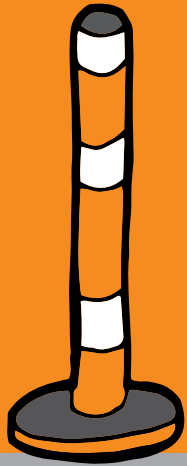


Digital Toolkit:

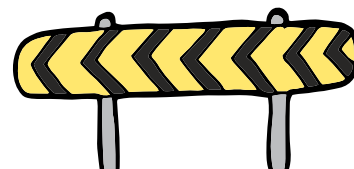


# Starting a **TRAFFIC GARDEN** Project



# TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	<b>3</b>
Purpose of this Toolkit.....	3
What is a Traffic Garden? .....	3
Benefits of Traffic Gardens .....	3
Types of Traffic Gardens.....	4
<b>GETTING STARTED ON YOUR TRAFFIC GARDEN</b> .....	<b>5</b>
Initial Planning Steps.....	5
Resources and Tools for Getting Started.....	8
Site Selection Process.....	9
Selecting the Site.....	10
Securing the Site.....	10
<b>PREPARING FOR INSTALL</b> .....	<b>11</b>
Design Process.....	11
Field Visit .....	12
Prepare Base Drawing Using Aerial.....	13
Prepare Traffic Garden Drawings.....	13
Other Physical Elements.....	14
Choosing the Right Materials .....	14
<b>MAKING THE PROJECT A REALITY</b> .....	<b>15</b>
Implementing a Surface-applied (Paint) Project.....	15
Traffic Garden Launch.....	16
<b>MAXIMIZING THE IMPACT OF YOUR TRAFFIC GARDEN</b> .....	<b>17</b>
Sustainability and Maintenance.....	17
Programming at a Traffic Garden.....	17
Community Events at a Traffic Garden.....	17
Traffic Garden Maintenance .....	18
<b>ADDITIONAL RESOURCES</b> .....	<b>19</b>
<b>APPENDIX A:</b> Basic Technical Specifications for Traffic Garden Design..	20
<b>APPENDIX B:</b> Sample Traffic Garden Layout Graphics.....	22



# INTRODUCTION

## Purpose of this Toolkit

This digital toolkit provides guidance for starting a traffic garden in your community. It includes detailed steps and guidance on the following:

- Initial planning and visioning
- Community engagement
- Site selection and design
- Installation and launch
- Maintenance



## What is a Traffic Garden?

A traffic garden is a mini-world of streets and scaled-down traffic features, free of cars, where kids and new learners can practice biking skills, learn about roadway safety, and have active fun. Traffic gardens sometimes exist on school blacktops, in parking lots, or as a part of neighborhood parks.

## Types of Traffic Gardens

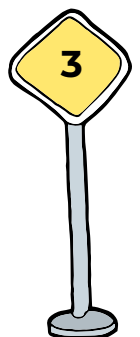
There is no single “typical” traffic garden. Instead, these small street networks come in many different layouts, appearances, and materials. Some examples showcasing the variety of traffic gardens include:

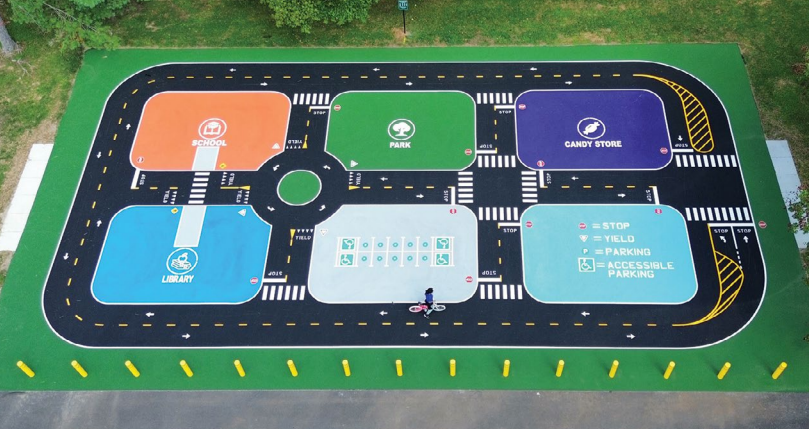
## Benefits of Traffic Gardens

Traffic gardens provide a safe space to build confidence while promoting independence and active learning. The community benefits from this affordable amenity as it provides space for programs, events, and neighborhood gatherings.

**They offer many benefits including:**

- Building confidence and independence
- Inspiring conversation about safer street design
- Providing access to safe practice spaces
- Integrating into STEM-related classes
- Gathering spaces for community-building





Huntington Park Bicycle Traffic Garden, MD:  
Basketball court conversion



The Heights Bike Garden, Vancouver, WA:  
Example of traffic garden collaboration with  
artist and incorporating eco-storytelling



University of Maryland Youth Traffic Garden  
2024, MD: a 1-day pop-up installation



Montbello Bicycle Skills Course, CO:  
Example of traffic garden on an  
unusually shaped site

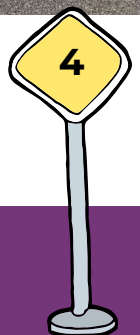


West Seattle Elementary School, WA:  
Example of traffic garden co-located with  
other use (basketball courts)



Brookhaven Safety Town, NY:  
Permanent installation with  
streets, curbs, buildings

You can find many more examples via the interactive  
[North American Traffic Gardens Map](#)



# GETTING STARTED ON YOUR OWN TRAFFIC GARDEN

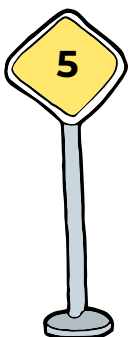
## Initial Planning Steps


**1 Determine Purpose:** First, it will be important to determine the purpose of your traffic garden. This will depend on how you plan to use the space. Sometimes traffic gardens are used by educators for experiential learning opportunities, sometimes they relate to a school-wide event and serve as a pop-up demonstration. Sometimes traffic gardens are an invitation to bring the neighborhood together and generate awareness around safe riding and safe streets. Determining purpose will help make the rest of the steps easier.

**2 Determine Type:** Second, it will be important to determine what type of traffic garden will work best depending on your purpose. You may want to consider whether you want this to be a community resource in a park or parking lot, or whether you want it to be connected to a school and curriculum. Maybe you would like a blend of the two and have it on school grounds but open to the public outside of school hours.

To help clarify your vision, below are the different types of traffic garden projects to consider, each serving unique goals and potentially overlapping in purpose and design. Projects can fall into one or more of the following categories, depending on their purpose and design:

- **Temporary Installation:** Removable, typically used for one-time events.
- **Semi-permanent Installation:** Designed to wear away over time, suited for short-term locations.
- **Permanent Installation – Surface-applied:** Features painted streets, pavement markings, and portable traffic signs.
- **School-based Installation:** Serves current and/or future student programs.
- **Permanent Installation – Built Infrastructure:** Incorporates mini-streets with curbing, installed traffic signs, model buildings, landscaping, and other permanent features.
- **Neighborhood-based Installation:** Intended to serve local children and connect with current or future programs.
- **Community-based Installation:** Designed for all ages and abilities, supporting existing and/or future programs.




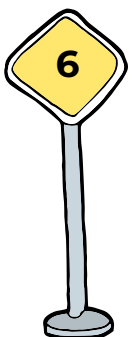
 **Assemble Team:** The third step is that you will need to assemble a Traffic Garden Team—your key support group for decision-making, outreach, and implementation. Seek community members interested in the project who can offer insights and help lay the groundwork needed for success. Here are suggested Traffic Garden Team roles, some of which may overlap and be one person:

- **Project Champion:** Drives the project vision, inspires commitment, navigates challenges.
- **Team Leader/Project Manager:** Oversees and coordinates team members and tasks.
- **Community Engagement Coordinator:** Connects with families, community members, and local organizations.
- **Designer:** Develops the traffic garden layout and ensures it meets technical and programmatic needs.
- **Program Leader:** Ensures that program and educational activities are integrated.
- **School Representative:** Main school contact working with staff and administration.
- **Site Owner:** Manages site-specific permissions and concerns.

Depending on your team’s structure, some roles may be combined or filled by a single person. Additional roles may include Safe Routes to School (SRTS) coordinators, local jurisdiction representatives (e.g., transportation department), active transportation advocates, assisted mobility advocates, school administrators, facilities staff, after-school staff, PE teachers, community liaisons, volunteer organizer, students, and families.

As your project progresses, you can engage local stakeholders at different stages. Consider reaching out to community members representing diverse social backgrounds, ages, and abilities as well as youth-focused nonprofits, biking organizations, bike shops, and other local business owners. Your SRTS Outreach Coordinator can also connect you with local organizations that are already partnered with SRTS—also known as Alliance Partners.

 **Develop Plan:** The final step of the initial planning phase is to develop a project plan and timeline. This plan serves as a roadmap for your team, ensuring everyone is working toward the same goals. Having a timeline will not only help you stay on track but also make it easier to adjust as needed. The plan and schedule are what will ultimately help you cross the finish line successfully.



# PERMANENT INSTALLATION (SURFACE-APPLIED) TRAFFIC GARDEN TIMELINE:



## Phase 1: Project Foundation and Vision (Months 1-4)

- **Month 1:** Form the Traffic Garden Team and establish a clear project vision.
- **Month 2:** Develop a project plan, identify potential sites, and explore funding opportunities.
- **Month 3:** Visit and evaluate shortlisted sites. Start building partnerships and stakeholder support.
- **Month 4:** Finalize the selection of the site, conduct team field visit to site, and assess program requirements.



## Phase 3: Installation (Months 9-12)

- **Month 9:** Schedule the installation timeline. Notify site owners and facilities staff. Place any orders for equipment and information sign.
- **Month 10:** Conduct site preparations. Complete any required repairs.
- **Month 11:** Finalize installation dates and logistical details including keys and notifications. Continue monitoring weather conditions and prepare back-up plans if needed.
- **Month 12:** Execute the installation according to the finalized plans, ensuring quality and accuracy. Inspect the completed project.



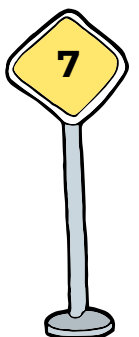
## Phase 2: Planning, Design & Coordination (Months 5-8)

- **Month 5:** Create the base drawing, test and refine the proposed layout on paper. Continue engaging with stakeholders and conduct community outreach.
- **Month 6:** Review and finalize the layout and traffic feature details. Develop detailed installation drawing set.
- **Month 7:** Identify materials and supplies needed. Prepare traffic garden information sign graphic. Identify potential contractors and begin obtaining quotes.
- **Month 8:** Finalize contractor selection. Arrange for any site repairs. Coordinate installation plan. Price any additional equipment.



## Phase 4: Wrap-Up and Launch (Months 13-15)

- **Month 13:** Add any final touches. Conduct any minor adjustments or refinements. Install information signs. Share photos with owner, project team, partners and stakeholders. Send thank you's.
- **Month 14:** Plan a celebratory launch event, invite speakers and community members, and engage the media for coverage.
- **Month 15:** Host the launch event, capture completion photos, and share project results and stories with stakeholders.

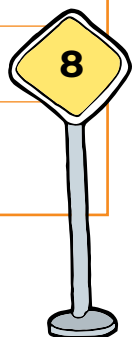


**Sample Budget Template  
for Permanent Installation  
(Surface-applied)  
Traffic Garden**

**Resources and Tools for Getting Started**

Developing an estimated budget helps your team outline costs, prioritize resources, and identify potential funding sources. A solid funding plan highlights where additional support is needed or where adjustments to the vision may be required.

<b>Item</b>	<b>Quantity</b>	<b>Cost</b>	<b>Total \$</b>
Surface preparation (e.g., repairs, resurfacing, recoating)			
Other site fixes (e.g., drainage, access)			
Contractor Traffic Installation Services (includes all paints, cleaning)			
Traffic Garden Traffic Stencils			
Custom Stencils			
Traffic Garden Portable Traffic Signs			
Traffic Garden Information Signs			
Any Storage			
Any New Equipment (e.g., bikes, helmets, pumps)			
Any Bollards or Planters to Block Vehicle Intrusion			
Any New Amenities to Enhance Site (e.g., benches, picnic tables)			
Professional Services Engaged (i.e., design services)			
Launch Event/Marketing			
Final Total			



Traffic gardens can be created with a range of budgets. Sources of funds that other communities have used include:

- **AARP Community Grant**
- **Automobile Insurance Company**
- **Foundation grants**
- **Governor road safety grants**
- **National roadway safety grants**
- **State health department grant**
- **SRTS DOT grants**
- **Vision Zero grant**
- **Community Development Block Grants (CDBG) programs**

Some communities have also successfully tapped into donated services, sponsorships, and contributions to assist in covering costs and bringing projects to life.

## Site Selection Process

When seeking a site, look for underutilized or overlooked spaces with potential for revitalization. While some locations may seem unsuitable at first due to cracked asphalt or already striped surfaces, these can often be addressed through repairs or resurfacing if sufficient funding is available.

**Schoolyards are a common choice but consider different areas on the grounds such as:**

- **Playgrounds**
- **Parking Lots**
- **Old Trailer Pads**
- **Abandoned or Neglected Areas**
- **Underused Spaces**
- **Leftover Segments**
- **Recreation Facilities like Unused Basketball or Tennis Courts**
- **Daycare Grounds**
- **Fairgrounds**
- **Spaces Adjacent to Playgrounds or Regional Trails**
- **College and University Grounds**
- **Unused Shopping Centers**
- **Areas Beneath Highways**

Traffic garden layouts are highly adaptable, allowing them to fit unique spaces, accommodate multiple uses, and integrate seamlessly into existing site functions. However, it is essential to thoroughly assess such sites to ensure they provide safe and accessible routes for all modes of travel, especially for pedestrians and cyclists, and that the selected site would create an inviting and comfortable space where families can gather. For long-term success, collaborate closely with property owners to address concerns and plan for sustainability. Additionally, prioritize spaces that meet basic safety and design requirements.



# CONSIDERATIONS WHEN EVALUATING SUITABLE SITES:

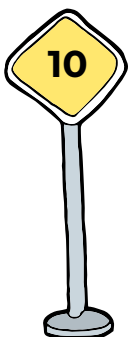
Site Consideration	Positive Features	What to Watch Out For
<b>Size</b>	<ul style="list-style-type: none"><li>• Mostly flat hard surface with clear space free of objects and hazards</li><li>• 45'+ width minimum.</li></ul>	<ul style="list-style-type: none"><li>• Steep slopes</li><li>• Poles and other fixed vertical objects close by</li><li>• Grates, drains and irregular manholes</li><li>• Pavement edge drop-offs and height differences</li><li>• Adjacent building corners</li></ul>
<b>Surface</b>	<ul style="list-style-type: none"><li>• Reasonable to excellent quality surface</li></ul>	<ul style="list-style-type: none"><li>• Wide cracks</li><li>• Widespread alligatored asphalt surface</li><li>• Potholes</li><li>• Extensive existing striping</li></ul>
<b>Access</b>	<ul style="list-style-type: none"><li>• Good sidewalk and trail access</li></ul>	<ul style="list-style-type: none"><li>• Poor pedestrian, bike, and wheelchair accessibility</li></ul>
<b>Safety</b>	<ul style="list-style-type: none"><li>• Closed to vehicles or ability to close off permanently</li></ul>	<ul style="list-style-type: none"><li>• Potential for vehicles to cross the site</li><li>• Risk of accidental reversing into the site</li></ul>

## Selecting the Site

When making the site selection from available options, consider visibility, accessibility, and safety. Locations near community hubs or along pedestrian/bike routes will naturally draw more users. Note when site options come with existing amenities such as benches, trash cans, lighting, and restroom access, as these features can significantly enhance the usability and appeal of the space.

## Securing the Site

Once a likely site is identified for your project, the next step is to secure permission for the use. When reaching out to the property owner, be prepared to share examples of other successful traffic gardens to build confidence in your proposal. If you receive approval, be sure to keep the property owner updated throughout the process. If you already have a site in mind, double-check that it meets the basic criteria before proceeding with further planning.



# PREPARING FOR INSTALL

## Design Process

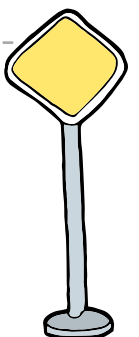
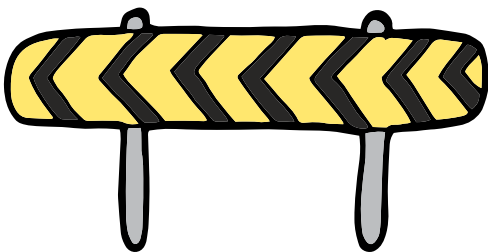
At this stage of the project, if a member of your Traffic Garden team has experience in drawing or design, they may take the lead on the traffic garden design process. Alternatively, you may seek technical design or review assistance from a local municipal planner, an engineer, or possibly the Safe Routes to School team. The typical design process involves a series of steps to ensure an engaging layout, identifying the required elements, refining the street layout, and finalizing the details for subsequent installation at the site.

## Field Visit

The field visit provides a detailed, on-site assessment that feeds directly into the design process. It's an exciting stage, as it's often the first time the Traffic Garden Team can fully visualize the project's potential. Involve multiple team members to capture diverse perspectives on the location. Use the field visit worksheet as a guide for evaluation and take plenty of photos to thoroughly document the site and any ideas or issues that emerge.






Field Visit Report	Identify All that Apply	Notes
<b>Available Amenities</b>	Trash Can, Bench, Picnic Tables, Bathrooms, Bike Racks	
<b>Site Services and Features</b>	Water, Power, Shade/Weather Protection, Lighting	
<b>Access from Street to the Site</b>	Ramps, Steps, Path, Trail, Convenience of Location	
<b>Gates</b>	Locked, Unlocked, Permanently Open	
<b>Surface Materials</b>	Asphalt, Concrete, Other	
<b>Surface Condition</b>	Excellent, Good, Poor	
<b>Cracks</b>	Minor, Isolated, Widespread	
<b>Edges</b>	Intact, Eroding, Steep	
<b>Drainage</b>	Well-drained, Evidence of Pooling Water, Drainage Grates, Unknown	
<b>Physical Elements</b>	Basketball Poles, Light Poles, Utility Boxes, Sheds, Trees, Buildings	
<b>Appearance &amp; Comfort</b>	Visibility, Shaded Areas, Surroundings, Safety Aspects	



## Prepare Base Drawing using Aerial

Find the site on your favorite online map. Switch from map view to aerial view and capture the image at a scale that shows the site and a little of the adjacent surrounding area. You can turn this into a base drawing for your site by outlining the site on the aerial and adding the following information as accurately as possible:

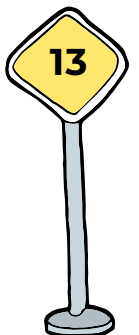
-  The outline of the hard surface you want to use for your traffic garden
-  Any obstructions on the surface that will need to be avoided, such as grates, curbs, poles, etc.
-  Nearby features such as buildings, pathways, trees, shrubs, walls, and fences that could influence the design or functionality of the traffic garden.

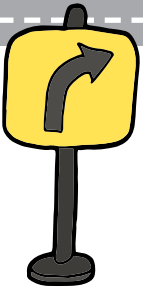
## Prepare Traffic Garden Drawings

Basic instructions for adding a traffic garden layout to the base drawing are as follows:

- **Sketch the Street Layout:** Start with the base drawing and outline your set of streets within the boundaries of the hard surface designated for your traffic garden. Make sure everything is to scale.
- **Refer to Technical Specifications in Appendix A:** Ensure your design meets the requirements for street and lane widths, roundabouts, traffic features, pavement markings and paint colors using the information in the attached appendix.
- **Include a Buffer Zone:** Ensure there is at least a 4-foot buffer around your street layout that remains free of obstructions or vegetation.
- **Add Dimensions and Final Details:** Add all necessary dimensions so that the traffic garden can be laid out on the site and finalize the traffic details of your drawing. Include a reference measurement to an existing feature also.
- **Finalize Your Layout:** Add any decorative features to the layout. You now have your final traffic garden layout!

**Refer to Appendix B** for sample traffic garden layout drawings that illustrate the type of drawing information that helps clarify the design and guides installation contractors effectively.





## Other Physical Elements

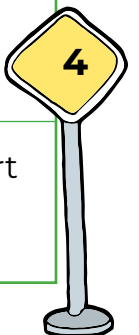
Indicate the location of these physical elements on the final layout and specify whether they will be provided by others or are the contractor's responsibility.

Elements to Complete Traffic Garden	Considerations
Portable Traffic Signs	
Information Signs	
Storage Shed	
Benches and or/Picnic Tables	

## Choosing the Right Materials

When choosing surface-applied materials for traffic gardens, consider factors such as cost, availability, suitability, durability, and appearance.

Installation Materials or Supplies	Notes
Traffic Garden Stencils	Professional grade traffic garden scaled stencils are available online
Traffic Line Striping	Typically, acrylic traffic paint
Pavement Marking	Typically, acrylic traffic paint
Surface Coating	Sealcoat, Other higher-grade acrylic resurfacing products with additional desirable characteristics
Color Coatings	Acrylic paint, Other higher-grade court resurfacing and color products with add colors and longer durability.



# MAKING THE PROJECT A REALITY

## Implementing A Surface-applied (Paint) Project

This is a sample implementation plan for a surface applied (paint-only) installation on a high-quality surface or one that has already been prepared and repaired. Although such an installation typically takes only a few days, the area must remain clear during and shortly after to allow for proper setup and drying, requiring coordination and scheduling with all parties involved. School-based projects typically plan traffic garden installations during breaks to avoid disruptions. Keep in mind that weather is a critical aspect of installation, so it is necessary to be ready to make last-minute adjustments.

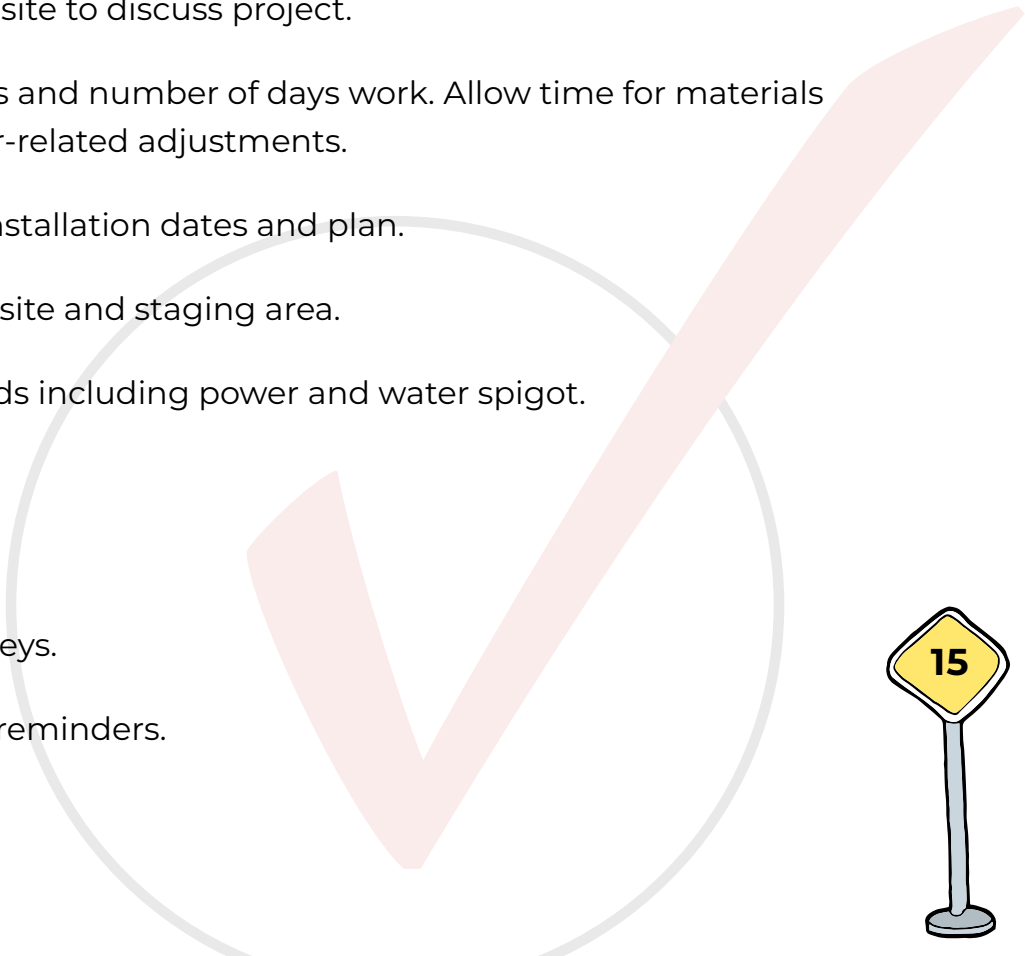
**Below is a sample surface-applied traffic garden installation planning checklist:**

### Planning for Installation

- Select and engage contractor.
- Provide detailed drawings and installation instructions.
- Meet with installer at site to discuss project.
- Plan installation dates and number of days work. Allow time for materials ordering and weather-related adjustments.
- Let all parties know installation dates and plan.
- Arrange for access to site and staging area.
- Confirm installer needs including power and water spigot.
- Watch weather.

### Last Minute Details

- Confirm access and keys.
- Send out installation reminders.
- Watch weather.



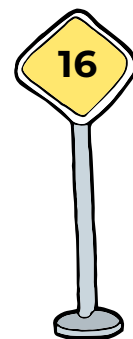
Once work is underway, the installation process begins by chalking out the street network layout fully before applying any paint to the surface. It's crucial to review the layout on the surface with the team to ensure proper alignment and resolve any issues early. Traffic gardens demand precision, especially for straight lines and well-defined intersections, so communicate these expectations clearly, as installers may not have previous experience with this type of project.

A Traffic Garden Team representative should be on-site throughout the installation process as much as possible. Arrive before the crew to ensure the site is accessible and ready to go. Greet the team and capture a group photo. Stay available as minor issues or adjustments may arise that require immediate decisions. Flexibility is key, as modifications to road lengths or other elements might be necessary for accuracy. Ensure the work is completed according to the plan and that the site is restored and clean afterward. Document the process with photos and share updates with the team and property owner.

### **Traffic Garden Launch**

A traffic garden launch is a chance to introduce the space to the community and celebrate everyone's contributions. Host an event that includes project partners, stakeholders, and local media to boost visibility. Recognize property owners, funders, volunteers, and officials for their support.

To build community engagement, share the traffic garden's story through newsletters, local groups, and school communications. Offer guided tours to inspire similar projects. Use media effectively by issuing a press release and sharing updates and photos on social platforms to highlight the positive impact. Keep momentum by sending thank you notes and updating property owners and funders on progress and future events. With thoughtful planning, the traffic garden will quickly become a valued community asset.



# MAXIMIZING THE IMPACT OF YOUR TRAFFIC GARDEN

## Sustainability and Maintenance

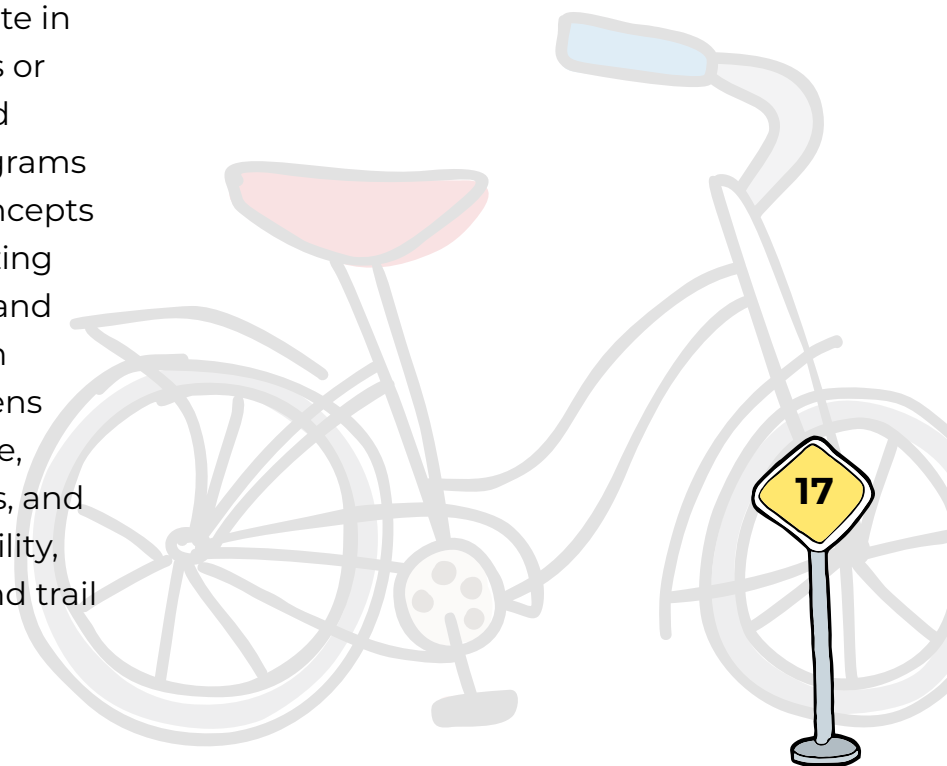
Even though the installation is complete, it's crucial to set up a maintenance system to keep the traffic garden in good condition. Regular upkeep ensures functionality and safety. Effective educational programs will keep the community engaged and maximize the garden's benefits. Additionally, there are various strategies to ensure the traffic garden becomes a lasting, integral part of the community and remains sustainable over the long term.

## Programming at a Traffic Garden

A traffic garden is an outdoor classroom shaped into a miniature version of the built environment, providing an engaging and interactive way for young people to learn. Kids can participate in structured instructional programs or simply enjoy riding their bikes and exploring with friends. These programs can explain basic traffic safety concepts and roadway rules while emphasizing safe behavior for walking, biking, and rolling. By incorporating hands-on learning experiences, traffic gardens help increase confidence on a bike, develop better bike handling skills, and promote a sense of self-responsibility, respect, and safety for all street and trail users.

## Community Events at a Traffic Garden

Traffic gardens can also serve as valuable neighborhood amenities and popular destinations for families, children, and community groups. There are numerous ways to engage the community and maximize the use of a traffic garden, including hosting summer camp programs, scouting events, bike rodeos, chalk art and mural activities, and free play sessions. They are great venues for celebrating Bike to School Day, organizing birthday parties, or even holding free bike repair events. By creating a welcoming space, traffic gardens can foster connections and encourage active transportation in a fun and accessible setting.





## Traffic Garden Maintenance

Setting up a maintenance system is an essential step in ensuring that the new installation remains safe and effective for its users. This may include creating a schedule, assigning tasks, and establishing a reporting system for any issues or concerns. Traffic gardens are relatively low-maintenance due to the lack of moving elements and limited wear associated with use.

Here's a sample traffic garden maintenance checklist:

### Regular Surface Inspections

- Inspect the surface for any cracks, damage, or uneven areas.
- Perform spot repairs promptly to prevent further deterioration.

### Traffic Signs and Pavement Markings

- Check the condition of all signs and pavement markings regularly.
- Touch up or replace any faded or damaged elements as needed.

### Debris and Litter Removal

- Keep the traffic garden area free from debris, litter, and obstacles.

### Equipment Maintenance

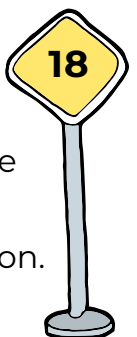
- Regularly inspect and maintain associated equipment, such as bikes and helmets, to ensure they are in good working order.

### Color Coating Maintenance







- Assess the condition of color coatings on the pavement.
- Schedule touch-ups when signs of wear appear.

### Access Condition Checks

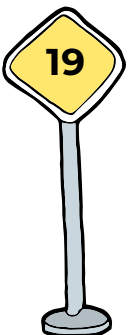
- Inspect access points around the traffic garden to ensure they remain safe and in good condition.



# ADDITIONAL RESOURCES

-  [Seattle Traffic Garden Handbook](#)
-  [Planting Seeds for Regional Roadway Safety, One Traffic Garden at a Time](#)
-  [Safe Routes Philly, Traffic Garden Guide, Temporary and Pop-ups](#)
-  [Traffic Gardens in Washington, a Toolkit for Permanent and Pop-up Traffic Gardens](#)
-  [Oregon Metro Portland Traffic Playground Toolkit](#)
-  [North American Traffic Garden Map](#)

Want to learn more about Traffic Gardens? Visit the Massachusetts Safe Routes to School website:  
<https://www.mass.gov/info-details/safe-routes-to-school-engineering#traffic-gardens->



# APPENDIX A:

## Basic Technical Specifications for Traffic Garden Design

The following specifications provide a foundation for designing a traffic garden layout for elementary age children. Increase street width when designing for older students.

### Best Practices for Site Design

- **Vehicle Access:** Ensure motor vehicles are restricted from entering or reversing into the traffic garden area. Use portable planters, bollards, or other barriers to block unauthorized entry, permitting vehicle access only for necessary activities such as utility work.
- **Environmental Considerations:** Consider the impact of overhanging trees, areas prone to ice formation, and ensure proper site drainage to maintain safe and functional conditions.
- **Safety Zones:** Maintain a clear buffer between the traffic garden and any fences, walls, or structures. Avoid locating the garden near trash storage areas.
- **Layout and Orientation:** Align the traffic garden layout with adjacent playground access and gym facilities. Coordinate access routes to the site, designate seating areas for adults, and identify designated spaces for staging bikes during programs.

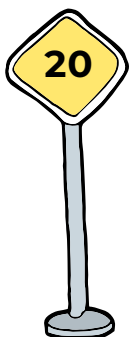
### Key Design Elements

- **Streets and Intersections:** Define streets using edge line striping and centerlines, creating a cohesive street network with different types of intersections, such as four-way, three-way, and roundabouts. Include at least one intersection featuring stop bars, yield markings, and corresponding signs.

- **Sidewalks (Optional):** Add sidewalks to increase complexity and encourage pedestrian interactions. Use contrasting colors or pedestrian symbols to indicate sidewalks within the network.
- **Traffic Signs and Pavement Markings:** Incorporate scaled-down versions of real traffic elements. Place portable, free-standing traffic signs throughout the garden and use stencils to mark key elements directly on the surface.

### Roadway Educational Elements

- **Stop Intersections:** Clearly mark intersections with stop bars, the word 'STOP,' and portable stop signs, and, when applicable, stenciled stop signs positioned outside the edge of the street striping.
- **Roundabout:** Install a single-lane roundabout with counter-clockwise direction and yield markings and "YIELD" word on all approaching streets. Include arrows to show riding direction on roundabout.
- **Pedestrian Crossings:** Mark crosswalks at intersections and mid-block crossings to encourage pedestrian and rider interactions.
- **Additional Markings:** Use arrows in lane centers, "STOP" and "YIELD" words at intersections, and symbols like bike lane markings and railroad crossings to reinforce educational elements.



## Other Design Aspects

- **Accommodating Devices:** Streets should comfortably fit students on balance bikes, two-wheelers, and other devices while allowing multiple riders simultaneously. Ensure smooth turns and avoid sharp corners or hairpin turns.
- **Accessibility:** Create barrier-free layouts to support students with mobility aids such as wheelchairs or adaptive bikes.
- **Storage:** Include secure storage areas for such elements as portable signs, bikes, and any other accessories.

## Street and Traffic Element Dimensions

- **Street Lanes:** Travel lanes should be minimum 3'-4' wide when street is two-way. One-way streets are minimum of 4' wide. Roundabout street lane should be minimum 4' wide.
- **Intersections:** Use 3' minimum corner radii where streets intersect. Intersections should be spaced well apart when using stop signs and stop bars (to reduce too many stop/starts).
- **Stop markings:** "STOP" letter height = 6", stop bar = 6" wide and matches full width of lane
- **Yield markings:** "YIELD" letter height = 6", "sharks teeth" triangles = varies
- **Crosswalks:** Crosswalk bar width = 6" x 24" with 6" gap between bars. Arrange symmetrically and size to fill entire crossing
- **Sidewalks:** Recommended widths = 2' minimum
- **Sign Dimensions:** Sign heads should be 10"-12" wide, with 48" high posts and portable bases weighing 15-25 pounds.

- **Striping Line widths:** Use minimum 2" wide lines for lane edges and center lanes. Measure all dimensions from center of lines and note this on drawings.

## Traffic Garden Colors

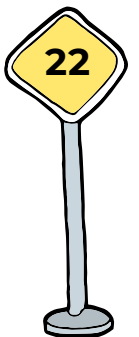
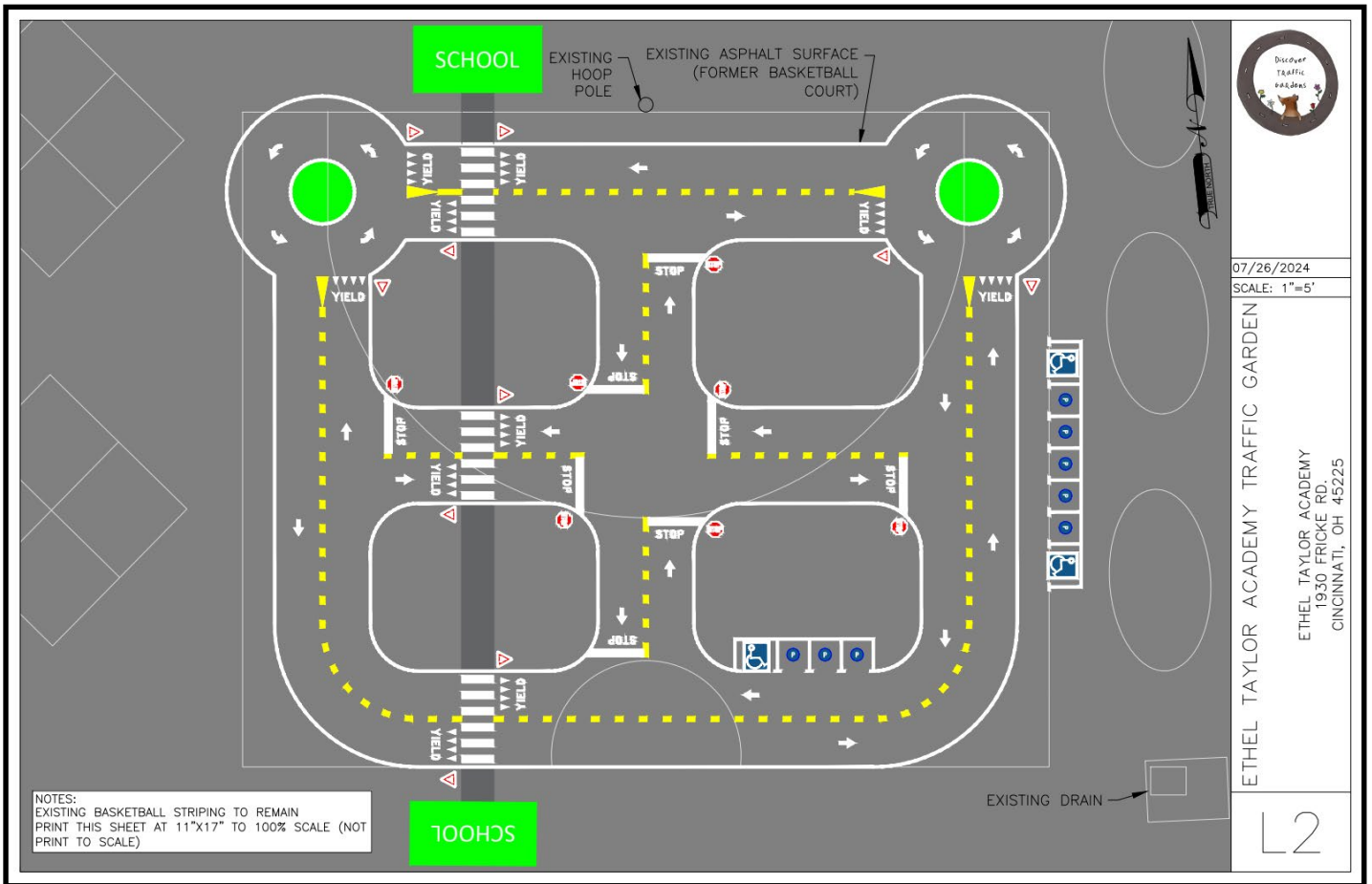
- **White:** Lane edge striping, arrows, crosswalks, and traffic pavement markings.
- **Yellow:** Center lines and any islands or median cross-hatching.
- **Green:** Bike lanes and bike boxes.
- **Blue:** Use for parking "P" symbols and handicapped parking symbols.
- **Other Colors:** Utilize contrasting colors for sidewalks, and any added features like buildings, parks, lakes, etc.



# APPENDIX B:

## Sample Traffic Garden Layout Graphics

### Layout Drawing Showing Color Scheme



# Sample Traffic Garden Layout Graphics

## Layout Drawing Showing Dimensions

