



Project Summary

Texas Department of Transportation

0-6582: Synthesis of Successful Bicycle Planning in Mid-Size Cities

Background

The Texas Tech Center for Multidisciplinary Research in Transportation worked together with the Texas Department of Transportation to conduct a survey of successful bicycle policies and practices in the United States. Although it is gaining popularity as a means of transportation, bicycling has historically been underutilized in the United States. The federal transportation funding program in the United States has focused on highway construction and maintenance for automated travel. As a result, many U.S. cities have been developed with very little thought for the use of bicycling as a means of transportation or recreation. Insufficient and badly designed bicycle facilities have caused many problems, including insufficient access, insufficient street markings, limited right-of-way, discontinuity, and heavily motorized vehicle traffic on bike paths. These challenges make it difficult for bicyclists to properly access and use the necessary facilities.

The goal of this research project was to synthesize successful practices of bicycle planning in mid-size cities. This included:

- a review of bicycle practice in the U.S.,
- a review of successful experiences in planning, design, and implementation of bicycle facilities,
- a survey of successful bicycle policies and practices in the U.S., and
- a synthesis of the survey data and responses, with common problems in bicycling and key factors for promoting bicycling transportation identified.

What the Researchers Did

The team developed and released an online survey targeting various groups, including: city traffic engineers, officials from metropolitan planning organizations (MPOs), department of transportation employees, transit agencies, bicycle users, bicycle advocacy groups, and members of transportation review board committees. The purpose of this survey was to rate various issues of funding, safety, and organization to create a clear picture of how successful bicycling would appear in Texas, particularly in mid-size cities. The survey was distributed to approximately 1300 respondents, many of whom disseminated it amongst other colleagues and posted the link on various websites. A total of 436 respondents took the survey, about 34% of the initial survey population. The high level of responses lends credibility to the study and indicates the importance and popularity of bicycling as a means of transportation.

Research Performed by:

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Project Completed: 11-30-10

What They Found

Most of the key findings from this study are relevant to most communities, although several focus more on mid-size cities. These key findings include:

- Primary funding resources for bicycle projects come from the Congestion Mitigation and Air Quality, Transportation Enhancement, and Safe to School programs.
- Continuous funding is the primary barrier for promoting bicycling in mid-size communities.
- It is difficult for bicycle projects to make the priority list under the existing funding policies; a sub-allocation policy that gives more flexibility to local transportation agencies and MPOs in determining how federal funding is spent is necessary.
- Political support, culture, strong advocacy groups, and education are all equally important in creating a bicycle friendly community.
- Unsuccessful bicycle plans of mid-sized cities usually show a lack of clearly executable goals, a lack of clearly defined short- and long-range implementation plans, and lack of maintenance plans.
- It is likely that bike plans are underutilized in mid-size cities.
- Safety is the primary concern for bicyclists.
- Motorist attitudes are generally negative toward bicycling and seemingly worsen with population increase.

What This Means

The research team suggests that the following actions be taken in order to properly plan and implement effective bicycle strategies.

- Long-range and short-term transportation plans should be made with an aim at building livable societies in which bicycling is given dual consideration with automotive transportation.
- Local transportation agencies and MPOs should be given more authority and flexibility in determining how to spend federal funding to meet the needs of local communities.
- Diversification of funding resources for bicycle projects is of primary importance for promoting bicycling.
- Bicycle plans should be implemented in a systematic manner and updated on a regular basis.

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