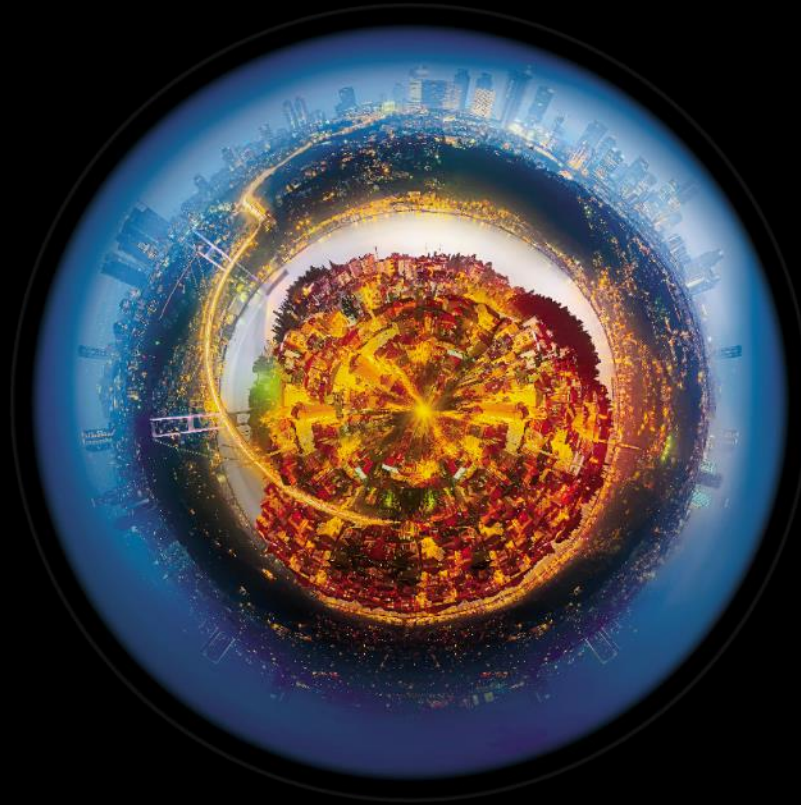


Deloitte.

Future *of*
Mobility



Future of Mobility

Vancouver Board of Trade Transportation Summit

June 2020

In 2015, Deloitte embarked on a journey to help our clients systematically explore the evolution of **The Future of Mobility** and work closely with them to transform how their organizations and communities can succeed in the new mobility ecosystem

We have been working to accelerate realizing the enormous promise The Future of Mobility offers...*More people and goods will move faster, safer, cheaper, cleaner, and with greater accessibility, inclusivity, and equity than ever before*

Today, we will explore the evolution of the Future of Mobility, and discuss the range of potential implications the COVID-19 pandemic may have on this trajectory

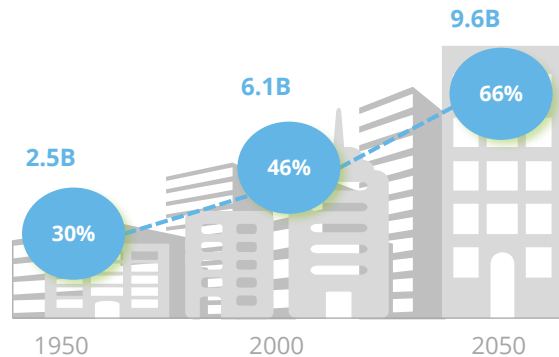


Global evolution of transportation and mobility



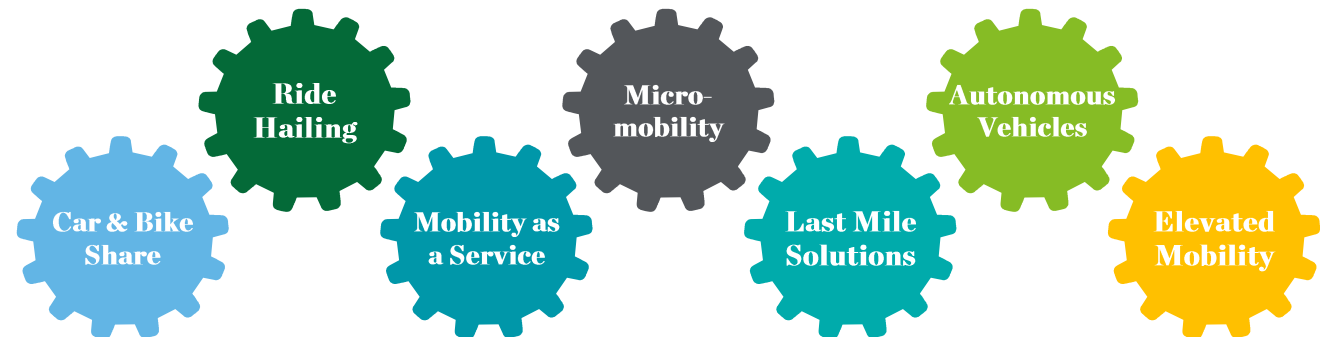
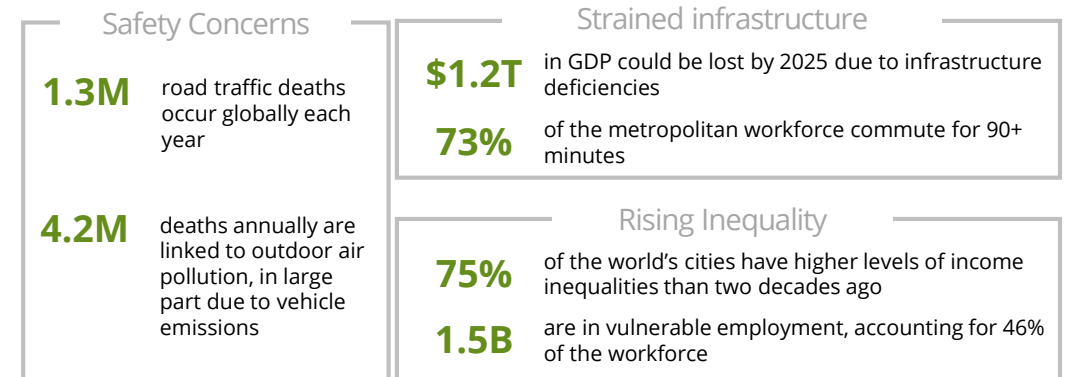
Challenges to architecting a “fit for purpose” mobility ecosystem

Global **populations** continue to increase dramatically, with **urbanization** also rising...



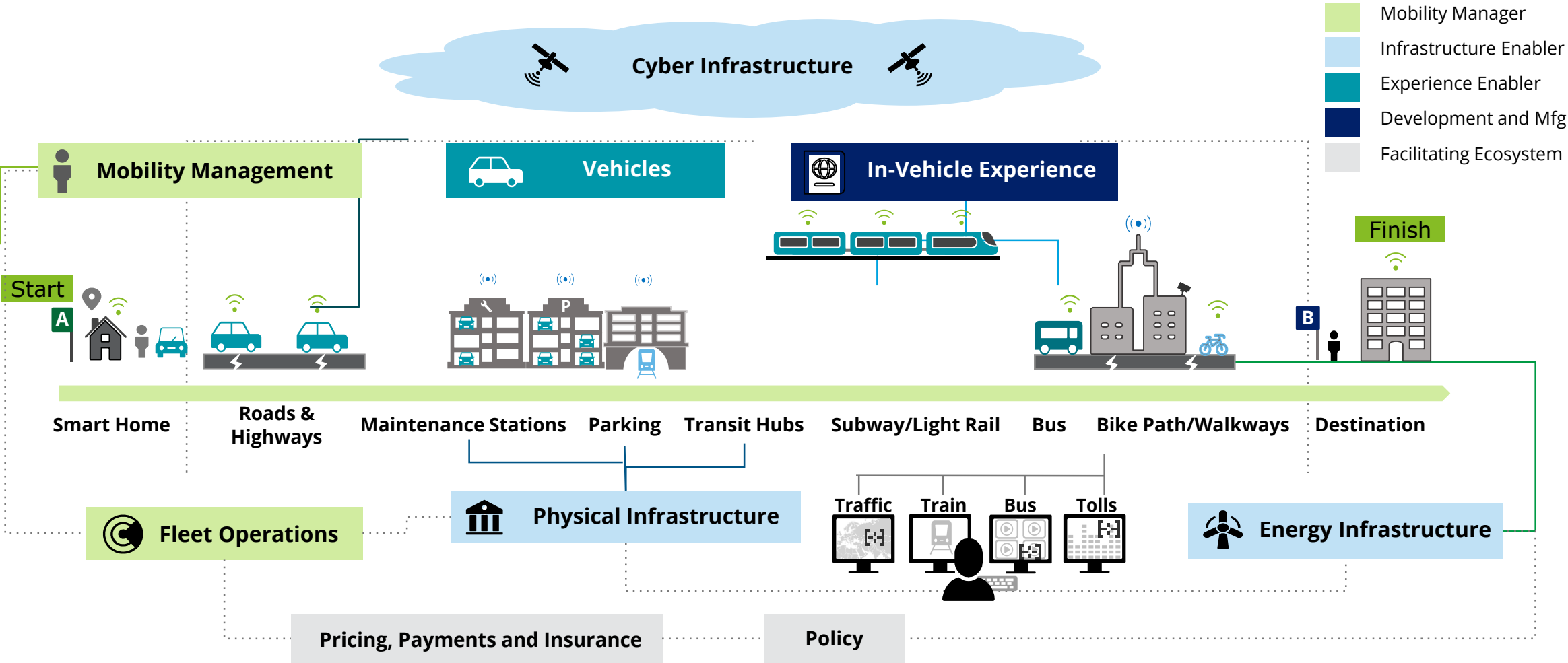
Private innovations for mobility services are often focused on **single modes** and are **uncoordinated**. Innovation must be coordinated to **solve mobility issues**, not just symptoms.

...Rising **congestion** causes safety issues, **infrastructure** is increasingly strained and rising **inequality** to access limits connections to employment and services.



The Future of Mobility is redefining how people move from Point A to B

In response to cities' growing challenges, new mobility ecosystems are emerging with the promise to deliver **seamless, integrated intermodal transportation** faster, cheaper, safer and cleaner than today



Source: The future of mobility: What's next, page 11, https://www2.deloitte.com/content/dam/insights/us/articles/3367_Future-of-mobility-whats-next/DUP_Future-of-mobility-whats-next.pdf

Activating Seamless Integrated Mobility Systems (SIMSystems)


For the past three years, we have been collaborating with **The World Economic Forum** to explore how leading cities around the world are activating their respective SIMSystems; while approaches vary, cities ubiquitously must grapple with four centers of gravity


In partnership with *The World Economic Forum*, we engaged 8+ cities to uncover best practices for SIMSystem activation





- **Detroit/Ann Arbor/Windsor**
- **Lisbon**
- **London**
- **Los Angeles**
- **San Diego**
- **Singapore**
- **Tel Aviv**
- **Tokyo**


Our common findings across cities:


- 

Political will is a key determinant
- 

A clear vision requires making trade-offs
- 

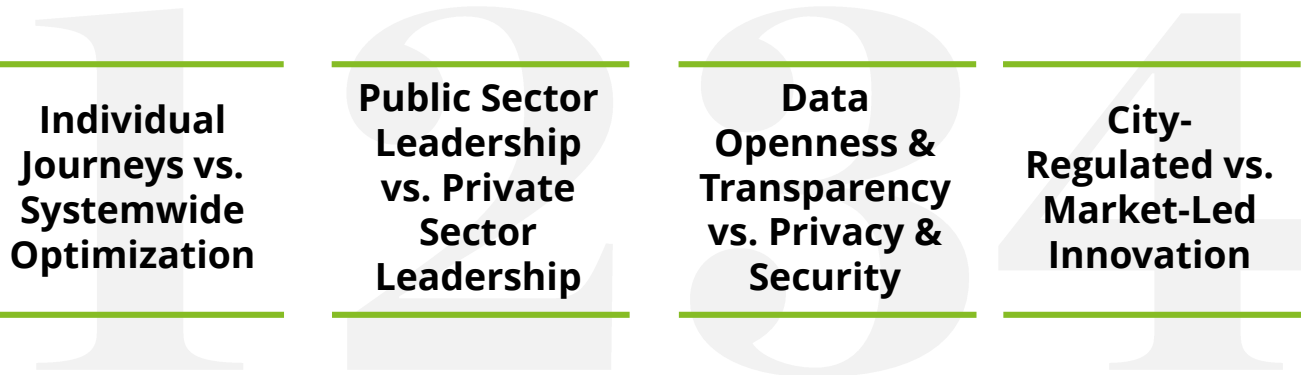
Governance structures matter
- 

Successful mobility systems require partnerships, funding and talent
- 

Pilots are not always the answer as seamless mobility requires ecosystem thinking
- 

Having data is necessary, but not sufficient

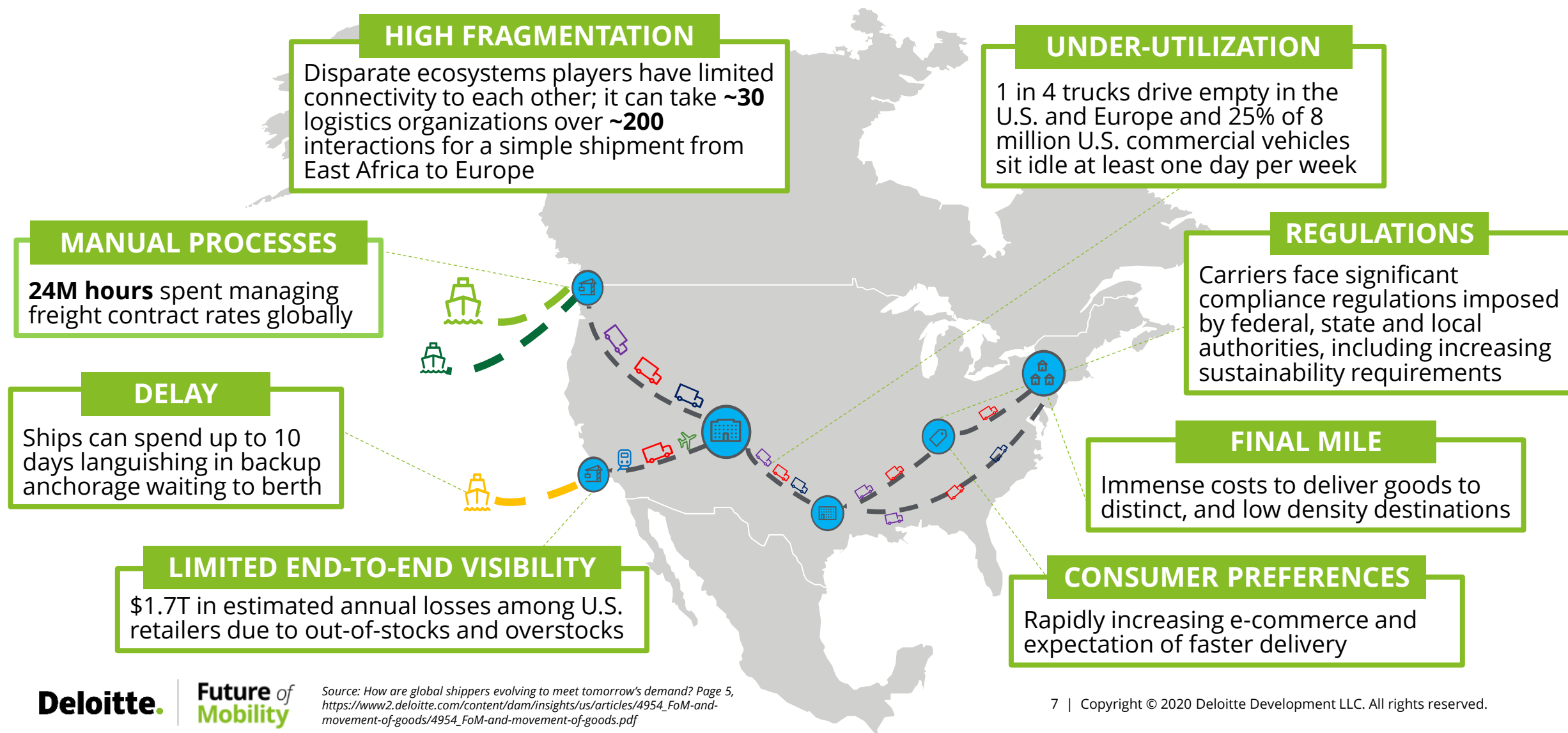
Mobility Centers of Gravity:



Source: Activating a Seamless Integrated Mobility System (SIMSystem): Insights into Leading Global Practices, Page 11, http://www3.weforum.org/docs/WEF_Activating_Seamless_Integrated_Mobility_Systems_2020.pdf

The future of goods movement is also challenged by lack of integration

Global logistics systems and players across nodes of the supply chain are also adapting innovation rapidly, but are experiencing different variations of similar obstacles causing inefficiency






The COVID-19 pandemic is having a massive impact across global transportation and logistics systems


FedEx, Microsoft are teaming up to deliver packages, widening gap with Amazon 


Confirmed: Intel is buying urban mobility platform Moovit in a \$900M deal 

U.K. Government Boosts Bicycling And Walking With Ambitious £2 Billion Post-Pandemic Plan 

Coronavirus is forcing Uber to return to its start-up roots 

Global emissions plunged an unprecedented 17 percent during the coronavirus pandemic 

Seattle to permanently close 20 miles of streets to traffic so residents can exercise and bike on them 

Self-Driving Startups Face Squeeze as Investors Flock to Big Players 

COVID-19: Still hope for Vancouver's cruise ship season but some lines have cancelled for 2020 

Hertz, Car Rental Pioneer, Files for Bankruptcy Protection 

Battered Canadian airline industry pushing for government bailout 

New York's MTA Seeks \$4 Billion Bailout as Ridership Plummets Over Coronavirus 

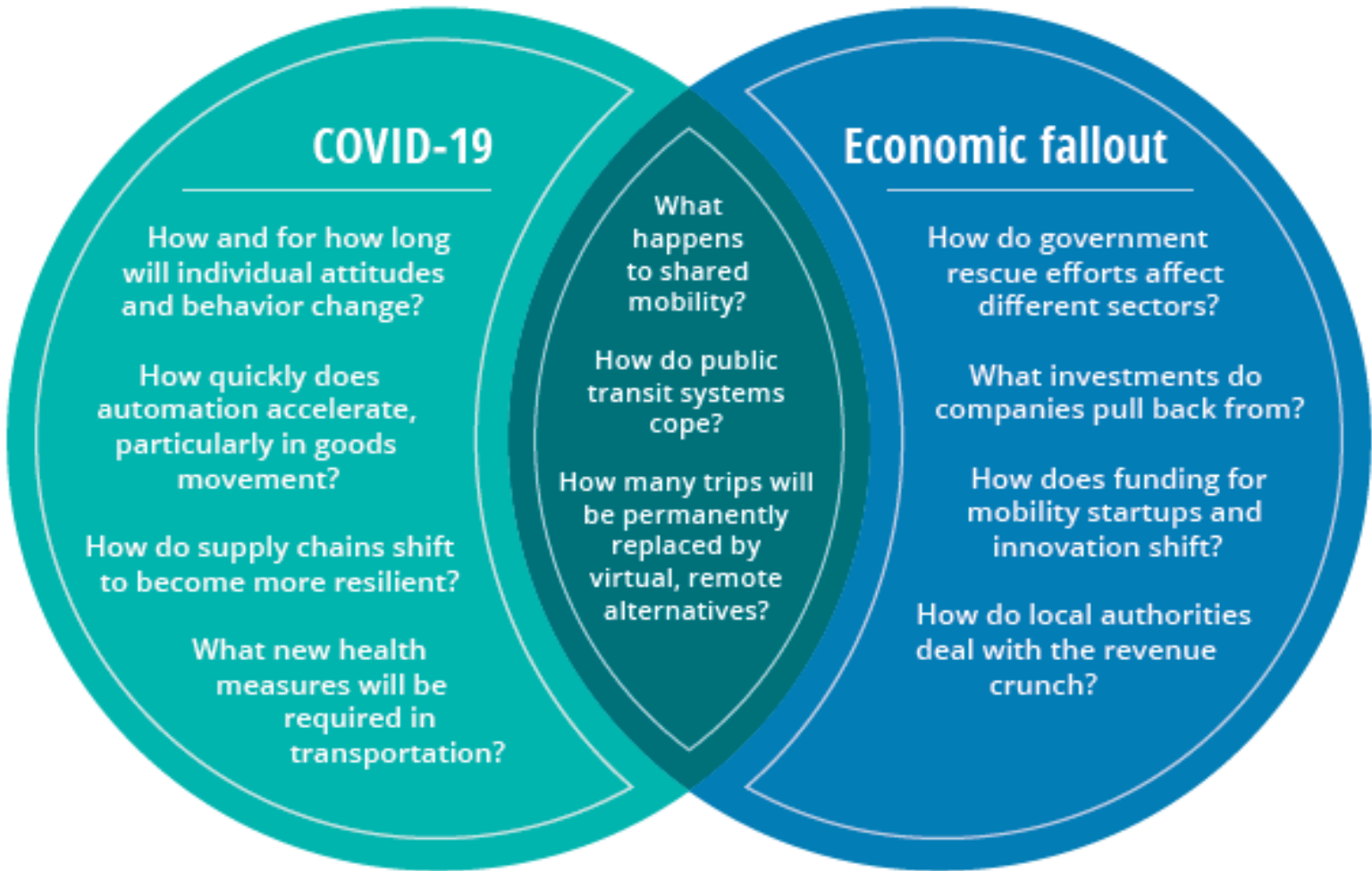


Mobility and transportation sectors at a crossroads

Deloitte. | **Future of
Mobility**

Twin crises will alter the trajectory of the future of mobility

COVID-19, the public health response, and the economic fallout are raising fundamental, even existential questions for players across the mobility spectrum



Deloitte.
Insights



FEATURE

The futures of mobility after COVID-19

Scenarios for transportation in a postcoronavirus world

Scott Corwin, Rasheq Zarif, Andrey Berdichevsky, and Derek Pankratz

PART OF A DELOITTE SERIES ON THE FUTURE OF MOBILITY

The Future of Mobility practice and Deloitte Insights recently launched a new paper:

Link: <https://www2.deloitte.com/us/en/insights/economy/covid-19/future-of-mobility-after-covid-19-transportation-scenarios.html>

Source: *The futures of mobility after COVID-19*, Page 5, https://www2.deloitte.com/content/dam/insights/us/articles/6739_fom-covid/DI_FoM-COVID.pdf

Mobility scenarios look at how people and goods move

Distinct scenarios provide predictions for three to five-year outcomes following the COVID crisis, shaped by **duration and severity of the pandemic**, and the **extent of the government's response**



The Passing Storm

The **pandemic is contained effectively by governments**, but is not without **lasting, and uneven, economic repercussions**

- Enduring **shifts in some mobility trends**
- Most providers and governments **return to status quo roles**
- “Typical” business cycle **downturn dynamics play out**, with consolidation across the board



Lone Wolves

A **prolonged pandemic spurs governments to adopt isolationist policies**, shorten supply chains, and increase surveillance

- **Governments accrue greater authority** in combatting COVID-19
- **Cities force data sharing and actively regulate mobility** via top-down monitoring to **meet systemwide goals**
- Data privacy cybersecurity give way to **increased government oversight**



Good Company

Governments around the world struggle to handle the crisis alone, with **large companies stepping up as a key part of the solution**

- **Public goods** (including transport) are increasingly **provisioned** by the **private** sector who **offer seamless transport for customers**
- Individuals are **open to sharing mobility data** with private sector
- Mobility technology **advances quickly**



Sunrise in the East

China and other East Asian nations are more effective in managing the virus and take the reins as primary global powers

- **Mobility Innovation, R&D and value chains consolidate in the East**, to the detriment of businesses in the West
- **Robust government data collection** becomes the norm to actively manage and address **system-wide challenges**

Source: *The futures of mobility after COVID-19*, Page 6, https://www2.deloitte.com/content/dam/insights/us/articles/6739_fom-covid/DI_FoM-COVID.pdf

“No regret” moves

Uncertainty should not be synonymous with inaction. The following are actions and trends we predict will persist, irrespective of which scenario plays out. These will be the basis for our no regret moves - where we play and how we win



Trip substitution via digitization

Telework, telemedicine, and e-learning become the new normal hence the need for mobility is reduced. Mobility is likely to never return to pre-coronavirus levels.



Focus on safety

The concept of safety is expanded to include sanitisation and hygiene. New measures are implemented in order to minimise contact and verify cleanliness.



Reliance on e-commerce

Health risks of venturing to brick-and-mortar stores coupled with stay-at-home orders accelerate the shift towards e-commerce and the technologies facilitating it.



Reconfigured mobility landscape

Uncertainty across the mobility ecosystem will see business models emerging to solve new use cases and consumer preferences.

Source: *The futures of mobility after COVID-19*, Page 14, https://www2.deloitte.com/content/dam/insights/us/articles/6739_fom-covid/DI_FoM-COVID.pdf

How do we continue to catalyze our communities and coalesce the mobility ecosystem to develop new solutions and sustainably, inclusively transform our cities?

