Toward More Equitable Transportation

Fair Share Transportation Planning

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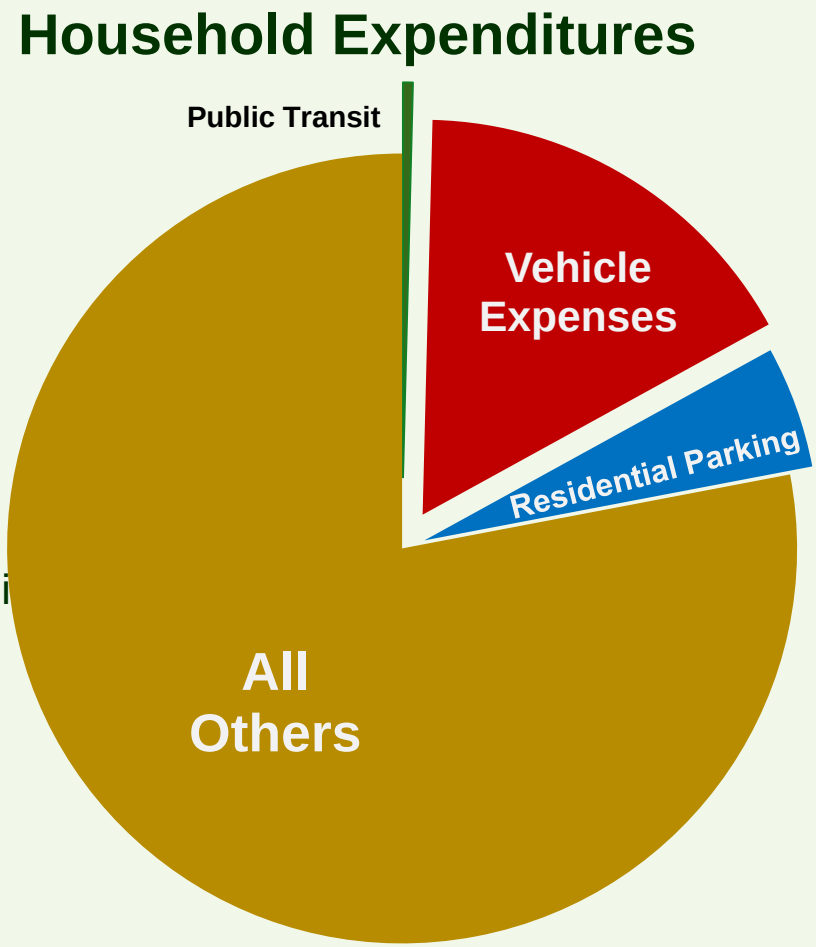
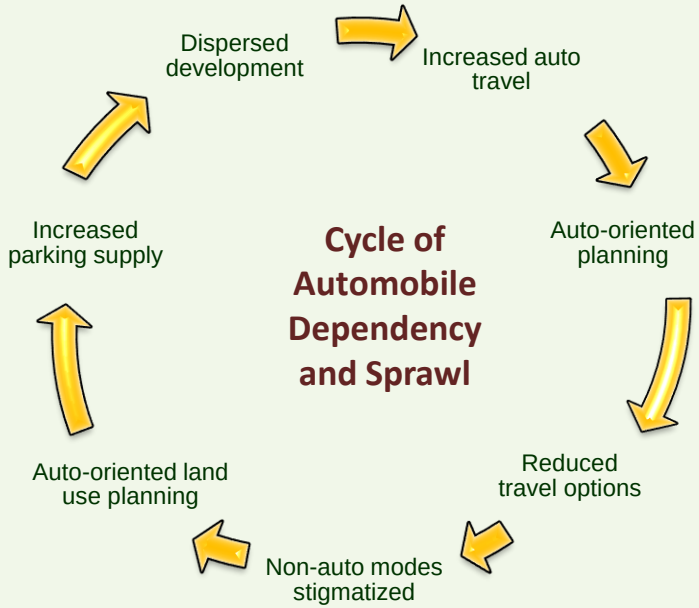
Transportation Affects our Lives

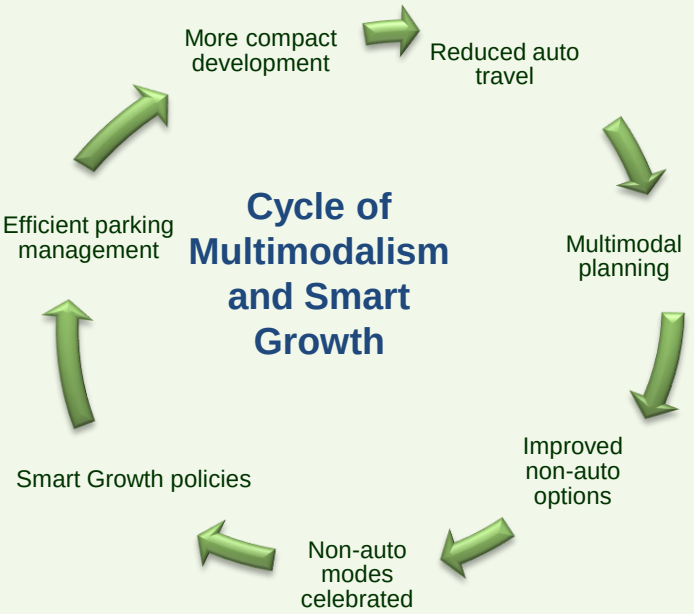
- 60-90 minutes of our day (10-30% of uncommitted time).
- 15-25% of household budgets (higher for lower-income households).
- Affects economic opportunities. Some people are mobility constrained.
- Housing affordability and development patterns (compact or sprawled)
- Public health and safety.
- Public realm, neighborly interactions and communi livability.
- Local economic development.
- 63% of GHG emissions.
- External costs (public infrastructure, congestion, crash risk and pollution)



A New Planning Paradigm



Predict and Provide



Decide and Deliver

"Predict and provide" transportation planning expanded 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.

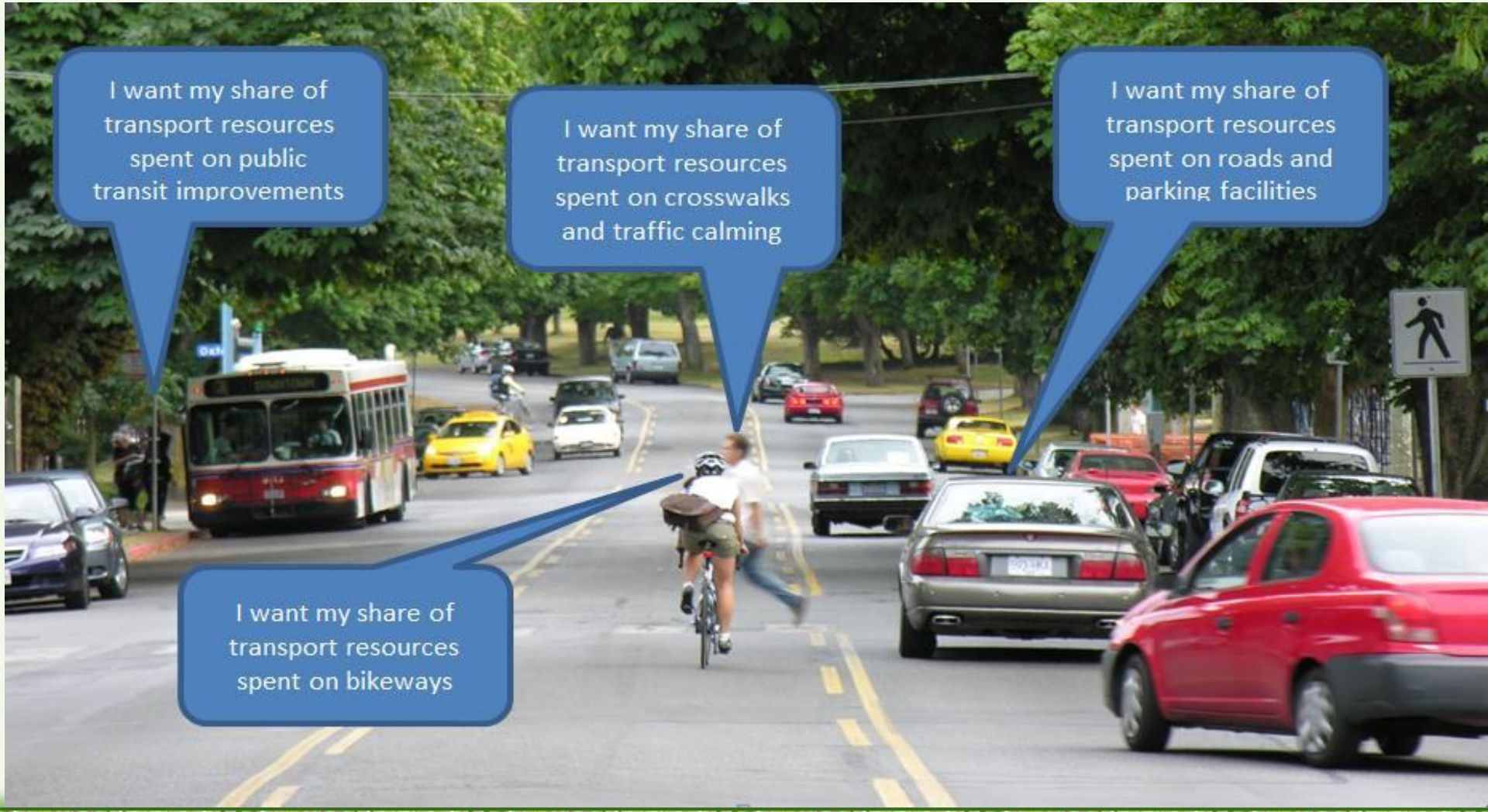
Transport Equity Summary

Type	Description
Horizontal Equity – Everybody is Treated Equally	
Fair Share	Each person receives a fair share of public resources.
External costs	Travellers minimize the costs they imposed on others.
Vertical Equity – Favors Disadvantaged People	
Inclusivity	Ensure that everybody enjoys basic mobility and accessibility. Reduce mobility disparities.
Affordability	Lower-income households can afford basic mobility.
Social Justice	Everybody is treated with fairness and dignity. Past injustices are corrected.

Transportation Equity Objectives

Horizontal Equity		Vertical Equity		
Fair Share	**External Costs**	**Inclusivity**	**Affordability**	**Social Justice**
• Everybody contributes to and receives comparable shares of public resources. • Serve non-drivers as well as drivers. • Affected people are involved in planning.	• Minimize external costs. • Favor resource-efficient modes that cause less congestion, risk and pollution. • Compensate for external costs.	• Accommodate people with disabilities and other special needs (Universal Design). • Basic access (ensure that everybody can reach essential services and activities).	• Favor affordable modes. • Provide discounts for lower-income users. • Provide affordable housing in high-accessibility neighborhoods.	• Protect and support disadvantaged groups (women, youths, minorities, low-income, etc.). • Affirmative action programs. • Correct for past injustices.

A Fair Share of Public Resources

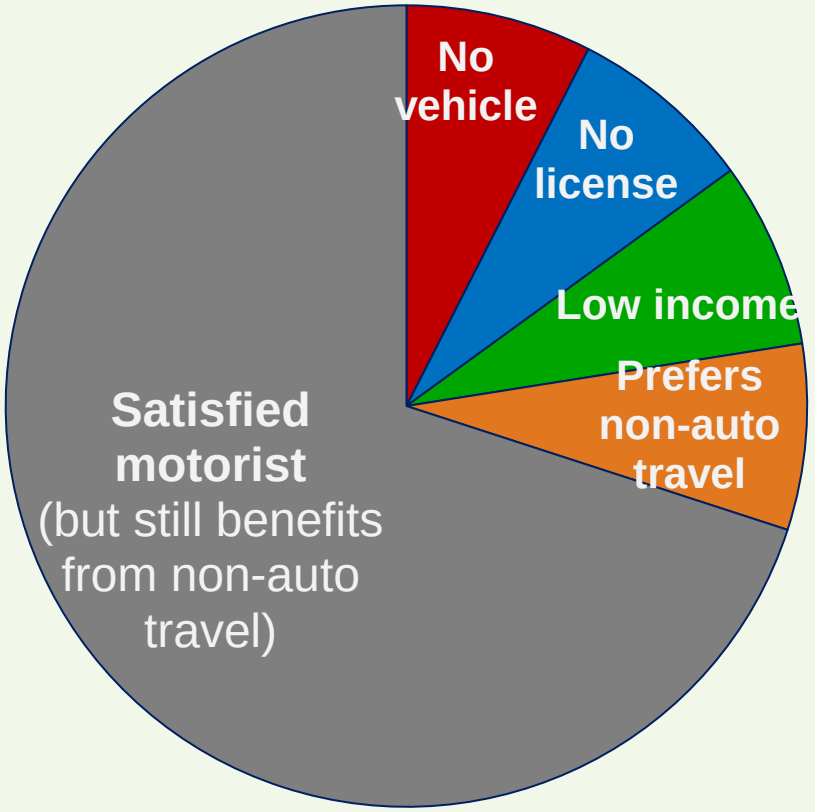


Non-auto Travel Demands

In a typical community 20-40% of travellers cannot, should not, or prefer not to drive for most trips.

- People with disabilities
- Youths who lack licenses and cars
- Motorists who dislike driving on busy highways
- Motorists whose vehicle is temporarily inoperable
- Law-abiding drinkers
- People who walk and bicycle for health and enjoyment
- Tourists

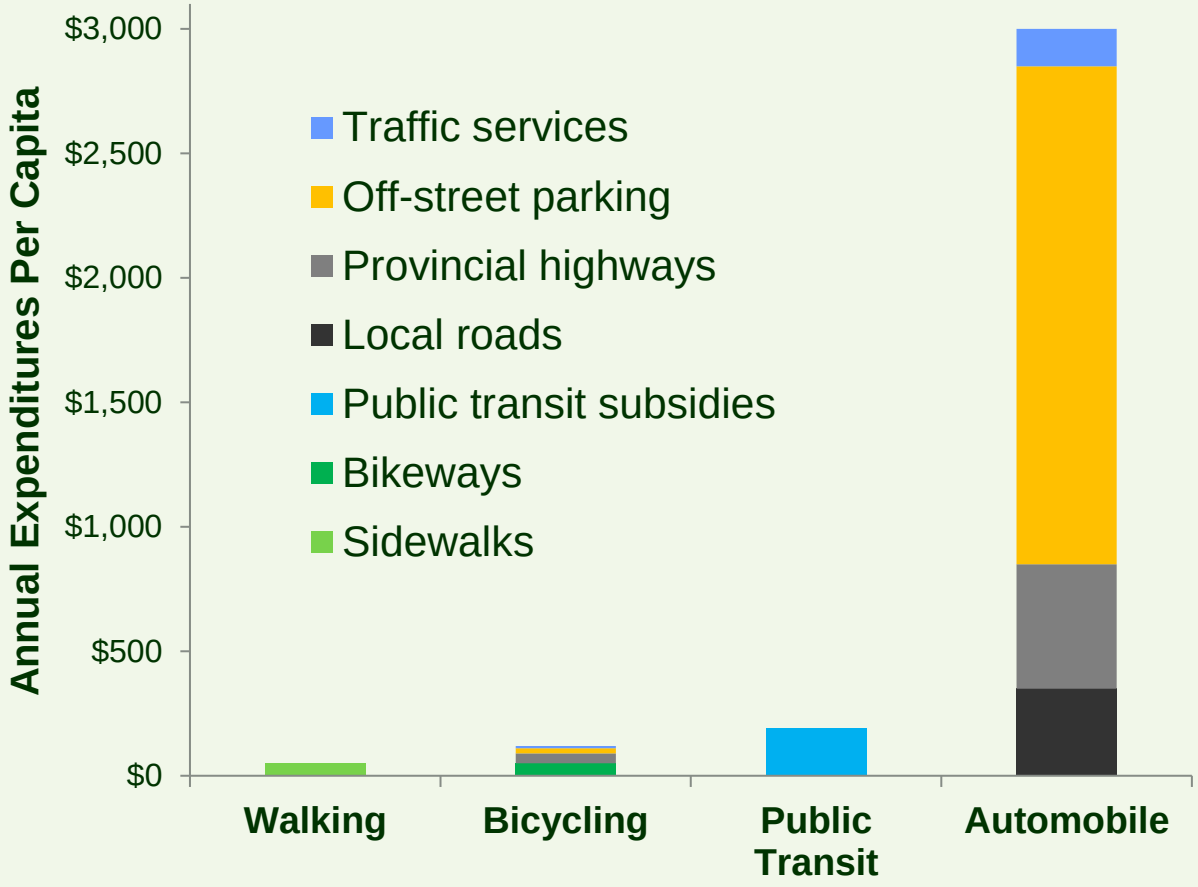
Motorists also benefit from improved travel options that reduce traffic and parking problems and their chauffeuring burdens.



Transportation Fairness

Cities typically spend about $50 annually per capita on sidewalks and crosswalks, and about $20-40 on bikeways and paths.

This is small compared with expenditures on roads and government-mandated parking facilities.



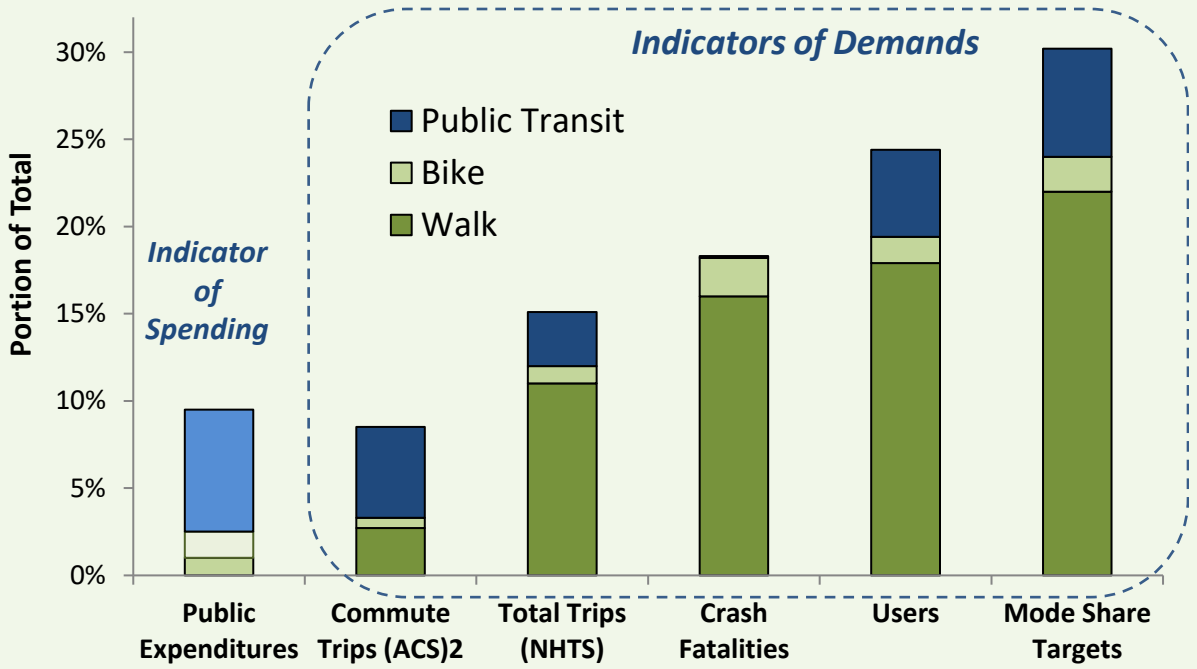
Spending Verses Demands

In a typical community non-auto travel represent less than 10% of infrastructure investments.

But

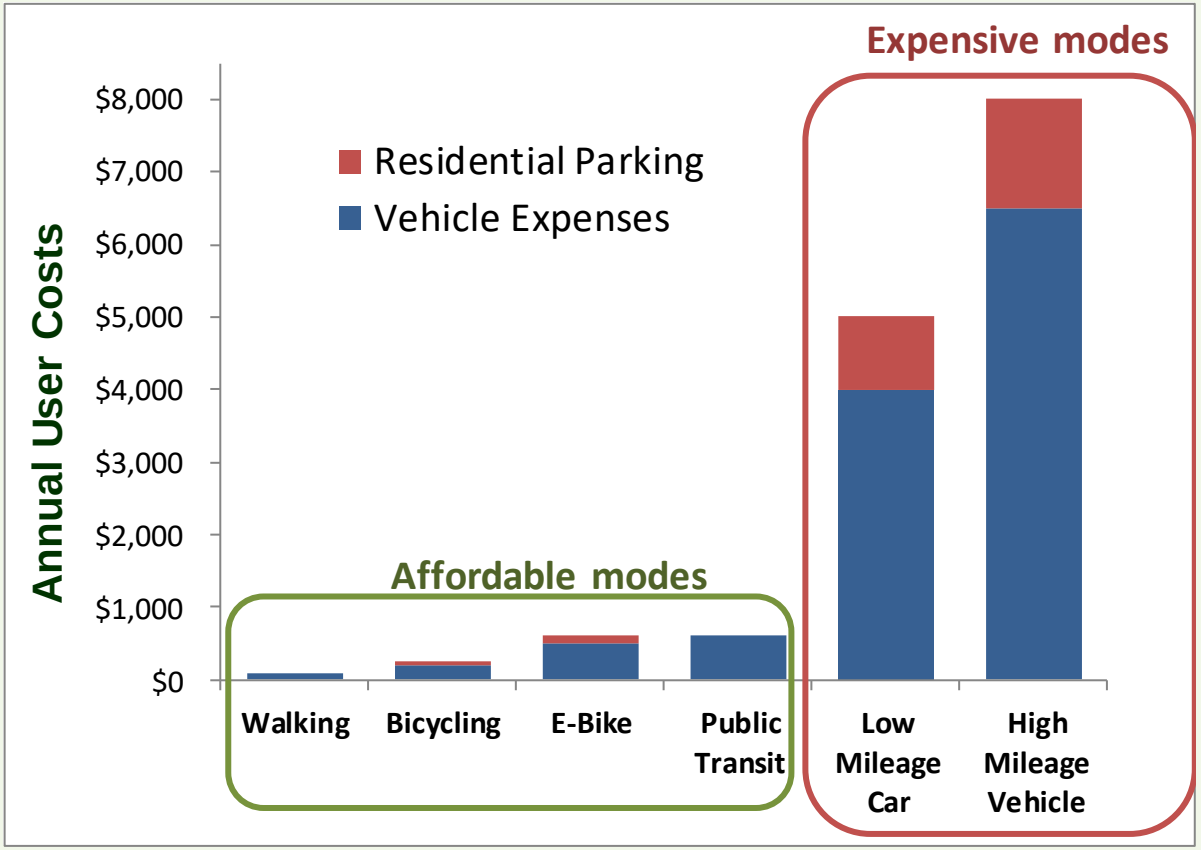
- 10-15% of current trips.
- 15-25% of traffic deaths.
- 25-35% of travellers.
- 20-40% of future targets.

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



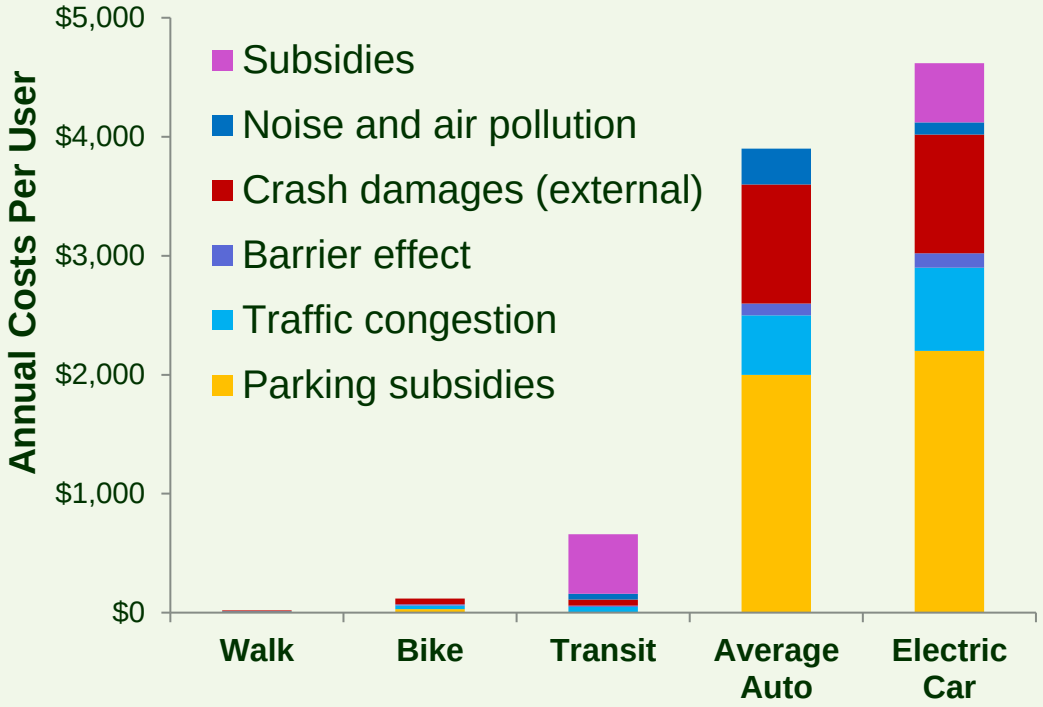
Transportation Affordability

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



External Costs

- Because they are large, fast and resource intensive, automobiles require 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, the external costs that automobiles impose on non-drivers tend to be regressive.



Transport Equity Analysis Summary

Type	Description	Metrics	Optimization Strategies
Horizontal – Fair Share	Each person receives a fair share of public resources.	Per capita share of public resources (money, road space, etc.).	Multimodal transport planning. Least-cost funding. Efficient pricing.
Horizontal – External costs	Travellers minimize and compensate for external costs.	Infrastructure costs, congestion, crash risk and pollution that travellers impose on other people.	Minimize and compensate for external costs. Favor resource-efficient modes.
Vertical – Inclusivity	Transportation systems provide basic mobility to disadvantaged groups.	Quality of travel for people with disabilities and other special needs. Disparities between groups.	Favor inclusive modes and accessible community development.
Vertical – Affordability	Lower-income households can afford basic mobility.	Transportation costs relative to incomes. Quality of affordable modes.	Favor affordable modes and housing in high-access areas.
Social Justice	Policies address structural inequities.	Whether organizations address inequities such as racism and classism.	Identify and correct structural inequities. Affirmative action.

This table summarizes transportation equity types, ways to measure them, and optimization strategies.

Valuing Multi-Modalism

An efficient and equitable transportation system is diverse so users to choose the most efficient 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

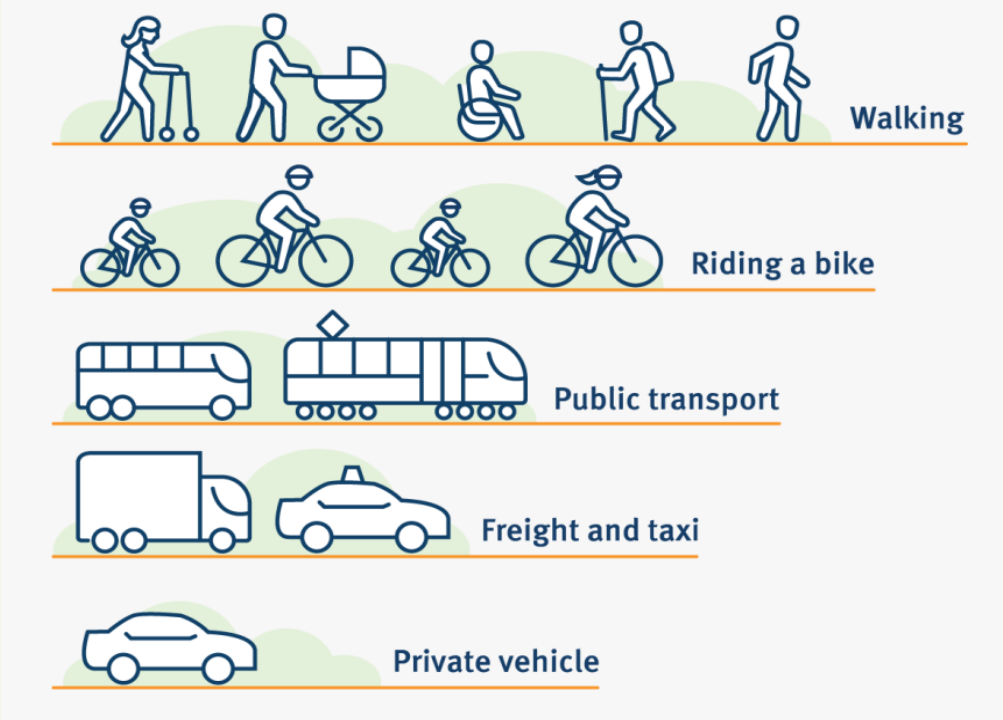
Current planning does a poor job of valuing this diversity.

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

- Enrique Peñalosa, Bogota Mayor

Vertical Equity – Sustainable Modes

A sustainable transportation hierarchy favors affordable, resource-efficient modes such as walking, bicycling, micromodes (e-bikes) and public transportation over expensive, exclusive and resource-intensive modes in planning and funding decisions.

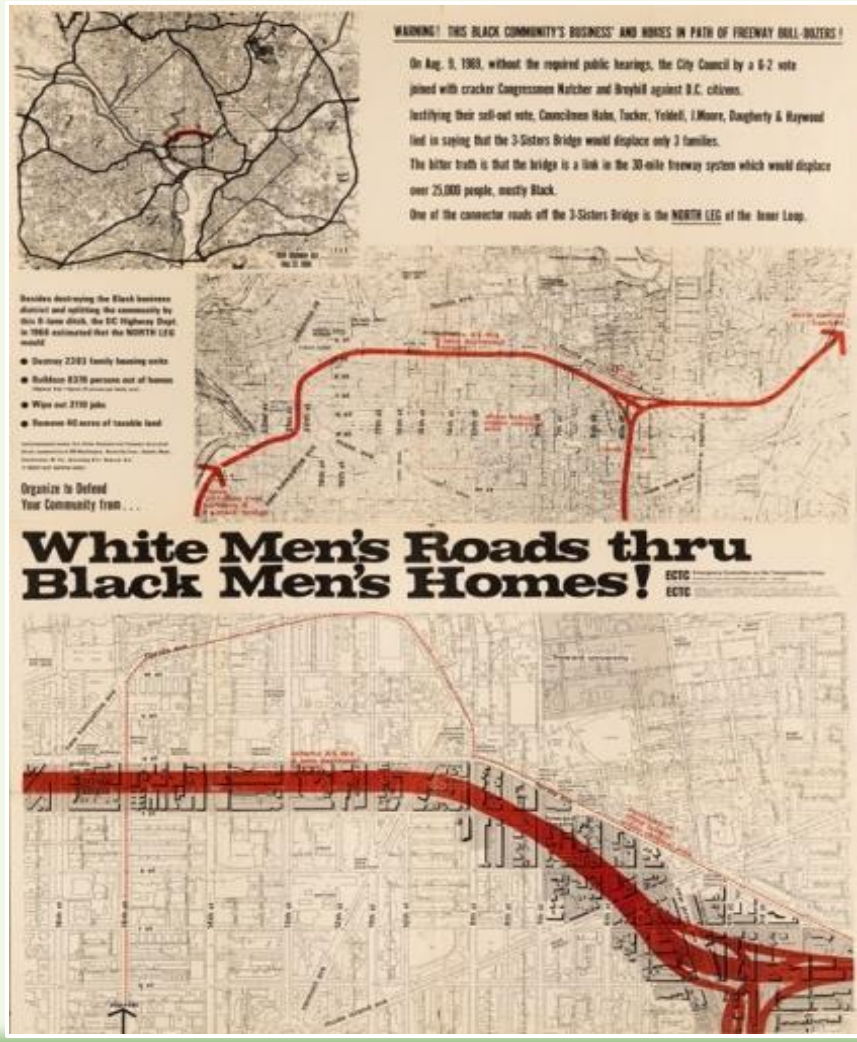


Social Injustice

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.



Completing Sidewalk Networks

Nanaimo target: **double walking by 2041**.

Typical communities spend $50 to $100 annually per capita on sidewalks and bikeway. This would need to double to complete their networks.

The city currently budgets $300,000 annually for pedestrian improvements, about $3 per capita.

Sidewalk funding increases are justified to satisfy ethical and legal requirements, and to achieve various economic, social and environmental goals. They can repay their costs through savings and benefits.

Serving PwD

Many people with disabilities (PwDs) have mobility impairments plus low to moderate incomes. They can gain independence, opportunity and dignity, by living in a compact urban village with the following features:

- An accessible sidewalk network.
- Complete streets with low traffic speeds.
- 70 or higher Walk Score.
- Frequent public transit services with accessible buses, trains and stations.
- Affordable and accessible housing.

Few North American neighborhoods have these attributes.

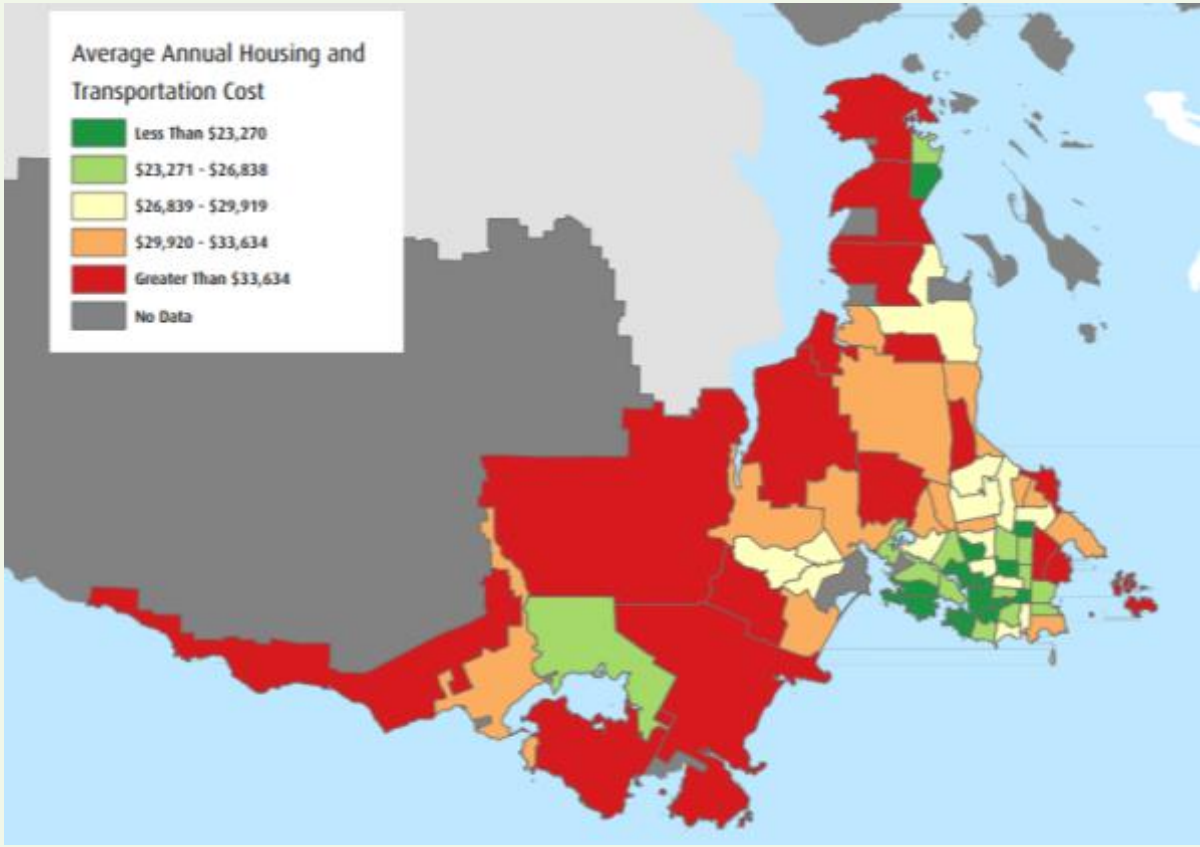
Urban Villages for People with Disabilities

www.planetizen.com/blogs/117156-urban-villages-people-disabilities .

Housing and Transportation Costs

Total housing and transportation costs are much lower in compact, multimodal neighborhoods where residents can minimize their vehicle expenses.

(CRD *Housing and Transportation Cost Estimate Study*, 2020)



Fairness in Rural Community

Rural communities have particularly large disparities between drivers and non-drivers, and therefore between people with and without disabilities, between those with high and low incomes, and between youths and adults.

As a result, affordable, multimodal planning is particularly important in rural communities. This can include:

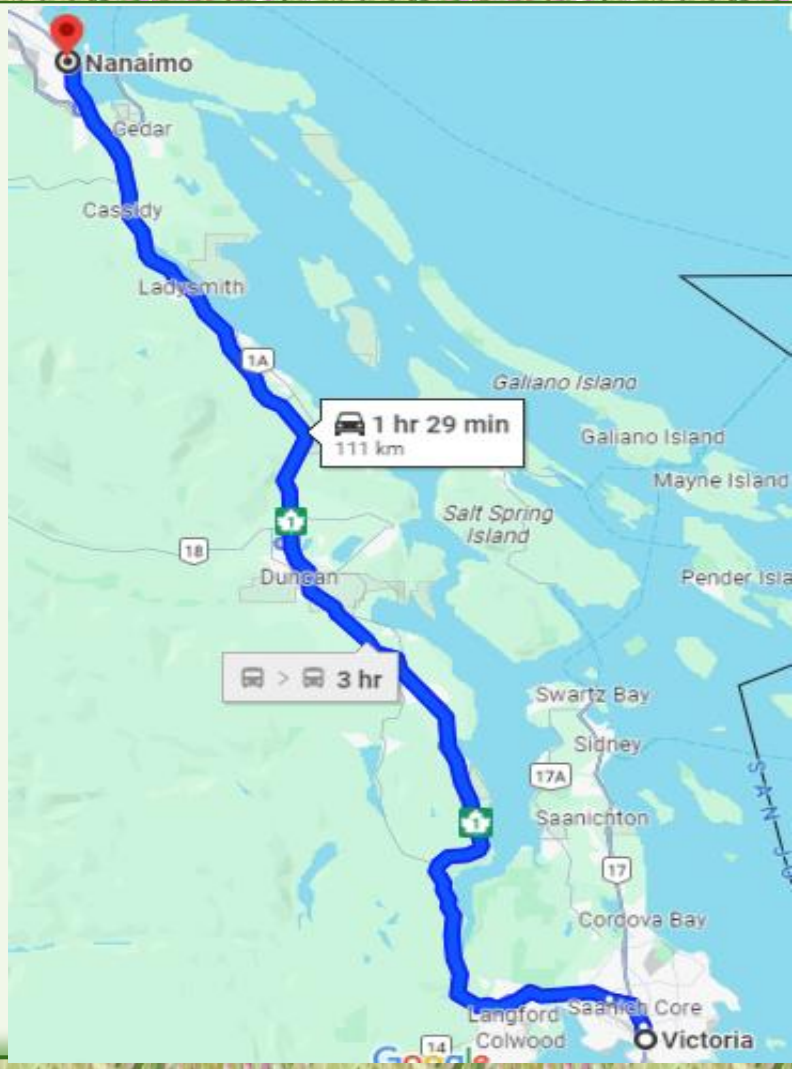
- Rural bicycling and e-bike planning
- Smart Growth and rural village planning.
- Interregional bus services.
- Demand response local transit services.
- Taxi services

*Washington State's **Travel Washington Intercity Bus** and **Rural Transit Assistance** programs provide planning support and funding for services that connect rural communities and urban centers.*

The Island Highway

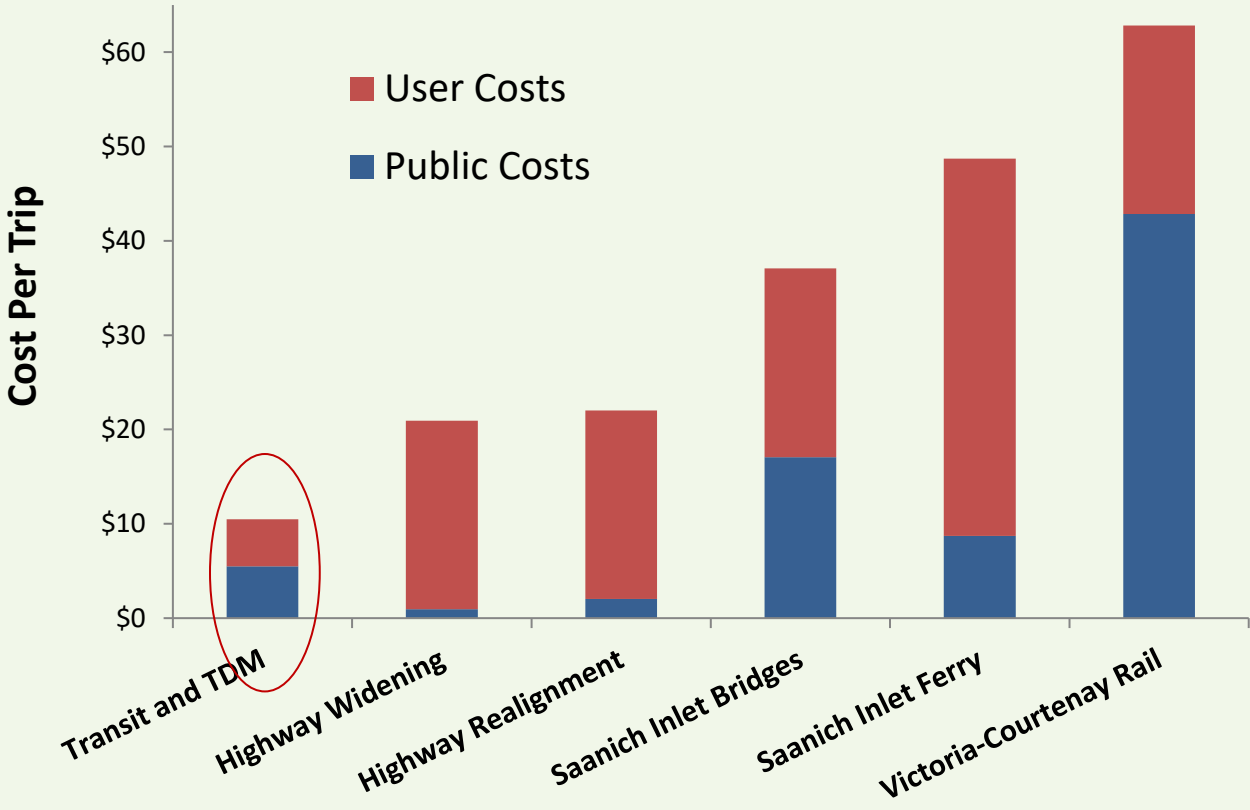
The Island Highway between Nanaimo and Victoria is:

- A major travel corridor carrying about 30,000 daily trips.
- Often congested, dangerous and sometimes closed due to crashes, flooding and rockfalls.
- Costly and environmentally damaging to expand.
- Lacking mobility options for non-drivers.



Comparing Solutions

Of the transportation improvements proposed in the *South Island Transportation Strategy,* frequent and affordable bus service with TDM incentives is the most cost effective and it provides the greatest range of benefits, particularly for non-drivers.



Implementation

Interregional bus service is the neglected stepchild of the transportation family. There are clearly defined responsibilities for planning, operating and funding sidewalks, bikeways, local roads, public highways, rail networks and local transit services, but not interregional bus, as summarized in the table below.

Due to unclear responsibilities, planning one interregional bus route, that now provides seven daily trips, **took eleven years**.

	Active Modes	Automobile	Rail	Bus
Local	Local Gov.	Local/Region Gov.	Transit agencies	Transit Agencies
Interregional	State/Prov. Gov.	State/Prov. Gov.	Rail Corps.	???

#70 Planning Timeline

“A Business Case for Improving Interregional Bus Service”

“Good News from the 2022 CRD Travel Survey”

“Understanding Smart Growth Savings”

“Fair Share Transportation Planning”

“Evaluating Transportation Equity”

“Completing Sidewalk Networks”

“Rural Multimodal Planning”

“Urban Village Planning”

and more...

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