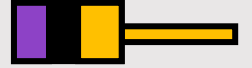




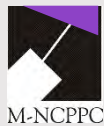
Tactical Urbanism: People & Pavement

Sunday May 7, 2017
2:30 - 3:45 p.m.

Hall 1A23/24 JCC
Session Code #9107964
APA National Conference



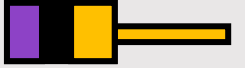
Crosswalks



The Montgomery
County Planning
Department

© Roadsworth-Peter Gibson

Washed Up, Montreal Quebec



The Montgomery
County Planning
Department



The Montgomery
County Planning
Department

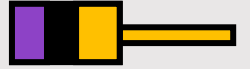
Statement Identity Promotion



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Department

Art Basel-Miami Beach @Miami Beach Convention Center

© Atelier Cruz-Diez Paris



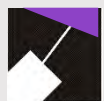
Good

Safe

Purpose+

Location

Looks



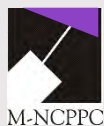


**Safe =
MUTCD +
Common Sense**





Pattern & Contrast
Width
Clear Curb & Grip
Signs & Posts
Sight & Stop Distance



Pattern and Contrast

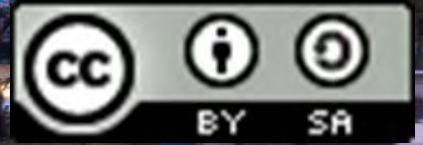
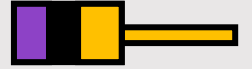


Photo credit ehpien



Treatments

Brick Lattice
Brick & Stone
Setts & Cobbles



Source: Ennis Flint



Colors

Red

Tans

Grays

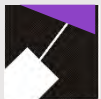
Rust

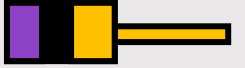
Browns

**Earth
Tones**

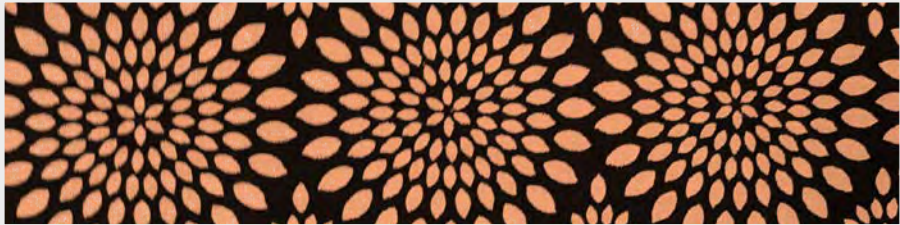
Burgundy

Greens





Safe



Safe



Source: Pasadena Playhouse District



Safe



Photo Credit: Ennis-Flint Safe Schools Dera Therm Crosswalk



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Not Safe



Lompoc California: Source: Healthy Lompoc Coalition.

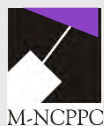


Not Safe



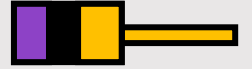
© Charles Bergen Studio

Photo credit: Lauren Landau Source: Dcist Blog
Chinatown Washington DC

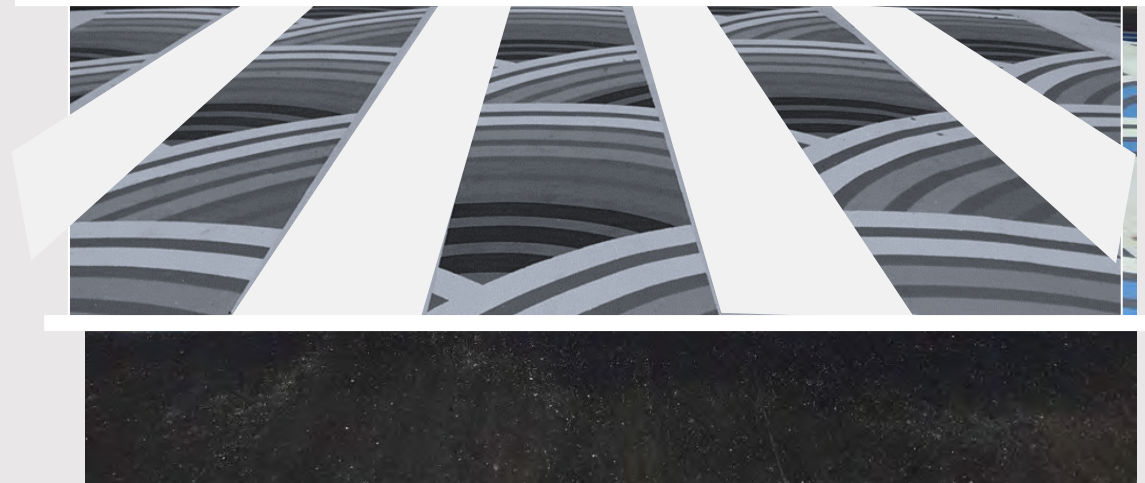
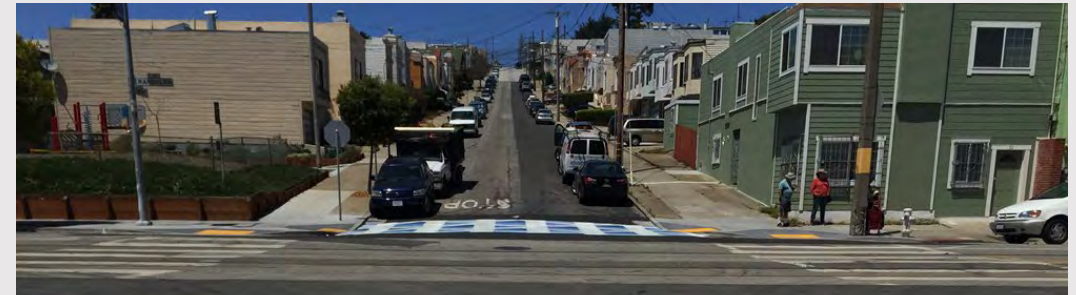


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Not Safe



Not Safe



Safe



© Christo Guelov Credit photo: Rafael Perez Martinez

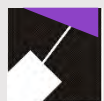


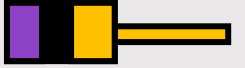
Purpose+

Statement

Celebration

Demonstration



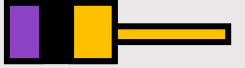


Statement



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© Roadsworth- Peter Gibson Footprint, Montreal Quebec



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© Roadsworth- Peter Gibson

Wishful Thinking , Montreal Quebec

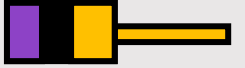


Morning Glory



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Department

© Roadsworth- Peter Gibson



Credit photo: Rafael Pérez Martínez

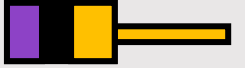
© Christo Guelov Credit photo: Rafael Perez Martinez

“Stream” ‘Zona joven’



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Department

M-NCPPC



Credit photo: Rafael Pérez Martínez

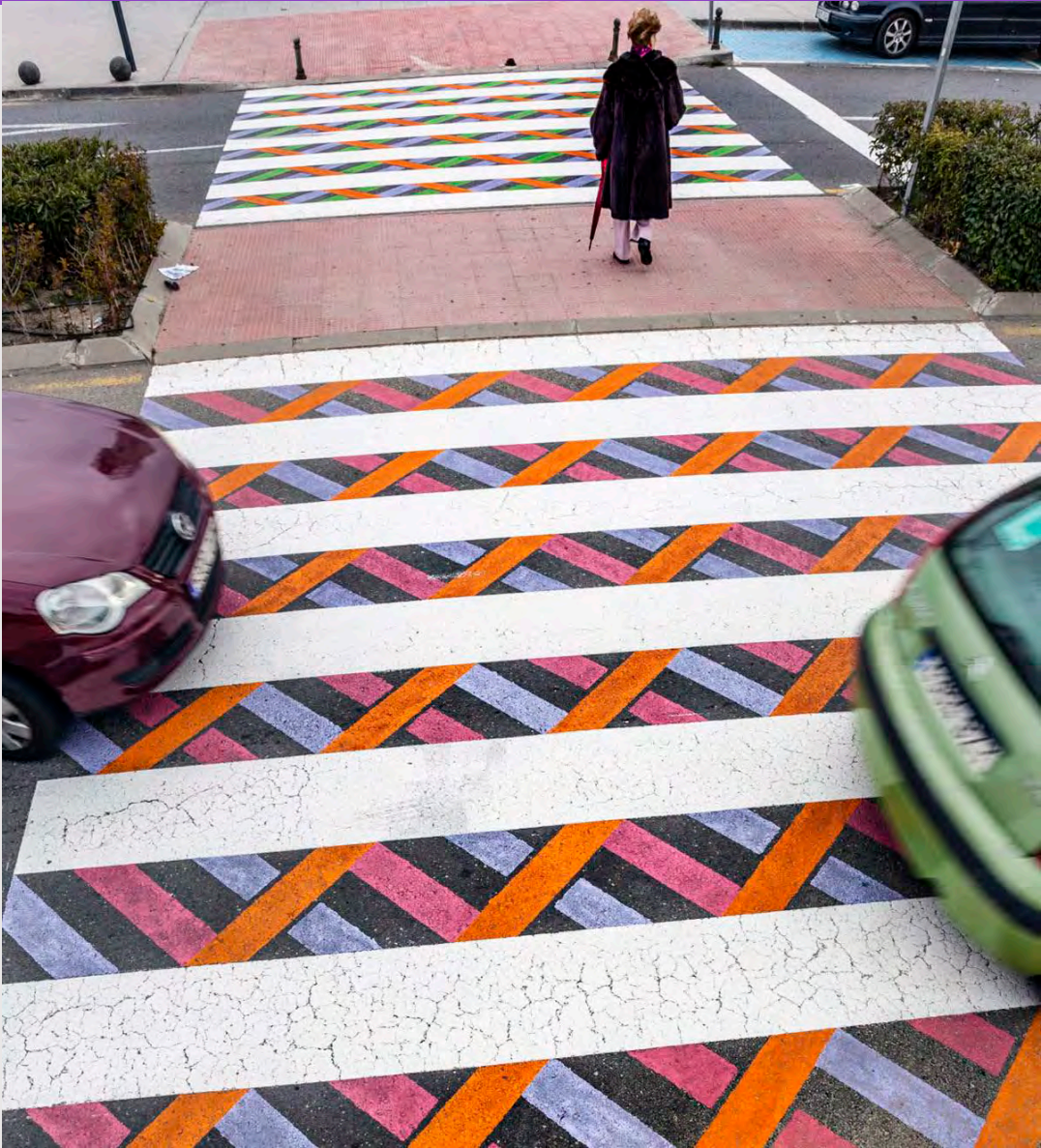
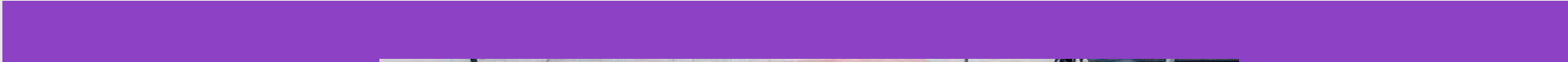
© Christo Guelov

Credit photo: Rafael Perez Martinez

'Carpet' Casa de Cultura



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'Fabrics' Mall 'Espacio'

© Christo Guelov Credit: photo: Rafael Perez Martinez



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Celebration





© Atelier Cruz-Diez Paris

Colchester UK



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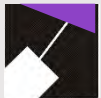
© Atelier Cruz-Diez Paris

Mexico City, Mexico



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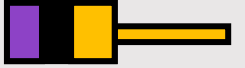


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© Roadsworth- Peter Gibson

Sardines / Fish Net / Plaza Mapuche / Due North Santiago, Chile. Hecho en Casa. 2013



Demonstration



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Austin Creative Crosswalks Pilot Program – Photo Credit Austin Texas Government



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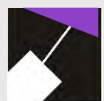
Good Location

Crosswalk

Lots of People

Low Traffic & Speed

Good Sight Lines





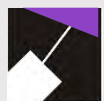
Good Design

Function

Concept

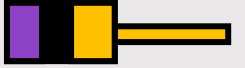
Color & Pattern

Workmanship

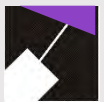


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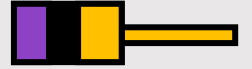


Key Steps



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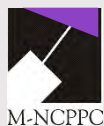
M-NCPPC



Permissions

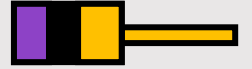
Department of Public Works

Collaborate



The Montgomery
County Planning
Department

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Options

- 1. Follow Rules**
- 2. Pivot**
- 3. Persevere**

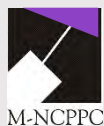




Pivot - Austin

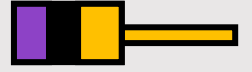


Source: City of Austin

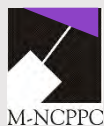


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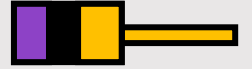


Persevere-Fort Lauderdale



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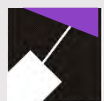
Strategy to Sell It

Purpose+

Images

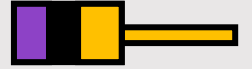
Collaborate Public Works

Champion

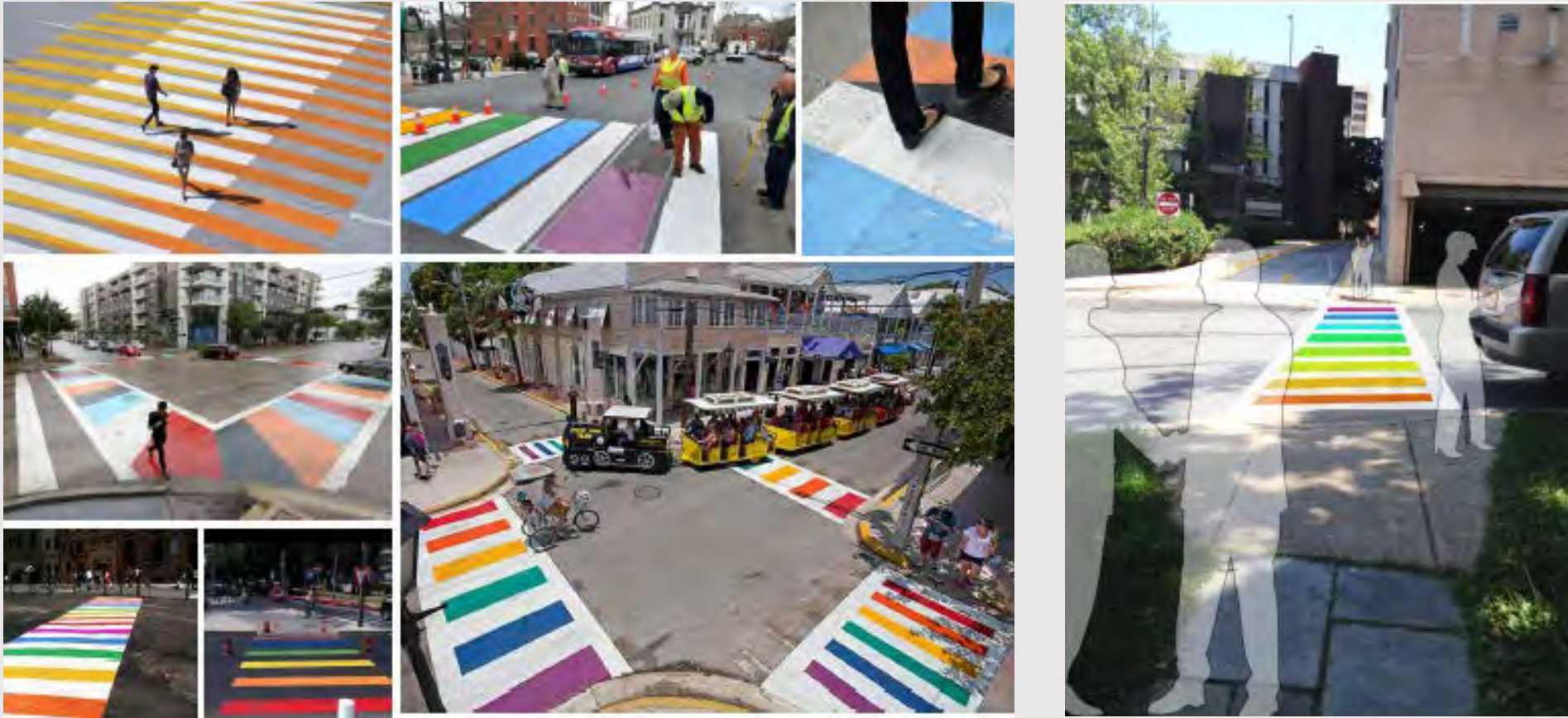


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County Planning
Department

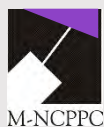
M-NCPPC



Images

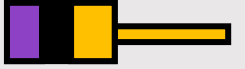


© Mike Bello

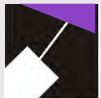


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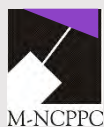
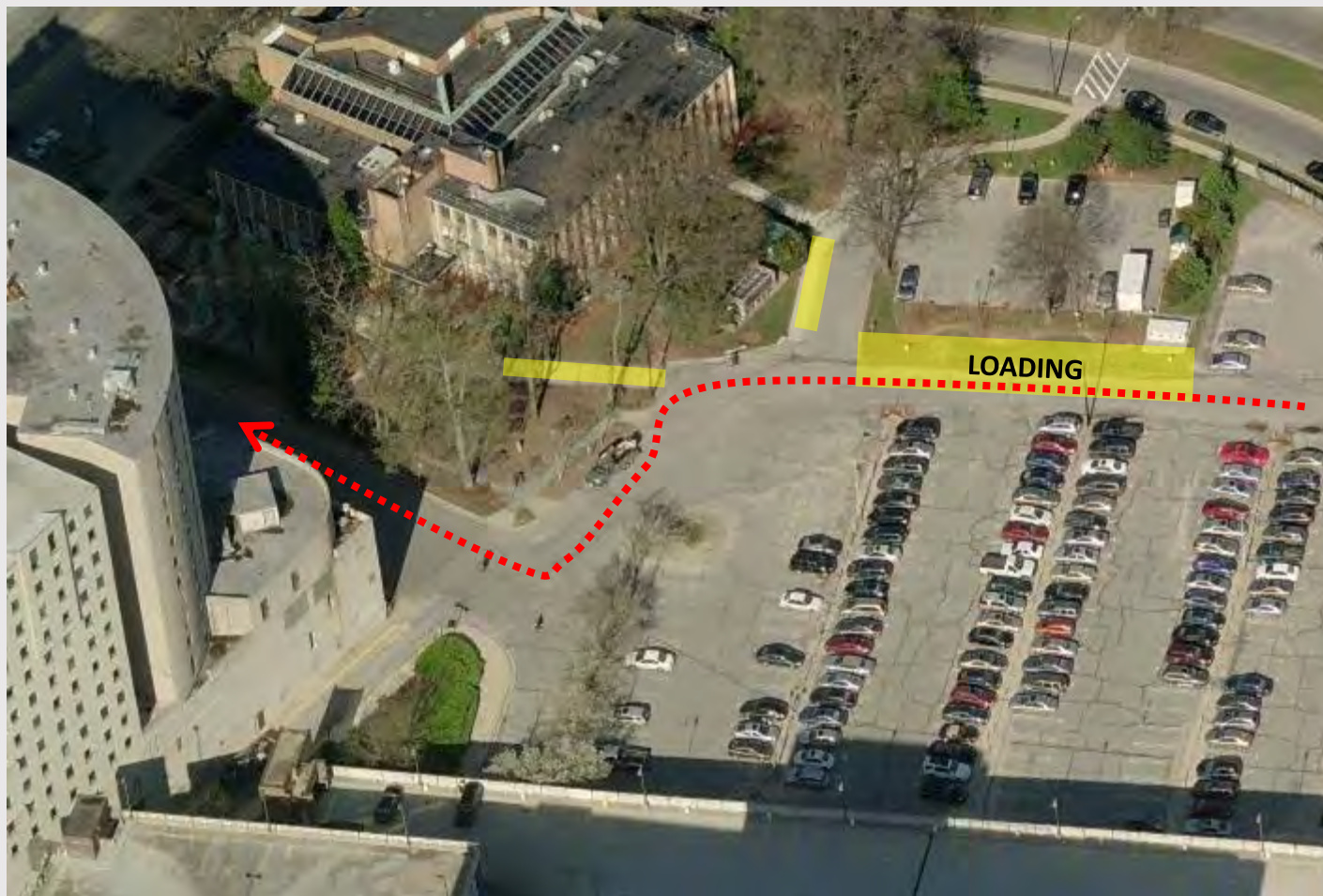
M-NCPPC



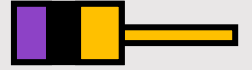
Path



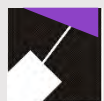
Loading



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County Planning
Department



Test



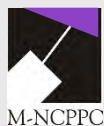
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Paint

2 Coats
Custom
Shark Grip



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Posts

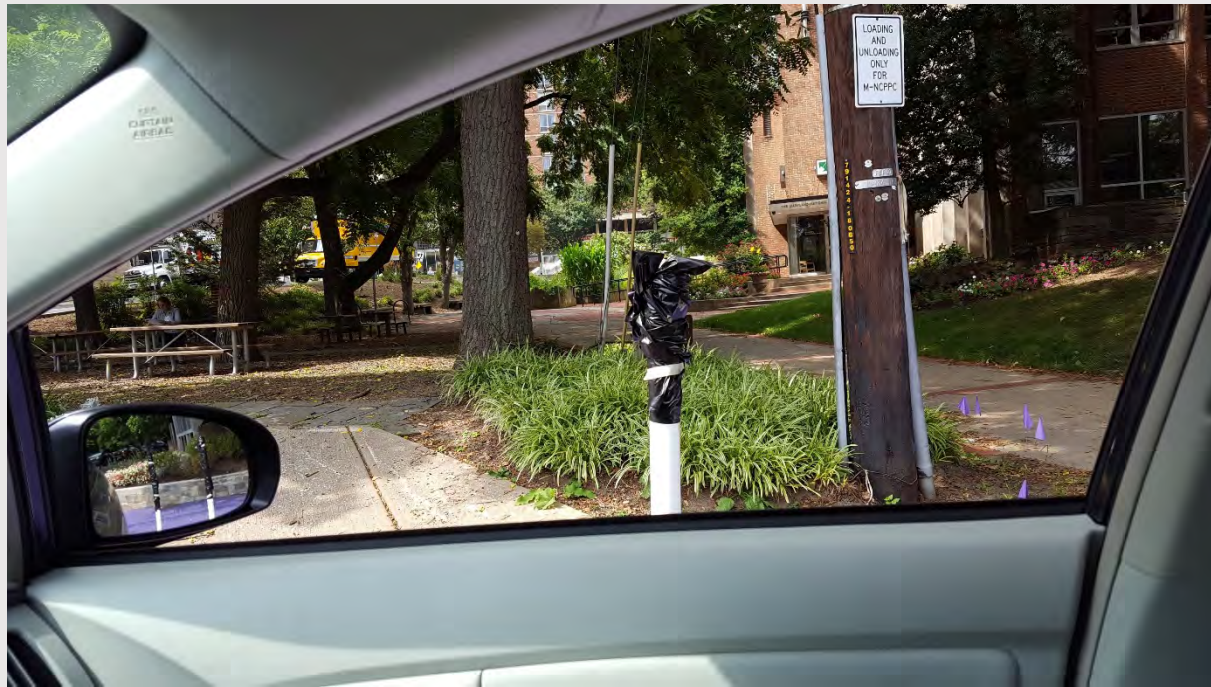
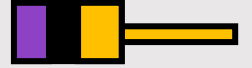
- Channelizers
- Twist Lock Base



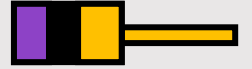
Height 48"



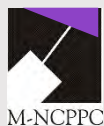
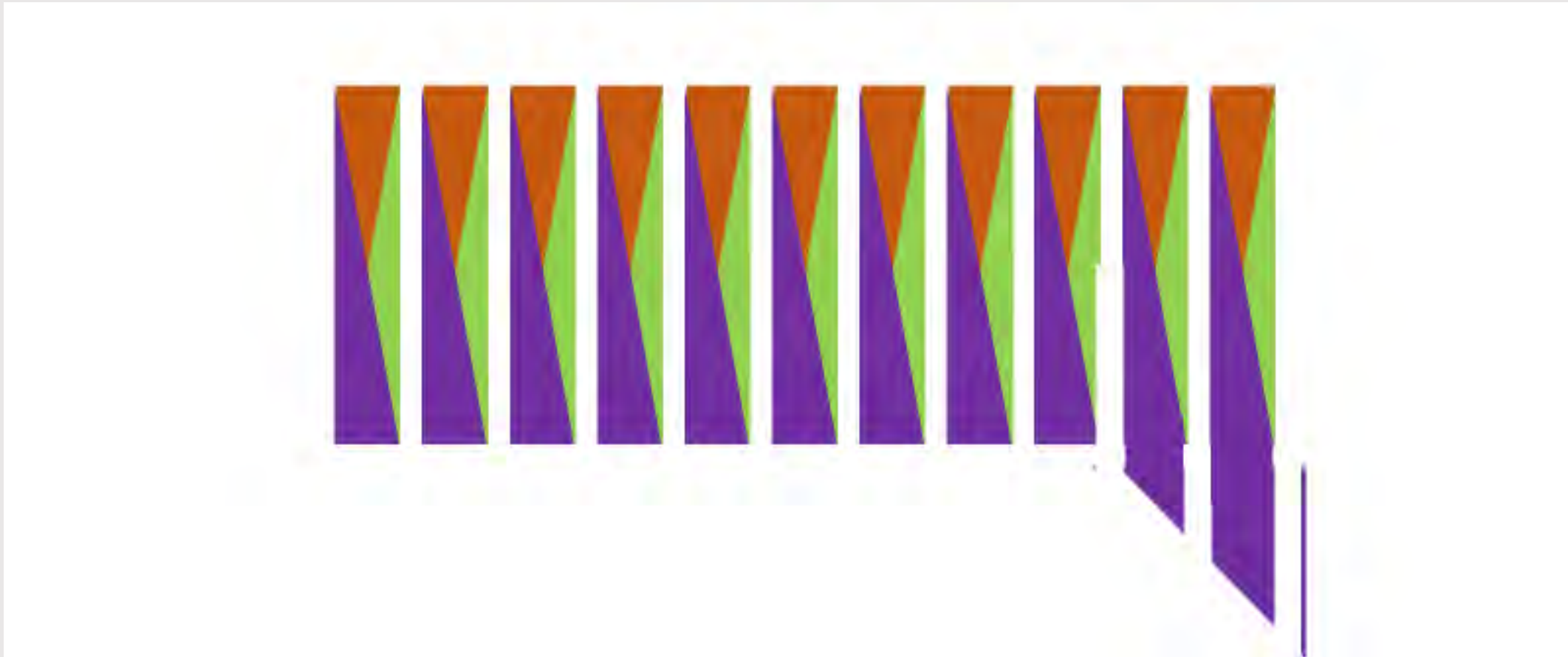
Testing



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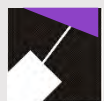
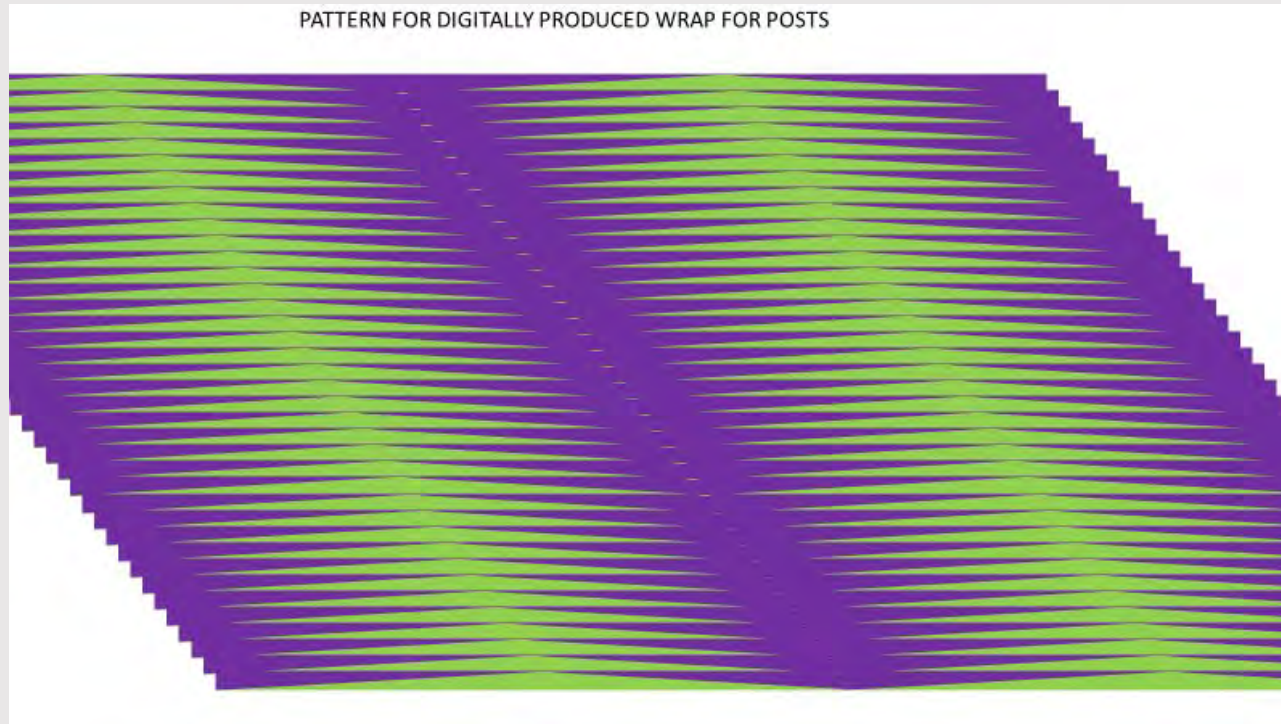
Pattern



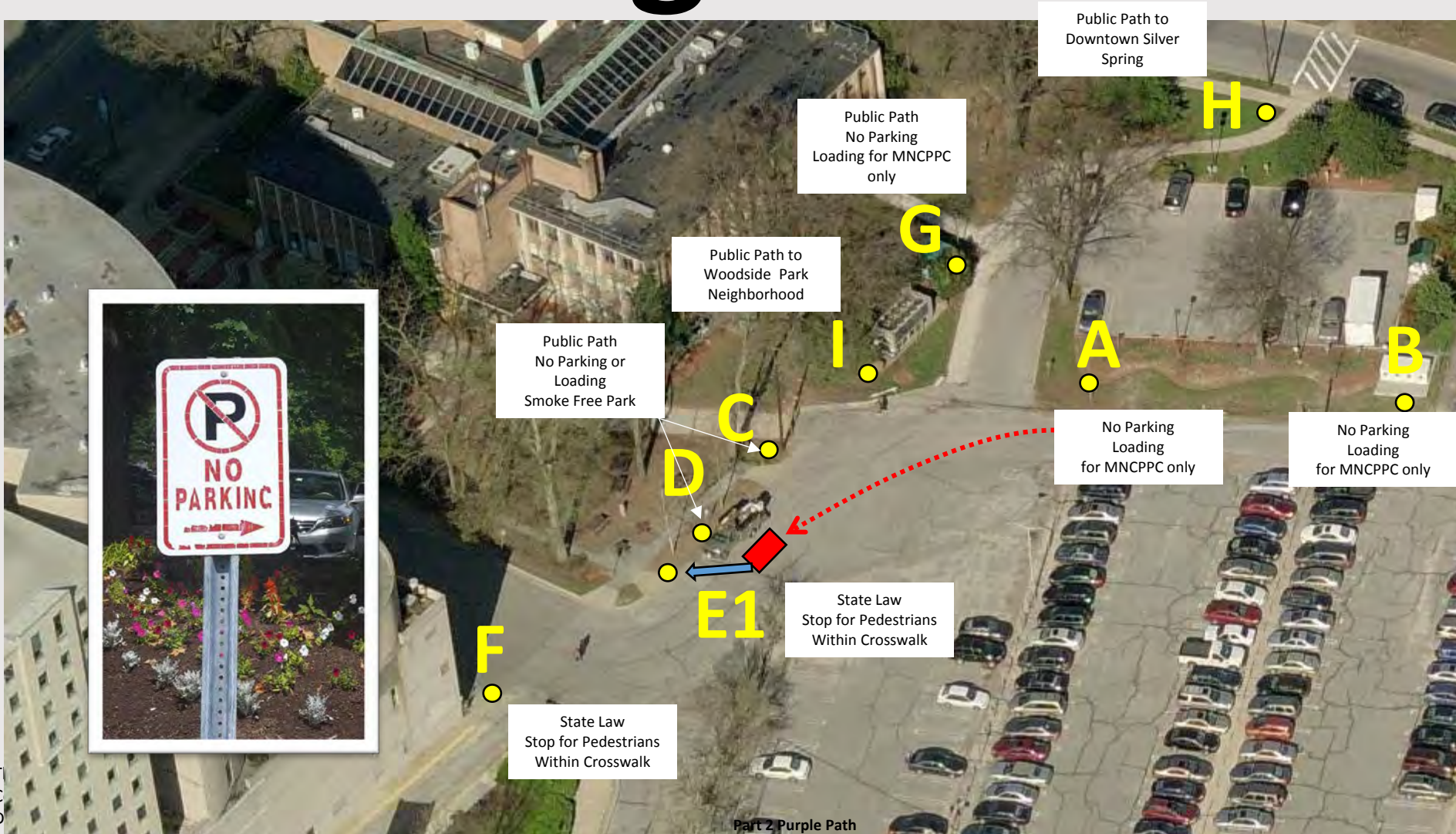


Wrap

PATTERN FOR DIGITALLY PRODUCED WRAP FOR POSTS



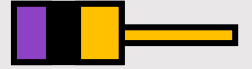
Signs





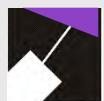
Options

- 1. Follow Rules**
- 2. Pivot**
- 3. Persevere**



Web Search

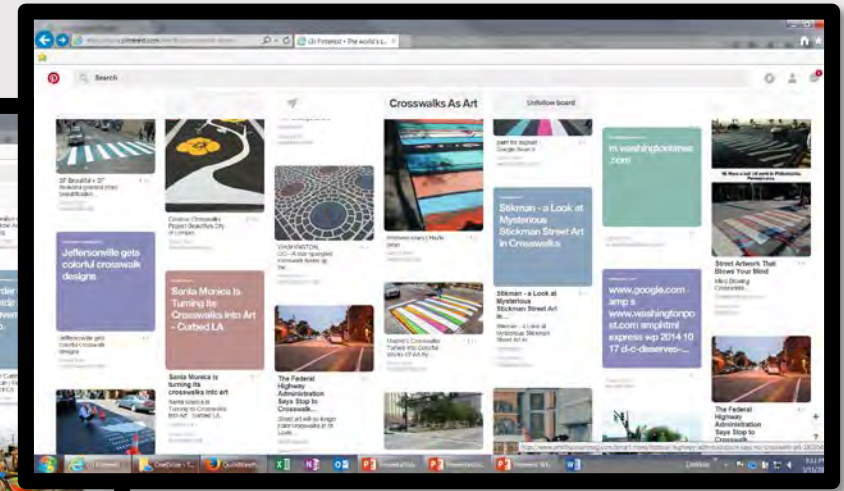
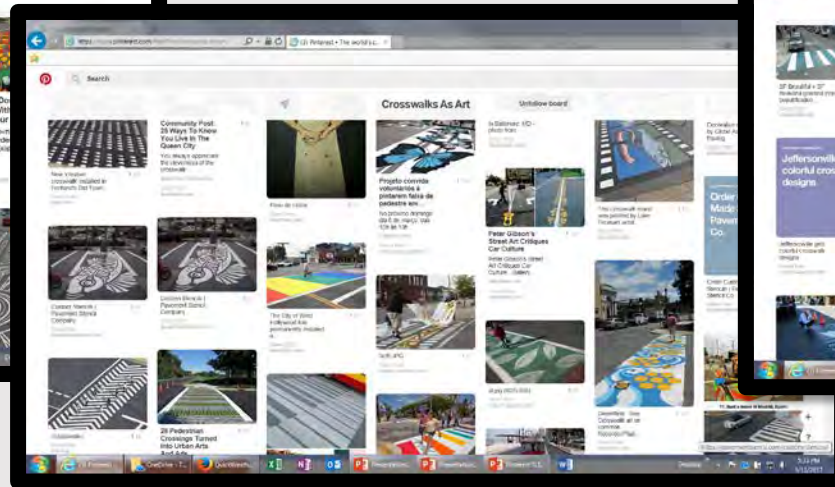
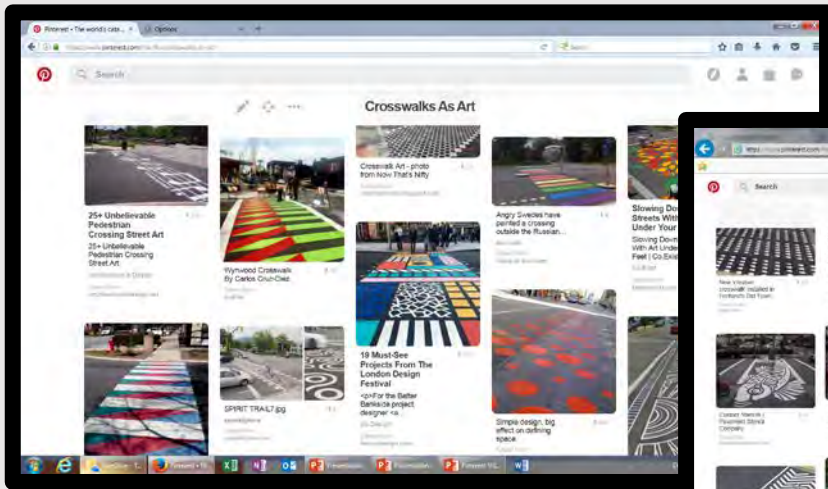
Montgomery Planning People & Pavement



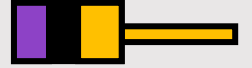


Pinterest

Margaret K. Rifkin RLA AICP



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American Planning Association
**Urban Design and
Preservation Division**

Making Great Communities Happen



APA's National Conference 2017



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Webinars

6/30 Creative Commons

Michael W Carroll, American U. Law School

7/7 Placemaking & Public Art

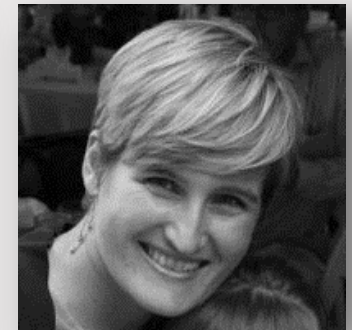
Paula Rees, Foreseer

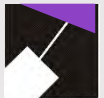
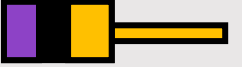
9/15 Smartphone Photography

Elody Crimi, Maryland Photographic Workshop

11/3 Path as Place

Cindy Zerger, Toole Design Group

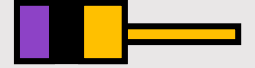




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Crosswalk



BETHESDA | CHEVY CHASE | GAITHERSBURG | KENSINGTON | NORTH BETHESDA | POTOMAC | ROCKVILLE

Planning Department Paints a Pathway to Help Pedestrians in Silver Spring

Planners used 50 gallons of paint for crosswalk and path through busy parking lot

BY AARON KRAUT



Published: 2016.06.28 09:47

Updated at 10:20 a.m.

- Montgomery County planners said they witnessed too many dangerous situations involving drivers, bikers and pedestrians in the large parking lot and entry road just outside their Silver Spring headquarters.



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County Planning
Department



Tactical Urbanism:

People and Pavement

APA | MAY 7, 2017

STREETPLANS

MIAMI

SAN FRANCISCO

NEW YORK

WE'RE A PLANNING, DESIGN, AND RESEARCH-ADVOCACY FIRM

Better Streets, Better Places

- Transportation Planning + Design
- Engineering
- **Placemaking + Tactical Urbanism**
- Urban Policy Development
- Urban + Architectural Design
- Public Outreach / Involvement
- Web Design
- Education | Training | Workshops
- Research-Advocacy



Tactical Urbanism

“

...city planning lacks **tactics**
for building cities that work
like cities...

”

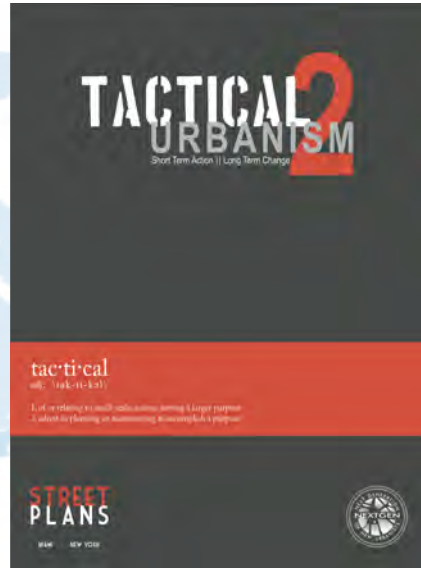
- Jane Jacobs
Author: The Death and Life of Great American Cities

Tactical Urbanism

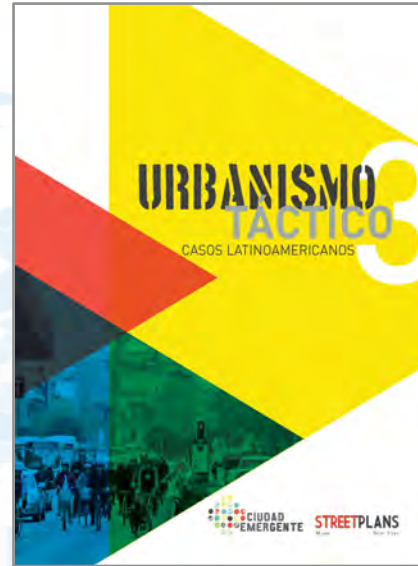
A city, organizational, and/or citizen-led approach to neighborhood building using short-term, low-cost, and scalable interventions intended to catalyze long-term change.



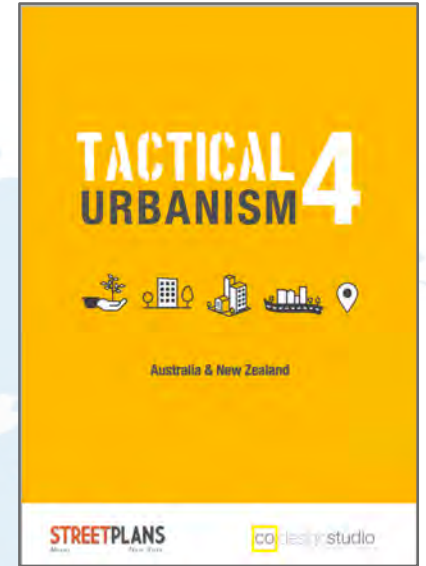
2011



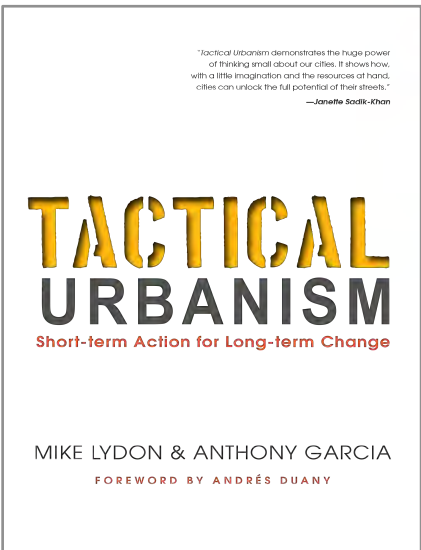
2012



2013



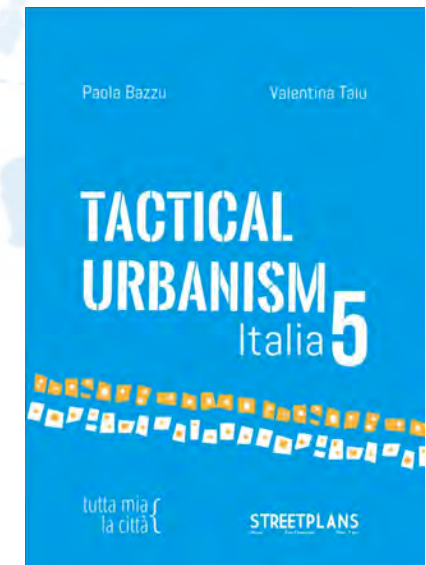
2014



2015



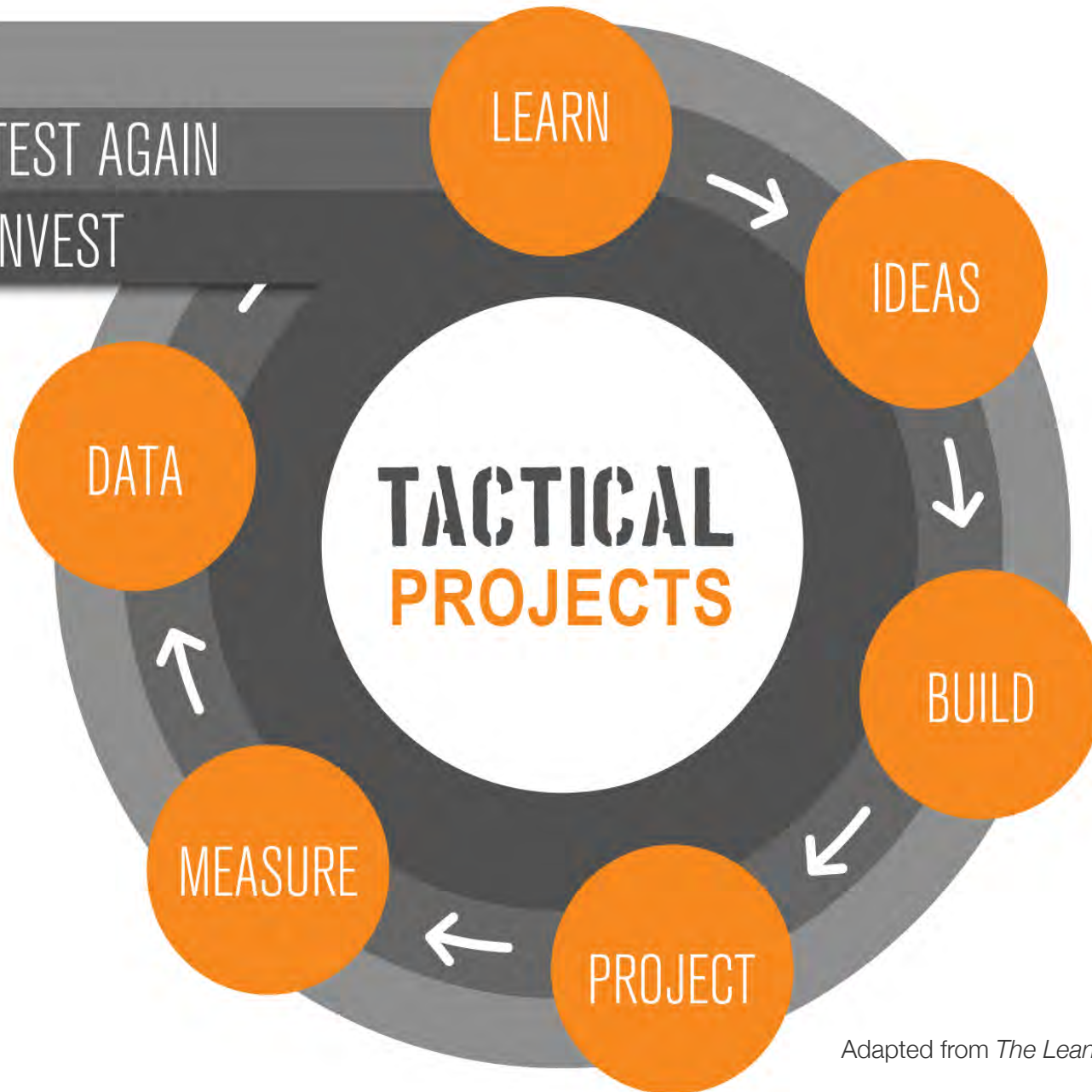
2016



2017

BUILD, MEASURE, LEARN

TEST
PLAN, TEST AGAIN
PLAN, INVEST



Why Tactical Urbanism?

- ✓ **Encourage people to work together in new ways**, strengthening relationships between residents, local organizations, and government agencies.
- ✓ **Allow people to physically experience a different reality** – A great way to re-imagine how streets and public spaces could be used.
- ✓ **Widen public engagement**. Take ideas from paper to pavement, and gather data from the real-world users of streets and other public spaces
- ✓ **Test aspects of a program, project or plan** collect data and learn what works before making large political / financial investments.
- ✓ **Deliver public benefits faster** by expediting project implementation

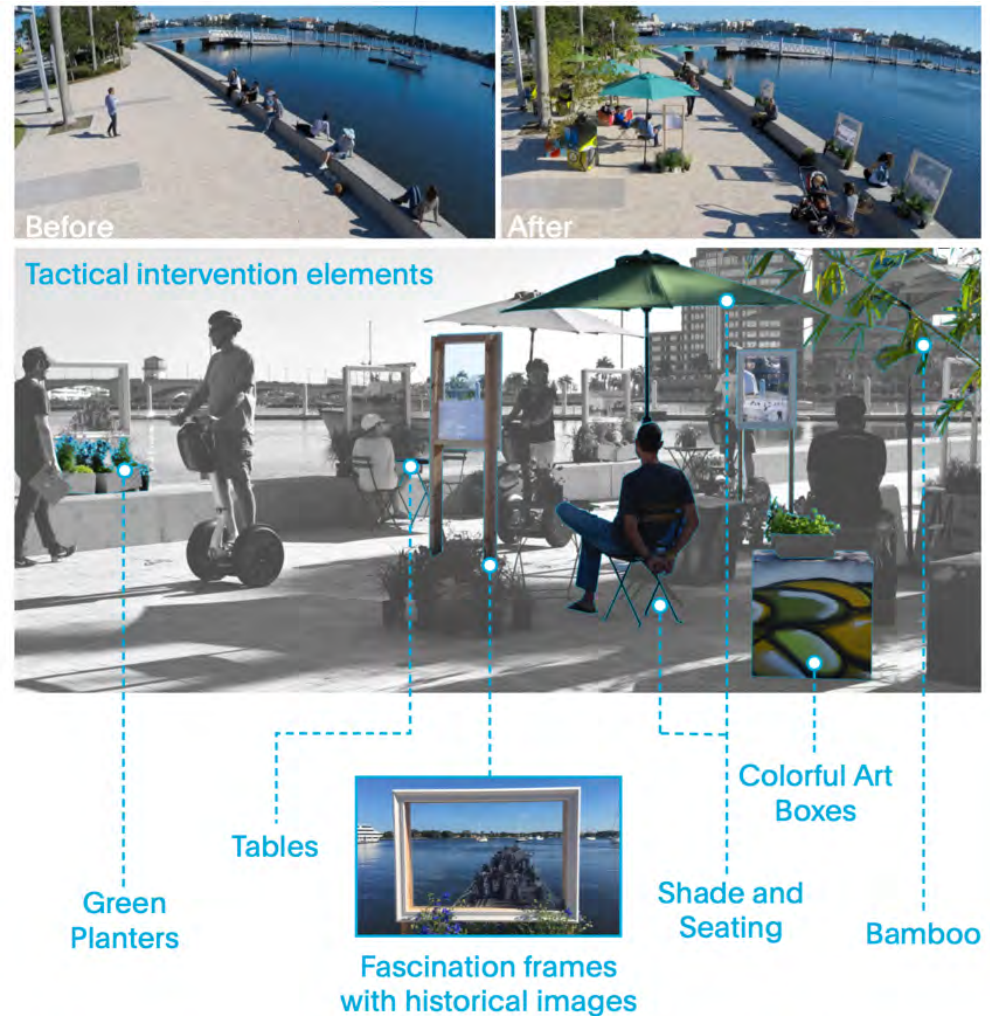
A high-angle photograph of a park or plaza. A person in a dark jacket and jeans is walking away from the camera on a dirt path, carrying a red and white bag. The path is bordered by green grass and young trees. To the right, a paved walkway with a grid pattern runs parallel to the dirt path, featuring a black lamppost and a wooden bench. In the background, there are more trees, a fence, and a building with a red sign. The scene is brightly lit, suggesting a sunny day.

User experience

Design

We've Learned Two Key Things

1. City departments and citizens/advocacy groups are really hungry for a new approach to civic engagement and project delivery.
2. Cities and citizens need policies, programs, design, and materials guidance that enable cities and citizens to undertake Tactical Urbanism projects.



I. What Are the Best Materials?



North Side Greenway Demonstration Project Materials Recommendations

Item ID: A08



FREELAND 100 GAL. CORRUGATED STOCK TANK

Size: 4 ft. L x 2 ft. W x 2 ft. H

Cost Per Unit: \$81.99

Design: Heavy 20 ga. galvanized steel sides & bottom

Notes:

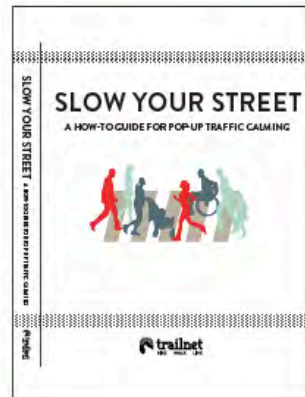
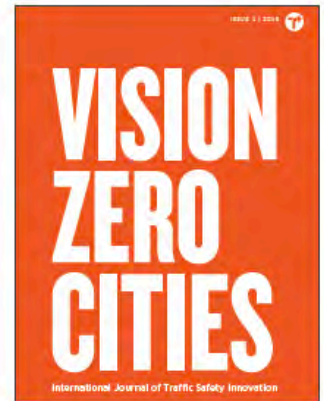
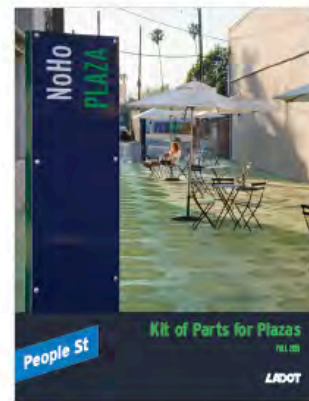
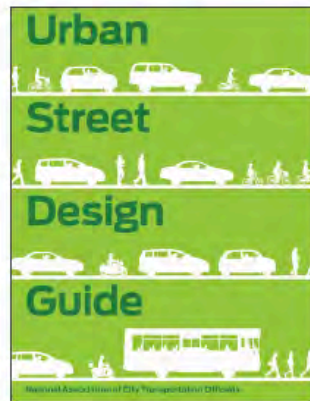
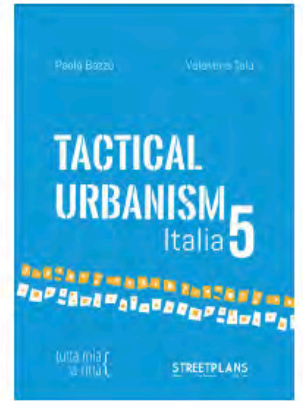
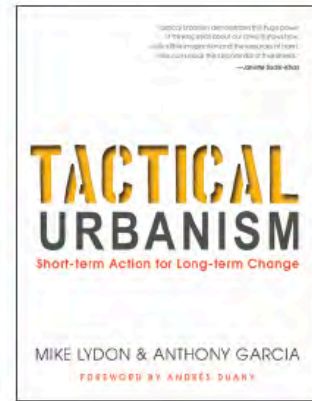
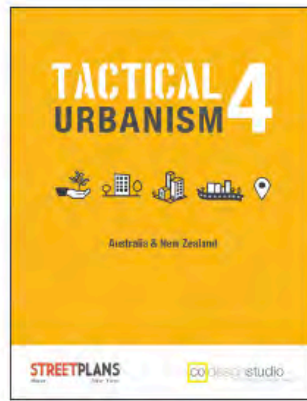
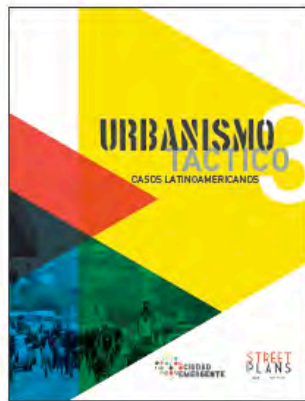
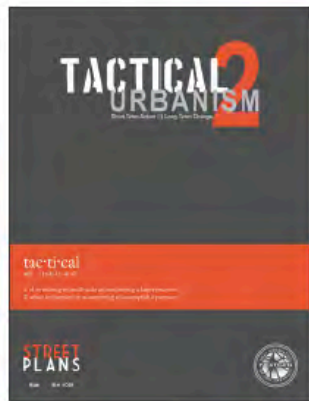
Stock tanks for use as a planter. Double-locked bottom seam has four thicknesses of galvanized steel / 1 in. steel tube top for long-lasting strength. Smooth crush-proof rim. Fully welded side seam. 3/4 in. drain flange
Weight: Approximately: 50 pounds / Shipping Dimensions: Approximately 24 x 48 x 24 inches. (LTL truck)

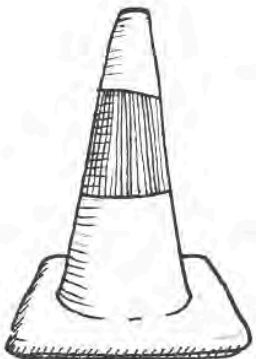
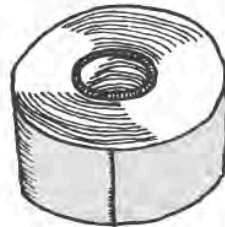
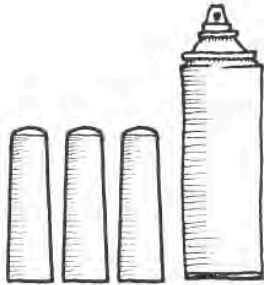
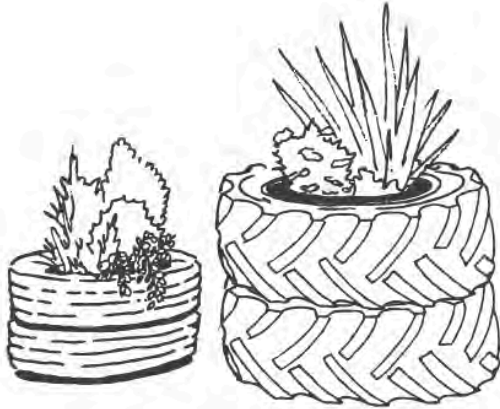
Reference link: <http://www.fleetfarm.com/detail/freeland-100-gal-corrugated-stock-tank/0000000033242>

2. How Do We Get Government Onboard?



3. Where Is The Design Guidance?





TACTICAL URBANIST'S GUIDE TO MATERIALS AND DESIGN **VERSION 1.0**

DECEMBER 2016 | CREATED BY THE STREET PLANS COLLABORATIVE, WITH FUNDING FROM THE JOHN S. AND JAMES L. KNIGHT FOUNDATION

Iterative Project Delivery

				
	DEMONSTRATION (1 day - 1 month · \$)	PILOT (1 month- 1 year · \$\$)	INTERIM DESIGN (1 year - 5 years · \$\$\$)	LONG-TERM/CAPITAL (5 years - 50 years · \$\$\$)
Project Type (time interval · relative cost)				
Project Leaders	Can be led by anyone (city, citizen group, or both!)	Government / organizational leadership + involvement required	Government / organizational leadership + involvement required	Government / organizational leadership + involvement required
Permission Status	Sanctioned or unsanctioned	Always sanctioned	Always sanctioned	Always sanctioned
Materials	Low-cost, typically low-durability. Can be borrowed or easily made	Relatively low-cost, but semi-durable materials	Low-moderate cost materials, designed to balance flexibility with maintenance needs	High-cost permanent materials that cannot easily be adjusted
Public Involvement	Public input + public action	Public input, champion engagement, government / organizational stewardship	Public input, government / organizational stewardship	Public input, government / organizational stewardship
Flexibility of Design	High: organizers expect project to be adjusted and removed.	High: organizers expect project to be adjusted; it may be removed if it does not meet goals	Moderate: organizers expect project to be adjusted, but it is intended to remain in place until capital upgrades are possible	Low: project is considered a permanent capital upgrade that is unlikely to be adjusted significantly once installed
Collect data to refine approach for current or future projects?	Recommended	Always	Always	Always - project performance can inform future investments

A FLEXIBLE PALETTE OF MATERIALS

This chapter presents a palette of materials — a toolbox that can be used for rapidly deploying projects and testing ideas in your city’s streets. We’ve grouped materials by their function, providing ideas for:

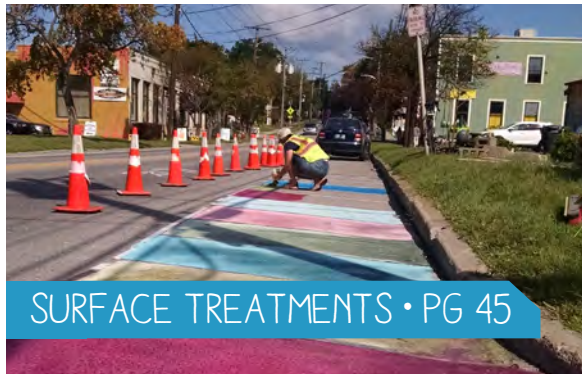
- Barrier Elements
- Surface Treatments
- Street Furniture
- Landscaping Elements
- Signs
- Programming

Grouping materials by function is intended to embrace the resourcefulness and creativity that is inherent to Tactical Urbanism projects while also providing engineering level criteria for practitioners. Unique, locally sourced materials may be available to fill the same functions as the commonly-used items listed here. Where that is the case, opt for locally sourced materials that reflect your community!

Within each function category in this chapter, materials are presented as material spec sheets, arranged from the least to most durable, across the following time intervals:

- Demonstration project (lasting 1 day - 1 month)
- Pilot project (1 month - 1 year)
- Interim design project (1 year - 5 years)

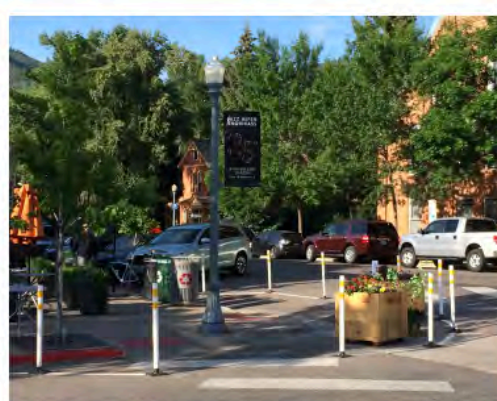
For more detailed definitions of each of these project phase time intervals, turn back to page 14.



Top left: By NYCDOT, all other images by Street Plans.

BARRIER ELEMENTS: SUB-CATEGORIES

POSTS + CYLINDERS.....	PG26
SOLID BARRIERS.....	PG30
PLANTERS.....	PG34
CURBING.....	PG39



Photos left to right: A Berkeley, CA Protected bikeway demonstration project using cardboard cylinders and a galvanized steel planters (East Bay Bike Coalition - see pages 29 and 39 for more info); A New York City parklet (Street Plans); A pilot curb extension with wooden planters in Aspen, CO (Charlie Simpson); Interim design protected bikeway in Long Beach, CA (Street Plans).

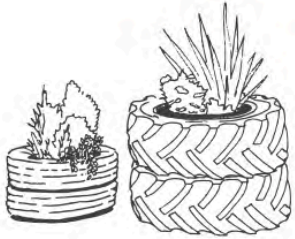
A NOTE ON BARRIERS

Everyday, cities around the country are testing out new materials to create physical and / or visual barriers between motor vehicles and people who are walking, biking or socializing in newly reclaimed asphalt space.

The appropriate barrier element will depend on your project type, time interval, and goals — the chart to the right provides a high-level list of criteria to consider when choosing a barrier. For more detailed guidance on comparing barrier elements, as well as tools to help you evaluate and field test barrier options.

BARRIER SELECTION CRITERIA	
Safety	Safety for All Street Users (walking, cycling, driving, wheeling etc.)
	Enhances Safety/Comfort for People of All Ages and Abilities
	Traffic Calming (Will help slow motor vehicles)
Planning + Design	Reflectivity
	Dimensions (Meets project requirements)
	Aesthetics (Considering local context, potential damage over project duration)
	Availability / Ease of Procurement
	Accessibility (ADA compliance, transit, trash collection, street sweeping snow removal, emergency vehicle access etc.)
	Cost
Maintenance	Construction Impacts / Ease of Installation
	Storm Water Impacts
	Stewardship Partner(s) (Example: an organization to water planters)
	Durability

TIRE PLANTERS



Typical Dimensions: (avg. diameter on tires for compact cars) 15/17", (average section height) 6/8"

Estimated Cost: Donated/borrowed

Overview: Used tires can be stacked and used to create planters

► Demo (1 day-1 wk.)

Pilot (1 month - 1 yr.)

Interim (1-5 yrs.)

Recommended Applications and Installation

- **Bike Lanes:** May be used to create a curb line or barrier
- Many other projects. Need to fill in.

Tips and Considerations

- » Pile at least 3 high to give physical sense of barrier/protection from traffic
- » Paint to improve aesthetics
- » Easy to source: Low-cost, recycled tires can be found for donation.
- » Easy to stack/store and move

Potential Sources

- » Borrow from auto supply store, junk yard

DIY CUSTOM WOOD PLANTERS



Typical Dimensions: avg. 15" high, 15" wide, length 2/4'

Estimated Cost: \$600 for 15 plywood planters

Overview: Large home made planters designed to create a barrier for pop-up protected bike lanes.

► Demo (1 day-1 wk.)

Pilot (1 month - 1 yr.)

Interim (1-5 yrs.)

Recommended Applications and Installation

- **Bike Lanes:** Place along edge to create continuous curb. Allow gaps for storm water flow.
- Plaza?

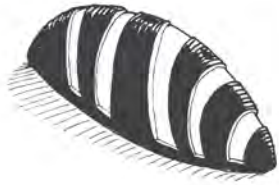
Tips and Considerations

- » Cheap and easy to build
- » Can be heavy/difficult to lift and transport

Potential Sources

- » Purchase supplies from local hardware store and create

ARMADILLOS



Typical Dimensions: Available in 3 and 5" length sizes, Requires 1.5ft of width for buffer area.

Estimated Cost: \$40-50 per unit, depending on size and quantity ordered.

Overview: Low, mountable plastic bump that can be used to achieve a curb-like barrier effect.

Demo (1 day-1 wk.)

▶ Pilot (1 month - 1 yr.)

▶ Interim (1-5 yrs.)

Recommended Applications and Installation

▶ **Bike Lanes:** Place cones along edge of lane, 1 every 5-8 ft. Installation does not require specialized equipment. Simply drill holes and install. A team of three people can install about 100 meters in a day. The product's pre-sunk bolt holes can accommodate anchors of various sizes.

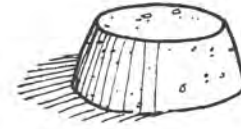
Tips and Considerations

- » Easily Installed and removed.
- » Durable and mountable for emergency vehicles, city service vehicles, etc.
- » Minimal/no stormwater obstruction.
- » Set armadillos at an angle to allow cyclists to cross barrier if necessary.
- » Low visual profile can lead to a decreased perception of safety for people walking or biking.
- » Manufacturer recommends using mechanical anchors with chemical adhesives. Plastic mechanical anchors are not recommended.

Potential Sources

- » Purchase from traffic control or construction equipment suppliers.

CONCRETE "TURTLE" BUMPS



Typical Dimensions: Require 1.5 ft. of width.

Estimated Cost: \$3-5/ft. (\$15k-\$30k/lane, per mile)

Overview: Often used as barrier near light rail tracks, these low, mountable bumps can be used to achieve a curb-like barrier effect.

Demo (1 day-1 wk.)

▶ Pilot (1 month - 1 yr.)

▶ Interim (1-5 yrs.)

Recommended Applications and Installation

- ▶ **Bike Lanes:** Place cones along edge of lane, 1 every 5-8 ft. Affix to pavement using chemical adhesives such as epoxy.
- ▶ **Curb Extensions and Plazas:** May be combined with planters or other barrier elements to define the edge of a plaza or curb extension. Affix to pavement using chemical adhesives such as epoxy.

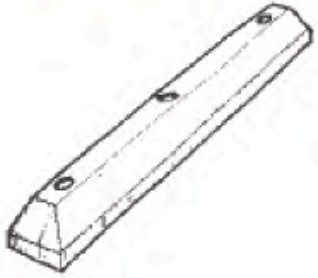
Tips and Considerations

- » Note that installation/set time will be impacted by weather and temperature. Buttons should be allowed to fully set before sustaining any impact.
- » Durable and mountable for emergency vehicles, city service vehicles, etc.
- » Minimal/no stormwater obstruction.
- » Low visual profile can lead to a decreased perception of safety for people walking or biking.

Potential Sources

- » Purchase from traffic control or construction equipment suppliers.

PARKING STOPS



Typical Dimensions: Length varies. 3/4/6/8 ft. long x 5.75 in. wide x 4 in. tall. Require 6 in. of width to install

Estimated Cost: \$45/unit

Overview: Low, mountable rubber or concrete curb that can be bolted to pavement and used as barrier.

Demo (1 day - 1 week)

▶ Pilot (1 month -1 year)

▶ Interim (1 - 5 years)

Recommended Applications and Installation

- ▶ **Bikeways:** Place along edge to create continuous curb. Allow gaps for storm water flow and curbside pedestrian access.
- ▶ **Roundabouts:** May be used to demarcate roundabout area, in conjunction with signs and other visual cues. (See Palo Alto Case Study for more.)

Tips and Considerations

- » Easily installed and removed - bolted to street surface.
- » Low profile may present a trip hazard; add reflective tape in high-use areas.
- » In most configurations, rubber curb stops will limit cyclist ability to cross over the barrier. Should only be used in places where this activity is not anticipated.
- » Not designed to be driven over on a regular basis. Can pose challenges for trash collection and other curbside services.

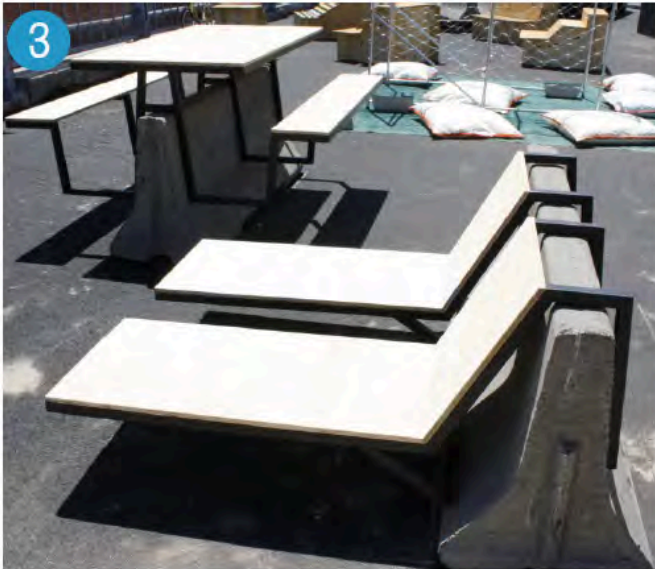
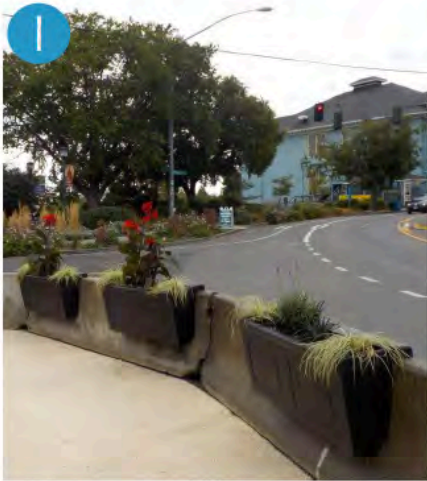
Potential Sources

- » Existing city public works or parks department inventory.
- » Purchase from traffic control or construction equipment suppliers.





PRO TIP: HACKING THE JERSEY BARRIER



Concrete jersey barriers are a common material for interim design public space, bikeway, or other street safety projects. To softening the harsh concrete look of a raw barrier, try to:

- 1 Add planters specially designed to sit on top of a concrete jersey barrier (see page 40 for more info).
- 2 Add public art. NYC DOT has successfully used jersey barriers as a canvas to integrate public art into interim-design bikeway projects
- 3 Create a seat, table, or shade canopy!

Top left: Sybertech self-watering planters used at a 2015 Pavement to Parks project at Phinney Avenue North at North 67th Street in Seattle (Sybertech). Top right: NYC DOT Barrier Beautification Program (NYC DOT). Bottom: Jersey barrier turned bench (lepamphlet.com).

PROJECT APPLICATION CASE STUDIES

This chapter presents case studies to illustrate how the materials palette can be applied.

Case studies are grouped by project type, presenting examples of applications for pedestrian crossings, bikeways, intersections, and other public space types.

Within each project type sub-section of the chapter, case studies are arranged by time interval providing examples of applications for:

- Demonstration projects (lasting 1-7 days)
- Pilot projects (30 days - 12 months); and
- Interim-design projects (12 months - 5 years)

For more detailed definitions of each of these project phase time intervals, see page 14.

For more case studies and project types, visit our blog at: tacticalurbanismguide.com

Photos left to right: Pop-up crossing treatments in Portsmouth, NH (Street Plans) | Pop-up planter-protected bike lane in Atlanta, GA (Street Plans) | Pilot neighborhood traffic circle (City of Palo Alto, Josh Mello. See page X for case study.) | Sunset Triangle Plaza (Los Angeles, Alyssa Walker)



PEDESTRIAN CROSSINGS

CROSSWALKS + MEDIANS.....	PG86
CURB EXTENSIONS.....	PG92



BIKEWAYS

VARIOUS: OVERVIEW.....	PG99
------------------------	------



INTERSECTIONS

MINI ROUNDABOUT.....	PG108
PROTECTED INTERSECTION.....	PG#



OTHER PUBLIC SPACES

PLAZAS.....	PG115
ALLEYS.....	PG122

CROSSWALKS & MEDIANS

Safe and frequent crossings are a basic ingredient of walkable streets. The NACTO Urban Street Design Guide notes that frequent crossings reinforce walkability and even have the potential to fuel greater demand for walking. This page provides high-level design considerations and materials categories for conventional crosswalks, mid-block crossings, and median refuge islands.

DESIGN CONSIDERATIONS

The NACTO Urban Street Design Guide provides detailed information about design considerations for crosswalks and crossings, including:

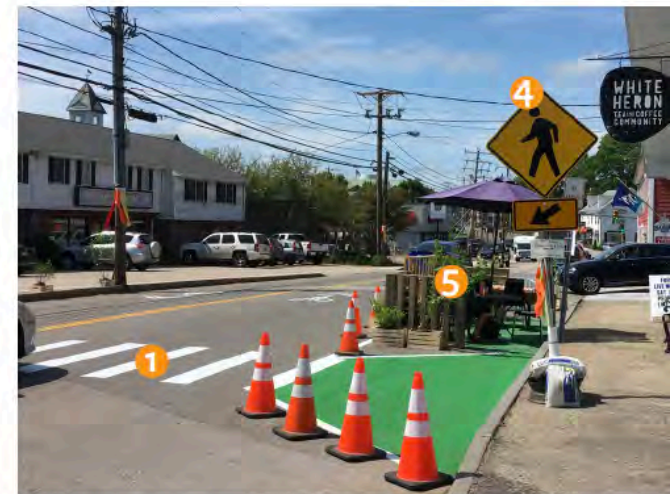
- Crosswalks
- Median refuge islands
- Mid-block crossings

When deciding if a crosswalk is needed consider the following Guidance from NACTO:

“Judgment on the application of a crosswalk should be based on multiple factors, including land uses, present and future demand, pedestrian compliance, speed, safety, and crash history. Volumes alone are not enough to determine whether or not a particular device should be used.”

COMMON MATERIALS CATEGORIES

- 1 SURFACE TREATMENTS:** Required striping (such as solid white lines or zebra stripes) serve to define the crosswalk. Colored treatments can also be added - art crosswalks integrate creative designs to calm traffic and reflect neighborhood identity.
- 2 BARRIER ELEMENTS:** Median refuge islands feature a curb or barrier-protected area between travel lanes to provides people crossing the street with a safe place to wait mid-way through the crossing.
- 3 LANDSCAPING ELEMENTS:** Medians may integrate landscaping to green and beautify the street. Planters can double as barriers.
- 4 SIGNS:** The MUTCD provides detailed guidance on required signs, which may include “pedestrian crossing” signs, stop signs, or others.
- 5 STREET FURNITURE:** Seating may be a desirable amenity for large medians in areas with high volumes of pedestrian activity.



Above: A median refuge made out of straw wattle, hay bales, and flowers improve the walking (and rolling!) experience in Ponderay, ID (Street Plans). Below: A new crosswalk and curb extension improved the visibility of people walking along Portsmouth, NH's Islington Street (Street Plans).

TYPICAL DIMENSIONS CHEAT SHEET

- 1 CROSSWALK WIDTH:** Crosswalk should not measure less than 6 ft. wide.
- 2 PARALLEL CROSSWALK LINES:** Parallel white boundary lines for crosswalks should measure greater than 6 in. and less than 24 in.
- 3 CONTINENTAL CROSSWALK STRIPING:** Diagonal or longitudinal continental or “zebra” striping lines should be 12 - 24 in. wide and spaced 12 - 36 in. apart.
- 4 MEDIAN REFUGE DIMENSIONS:**
 - ▶ **Width:** Desired width of median is 10 ft. or greater. (Absolute minimum is 6 ft.)
 - ▶ **Length:** Length of median refuge should be 6 ft. or greater.
 - ▶ **Height:** Median should be at curb level, approximately 4 in. - 6 in. high.
- 5 BIKE-FRIENDLY MEDIANS:**
 - ▶ **Width:** Island should be wide enough to accommodate 2-way bicycle traffic.
 - ▶ **Length:** Length of median refuge should be 6ft or greater.
 - ▶ **Height:** If used exclusively for bicycles, it may be desirable to keep refuge area at street level.



Above: Refreshing a faded crosswalk in Ponderay, ID (Strong Towns). Below: 12 in. wide strips of traffic tape and green spray chalk are used to create a crosswalk and traffic diverter along SE A Street in Bentonville, AR (Megan Sebeck).

COMMUNITY CROSSWALKS

Demonstration ▶ Interim Design

Project Type: Community Crosswalk

Location: Seattle, WA

Sponsor Organization: United Hood Movement

Agencies Involved: Seattle Department of Transportation (SDOT)

CONTEXT

Honoring the black history and culture of Seattle's Central District, the Seattle Department of Transportation officially unveiled a community crosswalk painted with the Pan-African colors red, green, and black in February of 2016.

This creative Pan-African crosswalk was enabled by the Seattle Department of Transportation (SDOT) through the Community Crosswalks Program, an initiative that allows communities to design special painted crosswalks to represent their neighborhood. Community partners participating in the program are responsible for design and maintenance of any specialized crosswalk design. SDOT installs the crosswalk and continues to maintain the legally mandated portions of the crosswalks (the horizontal white bars) as part of normal operations.



Seattle's, WA's United Hood Movement spray painted a number of existing crosswalks in Pan-African colors (Seattle Bike Blog).

UNSANCTIONED ▶ SANCTIONED

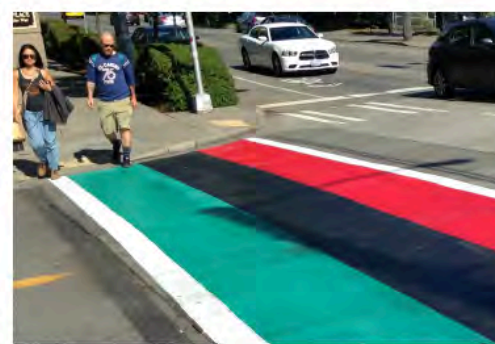
Like so many successful Tactical Urbanism projects, the Pan-African crosswalk began with a guerrilla act. Early on August 1, 2015, the United Hood Movement (UHM), a community organization supporting communities of color in marginalized neighborhoods, spray-painted four crosswalks the colors of the Pan-African flag — red, green, and black — in the Central District neighborhood. The unsanctioned project represented UHM's desire to celebrate the black history and culture of the Central District, a rapidly gentrifying neighborhood.

Though the guerrilla crosswalks caught city officials off guard, SDOT and the Mayor's office saw the situation as an opportunity to engage the community. Rather than remove the crosswalks, SDOT brought them in line with safety requirements, adding white reflective

traffic tape to the community's painted designs. Then, SDOT moved quickly to finalize a Community Crosswalks Program that had been in development, providing communities with a framework to legally design their own crosswalks.

The Pan-African crosswalk design was refined through the new program, and the ribbon-cutting for the permanent version occurred five months later. The sanctioned project honors the original design, upgrading the spray painted lines with thermoplastic meant to last 3 - 5 years.

Based on community feedback, SDOT is refining the design of the Pan-African crosswalk, changing the layout of the colors. SDOT will also add ten more crosswalks throughout the Central District. Only a few short months after the official ribbon-cutting, the planned redesign shows the quick responsiveness of SDOT to community desires.



Rather than crack down on an unsanctioned crosswalk, the Seattle Department of Transportation used it as a springboard to finalize a Community Crosswalks Program that had been in development, providing communities with a framework to legally design their own art crosswalks. The original guerrilla crosswalk design was refined through the new program, and the ribbon-cutting for the permanent version occurred five months later. The sanctioned project honors the original design, upgrading the originally spray painted lines to preformed thermoplastic (see page 56 for spec sheet) meant to last 3 - 5 years (SDOT).

LESSONS LEARNED

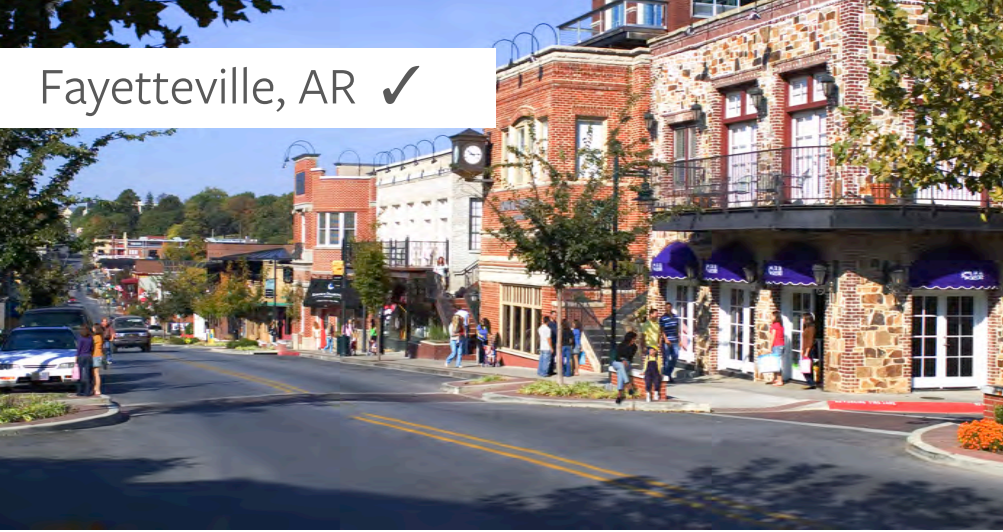
First, this case study is an example of Seattle's ability to work quickly to respond to community desires and embed placemaking into the street design process. Howard Wu, a Transportation Civil Engineer with the city of Seattle, notes that strong, citywide leadership provided an important foundation: "SDOT's Department Director Scott Kubly has looked to peer cities that are leaders in innovative approaches to street design. He encourages a nimble culture and a use of rapid implementation tactics across the Department. Seattle's Mayor also embraces this approach, so staff have the support to do this type of work."

Second, SDOT's ability to quickly formalize the Community Crosswalk Program has allowed decorative crosswalks to scale up within neighborhoods across the city. In the Central District, for example, the city plans to iterate the design of the current crosswalk even further and add ten more around the neighborhood.

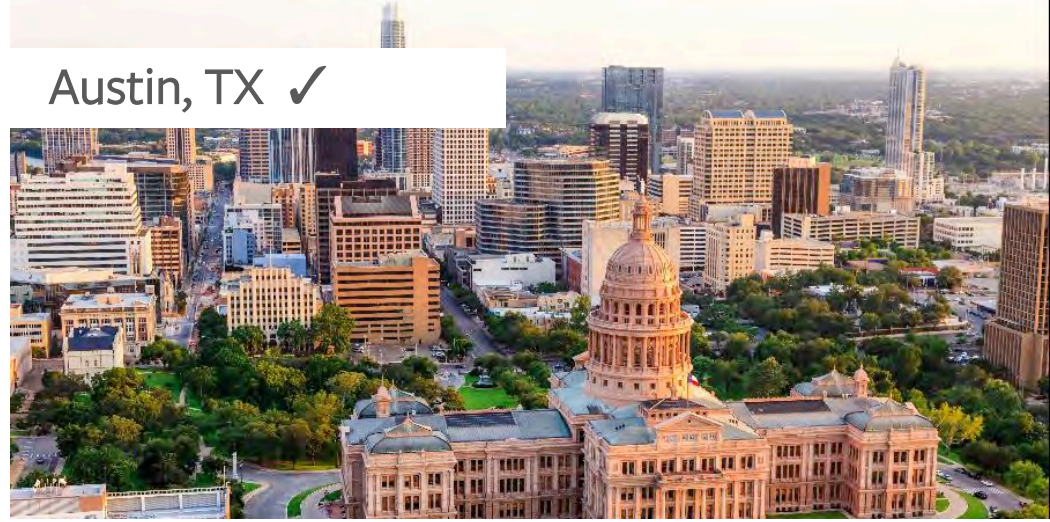
"DIRECTOR SCOTT KUBLY HAS LOOKED TO PEER CITIES THAT ARE LEADERS IN INNOVATIVE APPROACHES TO STREET DESIGN. HE ENCOURAGES A NIMBLE CULTURE AND A USE OF RAPID IMPLEMENTATION TACTICS ACROSS THE DEPARTMENT. SEATTLE'S MAYOR ALSO EMBRACES THIS APPROACH, SO STAFF HAVE THE SUPPORT TO DO THIS TYPE OF WORK."

- HOWARD WU

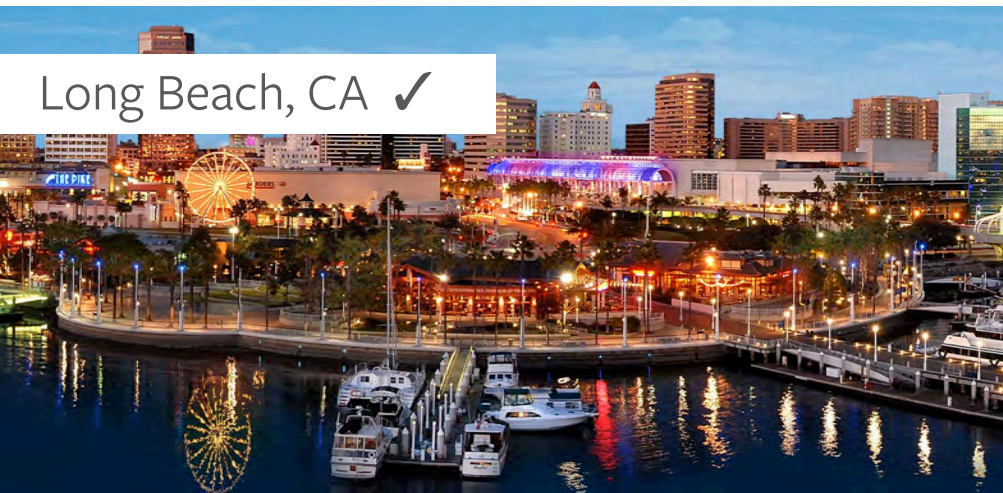
Fayetteville, AR ✓



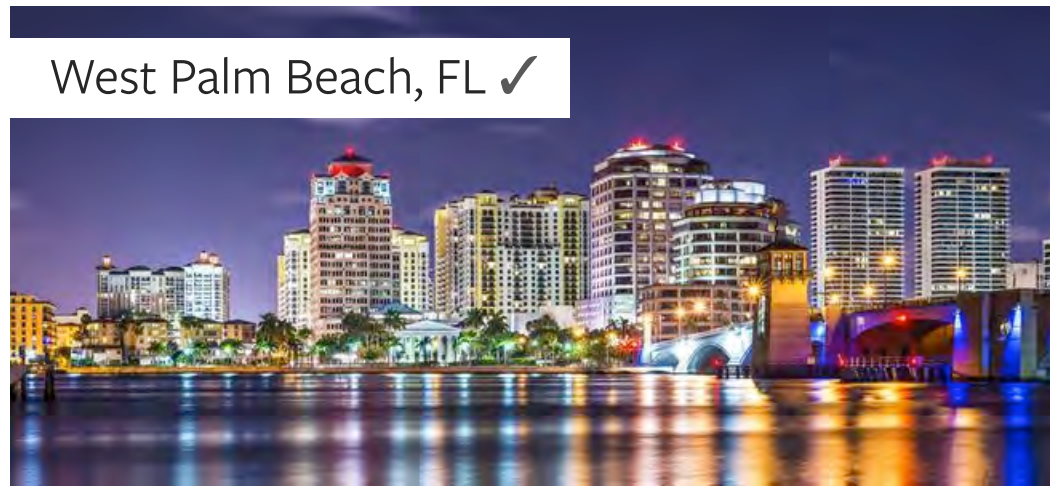
Austin, TX ✓



Long Beach, CA ✓



West Palm Beach, FL ✓



Washington, D.C. ✓



Akron, OH ✓



Fayetteville experiments with tactical roundabout downtown

By [Stacy Ryburn](#)

Posted: January 27, 2017 at 1 a.m.



[David Gottschalk](#)

Bonnie Adams (right) with Travel with Care and Rachel Schaffner, project coordinator for Fayetteville's Sustainability Department, paint the interior of a new mini-roundabout Thursday at Spring Street and School Avenue. The mini-roundabout is a pilot project to exemplify the concept of tactical urbanism. The project is similar to the temporary crosswalk in front of the Walton Arts Center's Nadine Baum Studios.

West Palm Beach, FL



Case Study #1:
SCAG Go Human
Demonstration
Projects

Southern California Association of Governments

6-County Jurisdiction:

- Ventura County
- Los Angeles County
- San Bernardino County
- Riverside County
- Orange County
- Imperial County







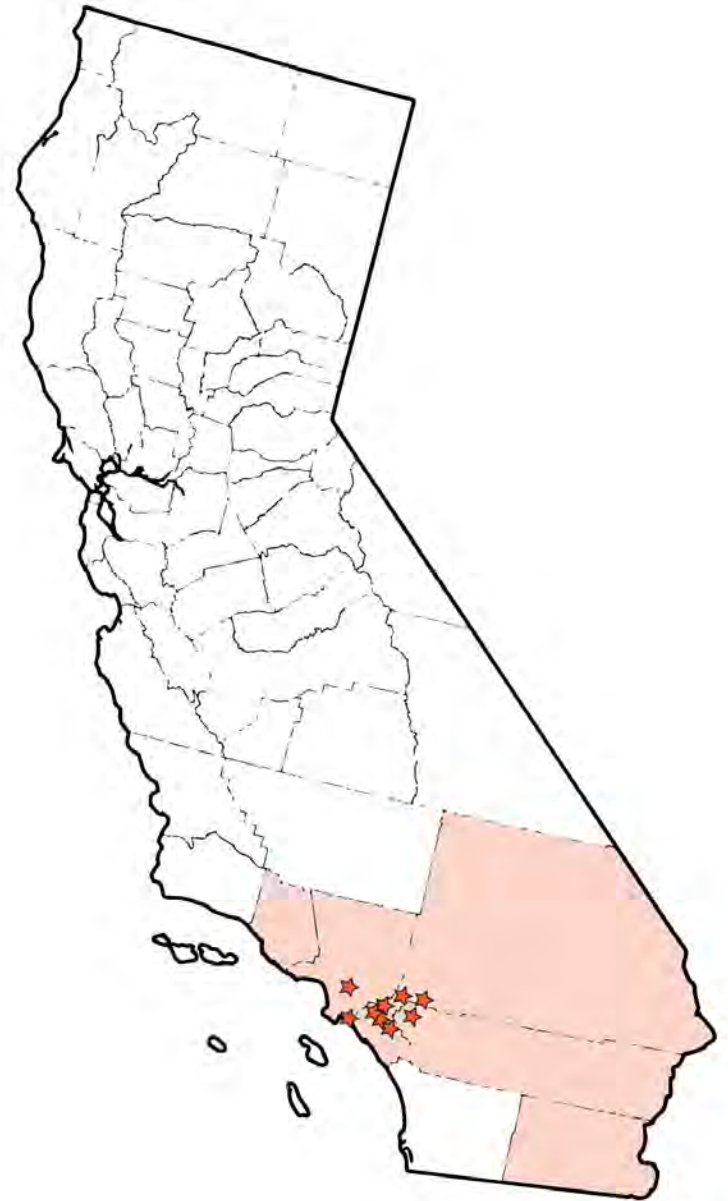
a region-wide community outreach and advertising campaign with the goals of reducing traffic collisions in Southern California and encouraging people to walk and bike more.

Goal: to create safer and healthier cities through education, advocacy, information sharing and events that help residents re-envision their neighborhoods.

Events with 9 Cities in the Region

Events Typically Include:

- Demonstration Projects (1-7 days)
- Programming



How we work together



SCAG team

- Demonstration Project
- Branding/Promotion
- Community Advisory Committee Facilitation
- Signage
- Programming (Active Transportation + Passport)
- Volunteer management
- Supply procurement
- Evaluation



Cities

- Traffic Control
- Permitting
- Site prep and clean-up
- Programming (General entertainment)
- Staffing (Support)
- Promotion (Support)



Community

- Context and need
- Input on Demonstration, Branding, Programming
- Promotion
- Supply procurement (Support)
- Volunteer recruitment

Pods: A traveling palette of materials

- Street furniture/seating
- Umbrellas
- Jumbo Games
- Feedback kiosks
- Signs and Banners
- Parklets (2 types!)
- Stencils
- Rental bikes (kids + adults)



Common Demonstration Project Types



Sharrows & Greenways



Bike Lanes



Traffic Circles



Pedestrian Crossings



Curb Extensions



Sharrows and Greenways

Design Cheat Sheet (*aka “How to make your Engineer Happy”*)

- Design stencil to MUTCD standards
- Place marking at least 11ft from curb (where curbside parking is present)
- Place markings max. 250 ft apart (closer for high volume contexts)





Sharrows and Greenways

Typical Process

- Design review and approval
- Traffic control plan
- Materials Procurement:
 - Stencils
 - Spray chalk
 - Extra cardboard
- Volunteers
 - Recruit
 - Train on site
- The Install





Sharrows and Neighborhood Greenways





Bike Lanes

Key Materials

- Stencil
- Tape or spray chalk (white line)
- Tools
 - Tape Measure
 - Chalk Line
 - Striping Machine!





Bike Lanes

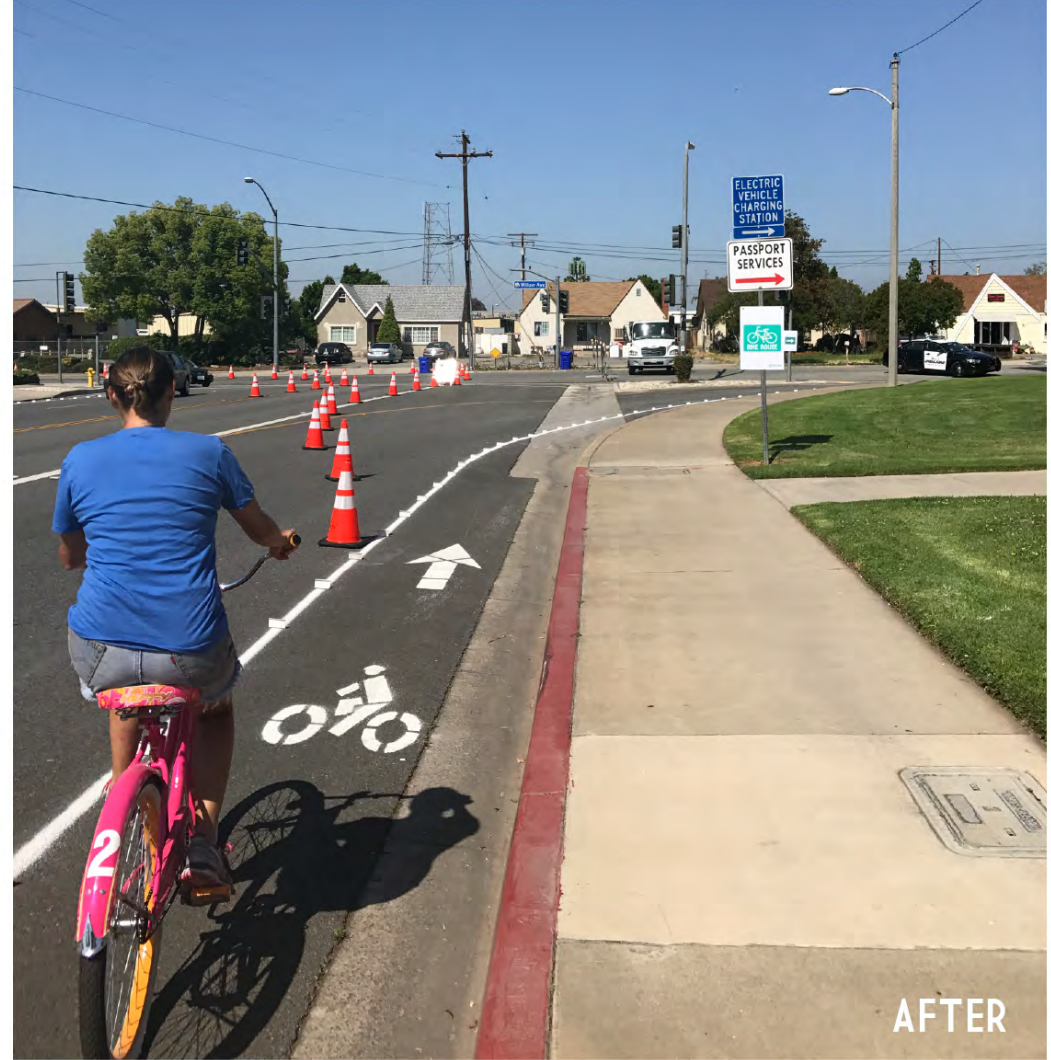
PRO TIPS







BEFORE



AFTER

BEFORE



AFTER





Pedestrian Crossings

Design Cheat Sheet

- Crosswalk should be at LEAST 6ft wide
- Zebra stripes: 12-24” and 12-36” apart
- Desired median width is 10 ft (6 ft minimum)





Pedestrian Crossings

PRO TIP





Pedestrian Crossings





Pedestrian Crossings





Curb Extensions

Design Cheat Sheet

- Curb extensions should be 1-2 ft narrower than the parking lane (in most cases) and at least as wide as the crosswalk
- If impacts to drainage are a concern, curb extension may be designed as an island offset from the curb (1-2 ft)





Curb Extensions

Key Materials

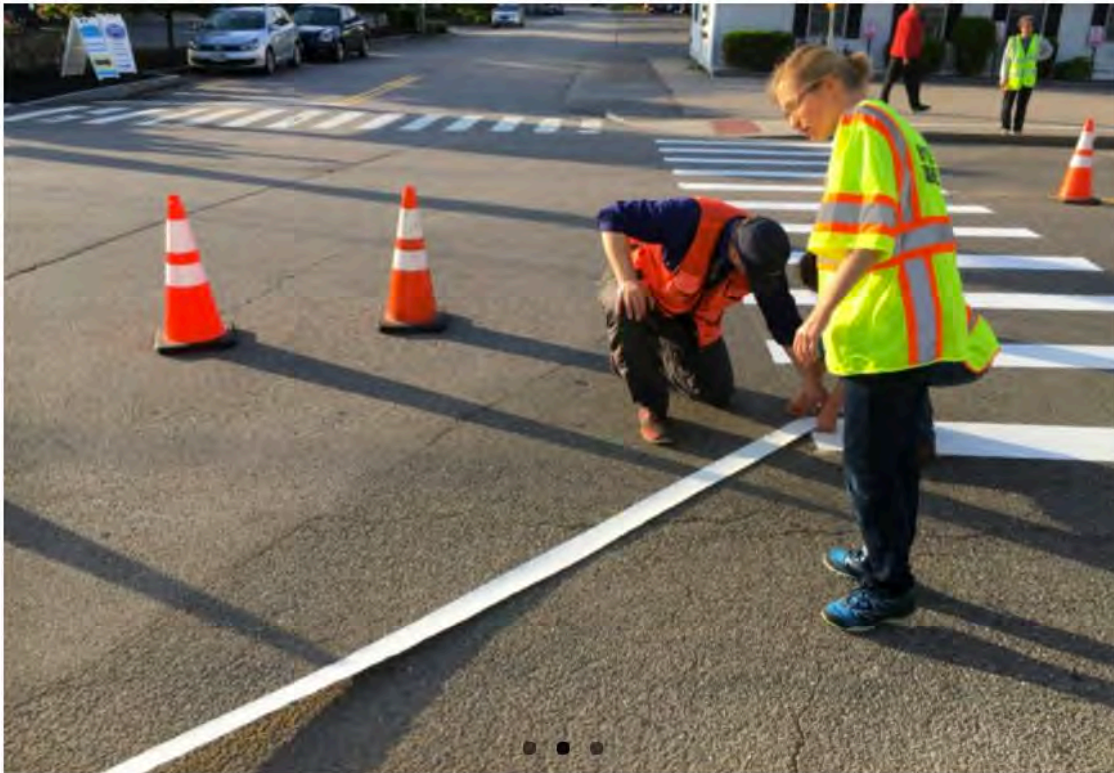
- Surface Treatment: cornstarch paint (with tempera pigment)
- Barrier Elements: plants, stanchions and banners
- Striping: White Duct Tape
- Signs



Curb Extensions



Foil-backed Traffic Tape

[Overview](#)[Applications](#)[Tips](#)[Sources](#)

Bikeways

Striping width recommended at 6 in. for outermost line, 4 in. for inner line. Recommended bike lane width is a minimum of 5 ft. Tape can also be used for intersection treatments or to stripe a bike lane buffer area, with diagonal chevron or cross hatch markings spaced every 8 - 10 ft. if buffer is 2 ft. or wider.

Pedestrian Crossings

Tape can be used to create temporary crosswalks, which come in many varieties and colors. A traditional continental crosswalk should have 12 ft. stripes a min. of 12 in. wide, with 12 - 36 in. gaps.

Curb Extensions / Plazas:

Stripe outer boundary of curb extension with double white lines, 4 in. wide.

Roundabouts

Use tape to stripe outer line of roundabout area, using stripes at least 4 in. wide.

Case Study #2:
Islington Street
Portsmouth, NH

Islington Street



WHITE
HERON
TEA AND COFFEE
COMMUNITY

NO
PARKING

FREE
LIVE MUSIC
SAT 1-3
TOM RICHTER
CAROL CORONIS
\$1 OFF BEER!

GOOD

EATS





WHITE HERON
TEA AND COFFEE
COMMUNITY



NO PARKING

For Safety
Cross with a Sign
Don't Obey Signs

FREE
LIVE MUSIC
SAT 10
PEOPLE
LIVE

NEW'S

JACKETS



BARBE

PARKING

438-2277





2 Brothers GARAGE
FULL SERVICE
AUTO REPAIR
433-0333

2 Brothers GARAGE FULL SERVICE
AUTO REPAIR
433-0333

STOP
FOR
PEDESTRIAN
CROSSWALK

2 Brothers GARAGE

FULL SERVICE
AUTO REPAIR
433-0333
24 HR. SERVICE

2 Brothers GARAGE FULL SERVICE
AUTO REPAIR
433-0333

STOP

FOR
PEDESTRIAN
CROSSWALK



WALK TO
MARKET SQUARE



IT IS A
7 MINUTE
WALK TO
ARTS & THEATRE



AMERICAN
BY/PRODUCTS
LYNN, MA 01902
USDOT228345

WHITE
HERON
COFFEE
COMMUNITY

The Livable Streets Revolution Is Incremental

PORTSMOUTH

Portsmouth to test new Islington St. bumpout, crosswalk

Deputy fire chief opposes narrowing of street



COMMENT

0

Recommend



Tweet

0



Portsmouth's Parking and Traffic Safety Committee approved a crosswalk at Islington and Cass streets near White Heron Tea as part of a pilot program. Photo by Rich Beauchesne/Seacoastonline

By **Jeff McMenemy**

jmcmenemy@seacoastonline.com



Posted Jul. 7, 2016 at 2:23 PM

Case Study #3:

planBTV Walk/Bike

Burlington, VT

Burlington, Vermont



Walk Bike plan BTV



WALK BIKE MASTER PLAN BURLINGTON, VT

MARCH 17, 2017

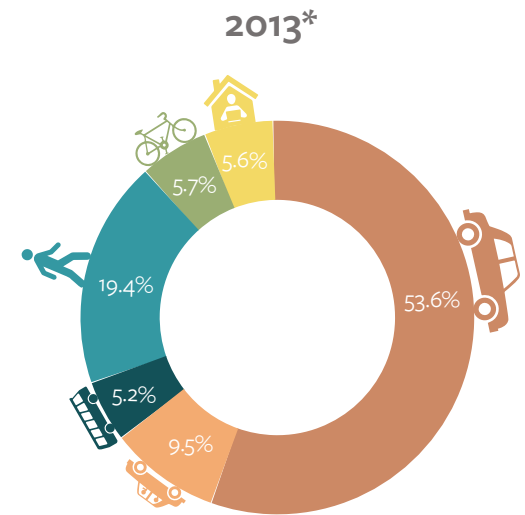
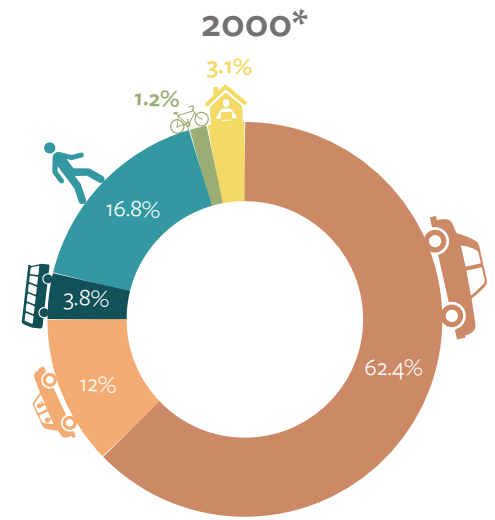


DuBois
& King
INC.

STREETPLANS
MIAMI SAN FRANCISCO NEW YORK

GPI
Greenman-Pedersen, Inc.











Existing Network



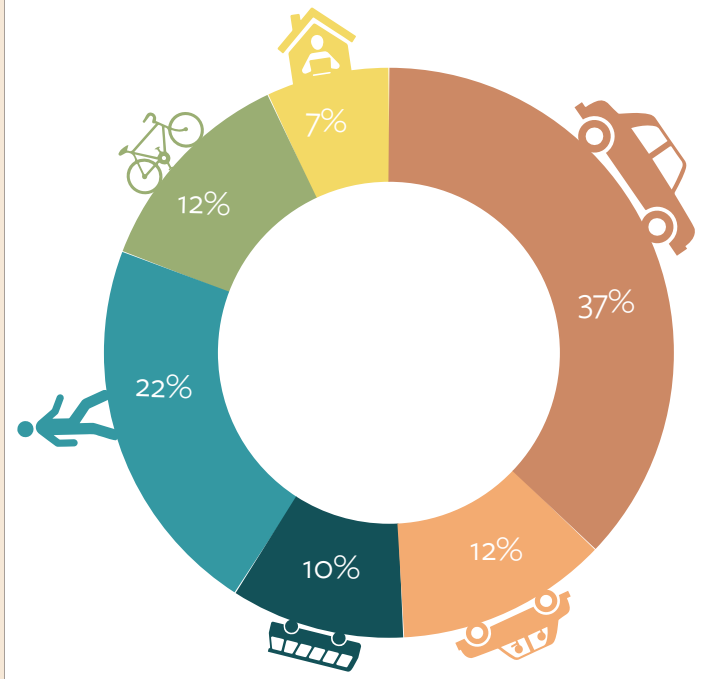
- Drove Alone
- Carpooled
- Used Transit
- Walked
- Biked
- Worked at home







2026 Network

Proposed Bikeway Network (20-Year Time Frame)

-  Shared Use Path
-  Protected Bike Lane
-  Neighborhood Greenway
-  Buffered/Conventional Bicycle Lane
-  Advisory Bicycle Lane
-  Shared Use Lane Markings
-  Potential Path Easement
-  City Boundary
-  Park
-  University/Campus Area

2026 Mode Share Goal



-  Drove Alone
-  Walked
-  Carooled
-  Biked
-  Used Transit
-  Worked at home

Even in Burlington, Change is Hard



Just Ask Peggy O'Neill

BURLINGTONFREEPRESS.COM

SATURDAY, MAY 23, 2015 1C



Guarded: Vicki Oftedal-Leary, at right, alerts motorists to a school-bound bicyclist's passage across South Union Street at Maple Street on Thursday morning in Burlington.

JOEL BANNER BAIRD/FREE PRESS

ONE-DAY BIKE LANE PROPOSED

'Pop-up' event would grant bicyclists more space on South Union Street



"We're hoping it would give people — bicyclists as well as drivers — a chance to feel what it's like."

PEGGY O'NEILL
SOUTH END RESIDENT



JOEL BANNER BAIRD
FREE PRESS STAFF WRITER

Could a one-day traffic switcheroo nudge Burlington motorists, bicyclists and pedestrians into behavior that is more civil, efficient and safe?

That notion is behind a "pop-up" bike lane on South Union Street proposed for May 29. The idea will undergo a final city review Tuesday.

The proposed event would afford bicyclists a high-visibility, two-way passage from Shelburne Street to Edmunds Middle School — a protected "cycletrack."

Motorists would be restricted to a single, northbound lane for the day, separated from bicycles by caution cones, from 5:30 a.m. to 8:30 p.m. The street typically allows vehicle drivers north- and south-bound passage.

"We're hoping it would give people — bicyclists as well as drivers — a chance to feel what it's like," South End resident Peggy O'Neill said.

O'Neill, a key organizer for the demonstration, has for the past month lobbied city officials and dozens of neighbors to give the pop-up a try.

The mother of three children, O'Neill is an avid cyclist, a frequent walker and a

See BIKES, Page 3C



Sharing the road: A school-bound bicyclist negotiates the intersection of South Union and Maple streets Thursday morning in Burlington.

JOEL BANNER BAIRD/FREE PRESS



JOEL BANNER BAIRD/FREE PRESS

Guarded: Vicki Oftedal-Leary, at right, alerts motorists to a school-bound bicyclist's passage across South Union Street at Maple Street on Thursday morning in Burlington.

ONE-DAY BIKE LANE PROPOSED

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FREE PRESS STAFF WRITER

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SOUTH END RESIDENT

See BIKES, Page 3C



Guarded: Vicki Oftedal-Leary, at right, alerts motorists to a school bus on South Union Street at Maple Street on Thursday morning in Burlington. JOEL BANNER BAIRD/FREE PRESS

ONE-DAY BICYCLE LANE PROPOSAL

'Pop-up' event would grant bicyclists more space on South Union Street



JOEL BANNER BAIRD
FREE PRESS

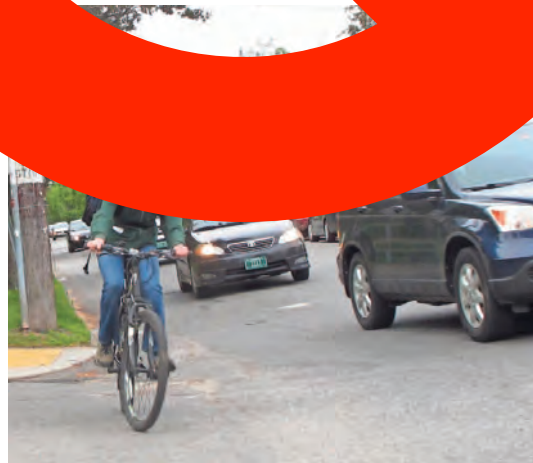
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See **BIKES**, Page 3C



Sharing the road: A school-bound bicyclist negotiates the intersection of South Union and Maple streets Thursday morning in Burlington. JOEL BANNER BAIRD/FREE PRESS



“

Citizens in your community
want to know what *you can*
do, not what *you can't do.*”

- Peter Block
Author: Community: The Structure of Belonging

Designing Policy as a Bridge-Builder

We want to create a short-term pilot for traffic calming measures at a dangerous intersection in our neighborhood.

- How can we get city approval? This type of work does not fall within existing permitting structures.
- What is the best way to design the temporary facility?
- What are the best materials for our project and budget?



We like the idea and the spirit. But...

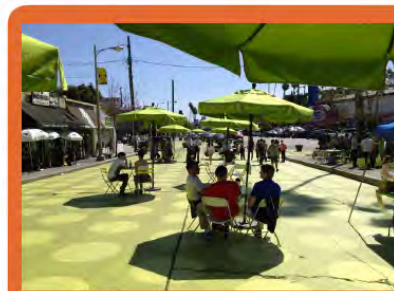
- What materials are safe to approve?
- What level of design is needed, and what are the standards?
- What are the protocols for safe installation and removal?
- What are our evaluation metrics?



Move Plans from Paper to Pavement

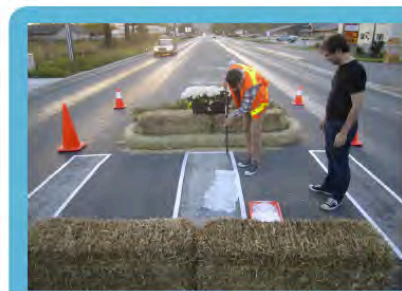
COMMUNITY-LED DEMONSTRATION PROJECT POLICY + GUIDE

City of Burlington, VT | April 2016



Pilot Project:

A temporary traffic or parking project led by the Department of Public Works that lasts less than 30 days. Authorized under the Pilot Project Policy - Article 1, Chapter 20, Section 3.



Demonstration Project:

A short-term, community-led street design project that lasts less than 7 days. Evaluated and permitted by city agencies through the structure designed in this guide.

Why Use This Approach?

Depending on the form the project takes, municipal authorities, organizations, and everyday citizens use short-term projects as a tool to:

- Deepen their understanding of user need;
- Draw attention to perceived shortcomings in policy and physical design;
- Widen public engagement;
- Tests aspects of a project or plan before making large political or financial investments;
- Expedite project implementation;
- Gather data from the real-world use of streets and other public spaces; and/or
- Improve collaborative partnerships between residents, local non-profits, and government agencies

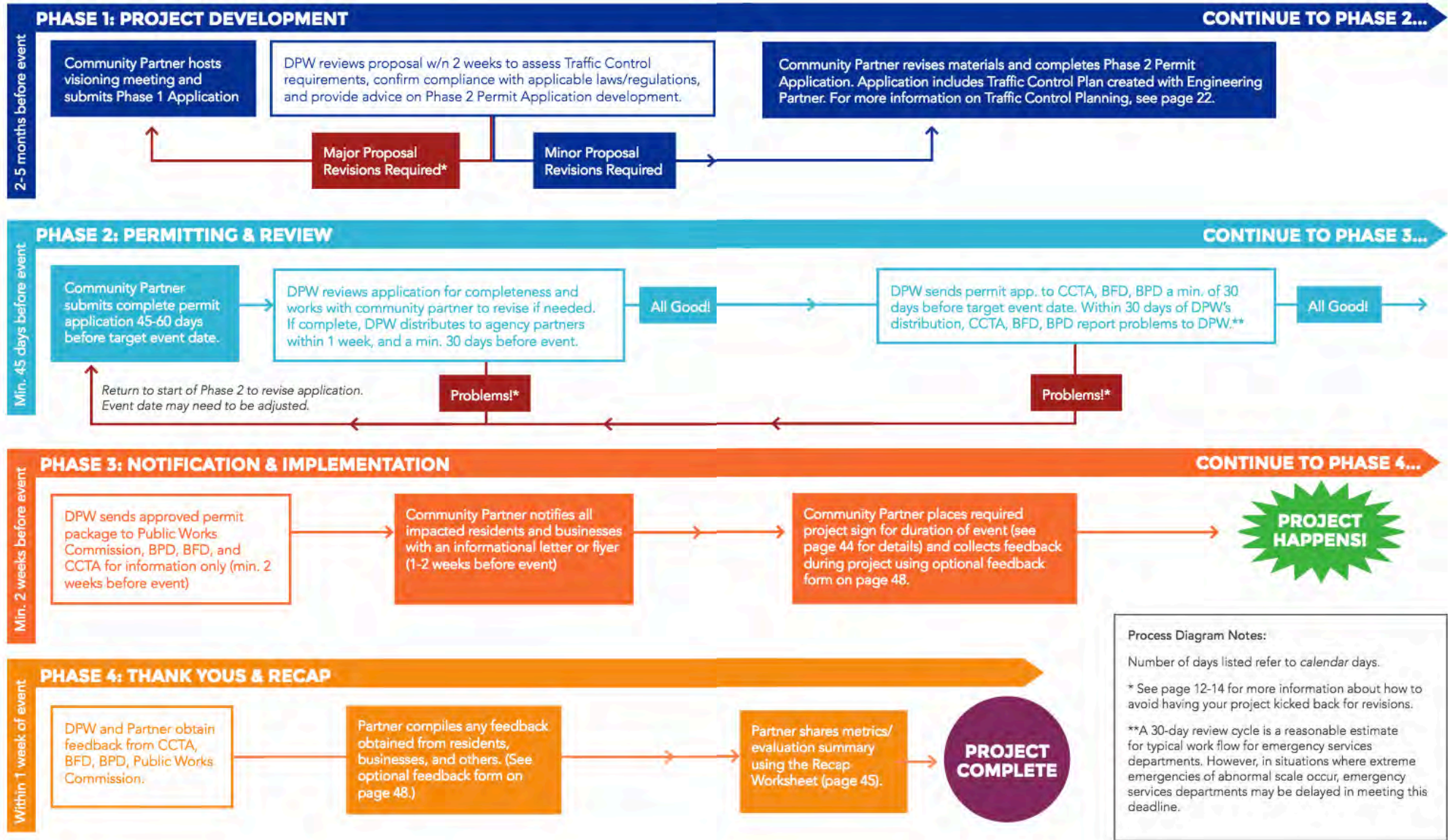
This approach is not completely new to Burlington. In [year], the [City Council?] approved a new City Ordinance to allow the Department of Public Works to implement temporary traffic and parking projects on all public streets (Article 1 Chapter 20 Section 3). The ordinance creates a pathway for DPW to use short-term or “pilot projects” to evaluate the merits and impacts of proposed street design projects. Pilot projects as defined in the ordinance may be in place for up to 30 days.

This guide and policy builds off of the pilot project ordinance. It breaks the process into even smaller segments, making it easier for everyday residents, advocacy organizations, and community groups to spearhead short-term projects alongside DPW and other agencies. Ideally, the community-led “demonstration projects” that this guide describes (to last from 1 to 7 days) will help inform the city-led efforts authorized by the pilot project ordinance.

Acknowledgments

This Policy and Guide was produced through a collaborative effort among city agencies and local advocates.

THE PERMIT PROCESS



Process Diagram Notes:

Number of days listed refer to *calendar* days.

* See page 12-14 for more information about how to avoid having your project kicked back for revisions.

**A 30-day review cycle is a reasonable estimate for typical work flow for emergency services departments. However, in situations where extreme emergencies of abnormal scale occur, emergency services departments may be delayed in meeting this deadline.

Getting to... Yes!



REQUIRED ITEM (PART 1 OF 3)

PHASE 3: NOTIFICATION & IMPLEMENTATION

Safety Guidelines

ADOPTING A "SAFETY FIRST" MENTALITY FOR TEMPORARY DEMONSTRATION PROJECTS

OBJECTIVE

The first goal of a demonstration project in the public right-of-way is to provide safer neighborhoods and streets using an open, temporary design and construction approach. The Department of Public Works and its employees, partners and volunteers are all part of this strategic mission and vision. Adopting a "safety first" mentality can help insure that accidents are prevented. Safety should be the first consideration for all parties at all stages of the project - through preparation, pre-build, installation, and clean-up.

GENERAL SAFETY

The project leader is responsible for making sure that everyone who assists with a temporary Demonstration Project reads these Safety Guidelines, completes a Release of Liability waiver, and completes the Sign-in Sheet. Participants must follow safety rules, laws, and procedures to ensure that their work environment is safe. This might include obtaining and wearing safety equipment, such as gloves, face protection, hearing protection, and clothing and footwear appropriate for the job to be performed (such as closed toed shoes or safety vests).

Requirements for Accident and Incident Reporting

The Community Partner shall notify the Police and Public Works Department of any traffic crashes or other incidents resulting in injury to persons or property occurring at the Demonstration Project site. Contact Burlington Police Department at 658-2704, and Burlington Public Works at 863-9094.

Anyone who observes an unsafe condition, behavior or protocol at the project site should speak up immediately, so that the group may adjust accordingly.

TRAFFIC CONTROL

Traffic control will be executed in accordance with the Traffic Control Plan developed during the project permitting process (see page 22 for details). Approved traffic control devices, including cones, barrels, barricades, and delineator posts shall be used as described in the Traffic Control Plan.

FIELD SAFETY MEETINGS

Demonstration Project leaders should hold safety meetings/briefings at least every day during implementation and project removal to discuss potential hazards or other safety concerns with the job(s) being performed that day. During the meeting, the project leader should describe safety protocols relevant to the project.

- Rules around accident and incident reporting (required for all projects - see above)
- Details of any personal protective equipment that might be required for work on any specific tasks (ex: work gloves, safety vests, closed toed shoes)
- Overview of the Traffic Control Plan approved for the day's activities.

At the close of the meeting, participants should sign the Sign in Sheet and Release of Liability Waiver on the following page.



REQUIRED ITEM (PART 2 OF 3)

PHASE 3: NOTIFICATION & IMPLEMENTATION

Release of Liability

THIS FORM MUST BE COMPLETED BY ALL PERSONS INVOLVED IN INSTALLING AND REMOVING A DEMONSTRATION PROJECT THROUGH THE CITY OF BURLINGTON'S COMMUNITY DEMONSTRATION PROJECT PROGRAM.

TWO ENTRIES PER PAGE - PRINT AS MANY PAGES AS ARE NEEDED

_____ agrees in any event to indemnify and hold harmless the City of Burlington, its appointed or elected officials, employees, and volunteers from any and all claims, actions, and judgments, including all costs of defense and attorney's fees incurred in defending against and arising from and related to vendors, their employees or volunteers actions.

Full Name: _____

Address: _____ Phone: _____

Intending to be legally bound hereby, the undersigned agrees that they agree to the statements above and have read and will abide by the Safety Guidelines described in this Guide.

Signature: _____ Date: _____

_____ agrees in any event to indemnify and hold harmless the City of Burlington, its appointed or elected officials, employees, and volunteers from any and all claims, actions, and judgments, including all costs of defense and attorney's fees incurred in defending against and arising from and related to vendors, their employees or volunteers actions.

Full Name: _____

Address: _____ Phone: _____

Intending to be legally bound hereby, the undersigned agrees that they agree to the statements above and have read and will abide by the Safety Guidelines described in this Guide.

Signature: _____ Date: _____



REQUIRED ITEM (PART 3 OF 3)

PHASE 3: NOTIFICATION & IMPLEMENTATION

Sign In Sheet

THIS SIGN-IN SHEET MUST BE COMPLETED BY ALL PERSONS INVOLVED IN INSTALLING AND REMOVING A DEMONSTRATION PROJECT THROUGH THE CITY OF BURLINGTON'S COMMUNITY DEMONSTRATION PROJECT PROGRAM.

Before you sign in below, you must read the Safety Guidelines provided (Part 1), and sign the Release of Liability Waiver (Part 2). All participants are required to abide by the Safety Guidelines.

NAME	ADDRESS	PHONE #	SIGNATURE

Parking Information:

What type of parking is present in your project site? Describe any restricted zones, accessible spaces, and whether curbside parking is regulated by parking meters.(See page 21 in Guide for more information.)

DESIGN AND LOCATION CRITERIA

Does your project meet the below requirements for quick and easy approval? Projects that do not meet the criteria listed here are not impossible, but they will require special consideration and longer approval times. Such projects are subject to approval by the Public Works Director on a case-by-case basis. For additional details about requirements related to clearance, access, and community support, please see the policy document in the Policy section of this Guide.

	YES	NO
Does your site avoid State Highways (VT 127 and Routes 2, 7, and Alt. Route 7)? Demonstration projects cannot be located on VT Route 127. Proposals for Routes 2, 7 or Alt. Route 7 are approved on a case by case basis and may require additional review.		
Does your site avoid streets classified as "arterial" by the City of Burlington? (North Avenue, Colchester Avenue, Shelburne Road or Main Street)		
Is your site a public right of way, with a speed limit that is 25 MPH or less?		
Will your project avoid interference with normal operation for delivery trucks, public transit routes/stops, or trash/recycling pick-up? If project will impact these services, alternate access must be provided and negotiated with the impacted parties.		
Does your project design preserve access to public utilities, utility covers, valves, building standpipes, etc.?		
Does your project design preserve vehicle access within 25 ft. of any fire hydrants at your location?		
Does your project preserve normal access to driveways? Projects should not block or limit driveway access, unless the driveway owner specifically permits use of their driveway for the demonstration (demonstrated by letter of support - attach if relevant).		
Does your project design preserve full access for emergency vehicles? (Project design must provide at least 14 feet of horizontal roadway clearance.)		
Does your project design preserve normal street/sidewalk access for individuals with disabilities?		
Is your project located on the same block as any ongoing construction projects?		
Are all street closures needed for your project expected to last less than 24 hours? Streets or public rights-of-way cannot be blocked for more than 24-hours unless special permission is obtained from DPW, BPD, BFD, and CCTA.		

PROJECT PLAN INFORMATION

Please attach the following materials to further describe your project idea:

- A short description of your project idea, including information about the goal/intent of the project.
- 3-5 photographs of your proposed project location, and any measurement information you were able to collect. (Measurement information not required - do not enter the street if it is not safe to do so!)
- A site plan (sketches, or drawings depicting your vision for the completed project)
- A brief description of the quantitative and qualitative metrics you intend to use to evaluate and gather public input on your project.

Do you have an Engineering Partner identified to help you create a Traffic Control Plan in the event that one is required? (Note that a Traffic Control Plan may not be needed for all project types. DPW will advise you of Traffic Control requirements when reviewing your Phase 1 proposal.)

- No
- Yes (List name and contact information below)

Do you have any residents or business owners from the surrounding area (on the block adjacent to your project site) on your planning team, or indicating advance support of the project? (Note that during Phase 2 of this application process, you will be required to demonstrate community support for your project via a petition.)

- No
- Yes (If yes, list below. Attach additional materials as needed.)

Submittal Date*:

** We recommend submitting your initial proposal 2-5 months before your target event date. First time applicants should aim to submit materials as early as possible.*

Please send your initial proposal to: Nicole Losch, Senior Transportation Planner - nlosch@burlingtonvt.gov

COMMUNITY-LED DEMONSTRATION PROJECT

This pop-up project was created through the City of Burlington's Demonstration Project Program. The program creates a pathway for everyday residents, advocacy organizations, and community groups to spearhead short-term demonstration projects alongside the Department of Public Works and other agencies.

Project Name and Description:

Project Duration:

**Lead Contact Person and/
or Organization:**



If lead contact person cannot be found,
contact the Burlington Department of
Public Works at 863-9094.



In case of emergencies, dial 911 for the Burlington Police Department.



NO PARKING
HERE TO KEEP CLEAR

RACKS & RUIN

JANE KOPLEWITZ



always open at
skirack.com

RACK & RUIN

Art Hop





Burlington's 1st Parking - Protected Lane



Image: Julie Campoli

Burlington's 1st Planter-Protected Lane

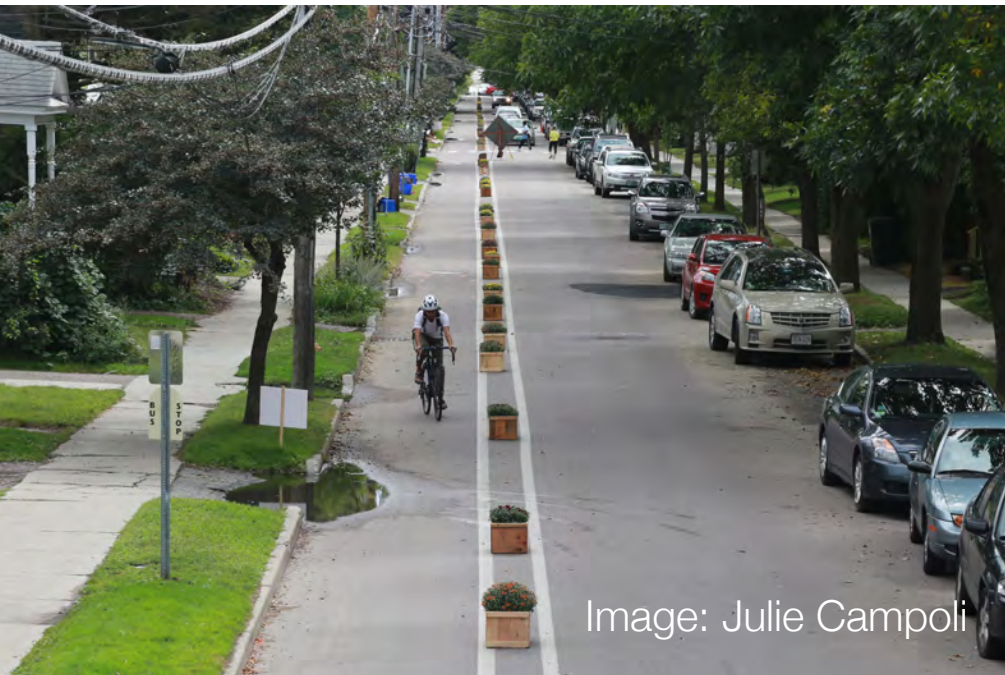


Image: Julie Campoli

Image: Nic Anderson

First Intersection Crossing Treatments



What We Learned



SPEEDING ON N. WINOOSKI AVE.

NORMAL CONDITIONS

■ ~1 in 4 vehicles (28%) did not observe the speed limit



WITH THE DEMO IN PLACE

■ Speeding dropped to 6% of vehicles counted



SPEEDING ON N. UNION ST.

NORMAL CONDITIONS

■ ~1 in 4 vehicles (23%) did not observe the speed limit

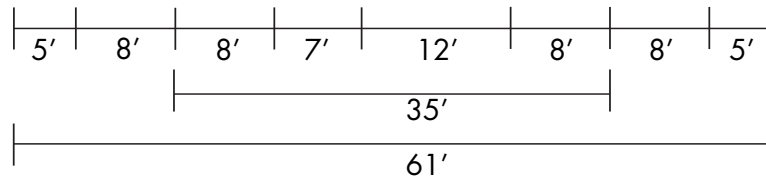


WITH THE DEMO IN PLACE

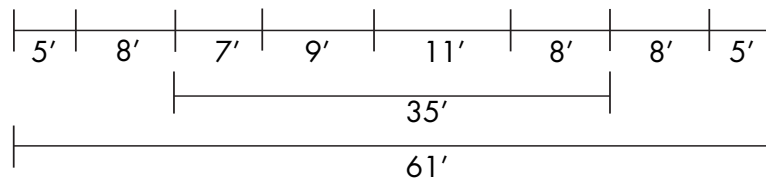
■ Speeding dropped to 6% of vehicles counted



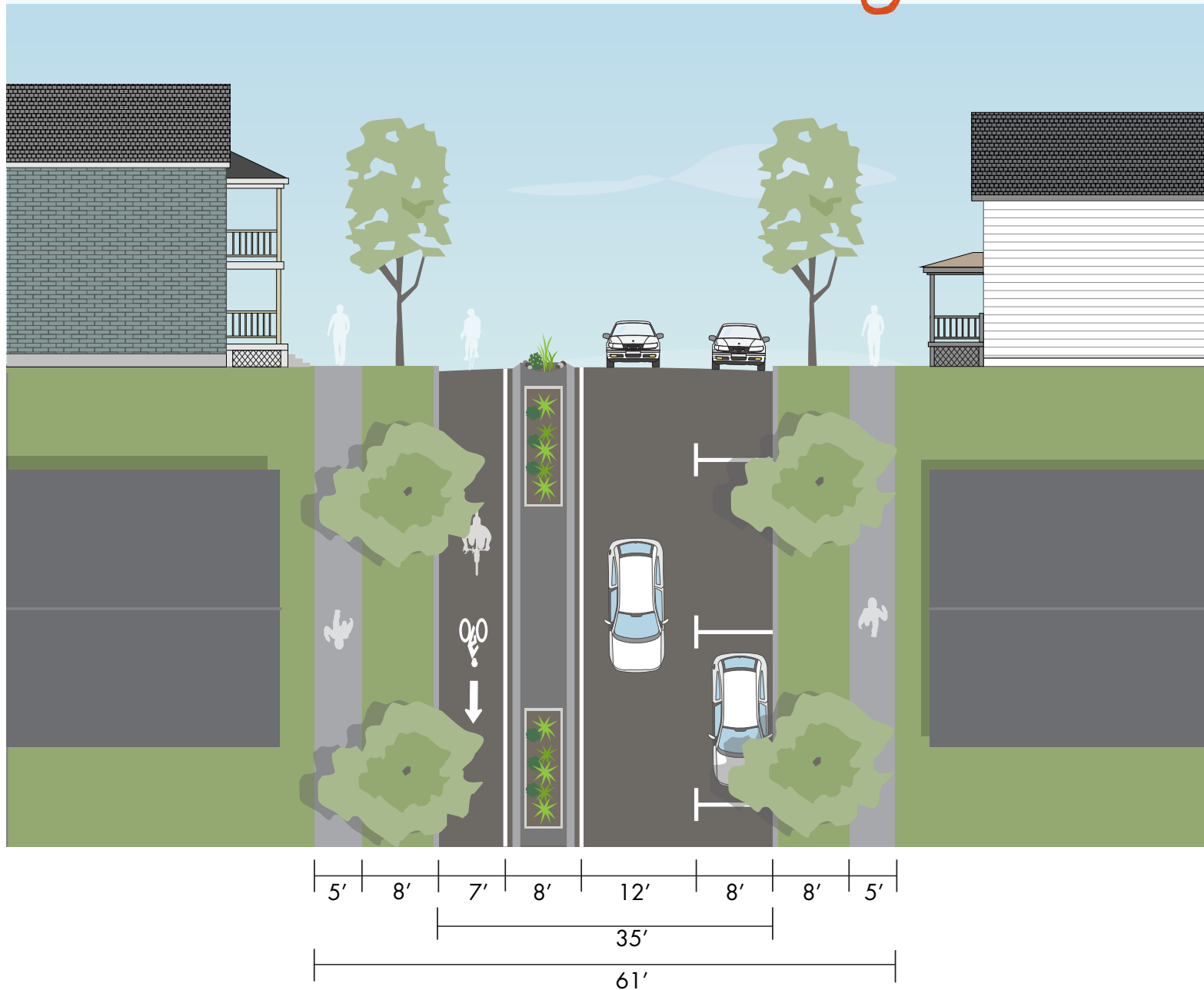
North Winooski Avenue



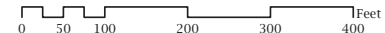
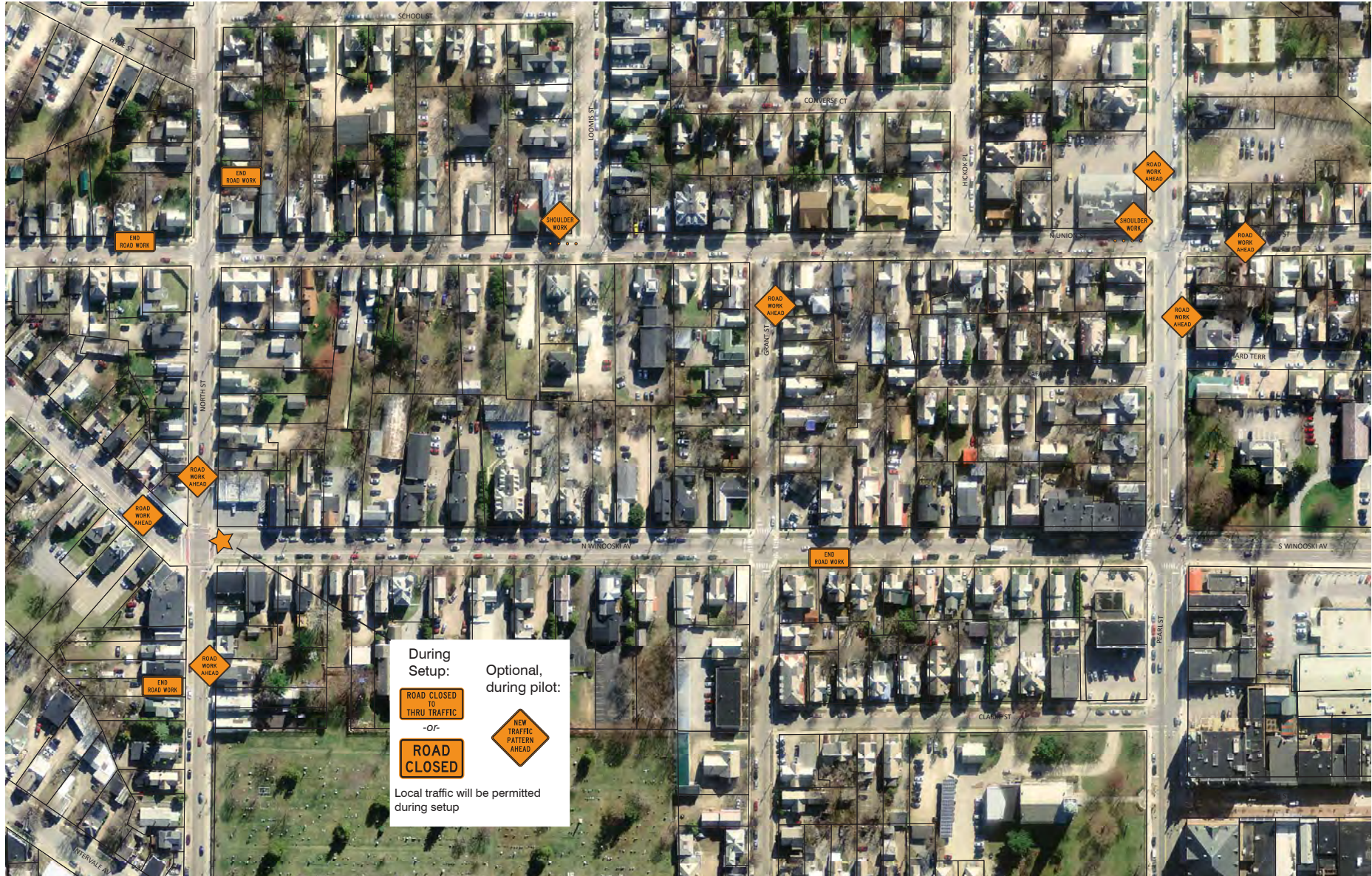
Phase I - Interim Design



Phase 2 - A Beautiful Bikeway



Pain Point: Traffic Management Plan



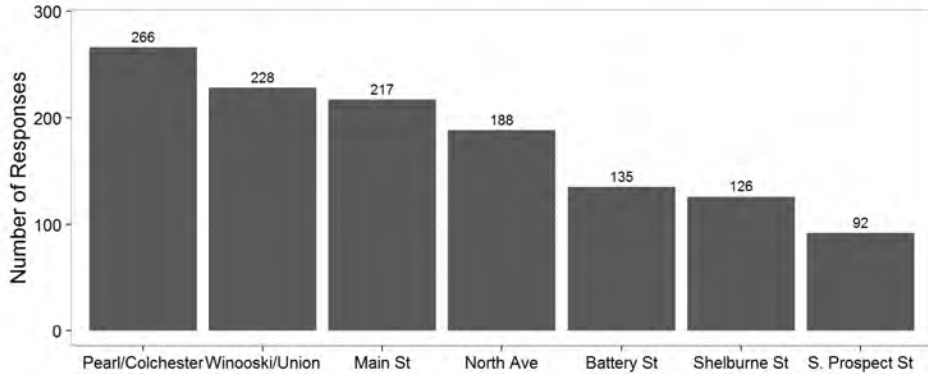
What the City Learned





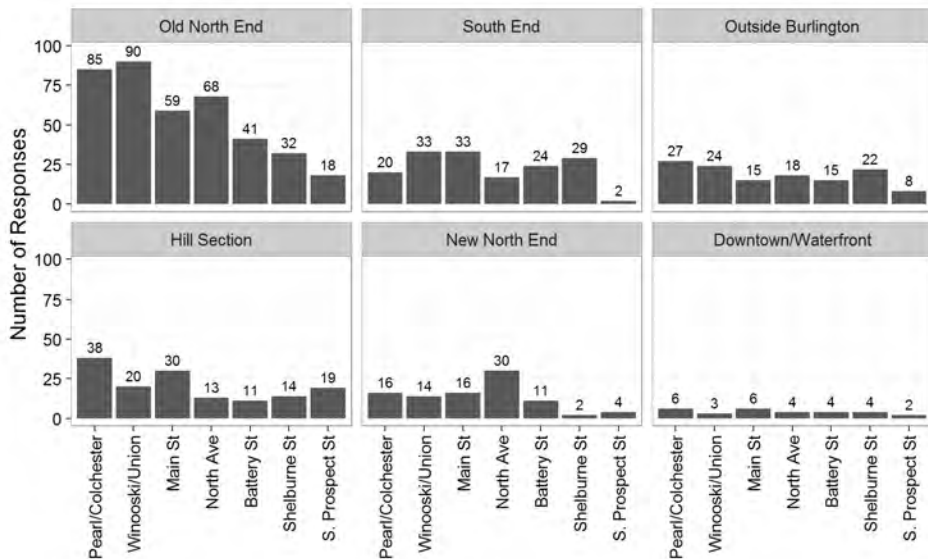
Local Demand is Real

Top Priority Streets



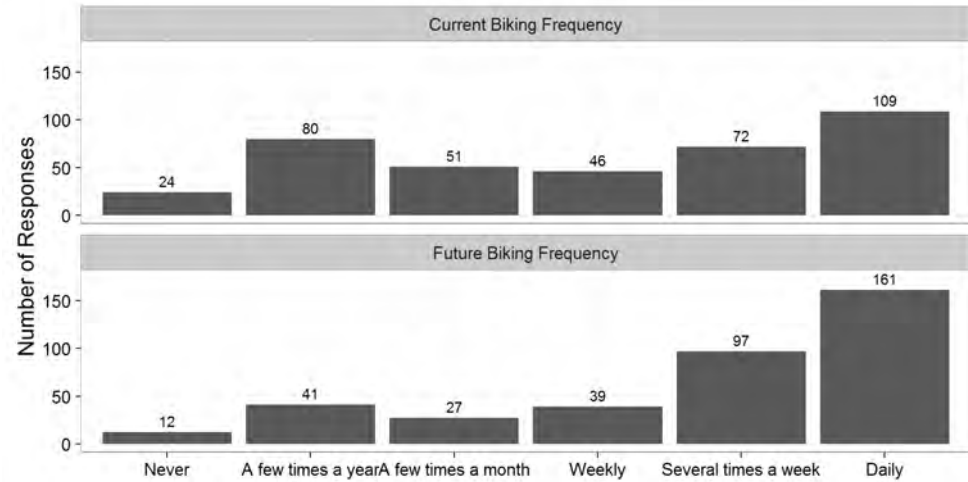
Priority Streets by Respondent Neighborhood

Note that while the overall priority between streets is shown above, there are some sensible differences in priority per the neighborhood of the respondent. For example, people in the Old North End preferred Battery Street at a higher rate than the rest of the city. Likewise for people outside Burlington and Shelburne St, people in the South End and Winooski/Union, and people in the New North End with North Ave.



Current and Future Biking Frequency

How often do you bike with kids or other "vulnerable" bicyclists, with the streets as they are today (Current) and if all selected priority streets had protected bike lanes (Future)



Note that among people with valid current and future responses, the number that said they would bike less, the same amount, or more if selected priority streets had protected bike lanes is as follows:

- Less Frequent 7
- Same 209
- More Frequent 156

Source: Local Motion

Scaling Up: North Avenue Pilot



What The Advocacy Sector Learned



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Running a Pop-up Demonstration Project

[Demonstration Projects Toolkit](#)



[National Models and Resources](#)



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Pop-ups and pilots are all ways of temporarily demonstrating the value of a walk-bike project in your community without having to commit to it long term. Pilots typically last for at least one year and pop-ups for a shorter amount of time, typically a week or less. Both use low cost, non-permanent materials such as planters, flexible bollards, spray chalk and cones to temporarily reconfigure the street. Survey and observational data can be collected before and after the demonstration to help decision-makers understand project benefits and impacts.

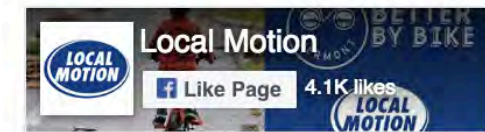
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LAUREL WAMSLEY





LONG-TERM/CAPITAL
(5 years - 50 years • \$\$\$)

Government / organizational leadership + involvement required

Always sanctioned

High-cost permanent materials that cannot easily be adjusted

Public input, government / organizational stewardship

Low: project is considered a permanent capital upgrade that is unlikely to be adjusted significantly once installed

Always - project performance can inform future investments



PILOT

(1 month- 1 year • \$\$)

Government / organizational leadership + involvement required

Always sanctioned

Relatively low-cost, but semi-durable materials

Public input, champion engagement, government / organizational stewardship

High: organizers expect project to be adjusted; it **may** be removed if it does not meet goals

Always



LONG-TERM/CAPITAL

(5 years - 50 years • \$\$\$\$)

Government / organizational leadership + involvement required

Always sanctioned

High-cost permanent materials that cannot easily be adjusted

Public input, government / organizational stewardship

Low: project is considered a permanent capital upgrade that is unlikely to be adjusted significantly once installed

Always - project performance can inform future investments



DEMONSTRATION

(1 day - 1 month • \$)

PILOT

(1 month- 1 year • \$\$)

LONG-TERM/CAPITAL

(5 years - 50 years • \$\$\$)

Can be led by anyone (city, citizen group, or both!)

Government / organizational leadership + involvement required

Government / organizational leadership + involvement required

Sanctioned or unsanctioned

Always sanctioned

Always sanctioned

Low-cost, typically low-durability. Can be borrowed or easily made

Relatively low-cost, but semi-durable materials

High-cost permanent materials that cannot easily be adjusted

Public input + public action

Public input, champion engagement, government / organizational stewardship

Public input, government / organizational stewardship

High: organizers expect project to be adjusted and removed.

High: organizers expect project to be adjusted; it **may** be removed if it does not meet goals

Low: project is considered a permanent capital upgrade that is unlikely to be adjusted significantly once installed

Recommended

Always

Always - project performance can inform future investments



DEMONSTRATION

(1 day - 1 month · \$)

PILOT

(1 month - 1 year · \$\$)

INTERIM DESIGN

(1 year - 5 years · \$\$\$)

LONG-TERM/CAPITAL

(5 years - 50 years · \$\$\$\$)

Can be led by anyone (city, citizen group, or both!)

Government / organizational leadership + involvement required

Government / organizational leadership + involvement required

Government / organizational leadership + involvement required

Sanctioned or unsanctioned

Always sanctioned

Always sanctioned

Always sanctioned

Low-cost, typically low-durability. Can be borrowed or easily made

Relatively low-cost, but semi-durable materials

Low-moderate cost materials, designed to balance flexibility with maintenance needs

High-cost permanent materials that cannot easily be adjusted

Public input + public action

Public input, champion engagement, government / organizational stewardship

Public input, government / organizational stewardship

Public input, government / organizational stewardship

High: organizers expect project to be adjusted and removed.

High: organizers expect project to be adjusted; it **may** be removed if it does not meet goals

Moderate: organizers expect project to be adjusted, but it is intended to remain in place until capital upgrades are possible

Low: project is considered a permanent capital upgrade that is unlikely to be adjusted significantly once installed

Recommended

Always

Always

Always - project performance can inform future investments

This Summer: Launching A Citywide Quick Build Program



Questions?



STREETPLANS

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Thank You!
Get to Work!

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@StreetPlans