

Let's Go Biking! Instructor Guide

Let's Go Biking! was developed by the North Carolina Department of Transportation's Division of Bicycle and Pedestrian Transportation to teach and encourage the practice of safe pedestrian and bicycle behaviors for children at the elementary age level (kindergarten through fifth grade). The primary resources for the creation of *Let's Go NC!* are the National Highway Traffic Safety Association's Cycling Skills Clinic, and the North Carolina Department of Transportation's Basics of Bicycling. *The Sonoma County Bicycle Coalition Safe Routes to School Program has adapted the Let's Go Biking! lesson plans for use in Sonoma County, California. This Instructor Guide is part of a larger "Let's GO NC!" Instructor Guide available at <http://www.ncdot.gov/bikeped/safetyeducation/letsgonc/>*

Due to developmental differences in the fine and gross motor skills as well as cognitive abilities in elementary aged children, the *Let's Go Biking!* covers differing, but overlapping, topics and skills for among and across each grade-group. Lessons within each grade-group are to be taught sequentially, so that earlier concepts learned serve as a foundation for the subsequent lessons. Key messages and learning objectives also build upon and reinforce concepts and skills from one grade-group to the next, while the number and complexity of the skills taught increases from one level to the next.

The following chart outlines the lessons within *Let's Go Biking!* It includes the time required, the goal and objectives of each lesson, the lesson prerequisites, and the grade-level plan components.



Lesson 1

K-1

Gearing Up

Goal: To help students understand the bicycle and why helmets are important

Time Allotted: 25-30 minutes

Instructor Discussion:

Preparing the cyclist, bike and helmet before riding; demonstrating why helmets are important

Vocabulary: *helmet, visible, frame, wheel, pedals, seat, handlebars*

Objectives

- Understand wheels and their role in transportation
- Know the basic parts of the bicycle
- Understand why a helmet is required
- Identify appropriate clothing to wear

Activity

- Understand dangers of brain injury and why children should wear a helmet

Lesson Review

2-3

Go by Bike

Goal: To teach children where to ride a bike

Time Allotted: 25 - 30 minutes

Instructor Discussion: Where people ride bikes, where they belong, why people ride bikes, health benefits of riding, and the importance of wearing a helmet

Vocabulary: *greenway, sidewalk, exercise, smog, physical activity*

Objectives

- Identify safe places to ride bikes
- Name reasons people ride bikes
- Understand health benefit
- Explain how to fit a helmet correctly

Skills Practice

- Understand dangers of brain injury and practice fitting helmets properly

Lesson Review

4-5

Getting Ready to Ride

Goal: To teach about bicycle equipment and rules of the road

Time Allotted: 25 - 30 minutes

Student Pre-Test

Video Instruction

Instructor Discussion:

Bicycling contributes to a healthy lifestyle, asking an adult before riding, basic equipment, rules of the road, and signs and signals.

Vocabulary: *Cardiovascular exercise, derailleur, yield*

Objectives

- Explain how bicycling contributes to a healthy lifestyle
- Identify appropriate, safe bicycling equipment
- Recognize basic traffic sign and signals and interpret their meaning for bicyclists
- Describe the basic rules of the road

Skills Practice

- Practice fitting helmet properly

Lesson 2

K-1

Go By Bike

Time Allotted: 25 - 30 minutes

Goal: To teach children where to ride a bike

Instructor Discussion: Where and How to Ride a Bike and Wear a Helmet

Vocabulary: *greenway, exercise, environment, cycling*

Objectives

- Identify safe places to ride bikes
- Name reasons people ride bikes
- Understand health benefit
- Explain how to fit a helmet correctly

Activity

- Understand who community helpers are and where a child can go to for help in an emergency

Lesson Review

2-3

Signs, Signals, and Safety

Time Allotted: 25-30 minutes

Goal: To help students understand how to be visible and ride safely

Instructor Discussion: How to be visible to motorists, checking your bike before riding, understanding signs and signals and following the rules

Vocabulary: *reflective, rules, signals*

Objectives

- Know how to make themselves and their bikes more visible for safety
- Check their bikes to see that everything is working properly
- Identify traffic signs and signals and what they mean
- Understand the rules of the road and why cyclists must obey them

Activity

- Understand signs and signals a bicyclist may encounter on the roadway

Lesson Review

4-5

Bicycling Basics

Time Allotted: 30 - 40 minutes

Goal: To teach safe bicycling behavior

Video Instruction

Instructor Discussion: Communicating with other traffic, avoiding risky situations, and reacting to others.

Vocabulary: *hazard, directional cues, risk*

Objectives

- Demonstrate proper hand signals
- Identify risky behaviors
- Recognize hazards and high-risk situations to avoid when bicycling
- Recognize directional cues from motorists

Activity

- Know equipment and use the ABC Quick Check to assess the bicycle

Lesson Review

Lesson 3

Instructor's
Guide

Section 1

Curriculum
Structure

K-1

Signs, Signals, and Safety

Time Allotted: 25-30 minutes

Goal: To recognize and understand safety signs and signals to ride safely

Instructor Discussion: What is traffic, how to understand traffic signs and signals, and how to follow the rules

Vocabulary: *sign, signal, vehicle, traffic, behavior*

Objectives

- Recognize and understand signs and what they mean
- Identify vehicles by size and type
- Learn the hand signals that cyclists should use when riding
- Identify good behaviors for cycling safely

Skills Practice

- Traffic Light Gam
- Safe or Unsafe

Lesson Review

2-3

Bicycling Basics

Time Allotted: 25-30 minutes

Goal: To help children understand about helmets and behaviors that will keep them safe when biking

Instructor Discussion: Watch for driveways, use hand signals, avoid risky behaviors, wear helmet correctly

Vocabulary: *danger, risky, driveway, hand signal*

Objectives

- Know what they need to do before they ride.
- State what they should do when they come to a driveway to avoid colliding with a vehicle.
- Be able to use the proper hand signals.
- Understand risky behaviors to avoid.

Skills Practice

- Hand signals
- Practice fitting helmets properly
- Identifying safety do's and don'ts

Lesson Review

4-5

Bike Control

Time Allotted: 30 - 40 minutes

Goal: To teach bicycling handling skills

Instructor Discussion & Skill-Building: Controlling the bicycle while communicating intentions to others.

Vocabulary: *hazard, maneuver, swerve*

Objectives

- Ride in a straight line without wobbling
- Demonstrate control while stopping quickly
- Scan ahead and behind without swerving
- Use hand signals while bicycling to indicate turning or stopping.
- Identify and safely maneuver around hazards

Skill-Building Activity

- Practice fitting helmets properly
- Check and adjust bicycle for fit
- Ride in a straight line
- Practice quick stops at the "Whistle Stop"
- Practice "Scan, Plan and Do" while bicycling
- Practice using hand signals while bicycling playing "Follow the Leader"
- Practice avoiding hazards in "Hazard Dodge"

Lesson Review

Lesson 4

K-1

Bicycling Basics

Time Allotted: 25-30 minutes

Goal: To improve riding skills while being alert for dangers

Instructor Discussion & Skill-Building: Instructor will discuss the senses and the dangers at driveways then demonstrate the hand signals and scanning for vehicles

Vocabulary: *sight, signal, hearing, touch, driveway*

Objectives

- Know how to use hand signals
- Identify which senses to use to detect traffic
- Demonstrate how to scan for vehicles
- Explain why driveways are dangerous

Skills Practice

- Hand signals practice
- Checking over shoulder
- Balance exercise
- Strength exercise

Lesson Review

2-3

Bike Control

Time Allotted: 25-30 minutes

Goal: To help students develop bicycle control and communicate with others.

Instructor Discussion & Skill-Building: Instructor will explain the rules for practice and what students will do on the course

Vocabulary: *driveway, wobble, straight line, intentions, Power Pedal*

Objectives

- Know how to properly fit bike helmet
- Use Power Pedal to start off smoothly and quickly.
- Stop quickly and smoothly
- Stop at the end of the driveway or at a stop sign.
- Ride bikes in a straight line without wobbling.
- Signal intentions to others around them

Skill-Building Activity

- Helmet fitting
- Bike fitting
- Start off with Power Pedal
- Stop quickly and safely
- Stop at end of driveway
- Ride in a straight line
- Practice hand signals

Lesson Review

4-5

Cooperative Riding

Time Allotted: 30 - 40 minutes

Goal: To teach predictable bicycle riding and how to anticipate the movement of others

Instructor Discussion & Skill-Building: Riding predictably and “reading” communication from others

Vocabulary: *roadway, motorists, predictably*

Objectives

- Safely enter and exit a ‘roadway’
- Make turns after using hand signals.
- Identify and respond to traffic signs and signals
- Identify and respond to high-risk situations, avoiding conflicts
- Communicate and cooperate with other pedestrians, bicyclists and ‘motorists’ by riding predictably.
- Predict the movements of others by ‘reading’ directional cues.

Skill-Building Activity

- Practice fitting helmets properly
- check and adjust bicycle for fit
- Practice entering and exiting driveways
- Practice “Pass with Care” exercise
- Practice scanning for and reacting to hazards while sharing the road with ‘motorists’

Lesson Review

Lesson 5

K-1 Bike Control	2-3 Cooperative Riding	4-5 Basic Traffic Skills
<p>Time Allotted: 30-45 minutes</p> <p>Goal: Balance and control of a simplified bicycle</p> <p>Instructor Discussion & Skill-Building: Explain the activity then conduct the practice</p> <p>Vocabulary: <i>balance, straight line, braking, slowing, stopping</i></p> <p>Objectives</p> <ul style="list-style-type: none"> • Demonstrate how to properly wear a helmet • Scoot and balance a bike • Propel themselves in a straight line • Learn to stop safely <p>Skill-Building Activity</p> <ul style="list-style-type: none"> • Helmet Fitting • Bike Fitting • Scoot and Balance • Ride in a Straight Line • Stop Quickly and Safely <p>Lesson Review</p>	<p>Time Allotted: 30-45 minutes</p> <p>Goal: Further develop bike skills and learn to cooperate with others</p> <p>Instructor Discussion and Skill-Building: Explain the activity and skills for the course</p> <p>Vocabulary: <i>control, cooperate, scan, hazard</i></p> <p>Objectives</p> <ul style="list-style-type: none"> • Scan behind over their shoulder to check for vehicles • Follow other cyclists safely • Signal appropriately • Interact safely with other cyclists <p>Skill-Building Activity</p> <ul style="list-style-type: none"> • Signal Turns • Scan over Shoulder • Follow the Leader • Hazard Dodge <p>Lesson Review</p>	<p>Time Allotted: 30-40 minutes</p> <p>Goal: To teach children how to negotiate more challenging traffic situations</p> <p>Instructor Discussion & Skill-Building: Skills for using a bicycle as a vehicle.</p> <p>Vocabulary: <i>intersection, motorists, predictably, anticipate</i></p> <p>Objectives</p> <ul style="list-style-type: none"> • Ride cooperatively with other bicyclists, 'motorists' and pedestrians • Respond correctly to traffic sign and signals at one-way street and intersection configuration • Ride predictably, anticipate and respond to others, including pedestrians • Scan, use hand signals, and avoid hazards while bicycling <p>Skill-Building Activity</p> <ul style="list-style-type: none"> • practice fitting helmets properly • check and adjust bicycle for fit • practice entering and exiting 'driveways' • practice using hand signals while bicycling • practice cooperative maneuvering skills, riding predictably, and interpreting cues from others • practice negotiating right-of-way at '4-way stop' • practice interpreting & responding to 'traffic signals' • practice yielding to pedestrians <p>Student Post-Test</p>

Materials Needed for Teaching

As stated in the first section on current research on education, instructors should incorporate supervised and structured experiences in real (or near real) traffic situations. Within each lesson, instructors are given the option to encourage skill-building practice in one of three ways: to bring children out into the community at real-world streets, intersections, and parking areas; to bring children to a near-road or parking area to practice the behaviors; or to simulate the experience by creating a model, to bring children to a near-road or parking area to practice the behaviors.

The amount of materials necessary for each lesson may vary due to the skill-building option each instructor chooses.

Instructors are encouraged to customize the curriculum according to the specific geographic locale (i.e., urban versus suburban or rural) in which they will teach. By using photographs, language, and descriptions specific to their community, instructors can further promote the understanding and practice of safe walking behaviors.

Standard materials provided with this curriculum for all lessons include Parent/Caregiver Tip Sheets and Student Assessment worksheets and answer keys. Some lessons may have additional materials supplied as part of the lesson set. These may include:

- Vocabulary cards
- Situational pictures or picture cards
- Model diagrams
- Song lyrics

Other basic materials to be secured by the instructor may include items like flip chart paper and markers, tape, yard sticks, colored paper; and cones, bean bags, rope or other material to replicate the model scenarios laid out in the diagrams (street, sidewalk, bus, intersection, etc.). Refer to the Materials list at the front of each lesson for the particular supplies needed for that lesson.

For the bicycle lessons a materials list is provided. More guidance for conducting the bicycle lessons, including materials specific to that portion of the curriculum, is given in the next section

Organizing the Bicycle Skills Lessons

Teaching the on-skills bicycling lessons requires handling a few more logistical tasks. The most significant involve having necessary materials, equipment, and volunteers on hand. Conducting skills lessons can be as simple or elaborate as resources can support. This instructor's guide is based on an assumption that a nominal budget is likely. The following basic steps apply regardless of the resources available for approximately 12-30 elementary-aged students as your target audience. For guidance on skills-based instruction with a medium or large audience, please see **Appendix D**.

Step 1. Determine the Size, Resources, and Format for the Lesson

Ask yourself the following questions to determine your planning process.

Size: The larger the class size, the more planning and time are necessary.

How large will the program be?

- **Small:** targets a local group or single school with a very limited budget
- **Medium:** targets a larger community with the public invited, but with a small budget. See **Appendix D**.
- **Large:** targets a citywide audience with significant budget and publicit . Consider hiring a professional to plan event and direct volunteers. See **Appendix D**.

Note: While this curriculum can be utilized by larger events to conducting each skills lesson back-to-back at a 1-day event, it is designed to be utilized by smaller groups that will teach these lessons over a period of time, allowing children time to practice the skills at home and build on the lessons learned in a previous session.

What resources are available?

- **Limited Resources:** small number of volunteers, participants must bring their own bicycles
- **Good Resources:** several volunteers and a supply of bicycles in good repair that participants can use.

Note: There may be variations across these two examples, as the number of volunteers needed may also depend on whether additional staff or instructors are on-hand within an organization, after-school program, or school. Also, there may be a mix between the two extremes of all bicycles supplied by the instructor versus all the bicycles brought by the children.

What level of experience is on hand?

- Has the lead organization (school, police department, YMCA, etc.) ever run a cycling skills clinic or other on-bicycle skills program previously? Is there an experienced instructor on staff?
- If not, is there an experienced instructor available that can be brought in?
- Are there ways to build up in-house staff experience prior to implementing the program?

Note: The Sonoma County Safe Routes to School Program may periodically offer 'train-the-trainer' workshops to those interested in becoming experienced instructors. These workshops offer an ideal opportunity to learn how to teach bicycling to children specifically using this curriculum and provide hands on practice for setting up the course layouts, running through the exercises, understanding developmental nuances across the different grade groups, and common tips for success.

What format would work best for instruction?

Format: The format for the program identifies how it will be administered. It is often based on the number of children, volunteers, and bicycles available.

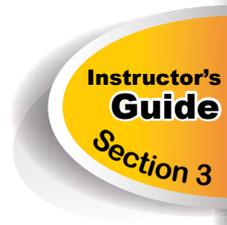
- **By Class:** Small event – can be offered as a physical education class running 12-30 children through each lesson in a 45-50 minute period. ***This is the recommended format upon which the lessons in this curriculum are based.*** Setup for the skills lessons may require several hours the day before, so plan around availability of the facility (gym, parking lot, blocked-off local street, etc.) and the security needs between setup and the class.
- **By Grades/Age Groupings:** Is easily adaptable for schools that choose this format. The curriculum can be conducted in 2-4 hours for each lesson set and can accommodate more children, such as all 4th graders or as an event for all 4th and 5th graders.

Note: Regardless of the size and format of the program, much of an instructor's or lead coordinator's effort will be spent planning and organizing for the on-skills lessons. The time available for planning and organizing the bicycle skills lessons will determine what type of size and format will work best.

Additional considerations:

- Will an entire school (multiple grades and ages) implement the program? Will only a subset use the curriculum, such as just 4th and 5th graders? Will one class go through at a time during their scheduled physical education or health education time (which may be taught by a PE teacher and meet once or twice a week), or will it be integrated into the regular class time (e.g. taught by the 4th grade teacher each day within one week)?
- The age of the participating audience determines the skills lessons to be taught and, ultimately, the skills stations required. Children under 10 years old can go first and get finished fast, since the course for younger children is limited compared to that for older children. Older children may also be more experienced at bicycling. Those who have already mastered the basics can be presented with additional challenges (see challenge activities in grade 4-5 lessons) and potentially a neighborhood ride at the conclusion of the program.

Planning Matrix for Skill-Building Activities



Planning Matrix for Skill-Building Activities	
Event Size	<p>Small (12-30 children at one time)</p>
Good Resources	<p>Focus primarily on:</p> <ul style="list-style-type: none"> • Location • Date/time <p>Example Scenario:</p> <ul style="list-style-type: none"> • A trailer of bicycles and helmets with paid or volunteer instructors and helpers are utilized. • A typical program of this type may be training for a Boy Scout troop, part of a school's PE class, etc. • Limited marketing efforts are required because the target audience is established, but reminders to staff, parents, and children will be necessary. <p>Advantage: Supplying equipment may mean the bicycles are well maintained. This lessens preparation time and leave greater time for children to actually be on the bikes.</p> <p>Tip: Local advocacy groups may purchase an outfitted trailer and provide skills lessons as part of community outreach efforts.</p>
Limited Resources	<p>Focus primarily on:</p> <ul style="list-style-type: none"> • Location • Date/time • Recruiting <p>Example Scenario:</p> <ul style="list-style-type: none"> • Children bring own bicycles and helmets. This will require more time for maintenance checks of equipment. Some spare bicycles and helmets should be on hand in case a child doesn't own it or it is not suitable (i.e. improper size bike or helmet fit) • Recruiting volunteers may require a significant effort unless this program is regularly conducted and there is a core group from which to draw. • A typical program of this type may be training for a Boy Scout troop, part of a school's PE class, etc. • Limited marketing efforts are required because the target audience is established, but reminders to staff, parents, and children will be necessary. <p>Advantage: children can practice on their own bicycles. Their helmets most likely will be properly fitted</p> <p>Tip: recruit maintenance volunteers from a local bike shop to help assess equipment and make simple, quick repairs on the spot in exchange for some free advertising.</p> <p>Tip: local police departments may have access to and be willing to donate abandoned or stolen bicycles.</p>

Step 2: Choose the Date, Time and Place

Date, time and place for the on-bicycle skill-building activities may be determined by school or calendar constraints, or these decisions may be made with approval from others.

Date

- Weekday events work well for school and after-school programs. This timing is particularly applicable for small single-school events. Weekend events may interfere with other activities such as sports practice or homework but may be necessary to reach a broader range of participants.
- If taught at school during the school day, check the school calendar to make sure the lesson dates don't conflict with another event, holiday, etc.
- Make sure school administrative staff have approved the program and that the dates are documented on the school calendar.
- Consider needs for back-up options or rain dates in the event of unexpected circumstances or bad weather.

Time

- Spring and fall are ideal times for outdoors bicycle lessons; lessons to be held in winter or summer months can be taught indoors.
- Late in the school year gives teachers the opportunity for fun lessons with the students. Some schools prefer conducting the lessons indoors during the winter months to prepare children for spring bicycling weather.
- The beginning or end of the school day may allow for greater availability of volunteers.

Place

- Because elementary age children tend to take information very literally, it is strongly encouraged to use a blocked-off road when possible to practice the skills lessons.
- Where a local street setting is not possible, consider using a parking lot, large basketball court or other suitable outdoor venue. Design the skills stations and course to look as much like the road as possible.
- Gymnasiums or other large indoor venues are also suitable. Considerations for indoor sites may also allow for an alternative location in the event of bad weather without the need to re-schedule the lesson on a different date.
- A smooth, flat, closely-cut grassy area or unpaved surface could also be substituted when no other suitable options are available.

Step 3: Establish a Timeline

A basic timeline is strongly encouraged to help instructors determine where efforts need to be placed and to assist in the delegation of responsibilities when feasible. No matter how small the program, if volunteers, equipment, space, or approvals are needed a basic timeline is helpful. Work backwards from the anticipated dates for the lessons to chart when key tasks must be completed. See a Sample Timeline in **Appendix A**.

Step 4: Establish Roles and Responsibilities

Regardless of the event size, a list of duties can help an individual instructor or a committee to keep track of responsibilities and roles for those tasks that are delegated. Such duties include:

- Recruiting volunteers
- Arranging for (temporary or permanent) storage of equipment (bikes, helmets, etc.)
- Distributing and collecting parental consent forms
- Determining outreach and marketing efforts
- Including students with disabilities
- Making copies of parent/caregiver tip sheets and other handout materials as needed
- Purchasing materials as needed
- Course set up and marking
- Clean up/break down

You don't need to be an 'expert' bicyclist to teach this course

Cycling skills needed:

The ability to:

- Ride straight with one or two hands on handlebars
- Ride straight while looking over either shoulder
- Avoid obstacles without swerving wildly
- Ride cooperatively and confidently with other road user

If you don't have the skills or knowledge

Find others to help: Contact local bicycle shops and bike clubs in the area.

Develop your own skills: Bicycling is an excellent low-impact form of aerobic exercise enjoyed by people of all ages. It is a fun and a wonderful way to get around. Becoming a proficient rider will be good for your lifestyle!

This curriculum is supported by several short video segments that show bicyclist performing the required maneuvers. These can help an instructor with limited bicycling skills to still run an effective course. Be sure to review each lesson and clarify any material you don't understand.

Step 5: Identify Sources for Volunteers, Partnerships, and Funding

Volunteers

When there are not enough staff to assist, volunteers are vital to successfully and efficiently run the skills lessons.

- Frequently law enforcement officers, fire departments, emergency service providers, or school nurses like to take part in cycling skills sessions. They have a powerful incentive to work on public safety events — they want to help community members prevent injuries and fatalities caused by bicycle crashes. Anyone would prefer taking part in preventing injury than responding after the fact. The ultimate goal of this interactive educational experience is the prevention of bicycle crashes.
- Many local organizations or clubs like the Rotary or Kiwanis for example, participate in such events.
- Use parents as volunteers whenever possible to give them additional exposure to the safety messages. It helps them reinforce the messages with children after the program.
- Sources of Volunteers:

Community service organizations

Faith-based organizations

Schools

Fire departments

Police departments

Health departments

Hospitals or rehabilitation centers

Driver education teachers

Pediatricians, family practice providers

Bike shops

Cooperative extensions, 4-H

Parent–teacher organizations

Emergency medical services

Injury prevention advocacy groups

Bicycle clubs or coalitions

League cycling instructors*

Libraries

Girl's or boy's clubs or scout programs

* Certified instructors through the League of American Bicyclists

Partnerships

Organizations needing assistance to gather the supplies, equipment and other resources needed to conduct the skills lessons may seek to partner with other organizations to donate items needed or provide monetary contributions. Identify partners willing to cover the cost of promotional material, supplies, ribbons, prizes, or refreshments, etc. For ideas of potential partners, review the list of sources of volunteers above. While these same groups may not be in a position to offer volunteers, they may be able to cover some items, or may be seeking tax write-offs or be interested in providing monetary support towards a safety education effort.

Funding

Similarly, there are many foundations and grants resources that may award funds to organizations that need assistance in implementing this curriculum. Local, state and federal agencies or foundations with missions to reduce injuries, improve public health, increase physical activity, promote active transportation, or improve child safety are all potential sources for this type of funding.

Step 6: Market to the Target Audience

For small, single-school programs or those taught through established after-school clubs or organizations, publicity or parent awareness is normally done via the typical means of communicating with parents: backpack news, e-mail listservs, phone trees, posters, parent/teacher meetings, and through the children themselves.

Market to Parents/Caregivers

While the target audience is the children, ultimately parents and caregivers will decide whether their child may participate in the program. They can also assist their child in practicing these skills at home, reinforcing and modeling safe behavior. Notifications to parents should

- Provide enough information about the bicycle education program, such as what it is, what they will be doing, what is expected, what the child will learn, etc., so the parent/caregiver feels comfortable signing the parental release form allowing the child to participate. See the sample Parent Notification Letter and Consent Waiver in **Appendix B**.
- Reinforce the desired safety messages and skills. It is not uncommon for the children to be clear on the safety messages, only to have it undermined by parents, grandparents, or other adults who grew up with a different set of rules. In addition to participants, adults are critical to reinforcing these safety messages. The Parent/Caregiver Tip Sheet supplied with each lesson help instructors to convey the same messages to the adults at home.

Leading the Bicycle Skill Building Activities

Review the lesson plans and the videos before you instruct to get a good idea of the skills that the children will be performing. Use the **Skill-Building Activities Checklist** to keep track of the logistics you need to finalize before conducting the outdoor lessons. Watch the **Teaching the Skill-Building Activities video** for a visual overview of how to set up and run a course. You'll need bicycles, helmets, props, materials to lay out and mark the course and the course layout to get started.

A complete list of materials, equipment and props needed are included upfront within each lesson. Below is a summarized, basic list of the materials generally needed for any cycling skills lesson.

Helmets, Bicycles, Tools, and Course Props

Helmets

The instructor and each child will need a bicycle helmet for each on-bicycle Skill-Building activity as well as the classroom lessons where indicated. Every child who participates **MUST** wear a helmet when bicycling. It is ideal for children to bring their own helmet, but contingencies should be made for those who may not have one, or have one that does not fit properly. Loaner helmets, discounted helmets for sale, or free giveaways offer different ways to ensure that all children can participate. The Bicycle Helmet Safety Institute offers a consumer resource for the purchase of inexpensive helmets, see <http://www.bhsi.org/cheapies.htm>. Also, NCDOT's Division of Bicycle and Pedestrian Transportation offers a limited number of helmets to groups getting bicycle safety and education programs started through its Bicycle Helmet Initiative, see http://www.ncdot.gov/bikeped/safetyeducation/helmet_initiative/.



If helmets are supplied by the program, be sure to have a range of sizes and colors for use – bike shops can give advice on models, sizing, and tips for fitting a helmet properly. All helmets must meet the safety standard set by the Consumer Product Safety Commission (CPSC), including those brought from home. There are different helmets available for different activities, and each type is made to protect the head from the impacts that are common to that particular activity or sport. If the helmet is a multi-use sport helmet, check the box or packaging to make sure it is listed as suitable for bicycling. Ski, hockey, or other sport helmets should be discouraged, as they don't provide protection for the needs of a bicyclist as well as one designed specifically for cycling.

If you have difficulty fitting helmets, NHTSA has an instructional video that breaks down helmet fitting into several steps: <http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Multimedia/BikeSafety.wmv>

Surgical, Shower, or Painter's Caps

For programs with helmets that are shared, a barrier over each child's head is needed to prevent the transmission of communicable diseases like lice, a relatively common occurrence in school-age children. Local hospitals or medical supply agencies may provide surgical caps. Whatever cap is used, it should be worn over the child's head prior to putting on the borrowed helmet. Helmets may also be sprayed with disinfectant and wiped down with paper towels after each use.

Bicycles

This program works best with groups of 12 to 20 children on bicycles for the Skill-Building Activity. Determine in advance if participants will bring bicycles from home or if the program will be providing them. Ideally some bicycles should be available so as not to exclude those who don't own bicycles.

If a set of bikes will be purchased for the program, make sure they are of good quality and easy to maintain – they will be used by many children over a period of years.

Consider getting bicycles with these features:

- Single speed bicycles
- Enclosed chains (chain guard)
- Quick-Release seats and wheels
- Hand brakes

Work with a local bike shop to find bicycles that satisfy these basic elements and you'll be glad you did. These bicycles will be simpler to maintain in the long-run and be easier to adjust to properly fit riders of differing heights. Coaster brakes make it difficult for riders to position themselves for a 'Power Pedal' so hand brakes are preferred for Skill-Building activities.

Note: Some schools or bicycle coalitions have bicycles that can be loaned.

Tools

It is advisable to have a volunteer on hand who is knowledgeable about making basic adjustments to children's bicycles. While not comprehensive, the following is a list of the most common tools used for adjusting children's bicycles:

- Bicycle Pump
- Hex Keys (Allen Keys): 4mm, 5mm, 6mm
- Adjustable Wrench
- Metric Crescent Wrenches: 8-15mm
- Pedal Wrench
- Chain Lube (NOT WD-40)



Provide Bikes or Let Children Bring Their Own?

Providing bicycles for the class

Advantages

- Identify the appropriate bicycle
- Only need about 20 bicycles for a whole school, after-school program or other organization
- Parents don't need to drop off kids' bikes
- Control of bike condition and repair
- Less time needed during lessons for bike check and minor adjustments

Disadvantages

- Time and effort to collect and repair used bikes or purchase new bikes
- Cost of maintaining bikes
- Bikes must be stored when not in use
- Children don't learn on bike they ride the most

Letting children bring their bikes

Advantages

- No bike purchase necessary
- No need for storing bikes during off-season
- Children learn on their own bike
- Children's bikes get checked and repaired

Disadvantages

- Parents may have to bring bikes each day
- No control of initial bike condition, repair or fi
- Time required to properly adjust bikes
- Short-term parking considerations if the location has limited bike storage
- Liability of overnight storage, if needed

Course Props and Other Materials

Simple props can be made from cardboard boxes or corrugated plastic to help create a simulated traffic environment. Some are used to teach the meaning of traffic signs in context; others mimic visual obstructions that may be found in real traffic environments. Bicycle boxes work well for creating visual barriers like the section of bushes. To create freestanding signs, attach the sign to a dowel and push into the top of a traffic cone. Signs can also be attached to a pedestal sign such as those used for music, menus or meetings.

Bean bags, dampened sponges, or rubber bath mats can serve as 'hazards' to teach control, balance, and quick maneuvering skills. For details on the signs used in this curriculum, including dimensions and some tips on creating them, see **Appendix C**.

In addition to the props, having the following materials on hand will help to prepare for and run an effective and efficient skill-building activity:

- Clip boards and Skills Checklist
- Pens, pencils
- First aid kit
- Basic bicycle maintenance tools:
 - Adjustable or fixed crescent wrenches for seat and handlebar adjustment
 - Slotted and Phillips screwdrivers
 - Hex keys (Allen wrenches)
- Tire pump and spare inner tubes
- Extra sizing pads for helmet fitting
- Traffic cones, colored masking tape, sidewalk chalk, halved tennis balls or sponges to mark the course
- Tape measure (50 feet +)
- Elastic bands for pants
- Name tags for volunteers
- Cooler for cold water/drinks (optional)
- Provision for a shaded area such as a tent (optional)
- Sunscreen (optional)
- Station signs (optional)
- Communication devices, such as two-way radios, cell phones, announcement system (optional – for large events)



Laying out and Marking the Course

A diagram with dimensions for laying out the course(s) for each Skill-Building Activity is provided at the end of each lesson. For a small event, the layout can be set up by one or two people in about an hour, assuming the surfaces are clean and free of debris.

Large events should utilize a more formal layout that lets the participants flow through different stations in an order manner. Due to the additional volunteers needed for large events, lay out the course well in advance to offer time to train the volunteers on the stations before the event.

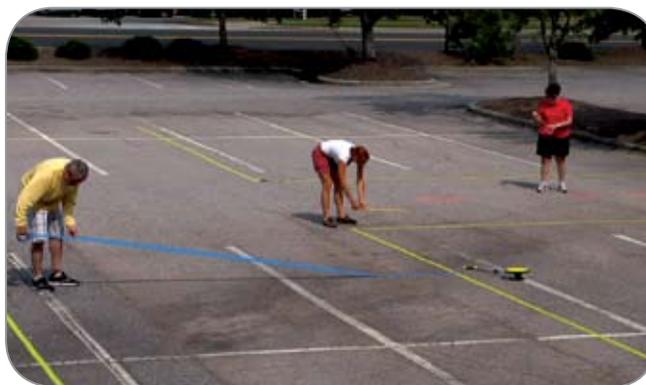
Procedure

1. Select a large site with smooth pavement and no potholes or deep cracks. Measure the area and compare it with the diagram(s) to make sure the course will fit.
2. Sweep the pavement of glass, sand, and other debris if needed before laying out the course. A garage broom works best.
3. Measure out and mark the course, starting with the corners or ends of each line, using small pieces of masking tape. A 50' or longer tape measure is preferred.
4. Beginning at one end, mark from the start of the line down to the next corner. If using wide masking tape, one person can hold the first end of tape down while another unwinds the roll to the next end. After both ends are down, walk over the tape to make it stick.
5. Repeat step 3 for each line.

Marking Materials

There are different materials available to mark the course.

- **Masking tape** is quick, convenient, and leaves no mess afterwards. However, it works best on clean, dry pavement. If it rains the night before the course is laid out, the tape will not stick. Also, in hot weather, tape can dry out, be hard to pull up, and leave a residue if it is left down for more than a day or two.
- **Field lining machine** with lime, marble dust
- **Striping machine** and inverted marking chalk. The machine can often be rented or borrowed from a local hardware store with purchase of the chalk. Depending on the manufacturer, spray chalk can remain visible for up to 30 days.
- **Duct tape** for outdoor use
- **Sidewalk Chalk** is cheap and convenient but it is difficult to mark straight lines. Several volunteers are needed to hold tape measures in places while the line is being drawn.



Altering the Course

Course layouts may need some alterations based on the size of the event and the location of the course. For the lessons geared toward 4th and 5th graders, the ultimate purpose is to simulate riding a bicycle in the road, if an actual safe street location is not feasible. Children at this age are still “literal learners”, so sticking to dimensions that are close to typical street or sidewalk widths is ideal. The more realistic, the better the child can learn and practice the skill to ensure his/her overall safety.

The course is typically laid out outdoors. If a large enough paved space cannot be secured, or if bad weather ensues, then consider using a school’s gymnasium or cafeteria. Community centers may also have large indoor space available. Note that indoor flooring may be slicker than pavement surfaces, so children must travel slower and make more gentle turns.

Some options for altering the course to fit constrained spaces are given in **Appendix C**.

Classroom Management

Children are going to be enthusiastic about riding the bicycles. This section suggests some guidelines that will help keep the activities orderly but still fun for all students. It's important to explain the class rules at the beginning of the program and at the beginning of each lesson. Children need to understand the reasons (such as safety and equipment maintenance) for the rules and the consequences that follow if the rules are broken.

In order to manage your class, here are some helpful tips:

- Have the students form a semi-circle, straddle their bikes, and place their hands palms up on the handlebars. The goal is to keep the children from fidgeting and fiddling with the bike while the instructor is talking.
- Organize the students in pairs by size if they need to share a bike. They can also help each other with fitting their helmets

Highlighted on the right are some suggested rules for when your class is performing the bicycle skills—you may want to add others.

Ideas to Keep All Students Engaged

It's important to keep all children engaged and included in the activities. You may have limited bicycles (some children will have to wait for their turn) or you may have children who are unable to ride the bicycles for some other reason. Whatever your circumstance may be, here are some tips for students to be included:

- Assign children to help with holding signs, being pedestrians, or helping in some other way.
- Create index cards with pedestrian and bicycle safety questions for children to ask each other.
- Have jump ropes or hula hoops on hand for these children to use
- Create index cards with different physical activities for them to do in a circle. Each student takes a card, does the activity then passes the card to the next person until all children have done the activities. If more time remains, the cards can be passed around again. Here are some activities:
 - Balance on 1 leg for 20 seconds
 - Do 20 jumping jacks
 - Stretch to the sky then touch toes 20 times
 - Hop on one foot 10 times then hop on the other foot 10 times
 - Add other activities that are appropriate for the age group.

Suggested Rules for Bicycle Lessons

- Raise your hand before speaking and speak one at a time.
- Always stop your bike safely without skidding, which can cause a crash and also damage the tires.
- Always use the kickstand or prop your bike securely. Let the instructor know if your kickstand has a problem.
- Treat your bike with care so it will work properly.
- Take care of the helmets.
- No hanging helmets on handlebars.
- Pay attention to the instructor(s) and be courteous.
- Always put equipment back in its proper place.
- When children are not performing a skill, the bicycle should be placed in a designated area.

Working with Children Who Cannot Ride a Bicycle

It is important to know who can or cannot ride a bicycle before beginning the skills lessons. Use the Sample Parent Notification Letter and Consent Form **Appendix B)** as a tool to collect this information. For children who cannot ride a bicycle and have no disability preventing them from doing so, teach them to ride. Extra one-on-one time with a patient instructor or parent volunteer can help a child develop enough confidence and competence to complete the on-bicycle skill-building activities in this program.

It is ideal to learn balance and steering skills before pedaling and braking. *Let's Go Biking!* assumes that many children in the K-1 age group may not know how to ride. Refer to the K-1 focused skills lesson, "Bike Control" for basic skills to practice with beginner cyclists. Balance bikes (bicycles without pedals) are ideal for teaching scooting, balancing and gliding skills. For older children, a balance bike may be too small. When a balance bike is not available, or the child is too big to use one, use a regular bicycle and lower the seat far enough to allow the child to sit on it with both feet flat on the ground. Temporarily removing the pedals will help encourage children to practice the fundamentals of balance first. Ask children to practice slowly pushing the bike forward with their feet while sitting on the bike. Once they get going, ask them to lift their feet for as long as they can and glide.



Once comfortable balancing, the pedals can be attached and children can try pedaling a few strokes while steering straight ahead. To begin pedaling, start with one foot on the pedal in the highest position and the other foot on the ground. As the child begins the pedal stroke, ask him/her to push off the ground with his/her foot and put it on the pedal. Be ready to help steady their first few attempts

Teach children to pedal evenly without rocking back and forth and steer in a straight line. Introduce the coaster brakes and how to slow down and stop smoothly and evenly. Allow plenty of time for practice. Give lots of praise and encouragement. Finally, when a child feels confident, raise the seat to the proper riding height.

Some children may need a little extra support. Having some extra cones and a volunteer on hand who can work with a group of children on very basic maneuvering can go a long way to building confidence. Students unable to ride may stay involved during on-bicycle Skill-Building Activities in by holding signs, rotating the traffic signal, or by acting as 'pedestrians' on the course.

Working with Children of Differing Abilities

It is very important to teach children with special needs fundamental walking and bicycling skills – for some, it may ultimately be their primary mode of transportation, a way to maintain independence, or a way to connect with their community. Bicycle riding plays a central role in the social and physical lives of most children in the United States. In addition to providing opportunities for transportation, recreation and physical fitness, bicycle riding contributes to building self-esteem and positive relationships with peers. Riding a bike also assists in the development of coordination, strength, stamina, and overall well-being.

It is important to offer children with disabilities and mental retardation the chance to develop their motor abilities. According to the US Census Bureau (2011), about 4 percent of school-aged children living in metro areas in California have a disability, while almost 6 percent of those living outside metro areas do. Children are more likely to experience cognitive difficulties than other disability types. *Let's Go Biking!* helps to reach out to children at varying cognitive skill levels through the instructive techniques, activities and messages reinforced through different learning paths (visual, auditory, tactile and kinesthetic). The primary difference for children with disabilities is that learning may require additional time and specialized teaching strategies.

It is strongly recommended to create a list of all the students enrolled in the class, including the types of disabilities they have and what their needs are for the class. After creating this list, the instructor should discuss the student's needs with their teacher or review the students Individualized Education Plan, if possible. This will help determine the modifications necessary to adapt the curriculum for students with disabilities.

As a general rule, instructors should use visual, verbal, and tactile cues when giving direction to ensure that students fully understand. For example, when teaching how to search before crossing a street, it can be helpful to post visual cues where the child should be looking. Instructors may gesture and point while verbal instruction directs the child to "Look left at the (visual cue A). Look right at the (visual cue B). Then, look left again."

It is important recognize that some children may have ambulatory difficulty or other impairments which may require unique arrangements to include them in these lessons. Children with disabilities can still participate in the course and learn essential skills to walking and bicycling with proper equipment and instruction. Skill-building activities may need additional time to complete, or require more repetition and practice in order achieve a satisfactory level of competency.

Safe Routes to School – Michigan has an excellent resource for involving students with disabilities in pedestrian safety programming which can be found at saferoutesmichigan.org.

Guidance Specific to Pedestrian Lessons

Children with visual impairments are often trained by Orientation and Mobility specialists to navigate their environment and travel as independently as possible. This guide does not cover street situations and techniques that O&M specialists use to train visually impaired pedestrians to get around. It is not expected that training for these skills is expected of teachers when using this curriculum.

Hands-on learning through outdoor Skill-Building Activities is especially important for students who have a disability because it allows them to practice real-world situations like crossing intersections and using sidewalks.

Strategies for creating an inclusive program:

- Consult special education professionals
- Involve parents of children with disabilities
- Choose an accessible route for Skill-Building Activities
- Practice in the classroom before performing Skill-Building Activities outdoors
- Talk about how to use other senses to determine safety while walking to school
- Supplement lessons with recorded street noises (i.e. sounds from a pedestrian signal)
- Include a classroom assistant or use small groups

Adaptive Equipment

Riding a bicycle can be a great opportunity for children with disabilities. While numerous alternatives to bicycling can offer physical activity and foster intrinsic motivation for participation, the bicycle is uniquely qualified to support physical activity for children with disabilities. The bicycle is relatively inexpensive, comes in a variety of types, has a wide array of adaptive components, offers opportunities for independence, and can be enjoyed on an individual level.

For children with physical disabilities there are a variety of options. Bicycles with rollers, larger sized tricycles, recumbent bicycles, and hand pedaled bicycles are options for a child to be able to independently ride. Assisted options include riding a tandem bicycle or tag-a-long bicycle with a volunteer or instructor to allow for children with certain physical challenges a viable way to participate. In some circumstances one-on-one instruction may be requisite. Additionally, a spotter may be often needed to accompany the participant and offer emotional and physical support.

The following bicycles and related adaptive equipment shown are examples of the types of equipment available. The needs and abilities of each child must be carefully assessed to determine the specific equipment and accessories appropriate for the individual.

Tricycles (Three-Wheeled Bicycle)

Allows for increased stability and modifications. This type of bicycle affords more leg extension and trunk support. Models are available with a range of postures – from recumbent (closer to the ground) to upright. Traditionally they are powered by using the feet. Variations include those powered by using hands in the same motion as a foot-pedaled bike, using a rowing motion, and those where the user may use both hands and feet at the same time.



Tandem Cycles (Bicycles Built for Two People) and Tag-A-Longs

For children who have more difficulty with motor control, decreased cognitive abilities, or visual impairments, a tandem bicycle may be a good option to allow a child to participate in the experience of cycling. There are three-wheeled models that allow for a user to sit parallel (one in front of the other) or perpendicular (side by side). They give the child the opportunity to ride while their partner ensures their safety. Steering and braking options differ. There are several varieties of tag-a-long bicycles which attach to a regular bicycle that offer the ability for a child to pedal.

Adaptive Accessories for Bicycles

- **Foot Straps:** makes it easier for prolonged contact with the pedals
- **Handle Straps:** makes it easier to maintain hand position on handlebars
- **Foot Support:** ranges from traditional supports found on an exercise bike to a modified pedal that conforms to the rider's foot with Velcro straps
- **Trunk Support:** ranges from simple support to bracing structures that can assist with balance
- **Head Padding**
- **Abductor Wedge:** maintains leg alignment
- **Pull/push stick:** used to start and stop momentum to teach a child how to ride a bike



Adaptations for Wheelchairs

- Equipment is available that attaches to the user's wheelchair, allowing the rider to gain access to the cycling experience. Options for individual or tandem riding are available.

Depending on the child's skill level, the following could be used as Indicators of success for children with disabilities:

- Ability to maintain contact with pedals
- Ability to maintain contact with handlebars
- Ability to keep head up and look forward
- Adequate strength to maintain riding speed
- Increased time spent bicycling during each lesson to show an rise in stamina
- Increased ability to control bicycle with each lesson
- Ability to follow basic instructions in a group setting
- Motivated, or able to be motivated to ride a bike
- Increased self-esteem

Adapted Physical Education Resource Manual

This manual details advocacy organizations, equipment companies, support organizations for specific disabilities, and other useful information on bringing bicycling to children who require adapted physical education is maintained by AAPAR. The most up-to-date version can be found on the AAPAR website: www.aahperd.org/aapar/

Let's Go Biking!

Balanced Curriculum Activities for Grades K-1

	Math	English Language Arts	Science	Arts Education	Social Studies	Healthful Living
1 Lesson 1: Gearing Up						
Who Wears a Helmet?						●
Decorate the Helmet				●		
2 Lesson 2: Go By Bike						
Couch Potato Game						●
Story: "My Dad Rides a Bike in His Bedroom"		●				●
3 Lesson 3: Signs, Signals, and Safety						
Traffic Jam Worksheet	●		●			
Brainstorming Traffic Rules					●	
4 Lesson 4: Bicycling Basics						
Make Your Own Traffic Light				●		
Land, Sea or Air?					●	
5 Lesson 5: Bike Control						
Bicycle Geometry	●					
Bicycle Safety Skit		●		●		

Let's Go Biking!

Balanced Curriculum Activities for Grades 2-3

	Math	English Language Arts	Science	Arts Education	Social Studies	Healthful Living
1 Lesson 1: Go By Bike						
Physical Activity and the Heart						●
Where Would I Bike?					●	
2 Lesson 2: Signs, Signals, and Safety						
How Does My Bike Work?		●				
Night Light and Reflectivity			●			
3 Lesson 3: Bicycling Basics						
Grammar and Punctuation		●				
I Ride Safely				●		
4 Lesson 4: Bike Control						
Bicycle Story Telling		●				
Bicycle Safety Skit				●		
5 Lesson 5: Cooperative Riding						
Create a Bike Story		●				
Categorizing Vocabulary		●				

Let's Go Biking!

Balanced Curriculum Activities for Grades 4-5

	Math	English Language Arts	Science	Arts Education	Social Studies	Healthful Living
1 Lesson 1: Getting Ready to Ride						
Estimate Commuting Costs	●					
Persuasive Letter		●				
2 Lesson 2: Bicycling Basics						
Bicycle Hazards Skit				●		
Bicycle Wheels and Geometry	●					
3 Lesson 3: Bike Control						
Bicycle Tourism		●				
Bicycle From Murphy to Manteo	●					
4 Lesson 4: Cooperative Riding						
Role of Bicycle in Transportation and History					●	
Public Service Announcement		●				●
5 Lesson 5: Basic Traffic Skills						
Visual Limitations			●			
Stopping Distance	●					

End-of-Unit Culminating Celebration

In addition to extending child learning by enhancing each lesson with appropriate suggestions for balanced curriculum, instructors are encouraged to organize an end-of-unit activity. This celebration reinforces the learning that has taken place over the course of the unit, helps instructors assess child understanding of the overall goals of the program and allows children to demonstrate to peers, other instructors, administration, parents and community-members their newfound knowledge. **Appendix F** contains Certificates of Completion for *Let's Go Biking!*

Examples of end-of-unit celebrations:

- **Field Trip (all grades):** Children can travel to places in their community where they will demonstrate (and practice) their pedestrian or bicycle safety skills. Instructors should consider inviting parents and other community volunteers.
- **Safety Fair (all grades):** Instructors can invite community workers such as police officers and crossing guards to demonstrate to children their daily work with traffic and pedestrian or bicycle safety. Older children can develop tri-fold posters to show what they have learned. Younger children can, using props and models, demonstrate for attendees what they have learned.
- **Grade-Level Play (grades K-1 or 2-3):** Children can put together a play about transportation safety or other themes in the lessons that include walking and biking.
- **Public Service Announcements (grades 2-3 or 4-5):** Children can create one to two minute educational broadcasts on pedestrian or bicycle safety. Depending on the age and maturity of the children, they can research proper marketing techniques, develop slogans, and use technology to develop their announcements. If allowed, these announcements can be broadcast to others within the teaching organization, or distributed to a wider market.
- **Walk to School Day (all grades):** Children, instructors, parents and members of the school community can celebrate walking to school while practicing safe pedestrian behaviors. International Walk to School Day is usually scheduled during the first full week in October. Additional information is available on at www.walkbiketoschool.org or www.sonomasaferroutes.org.
- **Bike to School Day (all grades):** This nationally held event began in 2012 and is held annually on the second Wednesday in May. Bike to School Day allows children to celebrate bicycling to school while practicing safe bicycle behaviors. Events may coincide with Bike to Work Day, also in May. Additional information is available on www.walkbiketoschool.org or www.sonomasaferroutes.org



Appendix A

Sample Timeline To Plan Bicycle Skill-Building Activities

Instructor's
Guide
Appendix A

Sample Timeline

Timeline	Sample Tasks
Three Months Prior	<ul style="list-style-type: none"> • Choose date, time, and place—obtain necessary approval. • Consider rain dates or alternative indoor locations. • Identify the planning committee, if needed. • Solicit volunteers and partners. • Check with local businesses and local service organizations about the possibility of donating handouts, prizes, or supplies. • Check for availability of loaner bicycles of varying size. • Contact local bike shops or bicycle clubs for volunteers to conduct bicycle inspections.
Eight Weeks Prior	<ul style="list-style-type: none"> • Send letters to volunteers with date, time, location of event, and information on their duties at the event.
Six Weeks Prior	<ul style="list-style-type: none"> • Start marketing the event. For a small event, market through the school or after-school program and with backpack mail. For larger events, use local media, including radio stations and newspapers and announcement flyers in schools, libraries, and recreation centers. Be sure to identify your partners or sponsors for the event. • Children should be reminded to bring their own bicycles and helmets if necessary. (Encourage participants to have their bicycles checked out for maintenance issues before the lessons.) Be sure to notify them if bicycles and helmets will be available for use for participants that don't have equipment or in lieu of their own equipment. If liability waivers are needed, consider sending them out with the equipment reminder. • Make a "floor plan" of the proposed site. If the site will not accommodate all stations needed, modify the layout or reduce the number of stations offered. This may reduce the number of volunteers needed, or select skills may be doubled up at appropriate stations. • Establish a secure place for children to park their bicycles at school or at a community event while registering or participating in non-riding activities. • Confirm with the bicycle shop to discuss any special assistance or needs. • Arrange for medical support, which may be as simple as the school nurse or may be as complicated as an emergency medical services truck on site.
Three Weeks Prior	<ul style="list-style-type: none"> • Make copies of material and signs; gather all material needed to conduct the lessons.
One Week Prior	<ul style="list-style-type: none"> • Have a meeting with all volunteers to explain the lesson(s) and how it will be conducted. • Give each volunteer a copy of the rules and directions. • If law enforcement officers or other organizations are volunteering, invite them to the meeting. • Answer questions and distribute site layout. • Check supplies to make sure you have everything. • Note: Be prepared to repeat the briefing on the day of the lesson and to make sure all questions are answered.
Day Before or Hours Before the Lesson	<ul style="list-style-type: none"> • Set up tables/chairs if needed. • Draw or tape the course layout. • Put station signs up if multiple stations will be laid out. • Note: Weather conditions may determine when the lessons can be set up. If, for example, there is any possibility of rain the night before, the use of chalk to draw the station design is not suitable.
Day of Cycling Skills Lesson	<ul style="list-style-type: none"> • Be flexible. • Be prepared. • Have fun!
After the Cycling Skills Lesson	<ul style="list-style-type: none"> • Meet with volunteers to get feedback about the event and gather suggestions for improving the process for the next one. • Provide a summary report to event partners or sponsors • Send thank you notes. People appreciate a written acknowledgement for their efforts.

Appendix B

Sample Parent Notification Letter and Consent Form

Instructor's
Guide
Appendix B

Sample Forms

Date: _____

Dear Parents/Caregivers:

Part of getting children ready to go out into the world is helping them know how to be safe in traffic. Whether walking or riding a bicycle, children need to know how to respond safely and properly on sidewalks and streets.

As part of a five-part program, we will be conducting simple and fun **bicycle skill-building lesson(s)** on _____ (date) where your child can learn, improve, and practice lifelong skills that may save his/her life. These important safety lessons will teach your child about proper helmet fit, the rules of the road, bike control, (customize/insert lesson objectives here).

The lessons will be taught in a safe learning environment so that children can practice skills and problem-solving. Your child will bring home material to review with you after each lesson; your role to reinforce the practice and behavior needed to enhance your child's ability to ride safely.

In order for your child to participate, the following is required:

1. You must review, sign, and return the attached consent form by _____.
2. Children must wear bicycle helmets and close-toed shoes that fasten (no flip-flops allowed).
 - a. If your child has a bicycle helmet, please send it with him/her on _____ (date).
 - b. If your child does not have a bicycle helmet, every effort will be made to provide either a loaner helmet for use during the activity, a discounted helmet for your purchase, or a free helmet if your family qualifies. If a helmet is needed, please discuss this with _____ prior to the event so arrangements for a helmet can be made for use during these lessons.
3. Insert information about bringing the child's bicycle if this applies.

This program is presented by (list of partners) in collaboration with (who you represent). There is no charge for this event.

Sincerely,

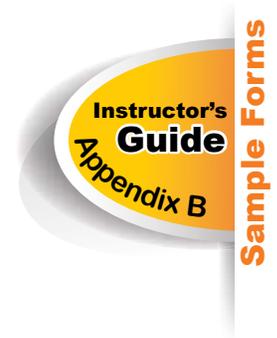
Event Coordinator/Lead Instructor

RELEASE AND WAIVER OF LIABILITY, ASSUMPTION OF RISK,
AND INDEMNITY

AND

Parental/Guardian Release

MINOR CONSENT AND RELEASE



Bicycling Safety Activities

I, minor's parent and/or legal guardian, understand the nature of bicycling activities and the minor's experience and capabilities and believe the minor to be qualified, in good health, and in proper physical condition to participate in such activity. I give permission for my child to participate in the bicycle education program. I hereby release, discharge, covenant not to sue, and agree to indemnify and save and hold harmless (insert organization), instructors and assistants ("Releasees") from all liability, claims, demands, losses, or damages on the minor's account caused or alleged to be caused in whole or in part by the negligence of the Releasees or otherwise, including negligent rescue operations and further agree that if, despite this release, I, the minor, or anyone on the minor's behalf makes a claim against any of the Releasees named above, I will indemnify, save, and hold harmless each of the Releasees from any litigation expenses, attorney fees, loss liability, damage, or cost any may incur as the result of any such claim.

PRINTED NAME OF CHILD: _____

PARENT/GUARDIAN: _____ DAYTIME PHONE: _____

ADDRESS: _____
(Street)

(City) (State) (Zip)

EMERGENCY CONTACT: _____ PHONE: _____

PARENT/GUARDIAN'S SIGNATURE _____ DATE: _____

My child: can ride a bicycle cannot ride a bicycle

If you have time, we need a couple of volunteers to help conduct these lessons at the times / dates below. You do not have to ride a bike to help.

Yes, I'd like to help with the bicycle skill-building activities on the date(s) checked:

- (insert date), time
- (insert date), time
- (insert date), time

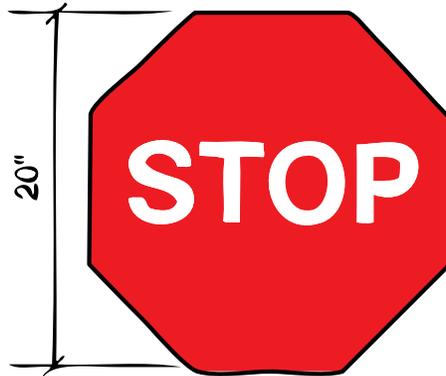
Appendix C

Prop Patterns and Course Layout Modifications

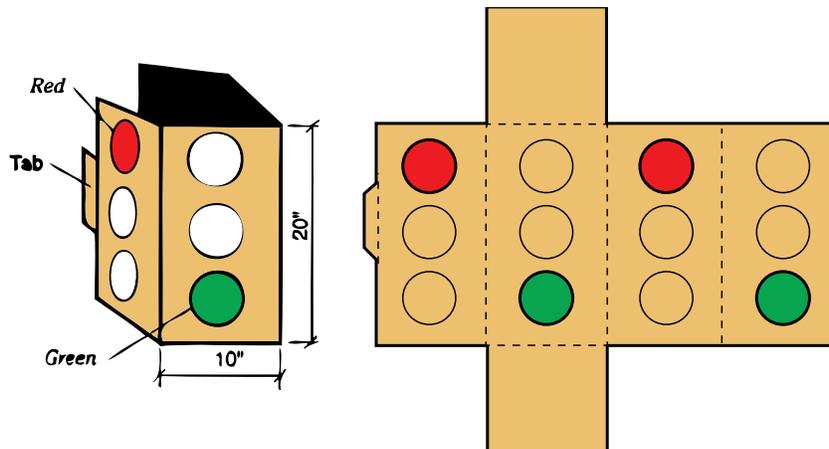
Prop Patterns

Cut color signs to the dimensions shown in the illustrations. Color each appropriately with wide markers or paint. To create freestanding signs, attach the sign to a dowel and push into the top of a traffic cone. The section of bushes can be used to create visual obstructions at the ends of driveways. The bushes will require several boards to create a frame and base.

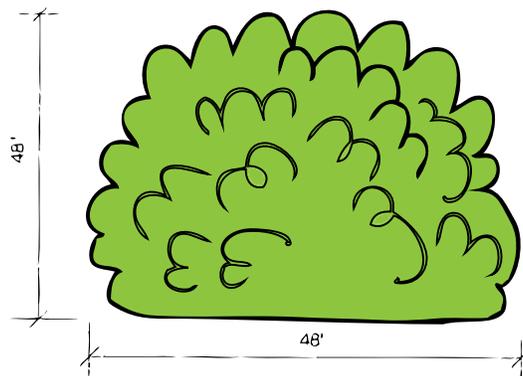
Stop Sign



Traffic Signal



Section of Bushes (Optional)



Course Layout Modifications

It is important to emphasize that the skills required to bicycle can be learned in a variety of settings. Practicing in a real world scenario is the best possible situation for a child to learn the skills outlined in *Let's Go Biking!*, whether that be a quiet residential street or empty parking lot. By focusing on the skills, not the specified layouts, you should be able to work out activities that teach the skills within the constraints at your particular location.

Think creatively. Your city or town may be willing to work with law enforcement to block off a street during a certain portion of the day. There may be a nearby church, police station, fire station, or local business that is willing to let the class use a portion of the parking lot.

It is important to consider the following before modifying the given layouts:

Bike Control Course & Challenge Course

- Children need adequate distance to get started and maintain balance before performing a skill. Ensure that there is an adequate “runway.” Children who can perform the power pedal will require less distance to get started than those who cannot.
- Leave adequate space for kids to turn around after exiting a course. Children who have better bicycle balance and handling skills will require less space to turn than those who cannot.

Driveways Course

- Larger and more complex layouts are given for children in Grades 4-5 who will begin to work on real life situations and skills. These skills in Lesson 4 can be performed on a roadway with a set of opposing driveways that has been blocked off by law enforcement. There may be another area on or near your school grounds which can function well for this activity.
- If you must reduce the length of the existing layout from 80 feet, you will reduce the capacity of the course (the number of children who are able to ride the course at a given time).

Intersections Course

- These skills can be performed at a real intersection (Lesson 5 Intersection Course Activities) which has been blocked off by law enforcement.
- The widths of the streets are approximately 8 feet to mimic a real world scenario. Reducing the street width is a possibility if you are constrained by a few feet on either side of the course.
- Keeping the legs of the intersection long mimics a real world scenario more closely, where one would have time to think about and respond with an appropriate action on the approach to the intersection. This is especially important with the traffic signal activity. If you do not intend to include pedestrians in your intersection, you can reduce the legs of the intersection by several feet.

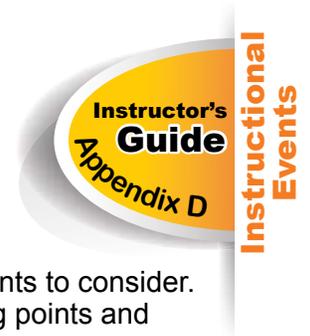
Have Some Cones Available

- There may be instances where a group of children may need more one-on-one instruction to build their confidence or get them to the same proficiency as the rest of the class. Setting up widely spaced cones and having a volunteer assist those children is a great way to incorporate their needs. Have the children weave through the cones while controlling their bicycle. Move the cones closer together to increase the difficulty.
- With larger groups it may be necessary to have more stations so children are not sitting idle. Having some cones on hand to set up a station is the best way to keep children working on skills with minimal set up required.



Appendix D

Holding a Medium or Large Instructional Event



For a Medium or Large instructional event based on the curriculum, there are more elements to consider. In addition to the guidance given in *Organizing the Bicycle Skills Lessons*, the following points and planning matrix will make it easier for you to put together an event of this size:

Target Audience

- Will the skills lessons be part of a community event? If so, is it likely that parents will show up with children of varying ages? Will participants be required to sign up ahead of time, or can they come on a walk-in basis?

Date

- Major community/citywide events work best on a weekend morning.
- Consider scheduling in conjunction with a community event like a safety fair, annual festival, Bike Month (celebrated in May), etc.

Establish a Planning Committee

- For medium to large events, establishing a committee can help distribute the workload necessary to plan and conduct a successful program. Some programs are completely run by bicycle advocate groups or individuals who coordinate the entire effort. Others are offered through groups like Kiwanis clubs, insurance agencies or police departments, who may bring in experts to teach lessons or assist with specific aspects, like helmet fitting or maintenance. If an outside organization will be utilized to conduct the lessons, then a planning committee may not be needed.

Market to the Target Audience

- Larger or citywide events many require advance notice in neighborhood newsletters, bulletin boards, Web sites and e-mail lists. Posters and yard signs can be effective if well-designed and displayed in local gathering places. Grocery stores, libraries, schools, bike shops and places of worship are all good locations to reach large groups. Press releases to local newspapers and radio and television stations are appropriate. The school district may be willing to announce and support a major event with publicity, volunteers and venues for a citywide event.

Let's Go Biking! Event Planning Matrix

Let's Go Biking! Planning Matrix for Medium Events

Event Size	Medium (35-100 at one time or staggered)
Good Resources	<p>Focus primarily on:</p> <ul style="list-style-type: none"> • Location • Date/time • Marketing <p>Example Scenario:</p> <ul style="list-style-type: none"> • This type of program may be held by a local police department, 4-H Club, etc. • A larger site may be required to accommodate the participants. • More volunteers as well as paid staff will be needed. • Plan on spending at least 6 months planning for the event and consider getting partners or sponsors to help defray some costs. • Marketing efforts may include using local media if the event is public. <p>Advantage: These types of events are typically held on the weekends so more parents can get involved.</p> <p>Tip: Consider using indoor and outdoor space to fit in a larger event.</p>
Limited Resources	<p>Focus primarily on:</p> <ul style="list-style-type: none"> • Location • Date/time • Recruiting • Marketing <p>Example Scenario:</p> <ul style="list-style-type: none"> • Recruiting volunteers is a critical, significant aspect to successfully hold a larger event. • A larger site may be required to accommodate the participants. • If the event is public, marketing efforts may include using local media, flyers in schools, libraries and community centers. • If it is a school program, consider engaging parents, high school students looking for service projects, college students, or young adult service organizations to volunteer their time. <p>Advantage: children can practice on their own bicycles. Their helmets most likely will be properly fitted.</p> <p>Tip: School settings can run a relatively large number of children through each bicycle skills lesson by effectively targeting and staggering each grade-group.</p> <p>Tip: Sign up participants or group certain ages together in pre-determined time slots to more effectively use the course layouts and minimize wait time by staggering participants.</p>

Let's Go Biking! Event Planning Matrix

Let's Go Biking! Planning Matrix for Large Events

Event Size	Large (100 – 300+ at one time)
Good Resources	<p>Focus primarily on:</p> <ul style="list-style-type: none"> • Location • Date/time • Marketing <p>Example Scenario:</p> <ul style="list-style-type: none"> • This type of program may be held by a municipality, Safe Kids coalition, advocacy group, etc. • Consider hiring professionals to train and direct volunteers. • Seek corporate sponsors to defray costs in exchange for free advertising. • Allow for at least 9 months of planning. • Venue should provide amenities like restrooms, water fountains, shade, large space for course layouts, and bicycle storage/parking as well as parking for those who drive to the event. <p>Advantage: Community events may also target and teach lessons to teenagers and adults.</p>
Limited Resources	<ul style="list-style-type: none"> • Not recommended.