COMMUNITY CHANGE GRANTS
Environmental and Climate Justice
U.S. Environmental Protection Agency

ENDYNA

Climate Action Strategy 2: Mobility and Transportation Options for Preventing Air Pollution and Improving Public Health and Climate Resilience

Mobility and Transportation 101

The best mobility and transportation solutions provide reliable and accessible connections using routes and modes that match a community's location, setting, and needs. Historically, minority and low-income communities have been harmed by placement of highways, truck terminals, and waste transfer stations in their neighborhoods. These activities pushed out some residents and increased air pollution. Many of the same neighborhoods experience less public transit, sidewalks, bike lanes, and safe crosswalks than whiter and higher-income neighborhoods. Environmental justice means listening to harmed communities' ideas for good mobility options and ways to reduce air pollution.

Common aspects of healthy, resilient, and clean mobility and transportation include:

- **Complete Streets:** Streets that make travel safe for all users, including people driving, walking or using mobility aids such as wheelchairs, cycling, or riding public transportation.
- **Climate-resilient transportation:** Travel routes that are usable in extreme heat or after heavy rain or snow thanks to shade trees, plants, and surfaces that let water pass through.
- **Zero-emission technologies:** Travel modes that do not emit any air pollutants or climate pollutants, such as electric vehicles, walking, or cycling.
- **First mile/last mile solutions:** Travel options that help people get from their place of origin to a transit station or from transit to their final destination. Examples include rentable bicycles or electric scooters, subscription-based commuter vanpools, and on-demand rides from a transit agency.

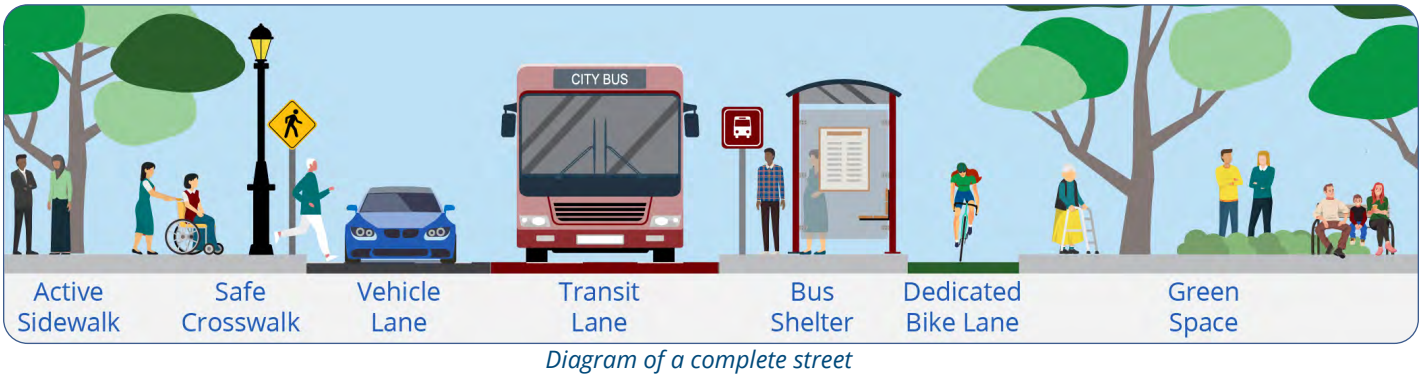

Diagram of a complete street

Mobility and Transportation Options for Preventing Air Pollution and Improving Public Health and Climate Resilience

Mobility and Transportation Solutions for Community Challenges

Lack of Access to Affordable and Environmentally Sustainable Transportation

Community Challenges	Possible Solutions
In a neighborhood where most daily trips require a car, getting to important community places is expensive and polluting. • Certain populations, such as low-income households, older adults, children, and people with disabilities, face more challenges getting to work or school. • Community members who want to reduce climate impacts or air pollution cannot choose a clean mode of transportation.	• Purchase, lease, or contract for the use of zero-emission vehicles for shared use. This could include community car sharing, vanpooling, ride-sharing, and related mobility options. • Support low-emission transportation options such as buses and shared bikes. This could include transit access measures like maintaining bus route frequency during non-peak hours. This could also include setting up a network of bike share stations with rentable electric bikes. • Do the measurement, analysis, design, planning and engineering work necessary to apply for state or federal funding for large-scale projects to greatly reduce your community's greenhouse gas emissions.

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Mobility and Transportation Solutions for Community Challenges

Unsafe Intersections and Streets for People Walking, Biking, or Using a Wheelchair

Community Challenges	Possible Solutions
Forms of travel such as walking and biking that are environmentally friendly and outside of vehicles are unsafe on streets designed for cars and trucks to go fast. Risk to pedestrians increase a lot for every small increase in vehicle speed. • People who rely on riding public transit, walking, biking, or using a wheelchair are often members of vulnerable groups based on age, income, or physical ability. • People walking, biking, or using transit contribute the least to air pollution and climate change while traveling. But they are the most at risk of injury or death from vehicle accidents. • Pedestrian injuries and deaths are higher in low-income neighborhoods relative to moderate income neighborhoods. They are also higher for Black and indigenous populations relative to white and Asian-American populations.	• Implement "complete streets" projects to improve residents' ability to walk, bike, and use transit. This will reduce how much residents travel by car and truck. This will also reduce vehicle-related air pollution. Include in projects improved access for people with disabilities to sidewalks, intersections, and transit. • Here are four examples of complete streets projects: 1. Make wide vehicle lanes narrower to cause drivers to pay more attention and go slower. 2. Where there is space, create designated bike lanes. Add protective planters or bollards between bike lanes and motorized vehicle lanes. 3. Create highly visible crosswalks with signals for pedestrians. Extend the curb at intersection corners to make crossing distance shorter. 4. Change the shape of corners at intersections to have a smaller radius. Sharper turns will cause drivers to take right turns more slowly. They will see pedestrians more easily. • Construct new, expanded, or enhanced bikeways, walkways, or non-motorized urban trails that reduce driving and related air pollution. Provide safe routes for zero-emission travel between residences, workplaces, commercial and community centers, and schools.

Mobility and Transportation Options for Preventing Air Pollution and Improving Public Health and Climate Resilience

Mobility and Transportation Solutions for Community Challenges

Walkways and Bikeways that Easily Flood or Become Uncomfortably Hot

Community Challenges	Possible Solutions
Existing walkways and bikeways do not offer a practical alternative to driving if weather regularly makes them difficult or unsafe to use. • Children who live near a safe walking or biking route to school may need to take the bus or be driven in a polluting vehicle if their route is unpredictably flooded or uncomfortably hot. • Adults going to work or school may choose to drive instead of using poorly maintained walking and biking paths. • Walking or biking along an unshaded paved path is a health risk. Going through flood waters is also a health risk. Paths that are often flooded will become cracked and uneven, causing safety risks.	• Implement climate resilience measures on bikeways or trailways. To counter flooding, raise the elevation or install permeable pavers. To counter extreme heat, increase shade coverage. • Do the work necessary to apply for state or federal funding for large-scale projects that greatly improve your community's climate resilience. This work includes measurement, analysis, design, planning, and engineering. For example, your community could develop a plan to improve stormwater management through upgrades that can handle increased frequency of large storms

Disclaimer: This document was created to help Community Change Grant applicants think through various potential solutions to the problems their community may be facing. All the listed "Community Challenges" and "Possible Solutions" are only examples. We did not attempt to list all possible challenges or solutions.

For more information on the Mobility and Transportation Options for Preventing Air Pollution and Improving Public Health and Climate Resilience Climate Action Strategy, see the Notice of Funding Opportunity (NOFO) Section I.G and Appendices C and F.

For further questions regarding technical assistance, please contact EJ_TechAssist@epa.gov or call 1(800) 540-8123.

For questions regarding the Notice of Funding Opportunity (NOFO), please contact CCGP@epa.gov.

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