

Successes In Stewardship

Celebrating 10 Years

July 2012

Nonmotorized Transportation Program Increases Biking and Walking

In August 2005, Congress established the [Nonmotorized Transportation Pilot Program](#) (NTPP) as part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The NTPP allocated \$100 million in Federal funds to support nonmotorized transportation investment programs in four communities across the U.S. As described in SAFETEA-LU, the purpose of the NTPP is “to demonstrate the extent to which bicycling and walking can carry a significant part of the transportation load, and represent a major portion of the transportation solution, within selected communities.” In its [April 2012 report to Congress](#), the Federal Highway Administration (FHWA) documented that together the four communities involved in the NTPP saw an estimated 36 percent increase in bicycling mode share and a 14 percent increase in walking mode share between 2007 and 2010. During that time, driving mode share decreased by an estimated 3 percent. These results show that investments in bicycling and walking can have a significant impact on the share of nonmotorized trips taken in a community.



GetAbout Columbia encouraged elementary school students to walk to school by implementing a walking school bus program. (Courtesy of GetAbout Columbia)

Pilot Community Investments

From 2006 through 2009, the NTPP provided over \$25 million annually to each of four pilot communities: Columbia, Missouri; Marin County, California; Minneapolis, Minnesota; and Sheboygan County, Wisconsin. The pilot communities represent a diverse cross-section of U.S. counties and cities in terms of population size, demographic profile, location, physical characteristics, climate, and extent of nonmotorized transportation infrastructure networks. Each community used its share of NTPP funds to implement locally devised strategies to increase the use of nonmotorized transportation and to document any accompanying safety, environmental, and health benefits. Each community's NTPP investment strategy is described below.

GetAbout Columbia

The goal of Missouri's NTPP pilot, [GetAbout Columbia](#), was to promote a cultural change in travel behavior and attitudes toward walking and bicycling while providing the necessary infrastructure to support such a shift. The city had high potential for the nonmotorized transportation investments to be successful due in part to its dense downtown, the student population at the University of Missouri, and its existing trail network. A citizen advisory board, working with the local bicycle and pedestrian commission, parks commission, and city staff, identified projects and programs in which to invest.



The Cal Park Hill Tunnel in Marin County connects a multi-use path to the Larkspur Ferry Terminal via a reconstructed railroad tunnel. (Courtesy of WalkBikeMarin)

To take advantage of the existing roadway network, GetAbout Columbia placed a high priority on constructing onstreet infrastructure. This included bicycle lanes and bicycle boulevards, which are typically residential streets where pedestrians and bicyclists are given priority over motorists. A smaller number of offstreet projects, such as pedways (extra-wide sidewalks), provided linkages between key destinations, like schools and commercial areas, to improve safety for pedestrians and bicyclists. GetAbout Columbia also initiated promotional efforts to inform residents about the program and to educate them about nonmotorized travel options.

WalkBikeMarin

Building on a history of nonmotorized transportation advocacy and activity, California's [WalkBikeMarin](#) focused its NTPP resources on filling key infrastructure gaps in its bicycling and walking networks. WalkBikeMarin consulted existing plans and worked with its Citizen Advisory Committee to identify projects that would have the greatest impact on bicycling and walking. Some of these investments improved connections to transit to accommodate bicyclists and pedestrians with long commutes.

In addition, WalkBikeMarin focused on incorporating bicycle and pedestrian accommodations into new roadway construction projects (whether or not the NTPP funded these projects) and retrofitting existing facilities to improve the nonmotorized transportation network. A smaller number of offstreet projects, such as the Cal Park Hill Tunnel, provide nonmotorized transportation connections to schools, ferries, and commercial areas. WalkBikeMarin also leveraged existing and emerging partnerships and conducted strategic community outreach to complement infrastructure investments.

Bike Walk Twin Cities

Since Minneapolis already has an extensive trail system and sidewalk grid, [Bike Walk Twin Cities](#) (BWTC) focused on onstreet connections to complete the city's nonmotorized transportation network. This approach required innovative street design and operations, such as road diets (reductions in the number of travel lanes to match vehicular demand while providing more dedicated space for pedestrians and bicyclists) and coordination with transportation professionals, elected officials, and citizens. In addition to funding infrastructure improvements, BWTC also funded multiple planning studies that helped to identify shovel-ready projects for future implementation.



BWTC provided funds to help launch Nice Ride, Minneapolis/St. Paul's bike share system. (Courtesy of BWTC)

BWTC established strategic priorities with input from an advisory committee of community stakeholders to guide the identification and selection of nonmotorized transportation projects to be funded. Local jurisdictions submitted project proposals, a team of staff and technical experts scored the proposals, the advisory committee made recommendations, and BWTC decided how to allocate the funds. BWTC placed a high priority on relatively low-cost improvements that expanded the use of existing roadway areas. The region also has the most demographically and socioeconomically diverse population of the four communities, so the pilot placed special emphasis on reaching traditionally underserved communities, such as low-income residents and immigrants.



NOMO constructed sidewalks in Plymouth, Wisconsin to fill gaps in the city's pedestrian network. (Courtesy of NOMO)

NOMO Sheboygan County

Sheboygan County in Wisconsin has a strong culture of recreational bicycling, but prior to the NTPP it had little infrastructure devoted to bicycling for transportation. Many of the communities in the county had comprehensive pedestrian networks and policies in place, but some areas had minimal walking infrastructure. Sheboygan County's NTPP group, [NOMO](#) (short for nonmotorized), is building public support for walking and bicycling as transportation modes.

Before allocating NTPP funds to infrastructure projects, NOMO developed Sheboygan's first, countywide pedestrian and bicycle plan. The plan identified priorities to guide investments through the NTPP and beyond and projects that help the county apply those priorities. It also provided guidelines and standards for facility design and incorporated Wisconsin laws and policies related to nonmotorized transportation.

The county's NTPP investments focused on filling gaps, building its walking and bicycling networks, and encouraging public support for and awareness of nonmotorized transportation through broad educational campaigns. NOMO started with projects that were relatively easy to implement, both technically and politically, to quickly develop a comprehensive network of bicycle and pedestrian facilities.

Evaluation Results

At the beginning of the program in 2007 and again in 2010 after many of the NTPP facilities had been constructed, each community counted bicyclists and pedestrians on a weekday and a weekend day in September with the methodology of the National Pedestrian and Bicycle Documentation Project, which is cosponsored by Alta Planning and Design and the

Institute of Transportation Engineers. The communities conducted these counts to estimate the impacts that NTPP investments had on bicycling and walking in the four communities.

Between 2007 and 2010, these counts revealed that walking increased by 22 percent and bicycling by 49 percent across 65 bicycle and 58 pedestrian count locations. In addition to the counts, the NTPP conducted surveys of people who were out bicycling and walking in the four communities to learn more about their transportation choices. The surveys indicated that the increase in bicycling and walking was attributable primarily to utilitarian trips, although recreational and exercise activity also increased.

The NTPP used the counts and other data to develop models that determine the impacts of the NTPP regarding energy consumption, the environment, and health in terms of mode share changes and vehicle-miles averted. The models estimate that between 2007 and 2010 residents of the pilot communities walked or bicycled between 32.3 and 37.8 million more miles than they would have without the NTPP. Based on this shift, the NTPP estimates that, across the four communities, the mode shares for bicycling and walking increased by 36 percent and 14 percent, respectively, between 2007 and 2010, during which time driving mode share decreased by an estimated 3 percent. Assuming a one-to-one tradeoff between vehicle trips and nonmotorized trips, the NTPP estimated that the program conserved 1.67 million gallons of gasoline and averted more than 30.8 million pounds of carbon dioxide emissions between 2007 and 2010. The NTPP also noted that the increase in nonmotorized travel and the decrease in automobile trips resulted in notable reductions in other air pollutants that contribute to health problems.

Next Steps

Moving forward, the pilot communities will continue to maximize the transportation benefits of the NTPP investments. Each community will continue to implement the remaining infrastructure projects; execute awareness, outreach, education, and enforcement initiatives; and collect data to evaluate and learn from the program. This will benefit the communities themselves as well as the wider field of transportation. As transportation agencies consider the importance of using performance measures to prioritize and track investments, the NTPP's data and results will guide State, county, and city governments across the country in measuring success in promoting bicycling and walking.

Contact Information

Gabe Rousseau
Team Leader
Office of Livability
Federal Highway Administration
(202) 366-8044
gabe.rousseau@dot.gov

Look What's New!

- FHWA recently published the [Fiscal Year \(FY\) 2011 Annual Report](#) and the [FY 2012 Research Plan](#) for the Surface Transportation Environment and Planning Cooperative Research Program (STEP). Authorized in SAFETEA-LU, FHWA's STEP funds research to improve the understanding of the relationship between surface transportation and the environment.
- FHWA has released a [Freight and Land Use Handbook](#), which provides transportation and land use planners with the tools and resources to properly assess the impacts of land use decisions on freight movements, as well as the impacts of freight development and growth on land use planning goals. The handbook identifies freight-related land use issues, key considerations, and available resources, in addition to providing examples and case studies from a range of urban and rural areas across the country.

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