TransLink Transit Passenger Facility Design Guidelines

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Introduction & Overview

Process
- Agency overview
- Need for the guidelines

Product
- Overview
- Facility Typologies
- Spatial Zones
- The Guidelines

Lessons Learned

Questions
Metro Vancouver & TransLink - Planning for the Future

A growing region - 50% increase in population (2.2m to 3.4m) and employment (1.2m to 1.8m) by 2040

Updated regional growth strategy

TransLink - APTA system of the year

Target of 50% of all trips by sustainable modes by 2040

Farebox recovery of nearly 50%
South Coast British Columbia Transportation Authority (TransLink)

Integrated regional transportation agency responsible for:
- Buses (local, express, commuter, etc...) - Coast Mountain Bus
- SeaBus (ferry)
- SkyTrain and Canada Line (ALRT)
- West Coast Express (commuter rail)
- HandyDART (paratransit)
- Ride Share (van pooling)
- Bridges (toll and free)
- Aircare (vehicle emissions reduction program)
- Major Road Network
- Walking and cycling
- Demand management initiatives
TransLink’s Internal Organisation

- Engineering on 14
- Planning on 15
- Corporate on 16
Need for the Guidelines

1. Support Transport 2040 and TransLink’s wider strategic objectives
2. Create a consistent, single set of design guidance that could be used across the whole organisation for all modes, facilities & community types
3. Strategically focus future transit passenger facility investment
4. Reduce the cost of scoping, design and maintenance of new and upgraded facilities by adopting a more systematic approach
Need for the Guidelines - Process Goals & Strategies

- Adopt and integrated planning and design approach
  - Involve all relevant planning and design disciplines to establish project goals and objectives
  - Facilitate cross-disciplinary teamwork and processes in the design and delivery of projects
  - Agree and clearly communicate roles and responsibilities for all stakeholders

- Systematize use of, and adherence to, the design guidelines
  - Integrate the guidelines within the design process from the project brief through project completion to operation and management
  - Encourage provincial and municipal partners to use the design guidelines within their own planning and design processes
  - Establish a clear and consistent design review process
  - Widely engage stakeholder to promote, communicate and build support for the design guidelines
Transit Passenger Facility Design Guidelines are part of a suite of related TransLink documents:

- Transit Service Guidelines
- Transit Infrastructure Design Guidelines
- Wayfinding Standards
- Transit Fleet Design Guidelines (forthcoming)
- Universal Accessibility Guidelines for Fleet & Facilities
- Universally Accessible Bus Stop Design Guidelines
- Bicycle Infrastructure Guidelines (Draft)
- Transit-Oriented Community Design Guideline (forthcoming)
How to Use the Guidelines – Integrated Design Process

- **Outcome focused, problem-solving process**
- **Brings together all parties to work collaboratively**
- **Feedback loops to capture lessons learned and maintain focus on the project goals & objectives**
Transit Passenger Facility Design Guidelines apply to all facility types.

In designing context sensitive solutions, designers must consider:

- Service/mode
- Facility capacity needs
- Frequency of services
- Use/demand
- Role in the network
- Physical form/surroundings

Facility typologies help designers understand and categorise the level of effort and complexity required in facility planning.
TransLink Transit Passenger Facility Design Guidelines

Typology: Exchanges

O1.1 Transit vehicle needs

O1.2 Staff facilities

A2.2 Integrated mixed-use developments

E3.2 Water use and quality

P1.2 Vibrant people places

O2.1.5 Bicycles

U1.3 Wayfinding and passenger information
Typology: Stops

O2.1.5 Bicycles

A1.3 Standardized and modular design elements

U2.1 Physical accessibility

E2.2 Renewable energy opportunities

U1.3 Wayfinding and passenger information

P2.3 Support a mix of pedestrian friendly land uses
How to Use the Guidelines – Understanding Spatial Zones

Defining the types of ‘spaces’ within facilities to help designers understand the functional demands on the space

This helps improve the design and operational performance and improves consistency of experience across the network.
Spatial Zones: Decision Spaces

- Advertising
- Tickets
- Escalators to/from platform
- Retail/cafe
Spatial Zones:
Circulation Spaces
Spatial Zones: Opportunity Spaces
The Design Guidelines

Guidelines are organized as a thematic framework that supports TransLink’s wider corporate, community, and public aspirations, visions, and policies.

Guideline Framework:

- Usability
- Operations
- Placemaking
- Environment
- Accountability
Usability - Put Passengers and Pedestrians First

- **Make it Easy**
- **Make it Universally Accessible**
- **Make it Safe and Secure**
- **Make it Comfortable**
Operations - Optimise Transit Efficiency

- Facilitate Transit Operations
- Support Transit by Integrating with Other Modes
- Facilitate Effective Management and Maintenance

0.1.1 Transit vehicle needs

- Provide appropriate space for transit vehicle and passengers according to the expected lifespan of the facility, considering potential changes to vehicle technologies and dimensions.
- Establish vehicle dimensions and manoeuvring space requirements from TransLink's Transit Infrastructure Design Guidelines. (See TIDG 1.3.1.3)
- Plan transit vehicle paths to minimize potential conflict with other road users and pedestrians. (See TIDG 4.2.2)
- Plan transit facility layout and configurations to avoid conflicts with efficient transit operations.
- Design arrival, drop-off, boarding and pick-up locations for all transit services to ensure that paths within the facility minimize conflicts, distances and avoid conflicts.
- Consider locating bus layover areas as far as possible from passenger pick-up and drop-off areas to minimize visual and noise impacts on passengers and businesses, while maximizing distances that add travel time and operating costs.
Placemaking - Create Great Places

- Make Transit a Community Asset
- Seamlessly Integrate Transit, Urban Development and the Public Realm

**P2.1 Integration with context**

Transit facilities function best and attract customers when they are integrated into their surroundings and are able to serve passengers day-to-day needs. Context sensitive transit passenger facilities that deliberately shape and animate the public spaces surrounding them will be well-suited to becoming active and integrated fixtures combined by the communities they serve.

- Design transit facilities and the public realm to respect the local context, respond to community objectives, and be appropriate to the character and topography of the site.
- Consider issues of facility layout, scale, proportion and massing, natural features and views, and hand landscaping.
- Design amenities and spaces to be fully integrated with surrounding amenities and buildings and to be adaptable, comfortable, environmentally accessible and safe and easy to use, preferably during all hours of transit operations.
- Orient buildings and maintain sightlines to key local landmarks or natural features to help passengers orientation and wayfinding. See U2.3 Wayfinding and Passenger Information.
- Integrate public places and activities into existing conditions, open space and ecological networks.

**THE PUBLIC REALM**

The public realm forms the physical link between transit facilities and the wider communities they serve. In this context, the public realm is defined as the spaces between and around buildings, streets and streets, that are accessible and usable by people. It includes all the public spaces, building frontages, open spaces, rights-of-way and sidewalks, as well as the streets, sidewalks, parks and natural areas. Hand and soft landscaping, water features, lighting and public art that help to animate it. Together, these elements give the public realm its identity. Functionally, it is also the realm of the user. Importantly, the public realm is also a dynamic space, enhanced by movement, activities and people.
Environment – Be Leaders in Environmental Sustainability

- Minimise Negative Environmental Impacts of Transit Facilities
- Reduce Energy Consumption
- Design Healthy Sites

**E2.1 Energy efficiency**

Efficient energy usage over the life of a building is a major contributor to reducing its environmental impact and overall operational costs.

- Specify energy-efficient lighting fixtures consistent with or exceeding IESNA Lighting Standards. See IESNA.
- Design for both efficient lighting (lumens per watt) and task lighting.
- Projected high-quality lighting.
- Design cost and energy efficient mechanical and engineering systems. See $1.2.
- Efficient Built Design.
- Minimize energy wasted through use of optimum mass and roof insulation, including consideration of green roof.
Accountability - Be Fiscally Responsible

- Design with whole life costs in mind
- Optimise economic benefits through design
- Design resilient, responsive and flexible facilities and spaces
Evaluation Framework Tool

- Simple framework for evaluating existing facilities (or new designs)
- Uses a series of questions to aid in the assessment
Challenges and Lessons Learned

Get all parties together (especially at a senior level) at the beginning of the project and build a ‘shared understanding’ of the need for the guidelines

Make sure people understand what the guidelines will cover...and more importantly what they won’t

Clarity on the differences between goals, strategies, guidelines, standards and specifications

Share the guidelines internally and externally - they were hard work and let others benefit
Thank you