



SESSION TOPIC

# Transportation: Electric Mobility in the New Smart City

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## MODERATOR

Kit Kennedy, *Senior Director, Climate and Clean Energy Program*

## PANELISTS

Britta Gross, *Director, Mobility Transformation Program*

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Joseph Chow, *Deputy Director, C2Smart University Transportation Centre, NYU*

Chris Snyder, *Sr. VP of Expansion / CEO of ViaVan, Via Transportation*



Table 1. Select Major Cities around the World Involved in E-Taxi Adoption

City	Minimum taxi fleet	Charging stations
Aguascalientes, Mexico	50 Nissan Leaf	NA
Amsterdam, Netherlands	650 Tesla S 225 LEVC TX	2,400 stations
Beijing, China	1,150 BYD e6 (up to 70K)	NA
Bogota, Colombia	50 BYD e6	5 stations
Brussels, Belgium	50 BYD e6	NA
Copenhagen, Denmark	30 taxis	NA
Hangzhou, China	1,000 BYD e6	NA
London, UK	9,000 LEVC TX by 2020	150 stations
Mexico City, Mexico	100 Nissan Leaf	NA
Nanjing, China	600 BYD e6	286 stations
New York, USA	6 Nissan Leaf	2 stations
Rio de Janeiro, Brazil	15 Nissan Leaf	NA
Rotterdam, Netherlands	25 BYD e6	500 stations
Sao Paulo, Brazil	10 Nissan Leaf	5 stations
Seoul, South Korea	300 Renault Samsung SM3 Z.E.	NA
Shenzhen, China	20,000 BYD e6	5,200 stations
Taiyuan, China	8,292 BYD e6	NA
Zurich, Switzerland	15% fleet Nissan Leaf	NA

Note: NA = not available.

## Electric fleet planning

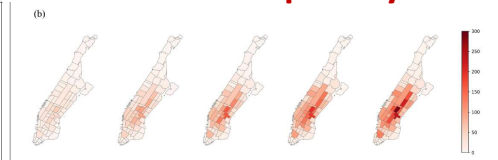
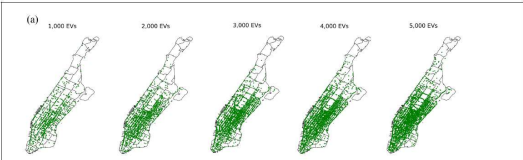
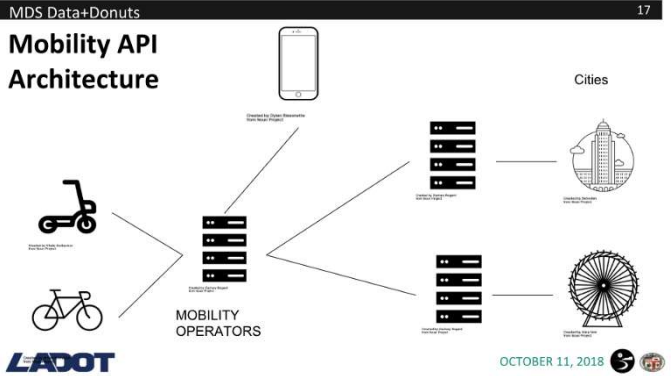


Figure 6. Charging demand distribution: (a) geographical distribution of charging demand (1,000 to 5,000 EVs), (b) demand projected onto taxi zones (1,000 to 5,000 EVs).

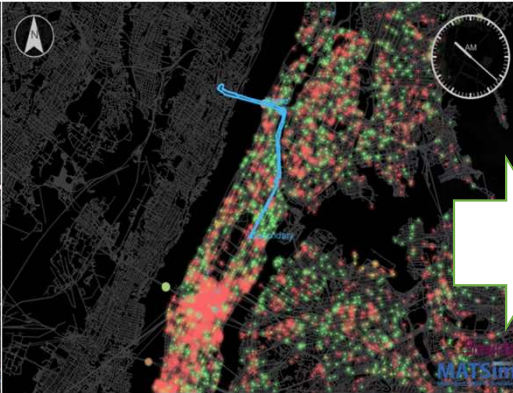


## Data privacy control

## VIRTUAL TEST BED for evaluating emerging transportation technologies and operating policies



transit



taxi



NYU

TANDON SCHOOL OF ENGINEERING

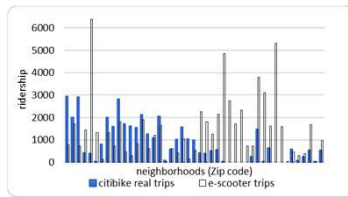


Prof. Joseph Chow

Deputy Director, C2SMART University Transportation Center  
Assistant Professor, Dept Civil & Urban Engineering

Congestion pricing scheme	Manhattan	Non-Manhattan	Total
Area-based	+\$30.83	-\$13.00	-\$8.17
Distance-based	+\$34.83	-\$12.00	-\$6.83

Forecast of impact of congestion pricing schemes on average consumer surplus per trip



## E-micro mobility

Figure 1: SEAM governance goal

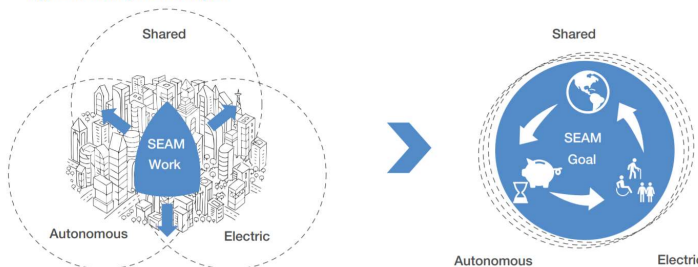
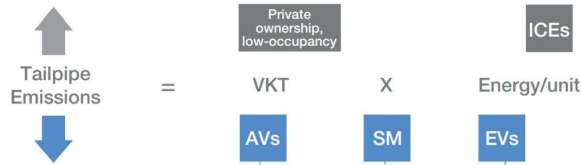


Figure 2: SEAM air quality and climate benefits – 45-95% reduction in emissions if combined right



## SEAM: Shared, Electric & Automated Mobility





The car has been the dominant mode of transport for a century...  
...but we've reached a breaking point

Via was founded to address this problem



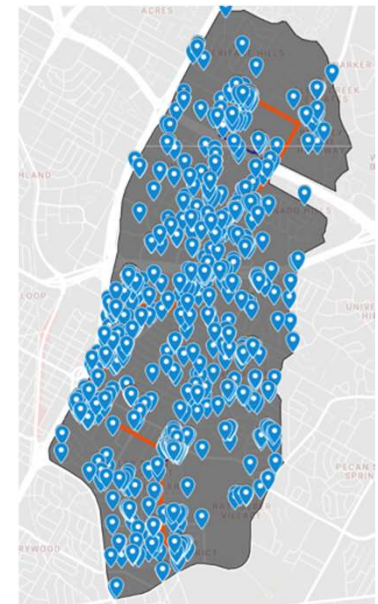
# Via's mission is to build and deploy technology to improve public mobility



Traditional public transit



Via: on-demand public transit



Via's technology is deployed across the globe in partnership with cities, public transit authorities, and corporations

75+  
Deployments

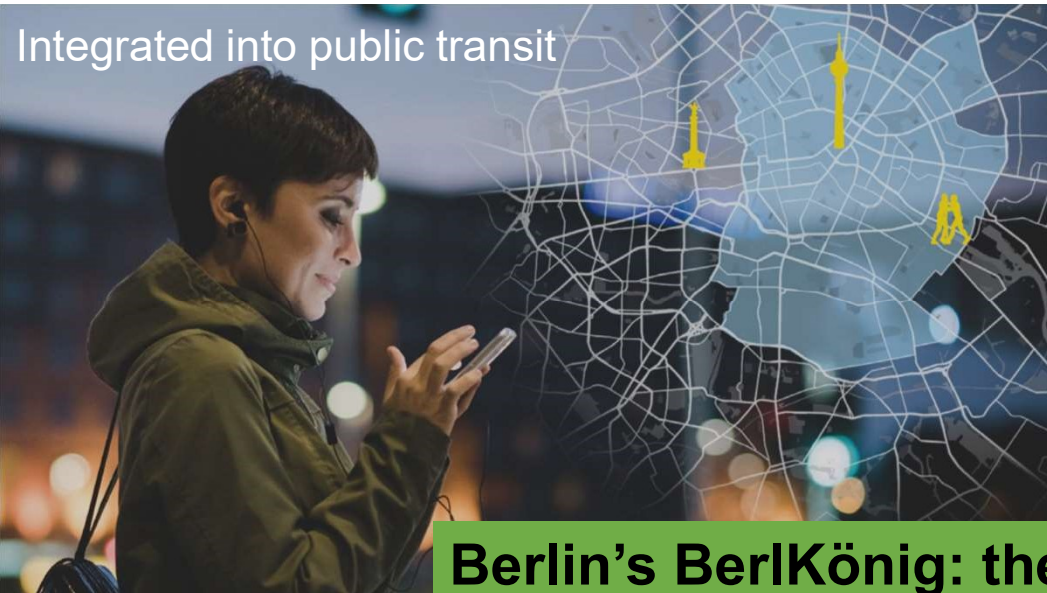
70mm  
Shared rides

20  
Countries





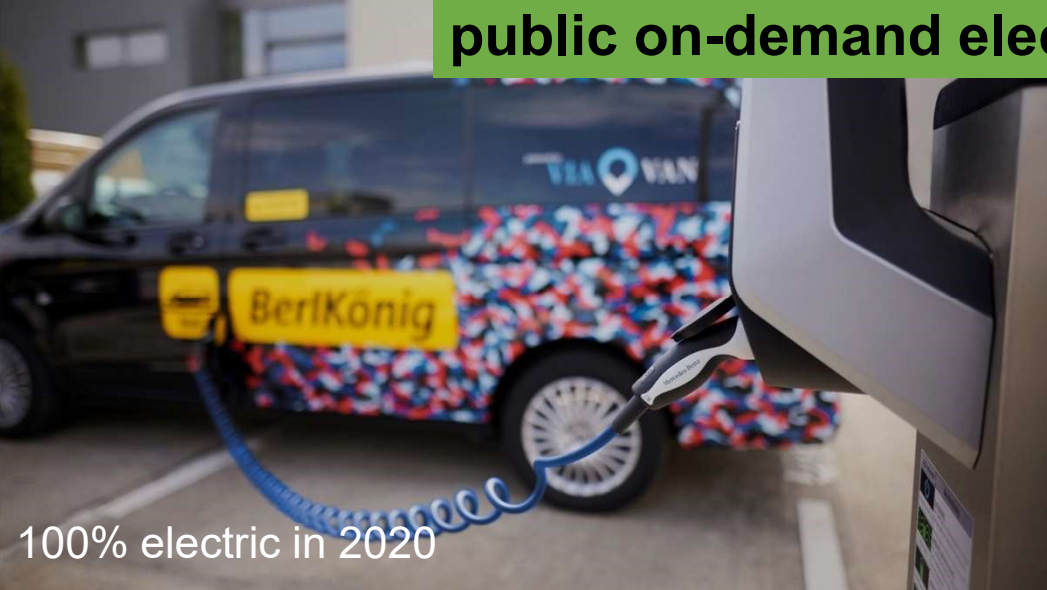
Integrated into public transit



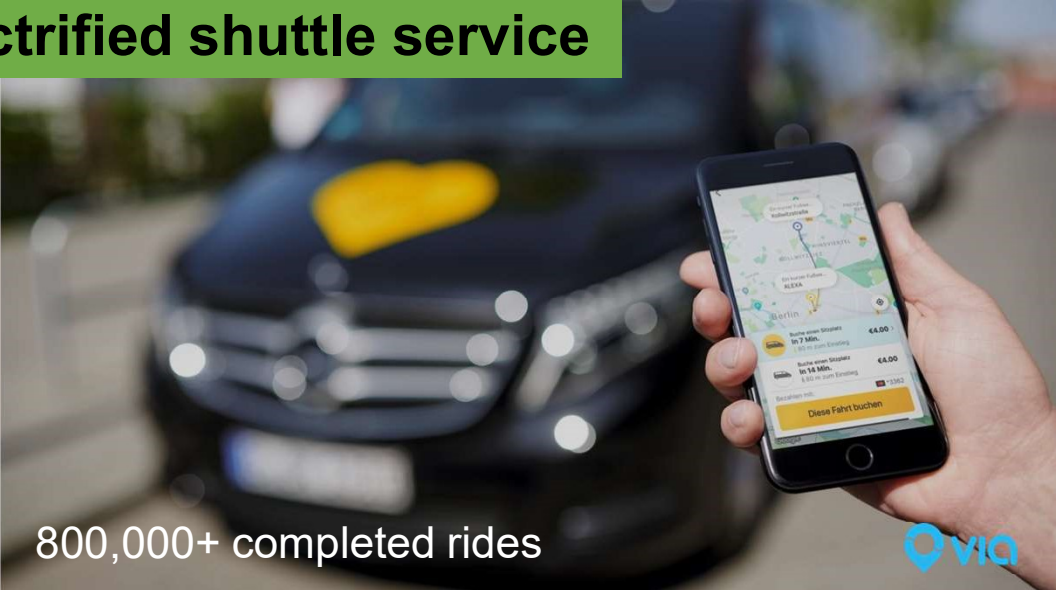
250,000+ private vehicle trips replaced



**Berlin's BerlKönig: the world's largest public on-demand electrified shuttle service**



100% electric in 2020



800,000+ completed rides

