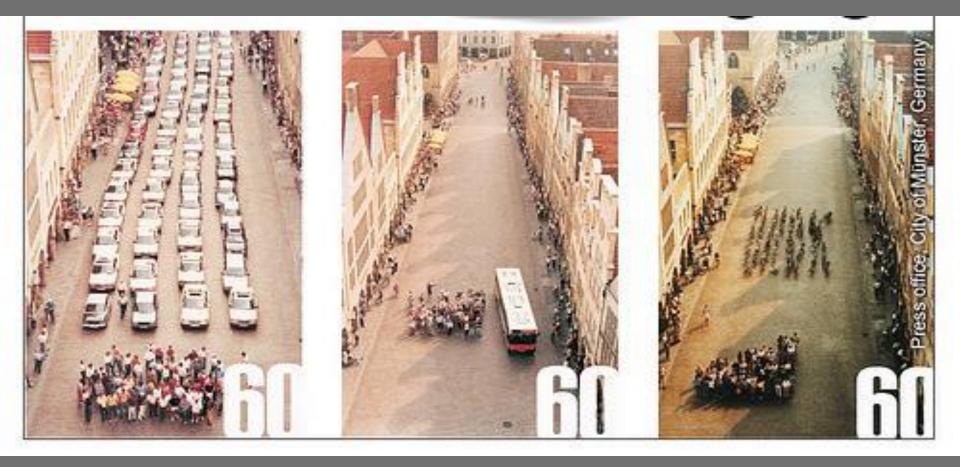


## **Transportation Demand Management** Overview of Tools and Strategies

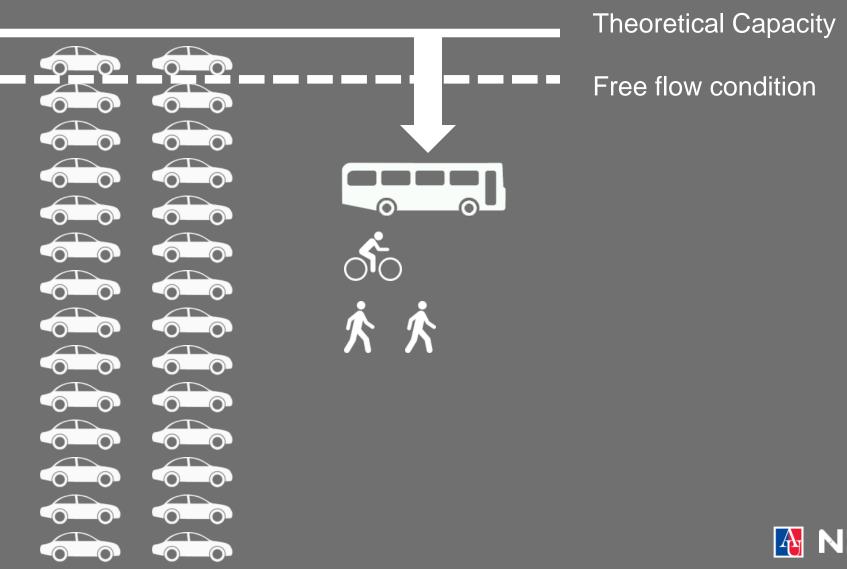




# What and Why?



### Maintaining Quality of Life, Work, and Health



#### **Types of travelers**

#### **Convinced & committed**

Early adopters, driven by values or budgets (or both!)

#### Capable, but cautious

Interested, but skeptical

Have used alternate modes occasionally but uncertain of them for regular use

Would use alternate travel if they had knowledge of them and they were of equal value

# No way, no how

וה וא O.K. TOO! If an informed choice



# HOW?

#### (How do you know it will work?)







# TOOLS OF THE TRADE

#### Information and Travel planning apps

Multimodal trip planning

#### May include:

- Trip time estimation
- Cost comparison estimation
- Calorie count estimation
- Carbon calculator
- Weather forecast

#### Needs to be:

- Accurate and reliable
- Easy to use
- Mobile
- Dynamic



Flickr User John Braken



#### Bicycle Access and Use

Bicycle facilities (*quality* and sufficient *quantity* of racks, lockers, showers ....even bicycle benefits)

Bike share expansion, promotion and use





#### Pedestrian Improvements

Good site design to enhance pedestrian connections and safety

Comfortable and interesting environment

Mixed land uses





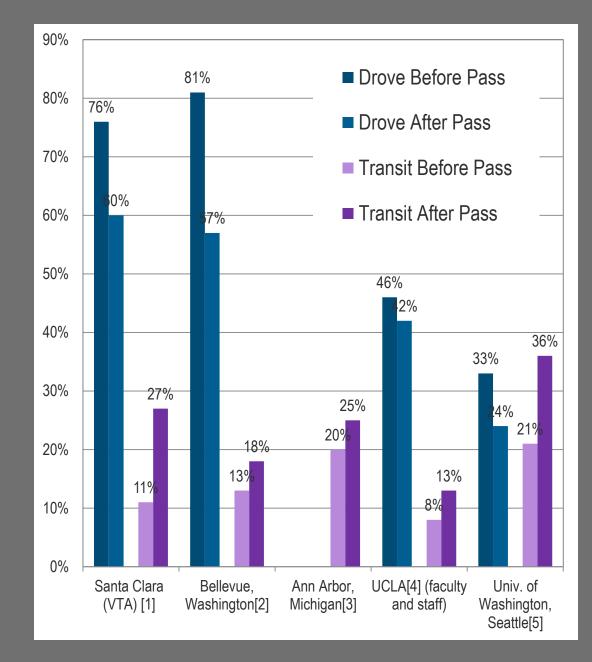
#### Transit Programs

Shuttles

**Discount fares** 

Universal pass

Employee discount or employer incentive





#### Vanpool, carpool, rideshare and ride matching

Transit extender

Subsidized lease

Insurance

Ride matching

Reduced parking rates and other benefits



Washington State Department of

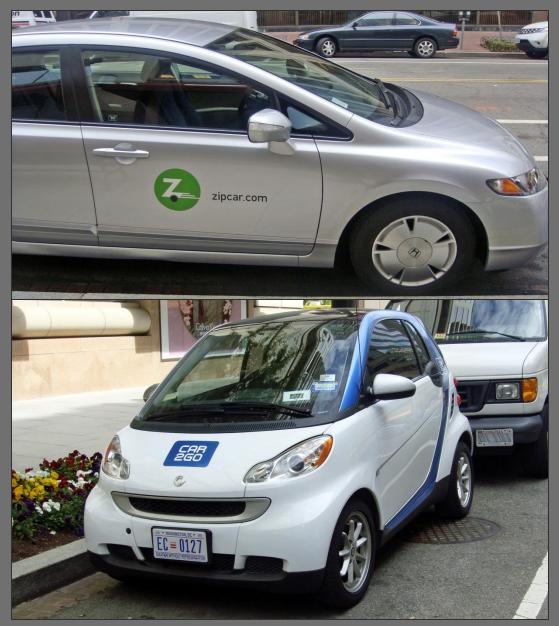


#### **Car Share**

Can take the place of fleet vehicles

Available vehicle for when employees, residents, or students want or need a car

Each car share vehicle eliminates demand for 11-25 private vehicles and each car share member reduces their driving by an average of 50%



Source: WikiMedia Commons



#### Guaranteed Ride Home

Low cost, big impact

Gives travelers confidence to use other modes

"in case something happens"

Very rarely called up



Credit: Roosbeh Rokni



#### Telework, online study or alternative work schedule

Increases employee morale

Decreases absenteeism

Maintains or increases work productivity

Not practical for all positions or industries



Flickr User RoberDan



#### Housing Programs

Live near work Promotion Real estate matching

Employer assisted housing

Employer provided housing



Flickr User Mkunnert



#### Parking Management

Parking cash-out programs

Parking permit reform (buy only what you need)

Demand-based pricing and variable pricing

Tailor parking requirements



Credit: Joel Dinda





sick leave

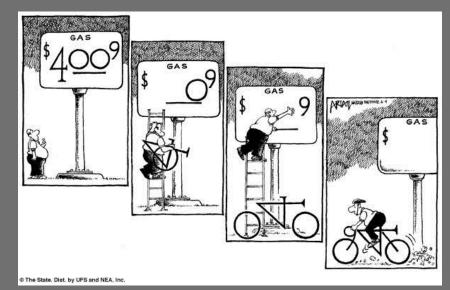
to have around your office.

<u> Warketin</u>



#### Cost – household

- Driving
  - ~\$9,122/year (AAA)
  - \$833/month + \$126/mo pkg
  - ~\$950/month auto commute
- Transit
  - ~\$6.30/roundtrip
  - \$245/mo (deductable)
  - = -2 roundtrips/work day
- Bicycle
  - \$75/year bikeshare = \$6/mo
  - \$1,500/bike (8 year) = \$15/mo







Thank you, Don Shoup!

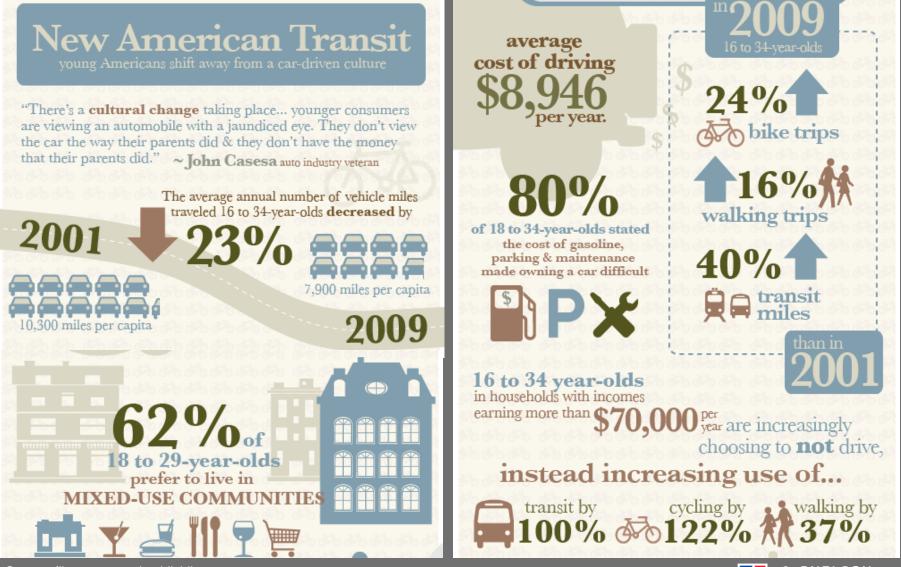


#### **Cost** - institution

	Surface	Above Grade Ramp	Below Grade Garage
Capital cost (per space)	\$10,000	\$20,000	\$40,000
@ 7% interest (30 yrs)	\$25,000	\$47,900	\$95,800
Monthly cost	\$70	\$135	\$265
O&M	\$15	\$65	\$80
COST RECOVERY ( / mo)	\$85	\$200	\$345



#### Competitiveness



Source: fibers.com and publicbikes.com







# MEASURABLE IMPACT

# Measuring Impact and ROI

Strategy	Details	Employee Vehicle Trip Reduction Impact
Parking Charges	Previously Free Parking	20%-30%
Information Alone	Information on Available SOV Alternatives	1.4%
Services Alone	Ridematching, Shuttles, Guaranteed Ride Home	8.5%
Monetary Incentives Alone	Subsidies for carpool, vanpool, transit	8-18%
Services + Monetary Incentives	Example: Transit vouchers and Guaranteed Ride Home	24.5%
Parking Cash Out	Cash benefit offered in lieu of accepting free or subsidized parking	17%





#### Karina Ricks 920 U Street NW Washington, DC 20001 (202) 315-5228 kricks@nelsonnygaard.com

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