

Transit Designed for Development

VTA's BART Phase II

A Guide to Achieve Exceptional
Transit Design and Catalyze
Community Building



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Transit designed for development (TDD) drives up ridership & catalyzes transit communities

Introduction

This guide is one of the tools VTA is using to raise the bar with the BART Silicon Valley Phase II extension, and future VTA transit extensions, to simultaneously achieve better transit design and catalyze community building and grow ridership to even greater levels.

Transit Designed for Development (TDD) provides a framework to make better transit design decisions that enable Transit Oriented Communities (TOC) without impacting the transit schedule or budget.

In practical terms raising the bar involves station design and neighborhood integration, the expectations for development on VTA sites, and planning and development by others in the station area, all of which leads to a TOC.

The starting point for seamless transit and community integration is designing transit from the community to the faregates. The goal is to intentionally fit together the station, access, community, and TOC into one seamless place. Stations then become destination anchors rather than portals between locations.

VTA invites you to use this TDD guide to contribute to TOC creation in our region.



Transit can provide a place to linger, even to fall in love

Nicollet Transit Mall, Minneapolis, MN

How to Use this Guide

The guide is intended to influence station design decisions to enable the creation of exceptional transit and catalyze community building in and around the station.

The guide does that by addressing how to design transit for development by providing:

- principles to apply
- examples to learn from
- checklists to utilize

TDD relies on multi-disciplinary problem solving with transit engineers, architects, transit operations, planners & real estate professionals all working together to rearrange the pieces to get an optimum outcome.



Marine Gateway, Vancouver, BC

1. Make Transit Work
2. Create a Place
3. Connect to the Community

Two Sides of a Coin: Design Transit & Development for TOC

The objective behind TDD is to end up with an exceptional transit facility designed from the community to the station - blurring the edge of the transit right of way to enhance ridership while catalyzing community building.

In this way, the transit design has done a better job of reflecting its' context, objectives for TOC and place making than might normally be the case without impacting the schedule or budget for the transit investment.

- Solve for the exceptional
- Go beyond the traditional
- Stay within schedule & budget

Envision the station as a catalyst for community building



The Pearl District, Portland, OR

Principles: Transit Designed for Development



Principles: Transit Designed for Development

■ **Think Beyond the ROW.** Design the station to fit into its surroundings, pay special attention to how pedestrian movement will be celebrated.

■ **Break Design Molds.** Go beyond traditional transit design molds for access, proximity and transfers; TOC & transit to achieve contemporary objectives of transit and community building.

■ **More than a Station.** Exemplary stations transcend moving people and modal transfers. They elevate the rider's experience by being attractive & remembered, physically comfortable & safe, indivisible from the city it serves.

■ **Places for People.** Transit plazas should be versatile, relate to adjacent land uses, & provide transit functionality. Treat them as individual design projects, combining mutually supportive objectives.

■ **Create A Safe Place.** Between the station & immediate development "activation" needs to span the primary hours of transit system operation. Personal safety & security are essential for all transit users.

■ **Be Catalytic.** Community building is a key outcome. That means connecting the station to development & design decisions to enable catalyzing redevelopment.

■ **Link Station & Development.** Pay attention to the edges. The design should anticipate how the station, future TOC, active spaces & the community will logically blend together.

■ **Reflect Community Vision.** Cooperative Public-Public & Public-Private Partnerships (Ps) are key to success. They clearly define responsibilities & a vision for the station.

■ **Give Pedestrians the Highest Priority.** The first 600 feet essentially connects the station with the surrounding community – give special attention to making the station a seamless, integrated part of the community & surroundings.

12 Lessons from Successful Stations

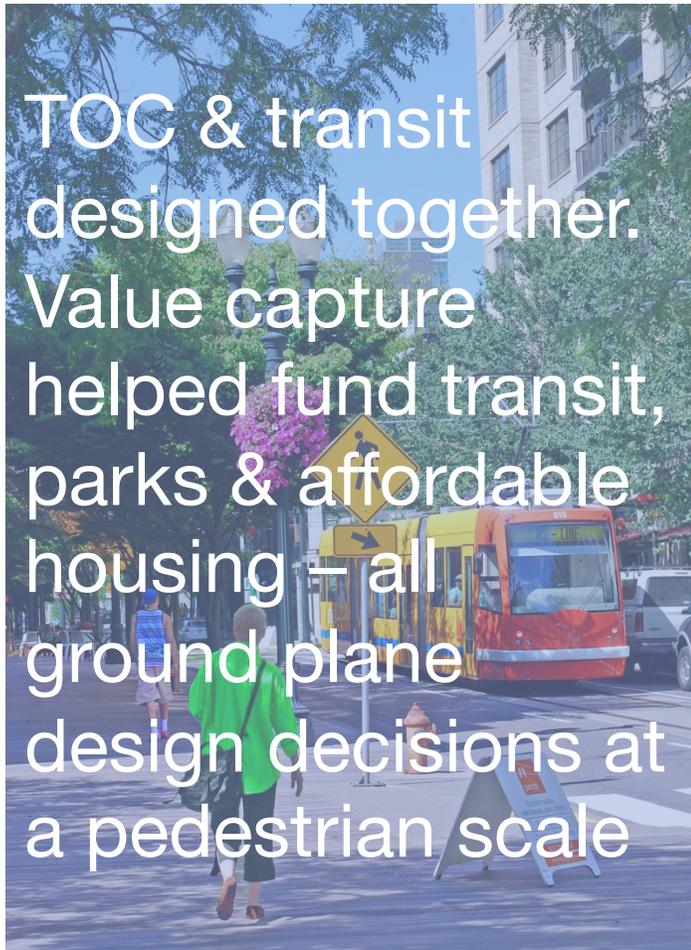
Successful station areas share some common threads worth remembering and repeating:

1. Treat the station as a catalyst for community building – look, think, & act beyond the ROW
2. Pay special attention to the first 600 feet – transit supportive uses, enable the pedestrian flows to & from the station
3. Think of the station as the heart of the community & reflect local identity
4. Public planning is necessary to enable & require good TOD outcomes
5. The best solutions typically cross boundaries – transit / streets / development all require attention to coordination, design & timing
6. Enable synergy between transit & development to create exceptional great places
7. Secure public-private partnerships for the success of the station area & the community it serves
8. A collective vision for the station / area with clearly defined responsibilities & leadership are in place
9. Seamless integration requires breaking traditional transit design molds for proximity, access, transfers, integration of TOC & transit
10. Make all ground plane design decisions at the scale of the pedestrian – streets calmed, transit design & TOC integration
11. Transit design intentionally enables the station & TOC ‘welcoming’ each other
12. Move bus interface to streets where possible to minimize pedestrian conflicts

Case Study

THE PEARL DISTRICT

Portland, OR



“The Pearl” is a nearly 100-acre transit-oriented neighborhood designed simultaneously with streetcar lines. A master agreement defined developer contributions in exchange for density to help pay for the transit, three parks and affordable housing. The TOC and transit are highly integrated. Part of the essential alchemy of the Pearl was understanding that contemporary transit is part people moving and part community building.

The Pearl District, like Denver Union Station, is an example of linking transit design, calmed streets & land use planning to create a vibrant community.

Make Transit Work

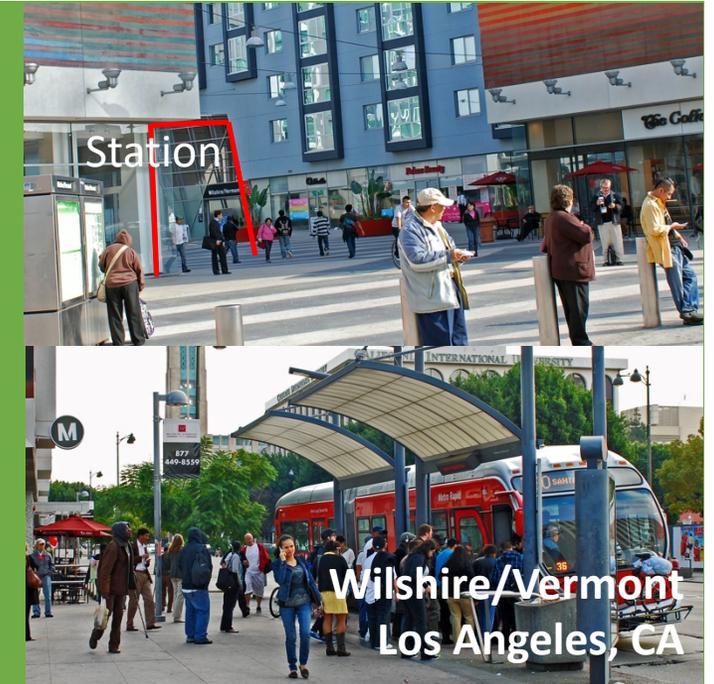
Developers and local governments fairly ask that if development is supposed to take transit into account, why shouldn't transit systems be designed with both transit and development in mind. Experience shows with early action, collaboration, and modifying design standards, transit can be built with the community and development in mind. Without changing the function, schedule or budget for the transit project. Bus and TNC drop-off and pickup at stations require special attention. They are extremely important, yet too often create places that are unpleasant for pedestrians. Make it convenient, but not dominant.

Principles

Think Beyond the ROW. Design the station to fit into its surroundings, pay special attention to how pedestrian movement will be celebrated.



TOC built over a subway station. Ground floor retail animates the walk from station portal to on-street bus transfers. High transit mode share and low auto trips. An early Los Angeles TOC, it does little to integrate with the surroundings.



Be Willing to Break Design Molds.

Go beyond traditional transit design molds for access, proximity and transfers; TOC & transit to achieve contemporary objectives of transit and community building.

More than a Station. Exemplary stations transcend moving people and modal transfers. They elevate the rider's experience by being attractive and remembered, physically comfortable & safe, indivisible from the city it serves.

Case Study

DENVER UNION STATION

Denver, CO



Images: Haigreaves Associates

The 19-acre project includes a major new downtown district and a new multi-modal station serving as the hub of Denver's regional transit system. A real estate developer led P3 team modified the transit design to cut the costs by 50% and optimized TOC. The commuter rail, light rail and bus transit center are laid out linearly and seamlessly integrated with the TOC. The P3 team delivered TOC on 6 facing blocks in conjunction with the transit infrastructure. Five partner governments oversaw the project. New Tax Increment Financing and assessment districts were created. Buildout has been years faster than expected.

Create a Place

A great station is much more than architecture, it is a place that people enjoy visiting for its own positive qualities – rather than just wanting to pass through on their way to more desirable locations.

Stations should strive to be great public places, contributing to the area's unique character. Station plazas are not “the space left over” when designing the system. “Placemaking” needs to be incorporated into the station design program.

Principles

Places for People. Transit plazas should be versatile, relate to adjacent land uses, & provide transit functionality. Treat them as individual design projects, combining mutually supportive objectives.



Target Field Station, Minneapolis, MN

Image: United Properties

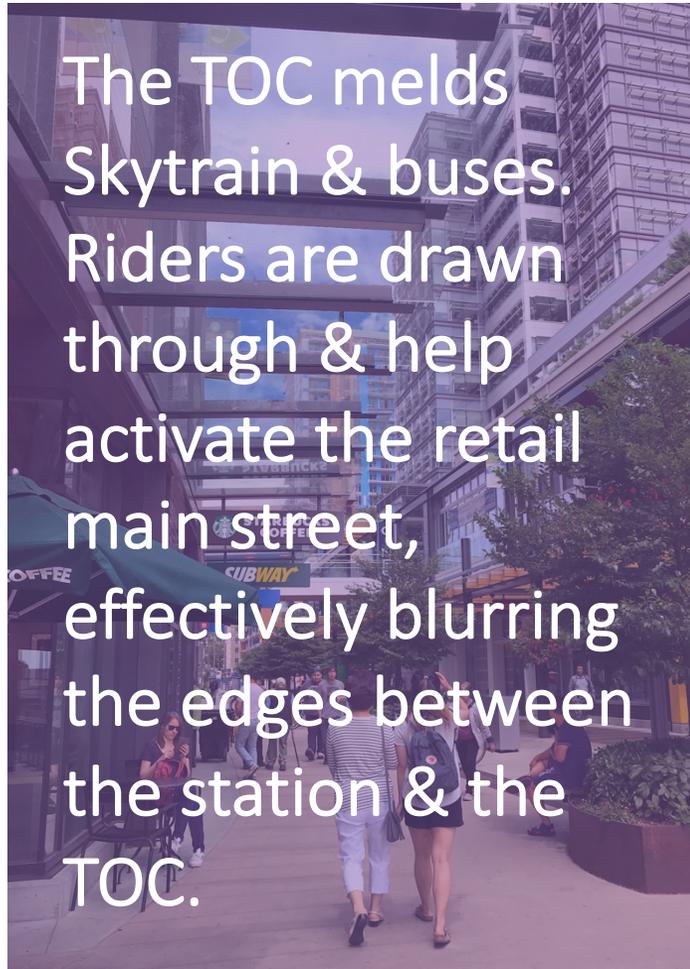
Create A Safe Place. Between the station and immediate development, “activation” needs to span the primary hours of transit system operation. Personal safety and security are essential for all transit users.

Be Catalytic. Community building is a key outcome. That means connecting the station to development & design decisions to enable catalyzing redevelopment.

Case Study

MARINE GATEWAY

Vancouver, BC



The 1.5 million square foot development is Vancouver's first suburban mixed-use TOC. Nestled between a transit center and the Marine Landing Skytrain station on Vancouver's Canada Line, the TOC is home to more than 750 residents and more than 2,000 jobs. Transit ridership increased by 2 million trips per year. The integration between Skytrain, the bus loop, and the TOC adds to the quality of the transit user experience. The bus loop is at the ground level and connects to a grand stairway up to the high street at level 2, and the Skytrain station by stairs and escalators at level three.

Connect to the Community

In many ways the line between the station and its surroundings should be invisible. The edges of VTA property and passenger movements are the connective tissue of the community. The station area should be permeable to enable a comfortable and inviting relationship with the surrounding community. The design process should carefully consider the edges, community context, relationships to adjacent development and how the station can catalyze development on VTA land and in its surroundings.

Principles

Link Station & Development. Pay attention to the edges. The design should anticipate how the station, future TOC, active spaces & the community will logically blend together.



Southbank Promenade, Melbourne, AU

Reflect Community Vision.

Cooperative Public-Public & Public-Private Partnerships (Ps) are key to success. They clearly define responsibilities & a vision for the station.

Give Pedestrians the Highest Priority.

The first 600 feet essentially connects the station with the surrounding community – give special attention to making the station a seamless, integrated part of the community and surroundings.

Case Study

PLATFORM DISTRICT

Hillsboro, OR

Transit parking became a dense TOC. Buses arrive at the station on a street shared with pedestrians. TOC plans enabled a public plaza run by the developer and district parking.



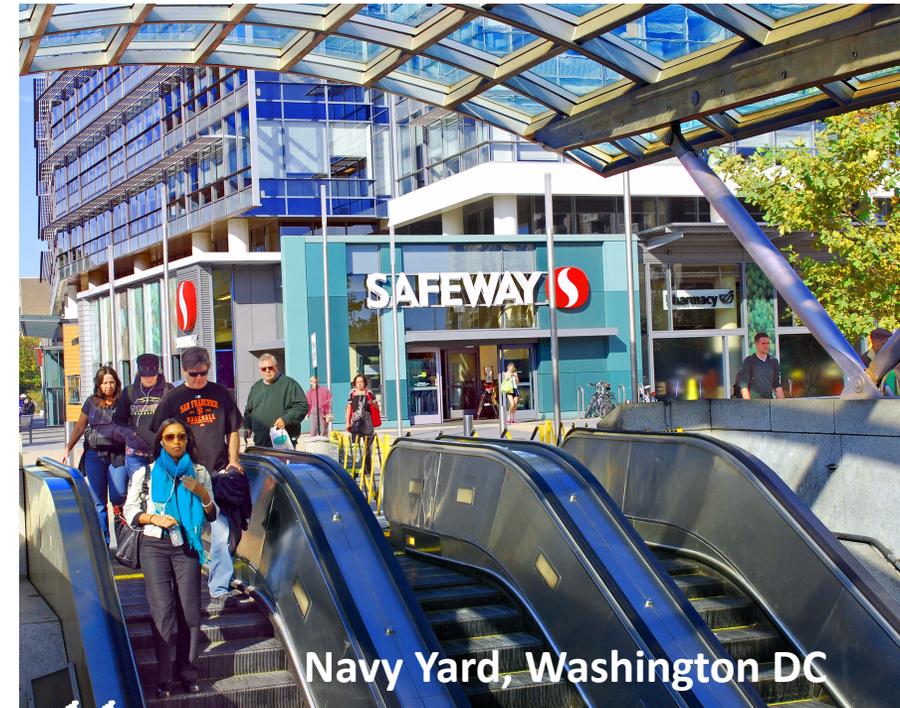
The 5-building suburban mixed-use project is part of a 237-acre TOC. Buses come to the station on a pedestrian street and the park-n-ride was replaced by the dense TOC with limited parking. In all, there are 1,291 residences and nearly 60,000 square feet of commercial. Apart from the affordable units, residential parking is unbundled, meaning it is not tied to a unit – residents can forego parking or pay for it separately. The developer built, maintains and programs a 0.8-acre plaza adjacent to the station. The transit agency donated land for the plaza.

Checklist for Transit Designed for Development



TDD uses the station design process to intentionally link city shaping and transit design. As such TDD seeks to harness the locational value of transit by shifting the reach of design decisions to outside the faregates. In part that implies “zooming out” the scale of investigations to give careful consideration beyond the transit ROW to the first 600 ft from the station in making decisions on the location of facilities, pedestrian flows, the orientation of portals, activation of plazas, wayfinding, access planning and integration of TOC’s among other things. Think of the guide as a menu to shape the station design process, not as a blueprint for how to do it.

1. Does the design brief explicitly consider the three elements of TDD: 1) Making transit work; 2) Creating a place; and 3) Connecting to the community? If not, what is being done to assure these elements get full consideration throughout design, construction, operations and maintenance?
2. Have multi-disciplinary teams been established to “disassemble” and reassemble station access pieces to achieve better integration of modes, community connections, place making and joint development? Specifically modal



Navy Yard, Washington DC

transfers, balanced access, separating transit parking from the station, placemaking and development.



Checklist for Transit Designed for Development

3. Is there guidance to assure pedestrian routes for transferring between modes (including LRT to BART) will be designed to symbiotically draw riders through supportive development, better enable activation of the urban realm and improve the passenger experience? Who is responsible?
4. Does the design process include investigations into the interface between the station footprint, streets and adjacent parcels to better connect the station and the community? Who will have responsibility for leading this? Who else will be involved?

5. Has a process to resolve competing objectives during design, construction and operations been established (for example balancing bus access, security, walkability, joint development, location of out buildings, plazas and maintenance?)

6. Are pedestrians and bikes being given priority in design decisions consistent with BART's access hierarchy?

7. Has a clear structure been set-up for the design team to work with local governments to achieve an integrated approach to calm streets accessing the station and along street edges facing entrances to stations?

8. Does the design process include a step to optimize space for TOCs near the station, placemaking and community connections by placing bus / TNC drop offs and transit parking away from station? WMATA's standard for distance allows bus bays up to 500 ft from the station. Kiss-n-ride up to 600 ft and PnR spaces up to 1500 ft away.

9. Are the 'spaces in-between' – the connective tissue between the station, TOCs and adjacent development explicitly called out for attention in the design process? Where will that responsibility lie? How will stakeholders beyond the design team be involved?



Checklist for Transit Oriented Communities

Stations exert influence well beyond the transit ROW. Unlike LRT stations, BART Phase 2 subway stations will be less visible. Stations can be integrated with development by creating a station district with a legible fabric of inviting sidewalks, calm streets, active ground floors, wayfinding and dense transit supportive uses. In that way the station becomes recognizable and a welcoming part of encouraging residents and employees to make transit their first choice in transportation. Partnerships between VTA, cities, developers and the community will be essential to drive ridership, fund improvements and integrate the station into the community it serves.

1. Has a priority been established for the station footprint outside the faregates to be arranged to optimize parcels, including VTA's, for joint development / TOC?
2. Has the project / VTA secured a formal role in commenting on development proposals on adjacent parcels? Within 600 feet or more of the station? If not, how will that be accomplished?
3. Do existing and proposed plans, policies, regulations and development approvals assure development within the station area will be transit supportive



Collins Landing, Melbourne AU

(minimum density, mix of uses, limited parking, affordability ...)?



Checklist for Transit Oriented Communities

4. Are procedures in place to ensure transit and adjacent private plazas are situated in a manner that they will be safe and activated throughout the span of transit operating hours?
5. Will the design utilize a district parking approach for transit and TOC parking to reduce capital costs, the size of the parking footprint and enable a smaller parking ratio as more development occurs on or around the station parcel?
6. Is there a mechanism to involve internal and external stakeholders to ensure integration of pedestrian access to the station, access to and through TOC's, street and corridor streetscaping?

7. Is station area wayfinding from the community to the station part of the project scope? If not, how will that be addressed?

8. Is the vision and economic vitality of the community reflected in planned TOC's, access and station improvements?

9. The context for the station will change over time. How is the station design process addressing making the edges of the station ROW "invisible" and resilient? What guidance and procedures can VTA provide others to assure a good fit overtime?

10. The BART Phase 2 stations will provide a new "front door" to the entire station area and beyond. By linking it with development the station can become a "business card" for the city. What is being done to make the station a destination, enrich the passenger and the community experience – for both the station area and station spaces?