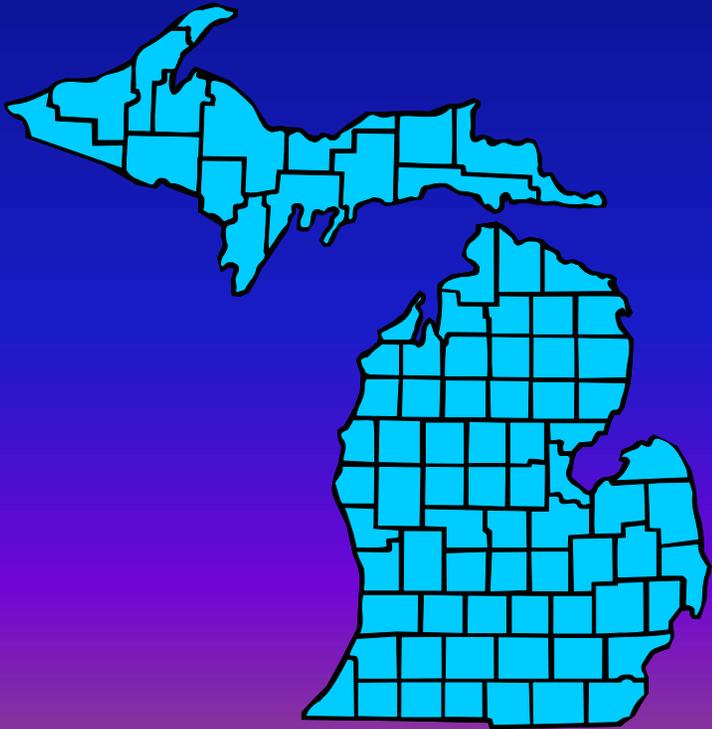


# Economic and Demographic Outlook for Michigan and Its Counties to 2035

## Final Results



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# Background on the Forecasts



- Today we are presenting to the MPOs and the state regional planning organizations our final economic and demographic outlook for Michigan and its counties.
- This outlook updates our forecast from the previous cycle in 2003.
- The forecast is in partnership with MDOT and is the product of:



- The REMI economic and demographic forecasting and simulation model
- The forecasting expertise of the U-M economists
- Comments and insights of a number of local MPOs and regional planning organizations

## General Observations on the State and County Forecasts for 2005–2035

- Long-term forecasts are intended to identify economic trends
  - NOT to predict business cycle movements
- Forecasts are unable to capture major one-time events
  - unless there is prior knowledge of the event and external information is directly introduced into the forecast
  - e.g., Google and Pfizer in Washtenaw County

## General Observations on the State and County Forecasts for 2005–2035

- Some counties have special circumstances that cause them to deviate from the general trends—for example, a county with a large college-age population.
- The long-term outlook for regions is governed by:
  1. Prospects at the national level
  2. Trends in productivity growth
  3. The mix of industries within regions (e.g., growing service sector, declining goods-producing sector)
  4. Demographic trends

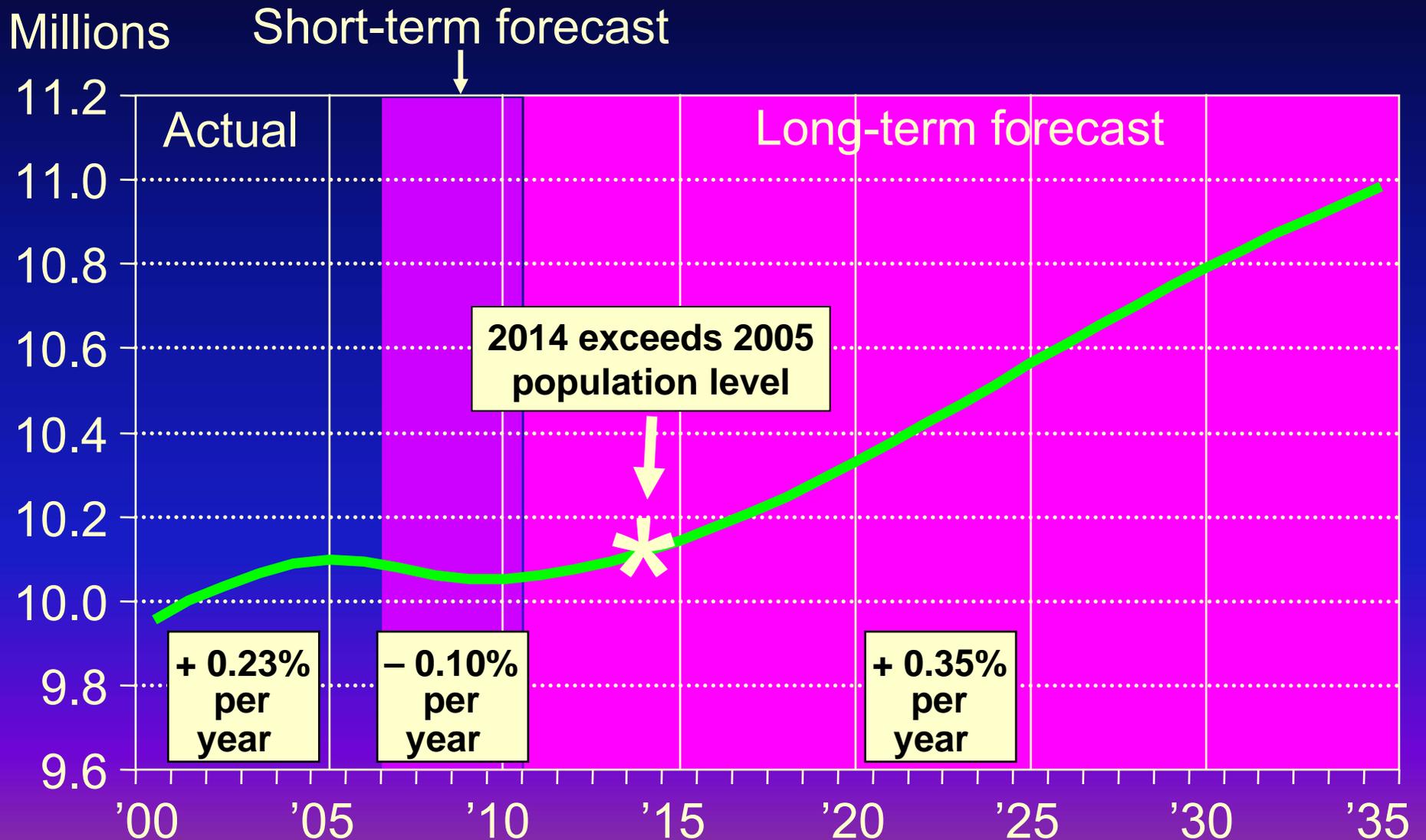
## Fundamental Drivers in Michigan's Long-term Outlook

1. The consequences of profound changes in the auto industry
2. The level of investment in other activities that show promise for future growth and prosperity, and for which the region has supporting assets
3. The impact of the aging of the “baby-boomer” generation, and the migration patterns of the younger and well-educated populace

# Forecasts of Population for Michigan

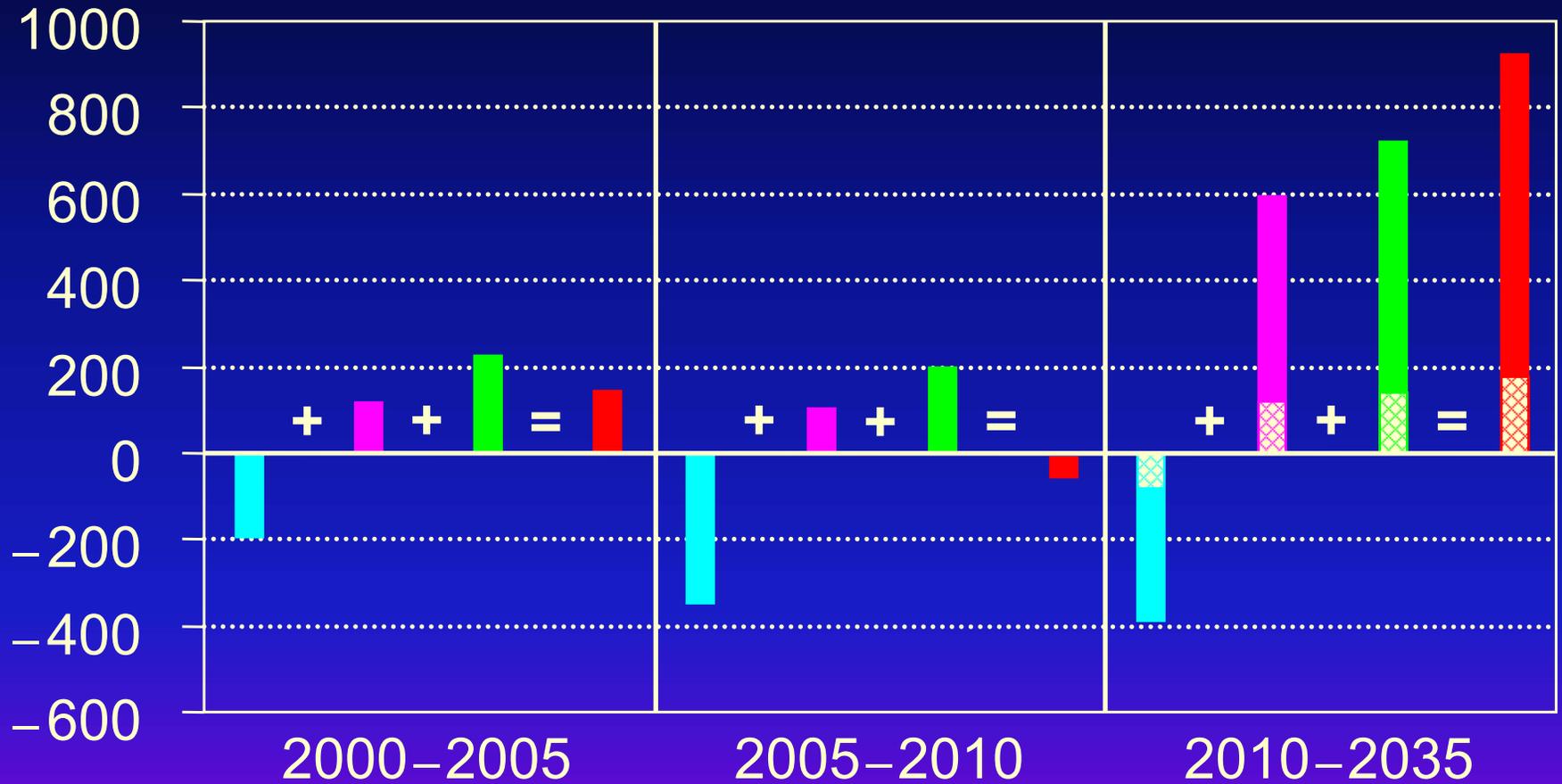


# Michigan Population, 2000–2035



# Components of Population Change in Michigan

Thousands



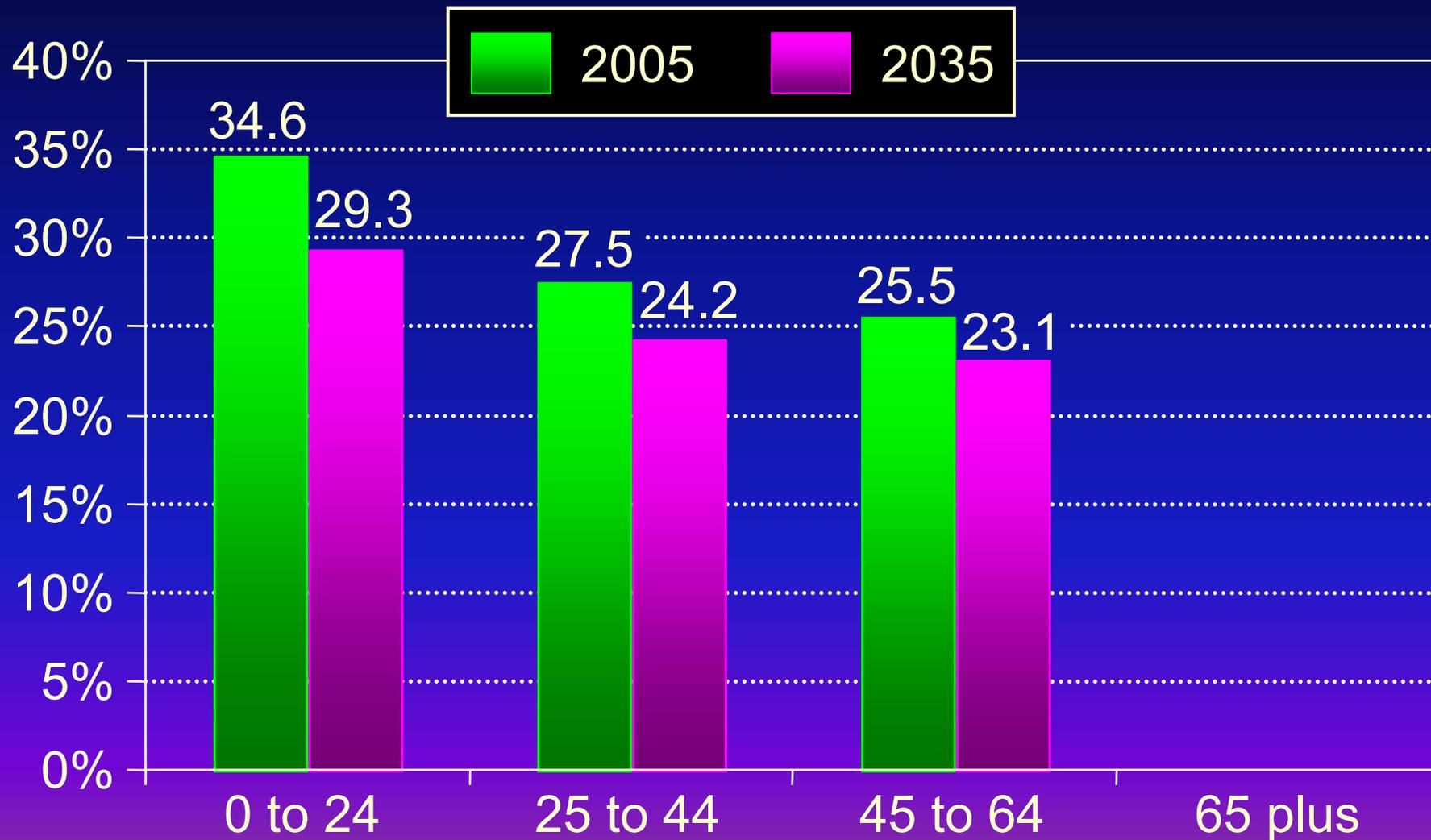
Net domestic migration

Natural change in population

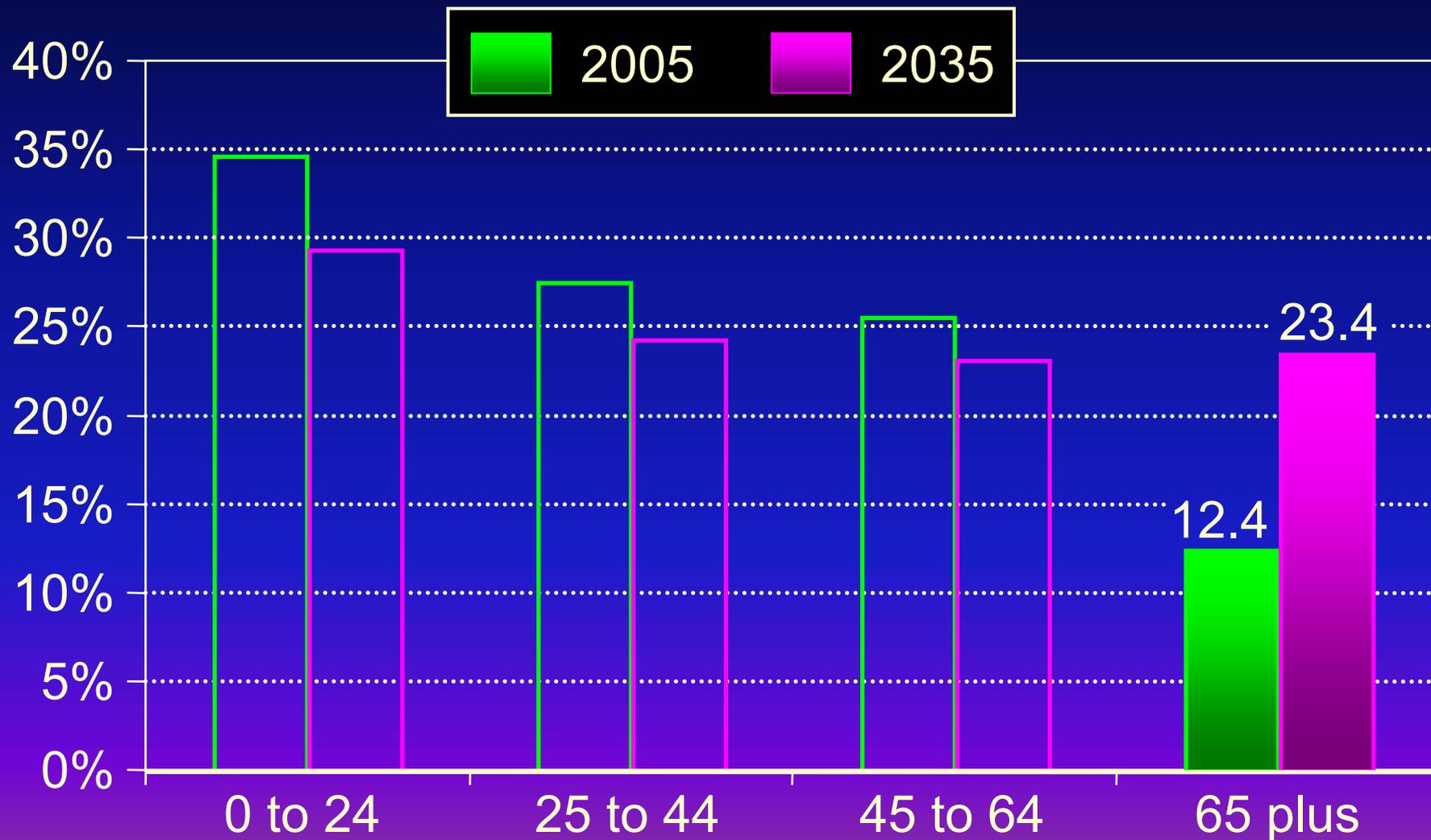
Net international migration

Total change in population

# Population Distribution by Age Group Michigan, 2005 and 2035



# Population Distribution by Age Group Michigan, 2005 and 2035



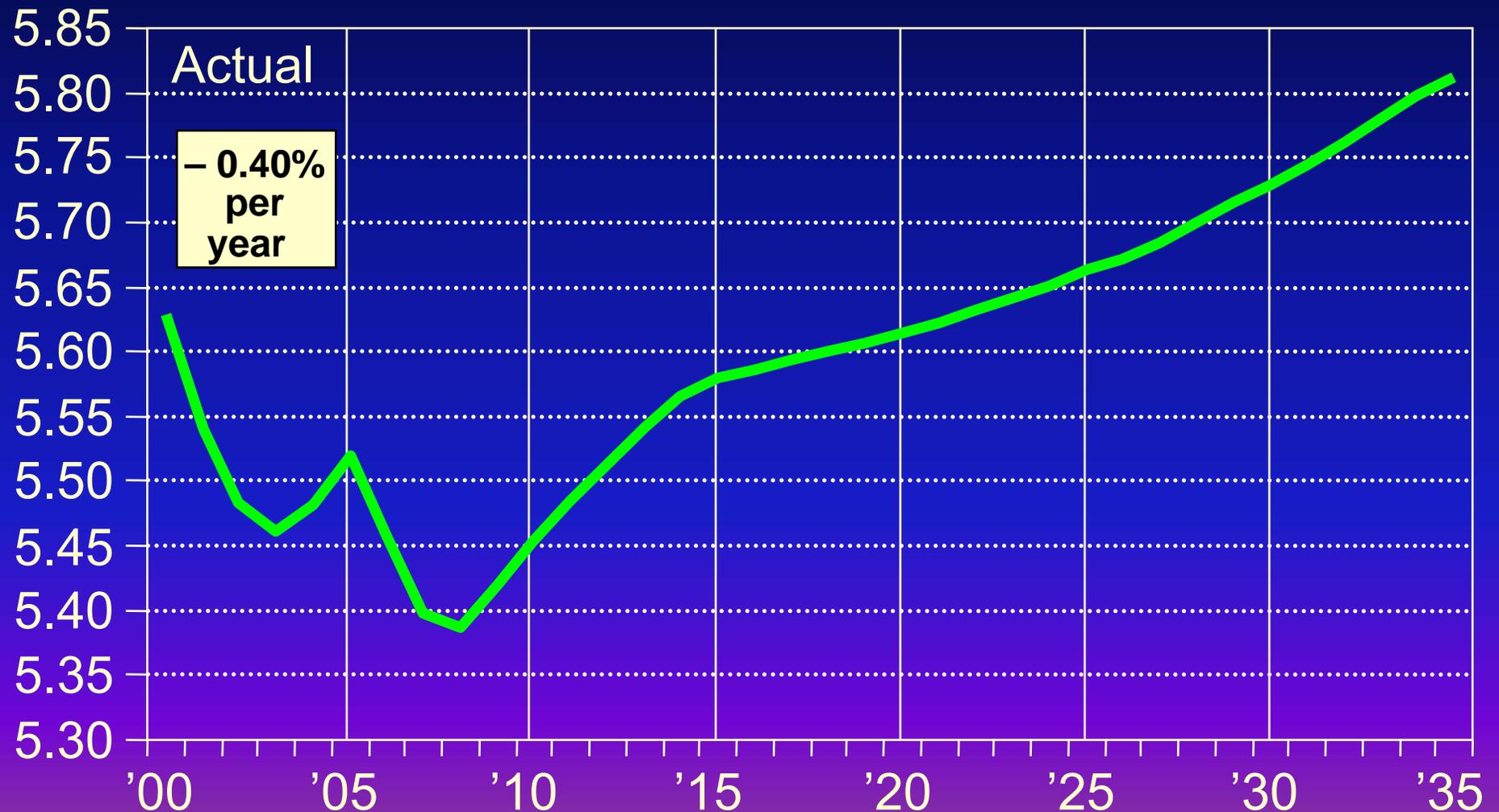
# Forecasts of Employment for Michigan



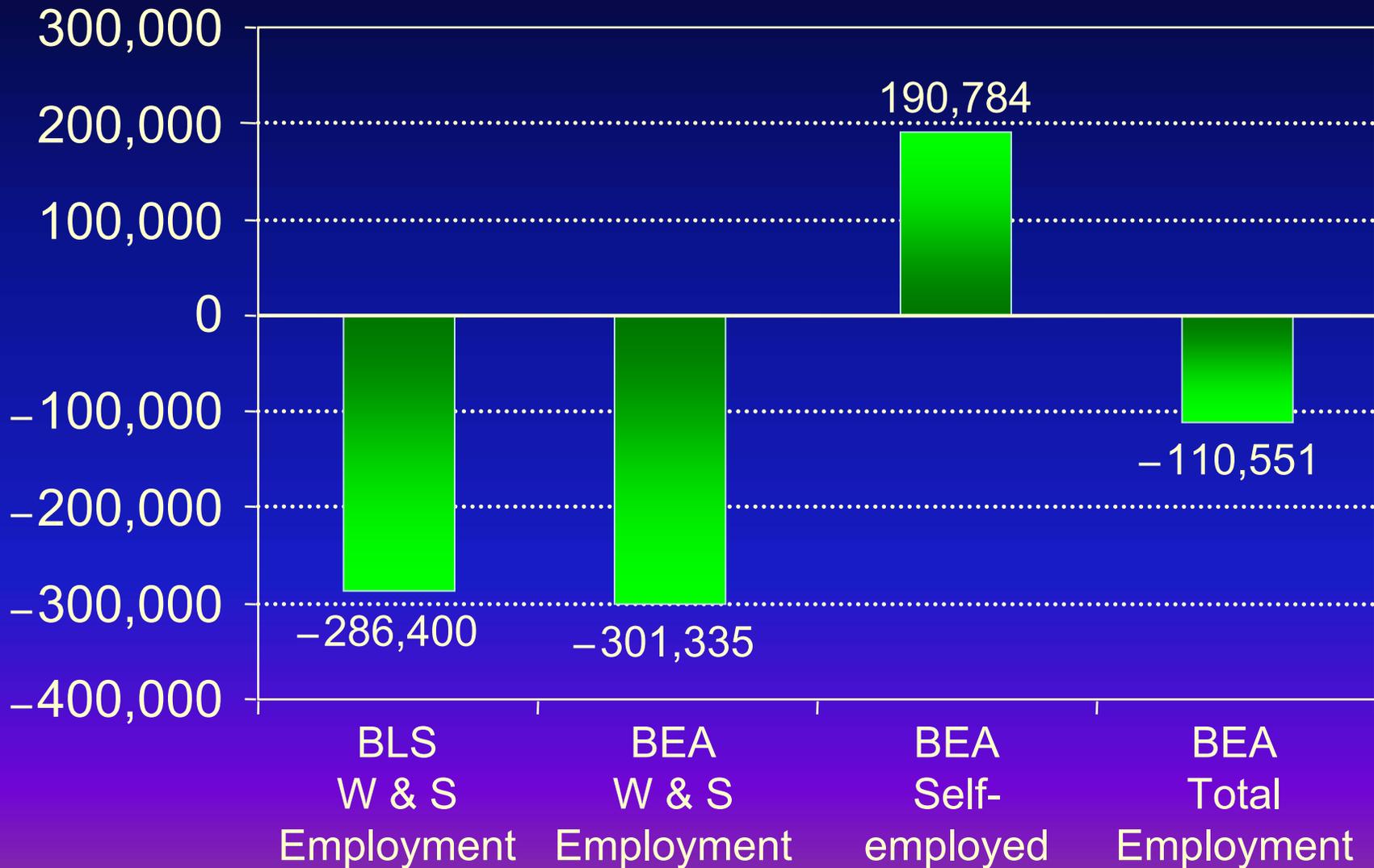
# Total Employment in Michigan, 2000–2035

(BEA definition—includes self-employed, farm, military)

Millions



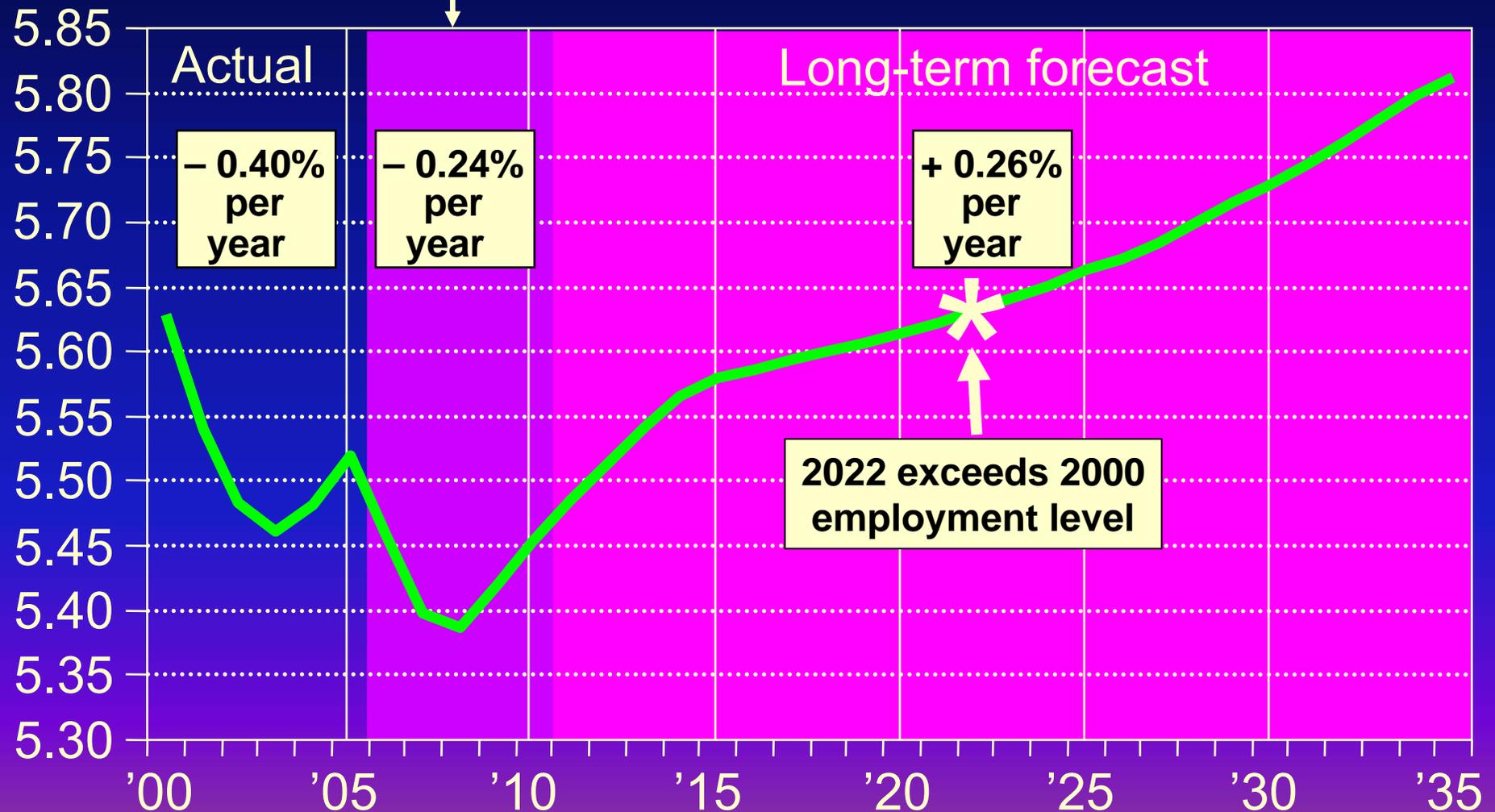
# Change in Michigan Employment, 2000–2005



# Total Employment in Michigan, 2000–2035

(BEA definition—includes self-employed, farm, military)

Millions Short-term forecast



# Total Employment in Michigan

	<u>2000</u>	<u>2005</u>	<u>2010</u>	<u>2035</u>
	5,629,498	5,518,947	5,453,071	5,812,239
	Change			
	<u>2000–2005</u>	<u>2005–2010</u>	<u>2010–2035</u>	
Total change	– 110,551	– 65,876	+ 359,168	
Avg. per year	– 22,110	– 13,175	+ 14,367	

# Industry Employment Forecasts for Michigan



# High-Education Industries

	<u>% of U.S. Employment with Bachelor's or More, 2000</u>	<u>Michigan Average Wage 2006</u>
<b>Average for all industries</b>	<b>27.2%</b>	<b>\$42,157</b>
Average, all high-education industries		48,216
Private education services	61.2%	30,111
Professional & technical services	58.0%	68,828
Management of companies	49.1%	91,798
Information	39.1%	54,625
Financial activities	36.0%	49,693
Government	33.4%	43,403
Health care, social assistance	32.7%	39,530

# Employment in High-Education Industries in Michigan

	<u>2001</u>	<u>2005</u>	<u>2010</u>	<u>2035</u>
	2,222,355	2,321,448	2,364,930	2,675,277
		Change		
		<u>2001–2005</u>	<u>2005–2010</u>	<u>2010–2035</u>
Total change		+ 99,093	+ 43,482	+ 310,347
Avg. per year		+ 24,773	+ 8,696	+ 12,414

# High-Education Industries in Michigan

	Employment Change			
	<u>2001</u>	<u>'01-'05</u>	<u>'05-'10</u>	<u>'10-'35</u>
<b>High-ed. industries</b>	<b>2,222,355</b>	<b>99,093</b>	<b>43,482</b>	<b>310,347</b>
Pvt. education svcs.	73,183	19,105	3,375	15,795
Prof. & tech. svcs.	366,306	-2,267	18,195	104,913
Mgmt. of companies	68,848	-1,558	-1,361	2,131
Information	87,123	-6,409	-1,342	-4,759
Financial activities	375,624	48,933	1,804	24,845
Government	699,496	-12,367	-26,529	-15,292
Health care, social assistance	551,775	53,656	49,340	182,714

# Low-Education Industries

	<u>% of U.S. Employment with Bachelor's or More, 2000</u>	<u>Michigan Average Wage 2006</u>
<b>Average for all industries</b>	<b>27.2%</b>	<b>\$42,157</b>
Average, all low-education industries		37,807
Arts, entertainment, recreation	26.4%	26,135
Other services (repair, personal, civic)	19.5%	25,700
Manufacturing	19.2%	58,070
Trade, transportation, & utilities	16.4%	35,638
Administrative services	15.5%	31,241
Farm, natural resources, mining	13.7%	29,436
Construction	9.7%	46,561
Accommodation, food services	8.7%	12,664

# Employment in Low-Education Industries in Michigan

	<u>2001</u>	<u>2005</u>	<u>2010</u>	<u>2035</u>
	3,317,532	3,197,499	3,088,140	3,136,962
	Change			
	<u>2001–2005</u>	<u>2005–2010</u>	<u>2010–2035</u>	
Total change	– 120,033	– 109,359	+ 48,822	
Avg. per year	– 30,008	– 21,872	+ 1,953	

# Low-Education Industries in Michigan

	Employment Change			
	<u>2001</u>	<u>'01-'05</u>	<u>'05-'10</u>	<u>'10-'35</u>
Low-ed. industries	3,317,532	-120,033	-109,359	48,822
Arts, enter., rec.	100,369	6,406	3,066	30,952
Other services	285,445	13,638	-3,283	16,162
Manufacturing	843,743	-142,839	-74,382	-154,412
Trade, trans., util.	1,007,145	-37,912	-22,158	-40,532
Admin. services	322,152	33,941	17,744	107,167
Farm, nat. res., mining	104,019	-3,658	-4,708	-23,161
Construction	304,276	-2,923	-35,611	26,725
Accommodation, food	350,383	13,314	9,973	85,921

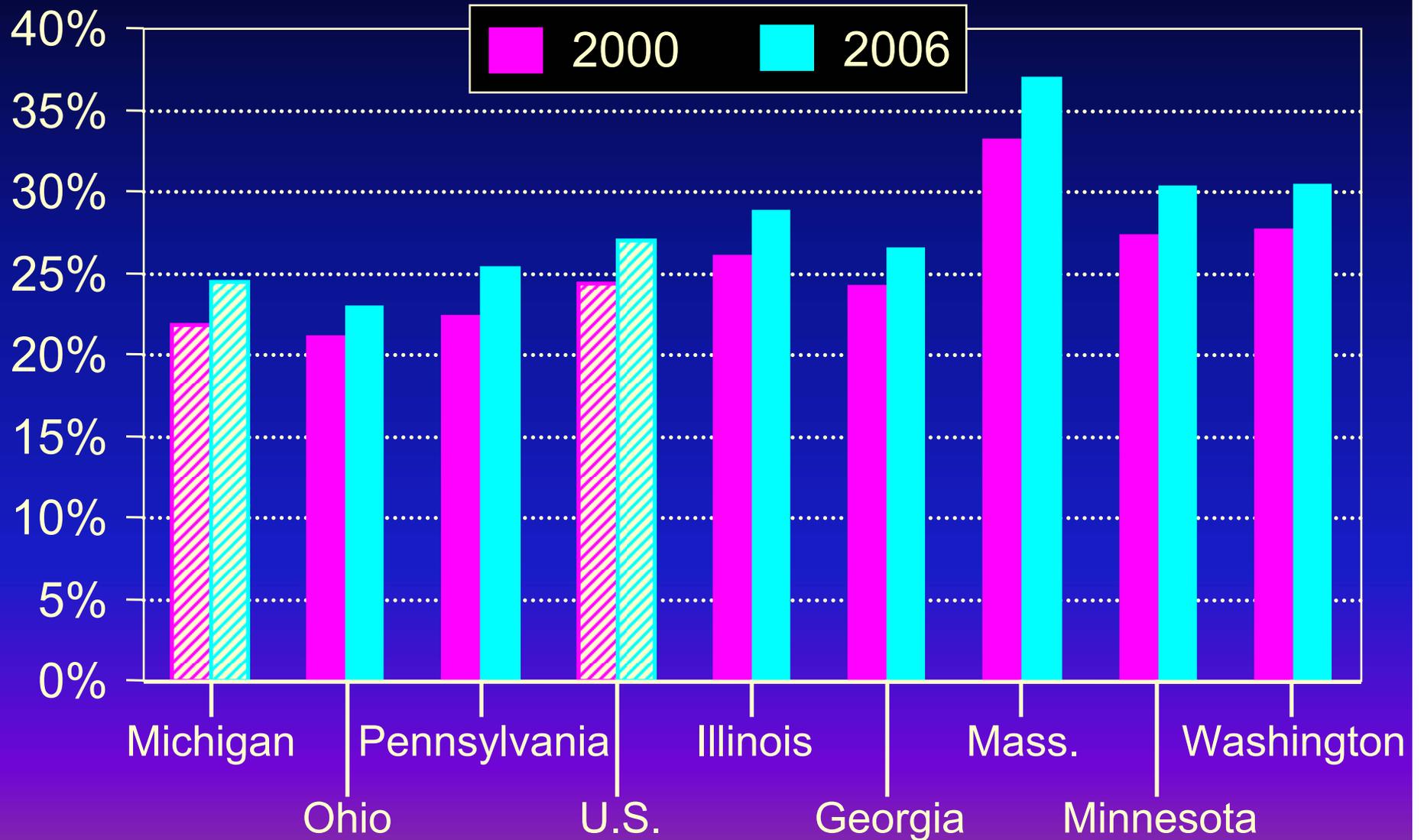
# Educational Attainment and the Local Economy



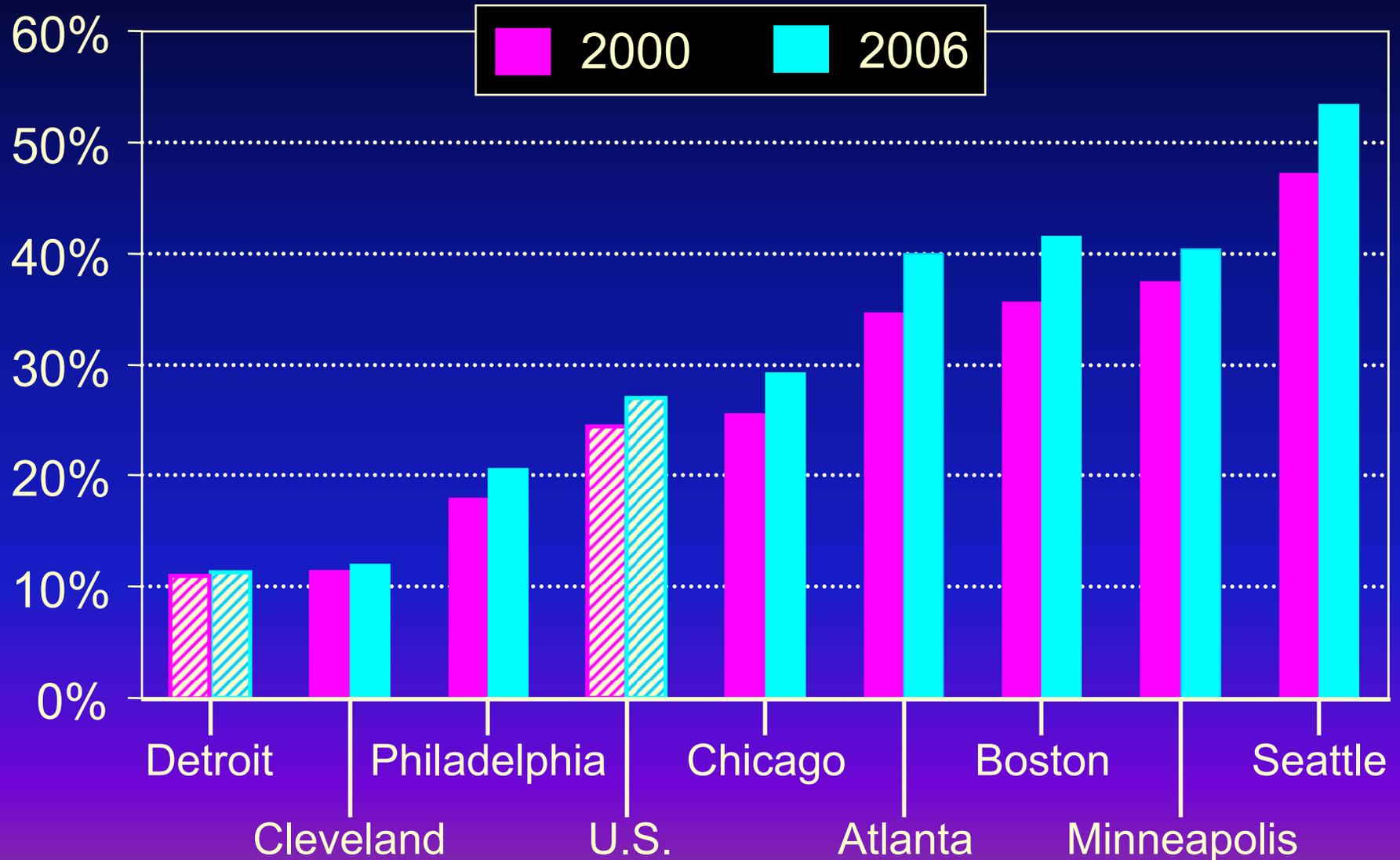
# Labor Force Statistics for Michigan by Educational Attainment, Age 25–64 Years 2004–05 Average

Educational Level	% Change Employed '99–'00 to '04–'05	Labor Force Participation Rate (%)	Unemployment Rate (%)	Weekly Earnings
Less than high school	–21.2	54.0	16.8	\$ 479
High school graduate	–7.0	73.5	7.3	612
Some college	–0.9	80.4	5.1	745
College graduate	9.8	85.4	3.4	1,121
Graduate school	10.4	88.8	2.2	1,387

# Percentage of Population Age 25 or Older with a Bachelor's Degree or More



# Percentage of Population Age 25 or Older with a Bachelor's Degree or More



# Forecasts of Income and Households for Michigan



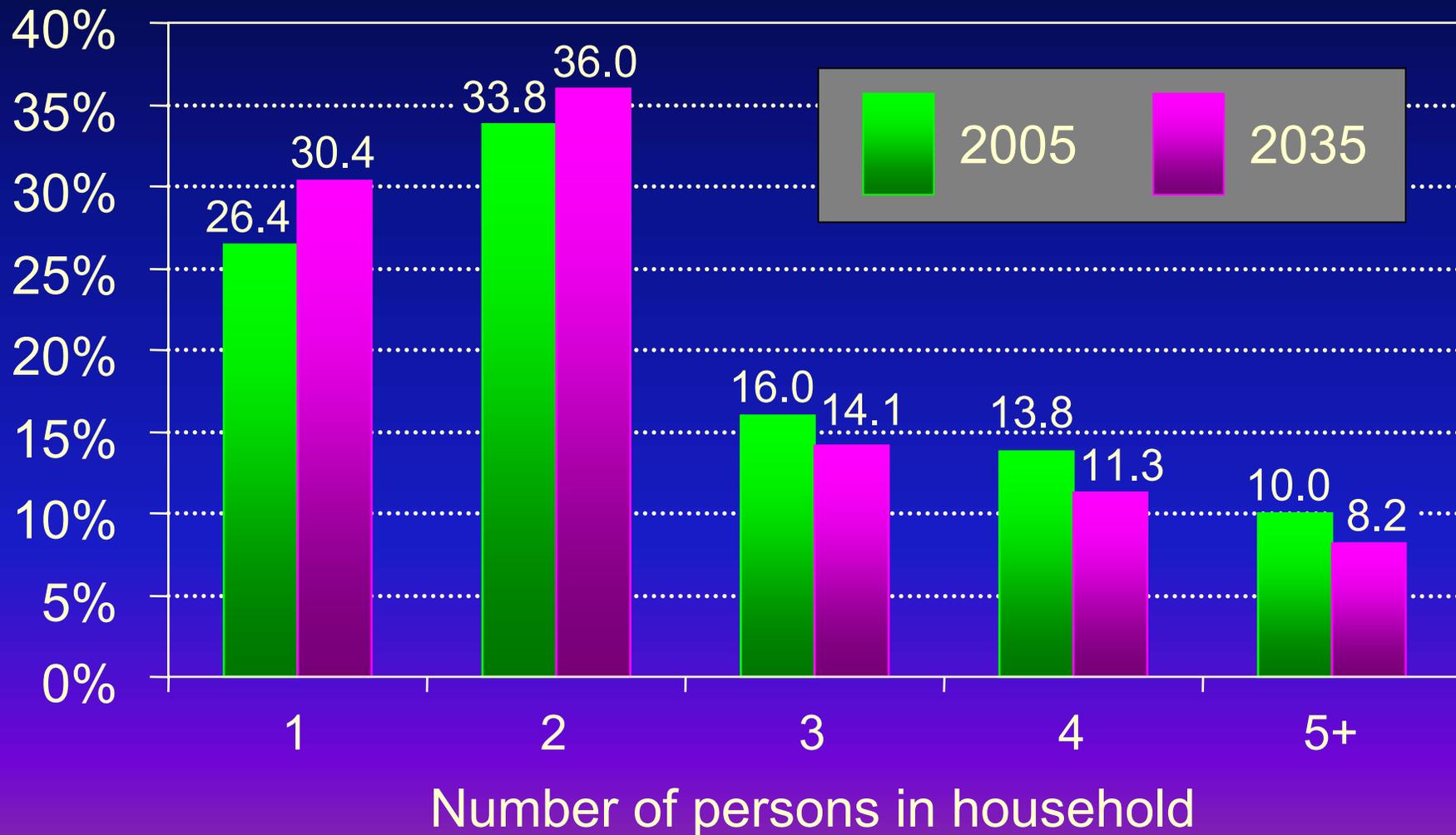
# Average Annual Growth in Michigan Per Capita Income (2005 \$)



# Number of Households in Michigan 2005–2035

	2005	2010	2035	% Change 2005–2035
Total population	10,100,833	10,057,256	10,982,682	8.7%
Group quarters	224,190	227,781	296,548	32.3%
Population in households	9,876,643	9,829,475	10,686,134	8.2%
Households	3,863,662	3,981,427	4,635,109	20.0%
Average household size	2.56	2.47	2.31	NA

# Distribution of Michigan Households by Size, 2005 and 2035

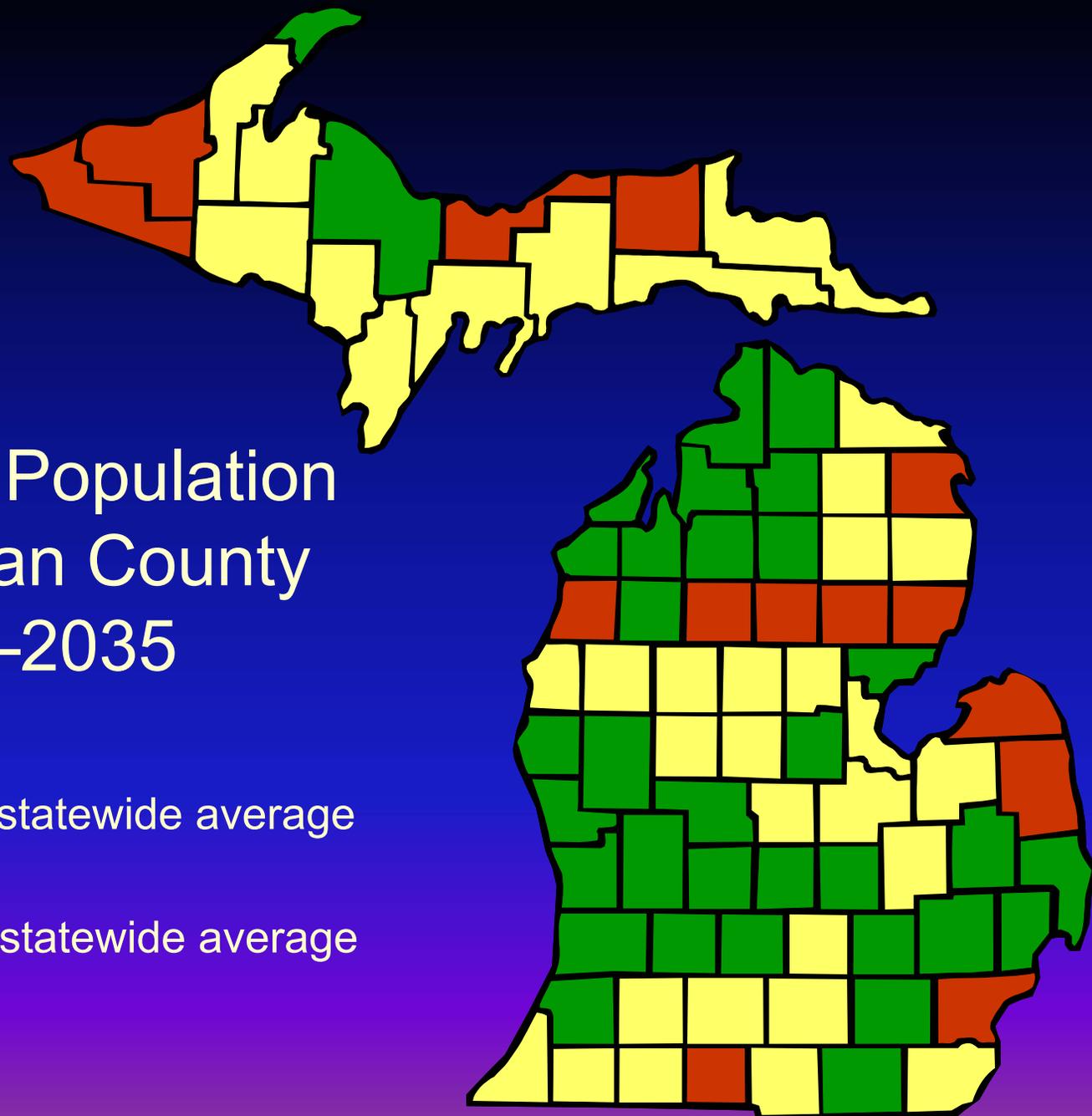


# County Population and Employment Forecasts



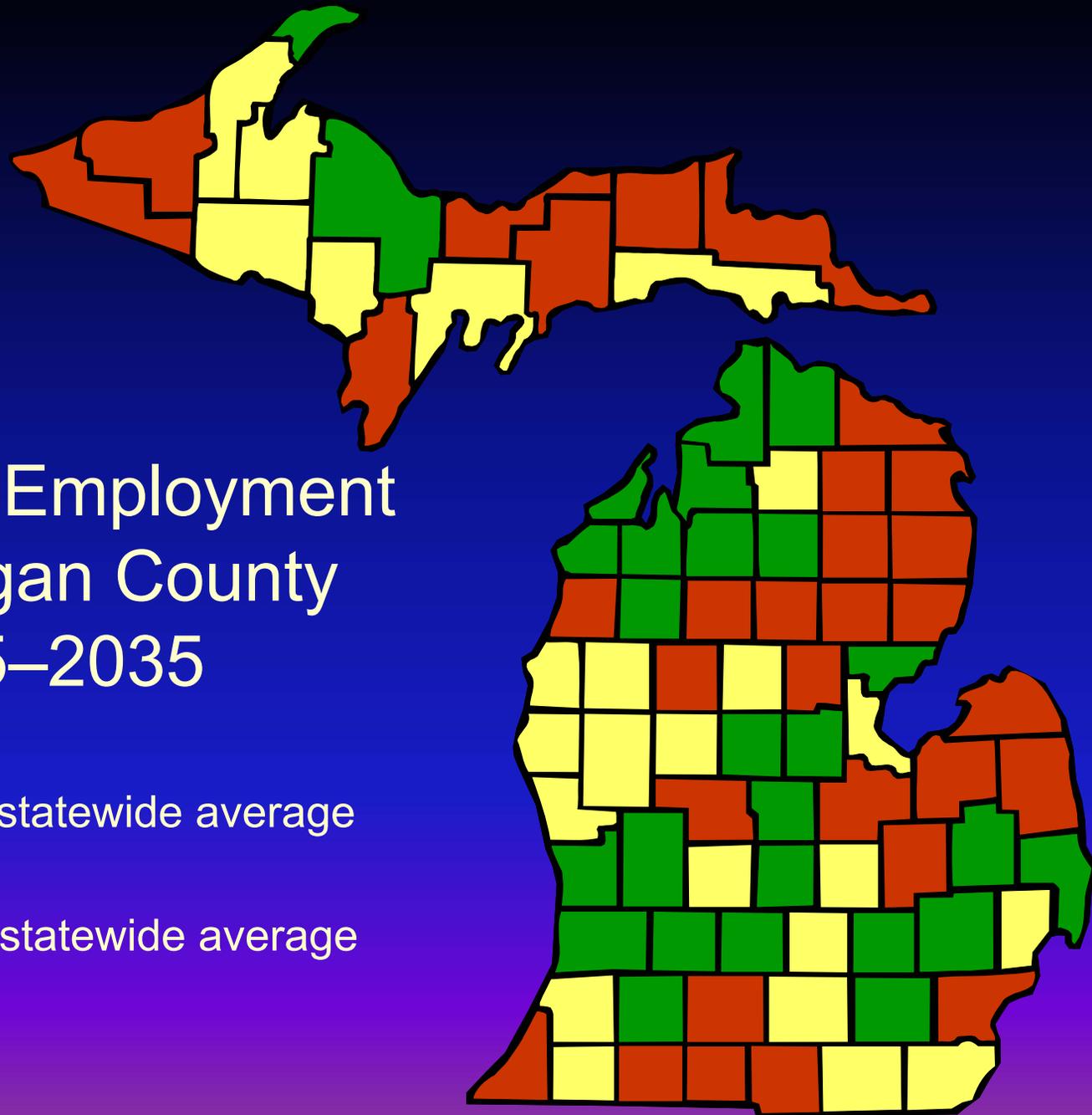
# Change in Population by Michigan County 2005–2035

-  Growth > statewide average
-  Growth < statewide average
-  Decline



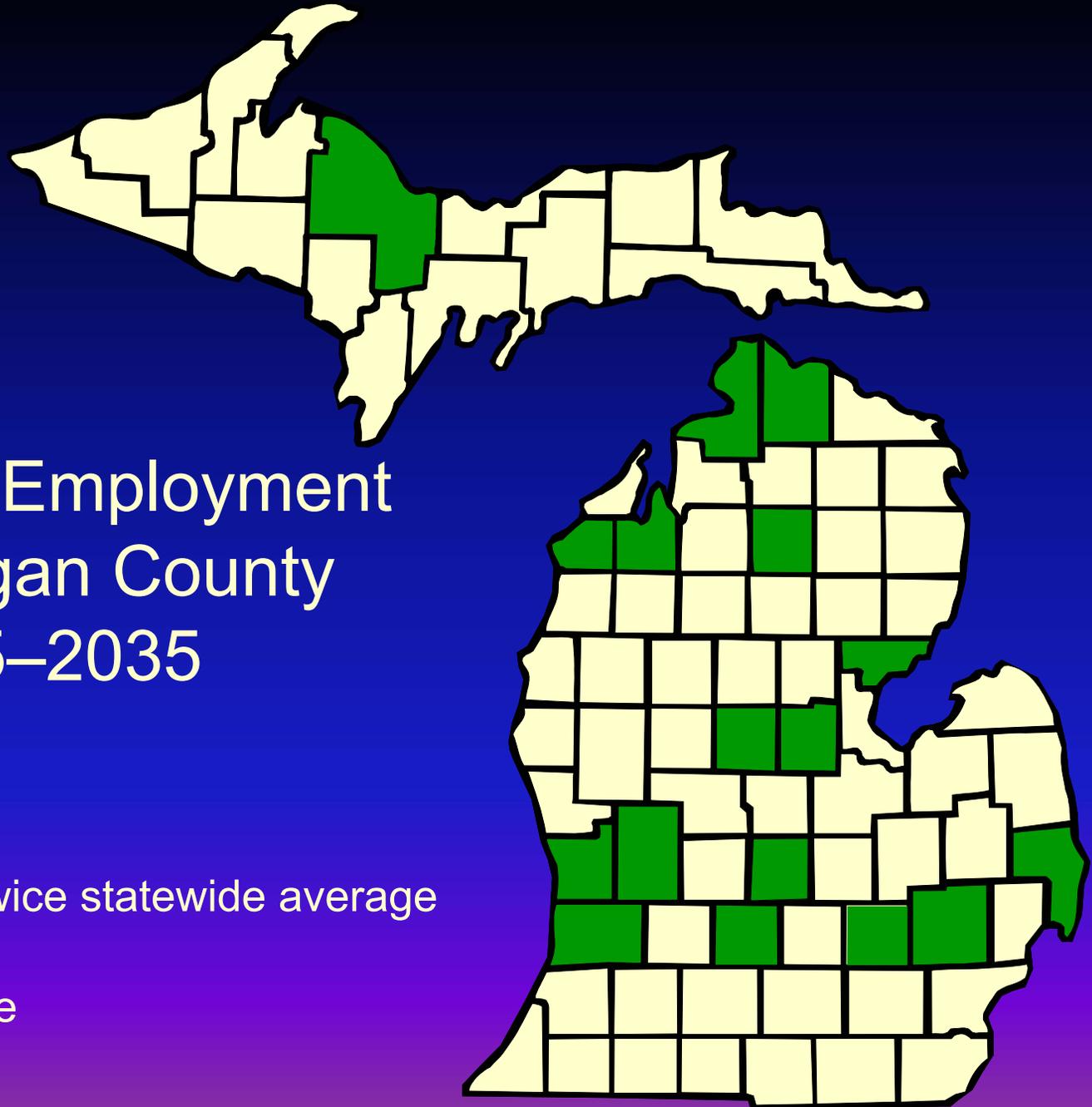
# Change in Employment by Michigan County 2005–2035

-  Growth > statewide average
-  Growth < statewide average
-  Decline



# Change in Employment by Michigan County 2005–2035

-  Growth > twice statewide average
-  Rest of state



# Summary and Conclusions



- Growth in both population and employment will be much slower in Michigan between 2005 and 2035 than during the 1990s.
- Employment in natural resources, retail trade, and government will decline over the next 30 years.
- The largest declines, however, will be in manufacturing, especially motor vehicle manufacturing, due to:
  1. Loss of Big Three market share
  2. Productivity gains in the auto industry and other manufacturing industries
  3. Shift in consumer spending away from goods and toward services, especially as we age

- Regions with a large share of employment in the declining industries will see little if any job gain over the next 30 years, and many will see employment declines because of the age structure of the existing population.
- Employment will increase in finance, professional and business services (which includes temporary and leased workers), private education, health and social services, and leisure and hospitality services.
- Regions with a large share of employment in the growing industries have the potential for relatively healthy employment gains over the next 30 years, but job growth will depend on growth in the working-age population.

- The fastest-growing counties in Michigan are clustered in four geographic areas:
  - The tourist-oriented and retiree-friendly northwestern lower peninsula, particularly the Traverse City area
  - The urban and suburban Grand Rapids area
  - The suburban Lansing area
  - The area most concentrated in high-education industries, comprising the counties of Oakland, Livingston, and Washtenaw counties

- Although the slowest-growing counties in Michigan are scattered throughout the state, there are three general areas of greater concentration:
  - The rural areas of the Upper Peninsula
  - The area along the shores of Lake Huron
  - The strip of counties along the state's southern border

- We are getting much older. By 2035, more than 23 percent of Michigan's residents will be 65 or older.
- Compare this with the situation in Florida today. In the state known as "God's waiting room," 17 percent of the residents are 65 or older.

- Total population in Michigan increases by 8.7 percent between 2005 and 2035.
- Group home population increases by 32.3 percent over this period as the aging population enters assisted living facilities, including nursing homes.

- The population living in households increases by 8.2 percent, but the **number** of households increases by 20 percent.
- Average household size is declining because older residents tend to live in smaller-sized households. Except as related to age, we have not made any other assumptions about household size preferences.

- Despite sluggish job growth over the forecast period, healthy aggregate productivity growth leads to a rising standard of living.
- Inflation-adjusted incomes will increase over time, but Michigan's economic position will be determined by its residents' level of education.

## Opportunities for Economic Development in Michigan

- The knowledge-based economy, and the educated workers who fuel it, are the fulcrum of future prosperity in Michigan.
- Bill Gates observed that for knowledge-based enterprises, educational attainment trumps everything when they're deciding where to invest.
- Michigan and its communities need to invest in programs to provide the education and training essential for the economy of the future.

## Opportunities for Economic Development in Michigan

- Among activities with fewer educational requirements, the hospitality industry shows promise for the future, providing services to visitors as well as to a growing number of older people.
- Support personnel for industries with the most favorable growth prospects—health care and professional/technical services—require skills but often not professional degrees.
- Other actions may show promise for the economic well-being of the state, but none is more compelling than investing in workforce development.



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