Livable Communities: Transit Services and Infrastructure that Promote Livability



Designing and fostering livable communities has become a priority at both the local and federal level. While 'livability' takes on different meanings in rural and urban areas, enhanced transportation services and infrastructure universally increases community mobility, accessibility, equity, and safety. This technical brief discusses the characteristics of a livable community, provides examples of enhancements to transportation services and infrastructure, and suggests ways to implement a successful livability initiative.

Released 2011, Updated November 2021

One of the core elements of livability involves intentional design that provides mobility options to connect home, work, and recreation for all members of the community. The original Livable Communities technical brief by National RTAP was created in 2011 as the concept of livable communities became a federal and local focus. Many of the initiatives that were discussed then are still relevant today, as rural, and tribal communities are still working to further a sense of place and create more mobility options. This update builds on those early initiatives, providing additional thoughts on changes in the mobility ecosystem and how those can help to realize a more livable community that is accessible to all people. As a high-level brief, these ideas and suggestions are intended to get transit agencies and cities thinking further about the concept of livable communities.

What is livability and what is a livable community?

AARP's Roadmap to Livability defines livable communities as those that are livable for people of all ages, abilities, and economic levels. They provide a host of advantages that enhance the quality of life of residents. In a livable community, people of all ages are able to get where they need to go, whether by car, public transportation, bicycle, wheelchair, or foot.

"When streets are safer for cyclists and pedestrians, quality of life improves for everybody," U.S. Secretary of Transportation Pete Buttigieg

Six livability principles

The Partnership for Sustainable Communities was among the first to develop a set of comprehensive livability principles at the federal level. These federal guidelines are still applicable to rural communities today:

- 1. **Provide more transportation choices.** Develop safe, reliable and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions and promote public health.
- 2. **Promote equitable, affordable housing.** Expand location- and energy-efficient housing choices for people of all ages, incomes, races and ethnicities to increase mobility and lower the combined cost of housing and transportation.
- 3. Enhance economic competitiveness. Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers as well as expanded business access to markets.
- 4. **Support existing communities.** Target federal funding toward existing communities-through such strategies as transit-oriented, mixed-use development and land recycling-to increase community revitalization, improve the efficiency of public works investments, and safeguard rural landscapes.
- 5. **Coordinate policies and leverage investment.** Align federal policies and funding to remove barriers to collaboration, leverage funding and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.
- 6. Value communities and neighborhoods. Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods.

These principles have been put into action in many areas. See the Partnership for Sustainable Communities' report on Five Years of Learning from Communities and Coordinating Federal Investments for case studies. For example, Maryland modified its criteria for ranking projects to be more consistent with the Partnership principles, focusing on projects that benefit the needs of existing communities, which includes projects near transit. Frostburg, MD, with a population under 9,000, received funding to revitalize its historic downtown, enabling new housing and economic growth along its commercial corridor. The Oglala Lakota People approved a regional plan that helped bring funding from the U.S. Department of Transportation (DOT) to pave a road that connects communities and the Pine Ridge Indian Reservation in South Dakota.

Who does a livable community serve?

Services and infrastructure should be designed for everyone in the community. This includes, but is not limited to:

- Older adults
- Persons with disabilities
- Children and students
- Lower income individuals
- Pedestrians and bicyclists
- Visitors to the community
- Transit riders and drivers
- All cultures and ethnicities

Why should we work toward livable communities?

There are many benefits to livable communities:

- 1. **Improve economic development:** Livability encourages growth in the economy as it allows more people to easily access services, retail, and entertainment opportunities.
- 2. **Improve physical and mental health:** Enhanced pedestrian and bicycle facilities allow people to combine physical activity with their daily travel and improve mental health by connecting with nature.
- 3. **Improve environmental health:** Access to services, retail, and entertainment opportunities reduce the need and use of a personal vehicle, reducing vehicle congestion, and emissions.
- 4. **Increase community building:** Livable communities can connect people across generations, build community engagement and pride, and support cultural heritage.
- 5. **Increase public transportation and shared mobility utilization:** Livable communities encourage travel by public transportation, and other shared mobility modes.

All these benefits lead to overall higher quality of life.

A small town whose Main Street is also a state highway becomes a more livable community as speeds are lowered, pedestrian and bicycle facilities are built, and transit stops are promoted. This allows community members an opportunity to get out of their vehicles and interact with storefronts, public space, government buildings, and each other. It can also attract new business as through traffic is slowed in the town center. This builds the economy and relationships necessary for a sustainable environment, while maintaining the rural character of the area.

How can a community be made more livable?

There are a variety of enhancements that can be made to transit services and infrastructure that will improve livability. Some are directly related to transit service design and vehicles while others focus on the community's infrastructure and environment. Some suggestions below will be more

appropriate for certain communities than others. Each community should consider its environment, service capacity and existing infrastructure when evaluating what enhancements should be made.

Enhancements to transit services

- Accessibility: Stop announcements, route identification, functional bus lifts and ramps, turning room, handrails, and pull cords for wheelchairs, schedules, and information in accessible formats these enhancements allow older adults and people with disabilities to maintain independence and fully access public transportation. Bus stops that are covered, well-lit, and provide seating increase comfort and safety for riders, especially at night and in harsh weather.
- **Bicycle racks on buses**: The ability to bring a bicycle onto public transit allows for multimodal trips and increases the catchment area around a transit stop.
- **Community engagement:** Public agencies should continuously look to interact with community members. Methods of engagement should be accessible and culturally sensitive. Feedback collected from community engagement should be used to design a transit system or pilot project that meets the needs of the community it strives to serve.
- Education: Transit and other shared mobility modes work best when they are coupled with an educational outreach plan. People need to understand what their travel options are so that they can make an informed decision.
- **Fare capping:** Transit agencies might consider altering their fare structures so that customers acquire passes as they use the system instead of paying for the entire cost of a fare pass upfront. Fare capping makes payment structures more convenient and equitable.
- **Implementing livable community driver training programs:** Bus drivers should be made aware of all forms of transportation and instructed on how to share the road with other vehicles, bicyclists, and pedestrians.
- **Investing in alternative energy:** Making cleaner energy choices, such as battery-electric vehicles, benefits the environment and the health of the public.
- **Mobility-as-a-Service (MaaS) solutions:** MaaS integrates the ability to discover, book, and pay for different transportation services, like ridesharing, public transit, and micromobility, ideally within one app or website. MaaS can make peoples' interactions with different shared transportation services more user-friendly and can encourage people to use shared mobility and public transit in place of individual car trips. While MaaS is in its early stages in the U.S., there are examples where components of MaaS are being piloted with the hope of a fully integrated transportation system in the future.
- **Mobility hubs:** This involves the co-location of different shared mobility services and facilities like bikeshare stations, charging for e-scooters, parking for carshare, sidewalks, and pick-up and drop-off locations for transportation network companies (TNCs) and taxis so that people can easily connect to and from public transportation.
- **Multi-Modal Options:** Fostering a diverse multi-modal network creates more travel options for people and they can then choose what mode is best at any given time. For example, a fixed-rail commuter station may help to travel to or from work, but the first and last mile of that trip still need to be met. Bikeshare, carshare, and TNCs are some of the options that can help to build a diverse mobility system.

- **Providing intercity bus service:** Providing bus service between cities and villages takes more cars off the road and expands options for those who do not drive.
- Serving the unbanked: Payment systems should be in place to allow unbanked customers to purchase and load fare payment cards that would otherwise require a bank debit or credit card.
- Utilizing intelligent transportation systems (ITS): Advancements in technology like automated scheduling and dispatching have made transportation greener and more efficient. Investing in these technologies will benefit the system's riders and the community's environment.
- **Wayfinding:** Signage directing customers to transit along with route information and schedules should be clear and accessible. Information for transit should be posted directly at stops but also in trip planning applications.



Protected Bus Shelter, Photo by Dawn Chase

Enhancements to the surrounding infrastructure and environment

The catchment area of a transit facility typically falls within a one-quarter to one-half-mile radius for walking and a 3-mile radius for bicycling. Improvements to these areas will provide a significant impact as community members are more likely to use public transportation if they can reach the services easily and safely. These infrastructure requirements fall under the Complete Trips concept.

- **Bicycle infrastructure:** This includes protected bicycle lanes, cycle tracks, sharrows (shared lane markings see image at the right from Fairfax Advocates for Better Bicycling), bicycle boulevards, median refuge islands, bicycle signal heads, 'Share the Road' signs, bicycle parking facilities around businesses and transit stops, and indoor parking and shower facilities for bicycle commuters.
- **Brighter reflective paint:** This increases the visibility of street lines and markings, especially for night driving in darker areas.



• **Building Strong Community Partnerships:** Processes held in partnership with community members can strengthen changes to a street's built environment. Public agencies

should obtain feedback from neighborhood organizations, businesses, and individuals directly impacted by an infrastructure project.

- **Curb cuts in sidewalks:** There should be curb cuts in the sidewalks at each intersection, and they should be aligned with the crosswalk. This allows pedestrians with mobility aids, strollers, or carts to comfortably and safely enter the crosswalk from the elevated sidewalk.
- Extended pedestrian walking time at traffic signals: Most walk signals do not give older pedestrians or those with disabilities adequate time to cross the street. This leaves the pedestrian exposed to oncoming traffic when the signal changes.
- Larger reflective road signs: These increase the visibility of road signs for older adults and night driving on darker, rural roads.
- **Pedestrian areas:** These are protected, designated areas for pedestrian use only. They can include sidewalks, pathways, trails, and crosswalks with signals.
- **Reduced traffic speeds:** Pedestrians and bicyclists benefit from slower traffic speeds in areas of higher density and near transit stops.
- Shorter turning radii for curbs: Traffic calming techniques can be used to slow vehicle

traffic and create a safer environment for micromobility options and pedestrians. For example, shortening the turning radius for curbs (see the image at the right) decreases the distance a pedestrian must walk to get from one side of the crosswalk to the other. It also slows the speed of the traffic as it turns the corner into the crosswalk. Other traffic calming technique examples include pedestrian refuge medians (islands in the center of the street), pinchpoints (where the road narrows), buildings, and trees. When a combination of these strategies is implemented, they are often referred to as road diets.



• **Traffic calming:** In many small towns, the main street is also a state highway. Traffic calming techniques, such as raised humps in the street, can be used to slow vehicle speeds for greater pedestrian safety while also maintaining the flow of traffic.

Funding and financial matters

There are many U.S. DOT and FTA grants and pilot programs that can provide funding for initiatives related to livable communities. Some of these may not be accepting applications at this time, they but may be at a future time. For a listing of all FTA grants, visit https://www.transit.dot.gov/grants.

- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grants program
- Grants for Buses and Bus Facilities Formula Program (Section 5339(a))
- Formula Grants for Rural Areas (Section 5311)
- Public Transportation on Indian Reservations (Tribal Transit Program) and Tribal Transit Formula Grants (Section 5311(c)(1)(B))

- Enhanced Mobility of Seniors & Individuals with Disabilities (Section 5310)
- Access and Mobility Partnership Grants
- Capital Investment Grants Program (Section 5309)
- Accelerating Innovative Mobility (AIM) Initiative
- Areas of Persistent Poverty Program
- Helping Obtain Prosperity for Everyone Program (HOPE)
- Accelerating Innovative Mobility (AIM) Grants
- Pilot Program for Transit-Oriented Development Planning (Section 20005(b))
- The Surface Transportation Block Grant Program (23 USC 133) provides funding that may be used for a wide range of projects to preserve and improve the conditions and performance of surface transportation, including transit, intercity bus, bicycle, and pedestrian projects.
- Low or No Emission Vehicle Program 5339(c)
- Mobility for All Pilot Program Grants
- Pilot Program for Transit-Oriented Development Planning Section 20005(b)
- Congestion Mitigation Air Quality in EPA Non-Attainment Air Quality Neighborhoods

In addition, funding from national, regional, and local foundations and philanthropic organizations can be used. Local matches may also be used as federal grant guidelines allow.

Examples of national livability grants include the AARP Community Challenge, an annual program that funds projects that build momentum for local change to improve livability. Non-profits, government entities, and other organizations can submit projects that deliver a range of transportation and mobility options in the community through walkability, bikeability, and/or access to public and private transit. America Walks Community Challenge Grants fund initiatives that create places where all community members have safe, accessible, equitable, and enjoyable places to walk and be physically active.

The AARP Roadmap to Livability provides the following possibilities for funding:

- Community fund-raising
- Requesting donations from businesses and the public
- Seeking donations via outreach (direct mail, crowdsourcing, etc.)
- Creating a corporate sponsorship program
- Selling tickets to a special event

Building toward a more livable future



Transportation providers and planners must look to the future and the six livability principles offer a framework to help in this process. For example, San Luis Obispo, California opened its first protected intersection (shown at left) in 2021, which increased safety for driving, bicycling, and walking. The intersection provided a more comfortable way to make left turns by bike without having to merge across several lanes of motor vehicle traffic. It also featured wider sidewalk corner curbs with a corner island that helps reduce the crossing distance for walking.

The planners also raised awareness about how to navigate this new protected intersection with a news release and local media coverage, social media posts, and a how-to video.

A relatively new concept is temporary "pop-up" outdoor structures. The Honolulu Complete Streets program published its Parklet Program Guide in 2020. Parklets are usually temporary structures, that may be built near transit facilities, that provide amenities that facilitate people watching, socializing, reading, outdoor dining, and bicycle parking.

Here are some tips for how transit agencies can help foster livability initiatives:

- Get the community involved in defining what livability looks like in the town
- Obtain commitment from the mayor, town manager, etc.
- Use strong visual aids to communicate projects and plans
- Include livability issues in the transportation master plan
- Promote mobility options and advertise transportation services
- Host a Bike to Work or Walk to School Day in the community
- Implement a bicycle benefits program with local businesses
- Connect ridesharing and rural on-demand and commuter transit vans to regional employers and schools

Transit agencies that help to plan and implement livability initiatives often find that it is a win-win for all involved and can act as a springboard for further enhancements to all aspects of community life.

Acknowledgments

National RTAP and SUMC gratefully acknowledge the following individuals for the 2021 review of the technical brief update: Adam Fukushima, City of San Luis Obispo; Pradip Pant, Hawaii Department of Transportation; and Whitney Szentesi, City of San Luis Obispo.

Further Information

AARP. The 8 Domains of Livability: An Introduction. 2020. https://www.aarp.org/livable-communities/network-age-friendly-communities/info-2016/8-domains-of-livability-introduction.html

AARP. Roadmap to Livability, Transportation Workbook. 2018. https://www.aarp.org/content/dam/aarp/livable-communities/livable-documents/documents-2018/Book-4-Roadmap-To-Livability-Transportation-62518-lrspr.pdf

AARP. Rural Livability Workshop Report. 2020. https://www.aarp.org/content/dam/aarp/livable-communities/livable-documents/2020/AARP-Rural-Livabilty-Workshop-Report-22420-singles.pdf

AARP Public Policy Institute. Livable Communities. http://www.aarp.org/research/ppi/liv-com/. Accessed June 30, 2021.

City of San Luis Obsipo. SLO Opens First Protected Intersection. July 8, 2021. https://www.slocity.org/Home/Components/News/News/8180/17

Fast Company. 50 Reasons Why Everyone Should Want More Walkable Streets. August 24, 2016. https://www.fastcompany.com/3062989/50-reasons-why-everyone-should-want-more-walkable-streets

Federal Highway Administration (FWHA), Transportation and Rural Livability. https://www.fhwa.dot.gov/livability/fact_sheets/transandrurallivability.cfm. Updated: September 15, 2020.

Honolulu Complete Streets. Parklet Program Guide. July 2020. http://www.honolulu.gov/rep/site/dts/dts_docs/Honolulu_Parklet_Program_Guide_July2020_sm.pdf

National Association of Area Agencies on Aging. Making Your Community Livable for All Ages: What's Working. 2015. https://www.n4a.org/files/n4aMakingYourCommunityLivable1.pdf

Secretary Pete Buttigieg talks with the League of American Bicyclists about making biking better. March 3, 2021. https://youtu.be/4VSBTNGDpbc

U.S. Department of Housing and Urban Development (HUD). Six Livability Principles. https://www.hud.gov/program_offices/economic_development/Six_Livability_Principles. Accessed August 19, 2021.

Victoria Transport Policy Institute. Community Livability: Helping to Create Attractive, Safe, Cohesive Communities. 2017. https://www.vtpi.org/tdm/tdm97.htm

Western Transportation Institute's and Upper Great Plains Transportation Institute's Small Urban and Rural Livability Center (SURLC). http://surlc.org/. Accessed June 30, 2021.

A program of the Federal Transit Administration administered by the Neponset Valley Transportation Management Association



The Shared-Use Mobility Center is a public-interest organization dedicated to achieving equitable, affordable, and environmentally sound mobility across the US through the efficient sharing of transportation assets.

