



How To Do A Manual Count of People-on-Bicycles in Your City









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ABOUT THE BILANG SIKLISTA PROJECT

The *Bilang Siklista* Project started after Mobility Awards was launched in 2020 during the height of the pandemic, when there was an uptake of Filipinos relying on bicycles to get to their destinations. The project is a simultaneous citizen-led collaborative capacity-sharing effort organized by the convenors of the Mobility Awards.

Bilang Siklista, which dually translates to Count Cyclists or As Cyclists (signifying role and contribution of cyclists), was part of the bigger campaign of Mobility Awards to establish the baseline data describing the number of people-on-bicycles on the road. The project mobilizes citizens and city governments to count cyclists and collaborate on open data that informs and justifies local public resource investment for safe, inclusive, and low-carbon transport infrastructure in the Philippines.

Building upon the success of the initial bicycle count with four cities in 2021, the project expanded its reach to 10 cities in 2022, followed by a nationwide scale-up to 17 cities in 2023. The apparent growth of the project scale showed that more cities embrace the potential of cycling as a daily transport and recognize the importance of data to influence road improvement as well as bicycle-friendly projects.

The growing number of volunteers who showed up during the bicycle count is a testament to their shared vision of catalyzing policies and public investments for active mobility transportation options in their city.

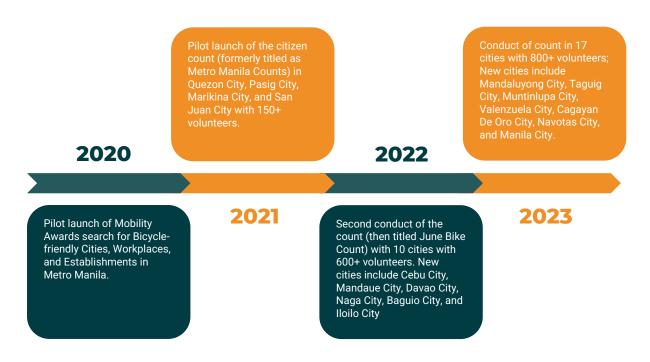


Image 1: Brief history of the Bilang Siklista Citizen Count Project

The data generated from the Bilang Siklista project justifies cycling as a carbon-free transport option by quantifying the amount of fossil fuel displaced and GHG emission avoided for every kilometer cycled. To view the full reports of the previous bike counts, visit www.mobilityawards.ph.





CHAPTER 1: WHY DO WE NEED TO COUNT PEOPLE-ON-BICYCLES?



As we continue to see the increase in numbers of cyclists on the roads and as cities continue to build and invest in offering safer and more efficient bicycle lanes, we recognize that we need to put numbers and figures for us to help further justify funding allocation, and help inform improvements on bicycle friendly programs and design.

What gets counted, counts. Putting figures in place expounds the situation and opens conversations on safer and more inclusive road planning.

WHY MANUAL COUNTING?

We do manual counting of people on bicycles while the local government has not yet institutionalized a data collection method for the cycling community. By getting citizens and volunteers involved, the need for local cycling data is heightened, and the demand for active mobility is amplified. This fills the gap in the cycling data while encouraging communities to actively engage in improving cycling conditions in their respective areas.

Manual count of people-on-bicycles offer a distinctive advantage by providing nuanced information that automated methods often overlook. Unlike automatic data collection, manual counts allow for the identification of factors such as gender, behavioral patterns, and capturing existing road conditions.

Manual counts are not perfect data collection tools, and can be further complemented by smart technologies already available. Cities can always mobilize the power of their own citizens and volunteers to help generate data, especially if manpower resources are missing.





CHAPTER 2: HOW TO ORGANIZE A BIKE COUNT IN YOUR CITY?

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PHASE 1 Get in touch with your City Leaders

PHASE 2 Identify count locations

PHASE 3 Get Volunteers and Allies on board

PHASE 4 Conduct bike count workshops with volunteers

PHASE 5 Implement count

PHASE 6 Collect and organize the data

PHASE 7 Show and tell
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PHASE 1: Get in touch with your city leaders

Whether you're doing the bicycle count to inform infrastructure development, advocate for policy changes, contribute to academic research, or to enhance public awareness and community engagement, it's always best to get in touch with your local government and have them on board.

Step 1: Write to your Mayor! Compose a formal letter of invitation addressed to your mayor, emphasizing the importance of a citizen bicycle count. Make sure to clearly articulate the objectives, expected outcomes, and benefits for the community. Request support, both in terms of endorsement and logistical assistance.

Step 2: Identify key city stakeholders and get them involved. Determine key city-level stakeholders involved in urban planning and traffic management to secure necessary approvals and cooperation. Reach out to relevant departments such as or equivalent to the following:

- Mayor's Office
- City Council
- City Administrator's Office
- Traffic Management and Transportation Department
- City Planning and Development Department
- Public Safety and Order Department
- Environmental/Climate Change Department
- Local Police Department

Step 3: Ask for essential information in your communication with city leaders, inquire about:

- Preferred date and time for the bike count
- Required personnel support from the government, such as traffic management officials or administrative staff.





PHASE 2: Identify count locations

Step 1: Scout Potential Locations. Collaborate with your city government and local communities to pinpoint the most strategic locations for the count (See Chapter 3: How to choose where to count?). Strive for a balance between the number of locations, number of volunteers, and the quality of data collected.



PHASE 3: Get Volunteers and Allies on Board

Undertaking a manual bicycle count can be a challenging task. Establishing partnerships with allies is crucial to distribute responsibilities effectively. The diagram below outlines potential individuals or teams capable of fulfilling essential roles in the project. Please note that this list is merely a sample and not exhaustive.

Champion

Role: Advocate and spokesperson for the bike count initiative. Responsibilities: Promote the importance of the bike count within the community. Invite citizens and community members to join and become involved. Examples: Government official (ie: Mayor, City Councilor, Barangay Captain, etc), Key Influential Figure (ie: Cycling Advocate, Local celebrity, Opinion Leader, Environmental Activist, etc), and community leader.

Coordination and Logistics

Role: Ensure smooth organization and execution of the bike count. Responsibilities: Coordinate with local authorities, traffic management, and city administration. Ensure to have lead coordinators per location so that all volunteers are accounted for and report to one focal person to avoid confusion especially when it comes to submitting their bike count forms.





Examples: Lead Community Organizer, Bike Count Location Focal Leads, Relevant city departments (ie: Transportation office, City Planning and Development Office, etc.)

Documenters

Role: Manage the recording and storing of collected data.

Responsibilities: Develop and maintain a system for collecting and organizing data as well as documenting the event.

Examples: Can be from pool volunteers who are data analysts, photographers, videographers, bookkeepers, etc.



Volunteer Counters

Role: Actively participate in the manual bicycle count process.

Responsibilities: Attend training sessions and count bicycle users at designated locations.

Examples: Local residents, cycling enthusiasts, student groups.

Fundraiser

Role: Secure financial support to sustain and enhance the bike count initiative. Responsibilities: Identify potential sponsors, donors, or partners. Example of potential sponsors: Local businesses, cycling organizations, city grants coordinator, etc.

Step 1: Implement strategies to recruit volunteers or sponsor partners: Utilize social media platforms to broadcast the call for volunteers. Leverage community networks, local clubs, and organizations to broaden your reach.





Offering incentives and merchandise is an effective strategy to motivate individuals to volunteer. For instance, in the Bilang Siklista count, we provided volunteers with essential items like count forms, pencils with sharpeners, clipboards, and bicycle count merchandise such as vests and facemasks. While these tangible rewards create a sense of appreciation, it's equally crucial to educate volunteers on the significance of their contribution. Understanding the importance of the bike count enhances their engagement and commitment.

Reaching out to existing cycling groups and communities within the cities proved to be beneficial. By tapping into these pre-existing networks, we were able to expand our volunteer base but also created a shared sense of purpose within the community.

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Step 2: Develop a volunteer management system: Create a system to organize volunteer information, including contact details, availability, and preferences. Utilize online tools or spreadsheets for efficient data management.

In the past Bilang Siklista count, we used Google Forms as a practical and user-friendly method for volunteer sign-ups. We also leveraged Facebook, Messenger, and Instagram to disseminate information about the project and attract potential volunteers. It also helps that early on, we reached out to local bicycle groups in the communities where we conducted the count. This helped us connect with enthusiasts and get them involved in the Bilang Siklista project.







Step 3: Assign volunteers to locations Once volunteers express interest, assign them to specific locations based on their preferences and geographical proximity. Ensure a balanced distribution across all identified counting sites. To know more about how many volunteers are needed for a certain type of location see *(Chapter 3: Location Types)*.

PHASE 4: Conduct bicycle count workshops with volunteers

Organize training sessions to ensure that volunteers are well-prepared and equipped with the necessary skills for accurate data collection. For detailed guidance on the content of the training and instructions on conducting the count, please refer to Chapter 3: "How to Do the Manual Count."

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Ensure that government personnel from relevant departments are actively included in the training sessions. The ultimate objective is to empower our government to independently conduct the count, thereby ensuring more consistent data collection. It is imperative to coordinate the training workshops in collaboration with the government.

Seek support from your city government for the training, including assistance with venue arrangements and provision of refreshments for all participants involved in the count. Most often, they are eager to offer assistance, which not only fosters their engagement but also instills a sense of ownership and accountability to the project.



PHASE 5: Implement count

It's go time! With a plan in place, now comes the task to begin counting. In this phase, it is important to be flexible to adapt to unexpected challenges that may arise. For example, there might be weatherrelated challenges so it's important to establish contingency plans to ensure the safety of volunteers





and maintain the integrity of the data collection process. Event will rely on PAG-ASA weather forecast. Event will be postponed if weather condition is deemed unsafe (Signal #2).

Additionally, we need to be prepared for potential no-shows among volunteers due to personal reasons. Encouraging real-time communication between volunteers and coordinators is key to promptly addressing and resolving any challenges that may arise.

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Ensuring the safety of volunteers is paramount. Request roving marshals, who could be volunteers or sourced from city government agencies such as the traffic management office, police department, or barangay department, to provide additional support in monitoring the safety of volunteers on the ground.



PHASE 6: Collect and organize the data

Now that the counting is done, it's time to gather and organize the data. Systematically organize the collected data, categorizing it based on relevant parameters such as location and time.

For Bilang Siklista volunteers, we streamlined the process by using a Google Drive link for the volunteers to upload scanned copies or photos of their count forms. This approach eliminated the need to visit each count location, allowing volunteers to head home promptly. However, for a more effective quality check, it's suggested to appoint a team leader for each location who will collect and compile the data from all members.





PHASE 7: Show and tell

Now that we have the data, let's tell everyone about our findings! When you count people on bicycles, you're not just tallying numbers; you're discovering stories within them. Once we have the data, it's important to organize it in a way that's easy to understand and get our message across effectively. Here are some things to consider when analyzing the data:

- Gender Dynamics: One of the fundamental aspects to consider is the gender distribution among cyclists. Analyzing the count data through a gender lens allows us to discern patterns and disparities in cycling participation. By identifying any discrepancies, we can tailor initiatives to promote inclusivity and encourage greater participation among underrepresented groups.
- Directional Flow Analysis: The directional flow of cyclists provides valuable insights into commuting patterns and how people use current infrastructure utilization. This knowledge enables us to optimize infrastructure planning and implement targeted interventions to enhance the cycling experience.
- Helmet Use Trends: By identifying trends in helmet usage rates, we can assess the
 effectiveness of existing safety initiatives and implement measures to promote safer cycling
 practices.

Share this information with the community, and encourage them to give feedback. Set-up meetings with city officials and planners to give them a detailed overview of the data. Point out important trends and areas that could be improved. The insights from the data will help guide future decisions about city planning, building infrastructure, and making policies for active transportation.

Documenting and sharing your counting process is essential for establishing best practices, enhancing transparency, and building credibility within your community. Sharing your bicycle count findings is a powerful way to:

- Engage the Community: Keep your community informed and involved in the process.
- Demonstrate Value: Showcase the importance of having bicycle facilities such as bicycle lanes, bicycle racks, etc.
- Justify Investments: Provide evidence supporting the need for continued investments in cycling infrastructure.

Create interesting presentations and reports to show the results of the bike count. Use visuals like charts and graphs to make the data easy to understand. To view samples, you can visit www.mobilityawards.ph for previous bicycle count reports.





CHAPTER 3: HOW TO DO THE MANUAL COUNT?

How do we count and what are we counting?

We are counting people-on-bicycles!



The count is a one-day event led by volunteer counters using the standardized count sheets adapted from the US National Bicycle and Pedestrian Documentation Project¹ to capture the number and trends of cyclists. Through a manual counting method, volunteers will record data using a standardized count form and pen/pencil. The count form (see Annex 1) aims to answer the following questions:

- How many cyclists goes-to-work and cross city borders and use our bike lanes?
- How many are women? How many are men?
- How many are wearing helmets, how many are not?
- When is the busiest hour?
- What trends emerge in the number of cyclists and their travel patterns during the observation period?
- Are there discernible differences in cyclist behavior across various areas or cities, and if so, what factors contribute to these variations?

What is the recommended frequency to do the count?

Choose how often to count based on what you can manage. It's okay to start small and learn from each count. This way, you can understand bicycle traffic better and improve as you go.

¹ The US National Bicycle and Pedestrian Documentation Project is an initiative focused on systematically collecting data related to bicycle and pedestrian activities across the United States. This project aims to provide comprehensive insights into the patterns and trends of non-motorized transportation, aiding in urban planning, policy formulation, and infrastructure development.





Our ultimate goal is for city governments to regularly and consistently conduct bicycle counts as part of their monitoring and data collection practices. This ensures a continuous and reliable source of information about bicycle traffic, supporting informed decision-making and the development of effective urban policies.

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To accurately count individuals using bicycles for transportation, such as commuting (bike-to-work), it's recommended to conduct the count on weekdays. On weekends, the count might predominantly capture recreational cyclists. It is also best to take note of events that may impact count data, such as festivals, road work, events, or extreme weather events (typhoons).

How long should we do the count?

The duration for a manual bike count can vary based on factors like the size of the area being observed, the volume of bicycle traffic, and the specific goals of the count. However, to capture peak bicycle usage, it's advisable to conduct the count during the busiest hours of the day when bicycle traffic is at its highest. This typically aligns with rush hours, both in the morning and afternoon, when people commute to and from work or school. A common timeframe for peak bike traffic is often within the range of 6:00 AM to 8:00 AM and 4:00 PM to 6:00 PM. Adjustments may be made based on local patterns and considerations.



How to choose where to count?

Count locations will be identified together with the city in consideration with the following criteria:

 Historical Count Sites: Locations where counts have been conducted previously, if applicable.





- Key Exit and Entry Points: Situated on the periphery or borders of the city, these points serve as crucial gateways, to capture cyclists entering and exiting.
- Existing Bicycle Facilities: Areas with established bicycle facilities, such as bicycle lanes
 or bicycle repair stations, to gauge usage and assess the impact of existing infrastructure.
- High Collision Areas: Areas with a history of high collision rates to highlight potential safety concerns and address specific challenges in those zones.
- High Traffic Areas: Locations with a known high volume of both bicycle, pedestrian, and vehicle traffic. Typically, these are key intersections within cities.
- Proximity to Establishments and Institutions: Areas near public markets, schools, shopping malls, etc., to understand the correlation between bicycle traffic and community hubs.
- Near Public Transit Hubs: Locations in close proximity to public transit hubs, such as MRT/LRT stations, PUV terminals, and tricycle terminals, to analyze intermodal transportation dynamics.
- Planned Projects: Locations earmarked for future development or cycling infrastructure projects.







There are different design types of streets that should be considered.

	LOCATION TYPES							
Type Description		Example	Number of Volunteers Required					
STRAIGHT ROAD	A straight stretch of road which can be a two-way or oneway street.	Commonwealth Avenue	Minimum of four (4) people					
INTERSECTIONS	A four-way intersection, or crossroads, usually involves a crossing over of two streets or roads.	Intersection between Ayala Avenue and Makati Avenue in Makati	Minimum of eight (8) people					

T OR Y-JUNCTIONS

A three-way intersection is a junction between three road segments:

T Junction: when two arms form one road



Y Junction: the latter also known as a fork if approached from the stem of the Y.





Shaw Boulevard corner Meralco Avenue

Minimum of six (6) people





Helpful reminders

- Scope out your site before you count. Do an ocular inspection to secure the best viewing
 position where you can avoid getting wet by the rain of direct sunlight.
- Start and end precisely at the top of the hour. We recommend arriving 15 minutes early.
- Wait to record the movement until it's complete. Sometimes, people on bicycles use sidewalks
 and pedestrian crossings to better position themselves in the roadway.

Frequently Asked Questions (FAQs)

- Should I include people riding on the sidewalk? Yes. This could indicate that existing infrastructure is not ideal for how cyclists want to get around. We want to know!
 - Tip: It's helpful if you can draw a sidewalk on the count form with separate arrows; otherwise, write a note at the top of the form indicating if there were a few or many sidewalk riders.
- Should I count people riding the wrong way on a one-way street, or those making an illegal turn movement? Yes. Any illegal or otherwise questionable movements should still be counted.
- Should I count people who have already passed more than once? Yes. Since we are counting the number of trips made by bicycles.
- Can I count people in three-wheels? A person in uni-cycle? Or people using a cargo bike? Yes. As long as it is pedal-powered or "pinapadyak".









What if my teammate's total count is not the same as my total count? Since this is a manual count, there will be room for human error.

Based on experience, we will rely on the data collected using the diagram count form as it is more accurate and has a lesser margin of error largely due to the fact that it is easier and faster to fill-out than the table count form.







CHAPTER 4: POSITIVE OUTCOMES AND IMPACT OF THE BILANG SIKLISTA BICYCLE COUNTS

City Officials are making use of the data generated by the citizens, and citizens are using the data to engage their cities to push for better bicycle infrastructures.

In **Quezon City**, development of 2-kilometer bicycle lanes along segments of Elliptical Road and Commonwealth Avenue. The selection of Elliptical Road and Commonwealth Avenue was based on data from bicycle counts conducted over the past two years, which identified these areas as having the highest number of cyclists.



Mandaue City has maintained consistent monitoring of its bicycle count data. According to the City Planning and Development Office (CPDO) of Mandaue, the noticeable increase in bicycle users since 2021 has prompted the city to expedite the completion of the Mandaue City Bike Lane, an extensive 129-kilometer Metro Cebu Bike Lane Network. This ambitious project encompasses four key areas, spanning the cities of Talisay, Cebu, Lapu-Lapu, and Mandaue.

In **Cebu City**, the count revealed that more people are opting to use bicycles to work because of the problems plaguing the city's public transportation system, with almost 10% increase from 2021 to 2023. The Sugbo Bike Lanes Board (SBLB) has adopted a resolution mandating an annual bicycle census. This measure aims to pinpoint key areas for enhancing bike infrastructure and guiding the city in implementing projects that promote safe and secure bike commuting.





In **Iloilo City**, the bicycle counts have proven instrumental in identifying critical intersections and areas for additional bicycle lanes enhancing cyclist safety and accessibility in collaboration with the Department of Public Works and Highways (DPWH). Consequently, the city is embarking on creating instructional videos aimed at promoting safety measures on how to properly traverse intersections as well as share the road concepts to educate all road users. To ensure ongoing data collection and informed decision-making, the city is instituting a quarterly Bicycle Count program headed by the city's Metro Count unit which will officially launch on the World Bicycle Day celebration on June 3, 2024.

In **Baguio City**, the citizen-generated data plays a pivotal role in shaping smart mobility policies and gender sensitivity programs. The Daily Cycle Movement (DCM), who spearheaded the bike count initiative in Baguio City in collaboration with the Mobility Awards, utilized bicycle count data to advocate for their cause during the Sanguniang Panlungsod hearing on the proposed ordinance promoting micro-mobility emphasizing the importance of properly and adequately developed bicycle lanes to ensure the safety of cyclists.



The Bilang Siklista results were welcomed by the government agencies especially the Department of Transportation (DOTr) and the Philippine Commission on Women (PCW).





ANNEX 1

Sample Invitation letter to the City Mayor

DATE

HON. (COMPLETE NAME OF MAYOR)

Mayor City

Subject: Request to Conduct Bicycle Count in [CITY]

Dear Mayor [NAME],

The [YOUR ORGANIZATION] cordially invites the City Government of [CITY] to participate in this year's *Bilang Siklista* as we conduct a bicycle count on [PROPOSED DATE]. The activity aims to engage citizens and city governments to count people-on-bicycles, as a critical part of data generation and monitoring how people-on-bicycles are using the road as a daily mode of transport.

This project is also our way to contribute to nation-building by mobilizing citizens to collaborate on open-data and to help local governments justify public resource investment for safe, resilient, inclusive, interconnected infrastructure for low-carbon transport in the Philippines.

The [Bilang Siklista or other PROJECT TITLE] will be strategically scheduled on a chosen weekday of [CITY] to capture data on cyclists utilizing their bicycles for daily necessities, whether it be commuting to work or school. The data generated will enable stakeholders, including city planners, to put figures on the numbers of road users, especially cyclists that are using the bicycle lanes; and to provide indicative information of the most routes used in the city.

We propose to conduct [FREQUENCY OF COUNT - MM/DD/YYYY] count. As for the areas covered by the activity, we propose the following roads (optional):

- 1. Road 1
- 2. Road 2
- 3. Road 3
- 4. Road 4
- 5. Road 5

Areas are subject to adjustments to the discretion and suggestions of the local government.





We hope to receive your confirmation on or before [DEADLINE]. Moreover, kindly provide us with the name and contact details of your designated focal person who will coordinate the activity with us.

Should you require any additional information or clarification about the project, please do not hesitate to reach out to us at [EMAIL]. We look forward to hopefully working with you on this important effort.

We thank you for your visionary leadership in making cities safe, accessible, breathable, and vibrant for everyone!

Sincerely,

[SIGNATURE]
YOUR NAME
DESIGNATION
ORGANIZATION NAME

ANNEX 2

Sample Bicycle Count Form

Table Count Form					
LOCATION:	DATE:	TIME:			
WEATHER:	NAME:				
NOTES:		TOTAL NO. CYCLISTS COUNTED:			

T	MALE		FEMALE		NOT DETERMINED	
Time Interval	With Helmet	No Helmet	With Helmet	No Helmet	With Helmet	No Helmet
00:00- 00:15						
00:15- 00:30						
00:30- 00:45						
00:45- 01:00						
01:00- 01:15						
01:15- 01:30						
01:30- 01:45						

Access an editable copy of the count forms in this link.



