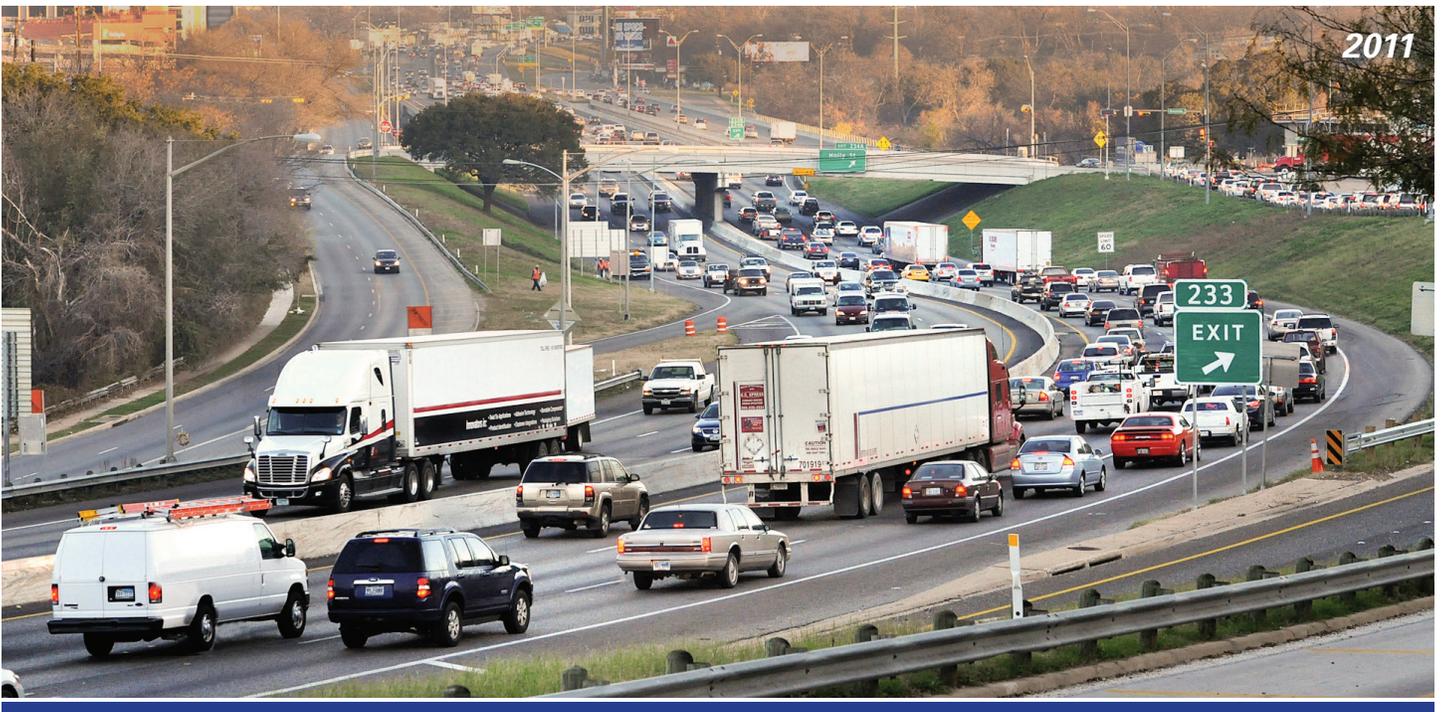


# Mobility Investment Priorities Project

## Assessing Economic Benefits of Walkability in Austin, Texas Executive Summary

September 2013





**Establishing Mobility Investment Priorities  
Under TxDOT Rider 42:  
Assessing Economic Benefits of Walkability in Austin, Texas  
Summary Report**

**Prepared for  
Texas Transportation Commission  
And  
83rd Texas Legislature**

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**Mobility Investment Priorities Project  
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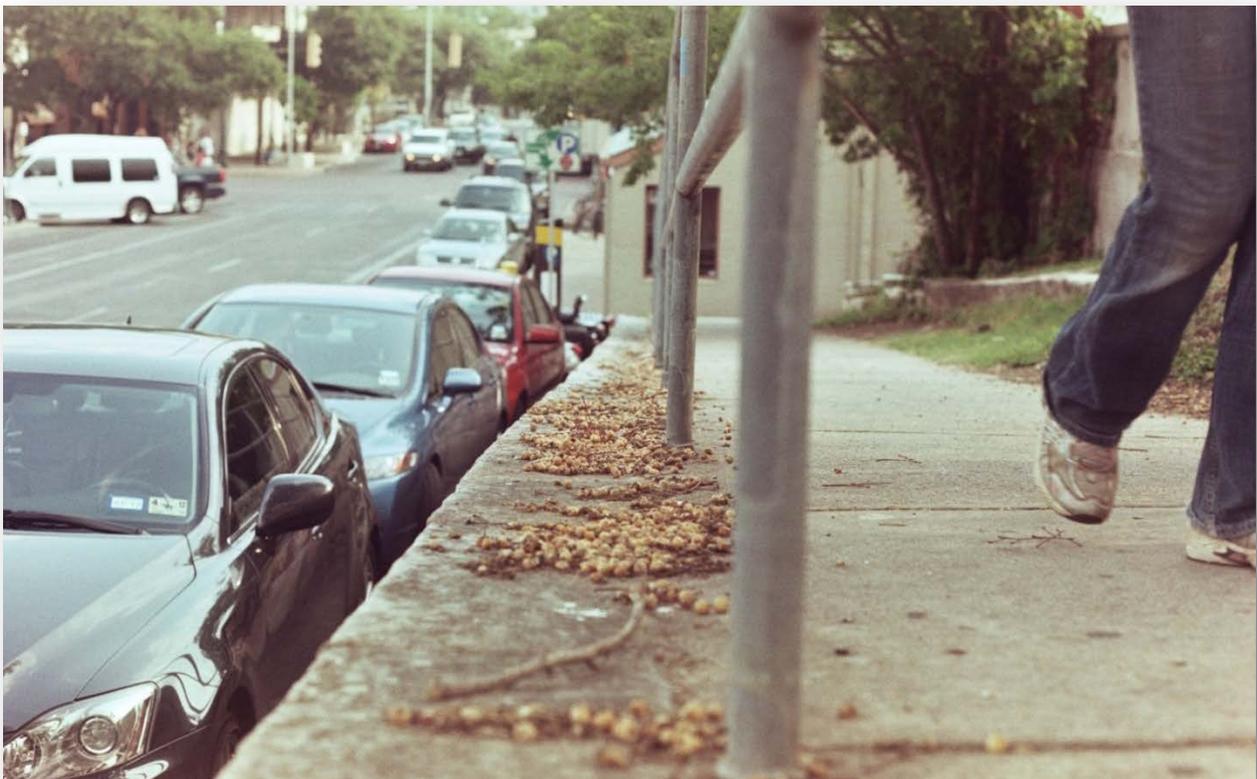


## INTRODUCTION

Transportation planners and makers have been promoting neighborhood walkability in pursuit of smart growth goals and reduction in carbon-intensive travel, as well as increased public health. Despite broad support for the benefits of walkable communities, the links between walkability and economic outcomes, such as residential property values, are still poorly understood. Our research effort investigated the impact of walkability on residential property values by analyzing single-family building (SFB), condominium, and multifamily building (MFB) sale transactions in Austin, Texas, from 2010 through 2012. The goal of this research was to help TxDOT and local governments make informed decisions that maximize the benefit of investments in promoting walkable communities and active transportation.

## STUDY DESCRIPTION

We evaluated how the premiums of walkable neighborhoods depend on local built environment and other neighborhood features including safety, street connectivity, and density of sidewalks, as well as various socio-demographic factors. We analyzed housing sales transaction data provided by the Austin Board of REALTORS<sup>®</sup>, in addition to land use, school, traffic, crime, and transportation network data obtained from the city of Austin, Capital Metropolitan Transportation Authority, Capital Area Metropolitan Planning Organization, Travis Central Appraisal District, and the Texas Department of Education. A Street Smart Walk Score (SSWS) was obtained for each sampled residential property from walkscore.com, which



generates a walkability score (0–100) based on the residential location’s proximity, measured by actual walking paths, to amenities such as grocery stores, restaurants, schools, and parks. A sophisticated modeling methodology was used to analyze these data in order to determine the effects of structural and neighborhood characteristics and walkability on residential property values. We confirmed robustness of our results by using different modeling approaches and a different walkability measurement based on the ‘bird flight path’ (as opposed to actual walk path distance) to amenities.

## **RESULTS**

The effects of structural and neighborhood characteristics on residential property values were highly significant for all three property types studied (SFB, condo, MFB). As expected, larger use area, more bathrooms, and having one or more garages increased property values while increase in age negatively impacted property values for all housing types. In terms of neighborhood characteristics, road and rail networks, school quality (as measured by academic performance), violent and property crime rates, traffic collisions involving pedestrians, average speed limits in the neighborhood, and distance to downtown affected residential property values, although these impacts varied across housing types. Socio-demographic characteristics such as racial and ethnic composition of the neighborhood, percentage of households with children and elderly persons, education level, poverty rate, and per capita income also influenced the effects of walkability on property values, albeit differently across housing types.

We categorized sampled properties based on their Street Smart Walk Score: car-dependent – driving only (0 to 24); car dependent – only a few walking destinations (25 to 49); somewhat walkable (50 to 69); very walkable (70 to 89); and walkers’ paradise (90 to 100). For all housing types, the marginal benefit of walkability on property values was generally higher for homes located in more walkable neighborhoods with walkability having positive impacts for properties located in neighborhoods that are at least somewhat walkable (walk scores above 50).

Residential properties located closest to the activities or destinations (i.e., walker’s paradise) benefited the most from increased property values. Our study also showed that higher Street Smart Walk Scores, the network-based walkability measurement, had a more positive impact on residential property values than the conventional bird-flight based walkability measurements for all property types.

## **DISCUSSION AND POLICY IMPLICATIONS**

Our findings illustrate the potential economic benefits of improving walkability, in addition to the environmental and public health benefits. On this account, we suggest that if improving neighborhood walkability is a community goal, the biggest home (and therefore tax) value payoff will be in already walkable neighborhoods. The results indicate that an investment in sidewalks or paths that link a set of homes in a walkable neighborhood to a desirable

destination will yield a greater home price increase than a similar investment in a generally non-walkable neighborhood. Rather than helping every neighborhood to some level of walkability, the data suggest the biggest payoffs are in neighborhoods where residents are already inclined to walk. Single-family homes in locations where a car is more likely to be an optional rather than a required element, show home values increase at twice the rate for a given walkability increase than homes in the next most walkable locations. And the effect of walkability improvements in those 'next most walkable' homes are five times greater than the group of homes with walkability scores below them. The potential economic benefits of walkability also extend to condominiums and multifamily housing, with the greatest increase in property values in neighborhoods that are already somewhat walkable.

This research has important policy implications. Given the fiscal constraints facing TxDOT and municipal governments in Texas and throughout the nation, promoting walkability solely on environmental and health benefits may not resonate for policymakers as much as the potential for economic benefits. Our findings show that allocating funding for walkability improvements on neighborhoods where walking is a likely result will yield the greatest dividends for cities through increased property tax revenue, as well as increased walking, cycling, and transit use.