



Developing Mobility Solutions for Vulnerable Road Users

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Lorrie Lynn
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From the Inside-Out: Safe Routes to School in Virtual Reality

Lorrie Lynn
Safe Kids San Diego
PREVCON
Monday, July 24, 2023
2:15 pm – 3:30 pm
Chesapeake A/B/C

Agenda

- Understand the theory and process for Safe Routes to School implementation
- Benefits of SRTS partnerships
- Flipping the script to virtual
- Returning to school

Background of Safe Routes to School with Rady Children's Hospital

Safe Routes to School (SRTS) is a program that encourages the use of active transportation to and from school to reduce childhood obesity, improve safety knowledge to reduce pedestrian injury, inform needed infrastructure changes and reduce carbon emissions.

Employing the Health Promotion model of the 5 Es (Education, Equity, Engagement, Engineering and Evaluation) and incorporating the Transtheoretical Model of Change theory SRTS emphasizes changes in behavior through education and reinforced with activities.

SRTS aims to improve Social Determinants of Health (SDOH) and reduce inequities in our communities, supporting several social determinates of health; infrastructure for safe active transportation, reduction of crime and improving environmental conditions such as air pollution.

Implementation Models of change process and behavior

The 6 E's



Education



Engineering



Evaluation



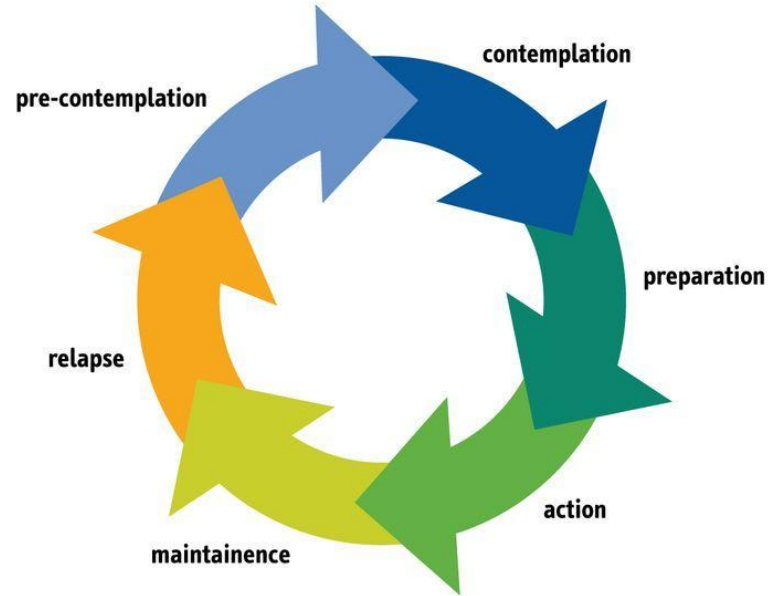
Encouragement



Enforcement



Equity



Transtheoretical Model of Change
Prochaska & DiClemente

SRTS aims to improve Social Determinants of Health (SDOH) and reduce inequities in our communities:

- infrastructure for safe active transportation
- reduction of crime
- improving environmental conditions such as air pollution

SOCIAL DETERMINANTS OF HEALTH

The social determinants of health are the conditions in which we are born, we grow and age, and in which we live and work. The factors below impact on our health and wellbeing.



Childhood experiences



Housing



Education



Social support



Family income



Employment



Our communities

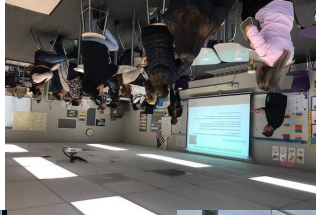


Access to health services

Source: NHS Health Scotland

Community Criteria

- Pedestrian bike injuries
- Environmental
- Free reduced lunches
- Diversity



SRTS Activities: Pre Lockdown

- Walk to School Day
- Bike Rodeos
- Community Events
- Parent Education
- Parent Walking Clubs
- Read Across America

City of National City – Safe Routes to School Example

Overarching Goals



Decrease pedestrian and bike injuries



Increase transportation mode choice for biking and walking



Decrease reduction in asthma (unable to implement)



Inform infrastructure improvements

High level measures

Crashes and injuries - Comparison by schools over consecutive three-year periods

Parents Surveys attitudinal change pre at start of grant and post at end of grant

Baseline report to nurses' office, annual visits at start and end of grant

Number of infrastructure improvements and funding earned for Infrastructure improvement

Overview National City: Changing Infrastructure



Desire for infrastructure changes and need for public support



Utilize Safe Routes to School through community walk audits and reports identifying needed infrastructure changes



Walk audit data informed the Community Reports which influenced the City engineer to prioritize projects



Feedback from community residents directly influenced infrastructure projects and guided SRTS priorities

Including the school community

1. The work of Safe Routes to School would also focus on education, encouragement and evaluation at the school level
2. Parents surveyed to understand greatest barriers for walking and biking to school
3. Surveys informed upcoming infrastructure changes focused on safe walking and biking around the schools
4. Bringing the school community together and shift the school culture to embrace active transportation



Education and Encouragement

Outreach to the 10 National School District elementary schools

Providing a combination of education and encouragement campaigns for families and children focused on the school community

Personal outreach and connection with school administration, teachers, families and students

Assemblies and classroom presentations

Community Outreach and Implementation

City Council of National City committed \$100K annually to support program outreach with 10 elementary schools

Safety trainings

Bike Rodeos

Walk/Bike to Schools

Volunteer parent ambassadors

Neighborhood Walk Audits

Presentations (school and community organizations)

Partner with community events (4th of July, National Night Out, Movies in the Park)

Create and distribute educational materials

Creating a new strategy for a changing world

SRTS is a school-based community education and engagement program

COVID-19 Pandemic resulted in school closing and then converting to virtual education

Creativity of the team to develop an SRTS virtual platform

How to get this into schools and to share with families

COVID and the pivot to virtual

When COVID 19 rates were climbing, the California government mandated a lockdown for all non-essential institutions.

On March 20, 2020, schools closed and were faced with the challenge of how to reach families to continue education for students.


























The Center for Healthier Communities at Rady Children's Hospital had long standing Safe Routes to School (SRTS) programs which quickly found themselves "locked out" of reaching the populations they were charged with serving.

The team quickly went into action by developing a virtual curriculum for schools and families. Education programs that incorporated lessons, videos, and evaluation was the template that informed all development.

Education and activities to keep families active and healthy

BIKE SAFETY BINGO

Next time you go on a ride, see how many items you can find and mark off each one.
Remember: Avoid social gatherings and stay at least 6 ft away from other people!

 CROSSWALK	 LEFT TURN HAND SIGNAL	 CLIMB & CRANK	 RED LIGHT	 LOOK LEFT RIGHT LEFT
 STOP SIGN	 HELMET	 HANDLEBARS	 PROPERLY FITTED HELMET	 RIDING IN A SINGLE LINE
 BIKE ROUTE	 BRIGHT CLOTHES	 FREE SPACE	 STOP HAND SIGNAL	 BRAKE
 YELLOW LIGHT	 BIKE LANE	 MOTOR VEHICLE	 BIKE TIRE	 CYCLISTS
 BIKE	 RIGHT TURN HAND SIGNAL	 YIELD SIGN	 GREEN LIGHT	 BUCKLED HELMET



SAFE ROUTES TO SCHOOL

DIY Bike Rodeo

It's a fun way to practice and develop skills needed to be a safe bicyclist!



Using experiences and results to pivot



Rolling out the digital platform met with many challenges that lead the team to re-think the best way to reach the families with limited access to technology.



The first online pedestrian education had only one student complete the evaluations.



To reach families with valuable education and resources the team worked with school leadership, community organizations and family liaisons to provide paper copies of the lessons from the digital platform at food drop off, community virtual events, and community organized drive-in movies.

Facing the digital divide: Meeting families where they were

Keeping SRTS relevant when families were focused on finding food and keeping their children healthy

Having technology did not translate into comfort using it

SRTS not allowed on school property – find other community trusted organizations

Join our online classroom!

Start date: April 28, 2020

During these difficult times Safe Routes to School is here for YOU! To have access to our bike safety education tools and activities, join our Google Classroom by clicking on the link in the box below.

NCSRTS_Central_Elementary_Classroom
Use class code: yagc3g5

Click [here](#) for instructions on how to download Google Classroom!

Don't forget to follow us on:

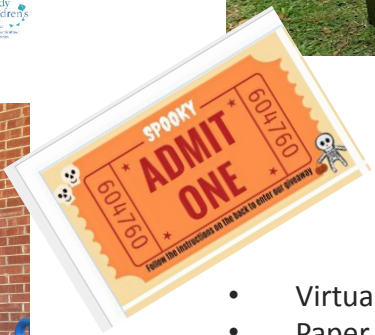
- @safetoschool
- @safetoschool
- ncsrtsc@gmail.com

Provided to you by:

BIKE SAFETY BINGO

Next time you go on a ride, see how many items you can find and mark off each one. Remember: Avoid social gatherings and stay at least 6 ft away from other people!

CROSSWALK	LEFT TURN HAND SIGNAL	CLOTHING & SHOES	RED LIGHT	LOOK LEFT RIGHT LEFT
STOP SIGN	HELMET	HANDRAILS	PROPERLY FITTED HELMET	RIDING IN A SINGLE LINE
BIKE ROUTE	BRIGHT CLOTHES	FREE SPACE	STOP HAND SIGNAL	BRAKE
YELLOW LIGHT	BIKE LANE	MOTOR VEHICLE	BIKE TIRE	CYCLISTS
BIKE	RIGHT TURN HAND SIGNAL	YIELD SIGN	GREEN LIGHT	BUCKLED HELMET



- Virtual Online Curriculum
- Paper copies distributed at lunch pick-up
- Encouragement for participation
- Education and activities to keep families moving
- Meeting families where they were
- Blending virtual and in-person

Meeting families where they were

- The conversion to hybrid increased the number of student evaluations administered and returned after each lesson.
- At one Halloween drive-in movie QR coded tickets were given to movie attendees. A QR code directed families to a pedestrian lesson and evaluation. 33 evaluations were completed.
- These strategies including parent surveys, walking tallies and program evaluations all showed positive change brought about by SRTS education, encouragement, and engagement.



Beyond the pandemic

Fall of 2022, schools reopened

Option of education in-person or virtually

A different world with different concerns

Able to hold in person walk to school events, Back to School Back to Safety presentations, parent meetings, and community events and celebrations

Increase transportation modes

1. Parent Surveys were distributed in aggregate before and after implementation of the program.
2. Results are based on an overall attitude shift of the parents at the school, not necessarily a shift in attitude of the original sample.
3. The survey conducted at the outset of the program revealed concerns:
 - a) lack of cross guards,
 - b) convenience of driving,
 - c) lack of adults to walk and bike with to/from school, and
 - d) violence or crime surrounding the school's neighborhood.
4. Covid-19 changed the daily school routine for families
 1. Increase in children wanting to walk
 2. Maintaining or increase in the number of children who reported walking

Infrastructure benefits to families

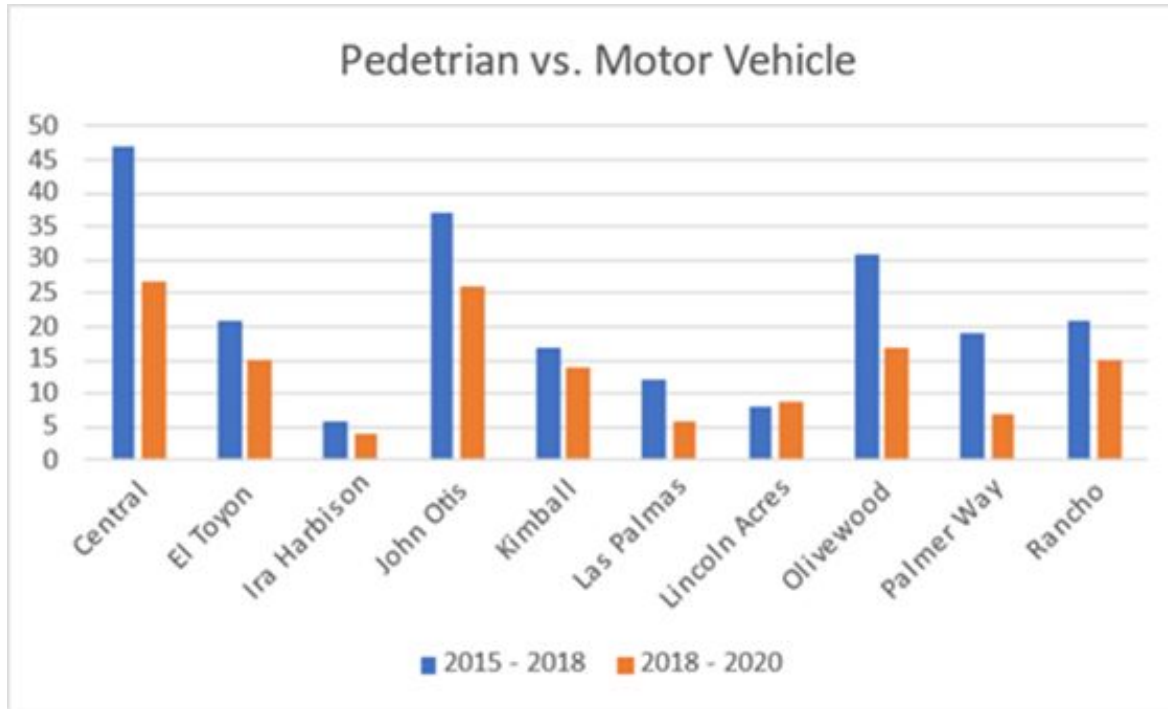


For more than 10 years, SRTS walk audits, surveys, community forums and community outreach had a significant influence on National City's ability to garner funding for improving the built environment

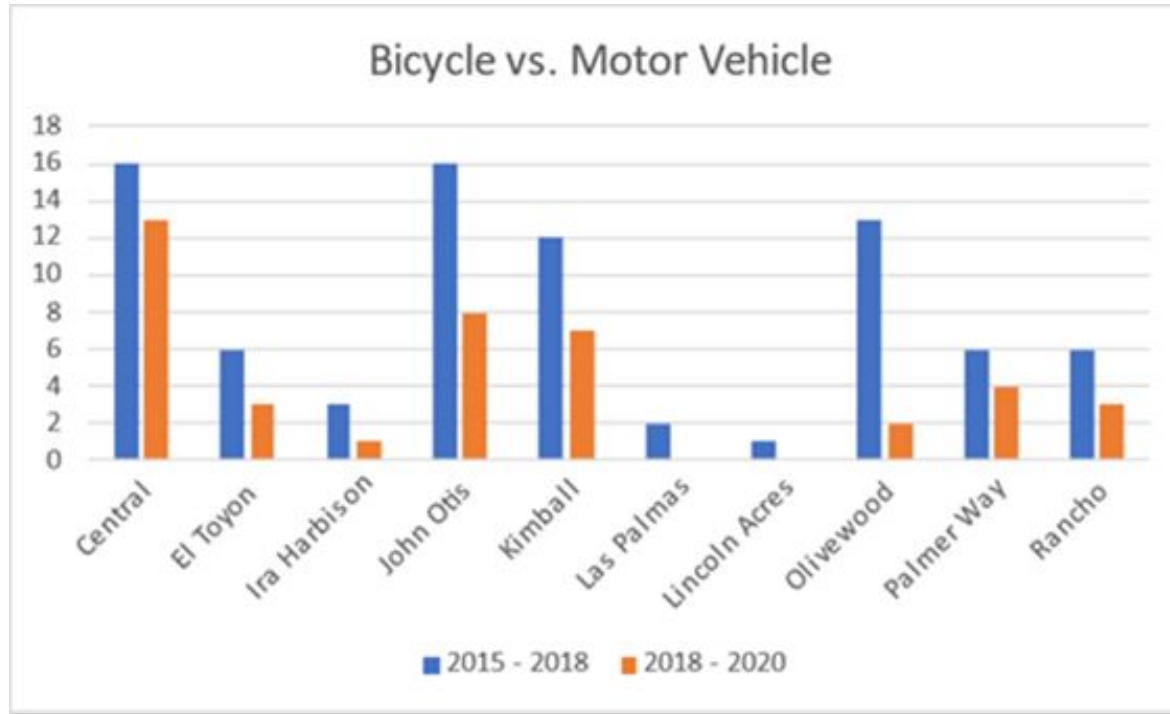
Results for school projects included raised crosswalks, signage and bicycle parking

By 2023 the city will complete an additional \$30 million in Active Transportation projects

Decrease in Pedestrian injuries



Decrease in Bicycle Injuries



Conclusion

- The relationships built prior to COVID19 lockdown helped SRTS stay relevant and valued
- Recognizing the digital divide and adjusting activities to reach all families with education and encouragement led families to begin or maintain healthy habits of walking or biking as demonstrated by parent surveys at a Walk to the Park Campaign, August 20, 2020.
- These surveys showed that 80% of families still walked 3-5 times, even during COVID-19 lockdown.
- By seeking guidance from community (school) leaders and support personnel (family liaisons) for direction and communications SRTS teams were able to maintain trust throughout the ever-changing environment.

Thank You!

- Lorrie Lynn
- llynn@rchsd.org





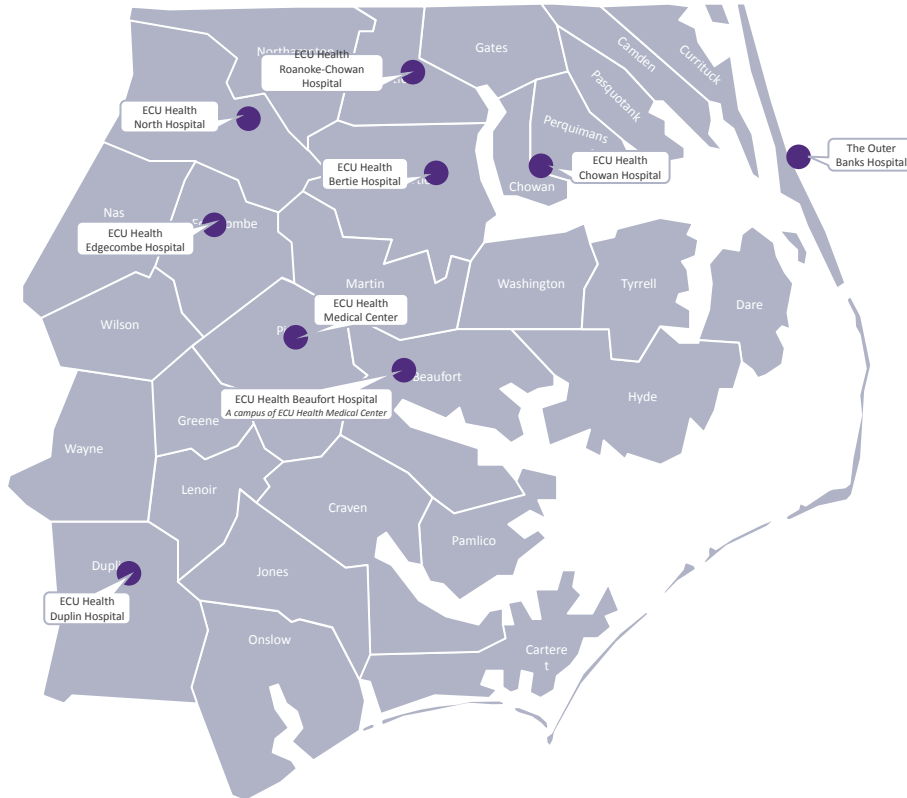
Got Bikes? The Gift of a Traffic Safety Garden to Winterville, NC

Ellen M. Walston, MSW, ACSW, LCSW

Eastern Carolina Injury Prevention Program @ ECU Health Medical
Center

July 24, 2023 PREVCON Washington, DC

Eastern North Carolina-ECU Health Counties



● ECU Health hospital locations

Video 1-Home-TG



My Inspiration-Mary-Jo Gellenbeck

- Traffic Garden Lady
- **November 2021-BWNC**
- Build it, Demonstrate it, Role-play on it
- Raleigh
- Charlotte
- Greensboro
- Durham



What is a traffic garden?

- Traffic gardens grow safe road users at every age (Gellenbeck 2023)
- Stage for role play as a traffic member
- Multi-generational park amenity
- Bike and pedestrian friendly
- Traffic navigation
- Safe and protected environment
- Children mimic
- Miniature settings of play
- Pop up, temporary, and permanent

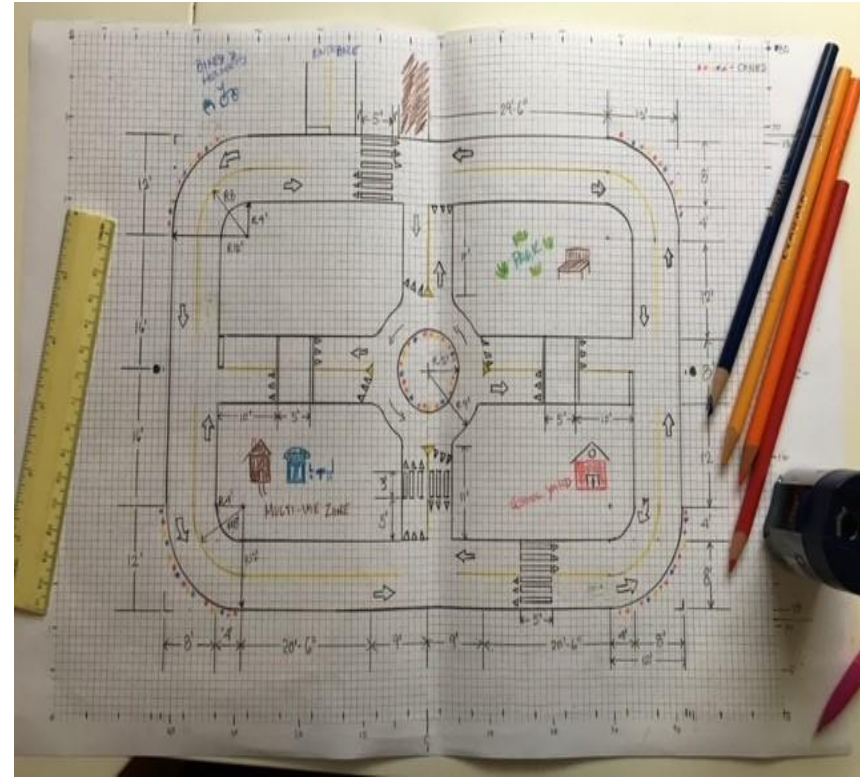


Video 2-FQ and Westside Roanoke



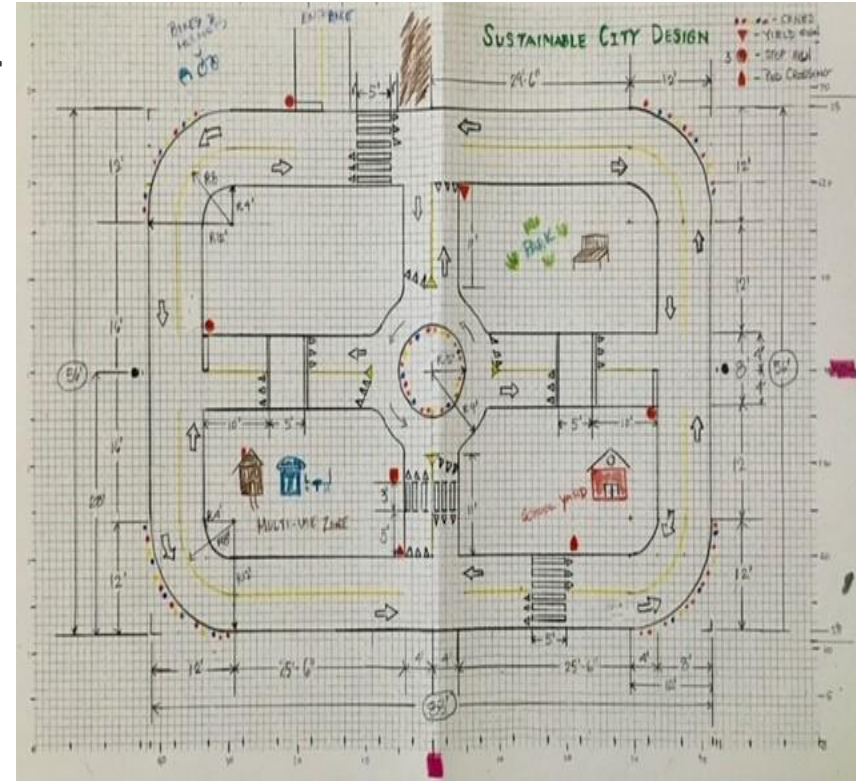
Potential uses for a traffic garden

- Bicycle and pedestrian educational training
- STEM/STEAM Curriculum
- Community bike rodeos
- School field trips
- Summer camp field trips
- Scenarios for drivers to navigate VRUs
- Scenarios for first time drivers
- Scenarios for rehab drivers
- Parents/Grandparents as Teachers groups
- Passive passengers vs. Active participants



What grows in a traffic garden?

- Seeds planted to be a terrific traffic member
- Skills to increase safety on roadways
- Greater sense of self-esteem and well-being
- Safe and relaxed environment for all generations
- Physical and mental strength conditioning
- Healthy lifestyle through activities
- Economic gains
- Environmental gains



Value of a traffic garden

- Education of 4 E's
- Kindergarten for Driver's Education
- Share the Road
- Health
- Partnerships
- Community building
- Attractive to visitors
- Vision Zero goals
- Multi generational relationship building
- Equity



Vision Zero

**Our cars are super sized. We are safe inside,
but not on the outside.**

Leah Shahum

Vision Zero Network Director



Vision Zero

- Traffic is a complex concept
- Understanding the meaning of traffic leads to safety
- Cross-discipline networking events

Transportation

Public Health

Public Instruction

Parks and Recreation

Private Sector



International Traffic Garden Designer Fionnula Quinn

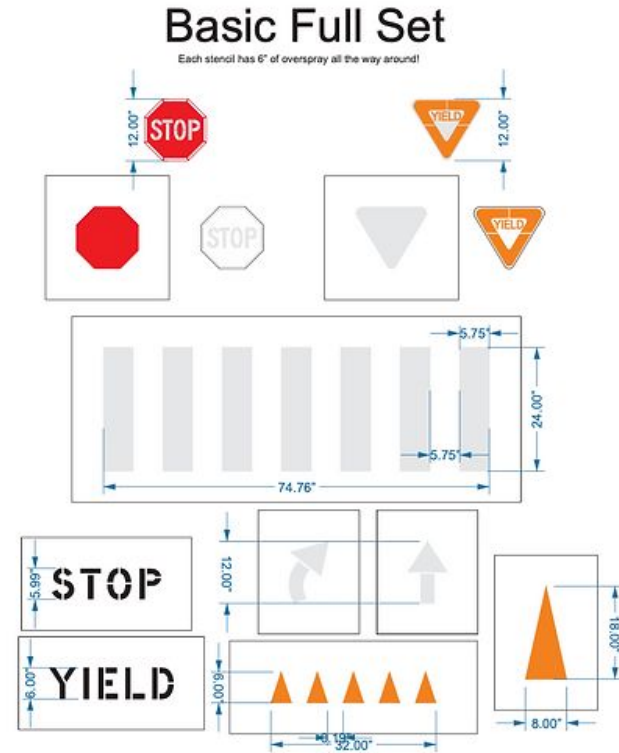
- Designs
- Professional grade stencil sets
- Activity books
- Guide books
- Workbooks
- Toolkits
- Informational and instructional videos
- Free resources at www.trafficgardens.com



Professional Grade Traffic Garden Stencil Sets

Available at

www.trafficgardens.com/resources



Free activity book

Available at

www.trafficgardens.com/resources

TRAFFIC PLAYGROUND
ACTIVITY BOOK

PLAY ALONG TO PRACTICE ROADWAY SAFETY!

Get to the Traffic Playground!
Can you get to the Traffic Playground without bumping into an obstacle?

Start here!

Finish

You made it!

A Traffic Playground is a mini-street play space designed for kids to learn and practice safe walking, biking, and scooting skills. No real cars allowed!

Hillsboro oregon

City of Hillsboro
Safe Routes to School

Keep going!

STOP

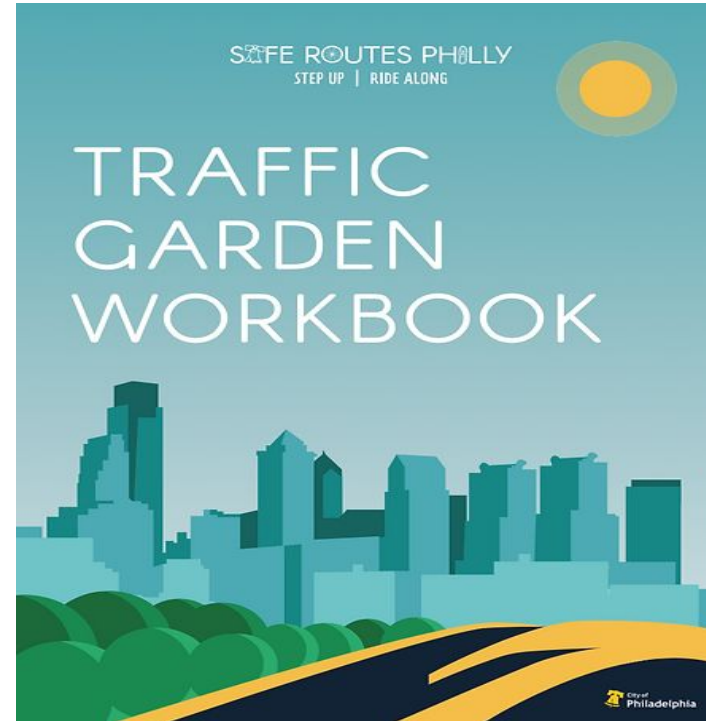
Bike Route

The activity book cover features a dark blue header with the title 'TRAFFIC PLAYGROUND' and 'ACTIVITY BOOK'. To the right is a green banner with icons of a person walking, a person on a scooter, a person on a bicycle, and a person in a wheelchair, with the text 'PLAY ALONG TO PRACTICE ROADWAY SAFETY!'. The main content area is white and contains a maze titled 'Get to the Traffic Playground!' with the question 'Can you get to the Traffic Playground without bumping into an obstacle?'. The maze starts at a 'Start here!' point and ends at a 'Finish' point. Various traffic signs and icons are placed within the maze, including a 'Keep going!' sign, a 'STOP' sign, a 'Bike Route' sign, and icons of a cat, a dog, and a person on a bicycle. To the right of the maze is a green box with a photo of a traffic playground and the text 'You made it!' and 'A Traffic Playground is a mini-street play space designed for kids to learn and practice safe walking, biking, and scooting skills. No real cars allowed!'. At the bottom right are the logos for Hillsboro, Oregon, and the City of Hillsboro Safe Routes to School program.

Traffic Garden Free Guide

Available at

www.trafficgardens.com/resources



Additional resource guides

TRAFFIC PLAYGROUND TOOLKIT

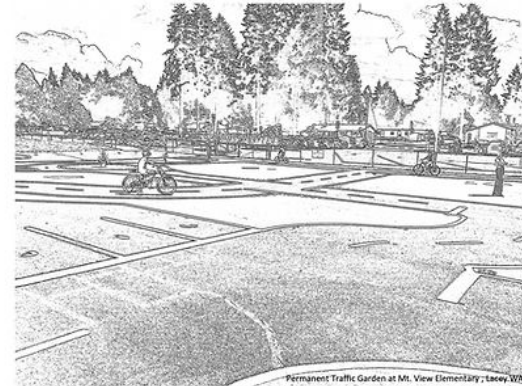


August 2020

This project was made possible with support from the Federal Transit Administration

Traffic Gardens in Washington!

A Tool Kit for Permanent and Pop Up Traffic Gardens



Permanent Traffic Garden at Mt. View Elementary, Leavenworth, WA

Presented By:



Publication 971 Non-DOH 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.

Video 4-Bicycle Education/TG@Schools



Timeline

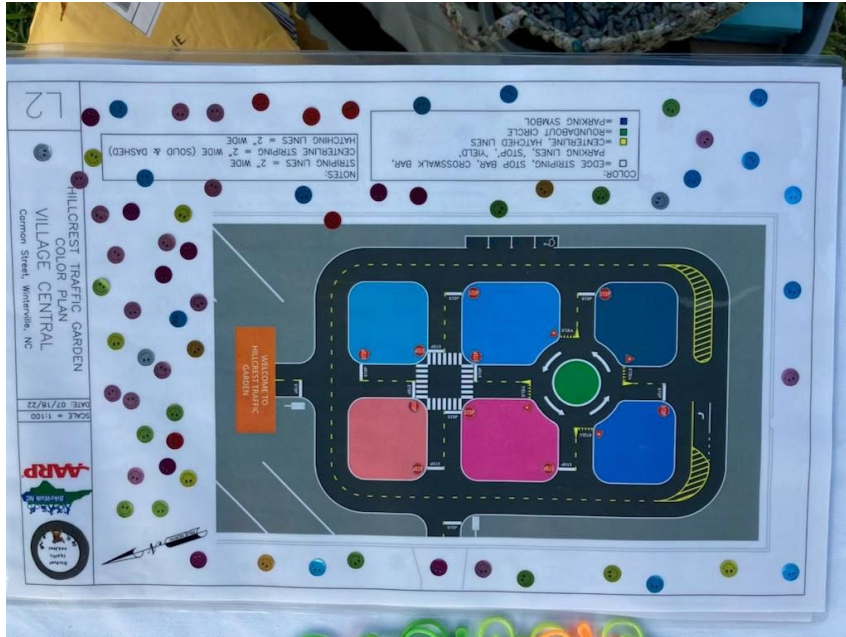
- **BWNC Summit November 2021**
- Site search for gift from BWNC February 2022
- AARP Community Grant applied March 2022
- MPPC event-Mayor May 7, 2022
- AARP Community Grant awarded June 2022
- WTC Presentation June 2022
- Contractor selection July 2022
- **BWNC Summit October 2022**
- **Winterville Traffic Garden Dedication October 29, 2022**



Partnerships

- 😊 AARP
- 😊 Winterville Town Council and Mayor
- 😊 Winterville Parks and Recreation Director
- 😊 Safe Kids Pitt County Coalition
- 😊 Pitt County Schools
- 😊 Winterville Fire/Rescue
- 😊 Winterville Police Department
- 😊 Bike Walk NC
- 😊 Pitt Community Schools and Recreation
- 😊 Cycling Community

Traffic Garden Design Process-Fionnula and Public Input



Traffic Garden Pre and Post



Winterville Traffic Garden at Hillcrest Park



How much does a traffic garden cost?

\$25,555

Questions?

Ellen M. Walston, MSW, ACSW, LCSW

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Greenville, North Carolina

Safe Kids Pitt County Coordinator

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Thank you.



SAFE
KIDS
WORLDWIDE.