

# Benefits of Livability

*Livability benefits range from healthier people and environment to stronger economies!*

Incorporating livability approaches into transportation, land use, and housing policies can help improve public health and safety, lower infrastructure costs, reduce combined household transportation and housing costs, reduce vehicle miles traveled, and improve air and water quality, among many other benefits. Some of these benefits are summarized below, and outlined in more detail in separate fact sheets for each of these topic areas.

## **Economy: Lower construction and operating costs.**

Mixed use development can reduce construction and operating costs, and often results in lower energy and maintenance costs.<sup>1</sup> Locating new compact development in existing developed areas can lower costs to taxpayers, businesses, and residents by reducing initial infrastructure and long-term operating costs, due to fewer miles of roads, water, and sewer systems to build and maintain. If between now and 2025, just 15 percent of anticipated new U.S. growth is concentrated within an existing developed area, the country could save \$109 billion in reduced road building costs, \$4.8 billion in water system costs, \$7.8 billion in sewer system costs, and \$4 billion in public services costs.<sup>2</sup>

***“Coordinated transportation and housing planning can make the best use of scarce federal dollars and can help create jobs, lower transportation costs and reduce our dependence on oil.” – U.S. Transportation Secretary, Ray LaHood***

AASHTO. “Weekly Transportation Journal.” June 2011.  
<http://www.aashtojournal.org/Pages/062411livability.aspx>.

**Transportation, Housing, and Land Use: Lower costs, better value.** Living in a location where only one car per home is needed can reduce total housing and transportation costs to 50 percent of income or less. Families in auto-dependent locations spend 25 percent of their income on transportation; efficiently located housing can reduce transportation costs to 9 percent of income.<sup>3</sup> Compact development around transit supports transit and economic vitality, creates walkable communities, provides a range of housing options, reduces traffic, and preserves open space.<sup>4</sup> Transit users in cities with robust transit systems can save up to \$10,230 per year using transit rather than owning a vehicle.<sup>5</sup> Houses in these types of communities retain value and perform better than conventional development in resale value comparisons.<sup>6</sup> People living in compact neighborhoods where they can walk and bike to nearby destinations drive 26 percent fewer miles per day than those in less compact areas.<sup>7</sup>

**Public Health: Walking and biking can reduce obesity and improve health.** Lack of physical activity is a key contributor to the obesity epidemic. Walking or bicycling as part of daily travel is as effective as structured

<sup>1</sup> C. Kooshian and S. Winkelman. “Growing Wealthier: Smart Growth, Climate Change and Prosperity.” Prepared for the Center for Clean Air Policy. January 2011.

<sup>2</sup> Kooshian, et.al.

<sup>3</sup> Center for Transit Oriented Development (2008) “The Affordability Index Toolbox” (Oakland, CA: Reconnecting America).

<sup>4</sup> “The Benefits of Compact Development.” October 2009. <http://greatcommunities.org/intranet/library/sites-tools/great-communities-toolkit/density.pdf>.

<sup>5</sup> American Public Transportation Association, “Despite Predictions of Lower Fuel Costs, Gas Prices Remain High as Public Transit Savings Soars,” May 10, 2011, [www.apta.com/mediacenter/pressreleases/2011/Pages/110510\\_May\\_Transit\\_Savings.aspx](http://www.apta.com/mediacenter/pressreleases/2011/Pages/110510_May_Transit_Savings.aspx)

<sup>6</sup> U.S. EPA (2011) *Market Acceptance of Smart Growth* (Washington, DC), report EPA 231-R-10-001.

<sup>7</sup> Frank, L.D., Kavage, S., and Appleyard, B. “The urban form and climate change gamble: How transportation and land development affect greenhouse gas emissions.” *Planning*, 73(8). 18-23. 2007. as cited in Ewing, Reid et al. “Chapter 1: Overview.” *Growing Cooler*. Prepared by the Urban Land Institute. 2007.

Creating more livable communities through transportation choices



workouts for improving your health.<sup>8</sup> Multimodal transportation systems and mixed use, walkable neighborhoods make it easier for people of all ages and abilities to get where they need to go – and to get regular exercise while doing it. Children, many older adults, persons with disabilities, and low-income households are less able to get to school, parks, shopping, and community activities when there are no walking, wheeling, and bicycling options. Walking and transit account for more than 10 percent of all trips for older adults.<sup>9</sup> More people walking and bicycling can actually make pedestrians and cyclists more noticeable and make it safer for them.<sup>10</sup> High biking cities averaged 2.5 fatalities per year per 100,000 residents compared to almost 9 deaths per 100,000 for low biking cities.<sup>11</sup>

**Environmental Benefits: Improved Air and Water Quality.** Replacing driving with walking and bicycling improves air quality and reduces air toxic pollutants.<sup>12</sup> Public transportation produces about 45 percent less carbon dioxide per person than traveling in individual vehicles.<sup>13</sup> Reducing the amount of land consumed by development helps preserve fields, farms, and forests, and supports better water quality by reducing run-off.<sup>14</sup>

## Success Stories

**Increase biking by investing in bikeshare systems.** Bikesharing is becoming a popular way to expand access and transportation options.<sup>15</sup> The Capital Bikeshare program, launched in May 2010, offers residents and visitors in Washington, DC and Arlington County, VA access to more than 1,100 bicycles at 110 stations. Participants can join for a day, a month, or a year.<sup>16</sup> Usage has grown from 33,000 member trips in December 2010 to 143,000 member trips in June 2011.<sup>17</sup>



Capital Bikeshare rental station, Washington DC. (Capital Bikeshare)

## Stimulate investment by increasing connectivity.

The Portland Streetcar in Portland, OR was constructed in 2001 to connect two major downtown redevelopment areas in different parts of the city. Because of the project, 55 percent of all Central Business District development from 1997 to 2008 occurred within a one-block area of the line. Developers were also able to reduce parking ratios in residential buildings. As of April 2008, \$3.5 billion had been invested within two blocks of the line. The Streetcar also connects to Portland's regional light rail line and other transit routes.



Portland's Streetcar and Mixed-Use Development. (<http://www.portlandstreetcar.org/node/41>)

<sup>8</sup> Dunn, A., et al. 1999. Comparison of lifestyle and structured interventions to increase physical activity and cardiovascular fitness: a randomized trial. *Journal of the American Medical Association*, 281: 327-34.

<sup>9</sup> Lynott, J., Figueiredo, C. (2011). "How the Travel Patterns of Older Adults Are Changing: Highlights from the 2009 National Household Travel Survey" (Washington, DC: AARP Public Policy Institute)

<sup>10</sup> Woodcock, J., et al. (2009) Public health benefits of strategies to reduce greenhouse-gas emissions: urban land transport. *Lancet* 374: 1930-43.

<sup>11</sup> Marshall, W.E., Garrick, N.W. (2011). Evidence of Why Bike-Friendly Cities are Safer for All Road Users. *Environmental Practice*. 13 (1): 16-27.

<sup>12</sup> Litman, Todd (2009), "Quantifying the Benefits of Nonmotorized Transportation for Achieving Mobility Management Objectives," Victoria Transport Policy Institute.

<sup>13</sup> Kooshian, et.al.

<sup>14</sup> U.S. EPA "The National Water Quality Inventory: 2000 Report to Congress," [water.epa.gov/lawsregs/guidance/cwa/305b/index.cfm](http://water.epa.gov/lawsregs/guidance/cwa/305b/index.cfm)

<sup>15</sup> Lippman, Daniel. "Bike-sharing gears up in U.S. as gas prices soar." McClatchy Newspapers. [www.mcclatchydc.com/2011/06/30/116799/bike-sharing-gears-up-in-us-as.html](http://www.mcclatchydc.com/2011/06/30/116799/bike-sharing-gears-up-in-us-as.html).

<sup>16</sup> <http://capitalbikeshare.com/>.

<sup>17</sup> <http://cabidashboard.ddot.dc.gov/CaBiDashboard/#Home>.

Federal Highway Administration: [www.fhwa.dot.gov/livability](http://www.fhwa.dot.gov/livability)  
Partnership for Sustainable Communities: [www.sustainablecommunities.gov/](http://www.sustainablecommunities.gov/)

