

What Data is Telling Us About Mobility In & Out of Downtown Bellevue

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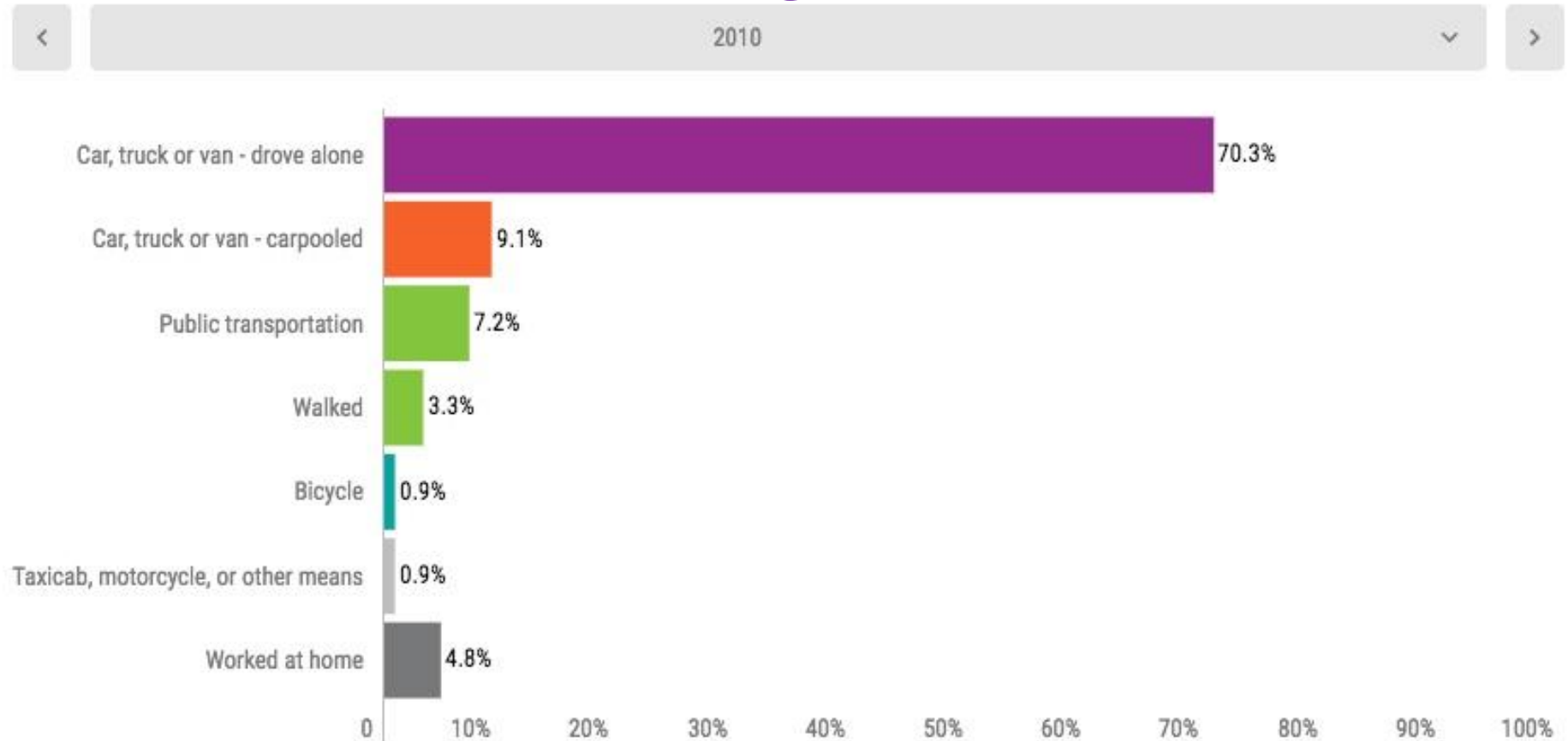
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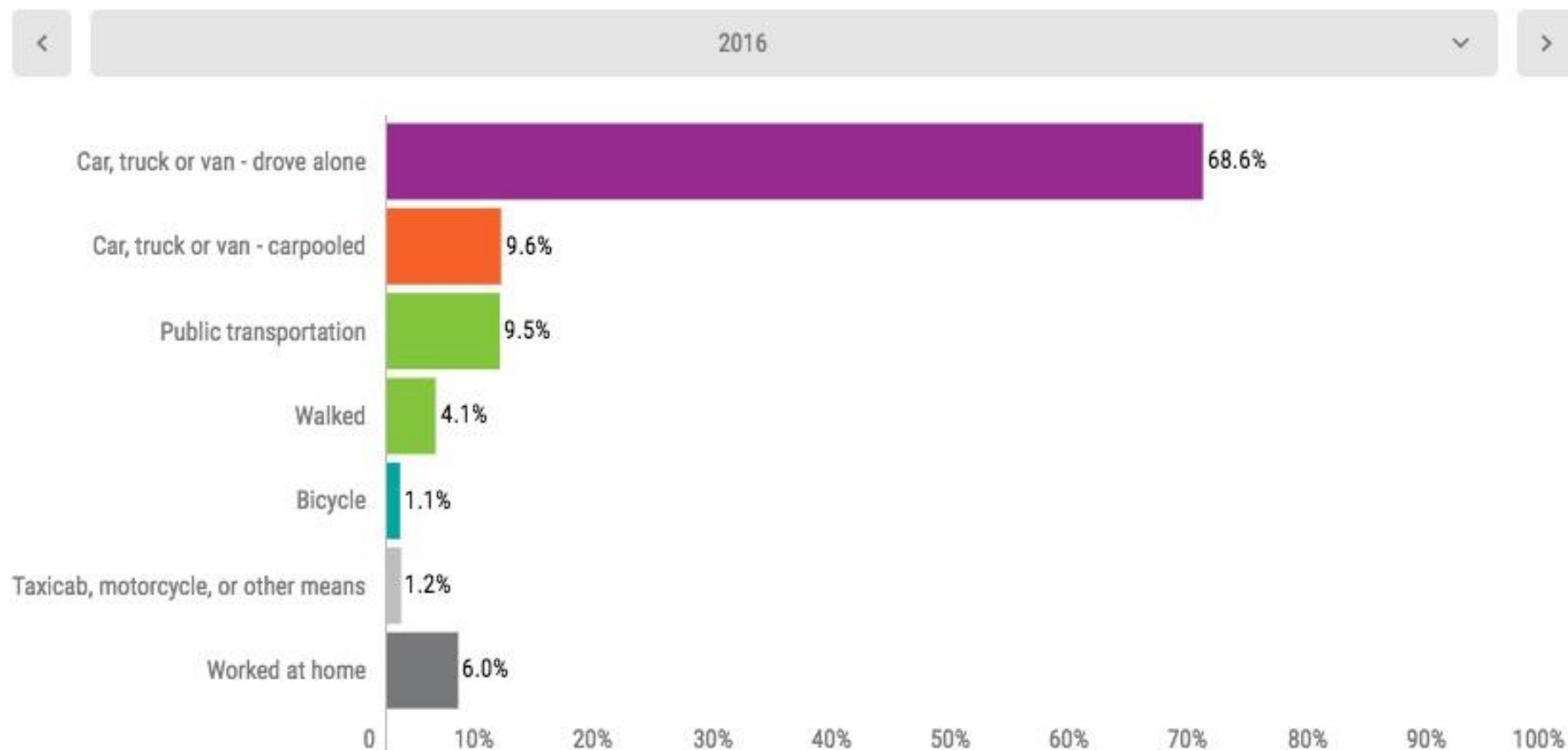
Commute to Work

Region Wide Commute Travel



Source: U.S. Census Bureau

Commute to Work



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Data Issues

- Census data are mediocre at describing mode split
- Many trips are made via more than one mode
 - Drive to park & ride
 - Bus to downtown
 - Walk multiple blocks from bus to office
- Many people travel differently on different days
 - Drive alone M/W
 - Bike T/F
 - Telecommute Th
- Census only records one mode

Travel is changing

- Drive alone commute trips are declining (slowly)
- Transit, walking, biking, telecommuting are all increasing (more so in dense urban areas)
 - They are all still small relative to driving a car
 - Transit's dominant use is to get to/from work
- Major city centers (Seattle and Bellevue) are leading those changes

Travel is changing to/from and around Downtown Bellevue

- That's good
- It has to
- Downtown Bellevue has changed, and continues to change

The Downtown Bellevue of my childhood no longer exists



Downtown Bellevue is changing

- Tremendous growth
 - People
 - Activities
 - Density
- Where people work, live and shop is also changing
 - Because it makes sense for people to change their 1970's behavior
- Transportation needs to change with the times
 - And it is

Data? Parking Price!

In the 1960's, land is “cheap” so look at the free parking!!!



Density was low



- Which makes distances between activities long
- Why build up when you can build out more cheaply?

Bellevue's Main Street and Bellevue Way looking north, c. 1965

Modern Bellevue

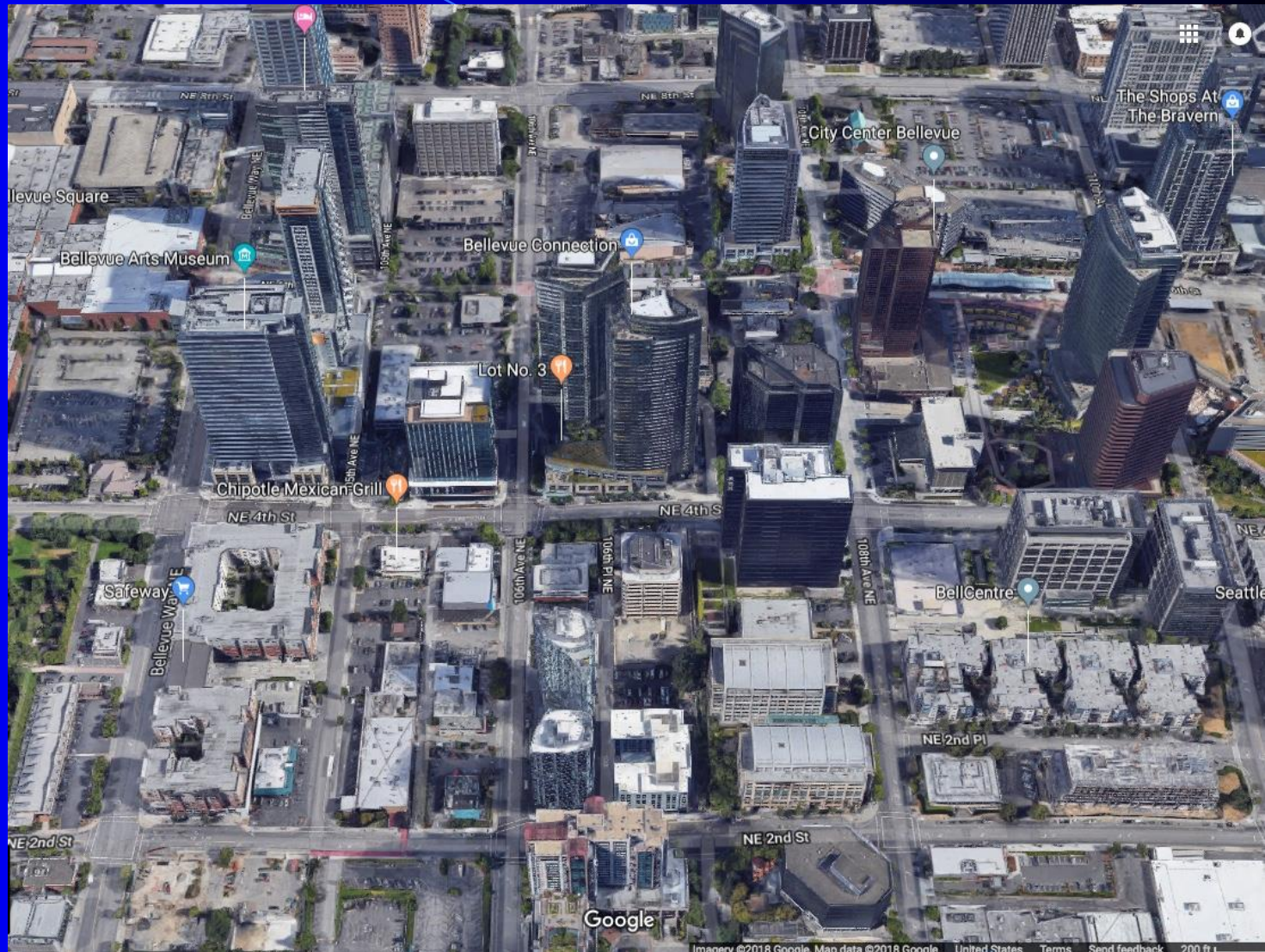
Land is
expensive

So parking is
rarely free

People now
live downtown

- Small space
- Easy commute
- Access to cool activities

Taking transit
to work makes
sense



Introduction to Travel Behavior

- Transportation and Land Use are directly linked
- Land Use (location) decisions include many factors - transportation is one of them
 - Value for price
 - Schools
 - Parks, etc.
 - Transportation access / price
 - Availability of transportation alternatives
 - Types of modes (Walkscore – can I walk to places?)
 - Congestion / commute options

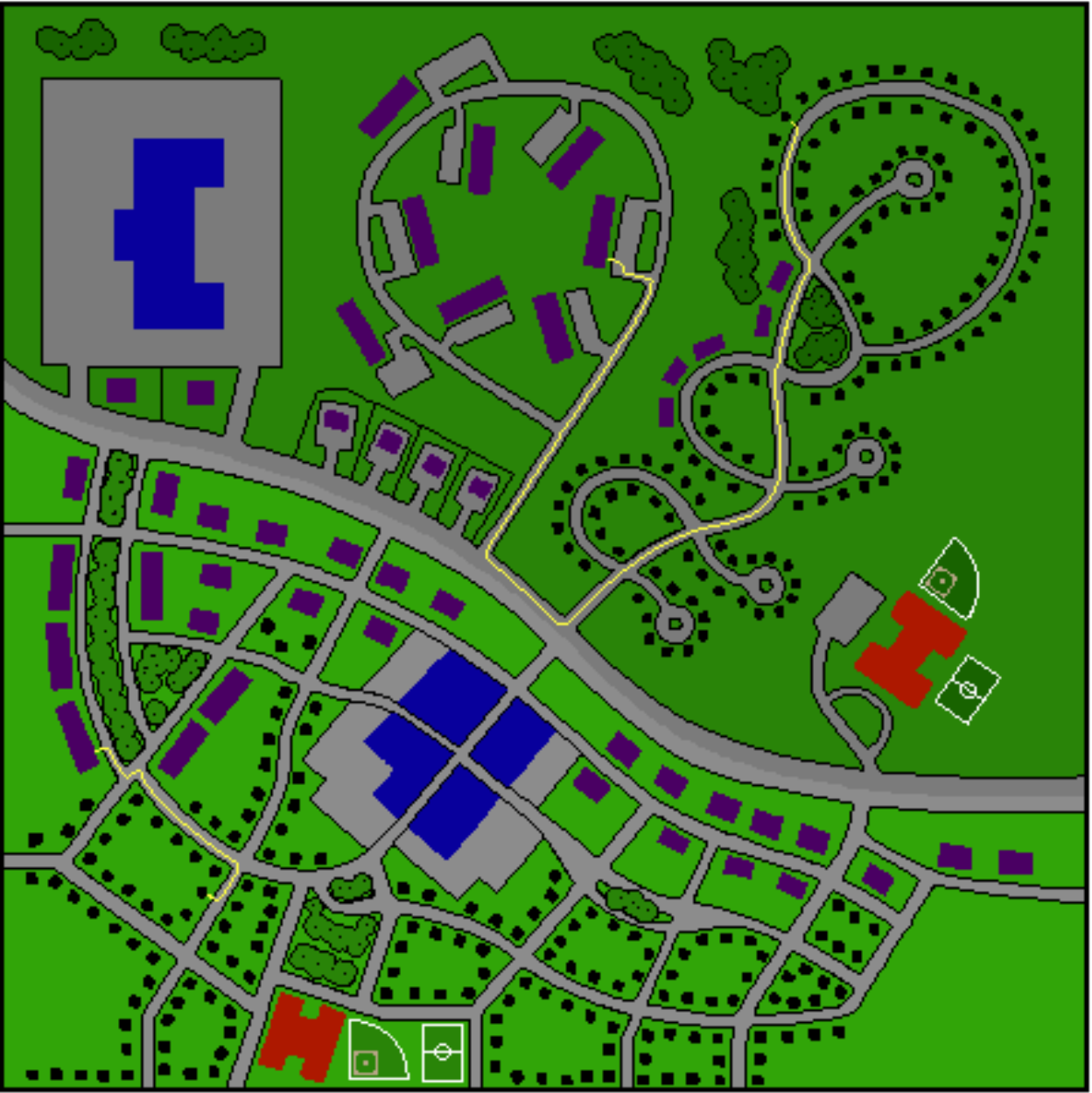
Facts Many People Would Like To Ignore

- People travel using modes that make sense to them
- The land forms we build pick the transportation system winners and losers
- For the last ~80 years we constructed a land form based on driving cars that doesn't work at the scale we are now building

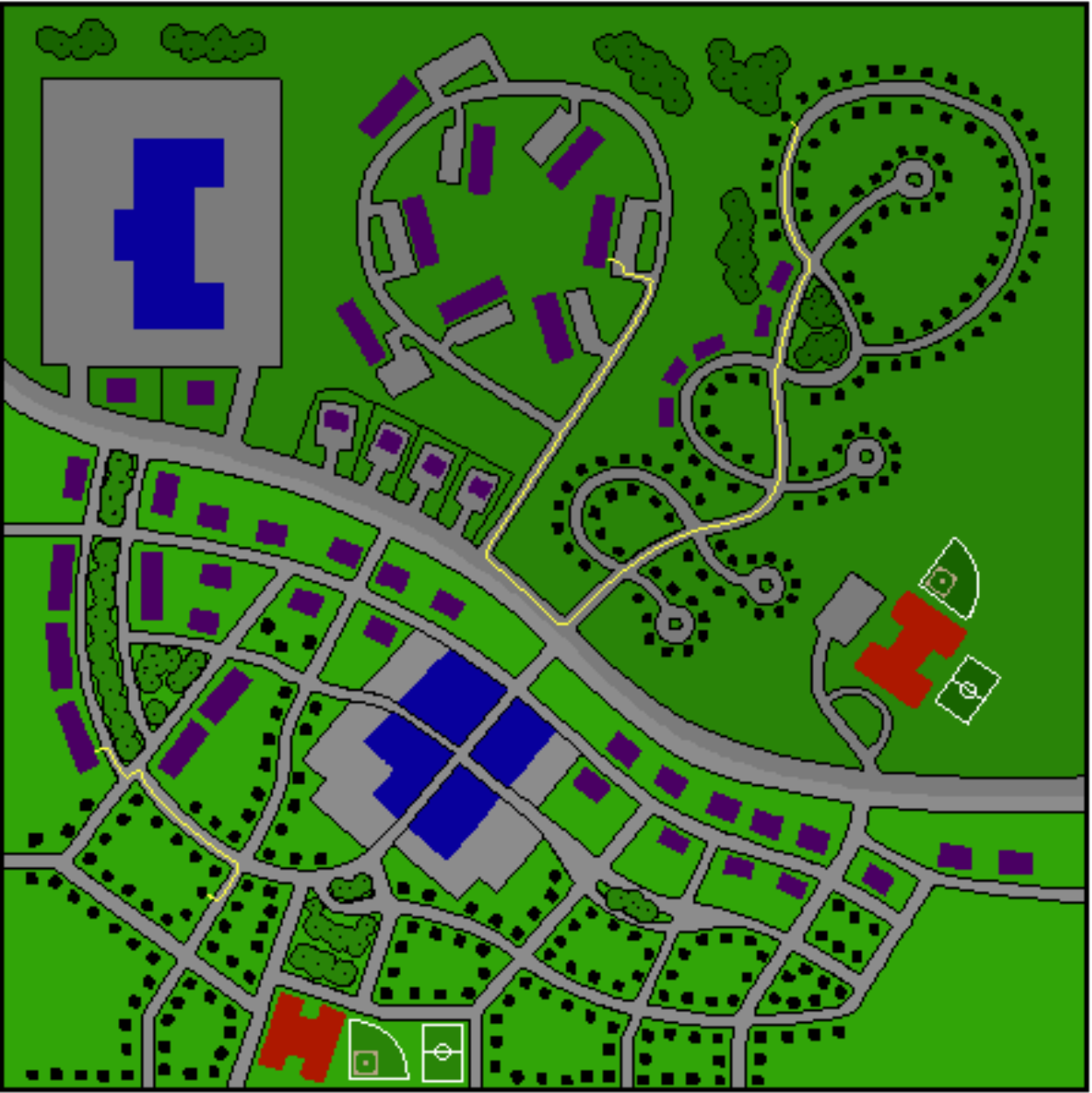
Facts We Don't Like

- Cars often don't work well when there is
 - High density (Downtown Bellevue), or
 - Built out sprawl
 - Snohomish/Skagit/Pierce Counties
 - see I-405, I-5, SR 167
 - (or LA, or Houston, or Atlanta)
- Cars are space inefficient (as we use them)
 - Space inefficient is not good where land is expensive and fully occupied

Neotraditional Street Layout



Suburban-Style Street Layout



Facts We'd Prefer to Ignore

- People like to commute alone in their cars
 - We've built metropolitan regions that encourage this behavior
 - The economic cost of meeting up with a non-family member is high
 - Time and cost
 - The benefits are modest at best
- Carpooling is stagnant as a mode, and in many places declining

Facts We'd Prefer to Ignore

- Widening of freeways is really expensive
- Land is expensive
- Construction is expensive
 - Especially working around existing traffic
- Lots of public resistance to widening
 - Why should I give up my house/business (and pay more taxes) so you can have a faster commute?



Modern Bellevue

- People are “economic beings” – they make economic choices
 - Increasing costs (money and time) cause them to change behavior
 - When it becomes too expensive to park, people look for good alternatives
 - When it becomes too congested, people look for good alternatives

Modern Bellevue

- There is a reason Manhattan has the lowest drive alone mode split in the U.S.
 - Parking is expensive
 - Transit is a rational alternative
 - The biggest issue in New York is that there is not enough transit
 - NYC gets this. They continue to build their city to support alternative modes

Cost & Congestion Encourage New Travel Options

- Private sector sees a market, so they are stepping in
 - Issue: The data about their services are theirs, not ours
- All modes require the right infrastructure to work effectively
 - “New modes” are mostly variations on old options
 - Made possible by technology
 - Easy to pay, share, track use/location of assets

Cost & Congestion Encourage New Travel Options

- You (the BDA) have a lot of say in which modes will work and which modes won't
 - Choose wisely and downtown Bellevue thrives
 - Choose badly and people/businesses will go elsewhere

If parking is a pain...

Ridehailing modes (Uber/Lyft/taxi) allow travelers to avoid the hassle of dealing with their car

- Direct travel
- Higher speed
- Higher cost

Where do they pick-up/drop-off?



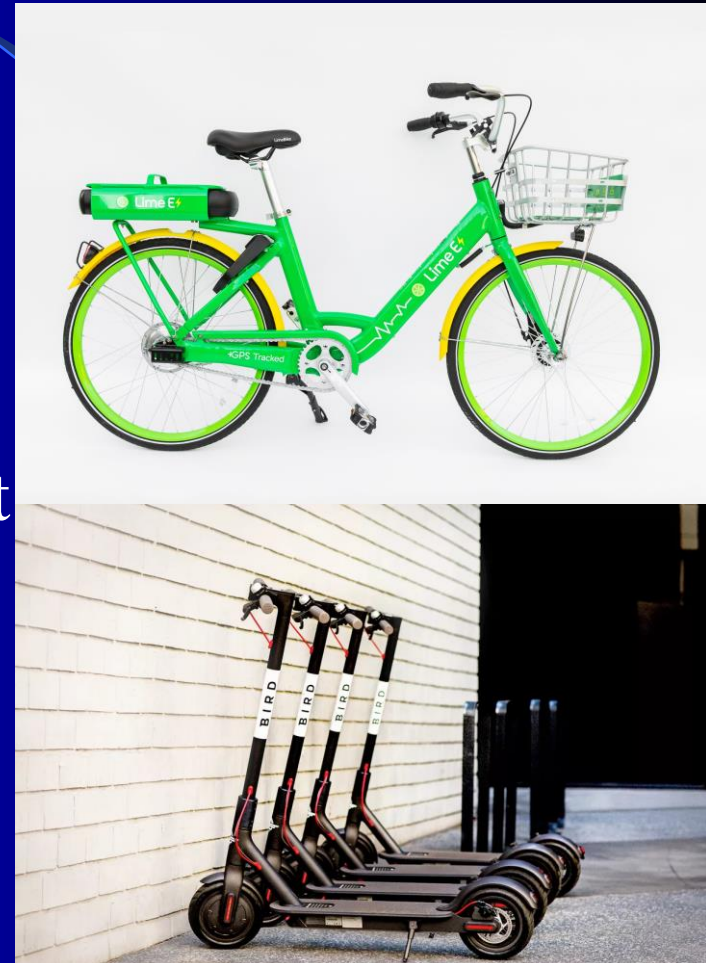
If parking is a pain...

- Carsharing options (Car2Go, Zipcar, ReachNow) allow limited use of vehicles – only when they are needed – lowering total cost
 - Converts high fixed costs into variable costs
 - Changes travel behavior due to high visibility of those costs for specific trips
- Where do they park while they wait to be used?



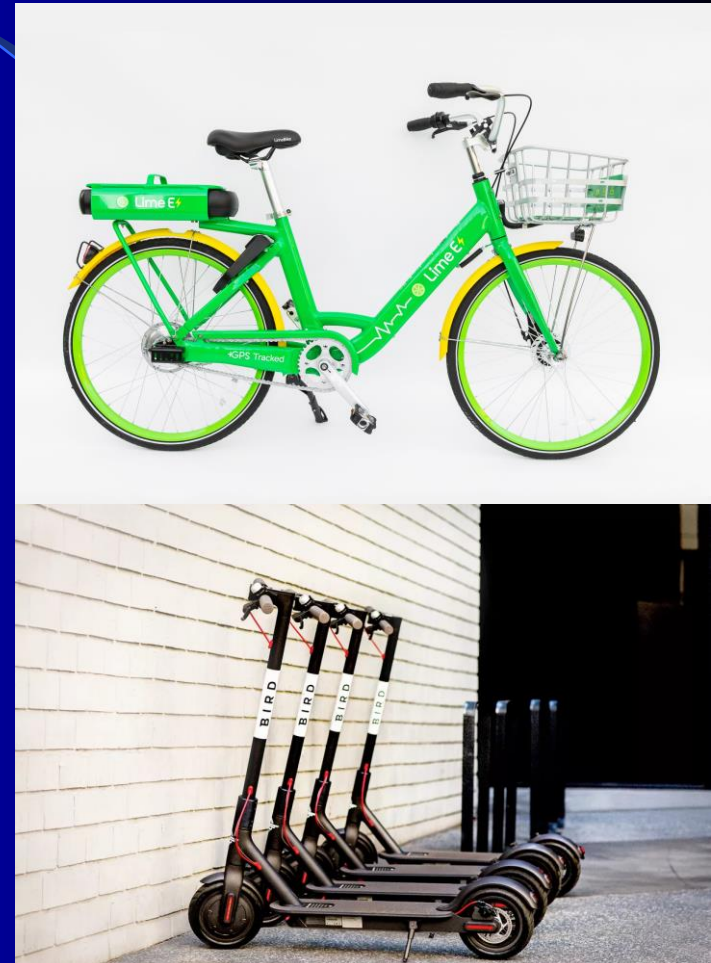
What about non-motorized modes?

- They are space efficient
- They are inexpensive
- They can obtain a good mode split if supporting infrastructure exists
- But only for specific types of movements / trips



Non-Motorized Modes

- Good for within city trips
- First/last mile to/from line haul transit
- These become more important as downtown becomes more mixed use,
- and
- Congestion / parking remain an issue



No one will use those...

- Infrastructure is needed to make these modes attractive
- Are they convenient?
- Do you feel safe?

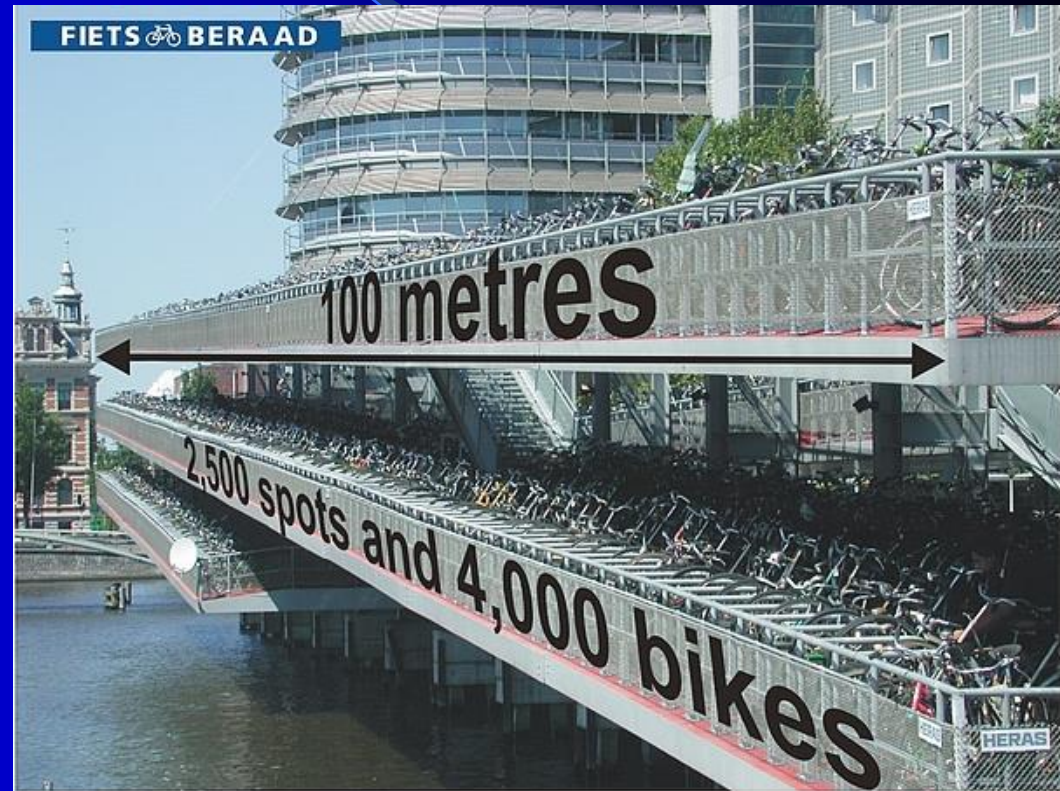


The Netherlands

Rain doesn't stop people from riding / walking if the facilities to support them are good

But the city has to build / support those facilities

Bellevue currently lacks many of those facilities



Vancouver, BC

A man in an orange jacket and helmet is riding a bicycle towards the camera on a city street. In the background, other cyclists and cars are visible, including a white SUV and a dark car. A yellow and black striped sign is on the right side of the road. The scene is set in an urban environment with buildings and streetlights.

**As Seattle struggles with bike lanes,
Vancouver, B.C., has won the battle**

Motorized Scooters? Skateboards?

- Not here yet, but they are coming
- On sidewalks?
 - Or in bike lanes?



Automated Cars will NOT Save Us

They are likely to arrive

- Eventually (not in the near future)

They reduce the perceived cost of congestion

- Encouraging more travel = more congestion
- Little incentive exists to share AV rides
- They remain very space inefficient



What does the future hold?

- Travel choices are based on the quality/cost of mode choice at both ends of the trip as well as the line-haul portion
- Money will largely drive which improvements you can make
 - We basically can't afford to build the transportation system needed to support travel "like we wish it would be"

What does the future hold?

- What you encourage will happen
 - If you build it correctly
 - But change happens slowly

Data for measuring changes

- We would like better data for managing the system
- Most new services are privately owned. And exist in a competitive market
 - Sharing data with the public releases that data to anyone via FOIA
 - Which gives away your business information to your competitors
- Detailed transportation trace data is highly identifiable. (Many companies can/do track your location)

Public Records Act

- Needs to be updated to reflect
 - Modern electronic world
 - Potential public/private collaboration
- UW Transportation Data Collaborative
 - A stopgap option which protects private data

What Should BDA Do?

- Bellevue is growing up
- Work towards helping the city become a true urban center
- That means a good mix of transportation options
 - Allows good internal circulation
 - Allows growth in downtown
- Help the city determine where cars/people/bikes/scooters can be safely operated
- Work with the suburbs to support options to transit