

# Executive Abstract: AI Labor-Market Tail Risk and Historical Comparison

Condensed from the agency tail-risk report and historical comparison memo.

**Bottom line.** Under the extreme plausible AI case, the United States faces a structural labor-market event rather than a normal recession: recession-scale unemployment, a larger and rising support population, falling labor-force participation, and materially weaker reabsorption into stable work. The policy planning problem is therefore not a temporary spike; it is persistent caseloads.

Relative to the February 2026 BLS baseline of 4.4% unemployment and 62.0% labor-force participation, the extreme plausible case implies a prolonged deterioration in labor-market attachment. It should be read as a program-sizing scenario, not as a conventional point forecast.

## WHAT THE EXTREME PLAUSIBLE CASE MEANS IN PRACTICE

- Modeled support population reaches 31.8 million by 2035 and 40.1 million by 2040. In this work, support population means the combined stock of AI-linked unemployed, underemployed, and labor-force-detached workers who may require public support.
- Official unemployment rises to 10.1% in 2035, peaks at 10.6% in 2037, and is still 10.1% in 2040. The problem does not normalize within the planning horizon.
- Labor-force participation falls to 55.2% by 2035 and 51.4% by 2040, indicating that a growing share of displaced workers disappear from headline unemployment rather than returning to stable jobs.
- AI-linked long-term unemployment reaches about 6.0 million by 2035 and remains above 5.1 million in 2040, implying a large population that may need durable income, training, health, and household-support interventions.
- Wage pressure spreads beyond directly automated jobs. By 2035, modeled wage levels in remaining human-employable work are about 21% below the reference path in low-barrier tasks, 15% below in mid-barrier tasks, and 6% below in high-barrier tasks.

## WHY THIS IS NOT A NORMAL RECESSION CASE

Past U.S. labor-market peaks were severe but cyclical. They were followed by reabsorption as demand recovered, firms rehired, and participation stabilized or improved. The AI tail-risk case is different because three forces can operate at the same time: continued task destruction, repeated redisplacement as model capability improves, and wage compression as displaced workers crowd into the remaining human tasks. In that setting, even a stable unemployment rate can mask worsening total support needs.

## EXTREME-CASE PLANNING CHECKPOINTS

Metric	2035	2037 peak	2040
Official unemployment rate	10.1%	10.6%	10.1%
Support population	31.8m	37.6m	40.1m
Labor-force participation rate	55.2%	53.2%	51.4%
AI long-term unemployed	6.0m	6.2m	5.2m

**Interpretation:** the headline unemployment rate stops worsening after the peak, but the broader support burden keeps rising because detachment and underemployment continue to build.

## HISTORICAL BENCHMARK: SEVERE ON UNEMPLOYMENT, WORSE ON PERSISTENCE

The historical comparison is the core policy message. On headline unemployment alone, the extreme AI case resembles past recession peaks. On support population, participation, and persistence, it is structurally worse because elevated burden remains in place instead of being reabsorbed within two to five years.

Episode	Peak U	Support pop*	LFPR	What happened next
1982 peak (Dec 1982)	10.8%	n/a	64.1%	Unemployment fell to 7.3% after 2 years and 5.7% after 5 years.
Great Recession (Oct 2009 / Apr 2010)	10.0%	26.9m	65.0%	Slow but clear reabsorption; unemployment fell to 8.8% after 2 years and 5.7% after 5 years.
Pandemic shock (Apr 2020)	14.8%	36.2m	60.1%	Exceptionally sharp spike followed by rapid rebound; unemployment was 3.7% after 2 years.
Extreme AI case (2035)	10.1%	31.8m	55.2%	Caseload already above the Great Recession proxy while participation is much lower and support needs are still rising.
Extreme AI case (2040)	10.1%	40.1m	51.4%	Support burden exceeds the pandemic proxy even though unemployment is below the April 2020 spike; no meaningful reabsorption by horizon end.

\* Historical support population is a broad proxy: unemployed + involuntary part-time + marginally attached workers. The scenario support population is a model-based count of AI-linked unemployed, underemployed, and detached workers. The measures are not identical, but they are useful for policy sizing and burden comparison.

## POLICY IMPLICATIONS FOR EXECUTIVE PLANNING

- Plan around stocks, not just rates. A 10% unemployment rate understates the number of households that may need support if millions more are detached or stuck in worse jobs.
- Assume persistence. Historical policy playbooks were built around temporary emergency support during cyclical downturns. The extreme AI case requires the agency to consider multi-year or durable support structures.
- Do not rely on retraining alone. If reabsorption is weak and displacement continues, training without job creation, subsidized employment, wage support, or demand-side measures will leave large caseloads unresolved.
- Track the right leading indicators: labor-force participation, involuntary part-time work, marginal attachment, long-term unemployment, and wage growth in lower-barrier work - not just the unemployment rate.

## EXECUTIVE TAKEAWAY

The agency should treat the extreme plausible AI case as a structural support-burden scenario: policy may need to absorb recession-scale unemployment plus a second tier of underemployment and labor-force withdrawal that persists instead of healing. The defining risk is not simply a bad labor-market year. It is a multi-year failure of reabsorption.

**Source basis:** distilled from the agency AI tail-risk report and historical comparison memo, anchored to BLS February 2026 labor-market data, BLS labor-force projections, FRED/BLS historical unemployment and participation series, and CBO historical reviews of temporary unemployment-support policy.