A stem-based program created to engage youth girls in the world of active transportation



# Lesson Guide

**Toledo Safe Routes to School** 

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### About Toledo Girls in Gear

The Toledo "Girls in Gear" (GIG) is a Safe Routes to School (SRTS) program in Toledo, Ohio. Toledo GIG takes a STEM (Science, Technology, Engineering, and Mathematics) based approach to inspiring adolescent girls grades 5th -8th grade to discover the joys of biking and the positive impact it has on their health and wellness while also exploring careers and hobbies that are typically male dominated.

GIG covers five lesson topics:

- 1. Basic bicycle safety
- 2. Basic bicycle mechanics
- 3. Nutrition education
- 4. Community urban design
- 5. Community Engagement/Public Speaking

The lessons are led by a diverse group of local female professionals currently working in the field of each topic.

GIG participants are engaged in fun, hands-on activities that introduce STEM career options in their own community by way of the bicycle. The program is designed to motivate adolescent girls to engage in the world of active transportation; all while improving their overall health and wellness through bicycling, developing healthy habits to last a lifetime, building self-confidence, and an awareness of the importance of infrastructure in communities that provide safe and comfortable routes for all forms of transportation.

Engaging adolescent girls between the ages of 10 – 14 in these types of experiences has a strong and positive influence on them throughout their adolescent and adult lives. A team of female professionals leads each of the skill building modules. The goal is to engage and inspire these young girls with a diverse group of professional women, breaking down barriers so that more girls recognize that typically male-dominated careers including engineering, city and regional planning and mechanics are achievable.



Students are provided the skills and resources needed to maintain their bicycle, ensuring their safety and ability to continue experiencing the joys of bicycling in their community.

# Why a Girls-Specific Bicycling Empowerment Program?

Toledo SRTS provides education and encouragement programs for students in lower income neighborhoods where 85% of the students are economically disadvantaged. According to the Lucas County Community Health Assessment (2023); Thirty-one percent of female youth ages 10-17 are overweight or obese. When comparing youth obesity rates among ethnic groups; Hispanic (22.7%) and Non-Hispanic Black (22%) are significantly higher than Non-Hispanic white at 13.1 percent. Lower income neighborhoods tend to have a higher percentage of African American and Hispanic students.

### **Impact Goals**

Toledo GIG aspires to motivate young girls to improve their overall health and wellness by using fun and simple activities on bicycle mechanics, bicycle safety and nutrition education with the potential to increase their physical activity outside of school time and foster healthy decision making that lasts a life time.

Through skill building, adult mentorship and understanding that a bike is a reliable mode of transportation. GIG has the ability to improve student attendance and academic performance, build self-confidence, foster independence, and develop positive community relationships.

### **Empowerment**

According to the National Science and Engineering Statistics report, men make up the majority of the STEM workforce. In 2021, about two-thirds (65%) of those employed in STEM occupations were men and about one-third (35%) were women. The STEM based approach of GIG encourages the hands on exploration of typically male dominated careers, empowering young girls to have the confidence in believing that a profession in science, engineering or urban planning is achievable.

### **Strengthening Community**

Local women in government and leadership roles have the ability to empower and educate young girls with the leadership skills needed to become influential in their communities, create positive change, and help breakdown systemic barriers.



As a culture, we don't particularly encourage girls to play with mechanical objects which can develop both comfort and interest.

 Association for Women in Science

### Gearing Up

### Tips to help you have a successful Girls in Gear program.

- At least six months prior to program; secure program location, recruit female session presenters, and funding for all materials and supplies.
- · At least two months prior identify local female community leaders to attend final session
- · At least one-month prior work with local school districts to identify potential participants and have each student complete the application form and get necessary signatures. Request a list of supplies from your presenters that is needed.
- Recruit volunteers or coordinate with a local bike shop to provide free bicycle safety checks and repairs if participants will be providing their own bicycle for program. This can be arranged to be done in advance or done on site during the girls first lesson in bicycle mechanics.
- · One-week prior gather all materials and supplies needed for each lesson.
- Each lesson is approximately two hours long.
- Work book pages are provided throughout the lessons, and are a helpful tool for instruction. They can be used as needed for teaching reference or for participants to complete as a tool for evaluation.
- Girls that complete all of the lessons will receive a bicycle lock, helmet, lights and wearable reflective gear. In some instances, girls may receive a bicycle if funding and donations have been secured.
- The girls will have the opportunity to meet with a local community leaders during the last session, and share their vison for urban development in their school neighborhood. It is important to invite this person several weeks in advance.

### Basic Bicycle Mechanics

### **SESSION ONE**

### **FOCUS**

The girls will learn the anatomy of a bicycle, how the essential parts work together, how to use a tire pump, and fix a flat tire.

### **OBJECTIVES:** The participants will be able to:

- Identify the anatomy of a bicycle
- Describe how the parts of a bicycle work together
- Demonstrate how to use a tire pump and how to fix a flat tire

### **SETTING**

Indoors or outdoors with enough room for them to spread out and work on the bikes

ICE BREAKER - Hand out a small bag of skittles to each girl.

### **SESSION STEPS**

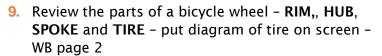
- 1. Have each girl choose their favorite color of skittle and answer the questions on the "skittle getting to know you guide" in power point.
- 2. Provide a brief overview of what will be covered in the next 5 days.
- 3. Show the girls the frame of a bicycle, with no components (parts) attached. This visual demonstration gives them an idea of all the parts it takes to build a bicycle to make it perform.
- **4.** Show them a complete bike and discuss the differences.
- 5. Test their knowledge. Give each girl a copy of page 1 in the workbook. Have the girls work in small groups and label as many parts as possible. Then display the labeled diagram and review.

### **MATERIALS NEEDED**

- Mini bag of skittles for each participant
- · 1bike frame
- 1 2 work stands (more if possible, one for each demonstration bike)
- 1 2 demonstration bikes (more if group is large and it's possible to have more)
- · Sets of tire levers (enough for each student)
- A few sets of tires for practice
- Extra tire tubes
- · Bike pump (a few if possible)
- · Chain oil and rag
- · Workbook, pages 1 and 2
- ABC Quick Check handout
- Blown up bicycle diagram (on foam core exhibit board would be helpful) or project on screen.

Session continued...

- 6. Check their knowledge. Put a bike on a work stand and ask for volunteers to point at and name a part of the bicycle. During this process you can guide them as needed. Once a part is identified, explain what each part does. Use the instructor guide if needed. See Appendix
- **7.** Particularly point to the wheel and teach the terms: tire, spoke, hub and rim.
- 8. Give each girl their personal tool set. Show them the three tools needed to change a flat bike tire: tire lever, tube and bike air pump. Watch video stop at 6:55. <a href="https://youtu.be/slgokbtPBqg">https://youtu.be/slgokbtPBqg</a> (Blippy) Alterernate video <a href="https://www.youtube.com/watch?v=Y6agbiDq\_bl">https://www.youtube.com/watch?v=Y6agbiDq\_bl</a>



Rim - the part of the wheel that the tire is attached

**Hub** - the core of the wheel, contains bearings and flanges for spokes.

**Spoke** – connects wheel rim to hub and keeps rim from bending

Tire - attached to wheel rim and holds the tube

10. Do a step-by-step demonstration of changing a flat tire. Divide into manageable group sizes and have the girls practice changing flats. Have them practice helping each other. Then, have them change the tires again on their own.

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### Basic Bicycle Mechanics

### **SESSION TWO**

### **FOCUS**

The girls will review bicycle terms. Learn and practice ABC Quick Check, how to lube chains, and how gears work.

### **OBJECTIVES:** The participants will be able to:

- Explain what the "ABC" and "Quick" stand for in ABC Quick Check
- Demonstrate how to do an "ABC" Quick Check
- Demonstrate how to clean and lube their bike chains
- Describe how gears work

#### **SETTING**

Indoors or outdoors with enough room for them to spread out and work on the bikes

### **SESSION STEPS**

- 1. Transition the discussion to recognizing a safe or unsafe bike. Show pictures and compare the difference between a safe bike and an unsafe bike to ride (see appendix). Have them discuss why the bike is safe or unsafe
- 2. Ask the girls what they think ABC stands for?
- 3. Air Discuss why it's important to frequently check how much air you have in your tires before riding your bike. Discuss PSI—Pounds per Square Inch—the common unit of measurement for air pressure in tires. Talk about how there are different ranges depending upon different tire sizes.

Watch and learn more about bike tire pressure and putting air in tire.

https://www.youtube.com/watch?v=IBtKSIKM\_Y8 stop video around 3:38. Allow each girl in opportunity to check and put air in a bicycle tire.

**4. Brakes** - Discuss the importance of checking your brakes before going on any bike rides. Check the brake pads, cables, etc.

### **ABC QUICK CHECK**



Check your bike with the ABC QUICK CHECK.

**Air** – pinch the tires, which should be hard

Brakes – make sure your brakes work

Chain – check the chain to make sure it is not loose

**QUICK** – take a look; make sure wheels and bolts are tight

**CHECK** – the rest of your bike; make sure nothing is broken

Watch and learn more about adjusting bike brakes: <a href="https://www.youtube.com/watch?v=IBtKSIKM\_Y8">https://www.youtube.com/watch?v=IBtKSIKM\_Y8</a> - Start 3:38 and stop at 5:10

**5. Chain** – Discuss the importance of maintaining a clean chain and how to do this. Keep your bike chain lubed for better performance.

Session continued...

Watch and learn more about maintaining a bike chain: <a href="https://www.youtube.com/watch?v=IBtKSIKM\_Y8">https://www.youtube.com/watch?v=IBtKSIKM\_Y8</a> - Start at 5:10 play until 6:47.

- 6. Ask the girls what they think Quick Check means Start the video at 6:47 and play till the end.

  <a href="https://www.youtube.com/watch?v=IBtKSIKM">https://www.youtube.com/watch?v=IBtKSIKM</a>

  \_Y8
- Have work stands set up and assist each of the girls through an ABC Quick Check. Lesson leaders should demonstrate and guide the girls through the process.
- 8. Have the girls practice shifting with the right and left shifters. Have them watch the function of the right shifter and then the left shifter.
- Have the girls practice taking chain lube and applying it to chain. Then have them take a cloth and practice removing any excess.
- **10.** Transition to understanding how gears work. Watch the video:

https://www.youtube.com/watch?v=CebW72nt\_ek&t=109s

- **11.** Place bicycles in stands demonstrate how to change the gears on the bicycle.
- 12. Gather together and discuss the bicycle mechanics work they have practiced. Discuss concerns or difficulties anyone may have had while working on the bikes.
- **13.** Review what will be covered in the next session.



### Bicycle Safety

### **SESSION ONE**

### **FOCUS**

Girls will assess their bicycle safety knowledge, understand the importance of wearing a bike helmet, get properly fitted for a bike helmet, learn about proper safety equipment while riding, Learn basic rules of the road

### **OBJECTIVES:** The participants will be able to:

- Explain the importance of wearing a bike helmet
- Demonstrate how to properly fit a bicycle helmet
- · Identify proper safety equipment while riding
- Describe and demonstrate the basic rules of the road

### **SETTING**

Indoors, in a classroom or meeting around a table

### **SESSION STEPS**

- Let's start with helmet safety! Explain that the most important reason to wear a bike helmet is because it helps protect your head from skull and brain injuries. Bring out a few helmets and ask the girls to demonstrate how they wear helmets and how they would fit themselves or others for a helmet. Listen to their ideas and expand on those that will lead into the following guidelines.
- 2. Have the girls turn to pages 3 and 4. As a group, read through the questions and allow them to think about the answers. They may fill in the answers they know. Allow them to refer to these pages during this session and fill in correct answers as they learn new information.
- 3. Use the NHTSA Ride Safe Ride Smart video <a href="https://youtu.be/PkVeKrk-WOE?si=TaBMjRZQssQaGNVP">https://youtu.be/PkVeKrk-WOE?si=TaBMjRZQssQaGNVP</a> about the importance of wearing a helmet. Stop at 4.55 and complete the activity below

- · Workbook, pages 3 6
- Photos of safe bikes, unsafe bikes, (see appendix)
- Helmets
- Stickers
- Permanent markers
- Variety of reflectors, lights, reflective clothing (e.g., vest)
- Honey dew melon
- · Tarp and paper towels
- · Step ladder or chiar
- · Chalk paint and sidewalk chalk
- Cones
- · Safety signs/stencils
- · A bike for each girl
- Bike Rode guide you may use this guide https://cluballiance.aaa.com/-/media/Files/Foundation/Scho ol-Safety-Patrol/2024/Bike-Rodeo-Manual-APPROVED-FINAL-VERSION.pdf or any that you prefer.
- Pens and Pencils

### Session continued...

- 4. Complete the NHTSA melon drop activity to demonstrate the importance of wearing a helmet. <a href="https://www.nhtsa.gov/sites/nhtsa.gov/files/811110.p">https://www.nhtsa.gov/sites/nhtsa.gov/files/811110.p</a> <a href="mailto:df">df</a> Once the demonstration and discussion is completed have students sign a helmet safety pledge.
- 5. Transition to bike safety and rules of the road. Start Ped Safer Journey video. https://www.pedbikeinfo.org/bicyclesaferjourney/mi\_e\_n.html Stop at .58. Ask students - How might you prepare yourself and your bicycle to be more visible while riding? After responses restart video and stop at 2.04 and discuss/review main points and show students multiple samples of bike lights, reflective gear etc...
- 6. Rules of the road Ask students Where do you like to travel to on your bike? (school, a friend's house, library, park, store) Follow up with the Where do you typically ride your bike to get to these places? (sidewalk, bike path, separated bike lane, in the road) What do you think are some good rules of the road for bicyclist? Prompt answers by asking them to think about what some rules are for cars. Start video and stop at 3.37 discuss and review.
- 7. Continue video until end more rules of the road. Ask Students What do you think could happen if talking or texting on your phone while riding? What are things in the neighborhood/environment you need to be able to hear while riding your bike? (cars, car horns, large vehicles; busses, garbage trucks, fire and police sirens)

Show Walk Safe in Toledo Video - Explain while this video is centered around pedestrian most of it pertains to bike safety. Use this as an opportunity to point out the difference in bike and pedestrian safety in terms which side of the road to walk/bike on.

https://youtu.be/WDQ5Eiz3tlE

### Bicycle Safety

### **SESSION TWO**

### **FOCUS**

Girls will learn hand signals. Girl will practice bike safety skills; starting, stopping, dismounting, riding a straight line, riding between cones, what to do at a street crossing and rail road crossing, how to shift gears and use proper hand signals while riding.

### **OBJECTIVES:** The participants will be able to:

- Demonstrate important bike riding skills
- Explain what to do at a street crossing and rail road crossina
- Demonstrate and practice shifting gears
- Demonstrate proper hand signals while riding.

#### **SETTING**

Outdoors, a large black top area where bicycle skill stations can be set up.

- 1. Opening video dangers of riding against traffic Dangers of riding against Traffic
- 2. Before heading outdoors. Review Bicycle Safety from Day 1. Use page 3 and 4 in workbook for review. Instruct the girls on proper hand signals.
- 3. Hand signaling Use page 5 in workbook. Distribute hand signal hand out.
- 4. Using the suggested bike rodeo guide or any that you prefer. Show the girls what types of courses that will be set up and the skills they will be practicing. Show illustrations on board.
- 5. Have the girls complete an ABC Quick Check on their bicycle.
- 6. Have each girl put on their helmet and check if it is fitted properly. Refer to the helmet guide.
- 7. Now it's time to head outdoors! You will want to have the rodeo set up already so you can get right to work! Use the bicycle rodeo guide to instruct on how to maneuver each of the courses.
- 8. Head back to class and allow 15 mins. for discussion on how comfortable the girls felt practicing each course. Is there a specific skill/course they would like to practice more?

- · Girls personal bicycles or a Fleet of bikes
- Helmets
- · Skills course materials (road signs, chalk, cones, sponges)
- · Skills course set-up in an empty parking lot (or a large room or gymnasium)
- · 2 3 adult volunteers
- · Workbook, pages 5 and 6
- · Hand signal hand out.
- Helmet fitting guide.
- · AAA Bicycle Rodeo Guide
- https://www.livewelltoledo.o rg/\_files/ugd/04d8b4\_5d58 3e74dbf7459c972b6bc0873 3da4c.pdf

Session continued...

**INSTRUCTOR NOTES:** 

### Health and Nutrition

### SESSION ONE

### **FOCUS**

Girls will learn the five food groups, there benefits and why eating a variety color of food is important. They will create multiple heathy meals using a healthy meal plate, and taste test multiple fruits and vegetables; identify the color, explain their health benefits and describe their texture and taste.

### **OBJECTIVES:** The participants will be able to:

- Name the 5 basic food groups and their benefits
- Describe their favorite meal, the food groups represented and health benefits.
- Identify the color group of fruits and vegetables and explain their benefits

#### **SETTING**

Indoors around a table or classroom

### **SESSION STEPS**

- 1. FUN ACTIVITY Make license name plate for bike upon arrival.
- 2. Watch this bike safety video for review Riding safely on the sidewalk -Riding safely on sidewalks
- 3. Ask students to close their eyes and think about their favorite meal or dish. Encourage them to think about the taste, texture, and colors of their favorite meal.
- 4. Invite students to share and brainstorm descriptive words to use when talking about food. (For example: Texture — soft, chewy, crunchy; Taste — sweet, sour, spicy; Feeling — comforting, happy, warm) List these words on the board

- · My plate
- Realistic food models
- · Rainbow food placemat
- · Assortment of fruits and vegetables for tasting
- · Knife and cutting board
- Gloves (for sanitation purposes when handling food)
- · Workbook pg. 7
- Supplies for making personalized license plates

### Session continued... Session continued...

5. Give students 10 minutes to write about their favorite meal in their notebooks. Ask them to answer the following questions: \*What is your favorite meal? Does it have a name? Why is it your favorite meal? (Prompts: Is there a specific memory around the meal, when it is served, or who prepares it?) \*How would you describe it to **someone?** (Prompts: Can you think of 10 or more words that describe your favorite meal? Think about the taste, what it looks like, and the colors it has, the texture, the feeling you get when you eat the meal.) \*What specific foods and beverages are part of your favorite meal?



- **6.** Transition to food groups. Watch https://www.youtube.com/watch?v=L9ymkJK2QCU
- 7. Ask the group what the 5 food groups are? **Answer**: Grains, Dairy, Protein, Fruits and Vegetables
- 8. Pass out MyPlate handout. Work book pg. 7. Explain the MyPlate and why it is divided like it is. Ask them to name different foods in each group.
- 9. Watch https://www.youtube.com/watch?v=VEhMKaUI2ns and then distribute the rainbow of foods placemat.
- 10. Activity: Divide the girls into groups of 2.

Give the girls each a MyPlate and model food.

Have the girls plan a healthy meal using all the food groups and display them on their plates. Keep in mind to keep the food colorful.

Once finished have each group report out on their meal.

- What food did they pick for each food group and why?
- Is the plate colorful?
- Looking at the food rainbow what are the benefits of the foods you chose?
- Would you eat this meal if your parents made it?
- 11. Select some fruits and vegetables that are less common. Have students taste the foods and describe them; color outside and inside, texture (soft, hard, juicy, mushy), taste (sweet, sour, bitter, spicy, bland)
- 12. Make smoothies!



### Health and Nutrition

### **SESSION TWO**

#### **FOCUS**

The girls will become more aware of the importance of healthy foods and meals. Learn to read and understand the Nutrition Food Label, determine which foods are healthy or unhealthy by reading the Nutrition Food Label, identify healthy drink options, and determine the amount of sugar found in common beverage options.

### **OBJECTIVES:** The participants will be able to:

- Read and explain the nutrition food label and determine which foods are healthy or unhealthy.
- Identify the amount of sugar found in common beverages and identify healthier options.
- Describe the health benefits of water.

#### **SETTING**

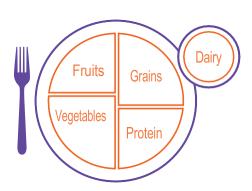
Indoors around a table or classroom

### **SESSION STEPS**

- 1. Have the girls discuss what they learned in the last session about the relevance of color when it comes to fruits and vegetables and how the body uses them. Encourage them to use nutrition terminology such as: fiber, carbohydrates, protein, energy, antioxidants, protein synthesis, etc.
- 2. Use workbook page 8 and have the girls fill in the Myplate with what they ate for dinner last night. Ask volunteers to identify the food groups, different colors of foods and describe the health benefits. (they can look at their rainbow foods place mat)
- 3. Transition to understanding food labels: Watch https://www.youtube.com/watch?v=OWMSJqnYFMY Go over Food Label handout in workbook pg. ( )
  - Serving size/number of servings

  - Nutrients (look at those to limit i.e. fat and sodium and those that have good nutrients)
  - Healthy Carbohydrates
  - Protein
  - Daily Values
  - Ingredient list

- · Assortment of food labels or containers with Nutrition Fact labels
- · Nutrition label worksheet
- · Samples of healthy and unhealthy bottled drinks
- · Sugar, measuring spoons, sharpie, sandwich bags.
- · Assortment of fruits and vegetables for tasting
- · Knife and cutting board
- Gloves (for sanitation purposes when handling food)
- · Workbook, pages 8 9



Session continued...
Session continued...

- 4. Activity: Place different food boxes around the room and have students go to each food and fill in the food label sheet and compare the foods and answer the questions.
  - Answer the following questions. Come back as a group and discuss the findings:
    - Were they surprised at what they found out?
    - Do they eat more than one serving size?
- **5.** Transition to understanding healthy and unhealthy beverages WATCH:
  - https://www.youtube.com/watch?v=Myh696Pmrfw
- 6. Discuss the importance of hydration when bike riding or doing any activities in hot temperatures. Water is extremely important for a healthy body and our body consists of 60-70% water.
  - It moistens the ears, nose and throat.
  - Helps get rid of toxins in the liver and kidneys
  - Improves skin health and digestion.

Drinking water after exercise will help hydrate you making you feel good and prevent dehydration.

You always want to drink before you are thirsty.

- **7. Activity** Bring in different common drinks: pop, diet pop, juice, sports drink, tea, water
  - Have them look at the labels of the drinks. Record calories, fat, sugar and first ingredient
  - Then based on the sugar grams of each drinks; measure out the amount of sugar using a teaspoon and sugar:
  - 4gams of sugar=1tsp of sugar

### Questions:

- Are you surprised by the results?
- Will this make you think the next time you are choosing a beverage to drink?
- **8. Activity:** Taste different infused waters and decorate water bottles.
- **9.** Wrap up Question. What are two changes you will consider making about your nutrition habits?
- **10.** Close with this video to reinforce bike safety!

Rules of the Road

**INSTRUCTOR NOTES:** 

### Community urban design

### **SESSION ONE**

#### **FOCUS**

The girls will compare "friendly" vs. "unfriendly" streets, and learn to recognize what makes a street safe for all users. They will be encouraged to use urban design terms while they read a map and create a walking route. Then they will conduct an audit of the route.

### **OBJECTIVES:** The participants will be able to:

- Recognize the difference between "friendly" and "unfriendly" streets.
- Identify and name elements that make a street safe for all users. Use urban design terms while they read a map and create a walking route.

Note: Tell the girls in advance that part of the session will be walking outside so that they dress appropriately for the weather.

### **SETTING**

Indoors and outdoors

### **OPTIONAL RESOURCE ARTICLE**

Session continued...

- Visuals and/or photos of street designs—safe and unsafe (see appendix)
- Map of the neighborhood to create a walking route with the girls
- Walk audit forms. Download at: bike.ohio.gov, click on the Girls in Gear image or copy from page 21
- · Pens, pencils
- · Workbook page 10

### **SESSION STEPS**

- 1. Begin by asking the girls if they've ever felt uncomfortable or unsafe walking or bicycling around their neighborhoods or to school.
- 2. Ask them what makes them uncomfortable about their experiences walking or bicycling.
- 3. Pull out the safe and unsafe street design visuals/photos from the appendix. Have the girls look at the photo(s) and verbally identify what is unfriendly or "bad" first. Lead a discussion about what they see or don't see on the street.
- **4.** Next show them friendly or "safe" street visuals/photos from the appendix and have them identify the elements that are visible on the friendly street(s) that are not on the unfriendly street(s). We want them to see and understand the differences between a people-friendly street—one that invites you to stay and makes you feel safe—and one that is unfriendly.
- 5. Once the conversation is finished, hand out or show a copy of the walk audit (page 21) to the girls. Explain the walk audit and that you'll be conducting one as a group. Show them a map so they can create a route. Then—get walking!
- 6. You may choose to have the girls take the audit form with them so they can refer to it and mark it as they walk or they may complete it after the walk. They may rate the neighborhood on the walk audit form independently or in pairs.
- 7. When the audit is finished, have them share and compare their observations and ratings. This discussion will help them understand how others feel about the neighborhood and will encourage them to use urban design terms.
- 8. Have the girls complete page 10 in the workbook. Encourage them to discuss and share their answers.



### Community urban design

### **WALK AUDIT**

### **LOCATION OF WALK:**

### DID YOU HAVE ROOM TO WALK?

- □ Yes
   □ Some problems:
   □ Sidewalks were broken or cracked
   □ Sidewalks were blocked with poles, signs, shrubbery, dumpsters, etc.
   □ No sidewalks, paths or shoulders
   □ Too much traffic
  - ☐ Something else

Rating (circle one)

Locations of problems:

### **WAS IT EASY TO CROSS?**

- ☐ Yes ☐ Some problems:
  - ☐ Road was too wide
  - □ Needed striped crosswalks or traffic signals□ Traffic signals made us wait too long
  - or did not give us enough time to cross
  - ☐ Parked cars blocked our view of traffic
  - □ Trees or plants blocked our view of traffic□ Needed curb ramps or ramps needed repair
  - ☐ Something else

Rating (circle one)

Locations of problems:

### **DID DRIVERS BEHAVE WELL?**

- ☐ Yes ☐ Some problems: Drivers...
  - ☐ Backed out of driveways without looking
  - ☐ Did not yield to people crossing the street
  - ☐ Sped up to make it through traffic lights or drove through traffic lights
  - ☐ Turned into people crossing the street
  - ☐ Drove too fast
  - $\square$  Something else Rating 1 2 3 4 5 6

### **RATING SCALE**



### WAS IT EASY TO FOLLOW SAFETY RULES?

☐ Yes ☐ No Cross at crosswalks or where you could

see and be seen by drivers?

- ☐ Yes ☐ No Stop and look left, right and then left again before crossing the streets?
- ☐ Yes ☐ No Walk on sidewalks or shoulders facing traffic where there are no sidewalks?
- ☐ Yes ☐ No Cross with a light or traffic signal?

Rating (circle one)

Locations of problems:

1 2 3 4 5 6

#### WAS YOUR WALK FUN?

- ☐ Yes ☐ Some problems:
  - □ Drivers
  - ☐ Needed more grass, flowers or trees
  - □ Scary dogs
  - ☐ Scary people
  - □ Not well lit
  - ☐ Dirty, lots of litter or trash
  - ☐ Dirty air due to car exhaust
  - □ Something else

### HOW DOES YOUR NEIGHBORHOOD STACK UP?

Add up your ratings and decide!

- 1. \_\_\_\_\_20 24 Celebrate! You have a great neighborhood for walking!
- 2. \_\_\_\_\_ 16 19 Celebrate a little.

Your neighborhood is pretty good

- 3. \_\_\_\_\_12-15 OK, but it needs work. It needs a lot of work
  - 8 11

You deserve better than that!

5. \_\_\_\_\_ 4 - It is a disaster for walking!

### Community urban design

### **SESSION TWO**

### **FOCUS**

The girls will analyze the neighborhood that they audited in Session 1. They will make urban design suggestions and improvements by placing photos of people-friendly objects onto maps of the areas they walked.

### **OBJECTIVES:**: The participants will be able to:

- Use a walk audit form and rate their neighborhood
- Recognize "friendly" and "unfriendly" elements in their neighborhood
- Describe urban design suggestions and improvements.

#### **SETTING**

Indoors in a classroom

### **OPTIONAL RESOURCE ARTICLE**



http://www.nytimes.com/2014/05/11/opinion/sunday/ kristof-whats-so-scary-about-smart-girls.html? r=3

### **SESSION STEPS**

- 1. Have the girls gather around a table. Briefly review the visual examples of safe vs. unsafe examples of street designs to create a thinking bridge about how they can make changes in the neighborhood that they audited in Session 1.
- 2. Lead a discussion of their neighborhood designs, including what they like and dislike about them. See optional resource article.
  - · Are there street lights?
  - · Are there trash cans?
  - Do they need recycling containers?
  - · For example, "My neighborhood has a small park with a playground. There is a bench on one side however there is no trash can or tree for shade. There is a crosswalk to cross the street to get to the

Session continued...

- Print off a variety of elements found on peoplefriendly streets, like: benches, trees, trash cans, recycling receptacles, bike lanes, etc., so that the girls can place them on parts of streets where they feel these elements are missing (see appendix)
- · 3' x 2' blown up map of the neighborhood where the walk audit is being conducted. This could be a GIS map or one downloaded from Google or Bing
- Extra paper to use to create additional elements
- Glue
- Markers for labeling
- · White out or invisible tape
- Workbook page 11

### Session continued...

playground. There isn't a bike lane and as an engineer, I would like to add one."

- **3.** Display the enlarged map of the neighborhood that they walked through as a group in Session 1.
- **4.** Have the girls discuss ideas that would improve the neighborhood.
  - How they would like to redesign the streets? Adding crosswalks and pedestrian signals? Improving the lighting? Installing stop or yield signs? etc.
  - · Where they would add amenities such as benches, trees, trash cans, recycling containers, bike lanes, bike racks, etc.
- 5. Once they have discussed and agreed as a group, have the girls work together to add changes by drawing on the map, using white out or gluing down elements they would like to add. If the girls want to make a lot of changes, they may want to recreate the map on poster board.
- · Have students complete the new and improved map.
- · Discuss the girls' answers.

### Public speaking

### **SESSION ONE**

Speaking in front of people hones communication skills. Practicing good public speaking improves self confidence. We want the girls to be comfortable speaking in front of people.

#### **FOCUS**

The girls will organize and practice their map design project presentations.

### **OBJECTIVES**: The participants will be able to:

- Display good communication skills,
- Improve their self confidence.
- Feel comfortable speaking in front of people

### **SETTING**

Indoor around a table

### **SESSION STEPS**

- 1. Have the completed map design project(s) on display for the girls to discuss and review together.
- 2. Hand out paper and index cards. Help the girls organize an outline on the paper; and write down speaking points for their map presentation(s) on the index cards. Let them know that the guests may ask questions so they will be prepared. Encourage empowerment and teamwork among the girls.
- 3. Have the girls practice their presentation(s), give them feedback, answer their questions and compliment them. Compliments could include: good eye contact, good posture (remember to stand up straight), well organized and/or other descriptive examples.
- 4. Have the girls complete page 12 in the workbook and share their responses.

- Completed map design project(s)
- Index cards
- Paper
- Workbook page 12

# Public speaking session two

### Graduation

This is the day where a local community leader should come in to meet the girls and talk about their involvement in the community. The purpose of bringing in an inspiring community leader is to show these young girls that they are capable of making a difference in their community; and that they can start NOW.

Split up this last session into three parts. First have the presentations of the girls' redesigned streets. Then have the community leader speak. Last, award the bicycles.

Note: The steps outlined below are one way to structure this session. You also could go to the community leader's office for remarks, then return to your meeting place for the girls' presentations and bicycle awards. Another option is to have the presentations and community leader speak at your meeting site or at the leader's offices.

If you feel that you won't have enough time, you can award the bicycles on another day.

Think about if the girls are driven to school and if they can ride their bikes home, or if they will need help loading them into cars.

### **SESSION STEPS**

- 1. Invite the community leader(s) speaker, guests, as well as parents, other local leaders and any other supportive adults to attend the Community Urban Design map presentations.
- Have the girls present their new map designs and ideas.
   Have them answer questions from the guests. Encourage
   the guests to ask lots of questions about the map(s) and
   about GIG.
- 3. Have the community leader(s) introduce themselves and allow the girls to ask them questions.
- 4. The grand finale... bike presentations!

- Community leader(s)
- Guests
- Sound system, if available, and with microphone, if a large crowd of 40-plus is expected
- Completed projects
- Presentation outlines/ index cards
- Bicycles and other graduation gift items helmets, locks, lights, etc.

### **Current Girls in Gear Partners**

Girls in Gear would not be the unique program it is without the amazing collaborators that contribute to this program. Girls in Gear is providing young girls with unique opportunities, and it is also allowing different groups to teach the girls, help them grow as leaders and serve as role models, professionals and instructors.

The five skill-building areas of focus are another reason why Girls in Gear is a success. Young girls are building confidence, developing technical skills and learning about transportation independence. Interacting with female professionals inspires them, and reinforces that women belong and that more women are needed in these career fields.

The partners listed below believe in this program and have donated their time to help inspire the next generation of young female leaders. We thank them for their support and leadership.

















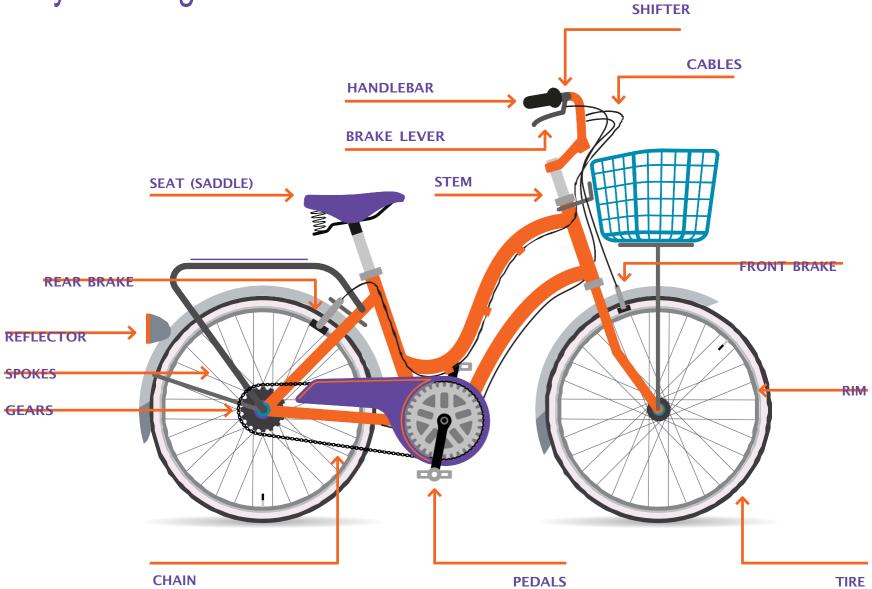




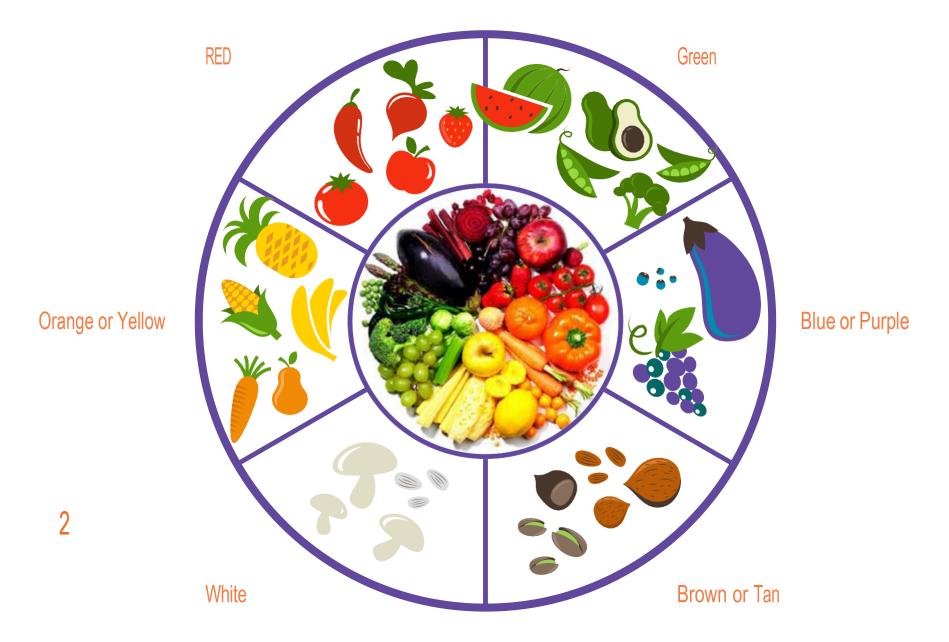


# Appendix

### Bicycle Diagram



### Rainbow Wheel



## Street Designs (Unfriendly)



















## Street Designs (FRIENDLY)



4

### People Friendly Street elements





**AFFILIATED PROGRAMS** 



