

THE AUTONOMOUS REVOLUTION

Cars Will Be Autonomous

These Are The Industries That Are Next

A \$4 Trillion Disruption Across 10 Sectors

JJ Shay | Global Gauntlet AI | December 2025

Executive Summary

Autonomous vehicles will reshape the global economy by 2035, disrupting industries worth over \$4 trillion annually.

The autonomous vehicle revolution is no longer theoretical. With Waymo completing 71M+ driverless miles and Tesla's fleet accumulating 3B+ autopilot miles, the technology inflection point has arrived.

This deck identifies the 10 industries facing the most significant transformation and the timeline for disruption.

\$4T

Total economic disruption

33.7%

ADAS market CAGR 2025-2030

The Technology Curve: Where We Are Today

LEVEL 0-1

No/Driver Assist

Standard today

LEVEL 2

Partial Automation

Tesla Autopilot

LEVEL 3

Conditional Auto

Mercedes Drive Pilot

LEVEL 4

High Automation

Waymo (geofenced)

LEVEL 5

Full Automation

Future state

Current Market Leaders



Waymo — 71M+ driverless miles, L4 robotaxis



Tesla — 13B+ autopilot miles; camera-only approach of Transportation

How Self-Driving Cars Became Inevitable

Three converging forces have made autonomous vehicles not just possible, but **economically inevitable**: exponential AI advancement, sensor cost collapse, and regulatory momentum.

AI & Compute Power

Neural networks now process billions of training miles in simulation.

AI driving systems learn from edge cases that would take humans millennia to encounter.

Tesla alone collects more driving data in one day than competitors gather in a year.

1000x

compute improvement since 2015

Sensor Economics

LiDAR costs dropped from \$75,000 to under \$1,000 in a decade.

Camera-based systems (Tesla approach) now rival sensor-heavy competitors.

Mass production is driving unit costs toward consumer price points.

98%

Source: industry analysis, regulatory filings

Industry Impact Framework

The 10 industries most exposed to autonomous vehicle disruption, ranked by market size and transformation timeline.

1

Trucking & Logistics

\$800B market • 2026-2030

2

Insurance

\$240B at risk • 2028-2035

3

Real Estate & Parking

\$150B parking • 2030-2040

4

Healthcare & Emergency

\$65B trauma care • 2030-2040

5

Retail & Last-Mile Delivery

\$90B last-mile • 2025-2030

6

Energy & EV Charging

Source: McKinsey Global Industry Analysis

\$100B infrastructure • 2025-2035

Trucking & Logistics

Heavy haul trucking is the beachhead for autonomous disruption — no hours-of-service limits means 24/7 asset utilization.

Why It's First

- Highway driving is simpler than urban navigation
- Driver shortage crisis (80,000+ unfilled positions)
- Labor costs are 40% of operating expense
- Clear ROI: eliminate driver downtime

Key Players

- **Aurora Innovation** — Targeting freight-first strategy
- **TuSimple** — First driverless semi tests completed
- **Waymo Via** — Alphabet's trucking division

\$800B

Insurance

90% fewer accidents means 90% fewer claims — auto insurance as we know it will fundamentally transform.

The Disruption Model

- Personal auto premiums will collapse as accidents decline
- Liability shifts from driver to manufacturer/software
- Product liability insurance for OEMs will surge
- Cybersecurity coverage becomes critical

New Opportunities

- Usage-based insurance (pay-per-mile models)
- Fleet insurance for robotaxi operators
- Software/AI liability coverage

\$240B

Real Estate & Parking

When cars drive themselves to remote lots or keep moving, 30% of urban land dedicated to parking becomes available for redevelopment.

Urban Transformation

- Parking garages become obsolete in city centers
- Street parking converts to pedestrian/bike space
- Suburbs gain value as commute becomes productive
- Gas stations repurposed (70%+ reduction)

New Development Patterns

- Buildings designed without parking requirements
- Drop-off zones replace parking lots
- Remote charging/storage hubs outside cities

\$150B

Source: International Parking Institute, UrbanFutureInstitute.org

Healthcare & Emergency Services

3,400 people die daily in traffic accidents worldwide. AVs will eliminate most — transforming trauma care and organ donation.

Healthcare System Impact

- Trauma centers face 70%+ reduction in vehicle injuries
- ER capacity freed for other emergencies
- Organ donations drop 20% (traffic fatalities are major source)
- Physical therapy demand shifts significantly

New Opportunities

- Autonomous medical transport for elderly/disabled
- Mobile health clinics reaching underserved areas
- 3D-printed organs to offset donation shortfall

\$65B

Source: WHO, CDC, National Safety Council

Retail & Last-Mile Delivery

Last-mile delivery is 53% of total shipping cost. Autonomous vehicles and drones will fundamentally restructure e-commerce economics.

Delivery Revolution

- Autonomous delivery vans eliminate driver labor costs
- Sidewalk robots handle small package delivery
- Drones serve rural and hard-to-reach areas
- 24/7 delivery becomes economically viable

Key Players

- **Amazon** — Prime Air drones, Zoox vehicles
- **Nuro** — Purpose-built delivery pods
- **Starship Technologies** — Sidewalk robots

\$90B

Source: McKinsey, Statista, Company announcements

Energy & EV Charging

Autonomous EVs will charge themselves during off-peak hours, creating grid optimization opportunities and eliminating the gas station model.

Energy Ecosystem Shift

- AVs become mobile energy storage units (V2G)
- Self-driving to remote charging hubs
- Gas stations face 70%+ reduction in demand
- Grid load balancing through smart charging

Infrastructure Transformation

- Charging hubs in low-cost real estate areas
- Robotic charging systems (no human needed)
- Wireless charging roads in development

\$100B

Source: IDTechEx, BloombergNEF, 2017

Media & Entertainment

Americans spend 300+ hours per year commuting. AVs transform that time into a captive audience for content, work, and commerce.

In-Vehicle Experience Revolution

- Streaming services gain 300+ hours of viewing time per user
- Vehicle interiors redesigned as entertainment spaces
- Gaming, VR, and productivity apps flourish
- Advertising in autonomous rideshare vehicles

New Business Models

- In-car commerce during rides
- Sponsored/subsidized rides with content
- Mobile office subscriptions

300+

Source: Bureau of Transportation Statistics, Midyear analysis

Public Transportation

Autonomous shuttles and robo-taxis will compete directly with buses and trains, forcing transit agencies to innovate or lose ridership.

Transit Transformation

- Autonomous shuttles replace fixed bus routes
- On-demand micro-transit expands coverage
- First/last mile problem finally solved
- 24/7 service becomes economically viable

Integration Models

- Europe pioneering multi-provider AV fleets
- Keolis operating unified AV services
- Public-private partnership models emerging

\$75B

Source: American Public Transportation Association, 2018

US public transit market

Legal & Liability

When the car is at fault, who do you sue? The fundamental shift from driver to manufacturer liability will reshape auto litigation.

Liability Framework Shift

- Personal injury suits shift to product liability
- Software/AI decision-making liability unclear
- DUI/traffic violations significantly reduced
- Cybersecurity liability emerges as new field

New Legal Specializations

- AV accident reconstruction experts
- AI decision-making forensics
- Data privacy and surveillance law

\$45B

Source: NHTSA, FBI, Industry analysis

Food & Hospitality

Autonomous delivery eliminates the gig economy middleman. Restaurants can deliver profitably without third-party fees.

Restaurant Industry Impact

- Autonomous delivery cuts costs 60-70%
- Ghost kitchens gain delivery advantage
- Drive-through lanes redesigned for AV pickup
- DoorDash/Uber Eats driver model disrupted

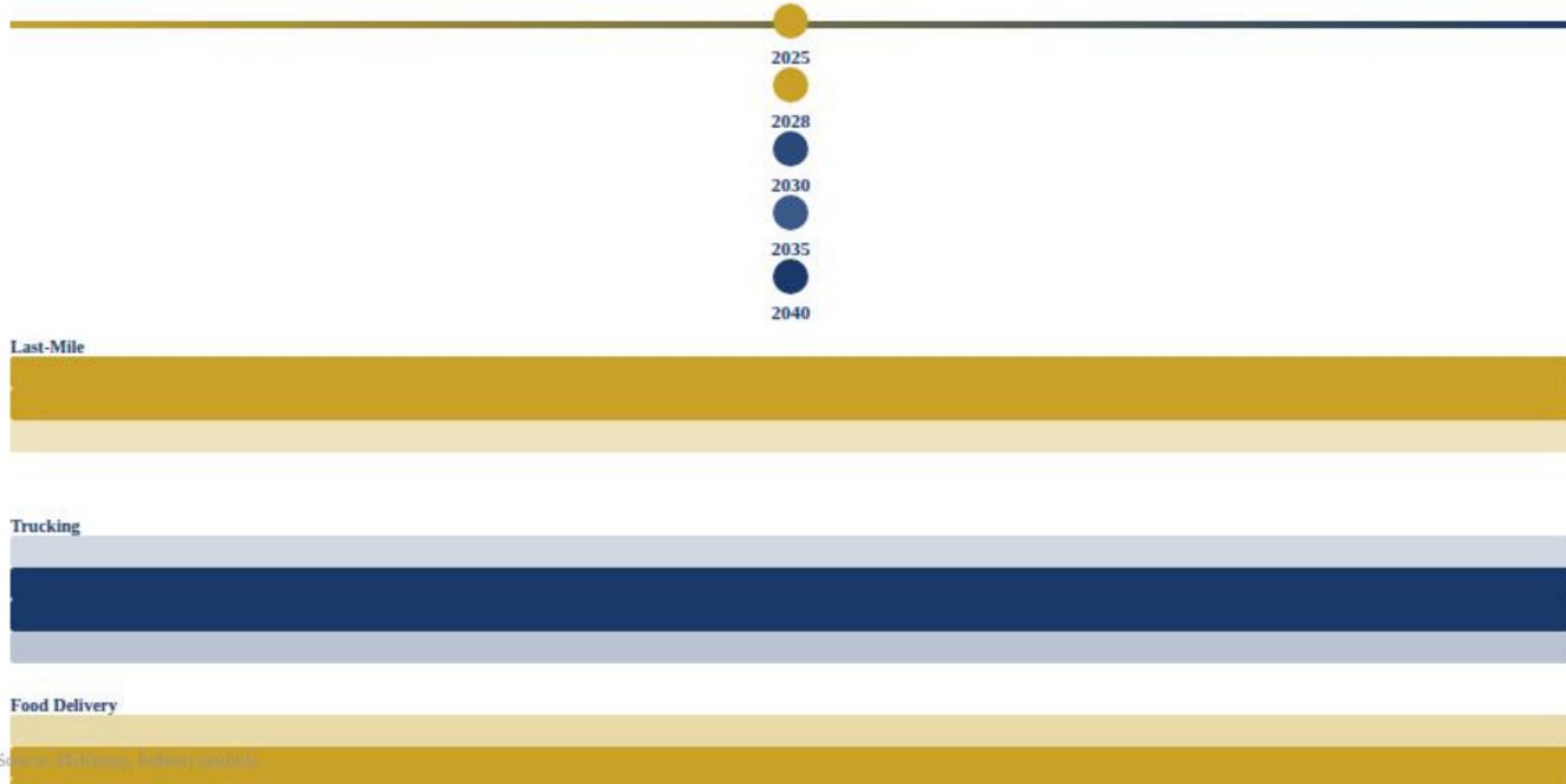
New Concepts

- Mobile restaurant vehicles serving events
- In-vehicle dining experiences
- Autonomous catering for offices

\$35B

Source: Statista, National Restaurant Association

Timeline: When Will This Happen?



Investment Implications

Long Positions

AV Technology Leaders

Waymo (Alphabet), Tesla, Aurora, Mobileye

Sensor & Chip Providers

NVIDIA, Qualcomm, Ouster, Luminar

EV Charging Infrastructure

ChargePoint, EVgo, Blink Charging

Fleet Management Software

Autofleet, Ridecell, Samsara

In-Vehicle Entertainment

Gaming, streaming, productivity platforms

Short Positions / Avoid

Traditional Auto Insurance

Note: Not investment advice. For illustrative purposes only.
Personal auto premiums to collapse 60-80%

Winners & Losers

Winners



Tech Companies

Own the software stack, capture recurring revenue



Consumers

\$1.50/mi → \$0.20/mi, 300+ hrs reclaimed



Content Platforms

Massive new captive audience for streaming



Urban Planning

30% of urban land freed from parking



Elderly & Disabled

Mobility independence restored



Logistics Companies

24/7 operations, 40% cost reduction

Losers



Professional Drivers

Source: Bureau of Labor Statistics

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Key Takeaways

1

The technology inflection point is here

71M+ Waymo miles, 3B+ Tesla miles, Mercedes L3 certified. This is no longer theoretical.

2

\$4 trillion in economic disruption is coming

10 major industries will be fundamentally transformed over the next 15 years.

3

The timeline is staggered — act accordingly

Last-mile and trucking first (2025-2030), then insurance/transit (2028-2035), then real estate (2035+).

4

Position now for the transition

Long AV technology and infrastructure. Short legacy auto insurance and parking real estate.

THANK YOU

Questions?

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Experience

\$4B+ in M&A Transactions

AI Systems Built

10+ Production Systems