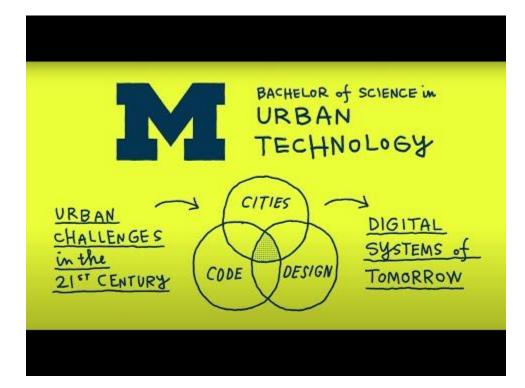
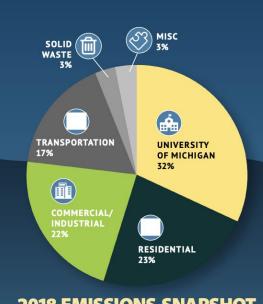
#### Urban Tech in Transportation

By: Ting Fong Chen

#### What is Urban Tech?



#### Why Transportation?

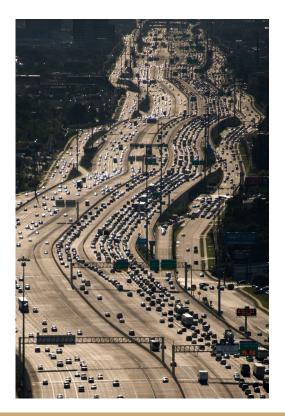


2018 EMISSIONS SNAPSHOT 2.1 million metric tons

Our 2018 greenhouse gas emissions inventory is our starting point as we race to zero emissions by 2030.



#### Mobility vs Accessibility

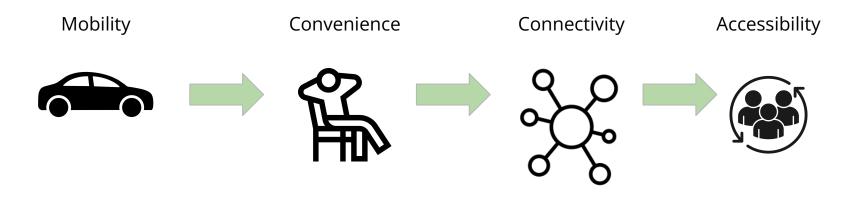


#### OR



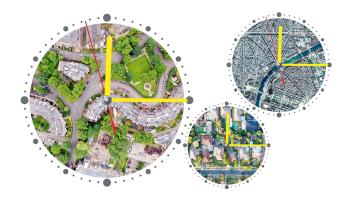
# Implications of maximizing efficiency

- What does efficiency mean in a transportation context?
  - Is the term "mobility" outdated?
  - Convenience is great, but it's still vague and at what cost?
  - Connectivity is better, but is it done at a rapid or incremental rate?
  - Accessibility is the true goal, everyone should get to where they want with a number of options and with similar travelling distances



#### Accessibility in Transportation

- Meeting the needs of different user groups
  - Those without cars should still be able to reach their destination in similar time & with similar levels of comfort
  - Different public transit modes serve different population sizes
  - Providing the necessary infrastructure to accommodate those transport modes
- Moving away from car-centric infrastructure & tech
  - Autonomous vehicles have great potential, but they shouldn't be the only solution
  - Integrated transit networks are crucial





# The hype around autonomous vehicles

- Why so popular?
  - Increases efficiency
  - $\circ$  Less time spent on driving  $\rightarrow$  higher productivity
  - Apparently safer because it can predict human movements
- Implications
  - Widens the digital divide?
  - What about people who don't have a car or have Internet access?
  - Monotonous/homogenous lifestyle? Higher autonomy  $\rightarrow$  no motivation or agenda?
  - Perpetuating car-centric development?







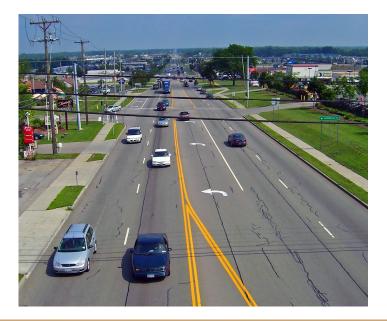


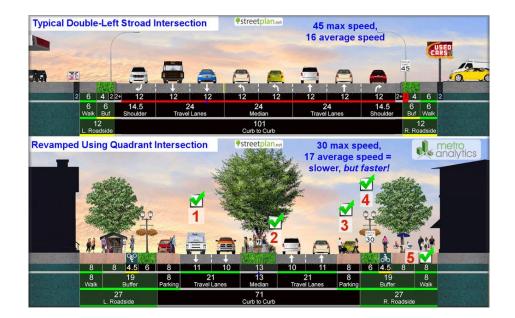




## Connections to Land Use, Street Design & Wealth

- The ubiquitous "stroad"
  - Mix of "street" & "road" that emphasizes both mobility & access





#### Connections to Land Use, Street Design & Wealth

• Transit is a means, not an end



More accessible transit



Larger sources of local wealth & investment

Higher connectivity



More people coming into neighborhood



# Connections to Land Use, Street Design & Wealth

- Walkability & mixed-use development with higher density
  - Integrated transit networks within & across cities & communities
  - Eliminating parking minimums
  - Building more middle housing





## Conceptual Shift in Thinking & Politics

- Public transit is for the public good, not for private investment (ahem Cali HSR)
- Autonomous vehicles in isolation won't solve every urban issue, but should be managed in tandem with other transportation networks
- The actual cost of building outwards & sprawl (and the savings that come with densification & robust transit)
- Option is key

# Potential Readings & Resources

- Books
  - Ghost Road: Beyond the Driverless Car Anthony Townsend
  - Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia Anthony Townsend
  - Confessions of a Recovering Engineer: Transportation for a Strong Town Charles Marohn
  - Walkable City: How Downtown Can Save America, One Step at a Time Jeff Speck

#### • Youtube Channels

- City Beautiful
- Not Just Bikes
- Strong Towns
- Podcasts
  - War on Cars
  - Strong Towns

