Transportation Post-COVID

Thoughts

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The Big Questions

- Will we have a vaccine?
- And if so, how soon?
- A vaccine lets us “return to normal”
  - The earlier it happens, the less likely major changes occur
  - The longer we go without one, the more likely changes in travel behavior become permanent,
  - Because people have a “new normal” by then
Pre-COVID Conditions

• Urban living was making a major comeback
  • Tech oriented businesses often prefer major urban centers versus suburban office parks

• Our inability to improve suburb-to-center commutes is causing the “traditional” suburb-to-center commute to grow even worse

• This made the traditional suburban land use trade-off less attractive
  • i.e., more land & lower prices in return for a longer commute
Why Urban Centers

• Mix of activities was attractive
  • Many things to do within a short distance

• Especially for younger and older singles and couples (& small families)
  • Easy participation in activities, good access to health care, more attractive than a large house

• Companies liked being in major centers, it allows interaction of employees with their peers (same and different companies)
  • Improved idea generation, cross-team communication
COVID Outcome

• Everyone that can telecommute did

• Large urban employment areas emptied, hurting service jobs
  • Many employees liked not having to commute
  • Where work tasks are clear, telecommuting is fine for productivity
  • Where work tasks are not clear, or where external communication is required, it can be less effective

• Dense areas highlight ease of spread of COVID 19
The Future?

• At best, many knowledge employees will work from home more often
  • Probably not every day
    • 2 or 3 times per week
    • Hot desks

• Some experimentation on schedules will occur

• Without a vaccine, this could go on quite a long time.
  • With a vaccine, it will be a matter of employer / employee preference
Land Use Impacts

• Less office space required downtown
  • Lower economic activity in urban centers

• Lower transit use into urban centers

• Lower freeway congestion (reduced duration of commute periods)
  • Will more people turn to driving, as congestion goes down?

  • Limiting freeway improvements, but not transit loss?

  • Lower air pollution emissions from vehicles?

• (Not sure about energy use)
The Future?

• Without a vaccine, will people be reluctant to use transit for fear of dense conditions?
  • We already lack the ability to provide seats on buses/trains on many major routes during commute periods

• Initial reduction in driving allowed some cities to re-purpose roads to encourage active transportation
  • If residents take advantage of these modes, and get used to using them,
  • We could see an increase in those modes
Data

• Electronic transit fare card data
  • Access to micro-mobility usage data???
    • Requires changes to data sharing laws and procedures

• Freeway performance data
  • Loops (in Washington, we are good at this)
  • Private sector vehicle probe data (e.g., NPMRDS)
  • Toll records

• Trip data on employees
  • Will employers share it?
Data

• Electronic device probe data (private sector)
  • Location Based Services (LBS) data
  • Cell phone data

• Can be used to estimate travel time, volume, and OD
  • Quality? Bias?
    • Being tested / improved