flexibility in development patterns and intensity in the nearterm (as the S. Virginia Corridor transitions to an urban corridor), encourages nodes of higher-intensity development to enhance access to services, housing options, and support expanded transit service over time.

Area Specific Policy: Employment Areas (Industrial/logistics areas)

There are two Employment Areas adjacent to the Corridor (blue shaded areas in **Figure 5**). Access to housing options and services within close proximity of industrial/logistics areas plays an important role in <u>supporting live-work opportunities</u> for the local workforce and reducing the need for cross-town trips. These employment areas and their connectivity to the Corridor may help influence the need for additional housing along the corridor, as well as generate additional transit ridership.

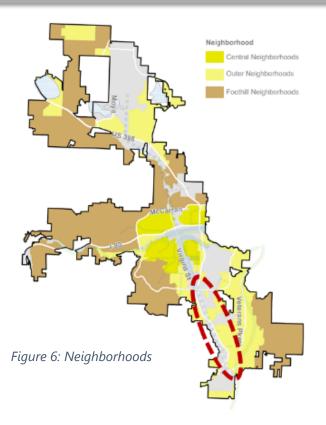
Area Specific Policy: Regional Centers

The north end of the Corridor includes a Regional Center (Figure 5). Regional centers serve residents of the City of Reno and the broader region, as well as visitors from across the state and country. Regional centers include a diverse mix of uses, including, but not limited to high-density office, residential, hotel, entertainment (including gaming), retail, and supporting uses. Regional centers are well-served by the region's multi-modal transportation network and serve as a hub for service to other destinations within the region.









Area Specific Policy: Outer Neighborhoods

The Corridor provides connectivity for several surrounding outer neighborhoods (**Figure 6**). As outlined in ReImagine Reno, *Outer neighborhoods include the city's older suburban areas, generally outside or adjacent to the McCarran loop, as well as newer suburban developments. They are generally comprised of single family detached homes and have a cohesive character. While new development continues to occur in some outer neighborhoods, others are in need of revitalization and reinvestment. <u>Significant capacity for future residential development</u> lies in outer neighborhoods. <u>Opportunities to encourage a broader mix of housing types and supporting non-residential uses</u> and amenities in outer neighborhoods are encouraged in order to meet changing community needs.*

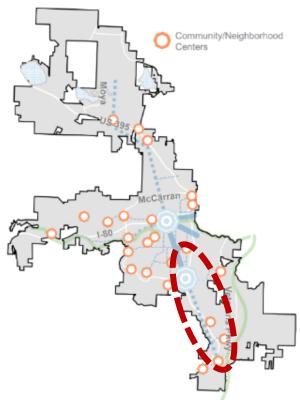


Figure 7a: Community/Neighborhood Centers

Area Specific Policy: Community/Neighborhood Centers

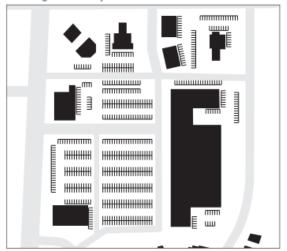
The Corridor includes several community/neighborhood centers (Figure 7a). Community/neighborhood centers provide opportunities for supporting services (e.g. restaurants, cafes, small retail stores, medical offices) intended to meet the needs of the immediate neighborhood. Walkable, small-scale neighborhood centers exist in several of the city's central neighborhoods, while larger community centers such as those anchored by a grocery store or other large retail tenant may include a vertical or horizontal mix of residential and/or office uses in addition to retail/commercial uses. Community/ neighborhood centers should have a cohesive and pedestrian-oriented design that features public/ community gathering and enhanced spaces pedestrian/bicycle connections to surrounding neighborhoods. The design principles that follow provide general guidance to support the revitalization of existing centers (Figure 7b) and the design of new centers. The Corridor has several existing centers with large parking areas that have the potential for revitalization and added density and a greater mix of uses that would also help encourage transit supportive development.



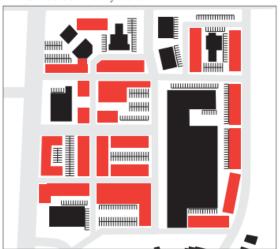




Existing Community Center



Revitalized Community Center



Existing Neighborhood Center



Revitalized Neighborhood Center



Revitalization of Existing Centers. The diagrams illustrate potential opportunities for site improvements and infill on surface parking lots to accommodate a greater mix of uses and promote the revitalization of existing centers. To achieve required parking for uses that replace surface parking lots, tuck-under and/or structured parking are to be utilized.

Figure 7b: Revitalization of Existing Centers

Land Use Designation and Zoning

While the southern half of the Study Area includes some residential and related parcels along its western edge that lie within unincorporated Washoe County, most of the Study Area – including all parcels adjacent to either South Virginia Street - fall within the land-use policy jurisdiction of the City of Reno. Under *Reimagine Reno*, the

"SMU: Concentrated nodes of higher-intensity development are encouraged at major intersections, near existing or planned transit stations... Residential development at a density greater than 30 dwelling units per acre is appropriate in these locations "

- Relmagine Reno Master Plan 2021

dominant master plan designation for the Corridor is Suburban Mixed-Use (SMU), with zoning to match (MS, Mixed-Use Suburban).







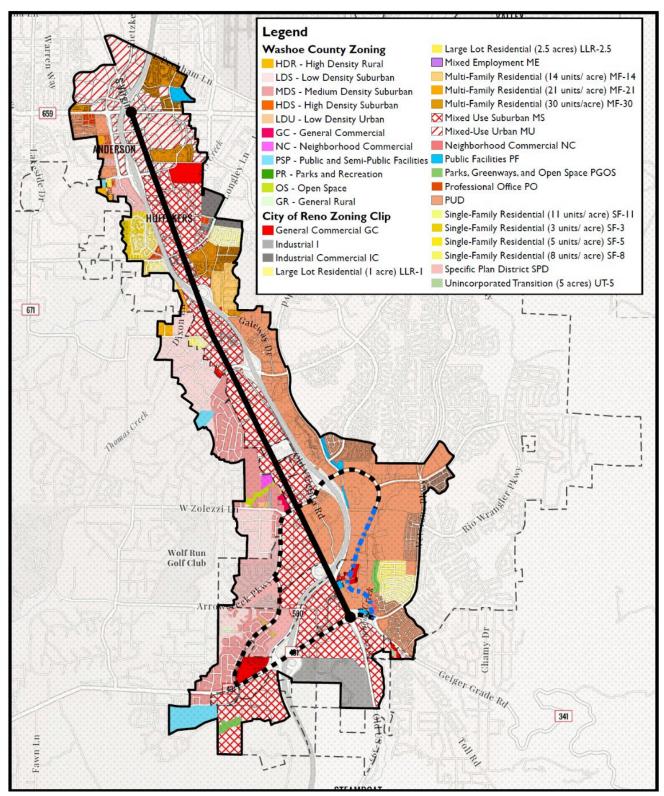


Figure 8: Zoning







The SMU master plan designation is described as follows in *Reimagine Reno*:

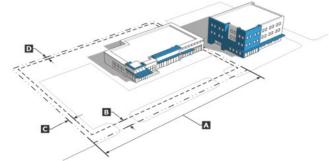
Low to moderate density with no minimum density requirements. Concentrated nodes of higher-intensity development are encouraged at major intersections, near existing or planned transit stations, and in other intensely developed areas of the city. Residential development at a density greater than 30 dwelling units per acre is appropriate in these locations.

Furthermore, the characteristics of the SMU master plan designation encourage transit supportive densities along the corridor. *Provides an opportunity for a broader mix of uses in a more suburban context while also preserving opportunities for higher-density infill and redevelopment in the future (for example, if transit services are expanded to serve the area).*

Although the SMU designation includes several conforming "Base Zoning Districts," the Study Area is predominantly under just one, Mixed-Use Suburban (MS). Requirements for development in the MS zone is excerpted from the City's zoning ordinance below:

18.02.308 MS: Mixed-Use Suburban Zoning

(a) Purpose The MS district is intended to accommodate a mix of low-intensity, autooriented uses, while supporting the gradual transition of the city's suburban corridors to a mix of higher-density residential, retail, commercial, and other employment- and service-oriented uses.



The MS zoning does not require a minimum or maximum for residential density or floor area ratio (FAR) and has very permissive setback requirements (if any, in some cases). There is no stated height limit, just a requirement for site review for buildings over 55 feet. These standards are conducive to transit-oriented development, which is often pushing the limits of allowable density. Unfortunately, the no minimum density and FAR presents a serious challenge to the type of zoning that would normally be a principal component of a set of transit-supportive land use policies as it allows for developments that are less transit supportive. To date the MS zoning along South Virginia Street has produced large scale autocentric developments including car dealerships with large asphalt parking areas, large industrial developments, and scattered multifamily projects with little to no multimodal connectivity to the surrounding area.

In addition to the MS zoning, at the south end of the Study Area Damonte Ranch and the surrounding areas have their own Planned Unit Development (PUD) zoning, which identifies specific land uses and standards for various parts of the master planned community. Similar to the MS zoning the PUD provides the upmost flexibility for use standards and would allow for a broad range of uses that may or may not be transit supportive. Unlike South Virginia Street, the Damonte Ranch area is the only node within the project corridor to date that has seen higher density development concentrated around commercial including the Downtown Damonte mixed-use development recently announced.

In conclusion, the *Reimagine Reno* Master Plan provides a framework for the Corridor to grow into a more urbanized corridor with a focus on node densification and supporting future transit and multimodal connectivity. The zoning within the corridor is largely where the disconnect occurs between what is being constructed in the corridor and the vision of the master plan as a result of a wide spectrum of what is allowed.







SUPPORTING TRANSIT ALONG SOUTH VIRGINIA STREET

One of the most important challenges to overcome to achieve a long-term vision of TOD along South Virginia Street relates to the current disconnect between land-use policy and actual on-the-ground development. Specifically, except the planned Downtown Damonte area, there seems to be little momentum favoring the development of compact, walkable, mixed-use built environments along South Virginia Street. To increase actual mixed-use development understanding the policies are only part of the equation. Understanding outside influences such as the private market, private landowners and developers, and the desire of the political jurisdictions to encourage shifts in development patterns have been and will continue to be the main components driving certain development along South Virginia Street.

Private Market Influences:

Development patterns along South Virginia Street have largely been left up to the private market with no standards or requirements for enhancing multimodal connectivity or setting minimum standards for mixed-use development. This has led to a mix of both transit supportive development: Multi-family developments, hotels, some walkable commercial (South Creek Crossing); and non-transit supportive development: Industrial park, recent increase in car dealerships. This creates a challenge for multimodal connectivity and continues to keep the corridor more autocentric. It also creates challenges for transit planning and understanding how future development patterns will continue. Given the broad range of uses allowed under the mixed-use zoning it is likely that development patterns will continue to change annually based on regional demand.



Private Landowners/Developers:

There are over 950 acres of vacant land and redevelopment opportunities as well as several planned projects in the Corridor (identified in **Figure 9**), some of which are planned to be more transit supportive such as the "Downtown Damonte" mixed-use development. Transit has not been a priority and is not at the top of mind for future development projects. Continuing to explore opportunities for partnerships, incentives, and garnering support around a vision for future multimodal connectivity and its benefits will be key to helping shape future development patterns. With the current flexibility of mixed-use zoning landowners and developers will lean more towards keeping it that way and will not favor new regulations or zoning standards that may limit their options for a future project or land sale.

Political Influences:

The City of Reno is underway on zoning code updates and City staff has indicated that there has not been a desire to make a shift to require minimum density and commercial floor area requirements or limit uses to encourage TOD for the Suburban Corridors. It was expressed by City staff that the TOD plan from 2008 was removed as part of the 2017 *Reimagine Reno Master Plan*, and the Suburban Mixed-Use zoning would allow for more TOD without minimum standards. There was no indication from City of Reno staff that changes to the zoning code would be considered to try and support TOD in the near future within the Corridor.

NDOT:

The Nevada Department of Transportation (NDOT) has a Safety Management Plan underway within the Study Area that is exploring future multimodal enhancements within the South Virginia Street right of way, which is







controlled by NDOT. Leveraging the partnership with NDOT to continue to improve multimodal enhancements in the corridor will be key to supporting future transit and overall connectivity for bike and pedestrians along South Virginia Street. Enhanced roadway improvements may also increase the likelihood of more mixed-use type developments.

Encouraging TOD without the help of more defined zoning tools will require focusing on nodes that have the most potential to support transit rather than the entire corridor; education on the benefits of TOD's, public and private partnerships, and leveraging incentives that can help influence development patterns, as well as working with agency partners such as NDOT to improve multimodal connectivity through infrastructure projects. These tools will allow the existing zoning to remain while influencing more transit supportive developments along the nodes identified in the *Reimagine Reno* Master Plan.

The benefits of TOD for the corridor:



Reduced Traffic Congestion: Enhanced public transit options like BRT which can significantly decrease the reliance on personal vehicles, leading to less congested roads and smoother traffic flow.



Health and Lifestyle Improvements: Reduced pollution levels and the promotion of more active modes of transportation, like walking and biking to transit stops, can contribute to healthier bodies and minds in the community.



Environmental Advantages: Public transit systems are instrumental in reducing greenhouse gas emissions and local air pollution, contributing to a cleaner, healthier urban environment.



Local Economic Growth: Effective transit not only boosts property values and business attractiveness but also stimulates broader economic development by better connecting industry to the workforce it relies on.



Increased Social Equity: A well-implemented transit system democratizes mobility, offering more equitable access to employment, education, and services across all socio-economic groups, especially when connected with affordable housing efforts.

The following sections further analyze the characteristics of and opportunities for future transit supportive development along South Virginia Street.

Characteristics of Transit-Supportive Development

A transit system and the built environment it operates in are mutually dependent when it comes to realizing the above benefits. Even the highest quality vehicles, stations, and operating systems may not attract a sizable number of riders away from auto-reliance unless the surrounding land uses and public infrastructure are thoughtfully designed to support, and benefit from, that transit.

This means thinking about how we design our neighborhoods – from the placement of buildings to the mix of shops, homes, and places of work. Ensuring that station areas have sufficient headcounts to generate rides is only one part of an equation that also involves factors like non-auto connectivity, physical orientation of uses, safety, and aesthetic desirability; it's about creating vibrant, attractive areas that naturally and safely encourage transit use. Here, we will explore the key elements that make up a transit-supportive neighborhood and why getting these details right is crucial for the success of future transit service and to help achieve broader regional goals and policies.







Compact and Focused Development

General Compactness: Compact development, as opposed to very low-density development, supports transit systems by efficiently utilizing land. This approach creates walkable, interconnected neighborhoods, facilitating public transit use. People and destinations are the life's blood of transit ridership, and compact design means more individuals and potential destinations per acre of corridor land.

Focused Intensity Near Stations: An outcome to the criteria of compactness is that station areas should emerge as pulse points of activity and development



density. Because BRT systems do not make stops between established station areas, corridor-adjacent properties that are not within walking distance of a station typically do not contribute much to ridership, either in terms of resident riders or destinations for BRT passengers.

Development density is therefore less critical for non-station stretches of corridor (meaning that low-density autooriented uses interested in locating on the corridor should be steered to non-station areas to the extent possible). Pleasing, human-friendly architecture, landscaping, and site design near stations is critical for making the required density palatable, and even attractive to residents and neighbors.

Mix of Uses

A mix of residential, commercial, and recreational spaces within walking distance of transit stations can enhance livability and encourage transit use. Not every station needs to include a full mix of residential and commercial uses, but primary stations that serve as end of the line points or multi-modal transportation hubs certainly should.

The mix of uses can be horizontal (side-by-side) or vertical (e.g. apartments above ground-floor commercial), as dictated by the market and developer preferences, so long as stations can potentially serve a variety of potential riders and destinations. In addition to



smoothing out the distribution of passenger demand across stations and dayparts, mixed-use environments can enable shared parking opportunities and increase the vibrancy and activity levels around stations (which can also have safety benefits).







Pedestrian and Bicycle-Friendly Design

Safe, convenient pedestrian and cycling infrastructure is vital to encourage transit use and support a healthy community. This criterion is most important directly adjacent to station areas, physically connecting passengers with the station platforms to and from buildings, trails, or parking areas. Design details for those last hundred feet of connections may only appear closer to the actual opening of the system, but the wider network of bicycle/pedestrian trails, crosswalks, walkways, lighting, and other elements, both along the route and into the city at large, should be planned for and in place well in advance.



Connectivity and Accessibility

Easy and direct access to transit stations from a variety of other transportation modes is key for a successful TOD. This criterion overlaps with the last in its emphasis on trail networks and other forms of bike/ped connectivity, but crucially also extends to local non-BRT bus route connections. Shuttle services to hotels and workplaces located outside the corridor should also be cultivated and accommodated to and from major stations. Increasingly, station areas will also need to plan for ride-share and other taxi-like travel modes with convenient, non-disruptive pick-up/drop-off zones (a category of accommodation that will likely grow to include driverless cars).



Affordable Housing

Incorporating affordable housing near transit stations is critical to attract and support transit-dependent populations, such as lower to middle-income riders. In the Reno-Sparks metro, awareness and appreciation of transit is currently limited to lower and middle-income populations that already rely heavily on transit to get around. While increased awareness and acceptance of transit may grow through education and promotion efforts, operational feasibility of a South Virginia transit line will depend on the ability of significant numbers of transit-users to find housing they can afford near future station areas. Most cities with effective transit service consider transit access and housing affordability to be integral components that work together as part of a comprehensive approach to building social equity.







TOD Opportunities for the South Virginia Street Corridor

The Corridor, while predominantly suburban, includes a mix of vacant parcels and potential redevelopment sites. Currently, there are over 230 acres of identified vacant land and redevelopment opportunities as well as over 500 acres of planned developments along the Study Area as identified in **Figure 9**. Until quite recently, almost all

developments along the inner portions of the corridor were commercial - ranging across retail, auto dealerships, low-rise office, lodging/casino, and light industrial. More recently over the past five or so years Reno, like much of the Western experienced a boom multifamily residential development. Examples of which can now be found along the central portions of the corridor amid commercial uses. In fact, many of the remaining empty land assemblies and identified redevelopment possibilities include medium to high density residential as part of the proposed use plans. Planned developments are primarily Damonte concentrated around Ranch. While some planning and design has been discussed much of the acreage has yet to see actual building permits filed and could change depending on market conditions.

Some of the more notable opportunities for a future TOD include revitalizing existing centers as outlined in the Reimagine Reno Master Plan such as Meadowood Mall and Summit Mall where large parking areas could be converted to vertical parking with additional commercial added. There is one TOD mixed-use development planned in the corridor on Damonte Ranch Parkway, Downtown Damonte, which could provide a great opportunity to work with the developers to better serve that planned project in the

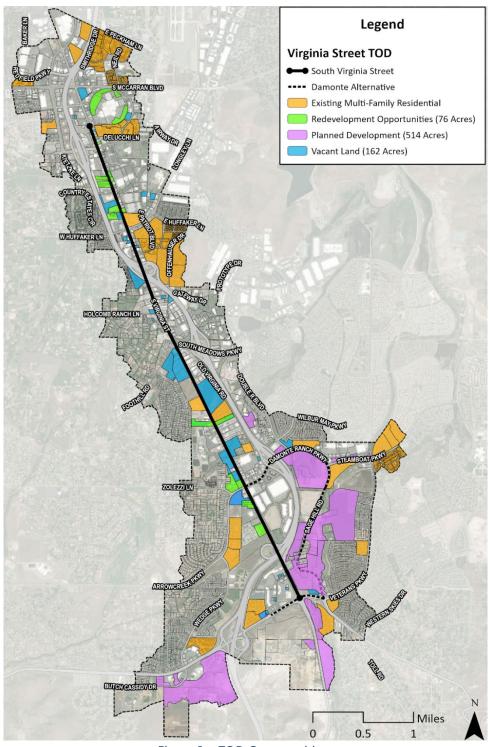


Figure 9 – TOD Opportunities







near future. These notable TOD projects are further described below and would provide a great opportunity to create book ends for the corridor to help encourage transit ridership and improve the potential for expanding the Virgina BRT line south of Meadowood Mall.

Opportunities for Infill/Revitalizing an Existing Center – Meadowood Mall

Though they include a concentration of lower-paying jobs and are popular travel destinations for shoppers, suburban shopping malls like Meadowood, near the northern end of the Study Area are not developed with transit service in mind. Although Meadowood is, in fact, the southern terminus of the existing Virginia Street BRT line, that station area is within a commercial development dominated by surface parking and auto-oriented interior transportation facilities.

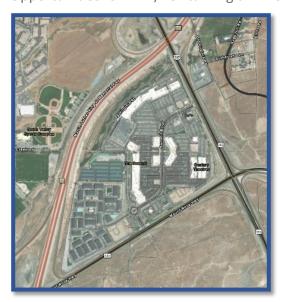
In the near term, that property may continue to expand its bike and pedestrian amenities and other transit-supportive design accommodations, which should help improve its functional role as a potential multimodal hub. Over the longer planning horizon,



Meadowood is a good candidate for more dramatic redevelopment, following in the path of many aging suburban enclosed malls across the country - shifting away from a purely retail destination function to a mix of land uses including residential, scaled-back and more neighborhood-serving retail, along with "other" uses and services that could include educational, medical, entertainment or even tech-oriented employment.

With a property roughly the same size as the planned Downtown Damonte (nearly 70 acres within the mall perimeter road), such a repurposing, if planned with transit service as an integral component, could make the Meadowood Mall property an excellent source for (and beneficiary of) future BRT ridership.

Opportunities for Infill/Revitalizing an Existing Center – Summit Mall



The tentative southern terminus for the proposed system extension would be located within a regional lifestyle retail center known as The Summit Mall. The center, largely completed in 2007, includes some 65 stores with just over 500,000 square feet of surface-parked retail space. Adjacent to the retail, a 132-room upscale Hyatt Place hotel is under construction, due for completion later in 2024.

Also adjacent, just south and west of the retail center, but within easy walking distance to a likely BRT station location, are the recently completed (2019) Innova apartments, with 581 units. Apartments in the project are primarily market-rate, but 10 percent of units are reserved as affordable. Alongside the apartments is a 100,000-square foot self-storage facility and a park-and-ride surface lot serving existing bus system riders. Just to the south, across Mount Rose Highway, approximately one







million square feet of industrial space is under construction, with plans for additional future industrial or commercial on the remaining land parcels.

While the development at this node is quite suburban in density and layout, the property does represent a concentration of possible transit-dependent employment in the retail and hospitality sectors, with future additions of industrial employees likely to be less transit-dependent. In combination with residents from the large apartment project, the site has the potential to contribute significant ridership to a future BRT terminus station.

Because of the relatively recent vintage of retail development on the site, this node may not have as much potential in the foreseeable future for aggressive, blank-slate redevelopment as the older Meadowood Mall property (previously discussed). That said, the abundance of surface parking could be viewed as land with at least some good mixed-use redevelopment potential, including added housing density, over the long term – provided some structured parking is added to the mix.

Planned TOD Development - Downtown Damonte

The most important single Study Area planned development, in terms of transit-supportive land use, is Downtown Damonte, the planned mixed-use focal point for the broader Damonte Ranch cluster of residential development in south Reno. The developer partnership of Nevada Pacific Development Corp. and The Di Loreto Companies describe the project in their site planning materials as "a walkable canvas of dining, housing, office, retail, medical, recreational, and commercial opportunities with a target occupancy date of late 2024 to early 2025."



That 73-acre project, as proposed, would include up

to 900 residential units – almost one quarter of the total residential unit development in the larger Damonte Ranch master-planned development. As such, the Downtown Damonte area alone could account for as many future added residents as are projected for the entire northern two-fifths of the Study Area, above Foothills Blvd./South Meadows Pkwy.

The mix of uses in Downtown Damonte would be primarily horizontal in nature, as opposed to a vertical mix having living units above storefront retail. As of late 2022 site plans, there would be 244,000 square feet of retail in the form of specialty shopping, dining, and bars, together with 150,000 square feet of class A office space. Adding to this trip-generating potential would be 180 new hotel rooms.

Adjacent to Downtown Damonte are parcels under development as a technology campus to be either wholly or largely occupied by Ridgeline Inc., a financial technology company that is anticipated to have more than 1,500 employees. That campus is very likely to be surfaced parked and not particularly compact – built to serve a workforce primarily expected to commute in by automobile. Nevertheless, it represents a large pool of relatively concentrated workers, some of which could be attracted to conveniences of BRT over time.

In short, Downtown Damonte, despite not being a prototypical pedestrian-focused TOD (or even directly reflecting the possibility of a transit station in its planning materials), has a great deal of promise for being a TOD catalyst







given its planned future density of housing units, employment, and likely clustering of dining and shopping. While employees of the development's lodging and retail establishments would be possibly transit-dependent, most of the new pool of prospective riders would likely include mostly riders-by-choice, given the upscale nature of most of the conceived project components for the site. As such, converting that planned new density into future transit ridership would require a significant increase in awareness and acceptance of mass transit use among the higher wage earners likely to make up the majority of new residents, shoppers, diners, hotel guests, and office employees in Downtown Damonte.

How Supportive of Transit are the Current and Expected Patterns of Corridor Development?

The following table summarizes how the existing and likely future built environment stack up against criteria for being transit-supportive. Because most station area locations are still tentative at this point, commentary relative to potential individual stations is necessarily limited.







Table 1: South Virginia Context Relative to Criteria for Transit-Supportive Development

	How transit-supportive? (1=not at all, 2=slightly, 3=moderately, 4=strongly, 5=very strongly)				
Criteria	Current Context	Trajectory	Notes		
Compact & Focused Development	1 to 2 – overall 3 - some multifamily and industrial areas (depending on station location)	4 - Downtown Damonte, as proposed. 1 to 3 overall, moderately supportive in multifamily and industrial/employment areas	Some recent multifamily developments have increased the overall corridor density, but none are particularly compact, from a typical TOD perspective. There is considerable job density overall in the industrial areas east of Sierra Center Parkway, though development is not particularly compact. In general, patterns of density are more randomly distributed than focused at likely station areas		
Mix of Use	1 to 2 at likely station areas overall. 3 at Meadowood Mall terminus area and a few other potential station areas (Longly/Huffaker, McCabe, South Meadows Pkwy and Damonte, but far from likely future transit station areas)	4 at Downtown Damonte, as proposed 1 to 2 over much of the remaining corridor	Though the corridor includes an impressive mix of uses overall, there are few developments near possible transit focus areas featuring a real mixeduse type development outside of the proposed Downtown Damonte. Most multifamily developments are separated by horizontal commercial or industrial uses, and generally are not well connected to services.		
Pedestrian & Bicycle- Friendliness	1 to 2 overall	3 to 4 at Downtown Damonte (Potential for 5 should NDOT implement separated facilities as identified by the South Virginia Street Safety Management Plan)	Nearly the full extent of South Virginia Street is flanked by sidewalks in the north with little sidewalks found south of Patriot Boulevard, but except in a few areas around new developments. Where sidewalks exists these are directly adjacent to the busy arterial traffic and interrupted frequently by curb cuts. Crosswalk protection and lighting are inconsistent. Some bike trails can be found intersecting S. Virginia, but not along it. Plans for Downtown Damonte reference being ped/bike friendly, but few details are available. NDOT is in the process of a Safet y Management Plan for South Virginia, which has proposed a separated bike path and larger sidewalks.		
Connectivity	1 to 2 overall 2 to 3 at Meadowood Mall	3 to 4 at Downtown Damonte	Unlike older parts of Reno surrounding the existing Virginia St. BRT, South Virginia lacks an urban grid of surrounding local streets, instead relying on a loose network of parkways, partially connected streets, and private roads built to satisfy one or two developments at a time with little regard for overall connectivity. Meadowood Mall serves an intermodal function for 2-3 local bus lines, providing access to the North Virginia BRT.		
Housing Affordability	1 to 2 overall	1 to 2 over much of the corridor	Several Affordable housing projects exist but almost all have no access to transit. Establishing reliable transit service along S. Virginia Street will help to incentivize more affordable housing projects.		







Future Development Scenarios

Looking to the future, the TMRPA and the 2022 Washoe County Consensus Forecast anticipates the county to grow at a rate of 0.92 percent. This would result in an increase in population of 98,299 and an increase in employment totaling 38,000 jobs from 2022 to 2042. Considering the range of development that is allowed in the zoning that was discussed earlier, and considering there are over 700 acres of vacant and redevelopment opportunities, the amount of growth that is absorbed within the study area will depend on the type of development that occurs in these areas. Therefore, the best way to plan for future growth will be through analyzing several development scenarios. These scenarios will help to predict the types of population and job growth that the corridor can anticipate over the next 20+ years to help better predict the type of transit that can be supported.

The following scenarios are based on the Traffic Analysis Zones (TAZ) that intersect the study area. From the TAZ the forecasted population growth and job growth were then projected based on specific scenarios impacting land use changes within the opportunity areas within the corridor. The data originated from the Truckee Meadows Regional Plan projections and were modified based on growth scenarios further described in the Scenario Growth Opportunity by TAZ Group Table on page 22. In all a total of ninety (90) TAZ were analyzed as part of this process. Under each scenario specific population growth rates and job rates were applied to the existing TAZ totals based on the opportunity areas identified in Figure 9. Figure 10 shows groups of TAZs that were analyzed for growth potential based on opportunities for future development and an estimated increase in population and employment were calculated for each TAZ group based on a certain percent increase in population (Scenario 1 – 1%, Scenario 2 – 1.5%, and Scenario 3 – 2%). A comparison of the scenarios and change in each TAZ group by scenario are provided on the following pages.

It should be noted that these growth scenarios will be used to model future transit routes and the anticipated ridership. While the types of development proposed in these scenarios directly impact the population and job growth, the total population and jobs will help to determine the type of transit that can serve the study area.

Existing South Virginia Street Corridor	43,000 ¹
Future Growth Scenario 1	58,000
Future Growth Scenario 2	64,000
Future Growth Scenario 3	75,000

¹Based on 2020 US Census Tracts in the study area.







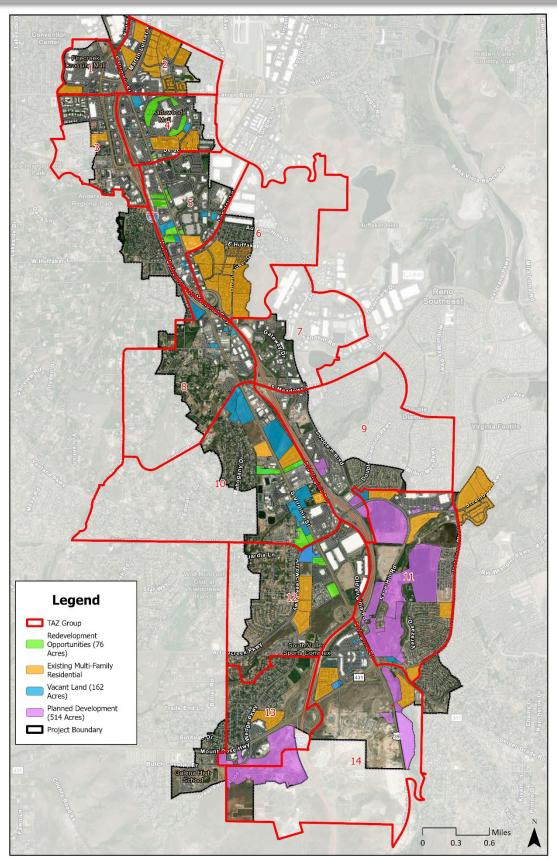


Figure 10: TAZ Groups and Growth Opportunity Areas





Table: Scenario Growth Opportunities by TAZ Group

TAZ Group	Future Employment Growth - Scenario 1	Fuure Population Growth - Scenario 1	Future Employment Growth - Scenario 2	Fuure Population Growth - Scenario 2	Future Employment Growth - Scenario 3	Fuure Population Growth - Scenario 3
1	1,139	78	1,103	76	1,094	73
2	380	679	368	662	365	637
3	1,264	320	1,225	312	1,214	300
4	1,721	525	1,667	512	1,907	3,216
5	1,142	204	1,106	789	1,217	952
6	810	457	785	445	782	443
7	2,376	1,711	2,302	1,667	2,282	1,607
8	431	142	417	211	424	456
9	2,555	189	2,475	184	2,454	177
10	713	1,860	283	2,413	997	5,019
11	776	3,812	2,799	3,158	2,796	3,110
12	146	1,181	663	1,592	659	1,933
13	197	128	191	474	189	457
14	782	2,558	973	1,527	975	1,569

Scenario 1: Historic Development Patterns

Scenario 1 anticipates a growth scenario that anticipates historic development patterns along the corridor to continue. This assumes that a broad range of intensities and developments ranging from car dealerships which are less transit supportive, to multi-family housing which is more transit supportive are anticipated to occur in the vacant land. This scenario assumes little to no infill/ redevelopment within the corridor. The population and job growth rate is assumed at one percent (1.0%). This results in a net increase of 14,866 people and 14,868 jobs throughout the study area.

Scenario 2: Transit Focus Areas

Scenario 2 assumes a growth model similar to the one highlighted in the *ReImagine Reno* Master Plan that allows a broad range of intensities to continue along the corridor but provides an increase in mixed-use developments that are more transit supportive around the major nodes (Figure 13 – Transit Focus Areas) and a mix of less transit supportive developments outside of these areas. The population growth rate under this scenario is approximately one and a half percent (1.5%) and a job growth rate of a little more than one percent (1.2%). This results in a net increase of 21,005 people and 18,747 jobs throughout the study area.

Scenario 3: Urban Corridor

Scenario 3 assumes transit supportive development anticipated along the full corridor, not just at the proposed transit focus areas. This assumes a growth model which is typically seen with the Mixed-Use Urban (MU) zoning designation which includes a minimum density requirement of 0.75 Floor Area Ratio (FAR) for non-residential development and 18 dwelling units per acre (du/acre) for residential. The population and job growth rate under this scenario is near two percent (2.0%). This results in a net increase of 26,005 people and 23,433 jobs throughout the study area.







Other Factors Influencing Future Transit Demand

Two crucial factors affecting potential ridership involve conditions outside the corridor study area. One factor relates to the home locations of current users of BRT, as related to income and wage levels, and how that is likely to impact future ridership and justify the need for additional affordable housing choices in the corridor. The second involves the scattered nature of employment destinations within the Reno market.

"Adding affordable housing at station areas would allow the corridor to even out the demand for service and add new riders."

Transit-Dependence and Affordable Housing

To better understand the critical role which affordable housing may play in a future South Virginia BRT system, Placer.ai cellphone geofencing data was utilized to look at the home locations of people who had visited the existing Meadowood platform over the past year (and thus presumably used the existing BRT serving downtown). That ridership "catchment" area was then overlayed on a map of residents by wage levels at a census block level.

The map at left shows a dark outline encompassing households accounting for the majority (actually, 70 percent) of platform visits. Note that ridership, by this measure, is very closely tied to a census block being in the lowest regional quartile for wages. This strongly suggests that BRT ridership in Reno is, at least currently, heavily driven by transit-dependent residents.

Transit dependence, in turn, is logically tied to a need for affordable housing. While there are a few affordable multifamily projects along the Corridor, housing in the study area is predominantly market rate, limiting the number of would-be transit users on the corridor. Without additions of affordable housing, the ridership dynamic would likely be largely made up of lower-income commuters living north of Meadowood Mall commuting south to work in the industrial employment concentration lying east of the interstate or the large retail centers on the corridor itself. Adding affordable housing at station areas would allow the corridor to more quickly be a source of northbound commuters, helping to even out the demand for service and add new riders.

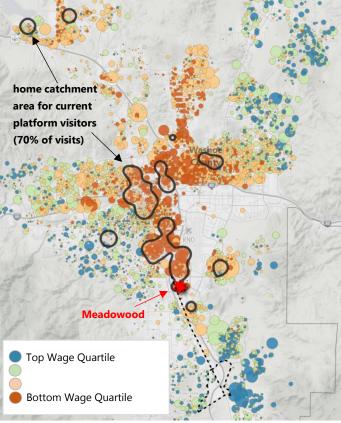


Figure 11: Users of the Existing Meadowood BRT Platform by Home Location and Wage Quartile, 2023







Scattered Worksite Destinations

While the corridor itself contains (or is adjacent to) a substantial concentration of industrial and retail jobs, most potential workplace destinations for prospective future corridor residents are not accessible via the north or future south BRT segments. In the case of industrial, other than the jobs found in or near the northeast reaches of the study area, most workplace locations can be found either in south Sparks or far north and east in Storey County. Without a strong complement of transfer buses or shuttles, most of this area employment will be unreachable via South Virginia BRT.

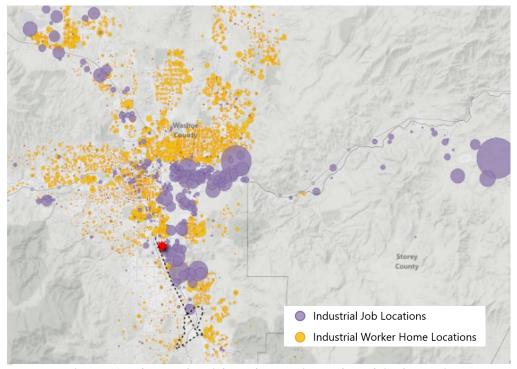


Figure 12: Where Industrial Employees Live and Work in the Region

Land Use Tools to Increase TOD Level Development in the Corridor

Recapping the Policy Challenges of Reno's Existing Zoning

The *ReImagine Reno* Master Plan identifies the encouragement of alternate forms of transportation as a strategy element include some language on Transit-oriented/transit-supportive development, with just a paragraph under 5.4C saying that the City should...

Prioritize transit-oriented development in regional and employment centers, along urban corridors and other locations that are currently served by or are planned to be served by high-frequency transit service (i.e., peak hour headways of 15 minutes or less) and/or fixed-route transit (i.e., bus rapid transit). Continue to encourage transit-supportive development in more remote employment centers, suburban corridors, and other locations that are currently served by high-frequency transit during peak hours.

Addressing the challenge of extending transit service into suburban south Reno, requires a multi-faceted approach. Since zoning regulations already permit a high degree of density and flexibility but the current development pattern isn't aligning with transit-oriented goals, the table below highlights some strategies that the







city might consider. By employing a combination of these strategies, Reno can encourage developments that are more aligned with promoting a transit-supportive environment even in areas that currently exhibit auto-centric, suburban characteristics.

Toolkit Recommendations

Tools for promoting transit-supportive development can be grouped into four main categories: Land Use, Economic (including Incentives and Financing), Public Outreach, and System Related as shown in the following TOD Toolkit table. There are many overlaps and dependencies across the various tools and they are intended to be used in combination, leveraging one another towards the goal steering transit-oriented and transit-supportive development.

Phased Implementation: Consider a phased approach to implementing any of the tools shown below. Particularly in the case of overlay, or focused re-zoning, which can be perceived as particularly onerous. Start with less stringent requirements and gradually increase them, allowing developers time to adjust and plan for the changes.

Monitor and Adjust Policies: Continuously monitor the impact of major program elements such as overlay zoning and be willing to adjust policies if they are not working as intended. This adaptive approach shows developers that the city is responsive to their needs and the market realities.

TOD Toolkit

Category	Tools & Policy Recommendations	Case Study Examples	
Land Use Planning, Design Tools involving elements of the City's general plan, land use	Master Plan Designations: Municipal land use planning begins with the master plan. The City should consider changes to the way South Virginia Street is categorized under Reno's master plan framework. Current designations may place too much emphasis on the corridor's suburban nature, downplaying its potential as a valuable extension of the existing BRT line to the north.	Canyon Park (Bothell, WA) – General Plan Designation – Swift Green Line (BRT) – Subarea Plan (part of the city's Comprehensive plan) identifies the neighborhood as a transportation hub (2020)	
regulations, and approaches to urban design	Station Area Plans: One of the most important elements in successful transit projects across the country is dedicated individual station area planning. This can be a valuable incentive tool for developers already contemplating projects around station areas that include transit-supportive elements. These plans, typically co-sponsored by the transit agency and municipality, involve a process that brings community stakeholders to the table early to become better informed as to the goals and benefits of transit and the key characteristics of transit supportive development.	2230 North Station (Provo, UT) – Station Area Plan – Utah Valley Express (BRT) – Station Area Plan being completed to guide mixed-use and commercial development near an existing station adjacent to a Walmart Neighborhood Market (2024)	
	By soliciting input about desires and concerns from station area neighbors, the process helps to secure community buyin and overcome resistance through transparent problemsolving. A station area plan may or may not involve an actively interested developer or developers but should	Transit Overlay District (Vancouver, WA) – Rezoning/Overlay Zones – C- TRAN (BRT) – District	







Category	Tools & Policy Recommendations	Case Study Examples
	always yield important insights into potential development challenges and opportunities at the individual site level. Timing is important for station area planning. There needs to be some degree of certainty, usually in the form of secured funding, that the transit systems will be built, with preliminary decisions already made relative to system elements and platform locations.	established along BRT lines, with Tier 1 density allowed adjacent to stations and lower- intensity Tier 2 density allowed elsewhere along the lines (2021)
	Focused Rezoning or Overlay Zones: Either as complement to, or instead of, individually negotiated development agreements (described in the next section, Economic Tools), consider implementing overlay zones at key arterial intersections intended for station areas. These overlays can set more specific guidelines or requirements for development in these areas, focusing on mixed-use, pedestrian-friendly designs that support BRT usage. Any design standards included in overlay regulations should be flexible enough to accommodate a range of potential development concepts.	Murray Fireclay Area TOD (Murray, UT) – Design Guidelines – Utah Valley Express (BRT) – Streetscape, building, and pedestrian environment design guidelines for TOD areas (2021)
	While overlay zoning directly addresses the primary observed challenge (lack of density, compactness, and land use mix around most prospective station areas), it does carry some risk of unintended consequences – potentially adding levels of bureaucracy and cost that may actually discourage station-area development relative to non-station areas. This can be countered by offering clear guidelines and assistance for developers navigating the overlay zoning regulations, including workshops, detailed guides, or dedicated city staff to help with compliance questions.	
	Balancing Regulation with Incentives: Ensure that any additional regulations introduced by overlay zoning are balanced with incentives. This could mean offering tax abatements, density bonuses, or other financial incentives to developers who comply with the overlay requirements. The key is to make compliance more attractive than avoiding it.	
	Urban Design Guidelines: As part of a program of zoning overlays, or separately, develop urban design guidelines that encourage developments to be pedestrian-friendly and easily accessible to BRT stations. This should include guidelines on building orientation, street frontages, and connectivity.	







Category	Tools & Policy Recommendations	Case Study Examples
	Reimagining Reno speaks to this, but in fairly general terms that could be spelled out in more concrete design terms, with recommendations and illustrations offering guidance on dimensions, materials, and key functional interrelationships of urban amenities. A set of urban design guidelines for BRT stations was developed in 2009 as part of planning efforts for the existing northern portion of the system. Those guidelines should be revisited and updated in light of the contextual differences along South Virginia south of McCarran.	
Economic Tools (incl. Incentives & Financing) These tools cover an overlapping set of real estate approaches, funding mechanisms, and selective favorable treatments that help to bridge economic feasibility gaps for desired projects.	Infrastructure Improvements: Public sector investments in infrastructure improvements represent one of the most important categories of incentives available to make areas around future BRT stations more attractive for development. Such spending may come directly from the City as part of its capital improvements plan or can be channeled through mechanisms like tax-increment financing (see below). Either way, these investments can help encourage desired private sector projects by taking on costs that would otherwise be borne by the developer. Even for nearby offsite costs that private developers would not be expected to bear, public investments such as streetscaping, pedestrian and bicycle pathways, and public spaces, can also improve the value of TOD projects while signaling a degree of permanence and commitment on the part of the City to	Division Transit Project (Portland, OR) – Infrastructure Improvements – TriMet Frequent Express (BRT) – New BRT line accompanied by safety improvements near stations, including new sidewalks, bike lanes, and crosswalks (2022) SR 522 TOD (Kenmore, WA) – Public-Private Partnerships – City of Kenmore (BAT) – The City of Kenmore invested \$80 million in infrastructure improvements along SR 522, including BAT lanes to improve bus service. The City assembled property downtown and sold it to developers who built 230 new TOD units (2010) LA County Land Banking Pilot (Los Angeles, CA) – Land Bank – Metro and LA County (new transit stations) – Metro and LA County are collaborating on a pilot program to make surplus land acquired for new transit facilities available for joint development (2022) Metro TOD Program (Portland, OR) – Land Bank –
	Development Agreements: These are commonly used as a means of formalizing negotiated commitments between the City and developers, such as trading public infrastructure investment for developer adjustments to site design and land use mix. These may range from complex agreements spanning multiple topics to relatively simple ones. For a simple example, a city might agree to pay for undergrounding of electrical utility lines serving a project in exchange for dedication of a certain percentage of multifamily units as permanently affordable. A development agreement, and the related memoranda of understanding (MOU) represent a more individualized means to encourage desired transit-supportive characteristics in private developments. Such case-by-case negotiating of policies and requirements stands in contrast	







Category	Tools & Policy Recommendations	Case Study Examples
	to more strictly applied frameworks such as a detailed overlay zoning district with pre-specified use and design requirements and little room for custom tailoring. For the highly varied assortment of potential station area environments along South Virginia, the development agreement approach may be preferred for its flexibility – perhaps accompanied by a set of TOD overlay standards that are more focused on guidelines and incentives than prohibitions or requirements.	Metro Regional Government (all transit stations) – Program includes a variety of TOD-targeted incentives, including Metro acquisition of land for future affordable housing (1998) Jamestown Square (Kansas City, MO) – Tax Abatement –
	Public-Private Partnerships & Joint Development: Engage with developers through public-private partnerships. This approach can ensure that new developments are aligned with the city's transit goals. For instance, the city might offer land or development rights at a reduced cost in exchange for developments that incorporate specific transit-friendly features. This notion of public-private partnerships pervades the TOD landscape around U.S. transit systems. This approach would typically work hand-in-hand with the value incentive of public sector investments in infrastructure improvements and would require a custom case-by-case approach — finding publicly-funded improvement that developers find sufficiently valuable to warrant tweaking project elements in a transit-supportive direction.	Ride KC (streetcar) – KCATA approved bonds for two apartment projects near a planned streetcar stop to provide private developer with 20-year tax abatement (2022) North College MAX BRT Corridor (Fort Collins, CO) – Tax-Increment Financing – North College Urban Renewal Authority – TIF district established in 2004 and expires in 2029. Currently has \$20 million to support priorities within the plan area,
	Land Banking: If feasible, the City or RTC could consider purchasing additional key parcels of land along the BRT route, especially around planned station areas. This gives the City more control over how these areas are developed in the future and allows for value capture – allowing the City to realize gains in residual land value that can be passed on to developers as incentives or used to fund other incentive elements listed here.	including gap financing for affordable housing (2004)
	RTC already controls two large land parcels on the east side of South Virginia near where a terminal station facility (potentially including a park & ride lot) might be located. The City and/or RTC could investigate the potential of acquiring a similar land assembly on the Meadowood Mall property that would eventually be part of BRT (or intermodal) facilities at that terminus. More aggressive assembly could seek to control a future TOD development site adjacent to that station, setting the stage for a potential joint development	





Category	Tools & Policy Recommendations	Case Study Examples
	assuming there is market feasibility in support of a full mall redevelopment along TOD lines.	
	Tax Abatement & Fee Waivers: One of the simplest tools for encouraging development is allowing the removal of certain taxes or fees that would otherwise be paid by the developer for projects that meet certain specific TOD criteria. This approach obviously requires the City to forego some portion of a currently applicable revenue stream. From the developer's perspective, temporary property tax abatement and/or waiving of certain impact fees may be more enticing than the payment-in-kind structure of targeted public infrastructure investments. To the extent that the savings freed up by abatement can be spent across a variety of development costs (as opposed to earmarked for a specific infrastructure item), it can be seen as more flexible money. Tax-abatement incentives for desired TOD projects is a common element in BRT and LRT policy across many systems in the U.S.	
	Tax-Increment Financing: TIF is one of the most common funding mechanisms used to help finance transit-supportive development projects. In general, TIF programs identify blighted and underperforming real estate in the City, produce redevelopment plans, and work with private developers to implement those plans by reinvesting a portion of new, incremental property and sales tax revenues generated from new real estate development.	
	In Reno, the Economic Development/Redevelopment Agency (RDA) administers such programs, identifying blighted areas, developing plans, and coordinating the allocation of TIF funds across infrastructure investments, land assembly, and other allowed spending items. This approach can function as the primary vehicle for making transit-supportive infrastructure investments of the kind described in the section above.	
	South Virginia Street (both above and below McCarran) is already identified as a priority area by the RDA, which explicitly references the need to work towards accommodating a future BRT right-of-way and implement Complete Streets along the corridor.	







Category	Tools & Policy Recommendations	Case Study Examples
	Eventual redevelopment of the Meadowood mall property could be an excellent candidate for future use of TIF funding in line with the RDA's stated mission.	
	Selective Project Streamlining: Once preliminary station area locations are solidified, the City can institute a policy of prioritizing consideration and streamlining of approvals processes for projects that are located near stations and that include qualifying transit-supportive elements. Uncertainties in the entitlement (and even construction/inspection) phases present risks for developers and lenders that may deter transit-supportive project elements. Streamlining can help reduce that risk.	
	Marketing Assistance: To the extent that the City (and potentially RTC) can take on some costs of marketing for critical transit-supportive developments, such as multifamily housing at station areas, they can help developers by increasing the pace of lease-up (for apartments) and sales absorption (for condos). This can be very appealing to lenders motivated to minimize their time to payoff. This incentive would necessarily come later in the process as station area planning begins to spur development projects. Direct marketing support would almost certainly require a budget line item for the public sector participant, so the City or RTC would need to weigh those costs against the "quick win" type benefits of encouraging rapid absorption or lease-up for a high-visibility project.	
	Affordable and Workforce Housing: Coordinating with State and other jurisdictions on low-cost affordable housing loans and other affordable housing incentives addresses a critical source of future ridership and is central to the with the big picture of transit's economic benefits. The Nevada Housing Division has the ability to issue tax-exempt housing revenue bonds and non-competitive tax credits for qualified housing projects, lowering the cost of capital and improving proforma project feasibility.	
	An important requirement of the Division's program is that local jurisdictions must put up 50 percent of the needed bonding authority. Such programs require a high degree of coordination between state and local authorities but represent an important part of the finance puzzle for developers of affordable housing.	







Category	Tools & Policy Recommendations	Case Study Examples
Outreach and Public Relations	Community Engagement and Education: A general lack of awareness of likely BRT benefits for commuters and developers appears to be a major potential shortfall constraining interest in transit supportive development. The City and RTC can step up efforts to work with local communities to educate them about the benefits of transit-oriented development. Community support can be a powerful tool in encouraging developers to consider transit-oriented projects. This type of outreach would be most focused during system planning but would presumably continue through early-phase BRT service rollout.	
	Engage Developers to Leverage Existing Projects: Work with private sector developers of existing and planned projects to incorporate transit-friendly features. This could include improving pedestrian access to BRT stations or providing amenities like bike-sharing stations. This strategy could be especially important in helping to shape last-mile amenities and infrastructure within the Downtown Damonte and Pioneer Parkway development area. In the more distant future, eventual redevelopment of the Meadowood Mall property (and potentially some densification/infill at The Summit) should involve extensive cooperation with transit planning.	
	Success Stories and Demonstrations: Look for "quick win" possibilities. Be prepared to showcase successful developments that have complied with the overlay zoning (or other policy changes) as examples and enjoyed added real estate value as a result. Demonstrating the potential benefits and feasibility can encourage others to follow suit.	
	Community Support and Advocacy: Build community support for developments within station area nodes, when local residents and businesses advocate for such developments, it can create a more favorable environment for developers and may help reduce resistance to regulatory burdens such as overlay zones.	
	Finding Shared Parking Opportunities: Major manufacturing and other industrial employment projects planned for the portions of the study area may be good locations for shared parking taking advantage of predictable large-scale work shift arrangements. These can be taken into consideration for targeted reductions in parking requirements at key locations.	







Category	Tools & Policy Recommendations	Case Study Examples
System-Related Operational Tools involving the logistics of system operations and the surrounding transportation and parking environment	Early Express-Only Phase: Awareness of and existing attitudes towards mass transit in Reno may currently limit prospects for attracting riders-bychoice, it may be especially important to enhance the convenience and commuting speed of the transit system. This can be done by significantly reducing the total number of stops so as to create more of an express service between key TOD focus areas such as The Summit, Downtown Damonte, and the current Meadowood terminus (which would presumably become more of a multi-model hub).	
	Transit Prioritization: Another way to enhance perceptions of convenience (and actual convenience/timeliness) for BRT is to aggressively add signalization priority for BRT vehicles at normally congested intersections. This is a fairly common BRT advantage across U.S. systems and one that may see opportunities for increased efficiency and effectiveness through advances in AI-supported software.	
	Lane Dedication: One advantage of the more suburban environment along South Virginia is that there may be more opportunities to find stretches of right-of-way suitable for BRT-only travel. In combination with signal prioritization, any chance to allow buses to circumvent auto congestion via dedicated lanes will improve system efficiency and speed – in turn improving the perceived value of BRT among choice riders.	
	Parking Regulations: Revisit parking regulations. Reducing minimum parking requirements for developments near BRT stations can discourage car use and encourage developers to use land more efficiently.	

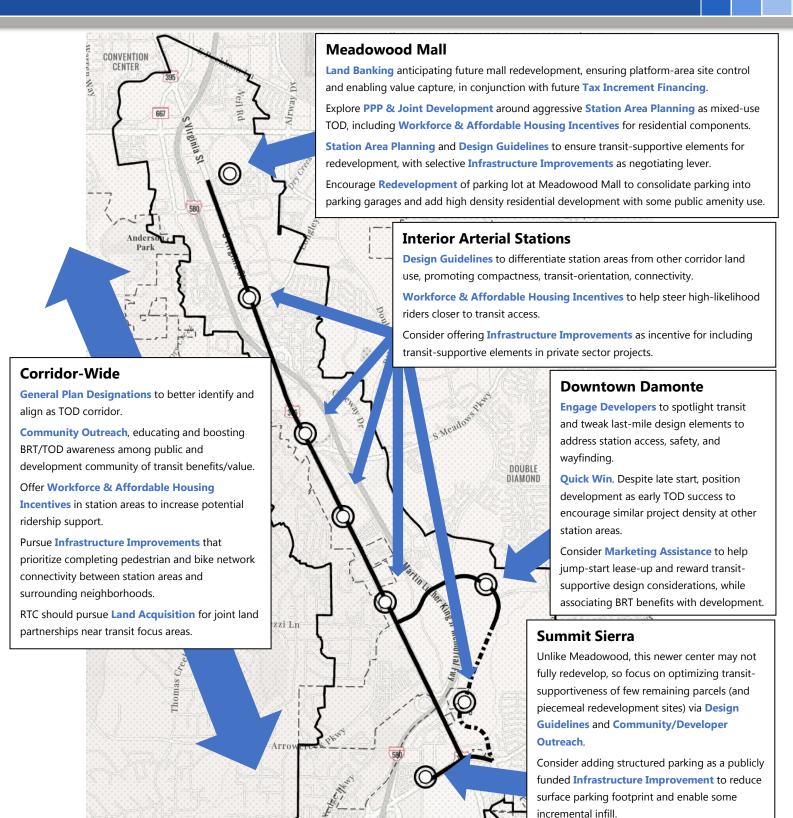
Recommended Policy Tool Combinations Across Likely Transit Focus Areas

Each of the above policy tools have the potential to play a role in steering the built environment of the Corridor to be more transit-supportive and better positioned to benefit from the presence of transit. Those transit-supportive characteristics are primarily important around future station areas, or likely nodes focused on transit, where residents and businesses can take advantage of pedestrian and other non-auto access to the service. Because each of the prospective nodes has its own unique combination of opportunities and challenges, the mix of policy tools for promoting transit-supportive development will need to be tailored to work across each separate node. The following **Figure13** applies policy approaches across the current set of tentative transit focus areas.

















Suburban BRT is Cutting Edge

Although the above recommendations mention other (typically BRT) transit systems there are no good "success stories" to apply to the present context under consideration. The transit extension down South Virginia would involve a foray into a more suburban environment. There are a few newly opened lines (in Vancouver, Washington, and Ogden, Utah, for example) that serve areas with similar suburban characteristics and several proposed or under construction suburban BRTs (in Fort Collins, Colorado, and metro Seattle, for example), but none of those have accumulated a body of performance evidence relative to the transit system or the corridor's success in promoting suburban TOD. As such, the recommendations given in this memo are based on professional judgement given the conditions and constraints faced on South Virginia, informed by some case study BRT systems that share similarities but are typically less suburban in character.

The suburban context of the proposed extension of the South Virginia BRT line limits the range of potential case studies that can be looked at for meaningful comparison. A number of cities across the Western U.S. have suburban BRT lines that are either in planning stages or are very recently opened. As such, those routes have yet to establish a record of ridership performance on which to attribute system "success". Proposed and new suburban BRT systems include:

- Tucson, AZ proposed BRT extension north from downtown/university campus north to suburban foothills (an alignment that more closely resembles the existing northern segment of the South Virginia line).
- Fort Collins, CO two planned extensions from their existing MAX BRT, one connecting the main CSU campus with a planned western satellite campus eager to participate in transit planning.
- Vancouver, WA Red Line and Mill Plain Line additions in largely suburban settings, both opened in 2023. Another line addition still in conceptual planning would extend service nine miles north across a context resembling the proposed South Virginia extension.
- Metro Seattle, WA several proposed BRT (and related bus-based) lines envisioned for suburban settings, but not yet constructed.

Suburban BRT Case Study Focus: Provo-Orem Utah Valley Express BRT

Only the Utah Valley Express (UVX), a BRT system opened in 2018, connecting Provo and Orem, has a reasonably similar suburban operating environment to the South Virginia setting and enough ridership track record to evaluate performance. That line is generally considered a ridership success story, with an impressive 14,600 daily riders just one year after opening. Part of the high ridership for the UVX line has been due to the policy of free fares, a policy which the Utah Transit Authority is in the process of transitioning to a sliding scale based on a set of affordability factors. The UVX line, as it is now known, offers frequent headways --service every six minutes at peak times, and every 10 minutes off-peak. About half its 10.5-mile route is in exclusive travel lanes for buses not shared with other vehicles. Like other BRT systems, buses have extra doors and limited stops. Buses are also longer than normal — 60 feet instead of 40.

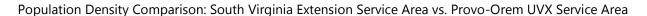
Land Use Framework:

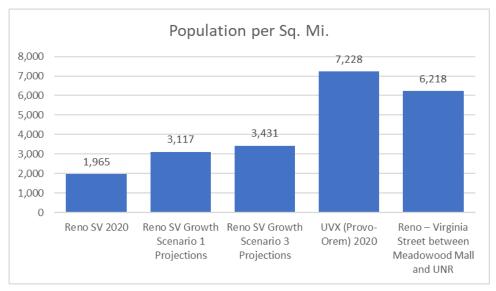
Although similarly suburban, the land use context along the UVX alignment differs significantly from that found along the South Virginia study area. The major difference is the UVX line includes both the Brigham Young University (a mid-point stop), as well as the Utah Valley University, a largely commuter college facility with enrollment of over 43,000 students. In addition, UTA and constituent local governments have been quite aggressive in terms of promoting transit-oriented development, largely through the use of joint development ventures leveraging land purchased well in advance of system planning and intentionally integrated into station area land use planning in cooperation with developers and public institutions.





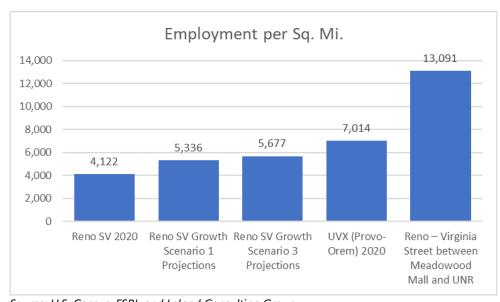






Source: U.S. Census, ESRI, and Leland Consulting Group

Employment Density Comparison: South Virginia Extension Service Area vs. Provo-Orem UVX Service Area



Source: U.S. Census, ESRI, and Leland Consulting Group

Although generally suburban in nature, the Provo-Orem line was built to serve an area far more densely used than the South Virginia study area. As the figure above illustrates, as of 2020, the UVX line's half-mile service area has nearly 3.7 times the population density as the comparable service area for the proposed South Virginia BRT extension alignment and approximately 1.7 times the employment density. Even without growth assumed for the Provo-Orem Line, under the more aggressive "Option 3" scenario for South Virginia, the UVX catchment area will still have more than double the population density and a 25% higher employment density. This case study shows that South Virginia Street, while continues to grow, still has a way to go in terms of density required to generate ridership that would support future BRT level transit.

