



A Developers Guide to Transit Oriented Development (TOD)



Preface

Mirroring a national trend, the Twin Cities area is seeing a growing market for Transit Oriented Development (TOD). Changing demographics and individual preferences, along with major investments in the public transportation system and increased highway congestion, are expected to more than double the demand for housing near transit by 2025.¹

While Baby Boomers age and become more reliant on public transportation, their children, the Millennials, continue to prize access to urban amenities and enthusiastically support active modes of travel. Noticing this shift, corporate clients are increasingly adding access to public transportation to their wish lists for desired site characteristics.² The trend is shifting from the park-and-ride community to the “live-and-ride,” “work-and-ride” and “play-and-ride”.


In 2015, over 85 million rides were taken on buses and trains operated by Metro Transit. As the region is expecting to grow by 800,000 people in the next quarter century,³ additional transit lines are in the works to meet the coming demand. Expansion of the METRO Blue Line to the northwest, the METRO Green Line to the southwest and Bus Rapid Transit (BRT) across the Twin Cities provides extensive opportunities for development. With increased transit access across the region, various types and sizes of TODs are being built.

Resources

The following guide is designed to support developers pursuing opportunities for Transit Oriented Development (TOD), as well as aid in the planning of high quality projects. For questions, comments or assistance on your next TOD, please contact the Metro Transit TOD Office:

tod@metrotransit.org

The suggestions outlined in this guide are advisory only and are not part of requirements of the Metropolitan Land Planning Act.



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What is TOD?

Transit Oriented Developments (TODs) are walkable urban environments with direct access to frequent transit service and a mix of uses. They provide diverse neighborhoods where individuals have the ability to live, work and play without the need of a personal automobile. Through a focus on TOD, the Metropolitan Council aims to integrate transportation, jobs and housing; leverage private investment; advance equity; and increase transit ridership.



Automobile-Oriented Transit

Image Source: GB Arrington

Developments around **premium transit stations** (commuter rail, light rail and bus rapid transit) have an increased need for design that promotes walkability and density, important elements which support public transit.

The image on the left shows the difference between an automobile-oriented development and a transit oriented development. Both options have the same amount of space dedicated to the park-and-ride, but the option on the right utilizes a small street grid to optimize development and improve walkability.

TOD Typologies

TODs are not just for dense urban areas. When designed well, they can meet the needs of a variety of communities. The five TOD neighborhood typologies included in this document (page 2) represent the existing or potential neighborhood types that can occur around transit. Though each TOD is unique, they should all strive to support pedestrian and bicycle-friendly environments.



The first quarter-mile (five-minute walk) from a transit station is considered a transit core and is ideal for pedestrian-friendly development. The area within a half-mile radius (10-minute walk) constitutes a full **TOD area** and is eligible for most TOD funding sources.

While the goal is to create a **mix of uses** so many or most daily trips can be taken by public transit, this does not mean that each building or even each station area must have every amenity. **Corridor-wide planning** can optimize sites to meet market demands and provide niche districts such as the Creative Enterprise Zone in St. Paul, which supports light industrial entrepreneurs through designated maker-spaces.



TOD Neighborhood Typologies



Urban Core

Urban Cores are **downtown environments** such as **Minneapolis** and **St. Paul** with a high density of jobs, entertainment and housing. These areas provide access to public transit and act as transportation hubs, providing critical connections to the remainder of the region. Personal vehicle usage tends to be lowest per capita in these areas, but higher pedestrian and bicycle traffic increases the need for good TOD design in urban cores.



Urban Center

Urban centers provide junctions for two or more premium transit stations. They tend to have high density residential, commercial or mixed-use environments and provide basic services such as health clinics, grocery stores, libraries and childcare centers. Though individuals may still choose to own a car, daily trips can be taken by foot, bicycle or public transit. Areas such as **downtown Hopkins** and **50th & France in Edina** have created vibrant urban centers that use district parking and prioritize pedestrians.



Urban Neighborhood

Urban Neighborhoods tend to be older communities with a traditional grid and alley block pattern and a mix of single-family residential and medium density multi-family housing. Main streets and corner stores provide local retail outlets and gathering points for transit stops. The primary orientation of an urban neighborhood is along a transit corridor such as **Chicago Avenue in Minneapolis** or **Snelling Avenue in St. Paul**.



Town Center

Town centers are adapted suburban neighborhoods that provide enough density to support public transit. Often times these areas also serve as park-and-rides that connect low-density suburban neighborhoods to public transit. **Burnsville** and **Fridley** are working on plans to change their station areas from traditional park-and-rides to live-, work- and play-and-rides.



Destination Hub

Locations such as **Mall of America** or the **University of Minnesota** provide destinations which take individuals beyond their regular commuting habits. The amount of space needed for large events can be difficult to manage during off-peak times. Shared use streets can provide flexible, comfortable and aesthetically pleasing spaces that can be used by pedestrians, bicyclists and/or vehicles based on events and day-to-day needs.

What are the benefits of investing in TOD?

Strong Market Demand

Millennials and Baby Boomers make up only two of the five age cohorts, yet they comprise over half of the population in the Twin Cities.⁴ With a generation of Millennials opting to live in urban environments and their parents foregoing the beach retirement communities and choosing to live near their children and grandchildren, **walkable and highly accessible TODs are and will continue to be in high demand.**



One of the biggest unknowns in the real estate market is where Millennials will choose to live in their 30s. Traditional thought speculates that they will either stay in a downtown environment or move back to the suburbs of their youth. TOD is emerging as an alternative that can provide the access that they need and the diversity they want.

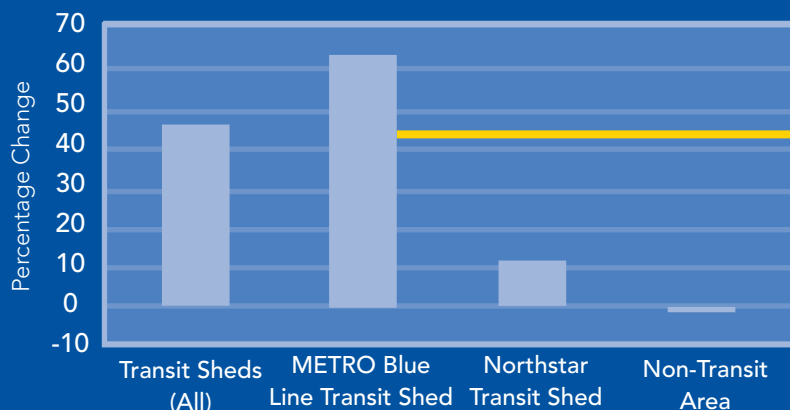
Over half of Millennials surveyed considered transit to be a quality of life factor that draws them to a region to live or work.⁵ A study conducted for the Federal Transit Administration (FTA) indicates that at least a quarter of all new households will want compact housing within a half-mile of transit, more than doubling the potential demand by 2025. In 2000, the Twin Cities had 25,601 households within a transit station area while the demand in 2025 is expected to be 113,928, indicating a **significant opportunity in the market.**⁶

Increased Market Resiliency

According to the Center for Neighborhood Technology, transit sheds (half mile from transit stations) are more resilient to economic downturns. The graph below shows the percentage change in average residential sales prices in the Twin Cities Region between 2006 and 2011. Areas surrounding the METRO Blue Line, formerly known as the Hiawatha Line, performed 63 percent better than the region as a whole. With the ever-present threat of real estate bubbles and economic variability, TODs can help to **reduce the risk of investments during economic downturns.**

In addition to resiliency, TODs benefits from **increased property values** or premiums due to their proximity to transit.

Change in Average Residential Sales Prices Relative to the Twin Cities Region, 2006-2011



63%

more value retention during the recession than the region as a whole

Source: The New Real Estate Mantra 2013, commissioned by the American Public Transportation Association in partnership with the National Association of Realtors.

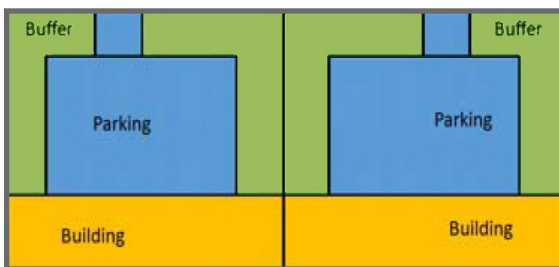
Transportation Affordability

Housing and transportation costs combined can provide an indicator for the overall affordability of an area. In general, transportation costs below 15 percent are considered affordable. According to the Housing and Transportation Index (H+T Index®), **Twin Cities residents in the early 2000s spent an average of 20 percent of their income on transportation, well above the national average.** Prior to light rail, commuter rail and bus rapid transit (BRT) investments, the outer Twin Cities suburbs spent 18 to 27 percent of their income on transportation. Residents in urban areas, such as downtown Minneapolis, had transportation costs as low as 11 percent. Though updated data is not available since the opening of the METRO Green Line in 2014, developers have noticed a decrease in parking usage per residential unit near transit stations, suggesting more utilization of active modes of transportation such as walking, biking and public transit.

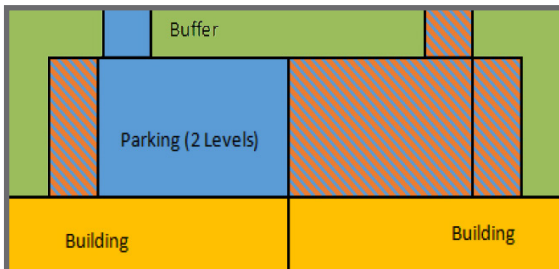
Decreased Development Costs

Areas with fast, frequent transit require less parking than those without. With costs per stall ranging from \$10,500 to \$32,000, this can equate to large savings when developing a site. A new Minneapolis ordinance allows buildings with 50 or fewer units to be built without parking if they are located a quarter-mile from frequent bus service or a half-mile from a rail station. Other cities are also updating their parking requirements to reflect similar trends along transitways. The recently developed Hamline Station Apartments along the METRO Green Line built 96 stalls for a 108 unit complex, yet are only utilizing 75 percent. In addition to lowering parking needs, Shared Parking and Parking Districts **minimize the cost to develop and maintain parking** while preserving land for more development, green space or other active, revenue-generating uses.

Traditional Parking Code



District/Shared Parking Approach



Source: Towerside Innovation District Parking Framework 2016, metrotransit.org/towersideparking

Shared Parking occurs when adjacent properties use the same parking lot or structure. It is most efficient when developments with opposite peak usage, such as residential and office, are paired together. Shared parking can reduce parking requirements by 20 to 40 percent⁶ and use land more efficiently.

A **Parking District** allows all vehicle users within a geographic area to use a consolidated parking facility that serves a variety of sites and land uses. By consolidating parking into fewer lots/structures, construction and operations costs are reduced and users can visit multiple sites within the district without having to drive and re-park. The 2016 Towerside Innovation District Parking Framework found a 50 percent reduction in parking needs when using parking districts vs. conventional ITE standards.

The image on the top shows traditional city codes in which the two adjacent properties are required to provide adequate parking, a buffer and a driveway - resulting in the duplication of requirements. The image on the bottom depicts the same two properties with a shared parking structure. The striped area shows the additional land that can be utilized for other purposes if zoning code requirements are modified to provide flexible setbacks.

Environmentally Friendly

The household Greenhouse Gas (GHG) emissions generated in transit rich environments like downtown Minneapolis are less than 3.3 tons annually. Cities such as Eden Prairie have yearly household GHG emissions over 8.6 tons.⁷ This is a difference of roughly 600 gallons of gasoline per household per year. As we continue to address climate change, **TODs can reduce emissions** by decreasing personal Vehicle Miles Traveled.

According to a recent study by the CNT,⁸ the average household can reduce the amount of GHGs they generate by 43 percent, simply by living in a central city near transit. Households in areas with the most access to public transit can reduce their emissions by up to 78 percent over households with little to no access to transit.



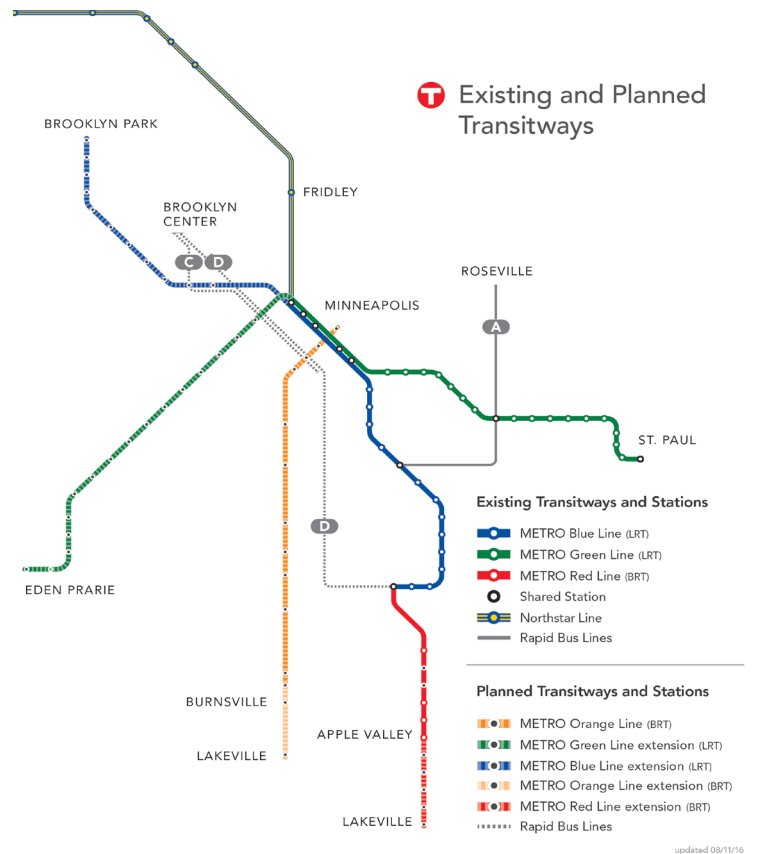
What sites are prime for TOD?

Five Year Transitway Vision

Over the next five years, Metro Transit has laid out a plan for expanding transit service in the Twin Cities. Included in this plan are three new BRT lines, in addition to extending the METRO Green Line to Eden Prairie and the METRO Blue Line northwest to Brooklyn Park. Once completed, there will be an estimated **74 square miles within premium transit station areas, providing extensive opportunities for development.**

Sites like the future Oak Grove Station along the METRO Blue Line Extension and the Prospect Park Station along the METRO Green Line provide opportunities for development on a large scale. The Ford site along the A Line in St. Paul is another site that will see major changes in the next decade. Along with large scale development comes the opportunity to reorient the neighborhood towards transit and create smaller street grids to improve access throughout the site. Developers have the opportunity to take a holistic view of parking and land use through implementation of district or shared parking at these sites.

Other sites such as downtown Robbinsdale provide an already vibrant Main Street with opportunities for smaller redevelopment and infill projects. These infill sites are particularly important as they reactivate underutilized parcels, creating a more dynamic pedestrian environment.



Twin Cities Premium Transit Service



Commuter Rail

Northstar Commuter Rail opened in 2009, covering a 40-mile stretch between Big Lake and downtown Minneapolis, including stations in Elk River, Ramsey, Anoka, Coon Rapids and Fridley. All eight cities have development opportunities and plan to promote vibrant station area growth.



Light Rail (LRT)

The METRO Green and Blue Lines currently run from downtown Minneapolis to St. Paul and Bloomington, with planned extensions to begin construction in the near future. Since the Green Line opened in 2014, there has been **\$4.2 billion in development** attributed to LRT along the corridor.



Bus Rapid Transit (BRT)

With the opening of the A Line in 2016, the region now has two premium bus routes: the A Line along Snelling Avenue and Ford Parkway and the METRO Red Line connecting Apple Valley to the METRO Blue Line at Mall of America. By 2020, three additional routes are expected to open (the METRO Orange Line, C Line and D Line), adding approximately 42 miles of premium service and potential for development.

TOD. It's Not Just for Rail Anymore.

TOD opportunities are not restricted to rail lines. BRT is an attractive services that draw extensive ridership. The **high quality fixed infrastructure** and **fast, frequent service** provide a long-term transit corridor with strong development opportunities. Infrastructure investments include:

- Faster service
- Enhanced stations
- Train-like features
- Enhanced security
- Larger and specialized vehicles

Within a month of the A Line opening in 2016, ridership along the corridor was up by 30 percent, showing the public support and demand for rapid bus. With greater ridership comes a greater demand for development around BRT Stations.



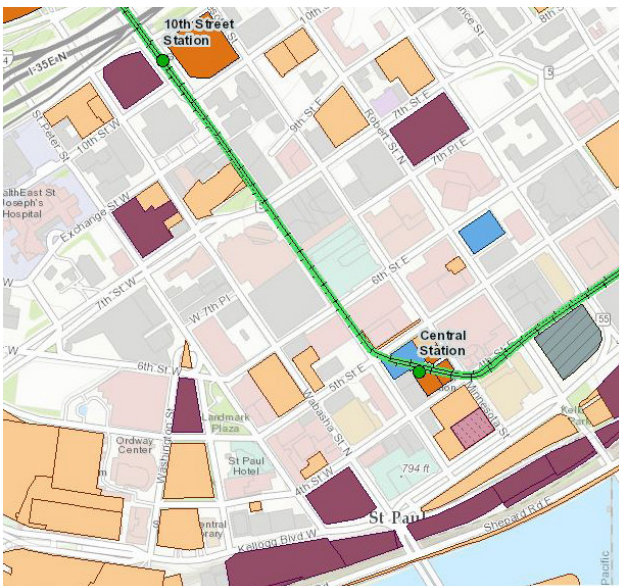
Transforming the Suburbs with TOD.

Though TOD sites with small grid patterns are best suited for walkable development, suburban sites that adopt TOD best practices can transform over time into successful transit station areas. When done well, a strong sense of place can be created, providing a suburb with a vibrant town center.

“Something significant has been occurring during the recovery from the Great Recession. Cities and companies have discovered that it is possible to re-create the efficiencies and attractiveness of an urban core environment in different markets and suburban locations. This is not to say that this is an easy transformation, nor is it one that can be accomplished quickly, but it may well be worth it if you look at the relationship between urban growth and how investors are viewing 2015 market performance.”

– Urban Land Institute
Emerging Trends in Real Estate®, 2015

What Resources are Available to Help Create a TOD in the Twin Cities?



The Metro Transit Office of TOD developed a new, interactive **ArcGIS Online** tool that identifies publicly-owned land along active and pending transitways in the Minneapolis/St. Paul region. The tool is helpful for a variety of professionals, including developers interested in new development opportunities; public agency staff along existing and planned LRT and BRT lines; and anyone interested in thinking about potential TOD opportunities on or near public land.

The **Public Parcels Database** is also available as a layer through the Metropolitan Council's **Make-a-Map application** under Transit Layers. This tool includes a wide array of public data sets (e.g., parks, land use, etc.) that add context to the publicly owned parcels database. For details and links to the public parcels database, please visit: metrotransit.org/tod.

What makes a good TOD?

Successful TODs use **urban design best practices**, **maximize land use** and **coordinate with local stakeholders** to meet the needs of the community. They are context sensitive and look at the individual characteristics of a site to determine the current and future needs of the neighborhood and transit corridor as a whole.



Building Design

Orientation

- Orient buildings to the primary street with minimal setback from the sidewalk
- Prominently feature all main entrances and connect them to the primary street façade
- Place active uses such as retail, office, light industrial or exercise facilities on the ground floor of buildings
- Intentionally hide elements such as parking and dumpsters and use alleyways when possible

Scale

- Create setbacks of upper floors to make higher density structures less imposing
- Articulate facades for more visual appeal and to prevent wind tunnel effects

Visibility

- Ground floors should have a minimum of 14' ceilings and 40 percent windows to increase transparency and contribute to the vitality of the streetscape
- Avoid large, blank walls or create murals if blank walls are necessary
- Provide a clear line of sight to points of interest such as transit stops and building entrances

Visual Complexity

- Include points of interest to provide landmarks and gathering places for locals and visitors
- Incorporate public art to create a sense of place
- Use a mix of materials to provide visual interest, a sense of character and wayfinding
- Design anchors on larger buildings to establish a sense of place



Convenience & Comfort

- Areas adjacent to transit stations should be designed to encourage use throughout the day
- Landscaping should include seating, pedestrian scale lighting and weather/sun protection provided by installation of trees, shelters, awnings or functional art pieces
- Indoor and outdoor areas should be designed to consider possible noise impacts from public transportation and motor vehicles
- Consider integrating transit waiting facilities into the building or streetscape and avoid landscaping that conflicts with current or future bus stops

The Center for New Urbanism is an international organization advocating for compact, walkable neighborhoods. They have a variety of resources available to aid in the design of high quality TOD. For more information, visit: cnu.org/resources.

District Design

Diversity of Uses

- Mixed-use developments should be pursued when possible to maximize the site's activity while reducing the need for a car. Creative approaches can be taken to minimize the risks of mixed-use projects such as selling retail units as condos and public-private partnerships.

“Strong transit-oriented development creates a healthy mix of uses that balance living, working, playing and learning. Mixed-use development requires more planning and risk management, but is essential to leverage public investment in transit infrastructure.”

– Chris Velasco, Co-Founder of PLACE

- Developments should encourage activity throughout the day in order to promote a vibrant, 18-hour district. Districts that are used throughout the day benefit from increased sales opportunities, more eyes on the street to improve safety and security and greater off-peak transit ridership and efficiency of transit.

Walkability

A good site plan is one that takes into account the movement of people rather than vehicles. How and where an individual waits for the bus, walks to the train or parks their bike is an important part of the user experience. Each stage of a trip and mode of transport must be intentionally accounted for in the design of a site to meet the needs of the community.

- Curb cuts should be limited on streets with transit service to minimize interactions between transit, personal vehicles and pedestrians.
- When possible, smaller blocks (100-300 ft.) should be built to improve the walkability of a neighborhood.

The maps on the right show the walking distance of a typical suburban development vs. a small and well-connected street grid. A person walking from point A to point B in scenario one has more than a half-mile added to their trip due to the inefficient street grid pattern.

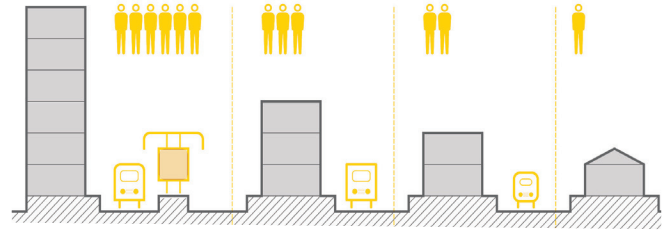
Noise Reduction Strategies



Elements such as landscaping and double pane windows can provide noise buffers in busy transit corridors. As transit and personal vehicles move from gas to electric, the use of **safety features such as horns and bells will continue to require long-term noise mitigation** around TOD.

Appropriate Density

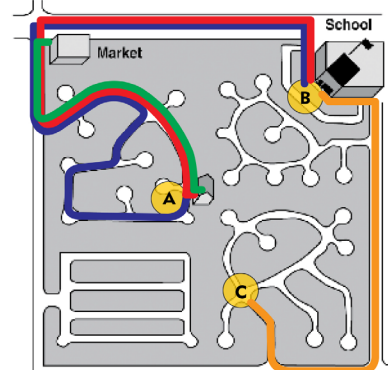
The amount of density will vary from community to community, but density in the right locations helps support transportation options for the region as a whole.



The Twin Cities regional long-range Transportation Policy Plan identifies density guidelines for TOD areas. These densities range from 3-5 units per acre in Suburban Edge Communities to 75-150 units per acre in Urban Cores. Chapter three of **Thrive MSP 2040** provides detailed density guidelines for new developments within TOD areas.

Street Connectivity Impact on Walking Distances

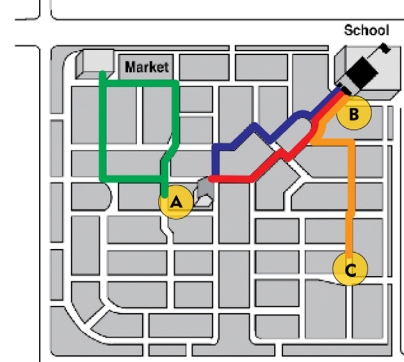
1 Typical Cul-de-sac Subdivision



A to B = .8 mi

C to B = .6 mi

2 Well-Connected Street Network



A to B = .2 mi

C to B = .3 mi

Source: Neighborhood Street Design Guidelines, An Oregon Guide for Reducing Street Widths, 2000

Parking

Parking is always a challenge. It takes up a large amount of space, incurs significant costs and, in most cases, does not provide revenue. The goal of TOD is to reduce the need for individuals to own and store personal vehicles; however, there will always be some level of need for parking within a transit area. The following parking recommendations can improve the experience for the auto user as well as those using active modes of transportation.

- Place parking out of sight and far enough from transit to encourage pedestrian flow along commercial districts surrounding the transit station.
- Install creative lighting and wall coverings in parking structures to improve wayfinding and security, while providing an inviting atmosphere.
- Design convertible structures that allow for adaptability if parking becomes unnecessary in the future.
- Reduce parking ratios by using local utilization data which, more accurately depicts the needs of the area.

The **Towerside Innovation District Parking Framework** serves as a case study for regional partners interested in exploring the establishment of their own district parking system. The study was led by Metro Transit, SRF Consulting Group and Nelson\Nygaard and engaged representatives of the Prospect Park North Partnership, University of Minnesota, the City of St. Paul and the City of Minneapolis. The study is available at metrotransit.org/tod.



Local Coordination



"You're investing in a community, not just a building. Developments that include the neighborhood in the planning process have greater success and opportunities for future development."

- Chris Wilson
Project for Pride in Living



Community Involvement

- Projects that actively engage the community early in the design process often have lower risks and better outcomes. When community stakeholders are brought to the table late in the design process, their options for participation are reduced to support or opposition of a project.
- Charrettes are useful tools on the front end of a visioning process to get investor and community buy-in. Organizations such as LISC can help developers understand the local community dynamics and vision.

Coordination with Local Transportation Agencies

- Since people moving into TODs are more likely to be transit users, it's important to understand how your site is served by current and future transit. Metro Transit's TOD Office is a resource to help you understand each site's interaction with transit services from light rail to local bus connections.
- Travel Demand Management (TDM) resources are available to help your development reduce single occupancy vehicle trips and promote active and healthy modes of travel. Contact **Metro Transit, St. Paul Smart Trips, 494 Commuter Services** and **Anoka County Commute Solutions** for TDM resources.

Equitable Investment

- An important aspect of Transit Oriented Development is that it provides a mix of incomes and opportunities. There are many ways to make your developments part of a more equitable community and region. The Equitable Scorecard is a resource available to help rate projects for their equitable development, environmental justice and accessibility. See the resources section (page 12) for more details.

Featured Developments



The Moline

Hopkins, MN
Doran Companies

The Moline, located adjacent to the planned METRO Green Line Extension's Hopkins Station, brings urban living to the suburbs. The mixed-use development includes public amenities such as a bicycle lounge and a park-and-ride facility. Through a public-private partnership with the City, Doran Companies reduced their risk while adding to the City's existing district parking framework.

Why we like it: By including district parking facilities into their building, parking development costs are reduced for both the developer and the city while preserving surrounding land for more productive uses.



Hamline Station

St. Paul, MN
Project for Pride in Living (PPL)

The Hamline Station development by Project for Pride in Living brings 108 workforce level affordable housing units to the METRO Green Line. Even with a parking ratio below 1:1, the building is seeing a 25 percent underutilization of its onsite parking, demonstrating the reduced need for parking in transit rich areas. PPL also sold the first floor retail as condominiums, reducing their long term management risk.

Why we like it: The site includes strong urban design characteristics like a mix of materials and active first floor uses. It also incorporates mixed-use development and contains reduced parking ratios.



Broadway Flats

Minneapolis, MN
Lupe Development, Rose Development and Minnesota Attainable Housing Corporation

The for-profit, mixed-use development along the future C Line rapid bus project brings 103 units of workforce housing, 19,000 square feet of storefront retail space, as well as an integrated bus stop into the building facade.

Why we like it: Through a public-private partnership with Metro Transit, the development integrates a bus waiting facility into the building exterior. The building also features a mix of housing and retail, a stepped entryway to preserve human scale, a major art installation and plaza to create a sense of place and shared parking between the retail space and adjacent church.

How to strategically fund a TOD?

With each successive transitway investment in the Twin Cities, new and more effective tools and incentives emerge to implement high-quality TOD.

The **TOD Funding Guide** is an up-to-date resource that captures these new and effective strategies to help with TOD implementation. The Guide is located on the **Metro Transit TOD Office website** and lists grant funding, financing and tax credit resources in the Twin Cities region.

The Guide is intended to serve as a reference for developers and cities and is a snapshot of the current financing environment in the region. Active funding sources from the Metropolitan Council, state, regional, local and federal agencies are included for a wide variety of development, pre-development and planning purposes.

One grant program included in the TOD Funding Guide is the Metropolitan Council's **Livable Communities (LCA) TOD Grant Program**. Within the first five years of the program, \$41 million has been awarded to 58 TOD projects.

These developments are expected to generate:

- \$775 million in private investment and \$138 million in other public investment
- Over 2,500 regular jobs and 6,000 construction jobs
- Over 450 housing units, 42 percent of which will be affordable

Although the LCA TOD Grant Program has only been in existence since 2011, the table below shows the LCA's long standing commitment to TOD.

Alternative Condominium Models

In addition to the public funding available for TOD projects in the Twin Cities, mixed-use developments along the METRO Green Line in Saint Paul have reduced their financing challenges and minimized risk by selling the ground floor retail units as condominiums.

Total LCA Grants Leveraging Regional Transit Investments (1998-2014)

Corridor	# Projects	# Grants	Total Awarded	Base Year
METRO Blue Line - Hiawatha	25	39	\$17.8M	1998
METRO Green Line - Central Corridor	61	92	\$42.5M	2006
METRO Green Line Extension - SWLRT	11	17	\$5.4M	2011
Northstar Commuter Rail	7	10	\$5.0M	2000

* Data includes transitways with planned openings by 2020

Gallery Flats



Source: Google Maps

Please visit the Metro Transit TOD Funding Guide for more information and a detailed list of funding options. The Guide and other resources can be found at metrotransit.org/tod.

Note – The LCA and public grants above require a developer partnership with a city or county in order to be eligible for funds.

Gallery Flats in Hopkins received an LCA - TOD grant in 2011 for site preparation and grading, utility relocation, a canopy connection to the future METRO Green Line Station platform and stormwater management.

Your One Stop Shop!

The **Metro Transit TOD Office** strives to be a resource for any TOD-related question or project, large or small, and will connect you to the right public resource, funding opportunity or organization to help you in your development process.

In addition to any questions you may have on the information throughout this guide, the TOD Office is equipped to help you with the following:

- Development pursuits on land owned by the Metropolitan Council
- Technical and policy information about existing and planned transit projects
- Coordination within Metro Transit and the Metropolitan Council, as well as with external partners
- Questions about Development opportunities along the METRO Blue Line Extension, METRO Green Line Extension and future transitway projects
- Information on FTA Joint Development opportunities



TOD@metrotransit.org

Special thanks to the following individuals for their feedback in the development of this Guide:

Peter Hendee Brown – Author and Lecturer at the Humphrey School of Public Affairs

Amanda Janzen – Schafer Richardson

Chris Velasco and Elizabeth Bowling - PLACE

Maria Wardoku – Blue Cross, Blue Shield

Chris Wilson – Project for Pride in Living

Resources

- Center for Transit Oriented Development
- Crime Prevention through Environmental Design (CPTED)
- APTA - Transit Parking 101
- TCRP 102 – Transit-Oriented Development in the United States: Experiences, Challenges, and Prospects
- Metropolitan Council's Shared Parking Calculator
- Twin Cities Region Equitable Development Principles & Scorecard
- LCA TOD Handbook

Citations

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4. 2010-2014 ACS 5-Year data. U.S. Census Bureau.
5. Connecting to Opportunity. Metropolitan Council, Saint Paul, MN, 2016.
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7. Minneapolis and Eden Prairie Regional Fact Sheets. Housing and Transportation Index®, Center for Neighborhood Technology
8. Haas, Peter, et. al., Transit Oriented Development and The Potential for VMT-related Greenhouse Gas Emissions Growth Reduction. Center for Neighborhood Technology. March, 2010.

Metro Transit TOD Checklist

Design

- Buildings are oriented to the primary street with minimal setbacks from the sidewalk
- Active uses such as retail, office, light industrial or exercise facilities occupy the ground floor of buildings
- Ground floors have a minimum of 14' ceilings and 40 percent windows to increase transparency and contribute to the vitality of the streetscape
- There are no large blank walls along pedestrian routes
- Setbacks are included on upper floors to preserve human scale
- Areas adjacent to transit stations are designed for a safe and comfortable waiting experience and efficient transit operations
- Facades are articulated for more visual appeal and to prevent wind tunnel effects
- A clear line of sight is provided to points of interest such as transit stops and building entrances
- All main entrances are prominently featured and connected to the primary street façade
- Elements such as parking and dumpsters are intentionally hidden and use of alleyways was considered
- Noise mitigation has been included for sites within close proximity to transit stations
- Installations such as trees, shelters, awnings or functional art are included to provide shade to pedestrians
- Anchors are designed into large buildings to establish a sense of place
- Public art is incorporated into the public spaces
- Points of interest are present to provide landmarks and gathering places for locals and visitors
- A mix of materials were used to provide visual interest, a sense of character, and wayfinding
- Seating is placed in public spaces

Land Use

- A reduction of parking ratios, district parking and shared parking were considered
- Curb cuts are limited on streets with transit service
- The development adds to the diversity of land uses in the neighborhood or along the corridor
- The development encourages activity throughout the day
- Smaller block sizes were considered to improve walkability (where possible)
- Parking is placed out of sight and far enough from transit to encourage pedestrian traffic along business corridors
- Creative lighting and wall coverings are planned for parking structures to improve wayfinding and security
- Parking structures have level floors with high enough ceilings to be convertible in the future

Community Engagement

- The community has been engaged in the planning process since the beginning of the project
- All forms of transportation to and from the site have been identified and incorporated into site design
- Local transit agencies has been contacted for feedback on site design and connectivity to transit
- Travel Demand Management tools have been considered to reduce personal vehicle use around the site

Equity

- The social equity of the development has been evaluated and found to be supportive of community needs
- Affordable housing has been considered
- Outreach has been conducted to underrepresented and/or underserved communities