Sidewalks and the Value ofWalkability

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Coalition of Sustainable Communities
NM Roundtable
New Mexico
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## Benefits and Costs

<table>
<thead>
<tr>
<th>Benefits</th>
<th>More Walking Activity</th>
<th>Reduced Automobile Travel</th>
<th>More Compact Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved user convenience, comfort and safety</td>
<td>User enjoyment</td>
<td>Reduced traffic congestion</td>
<td>Improved accessibility, particularly for non-drivers</td>
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<tr>
<td>Improved accessibility for non-drivers, which supports equity objectives</td>
<td>Improved public fitness and health</td>
<td>Road and parking facility cost savings</td>
<td>Transport cost savings</td>
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<tr>
<td>Higher property values</td>
<td>More local economic activity</td>
<td>Consumer savings</td>
<td>Reduced sprawl</td>
</tr>
<tr>
<td>Improved public realm (more attractive streets)</td>
<td>Increased community cohesion (positive interactions among neighbors)</td>
<td>Reduced chauffeuring burdens</td>
<td>Openspace preservation</td>
</tr>
<tr>
<td>Improved public transit access</td>
<td>More neighborhood security (“eyes on the street”)</td>
<td>Increased traffic safety</td>
<td>More livable communities</td>
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<tr>
<td></td>
<td></td>
<td>Energy conservation</td>
<td>Higher property values</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pollution reductions</td>
<td>Increased security</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Economic development</td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td>Equipment (shoes)</td>
<td>Slower travel</td>
<td>Increases some development costs</td>
</tr>
<tr>
<td>Facility costs</td>
<td>Increased crash risk</td>
<td></td>
<td></td>
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<tr>
<td>Lower traffic speeds</td>
<td></td>
<td></td>
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</table>
Urban Villages (Walkable Neighborhood)

- Sufficient population (typically 5,000+ residents within walkshed).
- Development density and mix (commonly-used services and activities within walking distance).
- Complete sidewalks, crosswalks and path networks.
- Universal design (accommodate wheelchair, scooter and handcarts).
- Low traffic volumes and speeds.
- Public transit.
- Attractive streetscapes.
- Perceived security.

Creates a neighborhood where it is easy to get around without driving.

Also called 15-minute neighborhood, New Urbanism, and transit-oriented development.
Measuring Walksheds
Walk Score indicates proximity to commonly-used services and activities.

However, it does not directly reflect the quality of walking conditions such as sidewalks and traffic speeds.
Residents of compact, multimodal neighborhoods have much shorter commute duration than in automobile-dependent, urban-fringe areas.

Mineta Institute Commute Duration Dashboard
https://transweb.sjsu.edu/research/2064-Commute-Duration-Dashboard-Guide
Transportation Costs

Households in compact, central neighborhoods spend far less on transportation than in outlying, automobile-dependent areas. (H&T Affordability Index)
Households in compact, central neighborhoods produce far less total emissions than in outlying, automobile-dependent areas. (Cool Climate Berkeley Maps)
Opportunity and Prosperity

Compact, mixed development provides more economic opportunities and increased productivity, property value and tax revenue per acre than lower-density areas.

*(Strong Towns and Urban 3)*

Lafayette, Louisiana
### Sidewalks, Proximity to Shops and Parks Continue to be Most Important Attributes When Deciding Where to Live

#### Most Important Factors in Deciding Where to Live: 1st Tier

<table>
<thead>
<tr>
<th>Year</th>
<th>Very Important</th>
<th>Somewhat Important</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>50%</td>
<td>34%</td>
<td>84%</td>
</tr>
<tr>
<td>2020 - July</td>
<td>52%</td>
<td>33%</td>
<td>85%</td>
</tr>
<tr>
<td>2020 - Feb.</td>
<td>48%</td>
<td>36%</td>
<td>84%</td>
</tr>
<tr>
<td>2017</td>
<td>49%</td>
<td>38%</td>
<td>87%</td>
</tr>
<tr>
<td>2015</td>
<td>50%</td>
<td>34%</td>
<td>84%</td>
</tr>
<tr>
<td>2023</td>
<td>41%</td>
<td>38%</td>
<td>79%</td>
</tr>
<tr>
<td>2020 - July</td>
<td>39%</td>
<td>35%</td>
<td>74%</td>
</tr>
<tr>
<td>2020 - Feb.</td>
<td>38%</td>
<td>38%</td>
<td>76%</td>
</tr>
<tr>
<td>2017</td>
<td>42%</td>
<td>38%</td>
<td>80%</td>
</tr>
<tr>
<td>2015</td>
<td>42%</td>
<td>36%</td>
<td>78%</td>
</tr>
</tbody>
</table>

**Q.5 If you were deciding today where to live, please indicate how important each of the following would be to you:**

- Sidewalks and places to take walks.
- Being within an easy walk of other places and things in a community, such as shops and parks.
<table>
<thead>
<tr>
<th>Mode</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual wheelchair</td>
<td>$200 annual</td>
</tr>
<tr>
<td>Electric wheelchair</td>
<td>$1,000 annual</td>
</tr>
<tr>
<td>Conventional transit</td>
<td>$2 to $4 per trip</td>
</tr>
<tr>
<td>Mobility services</td>
<td>$2 to $6 per trip</td>
</tr>
<tr>
<td>Taxi or ridehailing</td>
<td>$2 to $6 per mile</td>
</tr>
<tr>
<td>Van with wheelchair lift</td>
<td>$6,000 to $12,000 per year</td>
</tr>
</tbody>
</table>

Most people with disabilities benefit from living in an urban village with:
• Accessible and affordable housing.
• A complete accessible sidewalk and crosswalk network.
• Complete streets with low traffic speeds.
• 70 or higher Walk Score.
• Accessible, frequent and affordable public transit services.
Cool Walkshed Planning

Many communities experience extreme heat. Motorists have air conditioned cars and shaded parking lots. For pedestrian thermal comfort communities can create integrated networks of shadeways (shaded sidewalks) and pedways (enclosed, air conditioned walkways).

Dubai Shadeway

Toronto Pedway
Completing Sidewalk Networks

What do we want?

Complete sidewalk networks!

When do we want them?

Now!!!

- Typical U.S. communities spend $30 to $60 annually per capita on sidewalks, by property owners as mandated by law, and government expenditures.

- This results in sidewalks on just 40-60% of urban streets, with higher rates in older city neighborhoods and lower rates in suburbs.

- Completing sidewalk networks to fill in gaps and achieve universal design standards typically requires doubling or tripling these expenditures to $80 to $150 annually per capita, and more in some areas to make up for decades of underinvestment.

- This is small compared with what governments, businesses and travellers spend on motorized modes, but lacks institutional support and funding.
Funding Options

- Ithaca, New York charges household and business annual fees to build and maintain city sidewalks.

- Denver’s Ordinance 307, approved by referendum, will collect special property taxes to upgrade and complete the city’s sidewalk and recreational trail network.

- In response to a lawsuit, the city of Sacramento agreed to dedicate 20% of its annual transportation budget to make public sidewalks accessible.

- Approximately 40% of Los Angeles sidewalks are rated inadequate. A 2016 class-action lawsuit by disability rights advocates requires the City to spend $1.4 billion over 30 years to fix its sidewalks, which averages about $12 annual per city resident.

- In the article, “Fixing Broken Sidewalks,” Donald Shoup recommends that cities require sidewalk repairs at the point of sale. Before a sale the city inspects the sidewalk fronting the property. If the sidewalk is inadequate, the owner must fix it before a sale is completed. The sale then provides funds to pay for any required repairs. To accelerate this process a city can offer to repair sidewalks and receive payment when the property is sold in the future.
Fair Share Transportation Planning

I want my share of transport resources spent on public transit improvements.

I want my share of transport resources spent on crosswalks and traffic calming.

I want my share of transport resources spent on roads and parking facilities.

I want my share of transport resources spent on bikeways.
In a typical community 20-40% of travellers cannot, should not or prefer not to drive.

Without suitable travel options non-drivers lack independent mobility, require chauffeuring, bear excessive costs, or move to another community that offers better mobility option.
Considering expenditures on roads and traffic services, government-mandated parking facilities, and transit operating subsidies, the majority of transportation funding is devoted to automobile transportation.

As a result, people who drive less than average receive less public investment than those who drive more than average.
Non-auto modes typically receive less than 10% of infrastructure investments.

But represent:
- 10-15% of current trips.
- 15-25% of traffic deaths.
- 25-35% of travellers.
- 20-40% of future targets.

This is unfair and inefficient – if fails to respond to non-drivers’ travel demands, creating automobile-dependent transport systems.
External Costs

- Because they are large, fast and resource intensive, automobiles impose more facility, congestion, risk and pollution costs than other modes.
- People who drive more than average impose net external costs on people who drive less than average.
- Since vehicle travel tends to increase with income, these external costs tend to be regressive.
Walking, bicycling, micromodes and public transit are far more affordable than automobile travel.

Favoring automobile travel is regressive.
Social Injustice

Social justice considers structural inequities such as racism, sexism, and classism.

During the Twentieth Century highways displaced many multimodal urban neighborhoods where it was easy for disadvantaged groups to get around without driving.

This is an example of how incomplete and biased planning can lead to unfair and harmful outcomes.
An efficient and equitable transportation system is diverse so users to choose the best mode for each trip:

• Walking and bicycling for local errands.
• High quality public transit when travelling on busy corridors.
• Automobile travel when it is truly most efficient, considering all impacts.

Current planning does a poor job of valuing this diversity.

“A developed country is not where the poor drive cars, it is where the rich use public transportation”

- Enrique Peñalosa, Bogota Mayor
“Predict and provide” transportation planning expands roads and parking facilities in anticipation of future demands, creating a self-reinforcing cycle of automobile dependency and sprawl. “Decide and deliver” planning sets multimodal travel targets and implements policies to achieve them.
Widely-used census data indicate that only 8% of commute trips are by non-auto modes, but that ignores youth and recreational travel, and walking and bicycling links of motor vehicle trips.

More comprehensive surveys indicate that about 16% of total trips are by non-auto modes, with higher rates in denser areas and by lower-income travellers.

Non-auto travel tends to increase significantly when their conditions are improved, indicating latent demands that are not served due to underinvestment.
Latent Demands

Non-auto travel often increases significantly after communities improve their conditions and implement cost-effective TDM incentives, such as efficient parking pricing and commute trip reduction programs.

Demand analysis should reflect these effects. Transportation plans should indicate potential mode shares with more efficient and equitable investments.
An equitable transportation hierarchy favors inclusive, affordable, low-external-cost modes such as walking, bicycling, micromodes (e-bikes) and public transportation over expensive, exclusive and higher-cost modes in planning and funding decisions.
“Not So Fast: Better Speed Valuation for Transport Planning”
“Evaluating Active Transport Emission Reduction Potentials”
“Completing Sidewalk Networks: Benefits and Costs”
“Are Vehicle Travel Reduction Targets Justified?”
“Evaluating Active Mode Benefits and Costs”
“Fair Share Transportation Planning”
“Evaluating Transportation Equity”
“Cool Walkability Planning”
and more...
www.vtpi.org