Station Area Planning to Accommodate Different Rail Characteristics
Welcome -

Station Area Planning to Accommodate Different Rail Characteristics

• Station area planning plays an important role in creating a development framework for the future.
• Today, more than ever, multiple rail modes are being looked at to capture the energy related to a new station.
• Each mode has its own operating parameters.
• How can each be successfully planned --- as a catalyst for the development of livable communities?
• Let’s hear some real-life stories from the people who have planned around and for --- these different rail modes.

Moderator:
Rick Leisner, RLA, AICP
• Director of Planning
• Completed over 15 TOD plans and 20 downtown & special district plans, strong focus on sustainability.
Panel Members

**Susan Herre, AIA, AICP**
Federal Railroad Administration
Washington DC

- Susan is an Architect and Urban Planner at the Federal Railroad Administration (FRA).
- For the High-Speed and Intercity Passenger Rail Program, she is responsible for station projects & station area planning.
- She is a representative to the Federal Livability Partnership of HUD, EPA and DOT.
- Susan has spoken at numerous technical meetings and conferences held by the Federal Transit Administration, Rail-Volution, TRB and AIA.

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Panel Members

James Hencke, ASLA
Supervising Urban Designer
PB’s Placemaking Group
Portland, Oregon

- James is a Landscape Architect /Urban Planner and Chair of ASLA’s Urban Design Professional Practice Network.
- His creative, multi-disciplinary approach combines infrastructure, landscape, and urbanism to fashion communities of lasting value --- that are sustainable, equitable and livable.
- He is a TOD design veteran with over 50 TOD plans, 100 workshops, in 15 states and 6 countries.
- His past work has resulted in 5 state, national and/or international awards and he has spoken at 8 national conferences on TOD, sustainability and community planning.

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Panel Members

Martin Nielsen, MAIBC, P. Eng., LEED AP
Principal
Vancouver, BC

- Martin is an Architect and Engineer.
- His portfolio showcases a seamless integration of innovation, sustainable & efficient planning and design.
- His extensive experience leading green projects ensures that sustainable initiatives are the foundation for every solution.
- Along with past success in mixed-use design, development and transit projects, including the firm’s award-winning and internationally acclaimed transit stations, Martin has extensive experience in the coordination of large-scale planning projects --- building communities & neighborhoods.

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Station Area Planning
For High-Speed and Intercity Passenger Rail

Federal Railroad Administration
U.S.DOT

Tuesday
18 October 2011
10:00 - 11:30 am
The Context

Changing Preferences
Federal Leadership
Changing Preferences
Opportunities for improvements in quality of life through passenger transport
Changing Preferences

http://www.nbm.org/blueprints/00s/fall00/page6/sprawl.jpg
Federal Leadership: High-Speed Rail Vision

“Imagine whisking through towns at speeds over 100 miles an hour, walking only a few steps to public transportation, and ending up just blocks from your destination. Imagine what a great project that would be to rebuild America.”

January 2009
Federal Leadership: Livability
Federal Leadership: FRA’s Station Area Planning For High Speed & Intercity Passenger Rail
FRA
Station Area Planning recommendations
Station Area Planning Principles

1. Location: OPTIMIZE

2. Transportation Connectivity: MAXIMIZE

3. Development: DESIGN and INFILL
Is the station located to support existing population and employment densities?
1. **LOCATION:** Optimize the station location.

Is the station located to maximize access between regional or city centers to create a regional network?
Is the project serving and at the same time capitalizing on viable existing development?
1. LOCATION: Optimize the station location.

Is the station located in the "heart" of the area, where it would be most convenient and safe for the traveler to arrive?
HSR: Reinforce Existing Patterns

Amsterdam, Netherlands

Strasbourg, France
HSR: HSR stations ≠ Airports

Strasbourg, France
Train Station

Airport
HSR: HSR stations ≠ Airports
HSR: Station Area - Strasbourg
2. Transportation: Maximize connectivity

Is the station physically connected to other passenger transport such as intercity rail, light rail, streetcars, so that transfers are convenient?
2. Transportation: Maximize station connectivity
2. Transportation: Maximize station connectivity

In the station area, do streets include continuous sidewalks of adequate width for pedestrians?
2. Transportation: Maximize station connectivity

Do bikeways form a network throughout the city?
HSR Station Area: Design Prioritization

- Pedestrians
- Bicyclists
- Public Transit
- Taxis and Kiss-n-Ride
- Self-drive auto / parking
Before adding more parking
3a. DEVELOPMENT: Shape it through urban design.

Is there a perceptible station area district? What are the markers?
In the station area, are the streetscapes designed to invite walking, biking, and use of public transit?

Is there a mix of land uses?
Through its design presence, does the station serve as a landmark in the city?
What kinds and how many infill projects are proposed to be completed within 5 and 10 years of railway revenue operations?
In Closing
Challenges
The national view
Challenges
Station Area Planning – Building a Sustainable Future

Martin Nielsen, MAIBC, P.Eng.
Principal,
Perkins + Will
Firm Overview

Firm wide
- 1600 Staff
- Over 85% are LEED Accredited Professionals

Perkins+Will
Vancouver Office
- 90 staff
- 92% are LEED Accredited Professionals
Climate Change - the ecological imperative
Environmental Context

Energy

Water

Materials

Land Use

Health & Well-being
Environmental Context

Industrial Design

Architecture

Transportation / Infrastructure

Urban Planning
Metrotown SkyTrain Station – Transit Village Plan

Neighborhood Context
Metrotown SkyTrain Station – Transit Village Plan

Schematic View of Existing Station
Metrotown SkyTrain Station – Transit Village Plan

Option A – Wide Exchange
Metrotown SkyTrain Station – Transit Village Plan

Option B – Narrow
Metrotown SkyTrain Station – Transit Village Plan

- Station Area Strategies
- Pedestrian Streets
- Pedestrian Access
- Retail Experience
- Re-connect Street Grid
- Neighborhood Street
- Metrotown Mall Entry
- BC Parkway
- Sustainability Strategies
Metrotown SkyTrain Station – Transit Village Plan

- Parkway Square and Exchange
- Improved Pedestrian Access
- Improved Streetscape
- Expanded Station
- Bike Storage Facilities
- Elevated Walkway
- Redeveloped Maywood
Key Tenets

Linkages
Community
Town centre integration
Outdoor shopping street:
Beresford as a Great Street
Creative and exceptional
urban design and architecture
Central park

higher density at Burnaby

higher density at Skytrain

low density in neighborhood routes

transition to single-family neighborhood

higher density near existing towers

Maywood park

Maywood School

Burnaby Public Library / Civic Square

Metropolis at Metrotown

Metrotown skytrain station
Beresford as a Great Street
Beresford art walk

Beresford as a Great Street
An Outdoor Shopping Street
A Sense of Place

strong residential street relationships

individual homes with unique articulation

a range of public and private outdoor spaces
A Sense of Place
A Safe Place with Pedestrian-Oriented Streets
A Mixed-Use Place

Residential: Townhomes
Offices
Shops and Restaurants

Corner of Telford and Beresford emphasized by form and material

Residential: Tower

articulation of corner at Beresford and Telford
roof-top amenities
lantern element
outdoor green spaces
A pedestrian-oriented neighbourhood

A live–work–play community

Access to multi-modal public transit

District-scale utility systems

Green building practices

A Sustainable Place
A Sustainable Place

- Beresford art walk
- Celebratory street
- Maywood mews
- Active lanes
Metrotown Exchange – Workshop

Option B – Narrow Exchange
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Questions for Our Panel Members?

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