# Traffic Gardens in Washington!

### A Tool Kit for Permanent and Pop Up Traffic Gardens



### **Presented By:**









Publication 971 NonDOH April 2022 To request this document in another format, 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@DOH.wa.gov.

### What is the Purpose of a Traffic Garden?

Walking and biking provides great transportation options and health benefits for students, particularly in areas with a safe school zone walking and biking infrastructure. But many child cyclists do not know the rules of the road. And unintentional pedestrian injuries are the fifth leading cause of injury-related death in the United States for children ages 5 to 19.\* Children need a safe environment to learn and practice biking and walking skills. And children who learn to navigate roads as pedestrians and cyclists become drivers who watch for and respect the pedestrians and cyclists with whom they will share the road.

### Traffic Garden Concepts

A traffic garden is a small version of various roadways painted onto a paved surface in a park, closed off street, or school yard, where children can safely practice the rules of the road free from motorized vehicles. Evidence shows that, along with parent-initiated training, school-based training programs yield promising results in children's pedestrian behaviors and retention. These concepts, along with the purpose, are important elements when pitching the idea to your partners or potential funders.



Permanent Traffic Garden at Mt. View Elementary, Lacey WA

A traffic garden creates a much-needed safe, outdoor public space for children to participate in active learning. It also can be viewed as a public recreational site and a public art installation. These traffic gardens can be Permanent or "Pop up" – which are made with temporary chalk or paint to be installed temporarily. Make sure you check with property owners for consent and any permitting, coding, and/or enforcement you might need to address.

It takes a village to make a community traffic garden!

- School Districts
- City or County Parks
- Transportation Organizations
- Safe Kids Coalitions

Partnerships can include:

- Health Departments
- Hospitals
- Law Enforcement
- Target Zero

- Fire Departments
- City or County Planning
- Public Works Departments
- Injury Prevention Organizations

- Other organizations can find creative ways to be involved:
  - Arts Organizations can help with aesthetics
  - Insurance Agencies and Pediatric Offices can provide bike and other wheeled sports helmets
    - Other Local Businesses can help make ribbon cutting ceremonies fun, community events
      - Bike Rodeo Organizers can partner for annual events

### **Permanent Traffic Gardens**

Successful permanent traffic gardens rely on four components – community and environment, community engagement, design, and installation. An in depth "Traffic Playground Toolkit" from Metro Portland can be found at https://bit.ly/3zA3cJd.

#### **Community and Environment**

Ask yourself—what community could best benefit from a traffic garden? Great sites benefit multiple layers of a community! Are there safe routes to walk, bike, or scoot to the garden and/or is it on a bus line for those further away? If you work on a school site, does the community have access to the traffic garden on evenings, weekends, and other non -school hours? Is the traffic garden easily accessible for those with different transportation options? Are walking/riding paths to the traffic garden safe? Would parents and caregivers feel comfortable visiting this site? Would this be located in an area where older children play can relatively safely without parental supervision? Is there enough space to create an area large enough for the amount of children you anticipate using the garden? Sites can be as small as 20' x 20', but a larger size, say 100' x 100', will allow for may road options and participants.

#### **Community Engagement**

Once you've established a good environment/community to host the permanent traffic garden, you will want to establish a traffic garden core team to include stakeholders from your partners and additional community members to supervise all elements of the project. A shared vision will inform the project plan and resource allocation, aligned with known transportation trends. The team can leverage local resources to provide assistance, leads, and/or donations of expertise, supplies, and funds to complete the overall project.

#### Design

The team will then develop design criteria. The criteria will highlight design purposes (goals) and address equitable access. The best core teams will identify a local engineer to work with (preferable with traffic and CAD design experience and access) and then provide a conceptual layout of the traffic garden for the space provided. The core team will provide insight and overall project supervision.

#### Installation

Core team members and volunteers will install the chalk design and final paint work. Paint Parties are fun! If the site needs asphalt or asphalt sealing, make sure this has be allotted for in the budget—it needs to be done by a professional and can be expensive!

Check out a "Let's Get Started!" Worksheet in Appendix B.

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Reviewing the design to use for a Pop Up Traffic Garden at

Garfield Elementary, Olympia WA

#### Weather!

Remember to plan around the weather! It is hard to host a painting party or chalk a design in the rain. We suggest spending the Fall, Winter, and early Spring months procuring funding and doing all the preliminary work involved to install a permanent traffic garden and saving the actual install for late Spring and Summer months.

#### Permanent Traffic Garden Supply List

**Chalk**—lots of white and yellow chalk for the temporary design

**Chalk Line**—pick a color that will show up on the asphalt surface you are working on

#### String

Measuring tape

#### Masking tape

Arc Marker (this can be a wood stub with a screw attached at the top and string tied to this to create the different sized arcs you will need for your curves

Spray bottle with water and a scrub brush— hey, we all make mistakes, right?

**Stencils** for stops, yields , and other signage and markings you would like to incorporate into your traffic garden

**Stencil box**—this is great to protect your stencils from over spray

Paint—use traffic paint or a good alternative

Plastic paint drop cloth—you will want to protect your car from paint and chalk

#### **Budgeting?**

See Appendix A for Permanent Traffic Garden and Appendix B for Pop Up Traffic Gardens Budget Templates



Permanent Traffic Garden at Mt. View Elementary , Lacey WA



#### **Paint Party List**

Paint—you will probably need more than you estimate

**Paint rollers with long handles**—don't make your volunteers stoop to apply paint!

Wet wipes

**Disposable gloves** 

Garbage bags for any and all waste

Music and a speaker



Painting party! Painting the grass between the roads.

#### Spray Chalk Tip

Pop Up Traffic Gardens will use a lot of the same supplies as Permanent Traffic Gardens but use spray chalk instead of paint.

Buy larger sized cans of spray chalk—12 oz. chalk tips spray wider than their 6 oz. counterparts. Make sure the spray chalk is truly temporary—many landscaping and utility marking chalks will last for a long time!

### Pop Up Traffic Gardens

Pop Up Traffic Garden are quick, simple road-scapes that can be made in under three hours and will last on the ground until it rains or is scuffed enough to no longer be seen well. These are great to introduce communities to the traffic garden concept.



They can be implemented at bike rodeos, community safety fairs, during summer camps, and at schools teaching bike and/or pedestrian safety skills. They typically use temporary spray chalk instead of paint.

Find supply lists and budget templates in the Appendices!



A great resource, *Do-It-Yourself Traffic Garden Fun*, can be found at **TrafficGardens.com**. You can also order stencils to help complete your pop up traffic garden from this site and stay on top of traffic garden news. This booklet offers tips, several designs, and lists of supplies needed. It also shows you how to use an arc marker and how to make a stencil box.

Installing Double Diamond design

We utilized *Do-It-Yourself Traffic Garden Fun* to construct the **Town Square** design and a **Double Diamond Design,** two of the easier design s in the booklet.

A **Town Square** design can be created in 2 hours with 4 volunteers grouped in pairs. The total work space we used was 36 ft x 36 ft. The space required 60 oz of white chalk and 12 oz of yellow chalk. Crosswalks can be taped before spraying or, to save time, a stencil can be used.



Pop Up Traffic Garden at Roosevelt Elementary, Olympia WA

The **Double Diamond** design can be created in 2 hours with 4 volunteers grouped in pairs, too. The total work space we used was 24 ft x 50 ft. The space required 42 oz of white chalk and 24 oz of yellow chalk. We had google figure out some of the math for the diagonal of each inner square (roughly 17 ft) and the intersection space from one square in the other (8.5 ft.).

In both cases, we had lots of other color spray chalk available to create arrows to the traffic garden signage and fun designs such as bushes and flowers in the negative spaces and along the outside of the traffic gardens. These extra designs really made the traffic gardens stand out—making it easier to find and offering another element for joining in (children can add more flowers and other doodles in the non-road spaces)!

### Signage and Other Ideas

Your signage is a great way to introduce the traffic garden concept to the community, offer a few tips and safety reminders, and acknowledge any funders who made the traffic garden possible.



A liability waiver is always a good idea!

**Be creative!** Paint mascots and landscapes or buildings into the negative spaces between the roads in your traffic gardens! Add benches for those needing a place to rest and provide shade for cover from the hot sun or rain! Above all—traffic gardens are **FUN** so have fun creating them!

### **Appendix A**

Here is a Budget Template with items to purchase and approximate costs for you to use to figure out the funding you will need for your first Permanent Traffic Garden. Budgets will vary depending on supply chains and what discounts you may get and/or volunteer expertise. Many items, both painting and layout supplies, can be used over again so your next Permanent Traffic Garden will cost less!

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	Estimates	Your Estimates
Payroll Expenses		
Traffic Engineer (This could be a knowledgeable volunteer, stipend, or hourly rate)	Varies	
CAD Designers (This could also be a volunteer, volunteer or paid student with a stipend or hourly rate)	Varies	
Programs Expenses		
Asphalt Sealing Surface (if needed)	\$.50 sq. ft.	
Paint	\$.25 sq. ft.	
Paint Supplies	\$50-\$100	
Brushes (per painter)		
Gloves		
Garbage Bags		
Plastic Drop Cloths (to protect your car)		
Rollers (per painter)		
Long Roller Handles (per roller painter)		
Wet Wipes		
Layout Supplies	\$200-\$500	
Arc Marker (you can make this yourself)	\$0	
Bucket or Wheeled Bin for Storage/Transportation	\$30	
Chalk	\$45	
100 ft. Chalk Line	\$10	
Masking Tape	\$10	
100 ft. Measuring Tape	\$20	
PPE (masks, hand sanitizer, etc.)	\$20	
Spray Bottle and Scrub Brush	\$10	
Stencil Box (you can make this yourself)	\$0	
Stencils (arrows, crosswalks, etc.)	\$100-\$400	
Stencils from TrafficGardens.com	\$20	
String/Twine	\$5	
"Traffic Playground Toolkit" from Metro Portland	\$0	
Signage	\$250	
Food and Supplies for volunteers	\$200	
Ceremony	\$100	
Totals	\$5 to \$15K	

### Permanent Traffic Garden Supply List and Budget

### **Appendix B**

Pop Up Traffic	Garden Supply List and Budget
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	Estimates	Your Estimates
Programs Expenses		
Spray Chalk (.05 oz. sq. ft.)	\$.88 sq. ft.	
Layout Supplies	\$225-\$500	
Arc Marker (you can make this yourself)	\$0	
Bucket or Wheeled Bin for Storage/Transportation	\$30	
Chalk	\$45	
Chalk Line	\$10	
Masking Tape	\$10	
100 ft. Measuring Tape	\$20	
Plastic Drop Cloths (to protect your care)	\$10	
PPE (masks, hand sanitizer, gloves, etc.)	\$30	
Spray Bottle and Scrub Brush	\$10	
Stencil Box (you can make this yourself)	\$0	
Stencils (arrows, crosswalks, etc.)	\$100-\$400	
Stencils from TrafficGardens.com	\$20	
String/Twine	\$5	
"Traffic Garden Fun" from TrafficGardens.com	\$20	
Temporary Signage	\$50	
Food and Supplies for volunteers	\$100	
Totals	\$300-800	

Here is a Budget Template with items to purchase and approximate costs for you to use to figure out the funding you will need for your first Pop Up Traffic Garden. Many layout supplies can be used over again so your next Pop Up Traffic Garden will cost much less!

### Let's Get Started! Worksheet

Funders	Who may be interested in sponsoring?	 The Ask	Purpose and Concept (with local data) for the funder	
Location	Where is this needed?	there any	vns this and are v potential needs mits, etc.)?	
Partners	Who should you partner with for design and installation?		can you get to er (paint parties, etc.)?	

### Appendix C

#### Items for Start Up Pop Up Traffic Garden Kit

Vendor	Item	Amount	Where to find
Home Depot	100 ft. Chalk Line with Chalk	\$14	https://www.homedepot.com/p/Milwaukee-100-ft-Bold-Line-Chalk-Reel-Kit-with-Red-Chalk-48-22-3986/207005252
Home Depot	100 ft. Measuring Tape	\$22	https://www.homedepot.com/p/Milwaukee-100-ft-Closed-Reel-Long-Tape-Measure-48-22-5101/207191772
DIY	Arc Marker	\$0	Make from 4" 2 x 2 with a screw at the top and string
Amazon	Arrow Stencil	\$25	https://www.amazon.com/Arrow-Symbol-Pavement-Marking- Stencil/dp/B008FP69IE/ref=sr_1_14?crid=181PBVS80T2L3&keywords=arrow+stencil&qid=1643241240&sprefix=arrow+stencil %2Caps%2C207&sr=8-14
Amazon	Disposable Gloves	\$15	https://www.amazon.com/gp/product/B08F77MWYF/ref=ox_sc_act_title_3?smid=ATVPDKIKX0DER&psc=1
Home Depot	Masking Tape - Rough Surfaces	\$7	https://www.homedepot.com/p/3M-Scotch-1-41-in-x-60-1-yds-Masking-Tape-for-Rough-Surfaces-in-Green-2060- 36AP/206298155
Home Depot	Plastic Drop Cloth	\$4	https://www.homedepot.com/p/HDX-9-ft-x-12-ft-2-mil-Plastic-Drop-Cloth-DCHD-2/204711648
Office Depot	Rolling Bin	\$35	https://www.officedepot.com/a/products/987304/Office-Depot-Brand-Mobile-Folding-Cart/
Home Depot	Scrub Brush	\$5	https://www.homedepot.com/p/HDX-Scrub-Brush-with-Iron-Handle-252MBHDXRM/204357208
Home Depot	Spray Bottle	\$4	https://www.homedepot.com/p/HDX-32-oz-All-Purpose-Sprayer-Bottle-HDX32101/305884969
DIY	Spray Box	\$0	Cut from recycled cardboard box
Amazon	Spray Chalk (Black & White - 2)	\$30	https://www.amazon.com/gp/product/B07HGSV3XN/ref=ox_sc_act_title_1?smid=A2LZ7153F39UDT&psc=1
Amazon	Spray Chalk (Pastels - 3)	\$47	https://www.amazon.com/gp/product/B07HGTQ8PW/ref=ox_sc_act_title_2?smid=A2Q1LRYTXHYQ2K&psc=1
Amazon	Spray Chalk (Red, White, and Blue)	\$35	https://www.amazon.com/dp/B07D3Q71KF/ref=twister_B08MXPW5KM?_encoding=UTF8&psc=1
Discover Traffic Garden	Stencils	\$20	https://www.trafficgardens.com/product-page/traffic-garden-stencil-set
Home Depot	String/Twine	\$5	https://www.homedepot.com/p/Everbilt-12-x-420-ft-100-Cotton-Twine-Rope-White-70077/300019713
Discover Traffic Garden	Traffic Garden Fun Booklet	\$20	https://www.trafficgardens.com/product-page/diy-traffic-garden-guide
Amazon	White Chalk	\$17	https://www.amazon.com/gp/product/B01HDNVF14/ref=ox_sc_act_title_2?smid=A3ONBRP6JZO6JL&psc=1
Amazon	Yellow Chalk	\$29	https://www.amazon.com/gp/product/B003FGJZJS/ref=ox_sc_act_title_1?smid=A3I15NI5R3MBNB&psc=1
		\$335	



### Appendix D

## **Event Name**

Traffic gardens are fun and a great place to learn and practice bicycle safety skills. While you ride in the traffic garden, practice each of the skills below. Check-off the skills you complete.



Stop at the stop signs.



Look left, right, and left to make sure the road is clear.

Hand signal before turning left.



Hand signal before turning right.

\_\_\_\_\_



Hand signal before stopping.

Send your completed traffic garden check-list to abc@xxxxxxxx.com by xxxx and we will mail you a prize. Send us a photo of yourself riding in the traffic garden for a bonus prize! By sending a photo, you give us permission to use the photo for promotion.

Name: \_\_\_\_

Mailing Address: \_\_\_\_\_\_

When riding your bike, you should always wear a properly fitted helmet. Before you ride, follow these steps to make sure your helmet fits properly.



Look up. You should see the bottom rim of the helmet.





Mouth: Open your mouth as wide as you can. Does the helmet hug your head? If not, tighten the straps.

Bicyclists use hand signals to communicate to drivers and other road users. You should signal before you turn left, turn right or stop. There are two different hand signals for a right turn; you can practice using both.



### Appendix E

### Photos

### Temp Pop-Up Traffic Garden Example



Perm Traffic Garden Example

