MN SRTS Evaluation User Guide

Minnesota Safe Routes to School (SRTS) holds a vision that Minnesota is a state where all students can walk and bicycle on routes that are safe, comfortable, and convenient. Local communities across the state have been implementing SRTS initiatives since 2006. In 2015, the Minnesota SRTS Strategic Plan called for researching and developing evaluation methods to be used by agencies, schools, and school districts to measure the impact of SRTS activities locally and statewide. Evaluation can assist stakeholders in determining the effectiveness of SRTS programs (non-infrastructure) and projects (infrastructure). Evaluation results can demonstrate that an effort is worthwhile, identify changes needed for improvement, and identify efforts that should be discontinued altogether. The evaluation data and analyses can increase support for SRTS initiatives and influence how funding is allocated.

In 2017, the Minnesota SRTS Steering Committee created a task force with members from the Minnesota Departments of Transportation and Health, Blue Cross Blue Shield of Minnesota Center for Prevention, and the Bicycle Alliance of Minnesota to develop a robust evaluation plan for local and statewide evaluation of SRTS activities. The evaluation plan seeks to monitor and evaluate:

- How students get to school
- The safety of the school arrival/dismissal area
- How the school is implementing SRTS

To help local agencies, schools, and school districts plan activities, track progress, and assess impact, the task force recommends that local programs use the following tools:

Tool	Measured Outcome	Source
1. Student travel tally and/or parent survey	How students get to school (mode share)	National Center for Safe Routes to School
2. School Zone Hazard Observational Assessment	Safety of the school arrival/dismissal area (number of unsafe behaviors)	MN Safe Routes to School Evaluation Task Force
3. School Environment and Policy Assessment 4. School Implementation Progress Checklist 5. SRTS Plan Implementation Survey	How the school is implementing SRTS	MN Safe Routes to School Evaluation Task Force

STUDENT TRAVEL TALLY

What does it measure? Student Travel Tally measures how students get to school (mode share). Local programs may use one or both (Parent Survey) tools to measure mode share. The student travel tally serves as a baseline for the SRTS planning process. If conducted annually the student tally can also serve as a measure of mode shift and program effectiveness.

Format: The student travel tally is conducted by teachers in the classroom on 2-3 consecutive school days during a specified week. Teachers record the number of students arriving/leaving school that day using each type of travel mode. The downloadable form is available here. The tally should be administered in as many classrooms as possible, with a minimum of two classrooms per grade. The tally will be completed first thing in the morning – asking two questions: 'How did you arrive at school this morning?' and 'how do you plan to leave for home after school?' Before the survey starts, record school, teacher, grad, date and number of students. Mark the day's weather and number of students present when count is taking place. Only count the number of students present when count is taking place.

When asking the two key questions of "how did you travel to school?" and "how do you plan to return home?" read all seven travel options from the form aloud before students respond. Then, reread each option and count the number of students who raise their hands for each. Record the students' primary mode of travel. For example, if a student walks to the bus stop, then arrives at school by bus, then they should be counted in the bus column. Mark only once per student.

Frequency: Mode share should be measured annually or semi-annually, at approximately the same time each year to avoid variations in travel model due to seasons. The Tally should be completed on two or three midweek days (Tuesday, Wednesday, and Thursday). Avoid conducting tally's on Monday or Friday.

Interpretation: The tally results can be used to assess current status of mode share or if there are any changed to mode share since implementing SRTS strategies.

PARENT SURVEY

What does it measure? The parent survey measures what factors affect whether parents allow their children to walk or bike to school and the presence of safety related conditions along routes to school. Local programs may use one or both (Student Tally) tools to measure mode share.

Format: The parent survey can be completed by parents on paper or online.

Frequency: Mode share should be measured annually or semi-annually, at approximately the same time each year to avoid variations in travel model due to seasons.

Interpretation: Use information to asses where there may be opportunities for increasing safety or number of children who to walk or bike to school and to assess parents' attitude towards children walking or biking to school where SRTS programs occur and identify opportunities to improve.

SCHOOL ZONE HAZARD OBSERVATIONAL ASSESSMENT

What does it measure? This tool is a way to track leading hazards that decrease safety around schools. It requires in-person observation. The tool tracks different travel modes and corresponding behaviors (i.e. distractions, illegal parking/pick up, unsafe crossing, or helmet usage) separately. It can help local initiatives identify short and long-term areas of focus by identifying hazards that need to be addressed through SRTS and to plan infrastructure and/or non-infrastructure changes that will reduce these hazards. It can also be used to evaluate the effectiveness of the changes made through SRTS, that is, to measure decreases in unsafe events and behavior at an individual school. The data from the tool will also allow MnDOT to track overall progress statewide through state-level trends.

Format: To implement, the local SRTS lead will need staff or volunteer support (estimated 3-5 people depending on number of locations to be observed). At each location, volunteers should observe both the morning arrival and afternoon dismissal periods. The assessment is designed to capture the total number of people entering the observation space by each mode (driving, walking, or bicycling) and also track selected unsafe behaviors using a tally system. A single person may engage in more than one unsafe behavior. While we have designated some common unsafe behaviors there is a box titled "other" to capture unique safety hazards for each site. The tool also asks for time, weather, presence of crosswalk or school patrol, and other contextual details that can help interpret the results.

Coordinator Instructions:

BEFORE OBSERVATION: Recruit volunteers to conduct the observation. Try asking for help from staff, parents, students (7th grade and older) and student clubs, PTA members, or other school safety advocates.

Select areas to observe, preferably no more than six. Choose areas where students will be entering or leaving the school's zone, areas where there is a known hazard or areas where you are unsure of the safety of people walking and biking. Areas should be two-dimensional (not sightline), and can be half a block, an intersection, drop off area, school driveway, parking lot entrance, etc. If there are areas with a high level of traffic, it may be helpful to have more than one observer. The counts could be divided among observers in several ways, for example: One observer could count total number of people by mode of transportation and the other could count unsafe behaviors, or one observer could count drivers while the other counts bikers and walkers.

Determine what day(s) you will conduct the observation. The observation should be conducted on typical school day(s). Talk to the principal in advance for approval to conduct observation and to help find a day that is typical and does not include any special events such as Walk/Bike Day. If your volunteers cannot conduct the observation all on the same day or multiple volunteers are conducting the counts at different locations on different days, conduct all counts within a two-week time period and during the same time window each day.

Ask the principal or other school staff where the designated drop off area is located.

If possible observe arrival and dismissal time on a day before you conduct the observation. This will help you determine the start and stop times for the observation and will allow you to get a complete picture of arrival and dismissal. It is important to capture most of the traffic but not necessary to count all. Times should be consistent (relative to school's start and end time) each day and year data is collected. For most schools, 30 minutes, including 5-10 minutes after the bell rings in the morning and 5-10 minutes before the bell rings in the afternoon, will be sufficient to capture data.

DAY OF OBSERVATION:

1. Print out maps of the school area and give to observers.
2. Have observers complete the questions below (time, weather, location, description of conditions, etc.).
3. When volunteers are observing at a secondary school (Grades 7 through 12), have them track adult and teen drivers separately, use the form that has a row for teen drivers (labeled Secondary Schools at the bottom of the page).
4. Conduct the observation both during the morning arrival and afternoon dismissal.
5. Inform volunteers where the designated drop off area is located and where there is signage indicating the designated drop off area.
6. For visibility, volunteers may prefer to wear bright colors or a reflective vest, if available.

Frequency: This tool should be used as part of a local program's planning process to inform intervention priorities. The tool should be repeated 6-12 months after changes have been implemented to address the issues/hazards identified by the initial observations. To the extent possible, conduct the repeat observations under conditions that are as similar as possible to the initial observation (e.g., time of day, day of week, season, and locations).

AFTER OBSERVATION:

Analysis: Add up all the tally marks in each column and enter the totals into the Electronic Analysis Tool (available at https://www.dot.state.mn.us/mnsaferoutes/resources/evaluation.html). Then use the formulas to calculate the percentage of people engaging in each unsafe behavior by mode. If you observed multiple locations, do the analysis for each location separately.

Interpretation: The local SRTS coordinator and SRTS team should look at the results to identify the opportunities to reduce hazards. You can ask the following questions to help you understand the results. Use the answers to these questions to inform your SRTS program/project planning.

- At this location, how many people arrived/left by each mode?
- How many people engaged in unsafe behaviors for each mode?
- What percentage of people engaged in unsafe behaviors for each mode?
- Which unsafe behaviors were the most common?
- Which mode contributed the most to safety hazards?
- If you observed multiple locations, how did the results differ by location? Were different modes used and/or different safety hazards present at different locations?

- Look at the first page of the observation form. What safety features were present at the location? What safety features were missing that might help address the hazards you observed?
- What can be done to reduce the safety hazards you observed? For example, can arrival and dismissal times be separated by mode to improve safety?
- What are the highest priority needs for improving safety?

After you have implemented changes to address hazards, conduct a repeat observation and use the following questions to help you interpret the results:

- Were there changes in the percentage and number of people arriving/leaving by each mode?
- How did the percentage and number of people engaging in unsafe behaviors change?
- Which unsafe behaviors were the most common in the repeat observation? Did this change from the previous observation?
- Which locations experienced the most changes in percentage and number of unsafe behaviors?
- Can any of the changes be explained by differences in weather, season, time of day, or location between the two time periods?
- Did our SRTS program/project appear to reduce unsafe behavior?
- What new safety issues have emerged? (For example, if more kids are riding their bikes to school, the number of kids biking without helmets might also increase. This is not a failure, but rather reflects the need to add new education components now that more kids are biking.)

Definitions:

These evaluation tools and instructions use people-first language wherever appropriate (e.g., “people riding bicycles” rather than “bicyclist”). Use of this language communicates that all people using our streets and sidewalks are people before all else. They are our friends, neighbors, sons, daughters, brothers, sisters, parents, and loved ones. We encourage all schools and communities working on Safe Routes to School to adopt this language where appropriate when communicating with stakeholders and the public. Definitions are provided below for times when it is necessary to use labels (e.g., using shorthand on a data collection form or discussing an initiative or method that is identified using other language, such as “bicycle and pedestrian counts”).

- Pedestrian - Any person on foot walking or using a mobility assisted device (e.g., cane, walker, crutches, stroller, or wheelchair) through (to or from) your designated observation area
- Bicyclist – Any person on a bicycle
- Driver – Person operating the vehicle
- Distracted – Using a phone, texting, eating, wearing headphones or earpiece
- Stopping outside of designated space – Designated drop off and pick up locations are decided by each school.
- Does not yield to pedestrians – Vehicle that does not stop to let people on foot cross the street. Once a person is at the curb, the car should yield. Crossing Guards have the authority to stop traffic while school patrol waits until it is clear and then cars must yield.
- Unsafe Crossing Behavior – When a person on foot is crossing mid-block, against the signal or not observing traffic i.e. going between cars or crossing in front of a bus.

Special notes: This tool may NOT be used in place of bicycle and pedestrian counts to measure the number of people using each mode. Bicycle and pedestrian counts use a screen line (one-dimensional) methodology, whereas this tool observes all people entering a two-dimensional observation space, such as a half-block area.

SCHOOL ENVIRONMENT AND POLICY ASSESSMENT

What does it measure? The purpose of the tool is to identify what aspects of environment and policy in the school zone create a safe and appealing walking and biking environment, and what aspects need some improvement. Questions address your school's policies and practices around walking and biking, your school property arrival and dismissal procedures, and your school zone's environment. You may use this tool to measure progress over time in your Safe Routes to School initiative, including both infrastructure and non-infrastructure changes. It does not require in-person observation. Results can be used for planning changes to create a more appealing and safer walking and biking environment in the school zone and evaluation of these aspects of the school zone.

Format: This online tool is designed to be completed from one's desk. The tool allows you to score each environmental structure or policy aspect from ideal practices/conditions (Green) to poor practices/conditions (Red). Some of these aspects allow for a middle ground (Yellow) option, and others do not. The tool allows you to rate your overall school environment at a green, yellow, or red status depending on the safety of the environment with a maximum score of 42 points. Access the online assessment https://apps.health.state.mn.us/redcap/surveys/?s=EE3A7LA8M8. As you answer each question, targeted suggestions for improvement will appear based on your answer. You are encouraged to use these suggestions when planning your SRTS initiative. At the end of the assessment, you will be able to save and print a copy of your full results along with the targeted suggestions for improvement.

Instructions: This tool should be completed by someone who is familiar with the environment and policies that exist in the school zone and the schools' wellness plan, SRTS plan, and SRTS activities. You may need to talk to the School Wellness Coordinator, Principal/Vice-Principal, School Resource Officer, PTA Representatives, Physical Education Teacher, District/School Transportation Director, Parent Champions, and/or Crossing Guard/Student Safety Patrol Coordinator in order to find the answers to some of the questions. Answer each question based on the current status of the environment or policy. This may require some research on current conditions or policies, but this information is necessary as it will help to provide a complete picture of the safety of the school zone. You may view and print a complete list of the questions by following the link to the online assessment before you begin. Once you begin entering data, you may not save your place and return to finish later, so make sure you have all the answers before you begin entering data.

Frequency: This tool is most effective if completed annually. The first time will take longer. Annual updates can serve as a measure of change.

AFTER OBSERVATION: Review your answers to the assessment and the targeted suggestions for improvement with your stakeholders. Identify priority areas for change and develop an action plan to address them. Assess how your answers have changed over time. Have your efforts resulted in improvements in the topics you targeted? If not, what changes are needed in your approach in order to accomplish your program/project objectives?

Definitions:
School Zone - School property and the area surrounding the school property to a distance of 300 feet or one city block, whichever distance is greater.

SCHOOL IMPLEMENTATION PROGRESS CHECKLIST

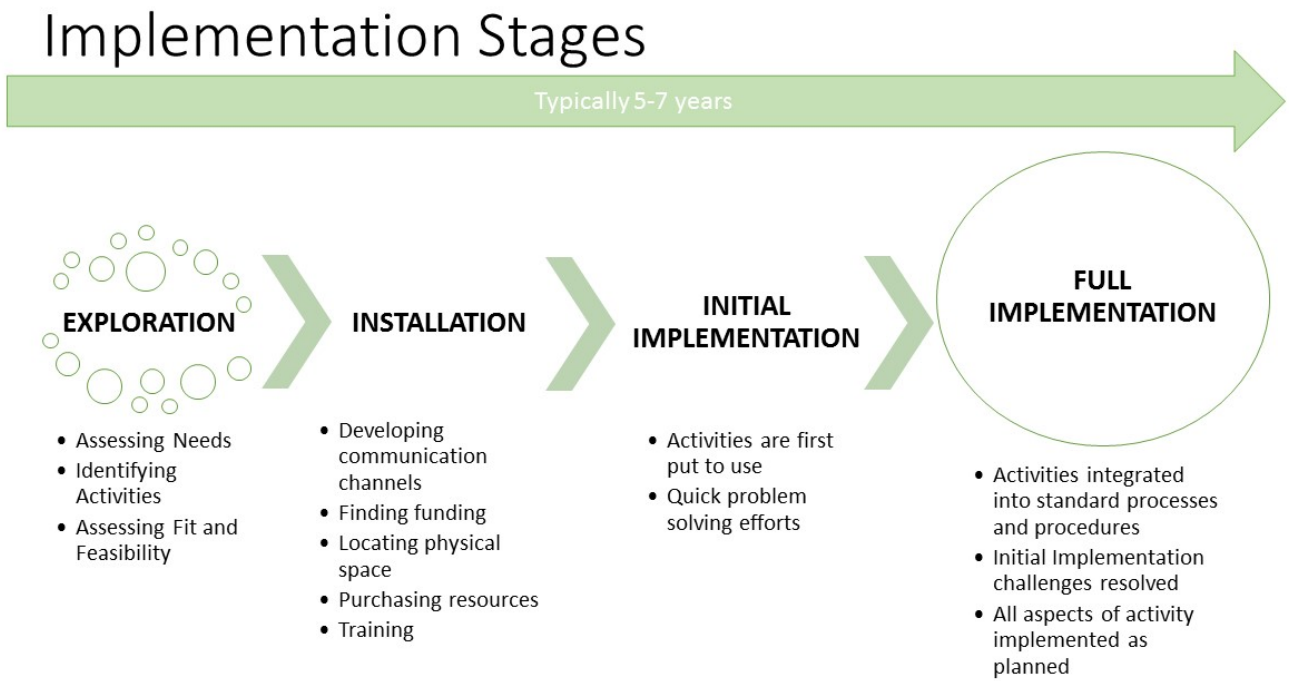
What does it measure? This tool is meant to measure the progress of implementation of Safe Routes to School activities at a specific school.

Format: This is an online tool that should be completed by someone who is familiar with all Safe Routes to School Activities at a specific school. Access the online assessment here: https://apps.health.state.mn.us/redcap/surveys/?s=4M9AJTN7PR. If there are multiple schools covered under the same Safe Routes to School plan, complete a separate checklist for each school. A school does not have to have a Safe Routes to School plan in order to complete this checklist.

Frequency: This tool should be completed annually.

Interpretation: This tool can be used to identify areas which of the six "E's" are being implemented at what level.

Definitions:



Source: http://implementation.fpg.unc.edu/module-1/implementation-stages

SRTS PLAN IMPLEMENTATION SURVEY

What does it measure? The Minnesota Department of Transportation (MnDOT) is gathering information from communities who have developed, or are in the process of developing a SRTS plan to better understand the impact of plans on building a successful SRTS program.

Specifically, MnDOT hopes to determine:

- Are SRTS plans being implemented in Minnesota?
- If yes, to what level of success?
- If no, what are the barriers or challenges?
- What resources would improve SRTS plan implementation?

Format: This tool is an online survey. This tool should be completed by a coordinator of the SRTS plan. Access the online assessment here: https://apps.health.state.mn.us/redcap/surveys/?s=CN7Y8PDEAW. If your SRTS plan is for multiple schools, please answer on behalf of all of the schools collectively. You can provide details about a particular school or strategy in the open-ended questions.

Frequency: Complete this tool annually.

For more information, contact saferoutes.dot@state.mn.us