## Notes Section 2

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### September 21, 2021

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# 2 11.550x - Leveraging Urban Mobility Disruptions to Create Better Cities

### 2.1 Course Introduction

- Overarching themes: transportation as it applies to Cities
  - Status quo: personal cars are used for most travel/trips
    - Future goal: for cities where zero-e and multimodal travel is not only available and accessible but the new normal for inhabitants.

#### 2.2 The Status Quo

- Over 100 years ago, cars were gradually made the standard choice for transportation (mobility). It was reasonable because of what came before it: horses; cities were less dense.
- Now, cities and towns have been designed around the automobile, leading to sprawling urban and suburban areas, traffic congestion (which economically harms the city).
- 20-50M people globally are disabled nonfatally by car crashes yearly; 1.35 died from car crashes in 2018.
- Traffic accidents are the leading cause of death of children 15-24 in the US
- 93% of traffic deaths occur in low/middle income countries
- Over half of all road death victims are pedestrians, cyclists, and motorcyclists.
- Statistically, public transit is THE safest way to travel.
- Environmental: Cars cause poor air quality, athsma, and global warming
- $\bullet$  In the average household, transportation is the second largest budget item

## 2.3 Consequences of auto-centric models

- Our transportation system disadvantages many classes of people, including racial minorities, people in home countries, etc.
- Our transportation system is extractive bc it depends on carbon fuels and imported vehicles; which disadvantages many.
- In most places, you are *forced* to have a car to partake in typical activities; some places, you can survive without a car, but barely.
  - Therefore, poorer people are forced to buy secondhand or less reliable cars, which puts them at a further economic disadvantage, despite their preexisting disadvantage.