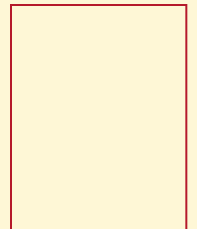


What's wrong with US transit policy?

Marty Wachs Lecture
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Genevieve Giuliano
University of Southern California



Presentation outline

- Background
 - Transit objectives
 - Short history of transit policy
- Trends
- Impacts
 - Transit dependents
 - Land use/urban form
- Some plausible explanations
- Conclusions

Why subsidize public transport?

- The politics
 - Basic mobility as public good
 - Access to jobs, services
 - Solve urban externality problems
 - Congestion
 - Air pollution
 - Energy consumption

The duel objectives of public transport

Why, con't

- The economics
 - Neither objective necessarily requires transit subsidies
 - Direct subsidies such as travel vouchers
 - Externalities best addressed directly
 - Pricing, regulation

Use of transit to achieve these objectives is a policy choice

Different objectives, different markets

Basic mobility: for those who do not have access to private vehicle

“Transit dependent”

More likely to be

Poor, Elderly, Minority

More likely to live

In central city

Zones of concentrated poverty

More likely to travel

Short trips

Off-peak

Mode choice based on
availability

Solve externalities: for those who do have access to private vehicle

“Discretionary transit user”

More likely to be

Not poor, Not elderly, Not minority

More likely to live

Outside central city

Zones of lower density

More likely to travel

Longer trips

Peak trips

Mode choice based on service
quality

Second objective becomes dominant

1960s	Begin fed capital subsidies	Rehabilitate, revitalize urban transit systems, return to self-sustaining
1970s	Growth of fed capital subsidies; add operating subsidies	Reduce congestion, air pollution, energy consumption; reverse urban decline; serve needs of transit dependent
1980s	Growth of state, local subsidies	Revitalize cities, reduce urban sprawl; reduce auto use
1990s	Flexible funds, more state, local subsidies	Rail transit for smart growth, compact cities
2000s	Continued funding growth, all levels of gov't	Address climate change, revitalize and restructure cities; reduce obesity and improve public health

The funding imperative

Federal funding
from general
fund

Competition
with other
programs

Need to generate
widespread
political support

Broad goals for
transit
investments

As transit continued to demand more funding support, transit agenda expanded to justify more support

Trends: transit supply and demand

	Bus	Comm. R	HRT	LRT	Total
Vehicle-miles (millions)					
1984	1845	168	436	17	3462
2006	2495	315	652	74	4684
% change	35.2	87.5	49.6	342.3	35.3
Unlinked pass trips (millions)					
1984	5908	267	2231	135	8829
2006	5894	441	2927	407	10017
% change	-0.2	65.2	31.2	201.5	13.5

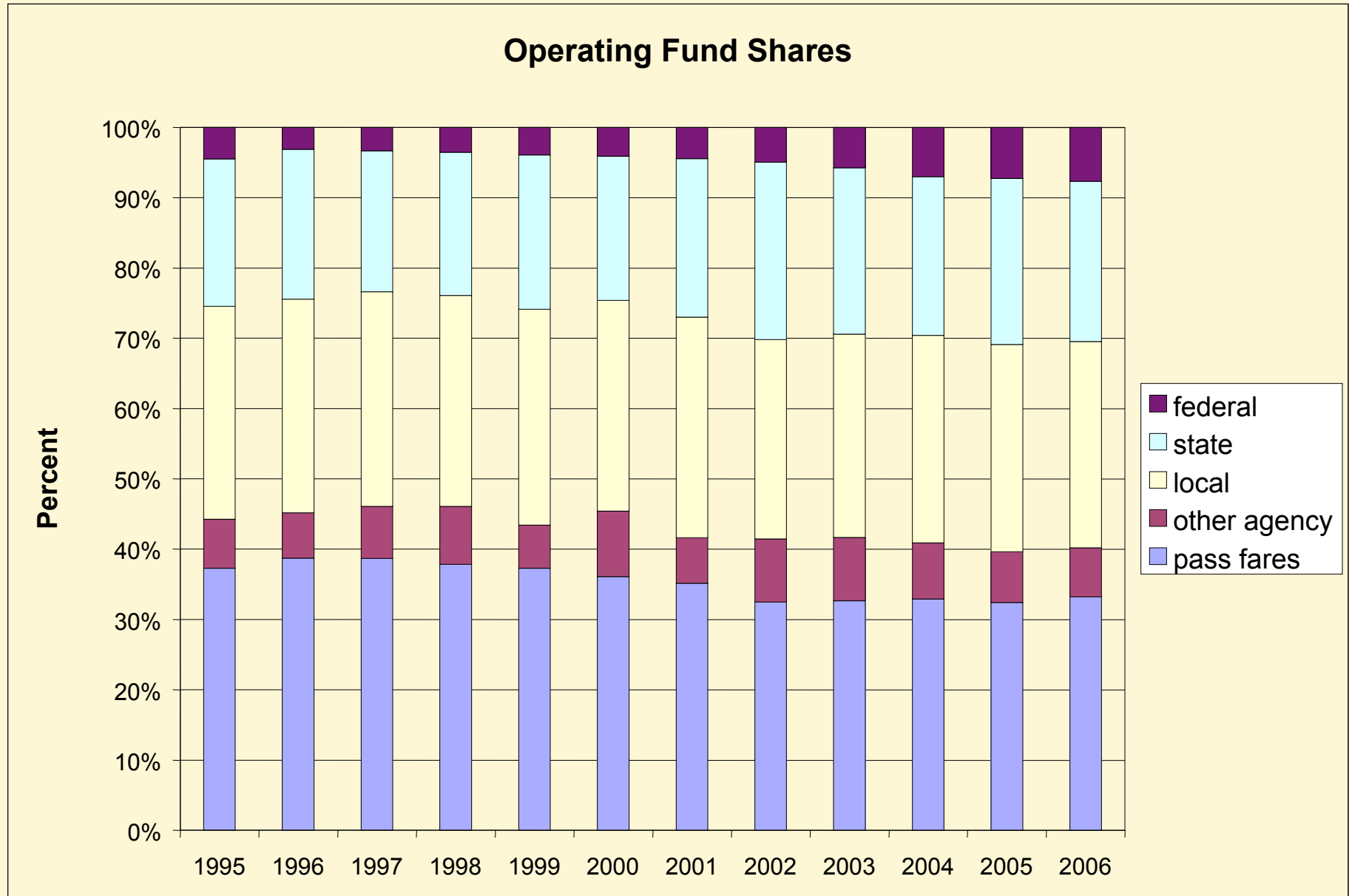
Pass trips/veh-mi 1984 2.55

Pass trips/veh-mi 2006 2.14

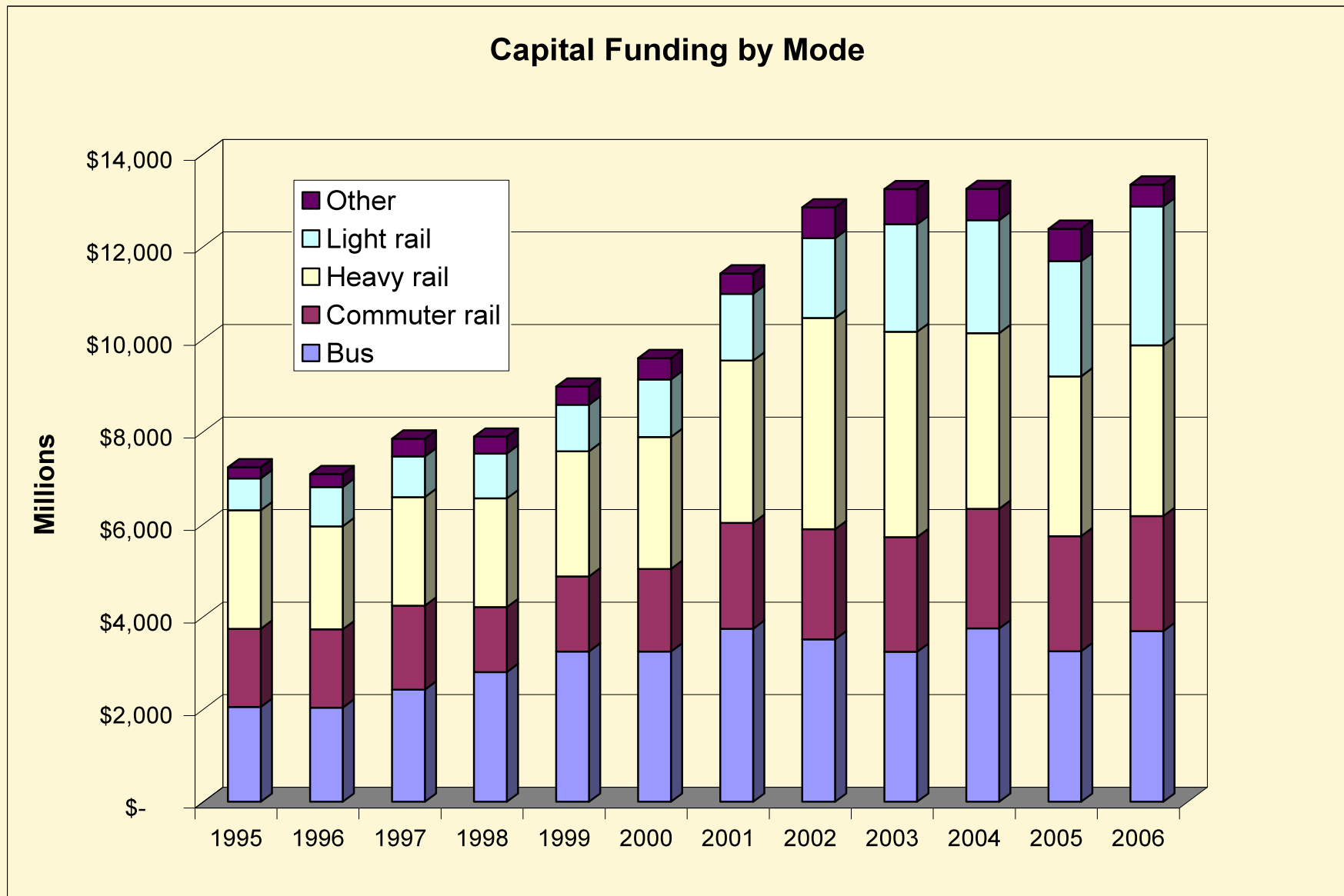
Fare recovery 1996 39%

Fare recovery 2006 33%

Trends: Operating funds



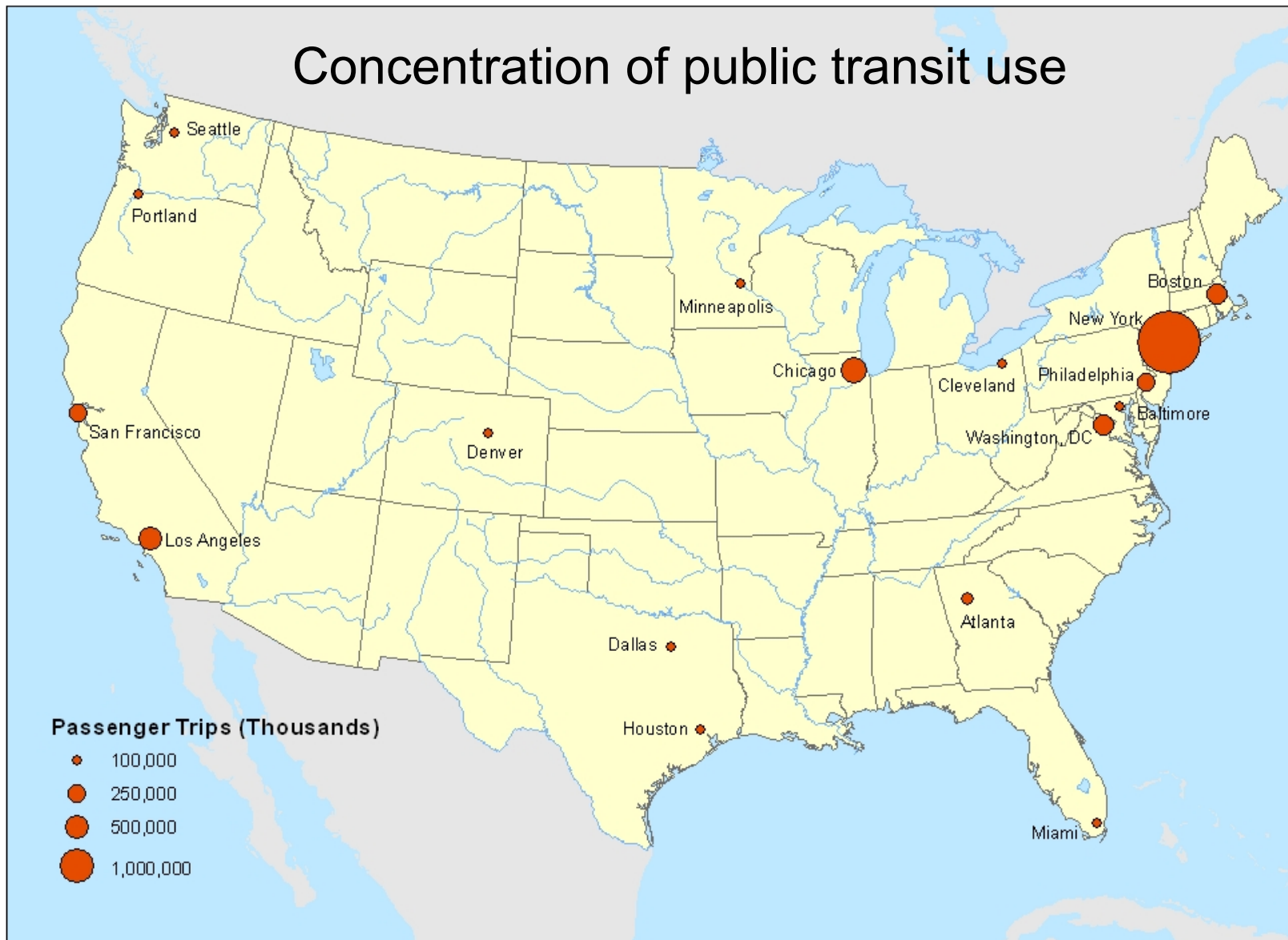
Trends: Capital funding



Public transit market today

- Pass trips have increased, but market share has not, with few exceptions
 - 2009 NHTS commute mode share = 3.7%
 - 2000 to 2009 ACS commute mode share declines by 6.4% in 25 largest cities
- Remains concentrated in cores of largest metro areas
 - NY is 35% of US total
 - LA, Chicago, Wash DC, Boston, Philadelphia are 30%
- Remains segmented
 - More low income riders on buses, LRT
 - More high income riders on HRT, commuter rail

Concentration of public transit use



Public transit finances today

- Most transit systems in financial trouble
 - LA Metro \$250M operating deficit
 - Chicago CTA \$300M
 - NYC \$800M
- Recession = loss of subsidy revenues from taxes, decline in ridership
- Declining marginal productivity of expansion = growing operating deficits
- Aging capital stock = higher maintenance costs
- Clean bus fleets = higher operating and maintenance costs

Impacts on transit dependents

- Most service expansion aimed at discretionary user
 - Commuter services
 - Peak services focused on employment centers
- Transit dependents less satisfied with quality, availability of transit service
- Transit access not associated with employment outcomes

Perceptions of transit service quality

Service Quality Measure	Poor			Not poor		
	Large	Small	Not	Large	Small	Not
Crowding, difficulty getting seat	27.2	26.9	45.9	20.8	31.2	48.0
Stations and vehicles not clean	42.0	25.2	32.8	22.3	35.4	42.3
Available when you need it	23.8	31.6	44.6	18.0	32.1	49.8
Worried about crime	24.9	26.6	48.6	16.2	37.3	46.6

Impacts on city structure

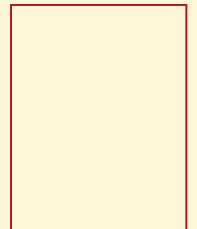
- After 40 years of investment, land use impacts should be observable
- Evidence on land use impacts very mixed
 - Challenge of isolating investment impact from other policy actions, external changes
 - Accessibility improvement necessary condition; transit investments do not necessarily improve accessibility
- The exemplary cases
 - San Francisco downtown, Wash DC metro stations, Portland downtown
- The more common cases
 - Other parts of BART, Miami, Atlanta, Sacramento, San Diego, San Jose

Conclusions on trends and impacts

- Transit investments to date have not
 - Significantly increased transit market share
 - Significantly improved basic mobility
 - Changed the structure of US cities
 - Significantly reduced congestion, air pollution, or energy consumption, or improved public health
- Yet public support for transit remains strong

Why, and what are the consequences?

Arguments for transit support and their consequences



Transit as second-best

- The argument
 - Pricing externalities directly is not politically feasible; investment in transit will reduce these externalities by attracting drivers to transit
 - Rail is preferred because of its travel time advantage and permanence
- Why successful
 - Pricing is politically difficult – imposes additional costs on users (voters), while benefits are dispersed
 - Funding transit is politically attractive – costs are dispersed, while benefits are concentrated, motivating interest group promotion

Transit as second-best, con't

- Problems
 - Transit is not second-best
 - parking pricing, fuel taxes, emissions regulation would more directly address externality problems
 - Investing in transit while not addressing problems more directly is inefficient
 - Transit cannot be competitive
 - Excess investment and large subsidy requirements

Investment in the future

- Argument
 - Transit investment is investment in the future; it will take decades to build a sufficiently dense system and influence land development patterns
- Why successful
 - Eliminates expectations for near-term results
 - Relies on visible capital infrastructure, benefiting current political leaders
 - A justification for continued investment, motivating stakeholder support

Investment in the future, con't

- Problems
 - No accountability
 - No performance requirements, no conditions for future investment
 - Transit ineffectiveness can be blamed on the auto dominated environment, or on insufficient investment
 - Incentive for unlimited investment, expansion
 - Without a performance metric, how to decide how much?
 - The “Robert Moses” problem
 - Incentive for initial investment (e.g. New Starts)
 - Current state, performance of transit not important

Transit subsidy policy

- Argument
 - Public transit should be available to everyone, hence funding for transit should be widely distributed
 - All urban areas will grow, and transit has an important role in influencing urban growth, hence capital funds should be widely available
- Why successful
 - Broad distribution of transit funding attracts voter support
 - Funding from higher levels of gov't attractive to locals
 - Bring dollars and jobs to local community
 - Discounted price of capital investments

Transit subsidy policy, con't

- Problems
 - Mismatch of funding imperatives vs transit markets
 - Transit market is concentrated; distributing funds broadly is inefficient
 - High value projects may not be funded
 - Availability of capital funds creates more demand and competition for projects
 - Discounted prices distort investment decisions
 - Competition without evaluation metrics leads to project promotion
 - Longer term consequences
 - Maintaining capital intensive systems
 - Growing reliance on subsidies

Who is the customer?

- All capital and 2/3 of operating costs are paid by non-users
- *Voter* becomes the primary customer, not the transit user, as transit agencies become more reliant on subsidies
- Reliance on subsidies reinforces perverse incentives
 - Buses and trains in every neighborhood, rather than where demand is concentrated
 - Focus on indirect, future impacts, rather than on improving service or productivity

Who is the customer, con't

- Consequences
 - Little incentive for transit productivity
 - Labor confrontations may be politically costly
 - Service improvements (e.g. reliability, real-time information) don't have priority
 - Little regard for the transit dependent
 - Low income persons less likely to be voters
 - Focus on future (discretionary) rider, not current rider
 - Framing of budget problem as lack of subsidies, not excessive reliance on subsidies or inefficiencies
 - Reaction to current funding problems consistent
 - Across the board service cuts and fare increases, rather than service restructuring
 - Few efforts to control labor or admin costs

Bottom line

- Public transit support has been built on strategies that ultimately undermine transit's objectives
 - Effective, reliable and reasonably priced service needed to attract passengers and market share
 - Neither goal can be achieved without increasing market share

So what?

- Costs are increasing
 - Inefficiencies
 - Opportunity costs
- Constantly increasing subsidy demands are not sustainable
 - Competition among public priorities
- Transit service is critical in some markets
 - Mobility is critical for everyone

What can we do?

- Quantify the costs of current practices
 - Given our understanding of transit demand, what if transit agencies sought to maximize passengers?
 - What are the welfare losses of current policies?
- Quantify incidence of costs and benefits
 - Who are the winners and losers?
- Restructure the incentives
 - Performance-based subsidies
 - More weight to ridership in subsidy allocation
 - Use federal funds for R&D on next-gen transit
 - Get prices closer to “right” for private vehicle

Thank You



giuliano@usc.edu