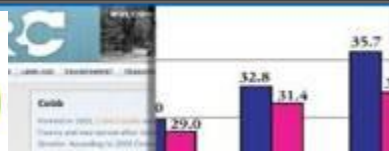
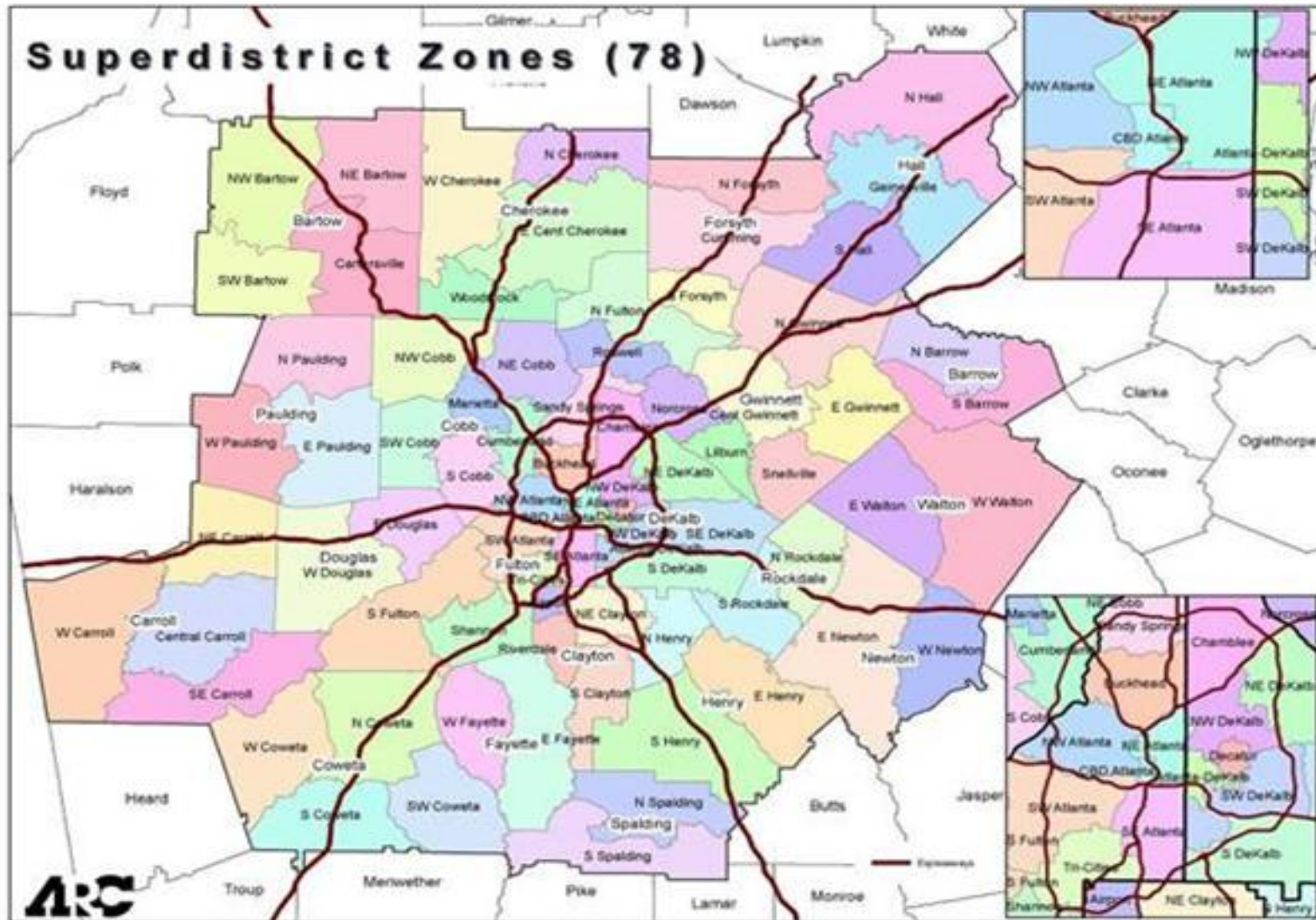




Implementing REMI at the ARC MPO Modeling Webinar January 25, 2011



Regional Forecast Area



ISSUES ADDRESSED

➤ Problems with REMI standard

- Too many jobs and people, led to TAC 1 calibration
- National GDP too high, led to recessionary adjustment

➤ Problem with Migration - Scenario #1

- Net migration too low, led to TAC 2 calibration

➤ Problem with Outliers - Scenario #2

- Hispanic fertility held at historical levels; convergence needed
- Educ . Svcs and Local Govt adjustment needed to continue



CALIBRATIONS & POLICY VARIABLES

- **Decreased the Gross Domestic Product**
 - Indicate a longer recession [2009-2011]
- **Included ARC's employment estimates**
 - Net effect reduction in jobs from standard [All years]
- **Increased the labor force participation rates**
 - Applied BLS participation rates [All years]
- **Increased Economic Migration: all years**
- **Decreased International Migration: all years**



CALIBRATIONS & POLICY VARIABLES

➤ Decreased the Hispanic Fertility Rates

- Assumptions of increased educational attainment and income levels in later generations; adjustments 2015-40
- Converging towards mean, but highest rates among all races and ethnicities

➤ 'Smoothed' ARC sector job adjustments

- Moved public education jobs from Local Government (Pub Admin in REMI) to Educational Services to match ARC ES-202
- Continued through to 2040 (end of forecast period)



HOW THEY MEASURE UP

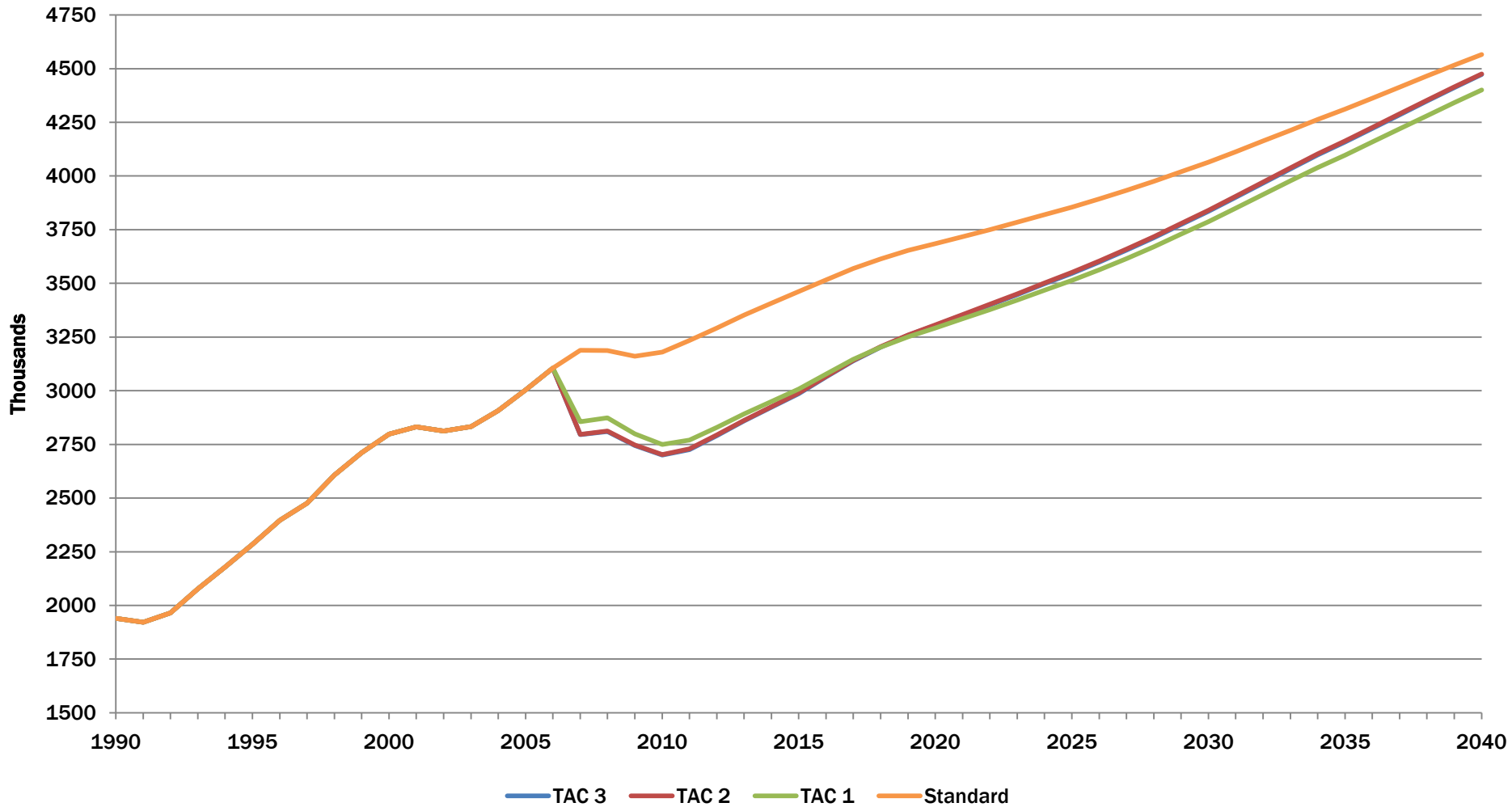
- **REMI standard vs. TAC 1 vs. TAC 2 vs. TAC 3**
 - Demographic changes
 - Economic impacts

- **Reasonableness of calibrations to the model**
 - Review of population, employment comparisons
 - Feedback on the adjustments to fertility rates
 - Review employment by sector



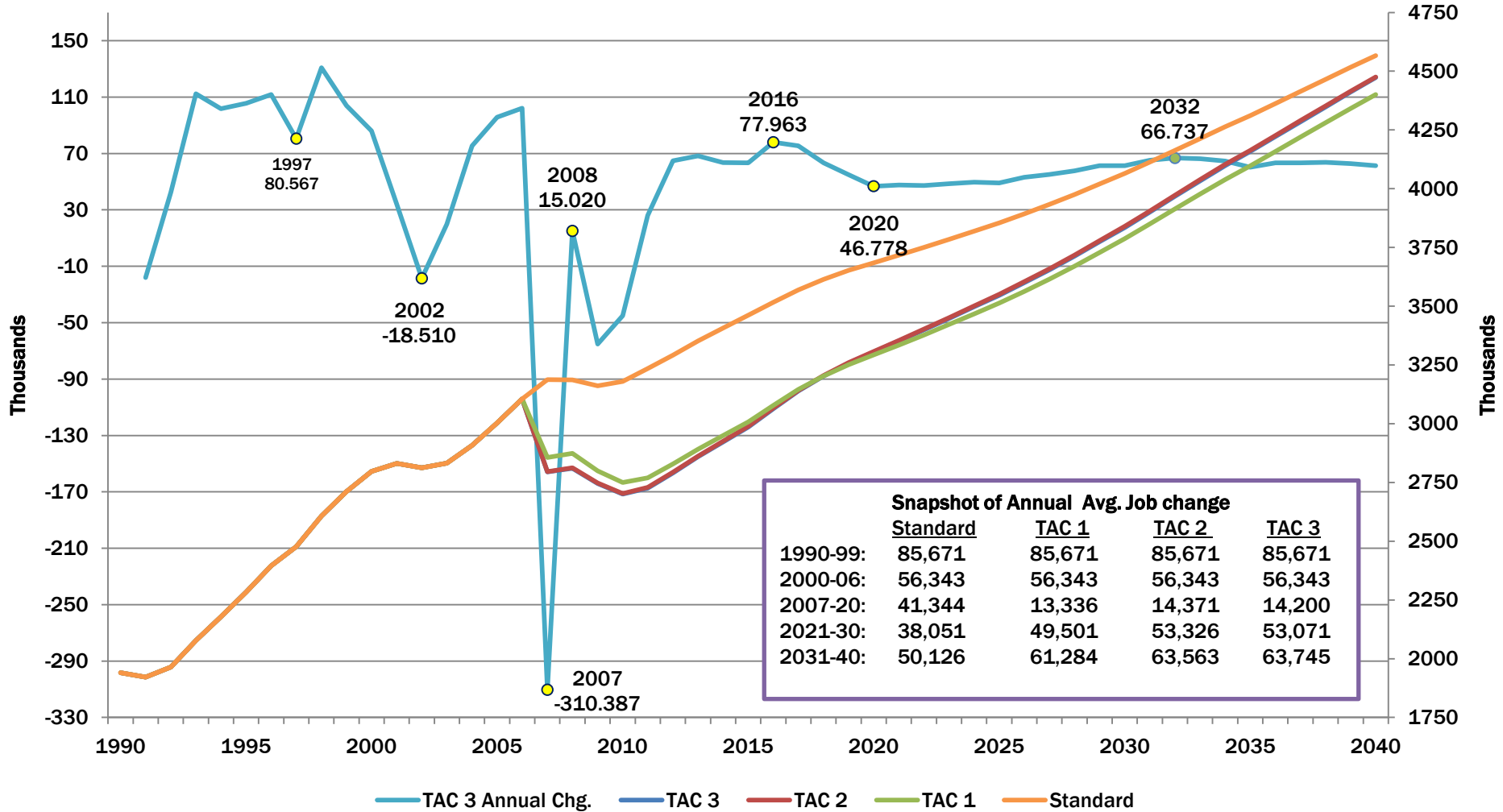
EMPLOYMENT COMPARISON

Total Employment



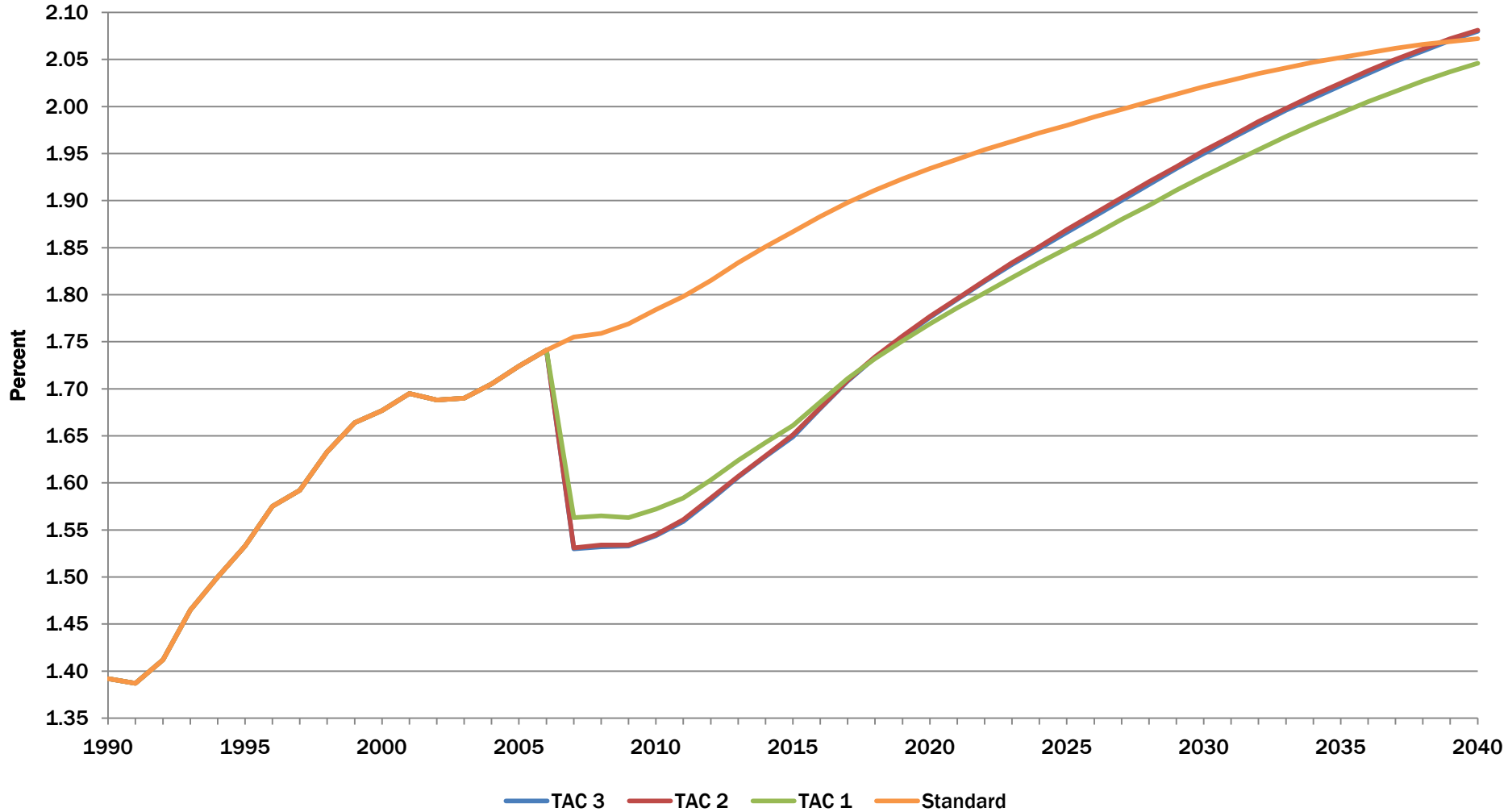
EMPLOYMENT CHANGE

Total Employment Comparison



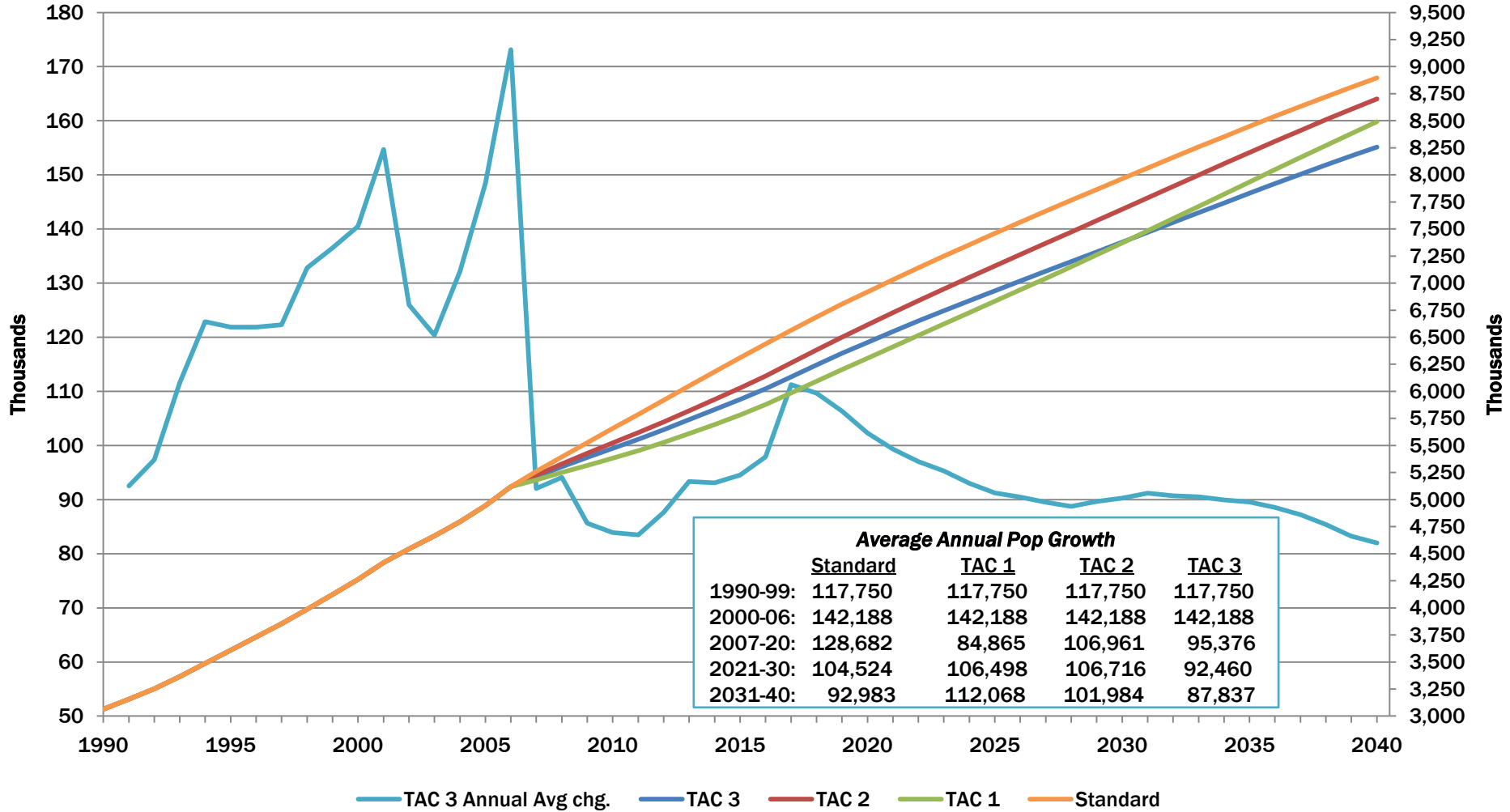
RELATIVE EMPLOYMENT

Pct. Of National Employment



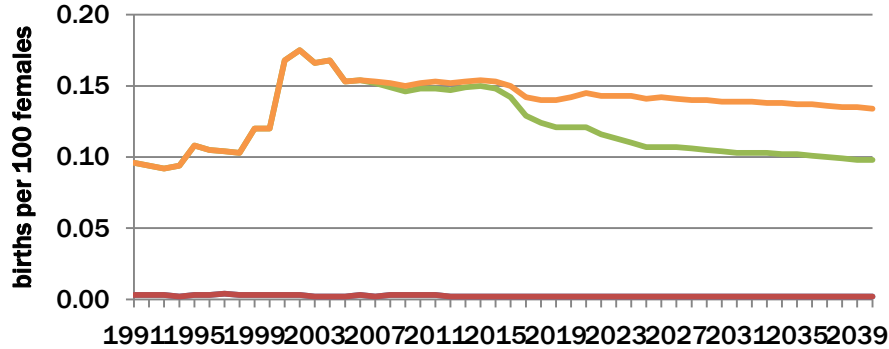
POPULATION COMPARISON

Total Population



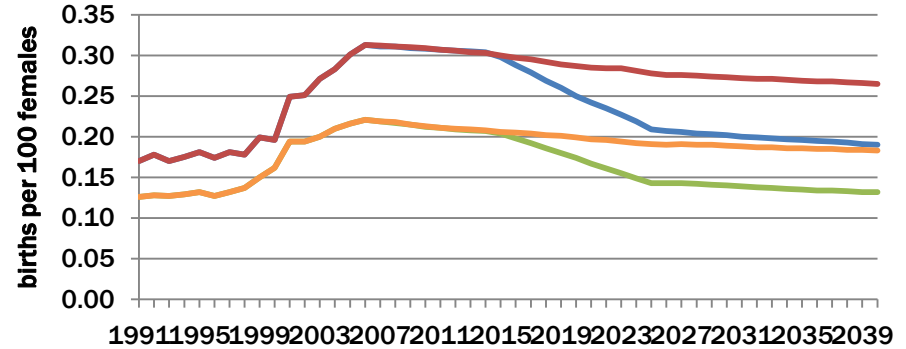
HISPANIC BIRTH RATES

Ages 10-19



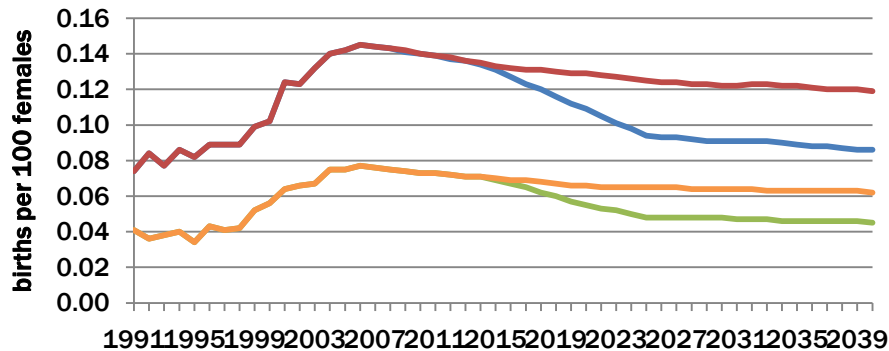
— TAC 3: Age 10-14 — Standard: Age 10-14
— TAC 3: Age 15-19 — Standard: Age 15-19

Ages 20-29



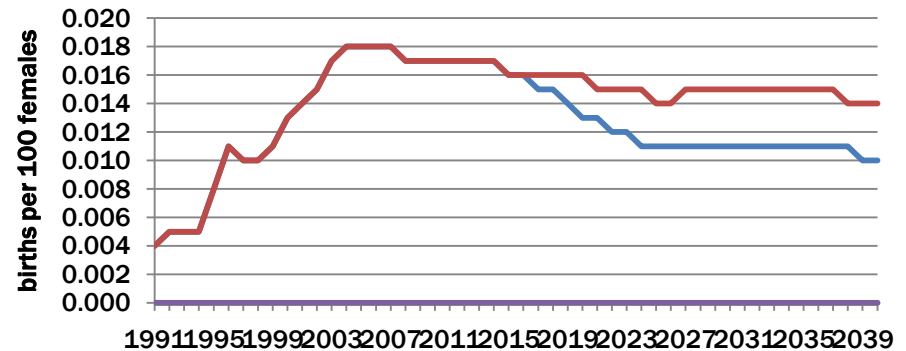
— TAC 3: Age 20-24 — Standard: Age 20-24
— TAC 3: Age 25-29 — Standard: Age 25-29

Ages 30-39



— TAC 3: Age 30-34 — Standard: Age 30-34
— TAC 3: Age 35-39 — Standard: Age 35-39

Ages 40-49

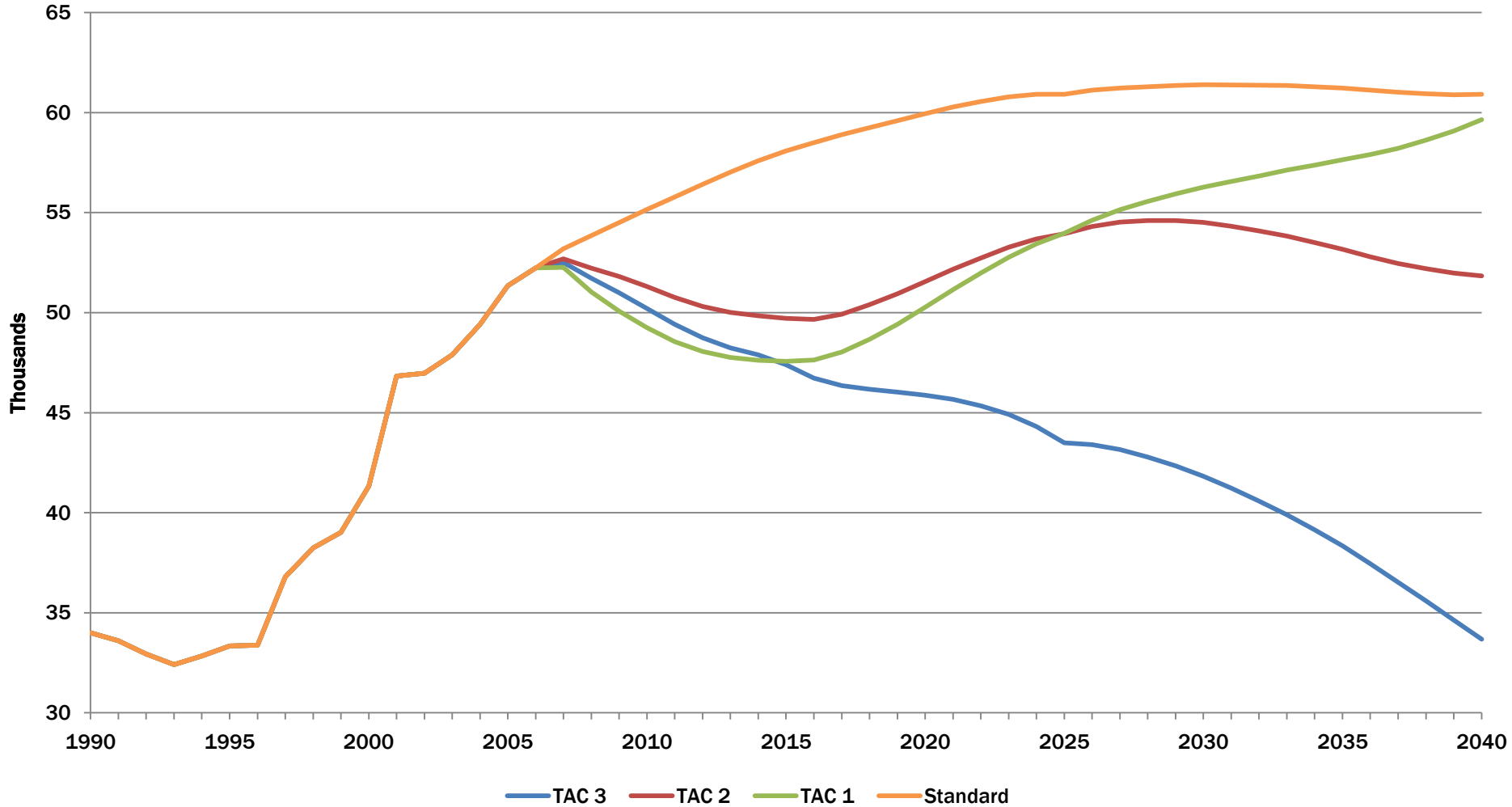


— TAC 3: Age 40-44 — Standard: Age 40-44
— TAC 3: Age 45-49 — Standard: Age 45-49



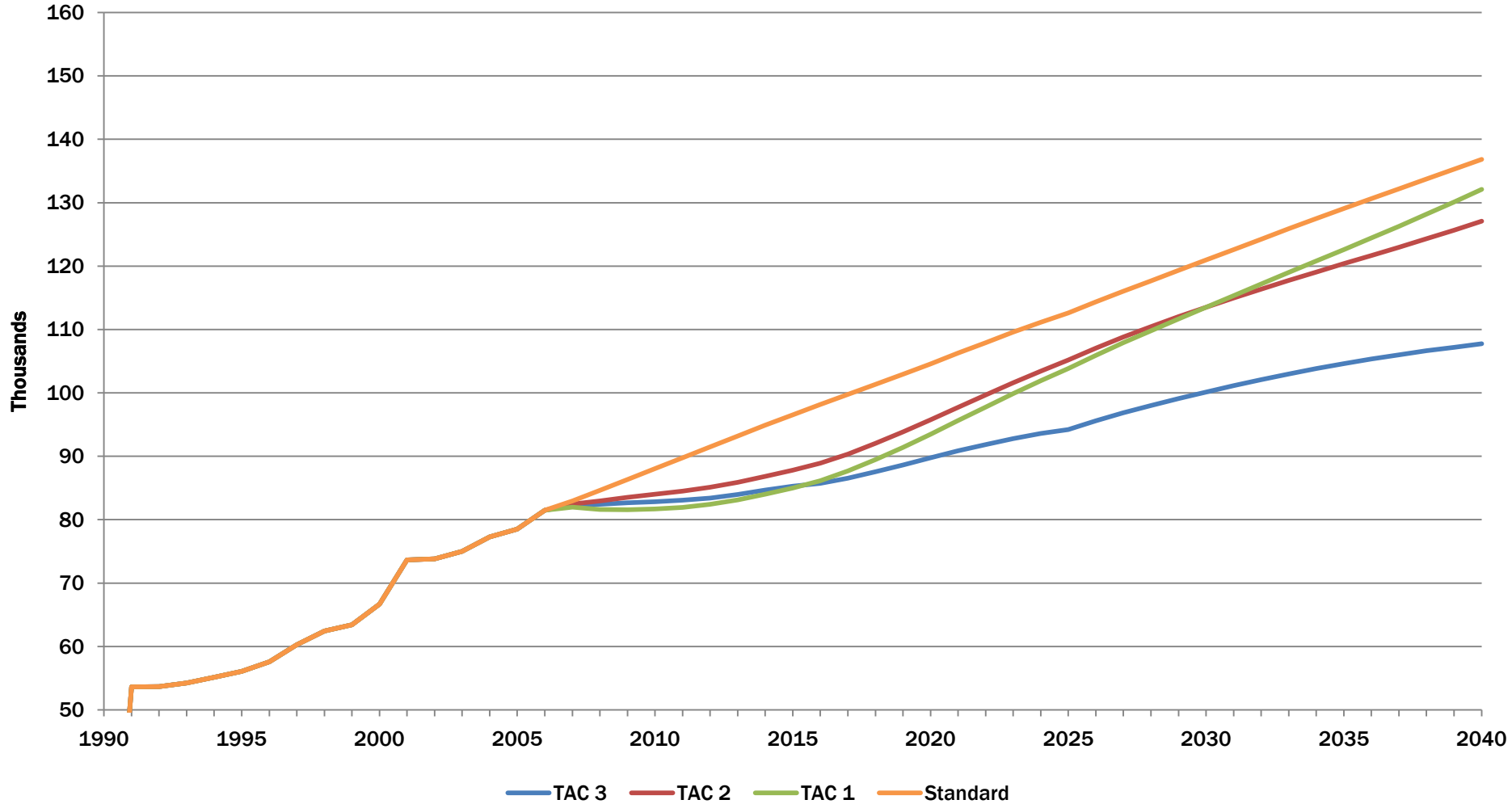
NATURAL CHANGE COMPARISON

All Race & Ethnicities



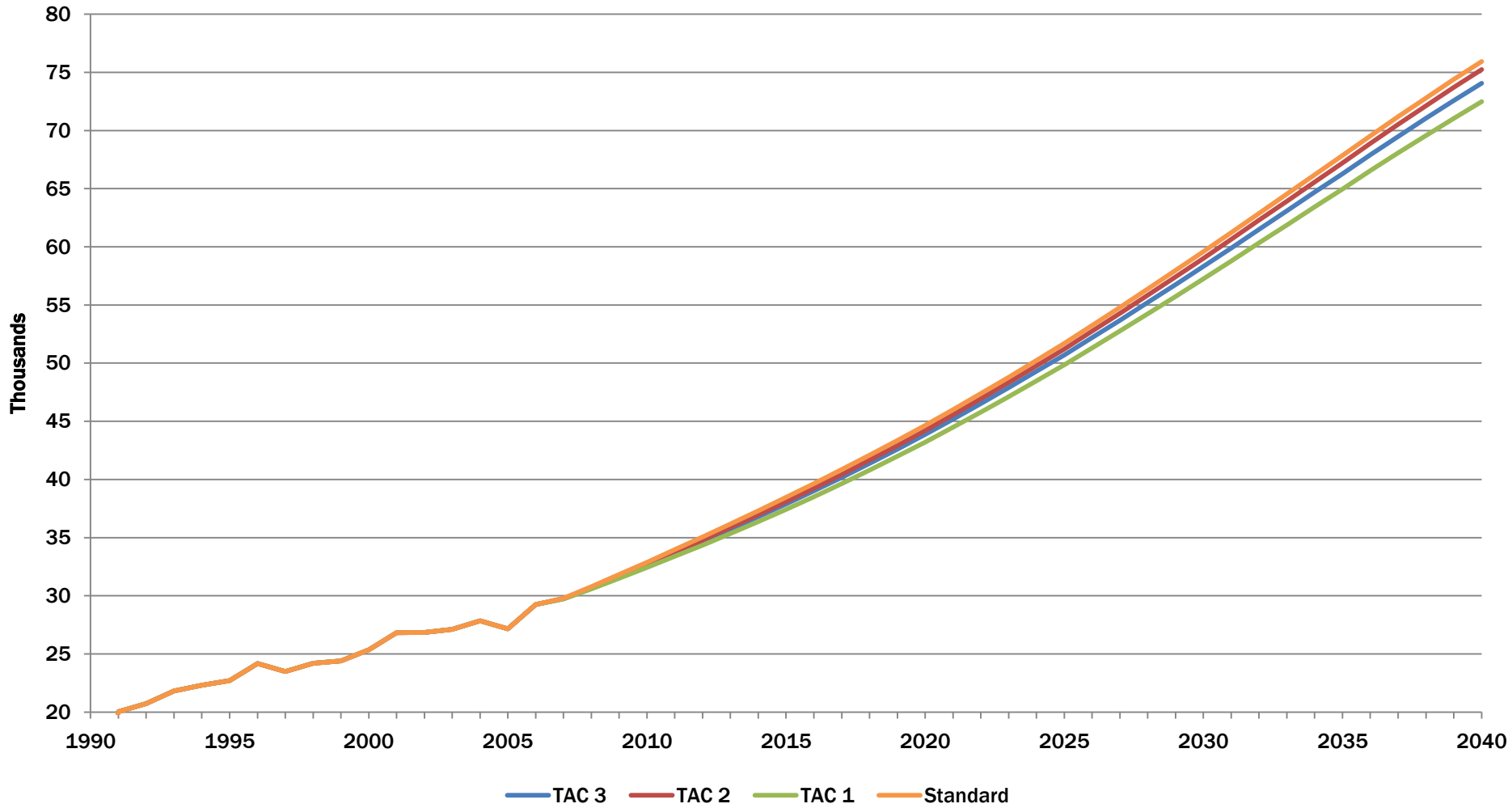
BIRTHS COMPARISON

All Race & Ethnicities



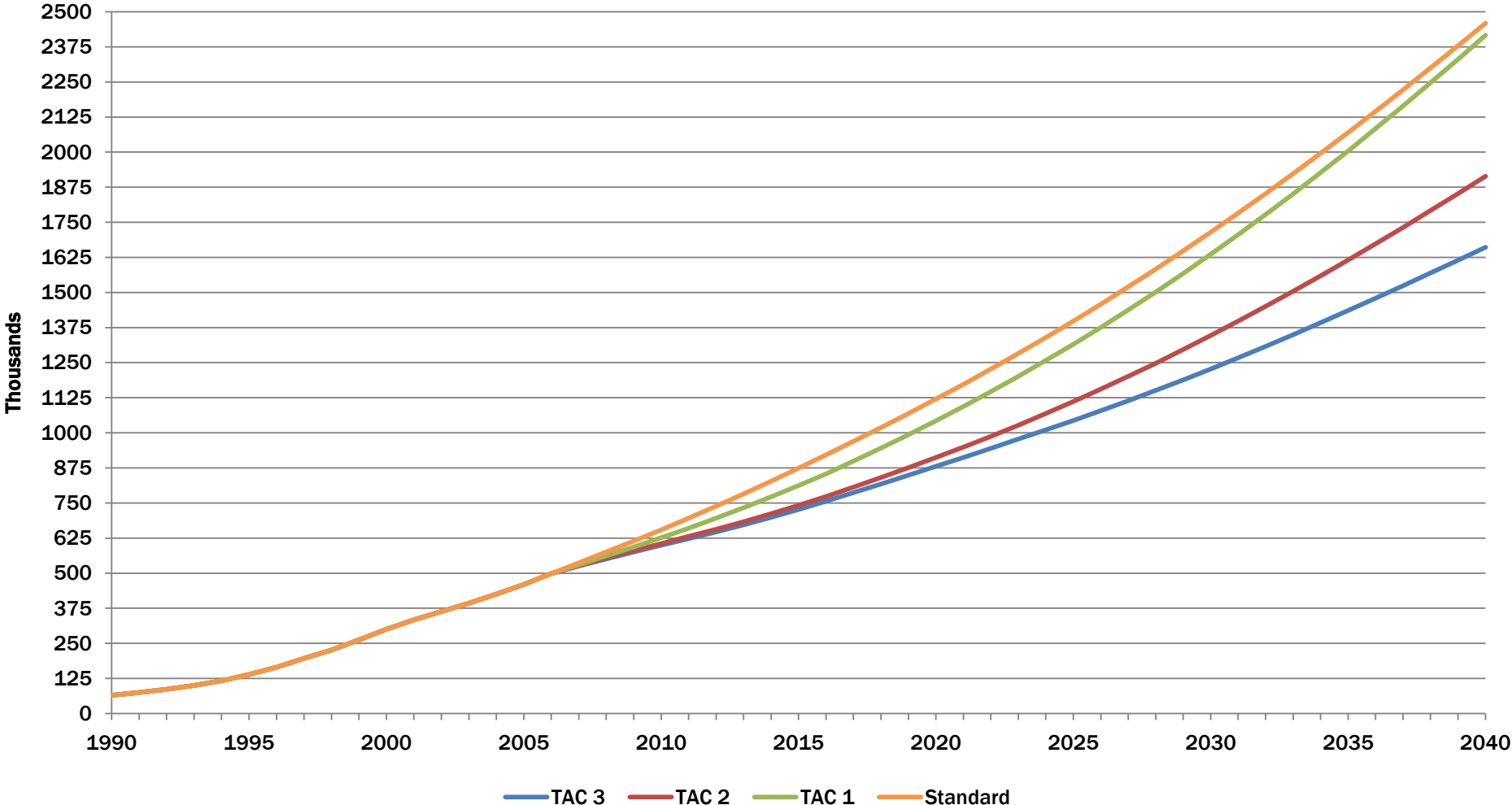
DEATHS COMPARISON

All Race & Ethnicities



RACE & ETHNICITY: TAC 3

Hispanic Population



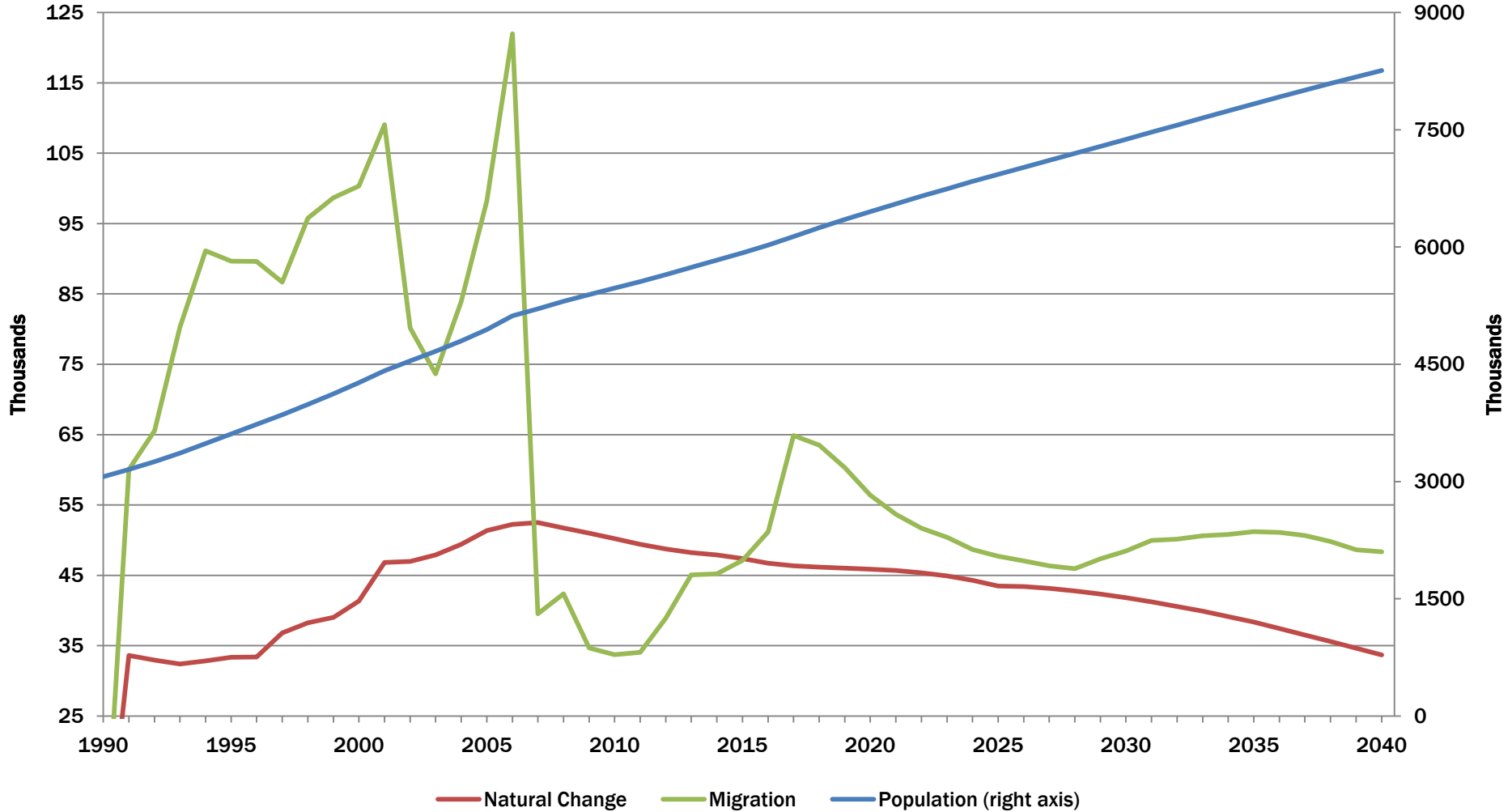
TAC 3 SUMMARY

- **As a result of the calibration/new policy variables**
 - **About 305k fewer people in the Atlanta Region in 2030, cf: TAC 2**
 - ❖ **Total population in 2030: 7,377,949**
 - **About 450k fewer people than TAC 2 scenario in 2040**
 - ❖ **Total population in 2040: 8,256,322**
 - **Since 2008, almost 52,000 jobs annually to 2040 in TAC 3**
 - ❖ **Compared to just over 51,000 in TAC 2 scenario**



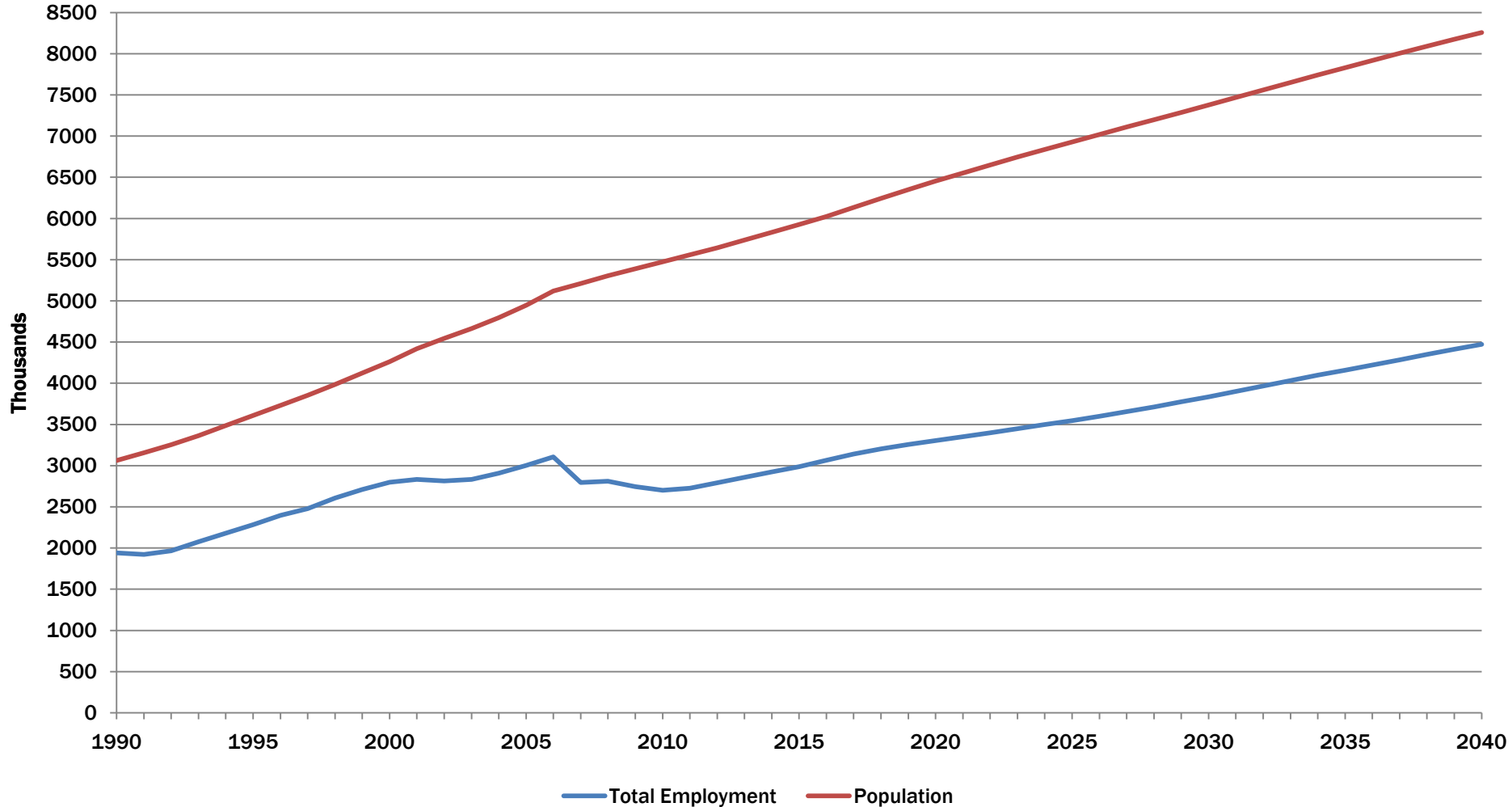
COMPONENTS OF GROWTH: TAC 3

Total Population



TAC 3 OVERVIEW

Components Summary



OTHER QUESTIONS OR COMMENTS



Next Steps

- **Website for ARC Forecasting:**
<http://www.atlantaregional.com/html/4220.aspx>
- **Assuming TAC agreement, draft Consensus Statement for TAC member signature**
- **Begin Disaggregation process (TAZ-D) to include jurisdictional outreach**



Background

Material presented at TAC Meeting 3



EMPLOYMENT ADJUSTMENTS

- Replaced REMI employment with ARC employment estimates
- Added proprietor jobs to ARC employment estimates
- Results in lower employment base and fewer jobs in the out years



EMPLOYMENT ADJUSTMENT

SUMMARY TABLE

NONEMPLOYER (PROPRIETORS) EMPLOYMENT

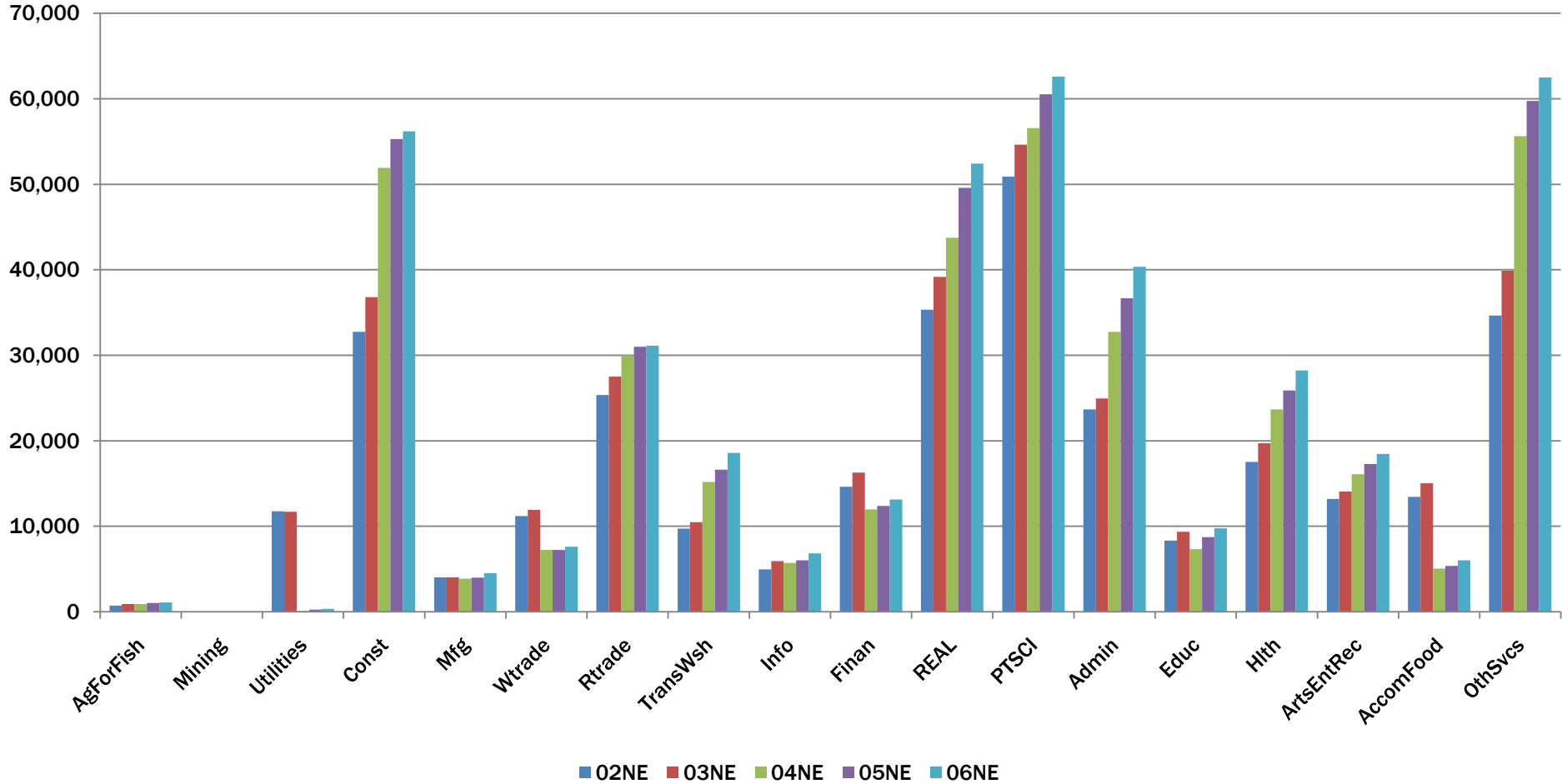
20-COUNTY AREA: 2002-2006

NAICS	Industry	02NE	03NE	04NE	05NE	06NE
11	AgForFish	726	919	904	1,041	1,095
21	Mining	12	12	11	33	34
22	Utilities	11,764	11,695	108	269	356
23	Const	32,737	36,799	51,924	55,281	56,205
31-33	Mfg	4,019	4,015	3,860	3,989	4,524
42	Wtrade	11,204	11,930	7,252	7,247	7,614
44-45	Rtrade	25,369	27,509	29,989	31,007	31,112
48-49	TransWsh	9,726	10,475	15,196	16,625	18,595
51	Info	4,978	5,944	5,712	6,037	6,839
52	Finan	14,625	16,268	11,969	12,389	13,136
53	REAL	35,340	39,163	43,764	49,568	52,410
54	PTSCI	50,890	54,638	56,566	60,522	62,598
56	Admin	23,668	24,946	32,752	36,680	40,340
61	Educ	8,333	9,350	7,336	8,740	9,776
62	Hlth	17,541	19,725	23,658	25,879	28,233
71	ArtsEntRec	13,198	14,069	16,109	17,284	18,458
72	AccomFood	13,454	15,038	5,054	5,374	6,028
81	OthSvcs	34,660	39,888	55,632	59,738	62,496
Total		312,244	342,383	367,796	397,703	419,849



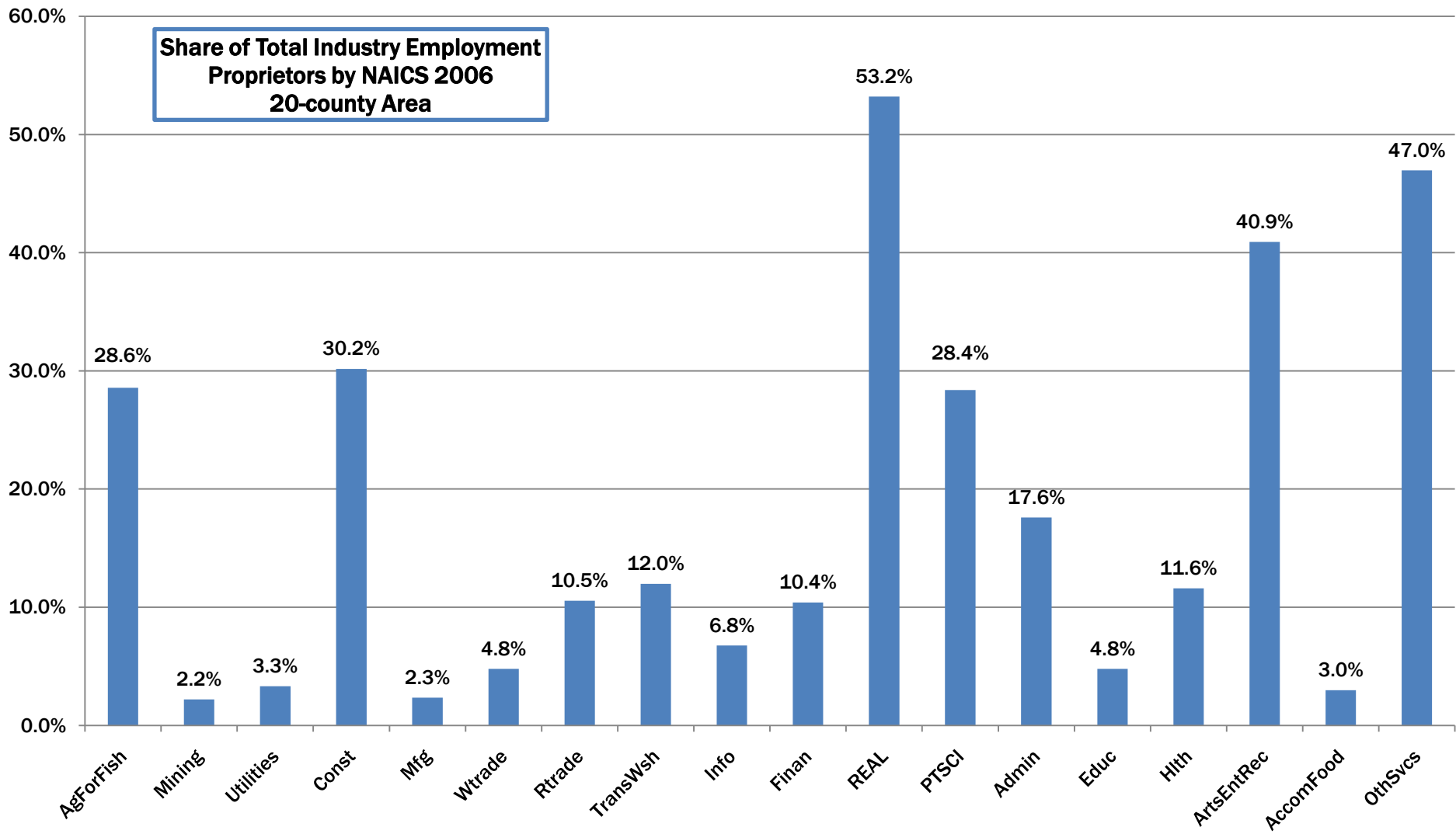
EMPLOYMENT ADJUSTMENT

Proprietors 2002-2006 20-county Area

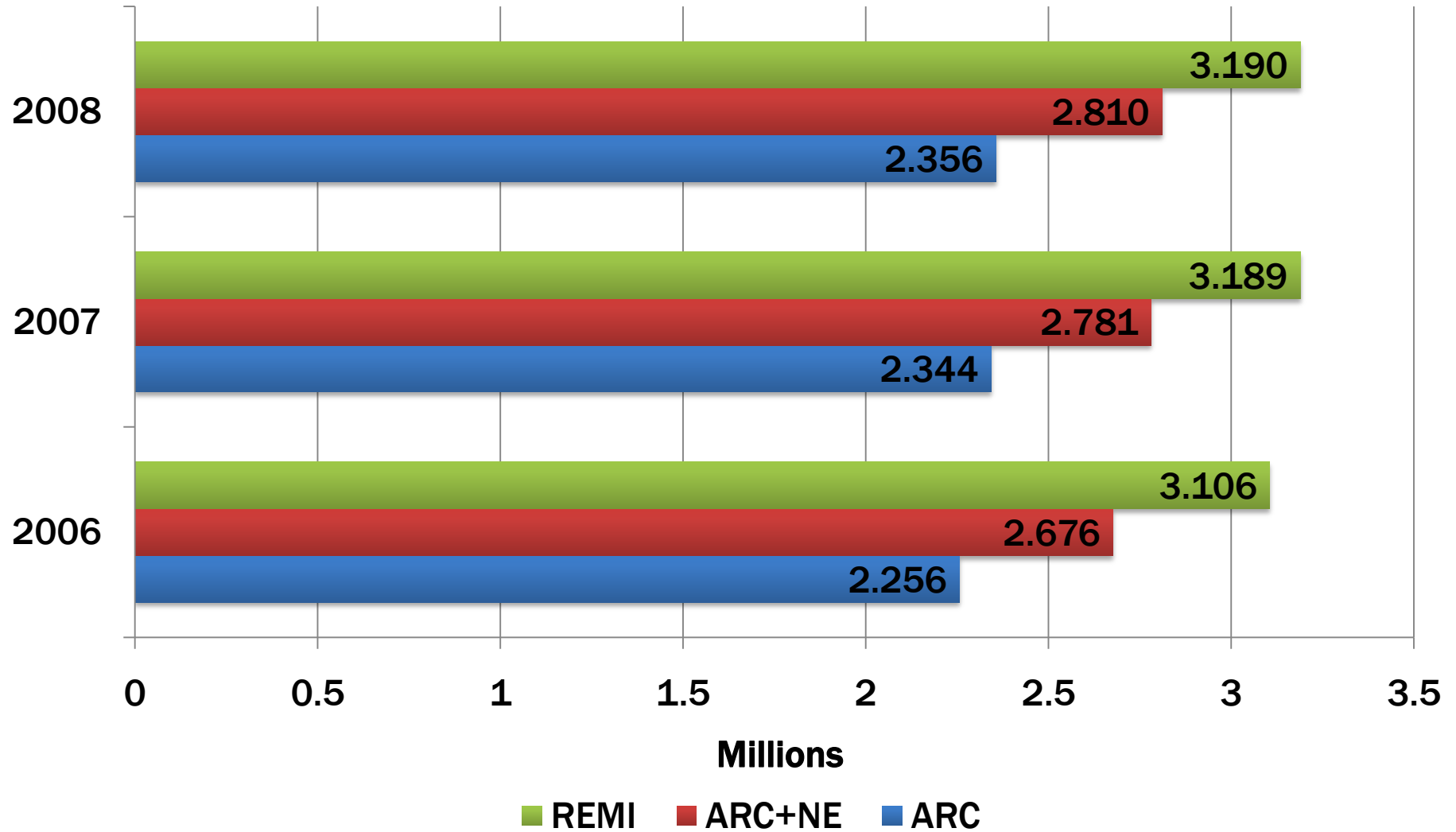


EMPLOYMENT ADJUSTMENT

Share of Total Industry Employment Proprietors by NAICS 2006 20-county Area



EMPLOYMENT ADJUSTMENT



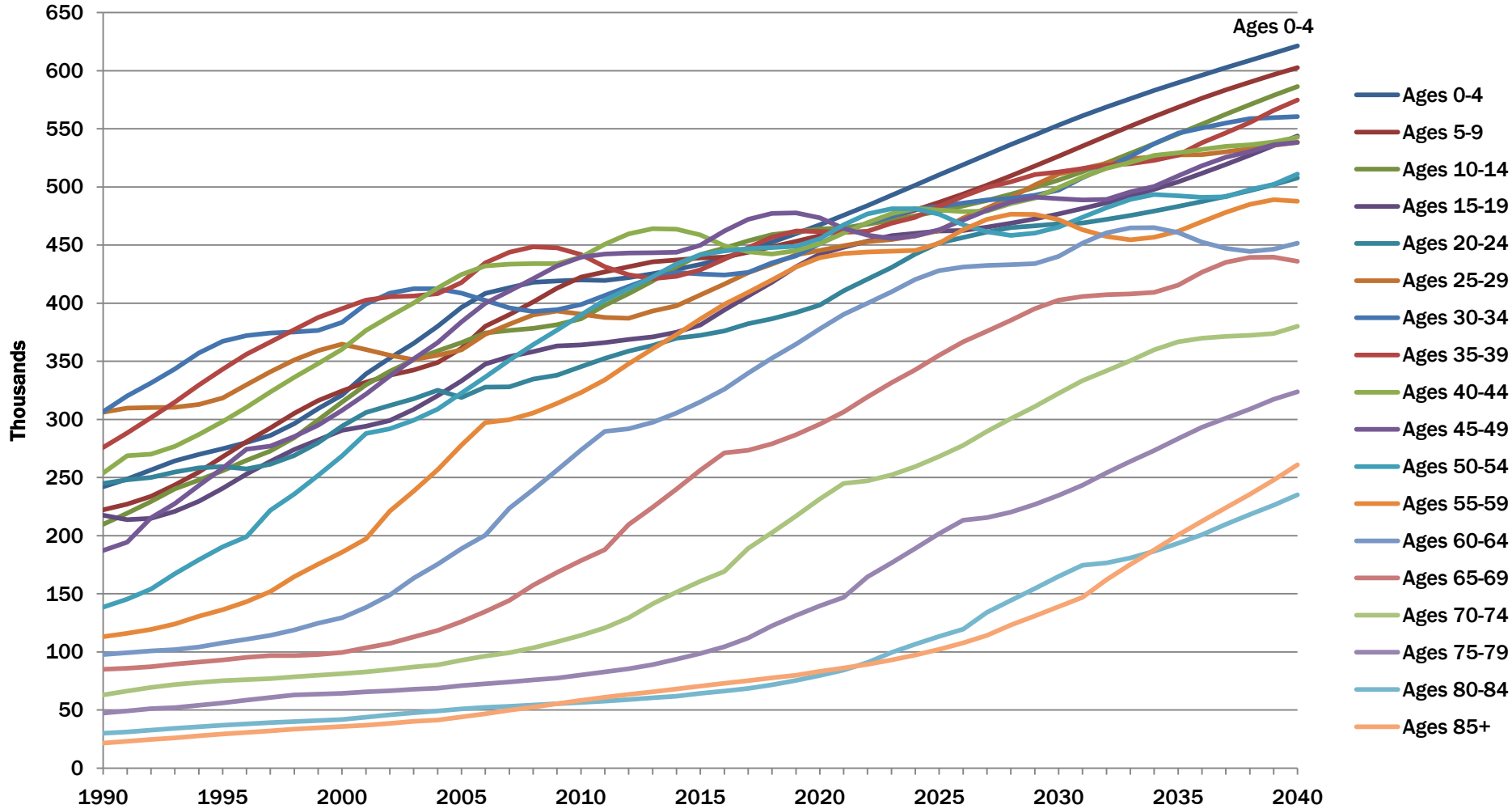
EMPLOYMENT ADJUSTMENT

Differences (TAC 2-Standard)	2000	2005	2006	2007	2008	2009	2010	2020	2030	2040	00-08 change	08-20 change	20-30 change	30-40 change	00-30 change	00-40 change
Forestry, Fishing, Related Activities, and Other	0	0	0	-3.562	-3.576	-3.621	-4.019	-2.977	-1.577	-0.445	-3.576	0.599	1.400	1.132	-1.577	-0.445
Mining	0	0	0	-1.710	-1.744	-1.756	-1.999	-1.435	-0.727	-0.120	-1.744	0.309	0.708	0.607	-0.727	-0.120
Utilities	0	0	0	-1.177	-1.120	-1.309	-1.563	-1.446	-1.067	-0.696	-1.120	-0.326	0.379	0.371	-1.067	-0.696
Construction	0	0	0	-24.461	-29.455	-35.549	-39.907	-25.578	-11.741	-3.930	-29.455	3.877	13.837	7.811	-11.741	-3.930
Manufacturing	0	0	0	-10.105	-9.520	-10.676	-18.305	-10.773	-8.611	-9.600	-9.520	-1.253	2.162	-0.989	-8.611	-9.600
Wholesale Trade	0	0	0	-12.363	-10.792	-12.584	-16.625	-13.715	-9.106	-5.122	-10.792	-2.923	4.609	3.984	-9.106	-5.122
Retail Trade	0	0	0	-26.801	-23.705	-28.699	-35.069	-35.741	-28.784	-21.355	-23.705	-12.036	6.957	7.429	-28.784	-21.355
Transportation and Warehousing	0	0	0	11.591	12.510	10.908	6.903	4.204	-1.374	-7.687	12.510	-8.306	-5.578	-6.313	-1.374	-7.687
Information	0	0	0	-4.439	-3.443	-4.709	-6.719	-6.426	-4.860	-3.628	-3.443	-2.983	1.566	1.232	-4.860	-3.628
Finance and Insurance	0	0	0	-25.810	-23.566	-25.270	-27.776	-21.425	-13.266	-6.303	-23.566	2.141	8.159	6.963	-13.266	-6.303
Real Estate and Rental and Leasing	0	0	0	-41.241	-40.040	-42.723	-46.294	-39.858	-25.573	-12.190	-40.040	0.182	14.285	13.383	-25.573	-12.190
Professional and Technical Services	0	0	0	-32.482	-31.248	-35.321	-41.696	-40.918	-30.346	-19.355	-31.248	-9.670	10.572	10.991	-30.346	-19.355
Management of Companies and Enterprises	0	0	0	-2.316	-1.958	-2.403	-3.575	-3.066	-2.534	-1.894	-1.958	-1.108	0.532	0.640	-2.534	-1.894
Administrative and Waste Services	0	0	0	-33.261	-31.186	-34.962	-40.685	-36.759	-25.446	-14.978	-31.186	-5.573	11.313	10.468	-25.446	-14.978
Educational Services	0	0	0	62.450	62.648	61.327	59.731	44.870	19.620	-6.178	62.648	-17.778	-25.250	-25.798	19.620	-6.178
Health Care and Social Assistance	0	0	0	-18.404	-15.630	-19.956	-24.599	-30.058	-29.386	-25.084	-15.630	-14.428	0.672	4.302	-29.386	-25.084
Arts, Entertainment, and Recreation	0	0	0	-7.380	-6.917	-7.923	-9.192	-9.958	-8.512	-6.295	-6.917	-3.041	1.446	2.217	-8.512	-6.295
Accommodation and Food Services	0	0	0	-14.101	-12.854	-17.020	-22.165	-27.695	-24.251	-18.596	-12.854	-14.841	3.444	5.655	-24.251	-18.596
Other Services, except Public Administration	0	0	0	-19.609	-17.937	-20.863	-24.568	-23.779	-18.371	-12.482	-17.937	-5.842	5.408	5.889	-18.371	-12.482
State and Local	0	0	0	-86.096	-85.160	-89.370	-92.909	-81.329	-48.981	-15.058	-85.160	3.831	32.348	33.923	-48.981	-15.058
Federal Civilian	0	0	0	-29.526	-29.219	-29.578	-30.067	-24.374	-12.457	-0.556	-29.219	4.845	11.917	11.901	-12.457	-0.556
Federal Military	0	0	0	-12.634	-12.401	-12.668	-13.018	-10.669	-5.532	-0.405	-12.401	1.732	5.137	5.127	-5.532	-0.405



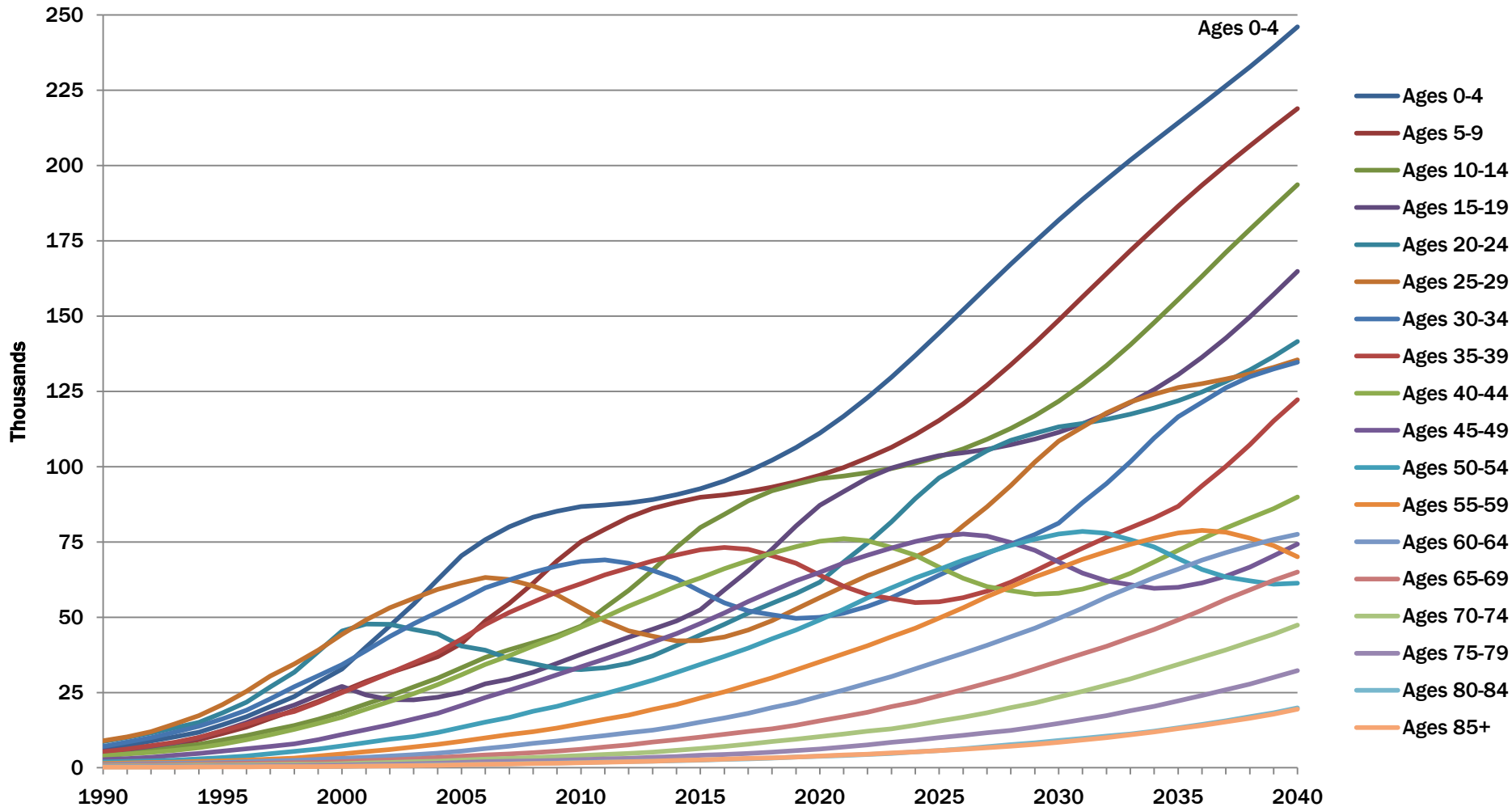
TAC 2 AGE COHORTS

Total Population



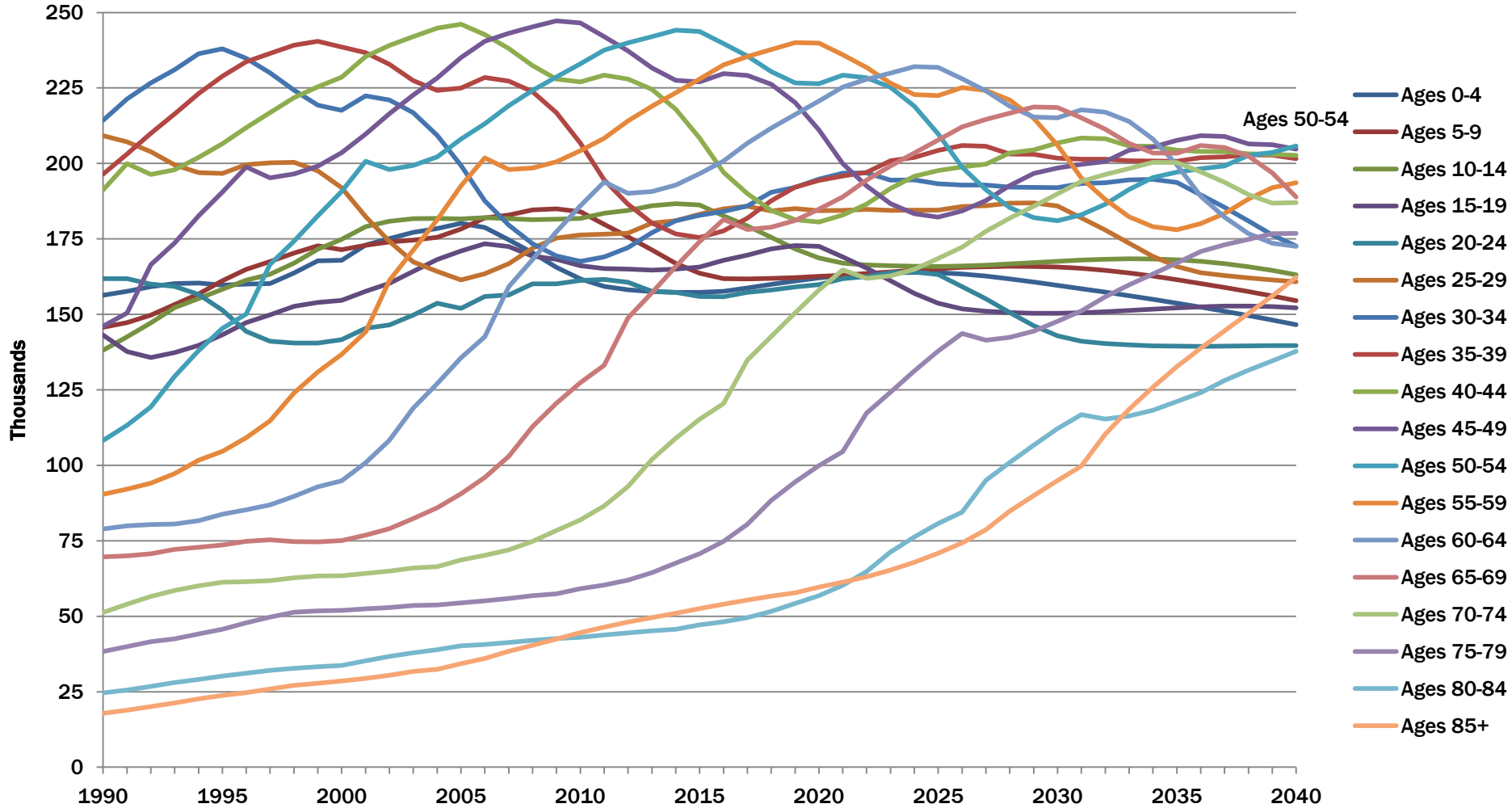
TAC 2 HISPANIC

Total Population



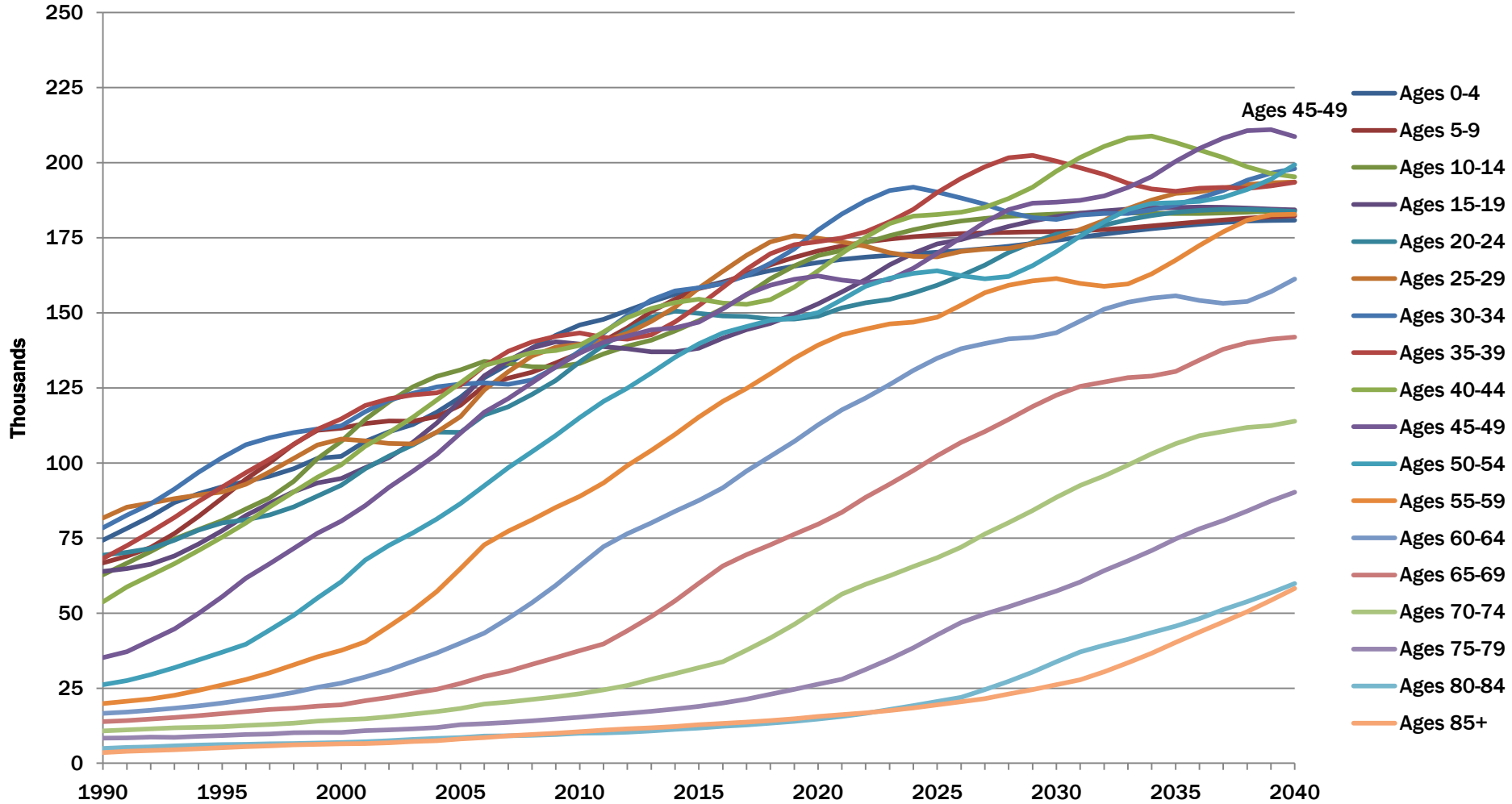
TAC 2 WHITE NON-HISPANIC

Total Population



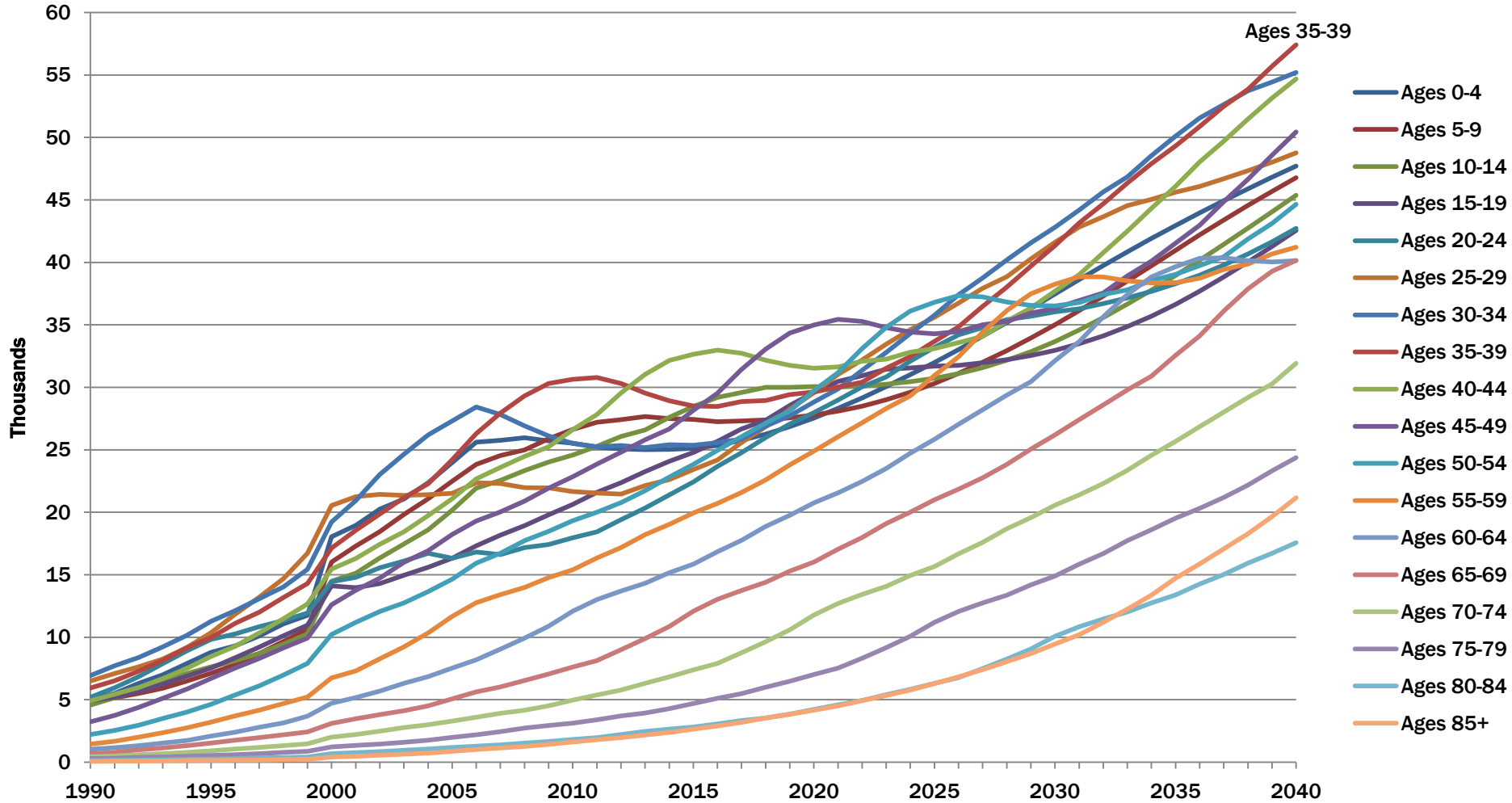
TAC 2 BLACK NON-HISPANIC

Total Population



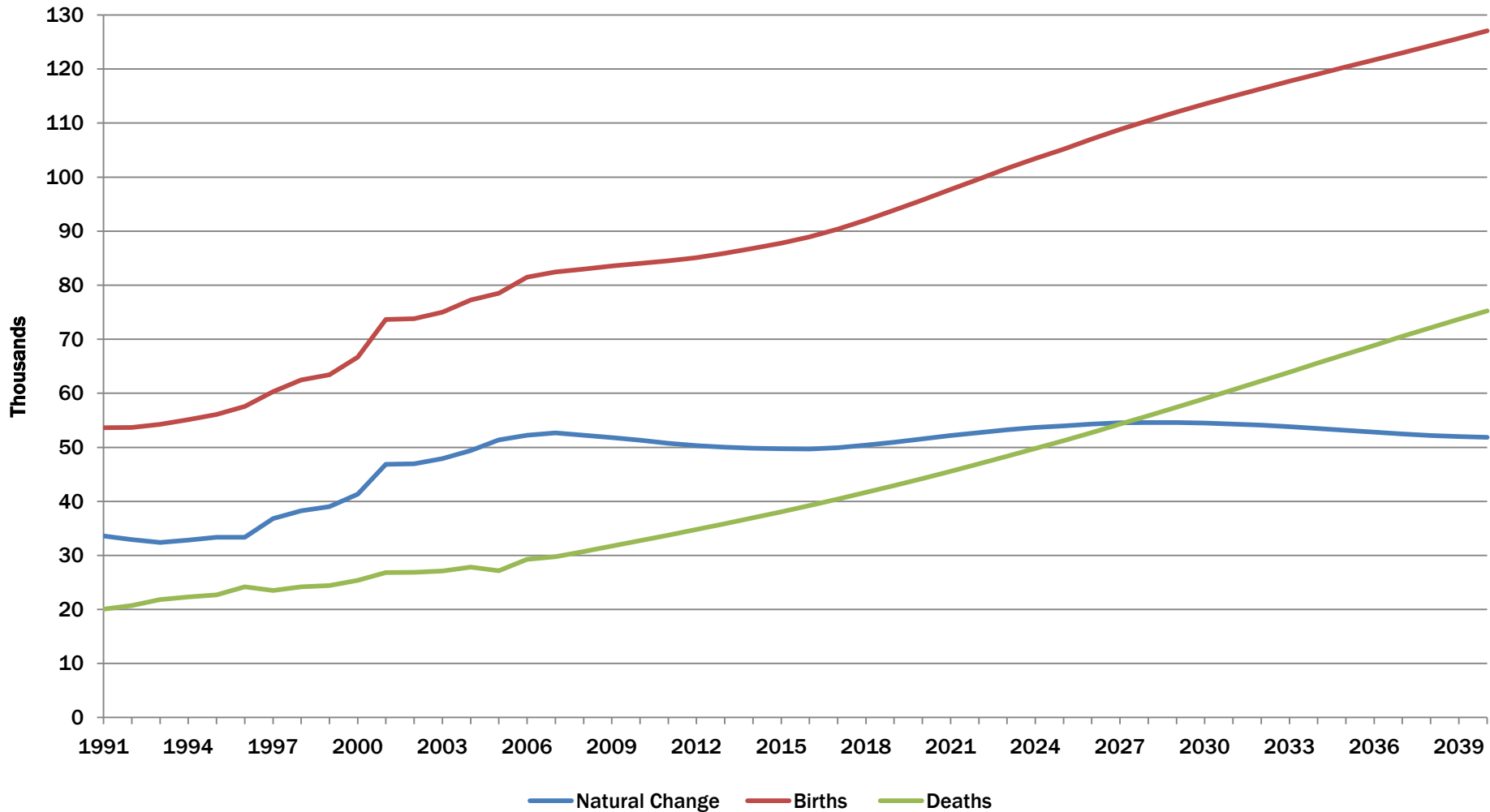
TAC 2 OTHER NON-HISPANIC

Total Population



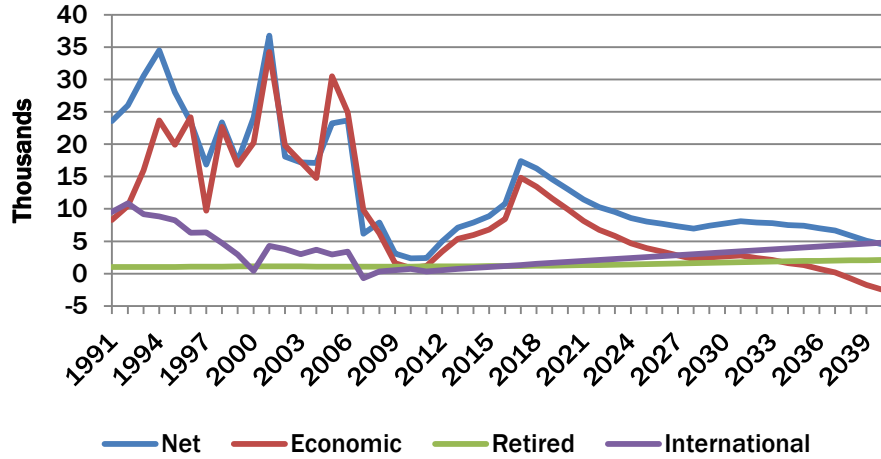
COMPONENTS OF GROWTH

All Race & Ethnicities

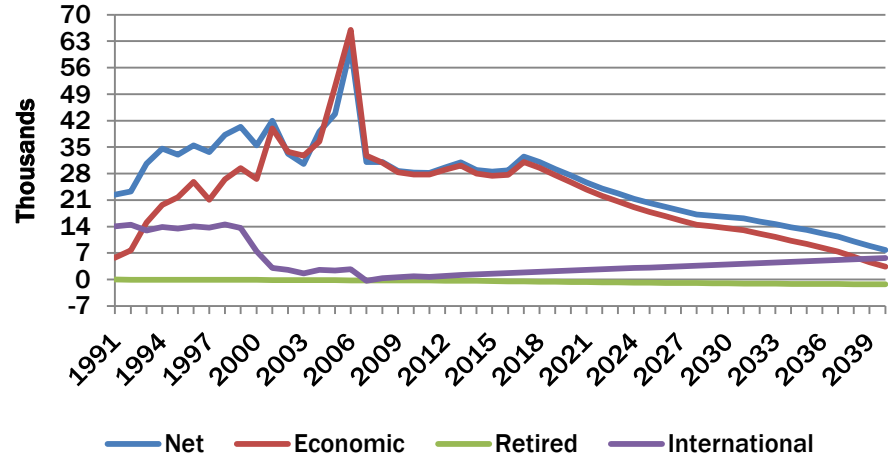


MIGRATION BY RACE & ETHNICITY

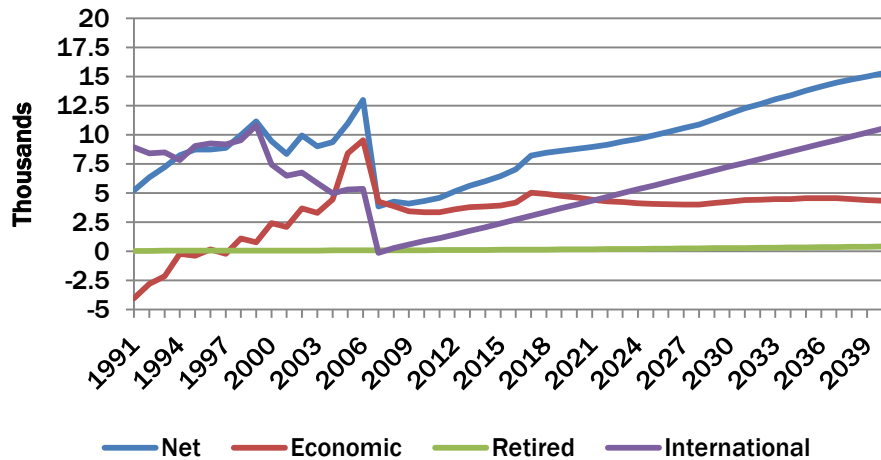
White Non-Hispanic



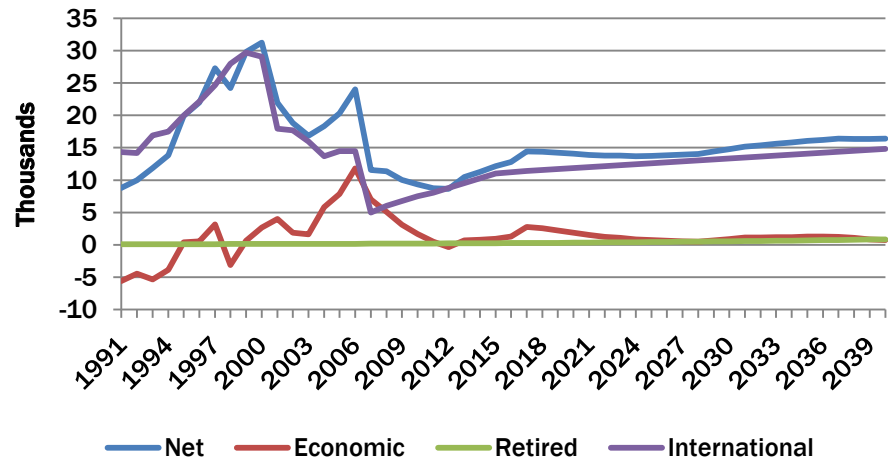
Black Non-Hispanic



Other Non-Hispanic

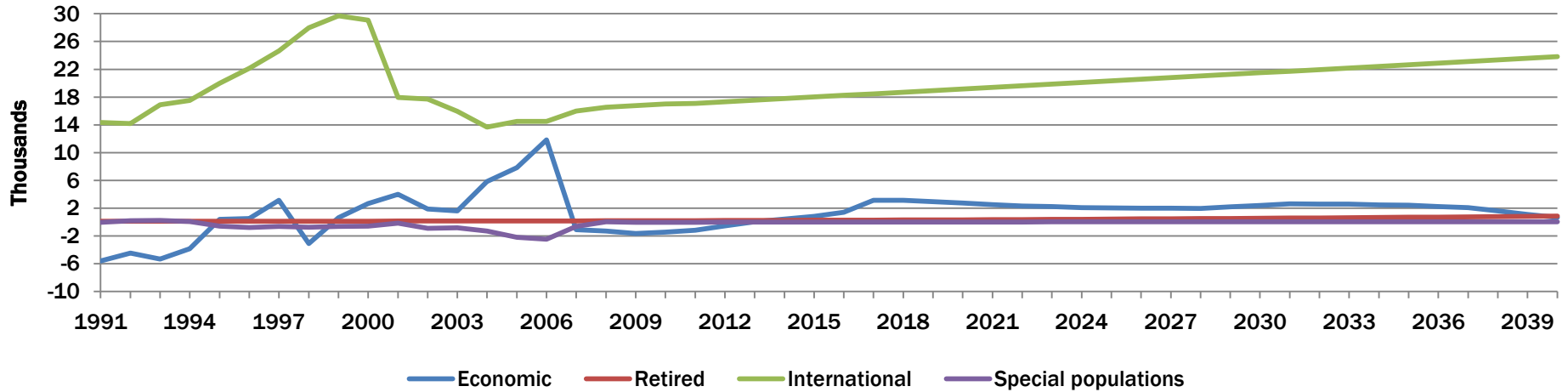


Hispanic

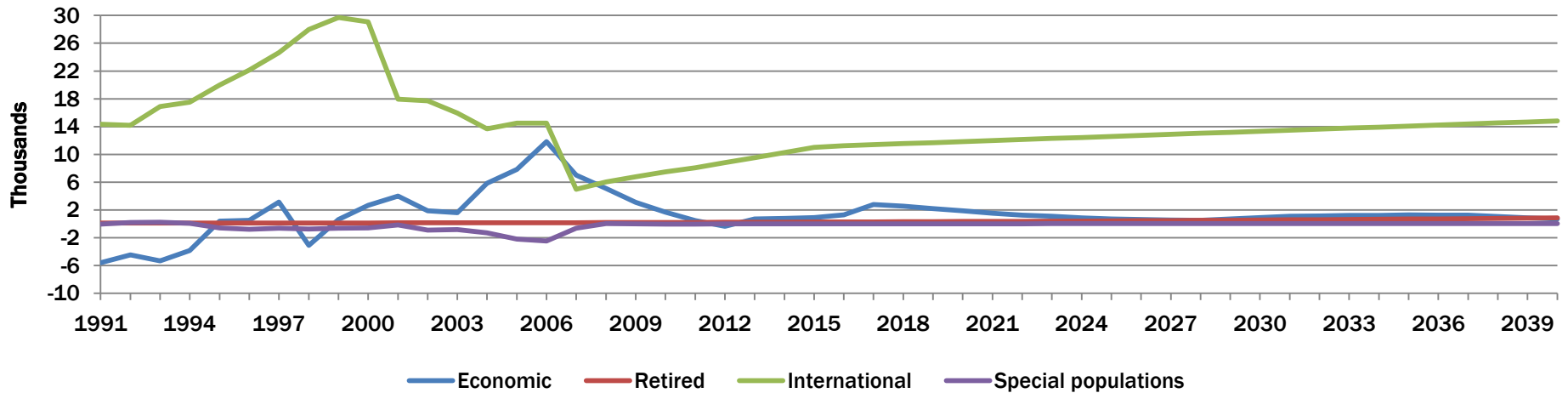


HISPANIC MIGRATION

TAC 1



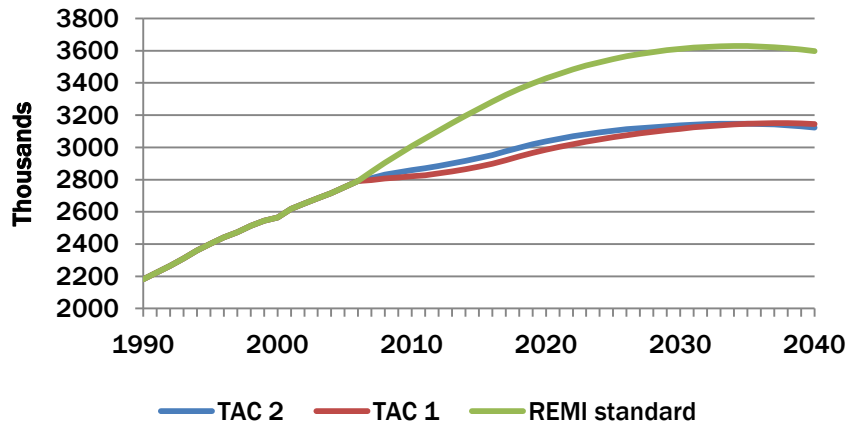
TAC 2



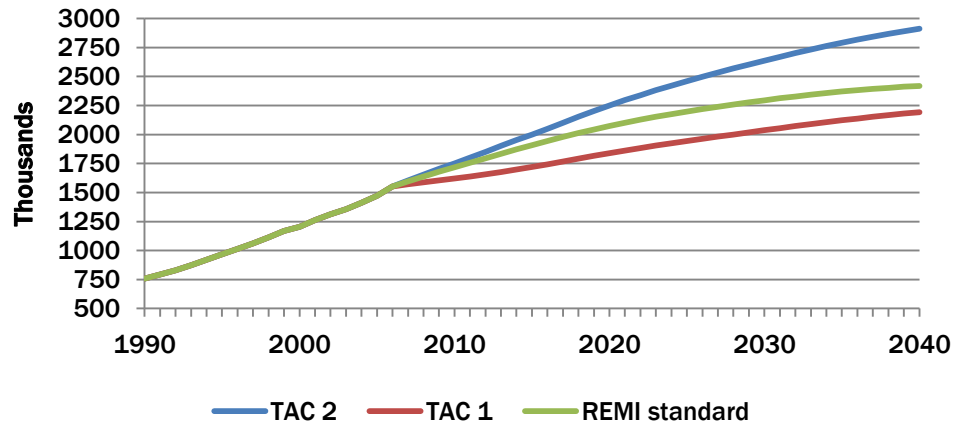
RACE & ETHNICITY: TAC 2

POPULATION

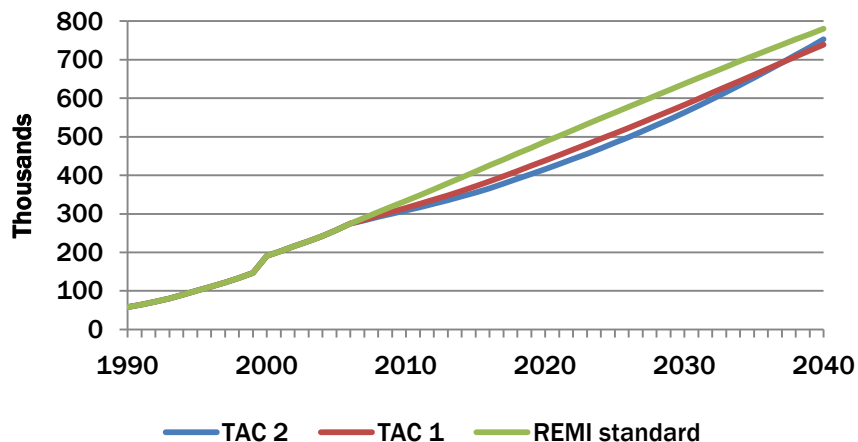
White Non-Hispanic



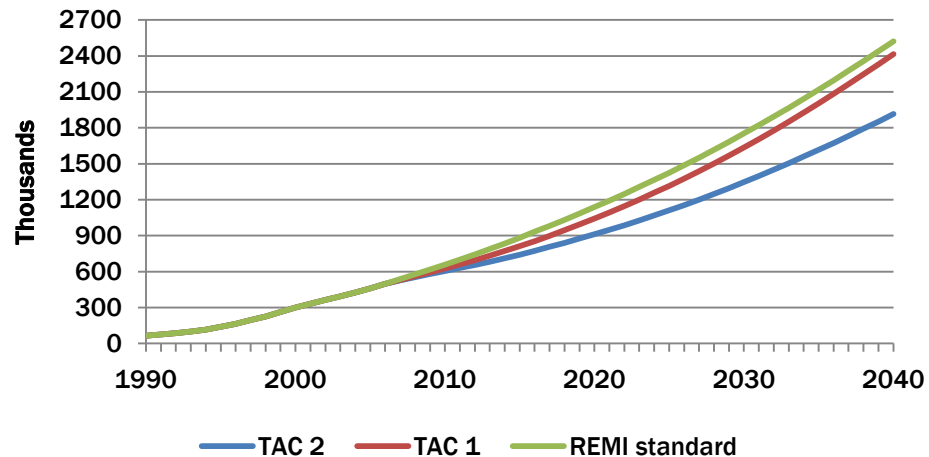
Black Non-Hispanic



Other Non-Hispanic

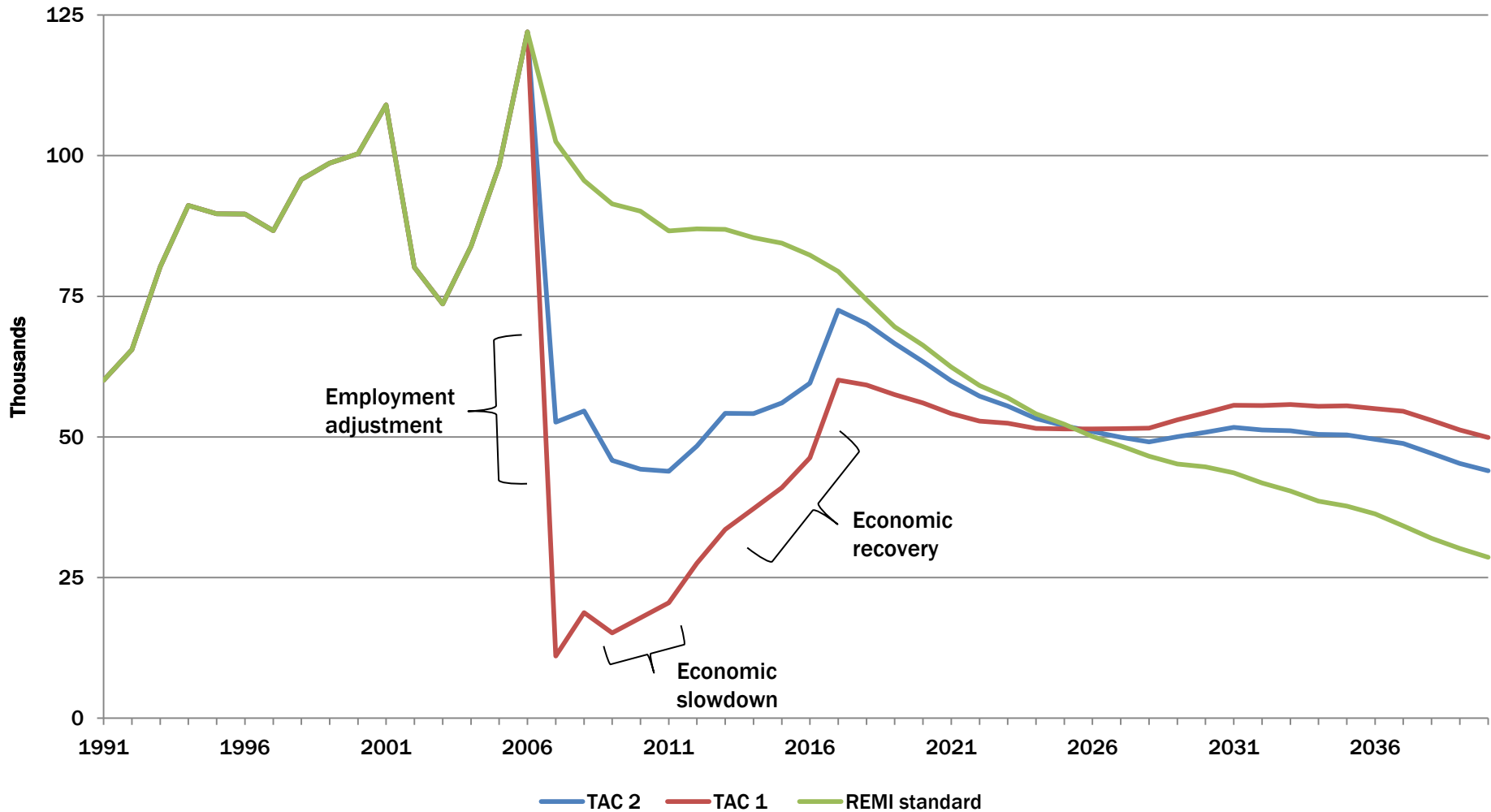


Hispanic



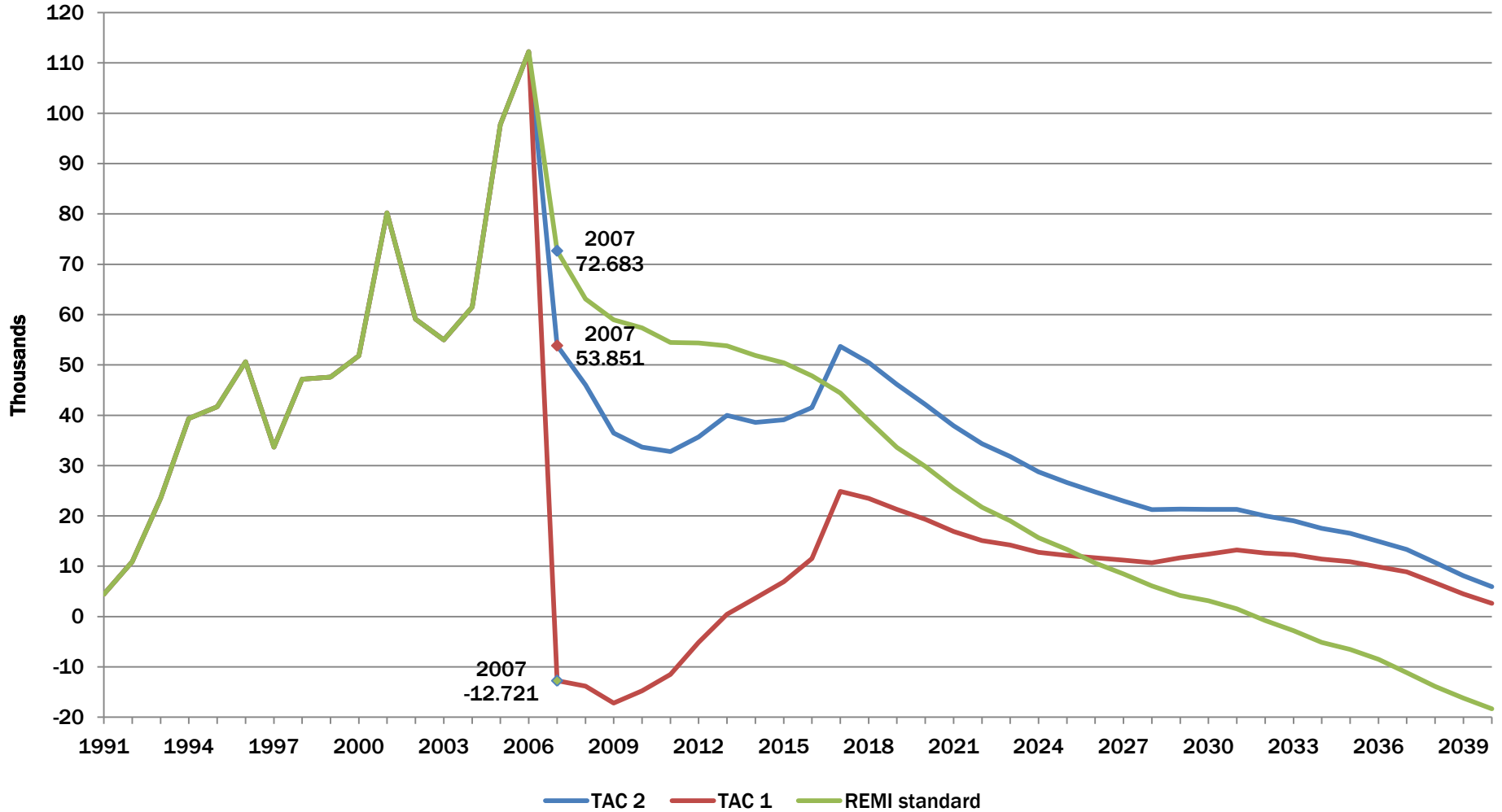
NET MIGRATION COMPARISON

All Race & Ethnicities



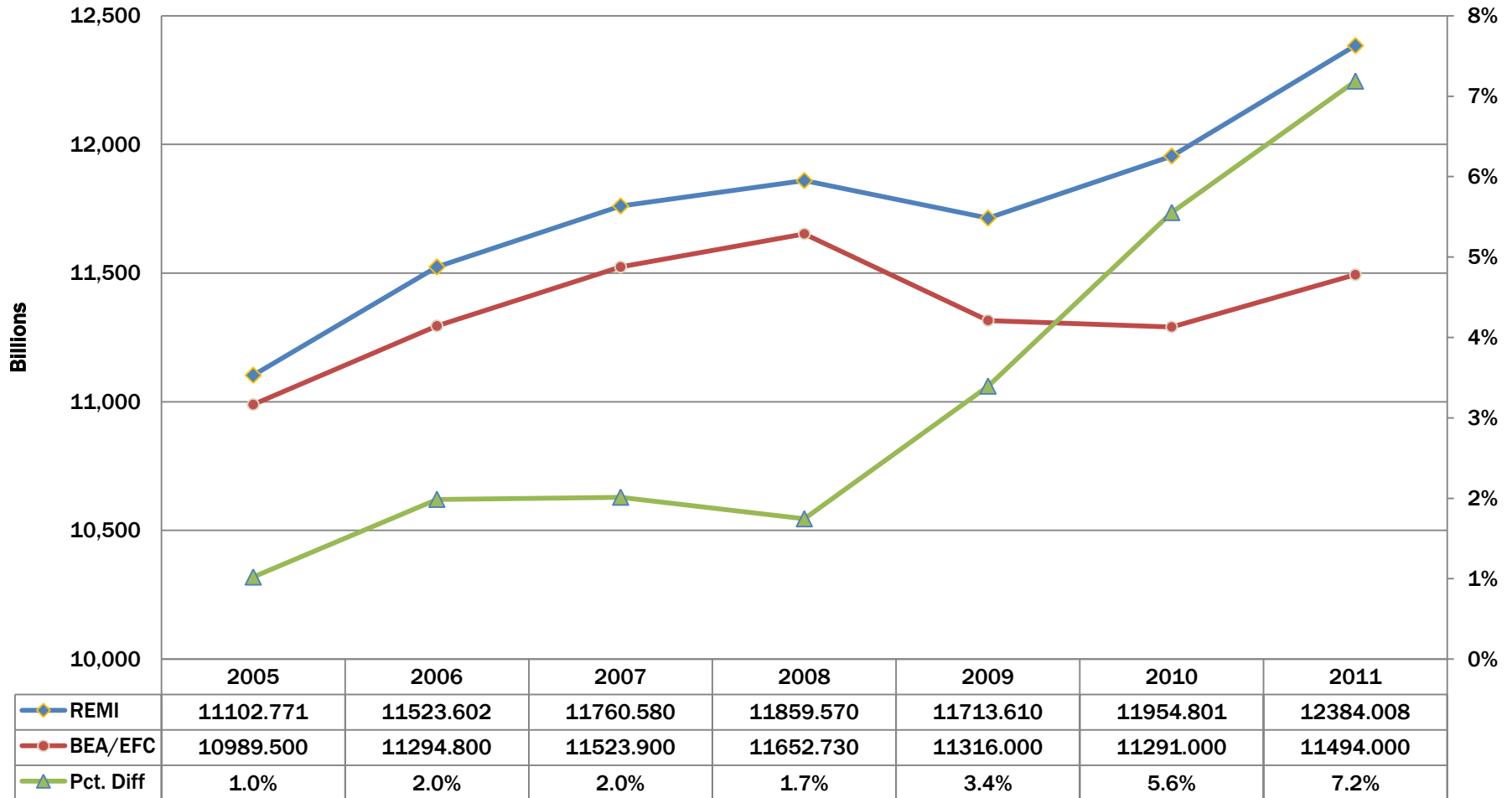
ECONOMIC MIGRATION COMPARED

All Race & Ethnicities



REMI RECESSION ADJUSTED

US GDP (chained 2000\$)



SUMMARY OF FORECASTS

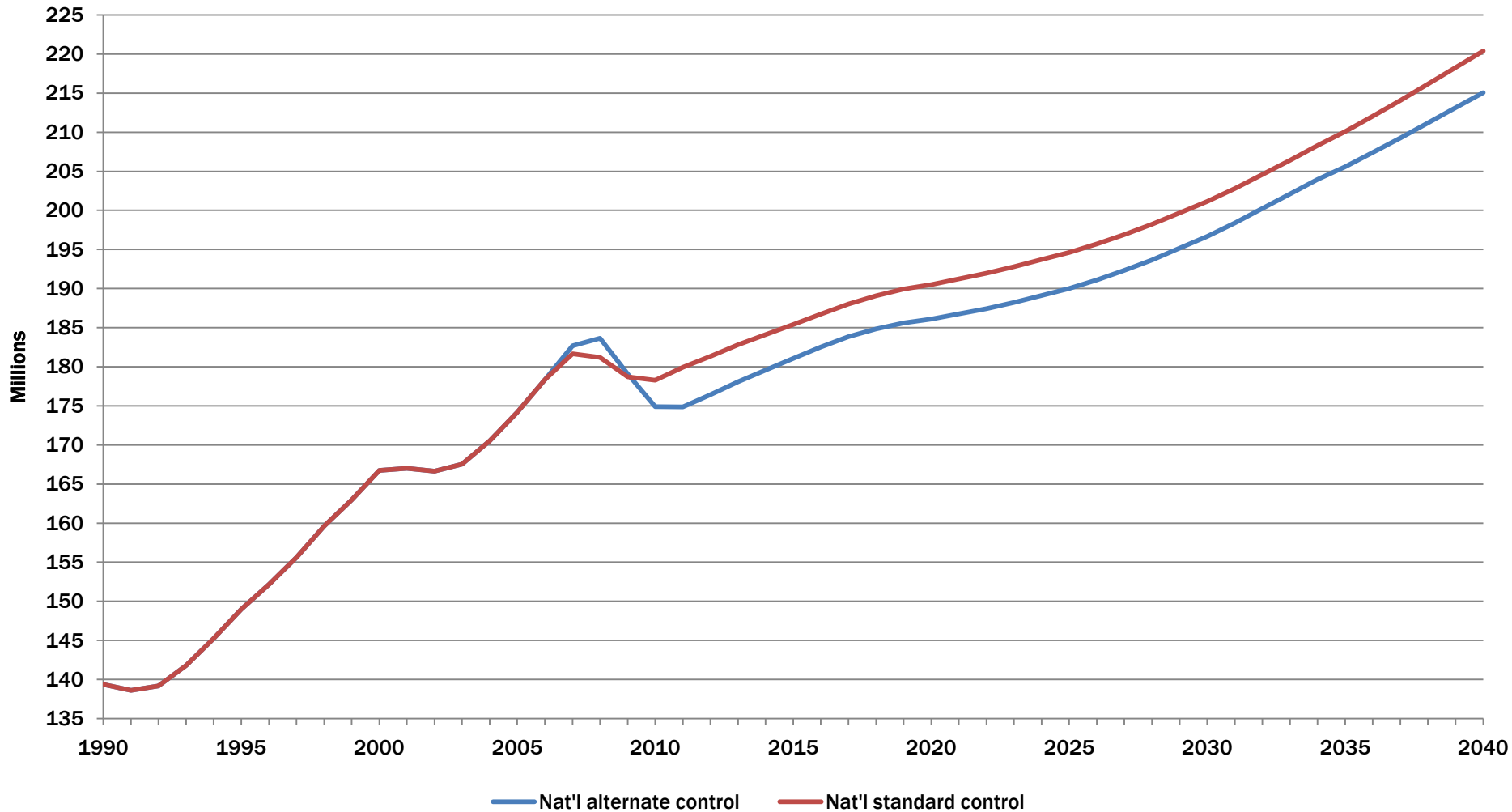
ARC 20-County Area	Units	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2020	2030	2040	00-30 change	00-40 change
Total Employment	Thousands (Jobs)	2797.292	2831.179	2812.669	2832.454	2907.816	3003.487	3105.609	2855.87	2873.258	2799.389	2749.359	3292.314	3787.321	4400.161	990.029	1602.869
Total Employment as % of Nation	Percent	1.677	1.695	1.688	1.69	1.705	1.724	1.741	1.563	1.565	1.563	1.572	1.769	1.926	2.046	0.249	0.369
Private Non-Farm Employment	Thousands (Jobs)	2500.415	2521.84	2493.032	2506.828	2576.182	2664.808	2758.749	2633.702	2646.581	2576.095	2530.214	3022.967	3448.519	3989.31	948.104	1488.895
Private Non-Farm Employment as % of Nation	Percent	1.777	1.791	1.78	1.78	1.791	1.808	1.822	1.692	1.694	1.695	1.706	1.892	2.023	2.115	0.246	0.338
Gross Domestic Product	Billions of Fixed (2000) Dollars	199.103	201.815	204.269	207.611	216.959	225.8	235.848	211.921	215.559	210.307	211.09	321.913	459.548	648.643	260.445	449.540
Personal Income	Billions of Current Dollars	141.707	147.884	149.705	152.797	161.804	174.831	184.989	182.099	189.115	191.313	191.366	384.052	743.157	1446.642	601.450	1304.935
Personal Income as % of Nation	Percent	1.683	1.697	1.687	1.67	1.666	1.7	1.687	1.55	1.538	1.529	1.53	1.702	1.858	1.996	0.175	0.313
Disposable Personal Income	Billions of Current Dollars	121.781	127.73	132.302	136.371	144.745	155.26	163.141	160.154	167.518	170.57	171.57	344.392	666.62	1298.792	544.839	1177.011
PCE-Price Index	2000=100 (Nation)	98.504	100.38	101.222	102.413	103.934	106.172	108.217	110.039	113.254	114.137	116.046	156.481	214.1	294.326	115.596	195.822
Real Disposable Personal Income	Billions of Current Dollars	123.63	127.246	130.705	133.158	139.267	146.234	150.754	145.543	147.913	149.443	147.846	220.086	311.359	441.277	187.729	317.647
Real Disposable Personal Income as % of Nation	Percent	1.72	1.737	1.73	1.725	1.742	1.798	1.798	1.669	1.666	1.662	1.665	1.854	2.028	2.186	0.308	0.466
Population	Thousands	4263.255	4417.954	4543.924	4664.294	4796.493	4944.939	5118.089	5181.401	5251.195	5316.439	5383.54	6306.198	7371.18	8491.856	3107.925	4228.601
Population as % of Nation	Percent	1.511	1.55	1.578	1.606	1.636	1.671	1.713	1.717	1.723	1.727	1.731	1.84	1.968	2.087	0.457	0.576

Rest of Georgia	Units	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2020	2030	2040	00-30 change	00-40 change
Total Employment	Thousands (Jobs)	2095.106	2076.561	2080.76	2117.206	2166.698	2228.587	2275.75	2329.047	2336.821	2273.672	2211.461	2253.792	2294.376	2469.626	158.686	374.520
Total Employment as % of Nation	Percent	1.256	1.243	1.249	1.264	1.271	1.28	1.276	1.275	1.273	1.27	1.264	1.211	1.167	1.148	-0.045	-0.108
Private Non-Farm Employment	Thousands (Jobs)	1629.496	1611.476	1609.076	1639.732	1687.324	1741.785	1786.877	1836.17	1836.61	1779.877	1729.784	1794.213	1854.049	2036.086	164.717	406.590
Private Non-Farm Employment as % of Nation	Percent	1.158	1.145	1.149	1.164	1.173	1.182	1.18	1.18	1.175	1.171	1.167	1.123	1.087	1.08	-0.035	-0.078
Gross Domestic Product	Billions of Fixed (2000) Dollars	91.041	90.037	92.445	95.27	98.855	102.986	105.294	108.67	110.422	107.768	106.698	139.2	174.674	225.835	48.159	134.794
Personal Income	Billions of Current Dollars	88.649	92.732	95.252	98.008	103.049	109.268	114.845	121.672	127.303	129.846	129.715	227.147	388.966	691.085	138.498	602.436
Personal Income as % of Nation	Percent	1.053	1.064	1.074	1.071	1.061	1.062	1.047	1.036	1.036	1.038	1.037	1.007	0.972	0.953	-0.046	-0.100
Disposable Personal Income	Billions of Current Dollars	76.183	80.094	84.179	87.472	92.184	97.036	101.281	106.78	112.575	115.656	116.252	203.72	348.749	619.318	127.537	543.135
PCE-Price Index	2000=100 (Nation)	100.959	102.697	103.549	104.838	106.951	109.297	111.422	113.815	117.69	118.928	121.155	163.435	223.155	306.077	62.476	205.118
Real Disposable Personal Income	Billions of Current Dollars	75.46	77.99	81.294	83.435	86.193	88.782	90.899	93.818	95.653	97.249	95.954	124.649	156.281	202.341	49.189	126.881
Real Disposable Personal Income as % of Nation	Percent	1.05	1.064	1.076	1.081	1.078	1.091	1.084	1.076	1.077	1.081	1.081	1.05	1.018	1.002	0.000	-0.048
Population	Thousands	3967.665	4004.172	4047.244	4075.714	4124.878	4162.779	4223.991	4253.393	4291.981	4319.931	4348.109	4729.576	4991.531	5220.215	761.911	1252.550
Population as % of Nation	Percent	1.406	1.404	1.406	1.403	1.407	1.407	1.414	1.41	1.408	1.403	1.398	1.38	1.332	1.283	-0.026	-0.123



GDP ADJUSTMENT

National Total Employment



EMPLOYMENT COMPARED

<u>Standard Control</u>	2000	2005	2006	2007	2008	2009	2010	2020	2030	2040	00-08 change	08-20 change	20-30 change	30-40 change	00-30 change	00-40 change	Ann Avg. Chg 2007-40
Forestry, Fishing, Related Activities, and Other Mining	5.771	5.847	7.143	7.357	7.425	7.27	7.265	7.171	6.768	6.318	1.654	-0.254	-0.403	-0.450	0.997	0.547	-0.026
Utilities	11.785	11.573	11.675	11.927	11.887	11.782	11.681	11.704	11.777	11.861	0.102	-0.183	0.073	0.084	-0.008	0.076	-0.002
Construction	180.091	198.293	210.129	201.218	192.123	180.818	175.819	199.397	206.067	220.847	12.032	7.274	6.670	14.780	25.976	40.756	0.491
Manufacturing	223.66	194.722	196.314	190.564	181.733	169.168	169.548	164.124	170.811	200.316	-41.927	-17.609	6.687	29.505	-52.849	-23.344	0.244
Wholesale Trade	171.853	167.545	168.687	173.16	170.429	165.213	168.337	171.084	154.758	137.051	-1.424	0.655	-16.326	-17.707	-17.095	-34.802	-0.903
Retail Trade	304.866	309.406	320.082	332.553	325.627	316.565	317.364	339.543	359.838	402.871	20.761	13.916	20.295	43.033	54.972	98.005	1.758
Transportation and Warehousing	128.348	129.484	133.647	139.319	141.631	140.926	142.951	168.091	191.433	217.173	13.283	26.460	23.342	25.740	63.085	88.825	1.946
Information	120.002	101.965	103.519	104.685	103.16	100.441	99.737	104.497	99.157	95.396	-16.842	1.337	-5.340	-3.761	-20.845	-24.606	-0.232
Finance and Insurance	144.664	147.324	152.651	156.395	155.81	155.511	155.336	184.935	201.117	221.711	11.146	29.125	16.182	20.594	56.453	77.047	1.633
Real Estate and Rental and Leasing	102.735	153.214	167.617	173.436	175.483	177.495	179.487	217.605	256.899	310.177	72.748	42.122	39.294	53.278	154.164	207.442	3.419

<u>Alternate Control</u>	2000	2005	2006	2007	2008	2009	2010	2020	2030	2040	00-08 change	08-20 change	20-30 change	30-40 change	00-30 change	00-40 change	Ann Avg. Chg 2007-40
Forestry, Fishing, Related Activities, and Other Mining	5.771	5.847	7.143	3.795	3.849	3.649	3.246	4.194	5.191	5.873	-1.922	0.345	0.997	0.682	-0.580	0.102	0.052
Utilities	11.785	11.573	11.675	10.75	10.767	10.473	10.118	10.258	10.71	11.165	-1.018	-0.509	0.452	0.455	-1.075	-0.620	0.010
Construction	180.091	198.293	210.129	176.757	162.668	145.269	135.912	173.819	194.326	216.917	-17.423	11.151	20.507	22.591	14.235	36.826	1.004
Manufacturing	223.66	194.722	196.314	180.459	172.213	158.492	151.243	153.351	162.2	190.716	-51.447	-18.862	8.849	28.516	-61.460	-32.944	0.256
Wholesale Trade	171.853	167.545	168.687	160.797	159.637	152.629	151.712	157.369	145.652	131.929	-12.216	-2.268	-11.717	-13.723	-26.201	-39.924	-0.722
Retail Trade	304.866	309.406	320.082	305.752	301.922	287.866	282.295	303.802	331.054	381.516	-2.944	1.880	27.252	50.462	26.188	76.650	1.894
Transportation and Warehousing	128.348	129.484	133.647	150.91	154.141	151.834	149.854	172.295	190.059	209.486	25.793	18.154	17.764	19.427	61.711	81.138	1.464
Information	120.002	101.965	103.519	100.246	99.717	95.732	93.018	98.071	94.297	91.768	-20.285	-1.646	-3.774	-2.529	-25.705	-28.234	-0.212
Finance and Insurance	144.664	147.324	152.651	130.585	132.244	130.241	127.56	163.51	187.851	215.408	-12.420	31.266	24.341	27.557	43.187	70.744	2.121
Real Estate and Rental and Leasing	102.735	153.214	167.617	132.195	135.443	134.772	133.193	177.747	231.326	297.987	32.708	42.304	53.579	66.661	128.591	195.252	4.145



EMPLOYMENT COMPARED

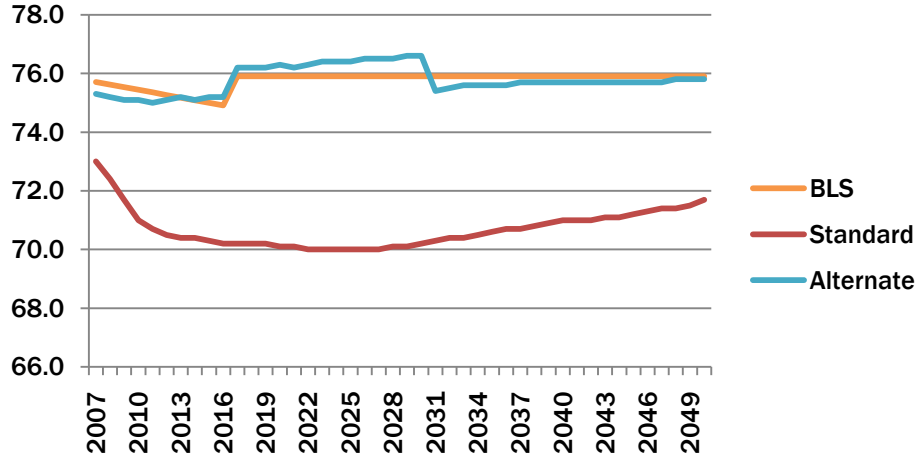
<u>Standard Control</u>	2000	2005	2006	2007	2008	2009	2010	2020	2030	2040	00-08 change	09-20 change	20-30 change	30-40 change	00-30 change	00-40 change	Ann Avg. Chg 2007-40
Professional and Technical Services	224.285	235.208	246.828	258.975	263.802	264.507	269.471	358.387	433.98	505.876	39.517	94.585	75.593	71.896	209.695	281.591	6.173
Management of Companies and Enterprises	47.49	42.066	41.419	43.55	44.164	43.695	44.639	51.672	53.788	52.309	-3.326	7.508	2.116	-1.479	6.298	4.819	0.219
Administrative and Waste Services	227.652	253.293	257.68	269.724	274.18	276.074	279.951	345.492	383.48	410.34	46.528	71.312	37.988	26.860	155.828	182.688	3.515
Educational Services	48.434	60.17	63.366	66.088	67.624	69.105	69.746	87.931	104.876	125.162	19.190	20.307	16.945	20.286	56.442	76.728	1.477
Health Care and Social Assistance	192.348	227.392	234.899	245.762	249.385	254.732	256.265	328.696	405.948	521.334	57.037	79.311	77.252	115.386	213.600	328.986	6.889
Arts, Entertainment, and Recreation	46.536	53.442	55.8	58.286	59.3	60.162	60.843	76.938	92.507	112.026	12.764	17.638	15.569	19.519	45.971	65.490	1.344
Accommodation and Food Services	180.348	206.52	213.815	225.907	230.932	233.143	236.458	270.644	288.568	312.477	50.584	39.712	17.924	23.909	108.220	132.129	2.164
Other Services, except Public Administration	135.991	164.657	170.468	176.873	178.246	179.617	180.48	215.027	250.982	301.253	42.255	36.781	35.955	50.271	114.991	165.262	3.110
State and Local	226.179	264.29	273.09	276.862	278.516	279.819	280.196	317.164	341.314	364.69	52.337	38.648	24.150	23.376	115.135	138.511	2.196
Federal Civilian	47.659	46.326	45.766	45.711	46.361	46.852	47.458	45.071	44.123	44.208	-1.298	-1.290	-0.948	0.085	-3.536	-3.451	-0.038
Federal Military	17.774	19.063	19.365	19.271	20.094	19.853	19.201	16.337	14.29	12.8	2.320	-3.757	-2.047	-1.490	-3.484	-4.974	-0.162

<u>Alternate Control</u>	2000	2005	2006	2007	2008	2009	2010	2020	2030	2040	00-08 change	09-20 change	20-30 change	30-40 change	00-30 change	00-40 change	Ann Avg. Chg 2007-40
Professional and Technical Services	224.285	235.208	246.828	226.493	232.554	229.186	227.775	317.469	403.634	486.521	8.269	84.915	86.165	82.887	179.349	262.236	6.501
Management of Companies and Enterprises	47.49	42.066	41.419	41.234	42.206	41.292	41.064	48.606	51.254	50.415	-5.284	6.400	2.648	-0.839	3.764	2.925	0.230
Administrative and Waste Services	227.652	253.293	257.68	236.463	242.994	241.112	239.266	308.733	358.034	395.362	15.342	65.739	49.301	37.328	130.382	167.710	3.972
Educational Services	48.434	60.17	63.366	128.538	130.272	130.432	129.477	132.801	124.496	118.984	81.838	2.529	-8.305	-5.512	76.062	70.550	-0.239
Health Care and Social Assistance	192.348	227.392	234.899	227.358	233.755	234.776	231.666	298.638	376.562	496.25	41.407	64.883	77.924	119.688	184.214	303.902	6.722
Arts, Entertainment, and Recreation	46.536	53.442	55.8	50.906	52.383	52.239	51.651	66.98	83.995	105.731	5.847	14.597	17.015	21.736	37.459	59.195	1.371
Accommodation and Food Services	180.348	206.52	213.815	211.806	218.078	216.123	214.293	242.949	264.317	293.881	37.730	24.871	21.368	29.564	83.969	113.533	2.052
Other Services, except Public Administration	135.991	164.657	170.468	157.264	160.309	158.754	155.912	191.248	232.611	288.771	24.318	30.939	41.363	56.160	96.620	152.780	3.288
State and Local	226.179	264.29	273.09	190.766	193.356	190.449	187.287	235.835	292.333	349.632	-32.823	42.479	56.498	57.299	66.154	123.453	3.972
Federal Civilian	47.659	46.326	45.766	16.185	17.142	17.274	17.391	20.697	31.666	43.652	-30.517	3.555	10.969	11.986	-15.993	-4.007	0.687
Federal Military	17.774	19.063	19.365	6.637	7.693	7.185	6.183	5.668	8.758	12.395	-10.081	-2.025	3.090	3.637	-9.016	-5.379	0.144

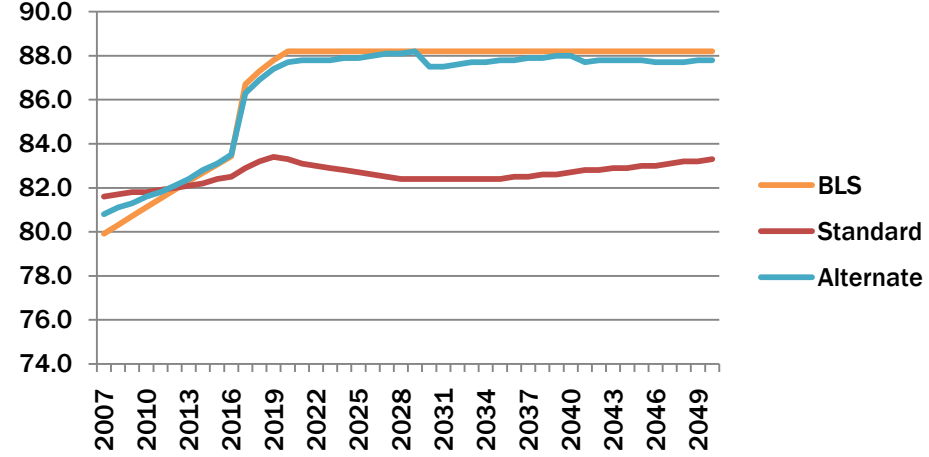


LFPR WOMEN 30-34

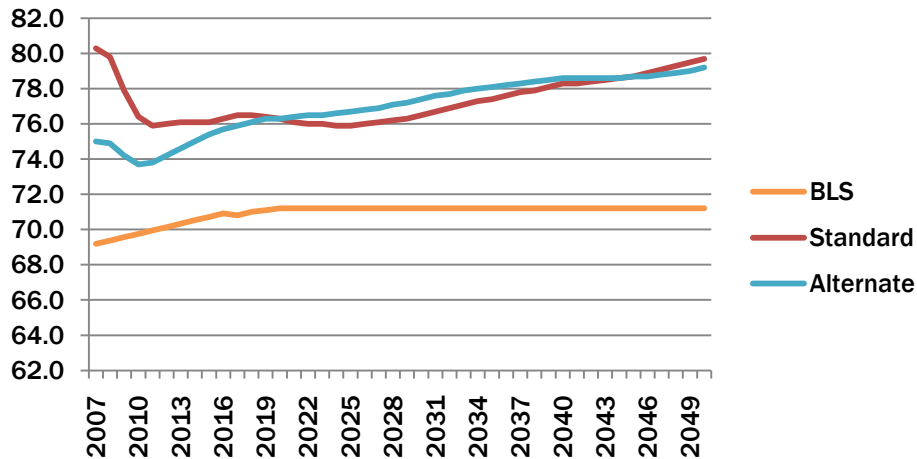
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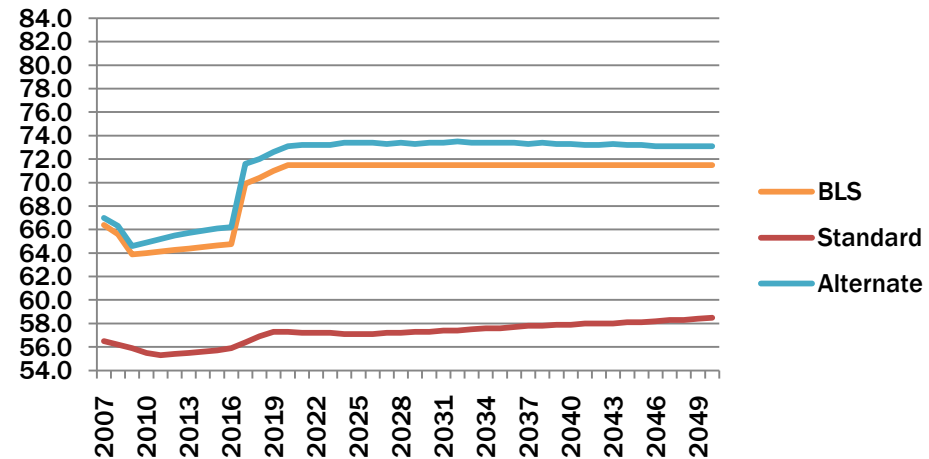
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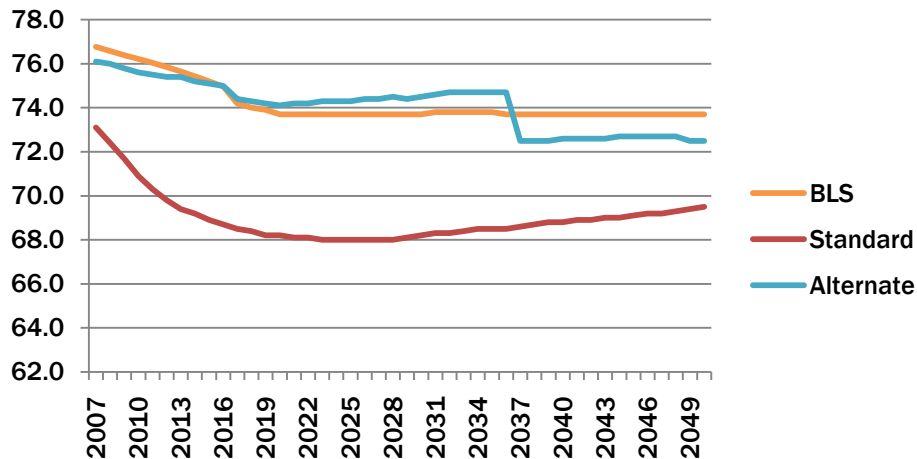


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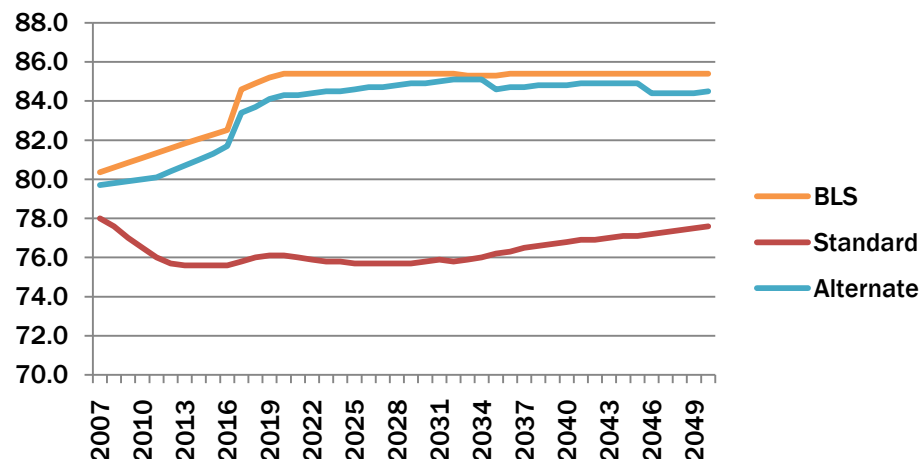


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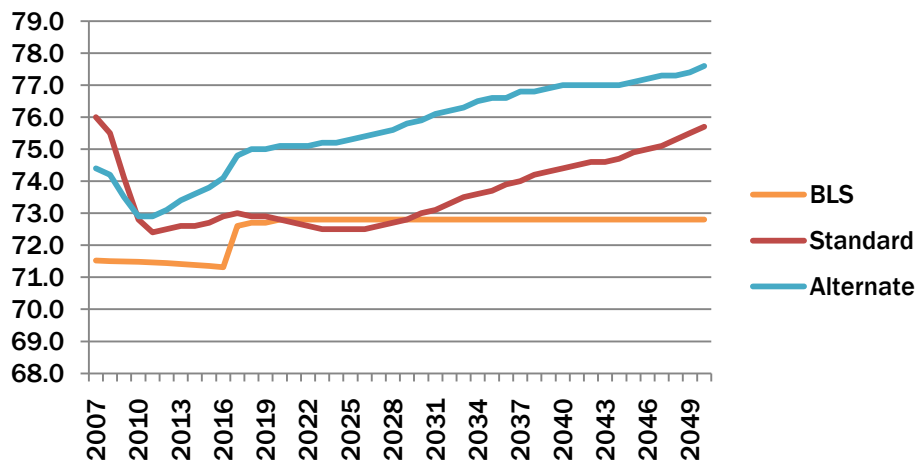
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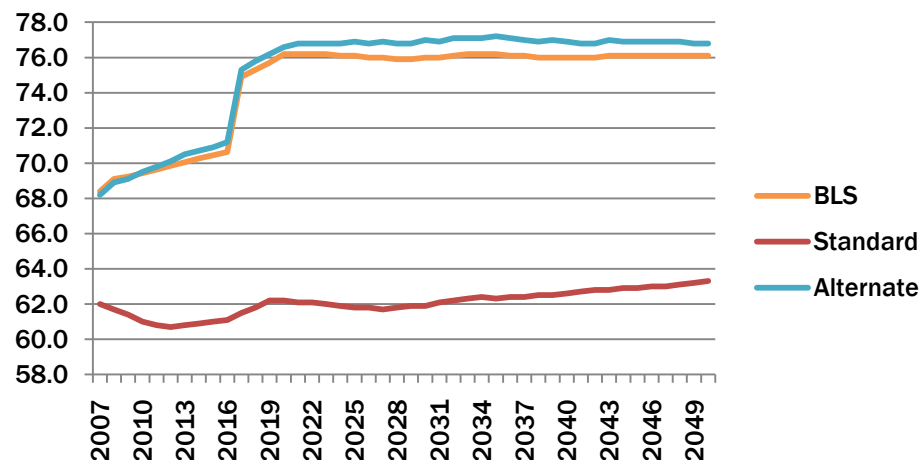
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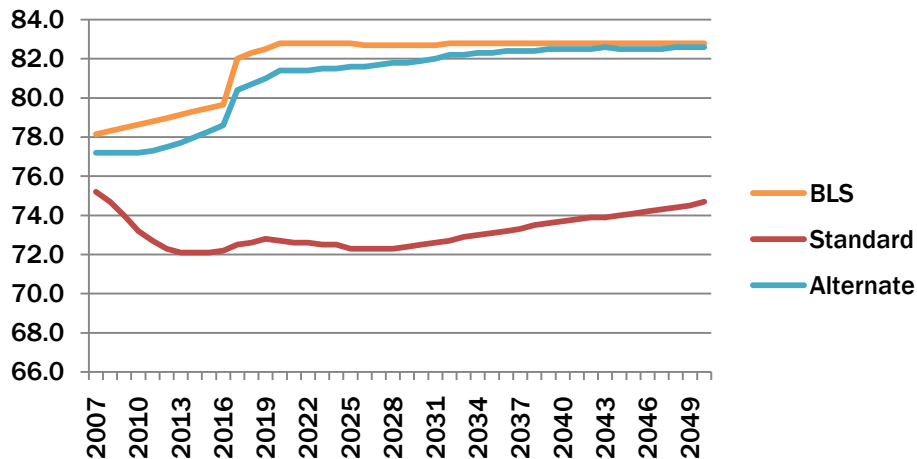


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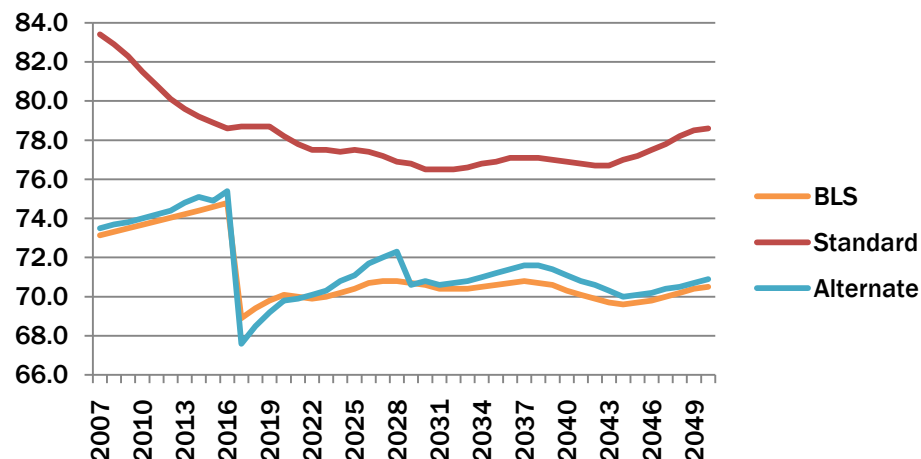


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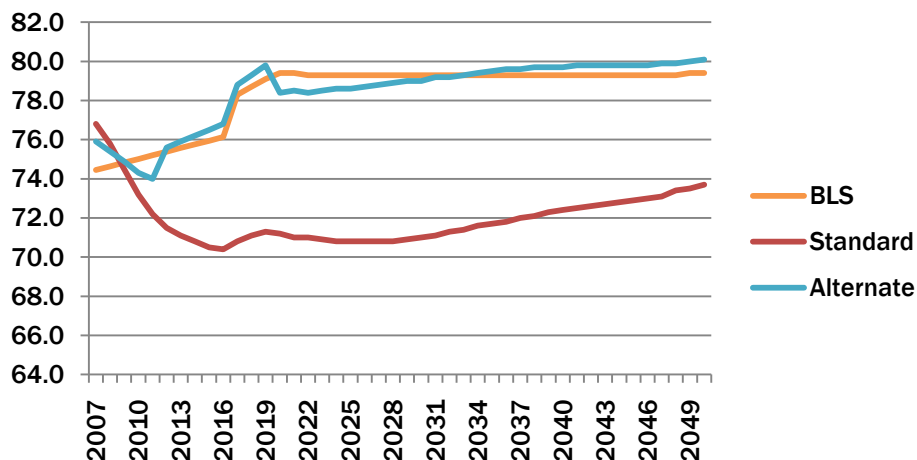
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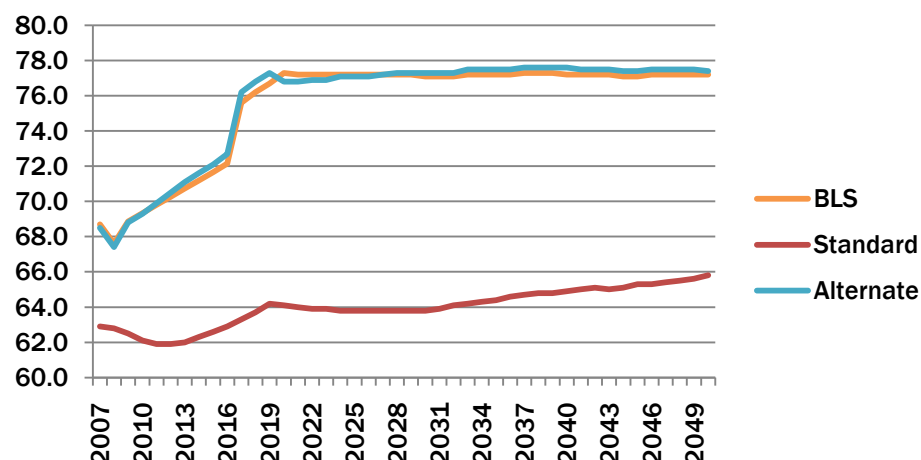
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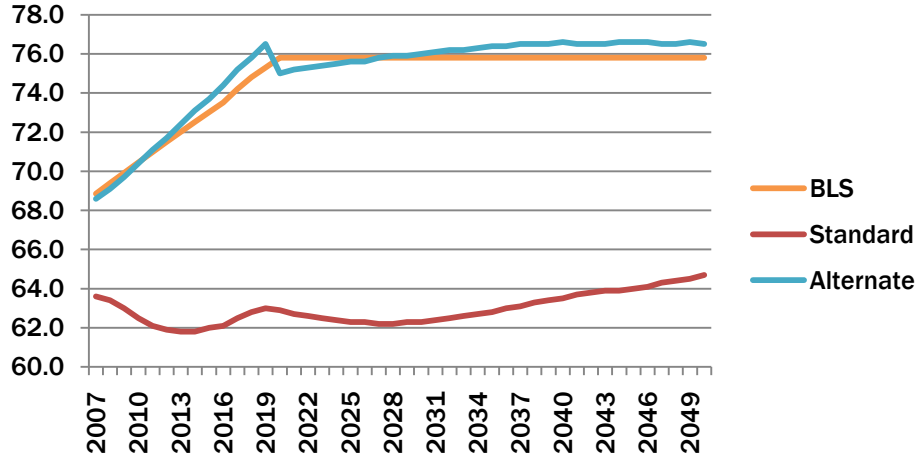


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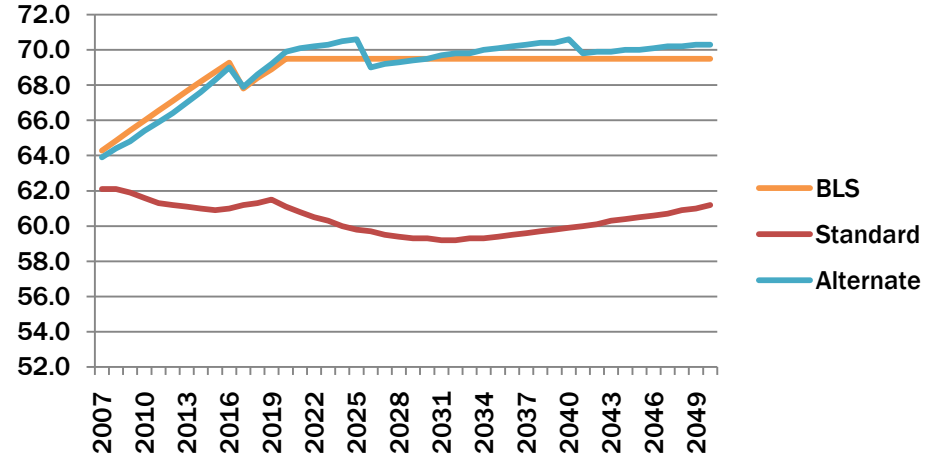


LFPR WOMEN 55-59

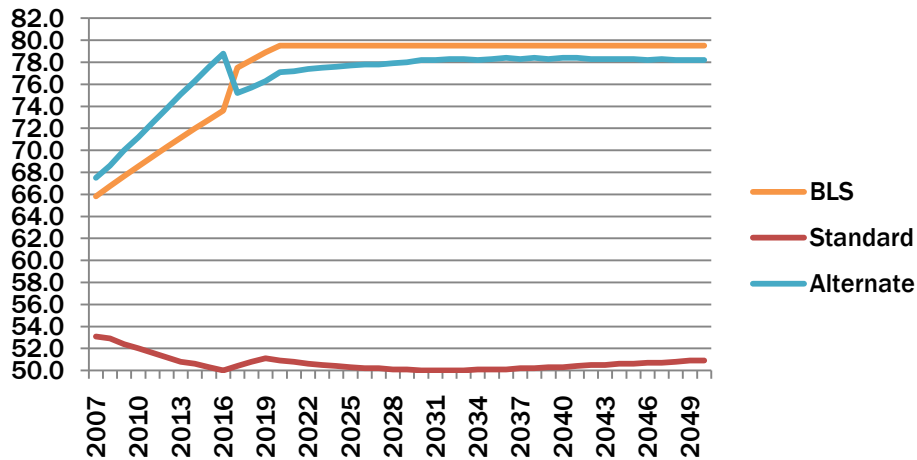
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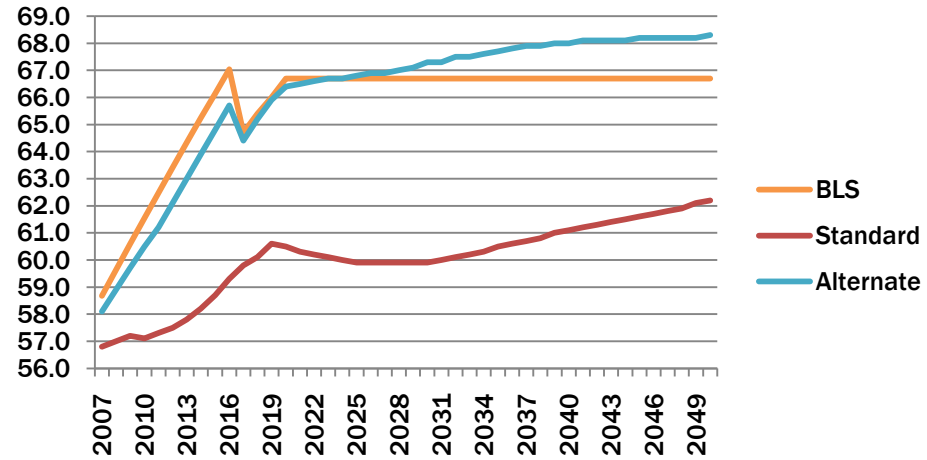
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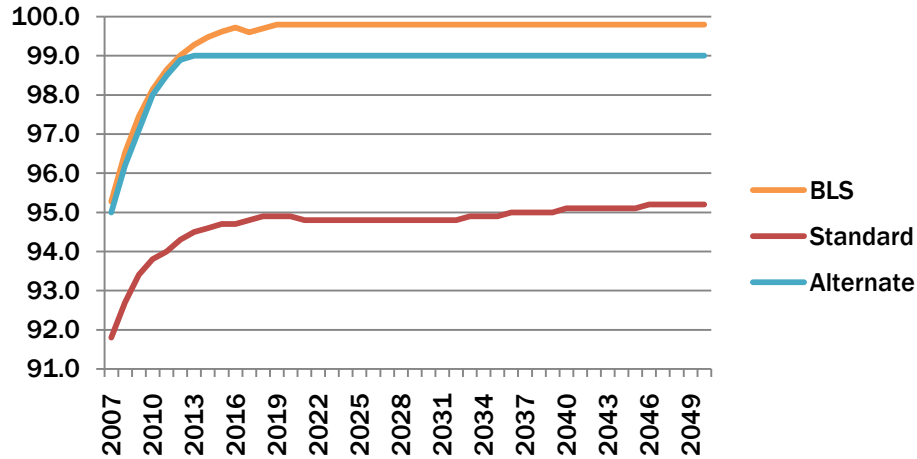


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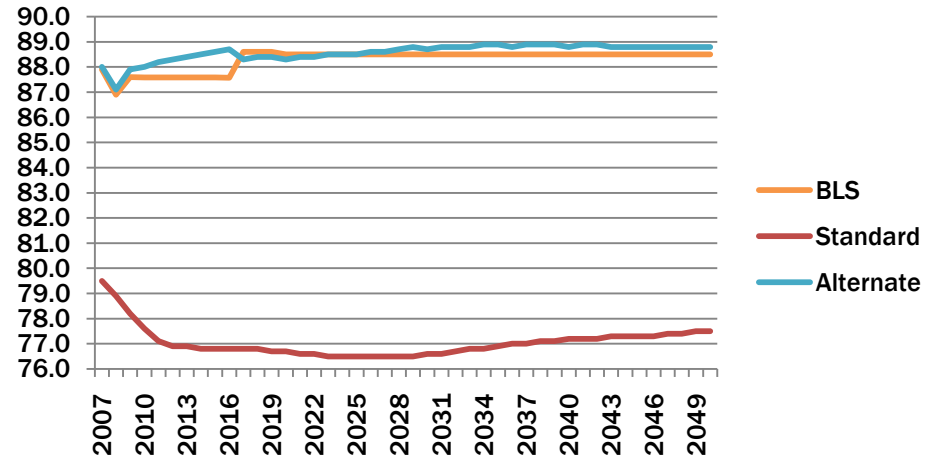


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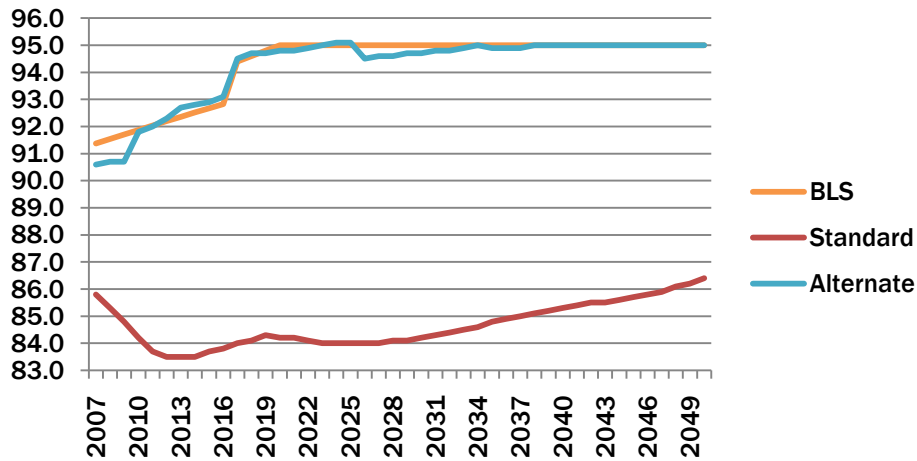
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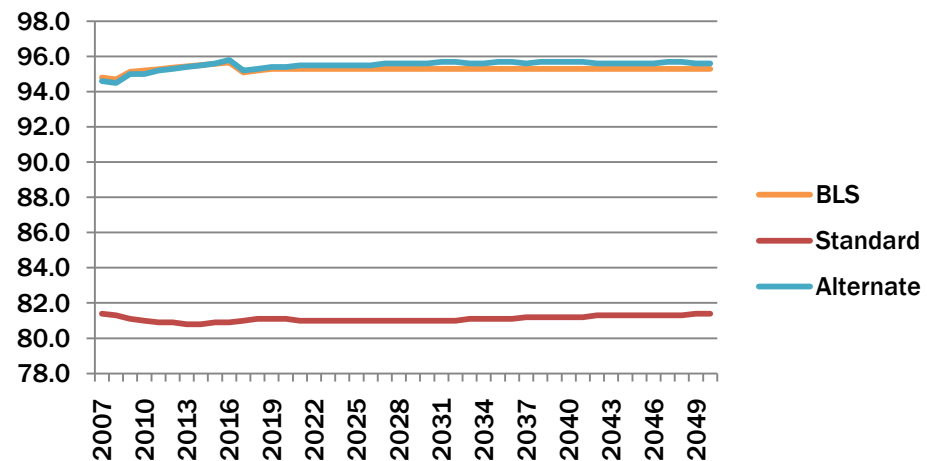
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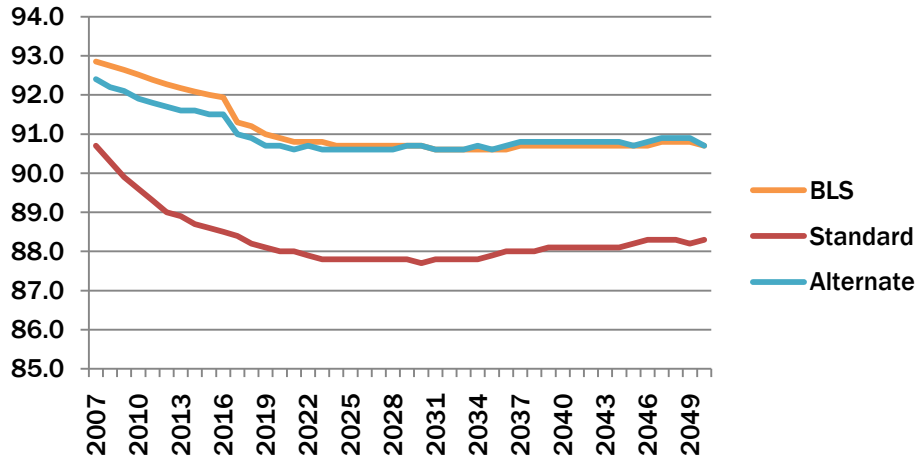


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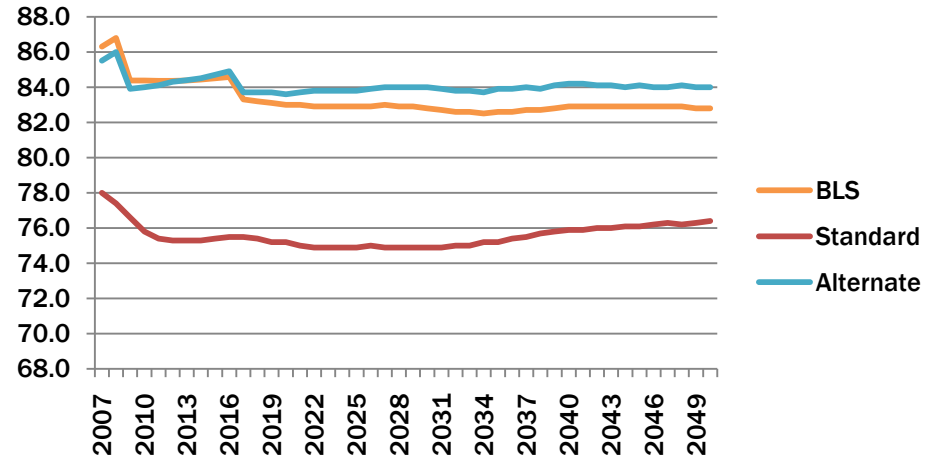


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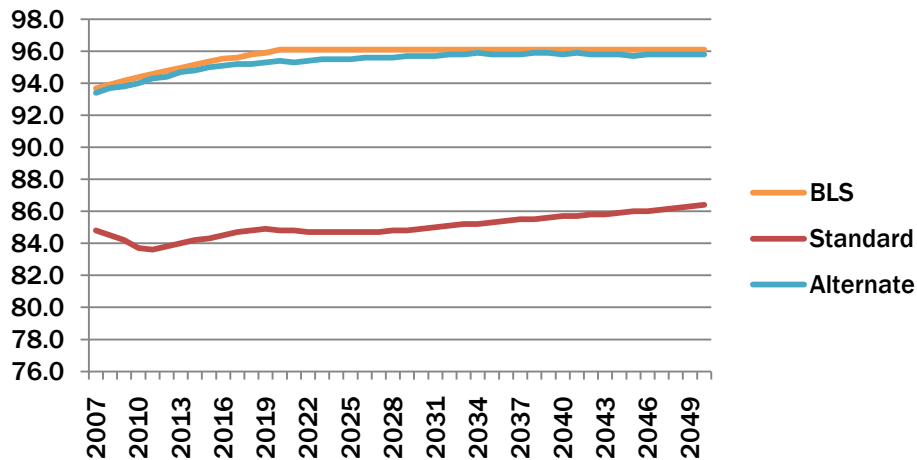
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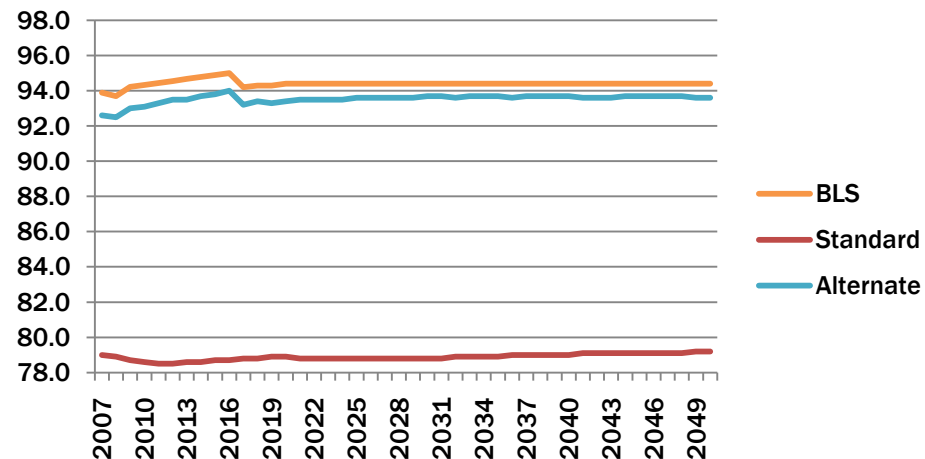
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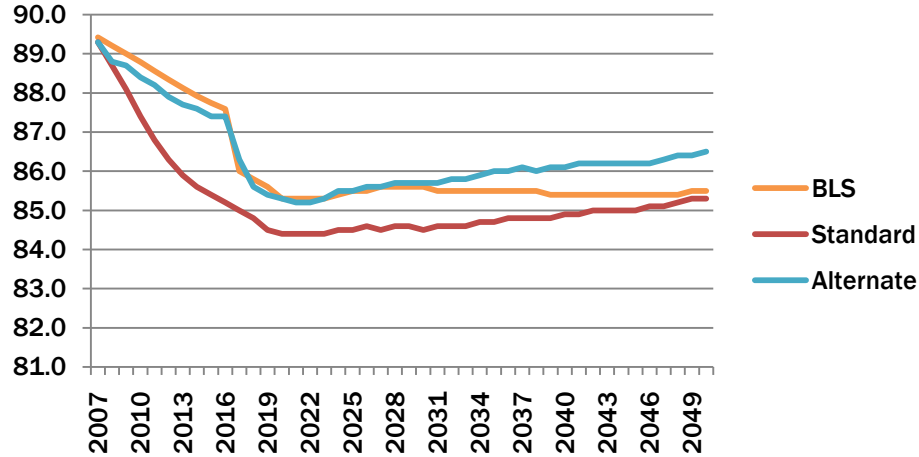


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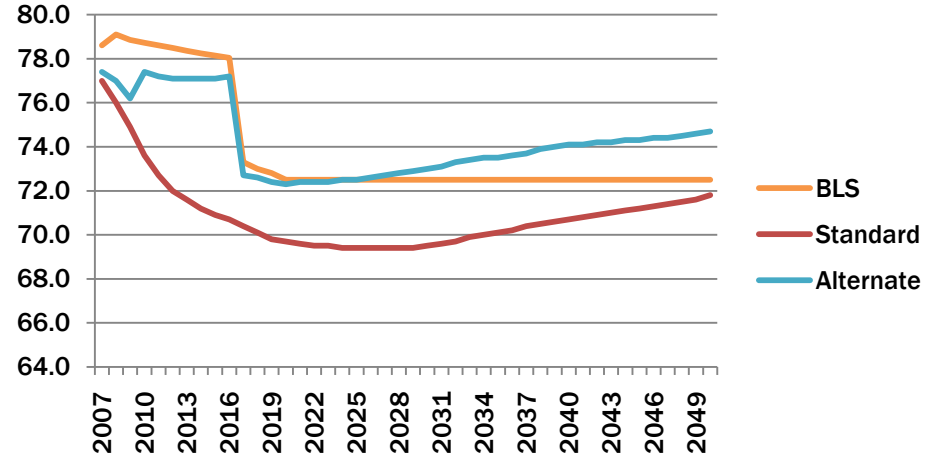


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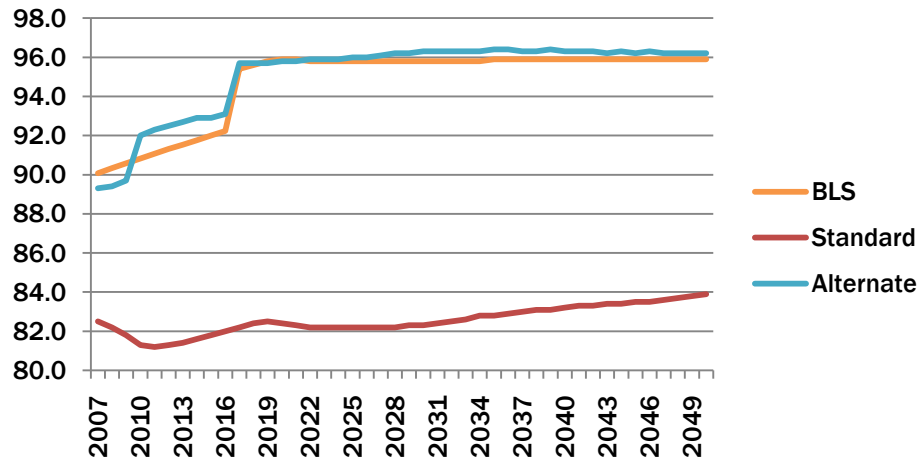
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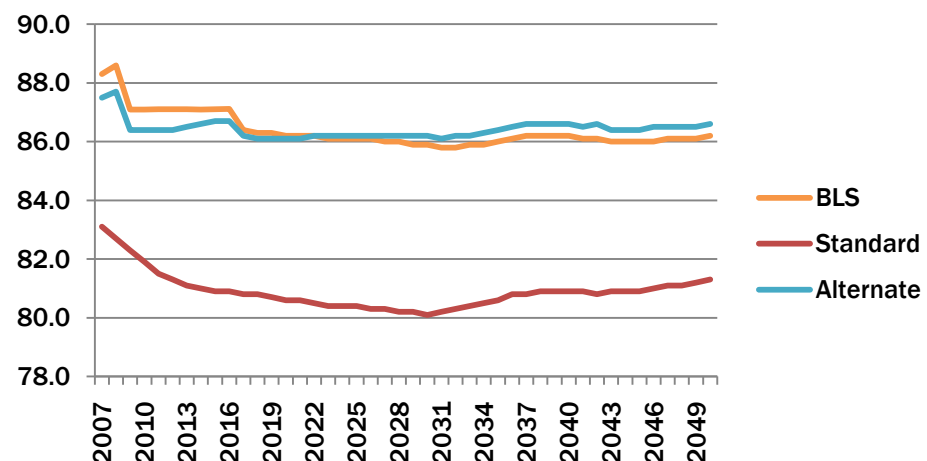
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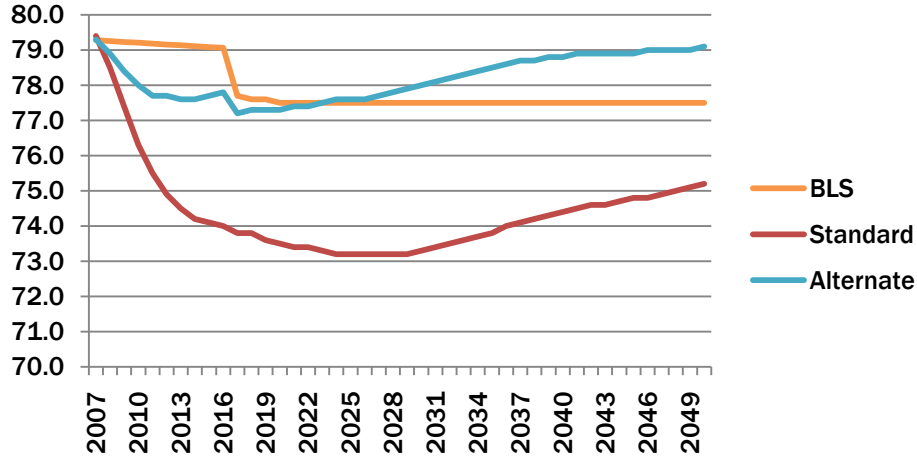


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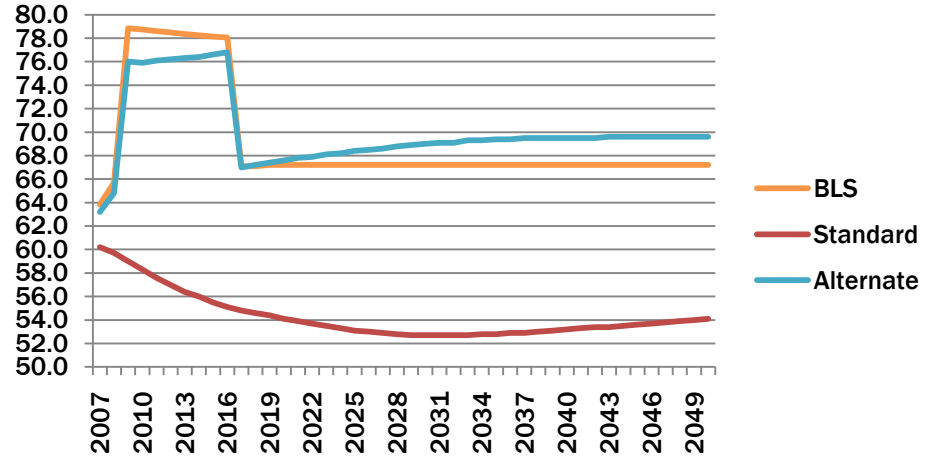


LFPR MEN 55-59

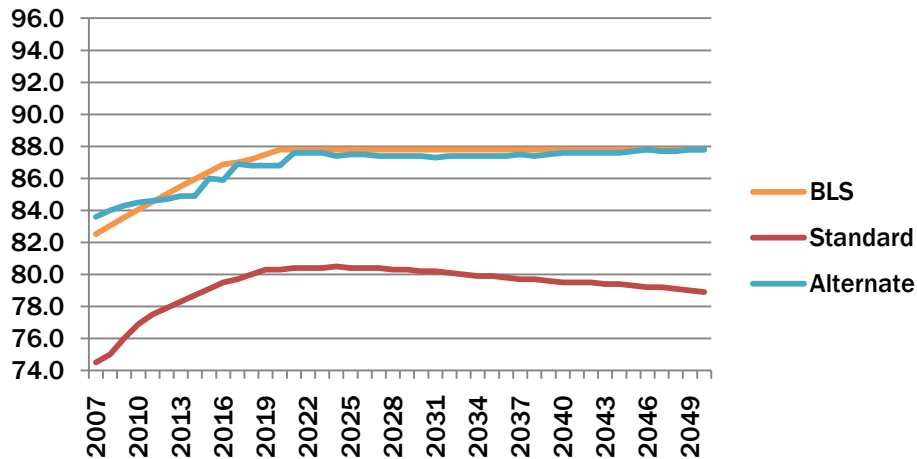
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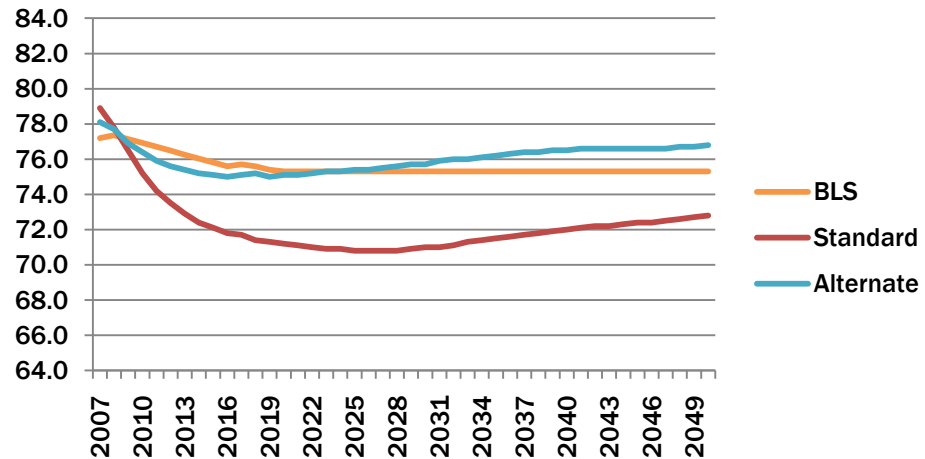
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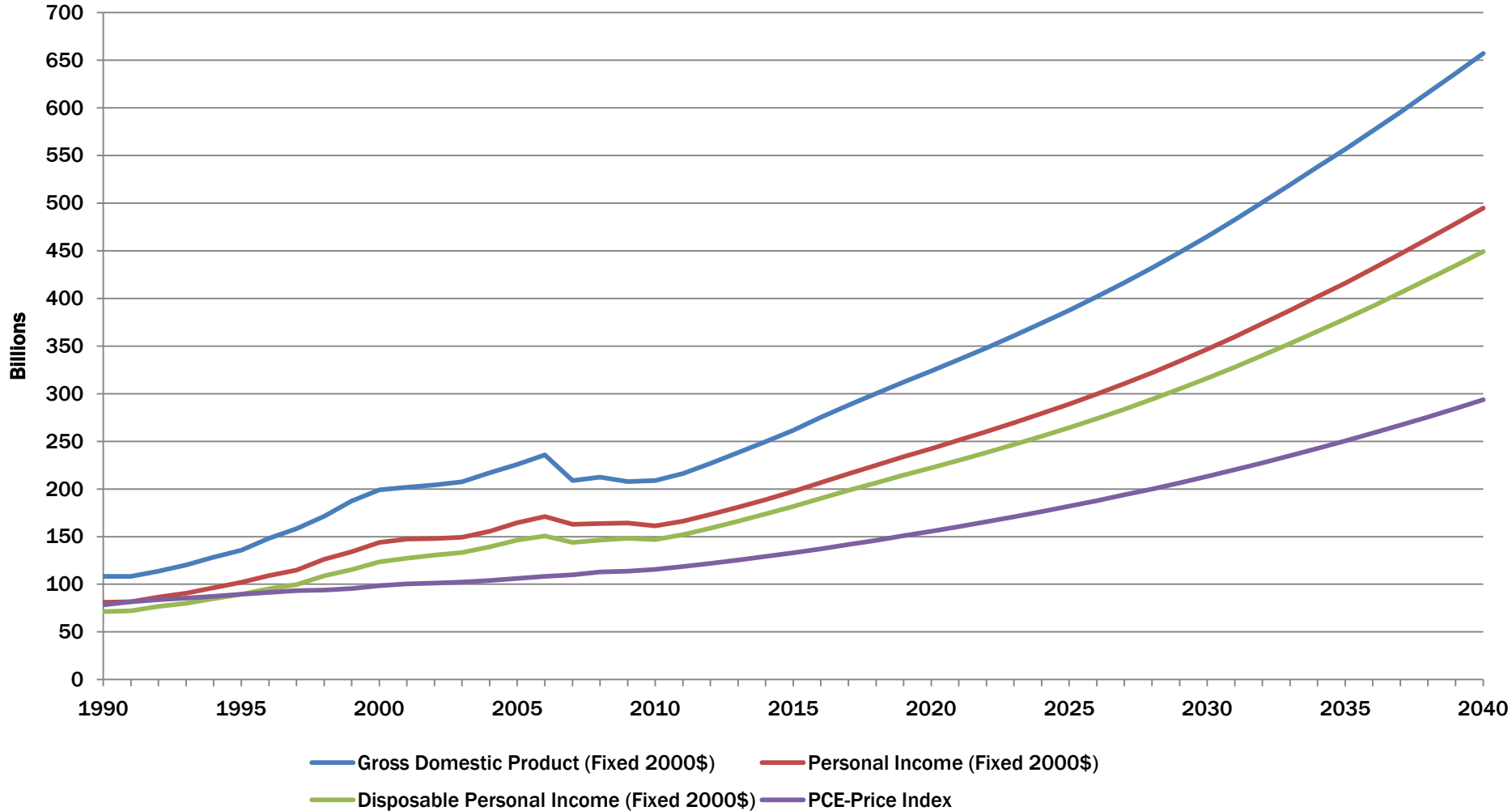


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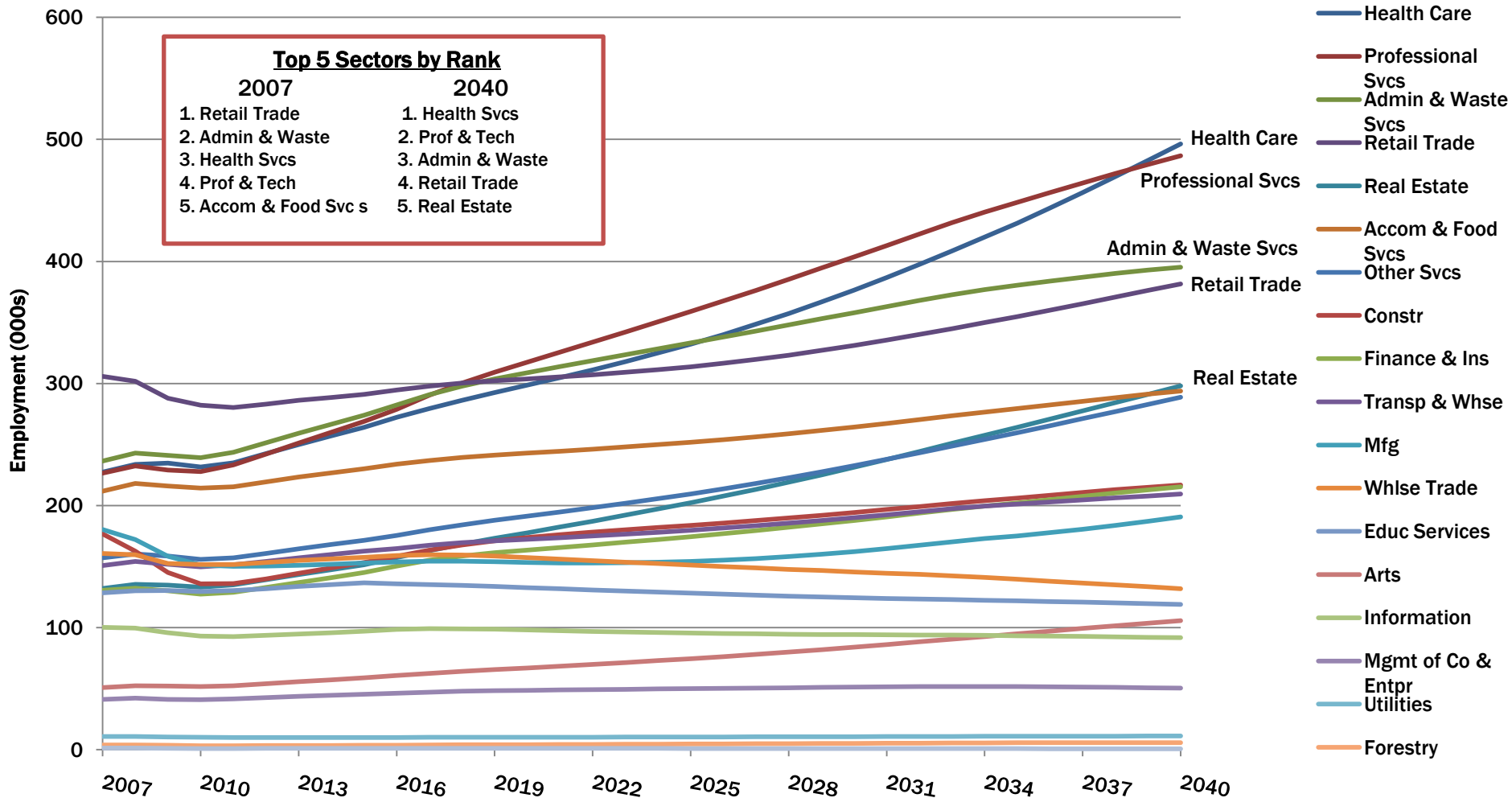


PRODUCTIVITY AT A GLANCE

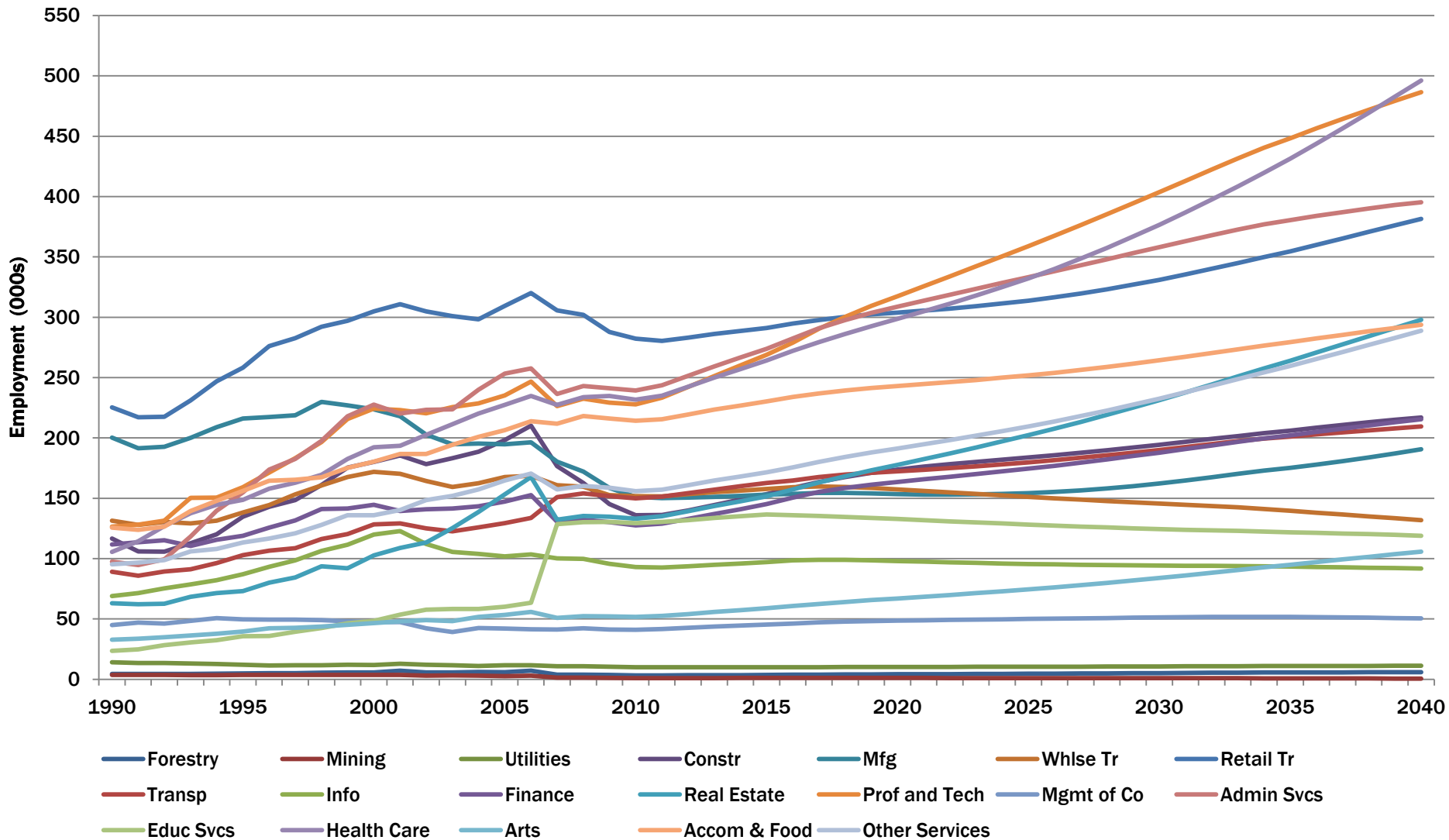
Components of Income



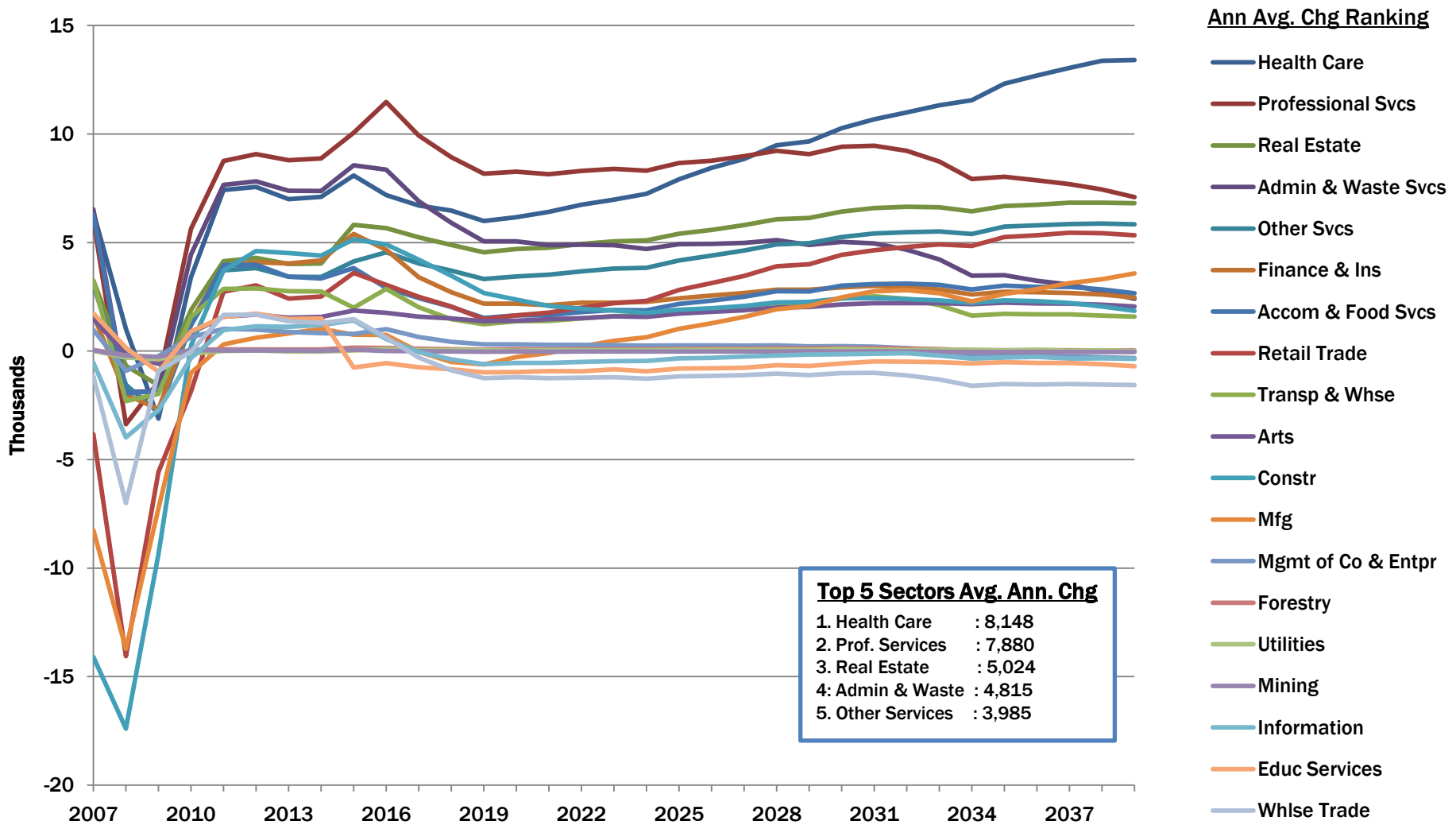
SECTOR CHANGE 2007-2040



SECTOR CHANGE 2007-2040

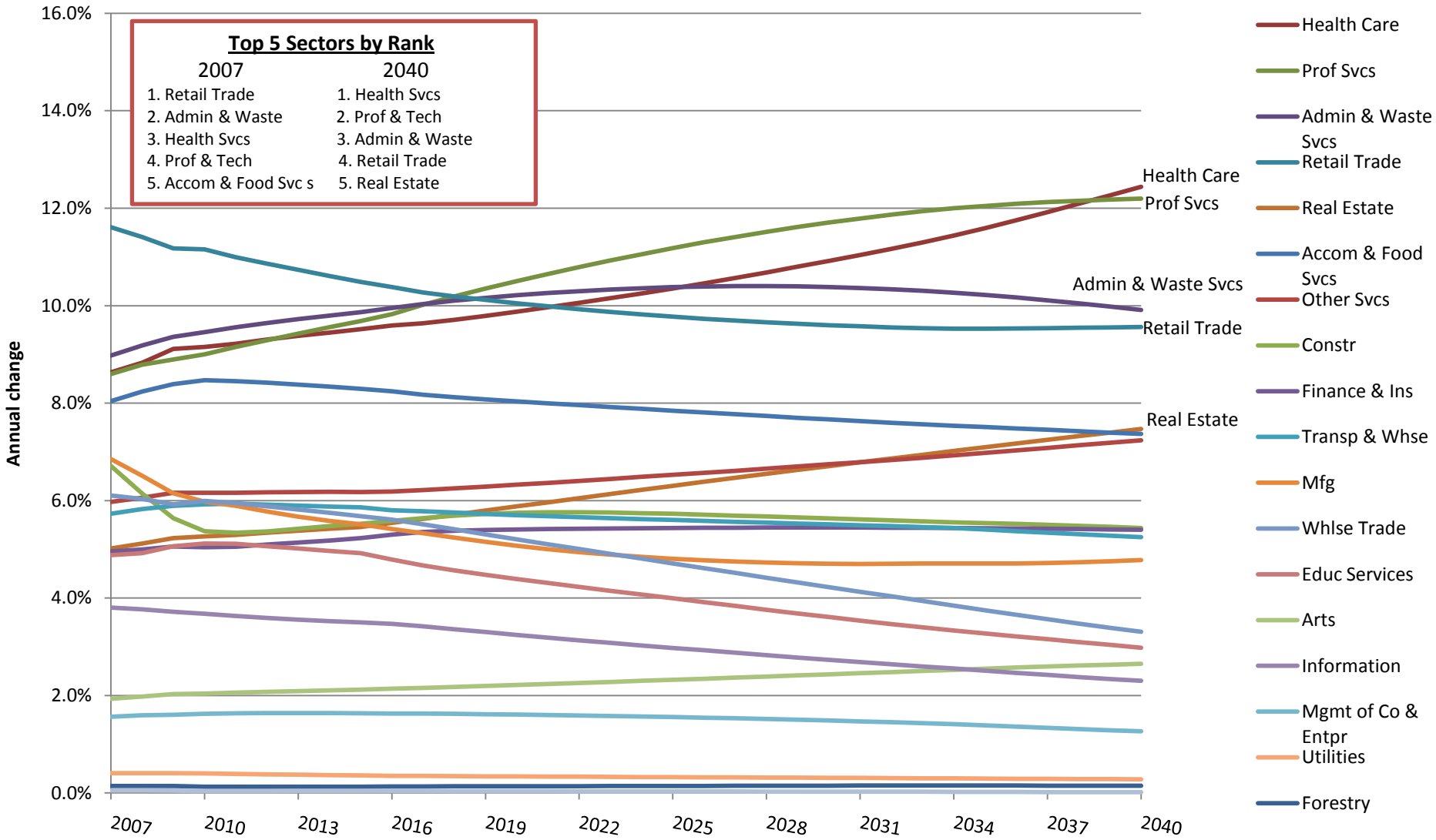


SECTOR ANNUAL CHG 2007-2040



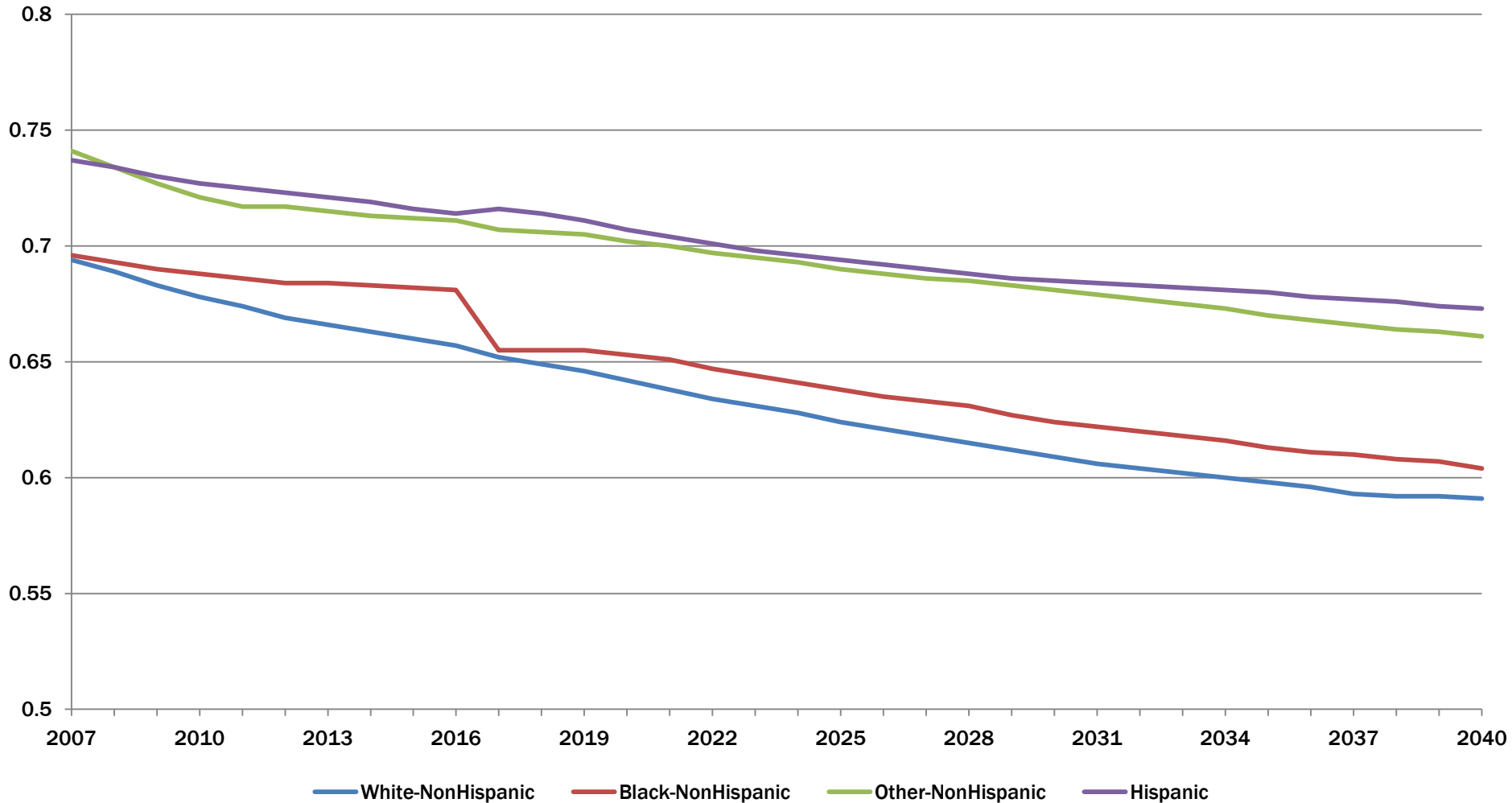
Sector Share Change 2007-2040

<u>Top 5 Sectors by Rank</u>	
2007	2040
1. Retail Trade	1. Health Svcs
2. Admin & Waste	2. Prof & Tech
3. Health Svcs	3. Admin & Waste
4. Prof & Tech	4. Retail Trade
5. Accom & Food Svcs	5. Real Estate



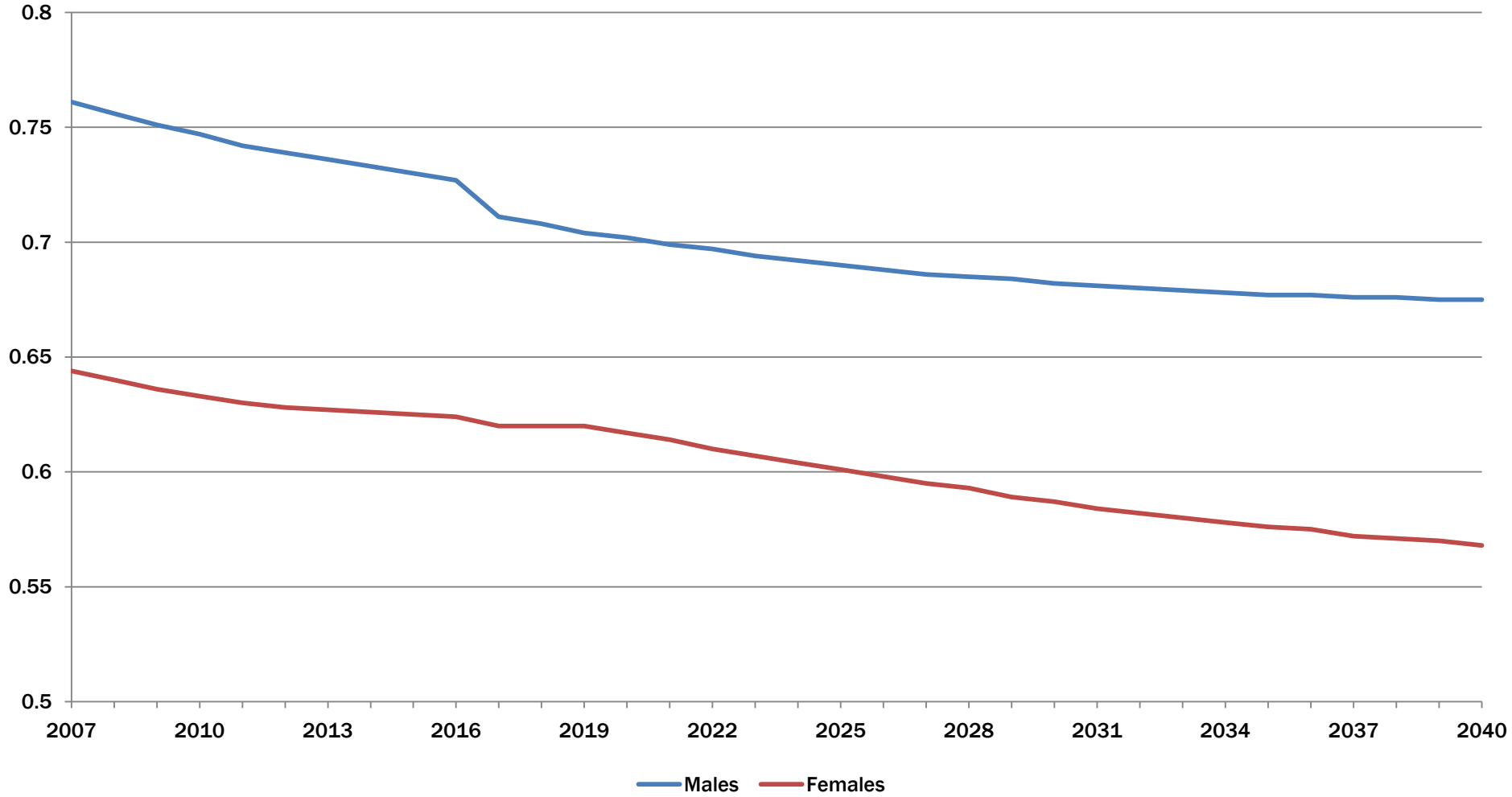
Labor Force Participation

Rates by Race and Ethnicity



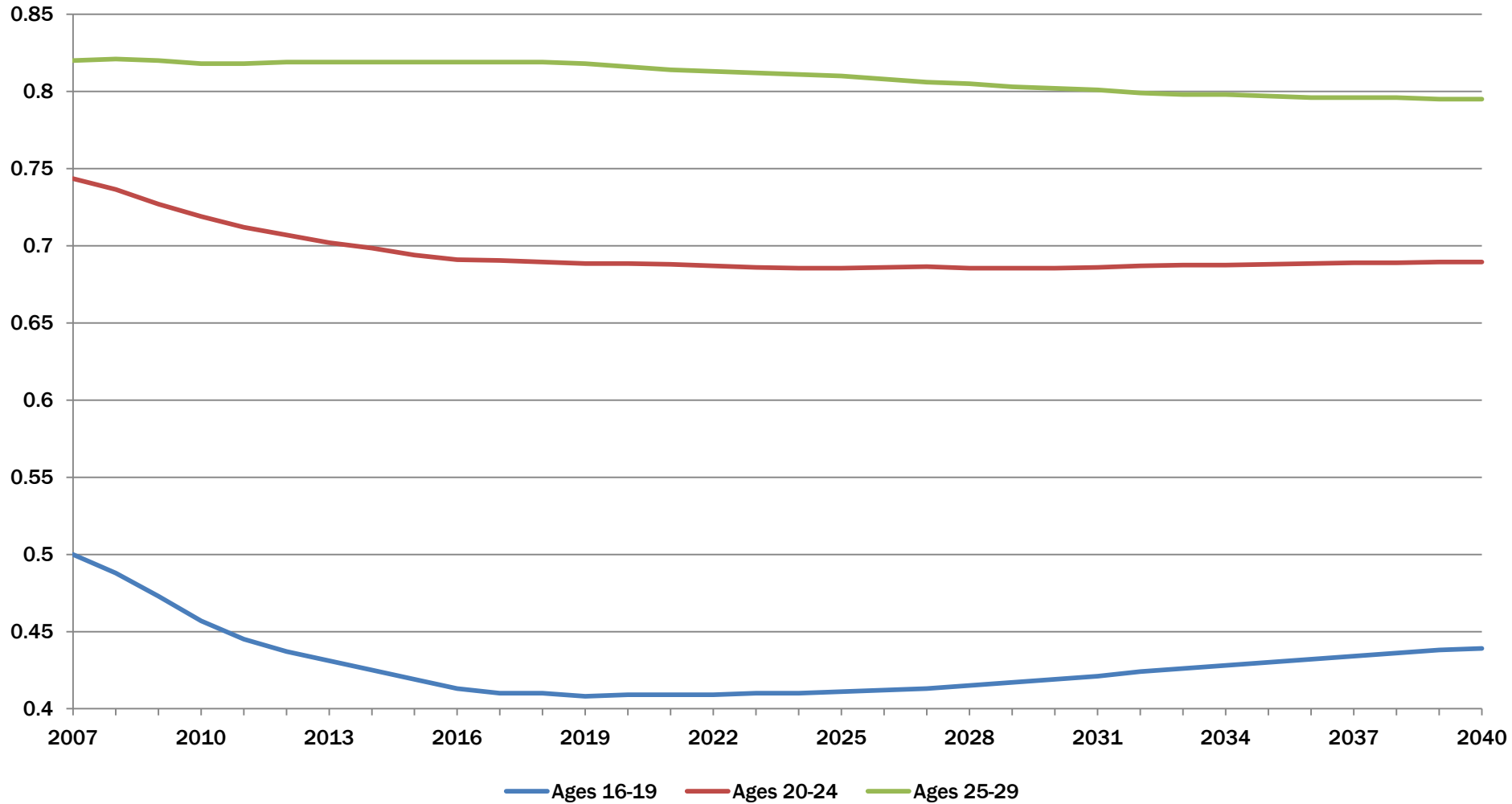
Labor Force Participation

Rates by Gender



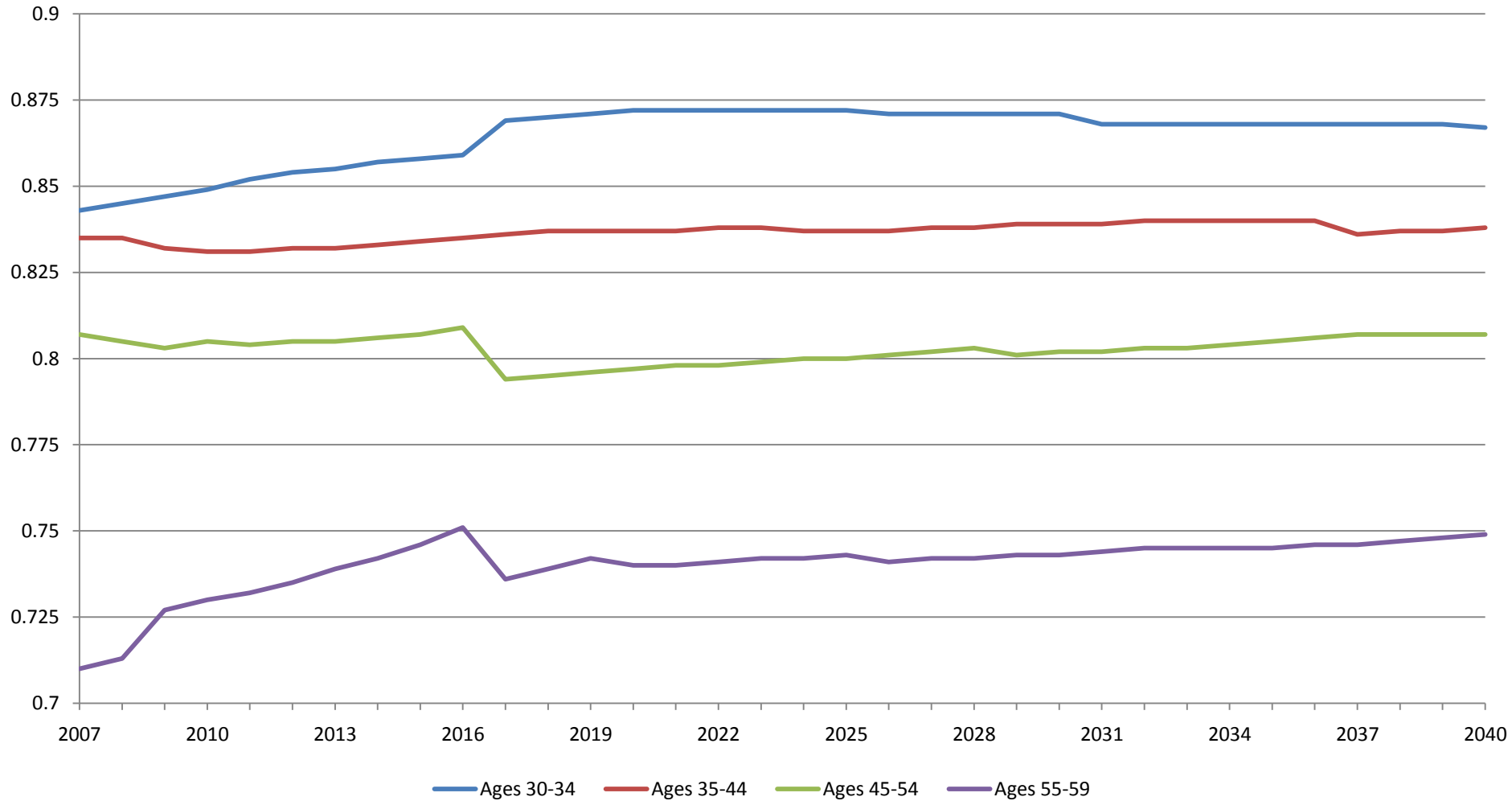
PARTICIPATION RATES

All Races by Age



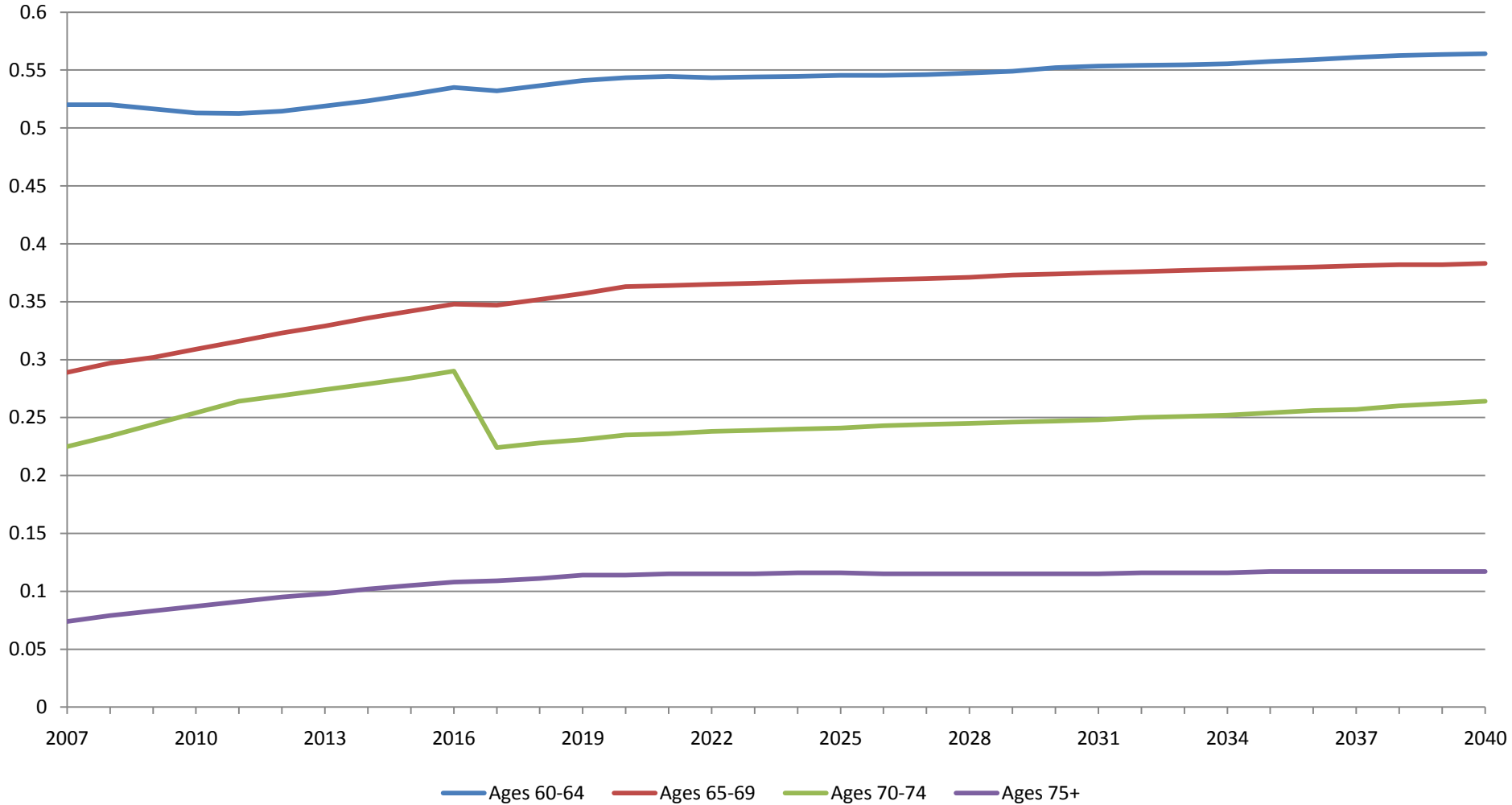
PARTICIPATION RATES

All Races by Age



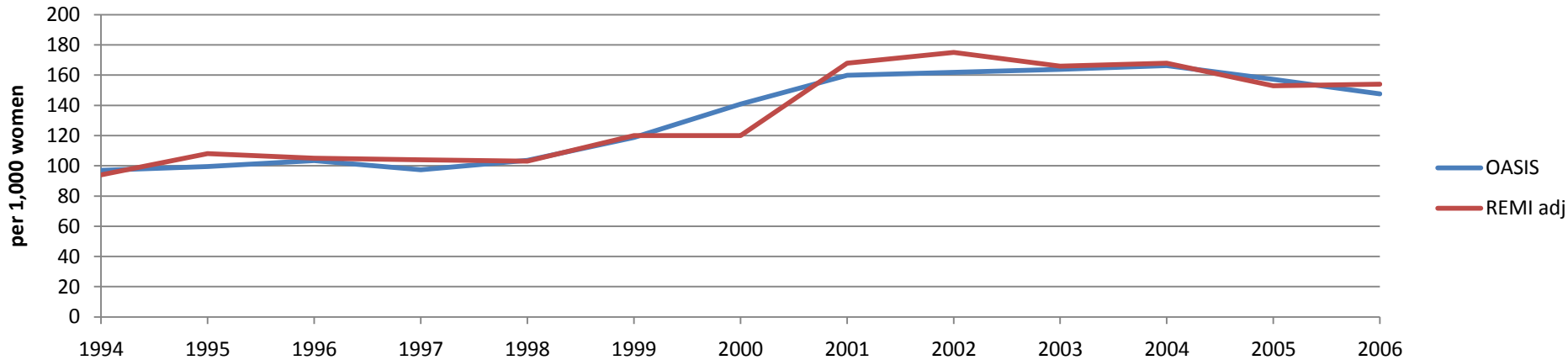
PARTICIPATION RATES

All Races by Age

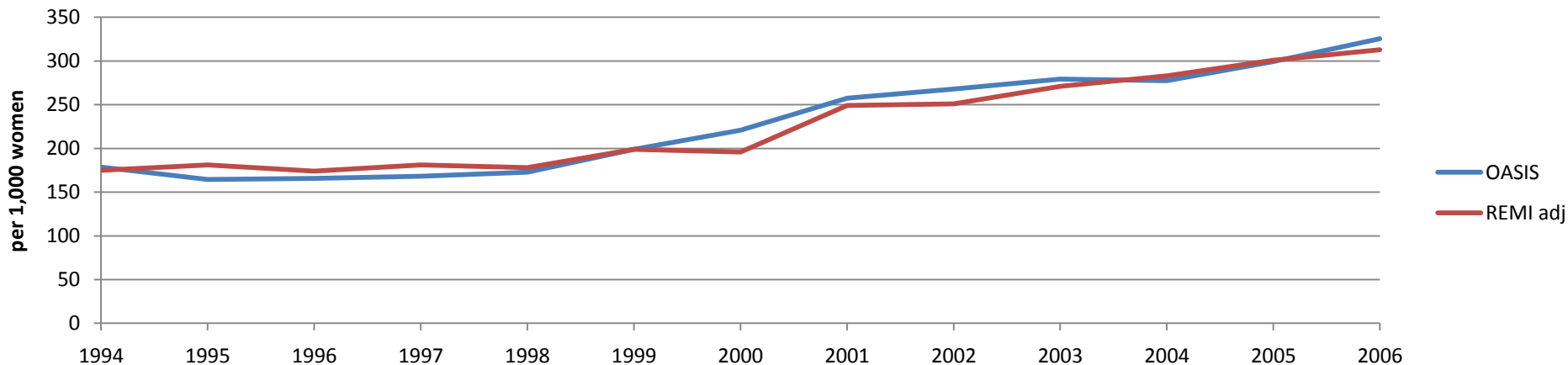


HISPANIC BIRTH RATES

Age 15-19

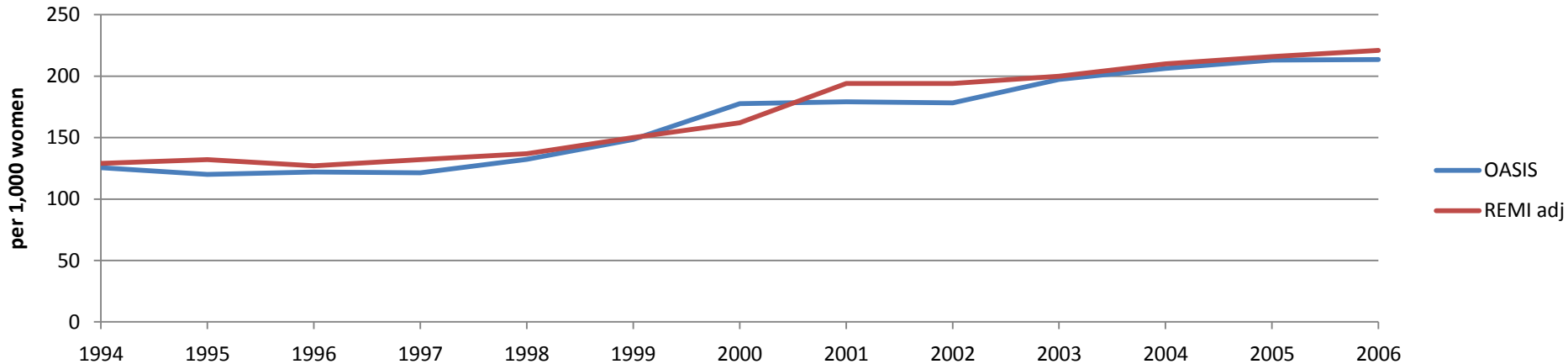


Age 20-24

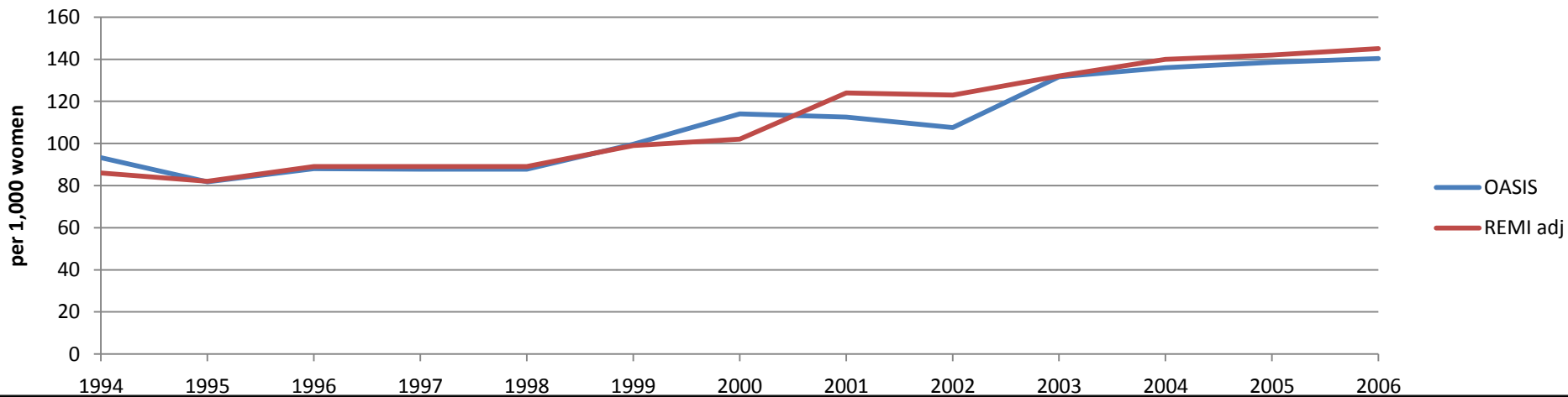


HISPANIC BIRTH RATES

Age 25-29

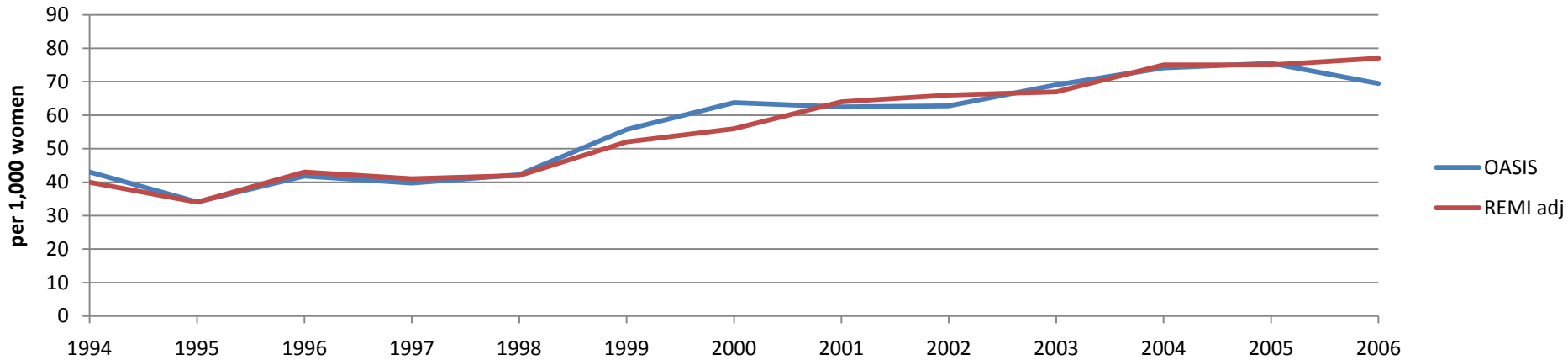


Age 30-34

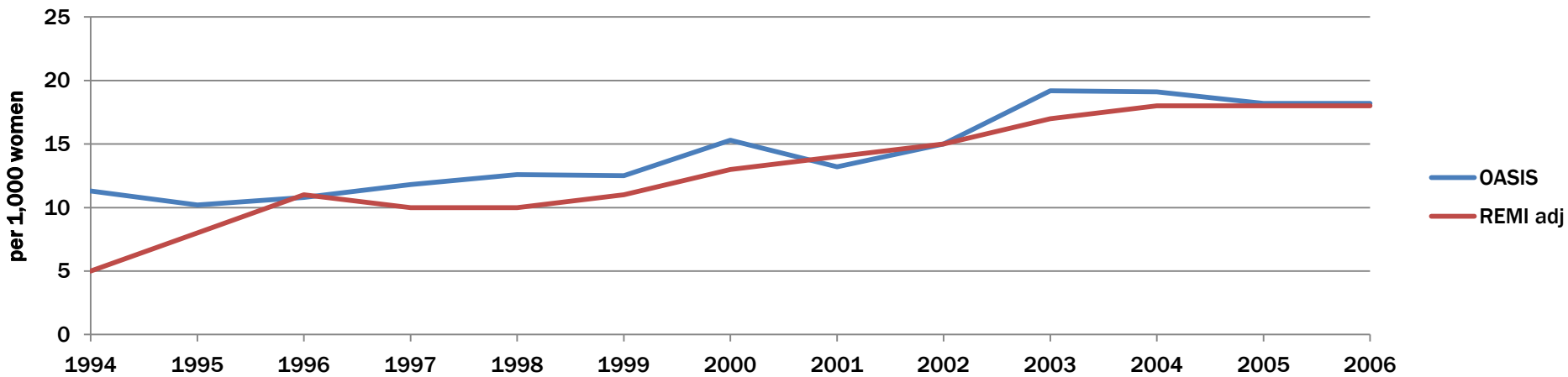


HISPANIC BIRTH RATES

Age 35-39

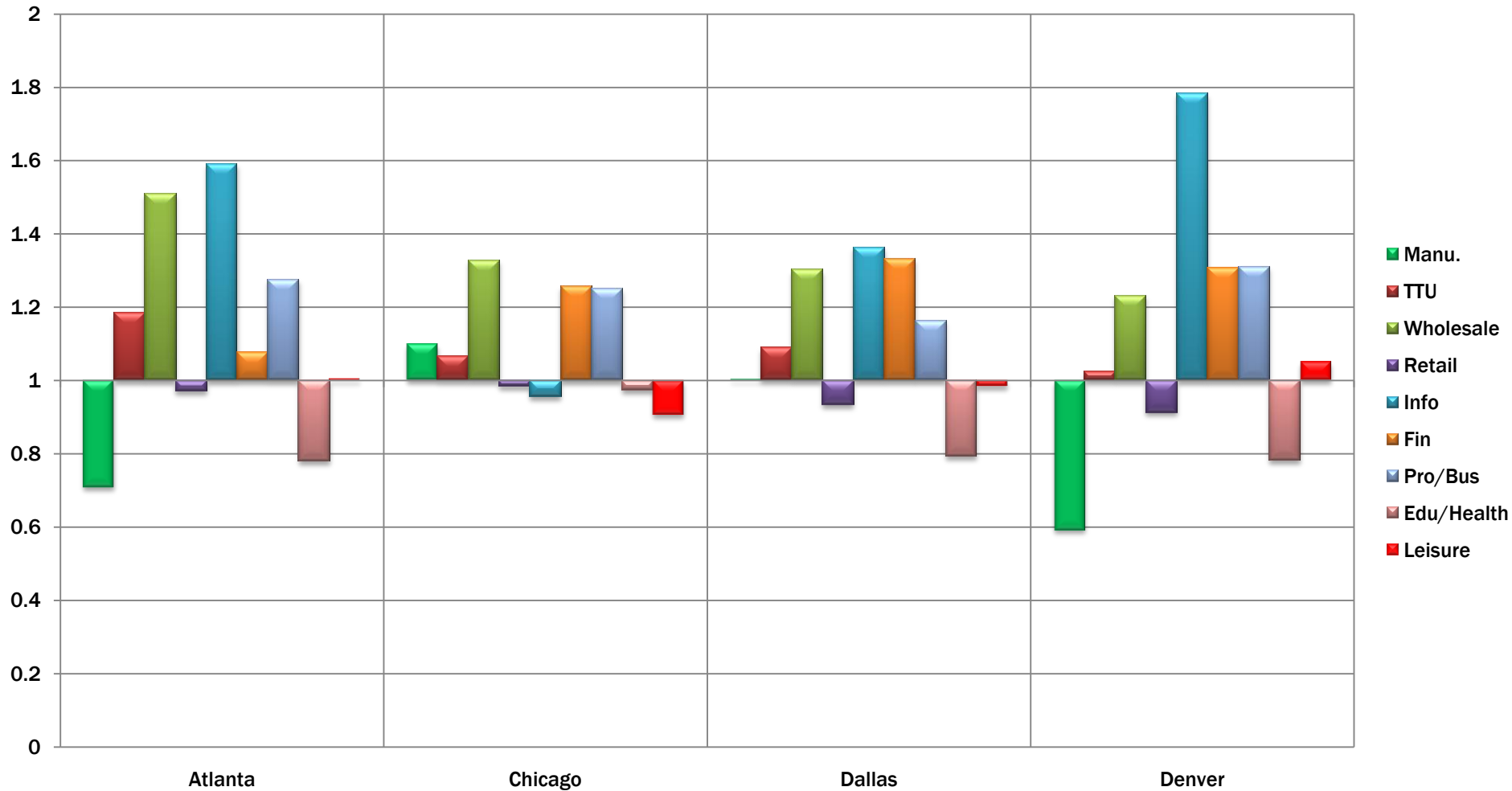


Age 40-44



OTHER METRO AREAS' INDUSTRY MIX

Location Quotient - January 2009 (preliminary)



LABOR FORCE

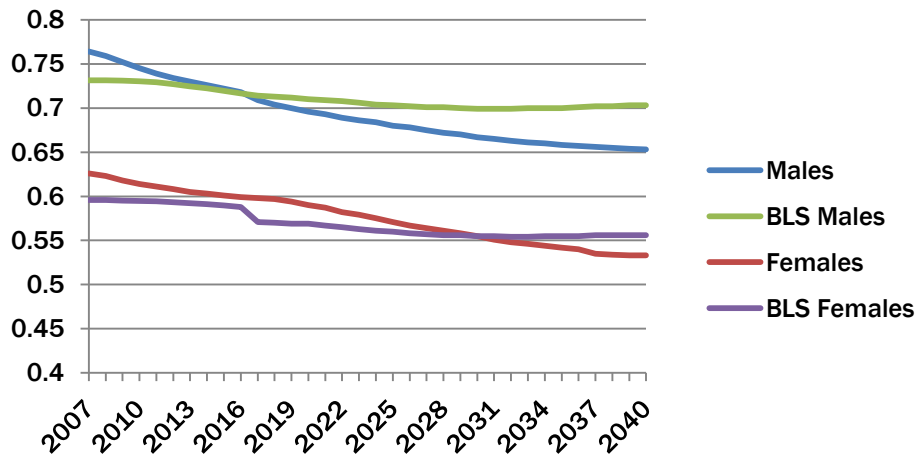
- **Focusing on adjusting cohort-specific labor force participation rates**
 - **Collected current forecasts from BLS by race, age and gender**
 - Analysis indicated BLS rates were significantly higher than model rates
 - Labor force participation rates were adjusted for each race and gender, ages 30-59 cohorts
 - Adjusting these rates revealed a more reasonable baseline and forecast for each module (econometric and demographic) in the REMI model

- **As seen in previous slides, future scenarios were adjusted based on these findings**

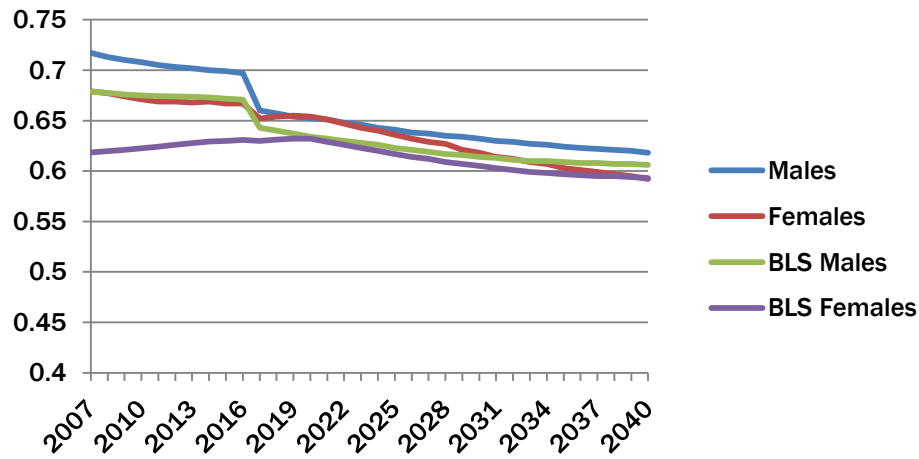


LABOR FORCE PARTICIPATION RATES

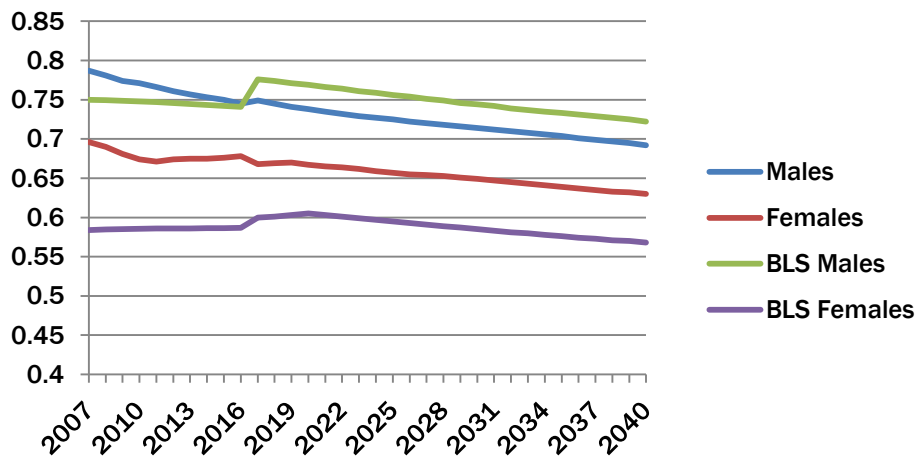
White Non-Hispanic



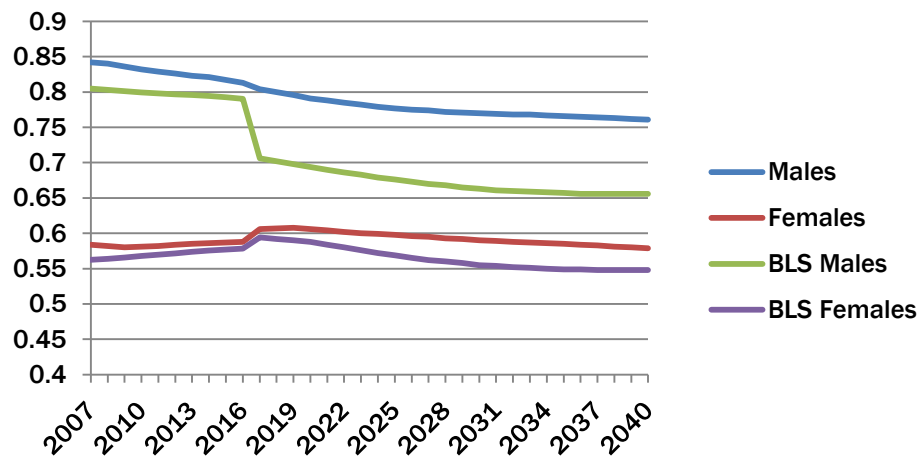
Black Non-Hispanic



Other Non-Hispanic



Hispanic



HISPANIC COMPOSITION

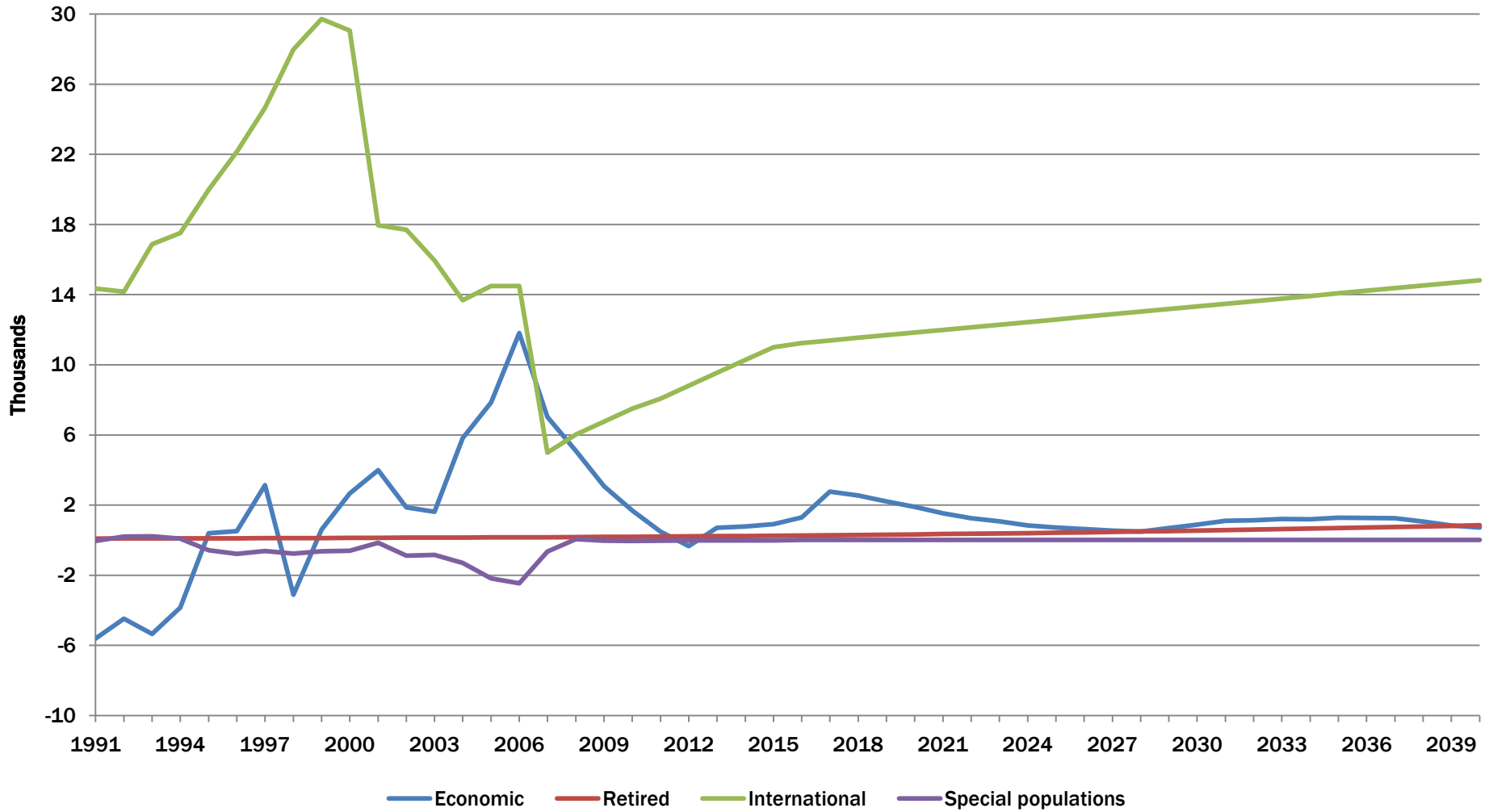
➤ TAC suggested a reduction of Hispanic immigration and fertility rates

- Data collection for Hispanic immigration and birth rates was undertaken
 - ❖ Data sources on immigration derived from the REMI model
 - ❖ Data sources on fertility retrieved with the GA DHR OASIS query tool
- Sources show immigration slightly decreased through calibration process and implementing developed policy variables
 - ❖ Still need further evaluation
- GA DHR confirmed the data within the model equates to actual data



HISPANIC COMPOSITION

Migration



HISPANIC COMPOSITION

Demographic change

