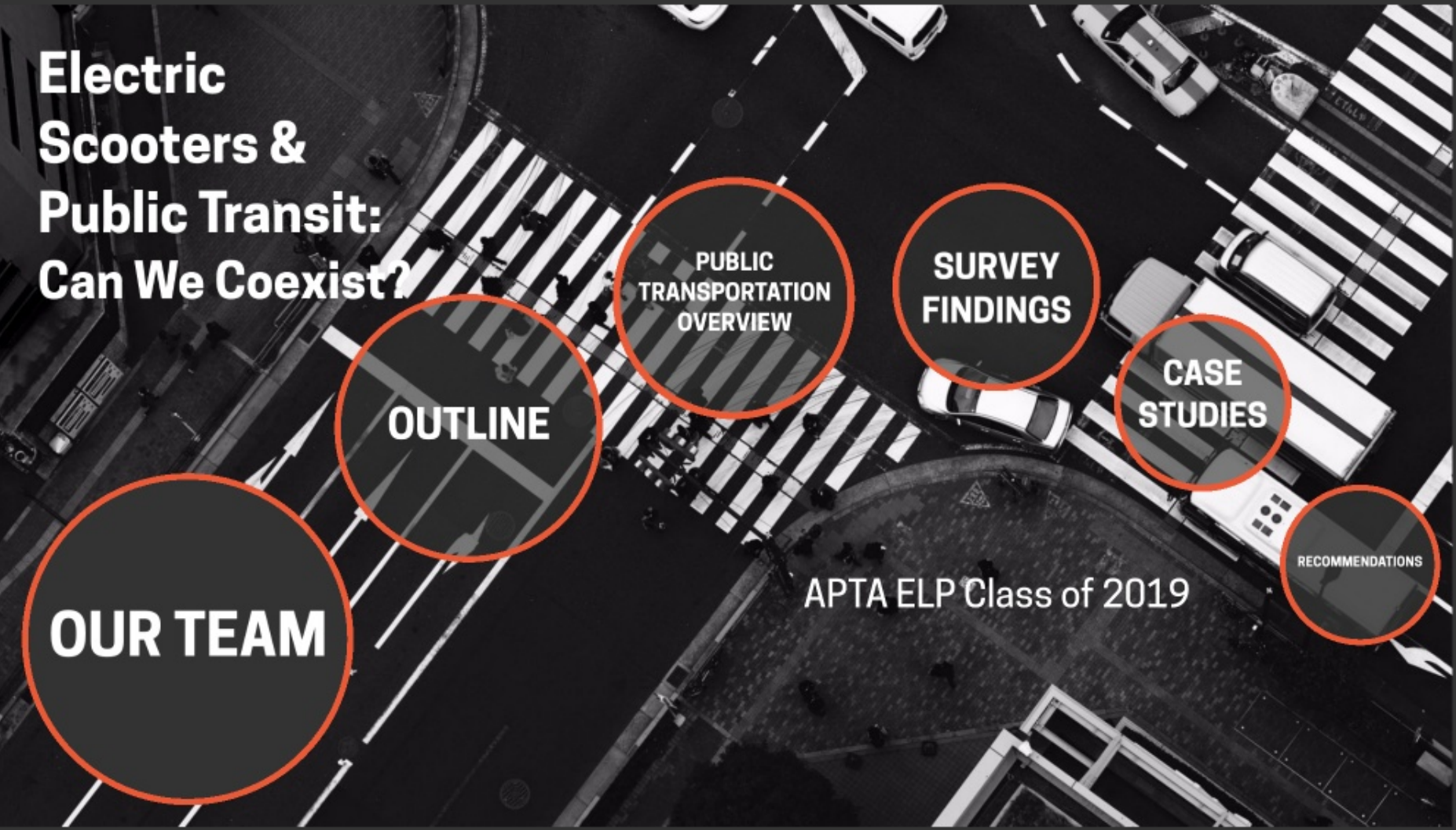

Electric Scooters & Public Transit: Can We Coexist?
OUR TEAM
OUTLINE
PUBLIC TRANSPORTATION OVERVIEW
SURVEY FINDINGS
CASE STUDIES
RECOMMENDATIONS
APTA ELP Class of 2019

Group 7

Imelda Hernandez
Los Angeles Metro

Vassilena Lerinska
San Diego Metropolitan
Transit System

Tony Santana
Valley Metro

OUTLINE

- Public Transportation Overview
- Survey Findings
- Case Studies
- Recommendations

Public Transportation Overview

Past/
Present

Future

Past

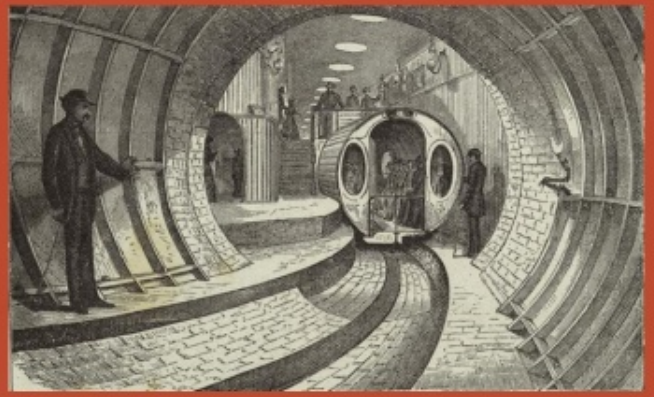
1827 - America's first public railroad

Present

Union Pacific Coal Train

BART Passenger Train

Past



1870 - First pneumatic subway attempt

Present

Past

1903 - Self-propelled airplane

Present

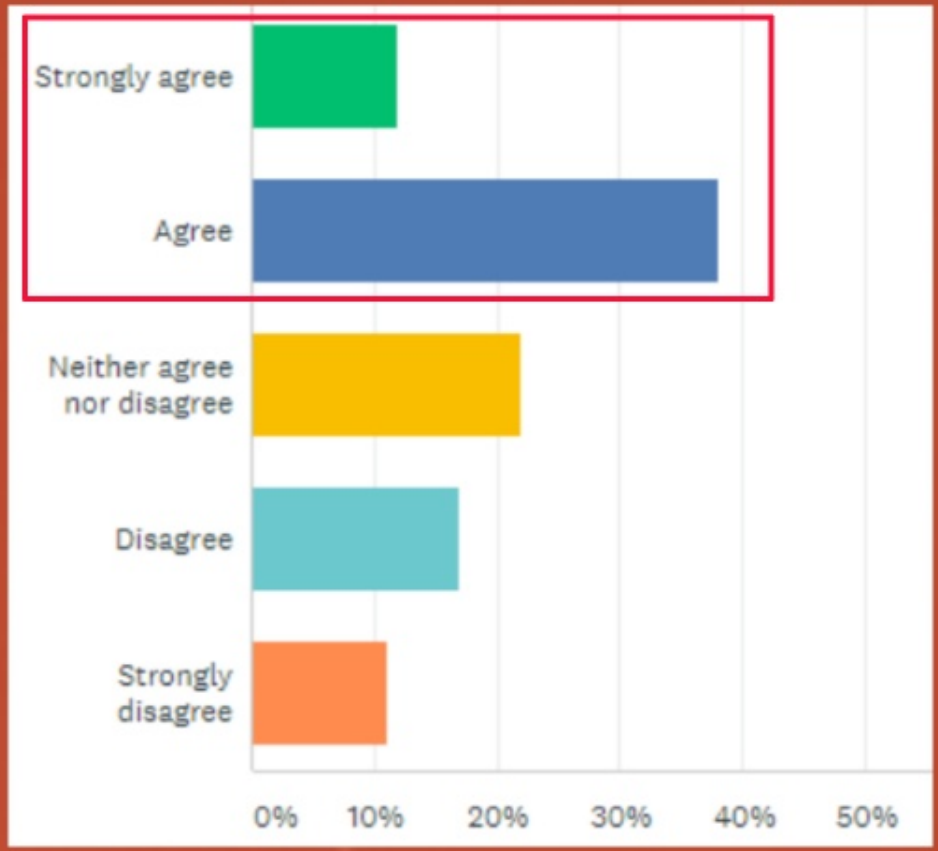
Over 100,000 flights per day globally!

Future

"When you're finished changing, you're finished." -Benjamin Franklin

SURVEY FINDINGS

Incorporating Public Scooters



50% responded either **Strongly Agree** or **Agree**

Future Growth of Mobility

Embrace Change

Keep Up with the Joneses

Proactively Collaborate

Welcome Pilot Programs

Evolve Institutional Mindset

Drawbacks of Incorporating Electric Scooters

Scooter Littering

Safety Hazards

Insufficient Regulation

Not ADA Accessible

Lack of Industry Knowledge

Advantages of Incorporating Electric Scooters

Change public's mindset

Reduce parking demand

Attract new riders

Reduce carbon footprint

More first/last mile options

Current Issues with Electric Scooters

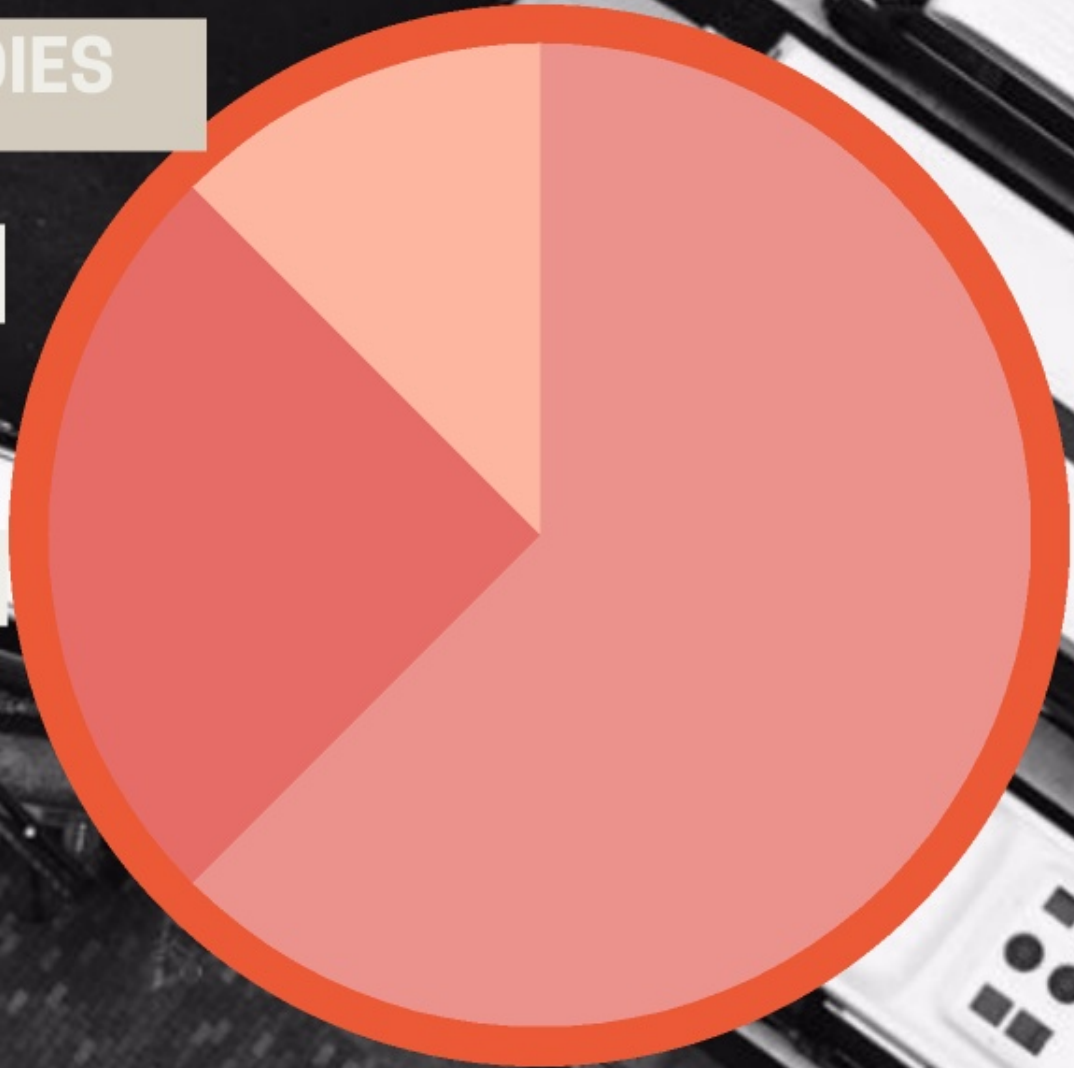
- Inconsistent message between and within cities
- Lack of subject knowledge
- Excessive regulation
- Insufficient regulation
- Lack of data sharing
- Poor communication with e-scooter companies

CASE STUDIES

Portland, OR

San Francisco, CA

Denver, CO



Case Study: Portland, OR

Portland Bureau of Transportation

Four (4) month program

- July 2018 - November 2018

Four (4) objectives

- Reduce traffic congestion
- Prevent fatalities and serious injuries
- Expand access to under served areas
- Reduce air pollution

Public education and engagement

- Community events
- Listed e-scooter laws, rules, and safety information on scooter
- Helmet distribution plan

Required to provide/share data

E-Scooter Providers

- Lime
- Bird Rides Inc.
- Skip Transport Inc.

Findings: Portland, OR

Pilot Program Results

- Permitted scooters: 2,043
- Total trips: 700,369
- Total miles: 801,888
- Average trip length: 1.15 miles

Pilot Program Findings

- E-scooters replaced private vehicle use
- E-scooter injuries increased
- Access to under served areas is possible
- Survey saw potential decrease in single occupancy vehicles
- Most complaints regarding helmet and sidewalk issues

Survey Findings

- 18% of visitors used scooters to get to/from public transportation
- 10% of respondents would have taken public transit if a scooter was not available for their last trip
- 6% of respondents used scooters to/from public transit
- 5% of respondents used public transit more often since first using scooters

Case Study: San Francisco, CA

San Francisco Municipal Transportation Agency (SFMTA)

Twelve (12) month program
- August 2018 - August 2019

Two (2) providers issued permits
- Skip
- Scoot

Up to 625 scooters allowed per provider
- Implemented a locking/tethering mechanism for each scooter

Public Education and Engagement
- Providers must support, rather than compete with public transportation
- Reach out to community groups
- Series of pop-up events and safety trainings

Community Plan
- Discounted low-income plan for qualified government assistance program users

Findings: San Francisco, CA

Five (5) Month Pilot Program Results

- Rides per month: 48,500
- Average trip time: 20 minutes
- Average trip length: 0.7 miles

Public Transportation Usage

- 34% used scooters to get to/from public transportation
- 28% would not have taken transit if a scooter was not available
- 7% would have taken transit regardless if a scooter was available
- Data shows that scooters induce transit trips at roughly four (4) times the rate they replace a transit trip

Recommendations/Next Steps

- Analysis shows pilot supports goals such as "Transit First"
- Continued education on safety
- Continued progress in underrepresented communities

Case Study: Denver, CO

Denver Dockless Mobility Pilot Program

Pilot began June 2018

- Five (5) permitted providers
- Bird, Lime, Lyft, Razor, Spin

Requirements

- Initial fleet of 350 scooters max
- Additional 100 scooters allowed in “opportunity areas”
- Re-balance scooters to areas near transit stops each day

Public education and engagement

- Work with partners on safety and education
- Increase access to public transportation

Required to provide/share data

- Usage/ridership
- Complaints
- Damage and Repairs

Findings: Denver, CO

Pilot Program Results

- Total miles: 952,898
- Total trips: 819,927
- Average trip length: 0.92 miles

Survey Results

- 43% of scooter trips replaced a walk
- 22% replaced a rideshare trip
- 10% replaced a vehicle trip

Pilot Program Findings

- Trips and length of trips are higher and longer on weekends
- Highest usage: morning/evening commute and mid-day/lunchtime
- Greatest e-scooter activity around downtown and Denver Union Station

Pilot Program Findings

- 37% of respondents connect to public transit via scooter occasionally
- 9% of respondents chose transit as one of their top three places for which they used a scooter
- 7% would have taken public transit if a scooter was not available for their last trip

RECOMMENDATIONS


Can we coexist?

Necessary Improvements

Protected Bike-Ways

Dedicated Parking

Safety Requirements

Lessons Learned

Data Requirements

- Trips
- Accidents
- Demographics
- Injuries
- Maintenance

Regulations and Guidelines

- Speed limit
- Signage
- Set up restrictions
- No-ride zones
- Limit on providers and fleet size

Provider Requirements

- Integrate into public transit
- Permit fees
- Scooters placement
- Parking enforcement
- Public Education
- Oversight

Imelda Hernandez: hernandezim@metro.net
Vassilena Lerinska: vassilena.lerinska@sdmts.com
Tony Santana: tsantana@valleymetro.org