

DICTATOR FOR A DAY

If I had unchecked power for one year to set policy, here's what I'd do — and why.

DAY 1 POLICIES:

1. High Speed Rail Network
2. Build Out Local Transit
3. Autobahn Lanes (and Driver Regulations)
4. Consumer Vehicle Weight Tax

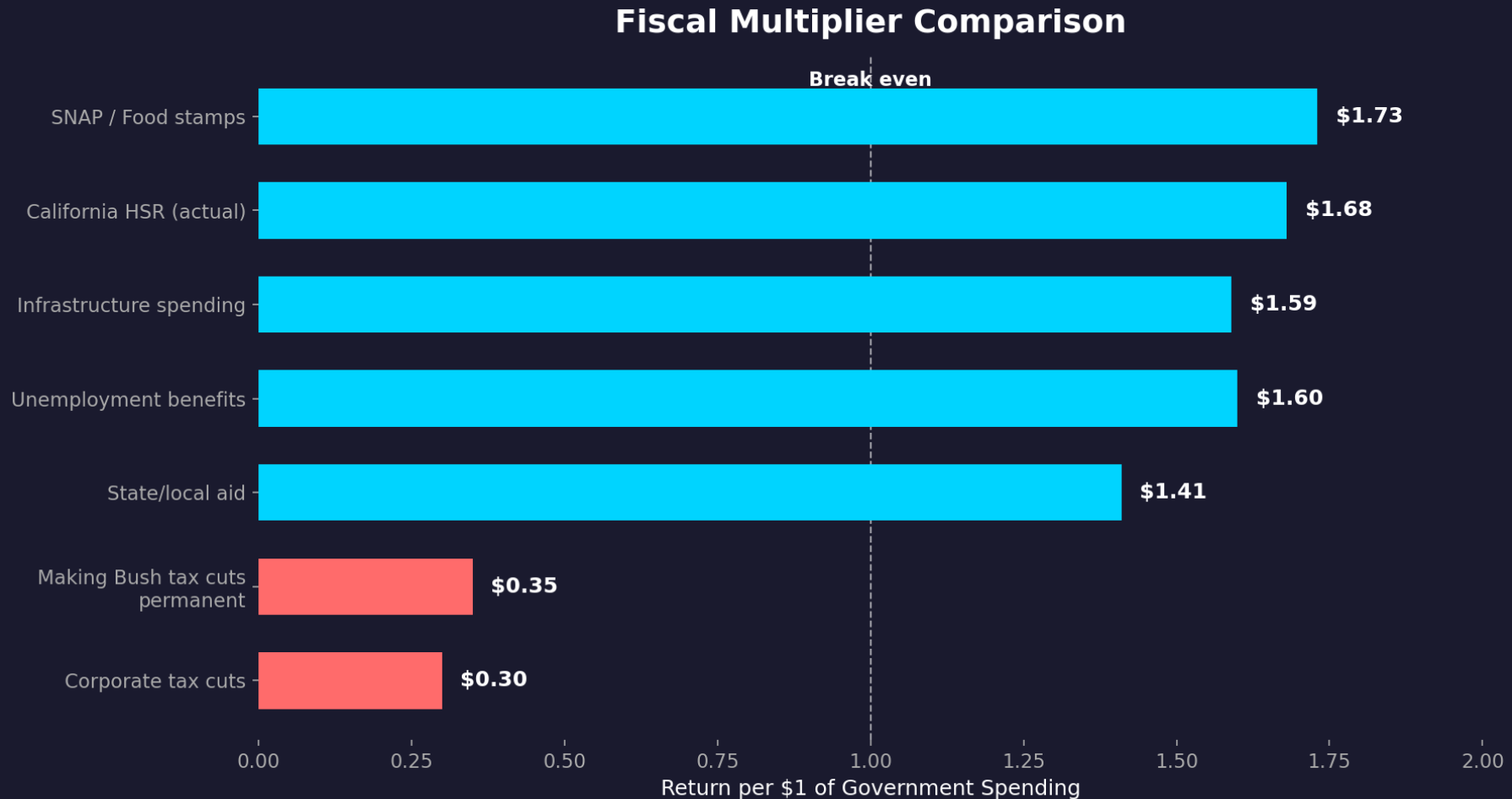
THE RULES I'M PLAYING BY:

- Every policy has evidence behind it
- Every policy benefits the bottom 90%
- Every policy is funded — no magic money
- I'll tell you what would make me wrong

THE LENS: SPENDING VS. INVESTING

The question everyone asks: "What does it cost?"

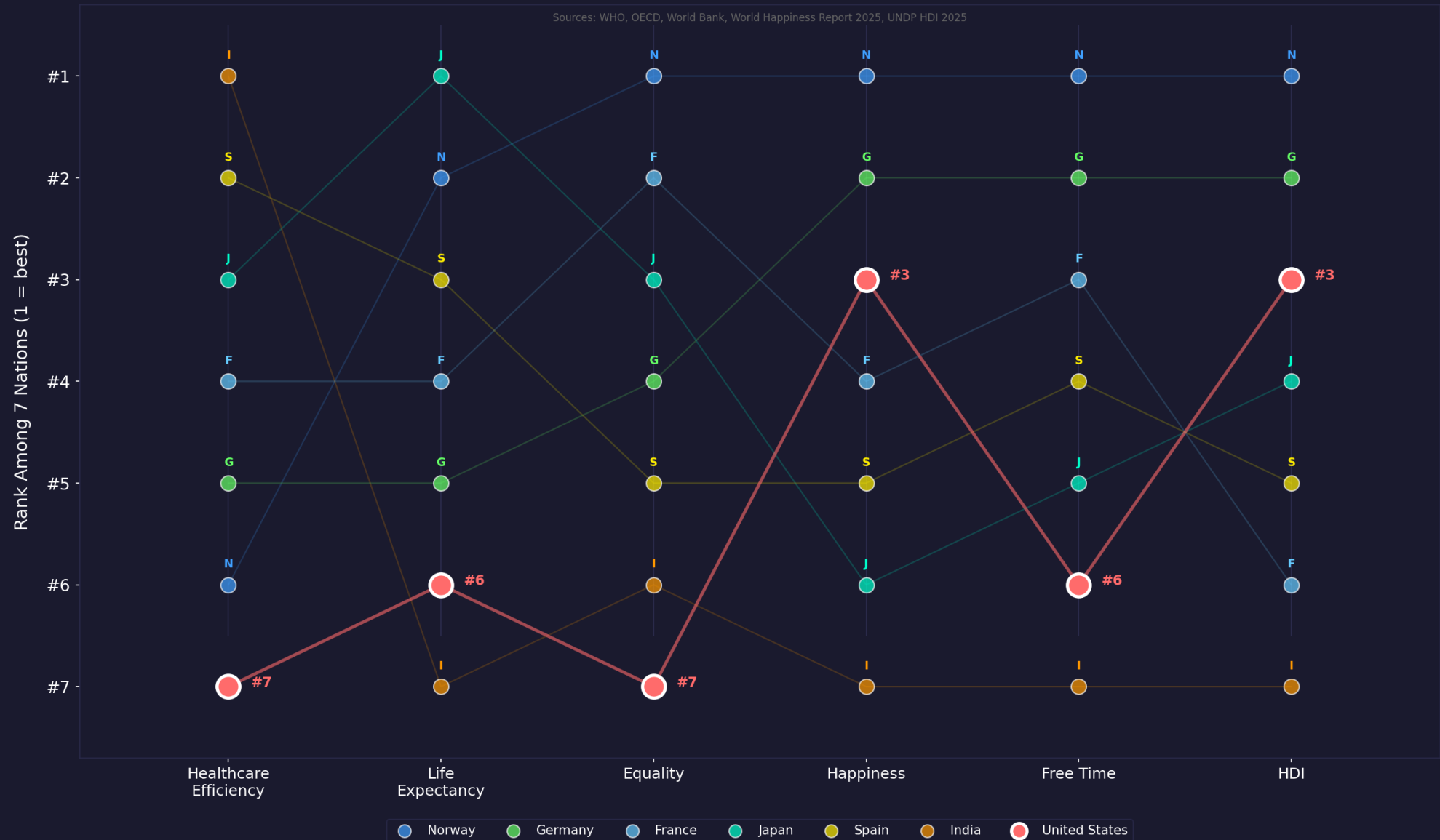
The question almost nobody asks: "What does it return?"



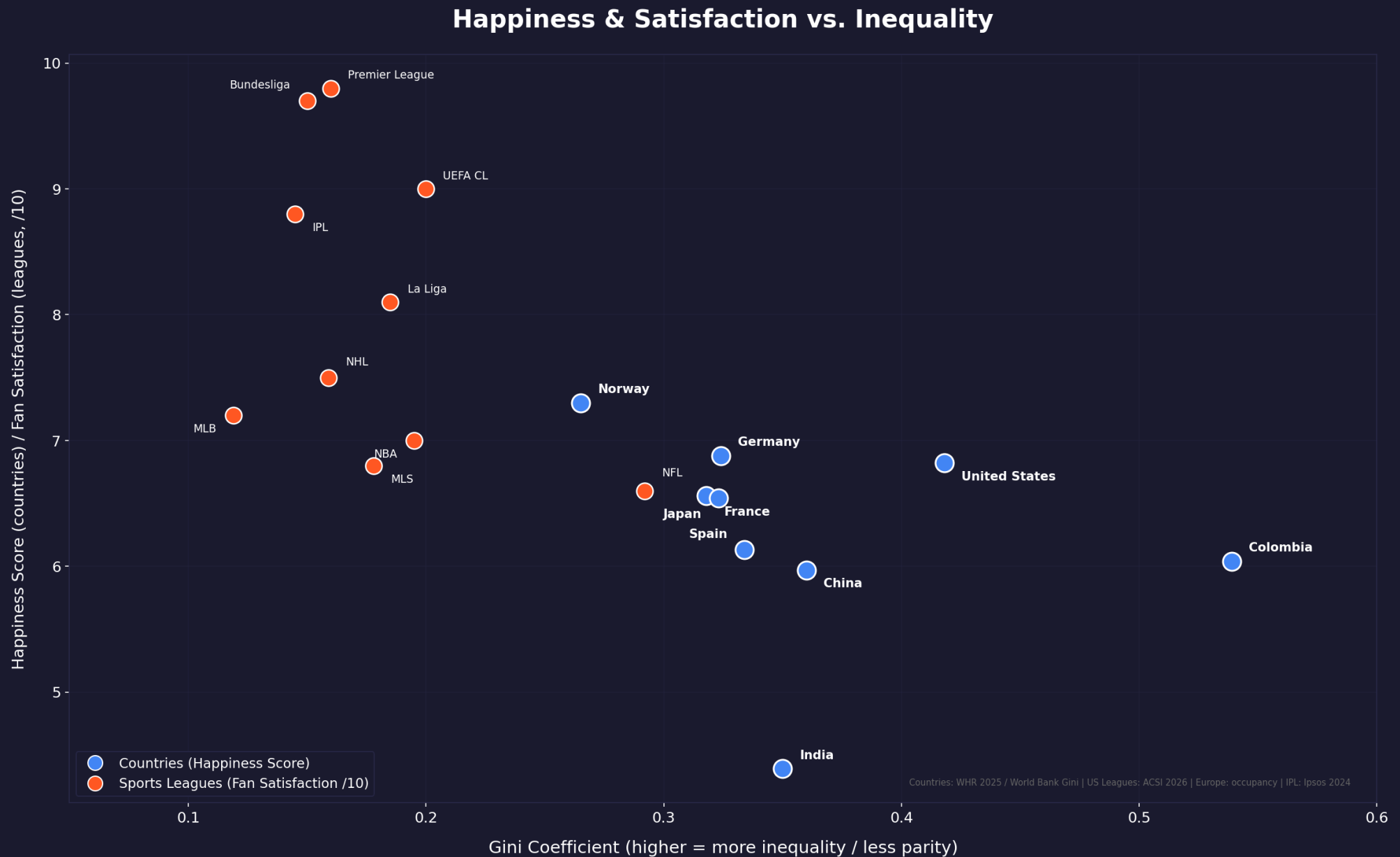
Source: Moody's Analytics / Mark Zandi, Congressional Testimony 2009; CBO

PUTTING IT IN CONTEXT

The US Paradox: Where Does the US Rank Among Peers?

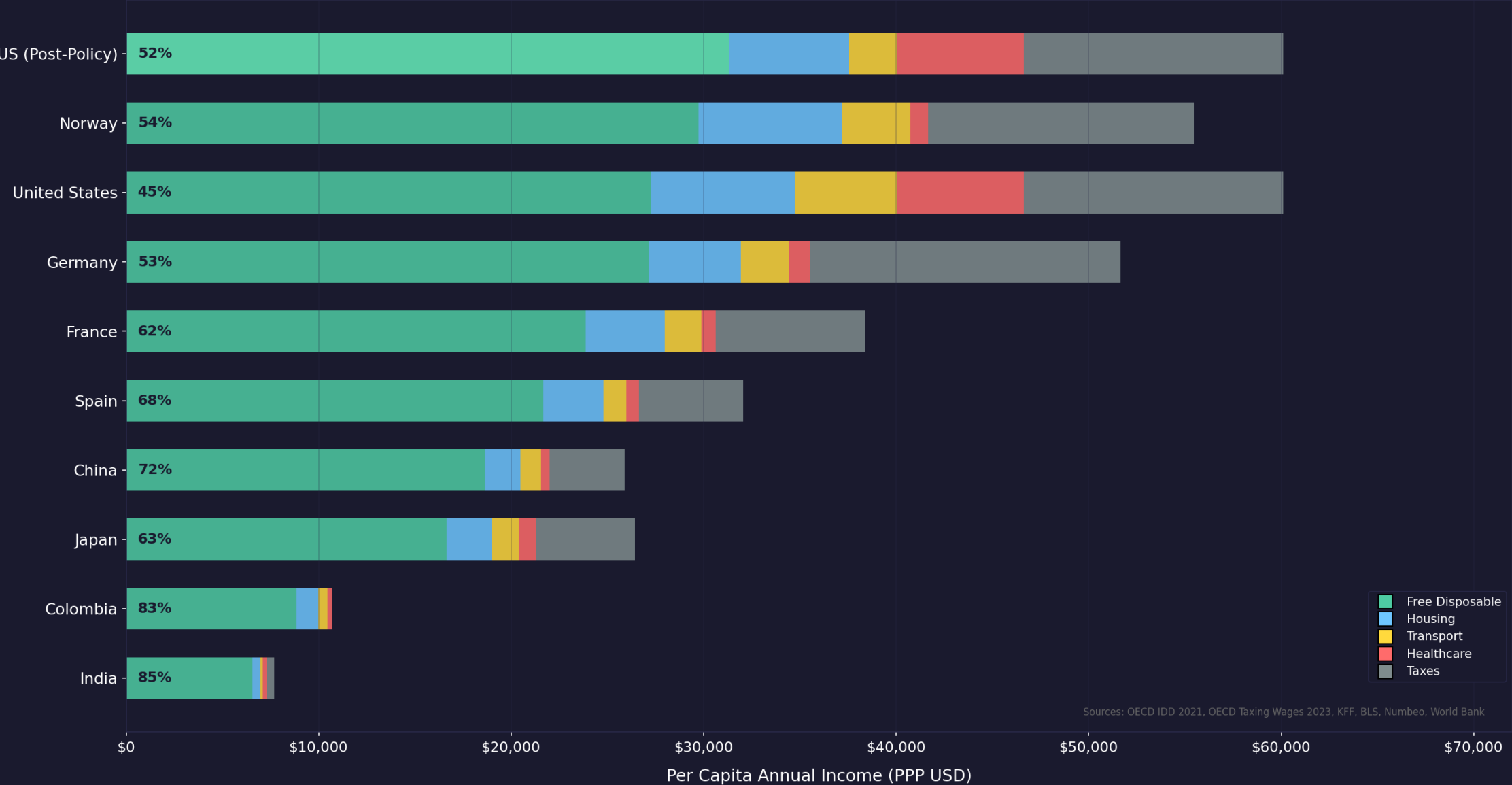


PUTTING IT IN CONTEXT



WHAT IT ALL MEANS FOR THE MEDIAN HOUSEHOLD

Where Your Income Goes: Gross Earnings vs. True Disposable

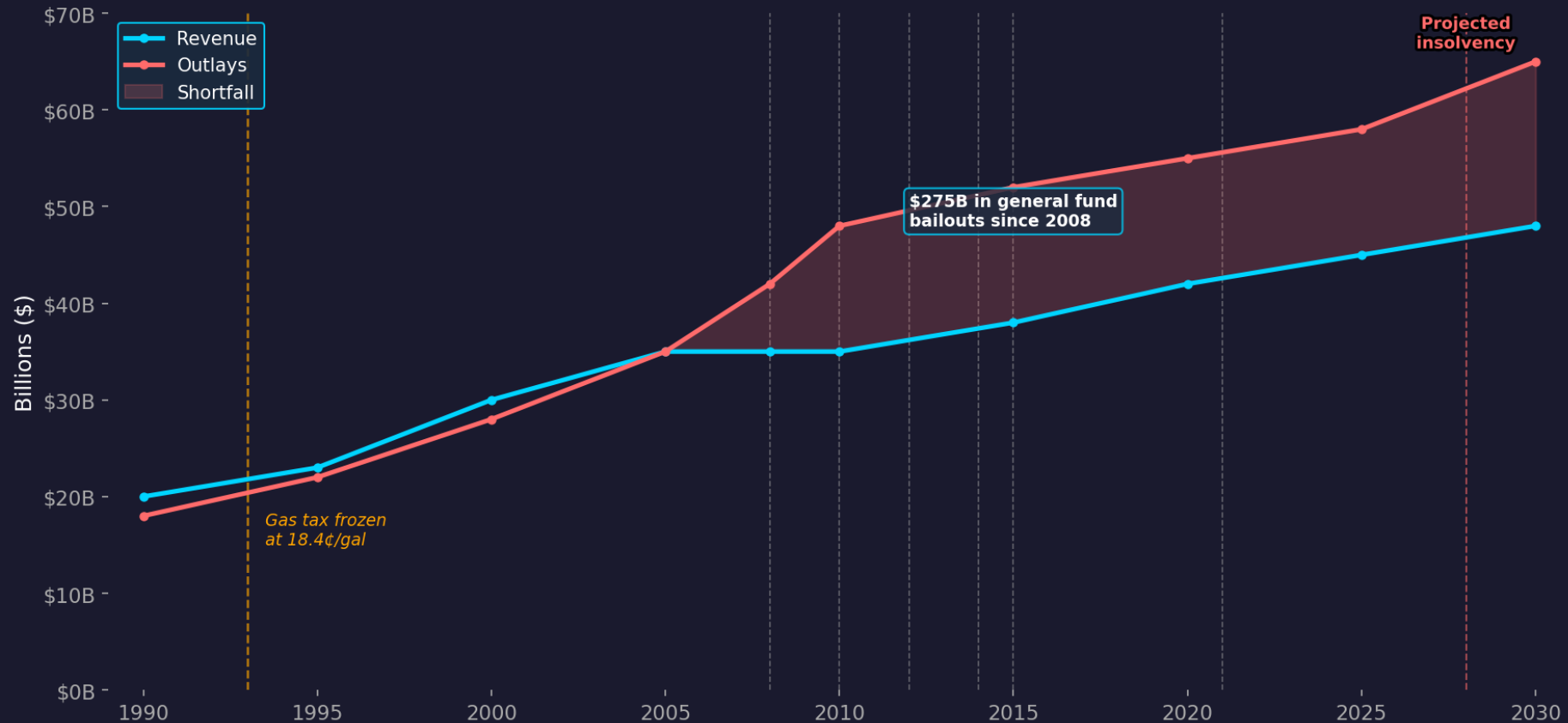


THE HIGHWAY TRUST FUND

We're already spending — we're just spending badly.

- The Highway Trust Fund has needed \$275 billion in bailouts since 2008
- Traffic crashes have an economic cost \$340 billion a year
- Truck damage alone costs taxpayers \$87.6 billion a year
- We have a \$786 billion backlog in road and bridge repairs

The Highway Trust Fund Has Been Insolvent Since 2008



THE VICIOUS CYCLE OF CAR DEPENDENCY

Vicious Cycle of Automobile Dependency

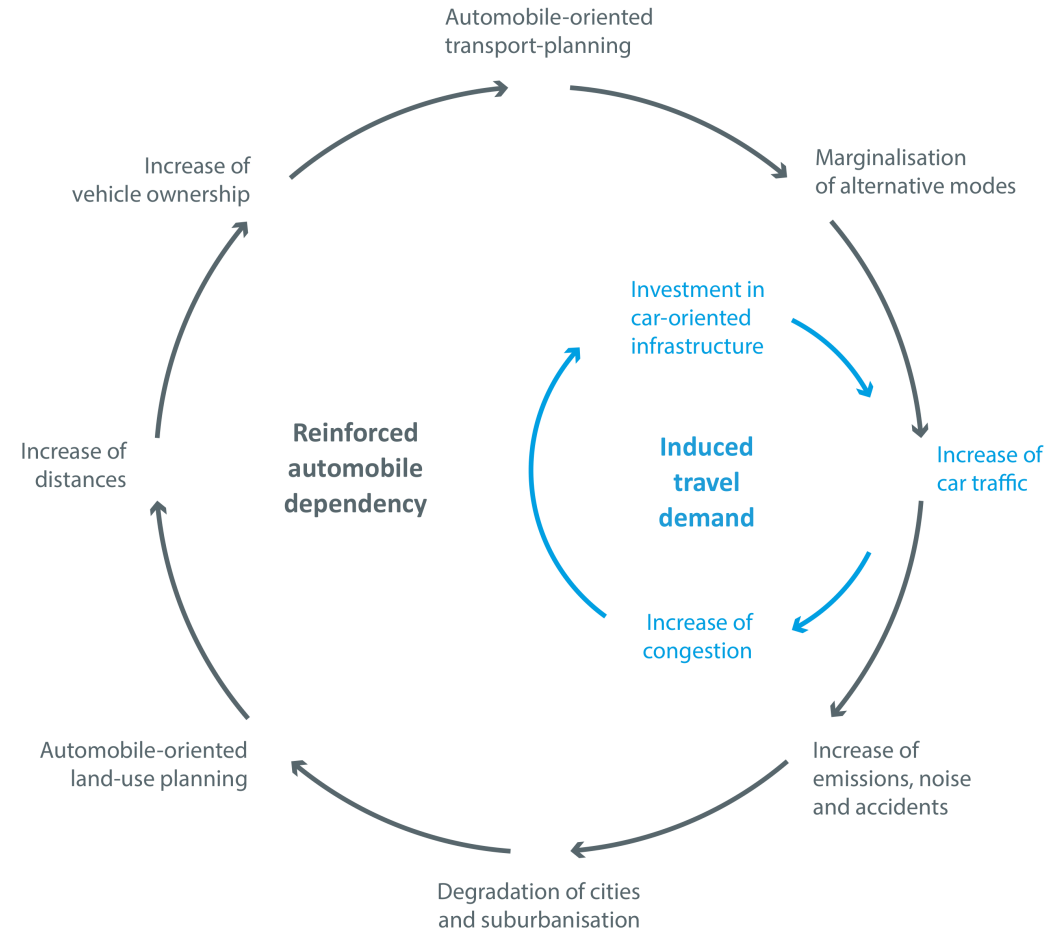


Illustration based on: Broadus et al (2009, p.9). Transportation Demand Management – Training Document, GIZ. https://www.sutp.org/files/contents/documents/resources/HT-Training-Material/GIZ_SUTP_TM_Transportation-Demand-Management_EN.pdf (accessed: 20.09.2018) and Kodukula (2011, p.3). Sustainable Urban Transport Technical Document #8 - Rising Automobile Dependency - How to break the trend, GIZ. https://www.sutp.org/files/contents/documents/resources/8_Technical-Documents/GIZ_SUTP_TD8_Rising_Automobile_Dependency_EN.pdf (accessed: 20.09.2018)



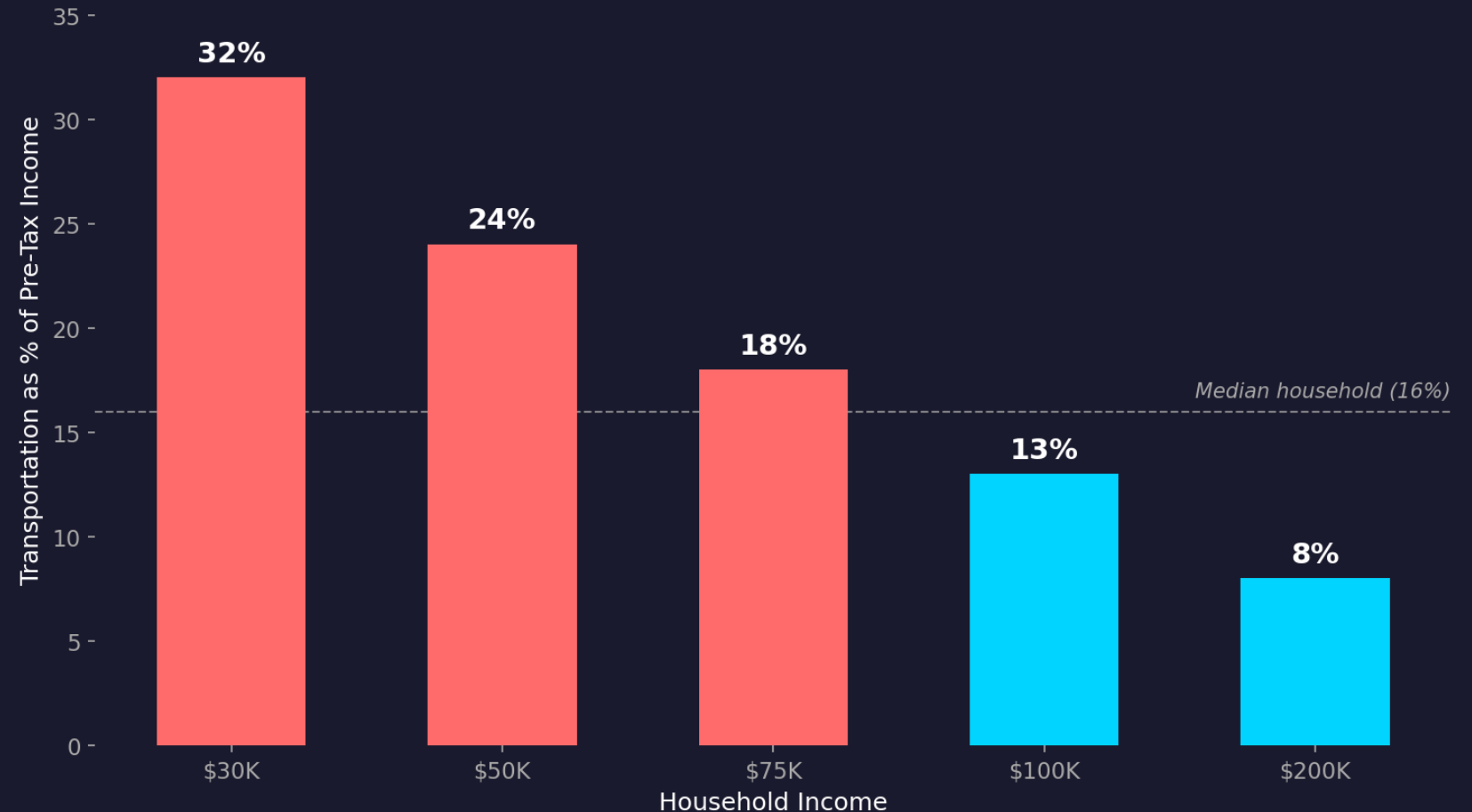
@TUMInitiative
transformative-mobility.org

TRANSPORTATION COST BURDEN

Who pays the most? The people who can least afford it.

- Transportation is the second-largest household expense — 17% of spending
- At \$30K income, transportation eats a third of your paycheck
- Low-income households are the most car-dependent and the least able to afford alternatives

Transportation Costs Hit Low-Income Households Hardest



PEOPLE-ORIENTED DEVELOPMENT

The way we build determines how we live.

- Minneapolis 2040 ended single-family zoning — home prices 16-34% lower. Oregon HB 2001 legalized fourplexes statewide
- Parking minimum elimination — 68% of Buffalo's new homes would have been illegal under old codes; parking adds ~17% to rent even without a car
- Barcelona superblocks: 25% less air pollution, 82% less traffic, 30%+ more local commerce

WHAT IT MEANS FOR YOU

- Housing costs drop when cities allow more housing types — duplexes, fourplexes, small apartments near transit
- Parking reform saves renters ~17% — you stop subsidizing empty parking spaces you didn't ask for
- Superblock-style design reduces noise, air pollution, and traffic — and local businesses thrive

LOCAL TRANSIT — BRT VS. LIGHT RAIL

BRT as the local transit backbone — connecting neighborhoods.

- BRT (Bus Rapid Transit) delivers 80% of light rail's benefit at 20% of the cost — \$20-50M/mile vs \$150-350M

Construction Costs Per Mile: Transit vs Roads

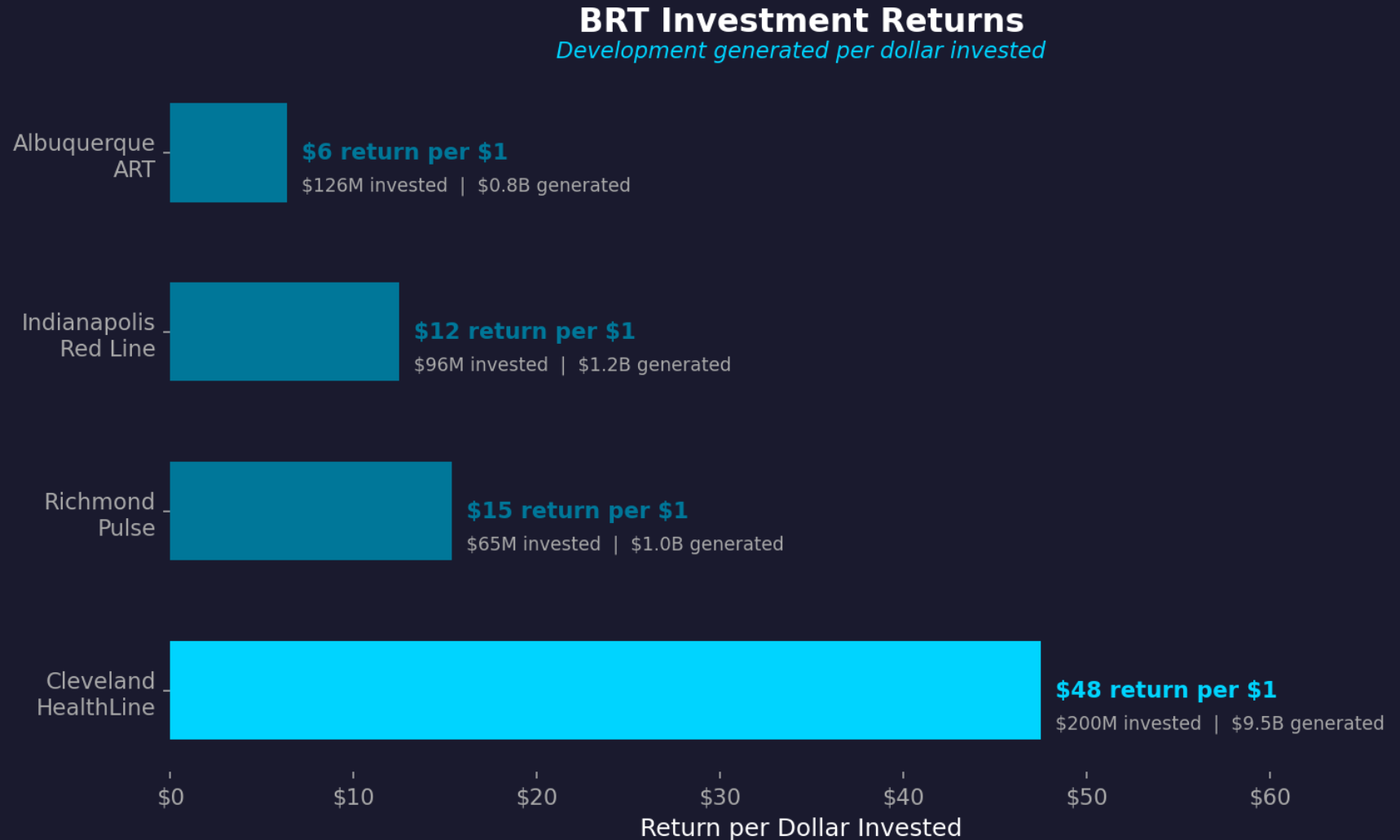


Sources: Transit Costs Project (NYU Marron), ITDP, GAO, FHWA

LOCAL TRANSIT — BRT INVESTMENT RETURNS

BRT works — and the receipts prove it.

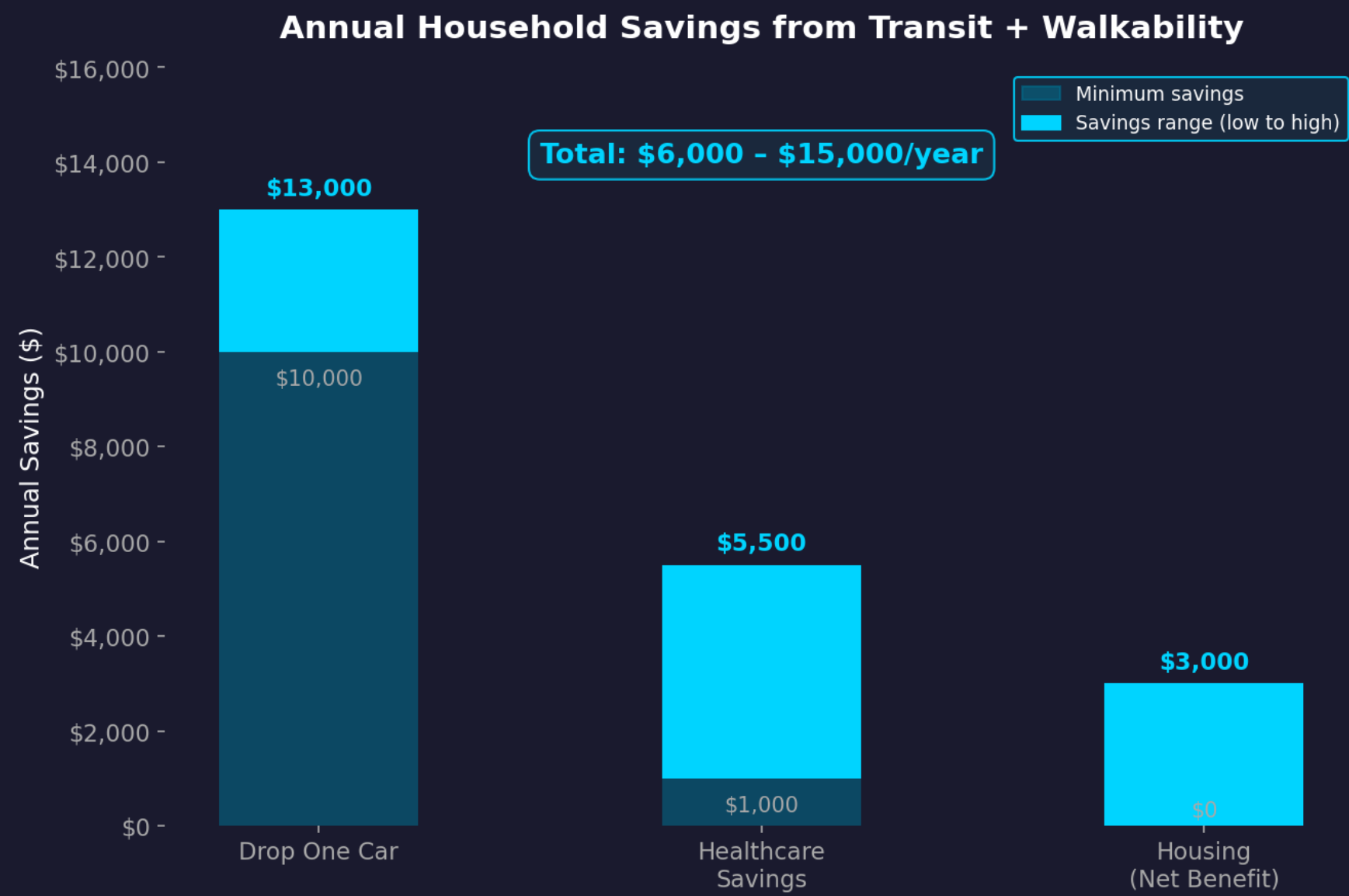
- Cleveland HealthLine: \$200M invested → \$6B+ in development within four years (\$114 per \$1 spent)
- Richmond Pulse: doubled ridership projections in year one; \$1B in projected economic activity over 20 years
- Bogota TransMilenio: 1.65M rides/day, no operational subsidies, commute times down 32%



LOCAL TRANSIT — WHAT IT SAVES YOU

What it means for you:

- At \$30K income: dropping one car saves ~\$10,000-13,000/year (AAA: \$11,577/yr; APTA: \$13,218/yr)
- At median income (\$75-100K): \$6,000-15,000/year in combined savings
- Even if you never ride a bus: upzoning + parking reform reduce housing costs



A NATIONAL HIGH-SPEED RAIL NETWORK

The case:

- Every \$1B invested creates ~24,000 jobs
- HSR is 8x more energy-efficient than flying, 4x more than driving

WHAT IT MEANS FOR YOU

- At \$30K income: dropping one car saves ~\$8,500/year — a 28% effective raise
- At median income: dropping one car + using rail for intercity saves \$500-\$10,500/year
- Even if you never ride: airline prices drop on competing corridors

HSR Works Everywhere It's Been Tried

Japan

(Shinkansen, 1964)

6.5%

Real income increase
along corridor

China

(CRH Network)

7.5%

GDP per capita increase
in connected cities

France

(TGV Network)

+20%

Domestic tourism
increase

Spain

(Madrid-Barcelona)

>€6B

In total
economic benefits

HSR: AIRLINES WANT THIS TOO

- Lufthansa replaced Cologne-Frankfurt air route with rail entirely — sells Deutsche Bahn tickets as Lufthansa flight numbers
- 500,000 passengers used it in 2024. Short-haul flights lose money for full-service carriers
- France banned certain short-haul flights where rail alternatives exist under 2.5 hours
- Madrid-Barcelona: air's passenger share fell from ~72% to ~37% after HSR launched

The elephant in the room — California

A real disaster. But NYU Transit Costs Project concluded the US cost premium is "institutional, and fixable" — no national authority, no standardized designs, no bulk procurement. A federal program faces a fundamentally different cost structure.

AN AMERICAN AUTOBAHN

A tiered system: pass a rigorous driving test, get your vehicle certified through a 150-point inspection, and you can access a dedicated unrestricted lane. Everyone else drives normally. Think CDL for commercial vehicles, but for speed.

The surprise:

The Autobahn — the road with no speed limit — has roughly half the fatality rate of US interstates.

How? Four pillars:

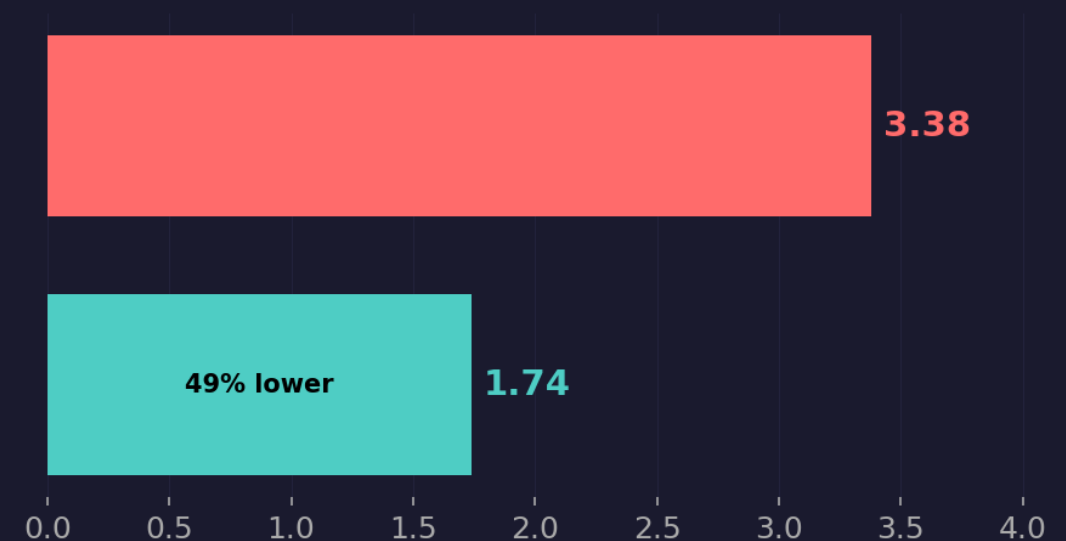
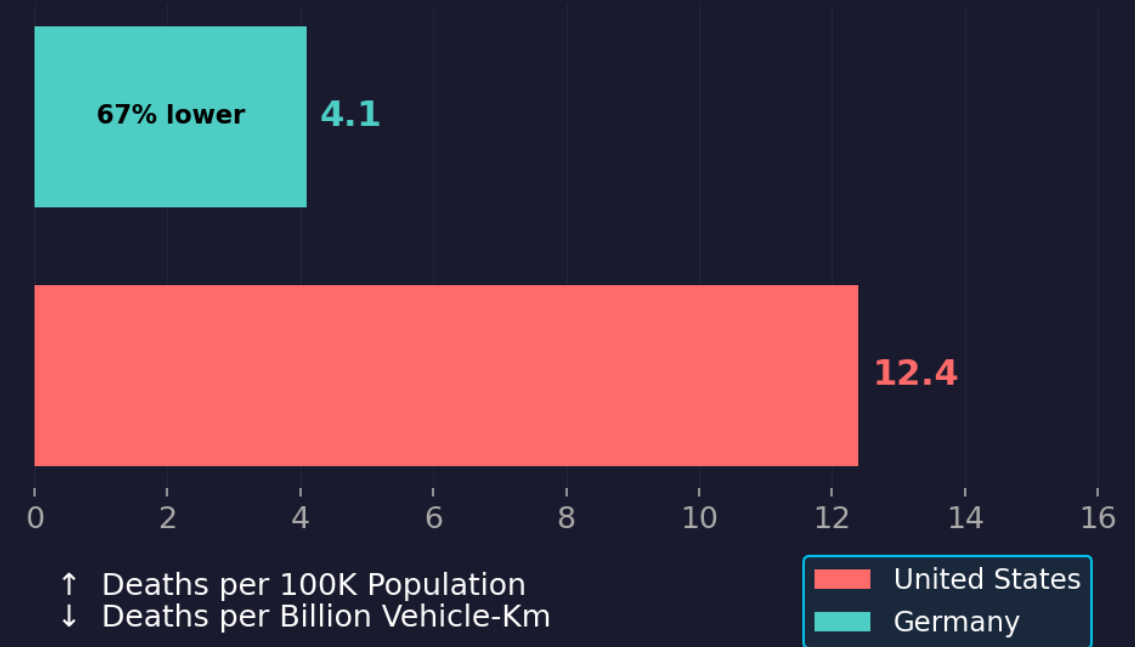
- Driver training — ~\$3,400 and 30-40 hours (vs ~\$937 / 6-10 hrs in US)
- Every vehicle passes a 150+ point inspection every 2 years; 1/3 of older cars fail
- Lane discipline — right-lane passing is illegal and enforced
- Roads are multi-layer concrete with immediate repair protocols

WHAT IT MEANS FOR YOU

- 40,000 Americans die in traffic crashes every year. Germany's standards would save tens of thousands
- Poor roads cost the average driver \$500-600/year in repairs (SF: \$1,049, DC: \$1,042, LA: \$921)
- Even on the Autobahn, average speed on unrestricted sections is ~88 mph. The real benefit is the standards

The Road With No Speed Limit Is Safer

Germany's Autobahn vs. US Interstates

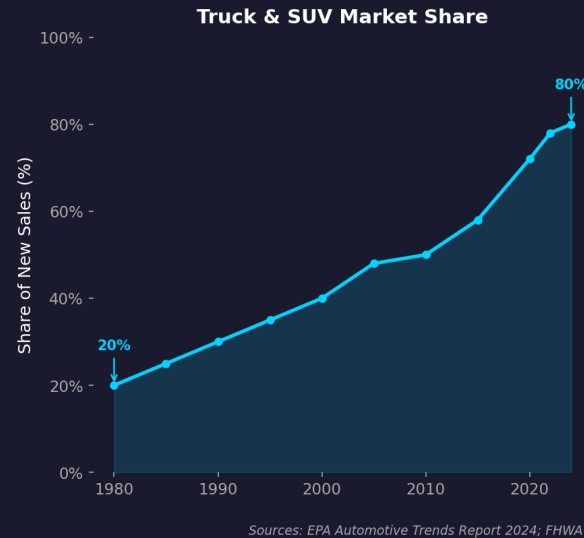
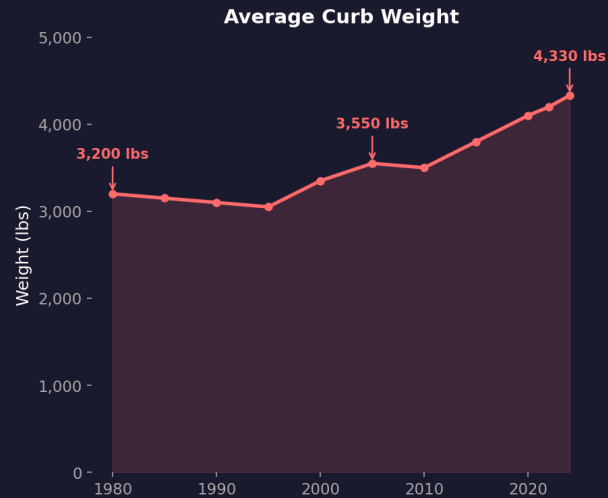


Source: ITF/OECD IRTAD Road Safety Report; WHO

VEHICLE WEIGHT — SAFETY

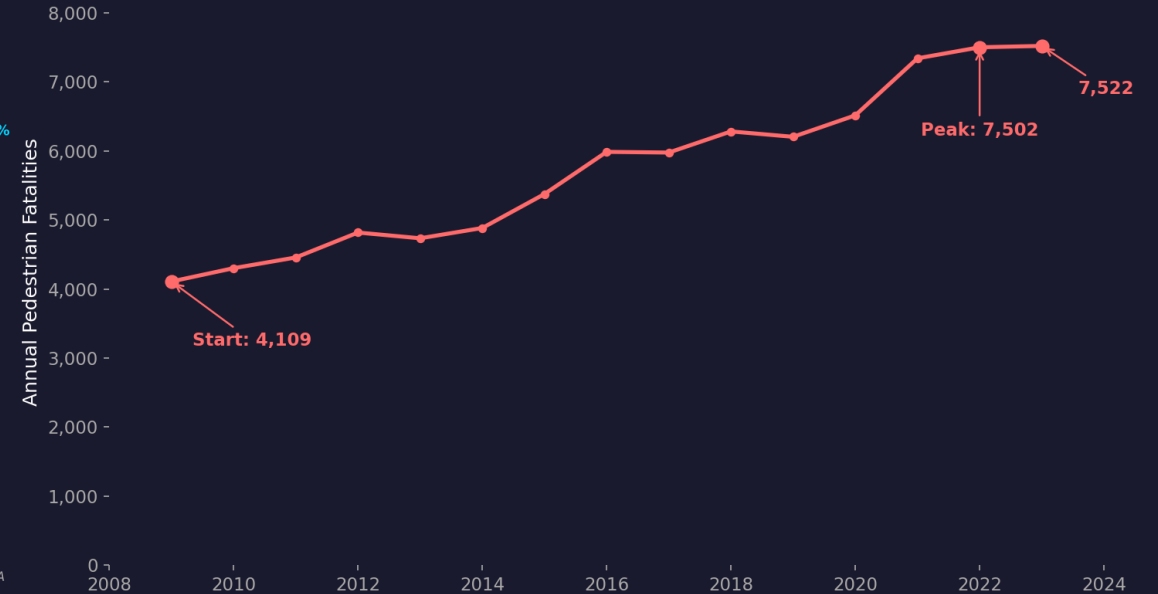
The problem:

Average New Vehicle Weight Has Surged



Pedestrian Deaths Have Surged 80%+ Since 2009

While total non-pedestrian traffic deaths rose only 13% over the same period



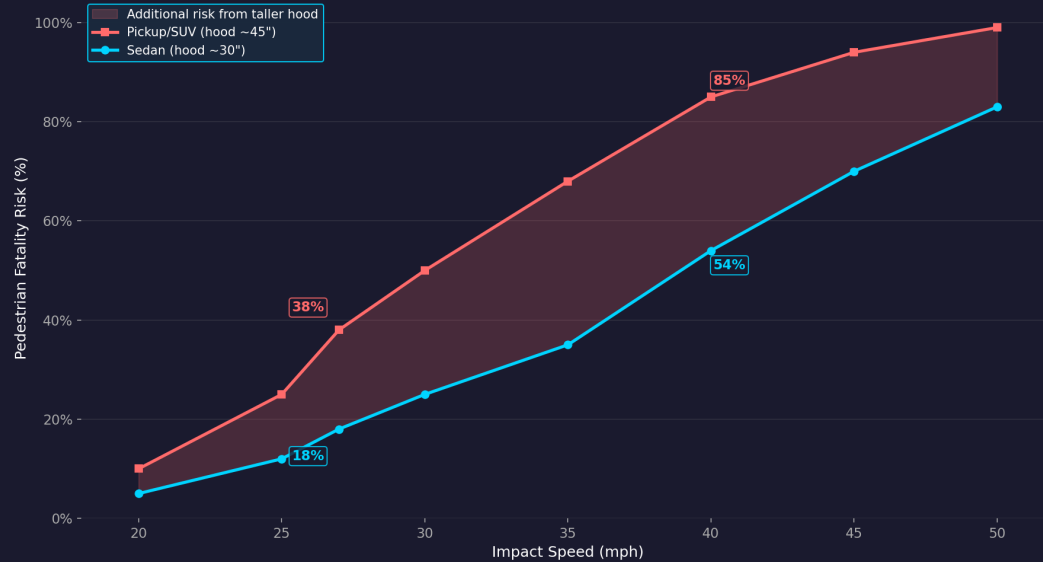
Source: NHTSA FARS

WHAT IT MEANS FOR YOU

- Most households pay nothing. Threshold: ~4,000-5,000 lbs (most sedans/small SUVs below it)
- \$500-600/year saved from better road conditions
- Fairness fix: sedan drivers currently subsidize road damage from 6,000-lb SUVs

VEHICLE WEIGHT — SAFETY

Taller Vehicles Kill More Pedestrians at Every Speed



Source: IIHS 2024; vehicles with hoods >40 inches are 45% more likely to kill pedestrians

The Fourth Power Law: Why Heavy Vehicles Destroy Roads

Road damage increases exponentially with vehicle weight



Source: AASHTO Road Test (1958); Federal Highway Administration

It's already happening:

- France has had a consumer vehicle weight tax since 2022
- Washington D.C. (2023) and Chicago adopted weight-based registration fees
- A coalition of GM, Toyota, Ford, and VW is pushing Congress for weight-based fees now

Policy: No tax below ~4,000-5,000 lbs. Progressive rate above. Separate EV formula (deduct battery weight). Work vehicle exemptions for contractors, farmers, tradespeople.

ADDITIONAL SOURCES

- Mariana Mazzucato Thinks We Need More Moonshots – Odd Lots
- Committee for a Responsible Federal Budget

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Questions?