

Guide to Pedestrian & Bicycling Maps

How to create route maps and arrival/dismissal maps for your school

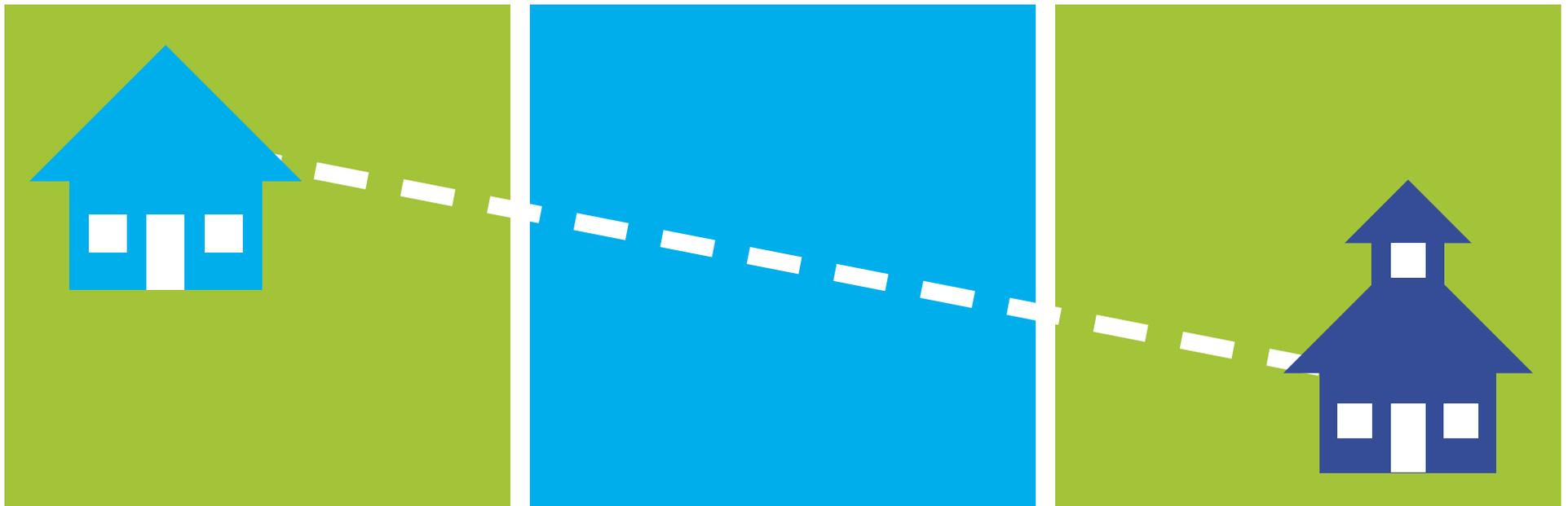




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1 Introduction

Why is mapping important for SRTS?

Maps are one of the most valuable tools in the Safe Route to School (SRTS) toolbox. Maps can help you communicate about:

- Existing pedestrian and bicycle infrastructure
- Potential pedestrian and bicycling routes
- Walking school bus and bicycle train routes
- Arrival and dismissal procedures
- And much more!

Guide purpose and organization

This guide is intended for people who are interested in developing SRTS maps but don't have previous map making experience or access to sophisticated map making tools. It describes the different types of maps you can create to support your SRTS program, with a focus on pedestrian and bicycling route maps and arrival and dismissal maps. It then provides step-by-step instructions for how to build SRTS maps using widely available programs such as Google My Maps and Microsoft PowerPoint.

Map templates

The guide is accompanied by map templates that can help you build maps in either Google My Maps or Microsoft PowerPoint. The templates include map icons, legends, and other graphics appropriate for SRTS maps, and can be downloaded at: www.dot.state.mn.us/mnsaferoutes/



2 Types of SRTS Maps

Pedestrian and bicycling route maps

Pedestrian and bicycling route maps show existing pedestrian and bicycle infrastructure and potential routes students and parents/guardians can use to walk and bicycle to school. They can be a useful encouragement tool and can help steer students and parents/guardians toward routes that are safer.

Pedestrian and bicycling route maps are helpful when they show:

- School location
- Street network
- Pedestrian and bicycling routes
- Crossing guard locations
- Controlled crossing locations (i.e., crossing locations that have STOP signs or traffic signals)

Pedestrian and bicycling route maps sometimes also show:

- Sidewalks
- Shared-use paths
- Bike lanes
- Estimated pedestrian and biking times and distances

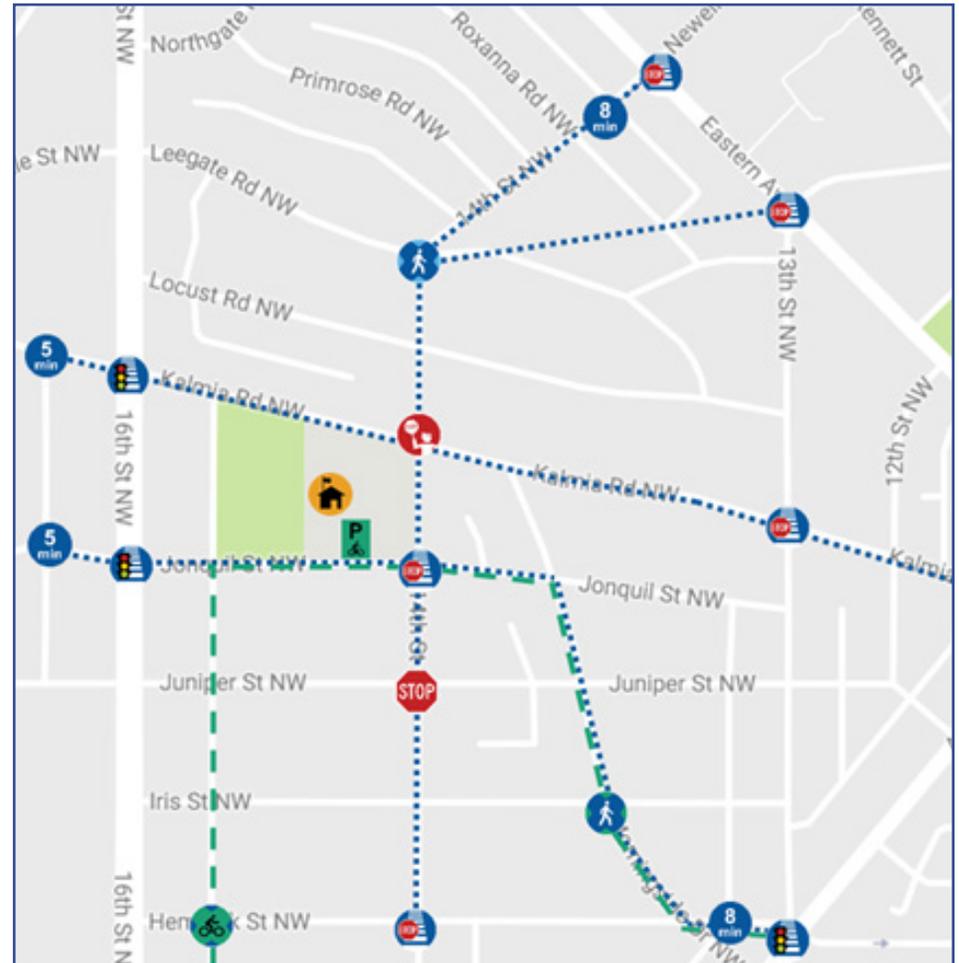


Figure 1: Example of a pedestrian and bicycling route map with estimated time and distance.

Selecting potential pedestrian and bicycling routes

When developing a pedestrian and bicycle route map, its best not to label the routes “safe” or “recommended,” as this may expose the school or district to liability. Even without these labels, however, you’ll need to spend some time thinking through and testing the routes you put on your map. Key considerations for selecting potential pedestrian and bicycling routes include:

- **Where students live.** This may seem obvious, but one of the most important considerations when identifying potential pedestrian and bicycling routes is where students live. It’s usually not possible (or advisable) to show every potential pedestrian and bicycling route, so you’ll want to choose ones that serve the most students—the main trunk lines, if you will, rather than every little branch. This implies having relatively detailed knowledge of where pockets of students live in the school neighborhood. If you don’t know where students live already, a school administrator may be able to help you. Ask if they can point you to a map of the school attendance boundary and tell you where students are provided with school bus service and where such service is not available. People from the school district may also be able to build a map using student address information showing where students are clustered around the school. Maps like this can be extremely useful when considering potential pedestrian and bicycling routes.
- **Student age and mode.** See *Estimating Pedestrian and Bicycling Route Lengths* at right for more information.

Estimating Student Pedestrian & Bicycling Route Lengths

Pedestrian and bicycling routes should generally reflect a distance students can cover in less than 30 minutes. The best way to determine this is by actually testing the route in the company of students of average age and ability for your school, but here are some rough rules of thumb for laying out the routes.

Grades	Max Walk	Max Bike
K-5	.75 mile	1.5 miles
6-8	1 mile	2 miles
9-12	1.5 miles	3 miles

Note: The rules of thumb provided above are suggested maximum distances. Shorter distances may be more appropriate for your map, e.g., if students are eligible for school bus service beyond a certain distance. Also, keep in mind that student walking and bicycling speeds may be significantly impacted by hills, intersection waiting times, and other factors, which is why it is always best to actually test the route before putting it on a map for public distribution.

Table 1: *Estimating Student Pedestrian & Bicycling Route Lengths*

- **Existing pedestrian and bicycle infrastructure.** The routes you select should take advantage of existing pedestrian and bicycle infrastructure near your school, such as sidewalks, shared use paths or trails, bicycle lanes, and bicycle lanes that provide a barrier between the roadway and bicycle lane. Make sure you have a good understanding of where such infrastructure is located when planning your routes and pay attention to the conditions on each side of the street as they may differ. The best way to develop this understanding is to actually walk or bike the routes you are considering by yourself first and later with a student. Aerial and street view maps, such as those available through Google Maps, Bing, and other services, can also help, but shouldn't be used for final route decisions, since the images shown on these services may be outdated or may not show all relevant details.
- **Motor vehicle speeds and volumes.** Routes should include streets with relatively low motor vehicle volumes and speeds (30 mph or less). This is particularly important in cases where students are expected to walk or bicycle in the street versus on a sidewalk or trail. You probably have a sense of this if you've traveled near the school, but make sure your impressions relate to school arrival and dismissal times, when there may be more traffic than during the middle of the day.
- **Street crossings.** Select pedestrian and bicycle-friendly crossing locations where vehicle traffic is controlled by a STOP sign or traffic light and there is good visibility. Also choose intersections where crossing guards or student safety patrol members are located.
- **Driveways:** Select pedestrian and bicycle routes that minimize driveway crossings, particularly crossings of active commercial driveways.
- **Personal security concerns.** Potential routes should generally avoid locations where there are known concerns about personal security, such as aggressive dogs or high crime activity. Talk with school administrators and other members of the school community to find out whether there are specific concerns near your school. A local law enforcement officer may also help you develop a better picture of where the concerns are.
- **Access to school grounds.** Finally, be sure to consider how student pedestrians and bicyclists will enter and exit school grounds once they arrive. Try to pick routes that keep student pedestrians and bicyclists from crossing or mixing with large volumes of vehicular traffic.

IMPORTANT! It is essential that you test potential routes before putting them on your map. Walk or bike the routes as appropriate, first by yourself and then with a student of average age from your school and one familiar with the neighborhood. Doing so will give you a better sense of how long the routes take, how suitable they are for the target age group, and whether any adjustments are needed.

Walking school bus, bicycle train, and special event maps

Many of the principles associated with developing pedestrian and bicycling route maps also apply to maps showing routes for walking school buses and bicycle trains, as well as maps for special events, such as a [Walk to School Day](#). However, these types of maps usually include some additional elements and considerations.

Key Map Elements

Your walking school bus, bicycle train, or special event map should include the elements typically included on a pedestrian and bicycling route map (see *Pedestrian and bicycling route maps*); however, it should also include meet up locations and times. In the case of a walking school bus or bicycle train, there may be multiple meet-up locations or “stops.”

Route Selection

The route selection process for a walking school bus, bicycle train, and special event map is also very similar to the route selection process for pedestrian and bicycling route maps (see *Selecting potential pedestrian and bicycling routes*). You’ll need to take into account such things as the mode, the students’ age, whether or not parents are present, existing pedestrian and bicycle infrastructure, safe crossing locations, and motor vehicle speeds and volumes, but you’ll also need to consider group size and select routes that provide enough space for your group to travel safely.

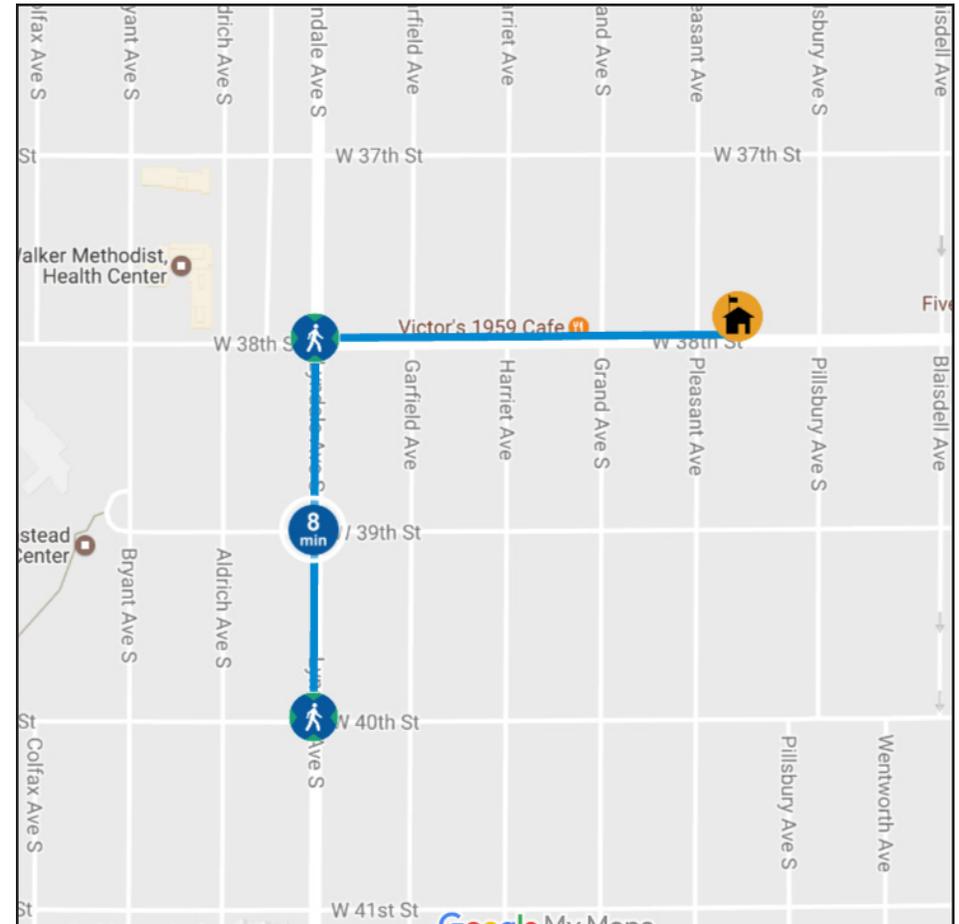


Figure 2. Walking School Bus Map

Arrival and dismissal maps

Arrival and dismissal maps can help you communicate important information about your arrival and dismissal process to parents/guardians and students. Arrival and dismissal maps do this by demonstrating where student pedestrians and bicyclists should safely access the school campus and where and how parent/guardian drop-off and pick-up occurs. Arrival and dismissal maps normally show:

- The school building and school property
- Roadways, intersections, and properties adjacent to the school
- Locations where pedestrians and bicyclists enter the school building
- On-campus sidewalks and paths
- Bicycle parking locations
- Bus-rider drop-off and pick-up locations as well as how buses enter and exit the campus
- Car rider drop-off and pick-up locations as well as how cars enter and exit the campus



Figure 3. Example of a street map base.

Arrival and dismissal maps sometimes also show:

- Pathways that pedestrians with disabilities can use to access the school building (i.e., ADA accessible pathways)
- Nearby public transit stops
- No parking zones

Arrival and dismissal maps may be built using a street map base (Figure 3) or aerial base (Figure 4). The advantage of the street map base is its relative simplicity and the fact that points and lines tend to show up better than they do on an aerial. The advantage of the aerial base is that it often shows important details not present on a street map, such as on-campus sidewalks, driveways, and parking lots.

Note: Aerial bases can be adjusted in PowerPoint to make lines and points more visible. One technique is to overlay the aerial base with a white rectangle and then adjust the rectangle's transparency so the aerial can be seen underneath but with less contrast (Figure 4).



Figure 4: Aerial base map example

Arrival and dismissal considerations

Arrival and dismissal maps are an excellent tool for communicating your school's arrival and dismissal procedures to parents/guardians and students. The process of developing the map should ideally be preceded by a review of the procedures themselves to determine whether there are ways they might be improved. Arrival and dismissal procedures that are well-designed and consistently applied:

- Promote safety
- Encourage walking and bicycling
- Keep motor vehicle traffic around the school to a minimum
- Address parent/guardian and community concerns

The best way to conduct a review of your existing arrival and dismissal is to gather together a group of key stakeholders from the school to observe arrival and dismissal on a typical day. At minimum this group should include the school principal. It might also include representatives from the school district's transportation division, law enforcement officers, parents/guardians, students, community members, local government planners or engineers, and others. The group should represent a diversity of perspectives. You'll want to include both people who have experience walking and bicycling to the school and people more familiar with driving or taking the bus.

Members of the group should be fully briefed about the existing processes before conducting observations. After the arrival or dismissal observation, bring the group back together to debrief about what they saw, generate ideas about how the process could be improved and build consensus. Consider reviewing infrastructure recommendations with an engineer to determine the feasibility of implementing the changes.



Strategies to consider that may help create a more comfortable environment for walking and bicycling include:

- Establishing off-campus parent/guardian drop-off and pick-up locations to reduce traffic immediately around the school. Potential locations include a nearby churches, parks, or retail parking lots.
- Routing pedestrians, bicyclists, cars, and buses in a way that minimizes the need for pedestrians and bicyclists to cross in front of, or share space in the roadway with, cars and buses.
- Staggering when students are dismissed, so that student pedestrians and bicyclists aren't departing the school at exactly the same time as cars and buses. Letting student pedestrians and bicyclists go first can further incentivize walking and bicycling and reduce school-related vehicle traffic.
- Implementing no-stopping or no-parking zones, increasing enforcement, and increasing education to prevent mid-block drop-offs.

Consider using the [SRTS Neighborhood Assessment Guide](#) to evaluate arrival and dismissal procedures at your school!

3 Building and Sharing Your Map

Basic Map Making Principles

Once you've determined what type of map you want, the next step is to build it. Here are some basic principles to keep in mind as you build:

- **Establish a hierarchy.** The most important elements should be highlighted. Use of size or contrasting color are two ways to achieve this hierarchy. Street names should be legible but do not need to be as large as the names of walking school bus stops, the school, or other important landmarks.
- **Avoid clutter.** Omit any data that isn't relevant to your map. Having too much information on the map can be confusing to the reader and obscure the message you are trying to convey.
- **Make it legible.** All information should be readable. Although your map should include a legend, the symbols on the map should be intuitive enough that readers shouldn't have to constantly refer to it.
- **Provide enough contrast.** There should be enough contrast to easily distinguish elements on the map. Ideally maps should be readable when printed in black and white.

Mapping Tools

There are several mapping tools to choose from, but the advice in this guide focuses on building maps with Google My Maps and Microsoft PowerPoint, since these tools are relatively simple and widely available. Each tool has particular strengths and weaknesses to consider before choosing (see Table 2).



Source: [USMC Archives. Map Making, Circa 1943.](#)

	Google My Maps	Microsoft PowerPoint
Strengths	<ul style="list-style-type: none"> • Dynamic and interactive. Users can zoom, scroll, and switch between aerial and street map views. • Can be embedded on a website with interactive features. • Map users can turn layers on and off based on their interest. • Base map and aerial imagery regularly updated. • Can be exported in three common formats, PNG, JPEG, and KML (a file type that can be used in various GIS programs). 	<ul style="list-style-type: none"> • Wide range of colors, dashed lines, and other graphics available to build map. • Can be easily customized. • Can adjust aerial base to make points and lines show up better. • Can be posted on a website. • Can be exported in a wide range of common formats, including PNG, JPEG, and PDF.
Considerations	<ul style="list-style-type: none"> • Requires Google account. • Limited range of colors to choose from for points and lines. • Limited ability to customize maps. • Can't adjust aerial base to make points and lines show up better. • Icons don't resize when zooming in and out, which can make details difficult to see when map is zoomed out. 	<ul style="list-style-type: none"> • Requires PowerPoint software. • Maps aren't interactive. Users can't zoom, scroll, and switch between aerial and street map views. • Must use screen capture from Google Maps or other mapping program to create base map.
Best for...	<ul style="list-style-type: none"> • Pedestrian and bicycling route maps where the ability to zoom in and out or switch from aerial to street map view offers a significant benefit to users attempting to understand the routes. 	<ul style="list-style-type: none"> • Arrival and dismissal maps. • Pedestrian and bicycling route maps where the ability to zoom in and out or switch from street map to aerial view does not offer a significant benefit to users attempting to understand the routes.

Table 2: Google My Maps and Microsoft PowerPoint: Strengths, Weaknesses, Considerations, and Best Use

Building and sharing your map in Google My Maps

Logging into Google

1. You'll need a Google account to use Google My Maps. If you don't already have one, go to <https://accounts.google.com/signup> and fill out the form.
2. Log in to your Google account at <https://accounts.google.com/>.

Downloading and copying the map template

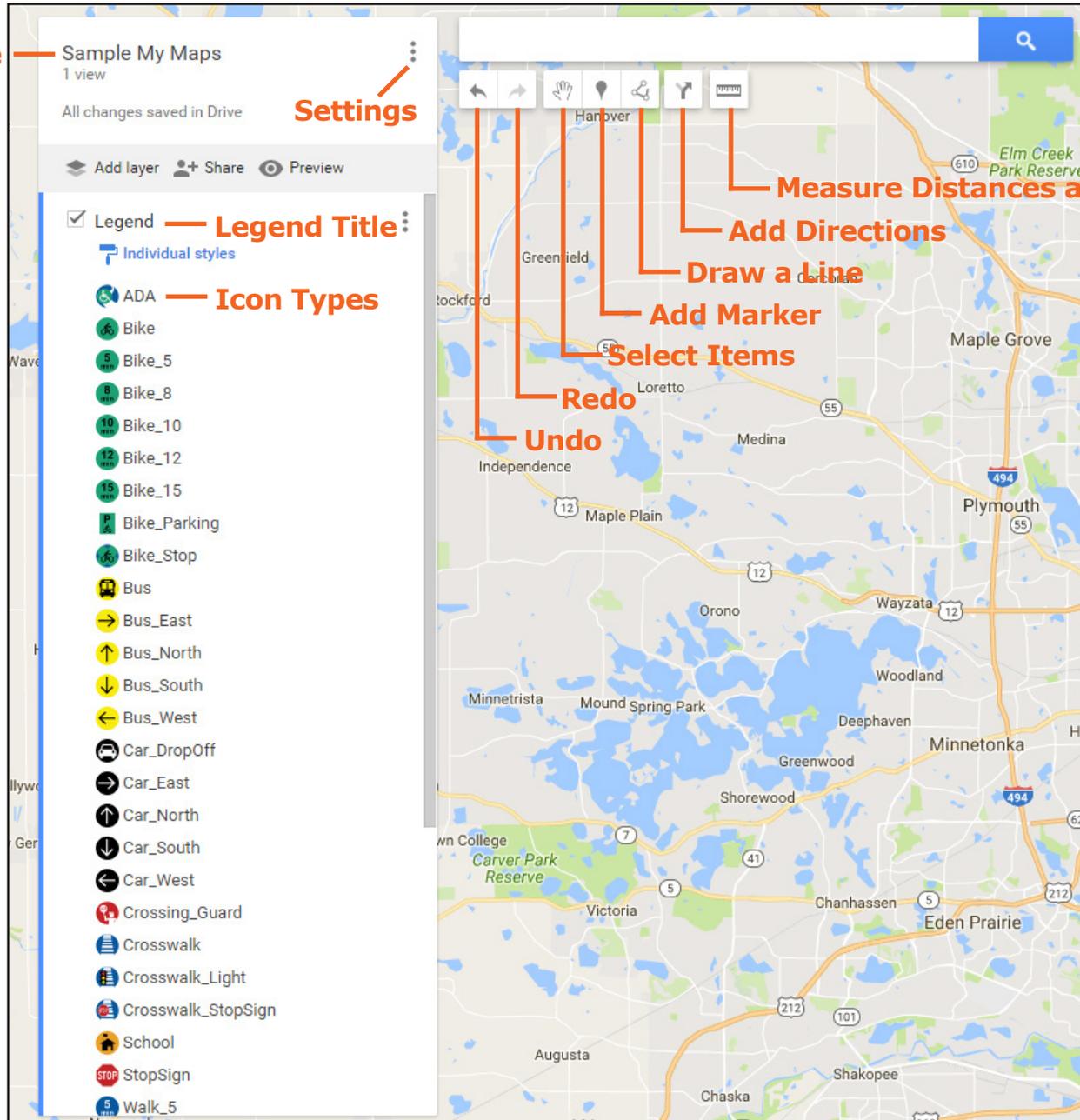
1. Once logged in, open the MN SRTS Map Template at: https://docs.google.com/file/d/0B3T4sHMzQN0NUTFTTDNLRmhtREk/edit?usp=doclist_api&filetype=mspresentation 
2. After the map template opens, click the settings icon in the upper right-hand corner of the legend for PC users and in the upper left-hand corner for Mac users.
3. Select "copy map".
4. Enter a name for your map and click OK.
5. A new editable map will open that comes preloaded with more than 30 custom map icons. These icons are included in a layer called "Legend." Layers are a way of grouping points and lines on your map.

Finding your school and adding it to the map

1. Below the "Legend" layer are several untitled layers and a "School" layer.
2. Click the "School" layer so that a blue bar appears on the left to indicate that it has been selected.
3. Click inside the search bar at the top of the page and type your school name or address to locate it. Google will suggest possible options as you type or you can click the search button to show results on the map.
4. Click your schools' name if it appears as you type or click on the green icon  that appears after you have searched. An info box will now appear over your school's location. Click "Add to map."
5. To change the icon representing the school to the custom icon provided in the template, click the style button . The style button can be found in the info box or in the legend by hovering over the point for your school. Once the style window is open, select from the school icon from under the "Other Icons" heading. If the school icon does not appear, click the "More icons" button and scroll to the "Custom Icons" at the bottom of the window. See Figure 5 for a complete list of custom icons provided with the Minnesota SRTS Program map template.

See Figure 5 to learn about Google My Map buttons.

Map Title



Settings

Legend Title

Icon Types

Undo

Redo

Select Items

Add Marker

Draw a Line

Add Directions

Measure Distances and Area

Figure 5: Google My Maps Layout & Buttons

Adding and styling icons

Icons can represent crossing guards, crosswalks, bicycle racks, and other non-linear locations. Please see Figure 6 for a full list of available icons. To add and style icons:

1. Navigate to where you would like to place the icon.
2. Select the marker button  and then click within the map where you would like to place the icon. Name the point and add any additional details. Click "Save."
3. Click the style button  in the info window or in the legend. Select from the icons under the "Other Icons" heading. If the desired icon does not appear, click the "More icons" button and scroll to the "Custom Icons" at the bottom of the window for PC users and at the top of the window for MAC users.
4. Select the desired icon and click "OK."

To move an icon, click on the icon to highlight it and then drag it to the new location.

Adding and styling lines

Lines represent pedestrian and bicycling routes and other linear features. To add and style lines:

1. Navigate to where you would like to place the line.
2. Select the line button  and click within the map where you would like to start the line, click again to continue the line, and finally click twice to complete the line. Name the line (School Bus Route for example) and add any additional details. Click "Save."

3. Click the style button  to adjust the color of the line and the line width. Use blue for pedestrian routes and green for bicycling routes. Use different widths for pedestrian and bicycling routes to help people who are color blind distinguish between them. Drag the slider in the style window to adjust the width of the line. To reshape a line, click on the line to highlight it and then drag the handles (white circles) to the desired locations.

Setting the default view

In Google My Maps, the default view is the view that appears when the map is first loaded. To set the default view, zoom and scroll so that the entire area you wish to display is visible. Click the settings icon , in the upper right corner of the legend for PC users and in the upper left corner for Mac users, and select "Set default view." Click the "Preview" button in order to test the default view.

Please read the **Finalizing, Distributing, and Maintaining Your Map** section below for important advice on confirming your map, vetting it with administrators, and distributing it to members of the school community.

WALKING & BICYCLING



Bike Parking

Bike Stop

Walk Stop

ADA Path

School

WALK DISTANCES



5 Minute Walk

8 Minute Walk

10 Minute Walk

12 Minute Walk

15 Minute Walk

BIKE DISTANCES



5 Minute Bike Ride

8 Minute Bike Ride

10 Minute Bike Ride

12 Minute Bike Ride

15 Minute Bike Ride

CROSSINGS



Stop Sign

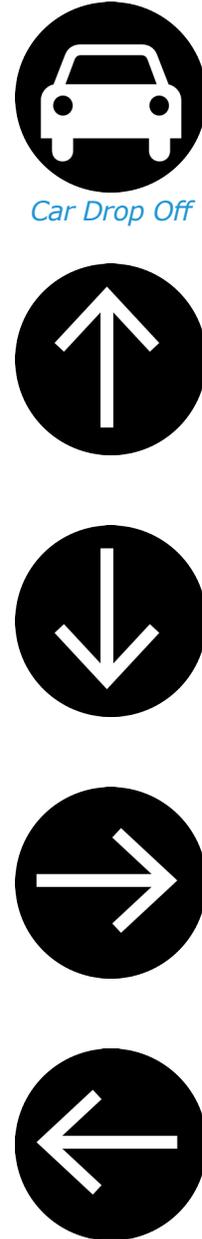
Crossing Guard

Crosswalk

Crosswalk with Light

Crosswalk with Stop Sign

VEHICULAR TRAFFIC



Car Drop Off

BUS TRAFFIC



Bus Drop Off

Figure 6. Available Mapping Icons

Sharing your map

There are three ways to share a map built in Google My Maps. You can:

- **Share the map link:** To share your map, click the “Share” button  which will open the sharing settings dialogue box. In this window, you can change the privacy settings for your map. Sharing can be restricted to specific people, anyone with the map link, or anyone on the web. From here you can copy the map link and post it to your social media networks or send it in an email. You can also send invitations to specific people through Google My Maps, giving them permission to either view or edit your map.
- **Print the map to paper or image file:** To print your map, click the settings icon  in the top right corner of the legend and select print. This will give you the option to choose the size, orientation, and output type. Output types include paper and PDF or PNG files.
- **Embed the map on a website:** To embed the map on a website, click the settings icon  in the top right corner of the legend and select “Embed on my site.” Copy the HTML code from the dialogue box and paste it into the code of the website. The width and height of the embedded map can be adjusted within the HTML code.



Please refer back to the **Types of SRTS Maps** section for guidance on what to include in your map, potential data sources, and important considerations.

Building and sharing your map in Microsoft PowerPoint

Microsoft PowerPoint is a widely-used program for developing presentations. Step-by-step instructions for creating and sharing a SRTS map in PowerPoint using the Minnesota SRTS Program's custom map template are provided below. For additional questions, please see [Microsoft's PowerPoint help page](#).

Downloading the map template

1. Download the PowerPoint template [here](#).

2. Save the template to a location on your computer that is easy to find.
3. Open the template to begin building your map.

Upon opening the template, you'll notice a variety of icons available for mapping your pedestrian and bicycling routes (Figure 7).

These icons can be used to show crossing types, route times, school locations, and more. Two example maps can be found following the icons page. This guide explains how to copy a base map from Google Maps into your PowerPoint and provides steps to add icons and routes.

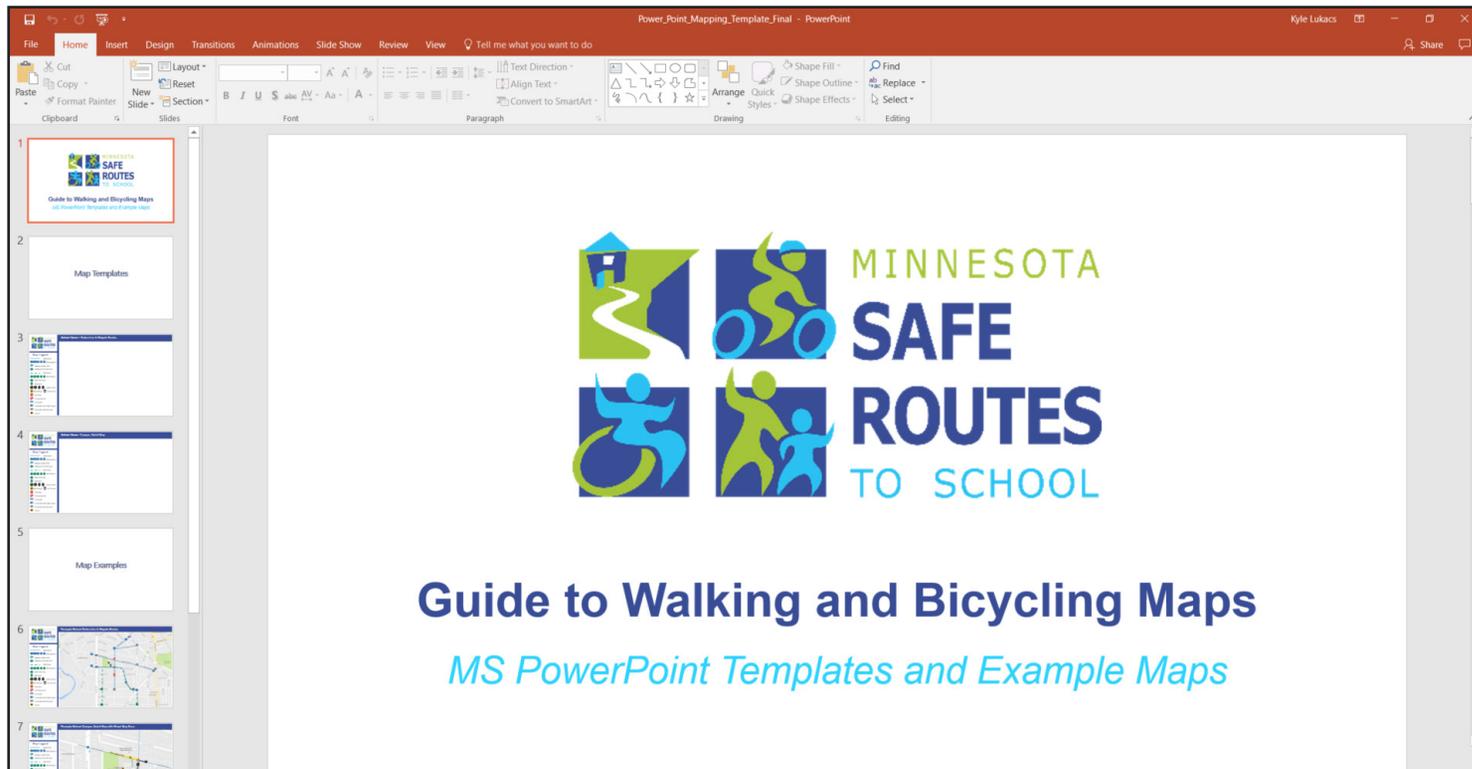


Figure 7. View of the PowerPoint map template for pedestrian and bicycling route maps

Copying the base map

The base map is a map showing your school and the streets around it that you will copy and paste into PowerPoint.

1. Open Google Maps. Click inside the search bar at the top of the page and type your school name. Google will suggest possible options as you type. Click on your school's name and address when it pops up.
2. Zoom to the extent you want your map to cover by using the mouse scroll wheel or the +/- controls at the lower right-hand corner of the screen.
3. If necessary, switch from "Map" view to "Earth" view by clicking the box in the lower left-hand corner. "Map" view provides a basic street map whereas "Earth" view shows the aerial.
4. Switch the "Earth" view from 3D to 2D by clicking the menu bar in the upper left-hand corner clicking 3D. While 3D imagery can be useful, it is typically only available in urban areas and is more difficult to read.
5. Take a screenshot.
 - **Windows Users**—Open the Snipping Tool. Drag the cursor, which appears as a +, over the area you want to capture. Once you release, the snippet window will open with the screen shot. Right click the image and select "copy" or hit CTRL+C simultaneously.
 - **Macintosh Users**—Press "COMMAND+SHIFT+4" simultaneously. Once pressed, the cursor will change to a +. Click and drag to cover the area you want to capture.
6. Navigate to one of the blank map pages in the PowerPoint template. Click within the blank box that says "Click Icon to add picture." Paste the screen shot image from step 4 into this box.
7. Now your map is ready to be customized with icons and routes.

Adding icons to your map

There are many icons available to show the location of crossing guards, crosswalks, bicycle racks, and other point locations (Figure 6). To add icons, follow the directions below:

1. Select the icon you wish to add to your map in the legend to the left. Copy the selected icon.
2. Paste the selected icon into your PowerPoint. The pasted icon will appear directly under the existing icon in the legend. Drag the pasted icon to the desired location on your map.

Adding and styling lines

Lines can be used to map pedestrian and bicycling routes and other linear features. To add and style lines, follow the directions below:

1. Select the type of line you wish to add to your map from the legend. Copy this line.
2. Paste the selected line into your PowerPoint. The pasted line will appear directly under the existing line in the legend.
3. Drag the pasted line to the desired location on your map.
4. Use the handles (white circles) at either end of the line to adjust the line's length and angle.
5. If you are mapping a pedestrian and bicycling route, offset the lines so that both modes are visible.

Sharing your map

1. To export your map to PDF, click "File," "Export," and "Create PDF/XPS."
2. To export your map as an image, click "File," "Save As," and select an image type (.PNG or .JPG).

4 Finalizing, Distributing, and Maintaining Your Map

In the previous sections, you learned about the technical details of building and sharing a SRTS map using Google My Maps or Microsoft PowerPoint. However, there are a few other very important steps that you'll need to take before actually distributing the map to members of the school community.

First, if you haven't already done so, it is **essential** to actually walk or bicycle any suggested pedestrian and bicycle route shown on your map to conform that it is suitable for the children at your school. It is recommended that you do this initially by yourself or with other adults (e.g. parents/guardians, school officials, local planning staff) and then with students of average age and ability at your school. If you note any hazards along the route, see what can be done in the near-term to address them, or consider an alternative route.

Second, when distributing your map, make sure to include information about how to use it, basic safety guidelines, contacts for questions and concerns, and any other relevant information, such as the school's arrival and dismissal process for walkers and bikers. The information you provide should make it clear that parents/guardians are ultimately responsible for determining the best route to school for their child and for determining whether their child is old enough to walk or bicycle to school without adult supervision. The information you provide should also suggest factors for parents/guardians to consider when selecting routes, such as the availability of sidewalks and paths, motor vehicle speeds and volumes, signalized or STOP-controlled crossings, and crossing guard locations. To the extent possible, these factors should also be represented on the map.

Note: Template language for messaging to accompany your map can be downloaded [here](#).

AT WHAT AGE CAN CHILDREN WALK TO SCHOOL BY THEMSELVES?

There is no state or federal law setting a legal age minimum before children can walk to school alone. You may want to contact the school district or local police department where your child attends to determine if they have a policy that prohibits children under a certain age from walking to school alone.

Children vary in their readiness to handle traffic situations, such as choosing a safe time to cross a street, even if they are in the same grade. In general, children are not ready to cross a street alone until age 10. Ideally parents/guardians are a central figure in their children's safety education. Parents/guardians have the best opportunities to effectively assess their individual child's skills and teach safe behavior in the course of daily life so they should be encouraged to participate in their child's safety education. It is less a matter of chronological age, and more about whether children have demonstrated they can safely walk and cross streets independently. For additional information about when children are ready to walk alone, see the resource developed by the National Center for Safe Routes to School called [Teaching Children to Walk Safely as They Grow and Develop](#).

For Minnesota-specific bicycle and pedestrian safety lessons, view the [Walk! Bike! Fun! Pedestrian and Bicycle Safety Curriculum](#).

Finally, it is very important to vet your map and any information you intend to send along with it with school administrators. You want to make sure school administrators support your effort, and consulting with them at various steps along the way can help with that. You also want to make sure the materials are complete and accurate. There may be policies, procedures, or other details you are not aware of that should be referenced or included. School administrators can help you identify such gaps. They may also be able to advise you on how best to distribute your map.

Distribution Tips

Pedestrian and bicycling route maps can be distributed in many ways. You can add the map to your school or parent/guardian teacher association website, distribute a paper copy at the start of the school year or during new student orientation, or include a link to the map with messaging about special events. See *Ideas for Distributing Your Map* at right for additional ideas.

- ***The method of communication also matters.*** People these days receive messages in a variety of different formats. Person A's preferred format doesn't always work for Person Y. As a result, it's usually best to convey messages using a variety of formats instead of just one. For example, you might include a paper copy of your map and supporting information in a start-of-school information packet, post these materials to the school website or Facebook page, and feature them in an article in the school's e-newsletter. A multipronged approach like this is likely to reach a wider audience, and your message will be reinforced among those who receive it multiple times. Consult with school administrators and others in your school community to identify a communications strategy that is best suited for your school and your intended audience.

- ***Timing matters.*** For example, communications about arrival and dismissal procedures and suggested pedestrian and biking routes are often most effective when they are distributed at the beginning of the school year when parents/guardians are more tuned in and then reinforced at strategic points throughout the school year.

IDEAS FOR DISTRIBUTING YOUR MAP

- Post it on your school or PTA website (you may need to work with the person who manages your school's IT to get this done)
- Post it to your school or PTA social media accounts (e.g., Facebook, Twitter)
- Include it with the start-of-school packet that is distributed to parents/guardians
- Include it in the student/parent/guardian handbook
- Distribute it at Back to School Night
- Put it on a bulletin board near the front office where everyone can see
- Include it in the school newsletter
- Send it home in student backpacks
- Send it to the PTA listserv

Maintaining Your Map

Congratulations on building and distributing your map! Chances are you can reuse or build upon this map in future years. However, there are a few things to check into first that might necessitate some tweaks.

- **Policy changes.** Has your school or school district adjusted its policies in a way that impacts school travel? For example, your school may have decided to adjust its arrival or dismissal procedure. Or your school district may have adjusted its criteria for school bus eligibility. Changes like this can have implications for your map.
- **Changes to transportation infrastructure.** Have the roads near your school changed in any way? For example, your community may have installed new sidewalks or pedestrian crossings that open up potential walking routes. Consider whether these routes should be added to your map.
- **Construction.** Is there construction activity in your community that impacts school travel? Construction projects can result in road and sidewalk closures, or in conditions that may not be appropriate for students walking and bicycling to school. If the construction will result in new houses or apartments, will students be coming from them? If so, how does this impact your map?
- **Community feedback.** What have people in the community told you about your map? Have they suggested any adjustments to the routes or provided feedback on how long they take? This kind of feedback can be extremely helpful. In fact, it might be a good idea to solicit it proactively, for example, by interviewing or surveying families that walk and bike to school.

Whatever updates you make, make sure to vet them with the school principal. Also, don't forget to actually test out any new routes to make sure they will work for students!

Finally, you've learned a lot through the map-making process. Don't let it go to waste. If you've identified important safety concerns or gaps in the pedestrian and bicycle network (e.g., missing sidewalks) bring them to the attention of school administrators and local government officials and consider working with others in your school community to develop a [Safe Routes to School travel plan](#) that identifies and prioritizes strategies for encouraging and enabling students to safely walk and bicycle to school. Good luck!

