

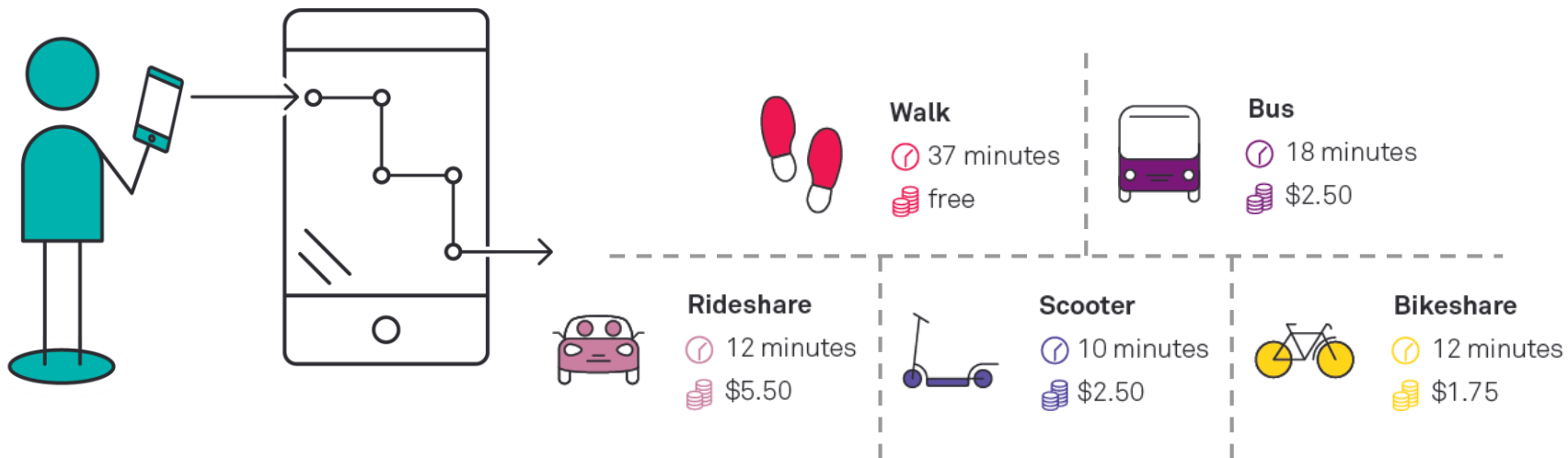


# A Technologist View on the Journey to MaaS

Procuring Innovation in the Transit Industry Part 2 Panel: The Search for New Models for Procuring New Technologies  
Tony Tom, Chief Business Development Officer, moovel North America  
APTA Annual Meeting: September 25, 2018

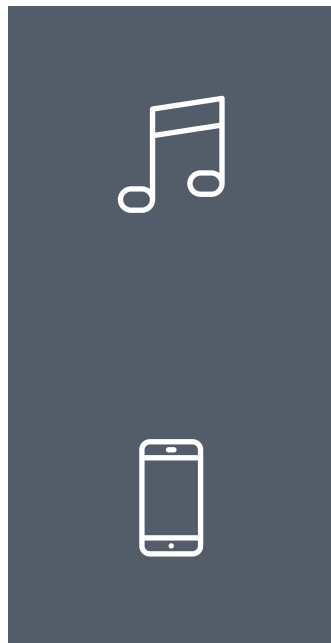
How people move in cities is evolving

# Trip options with MaaS



What we've observed in other industries

# Rise of Subscription Services



**CARE BY VOLVO**  
The revolutionary new way to subscribe to a car.

START HERE

HOW IT WORKS

**CHOOSE A COLOR**

PAINTS: Black Stone, Ice White, Amazon Blue, Osmium Grey Metallic, Fusio Metal

METALLICS (+\$8)

**YOUR MOMENTUM UPHOLSTERY**

Charcoal Leather in Charcoal Interior

Blond Leather in Blond/Charcoal Interior

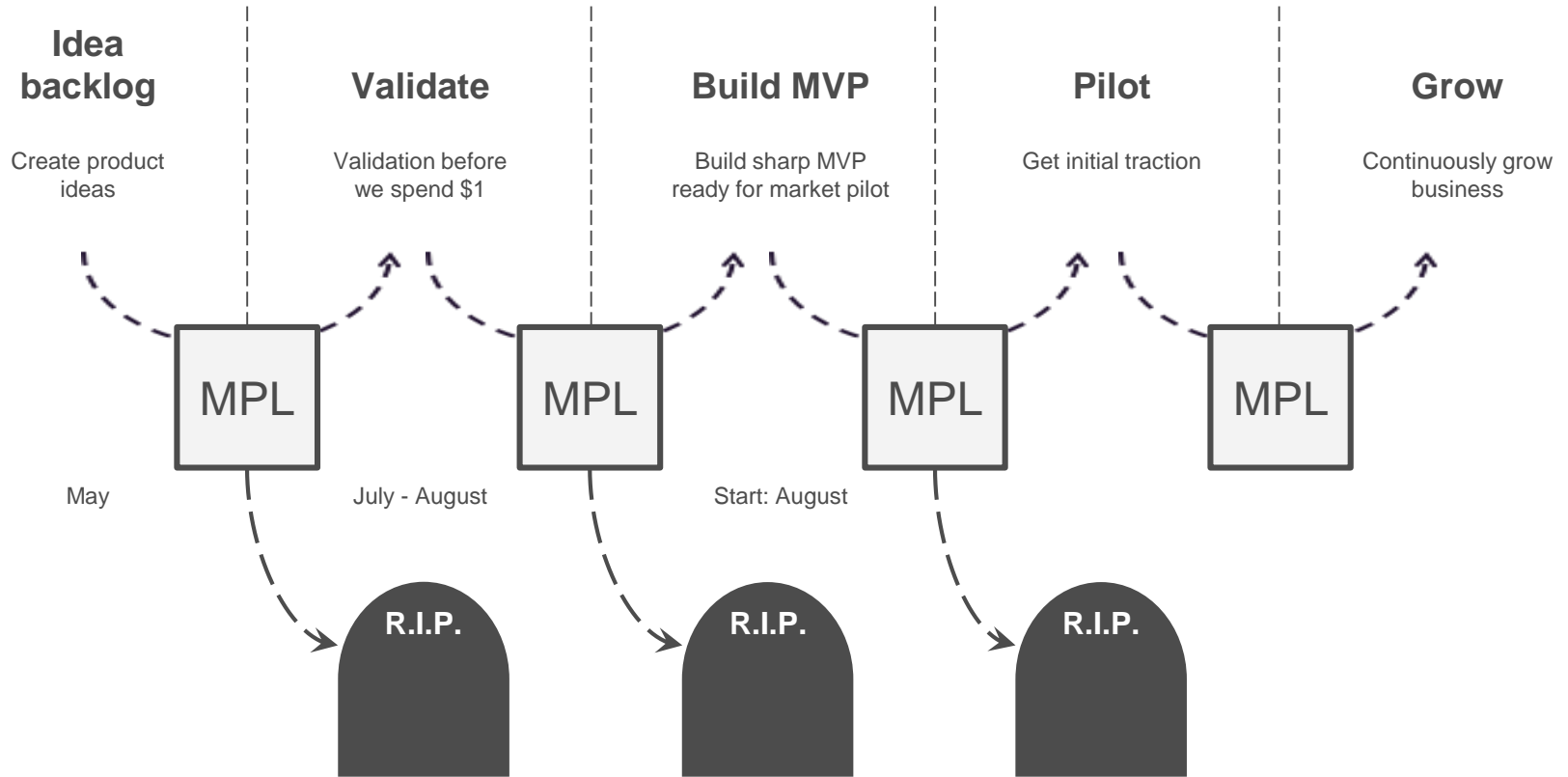
CONTINUE TO UPHOLSTERY >

CONTINUE TO INTERIOR >

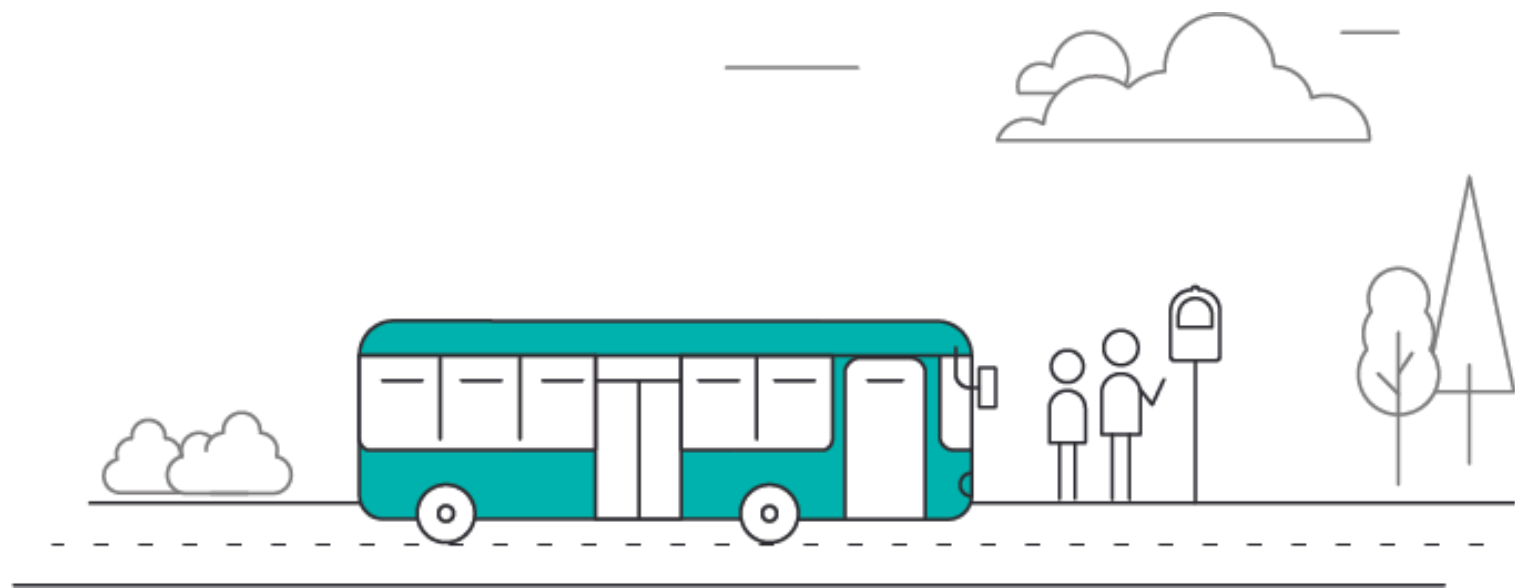


How we structure our thinking and process to move with **agility**

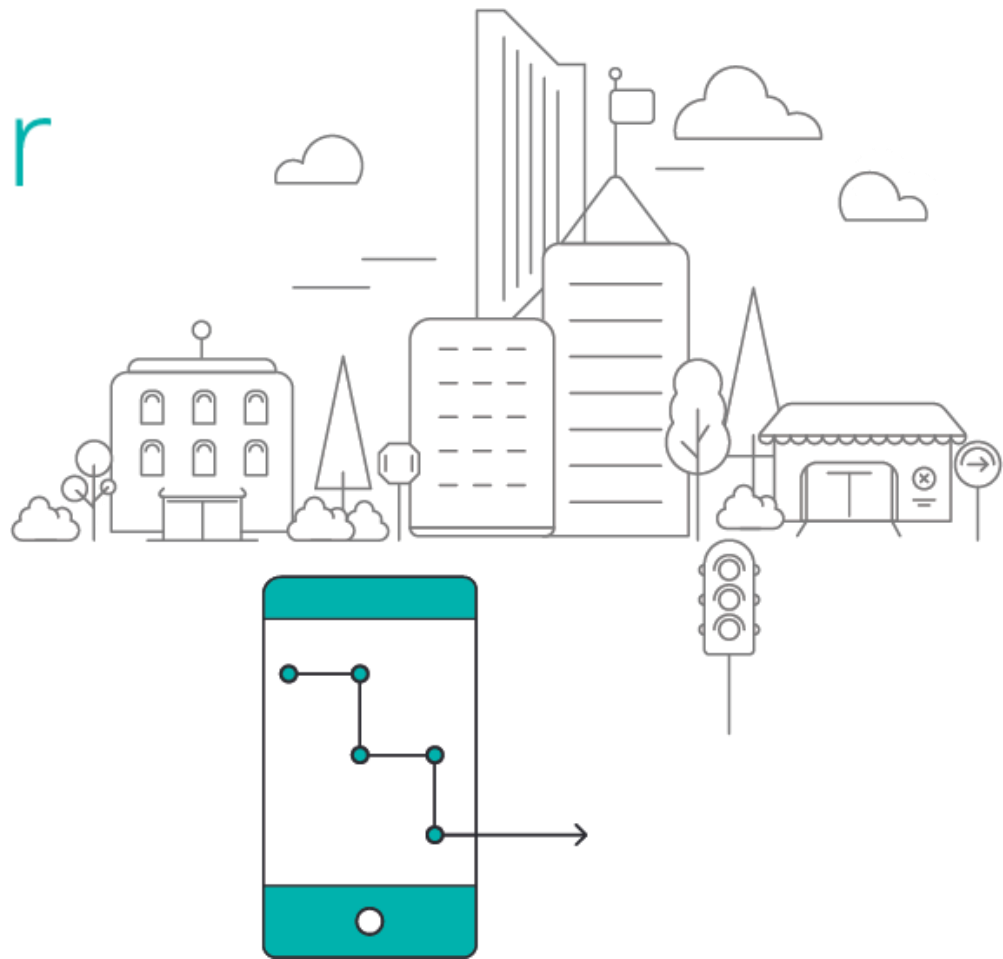
# The moovel PRODUCTION Line (MPL)



MaaS requires a strong public transit network.



Mobility-as-a-Service:  
better trips for  
better cities





*People who live in communities that offer public transportation are more likely to report high levels of well-being.*

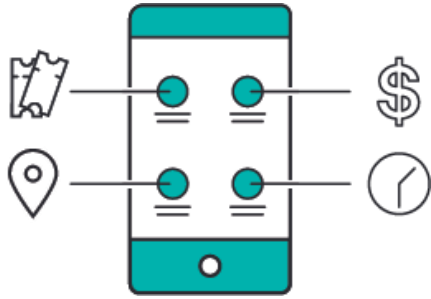
Source: [bit.ly/2kpPJ0l](https://bit.ly/2kpPJ0l)

## MaaS for cities means: MaaS for people means:

- Less traffic congestion
- Less air pollution
- More vibrant neighborhoods
- Safer streets

- Simple mobile payment
- Real-time route information
- Access to lower-cost travel options
- Access to more travel options beyond personal vehicles

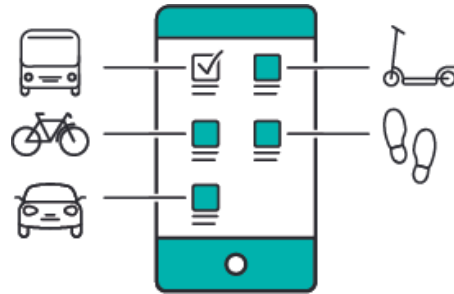
# What does MaaS look like for people?



## Search

Access real-time information about:

- Modes
- Routes
- Cost
- Time



## Book

Select and reserve the right mode for the trip



## Pay

Secure payment options for multiple services





# What does MaaS look like for cities?

For transit agencies and city planners, MaaS is a digital platform for managing fleets and payments, collecting data about ridership and road usage, and providing customer support.

*The average commute time in the U.S. is 50 minutes round trip, but some people spend far longer getting to and from work.*

Source: [bit.ly/2i16cHe](https://bit.ly/2i16cHe)

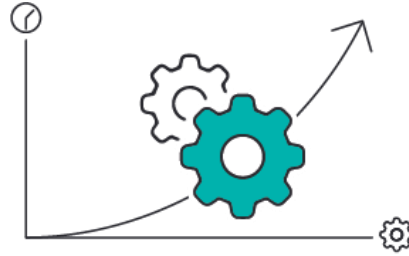


# Saving time and money with MaaS



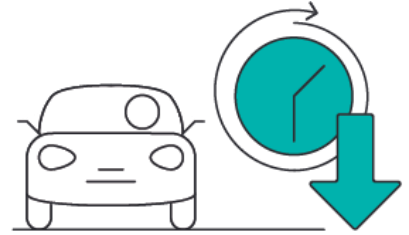
**Adding an extra 20 minutes of commuting per day has the same negative effect on job satisfaction as receiving a 19% pay cut.**

Source: [bit.ly/2i16cHe](https://bit.ly/2i16cHe)



If all time saved by MaaS were used for business activity, global productivity would increase by \$2.2 trillion.

If just 33% of time saved by MaaS were used for business activity, global productivity would still increase by \$733 billion.



MaaS has the potential to cut average daily commutes by 67 minutes per day for drivers and 61 minutes per day across all modes.

 **\$733 billion**

# What is Driving MaaS?

- Shared Services & AV Development
  - Congestion & Health Management
  - New Business & Service Opportunities
  - Stakeholder Partnerships
  - Technology Innovation
  - Digital Ticketing
- Consumers demand choice
  - Great prospects for green technologies
  - Increasing momentum to, and industry interest in, MaaS
  - Ride-sharing transport industry will exceed \$60 billion by 2021
  - 40 billion transport tickets will be bought via digital means by 2022

# Addressing Pain Points & Recommendations

Pain Point 1	<b>Technology Level</b>
Pain Point 2	<b>Business Model Level</b>
Pain Point 3	<b>City Level</b>
Pain Point 4	<b>Policy &amp; Regulation Level</b>
Pain Point 5	<b>Security</b>

“

Juniper notes that addressing MaaS at a city level requires transport authorities and governments to further explore key elements including traffic management, public transport management and payment infrastructure to deliver a frictionless experience. ”

# Addressing Pain Points & Recommendations

Recommendations to solve pain points:

- Collaboration Needed
- MaaS Policy & Regulation Development
- Implement an Open Data Policy & Security
- Define a Workable Business Model

“ Juniper recommends that collaboration on a public authority and departmental level needs to be complemented by industry-specific strategic partnerships with technology partners and service providers alike. ”

# How to Innovate with MaaS

- Embrace the start-up mentality to take calculated risks; explore P3's as a way to leverage the market to co-invest
- Invest in pilots to move with speed and agility
- Update IT policies to stay relevant in this era of ridehailing, bikesharing, carsharing, microtransit, micromobility and other mobility options
- Embody ideals in the tech community to iterate quickly, “fail fast” and open standards and mindsets to lead through and innovate within MaaS to meet and exceed consumer demand



Exploring Mobility-as-a-Service White Paper:  
<https://www.moovel-transit.com/en/na/juniper>

Practical Guide to Prepare your Agency for MaaS:  
<https://www.moovel-transit.com/en/na/maas>

## Thank you

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