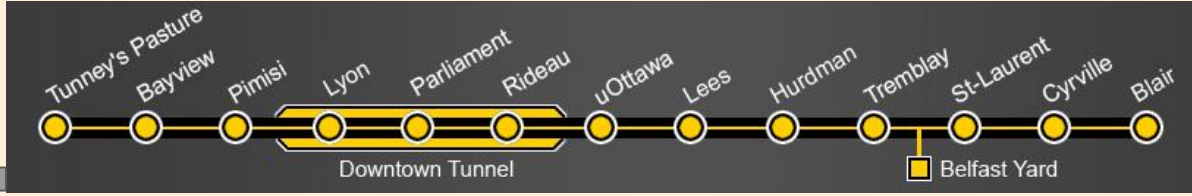


“LRT and ride-hailing services: Complements or competitors?”

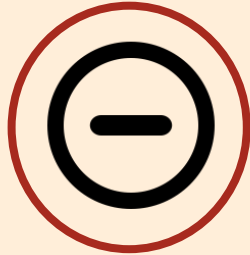
Chris Stoney
Angela Neals
Carleton University

Wednesday, October 10, 2018

Uber

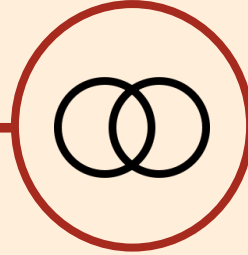


lyft



Competition

TNCs vs. Public
Transit Ridership



Complementarity

Evidence and Case Studies
from US & Ontario

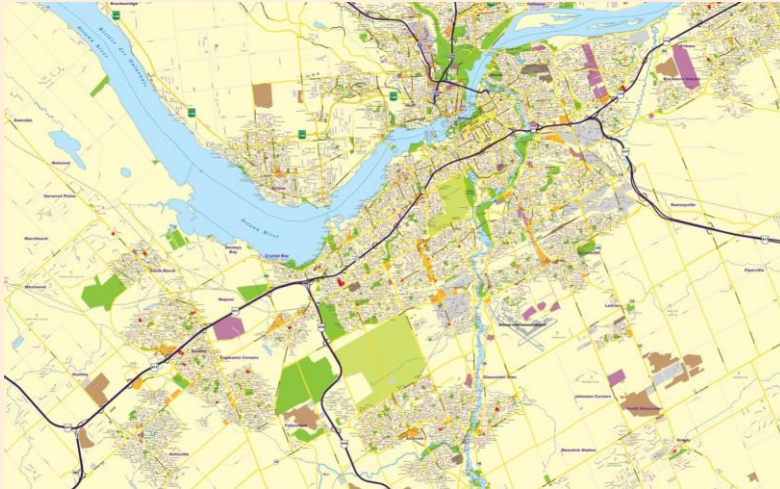


Discussion

LRT Purpose
Subsidizing ridership
Regulation

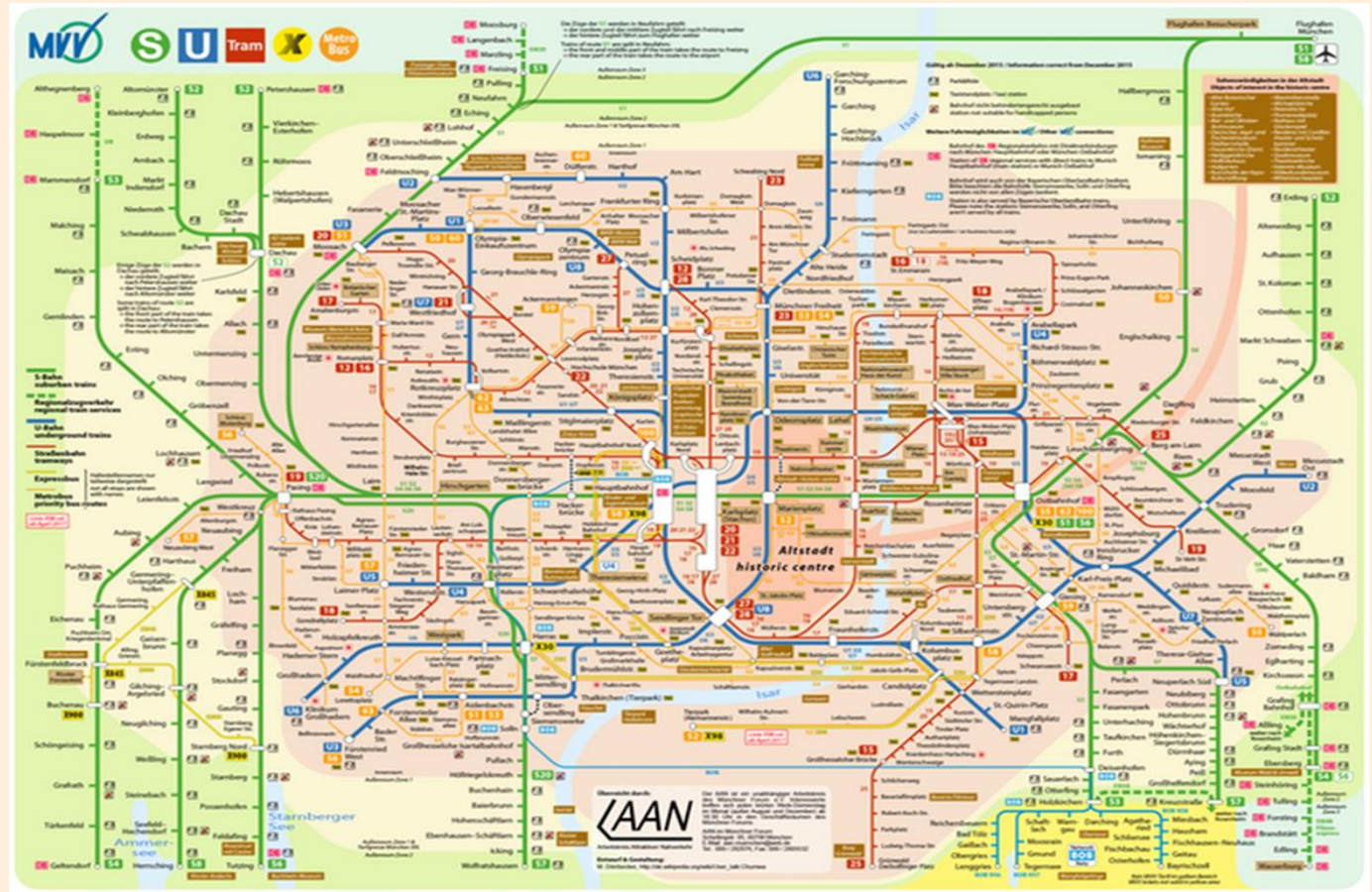
Factors: Ride-hailing as LRT's Competitor

- Research indicates decline in ridership of 6-14%
- Climate: variable weather conditions
- Proximity of stations: feasibility of transfer
- Relative price gap has closed
- Long commutes (short track)



Munich

transportation network



Map of Munich's public transit system, including U-Bahn (underground trains), S-Bahn (commuter/street rail), bus, and tram lines. ([Maximilian Dörrbecker](#), CC BY-SA)

Ottawa compared to Tokyo Rapid Transit System



So when is Uber the more attractive option?

“According to the analysis, Uber is faster than Metro in 99 out of 114 trips analyzed during times when the next train was 10 minutes away. And during rush hour, Uber is the quicker option for trips within the city that require transfers from one line to another—a result, the report notes, of the system’s spoke-and-hub configuration.”

When Should Commuters Ditch Transit for Uber?, Linda Poon Oct 13, 2017

<https://www.citylab.com/transportation/2017/10/when-to-ditch-dcs-troubled-metrorail-system/542664/>

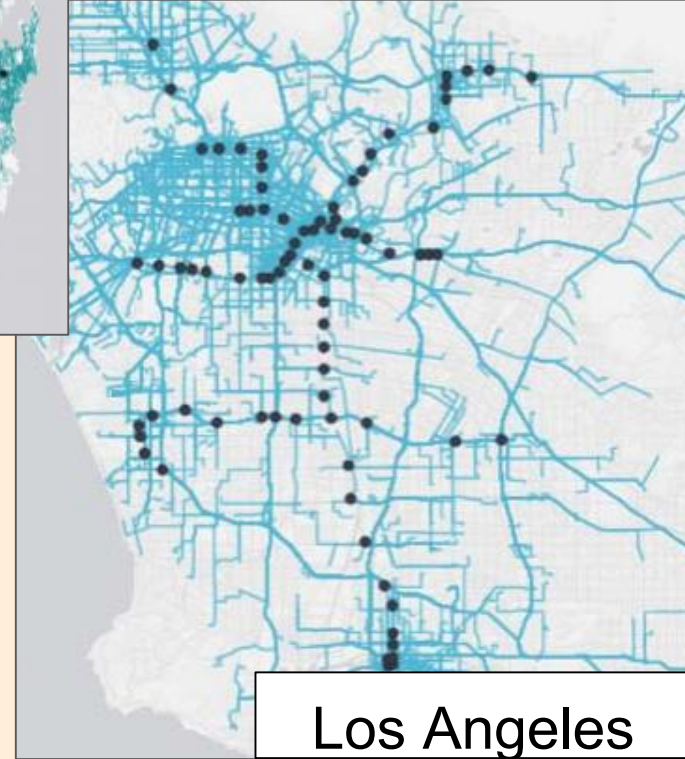
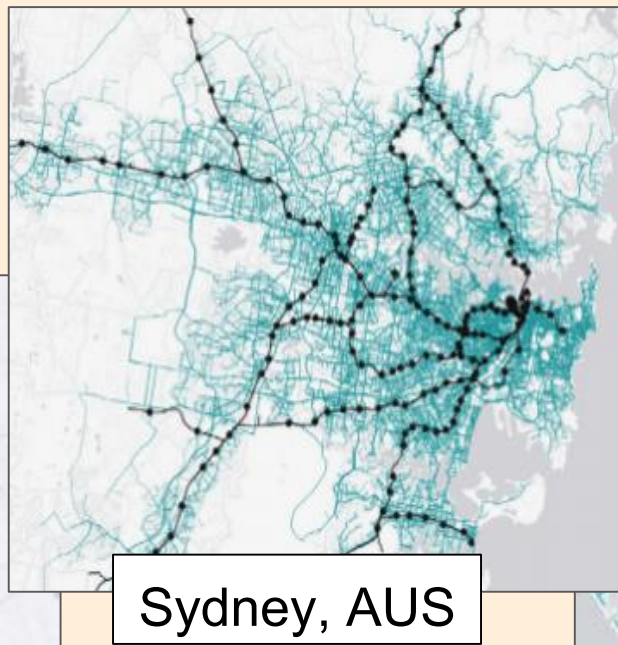
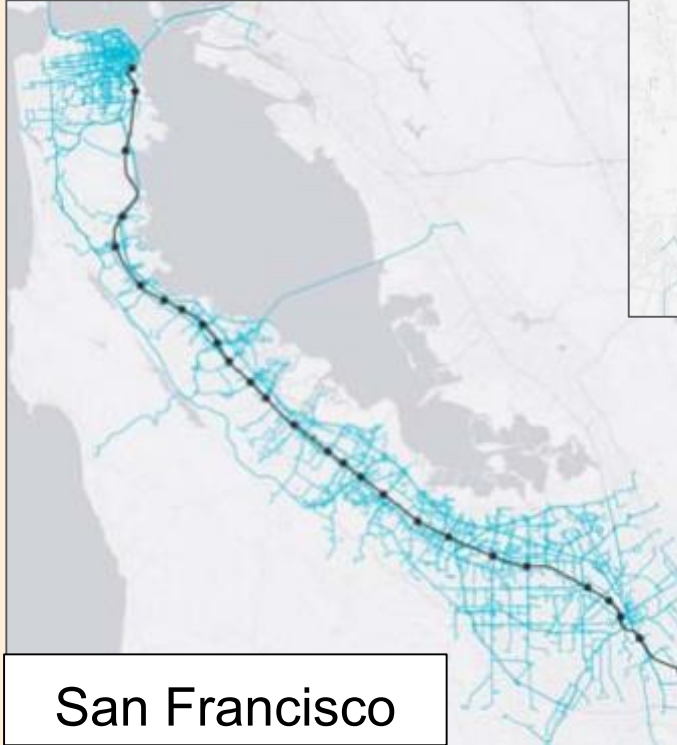
The “Uberizing” of public transit services

“New technologies and business models can inspire us to reconsider how we move through society. “Sharing economy” companies use digital technologies to connect customers who want something with people offering it directly—in the case of Uber and Lyft, transportation services. Applying this approach to public transit offers **new solutions to mobility problems**. “Uberizing” public transit services—bringing them to customers on demand—can transform our approach to transportation issues.”

Uberizing public transit is underway.....

Internationally the so-called “Uberization” of public transit is already underway. Many U.S. cities are beginning to partner with rideshare companies to improve the first and last mile connections to transit services and provide on-demand public transit. Lyft and Uber are also looking to fill this void by using a hybrid bus/on-demand type services marketed as “Lyft Shuttle” and “UberPool”. These combinations of modes appeal to riders’ desire for individual flexibility. By connecting rideshare apps with public buses and rail, “cities can help residents seamlessly move from one form of transportation to another”. [For example, Austin, Texas has piloted the Pickup app; 5 cities in Central Florida offer discounted intercity Uber trips and the city of Centennial, Colorado has partnered with Lyft to provide transit users free trips to and from their Dry Creek light rail station.](#)

Ride-hailing use already overlays
public transit routes



Newark, NJ



Newark, NJ (September 2015)

300,000 of the 1.3 million Uber rides (1 in 4 rides) in New Jersey were to or from transit or subway stations

Complementarity: Ride-Hailing & Public Transit

- Positive correlation between Uber ridership and public transit ridership
 - Uber increases transit ridership by 5% two years post market entrance (Hall et al. 2018))
 - **56% of those who use Uber weekly report taking public transit each week (Hall et al. 2018)**
- 25-40% of all Uber pick-ups and drop-offs are near a public transit station in U.S. Cities
- Makes better use of city land:
 - Fills gaps in public transit service, provides access to underserved communities, alleviates demand for parking, reduces costs of underutilized routes/services
- Improves mobility during all hours:
 - Most Uber trips occur between 10pm-4am and on weekends, when public transit runs less frequently
 - E.g. London Underground extended its service hours, Uber ridership during those hours increased
- Shared mobility economic benefits: **household cost savings, increased economic activity near public transit stations, improved social efficiency (increase transit ridership)**



Canada: Ride-hailing & Public Transit

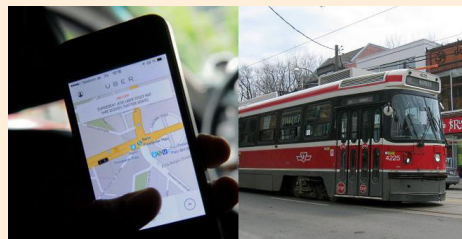
Innisfil ON

Saving more than \$8M/year with Uber instead of solving the first/last mile problem through public transit



Toronto, ON

Toronto Transit Commission: greater accommodation at transit stops for first mile/last mile travel.



Belleville, ON

"Uber for buses" allows customers to order a bus to their nearest bus stop



Uber & Metropolitan Atlanta Rapid Transit Authority (MARTA)



- “Last Mile Campaign”: distance between transit station and final destination
- Boost to tourism, new users receive \$20 through MARTA
- As traffic increases, Uber slashes costs of rides to and from MARTA stations by 50%

Portland and Uber

- 1 in 4 trips took place within a quarter mile of a transit station (February 2015)
- Westside Transportation Alliance: partnership with Uber to increase transit access, promo code with Uber
- Sustainable transport options to increase mobility without reliance on personal vehicle

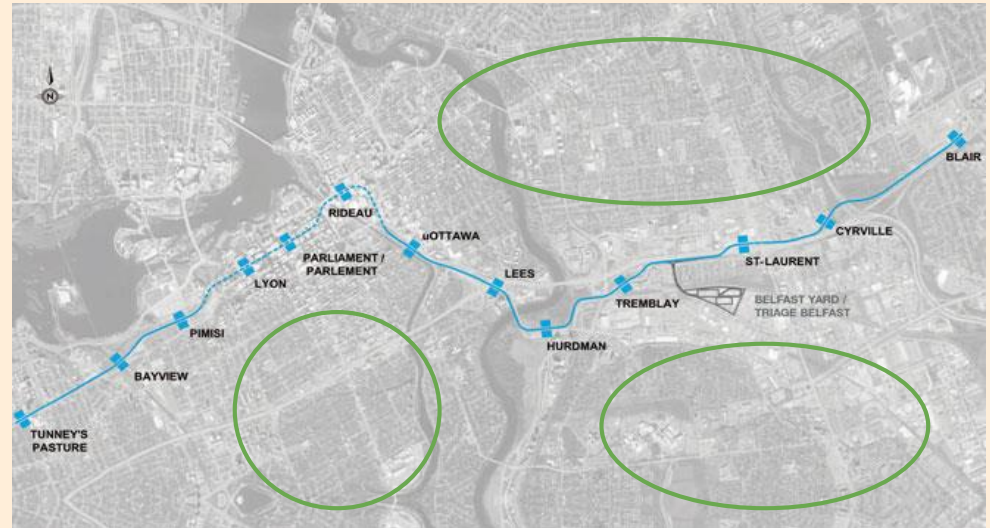
Uber and Dallas Area Rapid Transit (DART)



- Partnership to address mobility issues: improve nightlife, solve last mile problem
- Where transit demand on the rise, Uber offers lower volume corridors not accessible by transit
- GoPass app: to purchase transit tickets and book Uber rides (connectivity)

Factors: Ride-hailing as a Complement to LRT

- New solutions: multimodal transportation and “Transportation as a Service” model
- Accommodating different ridership needs: Uber, UberPool, Uber Express Pool,
- Technology-oriented services, promote connectivity and integration
- Reduce car ownership (increase ridership: reduce congestion, free up car parking)
- Addresses “the last mile” problem



Beyond Transit Systems

- Uber and Masabi: provides mobile payment options for public transit systems in New York, Boston, Los Angeles; allows riders to buy and use transit tickets within Uber's app.
- Transloc: merging public transit with ride-sharing platforms
- Integrate Uber API (application programming interface) into transit apps
- Monthly billing options



Discussion

- LRT Purpose: ridership, cars off road, mobility?
- Subsidizing ridership: who pays?
 - Integrated transit pass
 - Ride-hailing service discounts
 - Transport budget?
- Regulation:
 - Impact on stations/quality of life?
 - Capping # of Uber licenses?
 - Safety concerns/ improve driver training?



Research opportunities

Ottawa's LRT system provides us with an opportunity to examine the impact of rideshare technology on ridership and to compare Ottawa's modal integration policies with best practices from other cities internationally. The research will explore specific financial instruments, policies and potential partnerships directed towards enabling ridesharing services to complement LRT use, boost ridership and mobility.

Thanks – questions and discussion