Harnessing Data to Advance Safe Routes to Parks

Data can seem boring, hard to work with, and even intimidating. But if we know what to do with it, data can be the power booster that Safe Routes to Parks efforts need to make changes for safer, more equitable park access. Collecting and using data is an essential part of Safe Routes to Parks because it gives information about what is really happening in communities, which can spark ideas for solutions and inform how to move toward them. Data can help you identify community priorities, advocate for change, and measure success. This fact sheet provides ideas for ways to access and collect data as well as ways to effectively share the information to improve safe, equitable access to parks and green space.

Capturing Data From Community Surveys in Houston

CAN DO Houston enlisted and trained residents to lead the assessment process. These community leaders worked with their neighbors to select parks to focus on, conducted Safe Routes to Parks walk audits at each of the parks, and developed a survey to understand the barriers to accessing the parks and potential solutions to overcome those challenges. The Near Northside Park Safety Survey captured information on safety, quality, features, and access to area parks. This survey occurred in conjunction with walk audits and was also distributed to neighbors who didn’t participate in the walk audits. CAN DO Houston worked with the neighborhood leaders to analyze the data and identify the principle challenges to safe park access. The group then prioritized improvements to increase access, including reducing driver speeds, adding crosswalks, fixing cracked sidewalks, adding signage and streetlights, and removing a fence that served as a physical barrier to the park.

1. How Data Supports Safe Routes to Parks

Data helps identify the gaps, assets, and needs of a community—whether you are asking residents about their experiences getting to a park or recording how far people have to walk without a sidewalk to access a public greenspace.

- Data can be used to identify action items and prioritize improvements in a way that is equitable rather than based on how many resources people have to advocate for their particular project of interest.

- Data also bolsters advocacy efforts by helping make the case for improvements and funding. Does the community you are working in have higher rates of obesity or pedestrian fatalities and fewer sidewalks than other areas? That can help make the case for investments in better infrastructure.

- Finally, and perhaps most importantly, data collected at the beginning and throughout your Safe Routes to Parks work allows you to measure the success of your work and evaluate outcomes. You can use this information to demonstrate success and advocate for more of this work in your community.
Where to Find Data

**Local quantitative data sources**

It is likely that your local, county, regional, and state government agencies regularly collect data on a variety of relevant topics and may have it available via an open data portal on their website. However, the information may be housed within different departments, so here are some key places to look for data that you can use for Safe Routes to Parks. You can reach out to these agencies to determine what data is available, how to access it, and if there are existing tools available to easily analyze it.

- Public works departments, engineering departments, or regional transportation commissions may keep infrastructure inventories that include locations and characteristics of sidewalks, bike lanes, crosswalks, and other elements that affect Safe Routes to Parks. You may be able to obtain traffic volume data as well. To understand opportunities for future improvements, find out the department’s paving and repaving schedules. Are there opportunities to advocate for design improvements when the department is already adding paint or changing street infrastructure for pavement improvement or storm water projects?

- Parks and recreation departments may have data on park attendance and usage, infrastructure inventories, and maintenance schedules.

- Local and state law enforcement and state or local transportation departments may keep crime and crash data as well as data on traffic speed.

- Public health departments at the city, county, and state levels collect information on a wide variety of health indicators like obesity, air quality, rates of physical activity, road safety, and more.

Qualitative and Quantitative Data

There are two main categories of data: quantitative and qualitative. **Quantitative data** is information that can be expressed in numbers while **qualitative data** expresses more abstract concepts through words. For example, when you are assessing access to parks, quantitative data may be the number of miles of sidewalks or how many lighting fixtures line the way to park. Qualitative data may illuminate people’s thoughts and feelings about the infrastructure, like whether they feel safe walking to their neighborhood park and why. Both types of data can help give you a fuller picture of assets and gaps but may not give a full picture on their own.

Collecting qualitative data also provides an opportunity to engage with community residents and convey that you value their lived experiences and input. Community members are the people experiencing their community and using the infrastructure that constitutes the routes to parks, so they are the ultimate experts in Safe Routes to Parks work. Incorporate community experience into data that is used for decision making, advocacy, and measures of success. When people see their desires and ideas of what success looks like manifested in the work that is being done in their community, they will feel more bought in to the whole process. This engagement creates a solid foundation for community members to advocate for their priorities, knowing they will be listened to, and sets a model for community-informed decision-making in the future.

Regardless of what kind of data you are looking for, start your search by establishing what questions you want to answer. Data is a tool, not an answer in itself. You need to ask the right questions in order to get the information you need. This fact sheet includes variety of resources and strategies you can use to find both qualitative and quantitative data to answer those questions.
There are many resources for national data on public health and transportation, and we encourage you to check out this factsheet for those broader resources. Below are some more specific data sources and reports relevant to Safe Routes to Parks:

- **Benchmarking Report on Bicycling and Walking in the United States**: This report from The League of American Bicyclists highlights national data on walking and biking in the context of public health and equity. It also includes a collection of state and city specific data.
- **Dangerous by Design**: This report from Smart Growth America puts pedestrian fatality data in context of how much people are walking and ranks states, metropolitan areas, and congressional districts by how dangerous it is to walk.
- **National Equity Atlas**: This database provides information on demographic change, racial inclusion, and economic benefits of equity at the national level as well as for the 100 largest cities, 150 largest regions, and all 50 states.

**National quantitative data sources**

- **ParkScore**: This resource from the Trust for Public Land brings together a variety of data to evaluate park systems based on access, investment, acreage, and amenities in nearly 14,000 cities, towns, and communities.
- **Strava Metro**: This resource collects community-sourced data on active transportation trips via smartphone and GPS devices to visualize trends and patterns of how people move through their communities.
- **StreetLight Data**: This website houses data from anonymized location records from smartphones and navigation devices. It maps that data onto the road network with land use and demographics data to make the data useful for planning.

**Local quantitative data collection methods**

- **System of Observing Play and Recreation in Communities (SOPARC)**: This is a structured approach to observing and cataloging park use. NRPA has a basic intro to the method of counting and categorizing activity in the park and the RAND Corporation has a more in-depth guide.
- **Go Counter**: This is a mobile app from Rails-to-Trails Conservancy that allows you to count people and their specific activity on a trail and then save and export that data. You can upload your count data to their Trail Traffic Calculator to get Annual Average Daily Traffic and Annual Traffic Estimates.
- **Manual bike, pedestrian, and trail user counts**: Here is a 2-hour bicycle-pedestrian count sheet from Metropolitan Area Planning Council covering the cities and towns of metropolitan Boston. Think about the information you want to collect and makes sure you shift what you are recording to fit the objective. Consider whether you want to record information like whether people are wearing helmets or using a bike share bike.
- **Automatic trail counters**: There are a variety of temporary and permanent trail counter devices. Some are sophisticated enough to distinguish between whether people are walking or biking and which direction they are moving. For example, the City of Arlington, Virginia uses 32 automatic trail counters along several recreation trails and on-street bike lanes. Bike Arlington maintains a webpage with the location of all counters and information about them, including information on factors that can affect count accuracy.
Qualitative data sources

Your local parks, public health, or transportation departments may already have data from surveys or other engagement activities that they would be willing to share with you. If they do not have the information already, they may be interested in working together to collect it.

You can also collect your own qualitative data by talking with and working with the community. There are many simple, creative ways to collect feedback to questions in group settings. Browse these community engagement cards that outline arts-based activities that both foster community building and help you collect useful information to guide Safe Routes to Parks work in the community.

Another approach is to use photography as a way to tell stories and document needs. Identify the questions you want to answer and then provide the materials for participants to take photographs that express their answers and points of view. Participants can further expand on the images with written or spoken descriptions. This is a useful tool for self-advocacy that allows people to more fully express themselves through images.

For more information on how to collect data, look at the Safe Routes to Parks Evaluation Guide.

Community engagement cards feature ten different arts-based activities to help collect feedback from adults and youth.
3 How to Share Data, Frame the Story, and Choose Messengers Effectively

Data may help change minds, but stories change hearts. Once you have all of your data, you need to show how it fits into a larger story about the community in order to make it compelling and memorable. That is how you will build support for your work and influence decision makers to make policy and funding decisions that make park access safer and more equitable.

One way to do this is to tell individual stories and weave in the data you have collected to emphasize community members’ experiences and observations. Bring it together with a photo or a video to connect the human stories with the numbers. You can also present the qualitative and quantitative data on a map of the neighborhood(s) you are working in. This connects the data to places and provides important context for Safe Routes to Parks work.

You can use the following resources to share different levels of detail in map form:

- **Google Maps**: This site allows you to plot a route and add labeled pins to a sharable map.

- **OpenStreetMap**: This is a free, crowdsourced map where community members maintain data about roads, trails, and other destinations. It can also be integrated into other mapping sites.

- **ArcGIS story maps**: This free resource allows you to build a custom, interactive map for digital storytelling.

### Living Cully Story Maps

Living Cully Walks put together a story map to highlight transportation gaps. The map shows completed and scheduled active transportation projects compared to comments on gaps in the network during their 30+ outreach events. When you view it online (here), you can click along the street network to reveal more information.

Use this opportunity to help community members build advocacy skills by collaboratively creating resources and workshopping testimony for council meetings where people can share their story along with the data that supports their experience. If you used artistic engagement methods, host an exhibit that features presentations from some of the artists. Invite decision-makers to the exhibit, and if they can’t come to you, go and present the art to them at their next public meeting.

Anyone can help move the work forward and personally benefit from the opportunity to share their story, but it is especially meaningful for the people who are most impacted by the inequities in park safety and access. For example, children, people with disabilities, and people of color are particularly effective messengers, because they can speak to the specific barriers that keep them from accessing public goods and why that matters. Not only are they some of the most impacted populations, but they are also underrepresented in elected positions and have important perspectives that most elected officials do not have. Encouraging these messengers to share their stories—whether through public testimony, written word, or art—can illuminate community need and effectively carry the message to decision-makers and the public as a whole.

### Conclusion

Although most people support park access in the abstract, using a variety of qualitative and quantitative data can help make the case for investing in and working with communities that need it most. By strategically selecting messengers, sharing stories, and using data to illuminate both need and proposed solutions, advocates and communities can work together to improve Safe Routes to Parks.