Stronger Transit, Better Transit-Oriented Development

By Carli Paine, TransForm

Introduction

In addition to its environmental benefits, increasing proximity to transit is one way to reduce the social and economic isolation that many low- and moderate-income (LMI) communities face. By physically linking people to affordable housing and jobs through transit, transit-oriented development (TOD) benefits LMI households in a variety of ways, including saving money on transit costs and connecting them to employment centers across the region. This makes TOD an important tool for community development. This article explores the social and environmental benefits of TOD, and discusses the challenges associated with reduced funding for transit. It then suggests policies that will support transit, providing guidance for community development advocates seeking to increase TOD in LMI communities.

The Benefits of TOD: Cost Savings and Emissions Reductions

TransForm, a California-based transit advocacy nonprofit organization, recently conducted a study, *Windfall for All,* with the Center for Neighborhood Technology, to assess how compact walkable developments near transit can save households money and reduce greenhouse gas emissions. The study looked at household transportation costs (inclusive of owning and operating vehicles as well as public transportation expenses) in California's four most populous regions: the Bay Area, San Diego County, the Los Angeles region, and the Sacramento area. The study divided residents of these metropolitan areas into quintiles based on their level of access to public transportation and examined the benefits of living near transit options.

Figure 1 *Comparing measures of housing affordability for the 10 Bay Area cities with the lowest transportation costs per household. (1= most affordable)*

City	Transportation Affordability Rank	Housing Affordability Rank	Overall (T & H) Affordability Rank
Emeryville	1	7	1
San Francisco	2	37*	11
Berkeley	3	27	8
Oakland	4	8	3
Sausalito	5	84	77
Albany	6	34	27
San Pablo	7	1	2
Alameda	8	29	21
Larkspur	9	76	69
Richmond	10	3	5

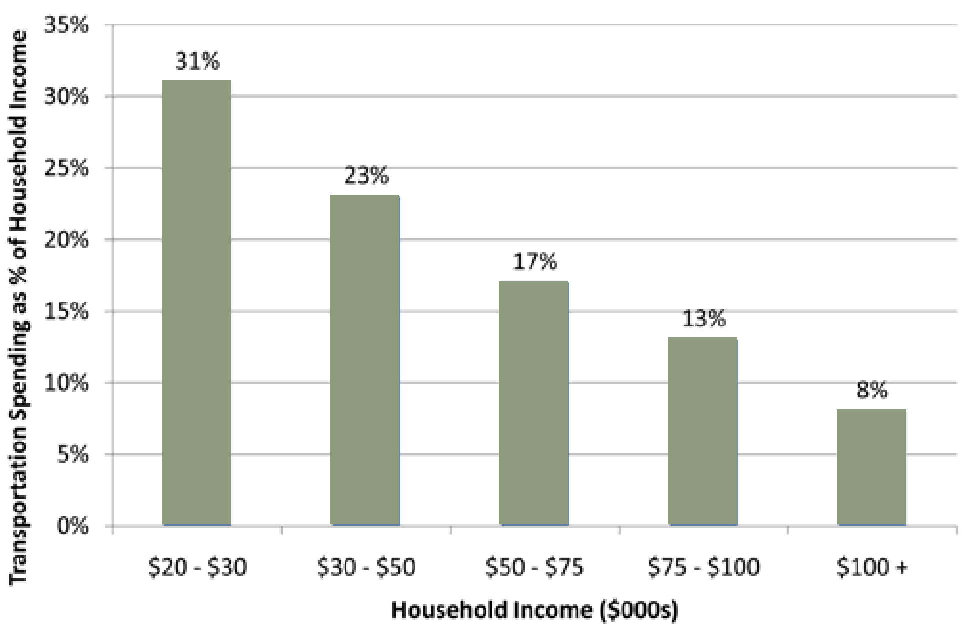
** While San Francisco housing is expensive per square foot, there are significant amounts of small units, studios, and dedicated affordable housing.*
Source: Calculated from CNT data for the 100 Bay Area cities and towns with populations over 3,000.

The study findings documented a clear link between transit access and transportation costs. It found that residents in the top 20 percent—those who live in neighborhoods with the best access to public transportation—spend significantly less on transportation each year than the rest of the regions' residents. Across all four metropolitan regions, if those in the lower quintiles had the same quality of transit access as those in the top 20 percent, they could save an average of $3,850 a year, a significant sum that could then be added to the household budget. In the aggregate, these savings total a collective $31 billion per year. In a high cost-of-living region like the Bay Area, the savings are even more dramatic: the average household would have $5,450 more per year to spend on education, health care, or other priorities if they enjoyed the same level of transit access that neighborhoods with the best transit access have.

The cost savings enjoyed by households in the neighborhoods with the best transit are mostly due to lower vehicle ownership rates. According to AAA, the majority of costs associated with dependence on personal vehicles aren't from fuel or maintenance. Car ownership expenses—insurance, registration, and financing—comprise 71 percent of the annual vehicle costs in the U.S. These are not costs that will diminish as we buy cleaner cars. However, when gas prices escalate quickly, like they have several times in the past few years, the difference in driving and fuel consumption becomes amplified.

Yet many LMI families can't take advantage of these savings, because housing located around transit options is often too expensive. Instead, LMI families are often forced to "drive until they qualify" in the search for housing that's affordable. The Center for Neighborhood Technology's Housing + Transportation Affordability Index combines the

Figure 2 *Transportation Spending as a Percentage of Household Income, by Income Bracket*



Source: Center for Neighborhood Technology 2009 & Virginia Polytechnic Institute and State University 2006 impact of transportation costs with housing costs. Figure 1 shows the shift in affordability ratings for various Bay Area cities when both housing and transportation costs are considered. When we account for the cost of housing, in addition to transportation costs, the geography of affordability shifts. Cities like Larkspur and Sausalito, which provide residents easy access to public transit, fall very low in the housing affordability rankings, bringing down their overall score. Within the Bay Area, Emeryville scores best, balancing both transportation and housing affordability.

High transportation costs hit low-income families, who already struggle with housing affordability, the hardest. (See Fig. 2 for transportation spending by income bracket.) Having the choice to walk, bike, or take transit can significantly reduce costs and increase the ability of lower-income families to invest in education, health insurance, home equity, or save for the future.

Providing robust public transportation options and developing in places and ways that are more efficient won't just help households' wallets, it also reduces costs for the public sector. Sacramento is one region whose land use blueprint has shown that growing more efficiently can save billions of taxpayer dollars on infrastructure as well as on individual transportation spending. Concerned about the pace and consequences of change in their area, Sacramento's regional leaders convened a public-engagement process from 2002 to 2004, to create a preferred future development pattern for the region. The outcome of the process was a blueprint for regional growth, ratified by local governments, which calls for more compact, transit-accessible development.

The Sacramento Area Council of Governments' (SACOG) "visioning" process engaged thousands of planners, elected officials, civic leaders, and citizens from the six-county region. The blueprint produced inspiring results (see Figure 4 below) that illustrated the potential difference between development-as-usual and implementing the blueprint which called for compact development around transit. The public sector in the region is projected to save billions of dollars from implementing its blueprint.

Windfall for All also estimated the environmental benefits of TOD. To do this, the study mapped the carbon dioxide emissions of the four California regions and found that the neighborhoods that support lower transportation costs through improved transit access are also those that have the lowest carbon dioxide emissions per household. Households in areas with fewer transportation choices and longer driving distances emit much more transportation-related greenhouse gases every year than those in transit rich, walkable neighborhoods with a diversity of uses (See Figure 5).

Figure 3 demonstrates the greenhouse gas emissions and the transportation cost savings for California households if neighborhoods in each region had the same level of transit options as the top quintile with the best transit access.

Figure 3 *Greenhouse gas emissions and transportation cost savings*

Region	Difference in CO2 Emissions	Transportation Cost Savings *(per household)*
Bay Area	42%	$5,450
Los Angeles Region	38%	$3,600
San Diego County	30%	$3,515
Sacramento Area	27%	$2,825

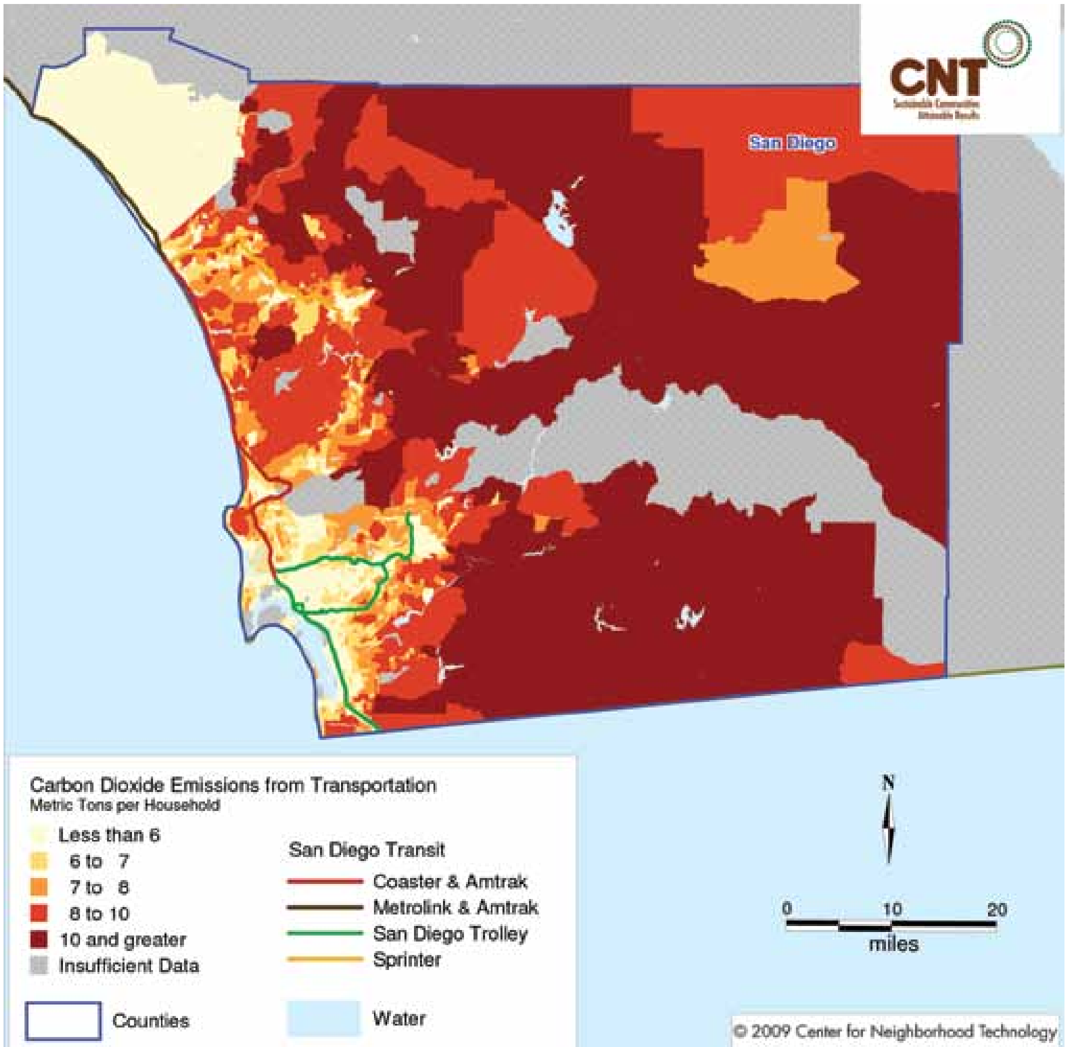
The analysis in *Windfall for All* showed that developing strategies for TOD can have multiple benefits, not only in terms of reduced household expenses for transportation, but also in terms of reduced public spending and reduced greenhouse gas emissions. A successful TOD strategy incorporates:

Figure 4 *Economic and Environmental Savings from the Regional Smart Growth Blueprint, Compared to "Business as Usual" Development Patterns, for the Sacramento Region from 2000 to 2050*

- $9.4 billion less for public infrastructure costs (e.g. transportation, water supply, utilities);
- 14% fewer CO2 emissions;
- $655 million less for residents' annual fuel costs;
- $8.4 billion less for land purchases to mitigate the environmental harm of development;
- 300% increase in public transit use;
- 6% to 13% growth in number of residents who walk or bike.

Source: SACOG Preferred Blueprint Alternative Special Report 2005.

Figure 5 *San Diego County, Annual Transportation-related CO2 Emissions per Household Census Block*



- Efficient use of land: infill development, compact growth, and reduced parking requirements where there are other transportation choices.
- Mixed and balanced uses: housing close to jobs, schools, public transit, parks, and shops; appropriate housing mix for income, family size, age; vibrant town and neighborhood centers.
- Transportation and pedestrian choices: convenient and frequent public transit, safe walking and biking access to transit, walkable and bikeable neighborhoods.

Protecting the T in TOD

TOD has solidified its standing as a key planning and development strategy, but the past few years have seen a threat to the long term success of TOD establishment in communities across the country. This threat has nothing to do with achieving community benefits or ensuring appropriate mix of uses—it's the lack of stable funding for public transit. Transit agencies across the country are facing unprecedented budget cuts. These cuts are taking place despite historically high ridership rates. Just when we should be seeing more frequent trains, buses, and ferries running, transit agencies are cutting service and raising fares to cut costs. When transit becomes less convenient and reliable, some "choice" riders opt to drive. But, transit-dependent people (youth, older adults, people with physical disabilities, and very low-income residents) end up paying more and lose independence and access.

Transit agency budget crises are the result of a perfect storm of rising operating costs like higher fuel prices, declining transportation tax revenues due to the economic downturn, and skewed funding policies that provide little support for public transit as compared to roadways. And, many transit funding sources may only be spent on capital expenses and provide limited, if any, support for transit operations.

There is a clear need for long-term sustainable funding to operate and maintain the public transportation we have, and then to expand service and infrastructure to accommodate the growing demand. Quality transit is critical to making TOD work and to ensuring the affordability and environmental benefits described above.

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Addressing the Challenge of Reduced Transit Funding

Redwood City, CA presents a preliminary case study of the challenges that communities investing in TOD may face unless there are long-term funding sources for public transit operations. Redwood City is the county seat of San Mateo County and is home to 76,000 residents and 47,000 jobs.[1]

Over the past 5 years, Redwood City has focused redevelopment efforts around its transit hub—the Redwood City Caltrain station, which links residents to a commuter rail line with 30 stations from San Francisco to San Jose. Redwood City's draft Downtown Precise Plan (March 2010) provides a vision of downtown living with access to public services, retail amenities, desirable residences, and access to transit within a three block radius.

But, Caltrain is facing a budget shortfall of $12.5 million this year and a $38.9 million projected shortfall for the 2012 fiscal year. The agencies that fund Caltrain are themselves financially squeezed and have subsequently reduced their contributions to Caltrain, and the state's contribution to public transit funding has diminished to an inconsistent trickle. As an agency, Caltrain has no authority to raise new revenues from voters via special taxes or fees, so its options for addressing the budget shortfall lay mainly in cutting service and raising fares. Caltrain held a hearing in June 2010 to consider declaration of a fiscal emergency and propose options that include eliminating all mid-day and weekend service.

The implications of cutbacks in service at Caltrain could threaten the viability of Redwood City's TOD plan for its downtown area. While research in this area is limited, TOD is likely to be less successful if the transit doesn't serve the needs of residents. Urban planners, developers, and policy-makers interested in TOD need to be involved in discussions around the future of transit, and policies need to be developed to ensure that transit funding is not left out of the TOD process.

Seeking Stable Transit Funding

One area of needed policy reform is at the federal level. Currently, 80 percent of federal transportation dollars goes to highways and roadways leaving only 20 percent to support transit, walking, and biking. This funding ratio is the legacy of a transportation program designed to build the nation's interstate highway system. The national highway network is complete. It's now time to update federal funding to support current policy priorities like ensuring healthy neighborhoods in which people can walk and bike or easily access transit for trips to work and recreational activities.

The general public supports this shift in policy. A recent bipartisan poll found that 59 percent of Americans agreed with the statement, "We need to improve public transportation, including trains and buses, to make it easier to walk and bike to reduce congestion."[2] Two-thirds of respondents (66 percent) said that they "would like more transportation options so they have the freedom to choose how to get where they need to go." But, 73 percent currently feel they "have no choice but to drive as much as" they do, and 57 percent would like to spend less time in the car. Among the voters who had not taken a bus, train or ferry in the previous month, the primary reason cited is that it is simply not available in their community (47 percent), while another 35 percent said it is not convenient to their school, home, or work. Lack of access to transit is the biggest barrier that individuals and families face in being able to take advantage of the cost savings that transit offers. In addition, demand for transit is also growing in real terms. The American Public Transit Association has calculated that public transportation ridership has increased faster than population growth and faster than the use of the nation's highways over the past few decades.[3]

Federal policies, in addition to underfunding public transit, also limit the ability of transit operators to respond to the need for increased service. In 1998, the federal government ended its 25 year program of funding for transportation operations, leaving only the funding for transit infrastructure intact. This means that a community may use federal funding for new buses and trains, but not to pay the operators who run them. The American Recovery and Reinvestment Act of 2009 gave transit agencies the option of using up to 10 percent of the transit economic stimulus funds they received on operations costs—the first recognition in a decade that keeping our existing transit running is a national priority.

Federal Policy Reform

The upcoming federal transportation bill authorization presents an important opportunity to ensure that federal transportation funding policies are aligned with today's priorities for walkable neighborhoods near high quality transit. Based on our research and our work in local communities, we propose several criteria that should be embedded in the new federal transportation bill, as well as in state and regional transportation funding approaches.

These new criteria include:

- Allowance for transit agencies to use funds for transit operations.
- Funding levels should be stable, foreseeable, and not vulnerable to redirection to non-transit purposes.
- Minimize the impacts on low-income residents, either as a core characteristic of the mechanism or through design of its implementation.
- Alignment with principles that support mixed use neighborhoods around transit.
- Investment in operating and enhancing core transit systems before high-cost transit expansion projects.
- Legal authority for transit agencies or metropolitan planning organizations (MPOs, regional transportation funding and planning agencies) to generate new funds for transit in response to needs, for instance with voter approval at the ballot or through statutory allowances.

It is also important that the uses of new transit funds are evaluated for their cost-effectiveness and impacts. Key to this analysis is the extent to which investments in public transit can reduce overall costs to households and to the public sector if spent in ways that promote more efficient communities. In addition, work needs to be done to ensure that land use policies are in place to support mixed use and compact development.

In addition to these public policy considerations, additional measures can be taken at the community and neighborhood level to encourage greater transit use and reduced dependence on personal vehicles. Incentives such as unlimited transit passes for residents, on-site car-sharing, and other strategies can further promote the use of alternatives in a transit rich neighborhood. Progressive parking policies that separate parking spots from residential units to provide the option of not purchasing parking if a household or employer doesn't need it, and promotion of shared parking facilities have also been effective at decreasing driving and the associated costs, and increasing transit use, walking, and biking. Ensuring that development includes housing that is affordable to households of all levels of income is a key component to ensuring that LMI households may take advantage of the transportation cost-savings and other benefits of living in TODs.

Conclusion

Developers, local governments, and community organizations that are working toward TOD must add their voice to the call for robust funding for public transportation. Affordable housing advocates and those working to reduce the cost burden on LMI households must also speak out for ensuring affordable, convenient public transportation. Ensuring that existing public transit continues to run and that new transit can be operated is critical to delivering cost savings to households, and cities, and to reducing the risk of global warming. CI

Carli Paine is Transportation Program Director at TransForm, which works to create world-class public transportation and walkable communities in the San Francisco Bay Area and beyond.

Endnotes

Making the Connection: Transit-Oriented Development and Jobs

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1. Low- and moderate-income means a family income that does not exceed—(1) for non-metropolitan areas, 80 percent of the statewide median family income; or (2) for metropolitan areas, 80 percent of the greater of the statewide median family income or metropolitan area median family income. (Notice of Funds Availability (NOFA) Inviting Applications for the First Accounts Program, issued by the US Department of the Treasury, December 17, 2001).
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