

# ROUNDTABLE ON PUBLIC TRANSIT AT TRIMET

BY GAIL GREET HANNAH

**On April 26-27, 2017 Landscape Forms convened a group of thought leaders from public transit agencies, private companies and the design professions for a moderated roundtable on public transit. The event was held in Portland, Oregon, home of TriMet, one of the nation's most successful municipal public transit agencies, and was moderated by Robert Hastings, FAIA, Agency Architect for TriMet Capital Projects and Construction Division.**

*The goal was to capture high-level thinking on creating viable, sustainable public transit that elevates the rider experience, builds support for public investment, and promotes livable communities. Roundtable guests included public transit agency professionals from TriMet and the Utah Transit Authority; an executive strategist from infrastructure manufacturer Siemens; a design visionary from BMW Group DesignWorksUSA; a data analytics specialist and principal of urban planning firm Urban3; and architects, landscape architects and planners from a diverse range of practices. They brought extensive experience in transit-related planning and design, community engagement, and the public entity/private stakeholder interface at the heart of complex transit projects.*

## Why Public Transit

*"We need to create a better habitat for humans. We need to build high quality public transit because our cities matter."*

**Sean Batty, Director, Stations and Guideways Dept., TriMet**

Public transportation made its US debut 200 years ago when the steam-powered Staten Island Ferry began carrying passengers across New York Bay. Through the 19th and 20th centuries, pioneering transit innovations from cable and streetcars to buses and rail-based rapid transit transformed American cities. The mid-20th century road and highway

systems and the embrace of the automobile created new challenges, and today auto congestion and carbon emissions threaten the quality of life in cities worldwide. Public mass transit is again central to the fabric of urban life and economy and is at the nexus of another transformative moment. The livable, sustainable city of the 21st century depends on it.

Public transit has a responsibility to provide mobility and freedom of movement for all - those who have other options and to those who do not - and to support the livability of the communities they serve. Public support for public transit requires agencies to demonstrate that investment in these systems provides measurable benefits to communities, especially as local governments are increasingly called upon as funding sources. Forward-looking communities across

the country understand transit infrastructure as part of the public realm. In some cities, including Providence, Rhode Island; Clemson, South Carolina; Erie, Pennsylvania; and Raleigh, North Carolina, transit agencies are cooperating with local governments on projects that combine transit, streetscape and parks. They are acting on evidence that a positive total experience around transit, including the design and quality of transit facilities, not only grows ridership but has positive impacts on the environment, job creation and real estate development. And there is a civic dimension to the enterprise. “Public transit is where people from different backgrounds, economic situations and abilities connect – people who might not otherwise,” says Kari Turner, AIA, PIVOT Architecture. “If we can make our communities places where people engage with one another, maybe we could become a little less fractious.”

## Why TriMet

TriMet provides a unique opportunity to observe how an exemplary municipal public transit agency is addressing the challenges of urban transit development. The roundtable began with a riding tour of TriMet’s Orange Line, which provides light rail service between downtown Portland and the town of Milwaukie. Bright, comfortable train cars glide quietly on tracks between stations furnished with custom designed benches, shelters, lighting and waste receptacles that compliment other urban design elements in the area. Transit columns are adorned with glass mosaics and stone artwork by local artists. Shelter roofs incorporate photovoltaic panels that provide solar energy, and stations have real-time information boards posting departures and arrivals. At places along the line, TriMet has provided habitat restoration with vegetation using eco-roof technology and storm water management, implemented with large bio-swales. (Through a mutually beneficial agreement, TriMet built the stormwater infrastructure and the city of Portland maintains it.) The train passes through a former brownfield site made viable for development by new transit initiatives, and near a 100% solar powered Park & Ride facility heavily planted with evergreens and grasses with a path to a nearby creek.

Observing a best-in-class transit system was instructive and inspiring for roundtable participants. But the fact remains that transit agencies across the country vary widely in their

modes of service, size, structure, and the political climates in which they operate. Darin Piippo of Landscape Forms talks to representatives from transit agencies around the country. “I show TriMet pictures to other agencies and they eat it up, but say, ‘We can’t do that. We’re not Portland.’” With the conviction that all transit systems need to provide safe, efficient, comfortable, and attractive facilities that contribute to their communities, the roundtable asked participants to suggest solutions and strategies relevant for everyone working to improve public transit and envision thoughtful, sustainable transit solutions at whatever scale. This report provides highlights from the wide-ranging dialog.

## Creating Experience...Creating Place

“Good public transit goes beyond efficiency. It’s about identity and creating an environment that people choose to be in.”

**Matt Porteous, ASLA, Hewitt**

One goal of all transit agencies is to make public transit a desirable option for every potential customer, which means attracting “choice riders” who opt for public transit even when they have other alternatives. The experience of being in the transit environment matters. Successful transit facilities strive to create good experiences with a range of amenities that include places for resting, socializing, dining, and working, indoors and out. “As landscape architects, we know that when we create something beautiful it succeeds,” declared Chris Hite of Dix.Hite+Partners. “It’s about making a great sequence of spaces with quality elements that appeal across demographics and generations — a small leafy park, shopping, restaurants, walking paths.” Peter Torrellas of Siemens agreed. “I’ve never seen a beautiful place that didn’t make a return on investment. Making spaces beautiful pays off.” Research confirms that access to nature has a positive impact on human health and emotional wellbeing. Landscaping has an important role to play in the transit environment and can deliver lasting value. Matt Porteous noted that the tree is one of the few pieces of infrastructure that’s an appreciating asset from day one.



*Top:* Roundtable participants ride the rails. Trimet's Bob Hastings provides background, points out highlights on the pre-discussion tour.

*Bottom:* Amenity, convenience and safety. Well-illuminated Trimet stations intersect with multi-modal transportation options.



**Top:** Easy on and off at street-grade train stops in the city. Signage with maps help riders plan their way.

**Bottom:** Getting to know you. Trimet tour provides a movable meet and greet.

“We have to take the urban conversation down to the level of community. As designers, we have to communicate the roots of the community in what we create.”

**Carol Mayer Reed, Principal, Mayer/Reed**

Mayer Reed went on to observe that while some elements are continuous through a system, some are specific to the individual environment. “We should try to make a system seem less like an institution and more like a neighborhood. We need to provide variety and choice.” Steve Durrant, FASLA, of Alta Planning + Design in Seattle noted that the stories people tell during the outreach process often speak to the character of a neighborhood or local culture and that design should reflect that. He cited a Midwest transit station in an area known for its bungalows, in which the architect used the shape of a bungalow in the transit shelter and an artist populated the attic with memories. It was a space that resonated with the community. “There are stories and memories there,” he said. Transit facilities can be places where community-building happens. Steve Witter of TriMet advised, “Make the transit experience provocative so you create conversations – get people to talk to their neighbors.”

Participants posed strategies for effecting better communication with communities and bringing a more diverse group of people into the discussion was high on the list. Joe Minicozzi of Urban3 advocated involving younger people as stakeholders, recalling a former NYC Commissioner who observed at meetings that while 30% of his community was under 30, there was rarely anyone under 30 in the room. Peter Torrellas emphasized the importance of finding the right channels of communication. He related an account of working with a city that received a \$50 million grant for low income communities that was undersubscribed. The city decided to go to the faith communities for partnership in educating and raising awareness throughout the city and within 30 days the grant money was oversubscribed. “Find someone to teach people in your organization how to engage the community, hear the voices and create a nimble conversation. Develop that muscle.”

Bob Hastings of TriMet reported that his agency creates scenarios to build support for what they want to accomplish.

“It takes at least 10 narratives to put something out there that speaks to people,” he explained. Leah Robbins of TriMet added, “And under all narratives make the foundation ‘we are all in this together.’” But even great narratives don’t always carry the day. TriMet’s Orange Line was part of a comprehensive South/North light rail project for which funding was voted down several years ago, so the agency worked on it incrementally, providing examples of success along the way until public support caught up. In instances where major financial investment is simply not feasible small steps like improved sidewalks, curb ramps and better bus stops can go a long way. Steve Meyer, Capital Projects Director at the Utah Transit authority reported that in Salt Lake City nicer bus stops along the transit corridor increased ridership by 17%. Kari Turner of PIVOT Architecture said, “Look at the infill – a series of curb ramps can change someone’s life.”

## Confronting Obstacles

“Current practice is skewed against getting people out of their cars and spending money on public transit. The US invented the national road system and cities are going broke keeping them up.”

**Joe Minicozzi, Urban3**

Minicozzi, who frequently facilitates meetings with stakeholders, suggested that advocates for investment in public infrastructure need a better grasp of human psychology to explain the effects of bad policy and economics. “We give tax breaks to people who squander the ecosystem and we need better communication skills to tell that story and its implications,” he declared. Continued investment in highway infrastructure that doesn’t pay for itself transfers costs to the urban environment, while public money could be used more effectively to build legacy value.

Part of the problem is the way travel demand estimates are calculated. “Our models are broken,” Jemae Hoffman of VIA Architecture in Seattle asserted. She called for factoring in the dollar amount additional rides on public transit contribute in triple bottom line (people, planet, and prosperity) savings

when making the case for public investment. Sean Batty pointed to the failure to consider opportunity costs. “There’s no resistance to the \$30,000 parking space we build and give away every day,” he said, and advised spending less money on services for cars and more on transit for people displaced by rising real estate values to remote locations outside the center city. Garen Moreno of BMWDesign-WorksUSA called for more accountability for the impacts of activity, pointing out that language is critical. “We talk about traffic ‘accidents’ and call the breaking of driving laws ‘moving violations’ when they might be called ‘attempted traffic violence,’” he declared. Steve Witter, Executive Director Capital Projects and Construction at TriMet noted that most people don’t have access to these kinds of conversations and asked, why aren’t mayors and governors saying these things?

## Leveraging Opportunities

“Public transit is important for attracting and keeping people in the city, helping create a healthy economy. Investment should be more driven by the public sector. We need to say, here are the things we should do, for these reasons.”

**Steve Meyer, Utah Transit Authority**

Roundtable participants agreed that public sector agencies and advocates need to do a better job of communicating the benefits of public transit: expanded opportunity and mobility for many more people, including a younger demographic who are the engines of urban economic growth and don’t all want to own cars, and older people who may still be nostalgic for their automobiles but are no longer able to drive. Carol Mayer Reed opined that “getting seniors out of their cars is a heavy lift, but if we can provide quality of life with public transit for them we will have done it for just about everyone.” Steve Durrant referenced CDC data showing that the availability of public transportation can have an impact on public health. And the benefits to the environment are well known - less congestion, fewer carbon emissions, better air quality—but not a sufficient deterrent to cars in the city.

Participants suggested more tolls and higher parking fees as disincentives. Peter Torrellas suggested continued education with younger generations who show a greater sensitivity to environmental concerns. “Let the kids bring awareness to their parents,” he advised. “Sustainability is a multi-generational challenge.”

“We need to create the digital era in public transit so the public sector can begin to drive the private sector more effectively and build the ecosystem for the public good.”

**Peter Torrellas, Siemens**

Cities don’t work hard enough on defining needs, Torrellas declared. He proposed that cities like Seattle, Portland, Charlotte and Austin that are seriously working on solutions get together and define what a great transit system looks like and begin to gather data, so they can ask for federal policy that says to private partners and investment bankers, “If you want to participate in the city you need to use this data platform. Those are the table stakes.” Then, he predicted, cities would have the data base they need to need to enable better strategic thinking and growing investment. (Jemae Hoffman, Director of VIA Architecture, noted that NACTO, the National Association of City Transportation Officials, has begun work on that.)

The transportation of the future will look quite different from the way it looks today. According to Torrellas, master plans for the Northeast Corridor include autonomous fleets in dedicated corridors that would be more affordable than the fixed highway system and compliment other transit options. Garen Moreno said, “Today we think of automobiles in a single way while in the future you may have a single-seat auto pick you up at the train and another vehicle for driving the kids. Or neither. I look forward to purpose-created transportation, from single-seat to multiple seat conveyances,” and called for building more flexible processes so planners and designers can navigate through new models and emerging technologies. The challenge is to find ways for all transportation infrastructure and all modes, including the automobile, to be used more efficiently. Peter Torrellas declared that the



*Top:* The discussion in full engagement mode. Bob Hastings moderates.

*Bottom:* A successful multi-modal public transit system at work: train, bus, car, bike and pedestrian options in a smartly orchestrated system.





**Top:** The discussion covered a wide range of issues critical to public transit.

**Bottom:** Solar panels on shelters power LED lighting. Benches and real-time arrival and departure data ease the ride home.



solution lies in data platforms and technology, which together could enable “complete journey management” through integrated scheduling, routing and payment across public and private transit options.

## Public/Private Partnerships

“If cities can engage in ways that make private companies see capital investment as a plus, they can work together, for example on carbon reduction strategies that make money for investors.”

**Garen Moreno, BMWDesignWorksUSA**

He explained that today BMW makes big capital investments buying knowledge and research and that actionable information is a valuable commodity that cities and transit agencies can bring to the table. Joe Minicozzi said a new conversation is needed. “The public sector makes the big investment and the private companies and venture capital building the infrastructure benefit. We’re not thinking strategically.” Sean Batty suggested that, as better health outcomes benefit insurance companies, the public sector should find a way to bring them in as funders.

“Businesses solve problems,” Peter Torrellas challenged. “Give us some problems to solve and you will see a lot of innovation.” He offered as an example the public WiFi network in Kansas City which was implemented through a public private partnership. Steve Meyers of UTA countered that his city has available land and legislation that allows it to do Park & Ride development with private companies. “The problem is, he said, “we ask for transit-oriented public space and they put in a grocery store as far from the station as possible. They don’t get it. You have to be willing to say no.” Meyer went on to declare that the public sector must find ways to monetize successful development and that municipal and transit structures need to work together on it. “There is political resistance to the public becoming a 5 – 20% equity partner in transit investment. We need more enlightened input from experts who understand urban projects.”

## Taking the Long View

“We need to better understand scale and time – how our plans for the environments will play out for the community so we can build in permanence.”

**Bob Hastings, TriMet**

“Our solutions need to be able to operate between time scales and, with climate change, may need to go beyond established policy” Hastings explained. Jemae Hoffman suggested that one way to build in permanence was to plan transit station areas around resilience – livable communities with stormwater management, local food, and renewable energy. They could include community gathering places for daily use that build the social fabric that helps communities in times of trouble. “We can call it Resilient Transit and People Oriented Development,” she said. Other participants advised that the quality and endurance of infrastructure are important, that good design, good materials and avoiding trends was a wise strategy, and that good asset management is essential.

Technology is a critical issue – for the design and build process, for facility operation, and for riders who rely on it to organize their travel and demand access to it when using transit facilities. Bob Hastings revealed that TriMet narrowly avoided making a “near catastrophic” error in implementing real-time info for its systems by failing to appreciate the power of the then nascent smart phone. “We need to understand how technology works, how it can support, when you do it yourself and when you let social forces do it,” he declared. TriMet’s Sean Batty observed that it is now possible to attach information on how a thing is made to the object itself, so agencies don’t need to rely on prior generations for all know-how. “We can create permanence in the way a species is permanent through evolution,” he said. And Peter Torrellas lauded the value of technology for documenting the decision-making process, effectively establishing a permanence of context that allows subsequent modifications without starting all over.

## Wrapping Up

In the wrap-up discussion, I heard words you don't often hear in relation to public projects: courage, soul, empathy, fear and hope, commitment, delight."

**Steve Durrant, FASLA, Alta Planning + Design.**

In response to moderator Bob Hastings query about their aspirations for the future, participants named walkable cities, less vehicle noise, a network "like a green railway" for walking and biking, density in urban cores with rural landscape, and a flourishing public transit infrastructure. Such a future will depend on agencies and municipalities working together toward common goals, on public and private investment, on rail and bus and bicycles and sidewalks, on the automobile and on conveyances not yet imagined, on platforms that tie them all together and on transit design and planning professionals who practice what they preach and say, "I'm also a public transit rider." Success will be measured in great experiences for people that address convenience, comfort, freedom of movement, the environment, opportunities for engaging with others and connecting with nature along the way.



## Professional Participation

### **Robert Hastings, FAIA**

Agency Architect  
*TriMet*

### **Sean Batty**

Director  
*TriMet*

### **Steve Meyer, P.E.**

Director of Capital Projects  
*Utah Transit Authority*

### **Kari G. Turner**

AIA  
*PIVOT Architecture*

### **Steve Durrant**

FASLA | Vice President  
*Alta Planning + Design, Inc.*

### **Matthew Porteous, ASLA**

Principal, Director of Practice –  
Landscape Architecture  
*HEWITT*

### **Jemae Hoffman**

Director  
*VIA Architecture*

### **Garen Moreno**

Director of Strategic Planning  
*BMW Group DesignworksUSA*

### **Joe Minicozzi**

Principal  
*Urban3*

### **Chris Hite**

President  
*Dix.Hite + Partners*

### **Steve Witter**

Executive Director  
Capital Projects and Construction  
*TriMet*

### **Leah Robbins, P.E.**

Director  
Southwest Corridor Project  
*TriMet*

### **Peter Torrellas**

National Business Manager  
State and Local Government  
*Siemens*

### **Carol Mayer Reed**

*Mayer/Reed, Inc.*

landscapeforms.com

landscapeforms®

DESIGN. CULTURE. CRAFT.