



Sidewalks and the Value of Walkability

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Coalition of Sustainable Communities

NM Roundtable

New Mexico

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Pandora Ave.
1200

ONE WAY















FERNWOOD
INN

FERNWOOD INN

FERNWOOD INN

Fernwood St

Benefits and Costs

	Improved Walking Conditions	More Walking Activity	Reduced Automobile Travel	More Compact Communities
Benefits	<ul style="list-style-type: none"> Improved user convenience, comfort and safety Improved accessibility for non-drivers, which supports equity objectives Higher property values Improved public realm (more attractive streets) Improved public transit access 	<ul style="list-style-type: none"> User enjoyment Improved public fitness and health More local economic activity Increased community cohesion (positive interactions among neighbors) More neighborhood security (“eyes on the street”) 	<ul style="list-style-type: none"> Reduced traffic congestion Road and parking facility cost savings Consumer savings Reduced chauffeuring burdens Increased traffic safety Energy conservation Pollution reductions Economic development 	<ul style="list-style-type: none"> Improved accessibility, particularly for non-drivers Transport cost savings Reduced sprawl Openspace preservation More livable communities Higher property values Increased security
Costs	<ul style="list-style-type: none"> Facility costs Lower traffic speeds 	<ul style="list-style-type: none"> Equipment (shoes) Increased crash risk 	<ul style="list-style-type: none"> Slower travel 	<ul style="list-style-type: none"> Increases some development costs

Urban Villages (Walkable Neighborhood)

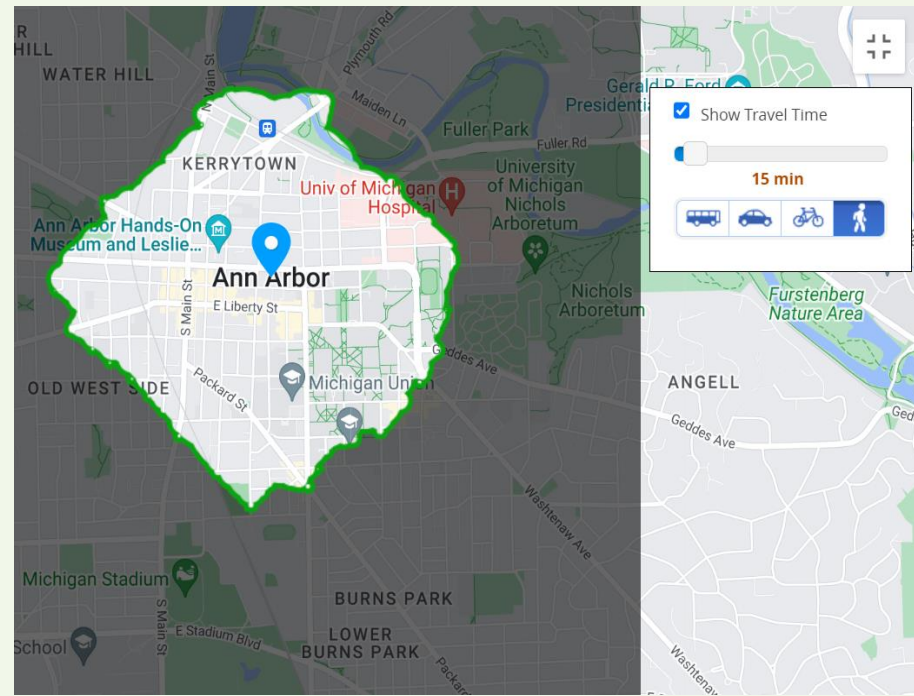
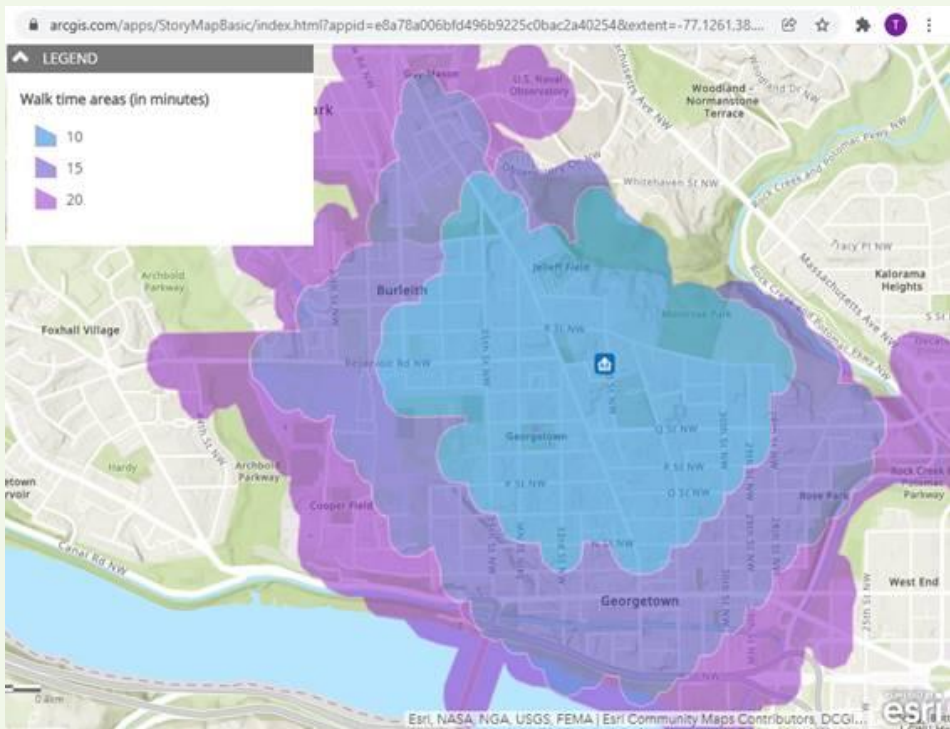
- Sufficient population (typically 5,000+ residents within walkshed).
- Development density and mix (commonly-used services and activities within walking distance).
- Complete sidewalks, crosswalks and path networks.
- Universal design (accommodate wheelchair, scooter and handcarts).
- Low traffic volumes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

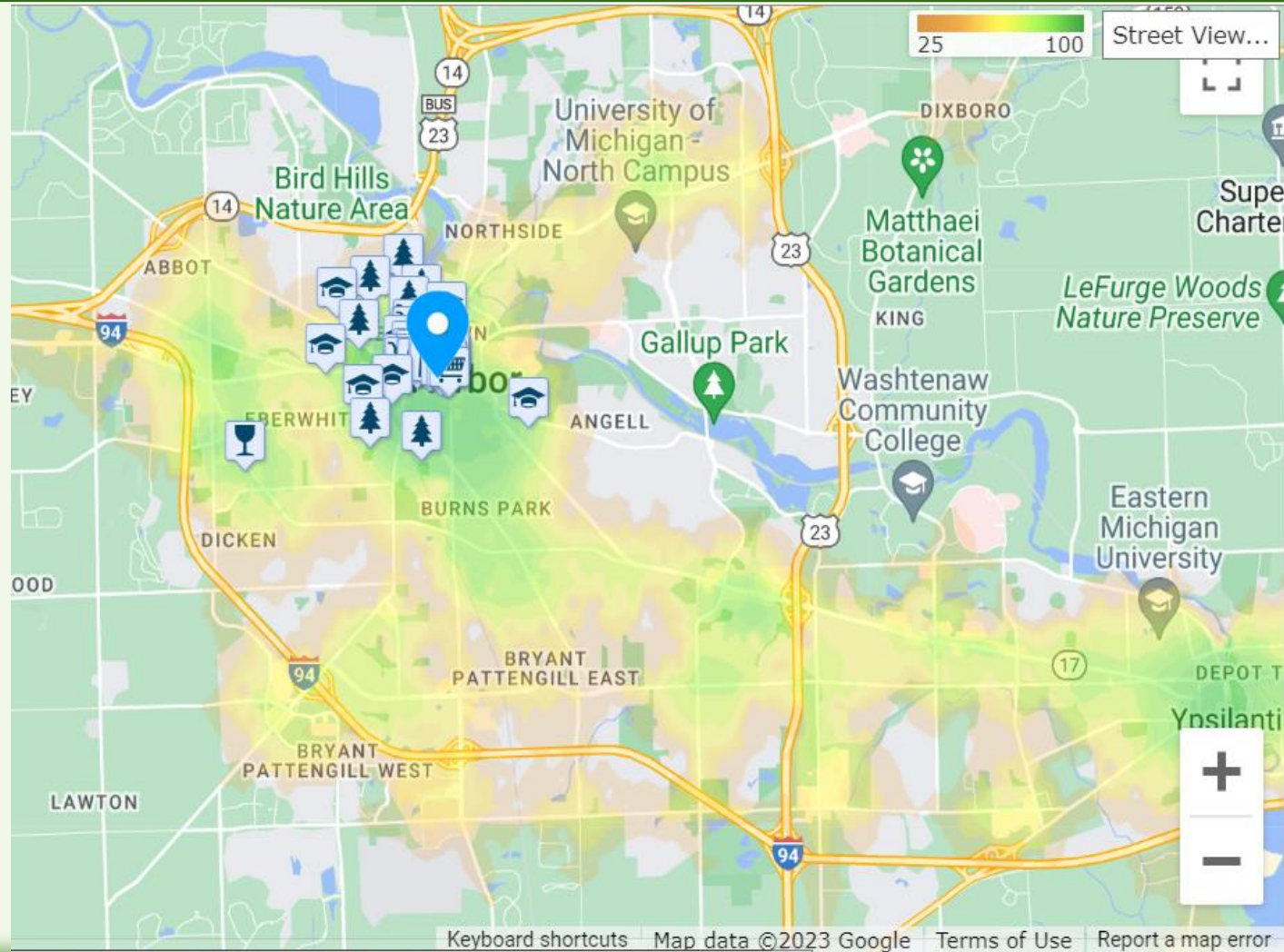
Measuring Walksheds



Walk Score

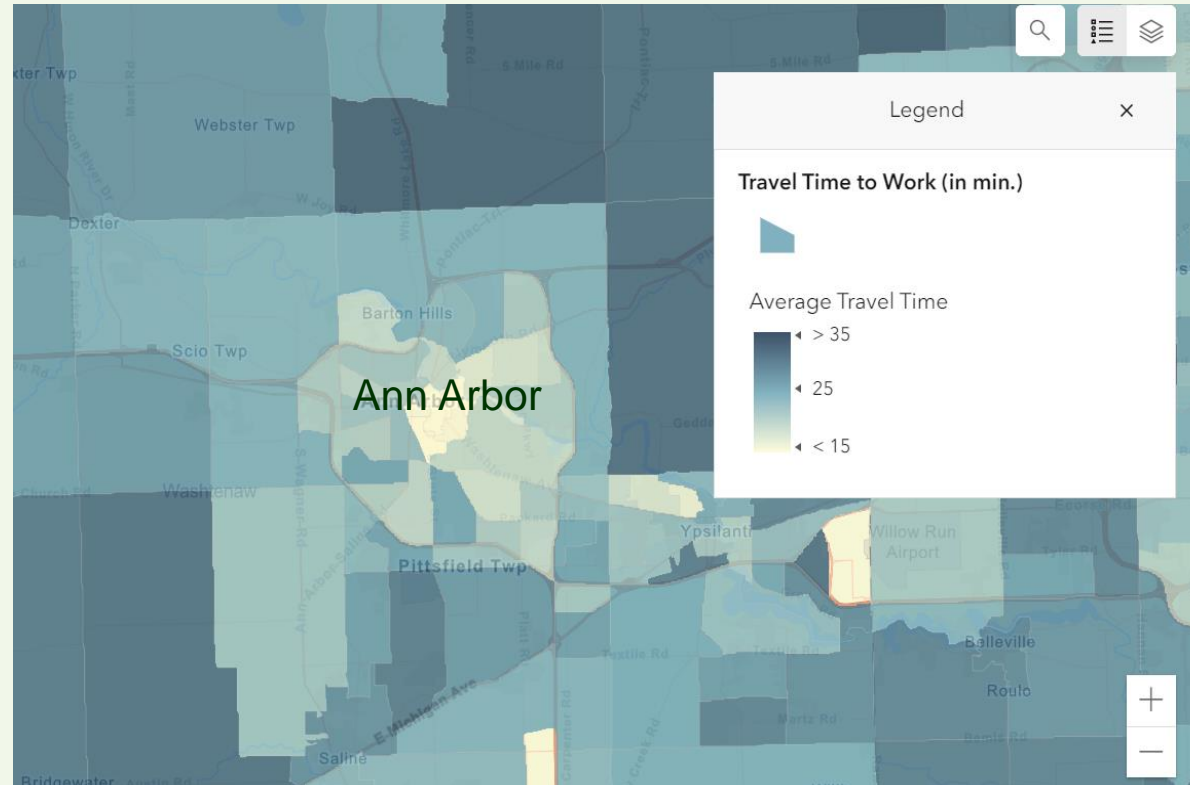
Walk Score indicates proximity to commonly-used services and activities.

However, it does not directly reflect the quality of walking conditions such as sidewalks and traffic speeds.



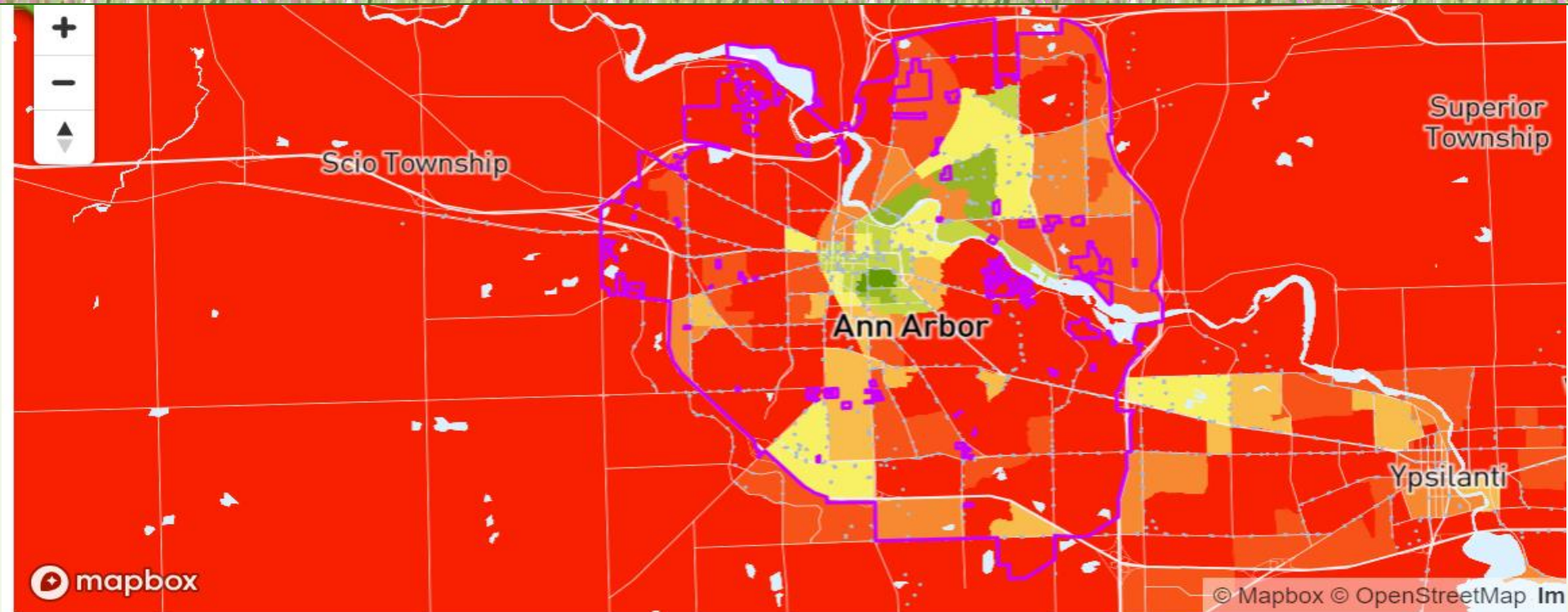
Commute Duration

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

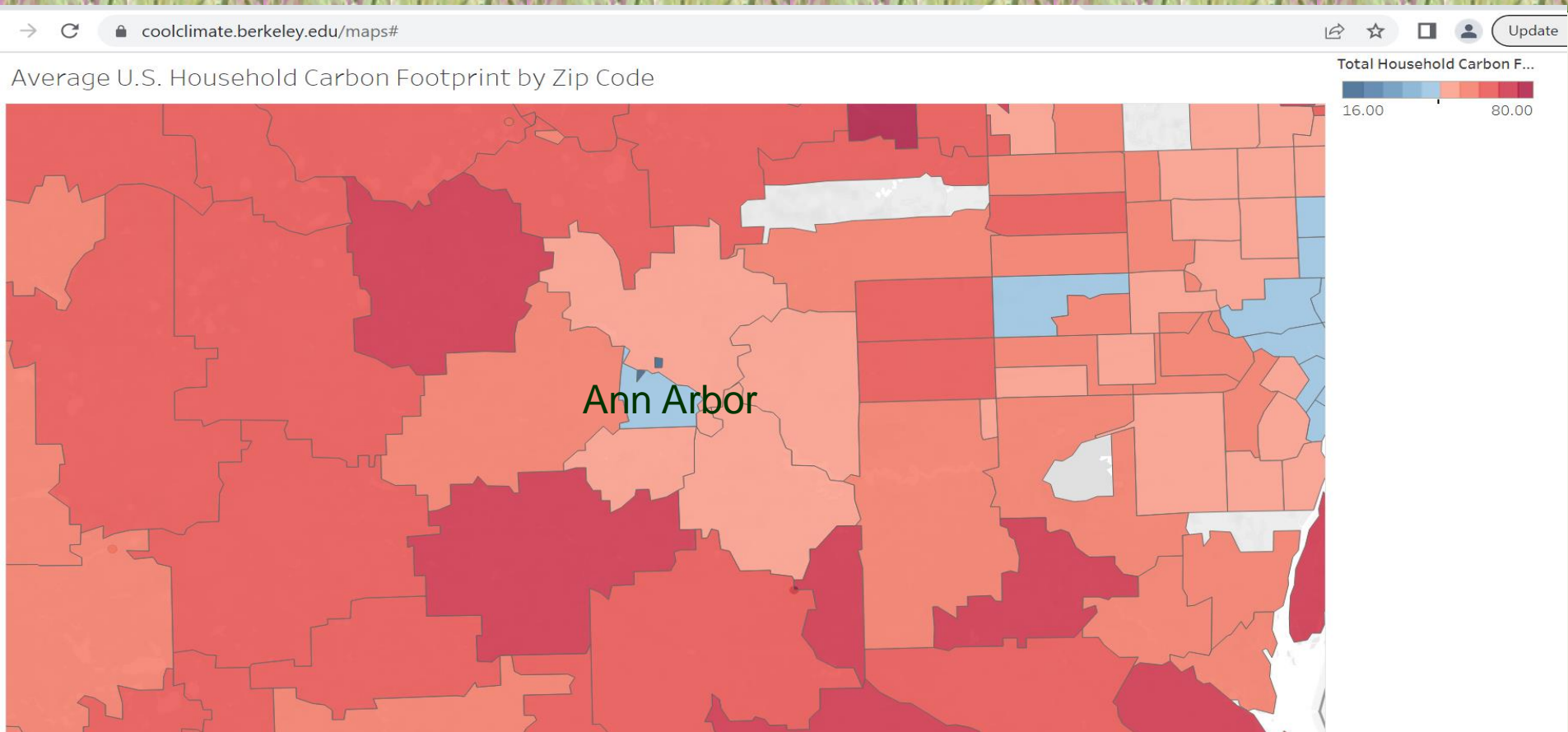


Total Annual Driving Costs



Households in compact, central neighborhoods spend far less on transportation than in outlying, automobile-dependent areas. (*H&T Affordability Index*)

Household Emissions

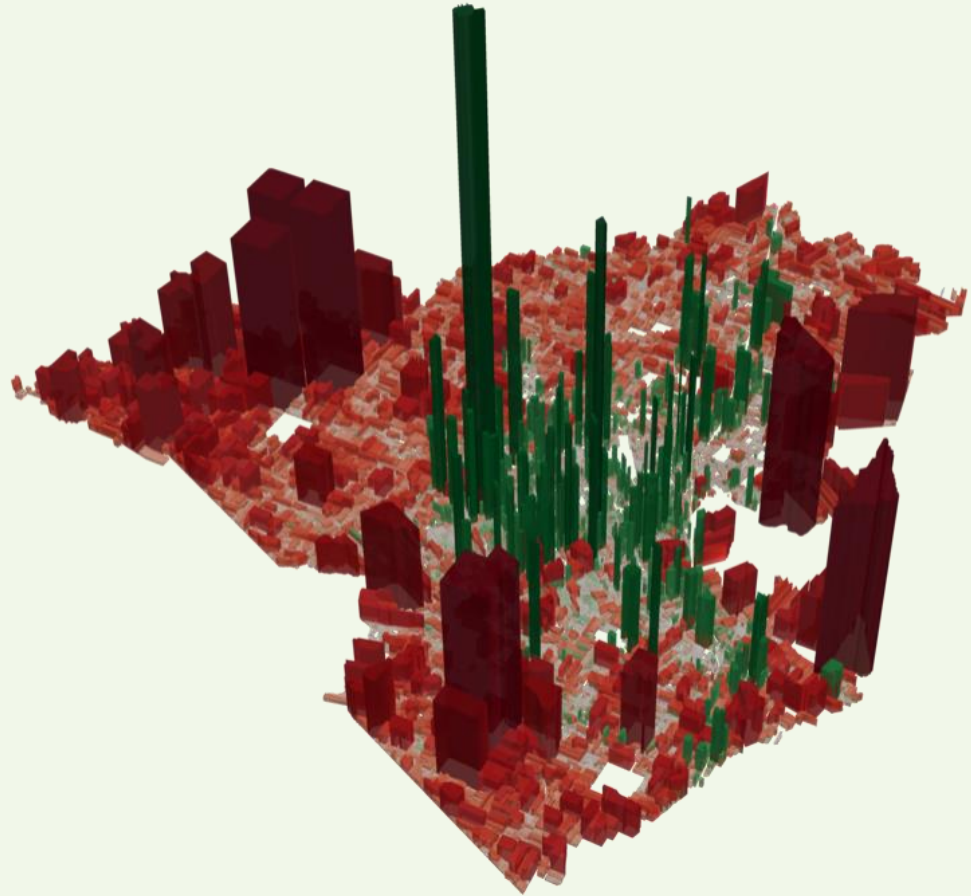


Households in compact, central neighborhoods produce far less total emissions than in outlying, automobile-dependent areas. (*Cool Climate Berkeley Maps*)

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**

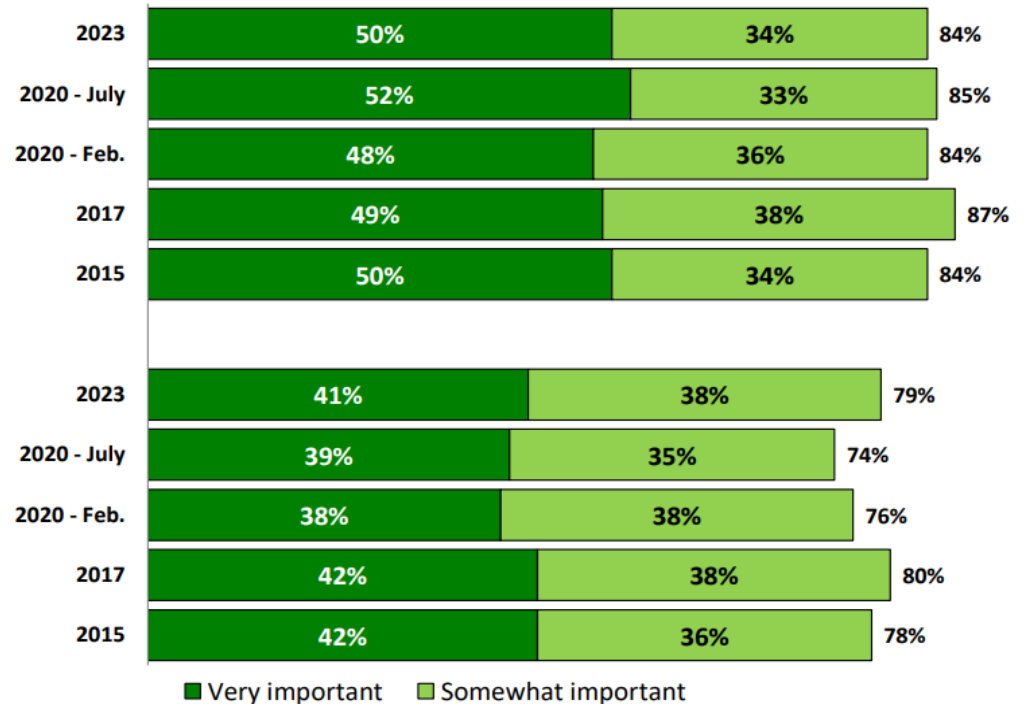
Consumer Preferences (NAR 2023)

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

Sidewalks and places to take walks.

Being within an easy walk of other places and things in a community, such as shops and parks.



Urban Villages for PwD

Mode	Costs
Manual wheelchair	\$200 annual
Electric wheelchair	\$1,000 annual
Conventional transit	\$2 to \$4 per trip
Mobility services	\$2 to \$6 per trip
Taxi or ridehailing	\$2 to \$6 per mile
Van with wheelchair lift	\$6,000 to \$12,000 per year



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.

Completing Sidewalk Networks

What do we
want?

***Complete
sidewalk
networks!***

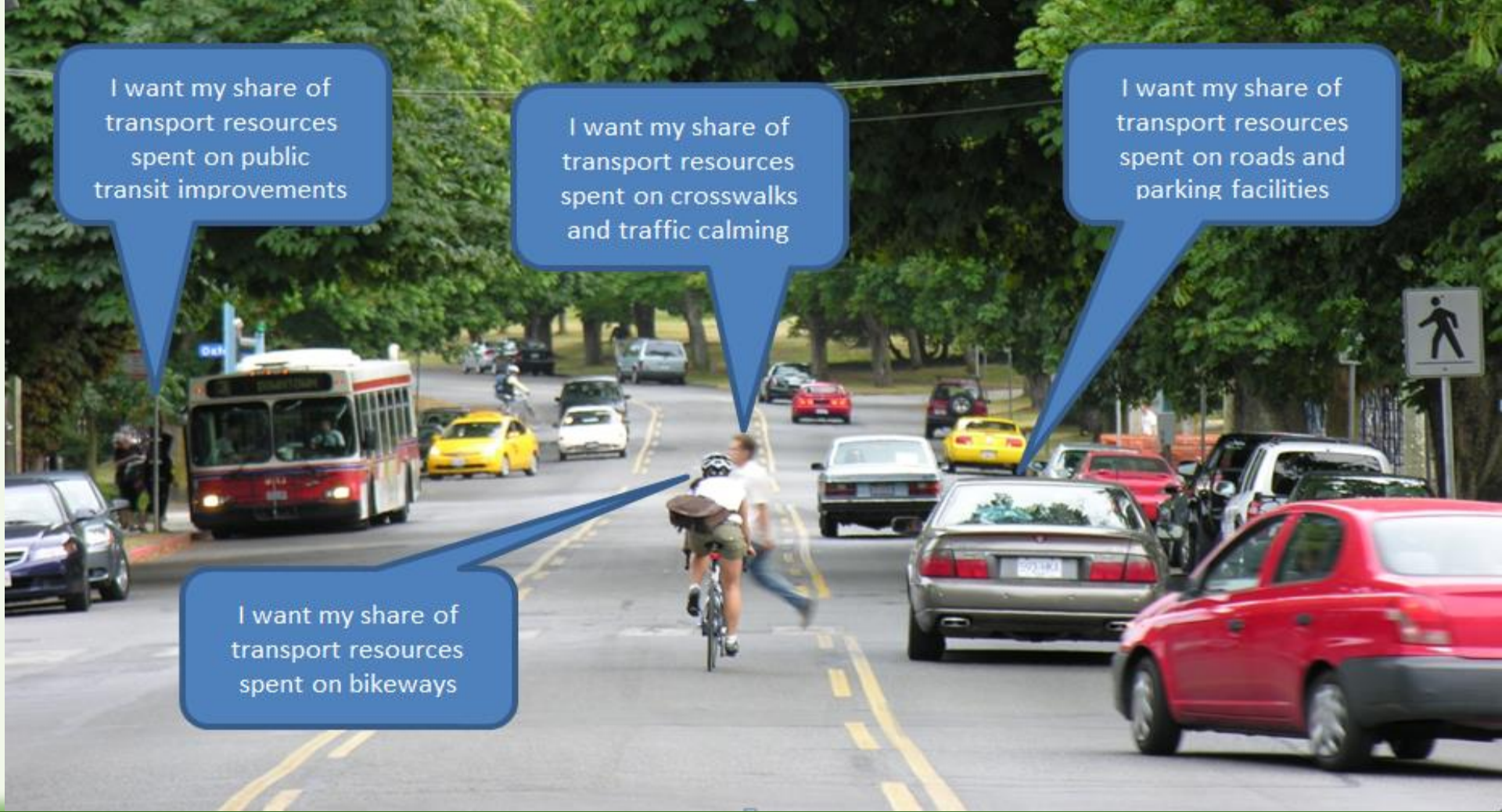
When do we
want them?
Now!!!

- 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

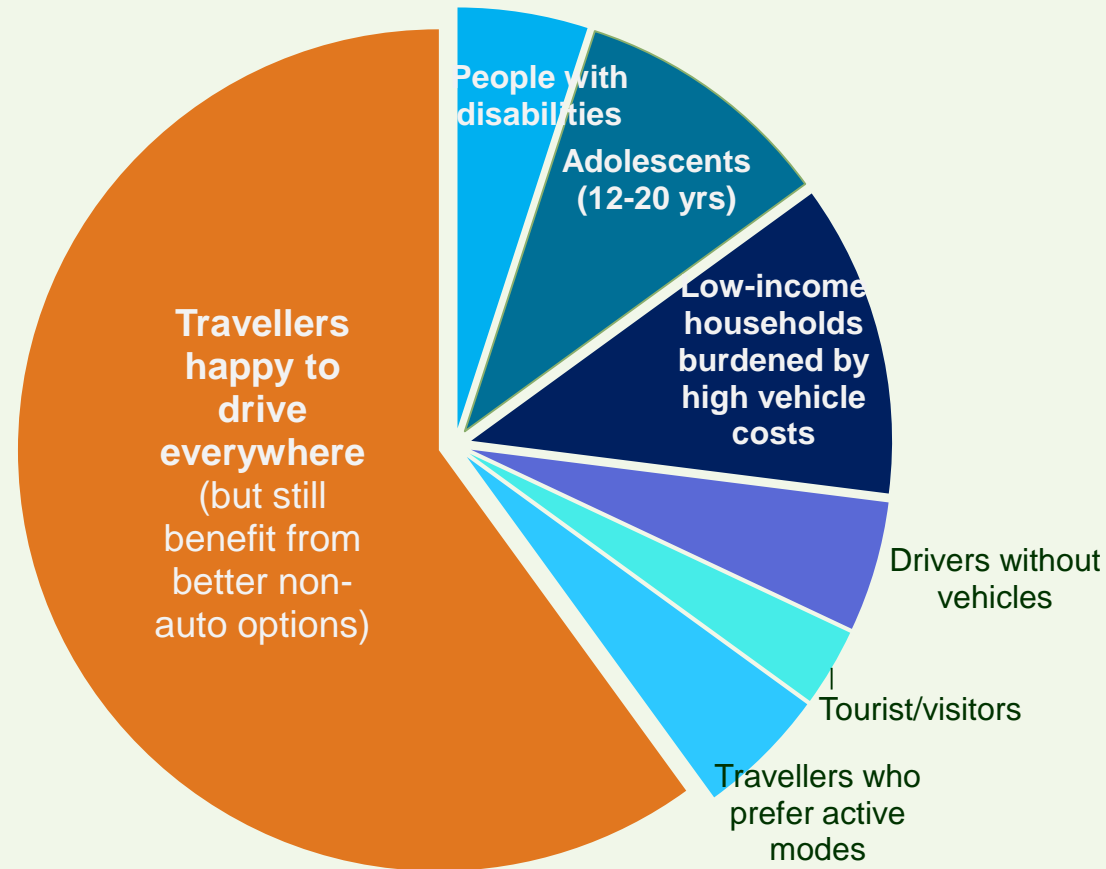
I want my share of transport resources spent on bikeways

Serving Non-Drivers

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.

Travel Demands



Current Infrastructure Spending

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.



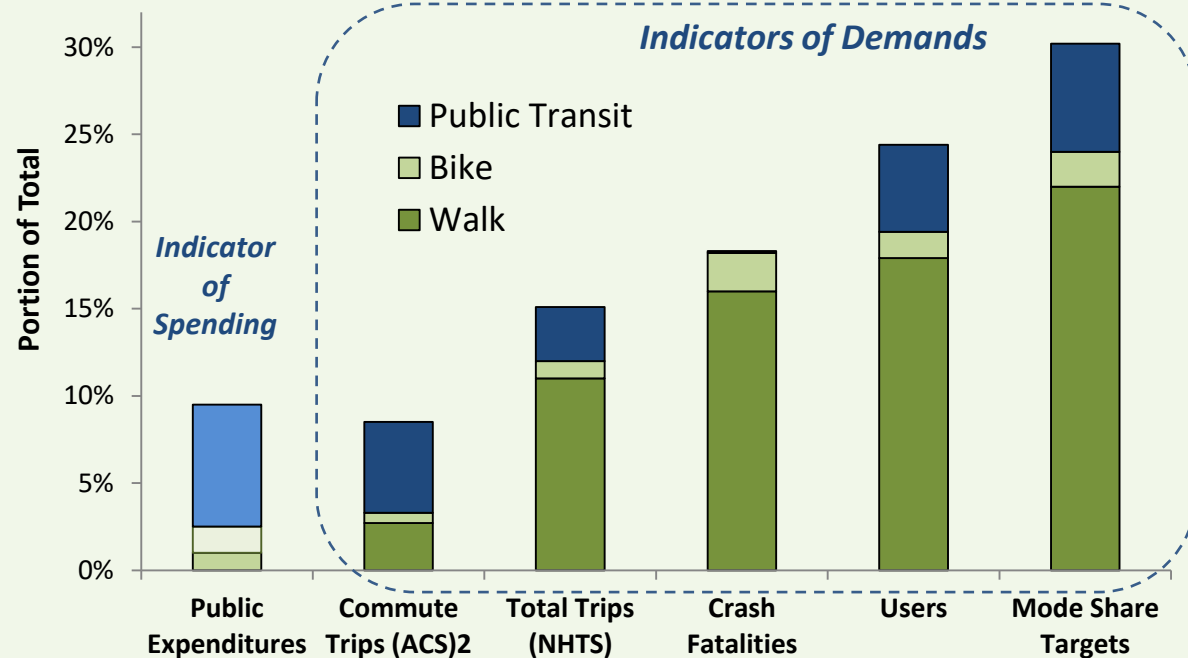
Investments Verses Demands

Non-auto modes typically receive less than 10% of infrastructure investments.

But represent:

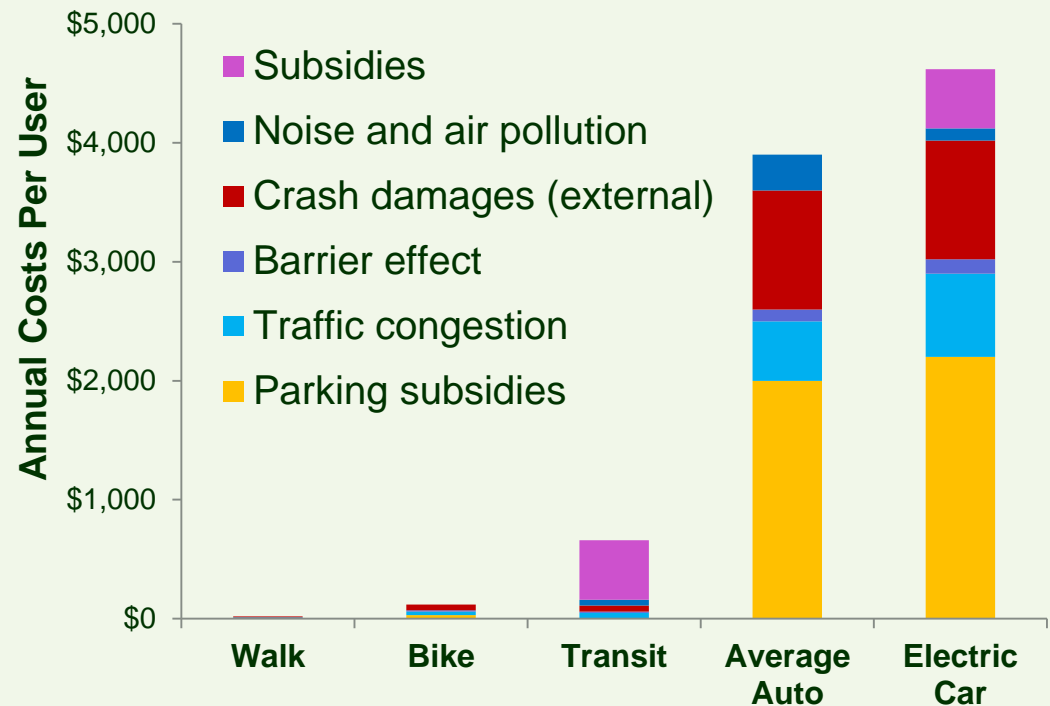
- 10-15% of current trips.
- 15-25% of traffic deaths.
- 25-35% of travellers.
- 20-40% of future targets.

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



External Costs

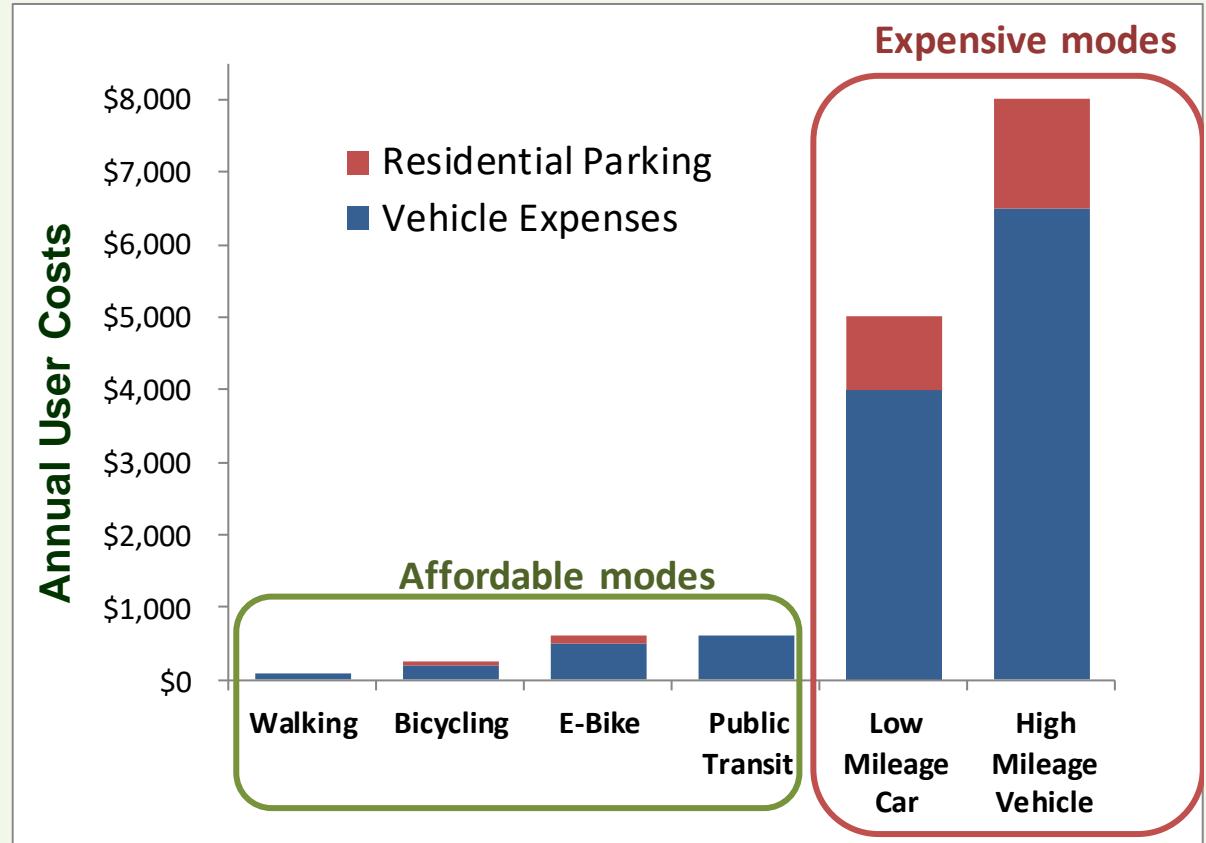
- Because they are large, fast and resource intensive, automobiles impose more facility, congestion, risk and pollution costs than other modes.
- People who drive more than average impose net external costs on people who drive less than average.
- Since vehicle travel tends to increase with income, these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



Affordability

Walking, bicycling, micromodes and public transit are far more affordable than automobile travel.

Favoring automobile travel is regressive.

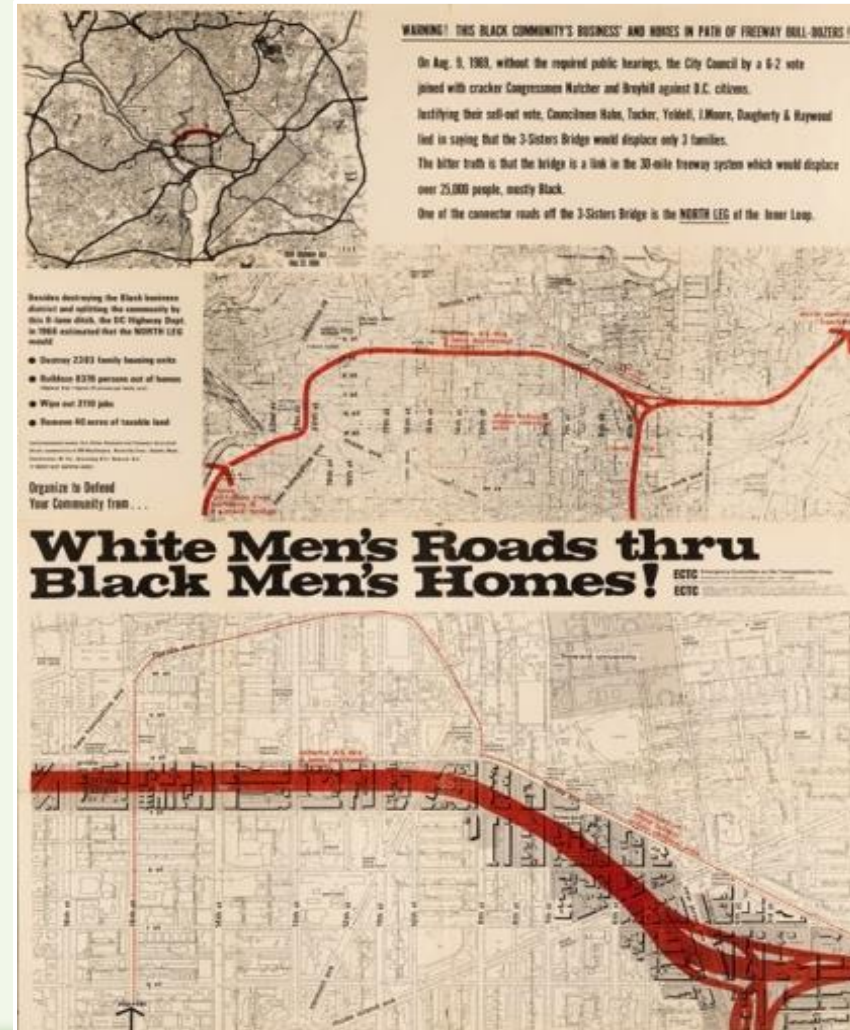


Social Injustice

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.



Valuing Multi-Modalism

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.

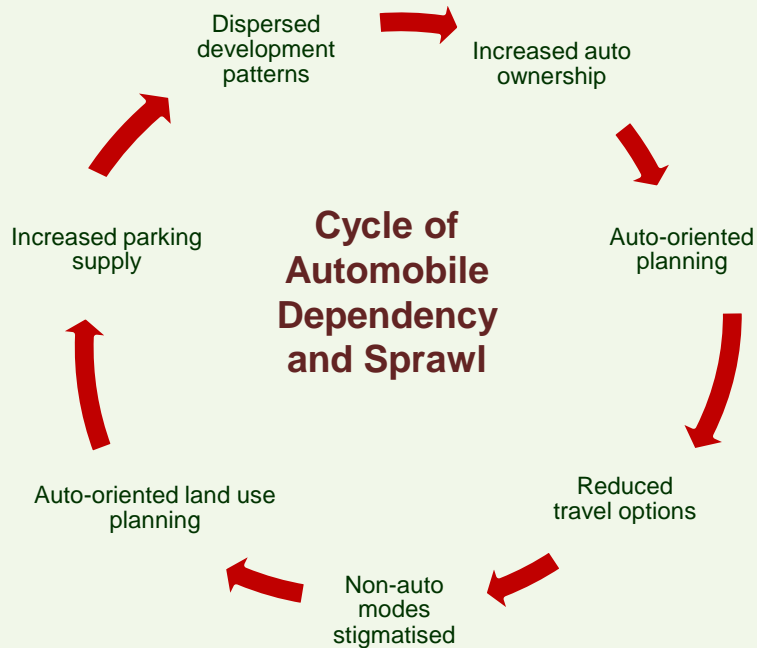


“A developed country is not where the poor drive cars, it is where the rich use public transportation”

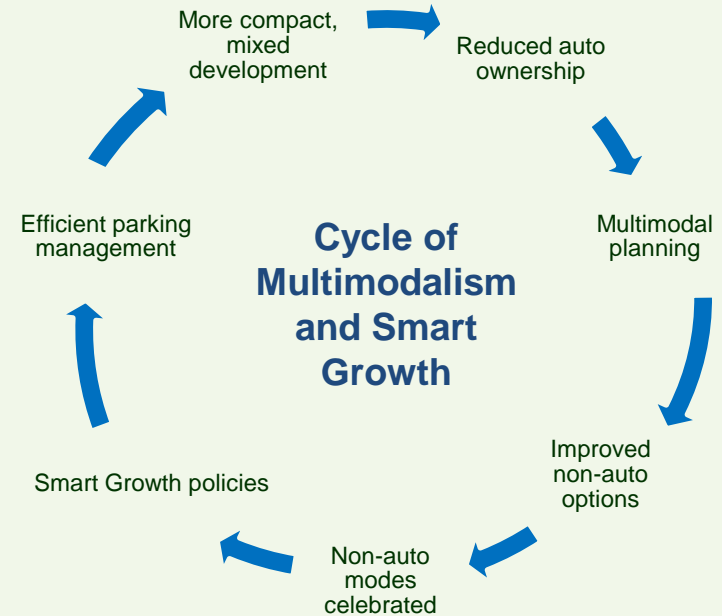
- Enrique Peñalosa, Bogota Mayor

From P&P to D&D Planning

Predict and Provide Planning



Decide and Deliver Planning



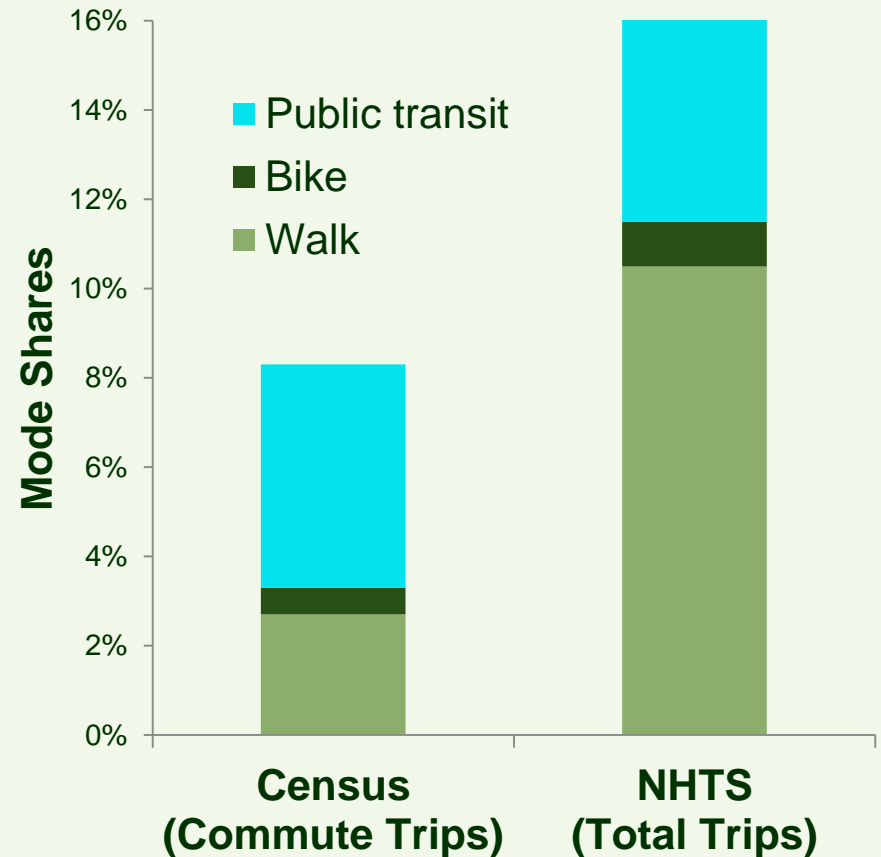
“Predict and provide” transportation planning expands roads and parking facilities in anticipation of future demands, creating a self-reinforcing cycle of automobile dependency and sprawl. “Decide and deliver” planning sets multimodal travel targets and implements policies to achieve them.

Undercounting Non-Auto Demands

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.

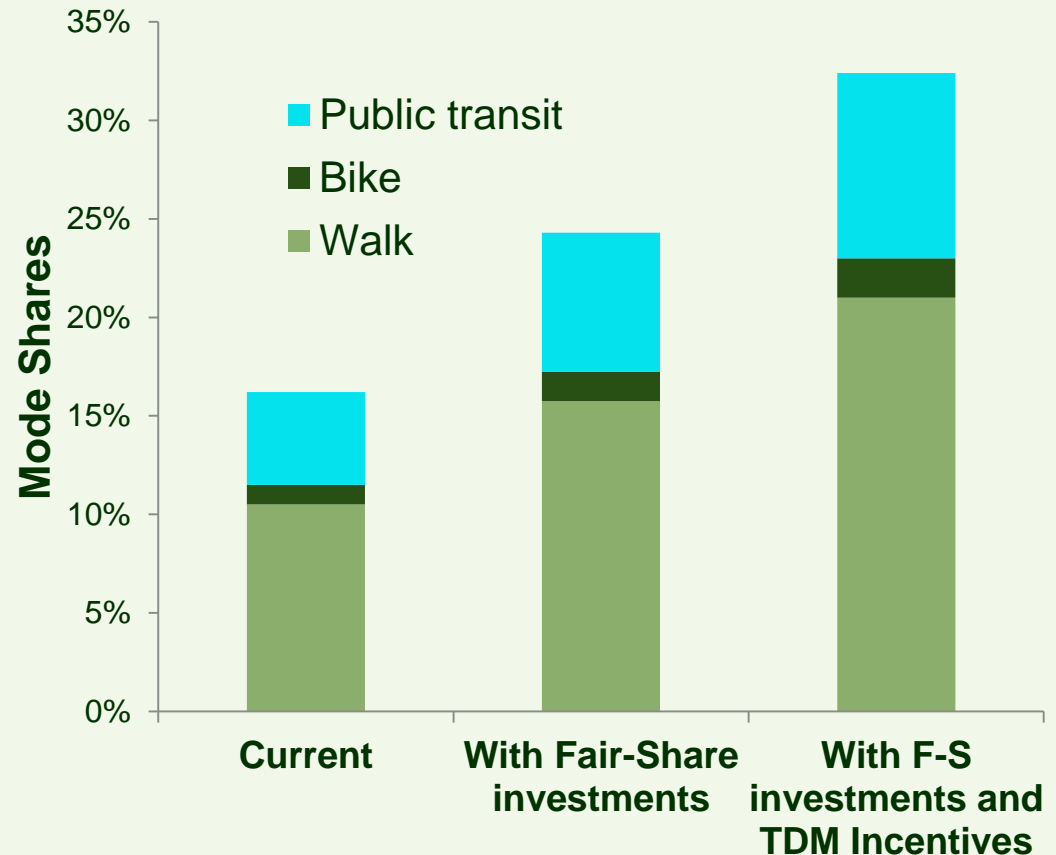
Non-auto travel tends to increase significantly when their conditions are improved, indicating latent demands that are not served due to underinvestment.



Latent Demands

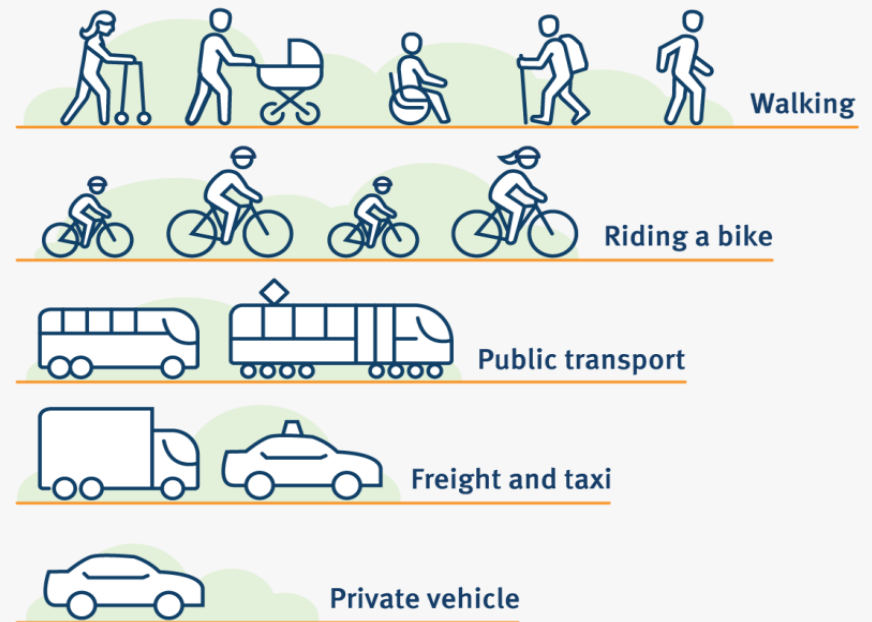
Non-auto travel often increases significantly after communities improve their conditions and implement cost-effective TDM incentives, such as efficient parking pricing and commute trip reduction programs.

Demand analysis should reflect these effects. Transportation plans should indicate potential mode shares with more efficient and equitable investments.



Sustainable Transportation Hierarchy

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.vtppi.org