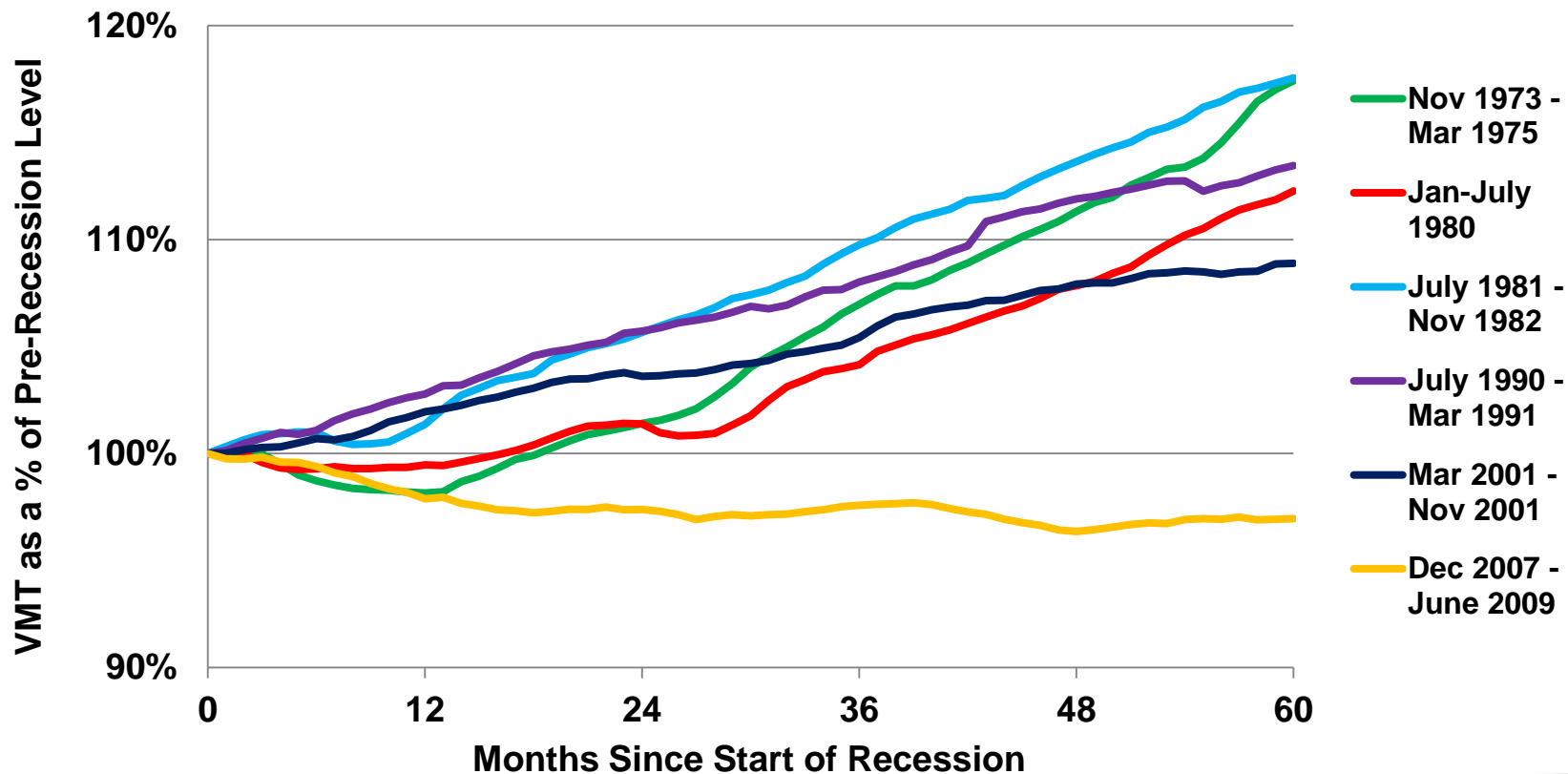
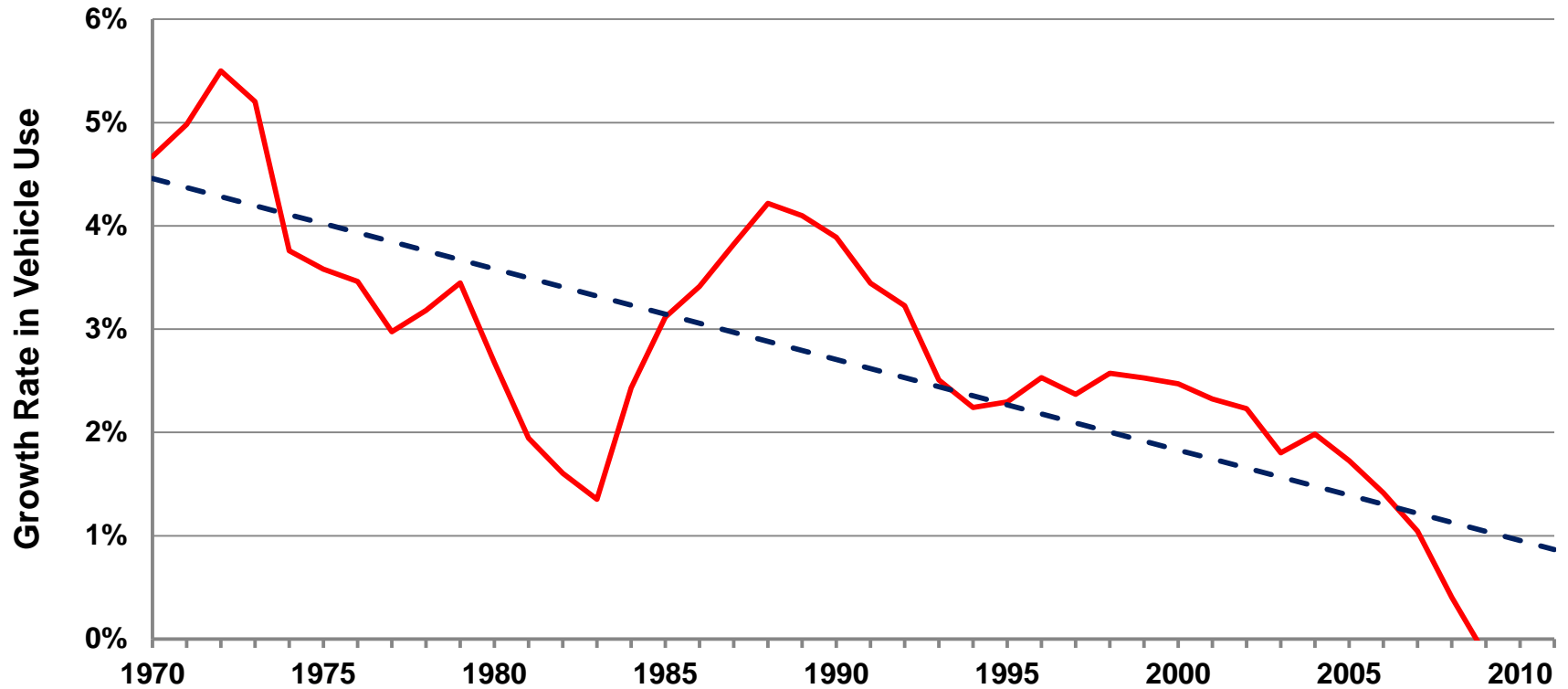


Here's What's New...



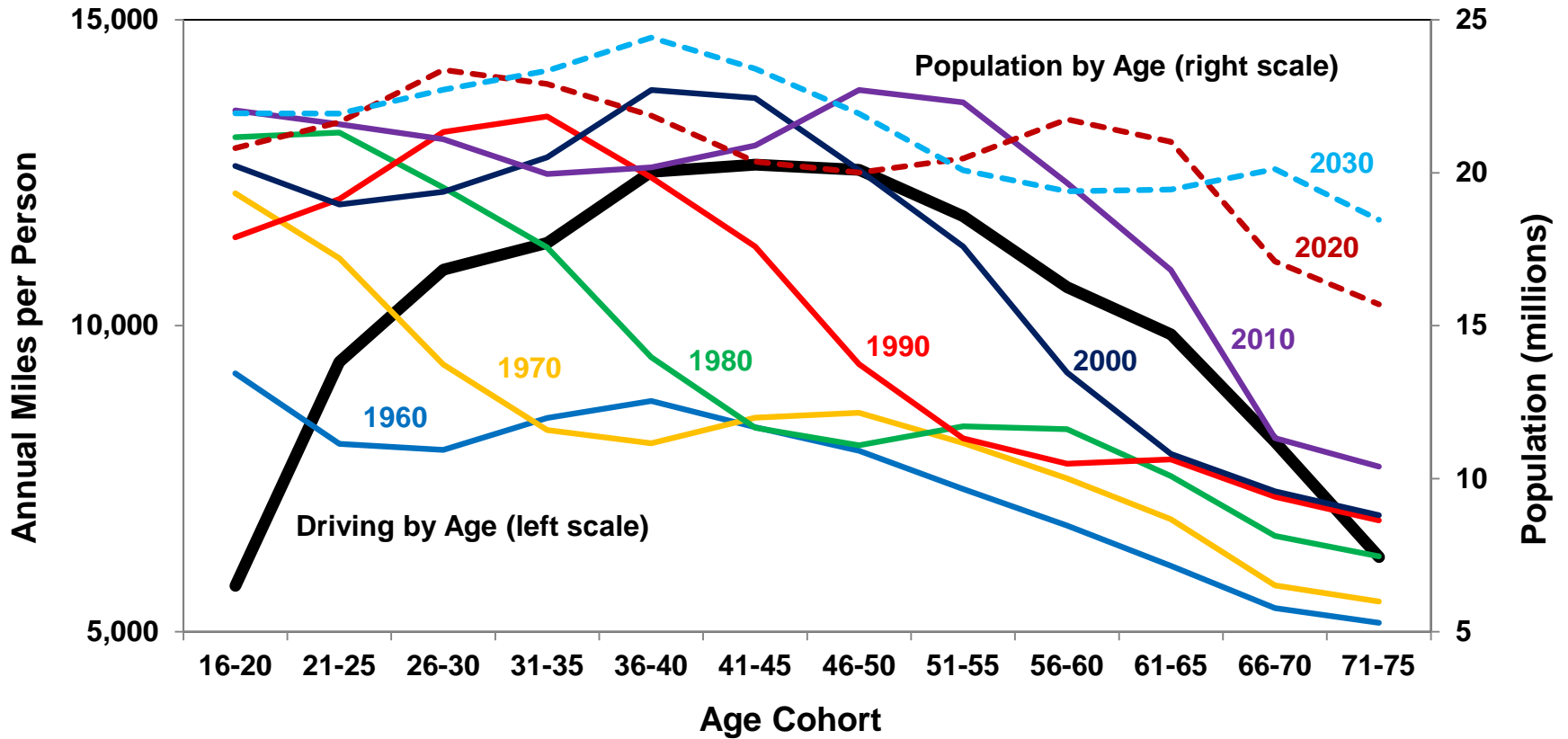
...but Here's What Isn't



A Perfect Storm?

- ❑ Decline in vehicle use since mid-2000s reflects the confluence of several major developments
 - Long-term demographic forces
 - Emerging economic challenges
 - Recent technological innovations
- ❑ Some slow-moving demographic trends reached critical thresholds starting about the year 2000
- ❑ Many economic challenges are recession-related, but others emerged well before it
- ❑ New technologies have improved enough to substitute for some travel
- ❑ It's early to say, but more fundamental changes in behavior may also be taking hold

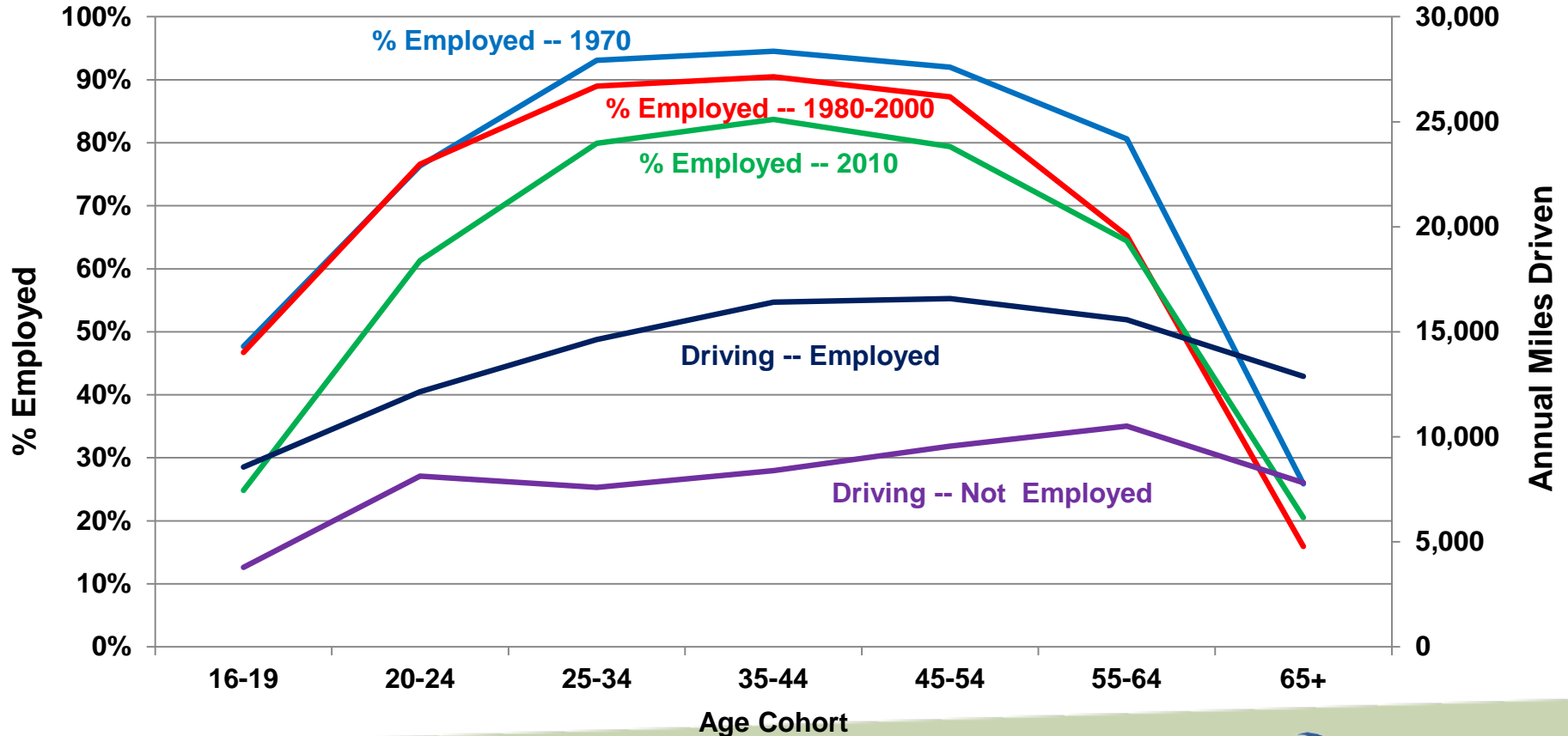
Baby Boom, Bust, and Echo



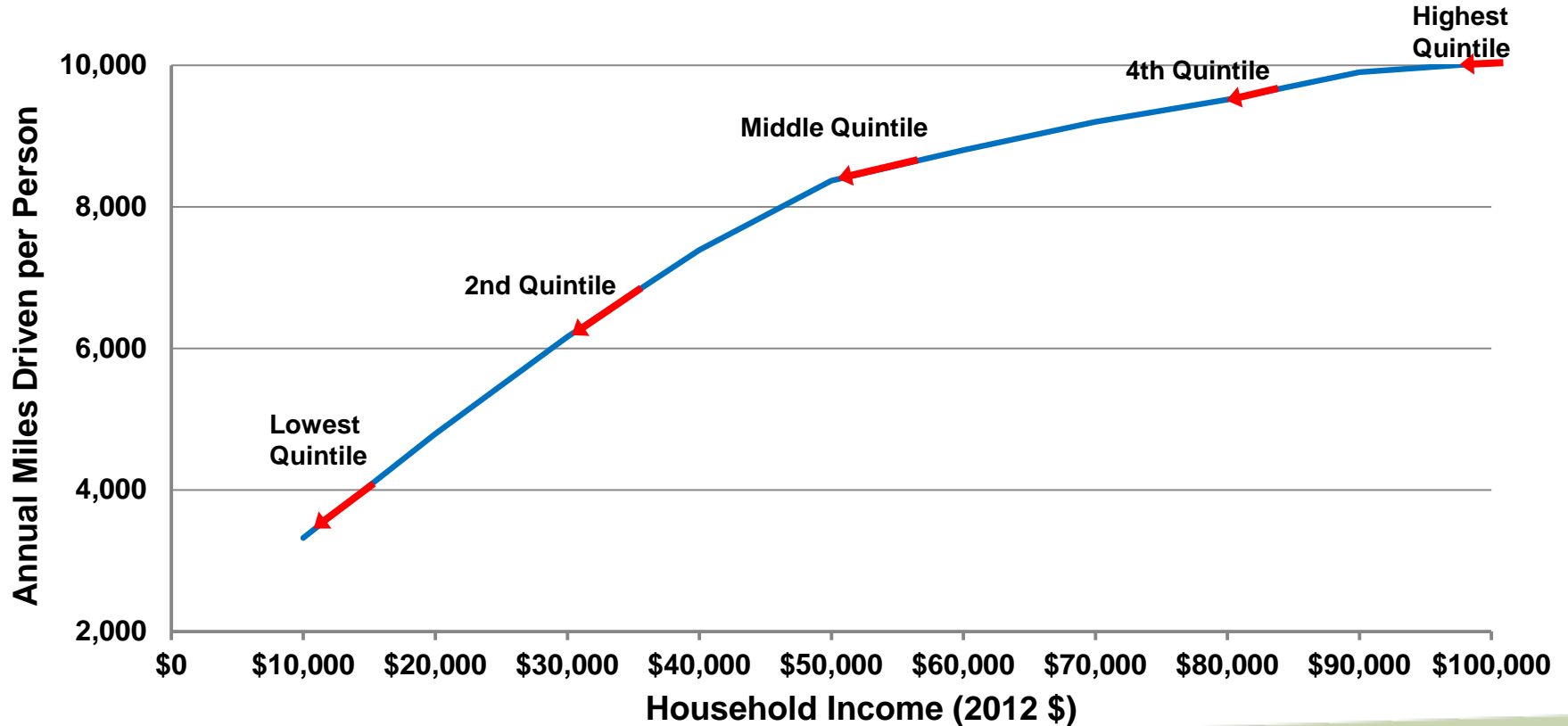
Jobs are “Catching Up” to Their Workers

Year	% of Workers		% of Jobs	
	Central City	Suburbs	Central City	Suburbs
1960	54%	46%	66%	34%
1970	46%	54%	57%	43%
1980	39%	61%	52%	48%
1990	35%	65%	51%	49%
2000	34%	66%	45%	55%

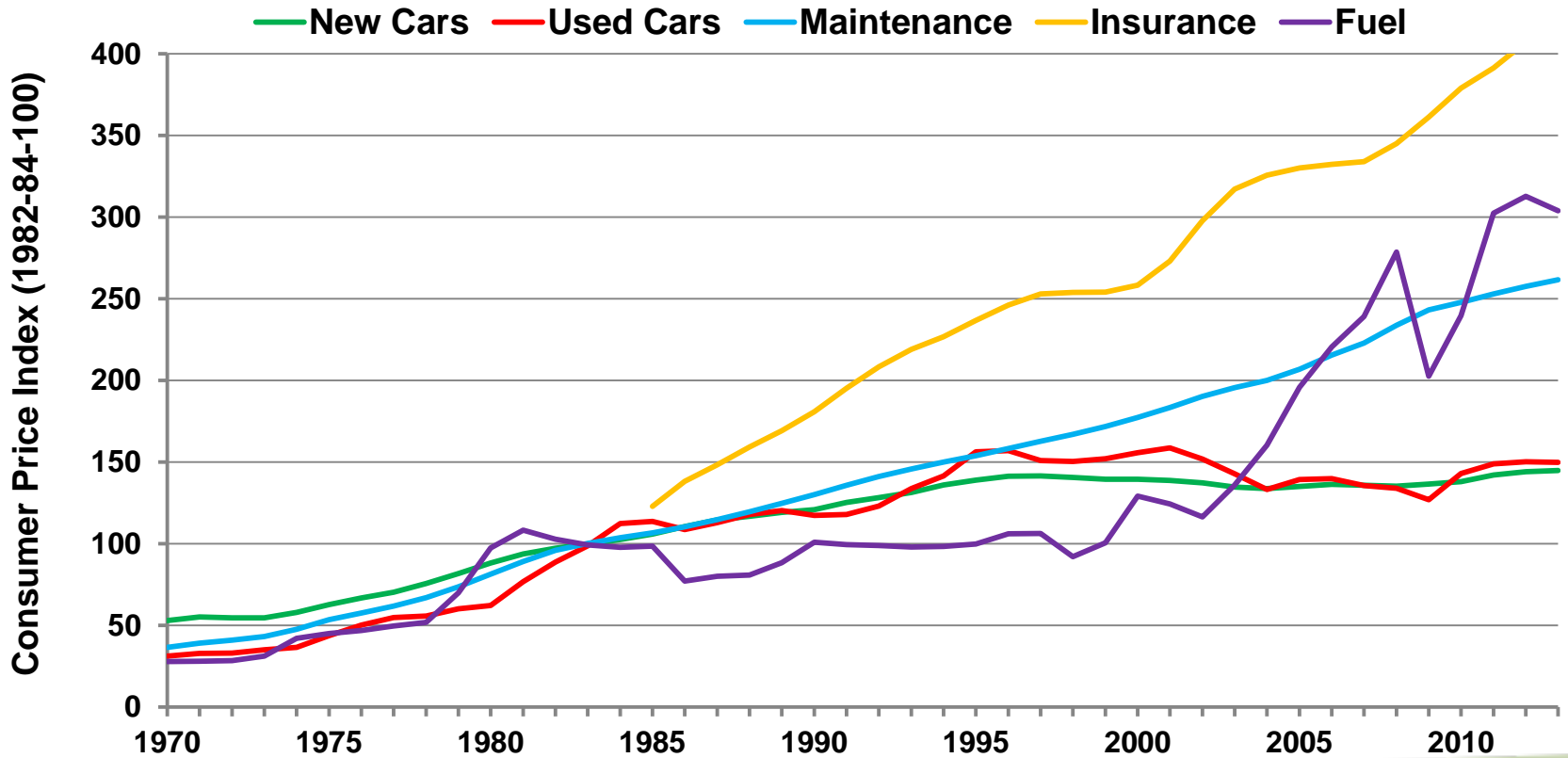
The Unemployed No Longer Drive to Work



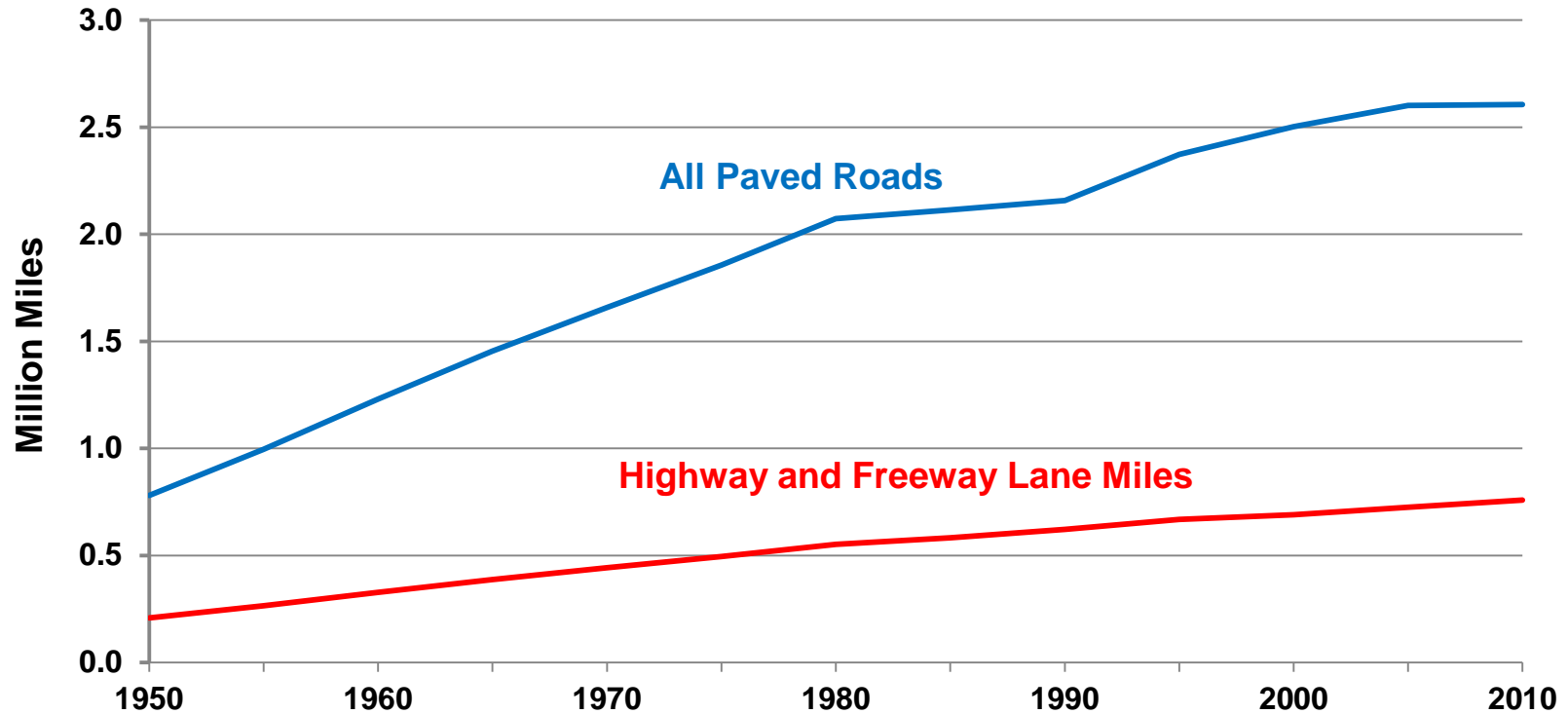
Income Losses Have Hit Hard



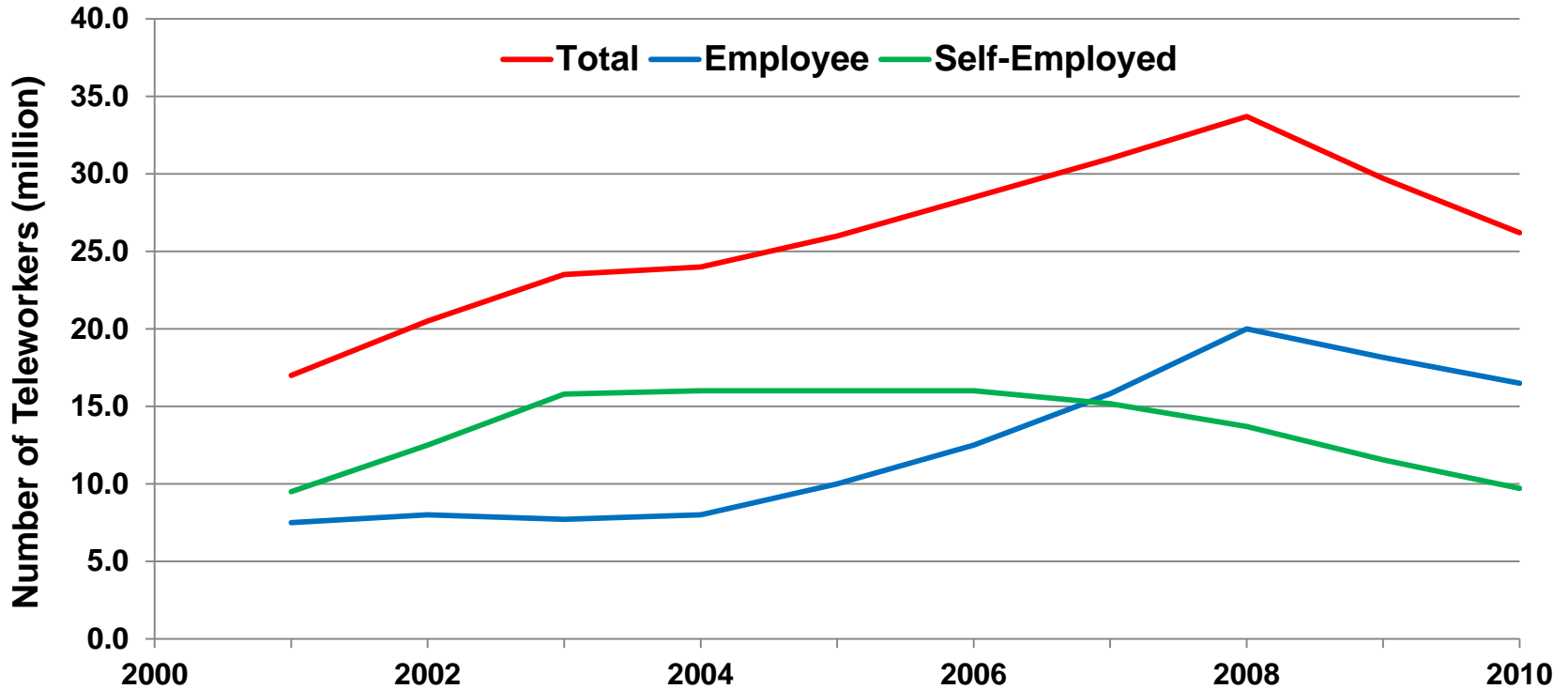
Driving is Getting Expensive



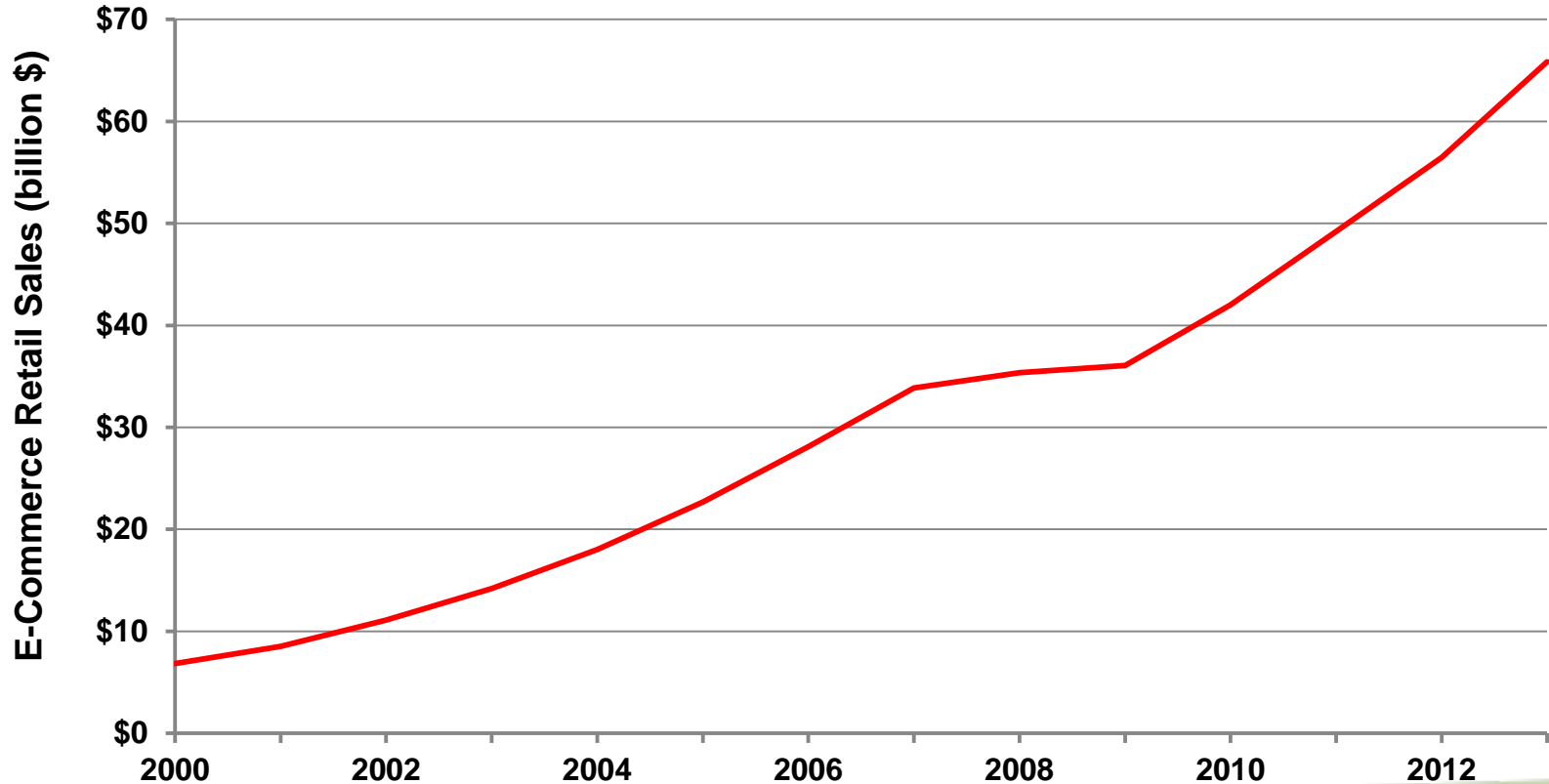
The “Highway Boom” Ended, Maybe



Teleworking Was Catching On, Until...



On-Line Retail is Exploding, but Still Small



New Travel Choices?

- ❑ Even if *all* new transit trips since 2005 were formerly made by auto drivers, increase in transit use “explains” at most 12% of decline in auto travel within urban areas
- ❑ Almost 60% of recent growth in transit use has been in New York, where auto use barely declined
- ❑ Data aren’t ideal, but increases in bicycle and walk trips can only account for only another 1-2% of decline in driving

So Where Are We Headed?

- ❑ We're already seeing a “bump” in vehicle use as the economy recovers, but it's very tentative
- ❑ Almost everything points to much slower growth in auto use
 - Likely to converge toward the rate of population growth
 - But this was well underway before the recession
- ❑ Truck use is likely to grow somewhat faster
- ❑ Its effects – on energy consumption, emissions, economic activity, and pavement wear – are disproportionate

Wild Cards

❑ Car sharing

- Do short-term rentals (Zipcar, etc.) increase or reduce overall driving ?
- Will Uber-type services draw from other modes, or just taxis?
- Will car “lending” ever really happen?

❑ Autonomous (“self-driving”) vehicles

- Will people send them on errands all day?
- Could they revive carpooling?

❑ Decline in labor force participation

- How much of it was just the recession, and how much is permanent?
- Will it permanently decline among women, too?