



# ON THE ROAD

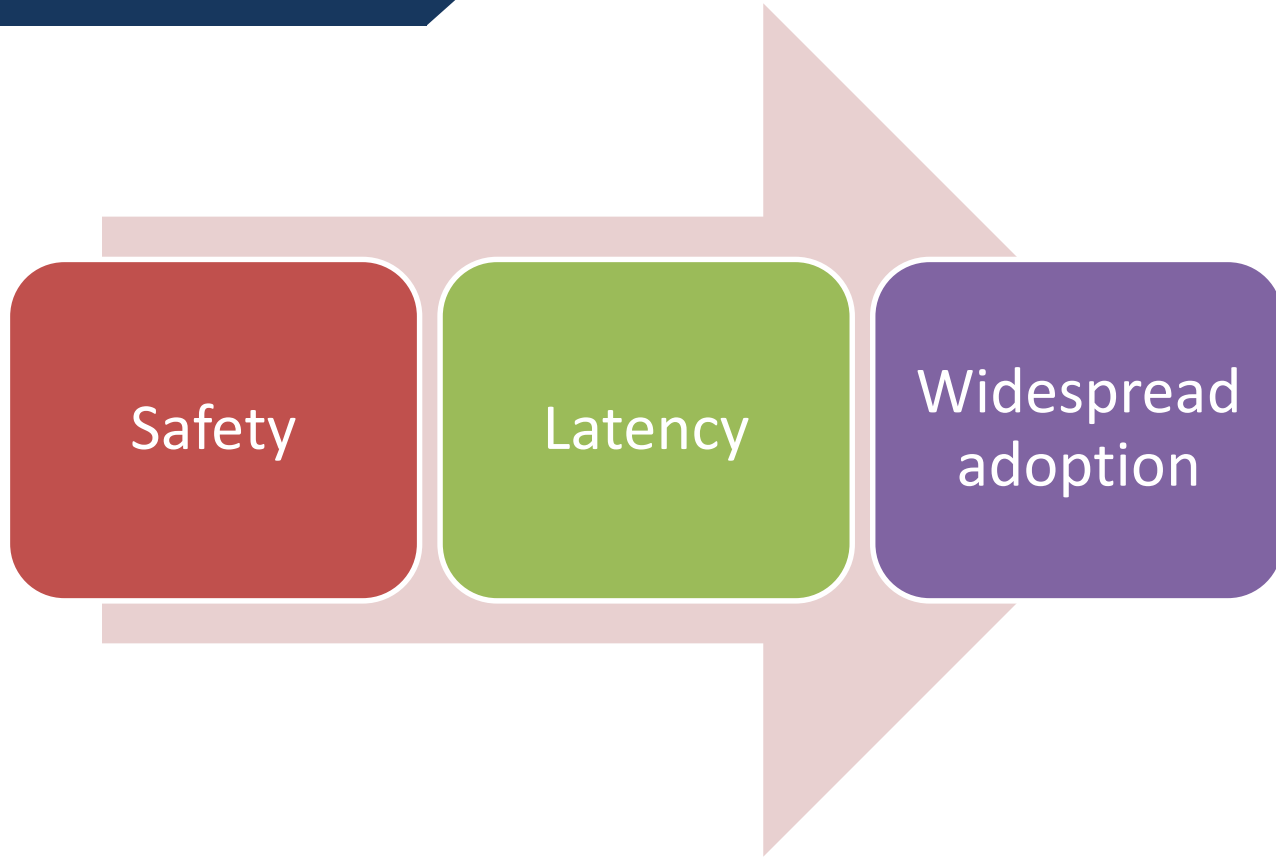
OCTOBER, 2017

REVATHI GREENWOOD, AMERICAS HEAD OF RESEARCH

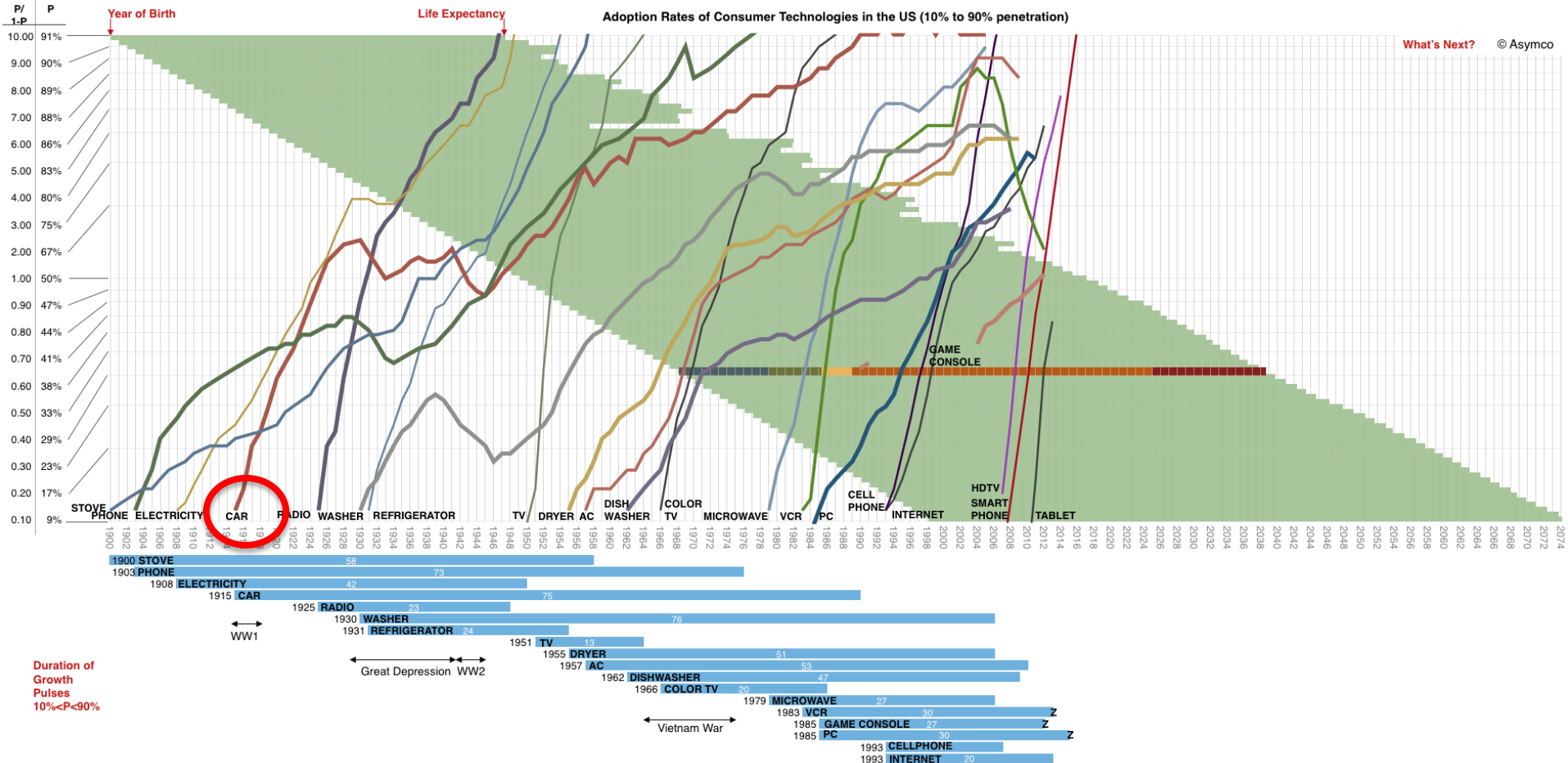


**CUSHMAN &  
WAKEFIELD**

## Three Pre Conditions



# ADOPTION OF OTHER TECHNOLOGIES

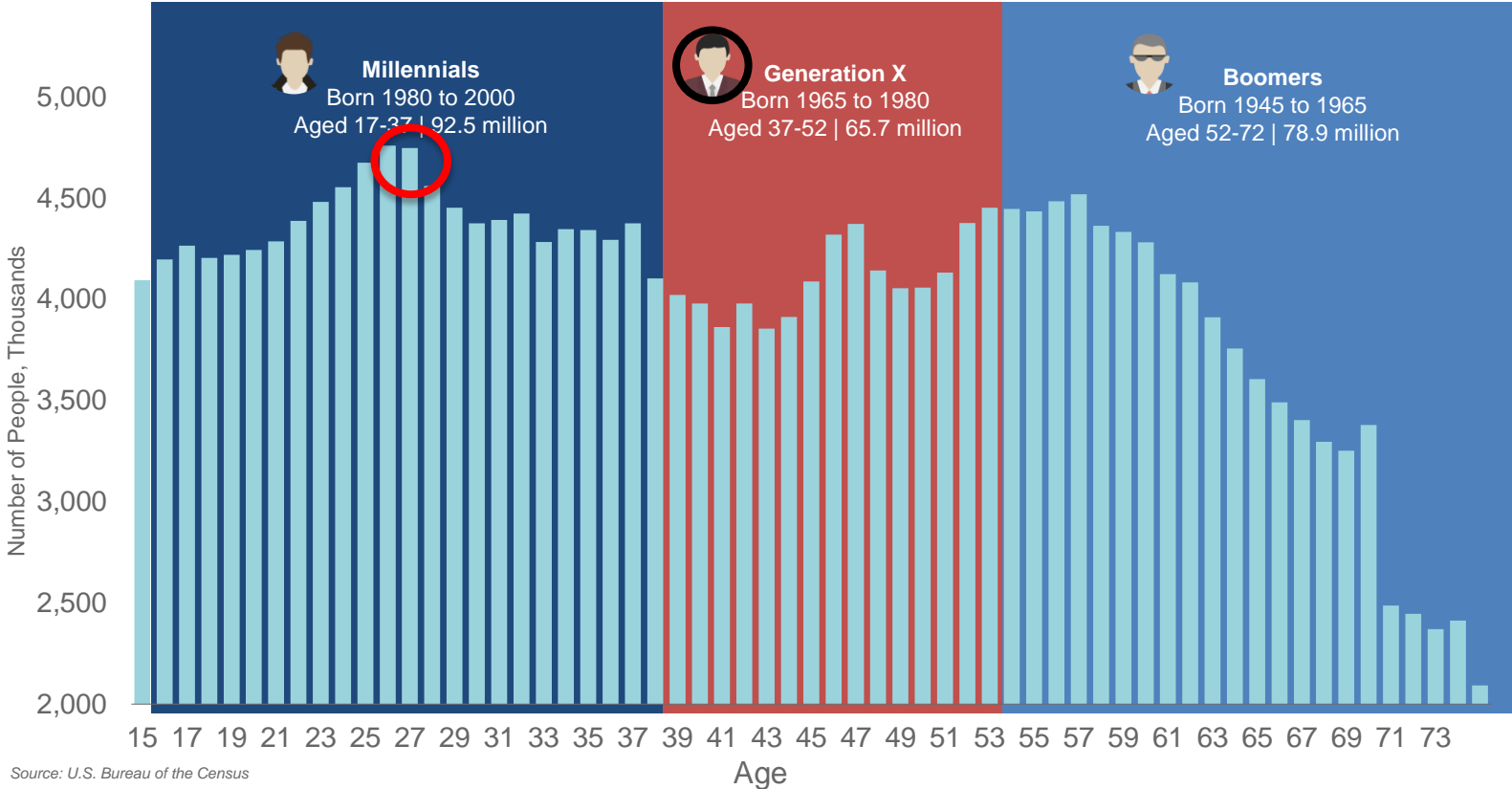


# Ride - hailing

- 21% usage in major cities
- Parking (37%), Drinking (33%)
- Vehicle ownership ↔
- Public transit use 6% ↑
- Vehicle Miles Travelled ↑
- Cost matters
- No driver = No costs?
- 65+ : 4%, Millennials : 36%

Source: U.S. UC Davies, Institute of Transportation Studies, October 2017

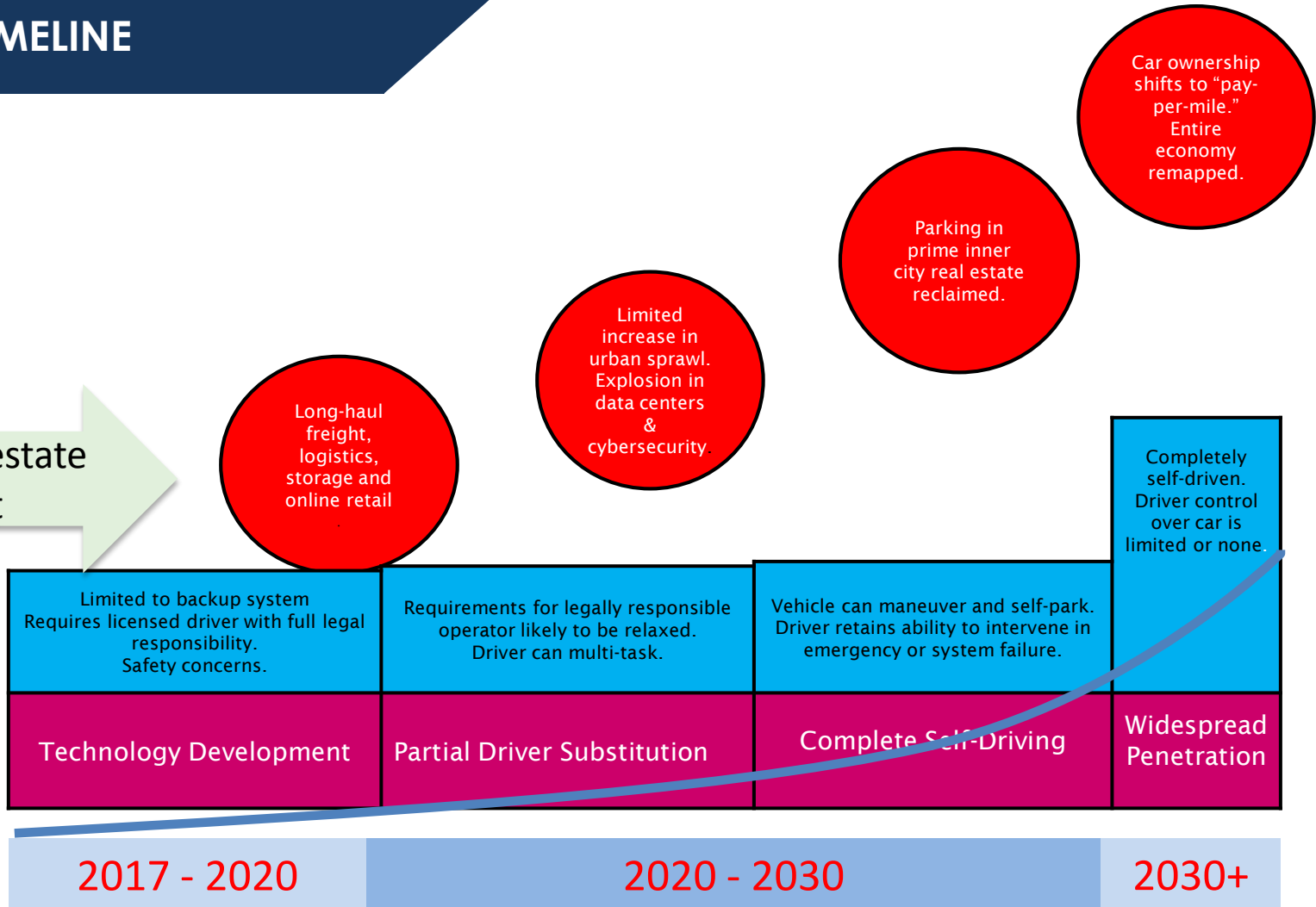
# DEMOGRAPHICS



Source: U.S. Bureau of the Census

# AV CAR TIMELINE

Lag in real estate impact



# TECHNOLOGY DEVELOPMENT (2017)

EARLY ADOPTION IN  
FREIGHT AND GOODS  
TRANSPORT



RioTinto



## LIMITED DRIVER SUBSTITUTION (UNTIL 2030)

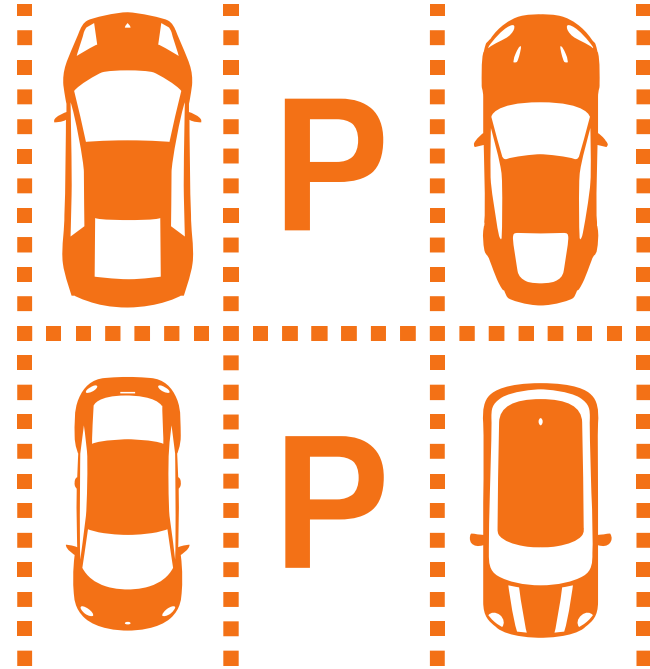
- **Limited increase in urban sprawl**
  - Daily commute: Move out but limited by Marchetti Constant
  - One-off travel: Suburban retail/entertainment centers
- Erosion of non CBD Transit-Oriented Development (TOD) premiums?
- Explosion in data centers and cybersecurity office demand





# 2030+ : COMPLETE SELF DRIVING CAPABILITY

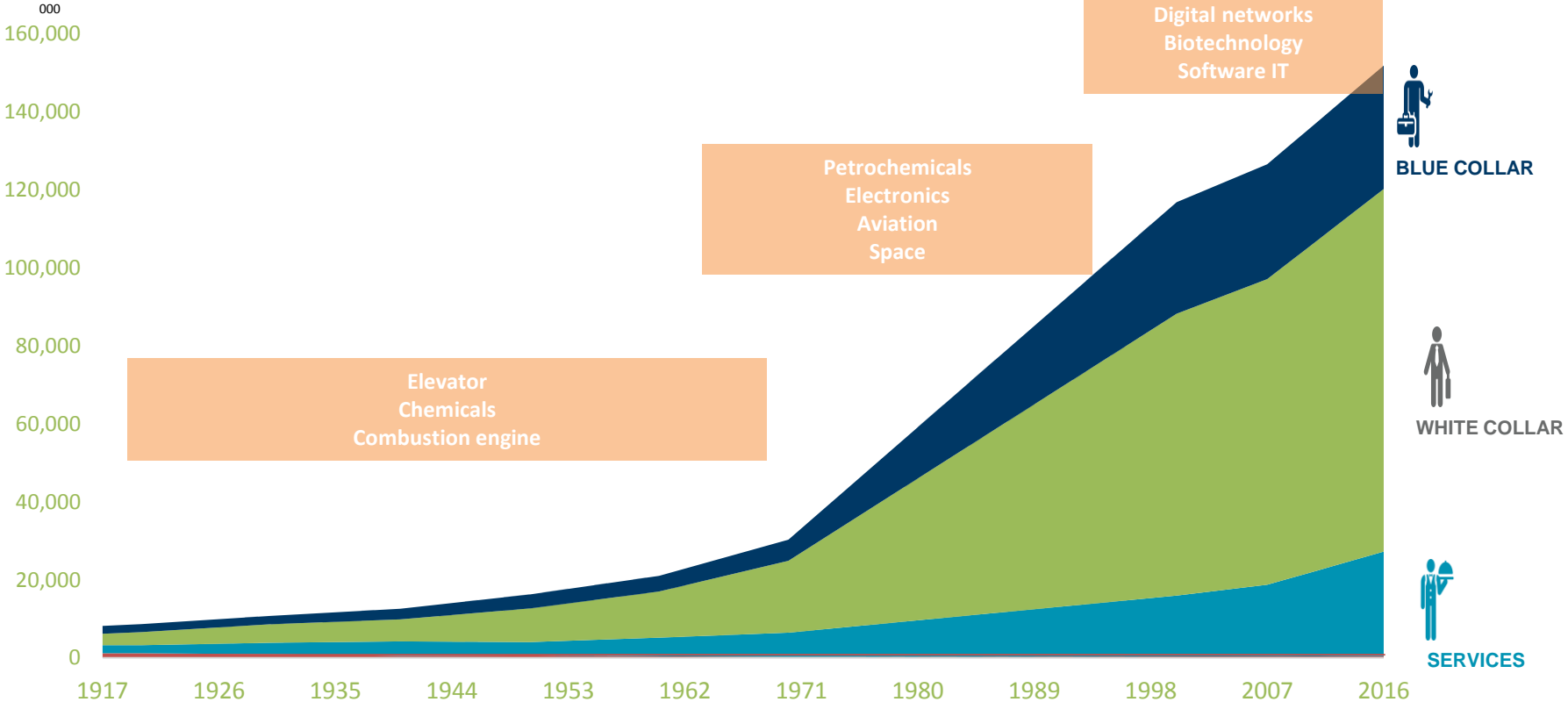
- 2x parking space vs office
- 31% of space in 41 CBD's for parking (Source: High cost of free parking, 2005)
- D.C.: 400,000 parking spaces occupying 80 million sq. ft.
- Owned cars parked **95%** of time
- Transportation cloud : Shared fleets, 80% fewer cars  
(Source: MIT's SENSEable City Lab)



# WHY IS THE FUTURE ALWAYS DYSTOPIAN?



# INNOVATION AND JOBS



Source: IPUMS-USA, University Of Minnesota

# PLANNING WITH UNCERTAINTY

A decade to prepare

Infrastructure capacity (5G, Physical)

Uneven adoption

## CONTACT INFORMATION

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