TECHNICAL MEMORANDUM

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To: Andreina Aguilar, City of Fresno

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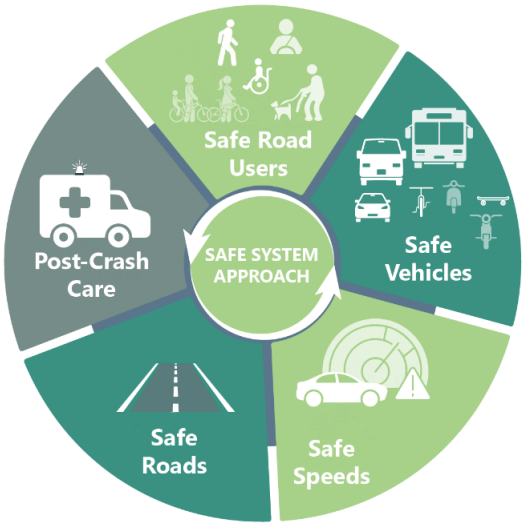
Subject: Safe Routes to School (SRTS) Toolbox for City of Fresno

This technical memorandum summarizes the Safe Routes to School (SRTS) Toolbox developed for the City of Fresno. The SRTS program brings together community partners to foster a safe, inclusive, and supportive environment that encourages students to walk, bike, or take transit to school. The Fresno SRTS Toolbox serves as a comprehensive resource, offering proven strategies, implementation tools, and guidance for building effective safety programs.

The Toolbox is organized around the six E's framework: **Education, Encouragement, Enforcement, Engagement, Engineering, and Evaluation**, and is grounded in the principles of the Safe System Approach. This approach, guided by the Federal Highway Safety Authority, emphasizes that:



- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety should be proactive
- Design must be redundant
- No loss of life is acceptable

This toolbox guides communities, schools, and other stakeholders through four key steps to develop and implement safety programs:

1. **Understand Existing Safety Conditions**: Assess how students travel to school using input from parents, school staff, and safety partners. Use data and observations to identify key issues and opportunities.
2. **Identify Relevant Countermeasures**: Explore the toolkit's list of strategies ranked by safety impact, cost, and complexity. Select those that best suit your school's needs and travel patterns.
3. **Create a SRTS Plan**: Define specific projects and priorities, identify partners for implementation, and set clear evaluation criteria and timelines.

4. **Implement & Evaluate**: Work with stakeholders to bring the plan to life. Track progress, adjust as needed, and share evaluation results to keep the community informed.

The countermeasures identified in this community toolkit align with strategies and designs recognized in plans within the City of Fresno, including the Fresno Unified School District's Safe Route Site Assessment Report, the City's General Plan, and the Active Transportation Plan Update. This Community Toolbox recognizes that effective Safe Routes to School programs require diverse leadership and can be initiated by any interested community stakeholder, including neighborhood associations, faith-based organizations, community-based organizations, parent groups, local businesses, or city departments working in partnership with the school district.

Safe Routes to School Toolbox - List of Tools by the Six E's

1. Education

1.1. Bicycle/Pedestrian Safety Curriculum
1.2. Bike Rodeo
1.3. Child School Bus Training
1.4. Road Safety Club
1.5. Share the Road Awareness Program
1.6. Walking Field Trip

2. Encouragement

2.1. Bicycle Racks or Rooms
2.2. Bike/Bike Gear Giveaway
2.3. Bike-Swap
2.4. Helmet Use Promotion
2.5. Remote Drop-off and Walk Program
2.6. Walk and Bike to School Day/Week/Month
2.7. Walk/Bike Route to School Map
2.8. Walking School Bus
2.9. School Safety Campaign

3. Enforcement

3.1. Automated Enforcement
3.2. Crossing Guards
3.3. High Visibility Enforcement
3.4. Neighborhood Speed Watch
3.5. Officer-led Demonstrations and Lectures
3.6. School Safety Patrol
3.7. Speed Feedback Sign
3.8. Speed Radars
3.9. Traffic Safety Diversion Program
3.10. Traffic Violators Schools

4. Engagement

4.1. Art Walk
4.2. Bike/Walk Social Media Campaign

1. EDUCATION

1.1. BICYCLE/PEDESTRIAN SAFETY CURRICULUM

DESCRIPTION

Bicycle and pedestrian safety curricula are structured educational programs that teach children essential road safety skills through age-appropriate lessons. These programs can be integrated into existing classroom instruction or physical education classes, providing students with knowledge about traffic rules, right-of-way concepts, and practical skills for safely navigating roads and intersections as pedestrians and cyclists.

IMPLEMENTATION DETAILS

- **Lead Implementers**: Teachers, physical education instructors, school safety coordinators
- **Supporting Partners**: City public works department, public health organizations, bicycle advocacy groups
- **Target Audience**: Elementary school students (grades K-5), teachers, and parents
- **Timeframe**: Can be delivered as a concentrated 1-2 week unit, weekly lessons throughout a semester, or monthly safety lessons integrated into regular instruction. Requires 4-6 weeks preparation.

Key Implementation Steps:

1. Assess current safety education efforts and identify gaps
2. Select or adapt curriculum materials for different grade levels
3. Train teachers and secure necessary equipment
4. Begin with pilot classrooms before expanding schoolwide
5. Incorporate hands-on practice in controlled environments
6. Reinforce concepts through visual aids and role-playing
7. Connect with local organizations for equipment and expertise
8. Include take-home activities for parent involvement

RESOURCES

Implementation Guides:

- National Highway Traffic Safety Administration, "Child Pedestrian Safety Curriculum" - https://www.nhtsa.gov/pedestrian-safety/child-pedestrian-safety-curriculum
- Safe Routes Partnership, "Safe Routes to School: A Primer for School Boards and Principals" - https://www.saferoutespartnership.org/resources/fact-sheet/srts-primer-school-boards-and-principals

Templates and Materials:

- Active Transportation Alliance educational resources - https://activetrans.org/resources/education
- National Highway Traffic Safety Administration, " Bicycle Safety Education for Children" - https://www.nhtsa.gov/book/countermeasures-that-work/bicycle-safety/countermeasures/other-strategies-behavior-change-1

QUICK FACTS

Age Range: 5-10 years
Cost Level: $ (Low)
Complexity: Medium
Time Investment: 4-6 weeks preparation
Modes: Walking, Biking

BENEFITS

- ✓ Equips students with life-saving road safety knowledge and skills
- ✓ Builds confidence in walking and biking through practical skill development
- ✓ Increases physical activity by encouraging active transportation
- ✓ Reduces traffic congestion around schools as more students walk and bike safely
- ✓ Establishes lifelong safety habits that extend beyond school years

1.2. BIKE RODEOS

DESCRIPTION

Bike rodeos are fun, educational events designed to teach safe bicycling skills to young children. These events feature multiple stations set up in a closed street segment or empty parking lot, with each station focusing on a specific cycling skill. Children progress through the stations, practicing essential biking techniques in a controlled, supervised environment that mimics real-world situations they'll encounter on the road.

IMPLEMENTATION DETAILS

Lead Implementers: Parent Teacher Association/Parent Teacher Organization (PTA/PTO), physical education teachers, local cycling clubs
Supporting Partners: Parents, teachers, bicycle mechanics, community organizations, police and fire departments
Target Audience: Elementary and middle school students (ages 5-13), parents/guardians
Timeframe: Can be organized as a one-day event, typically requiring 4-6 weeks of planning. May be held during school hours or as weekend/after-school events.

Key Implementation Steps:

1. Form a planning committee with school staff and community partners
2. Identify and secure an appropriate location with flat, paved surfaces
3. Design age-appropriate skill stations based on participant's abilities
4. Recruit and train volunteers for each station
5. Arrange for equipment (cones, chalk, signs, loaner bikes/helmets)
6. Promote the event to students and families
7. Conduct safety checks of all equipment before the event
8. Consider adding complementary activities such as bike registration or giveaways

RESOURCES

Implementation Guides:

- Lois Chaplin, "An Organizer's Guide to Bicycle Rodeos" - https://www.saferoutespartnership.org/sites/default/files/pdf/Bike_Rodeo_CT.pdf
- Healthy Communities Columbus Regional Health, "Volunteer's Guide for Bike Rodeo" - https://www.crh.org/docs/default-source/PDF/Healthy-Communities/pdf-bike-rodeo-toolkit.pdf?sfvrsn=e27c21a1_0

Templates and Materials:

- Station layout maps and instruction cards

- Volunteer recruitment and training materials
- Participant completion certificates

QUICK FACTS

Age Range: 5-13 years
Cost Level: $$ (Medium)
Complexity: Medium
Time Investment: 4-6 weeks preparation
Modes: Biking

BENEFITS

- ✓ Provides hands-on practice of vital bike safety skills in a safe environment
- ✓ Increases children's confidence and competence on bicycles
- ✓ Creates awareness of proper helmet fitting and importance of safety equipment
- ✓ Builds community connections between schools, families, and cycling advocates
- ✓ Can be combined with bicycle safety inspections and maintenance education
- ✓ Offers a fun, social atmosphere that makes safety education engaging

1.3. CHILD SCHOOL BUS TRAINING PROGRAMS

DESCRIPTION

Child School Bus Training programs teach elementary school students essential safety practices for using school buses. These structured learning experiences cover safe procedures for approaching, boarding, riding, and exiting buses, as well as proper behavior while on board. By developing consistent safety routines, students learn to navigate potential hazards around school buses and establish lifelong safe transit habits.

IMPLEMENTATION DETAILS

Lead Implementers: School transportation coordinators, teachers, bus drivers
Supporting Partners: School administration, parent volunteers, transportation departments, law enforcement
Target Audience: Elementary school students (K-5), parents/caregivers, school bus drivers
Timeframe: 1-2 classroom sessions plus practical training, with periodic refreshers throughout the year. Initial planning requires 2-3 weeks.

Key Implementation Steps:

1. Assess current school bus safety knowledge among students
2. Develop age-appropriate training materials and demonstrations
3. Coordinate with transportation department to schedule bus availability for hands-on training
4. Train school staff and bus drivers on educational approach
5. Conduct classroom lessons on safe bus behaviors
6. Organize supervised practice of boarding/exiting procedures
7. Provide take-home materials for parents to reinforce concepts
8. Schedule periodic refresher training, especially for new students

RESOURCES

Implementation Guides:

- National Highway Traffic Safety Administration, "Child Pedestrian Safety Curriculum" - https://www.nhtsa.gov/pedestrian-safety/child-pedestrian-safety-curriculum
- National Safety Council, "Buses Safest Transportation for School Children" - https://www.nsc.org/community-safety/safety-topics/school-safety/buses-safest-transportation-for-school-children

Templates and Materials:

- National Association for Pupil Transportation safety resources - https://www.napt.org/
- American School Bus Council safety materials - https://www.schoolbusfacts.com/

QUICK FACTS

Age Range: 5-10 years
Cost Level: $ (Low)
Complexity: Low
Time Investment: 2-3 weeks preparation
Modes: Transit

BENEFITS

- ✓ Reduces injuries and unsafe incidents around school buses
- ✓ Builds student confidence in using public transportation
- ✓ Creates consistent safety procedures that minimize confusion
- ✓ Improves overall transportation efficiency by reducing delays
- ✓ Prepares students for independent transit use in later years
- ✓ Involves parents in reinforcing important safety concepts

1.4. ROAD SAFETY CLUBS

DESCRIPTION

Road Safety Clubs are student-led organizations that promote safe roadway behaviors through peer education and community outreach. These clubs empower students to become safety advocates, creating awareness campaigns and activities that foster a positive safety culture within schools and surrounding communities. Club members learn comprehensive safety practices for all road users—pedestrians, bicyclists, transit users, and motorists—while developing leadership and advocacy skills that encourage lifelong safety consciousness.

IMPLEMENTATION DETAILS

Lead Implementers: School staff advisors, student leaders
Supporting Partners: City public works department, bicycle advocacy groups, law enforcement, traffic safety organizations
Target Audience: Middle and high school students (grades 5-12)
Timeframe: Ongoing throughout school year, with 4-6 weeks initial setup time

Key Implementation Steps:

1. Identify interested staff advisor(s) and student leaders
2. Develop club charter with clear mission and activities framework
3. Recruit students through announcements, posters, and class presentations
4. Establish regular meeting schedule (weekly or bi-weekly)
5. Create yearly calendar of awareness campaigns and safety activities
6. Connect with community partners for resources and expertise
7. Train club members on road safety fundamentals
8. Plan and implement student-led safety initiatives and campaigns
9. Document and evaluate effectiveness of club activities

RESOURCES

Implementation Guides:

- National Road Safety Foundation - https://www.nrsf.org/
- Youth for Road Safety (YOURS) - https://youthforroadsafety.org/

Templates and Materials:

- NHTSA Traffic Safety Marketing resources - https://www.trafficsafetymarketing.gov/
- Students Against Destructive Decisions (SADD) resources - https://www.sadd.org/resources

QUICK FACTS

Age Range: 10-17 years
Cost Level: $ (Low)
Complexity: Medium
Time Investment: 4-6 weeks initial setup, ongoing maintenance
Modes: Walking, Biking, Transit, Driving

BENEFITS

- ✓ Empowers students as safety advocates and leaders
- ✓ Creates peer-to-peer education opportunities that resonate with students
- ✓ Builds a sustainable culture of safety within schools
- ✓ Connects road safety to civic engagement and community responsibility
- ✓ Prepares students to be responsible future drivers
- ✓ Provides structured activities for safety awareness throughout the school year

1.5. SHARE THE ROAD AWARENESS PROGRAMS

DESCRIPTION

Share the Road Awareness Programs promote mutual respect and safety among all road users through targeted education and outreach. These initiatives focus on improving drivers' understanding of how to safely interact with vulnerable road users (VRUs)—including bicyclists, pedestrians, and transit users—while also educating VRUs about predictable behaviors that enhance their safety. By fostering awareness of each group's rights and responsibilities, these programs help reduce conflicts and collisions, particularly in school zones where diverse transportation modes converge.

IMPLEMENTATION DETAILS

Lead Implementers: School administration, City public works department, traffic safety organizations
Supporting Partners: Parent-teacher associations, bicycle advocacy groups, law enforcement, local media
Target Audience: Drivers, students, parents, school staff, and community members
Timeframe: Ongoing campaign with concentrated efforts at school year beginning and seasonal transition periods. Initial planning requires 4-8 weeks

Key Implementation Steps:

1. Identify priority safety issues specific to your school area
2. Develop clear, actionable messaging that addresses common conflicts
3. Create multilingual, visually engaging educational materials
4. Coordinate with city officials to install appropriate signage and road markings
5. Launch a multi-channel awareness campaign (social media, school communications, community events)
6. Distribute informational materials to parents during drop-off/pick-up and at school events
7. Incorporate interactive elements like demonstrations and simulation activities
8. Reinforce messaging with regular communications throughout the year
9. Evaluate effectiveness through observational studies and surveys

RESOURCES

Implementation Guides:

- National Highway Traffic Safety Administration, "Share the Road Awareness Programs" - https://www.nhtsa.gov/book/countermeasures-that-work/bicycle-safety/countermeasures/unproven-further-evaluation/share-road
- Go Safely California, "Share the Road" - https://gosafelyca.org/share-the-road/

Templates and Materials:

- League of American Bicyclists, "Smart Cycling Resources" - https://www.bikeleague.org/ridesmart
- Federal Highway Administration, "Bicycle Safety Guide and Countermeasure Selection System" - http://www.pedbikesafe.org/bikesafe/

QUICK FACTS

Age Range: All ages
Cost Level: $-$$ (Low to Medium)
Complexity: Medium
Time Investment: 4-8 weeks initial setup, ongoing maintenance
Modes: Walking, Biking, Transit, Driving

BENEFITS

- ✓ Reduces conflicts between different road user groups
- ✓ Increases driver awareness of vulnerable road users
- ✓ Establishes clear expectations for behavior at key conflict points
- ✓ Builds community-wide road safety culture
- ✓ Promotes more comfortable environment for walking and biking
- ✓ Complements infrastructure improvements with behavioral education

1.6. WALKING FIELD TRIPS

DESCRIPTION

Walking Field Trips combine hands-on safety education with enjoyable exploration of the school neighborhood. These supervised walking excursions provide elementary students with practical experience navigating sidewalks, crossing streets, and recognizing traffic safety features in real-world settings. By integrating safety instruction with an engaging destination activity, walking field trips make safety concepts tangible while introducing students to active transportation and local community assets.

IMPLEMENTATION DETAILS

Lead Implementers: Teachers, physical education instructors, parent volunteers
Supporting Partners: School administration, crossing guards, local parks/attractions staff
Target Audience: Elementary school students (grades K-3)
Timeframe: 1-2 hours per trip, with 2-3 weeks advance planning

Key Implementation Steps:

1. Identify appropriate destinations within walking distance (parks, libraries, community gardens)
2. Scout and plan a safe route with minimal street crossings
3. Secure necessary permissions from school administration and parents
4. Recruit and train adult volunteer chaperones (aim for 1 adult per 5-6 students)
5. Prepare age-appropriate pre-trip safety lessons for classroom instruction
6. Create route maps with highlighted safety features and crossing points
7. Equip students and chaperones with high-visibility vests or identifiers
8. Conduct brief safety instruction immediately before departure
9. Practice safety skills at each crossing and walking segment
10. Follow up with classroom discussion about what was learned

RESOURCES

Implementation Guides:

- Los Angeles Department of Transportation (LADOT), "The Walking Field Trip" - https://ladotlivablestreets-cms.org/uploads/f0e3c0d5d5334481b7698a6cbf359097.pdf
- Safe Routes Partnership, "Walkability Checklist" - https://www.saferoutespartnership.org/resources/fact-sheet/walkability-checklist

Templates and Materials:

- National Center for Safe Routes to School, "Teaching Children to Walk Safely" - https://www.saferoutesinfo.org/
- Pedestrian and Bicycle Information Center resources - http://www.pedbikeinfo.org/

QUICK FACTS

Age Range: 5-8 years
Cost Level: $ (Low)
Complexity: Low
Time Investment: 2-3 weeks preparation
Modes: Walking

BENEFITS

- ✓ Provides real-world practice of pedestrian safety skills
- ✓ Builds confidence in walking and navigating neighborhood streets
- ✓ Creates positive associations with walking as transportation
- ✓ Introduces students to local community resources and destinations
- ✓ Incorporates physical activity into the school day
- ✓ Demonstrates walking routes that families might use independently

2. ENCOURAGEMENT

2.1. BICYCLE RACKS OR ROOMS

DESCRIPTION

Bicycle racks or rooms are dedicated infrastructure elements within school grounds that provide secure, organized storage for students' bicycles and other active transportation equipment during school hours. Properly designed and strategically placed bicycle parking encourages more students to bike to school by addressing concerns about bicycle theft or damage, while demonstrating the school's commitment to supporting active transportation options.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School administrators, facilities management staff
- **Supporting Partners:** Parent-teacher organizations, local bicycle advocacy groups, city public works department
- **Target Audience:** All students, particularly those living within biking distance of school
- **Timeframe:** 2-3 months for planning and installation

Key Implementation Steps:

1. Assess current bicycle parking needs and identify optimal locations on school grounds
2. Select appropriate rack designs that support the frame of the bicycle in two places
3. Ensure racks are placed in visible, well-lit areas within fenced school grounds
4. Consider weather protection through covered areas or dedicated bicycle rooms
5. Establish monitoring procedures during arrival and dismissal times
6. Install racks according to spacing guidelines (typically 30" between bikes)
7. Create protocols for bicycle room access and security if applicable
8. Consider complementary amenities like repair stations or storage for helmets and gear
9. Promote the new facility to students and families

RESOURCES

Implementation Guides:

- Association of Pedestrian and Bicycle Professionals, "Essentials of Bike Parking" - https://www.apbp.org/bicycle-parking-solutions
- Safe Routes Partnership, "Bicycle and Pedestrian Facilities" - https://www.saferoutespartnership.org/safe-routes-school

Templates and Materials:

- School bicycle parking planning worksheet
- Bicycle room management protocols

QUICK FACTS

- **Age Range:** All school ages
- **Cost Level:** $$ (Medium)
- **Complexity:** Medium
- **Time Investment:** 2-3 months
- **Modes:** Bicycling, Skateboarding, Scootering

BENEFITS

- ✓ Increases bicycle ridership by addressing security concerns
- ✓ Reduces bicycle theft and damage
- ✓ Creates organized arrival and dismissal procedures for cyclists
- ✓ Demonstrates school commitment to sustainable transportation
- ✓ Provides opportunities to incorporate bicycle education and maintenance activities

2.2. BIKE/BIKE GEAR GIVEAWAY PROGRAMS

DESCRIPTION

Bike/Bike Gear Giveaway programs provide students with bicycles or essential safety equipment such as helmets, lights, reflectors, and locks at no cost. These initiatives help eliminate equipment barriers that prevent students from cycling to school, particularly for students from lower-income households. Giveaways can be organized as standalone events or integrated with other school activities, safety campaigns, or competitions to promote active transportation and proper safety practices.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School administrators, SRTS coordinators, parent-teacher organizations
- **Supporting Partners:** Local bicycle shops, community organizations, public health departments, cycling clubs, law enforcement agencies
- **Target Audience:** Students without access to bicycles or proper safety equipment, prioritizing those with financial need
- **Timeframe:** 1-3 months of planning for a single event

Key Implementation Steps:

- Identify funding sources or donation partners for bicycles and safety equipment
- Develop criteria for selecting student recipients based on need and interest
- Create an application process that respects student privacy and dignity
- Coordinate with local bike shops or bicycle organizations for equipment and expertise
- Plan distribution event that includes safety education and proper fitting instruction
- Consider bundling helmets and safety gear with any bicycle distribution
- Arrange follow-up maintenance checks or workshops for students receiving bicycles
- Document outcomes to support future funding or expansion of the program

RESOURCES

Implementation Guides:

- Safe Routes Partnership, "Bicycle and Pedestrian Safety Education" - https://www.saferoutespartnership.org/safe-routes-school
- League of American Bicyclists, "Bike Donation Program Guidelines" - https://bikeleague.org/bfa/business/resources/

Local Partner Organizations:

- Fresno Cycling Club
- Local bike shops
- Fresno County Department of Public Health

QUICK FACTS

- **Age Range:** Elementary through high school
- **Cost Level:** $$-$$$ (Medium to High, depending on scale)
- **Complexity:** Medium
- **Time Investment:** 1-3 months
- **Modes:** Bicycling

BENEFITS

- ✓ Provides access to active transportation for students who couldn't otherwise afford it
- ✓ Increases bicycle ridership while ensuring proper safety equipment use
- ✓ Creates opportunities for safety education and proper fitting instruction
- ✓ Builds community partnerships between schools and local organizations
- ✓ Can target assistance to students with greatest need

2.3. BIKE-SWAP

DESCRIPTION

A Bike-Swap is a community event where families can exchange bicycles that their children have outgrown for more appropriately sized ones. These events create a sustainable bicycle sharing ecosystem that addresses the challenge of children quickly outgrowing their bikes. By facilitating the exchange of bicycles between families, bike swaps make cycling more affordable and accessible while reducing waste and promoting reuse within the community.

IMPLEMENTATION DETAILS

- **Lead Implementers:** Parent-teacher organizations, school administrators, SRTS coordinators
- **Supporting Partners:** Local bicycle shops, cycling clubs, community organizations, volunteer mechanics
- **Target Audience:** Families with growing children, particularly those with limited resources
- **Timeframe:** 1-2 months preparation for a single event

Key Implementation Steps:

- Partner with local cycling organizations like Fresno Cycling Club to leverage existing programs
- Secure an appropriate venue with sufficient space for bicycle display and testing
- Establish a system for assessing bicycle condition and determining exchange values
- Recruit volunteer mechanics to perform safety checks and minor repairs
- Create guidelines for acceptable bicycle conditions and needed repairs
- Develop a simple tracking system for bikes coming in and going out
- Organize volunteer staffing for the event day
- Publicize the event through school communications, social media, and community calendars
- Consider offering bicycle safety demonstrations during the event
- Plan for what to do with remaining bicycles (donation to bike library, charity, etc.)

RESOURCES

Implementation Guides:

- Safe Routes Partnership, "Bicycle and Pedestrian Safety Education" - https://www.saferoutespartnership.org/safe-routes-school
- League of American Bicyclists, "Community Bike Exchange Guide" - https://bikeleague.org/

Templates and Materials:

- Bicycle condition assessment checklist
- Exchange tracking forms
- Event planning timeline and volunteer roles descriptions

QUICK FACTS

- **Age Range:** Elementary through high school families
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** 1-2 months
- **Modes:** Bicycling

BENEFITS

- ✓ Makes appropriately sized bicycles accessible to more families
- ✓ Extends the useful life of bicycles through reuse
- ✓ Creates a sustainable and affordable alternative to purchasing new bicycles
- ✓ Builds community connections among cycling families
- ✓ Provides opportunity for bicycle safety education and maintenance instruction
- ✓ Reduces waste by keeping bicycles out of landfills

2.4. HELMET USE PROMOTION

DESCRIPTION

Helmet Use Promotion initiatives are comprehensive programs designed to increase the proper use of helmets among students who ride bicycles, scooters, or skateboards to school. These programs combine education about the critical safety benefits of helmet use with practical guidance on proper fitting, engaging activities, and potential helmet distribution to those in need. By addressing both knowledge gaps and access barriers, these initiatives help protect students from serious head injuries in the event of a fall or collision.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School health coordinators, physical education teachers, SRTS coordinators
- **Supporting Partners:** Public health departments, healthcare providers, law enforcement, bicycle advocacy groups
- **Target Audience:** Students of all ages who use wheeled transportation, their parents and caregivers
- **Timeframe:** Ongoing campaign with periodic focused events; 4-6 weeks for initial setup

Key Implementation Steps:

- Develop age-appropriate educational materials on helmet safety benefits and proper use
- Schedule helmet fitting demonstrations during physical education classes or assemblies
- Create engaging helmet safety messaging for school newsletters and social media
- Partner with local health providers or organizations to secure donated helmets
- Organize helmet fitting workshops where students learn to properly adjust their helmets
- Identify students who need helmets and create a discrete distribution system
- Involve parents through take-home information and inclusion in helmet fitting events
- Consider establishing a "helmet heroes" recognition program for consistent helmet users
- Collect data on helmet use rates before and after program implementation

RESOURCES

Implementation Guides:

- National Highway Traffic Safety Administration, "Fitting Your Bike Helmet" - https://www.nhtsa.gov/sites/nhtsa.gov/files/8019_fitting-a-helmet.pdf
- Safe Kids Worldwide, "Helmet Safety" - https://www.safekids.org/tip/bike-safety-tips

Templates and Materials:

- Helmet fit check guides (printable)
- Parent pledge forms for supporting helmet use
- Helmet decoration activity materials to increase student ownership

QUICK FACTS

- **Age Range:** All school ages
- **Cost Level:** $-$$ (Low to Medium, depending on helmet distribution)
- **Complexity:** Low
- **Time Investment:** 4-6 weeks initial setup, then ongoing
- **Modes:** Bicycling, Skateboarding, Scootering

BENEFITS

- ✓ Reduces risk of serious head injuries during falls or collisions
- ✓ Increases student knowledge about importance of head protection
- ✓ Normalizes helmet use as standard safety practice
- ✓ Addresses equity by providing helmets to students who need them
- ✓ Creates opportunities for student leadership in safety promotion

2.5. WALK/BIKE ROUTE TO SCHOOL MAPS

DESCRIPTION

A Walk/Bike Route to School Maps are visual resources that identify the safest and most accessible pathways for students to walk or bike to school. These maps highlight preferred routes that feature adequate infrastructure such as sidewalks, bike lanes, crosswalks, and traffic signals. By presenting clear, family-friendly information about recommended routes, these maps help students and parents make informed decisions about active transportation to school while addressing safety concerns that may otherwise discourage walking and biking.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School administrators, SRTS coordinators, city transportation planners
- **Supporting Partners:** Parent volunteers, neighborhood associations, GIS specialists, public works departments
- **Target Audience:** Students, parents, caregivers, and community members
- **Timeframe:** 2-3 months for development and distribution

Key Implementation Steps:

1. Form a mapping committee with representation from the school and city transportation staff
2. Conduct walking and biking audits to identify infrastructure conditions around the school
3. Gather data on student residential patterns to determine key routes
4. Identify routes within 0.25 and 0.5 mile radii, prioritizing those with:
    - Complete sidewalks and safe crossings
    - Designated bike lanes or low-traffic streets
    - Good visibility and lighting
    - Connections to residential areas and key destinations
5. Create draft maps and gather feedback from parents, students, and staff
6. Incorporate infrastructure improvements recommended in the Fresno Unified Safe Routes Site Assessments
7. Design maps to be visually appealing and easy to understand
8. Translate maps into languages commonly spoken by school families
9. Distribute through multiple channels: school website, printed handouts, orientation packets
10. Update maps annually or when significant infrastructure changes occur

RESOURCES

Implementation Guides:

- Safe Routes Partnership, "Mapping Safe Routes to School" - https://www.saferoutespartnership.org/resources/fact-sheet/walking-route-map-guide

Templates and Materials:

- Base map templates showing school neighborhood streets
- Icons for identifying key features (crosswalks, signals, bike lanes)
- Map distribution plan template

QUICK FACTS

- **Age Range:** All school ages and their families
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** 2-3 months
- **Modes:** Walking, Bicycling

BENEFITS

- ✓ Guides students and families to use the safest available routes
- ✓ Increases confidence in active transportation by addressing safety concerns
- ✓ Complements infrastructure improvements identified in the Site Assessments
- ✓ Helps identify priority locations for future safety improvements
- ✓ Creates a valuable resource for new families unfamiliar with the neighborhood
- ✓ Can highlight additional features like crossing guard locations and remote drop-off points

2.6. REMOTE DROP-OFF AND WALK PROGRAMS

DESCRIPTION

A Remote Drop-off and Walk Program establishes designated locations a short distance from school where parents can drop off and pick up their children, allowing students to walk the remainder of the journey. This hybrid approach makes active transportation accessible to students who live too far to walk or bike the entire route to school. By reducing vehicle congestion directly around school entrances while still providing some walking benefits, these programs create a safer school zone environment and help students incorporate physical activity into their daily routine.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School administrators, SRTS coordinators, parent-teacher organizations
- **Supporting Partners:** Local businesses or organizations with available parking, city traffic engineers, law enforcement
- **Target Audience:** Families who typically drive students to school, particularly those living beyond walking distance
- **Timeframe:** 1-2 months for planning and implementation

Key Implementation Steps:

1. Identify potential drop-off locations approximately 1/4 to 1/2 mile from school with:
    - Adequate parking capacity
    - Safe entry/exit points
    - Minimal traffic conflicts
    - Permission from property owners (churches, parks, community centers)
2. Assess walking routes from drop-off points to ensure they have:
    - Complete sidewalks
    - Safe crossings with signals or crossing guards where needed
    - Good visibility and lighting
3. Create designated walking routes with clear signage or pavement markings
4. Develop protocols for drop-off/pick-up procedures and supervision
5. Recruit parent volunteers or staff to monitor drop-off points and walking routes
6. Create maps showing drop-off locations and walking routes to school
7. Promote the program through school communications and morning announcements
8. Consider special themed days or incentives to encourage participation

RESOURCES

Implementation Guides:

- Pedestrian and Bicycle Information Center, "SRTS Guide: Park and Walk" - http://guide.saferoutesinfo.org/encouragement/park_and_walk.cfm
- Lafayette Elementary Remote Drop Off Safe Routes to School Program - https://www.naturalresourcesservices.org/projects/lafayette-elementary-remote-drop-safe-routes-school-program-0

Templates and Materials:

- Remote drop-off location assessment worksheet
- Parent volunteer scheduling template
- Program participation tracking forms

QUICK FACTS

- **Age Range:** Elementary and middle school students
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** 1-2 months
- **Modes:** Walking (partial)

BENEFITS

- ✓ Reduces traffic congestion and safety hazards directly at school entrances
- ✓ Provides physical activity benefits even for students who live too far to walk the entire route
- ✓ Creates a transition time between home and school that helps students arrive more focused
- ✓ Builds community through shared walking experiences
- ✓ Serves as an entry point for families to try active transportation
- ✓ Addresses infrastructure challenges identified in the Fresno Unified Safe Routes Site Assessments by routing students to safer pathways

2.7. WALK AND BIKE TO SCHOOL EVENTS

DESCRIPTION

Walk and Bike to School Events are organized celebrations that encourage students and families to try active transportation for traveling to school. These events can be held as a single day, week-long, or month-long initiative that builds excitement around walking and biking while creating a supportive community atmosphere. By transforming active transportation into a special occasion, these events help overcome initial hesitations, demonstrate the feasibility of walking and biking, and can serve as a gateway to more regular active commuting habits.

IMPLEMENTATION DETAILS

- **Lead Implementers:** SRTS coordinators, school administrators, parent-teacher organizations
- **Supporting Partners:** Local police department, public health organizations, neighborhood associations, local businesses
- **Target Audience:** All students and families, with special focus on those living within walking/biking distance
- **Timeframe:** 1-2 months for planning a single-day event; 2-3 months for week or month-long programs

Key Implementation Steps:

- Form a planning committee with representatives from school staff and parent volunteers
- Select appropriate dates (consider national events like Walk to School Day in October)
- Create different participation options based on distance from school:
    - Direct walking/biking for those living close enough
    - Remote drop-off points for those living farther away
    - "Walk at School" activities for students who must arrive by bus
- Develop promotional materials emphasizing fun, community, and health benefits
- Plan special event elements such as:
    - Welcome stations with refreshments and celebration materials
    - Walking school buses with meetup points and adult chaperones
    - Safety education components and helmet checks
    - Engagement activities like stamping "walking passports"
- Coordinate with local police for traffic management at key crossings
- Track participation and celebrate success through announcements and recognition
- Document lessons learned to improve future events

RESOURCES

Implementation Guides:

- Walk & Bike to School, "Event Planning Resources" - http://www.walkbiketoschool.org/plan/event-planning-resources/
- National Center for Safe Routes to School, "Planning a Walk to School Day Event" - http://www.saferoutesinfo.org/program-tools/planning-walk-school-day-event

Templates and Materials:

- Event planning timeline
- Promotional flyer templates
- Participation tracking sheets
- Walking/biking route maps

Important Dates:

- International Walk to School Day (October)
- National Bike to School Day (May)

QUICK FACTS

- **Age Range:** All school ages
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** 1-3 months
- **Modes:** Walking, Bicycling

BENEFITS

- ✓ Creates a supportive environment for families to try active transportation
- ✓ Builds community connections among participating families
- ✓ Raises awareness about walking and biking routes to school
- ✓ Generates excitement and positive associations with active transportation
- ✓ Provides opportunity to identify and address infrastructure concerns
- ✓ Can lead to sustained behavior change when followed with ongoing programs
- ✓ Reduces traffic congestion around schools during the event

2.8. WALKING SCHOOL BUSES AND BICYCLE TRAINS

DESCRIPTION

Walking School Buses and Bicycle Trains are organized groups of students who walk or bike to school together along a designated route with adult supervision. Similar to a traditional school bus, these programs feature established routes with regular "stops" where students can join the group. This structured approach addresses parental safety concerns, builds community connections, and enables students to enjoy the benefits of active transportation in a supervised environment. The programs can operate daily, weekly, or on special occasions depending on volunteer availability and community interest.

IMPLEMENTATION DETAILS

- **Lead Implementers:** Parent volunteers, SRTS coordinators, school staff
- **Supporting Partners:** Parent-teacher organizations, neighborhood associations, local police department
- **Target Audience:** Elementary and middle school students
- **Timeframe:** 1-3 months for planning and implementation

Key Implementation Steps:

- Conduct interest surveys to identify potential participants and volunteers
- Map student residences to determine optimal routes that align with:
    - Recommended pathways from the Walk/Bike Route to School Map
    - Residential clusters of interested students
- Recruit and train adult volunteers as route leaders and assistants
- Establish clear protocols for:
    - Route schedules and meeting points
    - Weather cancellation procedures
    - Student behavior expectations
    - Emergency response plans
- Create route maps with designated stops and timing
- Distribute identification items like safety vests or flags for visibility
- Start with a small pilot program (1-2 routes, 1-2 days per week)
- Track participation and gather feedback to refine the program
- Gradually expand as interest and volunteer capacity grows

RESOURCES

Implementation Guides:

- Pedestrian and Bicycle Information Center, "SRTS Guide: Walking School Buses and Bicycle Trains" - http://guide.saferoutesinfo.org/encouragement/walking_school_bus_or_bicycle_train.cfm
- Safe Routes Partnership, "Step by Step: How to Start a Walking School Bus at Your School" - https://www.saferoutespartnership.org/resources/toolkit/step-step

Templates and Materials:

- Volunteer application and training materials
- Route planning worksheets
- Parent permission forms
- Student participation tracking system

QUICK FACTS

- **Age Range:** Elementary and middle school students
- **Cost Level:** $ (Low)
- **Complexity:** Medium-High
- **Time Investment:** 1-3 months
- **Modes:** Walking, Bicycling

BENEFITS

- ✓ Addresses parental safety concerns through adult supervision
- ✓ Creates consistent active transportation habits among participants
- ✓ Builds community connections between families and neighborhoods
- ✓ Provides social interaction opportunities for students
- ✓ Reduces morning traffic congestion around schools
- ✓ Can identify infrastructure challenges through firsthand experience
- ✓ Adapts to neighborhood-specific needs and resources

3. ENFORCEMENT

3.1. CROSSING GUARDS

DESCRIPTION

Crossing guards are trained personnel who help students cross streets safely near schools. They stop traffic when necessary, ensure students use crosswalks properly, and serve as a visual reminder to motorists to drive cautiously in school zones. They are particularly valuable at busy intersections, locations with limited visibility, or where young children frequently cross.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School district, police department, school administration
- **Supporting Partners:** Parent volunteers, community organizations, city public works department
- **Target Audience:** Elementary and middle school students
- **Timeframe:** 2-3 months for recruitment and training; ongoing implementation

Key Implementation Steps:

- Identify high-risk crossing locations through safety assessments
- Secure funding for paid positions or recruit reliable volunteers
- Develop training program covering traffic laws, crossing procedures, and emergency protocols
- Provide high-visibility equipment and appropriate weather gear
- Create schedules aligned with school arrival and dismissal times
- Establish communication protocols with schools and police
- Implement a supervision and evaluation system
- Consider liability insurance requirements

RESOURCES

Implementation Guides:

- Safe Routes to School National Partnership, "Crossing Guard Program Guidelines" - https://www.saferoutespartnership.org/resources/toolkit-website/mn-crossing-guard-training
- SRTS Guide, "Adult School Crossing Guard Guidelines" - http://guide.saferoutesinfo.org/crossing_guard/

Training Materials:

- AAA School Safety Patrol Program - https://exchange.aaa.com/safety/aaa-school-safety-patrol/
- California School Crossing Guard Training Guidelines - https://www.scusd.edu/sites/main/files/file-attachments/california-school-crossing-guard-training-guidelines_4-29-2015_final.pdf

QUICK FACTS

- **Age Range:** Adult supervisors for K-8 students
- **Cost Level:** $$ (Medium) if paid positions; $ (Low) if volunteer-based
- **Complexity:** Medium
- **Time Investment:** 2-3 months initial setup; ongoing implementation
- **Modes:** Walking

BENEFITS

- ✓ Provides immediate supervision and protection for students at street crossings
- ✓ Increases drivers' awareness of school zone and pedestrian presence
- ✓ Builds confidence in parents to allow children to walk to school
- ✓ Creates opportunity for community involvement in school safety
- ✓ Serves as visual enforcement of traffic laws even without police presence

3.2. HIGH VISIBILITY ENFORCEMENT

DESCRIPTION

High Visibility Enforcement uses targeted police presence at strategic times and locations around schools to enforce traffic laws and deter violations. Officers monitor compliance with speed limits, yielding to pedestrians, proper drop-off/pick-up procedures, and other traffic regulations. The approach is characterized by its visibility to all road users, which serves as both enforcement and education.

IMPLEMENTATION DETAILS

- **Lead Implementers:** Police department, school resource officers
- **Supporting Partners:** School administration, school district, parent organizations
- **Target Audience:** Drivers, parents, and all road users near schools
- **Timeframe:** 1-2 months planning; implementation during critical periods throughout school year

Key Implementation Steps:

- Analyze crash data and safety assessments to identify high-risk locations and behaviors
- Coordinate with school administrators to determine optimal timing for enforcement
- Announce enforcement initiatives in advance through media and school communications
- Deploy marked patrol vehicles and uniformed officers at visible locations
- Focus on periods of highest risk (start/end of school day, special events)
- Balance education with enforcement through initial warnings when appropriate
- Document and share results with community to demonstrate effectiveness
- Rotate enforcement locations to maximize impact across multiple schools

RESOURCES

Implementation Guides:

- National Highway Traffic Safety Administration, "School Zone Enforcement Best Practices" - https://www.nhtsa.gov/
- Governor's Highway Safety Association, "High Visibility Enforcement Campaign Planning Guide" - https://www.ghsa.org/law-enforcement

Local Coordination:

- Connect with local police department community liaison officers
- Consult with school district transportation coordinators

QUICK FACTS

- **Age Range:** Adults (primarily drivers)
- **Cost Level:** $$ (Medium)
- **Complexity:** Medium
- **Time Investment:** Periodic implementation throughout school year
- **Modes:** All modes

BENEFITS

- ✓ Creates immediate compliance with traffic laws in school zones
- ✓ Demonstrates community commitment to student safety
- ✓ Changes driver behavior through visible enforcement
- ✓ Provides opportunity for education alongside enforcement
- ✓ Collects data on common violations to inform future safety measures

3.3. OFFICER-LED DEMONSTRATIONS AND LECTURES

DESCRIPTION

Officer-led demonstrations and lectures are educational sessions conducted by law enforcement officers in schools to teach students about traffic safety, pedestrian and bicycle rules, and safe behavior around roads. These presentations combine classroom instruction with interactive demonstrations, allowing students to learn directly from safety professionals while building positive relationships with law enforcement.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School resource officers, local police department
- **Supporting Partners:** School administration, teachers, parent organizations
- **Target Audience:** K-12 students, with age-appropriate content
- **Timeframe:** 1-2 hours per session; can be scheduled throughout the school year

Key Implementation Steps:

- Coordinate with school administrators to schedule presentations
- Develop age-appropriate content focusing on relevant safety issues
- Prepare interactive components such as bicycle safety demonstrations
- Include visual aids and real equipment (safety gear, patrol vehicles)
- Create take-home materials to reinforce messages with families
- Consider assembly format for larger groups or classroom visits for more interaction
- Gather feedback from teachers and students to improve future sessions
- Connect presentations to broader safety initiatives at the school

RESOURCES

Implementation Guides:

- National Highway Traffic Safety Administration, "School-Based Traffic Safety Programs" - https://www.nhtsa.gov/
- International Association of Chiefs of Police, "School Safety Resources" - https://www.schoolsafety.gov/resource/international-association-chiefs-police-prevention-and-school-safety-resources

Presentation Materials:

- Age-appropriate safety videos and presentations
- Interactive activities and safety scenarios
- Handouts for students to take home to parents

QUICK FACTS

- **Age Range:** 5-18 years (content adapted by age group)
- **Cost Level:** $ (Low)
- **Complexity:** Low
- **Time Investment:** Minimal planning; 1-2 hours delivery per session
- **Modes:** Walking, biking, transit, personal vehicles

BENEFITS

- ✓ Provides safety information from trusted authority figures
- ✓ Creates positive interactions between students and law enforcement
- ✓ Offers opportunity for students to ask questions in a safe environment
- ✓ Reinforces traffic safety rules through memorable demonstrations
- ✓ Builds foundation for lifelong safe transportation habits

3.4. SCHOOL SAFETY PATROL PROGRAMS

DESCRIPTION

School Safety Patrol programs train and empower student leaders to help their peers navigate safely around school grounds, particularly during arrival and dismissal times. Patrol members, usually upper elementary or middle school students, assist with monitoring crosswalks, car lines, and bus loading zones under adult supervision. They serve as role models who reinforce safety rules and proper pedestrian behavior.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School administration, teachers, parent volunteers
- **Supporting Partners:** Police department, school resource officers, AAA or similar organizations
- **Target Audience:** Upper elementary and middle school students (typically grades 4-8)
- **Timeframe:** 1-2 months for program setup; ongoing implementation throughout school year

Key Implementation Steps:

- Obtain administrative approval and support for the program
- Recruit responsible student volunteers and adult supervisors
- Provide comprehensive training on safety procedures and responsibilities
- Secure appropriate equipment (safety vests/belts, badges, flags)
- Create a schedule rotating patrol members throughout the week
- Establish clear protocols for what patrollers should and shouldn't do
- Implement recognition program to acknowledge student participation
- Conduct regular check-ins to address challenges and reinforce training

RESOURCES

Implementation Guides:

- AAA School Safety Patrol Operations Manual - https://exchange.aaa.com/safety/aaa-school-safety-patrol/
- National Association of School Resource Officers, "Student Safety Programs" - https://www.nasro.org/

Program Materials:

- Training curriculum for patrol members
- Permission slips and program guidelines for parents

- Recognition certificates and incentives

QUICK FACTS

- **Age Range:** 9-14 years (patrol members)
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** 1-2 months setup; daily implementation during school year
- **Modes:** Walking, school bus, parent drop-off/pick-up

BENEFITS

- ✓ Develops leadership skills and responsibility in student participants
- ✓ Creates peer-to-peer safety messaging that resonates with students
- ✓ Extends adult supervision capacity during busy arrival/dismissal periods
- ✓ Establishes safety culture within the school community
- ✓ Provides early introduction to civic responsibility and public service

3.5. SPEED FEEDBACK SIGNS

DESCRIPTION

Speed feedback signs are interactive displays that detect and digitally display the speeds of approaching vehicles compared to the posted speed limit. When installed near schools, these devices provide immediate feedback to drivers about their speed, encouraging them to slow down if they're exceeding the limit. Some advanced signs also flash warnings or display messages when speeds are too high.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City traffic department, school district
- **Supporting Partners:** Police department, neighborhood associations, parent groups
- **Target Audience:** Drivers traveling through school zones
- **Timeframe:** 1-3 months for procurement and installation; ongoing maintenance

Key Implementation Steps:

- Analyze traffic data to identify locations with speed compliance issues
- Select appropriate technology based on street characteristics and budget
- Obtain necessary permits and approvals for installation
- Install signs at strategic locations approaching school zones
- Consider portable units that can be relocated as needed
- Program displays for school hours with appropriate speed thresholds
- Collect and analyze speed data to measure effectiveness
- Combine with periodic police enforcement for maximum impact

RESOURCES

Implementation Guides:

- Federal Highway Administration, "Speed Management: A Manual for Local Rural Road Owners" - https://highways.dot.gov/safety/local-rural/speed-management-manual-local-rural-road-owners
- Institute of Transportation Engineers, "Traffic Calming Measures" - https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/#:~:text=Four%20types%20of%20measures%20are,street%20environment%20for%20non%2Dmotorists.

Technical Specifications:

- Solar-powered vs. hardwired options

- Data collection capabilities
- Display customization options

QUICK FACTS

- **Age Range:** All ages (targets drivers)
- **Cost Level:** $$ (Medium)
- **Complexity:** Low
- **Time Investment:** 1-3 months installation; minimal ongoing management
- **Modes:** All modes (focuses on vehicle speeds)

BENEFITS

- ✓ Provides immediate feedback to drivers about their speed
- ✓ Creates awareness of school zone speed limits
- ✓ Reduces average speeds in deployment areas
- ✓ Collects valuable data on traffic patterns and speed compliance
- ✓ Serves as a constant reminder without requiring staff resources

3.6. SPEED RADARS

DESCRIPTION

Speed radars are devices used by law enforcement to measure vehicle speeds in school zones and surrounding areas. Unlike feedback signs that display speeds to drivers, these handheld or vehicle-mounted units are primarily used for enforcement operations. Officers can efficiently identify and stop speeding vehicles, creating a deterrent effect that encourages compliance with posted school zone speed limits.

IMPLEMENTATION DETAILS

- **Lead Implementers:** Police department, school resource officers
- **Supporting Partners:** School administration, city traffic department
- **Target Audience:** Drivers in school zones
- **Timeframe:** Immediate implementation once equipment is obtained; ongoing enforcement

Key Implementation Steps:

- Identify priority enforcement locations based on safety data and school input
- Train officers on proper equipment use and enforcement procedures
- Create a targeted enforcement schedule focusing on arrival/dismissal times
- Announce enforcement initiatives through school and community channels
- Deploy officers at visible locations to maximize deterrent effect
- Consider combining enforcement with educational outreach
- Document and analyze citation data to identify patterns and measure effectiveness
- Rotate enforcement locations to maintain driver awareness

RESOURCES

Implementation Guides:

- International Association of Chiefs of Police, "Traffic Safety Strategies" - https://www.theiacp.org/sites/default/files/all/t/TrafficSafetyStrategiesCompleteReport.pdf
- National Highway Traffic Safety Administration, "Speed Enforcement Guidelines" - https://highways.dot.gov/media/15221

Equipment Information:

- Handheld vs. vehicle-mounted radar options
- Calibration and maintenance requirements
- Evidence documentation systems

QUICK FACTS

- **Age Range:** Adults (drivers)
- **Cost Level:** $$ (Medium)
- **Complexity:** Low
- **Time Investment:** Periodic implementation throughout school year
- **Modes:** All modes (focuses on vehicle speeds)

BENEFITS

- ✓ Creates immediate compliance with speed limits in school zones
- ✓ Provides direct consequence for dangerous driving behaviors
- ✓ Builds consistent enforcement presence during critical periods
- ✓ Communicates community commitment to protecting student safety
- ✓ Generates data to inform future safety improvements and enforcement strategies

3.7. TRAFFIC VIOLATORS SCHOOLS

DESCRIPTION

Traffic Violators Schools are educational programs designed for drivers who have received citations for traffic violations near schools. These structured courses focus specifically on laws and safety practices relevant to school zones, emphasizing the importance of cautious driving around children. Successful completion may result in reduced fines, prevention of point accumulation on driving records, or other legal benefits depending on local regulations.

IMPLEMENTATION DETAILS

- **Lead Implementers:** Court system, department of motor vehicles, police department
- **Supporting Partners:** School district, traffic safety organizations, driver education providers
- **Target Audience:** Drivers cited for violations in school zones
- **Timeframe:** 2-4 months for program development; ongoing implementation

Key Implementation Steps:

- Develop a curriculum specific to school zone safety rules and concerns
- Establish a program structure (in-person classes, online options, or hybrid approach)
- Create certification procedures for instructors and course materials
- Coordinate with courts and DMV for citation processing and completion verification
- Set appropriate course duration and frequency (typically 4-8 hours)
- Include multimedia elements and interactive components to enhance learning
- Implement pre- and post-tests to measure knowledge improvement
- Create mechanisms for participant feedback and program improvement

RESOURCES

Implementation Guides:

- American Association of Motor Vehicle Administrators, "Driver Improvement Program Guidelines" - https://www.aamva.org/
- National Safety Council, "Defensive Driving Courses" - https://www.nsc.org/

Program Components:

- Curriculum focusing on child pedestrian safety
- Case studies of school zone crashes and prevention strategies
- Video demonstrations of proper driving in school zones
- Local regulations and penalty information

QUICK FACTS

- **Age Range:** Adults (drivers)
- **Cost Level:** $ (Low) to implement; typically self-funding through participant fees
- **Complexity:** Medium
- **Time Investment:** 2-4 months setup; ongoing administration
- **Modes:** All modes (focuses on vehicle operation)

BENEFITS

- ✓ Provides focused education on school zone safety for those who have demonstrated need
- ✓ Offers alternative to purely punitive measures for traffic violations
- ✓ Creates opportunity for behavior change through education
- ✓ Self-sustaining through participant fees once established
- ✓ Reinforces importance of safe driving practices around schools

4. ENGAGEMENT

4.1. ART WALK

DESCRIPTION

An Art Walk is a community-based event that combines creative expression with pedestrian safety awareness. Students create artwork focused on transportation safety themes, which is then displayed along walking routes to school. The installation creates an engaging path that encourages walking while reinforcing safety messages through student-created visual elements.

IMPLEMENTATION DETAILS

- **Lead Implementers:** Art teachers, PTA/PTO, school administration
- **Supporting Partners:** Local artists, community organizations, city departments
- **Target Audience:** K-12 students, families, community members
- **Timeframe:** 1-3 months planning; installation can be temporary or permanent

Key Implementation Steps:

- Partner with art teachers to incorporate safety themes into curriculum
- Identify safe walking routes that would benefit from increased visibility
- Secure necessary permissions for public art installation
- Organize art creation sessions with clear safety messaging
- Plan installation event with community participation
- Consider weather protection for outdoor artwork
- Create maps of the Art Walk route for distribution
- Host a community unveiling event to celebrate completion
- Document the project through photos for future promotion

RESOURCES

Implementation Guides:

- Americans for the Arts, "Public Art Toolkit" - https://www.americansforthearts.org/
- Safe Routes Partnership, "Creative Engagement for Safe Routes" - https://www.saferoutespartnership.org/

Project Ideas:

- Sidewalk chalk art contests around safety themes
- Painted rocks with safety messages placed along routes

- Weather-resistant banners or murals at key crossing points
- Student-designed safety mascots or characters

QUICK FACTS

- **Age Range:** 5-18 years (creation); all ages (participation)
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** 1-3 months for planning and creation
- **Modes:** Walking

BENEFITS

- ✓ Makes walking routes more visible and appealing to students
- ✓ Combines arts education with transportation safety
- ✓ Creates community ownership of school routes
- ✓ Provides creative outlet for safety messaging
- ✓ Enhances neighborhood aesthetics while promoting safety

4.2. BIKE/WALK SOCIAL MEDIA CAMPAIGNS

DESCRIPTION

Bike/Walk Social Media Campaigns use digital platforms to promote active transportation to school through engaging content, challenges, and information sharing. These campaigns raise awareness about the benefits of walking and biking, highlight safe routes, and build community support for active transportation. Through strategic messaging and visual content, these campaigns can shift transportation habits and create a positive culture around walking and biking to school.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School communications staff, PTA/PTO, student leadership
- **Supporting Partners:** Local transportation advocates, public health organizations, city communications team
- **Target Audience:** Students, parents, school staff, community members
- **Timeframe:** 2-4 weeks for planning; campaigns can run for a specific period or be ongoing

Key Implementation Steps:

- Identify campaign goals and target audiences
- Select appropriate social media platforms based on community usage
- Create a content calendar with consistent posting schedule
- Develop engaging visuals, videos, and infographics
- Incorporate student voices and experiences
- Use consistent hashtags and branding
- Share maps of safe routes and infrastructure improvements
- Highlight success stories and participation milestones
- Coordinate with school events like Walk/Bike to School Day
- Track engagement metrics to measure effectiveness

RESOURCES

Implementation Guides:

- Safe Routes Partnership, "School District Communications Toolkit" - https://www.saferoutespartnership.org/sites/default/files/resource_files/school_district_communications_toolkit_final_0.pdf
- Bike Walk Tompkins, "Bicycling For Everyone: Social Marketing Campaign" - https://everyone.bikewalktompkins.org/action/social-marketing-campaign

Content Ideas:

- Student-led route reviews and recommendations
- "Why I Walk/Bike" testimonials from students and staff
- Safety tip graphics and videos
- Before/after infrastructure improvement highlights
- Weekly or monthly participation challenges

QUICK FACTS

- **Age Range:** All ages (content can be targeted by platform)
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** Ongoing maintenance once established
- **Modes:** Walking, Biking

BENEFITS

- ✓ Reaches wide audience at minimal cost
- ✓ Creates peer influence through social sharing
- ✓ Builds community awareness of active transportation options
- ✓ Provides platform to share safety information in engaging formats
- ✓ Allows for real-time updates about routes, events, and infrastructure

4.3. POP-UP DEMONSTRATIONS

DESCRIPTION

Pop-Up Demonstrations are temporary installations that transform streets near schools to showcase potential safety improvements and gather community feedback. Using low-cost, removable materials, these demonstrations allow communities to test infrastructure changes like crosswalks, curb extensions, bike lanes, or traffic calming features before permanent implementation. These short-term interventions create opportunities for hands-on learning and meaningful community input.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City public works department, community organizations, school administration
- **Supporting Partners:** Parents, students, local businesses, design professionals
- **Target Audience:** School community, neighborhood residents, city officials
- **Timeframe:** 1-3 months planning; 1 day to 2 weeks implementation

Key Implementation Steps:

- Identify locations with documented safety concerns
- Develop simple designs that address specific safety issues
- Secure necessary permits and approvals from local authorities
- Gather inexpensive materials (traffic cones, planters, temporary paint)
- Recruit volunteers for installation and monitoring
- Create informational signage explaining the demonstration
- Collect feedback through surveys, comment boards, or digital tools
- Document the installation with photos, videos, and participant counts
- Share results with decision-makers to advocate for permanent changes

RESOURCES

Implementation Guides:

- National Association of City Transportation Officials, "Urban Street Design Guide" - https://nacto.org/publication/urban-street-design-guide/
- People for Bikes, "Quick Builds for Better Streets" - https://www.peopleforbikes.org/

Material Suggestions:

- Temporary spray chalk for crosswalks and bike lanes
- Traffic cones and construction tape for lane delineation
- Potted plants or hay bales for curb extensions

- Wooden pallets for pedestrian platforms or parklets

QUICK FACTS

- **Age Range:** All ages (planning and participation)
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** 1-3 months planning; 1-14 days implementation
- **Modes:** Walking, Biking, Transit access

BENEFITS

- ✓ Tests infrastructure changes before permanent investment
- ✓ Gathers real-world usage data and community feedback
- ✓ Creates visible demonstration of commitment to safety
- ✓ Builds community support through hands-on participation
- ✓ Educates public about street design principles
- ✓ Accelerates implementation timeframe for safety improvements

4.4. QUICK-BUILD PROJECTS

DESCRIPTION

Quick-Build Projects are semi-permanent infrastructure improvements implemented using materials that cost less and can be installed more quickly than traditional construction. These projects address identified safety concerns near schools through interventions like painted curb extensions, flex-post protected bike lanes, pedestrian refuge islands, or enhanced crossings. Unlike pop-up demonstrations, quick-build projects are designed to last 1-5 years while still allowing for adjustments based on performance.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City public works department, school district facilities team
- **Supporting Partners:** Parent groups, neighborhood associations, local businesses
- **Target Audience:** Students, families, all road users near schools
- **Timeframe:** 2-6 months planning and implementation; 1-5 years duration

Key Implementation Steps:

- Review infrastructure recommendations from safety assessments
- Prioritize projects that address high-risk areas and can be implemented quickly
- Develop designs that use durable but non-permanent materials
- Secure funding through city programs, grants, or school safety allocations
- Obtain necessary permits and approvals
- Create implementation timeline that minimizes school disruption
- Install improvements using city crews or contractors
- Monitor effectiveness through before/after safety evaluations
- Make adjustments based on performance and feedback
- Use successful projects to advocate for permanent installation

RESOURCES

Implementation Guides:

- National Association of City Transportation Officials, "Quick Build Guide" - https://nacto.org/
- Safe Routes Partnership, "Quick Build for Safe Streets" - https://www.saferoutespartnership.org/

Material Suggestions:

- Thermoplastic pavement markings for crosswalks and bike lanes
- Flexible delineator posts for protected bike lanes and curb extensions

- Pre-cast concrete planters for creating buffers and chicanes
- Bolt-down rubber curbing and speed cushions for traffic calming

QUICK FACTS

- **Age Range:** All ages (benefits all road users)
- **Cost Level:** $$ (Medium)
- **Complexity:** Medium
- **Time Investment:** 2-6 months implementation; 1-5 years duration
- **Modes:** Walking, Biking, Transit access

BENEFITS

- ✓ Implements safety improvements on a faster timeline than traditional projects
- ✓ Costs significantly less than permanent concrete and asphalt construction
- ✓ Allows for adjustments based on real-world performance
- ✓ Creates immediate safety benefits while building support for permanent solutions
- ✓ Demonstrates commitment to addressing identified safety concerns
- ✓ Serves as proof-of-concept for more extensive infrastructure investments

4.5. RAPID RESPONSE SAFETY COMMUNICATION PROTOCOL

DESCRIPTION

A Rapid Response Safety Communication Protocol is a pre-established system for quickly sharing information about traffic safety incidents, hazards, or concerns around schools. This protocol creates clear channels for reporting issues and ensures timely communication among school officials, parents, students, and relevant agencies. By streamlining information flow, the protocol allows for prompt addressing of safety concerns and keeps the school community informed about potential risks.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School administration, district communications team
- **Supporting Partners:** Police department, City public works department, parent organizations
- **Target Audience:** School community, surrounding neighborhood, relevant agencies
- **Timeframe:** 1-2 months to develop; ongoing implementation

Key Implementation Steps:

- Assemble a safety communication team with clear roles and responsibilities
- Create reporting mechanisms for students, parents, and staff to flag concerns
- Develop templates for different types of safety communications
- Establish criteria for different response levels based on severity
- Identify appropriate communication channels for various situations
- Create contact lists for key stakeholders and emergency responders
- Develop procedures for information verification before distribution
- Schedule regular tests of the communication system
- Document incidents and responses to improve future protocols
- Review and update the protocol annually

RESOURCES

Implementation Guides:

- National Center for Safe Routes to School, "Safety Communication Toolkit" - https://www.saferoutesinfo.org/
- School Safety Partners, "Crisis Communications Planning Guide" - https://schoolsafetypartners.org/

Communication Tools:

- Digital alert systems (text, email, app notifications)
- Communication templates for different scenarios
- Incident reporting forms
- Contact directories for key stakeholders

QUICK FACTS

- **Age Range:** All ages (adult implementation; benefits entire school community)
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** 1-2 months setup; ongoing maintenance
- **Modes:** All modes

BENEFITS

- ✓ Ensures quick response to emerging safety concerns
- ✓ Creates clear procedures to follow during safety incidents
- ✓ Reduces misinformation through official communication channels
- ✓ Builds trust through transparent and timely information sharing
- ✓ Facilitates coordination between school and community agencies
- ✓ Helps identify recurring safety issues through systematic documentation

5. ENGINEERING

5.1. PAVEMENT MARKING TREATMENTS

DESCRIPTION

Pavement markings are critical visual elements that help guide, warn, and regulate all roadway users. In school zones, these treatments are especially important for enhancing visibility, clarifying space allocation, managing conflicts, and providing clear guidance for pedestrians, cyclists, and motorists. Well-designed markings can significantly improve safety at key conflict points and encourage proper road user behavior around schools.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City traffic engineers, planning department
- **Supporting Partners:** School district facilities team, public works department, bicycle advocacy groups
- **Target Schools:** All school types (elementary through high school)
- **Timeframe:** Varies by treatment type (short-term for simple restriping to medium-term for comprehensive road reconfigurations)

SPECIFIC TREATMENTS:

Bike Boxes & Bicycle Intersection Designs

Designated spaces at signalized intersections that position cyclists ahead of vehicles, increasing visibility and safety during the signal phase. These include bike boxes (waiting areas in front of the vehicle stop line) and two-stage turn queue boxes (designated areas for cyclists to wait while making two-stage turns).

Bike Lanes

Designated lanes for bicycle travel, separated from motor vehicle traffic by striping, signage, and pavement markings. Classes include Class II (standard painted bike lanes), Class II buffered (with additional painted buffer), Class III (shared lanes with sharrows), and Class IV (protected/separated bike lanes).

Cycle Treatment at Driveways

Special pavement markings that highlight bicycle paths across driveways, emphasizing right-of-way and increasing visibility of cyclists where vehicles enter/exit properties.

Daylighting

The practice of removing parking spaces near intersections and mid-block crossings to improve sight lines between pedestrians and motorists. Typically implemented with red curb paint and "No Parking" or "No Standing" signs within 20 feet of crosswalks.

High Visibility Crosswalks

Enhanced pedestrian crossing markings using continental (ladder), zebra, or similar patterns instead of standard parallel lines. These are more visible to approaching motorists and help define pedestrian spaces, especially in school zones.

Midblock Crossings

Marked pedestrian crossings located between intersections, often used to accommodate natural walking paths to school entrances. These require special treatments including high-visibility markings, signage, and may benefit from additional treatments like refuge islands or beacons.

Parking Restriction

Strategic prohibition of vehicle parking in locations where parked vehicles would reduce visibility or safety. Implemented using painted curbs, signage, and enforcement, particularly important for daylighting crossings and drop-off/pick-up zones.

Remove Center-Turn Lane

Reconfiguration of roadways to eliminate continuous two-way left-turn lanes in favor of other uses like protected bike lanes, wider sidewalks, or dedicated turn pockets only at intersections.

Road Diets

Reduction of vehicle travel lanes to accommodate other uses such as bike lanes, wider sidewalks, or medians. Typically involves converting a four-lane undivided road to a three-lane road with a center turn lane and bike lanes.

Shared Roadway Markings (Sharrows)

Pavement markings used on streets where bicyclists and motor vehicles share the same travel lane. These markings indicate the preferred line of travel for bicyclists and alert motorists to expect cyclists.

Conflict Zone Markings

Colored pavement markings (typically green) applied at locations where bicycle facilities cross areas with potential vehicle conflicts, such as driveways, turn lanes, or merging areas. These highlight the potential for interactions between vehicles and cyclists.

Advanced Stop Lines

Stop lines placed further back from crosswalks at signalized or stop-controlled intersections, creating greater separation between stopped vehicles and crossing pedestrians and improving visibility.

School Pavement Markings

Text and symbols painted directly on the roadway surface ("SCHOOL", "SLOW", "20 MPH", etc.) to alert drivers they are entering a school zone and should reduce speeds and increase awareness.

RESOURCES

Implementation Guides:

- FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations: https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf
- NACTO Urban Bikeway Design Guide: https://nacto.org/publication/urban-bikeway-design-guide/
- Manual on Uniform Traffic Control Devices (MUTCD): https://mutcd.fhwa.dot.gov/

QUICK FACTS

- **Cost Level:** $ to $$ (most marking treatments are relatively low-cost)
- **Complexity:** Low to Medium
- **Time Investment:** 1-6 months (depending on approval process and scope)
- **Effectiveness:** Medium to High
- **Modes Addressed:** Walking, Biking, Driving

BENEFITS

- ✓ Increased visibility of vulnerable road users, particularly at conflict points
- ✓ Clarification of designated spaces for different road users
- ✓ Enhanced awareness of school zones for approaching motorists
- ✓ Improved predictability of roadway user behavior
- ✓ Cost-effective safety improvements relative to major infrastructure changes

5.2. ROADWAY TREATMENTS

DESCRIPTION

Roadway treatments modify the physical design of streets and intersections to create safer environments for all users, particularly around schools. These infrastructure improvements address safety challenges by altering roadway geometry, adding pedestrian facilities, and implementing features that reduce conflicts between different road users. Well-designed roadway treatments can significantly improve safety at school zones by managing vehicle speeds, creating designated spaces for pedestrians and cyclists, and enhancing accessibility for all users.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City traffic engineers, public works department
- **Supporting Partners:** School district facilities team, city planning department, accessibility advocates
- **Target Schools:** All school types (elementary through high school)
- **Timeframe:** Medium to long-term (typically requires planning, design, and construction phases)

SPECIFIC TREATMENTS:

Conversion to one-way street

Modification of a two-way street to allow traffic flow in only one direction, typically implemented in areas with limited street width, high pedestrian volumes, or complex pick-up/drop-off operations. One-way conversions can simplify traffic patterns around schools and reduce crossing distances for students.

Curb extensions/bulb-outs

Widened sidewalk areas that extend into the parking lane or roadway at intersections or mid-block crossings. These treatments reduce crossing distances for pedestrians, improve visibility between pedestrians and motorists, prevent parking near crosswalks, and can slow turning vehicles.

Directional curb ramps

Sidewalk ramps aligned with the crosswalk direction of travel, featuring detectable warning surfaces that assist visually impaired pedestrians. These ADA-compliant ramps provide clearer guidance for all pedestrians and improve safety by directing users toward the crosswalk rather than into the center of an intersection.

Install median

Raised or painted areas in the center of a roadway that separate opposing lanes of traffic. Medians can be designed as pedestrian refuges, restrict left turns to improve safety, provide space for landscaping, and visually narrow the roadway to encourage slower speeds.

Pedestrian/median refuge islands

Protected spaces in the center of the roadway that allow pedestrians to cross one direction of traffic at a time. These islands are particularly valuable on wide, multi-lane roads by breaking crossings into shorter segments and providing a safe waiting area between traffic flows.

Raised crosswalks/intersections

Elevated pedestrian crossings that bring the roadway to sidewalk level, functioning as both a crosswalk and a traffic calming feature. These treatments increase pedestrian visibility, reduce vehicle speeds, and emphasize pedestrian priority at crossing locations.

Sidewalks

Dedicated pedestrian pathways separated from vehicle travel lanes, typically constructed of concrete and located along the sides of roadways. Sidewalks provide safe spaces for students to walk separated from traffic and are fundamental infrastructure for safe routes to school.

Shared-use path

Off-street pathways designed to accommodate multiple non-motorized users, including pedestrians, bicyclists, skaters, and others. These paths provide completely separated facilities from roadways and often serve as important connections between neighborhoods and schools.

Back-in angle parking

A parking configuration where vehicles back into angled spaces rather than pulling in forward. This design improves safety when departing by providing better visibility of oncoming traffic, bicyclists, and pedestrians, particularly important in school zones where children may be present.

RESOURCES

Implementation Guides:

- FHWA Proven Safety Countermeasures: https://safety.fhwa.dot.gov/provencountermeasures/
- NACTO Urban Street Design Guide: https://nacto.org/publication/urban-street-design-guide/
- Pedestrian and Bicycle Information Center (PBIC): http://www.pedbikeinfo.org/

- Public Rights-of-Way Accessibility Guidelines (PROWAG): https://www.access-board.gov/prowag/

QUICK FACTS

- **Cost Level:** $$ to $$$$ (varies widely by treatment type)
- **Complexity:** Medium to High
- **Time Investment:** 6 months to few years (depending on scale and complexity)
- **Effectiveness:** High
- **Modes Addressed:** Walking, Biking, Driving

BENEFITS

- ✓ Creates physical separation between vehicles and vulnerable road users
- ✓ Reduces vehicle speeds through design rather than enforcement
- ✓ Improves accessibility for users of all abilities
- ✓ Enhances comfort and perceived safety for students walking and biking
- ✓ Provides organized, predictable movement patterns for all road users
- ✓ Creates long-lasting safety improvements with minimal maintenance requirements

5.3. SCHOOL ZONE TREATMENTS

DESCRIPTION

School zone treatments focus on creating safe, efficient environments in the immediate vicinity of schools where student drop-off, pick-up, and general circulation occur. These specialized engineering measures address the unique challenges of school traffic patterns, including high pedestrian volumes during arrival and dismissal times, student loading/unloading activities, and the need to create separation between different transportation modes. Well-designed school zones establish clear expectations for all users, reduce congestion, and prioritize safety during peak activity periods.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School district facilities team, city traffic engineers
- **Supporting Partners:** School administration, parent organizations, public works department
- **Target Schools:** All school types (elementary through high school)
- **Timeframe:** Short to medium-term (many treatments can be implemented within existing infrastructure)

SPECIFIC TREATMENTS:

Dedicated drop-off zones

Designated areas specifically designed for the safe loading and unloading of students from private vehicles. These zones include sufficient length for multiple vehicles, adequate sidewalk space for waiting students, clear signage, and sometimes features like pull-through lanes to separate school traffic from through traffic.

Improve signage in drop-off zones

Enhanced regulatory, warning, and informational signs that clearly communicate rules, procedures, and expectations in school loading zones. Effective signage systems use consistent placement, appropriate sizing, and clear messaging to guide drivers through proper loading/unloading procedures.

School circulation and parking

Comprehensive planning of traffic flow patterns on and around school grounds, including designated routes for buses, private vehicles, service vehicles, and emergency access. This includes parking management strategies that separate staff parking from visitor areas and student drop-off/pick-up operations.

Remove obstruction to improve sign visibility

Identification and elimination of vegetation, parked vehicles, or other objects that block the view of traffic signs, particularly school zone speed limit signs. This maintenance-focused treatment ensures that critical regulatory and warning messages remain visible to approaching drivers.

School gateway treatments

Distinctive visual cues and physical elements that mark the entrance to a school zone, creating awareness that drivers are entering an area with increased pedestrian activity. Gateway treatments may include enhanced signage, colored pavements, vertical elements, landscaping, and other visual indicators that signal the transition into a school zone.

RESOURCES

Implementation Guides:

- Safe Routes to School Guide - Student Drop-off and Pick-up: http://guide.saferoutesinfo.org/dropoff_pickup/index.cfm
- FHWA Traffic Control for School Areas: https://mutcd.fhwa.dot.gov/htm/2009/part7/part7_toc.htm
- National Center for Safe Routes to School - Arrival and Dismissal: https://www.saferoutespartnership.org/sites/default/files/resource_files/keep_calm_and_carry_on_to_school_-_improving_arrival_and_dismissal_for_walking_and_biking.pdf

QUICK FACTS

- **Cost Level:** $ to $$$ (ranging from sign improvements to major site reconfiguration)
- **Complexity:** Low to Medium
- **Time Investment:** 1 month to 1 year (depending on scope)
- **Effectiveness:** High when combined with operational and educational components
- **Modes Addressed:** Walking, Biking, Driving, School Bus

BENEFITS

- ✓ Reduces conflicts between pedestrians and vehicles during arrival/dismissal periods
- ✓ Creates more organized, predictable movement patterns around schools
- ✓ Improves efficiency of drop-off/pick-up operations, reducing congestion and delay
- ✓ Enhances driver awareness of school zones and expected behaviors
- ✓ Provides clear guidance for parents, visitors, and other occasional users
- ✓ Can be implemented through phased approach as resources allow

5.4. SIGNAL TREATMENTS

DESCRIPTION

Signal treatments employ traffic control devices and timing strategies to manage interactions between pedestrians, cyclists, and motorists at intersections and crossings. These specialized engineering measures are particularly important around schools where large numbers of students need to cross busy streets safely. Signal treatments can provide protected crossing opportunities, increase pedestrian visibility, reduce conflicts with turning vehicles, and create more predictable traffic patterns that prioritize student safety.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City traffic engineers, public works department
- **Supporting Partners:** School district facilities team, accessibility advocates, traffic safety committees
- **Target Schools:** All school types, particularly those on arterial or collector streets
- **Timeframe:** Short to medium-term (signal timing adjustments) to long-term (new signal installation)

SPECIFIC TREATMENTS:

Signal timing adjustment

Modification of traffic signal operation to better accommodate pedestrian and bicycle movements, especially during school arrival and dismissal times. This includes extending crossing times to account for student walking speeds and coordinating signal timing along corridors to manage traffic flow.

Signal phasing treatments

Specialized traffic signal operations that separate conflicting movements in time, such as dedicated bicycle signal phases, split phasing for left turns, or alternating vehicular and pedestrian phases. These treatments reduce potential conflicts between different road users at signalized intersections.

Leading pedestrian interval and pedestrian recall

Signal timing feature that gives pedestrians a head start (typically 3-7 seconds) before vehicles receive a green light, increasing their visibility and establishing right-of-way in the crosswalk. Pedestrian recall automatically provides the walk signal during every cycle without requiring button activation.

Pedestrian countdown signal heads

Enhanced pedestrian signals that display a numerical countdown showing the time remaining to cross the street during the flashing don't walk phase. These displays help pedestrians make better decisions about when to start crossing and encourage completion of crossing before the signal changes.

Pedestrian hybrid beacon

A special signal used at mid-block crossings or intersections that remains dark until activated by pedestrians, then uses a red display to stop traffic during pedestrian crossing. Also known as High-intensity Activated crossWalK (HAWK) beacons, these signals provide protected crossings on roadways where traditional signals may not be warranted.

Pedestrian scramble

A special signal phase that stops vehicle traffic in all directions, allowing pedestrians to cross in any direction, including diagonally. Also known as an "all-pedestrian phase" or "Barnes Dance," this treatment is particularly valuable at intersections with high pedestrian volumes near schools.

Prohibit/limit turns/U-turns

Restrictions on vehicle turning movements at intersections near schools, typically implemented through signage, physical barriers, or signal control. These restrictions reduce potential conflicts between turning vehicles and crossing pedestrians during peak school travel times.

Protected/projected permissive left turns

Signal phasing that provides a dedicated green arrow for left turns followed by a permissive phase (circular green). This treatment reduces conflicts between turning vehicles and pedestrians by providing a protected interval for turns while maintaining intersection efficiency.

Accessible pedestrian signals

Pedestrian signals enhanced with audible tones, verbal messages, and/or vibrotactile features that provide crossing information to pedestrians with vision or hearing impairments. These signals ensure that all students can safely navigate signalized intersections independently.

Rectangular rapid flashing beacons

User-activated warning beacons using irregular flashing patterns to increase driver awareness of pedestrian crossings. These devices are typically installed at uncontrolled crosswalks and significantly improve driver yielding behavior at school crossings.

Restrict right turn on red

Prohibition of right turns during the red signal phase at intersections with high pedestrian volumes. This treatment eliminates a common conflict point for crossing pedestrians and is particularly important where students regularly cross during school travel periods.

RESOURCES

Implementation Guides:

- FHWA Proven Safety Countermeasures - Leading Pedestrian Intervals: https://safety.fhwa.dot.gov/provencountermeasures/lead_ped_int/
- NACTO Urban Street Design Guide - Traffic Signals: https://nacto.org/publication/urban-street-design-guide/intersection-design-elements/traffic-signals/
- FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations: https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf

QUICK FACTS

- **Cost Level:** $ to $$$$ (from simple timing adjustments to new signal installation)
- **Complexity:** Medium to High
- **Time Investment:** 1 month to 2 years (depending on complexity)
- **Effectiveness:** High
- **Modes Addressed:** Walking, Biking, Driving

BENEFITS

- ✓ Creates protected crossing opportunities for students
- ✓ Reduces conflicts between pedestrians and turning vehicles
- ✓ Increases driver awareness and compliance at crossings
- ✓ Improves accessibility for students with disabilities
- ✓ Enhances predictability of traffic operations
- ✓ Can be customized to address specific safety challenges at school crossings

5.5. SIGN TREATMENTS

DESCRIPTION

Sign treatments use visual communication devices to regulate traffic, warn of potential hazards, and provide information to all road users. In school zones, signs play a crucial role in alerting drivers to the presence of students, establishing special regulations, and guiding safe behaviors. Strategic placement of appropriate signage can significantly improve safety around schools by increasing driver awareness, reinforcing traffic laws, and providing consistent guidance for pedestrians, bicyclists, and motorists.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City traffic engineers, public works department
- **Supporting Partners:** School district facilities team, parent organizations, neighborhood associations
- **Target Schools:** All school types (elementary through high school)
- **Timeframe:** Short-term (most sign installations can be completed quickly)

SPECIFIC TREATMENTS:

Bicycle/pedestrian signs

Regulatory and warning signs that address bicycle and pedestrian movements, including "Bicycle May Use Full Lane," "Share the Road," pedestrian crossing warnings, and bicycle route markers. These signs establish legal rights-of-way and alert motorists to expect non-motorized travelers near schools.

Pedestrian paddle signs

In-street signs placed at crosswalks that remind drivers of their legal obligation to yield to pedestrians. These highly visible signs are typically placed on the centerline or median and significantly improve driver yielding behavior at school crossings.

School zone signage

Signs that establish school zones and associated regulations, including "School Zone," "School Crossing," reduced speed limits during school hours, and "School Bus Stop Ahead." These signs create awareness of special regulations and the likely presence of children.

Shared roadway signs

Signs that designate streets as preferred routes for bicyclists where dedicated bike lanes are not present. Examples include "Bicycle Route," "Bicycle Boulevard," and other designations that help identify preferred routes to school for student cyclists.

Stop controlled intersection

Signs that establish right-of-way at intersections, including standard "Stop" and "Yield" signs and associated advance warning signs. Proper intersection control is essential for predictable traffic patterns around schools.

Wayfinding

Informational signs that help orient pedestrians and bicyclists and direct them to specific destinations or along designated routes. School-focused wayfinding can identify safe routes, direct students to building entrances, and provide distance information.

RESOURCES

Implementation Guides:

- Manual on Uniform Traffic Control Devices (MUTCD) - Part 7: Traffic Control for School Areas: https://mutcd.fhwa.dot.gov/htm/2009/part7/part7_toc.htm
- National Center for Safe Routes to School - Engineering: http://guide.saferoutesinfo.org/engineering/

QUICK FACTS

- **Cost Level:** $ to $$ (relatively low-cost implementation)
- **Complexity:** Low
- **Time Investment:** 1-3 months (including planning and installation)
- **Effectiveness:** Medium (most effective when combined with other treatments)
- **Modes Addressed:** Walking, Biking, Driving

BENEFITS

- ✓ Increases driver awareness of school zones and student presence
- ✓ Establishes clear regulatory expectations for all road users
- ✓ Improves compliance with traffic laws around schools
- ✓ Provides consistent guidance for occasional visitors to school areas
- ✓ Identifies preferred routes for students walking and biking
- ✓ Can be quickly implemented compared to other engineering measures

5.6. TRAFFIC CALMING TREATMENTS

DESCRIPTION

Traffic calming treatments use physical design elements to reduce vehicle speeds, improve driver attentiveness, and create safer environments for pedestrians and bicyclists around schools. These engineering measures modify roadway geometry and introduce vertical or horizontal deflection to naturally slow traffic by requiring increased driver focus. Well-designed traffic calming creates self-enforcing speed environments that are particularly valuable in school zones, where maintaining appropriate vehicle speeds is critical for student safety.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City traffic engineers, public works department
- **Supporting Partners:** School district facilities team, neighborhood associations, city planning department
- **Target Schools:** All school types, particularly those on local or collector streets
- **Timeframe:** Short-term (temporary/quick-build) to long-term (permanent construction)

SPECIFIC TREATMENTS:

Chicanes

Series of alternating curb extensions or islands that create an S-shaped path of travel for vehicles, requiring drivers to navigate laterally through the roadway. This horizontal deflection slows vehicle speeds while maintaining traffic flow and can be particularly effective on longer, straight roadways adjacent to schools.

Reduce school zone speed

Implementation of reduced speed limits in designated school zones, typically 15-25 mph during school hours. These lower limits are established through a combination of regulatory signage, pavement markings, and supporting traffic calming measures that create a comprehensive speed management strategy.

Roundabouts

Circular intersections where traffic flows counterclockwise around a center island, replacing stop signs or traffic signals. These yield-controlled intersections improve safety by reducing vehicle speeds, eliminating the most severe crash types, and simplifying pedestrian crossings into multiple distinct segments.

Speed cushion/speed humps

Raised areas of pavement extending across the roadway that vertically deflect both the wheels and frame of traversing vehicles. These devices are typically 3-4 inches high and 12-14 feet in length, with speed cushions including wheel cutouts to accommodate emergency vehicles and transit.

Tightening curb radii

Reduction of the corner radius at intersections to slow turning vehicles and improve pedestrian safety. Smaller curb radii force drivers to reduce speed when turning, improve visibility between drivers and pedestrians, and reduce pedestrian crossing distances.

Dynamic speed feedback signs

Electronic signs that display approaching vehicle speeds, typically combined with the posted speed limit and visual reinforcement (like flashing lights for speeders). These driver feedback tools have been proven effective at reducing speeds in school zones by increasing awareness and accountability.

RESOURCES

Implementation Guides:

- FHWA Traffic Calming ePrimer: https://highways.dot.gov/safety/speed-management/traffic-calming-eprimer
- Institute of Transportation Engineers Traffic Calming Library: https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/
- NACTO Urban Street Design Guide - Speed Reduction Mechanisms: https://nacto.org/publication/urban-street-design-guide/design-controls/design-speed/speed-reduction-mechanisms/

QUICK FACTS

- **Cost Level:** $ to $$$ (varies by treatment type and implementation approach)
- **Complexity:** Low to Medium
- **Time Investment:** 2 months to 1 year (depending on scope and permanence)
- **Effectiveness:** High (creates self-enforcing speed environments)
- **Modes Addressed:** Walking, Biking, Driving

BENEFITS

- ✓ Creates naturally slower vehicle speeds through physical design
- ✓ Improves driver attentiveness and awareness of surroundings
- ✓ Reduces the severity of potential crashes
- ✓ Enhances comfort and perceived safety for pedestrians and bicyclists

- ✓ Provides continuous speed management (unlike enforcement)
- ✓ Can be implemented through phased approach (quick-build to permanent)

5.7. TRANSIT TREATMENTS

DESCRIPTION

Transit treatments enhance the safety, accessibility, and functionality of public transportation services around schools. These engineering measures focus on improving connections between transit stops and school entrances, reducing conflicts between transit vehicles and other road users, and creating comfortable waiting environments for students. Well-designed transit facilities can significantly increase the viability of public transportation as a safe and reliable option for student travel to and from school.

IMPLEMENTATION DETAILS

- **Lead Implementers:** Transit agency, city traffic engineers, public works department
- **Supporting Partners:** School district facilities team, accessibility advocates, city planning department
- **Target Schools:** Middle and high schools with transit service nearby
- **Timeframe:** Medium to long-term (coordination across agencies required)

SPECIFIC TREATMENTS:

Access to transit stops

Pedestrian infrastructure that connects school grounds to nearby transit stops, including continuous sidewalks, marked crosswalks, and accessible pathways. These connections ensure students can safely and conveniently access transit services from school property.

Transit bulbouts

Sidewalk extensions at transit stops that allow buses to pick up and drop off passengers without leaving the travel lane. These treatments reduce delays for transit vehicles, provide additional waiting space for students, and can incorporate amenities like shelters and seating.

Transit islands

Raised platforms between travel lanes and separated bicycle facilities that serve as boarding areas for transit passengers. These treatments eliminate conflicts between buses and bicyclists by routing bicycle traffic behind the transit stop rather than between the bus and the curb.

Transit stop shelter/trees

Physical structures that provide weather protection, seating, and comfort amenities at transit stops, often supplemented with shade trees or other landscaping. Improved waiting environments encourage transit use and enhance safety through better visibility and defined waiting areas.

Transit stopping management

Operational strategies and design elements that organize transit loading/unloading activities to reduce conflicts with other transportation modes. This includes dedicated bus bays, no-parking zones at stops, and coordination of arrival/departure times with school schedules.

RESOURCES

Implementation Guides:

- NACTO Transit Street Design Guide: https://nacto.org/publication/transit-street-design-guide/
- TCRP Report 153: Guidelines for Providing Access to Public Transportation Stations: https://nacto.org/wp-content/uploads/1-4_Coffell-et-al_Guidelines-for-Providing-Access-to-Public-Transportation-Stations_TCRP-153_2012.pdf
- Pedestrian Safety Guide for Transit Agencies: https://safety.fhwa.dot.gov/ped_bike/ped_transit/ped_transguide/transit_guide.pdf

QUICK FACTS

- **Cost Level:** $$ to $$$ (varies by treatment complexity)
- **Complexity:** Medium to High (requires inter-agency coordination)
- **Time Investment:** 6 months to 2 years (depending on scope)
- **Effectiveness:** Medium to High
- **Modes Addressed:** Transit, Walking

BENEFITS

- ✓ Increases viability of transit as a school transportation option
- ✓ Reduces conflicts between transit vehicles and other modes
- ✓ Improves safety for students waiting for and accessing transit
- ✓ Creates more comfortable and visible waiting environments
- ✓ Enhances accessibility for students with disabilities
- ✓ Can reduce private vehicle congestion around schools

5.8. INTERSECTION TREATMENTS

DESCRIPTION

Intersection treatments focus on improving safety at road junctions where multiple travel paths converge, creating potential conflicts between pedestrians, bicyclists, and motorists. These engineering measures address visibility challenges, manage turning movements, clarify right-of-way, and reduce exposure for vulnerable users. Well-designed intersections around schools are critical for student safety, as these locations typically present the highest risk of crashes and account for a significant portion of student travel routes to and from school.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City traffic engineers, public works department
- **Supporting Partners:** School district facilities team, neighborhood associations, accessibility advocates
- **Target Schools:** All school types (elementary through high school)
- **Timeframe:** Short-term (sight distance improvements) to long-term (major reconfigurations)

SPECIFIC TREATMENTS:

Improve sight distance

Modifications that enhance visibility between different road users at intersections and driveways by removing or restricting visual obstructions. These improvements include trimming vegetation, restricting parking near corners (daylighting), relocating utility poles, and adjusting signal equipment placement to ensure clear sightlines.

Reduce/redesign driveway conflict points

Modifications to school access points that minimize the number and complexity of locations where vehicles cross pedestrian pathways. Strategies include consolidating multiple driveways, creating separated pedestrian walkways through parking areas, implementing one-way circulation patterns, and clearly defining vehicular and pedestrian spaces.

Visual narrowing (landscaping)

Use of landscaping elements, street trees, and planters to create the perception of a narrower roadway, naturally encouraging slower vehicle speeds through intersections. These treatments combine aesthetic improvements with traffic calming benefits while maintaining adequate space for all users.

Protected intersections

Comprehensive intersection designs that physically separate bicyclists and pedestrians from turning vehicles until the conflict point becomes visible to all users. Elements include corner refuge islands, forward bicycle queuing areas, dedicated bicycle signal phases, and setback crossings that improve visibility and reaction time.

RESOURCES

Implementation Guides:

- FHWA Intersection Safety: https://highways.dot.gov/safety/intersection-safety
- NACTO Urban Street Design Guide - Intersections: https://nacto.org/publication/urban-street-design-guide/intersection-design-elements/
- FHWA Proven Safety Countermeasures for Intersections: https://safety.fhwa.dot.gov/intersection/cam/fhwasa15006.pdf

QUICK FACTS

- **Cost Level:** $ to $$$$ (from simple visibility improvements to complete reconstruction)
- **Complexity:** Low to High (depending on scope)
- **Time Investment:** 1 month to 2 years (varies by treatment type)
- **Effectiveness:** High (addresses locations with highest crash risk)
- **Modes Addressed:** Walking, Biking, Driving

BENEFITS

- ✓ Reduces the most common crash types around schools
- ✓ Improves visibility between different road users
- ✓ Creates more predictable movement patterns at conflict points
- ✓ Enhances comfort and perceived safety for students crossing intersections
- ✓ Accommodates users of all ages and abilities
- ✓ Can be implemented through phased approach as resources allow

6. EVALUATION

6.1. ROAD SAFETY AUDITS

DESCRIPTION

Road Safety Audits are formal, systematic examinations of existing or planned transportation facilities conducted by an independent team of safety specialists. These comprehensive assessments identify potential safety issues and recommend improvements specifically focused on school access routes. Unlike general traffic studies, road safety audits consider the specific needs of students walking, biking, and taking transit to school, evaluating infrastructure through the lens of child safety.

IMPLEMENTATION DETAILS

- **Lead Implementers:** City public works department, professional traffic engineers
- **Supporting Partners:** School administration, parent representatives, public health professionals
- **Target Audience:** Decision-makers responsible for infrastructure improvements
- **Timeframe:** 2-4 months for complete audit process

Key Implementation Steps:

- Assemble a multidisciplinary audit team with appropriate expertise
- Gather relevant data (crash history, traffic counts, previous studies)
- Review existing conditions documentation and plans
- Conduct field visits during school arrival/dismissal periods
- Observe all transportation modes and user behaviors
- Identify safety issues and contributing factors
- Develop specific, actionable recommendations
- Prioritize improvements based on safety impact and feasibility
- Present findings to school community and decision-makers
- Incorporate recommendations into infrastructure planning

RESOURCES

Implementation Guides:

- Federal Highway Administration, "Road Safety Audit Guidelines" - https://highways.dot.gov/safety/data-analysis-tools/rsa/fhwa-road-safety-audit-guidelines

Audit Tools:

- Field observation checklists
- Safety issue classification systems
- Countermeasure selection matrices
- Risk assessment frameworks

QUICK FACTS

- **Age Range:** Adult implementation; benefits K-12 students
- **Cost Level:** $$ (Medium)
- **Complexity:** High
- **Time Investment:** 2-4 months
- **Modes:** All modes

BENEFITS

- ✓ Provides objective, expert assessment of safety conditions
- ✓ Identifies issues that may not be apparent in standard traffic studies
- ✓ Creates documentation to support funding requests for improvements
- ✓ Establishes priorities for phased implementation of safety measures
- ✓ Builds consensus through inclusive, multi-stakeholder approach
- ✓ Forms foundation for comprehensive Safe Routes to School planning

6.2. SCHOOL SITE SAFETY ASSESSEMENTS

DESCRIPTION

School Site Safety Assessments are structured evaluations of the transportation environment immediately surrounding school grounds. These assessments focus on student arrival and dismissal procedures, circulation patterns, and infrastructure conditions that affect safety. Unlike broader road safety audits, these assessments concentrate specifically on school property and adjacent streets, examining how vehicle, pedestrian, bicycle, and bus traffic interact during peak school hours.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School administration, district facilities department, parent organizations
- **Supporting Partners:** City transportation staff, crossing guards, school resource officers
- **Target Audience:** School administrators, district leadership, city planners
- **Timeframe:** 1-2 months for complete assessment

Key Implementation Steps:

- Form assessment team including staff, parents, and transportation professionals
- Gather relevant school data (enrollment, transportation modes, bell schedules)
- Create detailed maps of current drop-off/pick-up procedures
- Conduct field observations during morning and afternoon peak periods
- Document traffic flow, behavior patterns, and infrastructure conditions
- Identify conflict points between different transportation modes
- Survey parents and students about safety concerns
- Develop specific recommendations for improvement
- Create implementation plan with short and long-term actions
- Reassess annually to monitor progress and identify new concerns

RESOURCES

Implementation Guides:

- Safe Routes Partnership, "School Site Assessment Guide" - https://www.saferoutespartnership.org/resources/evaluation/safe-routes-school-evaluation-handbook
- National Center for Safe Routes to School, "School Assessment Toolkit" - https://www.saferoutesinfo.org/

Assessment Tools:

- Observation checklists and data collection forms
- School site mapping templates
- Parent/student survey instruments
- Photo documentation protocols

QUICK FACTS

- **Age Range:** Adult implementation; benefits K-12 students
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** 1-2 months
- **Modes:** All modes

BENEFITS

- ✓ Identifies immediate safety concerns that can be addressed quickly
- ✓ Creates baseline data for measuring future improvements
- ✓ Focuses on specific areas under school control
- ✓ Engages school community in identifying and solving safety issues
- ✓ Provides actionable recommendations tailored to school context
- ✓ Complements broader infrastructure assessments in surrounding neighborhood

6.3. SAFE ROUTE TO SCHOOL (SRTS) EVALUTION

DESCRIPTION

SRTS Evaluation is a systematic process for measuring the effectiveness of Safe Routes to School programs and infrastructure improvements. This comprehensive assessment tracks changes in student travel patterns, safety metrics, and community perceptions over time. By collecting and analyzing data before and after interventions, schools can demonstrate program impacts, identify successful strategies, and make evidence-based adjustments to improve outcomes.

IMPLEMENTATION DETAILS

- **Lead Implementers:** School district SRTS coordinator, program administrators
- **Supporting Partners:** Teachers, parent volunteers, city transportation planners
- **Target Audience:** School administrators, grant funders, community stakeholders
- **Timeframe:** Ongoing process with regular data collection points

Key Implementation Steps:

- Establish baseline measurements before implementing SRTS initiatives
- Select appropriate evaluation metrics based on program goals
- Develop data collection tools and protocols
- Train staff and volunteers on consistent data collection methods
- Implement regular data collection schedule (typically fall and spring)
- Track student travel mode through classroom tallies and parent surveys
- Monitor safety indicators such as crashes, near-misses, and violations
- Document program activities and participation rates
- Analyze data to identify trends and measure progress
- Share results with stakeholders and use findings to refine programs

RESOURCES

Implementation Guides:

- National Center for Safe Routes to School, "Evaluation Guide" - http://guide.saferoutesinfo.org/pdf/SRTS-Guide_Evaluation.pdf
- Safe Routes Partnership, "Evaluation Framework" - https://saferoutespartnership.org/resources/research/multistate-evaluation-safe-routes-school-pro

Evaluation Tools:

- Student travel tally forms

- Parent survey instruments
- Program activity tracking logs
- Data analysis templates
- Infrastructure assessment tools

QUICK FACTS

- **Age Range:** Adult implementation; benefits K-12 students
- **Cost Level:** $ (Low)
- **Complexity:** Medium
- **Time Investment:** Ongoing with seasonal data collection
- **Modes:** All modes

BENEFITS

- ✓ Demonstrates program effectiveness to stakeholders and funders
- ✓ Identifies most successful strategies for continued investment
- ✓ Allows for timely adjustments to improve outcomes
- ✓ Builds case for expanded programs and infrastructure improvements
- ✓ Creates accountability through regular progress monitoring
- ✓ Provides data to support future grant applications
- ✓ Contributes to broader understanding of effective SRTS approaches