Argyle Shared Street T.H.E. Conference February 23, 2016







BURNS MCDONNELL

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Presentation Overview



What is a Shared Street?



Why a Shared Street Here?



Argyle Shared Street Design



Project Implementation





Flexible Space | Slow Street | Woonerf

What is a Shared Street?

What is a Shared Street?

В Shared Space is more a way of thinking than it is a design concept. It is most readily recognized as a street space where all traffic control devices such as signals and stop signs, all markings such as crosswalks, and all signing have been removed. Curbing is removed to blur the lines between sidewalks and motorized travel way. The **philosophy** is that absence of all of those features forces all users of the space – from pedestrians to drivers – to negotiate passage through the space via eye contact and person to person negotiation.

- Gary Toth, Aug. 17, 2009 http://www.pps.org/blog/shared-space

Design Elements



- ✓ Speed limit less than 10 mph
- ✓ Removal of barrier curbs
- ✓ Blurred lines between pedestrian and vehicular spaces
- Minimal traffic control signage



Benefits



 ✓ Increased safety through individual responsibility

- ✓ Drivers are 14 times more likely to give way to pedestrians
- ✓ Expansion of public space
- ✓ Flexible space for street fairs, markets, parades, and cafés
- ✓ Increased pedestrian and bicycle traffic
- Promotes economic development

























Why a Shared Street Here?

Why Argyle Street?

- Actively used as **public space** through parades and the Night Market
- Serves as key destination point for area residents and out-of-town visitors
- ✓ Low traffic volumes considering east-west connection (Broadway to Sheridan)
- Community desires safety improvements and economic development
- Deteriorated infrastructure and substandard ADA accessibility





Project Goals

- ✓ Improve infrastructure by creating a cohesive and flexible streetscape plan within funding limitations
- Support existing Argyle St. merchants and their customers, and bolster Argyle St. as a regional business destination
- Brand Argyle St. business district and develop community identification
- Provide a complete and shared street that benefits the flow of pedestrian, vehicular and bike traffic equally
- Implement streetscape and infrastructure elements, increase public safety and deter negative activity



















Argyle Shared Street Design

Key Elements

- 10mph Speed Limit
- Full ADA Compliance
- Chicanes to Guide Movement
- Placement of Street Furniture
- Infiltration Planters over Existing Catch Basins
- Paver Colors, Patterns and Textures
- Permeable Paver System
- Unit Pavers over Existing Asphalt
- Pedestrian Refuge Island with Enhanced Crosswalk and Vertical Monument





Chicanes and Transitions

Transition areas are critical to the overall design and help to **WINTHROP AVENUE** convey to the user a new ENMORE AVENUE space is being entered. ADA ACCESSIBLE WARNING TILI BOLLARDS SPACED 8' ON CENTER PAVER TYPE A "PEDESTRIAN CLEAR PATH" DETECTIBLE WARNING PAVER (AT BACK OF PARKING LANE PAVER TYPE B (PARKING LANE) + + + 1 + + +/ + + 11 Chicanes emphasized by paver bands and infiltration planters help to slow vehicles PAVER TYPE B (PARKING LANE BACK OF PARKING LANE) down and guide users through the space. PAVER TYPE A "PEDESTRIAN CLEAR PATH"

TRANSITION EXAMPLE

Visual/Tactile Cues and ADA





"Because many of the design elements in the Jefferson Street vision are new for the city, agencies have tried to adapt their design standards for the innovative street. The Mayor's Office of Disabilities has been working with Lighthouse for the Blind and other disabilities advocacy groups to come up with solutions for visually impaired street users that meet ADA guidelines and also account for streets with less rigid divisions between elements. Central deline ators, or slightly raised and beveled street pavers, such as those used successfully in the UK for similar shared streets, will likely define the boundary between pedestrian safe zones on the street and sections where cars will drive. A slightly raised curb will be installed beside the proposed streetcar lines once those are built."

(http://sfnreexablog.org/2009/02/18/planning-department-unveilb-tan-franciscot-first-pedetarian-priority-street/Amore-1589)

Visual/Tactile Cues and ADA

Visual/tactile cues used to identify presence of a shared public way and delineate between pedestrian-only and shared zones.

- ✓ Changes in material texture
- ✓ Changes of material color and contracts
- ✓ Use of 1/2 inch maximum beveled transitions
- Use of caning detectable wayfinding or pathing materials
- \checkmark Landscaping and raised planters
- ✓ Street furniture such as benches, seating ledges, or trash cans, bollards, railings and other architectural elements
- ✓ Temporary or movable objects





Community Identification







Drainage Considerations

One acre of stormwater BMPs
2.95 acres of catchment area
33.6% impervious area reduction
91.5% of project area diverted to stormwater BMPs

Permeable Paver Bedding Material 6" Base Course (CA-7) 12" Subbase (CA-1)

Permeable Paver Section



Field Infiltration Tests Yielded 3.9 to 6.5 inches per hour captured under existing conditions, more than double the requirement by Water Management.

site design group, ltd.

Before & During Construction













Project Implementation











Portland, Oregon - Out of the Mud Initiative (2012)

• Ordinance proposed and approved by City Council that included the following language:

"When appropriately designed a narrow shared roadway allows for all modes, including pedestrians, to safely share the street without delineating a separate space for each... Examples of safe shared roadways are found throughout the world and have helped inform the work of the Bureau of Transportation on the Out of the Mud Initiative" ¹

Netherlands - Woonerfs (1976)

• Granted legal staus by Royal Decree

"Stipulating that pedestrians may use the full space of any street designated as a woonerf and that vehicles must not travel at speeds exceeding walking pace"²

Cambridge, Massachusetts

• Traffic Director has the authority to issue regulations without going through City Council.

Sec. 9.29 SHARED STREET (excerpt)

(b) All public right-of-ways defined as a "Shared Street" shall operate in the following manner.

(1) All types of motorized vehicles and non-motorized vehicles including bicycles must yield to pedestrians.

(2) All types of motorized vehicles and non-motorized vehicles including bicycles shall use caution and travel at a speed that ensures pedestrian safety. A speed greater than 10 miles per hour is considered hazardous to pedestrians.

Boulder, Colorado - Pearl Street Pedestrian Mall (1989/2008)

7-4-51. Vehicle on Mall Prohibited.

(a) No person shall drive or operate any motor vehicle, moped or animal-drawn vehicle on the mall except:

(1) Authorized emergency vehicles responding to an emergency or on other official business;

(2) Vehicles making deliveries to properties abutting the mall that cannot accept delivery in any other reasonable manner, but no such deliveries shall be made between the hours of 10:00 a.m. and 4:00 p.m.;

(3) Vehicles used in the construction, operation or maintenance of the mall; or

(4) Vehicles that have a permit issued by the city manager, who is authorized to issue the same for a period not to exceed forty-eight hours if the presence of the applicant's vehicle is reasonable and necessary for a special activity authorized under chapter 4-11, "Mall Permits and Leases," B.R.C. 1981.

(b) No driver excepted from the prohibition of subsection (a) of this section shall drive on the mall unless:

(1) The speed does not exceed five miles per hour;

(2) The vehicle is operated in a manner that is careful and prudent for an area that is primarily for pedestrians; and

(3) Authorized emergency vehicles responding to emergencies have emergency lights or sirens in use in accordance with subsection 7-2-12(c), B.R.C. 1981, maintenance vehicles with special warning lights display them, and all other motor vehicles have emergency flashers in use.

^{1 &}quot;Up Out of the Mud" Street by Street Initiative, CIty of Portland Oregon - https://www.portlandoregon.gov/ transportation/article/422120

^{2 &}quot;Rights of Way: Shared Streets and the Evolving Municipal Traffic Code" - urbanomnibus.net/2012/05/rightsof-way-shared-streets-and-the-evolving-municipal-traffic-code/





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What are streets for