# Evaluation Guide for Community Safe Routes to School Programs

## Identifying issues, improving activities and understanding results

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Pedestrian and Bicycle Information Center

SafeRoutes National Center for Safe Routes to School

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# Contents

## *Evaluation Guide for Community Safe Routes to School Programs*

# Overview

Around the country, communities are conducting Safe Routes to School (SRTS) programs in order to enable and encourage children to walk and bicycle safely to school. Communities tailor a combination of engineering, education, encouragement and enforcement strategies to address the specific needs of their schools. Evaluation is an important component of any SRTS program. **Evaluation** is used to determine if the aims of the strategies are being met and to assure that resources are directed toward efforts that show the greatest likelihood of success. Also, evaluation can identify needed adjustments to the program while it is underway. This information describes how to conduct a SRTS program evaluation that is tailored to that program's objectives and strategies.

## Benefits of Evaluation

Every SRTS program, no matter the size, can benefit from evaluation. For local programs, evaluation allows for:

- **Making sure that the underlying problem is identified so that proper strategies to address the problem are picked.** Sometimes a SRTS program begins without a good understanding of the underlying issues resulting in a less successful program.
- **Setting reasonable expectations about what the program can do.** By knowing the starting point, SRTS programs can set specific and reasonable objectives.
- **Identifying changes that will improve the program.** Part of evaluation is monitoring what happens throughout the life of a project so that mid-course corrections can be made, if needed, to improve chances of success.
- **Determining if the program is having the desired results.** This is a primary purpose of any evaluation and can be used to inform funding sources, the media, and the public to help build support for SRTS.

There are benefits that extend beyond an individual program. Data collected and shared by local programs can influence future funding at the local, state and national level. Today's SRTS exists in part because of the evaluations of earlier programs. In the 1970s, Odense, Denmark, initiated SRTS efforts to combat the high rate of pedestrian and bicyclist injuries. Over a 20-year period, the number of injured school children in Odense decreased 30-40 percent. That success helped lead to the establishment of SRTS programs in the U.S. — first in the Bronx in New York City, then Congressionally-funded pilot programs in Arlington, MA, and Marin County, CA, and then state-level programs in Texas and California, as well as others. Evaluation of the success of those early programs in increasing walking and bicycling to school and reducing the numbers of parents driving their children to school, combined with strong demand, spurred Congress to establish the $612 million National Safe Routes to School Program in 2005. Findings from evaluations conducted by local programs will play a similarly important role when policymakers at the national, state, and local levels decide whether and how to continue SRTS programs.

## Audience

This information is intended for all those who have an interest in the success of SRTS programs, particularly those seeking information about how to evaluate a local program. This information is written with local program implementers in mind — people who are busy and responsible for many tasks, who do not necessarily have experience with evaluation but are invested in the success of SRTS. It is not expected that readers intend to conduct a scientific research study. The information focuses on ways to gather information about a program's progress, potential improvements and results that do not take lots of time or necessarily require a specialist.

Ideally, evaluation begins when the SRTS program is in the planning phase. However, the information in this

section can be helpful for those with programs at other points, too, such as:

- Applying for funding in order to justify the request.
- Identifying problems and potential solutions if a part of the program is not having the desired impact.
- Conducting or completing a program to be able to identify successes or needed adjustments.

## Purpose

This information is designed primarily to assist in the development and implementation of a local SRTS program evaluation plan. It describes how the timing of evaluation corresponds to the life of a program; gives an overview of commonly used ways to collect data, including two ready-to-use data collection instruments (see the student travel tally in Appendix A and parent survey in Appendix B); and then outlines a six step process for SRTS program evaluations.

If initial planning meetings have already taken place or an application for funding has been submitted, it is likely that the first step has already been accomplished. A worksheet (Appendix C) provides a way for program implementers to organize their program information for each step and a completed worksheet (Appendix D) serves as an example.

Every effort has been made to condense this information to the most vital information needed for a local SRTS program. Readers interested in developing a deeper understanding of evaluation are encouraged to review the Resources section.

### Six Step Process for SRTS Program Evaluation

1. Plan the program/Collect information
2. Write objectives
3. Decide what, how and when to measure
4. Conduct the program and monitor progress
5. Collect information and interpret findings
6. Use results

*This guide outlines a six step process along with tools and a worksheet for developing an evaluation plan.*

# When and How to Evaluate

Safe Routes to School (SRTS) evaluation plans come in different sizes and shapes to fit different program goals, strategies and resources. This section provides an overview of the times during a SRTS program when evaluation occurs and then provides two evaluation plan options based on those times. The options differ in amount of time and resources required. The benefits and drawbacks of each option are provided to assist program implementers in deciding what evaluation plan would work best for their situation.

## The Timing of Evaluation

The evaluation process mirrors the lifespan of a program. It ideally begins when the program is initially formulated and ends after a program ends. Evaluation helps in different ways at different times in the program's life. Each time provides important information that can strengthen or improve a program.

Evaluation occurring:

- **Before** the program collects baseline information and helps plan the program.
- **During** the program identifies progress and/or challenges and areas needing improvements.
- **After** the program identifies changes in behaviors, attitudes and/or the physical environment and informs decisions about the future of the program.

### *Before the Program Begins*

Understanding what is happening in a community and around a school requires the collection of baseline information in order to discover barriers and assets to walking and bicycling and to understand the circumstances before a program takes place. Baseline data collection also serves as a reference point against which to compare conditions during and after the SRTS program, such as the number of walkers. This evaluation stage is also called formative assessment.

Naples, Florida.

*Evaluation ideally begins when the program is initially formulated and ends after a program ends.*

### *During the Program*

This information gathering occurs while the program or a particular activity is underway. Monitoring what activities are being done during the program is a way to check that a program is doing what it planned to do and to identify improvements to make along the way. It can reveal what is working and what is not and can allow for quick fixes. For example, if the program includes crossing guards and the evaluation reveals that the parents are not obeying them, then there is the opportunity to work toward solving that problem right away. Evaluation during the program usually includes counting things such as the number of education sessions taught, the number of walkability checklists completed or the number of fliers distributed — all related to what activities are being conducted. This kind of monitoring continues through the life of a program as a way to report on what took place. This evaluation stage is also called process evaluation.

### *After the Program*

This data collection occurs after the program or activity is completed and can reveal the program's effects. The same evaluation tools used to collect data before the program was implemented are used to gather data after the program's completion. The evaluation consists of measuring changes in knowledge, attitudes, beliefs, behaviors, or the physical or social environment from before the SRTS activity or project occurred to after the activity or project ended (or yearly). This is also called outcome evaluation. Additionally, the project conclusion is when the data collected during the program are summarized in order to understand what took place and whether the planned activities were conducted as intended. Summarizing this information helps make sense of the outcome evaluation results because it explains the context in which the results were achieved.

*The standard method of evaluation is the preferred method as it is more comprehensive and allows for adjustments during the program.*

## Options for Evaluation

This section discusses two evaluation methods for local programs to consider: standard and basic. The standard method of evaluation is the preferred method as it is more comprehensive and allows for adjustments during the program. However, it is understood that not everyone will have the resources for standard evaluation. Therefore, the basic evaluation will also be explained.

**Standard evaluation:**
Evaluation is done before, during, and after the program.

**Basic evaluation:**
Evaluation is done before and after the program.

Standard evaluation can be conducted by the program implementers or with the help of a professional evaluator. Standard evaluation is ideal since it provides information throughout the life of the program and can be used to examine the effectiveness of specific strategies. However, for some programs the ideal must be balanced with the time and the resources available. Basic evaluation may be the choice that fits the circumstances.

This information is shaped around standard evaluation conducted by the program implementer, since it provides a more complete picture than basic evaluation and does not have the costs associated with engaging an evaluation specialist. However, the worksheets and evaluation tools can be used for either of these evaluation plans. Below are descriptions of these options.

### *Standard Evaluation:*

- Data collection is done before, during and after the program (Steps 1, 4 and 5)
- Provides more information for improving the program along the way than basic evaluation
- Provides a better understanding of what worked in the program than basic evaluation
- Requires more time and resources than basic evaluation

## Six Step Process for SRTS Program Evaluation

### Standard Evaluation
**Collects data during steps 1, 4 and 5.**

BEFORE
1. **Plan the program/Collect information**
2. Write objectives
3. Decide what, how and when to measure

DURING
4. **Conduct the program and monitor progress**

AFTER
5. **Collect information and interpret findings**
6. Use results

### Basic Evaluation
**Collects data during steps 1 and 5.**

BEFORE
1. **Plan the program/Collect information**
2. Write objectives
3. Decide what, how and when to measure

DURING
4. Conduct the program

AFTER
5. **Collect information and interpret findings**
6. Use results

Similar to basic evaluation, standard evaluation includes the information collected before and after the program. However, standard evaluation also requires monitoring program activities *while they are underway*. In addition, programs may also choose to add questions to the parent survey or gather other information to learn more about specific issues relevant locally. For example, if speed around the school is believed to be a problem and a public education campaign to remind drivers about appropriate driving speed is planned, then gathering speed data before, during and after the program would make sense.

The diagram above shows how the timing of the data collection relates to the six steps for evaluation.

### *Standard Evaluation with the Assistance of a Professional Evaluator:*

- Ideal for large, complex programs.
- Allows for a more rigorous research design for understanding what worked.
- Requires more resources than standard or basic evaluation conducted by the implementers.

A professional evaluator offers the opportunity for a more rigorous research design which often provides a more valid and reliable picture of what is happening with the program, why it is happening, and the relationship between the evaluation results and program activities. While involving an evaluator is not necessary or feasible for every program, for some, such as large, multi-component programs, it may be most appropriate. See Working with an Evaluation Specialist (Appendix E) for information on how to find and best use an evaluation specialist. More complex evaluation designs require additional considerations of what and how information will be collected. See Evaluation Designs (Appendix F) for more information.

### *Basic Evaluation:*

- Data collection is done before and after the program (Steps 1 and 5)
- Provides the minimum amount of evaluation a program should conduct
- Requires the least amount of time and resources

Basic evaluation includes collecting baseline information using a student travel tally and parent survey and using these tools again when the program is over. This will enable program implementers to gain insights on attitudes, behaviors, and conditions before a program begins and what changes have taken place after the program. For example, changes in student travel tallies will reveal any increase or decrease in the number of

students walking or bicycling to school, and the responses to the parent survey will reveal any changes in parent attitudes toward walking and bicycling to school.

The diagram on the previous page shows how the timing of the data collection relates to the six steps for evaluation.

## Basic Evaluation Tips

**When time and resources are very limited, some basic steps can help.**

Local programs often have many responsibilities, just one of which is monitoring the progress and effects of their Safe Routes to School (SRTS) program. If time and resources are very limited, collecting data before and after the program can provide information to help guide program planning, understand the progress and identify next actions. This basic evaluation calls for data collection during Steps 1 and 5 of the standard evaluation process.

Note: Using the SRTS student travel tally (Appendix A) and parent survey (Appendix B) developed by National Center for Safe Routes to School enables programs to use online tools at www.saferoutesinfo.org/tracking to enter data, generate reports and summarize results.

### Before the Program

#### Collect Baseline Information

Before starting any SRTS activities:

- Use a student travel tally and parent survey to identify current student walking and bicycling rates and parent attitudes toward children walking or bicycling to school.
- Compile the information. Baseline information from the tools in this section can be entered onto Web-based tools at www.saferoutesinfo.org/tracking to summarize information and create basic reports.
- Ask the school principal to describe:
  - the main walking and bicycling routes
  - any safety concerns
  - any known pedestrian or bicyclist crashes in recent past
  - any rules relating to walking/bicycling to school
- Assess the main walking and bicycling routes. Walk the main routes that students take or would take when walking of bicycling to school looking for any safety concerns and other potential barriers.

#### Use Results to Inform SRTS Program Plan

Use information to determine strategies and goals. Correct unsafe conditions before conducting encouragement activities.

### After the Program

#### Collect Information Again at the End of the Program

Collect the student travel tally and parent survey information again. Enter the data into the Web-based tools at www.saferoutesinfo.org/tracking. These tools can generate reports that compare findings. If engineering improvements were made, reassess the walking and bicycling routes affected with the audit checklist.

#### Compare Results Collected Before and After the Program to Identify Changes

Did walking and bicycling increase? Did parents' attitudes change? Did safety improvements occur? Did parents recognize these improvements?

To plan and conduct a more thorough evaluation that could provide deeper insights on a program's achievements and results, see standard evaluation.

## *Who Will Be Involved in the Evaluation?*

One person cannot do all the planning for evaluation alone. The group responsible for planning and conducting the Safe Routes to School (SRTS) program will also most likely be responsible for evaluation. The following stakeholders all can play important roles.

**Implementers:**
Those involved in running the SRTS program.

**Partners:**
Those who support the program with resources, such as finances or time

**Participants:**
Those served or affected by the program, including students, parents/caregivers or neighbors.

**Decision-makers:**
Those in a position to do or decide something about the program.

**Professional evaluators:**
Those whose assistance is required if a complex research design or data analyses is planned. (See Appendix E.)

**SRTS program leader:**
The person who oversees the evaluation process and convenes the stakeholders.

## *Sharing Information as it is Collected*

Since each stage of evaluation provides important information that can strengthen or improve a program, the results need to be put to use as soon as possible at each stage:

**Before the program:**
Helps inform the program objectives and activities so the findings can be shared with those who can get the program started.

**During the program:**
Identifies what is or is not working while the program is being conducted. These results should be shared with those who can make mid-way changes to the program to improve it.

**After the program:**
Highlights the changes since the program began. These results need to be shared with those that can re-fund the program or make other decisions about whether to expand or change the program.

# Collecting Safe Routes to School Information

Now is when a program begins to consider what kind of information will be collected for evaluation. There are many ways to gather information that will inform and evaluate a Safe Routes to School (SRTS) program. This section describes the types of information collected and the methods for collecting it. The next section will integrate what these methods are and when these different methods might be used.

## Kinds of Information to Collect

There are two kinds of information that will be collected:

**Numbers**
This is also called **quantitative** data. A good example of this type of data is tallies of how students arrive at school.

**Words**
This is also called **qualitative** data. A good example of this type of data is what a principal says about traffic safety around the school during an interview.

Results of some data collection methods, such as surveys or observations, may be either numbers or words depending on the type of questions asked. Quantitative data is sometimes easier to handle — numbers from surveys are entered, totaled and compared. However, qualitative data offers a richer understanding of the how or why behind quantitative findings. For example, interviews with parents who participate in a walking school bus help reveal why they choose to be involved and how the walking school bus improves their perception of traffic safety. Interview questions can collect personal opinions or experiences; however, the answers may not necessarily reflect reality. For example, the question "Do walking school buses keep children safe?" can best be answered with data rather than personal opinion. Both quantitative and qualitative data are useful and can inform each other so that together they paint a more complete picture. The type of information collected (quantitative or qualitative) becomes important later when it is time to interpret findings because they will be analyzed in different ways.

*Both quantitative and qualitative data are useful and can inform each other so that together they paint a more complete picture.*

## Ways to Collect Information

There are five ways often used by SRTS programs to collect information:

1. Tallies/counts
2. Surveys
3. Observations and audits
4. Interviews
5. Existing data sources

### *1. Tallies/Counts*

Tally forms are simply ways to count numbers of people or things. Tally forms can answer a question that every SRTS program needs to be able to answer: *How do students travel to and from school?* Tallies can be used to count the number of children traveling to and from school using different modes of travel, such as walking, bicycling, bus, private vehicle, etc. Travel behavior enables a program to measure changes after SRTS activities. It also provides a means of identifying which

modes of travel to target and gives a general understanding of the school travel environment.

### School Travel Tally Forms

Student travel tally forms (Appendix A) developed by the National Center for Safe Routes to School are available for download and use. There is a 1-page tally sheet that teachers complete and online tools (www.saferoutesinfo.org/tracking) that generate a cumulative report for the entire school. Basic steps for use are to the right.

## *2. Surveys*

Surveys or questionnaires are commonly used in evaluation. They provide a low-cost way to obtain information from many people in a relatively short amount of time, and they allow responses to be anonymous. Surveys may be distributed in many ways such as paper and pencil, telephone, e-mail messages, or over the Internet. Questions for a survey need to be carefully written and ideally pre-tested with potential respondents to be sure that the questions are understandable and that the answers will provide the kind of information sought. Entering survey data and generating results can be time consuming. The parent survey (described below and at box at right) developed by the National Center for Safe Routes to School has a Web-based entry tool (www.saferoutesinfo.org/tracking) that automatically summarizes results.

Parent surveys can answer the question: *What are the attitudes and issues that may influence how students get to and from school?* Understanding why students are or are not walking and bicycling is important. A survey may reveal that parents or caregivers perceive it is unsafe for their children to walk or bicycle. Then the job for a local program is to determine if the perception is reality. If safety is an issue, strategies to fix the unsafe conditions are needed. If it is a *perception* of a safety issue rather than a real danger, then strategies to correct such misperceptions are needed. Without this information, the local program might focus efforts on an issue that will not result in significant improvements.

### Parent Survey

A parent survey (Appendix B) developed by the National Center for Safe Routes to School is available for download and use. The survey includes questions about what affects parents' decisions to let children walk or bicycle to school, the presence of factors that might influence parents' decisions, and parents' perceptions of safety related to walking or bicycling to school.

Completion of the survey requires about 5 to 10 minutes. Basic steps for use are above.

### Safe Routes to School Student Travel Tally Forms

Instructions:

- For two days of one week, teachers ask students how they got to school that day and how they got home the previous day.
- Students raise their hands for each mode (walk, bike, car, etc) of travel and the teacher records the counts.
- The in-class tally sheets are collected and the cumulative results are added up. This can be done by entering information into an online data entry tool (www.saferoutesinfo.org/tracking).
- The summary tool also displays some basic analysis information, such as graphically comparing the amount of walking or biking during the morning and the afternoon.

### Safe Routes to School Parent Survey

Instructions:

- The survey can either be sent home with students for their parents or caregivers to complete or can be distributed as part of parent-teacher conferences.
- Surveys are returned to teachers, who then submit them (often to the SRTS program implementer) to be summarized.
- An online tool (www.saferoutesinfo.org/tracking) assists local program leaders in data entry and summarizing the survey results.

### *3. Observations and Audits*

Information can be gathered by both observing the physical environment and the behaviors of people like pedestrians, bicyclists and drivers. There are many existing tools available, such as walkability and bikeability checklists and instructions for conducting a walk or bicycle audit (go to www.saferoutesinfo.org/guide/engineering and click on School Route Maps and the Tools to Create Them in the menu). The tools range from those designed for use by the general public to detailed, technical audits intended for transportation professionals.

### *4. Interviews*

This may include interviewing people one-on-one or in groups. Individual interviews may be informal, such as chatting with parents when they drop off children at school, or formal interviews with a principal, town planner, or another stakeholder using pre-planned questions. A benefit of interviewing is that it will render more specific information about a person's experience, opinions or knowledge than a survey. On the other hand, it can be time consuming and responses are not necessarily anonymous.

### *5. Existing Data Sources*

Existing data sources can reveal important information, especially before a program begins. There are many potential sources with a variety of helpful information. Statistics about pedestrian and bicycle crashes may be available from local or state injury prevention programs, hospitals or law enforcement agencies. The school or town may already have a walking route map, and potentially, the school or local health agency may already ask students about their attitudes and behaviors regarding physical activity which would eliminate the need to collect some data. The school may also have records that reveal how many students live within walking and bicycling distance.

### *Evaluation Standards*

There are four important questions to consider during the entire process of evaluation. These four questions summarize key evaluation standards (see Resources) of utility, feasibility, accuracy and propriety which are important to consider before moving forward with an evaluation plan.

## Observation of a School: Student Arrival or Departure

One of the best ways to understand walking and bicycling safety issues at a particular school is by observing students arriving or departing during a normal school day. This includes observing children as they walk or bike the routes to school, how they cross streets, the interactions they have with cars and buses on the school campus, and how they make their way to the school door. The goal is to identify two main things:

- The physical environment for walking and bicycling both on the school campus and in the surrounding area; and
- The behaviors of pedestrians, bicyclists and motorists and buses.

A good way to start is in a neighborhood near the school. Follow the route the students are taking. Upon arrival on school campus, walk in a loop to observe all locations and forms of behavior. Jot down things that need to be addressed. Have an observer at the main entrance fifteen minutes prior to school starting and the first fifteen minutes when school is dismissed.

### Is the evaluation useful?

The amount and type of information collected should meet the needs of those who intend to use the evaluation findings. If not, there is no need to collect the data. For example, collecting student body weight data would only make sense if the program included increasing physical activity among its goals.

### Is the evaluation feasible?

The evaluation should be possible and realistic to complete. The information must be collectable within the needed timeframe and costs must fall within a reasonable budget.

### Is the evaluation accurate?

The evaluation findings should be correct. For example, if an observation of student arrival only counted students arriving on one street but not another street,

then the findings would not be a complete, true picture of student travel.

### Is the evaluation fair?

The evaluation has to be conducted with awareness of the rights of the people involved in the program. For example, no one should be singled out or made to feel uncomfortable because of how they respond to a question.

## *Working with Schools*

Data collection, such as student travel to and from school or surveys of parents, will require close coordination with the school. For example, schools may have rules about collecting information from students and it will require time from teachers, school staff and administration in order for data collection to be a success.

Collecting data from students can be challenging. Be aware that data are routinely collected from students to meet state requirements and additional requests may be difficult to accommodate. Furthermore, parent permission may be needed before surveying students. The following tips come from program implementers who have fostered relationships that have eased the way for data collection:

- Learn and act on the permission requirements early if students are to be surveyed.
- Develop a relationship with and gain the understanding of the school board and school principal as to why Safe Routes to School (SRTS) is important and how data collection will help.
- Learn what data is already being collected in what manner and see if there is a way to coordinate efforts.
- Find a key supporter of the SRTS data collection efforts in the administrative office.

# Evaluation in Six Steps

Ideally, planning a Safe Routes to School (SRTS) program and planning its evaluation are done together. For local programs just starting to talk about SRTS, it is the right time to be thinking about how progress and results will be measured. If a local program has already spent time developing a plan and collecting information about what is happening that is related to walking and bicycling to school, then the first step of evaluation most likely has occurred even if no one considered it to be evaluation.

A six step process for conducting an evaluation is described in detail in this section. Program implementers may choose to record their local program information on the downloadable blank worksheet (Appendix C). An example school (Appendix D) is used to demonstrate how an evaluation might be planned using the worksheet.

## Step 1: Plan the Program/Collect Information

Planning for evaluation should start when the program is in its very beginning phase. For programs already underway, the components of this step may already be accomplished. This step includes the following actions (not necessarily in this order):

- Defining the program's goal(s)
- Collecting baseline data and understanding current walking and bicycling conditions
- Picking activities

If these actions are done, move on to Step 2. If not, this section will explain why and how to accomplish these tasks.

### *1a. Defining the Program's Goal(s)*

Knowing what to evaluate requires that a local program knows what it wants to achieve in the long term. A goal is a broad statement of the program's purpose. It may be the first decision made before launching a program. Sometimes baseline data and other information are collected first and those findings drive the goal.

Deciding on the program's goal requires input from all stakeholders. A local program may have one or more goals. The goal(s) may be tailored to a community's particular interests or needs or chosen from the stated purposes or desired outcomes of the Safe Routes to School National Program.

**Six Step Process for SRTS Program Evaluation**

1. **Plan the program/Collect information**
2. Write objectives
3. Decide what, how and when to measure
4. Conduct the program and monitor progress
5. Collect information and interpret findings
6. Use results

*Planning for evaluation should start when the program is in its very beginning phase.*

The purposes of the Safe Routes to School National Program stated in the Federal legislation are:

- To enable and encourage children, including those with disabilities, to walk and bicycle to school.
- To make walking and bicycling to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age.
- To facilitate the planning, development and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption and air pollution in the vicinity of schools.

The desired outcomes of the Safe Routes to School National Program are:

- Increased bicycle, pedestrian and traffic safety
- More children walking and bicycling to and from schools
- Decreased traffic congestion
- Improved childhood health
- Reduced childhood obesity
- Encouragement of healthy and active lifestyles
- Improved air quality
- Improved community safety
- Reduced fuel consumption
- Increased community security
- Enhanced community accessibility
- Increased community involvement
- Improvements to the physical environment that increase the ability to walk and bicycle to and from schools
- Improved partnerships among schools, local municipalities, parents and other community groups, including non-profit organizations

## *1b. Understanding Local Walking and Bicycling Conditions*

Before beginning a SRTS program, it helps to have an understanding of current circumstances that may influence walking and bicycling to school. These include both assets that make a community supportive of children walking and bicycling, as well as barriers that make it difficult or unsafe. The information helps generate ideas about how to run the program in order to capitalize on assets and overcome barriers. For example, assets revealed through this process may be financial support or resources, such as volunteers to help run the activities or a local media outlet or business that wants to champion the cause.

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Anchorage, Alaska.

Collecting data about the current situation is equally important and serves as baseline data that can be used for comparison after SRTS activities have been conducted. For example, the walkability of a particular route or parental attitudes toward walking and bicycling may be assessed before a program begins. These same measures should be repeated after the program has been implemented to see if a change occurred.

There are pieces of information to collect that will paint the picture of local conditions, including:

**School information:**
School information includes particular characteristics about a school and its circumstances that influence walking and bicycling by students. Examples include policies, school district boundaries or staggered dismissal times.

**Walking and bicycling numbers:**
This information includes the number of students

*Collecting data about the current situation is equally important and serves as baseline data that can be used for comparison after Safe Routes to School activities have been conducted.*

walking and bicycling to school and the number that live close enough that walking and bicycling would be an option if all other conditions, like safety or convenience, were met.

**Safety issues:**
Safety issues may include traffic, personal safety and lack of facilities, such as sidewalks, bike paths, crosswalks, or bicycle racks.

**Attitudes about walking and bicycling:**
Parents, children and school staff all have attitudes about walking and bicycling that influence their behavior. For example, if parents believe that children are more attentive at school if they walk, then this may motivate them to walk to school with their child.

**Other assets:**
There can be financial support or resources, such as volunteers to help run the activities or a local media outlet that wants to champion the cause. Assets to consider include:

- Sources for grant money
- Sources for volunteer support
- Local government resources (particularly needed for built environment changes, such as sidewalks)
- Local business support
- Media interest

## Tools to Use for Collecting Information:

- The student travel tally will reveal current walking and bicycling counts.
- The parent survey will uncover attitudes about walking and bicycling and provide insight into what kinds of actions might increase the number of children walking and bicycling.
- The walking and bicycling route assessment is an important way to identify safety and other problems on travel routes.
- An **interview with the school principal** or someone else who knows about children's travel to and from school. Information to considering gathering includes:
  - The number of children who live within walking or bicycling distance
  - How the school district defines walking and bicycling distance
  - School personnel who might be interested in participating in a SRTS program
  - Rules or policies that impact travel to school

## Other Ways to Learn About Current Conditions

There are many other worthwhile ways to gather information about current conditions, including:

- Survey the community regarding their views on walking and bicycling to school.
- Interview different groups, including:
  - Stakeholders: Ask what they see as the strengths and weaknesses in the community with regard to SRTS.
  - Students: Ask what might persuade them to walk or bicycle to school.
  - School Resource Officer or other local law enforcement officers: Ask them to identify potentially unsafe intersections or driver and pedestrian behaviors.
  - School board members: Ask for their suggestions regarding strategies.
  - School nurse: Ask about health and safety benefits and concerns related to walking or bicycling to school.
- Crash reports from the local police department
- Student attitude surveys
- Discussions with groups of parents or parent interviews

## Example School

In this example, the school knew their first goal was to increase safe conditions for walking and bicycling to school. The information collected about local conditions and issues helped them set their other goal to reduce traffic congestion.

**Safe Routes to School Program Evaluation Plan**
School: High Hopes Elementary School

1. Program Planning Information

1a. Program goal(s):

- Increase safe walking and bicycling to school
- Reduce traffic congestion around school

1b. Local conditions and issues (formative assessment):

(1) School information:

- Half of school enrollment lives within a mile of school
- School has no policies against walking or bicycling

(2) Walking and bicycling numbers:

10 percent of children walk or bicycle to school

(3) Safety issues:

- Principal stated that one child was hit by a car last year in the crosswalk.
- Police stated that speeding was a problem; using radar gun to determine speeds, they determined that the average driver is going 35 mph instead of 25 mph through school zone during morning arrival.
- Observation of school campus during morning arrival showed traffic congestion around drop-off area to be a problem for walkers and bicyclists.
- Walk audit of routes to school showed good conditions for walking.

(4) Attitudes affecting walking and bicycling:

- Parent survey rated safety as main concern
- Discussions with parents showed interest in their children being able to walk to school if adult supervision provided

(5) Other assets that can benefit the program:

- Opportunity to receive grant to fund program
- Parents willing to provide volunteer help

Conclusions:

- Strategies to increase walking and bicycling to school should include adult supervision.
- Efforts are needed to reduce speeds around the school.
- Drop-off and pick-up area is a problem.

### *1c. Activities or Strategies*

The program reaches its goals through activities or strategies. Examples of activities include initiating walking school buses, fixing broken sidewalks and focused speeding enforcement in school zones. There are many strategies that may be included in a SRTS program and more than one strategy may be needed to achieve any one goal. For example, to reach the goal of increased knowledge, educational strategies may be initiated. To achieve the more complex goal of the changing behaviors of drivers, pedestrians or bicyclists, education, encouragement, enforcement and engineering strategies together may be needed. The following are examples of some of the possible program activities divided into categories often used by SRTS programs: education, encouragement, engineering and enforcement. For more information see www.saferoutesinfo.org/guide.

#### Education Activities:

- Safety games or safety trainings
- Materials for parents to teach safety to children
- Classroom programs
- Materials for drivers near schools or drivers' safety training

#### Encouragement Activities:

- Walking school buses
- Walk and Wheel Wednesdays
- Incentive programs
- Mileage clubs
- Walk to School Day

#### Engineering Activities:

- Sidewalks or paths
- Signs or signals
- Rerouting of pick-up and drop-off areas away from walkers

#### Enforcement Activities:

- Crossing guards
- Campaign to reduce speeds around schools
- Neighborhood Hotline

## Example School

This school decided to take a comprehensive approach and identified more than one strategy for each of education, encouragement, engineering and enforcement.

**Safe Routes to School Program Evaluation Plan**
School: High Hopes Elementary School

1. Program Planning Information

1c. Program Activities

Education Strategy:

*Provide basic bicycle and pedestrian safety classroom lessons to school children, reinforced by take-home safety sheets for parents as well as a map of existing safe walking and biking routes.*

Encouragement Strategy:

*Start a Walk and Wheel Wednesday program that includes organized walking school buses and an incentive program.*

Engineering Strategy:

*Reroute parent drop-off area away from walkers and bicyclists, including improving the pedestrian crosswalk to school site.*

Enforcement Strategy:

*Develop a Parent Driver Safety Campaign that includes a school zone speed enforcement program and a clear enforcement message.*

## Step 2: Write Objectives

At this point, the program's goal(s) are set, information relating to current walking and bicycling has been examined and activities have been selected. The next step is to write objectives for the activities. Objectives describe what is expected for both while the program is underway and after the program or an activity is completed. This information will ultimately help program implementers know if they have achieved what was intended.

There are two different kinds of objectives:

1. Those that describe **what will be done**, such as Walk to School events, called **process objectives**.
2. Those that describe **what change is expected** or desired as a result of what has been done called **outcome objectives**.

Selected program activities need to have both process and outcome objectives. In general, objectives should include specific information about what is to happen, to whom, by when, and in what amount. These are sometimes called SMART (specific, measurable, achievable, relevant, time-bound) objectives (see Appendix G). The table below provides examples of the two types of objectives that can be tailored to fit a local program.

### Six Step Process for SRTS Program Evaluation

1. Plan the program/Collect information
2. **Write objectives**
3. Decide what, how and when to measure
4. Conduct the program and monitor progress
5. Collect information and interpret findings
6. Use results

| Activity | Objectives: What will be done | Objectives: What change is expected |
|---|---|---|
| Initiate Walking Wednesday | Distribute 100 fliers announcing the Walking Wednesday program during first two months of the activity. | Increase the number of children walking on Wednesdays from 20 to 50 by the end of the school year. |
| Promote Safe Routes to School (SRTS) | Present information on the SRTS program at PTA meeting and place article in school newsletter during first two months of the activity. | Increase parental support of SRTS by 50% by the end of the school year as measured by changes to the parental support question in the parent survey. |
| Conduct Pedestrian Safety Education | Deliver safety presentations to all 4th grade classes within one year. | 85% of 4th Graders pass a walking safety knowledge test within one year. |
| Promote Bicycle Helmet Use | Custom-fit 50 helmets for bicyclists during the fall semester. | Increase students wearing bicycle helmets from 20% to 60% by end of school year. |
| Install Sidewalks | Get sidewalk improvements listed on city plan during the school year. | Complete all sidewalk gaps along the 4 major designated safe routes to school within a three year period. |
| Install Bicycle Rack | Install two bike racks at the school by end of the fall semester. | Increase the percent of children bicycling to school from 1% to 5% within 3 years. |
| Conduct Bicycle Security Education | Teach 80% of bicycle riders how and why to properly lock their bicycles by the end of fall semester. | Decrease the percent of parents from 18% to 10% who identify "security concerns" as a barrier to allowing their child to ride a bicycle to school by the end of the spring semester. |
| Encourage Speed Reduction | Hold one news conference and deliver informational fliers to all school parents within two months of start of the activity. | Reduce speeds in school zone from 35 mph to 25 mph during the first year of the SRTS program. |
| Enforce Parking Regulations | Place 50 information cards on illegally parked cars during the first three months of activities. | Reduce illegal parking during arrival and dismissal by 60% by the end of the school year. |

## Example School

The example shows how the school is developing the evaluation plan for their encouragement strategies. Objectives are divided into "What will be Done" and "What Change is Expected." The time frame for when this will happen is also filled in. The completed worksheet shows the evaluation plan for all the strategies. In the next step, "What will be Measured" and "How and When It will be Measured" will be completed.

**Safe Routes to School Program Evaluation Plan**
School: High Hopes Elementary School

Encouragement Strategy:
Start a Walk and Wheel Wednesday program that includes organized walking school buses and an incentive program.

Time Frame:
Kick-off in October (International Walk to School Month) and promote weekly through school year

Data Collectors:

| What will be Done | What will be Measured | How and When it will be Measured |
|---|---|---|
| Five walking school buses established | | |
| An average of 50 students participate in Walk and Wheel Wednesdays program | | |
| A six-week long incentive program with 50 children participating | | |
| **Change Expected** | **What will be Measured** | **How and When it will be Measured** |
| 20 percent increase in children walking or bicycling to school on Wednesdays | | |

*Notes:*

## Step 3: Decide What, How and When to Measure

After objectives are written, the next step is to identify what will be measured and how and when the information will be collected.

### *What to Measure*

Knowing the activities and their objectives makes what to measure easy to decide. For example, if a selected activity is to encourage parents to walk with their children to school by initiating "Walking Wednesdays," then determining the number of parents and children who walk on Wednesdays (the "**what**") by observing and counting them (the "**how**") will reveal any changes in behavior. Using an example from the table in Step 2, the objective might say, "Increase the number of children walking on Wednesdays from 20 to 50 by the end of the school year." The table found in this section provides more examples of what may be measured depending on the objective.

For every objective, there should be at least one measurement. For some objectives there may be multiple measurements. Using another example from Step 2, if the objective states, "Reduce speeds in school zone from 35 mph to 25 mph during the first year of the Safe Routes to School program," potential measurements include the speed of vehicles near the school and the number of warnings given to drivers in the school zone. How the information will be collected then needs to be determined. In the speed reduction example, a portable speed detection device and police records are two possible ways.

### *How to Measure*

Collecting SRTS information offers an array of choices for measuring. Re-using the same tools from the planning process (Step 1) allows a comparison of the information before and after the program. Adding additional measures is a way for programs to better understand the potential impact of specific program activities.

Depending on what information is desired, different people may supply it. For example, while parent surveys may show that parents think speeds are reduced, the speed measures collected by law enforcement can show if speeds really are reduced.

**Six Step Process for SRTS Program Evaluation**

1. Plan the program/Collect information
2. Write objectives
3. **Decide what, how and when to measure**
4. Conduct the program and monitor progress
5. Collect information and interpret findings
6. Use results

### *When to Measure*

At a minimum, information should be collected before and after the activity in order to identify any changes that have occurred. The information that was collected before the program began provides the baseline information. Collecting information while the activity is underway (Step 4) will provide additional information.

When measuring walking and bicycling rates, it is also important to consider weather variations in the four seasons and the impact on walking and bicycling. Given that walking and bicycling may vary with temperature and precipitation, ideally information would be collected in the fall, winter, and spring so the same seasons could be compared.

The table on the following page shows examples of combining what will be done and what change is expected with what will be measured, how it will be measured and when (before, during or after the program).

Also see Examples of What and How to Measure (Appendix I) organized by strategy.

| Objectives | What to Measure | How and When to Measure |
|---|---|---|
| **Initiate Walking Wednesday** | | |
| Distribute 100 fliers to parents announcing the Walking Wednesday program within the first 3 months of school. (What will be done) | Number of fliers distributed | Count of distributed fliers (During) |
| Increase the number of children walking on Wednesdays from 20 to 50 within 1 year. (Change expected) | Number of students walking on Wednesdays | • Classroom travel survey on Wednesdays<br>• Observational count of students walking on Wednesdays (Before*, during and after) |
| **Install Sidewalks** | | |
| Get sidewalk improvements on city plan within 1 year. (What will be done) | Presence of sidewalk improvements on city plan | Existing data on city plan (During) |
| Complete gaps in sidewalks along routes to school within 2 years. (Change expected) | Presence and quality of sidewalks | • Observation<br>• Walkability assessment (Before* and after) |
| **Install Bicycle Rack** | | |
| Install two bike racks at the school within 1 year. (Change expected) | Number of bike racks at the school | • Observation<br>• School audit (Before* and after) |
| **Encourage Speed Reduction** | | |
| Hold one news conference and deliver informational fliers to all school parents regarding speed awareness campaign within the first 3 months. (What will be done) | Number of news conferences and fliers distributed | Count of news conferences and fliers distributed (During) |
| Reduce average speeds in school zone from 35 mph to 25 mph within 1 year. (Change expected) | • Speed of vehicles near school<br>• Number of citations given | • Portable speed detection device<br>• Records from local law enforcement agency (Before*, during and after) |
| **Enforce Parking Regulations** | | |
| Place information cards on illegally parked cars warning drivers of the danger they create during first 6 months. (What will be done) | Number of cards distributed | Count of cards distributed (After) |
| Stop illegal parking during arrival and dismissal within 1 year. (Change expected) | Number of illegally parked cars | Observational count (Before*, during and after) |
| **Conduct Pedestrian Safety Education** | | |
| Deliver safety presentations to all 4th grade classes within 1 year. (What will be done) | Number of classes receiving presentations | Count of presentations (After) |
| All 4th graders pass a walking knowledge quiz within 1 year. (Change expected) | Score on quiz | Paper and pencil quiz (Before* and after) |
| **Promote Bicycle Helmet Use** | | |
| 50 helmets are custom fit for students within 1 year. (What will be done) | Number of helmets fitted | Count of helmets distributed (After) |
| Increase percentage of student bicyclists wearing helmets from 20% to 60% within 1 year. (Change expected) | Number of bicyclists with helmets | • Observational count of bicyclists with helmets<br>• Survey of bicyclists (Before*, during and after) |
| **Encourage Yielding to Pedestrians** | | |
| Distribute 100 fliers about meetings and activities to neighborhood during first month of school. (What will be done) | Number of neighborhood residents who attend meetings | Sign in sheet at meetings (During) |
| Improve percent of drivers yielding to pedestrians from 30% to 70% within 1 year. (Change expected) | Driver behavior around school at school arrival and departure times | Observation of drivers yielding to students within school zones at school arrival and departure times (Before* and after) |

* Use the student tally and parent survey to capture this information before the program begins.

## Example School

Now the school can complete the sections on: what will be measured, how it will be measured, and when. This is also when the data collectors can be determined.

**Safe Routes to School Program Evaluation Plan**
School: High Hopes Elementary School

Encouragement Strategy:
Start a Walk and Wheel Wednesday program that includes organized walking school buses and an incentive program.

Time Frame:
Kick-off in October (International Walk to School Month) and promote weekly through school year

Data Collectors:

- SRTS Program coordinator to conduct travel surveys and walking school buses location information
- PE teacher to count Walking Wednesday participants
- School Wellness Coordinator or nurse to collect incentive sheets and distribute incentives

| What will be Done | What will be Measured | How and When It will be Measured |
|---|---|---|
| Five walking school buses established | Number of walking school buses and number of children in each school bus | Count walking buses at beginning and end of school year |
| An average of 50 students participate in Walk and Wheel Wednesdays program | Number of students walking to school on each Walk and Wheel Wednesday | School travel tally sheets collected on designated Wednesdays<br>Count of students arriving at school by walking or wheeling |
| A six-week long incentive program with 50 children participating | Number of students who sign-up to participate<br>Number of students who receive incentives | Total count of participating students at beginning and end of six week program |
| **Change Expected** | **What will be Measured** | **How and When It will be Measured** |
| 20 percent increase in children walking or bicycling to school on Wednesdays | Number of children walking or bicycling | School travel tally sheets collected before, during and after program |

*Notes:*

## Step 4: Conduct the Program and Monitor Progress

Step 4 is when the program's progress will be monitored using the process developed in Step 3. Monitoring or tracking usually involves counting or describing activities. Examples include:

- Counting participants at a bicycle rodeo event.
- Observing crossing guard locations to determine improved safety or increased use.
- Observing a student pick-up location for improved safety or reduced numbers of vehicles.
- Interviewing a walking school bus leader to learn about safety issues or whether parents and students are enjoying the walking school bus.

### Six Step Process for SRTS Program Evaluation

1. Plan the program/Collect information
2. Write objectives
3. Decide what, how and when to measure
4. **Conduct the program and monitor progress**
5. Collect information and interpret findings
6. Use results

The intent is to put results into action to improve the program while the program is underway. For example, counting participants at a bicycle rodeo event may reveal that the number of participants is lower, higher or about the same as what was planned. If participant numbers were low, having this information would allow for additional promotion or other strategies to address the shortfall before the next bicycle rodeo. Finding participation to be higher than planned may mean that additional volunteers or equipment will be needed for the next rodeo. When the program ends, this tracking will also make it possible to summarize all activities.

### Example School

For this school, the interim results indicate that the strategies may be starting to work but that more effort needs to be put into informing parents.

**Safe Routes to School Program Evaluation Plan**
School: High Hopes Elementary School

4. Conduct the Program and Monitor Progress

Findings during the program:

- Students were unaware of safe walking and bicycling behavior
- Students and families were unaware of existing safe routes to school
- Three walking school bus routes established
- Police report speeding is reduced by some but not all drivers
- Parents interviewed unaware of speed enforcement
- Incentive program increases participation in Walk and Wheel Wednesday program
- Parents do not yield to pedestrians in crosswalk

Recommendations for adjustments:

- Reinforce student safety presentations with hands-on safety events
- Identify two more routes for walking school buses
- Get media coverage of enforcement efforts
- Send information home to parents about enforcement efforts
- Introduce different incentive programs throughout the school year
- Crossing guard needs to be stationed at crosswalk

## Step 5: Collect Information and Interpret Findings

When the program is over or at a logical evaluation point, like the end of the school year, it is time to examine both whether activities were carried out as intended and whether the results met expectations. This is when data collected in Step 1 is collected again in the same manner as originally collected. Once data are collected, the results are interpreted.

### *The Interpretation Process*

Interpreting results, also called data analysis, does not have to be hard or complex. The process for analysis mainly depends on whether the data is words (like quotes from interviews) or numbers (like responses to survey questions). Some forms of data require little to no analysis, such as direct quotes from an interview with a traffic engineer before and after a traffic improvement.

A brief summary of how to analyze results is included here. More complex analyses may require working with an evaluation specialist.

### *Interpreting Number-Based Information*

The basic steps include:

1. Entering the data into Microsoft Excel, Access, Epi Info or other programs.
2. Checking for data entry errors. A common method is to enter all or some of the data twice to see if it matches and fix any errors detected.
3. Tabulating the data (e.g., calculate the number of participants or percentage of participants who walked to school every day or at least one day per week).
4. Sorting data by sub-groups (like grade or gender).
5. Making comparisons with program objectives, with a comparison site (if one has been identified), or with other Safe Routes to School programs.

Adapted from the *CDC Physical Activity Evaluation Handbook* (www.cdc.gov/nccdphp/dnpa/physical/handbook).

### Six Step Process for SRTS Program Evaluation

1. Plan the program/Collect information
2. Write objectives
3. Decide what, how and when to measure
4. Conduct the program and monitor progress
5. **Collect information and interpret findings**
6. Use results

*Interpreting results, also called data analysis, does not have to be hard or complex.*

### *Interpreting Word-Based Information*

Basic analysis of word-based information (respondents' verbal answers in interviews, focus groups, or written commentary on surveys) includes:

- Reading through all the data.
- Organizing comments into similar categories (e.g., concerns, suggestions, strengths, weaknesses, similar experiences, recommendations, etc.).
- Labeling the categories or themes.
- Attempting to identify patterns in the themes. For example, parents who walked a particular route with their child to school all felt the route was safe.

Adapted from the *Basic Guide to Program Evaluation* (www.managementhelp.org/evaluatn/fnl_eval.htm#anchor1665834).

Once the analysis is complete, conclusions can be drawn and outcomes summarized. Below are a few examples of possible findings.

### (1) Program Activity: Using a Frequent Walker Punch Card to encourage students to walk or bicycle to school.

Finding A: More students walking and bicycling and parents' surveys show more positive attitudes toward the benefits and feasibility of these travel modes.

Finding B: More children are not walking or bicycling and parent surveys reveal some of the reasons.

### (2) Program Activity: Conducting an education and enforcement campaign to decrease speeding in school zones.

Finding A: Speeds reduced, parents aware of campaign and feel safer.

Finding B: Speeds reduced, parents unaware of campaign and do not feel safer.

Finding C: Speeds not reduced, parents unaware of campaign and do not feel safer.

## When Results Do Not Match Expectations

If objectives were not met, what explanations are there? Were activities conducted as planned? Were any necessary changes made along the way? Were there external factors that might have worked against the Safe Routes to School program? For example, perhaps students were redistricted so that fewer lived within walking or bicycling distance compared to when the program began, or there may have been an event that had a huge impact, such as a pedestrian injury. Consider the context in which the results took place before drawing any conclusions.

Each of these findings would lead to different conclusions and recommendations which will be discussed in the next step.

## Example School

In this example, the school was able to show an increase in students walking to school and identified some strategies that could improve the program.

**Safe Routes to School Program Evaluation Plan**
School: High Hopes Elementary School

5. Collect Information and Interpret Findings

Results:

- Students walking to school increased from 50 to 75, a 50 percent increase
- 50% increase in helmet usage among students bicycling to school
- Four walking school buses started; 5th bus to start next fall
- Parent surveys show awareness of speed campaign but not more willing to let children walk
- Nearly all (90%) of parents use new drop-off site

Recommendations:

- Continue walking school bus program
- Continue Walk and Wheel to School day
- Secure source for free bicycle helmets
- Continue speed enforcement program with more effort to inform parents at the start of school next year

## Step 6: Use Results

This is where all the work to collect and interpret the findings pays off. It is an opportunity to build off of what is working, change what is not working as well as it could and announce successes. This step includes: preparing the products of the evaluation like recommendations and reports, sharing them with stakeholders and other audiences, and following up to promote maximum use.

### *Formulating Recommendations*

The first task is to create recommendations based on the evaluation findings. When developing recommendations:

- Align recommendations with stakeholders' and funders' priorities when possible.
- Share draft recommendations with stakeholders and solicit feedback before finalizing the report.
- Target recommendations appropriately for each audience. For example, a local health department might be most interested in increased physical activity levels, while local law enforcement might be more interested in decreased traffic violations.

Using the example program's goals and findings from Step 5, a sample of potential recommendations was developed.

### (1) Program Activity: Using a Frequent Walker Punch Card to encourage students to walk or bicycle to school.

Finding A: More students walking and bicycling and parents' surveys show more positive attitudes toward the benefits and feasibility of these travel modes.

> Recommendation: Continue use of the Frequent Walker Punch Card.

Finding B: More children are not walking or bicycling and parent surveys reveal some of the reasons.

> Recommendation: Adjust activity to address barriers identified by the parents.

### Six Step Process for SRTS Program Evaluation

1. Plan the program/Collect information
2. Write objectives
3. Decide what, how and when to measure
4. Conduct the program and monitor progress
5. Collect information and interpret findings
6. **Use results**

### (2) Program Activity: Conducting an education and enforcement campaign to decrease speeding in school zones.

Finding A: Speeds reduced and parents aware of campaign and feel safer.

> Recommendation: Continue campaign and monitor to see if the effect is maintained.

Finding B: Speeds reduced, parents unaware of campaign and do not feel safer.

> Recommendation: Keep the enforcement program in place, but modify the educational outreach.

Finding C: Speeds not reduced, parents unaware of campaign and do not feel safer.

> Recommendation: A different enforcement or education technique is needed as well as other changes.

### *Sharing Results and Recommendations*

There are several reasons to share results, including:

- Providing positive reinforcement for everyone involved, including children, families, stakeholders and funders.
- Offering a newsworthy "hook" that can result in media coverage of the program.
- Providing a way to share lessons learned.
- Communicating next steps and additional needs, thus moving the program forward.

Channels for information sharing include:

- School or community newsletters and Web sites
- Stories in the local media (see Tips for Working with the Media in Appendix J for tips on getting media coverage, or for more in-depth information, see the Media and Visibility chapter)
- Reports to the local decision-makers and political leaders in the community
- Meeting or conference presentations

For example, community leaders may be reached through a short report presented at a town council meeting with the media invited. Results also are shared with funders as progress reports or to solicit additional funds. Knowing the positive impacts of a Safe Routes to School program will help to keep the program alive.

The primary purpose of sharing evaluation findings is for local program partners to know what is working and what changes to make to improve the program and to celebrate successes. Local evaluation results can have other benefits. Documented successes are needed as communities struggle to identify the best approaches for improving walking and bicycling to school. Local program leaders cite case studies as one of the most helpful types of information. Schools with programs or strategies that are evaluated to be successful are encouraged to share their results with the National Center for Safe Routes to School so that these programs can be shared with the rest of country.

## Example School

Below shows how the school organized how they would share their program results according to the audience.

**Safe Routes to School Program Evaluation Plan**
School: High Hopes Elementary School

6. Plan for Using Results

| Individual or Organization with Whom to Share Results | Format in which the Results will be Shared | Channel by which the Results will be Shared | Which Results or Recommendations will be Shared |
|---|---|---|---|
| School parents | Report | • PTA meeting<br>• Article in newsletter | • Speeding reduced<br>• Walking buses a success<br>• More students walking |
| Community | Media story | • Local newspaper<br>• Radio station | • Speeding reduced<br>• Walking buses a success<br>• More students walking |
| Community officials | Report | Town Council meeting | • Speeding reduced<br>• Walking buses a success<br>• More students walking |
| Students | Presentation | School assembly and classrooms | • Walking buses now a way to get to school<br>• More students walking |
| Local business contributors | Presentation | Chamber of Commerce meeting | • More students walking<br>• Part of encouragement programs |
| Funders | Presentation/ Report | News conference with funders present | • More students walking<br>• Safer because of reduced speeds<br>• How program should be continued with recommendations |

# Appendices

## A. Safe Routes to School Student Travel Tally

This form will help measure how students get to school and whether the SRTS program affects trips to and from school. Teachers can use this form to record specific information about how children arrive and depart from school each day for a week. The information this form helps collect will be used to help track the success of SRTS programs across the country. Also available online at www.saferoutesinfo.org/resources under the Evaluation heading.

## B. Safe Routes to School Parent Survey

This survey asks for information about what factors affect whether parents allow their children to walk or bike to school, the presence of key safety-related conditions along routes to school, and related background information. The survey results will help determine how to improve opportunities for children to walk or bike to school, and measure parental attitude changes as local SRTS programs occur. Also available online at www.saferoutesinfo.org/resources under the Evaluation heading.

## C. Evaluation Worksheet

This worksheet follows the format of the six steps presented in this guide. Program implementers may choose to use it to record their local program information and evaluation plan development. Also available online at www.saferoutesinfo.org/guide/evaluation in Appendix C.

## D. Example Completed Evaluation Worksheet

This example worksheet demonstrates how a local program could use it to plan and conduct its evaluation. Also available online at www.saferoutesinfo.org/guide/evaluation in Appendix D.

# Safe Routes to School Students Arrival and Departure Tally Sheet

**+ CAPITAL LETTERS ONLY – BLUE OR BLACK INK ONLY +**

**School Name:** **Teacher's First Name:** **Teacher's Last Name:**

**Grade:** (PK,K,1,2,3...) **Monday's Date** (Week count was conducted) **Number of Students Enrolled in Class:**

0 2 M M D D Y Y Y Y 1 5

- Please conduct these counts **on two of the following three days Tuesday, Wednesday, or Thursday. (Three days would provide better data if counted)**
- **Please do not conduct these counts on Mondays or Fridays.**
- Before asking your students to raise their hands, please read through all possible answer choices so they will know their choices. Each Student may only answer once.
- Ask your students as a group the question "**How did you arrive at school today?**"
- Then, reread each answer choice and record the number of students that raised their hands for each. **Place just one character or number in each box.**
- Follow the same procedure for the question **"How do you plan to leave for home after school?"**
- You can conduct the counts once per day but during the count please ask students both the school arrival and departure questions.
- Please conduct this count regardless of weather conditions (i.e., ask these questions on rainy days, too).

**Step 1.**
Fill in the weather conditions and number of students in each class

**Step 2.**
**AM** – "**How did you arrive at school today?**" Record the number of hands for each answer.
**PM** – "**How do you plan to leave for home after school?**" Record the number of hands for each answer.

| **Key** | **Weather** | **Student Tally** | **Walk** | **Bike** | **School Bus** | **Family Vehicle** | **Carpool** | **Transit** | **Other** |
|---|---|---|---|---|---|---|---|---|---|
| | **S= sunny R= rainy O=overcast SN=snow** | **Number in class when count made** | **-** | **-** | **-** | **Only with Children from your family** | **Riding with children from other families** | **City bus, subway, etc.** | **Skate-board, scooter, etc.** |
| **Sample AM** | S N | 2 0 | 2 | 3 | 8 | 3 | | 3 | 1 |
| **Sample PM** | R | 1 9 | 3 | 3 | 8 | 1 | 2 | 2 | |
| **Tues. AM** | | | | | | | | | |
| **Tues. PM** | | | | | | | | | |
| **Wed. AM** | | | | | | | | | |
| **Wed. PM** | | | | | | | | | |
| **Thurs. AM** | | | | | | | | | |
| **Thurs. PM** | | | | | | | | | |

**Please list any disruptions to these counts or any unusual travel conditions to/from the school on the days of the tally.**

**+ +**

# Parent Survey About Walking and Biking to School

**Dear Parent or Caregiver,**

Your child's school wants to learn your thoughts about children walking and biking to school. This survey will take about 5 - 10 minutes to complete. We ask that each family complete only one survey per school your children attend. If more than one child from a school brings a survey home, please fill out the survey for the child with the next birthday from today's date.

After you have completed this survey, send it back to the school with your child or give it to the teacher. Your responses will be kept confidential and neither your name nor your child's name will be associated with any results.

**Thank you for participating in this survey!**

**+ CAPITAL LETTERS ONLY – BLUE OR BLACK INK ONLY +**

**School Name:**

**1. What is the grade of the child who brought home this survey?** ☐☐ Grade (PK,K,1,2,3…)

**2. Is the child who brought home this survey male or female?** ☐ Male ☐ Female

**3. How many children do you have in Kindergarten through 8th grade?** ☐☐

**4. What is the street intersection nearest your home?** (Provide the names of two intersecting streets)

**and**

**Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box.**

**5. How far does your child live from school?**

- ☐ Less than ¼ mile
- ☐ ½ mile up to 1 mile
- ☐ More than 2 miles
- ☐ ¼ mile up to ½ mile
- ☐ 1 mile up to 2 miles
- ☐ Don't know

**Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box. +**

**6. On most days, how does your child arrive and leave for school?** (Select one choice per column, mark box with X)

| Arrive at school | Leave from school |
|---|---|
| ☐ Walk | ☐ Walk |
| ☐ Bike | ☐ Bike |
| ☐ School Bus | ☐ School Bus |
| ☐ Family vehicle (only children in your family) | ☐ Family vehicle (only children in your family) |
| ☐ Carpool (Children from other families) | ☐ Carpool (Children from other families) |
| ☐ Transit (city bus, subway, etc.) | ☐ Transit (city bus, subway, etc.) |
| ☐ Other (skateboard, scooter, inline skates, etc.) | ☐ Other (skateboard, scooter, inline skates, etc.) |

**+ Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box +**

**7. How long does it normally take your child to get to/from school?** (Select one choice per column, mark box with X)

| Travel time to school | Travel time from school |
|---|---|
| ☐ Less than 5 minutes | ☐ Less than 5 minutes |
| ☐ 5 – 10 minutes | ☐ 5 – 10 minutes |
| ☐ 11 – 20 minutes | ☐ 11 – 20 minutes |
| ☐ More than 20 minutes | ☐ More than 20 minutes |
| ☐ Don't know / Not sure | ☐ Don't know / Not sure |

**+ +**

**8. Has your child asked you for permission to walk or bike to/from school in the last year?** ☐ Yes ☐ No

**9. At what grade would you allow your child to walk or bike to/from school without an adult?**

(Select a grade between PK,K,1,2,3…) ☐☐ grade **(or)** ☐ I would not feel comfortable at any grade

**Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box**

**10. What of the following issues affected your decision to allow, or not allow, your child to walk or bike to/from school?** (Select ALL that apply)

**11. Would you probably let your child walk or bike to/from school if this problem were changed or improved?** (Select one choice per line, mark box with X)

| | | | |
|---|---|---|---|
| | ☐ My child already walks or bikes to/from school | | |
| ☐ Distance | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Convenience of driving | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Time | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Child's before or after-school activities | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Speed of traffic along route | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Amount of traffic along route | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Adults to walk or bike with | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Sidewalks or pathways | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Safety of intersections and crossings | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Crossing guards | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Violence or crime | ☐ Yes | ☐ No | ☐ Not Sure |
| ☐ Weather or climate | ☐ Yes | ☐ No | ☐ Not Sure |

**Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box**

**12. In your opinion, how much does your child's school encourage or discourage walking and biking to/from school?**

☐ Strongly Encourages ☐ Encourages ☐ Neither ☐ Discourages ☐ Strongly Discourages

**13. How much fun is walking or biking to/from school for your child?**

☐ Very Fun ☐ Fun ☐ Neutral ☐ Boring ☐ Very Boring

**14. How healthy is walking or biking to/from school for your child?**

☐ Very Healthy ☐ Healthy ☐ Neutral ☐ Unhealthy ☐ Very Unhealthy

**Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box**

**15. What is the highest grade or year of school you completed?**

☐ Grades 1 through 8 (Elementary)
☐ Grades 9 through 11 (Some high school)
☐ Grade 12 or GED (High school graduate)
☐ College 1 to 3 years (Some college or technical school)
☐ College 4 years or more (College graduate)
☐ Prefer not to answer

**16. Please provide any additional comments below.**

# Program Evaluation Plan Worksheet

## 1. Program Planning Information

**1A. PROGRAM GOAL(S):**

**1B. LOCAL CONDITIONS AND ISSUES (FORMATIVE ASSESSMENT):**

**(1) School information:**

**(2) Walking and bicycling numbers:**

**(3) Safety issues:**

**(4) Attitudes affecting walking and bicycling:**

**(5) Other assets that can benefit the program:**

**Conclusions:**

**1C. PROGRAM ACTIVITIES**

**Education Strategy:**

**Encouragement Strategy:**

**Engineering Strategy:**

**Enforcement Strategy:**

## 2. Objectives

For each strategy, write at least one objective that describes what will be done (also called a process objective) and another objective that describes the change expected (also called an outcome objective). See the next page.

## 3. What, How and When to Measure

Next to each objective, fill in what will be measured, how it will be measured, and when (before, during or after the program). See the next page.

*Copy this page as needed.*

**STRATEGY:**

**Time Frame:**

**Data Collectors:**

| What will be Done | What will be Measured | How and When it will be Measured |
|---|---|---|
| | | |
| | | |
| | | |

| Change Expected | What will be Measured | How and When it will be Measured |
|---|---|---|
| | | |
| | | |
| | | |

**Notes:**

## 4. Conduct the Program and Monitor Progress

**FINDINGS DURING THE PROGRAM:**

**RECOMMENDATIONS FOR ADJUSTMENTS:**

## 5. Collect Information and Interpret Findings

**RESULTS:**

**RECOMMENDATIONS:**

## 6. Plan for Using Results

| Individual or Organization with Whom to Share Results | Format in which the Results will be Shared | Channel by which the Results will be Shared | Which Results or Recommendations will be Shared |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

SafeRoutes
National Center for Safe Routes to School

# Example Completed Worksheet

# Program Evaluation Plan Worksheet

## 1. Program Planning Information

**1A. PROGRAM GOAL(S):**

- Increase safe walking and bicycling to school.
- Reduce traffic congestion around school.

**1B. LOCAL CONDITIONS AND ISSUES (FORMATIVE ASSESSMENT):**

**(1) School information:**

- Half of school enrollment lives within a mile of school
- School has no policies against walking or bicycling

**(2) Walking and bicycling numbers:**

10 percent of children walk to bicycle to school

**(3) Safety issues:**

- Principal stated that one child was hit by a car last year in the crosswalk
- Police stated that speeding was a problem; using radar gun to determine speeds, they determined that the average driver is going 35 mph instead of 25 mph through school zone during morning arrival.
- Observation of school campus during morning arrival showed traffic congestion around drop-off area to be a problem for walkers and bicyclists.

**(4) Attitudes affecting walking and bicycling:**

- Parent survey rated safety as main concern
- Discussions with parents showed interest in their children being able to walk to school if adult supervision provided

**(5) Other assets that can benefit the program:**

- Opportunity to receive grant to fund program
- Parents willing to provide volunteer help

**Conclusions:**

- Strategies to increase walking and bicycling to school should include adult supervision.
- Efforts are needed to reduce speeds around the school.
- Drop-off and pick-up area is a problem.

**1C. PROGRAM ACTIVITIES**

**Education Strategy:**
Provide basic bicycle and pedestrian safety classroom lessons to school children, reinforced by take-home safety sheets for parents as well as a map of existing safe walking and biking routes.

**Encouragement Strategy:**
Start a Walk and Wheel Wednesday program that includes organized walking school buses and an incentive program.

**Engineering Strategy:**
Reroute parent drop-off area away from walkers and bicyclists, including improving the pedestrian crosswalk to school site.

**Enforcement Strategy:**
Develop a Parent Driver Safety Campaign that includes a school zone speed enforcement program and a clear enforcement message.

## 2. Objectives

For each strategy, write at least one objective that describes what will be done (also called a process objective) and another objective that describes the change expected (also called an outcome objective). See the next page.

## 3. What, How and When to Measure

Next to each objective, fill in what will be measured, how it will be measured, and when (before, during or after the program). See the next page.

*Copy this page as needed.*

**EDUCATION STRATEGY:**

Provide basic bicycle and pedestrian safety classroom lessons to school children, reinforced by take-home safety sheets for parents as well as a map of existing safe walking and biking routes.

**Time Frame:**

Year-long with focus on month before start of Walking Wednesday program

**Data Collectors:**

- Safe Routes to School Coordinator to count number of presentations scheduled
- Classroom teachers to count number of students at presentations
- Safe Routes to School Taskforce to do traffic counts

| What will be Done | What will be Measured | How and When it will be Measured |
|---|---|---|
| All 4th–6th grade classes receive bicycle and pedestrian safety presentations | ▪ Number of presentations<br>▪ Number of children present | Count number of presentations and children in attendance |
| Take-home bicycle and pedestrian safety sheets for parents via backpack mail (500 sheets) | Safety Sheets distributed | Count number of safety sheets created and distributed |
| Map of existing routes sent to all parents via backpack mail | Number of maps distributed | Number of maps created and distributed |

| Change Expected | What will be Measured | How and When it will be Measured |
|---|---|---|
| 90 percent of 4th-6th graders will increase knowledge of safe behavior | Student safety knowledge | ▪ Count number of students who receive presentations.<br>▪ Score on student knowledge surveys<br>▪ Observe student safety behavior during Walk and Wheel days |
| 50 percent of parents will increase their knowledge of safe behavior | Parent safety knowledge | ▪ Count number of parents who receive safety sheets<br>▪ Count number of parent-driver violations before and after distribution of safety sheets |
| 20 percent of students and families will identify a safe walking and bicycling route | Students walking and wheeling to school | Number of students using existing walking routes through traffic counts before, during and at the end of the school year |

**Notes:**

*Copy this page as needed.*

**ENCOURAGEMENT STRATEGY:**

Start a Walk and Wheel Wednesday program that includes organized walking school buses and an incentive program.

**Time Frame:**

Kick-off in October (International Walk to School Month) and promote weekly through school year

**Data Collectors:**

- SRTS Program coordinator to conduct travel surveys and walking school buses location information
- PE teacher to count Walking Wednesday participants
- School Wellness Coordinator or nurse to collect incentive sheets and distribute incentives

| What will be Done | What will be Measured | How and When it will be Measured |
|---|---|---|
| Five walking school buses established | Number of walking school buses and number of children in each school bus | Count walking buses at beginning and end of school year |
| An average of 50 students participate in Walk and Wheel Wednesdays program | Number of students walking to school on each Walk and Wheel Wednesday | ▪ School travel tally sheets collected on designated Wednesdays<br>▪ Count of students arriving at school by walking or "wheeling" |
| A six-week long incentive program with 50 children participating | ▪ Number of students who sign-up to participate<br>▪ Number of students who receive incentives | Total count of participating students at beginning and end of six week program |

| Change Expected | What will be Measured | How and When it will be Measured |
|---|---|---|
| 20 percent increase in children walking or bicycling to school on Wednesdays | Number of children walking or bicycling | School travel tally sheets collected before, during and after program |

**Notes:**

*Copy this page as needed.*

**ENGINEERING STRATEGY:**

Reroute parent drop-off area away from walkers and bicyclists, including improving the pedestrian crosswalk to school site.

**Time Frame:**

Over the upcoming school year

**Data Collectors:**

- Town engineer/planner to evaluate current conditions
- Safe Routes Taskforce to collect traffic counts

| What will be Done | What will be Measured | How and When it will be Measured |
|---|---|---|
| A new parent drop-off area is designated away from walkers and bikers | New drop-off site is designated and promoted | The way the new drop-off site is publicized (number of new signs, announcements) |
| Crosswalk is improved | Improvements made to crosswalk | Way crosswalk was improved (paint signage, etc.) |

| Change Expected | What will be Measured | How and When it will be Measured |
|---|---|---|
| 100 percent of parent-drop-offs are rerouted to new site | Number of parents who use new drop-off site | Traffic counts at before and after rerouting |
| 100 percent of students who walk and bicycle have access to a safe crosswalk to the school | ▪ Number of students using crosswalk<br>▪ Number of pedestrian and bicycle accidents involving a motor vehicle at crosswalk site | ▪ Traffic counts before and after crosswalk improvement<br>▪ Police data of accident reports six months after improvement<br>▪ Anecdotal data from Principal six months after improvement |

**Notes:**

*Copy this page as needed.*

**ENFORCEMENT STRATEGY:**

Develop a Parent Driver Safety Campaign that includes a school zone speed enforcement program and a clear enforcement message.

**Time Frame:**

Month-long fall campaign to be repeated in the spring

**Data Collectors:**

- Police to measure speeds
- Police to report enforcement activities and citations issued
- Safe Routes to School Team to collect enforcement

| What will be Done | What will be Measured | How and When it will be Measured |
|---|---|---|
| Student Safety Poster and message contest | ▪ Number of student poster submissions<br>▪ Selection of 1 message and poster | ▪ Count posters<br>▪ Count number of times safe message is replicated in safety campaign materials |
| Distribute 500 fliers/stickers to parent drivers with enforcement message | Number of fliers/stickers distributed | Number of fliers/stickers distributed at end of month-long campaign |
| Site speed trailer in high-traffic school zone area | Number of speeding cars and average speeds | Record number of cars that are over speed limit and speed (single day count) |
| Police conduct enforcement activity 3 days each month of the campaign | ▪ Number of days of enforcement activity<br>▪ Number of traffic violators | ▪ Count number of police enforcement days<br>▪ Count number of citations |
| Conduct 1 news conference | Number of media that are present at news conference | Media stories from news conference |

| Change Expected | What will be Measured | How and When it will be Measured |
|---|---|---|
| Reduce average speed from 35 mph to 25 mph during arrival and departure times | Reduced speeds | ▪ Speed data from speed trailer during one-day counts<br>▪ Number of traffic violations during police enforcement days |
| Increase parent driver awareness and improve driver behavior | Number of traffic violations (cited and observed) | ▪ Observations during Walk and Wheel Wednesdays at beginning and end of month-long campaign<br>▪ Police data collected at end of month-long campaign |

**Notes:**

## 4. Conduct the Program and Monitor Progress

**FINDINGS DURING THE PROGRAM:**

- Students were unaware of safe walking and bicycling behavior
- Students and families were unaware of existing safe routes to school
- Three walking school bus routes established
- Police report speeding is reduced by some but not all drivers
- Parents interviewed unaware of speed enforcement
- Incentive program increases participation in Walk and Wheel Wednesday program
- Parents do not yield to pedestrians in crosswalk

**RECOMMENDATIONS FOR ADJUSTMENTS:**

- Reinforce student safety presentations with hands-on safety events
- Identify two more routes for walking school buses
- Get media coverage of enforcement efforts
- Send information home to parents about enforcement efforts
- Introduce different incentive programs throughout the school year
- Crossing guard needs to be stationed at crosswalk

## 5. Collect Information and Interpret Findings

**RESULTS:**

- Students walking to school increased from 50 to 75, a 50 percent increase
- 50% increase in helmet usage among students bicycling to school
- Four walking school buses started; 5th bus to start next fall
- Parent surveys show awareness of speed campaign but not more willing to let children walk
- Nearly all (90%) of parents use new drop-off site

**RECOMMENDATIONS:**

- Continue walking school bus program
- Continue Walk and Wheel to School day
- Secure source for free bicycle helmets
- Continue speed enforcement program with more effort to inform parents at the start of school next year

## 6. Plan for Using Results

| Individual or Organization with Whom to Share Results | Format in which the Results will be Shared | Channel by which the Results will be Shared | Which Results or Recommendations will be Shared |
|---|---|---|---|
| School parents | Report | ▪ PTA meeting<br>▪ Article in newsletter | ▪ Speeding reduced<br>▪ Walking buses a success<br>▪ More students walking |
| Community | Media story | ▪ Local newspaper<br>▪ Radio station | ▪ Speeding reduced<br>▪ Walking buses a success<br>▪ More students walking |
| Community officials | Report | Town Council meeting | ▪ Speeding reduced<br>▪ Walking buses a success<br>▪ More students walking |
| Students | Presentation | School assembly and classrooms | ▪ Walking buses now a way to get to school<br>▪ More students walking |
| Local business contributors | Presentation | Chamber of Commerce meeting | ▪ More students walking<br>▪ Part of encouragement programs |
| Funders | Presentation/ Report | News conference with funders present | ▪ More students walking<br>▪ Safer because of reduced speeds<br>▪ How program should be continued with recommendations |

## E. Working with an Evaluation Specialist

Some programs will have the resources and interest in conducting a more comprehensive, complex evaluation and will seek the assistance of a specialist in order to do so. The role of an evaluation specialist and tips for creating a successful product are described here.

### *The Role of an Evaluation Specialist*

If a program plans to use an evaluation specialist, the specialist should be included from the very beginning. The specialist can help identify what can be measured and what questions an evaluation will be able to answer. The evaluation specialist can anticipate potential future problems that may arise when gathering or analyzing particular types of data. For example, the evaluator will recognize the potential effect of seasonal differences in the number of walkers, or the impact political changes might have on enforcement activities. Beyond recognizing the potential problems, however, the evaluator will also know how to deal with them.

A specialist may perform the following tasks:

- Design the evaluation
- Identify and train data collectors
- Collect the data
- Provide interim feedback during the program
- Analyze data and present the findings
- Provide input on recommendations

The evaluator can determine survey tools, train data collectors and decide how to analyze results. Program implementers need to stay in communication with the evaluator to make sure that the processes and products align with expectations.

### *Finding an Evaluation Specialist*

For Safe Routes to School programs, a local college or university will most likely be the best source of evaluators or leads on where to find someone. When seeking an evaluator, consider the following list of desirable characteristics:

- Explains evaluation and related processes in understandable terms.
- Demonstrates previous evaluation experience, particularly in use of observations, surveys, and analysis of existing data.
- Writes technical information in a clear, logical manner and uses graphics to help explain findings.
- Knows where to access needed data, such as pedestrian and bicycle injury and fatality rates.
- Has experience working with non-professional data collectors.
- Statistical analyses may be appropriate, depending on what is going to be measured. Describe what is known about the planned program activities and ask the evaluator what he or she would recommend. Ask for a description of situations which would not require statistical analyses. If the answer is "Statistical analyses are always required," that may indicate a problem.

Adapted from the National Highway Transportation Administration's *Art of Appropriate Evaluation* (www.nhtsa.dot.gov/people/injury/research/ArtofAppEvWeb/pages/5GettingHelp.htm).

## F. Evaluation Designs

The quality of an evaluation varies by design. The most rigorous design is a randomized trial, which requires randomly assigning individuals or groups to either intervention or control status. This is probably not feasible or appropriate for a community-level Safe Routes to School (SRTS) program. Less rigorous designs have strengths and weaknesses to consider when choosing among them.

### *Common Evaluation Designs for Program Evaluation*

#### Pre and Post One-Sample Tests:

For example, assess how many students walk to school before a kick off event takes place and how many students walk after the event.

**Strength:**
Easy to conduct, it is the most feasible design.

**Weakness:**
Results may not be accurate as there is no control for outside factors that may explain the findings even in the absence of the SRTS program.

#### Pre and Post Two-Sample Tests:

For example, measure how many students walk or bike before and after SRTS has been in place for 6 months and measure at those same points in time in a similar school elsewhere that did not take part in SRTS.

**Strength:**
Fairly easy to conduct, better control than the one-sample test, especially if the second school is similar with regard to outside factors.

**Weakness:**
No two schools are exactly alike with regard to outside factors; some unmeasured difference between the two schools may still explain the result rather than the SRTS program itself.

#### Time-Series Design:

For example, measure rates of walking and bicycling before the SRTS program, then every other month for one year. A time-series design is most feasible with one sample (the school where the program occurs). However, it is more accurate when it includes a comparison school to rule out the possibility of other explanations (beyond the SRTS program) for the changes.

**Strength:**
The strongest of the three designs presented here when it includes a comparison group. Provides information over time.

**Weakness:**
More costly to conduct and because the comparison school will not be exactly the same, some differences in the results will still not be explained just by the presence of the SRTS program.

Adapted from *Physical Activity Evaluation Handbook* DHHS, CDC, 2002.

Note: All of these designs require baseline data (data collected before the SRTS program begins). This is another reason it is important to identify conditions before the program starts.

## G. Writing Smart Objectives

Planning for a program, and the evaluation of that program, is made easier by carefully creating objectives that include specific information about what is to happen to whom by when in what amount. Following the "SMART" acronym helps create objectives that are measurable and attainable. The meaning behind each letter of SMART is described below.

**"SMART" Objectives**

- Specific
- Measurable
- Achievable
- Relevant
- Time-bound

### *Specific*

A specific objective guides measurement while a vague objective is hard to measure. For example, to find out whether a Safe Routes to School (SRTS) program increased students' well-being is harder to measure than whether the program increased the number of steps they took before school.

### *Measurable*

To qualify as measurable, there should be a tool, like a tally form, or methodology to capture the needed information.

### *Achievable*

Objectives should be attainable. If only 25 percent of the students live within 2 miles of school, it is not realistic to expect that a SRTS program will result in walking and bicycling by 50 percent of all students. It is important to consider all the information gathered before the program to derive realistic objectives.

### *Relevant*

While it may seem obvious, the objective should relate to the intended activities. For example, if a SRTS program is focused on engineering improvements on one particular route to school, it is not relevant to have walkability of the entire community as the objective.

### *Time-Bound*

An objective needs to have a time frame. If not, it may be arguable that an objective is yet to be met some time in the future, or someone may expect the objective be met sooner than is realistic. A date or time frame eliminates these uncertainties.

For examples of SMART objectives, see Step 2: Write Objectives.

## H. Data Collection, Storage and Management

Planning for data collection includes making important decisions about the people involved and the data itself. Consider the following:

### *1. From Whom Will Information Be Collected?*

If information from parents is desired, will data from all parents with children at a particular school be collected? If information from students is needed, will all students be surveyed or interviewed or observed? Selecting a smaller group of people to represent the entire group of interest (like parents or children) can make data collection much easier. However, it can be tricky because the appropriate size (sometimes called the sample size) may vary depending on the question. For example, if the number of children walking or bicycling to school is desired, the appropriate group from which to collect data may be the subset of students who live within two miles of school. If awareness of safety issues is to be measured, the entire student body (and their parents) may be the appropriate sample. If gathering information from the entire student body is not possible, a representative sample is needed, which may require stratified random sampling. While this term may sound complex, it only means separating students by grade, sex, race/ethnicity or another variable and randomly selecting some from each sub-group (for example, ten boys and ten girls from each grade, randomly selected as every third boy or girl who enters the classroom on data collection day).

### *2. Data Collectors*

Consideration must be given to who will collect the data and how they will they be trained. Good training helps ensure consistent data collection from different data collectors. Without this, it is difficult or impossible to ensure that results are accurate. Common errors, such as entering the wrong information, may arise out of boredom or fatigue. Ideally, having a second person enter all the data or a fraction of it again helps to avoid this error by testing how frequently errors are occurring and working to fix the problem. If an evaluation specialist has been hired, he or she will be responsible for training data collectors and making a plan to prevent errors.

### *3. Protecting Confidentiality*

Confidentiality is often of concern to schools and many districts have their own policies and procedures that must be followed. For example, if any data will be collected from students, informed consent from the parents is often required.

### *4. Data Storage*

In most cases, data will be stored electronically in a spreadsheet or database. This is helpful because once raw data from paper forms (tally sheets, surveys, etc.) has been converted to a reliable electronic format it can be transferred to other software programs for analyses and/or graphic design.

## I. Examples of What and How to Measure

The examples below are organized by strategy. "How to measure" column also indicates in bold the type of method it is. For more information about these methods in general, see Ways to Collect Information on page 8-8.

| Topic | What to measure | How to measure |
|---|---|---|
| **Engineering Topics** | | |
| Install bicycle racks | Construction of bicycle racks | **Observation** |
| Construct sidewalks | Prioritization on local improvement plan | **Existing records** from city |
| | Construction of sidewalks | **Observation** |
| Improve intersection near school | Installation of signage and devices | **Observation** |
| Build walking and bicycling paths | Presence of walking and/or bicycling paths | **Audit**<br>**Observation** |
| **Enforcement Topics** | | |
| Driver education campaign to encourage slowing down | Number of fliers distributed<br>Number of media stories | **Observation** |
| | Number of warnings or citations given near school | **Data** from police department |
| Using a speed trailer | Speed of vehicles near school | Portable speed detection device<br>**Existing data** or log |
| Beginning a school safety patrol | Number of safety patrol volunteers training | **Observation** |
| Enforcing no parking in drop-off and pick-up areas | Number of fliers placed on illegally parked cars | **Observation** |
| | Number of tickets for illegally parked cars | **Records** from Law Enforcement |
| | Number of illegally parked cars | **Observation** |
| **Education Topics** | | |
| Teach pedestrian or bicyclist safety to students | Score on a knowledge survey | **Survey**<br>**Student interviews** |
| Practice pedestrian or bicyclist safety skills with students. | Percent of helmeted bicyclists | **Observation** |
| | Percent of pedestrians crossing properly | **Observation** |
| Educate parents about laws requiring yielding to pedestrians and bicyclists | Score on survey question | **Survey** |
| | Number of parent driver violations | **Observation** |
| Develop an "Eyes on the Street" program | Number of volunteers in program | **Tally** |
| **Encouragement Topics** | | |
| Hold a Walk to School event | Number of participants | **Interview** with school staff person<br>**Survey** of students |
| | Media coverage | **Existing data** from newspaper |
| Conduct a walking school bus/bicycle train program | Number of participants | **Observation** |
| | Training of students and volunteers | **Survey** of students |
| | Parents' attitudes about walking and bicycling to school | **Interview** with leader<br>Written or telephone **survey** |
| Use a Frequent Walker Punch Card | Number of cards distributed<br>Number of prizes given | **Tallies** |
| Promote a Morning or Recess Mile program | Number of participants | **Observation** |

## J. Tips for Working with the Media

- **Make sure there's something newsworthy to say.** The story should "hook" onto a newsworthy element, such as an existing national or state-level event or involvement of a local official or celebrity.
- **Think visually.** Student-made posters or school mascots provide great visuals for the media, and they make photos of events more appealing.
- **Prepare for an interview.** Use talking points to ensure a consistent message about your Safe Routes to School program. Think ahead of time about people who might speak to the media for an interview and obtain their permission to share their contact information.
- **It is okay to pick up the phone and talk to a reporter or editor about the program.** Find out who covers a beat related to Safe Routes to School (education, physical activity, local issues, etc.) For television, the best time to call is between 10am-2pm and 7pm-10pm to avoid peak news broadcast hours.
- **Be available.** Make it a priority to answer requests when possible.
- **Limit the length of news releases and advisories.** When writing a news release or media advisory, keep the length to one or two pages and offer more detailed information on a Web site or through supplemental materials. It is important to include accurate and complete contact information.
- **Establish media partnerships.** Approach local media to discuss opportunities for partnering on the promotion of Safe Routes to School. Contact the community affairs department to discuss potential partnerships, such as public service announcements.

For template media materials and resources, see www.saferoutesinfo.org/resources/index.cfm.

For more information, see the Media and Visibility chapter of the SRTS Guide (www.saferoutesinfo.org/guide/media).

Adapted from the National Center for Safe Routes to School Media Tip Sheets (www.saferoutesinfo.org/resources/marketing_tip-sheets.cfm).

# Resources

This information can be used to develop most desired types of evaluation, but it is limited by the enormous potential scope of activities that might be part of a Safe Routes to School program and by the scope of program evaluation and evaluation research. The following resources are for readers interested in developing a better understanding of evaluation, either for their own benefit or to conduct more complex evaluation.

## General Resources

- *Demonstrating Your Program's Worth: A Primer on Evaluation for Programs to Prevent Unintentional Injury*, 2000 (www.cdc.gov/ncipc/pub-res/demonstr.htm)
- *Art of Appropriate Evaluation* (www.nhtsa.dot.gov/people/injury/research/ArtofAppEvWeb/index.htm)
- *Safe Routes to School: Practice and Promise* (www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2004/pages/section-3-ExperienceField.htm)
- *Physical Activity Evaluation Handbook*, 2002 (www.cdc.gov/nccdphp/dnpa/physical/handbook/pdf/handbook.pdf)
- *CDC Evaluation Working Group Resource List* (www.cdc.gov/eval/resources.htm)
- *Guiding Principles for Evaluators* (www.eval.org/Publications/GuidingPrinciples.asp)

## Evaluation Standards

Joint Committee on Standards for Educational Evaluation Program. *Evaluation standards: How to assess evaluations of educational programs*. 2nd ed. Thousand Oaks, CA: Sage Publications, 1994.

## Evaluation Texts

- *Handbook of Practical Program Evaluation*, 2nd ed, Wholey and Newcomer, 2004.
- *Evaluation: A Systematic Approach*, 7th ed, Rossi, et al, 2005.
- *Case Study Research; Design and Methods*, 3rd ed, Yin, Robert K., Sage Publications, London, 2003.