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MEMORANDUM

To: Robin Lewis, City of Bend, OR
From: Katie Mangle, Derek Abe, Alta Planning + Design
Date: June 18, 2015
Re: **Demonstration Project Pre-Planning Memo**

The purpose of this Memo is to describe examples of demonstration projects, and outline the steps and considerations the City of Bend should consider in planning for short and long-term demonstration projects to test and build support for implementation of bicycle and pedestrian safety projects.

Introduction

Demonstration projects are a practical and cost-effective way to convey, to test, and move toward implementation of active transportation and community-building projects. Demonstration projects have gained popularity with local municipalities around the country because they demonstrate first-hand how the project will impact traffic conditions and access for all road users and area residents and businesses. In the process, the impacts can be experienced so that the project can win the support of residents and earn the trust of local businesses. Moving forward, the City will have the support of the community to make the improvement permanent in a future phase. Demonstrations projects are typically characterized as:

- Shorter-term trial projects;
- Iterative and incremental processes;
- Targeted, smaller-scale and relatively inexpensive investments;
- Comprising scalable and replicable design elements;
- Empirical and experiential exercises inspiring confidence in facility design and operations; and
- Having measureable, data-driven outcomes

Because they are temporary, they are usually perceived as low risk installations, and as a result have tremendous potential to quickly establish the safety and accessibility impacts for all road users. Projects of this temporary nature typically involve an evaluation component that serves to allay existing concerns about safety and convenience, and perceived negative impacts, with the confidence provided by a data-driven process and a

base of evidence substantiating the positive impacts. Demonstration projects are especially effective when combined with other existing community events such as “open streets” or street fairs, because the everyday safety and health benefits of walking and biking are complemented by the fun, vibrant social experience that embody local community events. They provide opportunities to express how places designed for safe walking and biking contribute to that same sense of community and placemaking.

The facility designs for each of the demonstration projects will be developed around the vision, goals and objectives of the City of Bend, the Technical Advisory Committee, and other community groups. Throughout these processes it will be essential to:

- 1) Understand the community’s needs and concerns;
- 2) Prioritize safety and cost-effective walking and biking improvements that can be monitored and evaluated;
- 3) Leverage partnerships and community building opportunities;

The three proposed demonstration projects considered for the Bend Safety Implementation Project fall under two categories, 1) Short-term demonstration projects, and 2) Medium-term demonstration projects. The City is considering demonstration projects in the following locations:

- Short-term demonstration project on Colorado Avenue from Bond Street to Bend Parkway
- Medium-term demonstration projects on Colorado Ave from Bond Street to Bend Parkway, and on Greenwood West.

Other sites may be considered as well. Demonstration projects are a tool for the City to use to test potential re-allocation of the right-of-way, and engage the community. Short-term demonstration projects could allow the City to explore specific changes to the streets, by testing the impacts of changes (such as diverters or lane removal), and show the community the effect of changes before committing to permanent capital projects.

Short-term Projects

- 1-3 days
- Typically in conjunction with other street closure (e.g. neighborhood block party, Open Streets event, etc.)
- Typical materials may include, but are not limited to:
 - White duct tape
 - Spray chalk
 - Donated/borrowed street furnishings
 - Street cones

Medium-term Projects

- 1 week to several months
- Typically the road remains open to all modes
- Typical materials may include, but are not limited to:
 - Paint – survey paint or other
 - Donated or borrowed street furnishings
 - Straw wattles
 - Signs
 - Flexible delineators
 - Planters

Case Studies

Monterey Road – Morgan Hill, CA: short-term installation

Two alternatives were built as temporary installations during a 3-day “tactical urbanism” demonstration¹:

- Additional pedestrian space on one side of the street
- A buffered bike lane on the other side of the street

Pertinent Details:

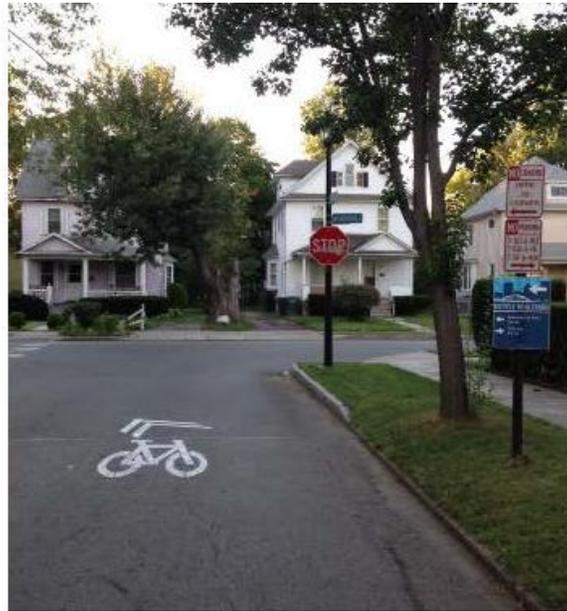
- 15 volunteers and staff worked for 5 hours to install the project along blocks (approximately 650 feet)
- Paper and online surveys were used to collect user data
- Adhesive tape used for the temporary bike lane
- Street furnishings donated or borrowed from local businesses
- City-provided traffic control devices



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¹ Tactical urbanism is an umbrella term for short-term, low investment changes to the urban environment.

Bicycle Boulevard – Rochester, NY: mid-term installation



Two miles of temporary bike boulevard, including shared lane markings every ~250, and wayfinding signs.

Pertinent Details:

- In-place for two weeks
- Materials : \$500
 - Survey marking paint
 - Spray chalk
 - Borrowed shared lane marking stencil (otherwise \$150)
 - 30+ temporary wayfinding signs (~30 hours to develop)
- Labor : \$5,000 fee
 - 2 city staff; 3 Alta staff
 - 1 day of installation
 - 40 hours of pre-event planning

65th Street – Denver, CO: Short-term installation



Pop-up protected bike lane for a one-day meeting demonstration installation.

Pertinent Details:

- White duct tape for protected bike lane delineation
- Candlestick cones – borrowed from public works
- Minimal explanatory signs
- 6-8 person professional crew to install

Planning

Logistical Needs

Logistical and administrative issues to be addressed for the City of Bend demonstration projects include, but may not be limited to:

Pre-event Considerations:

- Is there any additional programming for these spaces that should be considered (e.g. public open space, parklets, etc.)?
- Are there any other events that these demonstration installations could be rolled into, or tied to?
- Are there any other local partners that could lend social or political, or community capacity to these events and installations?
- Is there any community history that these projects should be sensitive to?
- What are the dynamic versus static elements of each installation (i.e. what elements will change over the course of each installation, and what will remain constant)?
- Who needs to be notified, and how (e.g. fliers to businesses, prior notifications of changes to road users, etc.)?
- Who should be invited to participate as part of the event? As an example, for the Colorado Ave demonstration projects, local businesses such as Market of Choice, Crux Fermentation, Boneyard Brewery, and/or other Downtown/Old Mill businesses should be invited to set up a tent/booth for the event and contribute in other partnership/sponsorship capacities.
- What kind of site-prep needs to occur?
- What can be assembled or pre-fabricated off-site?
- Do we need a press release?
- Do we need any pre-event marketing, branding, or outreach campaign?

Event Coordinators/Contractors/Volunteers:

- Selection of an event coordinator. On opening day the event coordinator will be responsible for managing event setup and takedown, volunteer coordination, daily program logistics, and serve as the primary contact for media/public inquiries.
- Selection of contractors for construction and installation of pavement markings, signage, planters, street furniture, etc. One person should oversee proper construction/installation of demonstration project streetscape/facility elements, and quality control. For the Short-term demonstration project, construction/installation may be handled by Alta/City of Bend Staff and local volunteers alone.
- Who are the local contacts for volunteers? The City could solicit support from Bend Bikes, Central Oregon Trail Alliance and/or other local bike advocacy organizations, Downtown Bend, Visit Bend, etc.
- How many people will be needed? The scale and permanence of the demonstration will dictate the number of volunteers necessary. Larger scale, longer duration projects will require professional contractors and necessitate a smaller construction volunteer base. A project that is

programmed as part of a larger event, such as an Open Streets event or street fair may require more volunteers to facilitate other daily programmatic responsibilities.

- What are the volunteer tasks?
- What City of Bend staff need to be present (e.g. Public Works, any public officials, security or law enforcement)?

Permitting:

- What permits are required?
- What are the schedule impacts of the permitting process; how much time is required for permit review?
- What are the costs associated, if any?
- Who is responsible for any required insurance or liabilities?

Design Needs

To aid in the logistical efforts of each demonstration project installation, a detailed site design for each location needs to be confirmed and agreed upon. Detailed demonstration project plans would be drafted to illustrate temporary striping, signing and traffic signal modifications. The Sounding Board sessions could serve as the primary forum for review and approval of the design elements of each demonstration projects in accordance with the goals and objectives established by the Sounding Board, TAC sub-committee, and City staff.

Materials, Misc.

Both the Logistical and Design Needs above will drive the physical materials needs of each demonstration installation project.

- What is needed (e.g. traffic cones, planters, etc.)?
- What is the budget for materials?
- What are the local sources for materials?
- Are there any material source partners that would be willing to loan/donate materials?
- Who is transporting the materials and how?

See below for a sample chart organizing the materials needs of a mid- to long-term demonstration installation.

City of Bend Safety Implementation Project

Example Demonstration Project Planning

COSTS & MATERIALS

Item	Quantity/Amount	Est. Cost	Possible Source	Procurement Lead	Outreach Needed	Notes
ALTERNATIVE 1: EXPANDED PEDESTRIAN SPACE						
Planned for 2 block installation on eastern (northbound traffic) side of street						
Wine Barrels	~40	Donated/borrowed	Morgan Hill Winery	John		Barrels to be placed approx. every 15' Donation confirmed
White rope	Estimate 600-750ft required, accounting for sag between barrels	Donated/borrowed	Downtown Association has some. Will have to use sparingly.	John		Will place rope at key locations as we must use sparingly. Parklet businesses will be responsible for creating their own barrier, to reduce amt of rope needed.
Silk flower baskets	75-80 available	Donated/borrowed	Downtown Association	Brad		Intend to place the flowers on top of the barrels
AstroTurf	240 ft. available	Donated/borrowed	Downtown Association	John		Will use to cover expanded ped space area To clean off astro turf once put in place. Have asked volunteers/staff if they have one to borrow. Availability TBD.
Leaf Blower	1	Donated/borrowed	Staff/Volunteers?	Julie		Bring as alternative to leaf blower?
Shop Vac	1	Donated/borrowed	Julie	Julie		Will create signs and print in house. Signs will be placed in parking area next to expanded ped space.
Paper Parking Signs	3	Produced/printed in house	Harris Assoc.	Julie		
ALTERNATIVE 2B: BUFFERED BIKE LANE						
Planned for 2 block installation on western (southbound traffic) side of street						
Traffic Tape for ALL buffer lines (exterior, diagonal filler lines, and interior dotted line)	1200 ft. of 4" strips (8 x 150ft rolls of 4" tape)	\$520 for 8 rolls, including shipping	PavementMarkingTape.com	Purchase - Karl/Julie C.		ORDER COMPLETE
Adhesive for stencils only (4 bike lane markings, 2 right turn arrows)	1 x 50ft roll of 54" MacTac Street Wrap temporary pavement adhesive	\$219.99	Fellers.com	Purchase - Karl/Julie C.		ORDER COMPLETE
2x4 Boards	170 ft of 2x4" boards	TBD	Johnson Lumber	Purchase - Downtown Assoc.		Intend to use boards for "curb" at outer edge of buffer
Nails	Nail in 2x4" boards, approx. every 10ft 100-125 nails needed	\$9.87	Johnson Lumber	Purchase - Downtown Assoc.		Nail 2x4" boards into pavement to secure them. One nail approx. every 10 feet
White Paint	1 - 2 cans	\$10-20	Johnson Lumber	Purchase - Downtown Assoc.		For painting portions of wooden "curb"
White duct tape	1 large roll	Donated/borrowed	Street Plans	Julie		Will bring as backup supply Harris will print full size bike lane graphic on plotter. Street Plans will use this to produce the cardboard stencil with volunteers at the event.
Bike Lane Marking Stencil	1	TBD	Harris/Street Plans	Julie		Harris will print full size right turn arrow on plotter. Street Plans will use this to produce the cardboard stencil with volunteers at the event.
Right Turn Arrow Stencil	1	TBD	Harris/Street Plans	Julie		Will use stencil to create a guide for installing diagonal buffer lines at a uniform 30-45 degree angle.
Buffer Line Alignment Stencil	3	Produced in house	Street Plans to produce No printing needed	Julie		
Cones or construction posts	Strategically used at corners per traffic plan	Donated/borrowed	City Public Works	Julie/Karl		
PARKLETS						
Materials for 1-2 parklets in project site. Refer to project map for locations.						
Tables and Chairs to fill space, and barriers to protect space from traffic	TBD - based on local business participation	Donated/borrowed	Local Monterey Rd. Businesses	Maureen/Julie	Yes - via business outreach letter	Businesses encouraged to help fill parklets w/ seating options in Business Outreach letter. Volunteers will be tasked w/ helping business owners move items.
Sting lights for night time decoration (OPTIONAL)	4-6 strands	Donated/borrowed	Local Monterey Rd. Businesses	Maureen/Julie	Yes - via business outreach letter	Businesses encouraged to use lighting elements in parklets in Business Outreach letter. Outlet access is a limiting factor. Volunteers could assist with installation.
Plants (IF AVAILABLE VIA DONATION)	As many as possible based on donation. Ideally ~20	Possibly donated/borrowed	Local nursery/hardware store	Bruce	May need sponsorship mention	Will be used to decorate parklets
BICYCLE CORRAL						
Materials for 1-2 bike corral areas in parking spots on project site. Refer to map for locations.						
A-frame bicycle racks	2 available, approx. 10 ft. each	Donated/borrowed	Concept Cycletry	Bruce		Must use sample bicycles on the racks to make sure people know how to use them!