



Portland Street by Street Initiative

*Performance Based Streets for Local Service Streets
in single family residential zones
(Neighborhood Streets)*

*Planning & Sustainability Commission
July 2012*

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Why Street by Street?

Adaptive Streets ~ Complete Streets ~ Context Based Streets ~ Flexible Streets

Street standards developed for new streets/sub divisions; streets have evolved

Unsettling--not to standard is *interim* or *substandard*

City-required developer infill approach not getting streets and walks improved

Not using waivers to their fullest potential

Neighborhoods lack understanding how street improvements occur

One Design Fits All ; One Process Fits All, but varied: Terrain / Time / Stormwater Infiltration Rates / Development Pattern

LID Program applies the Standard; Expensive

How useful is a piece of sidewalk, curb and pavement when the rest of the street cannot get built?

Current data of Local Streets has little detail on the in between:
Pavement condition / City Maintained or not / TSP Class of "Local"

Street by Street Initiative

Street by Street -

- Affordable Streets
- Construction Methods
- Maintenance Options
- Options Clarified

•Getting something built is better than nothing

•Do no harm

•Want affordable sections and materials to build function and form and to allow greater livability and active streets

Performance Based Streets

Options for:

- Cross Section
- Alignment
- Materials
- Settled Performance

“Standard” High Performance Based Street



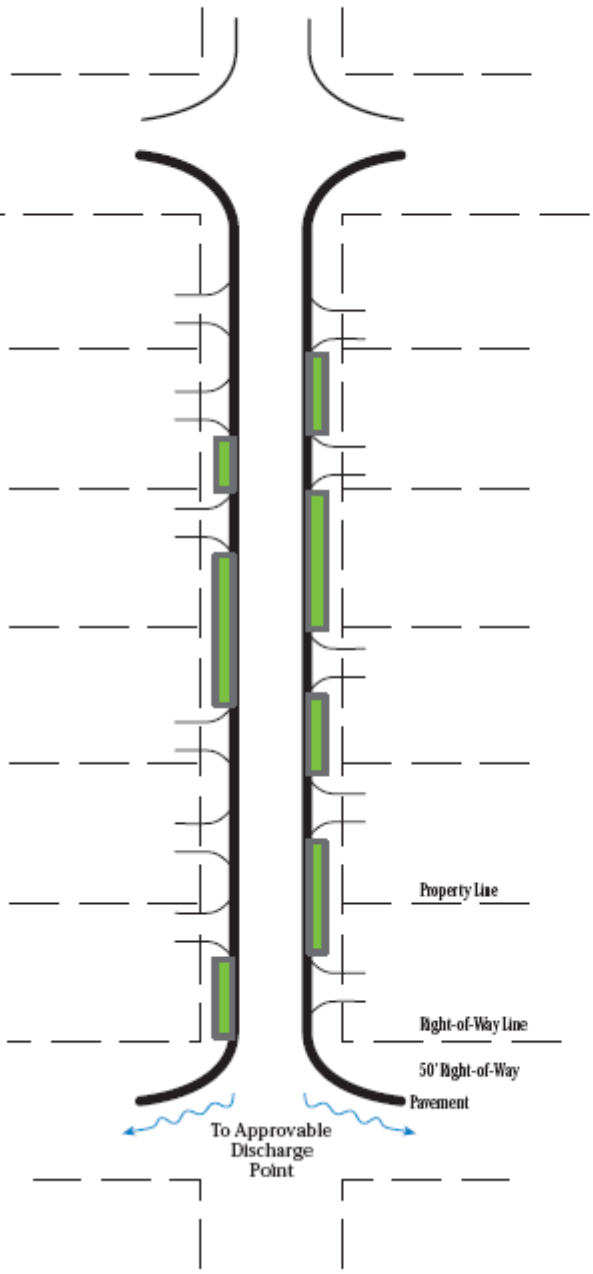
High Performance Local Street – LID
~\$1,300 – 1,500/ln ft

Established & Standardized:




- Sections
- Materials
- Maintenance



STORMWATER (plan view)
Standard Integrated Street – Curbed



Design Options:

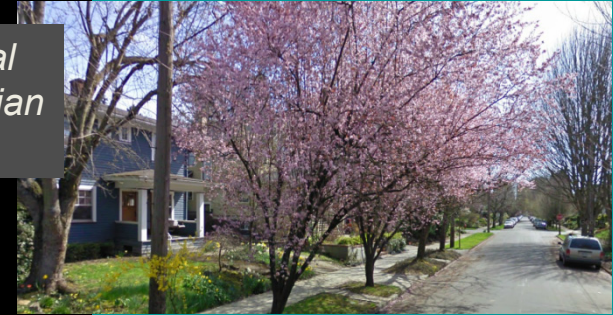
- a. 
Swale Along Street Length
- b. 
Planter Along Street Length
- c. 
Curb Extensions

Streets Not to City Standard

Local Streets /Neighborhood Streets:

- 1,006 miles total local streets
- 45 miles unpaved (5%)
- 167 miles paved without curb (17%)
- 752 miles paved with curb (78%)

In single family residential zones; excludes Pedestrian Districts



Neighborhood Streets:

Access – Livability – small but significant

- 49% of total city streets (CL miles)
- 73% of those unpaved are local
- 51% of those without curb are local

All streets:

In all zones, no exclusions

- 2,070 miles total streets
- 62 miles unpaved
- 325 miles paved without curb
- 1,625 miles paved with curb

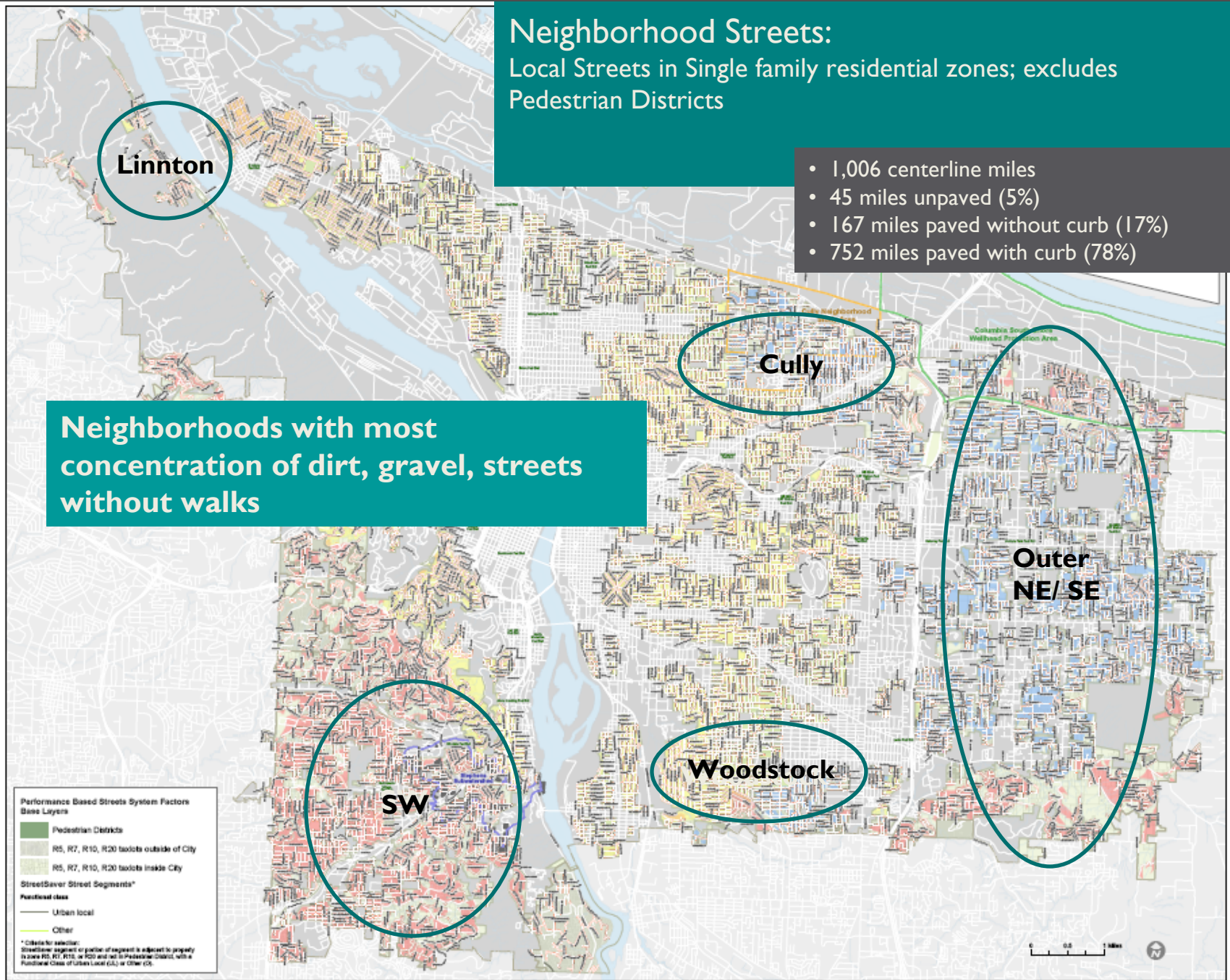


Neighborhood Streets:

Local Streets in Single family residential zones; excludes Pedestrian Districts

- 1,006 centerline miles
- 45 miles unpaved (5%)
- 167 miles paved without curb (17%)
- 752 miles paved with curb (78%)

Neighborhoods with most concentration of dirt, gravel, streets without walks



Performance Based Streets System Factors
Base Layers

- Pedestrian Districts
- RS, R7, R10, R20 taxlots outside of City
- RS, R7, R10, R20 taxlots inside City

StreetSaver Street Segments*

Functional class

- Urban local
- Other

* Criteria for selection:
StreetSaver segment or portion of segment is adjacent to property in zone RS, R7, R10, or R20 and not in Pedestrian District, with a Functional Class of Urban Local (UL) or Other (OT).

The background image shows a residential street scene. On the left, there are two-story houses with light-colored siding and white trim. A gravel area, possibly a driveway or a new road surface, occupies the foreground and middle ground. The sky is overcast. The text is overlaid on the left side of the image.

Objectives of Street by Street

- A. Performance-based neighborhood streets
- B. Inform program through stakeholder input
- C. Fundamental Building Blocks Concepts and Design
- D. Clear Construction Options
- E. Clear Maintenance Options
- F. Pilot Program & Projects
- G. Optional developer fee in lieu of performance and associated Street Improvement Fund.
- H. On line tool to guide the community
- I. City Program and Implement/Deliver; Change and Train

Infill Development - Street Pattern



SW Boones Ferry Rd



SE 128th Ave

Waivers of Remonstrance

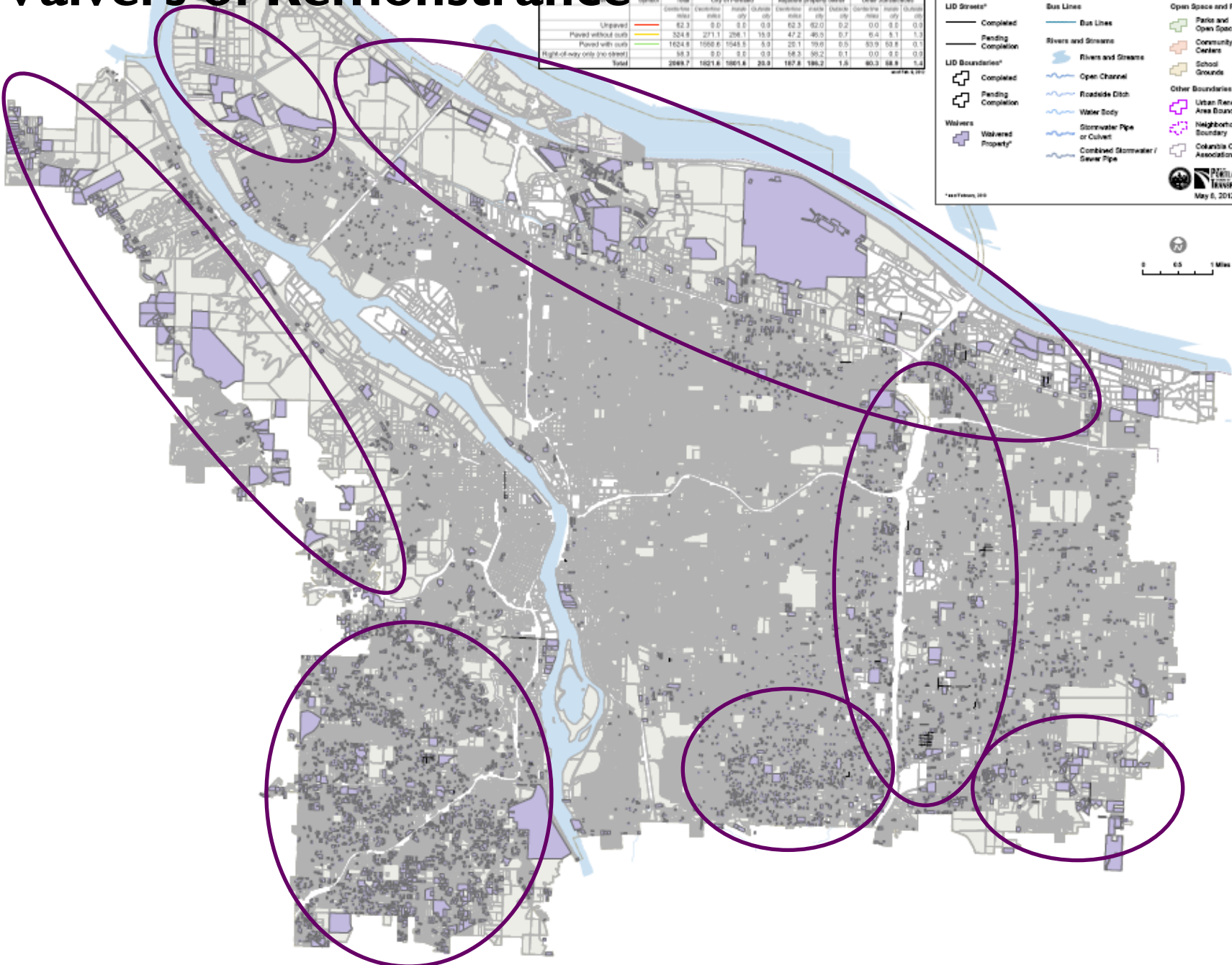
Symbol	Total Square Feet	City of Portland						Multnomah Authority			Other Jurisdictions		
		Citywide	North	Central	South	East	West	Citywide	North	South	Citywide	North	South
Unpaved	82.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paved without curb	524.8	271.1	258.1	15.0	42.2	40.0	0.7	6.4	5.1	5.3			
Paved with curb	1824.8	1588.6	1544.5	5.0	25.1	39.0	0.5	83.9	53.8	0.3			
Right-of-way only (no street)	58.3	0.0	0.0	0.0	58.3	59.2	0.1	0.0	0.0	0.0			
Total	2429.7	1821.6	1551.6	20.0	127.6	136.2	1.5	80.3	58.9	5.4			

Local Improvement Districts and Street Surfaces

- LID Streets***
 - Completed
 - Pending Completion
- LID Boundaries***
 - Completed
 - Pending Completion
- Waivers**
 - Waivered Property*
- Bus Lines**
 - Bus Lines
- Rivers and Streams**
 - Rivers and Streams
 - Open Channel
 - Roadside Ditch
 - Water Body
 - Stormwater Pipe or Culvert
 - Combined Stormwater / Sewer Pipe
- Open Space and Parks**
 - Parks and Open Space
 - Community Centers
 - School Grounds
 - Other Boundaries
 - Urban Renewal Area Boundary
 - Neighborhood Boundary
 - Corridor Association Boundary

* as of February, 2012

PERILAND TRANSPORTATION
May 6, 2012





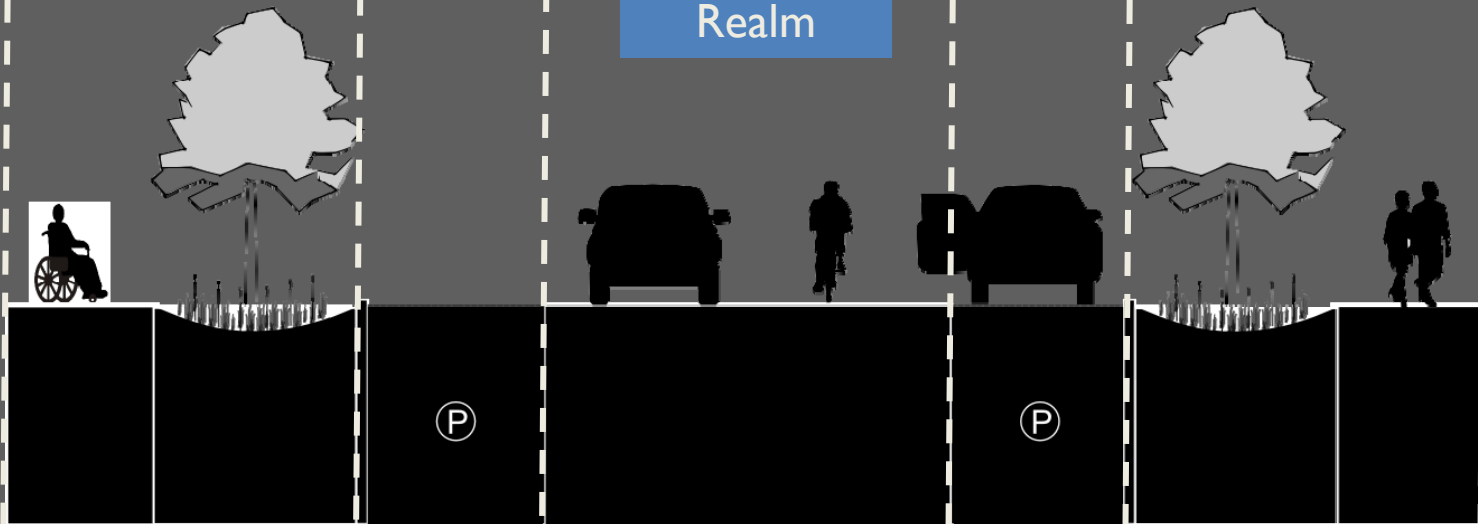
Walkway Realm

Parking Realm

Moving Vehicle Realm

Parking Realm

Walkway Realm



6'

4-8'

26' - 28'

4-8'

6'

Performance:

- **Mobility**
- **Durability**
- **Safety & Comfort**

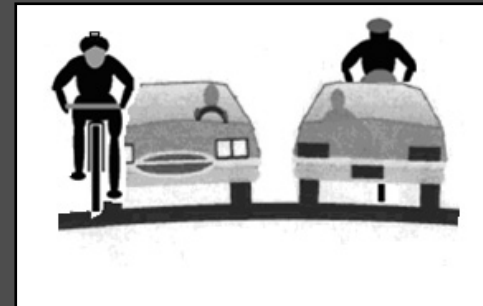


10 ft = 1 way vehicular

20 ft = 2 way vehicular

16 ft = 2 way queuing

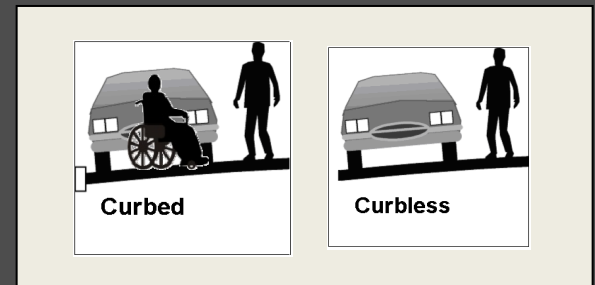
Moving Vehicle Realm



6.5 ft = sedan width

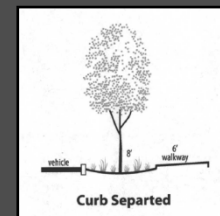
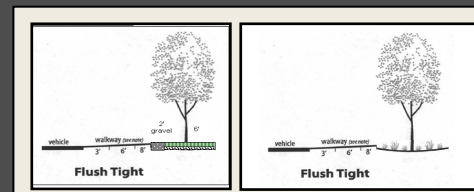
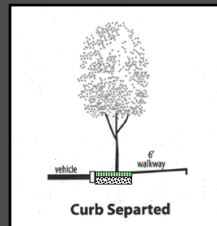
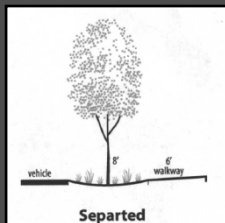
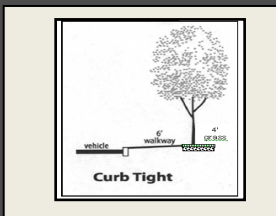
7-8 ft = parking curb side width

Parking Realm



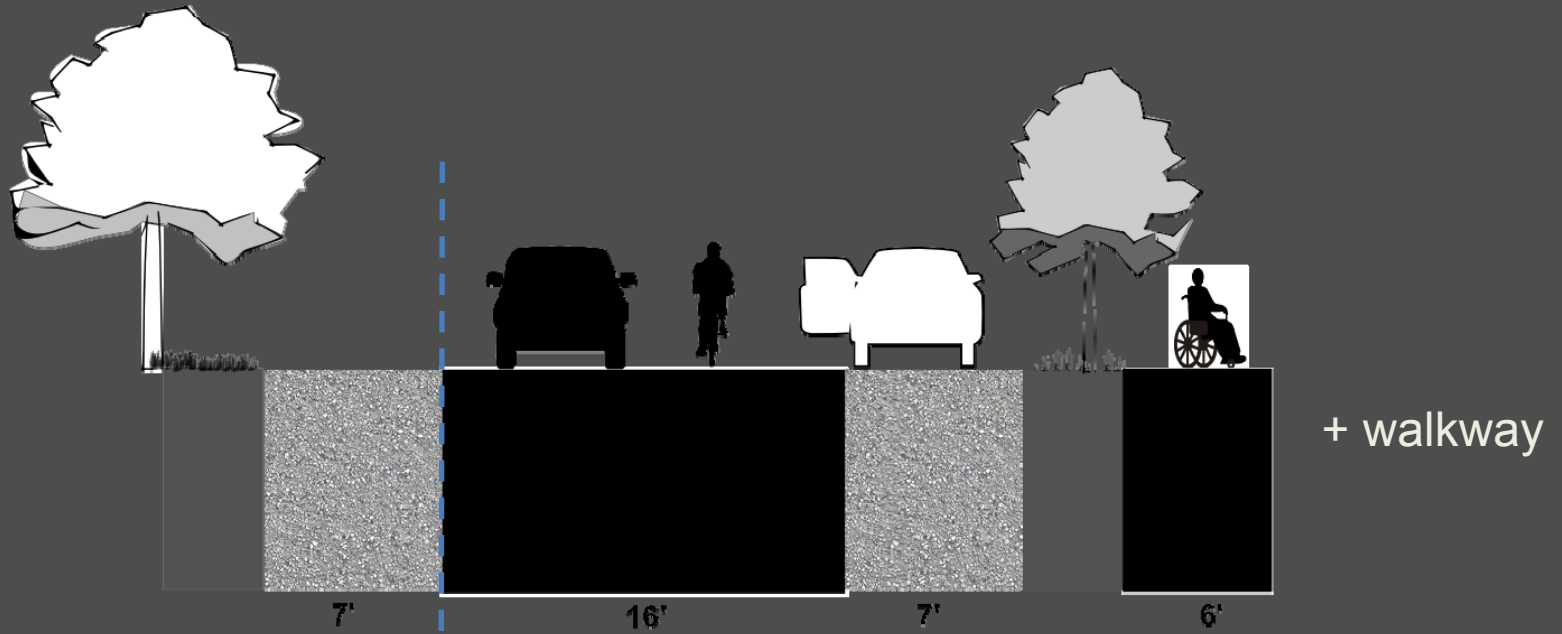
12 ft = 0.5' curb + 4' planter + 6' sidewalk + 1.5' offset

16 ft = curb + 8' storm + sidewalk + offset

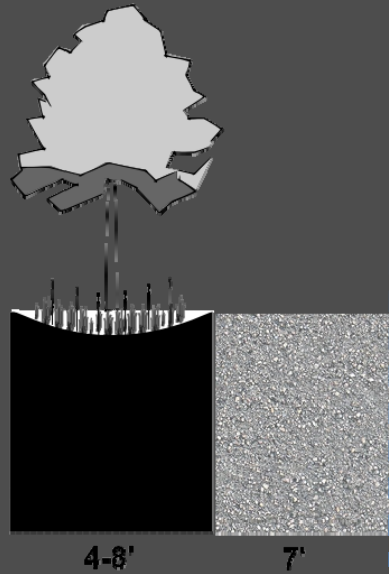


Walkway Realm

Base Combined



+
Integrated
stormwater







Shared Street

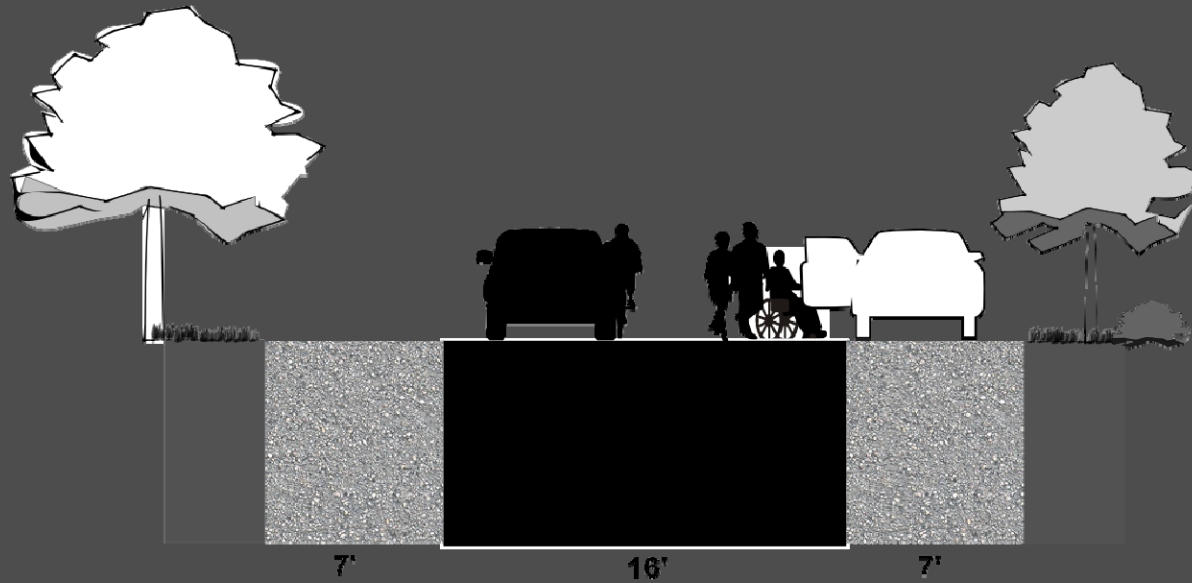


1. Low Speed
2. Low Volume

3. Designed for use

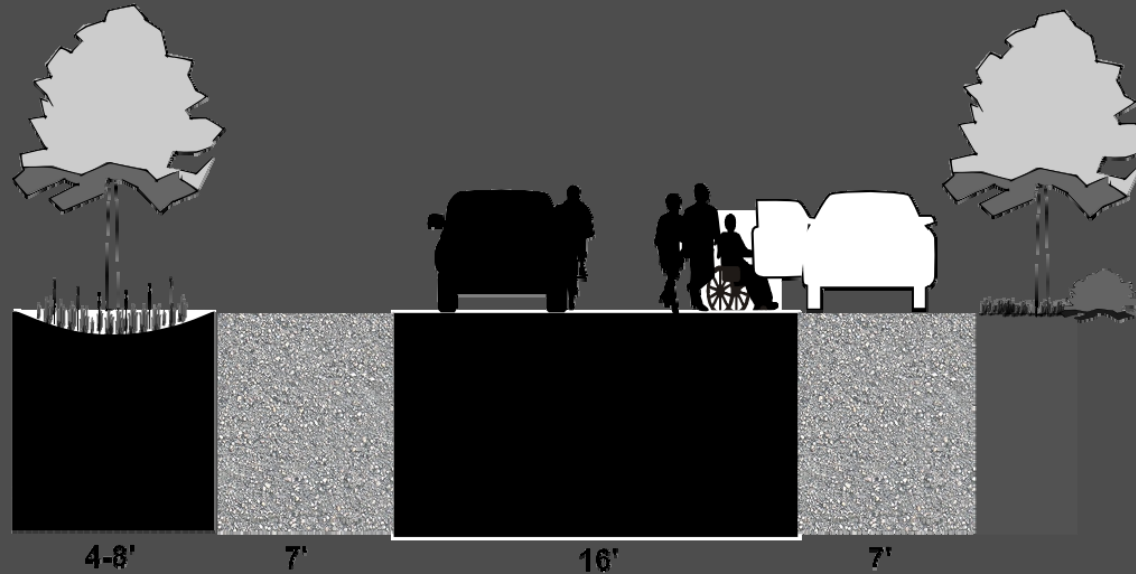
(A) Detect-ability (B) Material (C) Safety (D) X-section

4. Operate as local access street



shared

Lean Shared Street \$~300/ln ft
 (no buy ups; no public stormwater; lots of assumptions) - LID



+Integrated stormwater system

Traffic Calming

- Segmented Block
- Gateway/Narrow Entrance
- Materials & Alignment



eporia problem Image Date: July 2011



ater: July 2009

Stormwater Runoff Management

Current Solutions

with approved discharge point or ≥ 2 "/hr infiltration rate

- Standard Integrated Street
 - 8ft Swale; 6ft Planter; 4-6ft Curb Extension
- Conveyance to a Stormwater Basin (WQ and Detention)
 - 3-5ft *Open Ditch; 1-3ft *Filled Ditch; Curb & Gutter
- Pervious Pavement

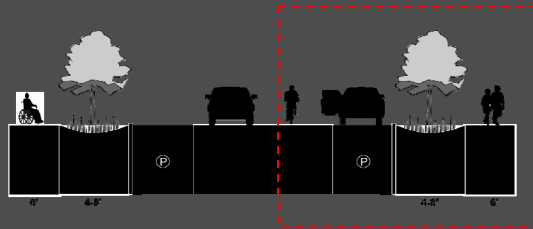


Performance Based Streets

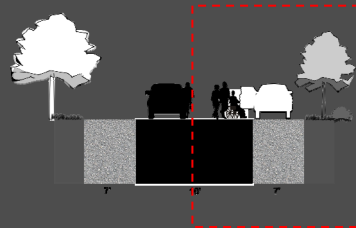
- Road Shoulder Improvements; ???

Costs (average, estimate only, nothing remarkable)

Local Improvement Districts – one lot with 50 ft fronting street

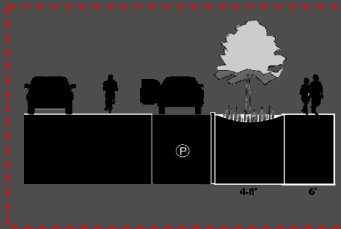


High Performance Local Street \$70,000



Lean Shared Street \$7,500
(no buy ups; no public stormwater)

Developer Infill PW Permit – one lot with 50 ft fronting street



Current Infill Frontage Improvement
Exact number unknown; estimate only \$47,500

Developer/Non-Developing Resident

Basic Information

Old: Call someone at PBOT
NEW Strong Website

NEW Performance Based Streets Public Works Permit

Public
Works
Inquiry

'Alternatives"
Consideration
(new)

Concept
Development
30%

Plans &
Design
60-95%

Perform-
ance
Based PW
Permit

Construction
and Project
Acceptance

Developer Optional Fee

If not required to build HPS with development—

- Fee is seed money
- Credit transfers with the property
- For future street construction
- Fee based either on (still developing):
 - (A) High Performance Street (HPS)
 - (B) Base Street Configuration
 1. Lean Shared Street + ISW
 2. Lean Street + Separated Walkway + ISW
- Administrative Fee (prelim.)
- Credit for improved length off site

Development Appeal Basis

- Majority of Pedestrian Corridor is built at a configuration less than the current standard and the proposed matches existing improvements (Admin Rule TRN 1.09)
- Infill of single-family for three or fewer contiguous lots where the majority of lots have been developed and there is no pattern of existing sidewalks in the area (Pedestrian Design Guide A 2.3)
- Right-of-Way has topographic, existing development, or natural resource constraints (Pedestrian Design Guide A 2.2)
- Existing road has no curb and it is not practicable to construct standard improvements or interim path (Pedestrian Design Guide A 2.3)
- BES stormwater or sewer requirements (PCC Title 17.32) - the requirement is not practicable or infeasible

Issues Still to Resolve



- Pilot Projects; Pilot Program
- Range of design alternatives to offer
- Range of material options to offer
- Settle maintenance responsibilities
- How to involve neighborhood in decision making process
- Optional Developer In lieu of improvements fund
- Development Fund - expenditure program
- Details of permits and programs
- Implementation

Street by Street Initiative ...more to come

2012

PDOT Directors Team
Technical Advisory Committee
Stakeholders Advisory Committee
Public Works Appeals Panel
Citywide Land Use Transportation Subcommittee
Bureau of Planning & Sustainability
Accessibility in the Built Environment Subcommittee
SWNI Transportation Subgroup Meeting
Homebuilders (HBA) Group
City Wide Land Use Group
Planning & Sustainability Commission
SW Trails Meeting
Linnton Neighborhood Meeting
City Planning & Development Directors Group
Development Review Advisory Committee (DRAC)
City Council Work Session - August 28 (9:30-11:30am)
Public Meetings - September or October ?
City Council – September or October ?

Comp Plan and TSP Updates - 2013