Project: Safe and Accessible Pedestrian Facility Inventory Model (SAPFIM): Planning and Design

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Summary

Pedestrian facilities like sidewalks, curb ramps, and crosswalks are critical elements that play a vital role in the life of a community. According to the American Association of Retired Persons (AARP), 8 out of 10 Americans prefer being in a community that offers sidewalks, which provides pedestrians with an accessible and safe path to walk within the public right-of-way separated from motor vehicles and on-road bicycles. Six out of ten prefer a neighborhood that features a mix of residential, commercial, and activities or services within easy access instead of a neighborhood that requires a car for every errand. AARP states that “People who live in neighborhoods with sidewalks are 47% more likely than residents of areas without sidewalks to be active at least 39 minutes a day”. As pedestrian facilities are critical for pedestrian movement and access, they enhance livability, connectivity, and promote a healthier lifestyle. Further, they benefit communities by promoting social economic activities. Therefore, safe, accessible, and well-maintained pedestrian facilities are a fundamental community investment that enhances public health and maximizes social capital. Continuous and accessible pedestrian networks improve mobility and livability for all pedestrians and are particularly important for seniors and pedestrians with disabilities.

Pedestrians who use sidewalks may have disabilities and may use mobility aids such as wheelchairs, scooters, walkers, canes, etc. Others may have visual impairments (blind or low vision) or have hearing impairments (deaf or hard-of-hearing). According to the Americans with Disabilities Act (ADA) regulations, 28 CFR Part 35, services provided by state and local governments, including features and devices along roadside pedestrian facilities must be “accessible to and useable by” all users, including people with disabilities. It is often a big challenge for large urban areas to maintain and redesign or repair pedestrian facilities to comply with the Americans with Disabilities Act. It requires a tremendous effort to ensure accessibility for seniors and people with disabilities when these facilities are substandard or poorly maintained.

Based on these challenges, agencies are required to develop transition plans to plan and schedule corrections to identified deficiencies. However, planning for the best provisions for accessibility during the process of redevelopment and construction in a number of communities can be challenging. Without readily available and accurate information, pedestrian improvements cannot be easily prioritized. Pedestrian facilities are instrumental in encouraging walkability, which can help improve the quality of life of our citizens and the livability of our communities. Therefore, it is critical that local agencies have access to detailed information of pedestrian facilities to be able to make intelligent decisions. For example, a computerized pedestrian facilities inventory can easily help identify areas with no sidewalks and document the conditions of existing sidewalks, the level of 8 accessibility, and the existence of obstacles or deficiencies that prevent pedestrians to take full advantage of these facilities. A
tool to keep track of pedestrian facilities can assist local agencies in prioritizing investments for pedestrian improvements: repairs, improvements, and new construction projects. To accomplish this, there is a need to develop a software tool that can facilitate this effort. Having a tool available to local agencies can help improve the livability of communities. It can also help identify any safety and accessibility deficiencies that are barriers to senior and pedestrians with disabilities.

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