The Long Run Has Become the Short Run
Budget Implications of Demographic Change

"Failure on our part to prepare for demographic change will have substantial adverse effects on the economic welfare of our children and grandchildren and on the long-run productive potential of the U.S. economy."

Ben Bernanke, Chairman, Federal Reserve Bank, October 2006

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The Long Run Has Become the Short Run

For decades, the eventual aging of the Baby Boom Generation into its retirement years and the beginning of the Age of Entitlements has been something in the distant future. There were always more immediate issues to attend to. That once-distant future is now here. The long run has become the short run and we can no longer ignore the implications of this dramatic change in our society and economy.

The next two decades will be unlike any in recorded history. Minnesota and the United States, and indeed much of the world, will experience unprecedented demographic changes. The biggest will be the aging of the world population. In Minnesota and the United States, this will be characterized by aging of the Baby Boom Generation into its retirement years and beyond. The 2010s will see Minnesota transform from a young state to an old state, from a work-based economy to a retirement-based, entitlement economy. Many of the rules that govern how the world "normally works" will change and a new set of rules of thumb for the "New Normal" will take their place.

The coming changes will affect individuals and businesses. They will also affect all levels of government. The mix of services demanded by the public will change as the population ages, as will the rate at which revenues grow over time. And, while Minnesota currently supplements the biennial budget forecast for years currently under consideration with planning estimates of revenues and expenditures for the following biennium, legislative leaders have requested a somewhat longer overview of the likely path that state expenditures and revenues may follow over the next decade as our state ages. This report, the first of the annual reports required under current law, provides some of the additional information needed for policymakers seeking to incorporate longer term considerations into the budget development process. It extends and builds on work completed in 2008 for Minnesota's Long Term Budget Trends Study Commission.

The Next 10 Years, 2011-2020

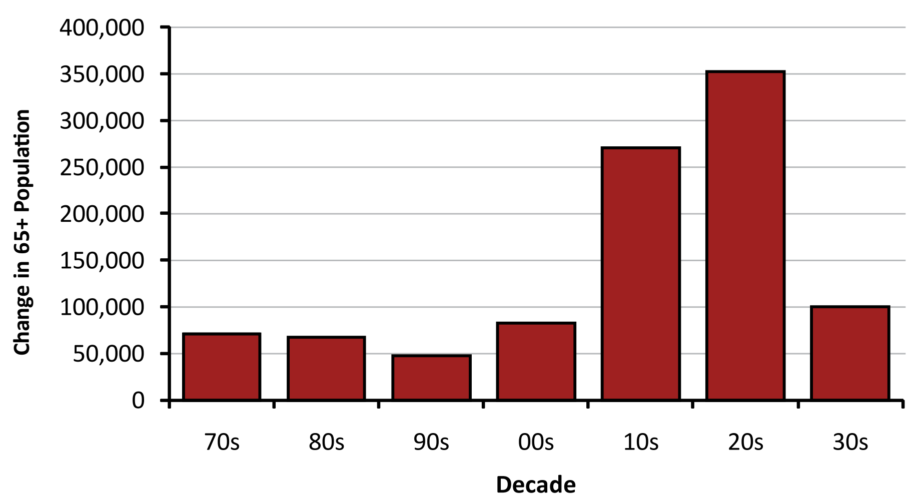
"Don't underestimate how quickly this can happen. There are structural headwinds out there and we better get our act together before those structural headwinds become overwhelming."

Mohamed El-Erian, Co-Chief Investment Officer of the global investment firm PIMCO, May 6, 2010 CNBC interview

The first wave of the Baby Boom Generation turned 62 in January 2008, just as the Great Recession began. That same group began turning 65 in January 2011. The 2010s will similarly be a decade of great transition. Retirements will increase sharply through 2013. The ratio of workers to retirees will fall from five per retiree in 2010, to four per retiree in 2020 to only three in 2030.

In the decade of the 2010s, nearly as many people in Minnesota and the United States will turn age 65 as in the previous four decades combined. The 2020s will witness even greater numeric increases, and then the aging surge will be largely over. By the 2030s, growth of the 65-plus population will slow to the levels of the 1970s, 80s and 90s. By then, however, the economy and society will be fundamentally altered.

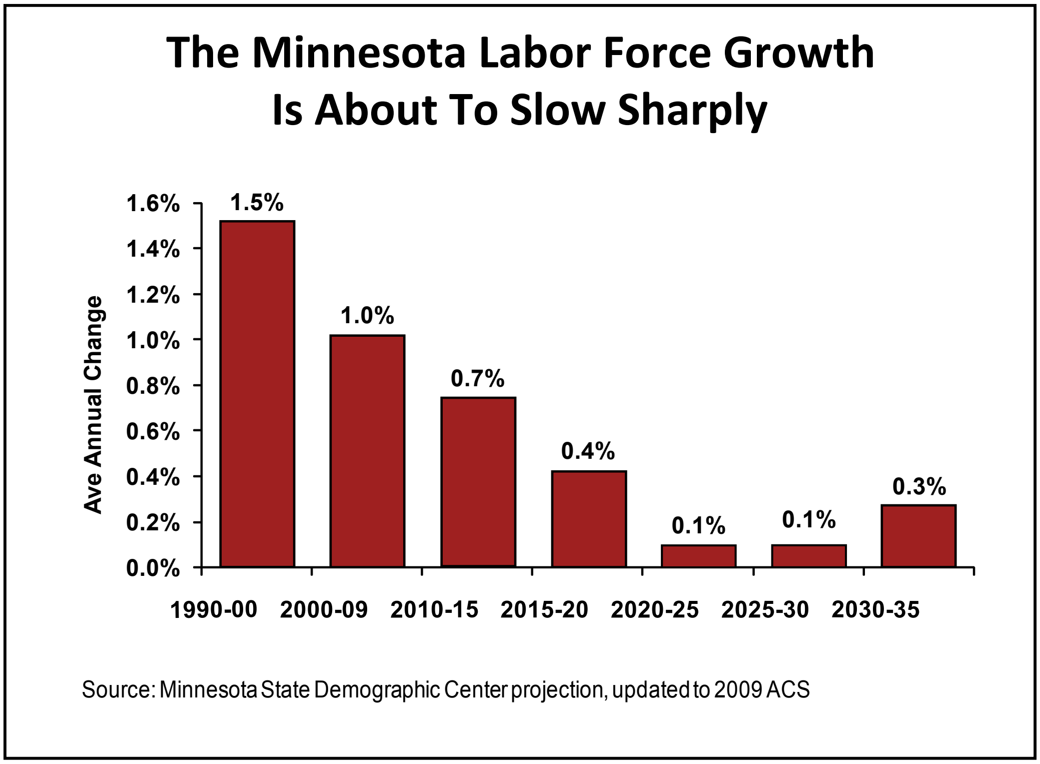
This Decade And Next Will See Unprecedented Increases In Minnesota's 65+ Population



Source: Minnesota State Demographic Center projections

During the 2010s, labor force growth will slow as retirements increase sharply and the number of young people entering the workforce declines. Slower labor force growth likely means slower economic growth. How much slower depends on how rapidly per-worker productivity increases. In the absence of major improvements in the rate of growth in per-worker productivity, overall economic growth will slow. In the absence of even stronger productivity growth per capita, income growth will slow because the proportion of the population of working age will be declining.

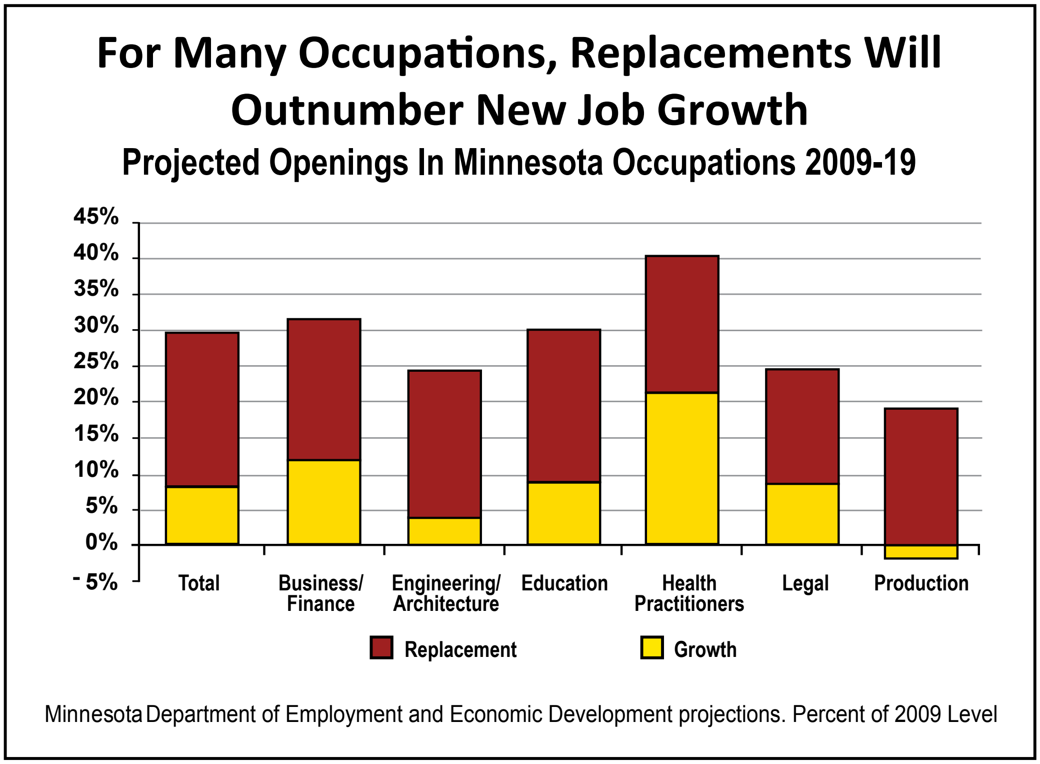
By the 2020s, Minnesota's labor force growth rate will be at record-low levels. Total hours worked are expected to slow even more, as increasing numbers of older workers shift from full-time to part-time jobs. This extraordinary slowdown in labor force growth and total hours worked is projected even though the average retirement age increases as older people stay in the labor force longer than previous cohorts. The increase in retirement age will break a half-century-long downward trend in average retirement age.



The impending jump in retirements will create opportunities for younger people who are beginning careers and for businesses seeking to restructure their workforce. Pressure to generate new jobs will lessen sharply by mid-decade as the number of new entrants to the workforce declines to approximately half its current level. This decline in the "natural growth of the labor force" means fewer new jobs will be needed to hold the unemployment rate constant. At the same time, the unprecedented number of "replacement openings" generated by higher levels of retirements will create additional opportunities for younger workers with the skills and abilities to fill those jobs.

Other employer responses to the retirement boom are also possible. Some employers will focus on increasing per-worker productivity so that hiring replacements for retiring workers will not be on a one-for-one basis, but rather at a reduced ratio. Other employers may look to alternative sources of labor by hiring workers from other countries or by relocating operations to areas of the world that have more favorable labor market conditions.

The jobs problem facing state policymakers during the latter part of this decade is not likely to be simply a shortage of jobs, but rather a shortage of the jobs that match with the skill sets of those in the labor market. That problem can be solved in two ways – by seeking more jobs that match the skill sets of the unemployed or by transforming the existing skill sets of the unemployed into skill sets in greater demand in the global economy.

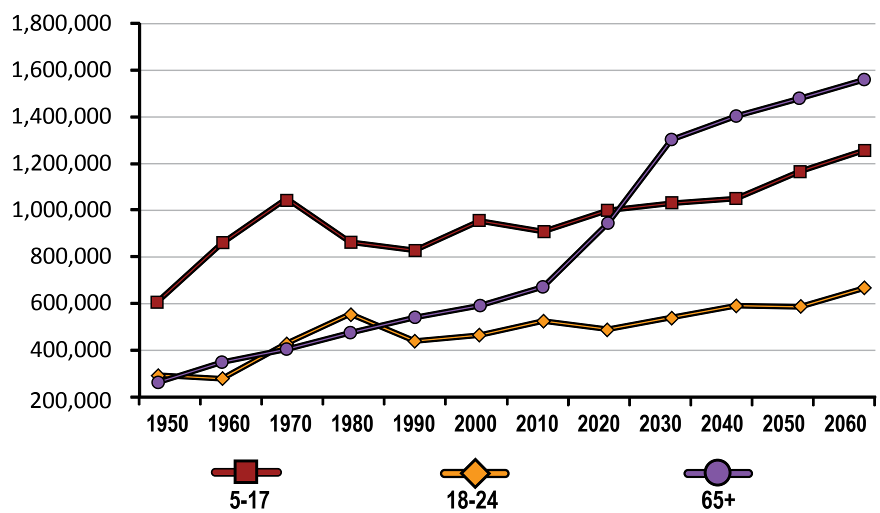


There is concern that there is a disturbing and growing mismatch between the skills of those looking for work and the skills employers seek to hire. If left unchecked, this could lead to a situation of a "lost generation," where those with the necessary skills do very well while those without the desired skills will struggle economically for the remainder of their lives.

Of particular concern is an anticipated shortage of physicians and registered nurses by mid-decade. The inadequate number of individuals trained as doctors and nurses over the past three decades, coupled with increasing retirements, will combine at the very time that demand for healthcare services will increase sharply to create a growing concern over a shortfall in doctors and nurses. Given that these occupations require several years of training, remedying the shortfall will not be easy.

These labor market adjustments will happen at the same time that demand for government services for seniors will increase sharply. Unchecked, the combination of slower labor force growth and additional demand for selected services for the aging could lead to chronic government deficits at all levels and increased pressures to shift expenditures from investments in education, infrastructure and research to health and social care for an aging society. This shift in expenditures emphases will in turn dampen the environment for future economic growth, reducing future productivity increases and future economic growth. A milestone in this process is that by the end of this decade, Minnesota will have as many people age 65 and older as children in K-12 education, and state government expenditures will continue to shift from education to healthcare and other services directed toward an aging population.

More 65+ Than School Age Residents In Minnesota By 2020 Creating Pressure To Change Budget Priorities



Source: U.S. Census counts, Minnesota State Demographic Center projections

Minnesota State Government Revenue Growth Will Slow

"As Minnesota's population begins to transform, new, long ranging factors will begin to weigh more and more heavily on the state's tax base, spending needs, and overall economic progress."

2008 Minnesota Budget Trends Commission Report

Long-term revenue projections for the Budget Trends Commission report indicated that state policymakers should expect significantly slower revenue growth over the next 25 years in comparison to the late 1990s. Between 1996 and 2001, state revenues grew at a compound annual rate of 6.8 percent. Looking to the future, the Budget Trends Commission report projected revenue would grow at a 3.9 percent annual rate between 2028 and 2033.

Unfortunately, the 25-year forecast was made in 2008, before the worst of the impacts of the Great Recession were known. The 10-year projections which follow update the Budget Trends Study Commission projections to reflect changes in the revenue outlook for fiscal years 2010 through 2020 attributable to changes in the economic outlook since 2008.

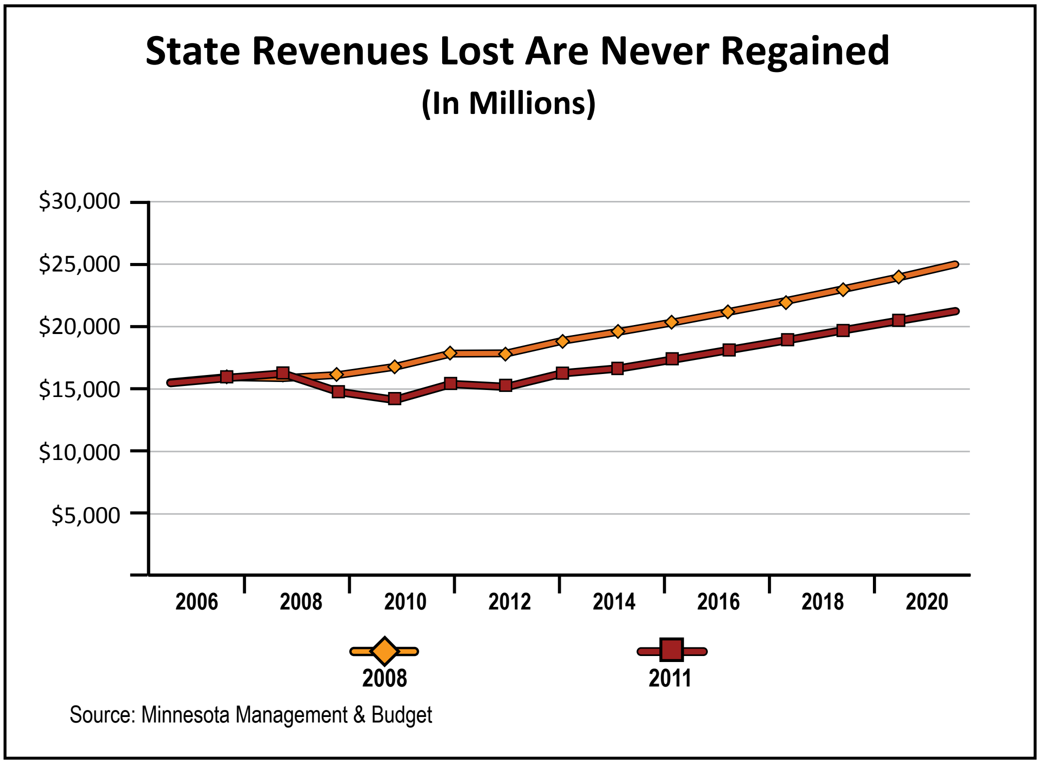
FY 2010 General Fund Revenues 15 Percent below Projection

The U.S. economy was showing definite signs of weakness in early 2008 – signs sufficiently ominous that the February 2008 baseline forecast by Global Insight (GII) included a short, shallow recession with real GDP declining at an annual rate of 0.4 percent in the first quarter of 2008 and 0.5 percent in the second quarter. After those two negative quarters, real GDP growth was then forecast to average just 1.4 percent in 2008, and more than 100,000 jobs were expected to be lost before the economy began to recover in the late summer. The U.S. unemployment rate was anticipated to top out at 5.6 percent in early 2009, and by mid-2009, payroll employment was expected to be growing by between 100,000 and 150,000 per month on a sustained basis.

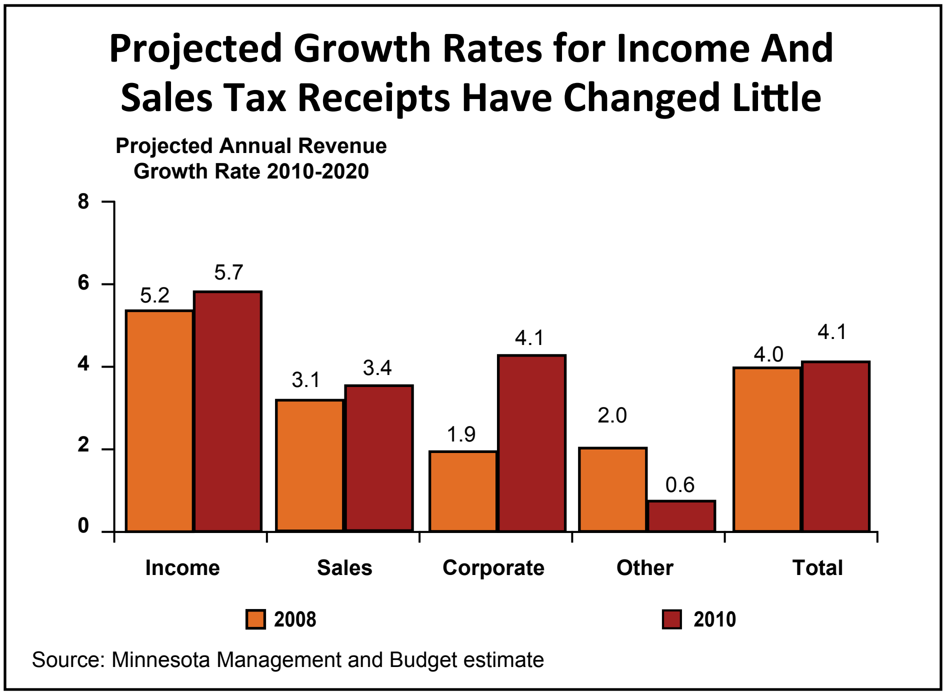
While the Minnesota Management & Budget (MMB) forecast was substantially gloomier – a 2008 employment decline of 0.5 percent in contrast to Global Insight's projected 0.3 percent nationwide increase – even those projections have been proven overly optimistic.

The longest and deepest recession since World War II produced five consecutive quarters of declines in U.S. wages on a four quarters-apart basis, the loss of 8.4 million jobs, and an unemployment rate above 9 percent. Those economic difficulties were not part of the scenario on which the February 2008 revenue forecast was based, nor were they anticipated in the 25-year forecast results when they were prepared in the summer of 2008.

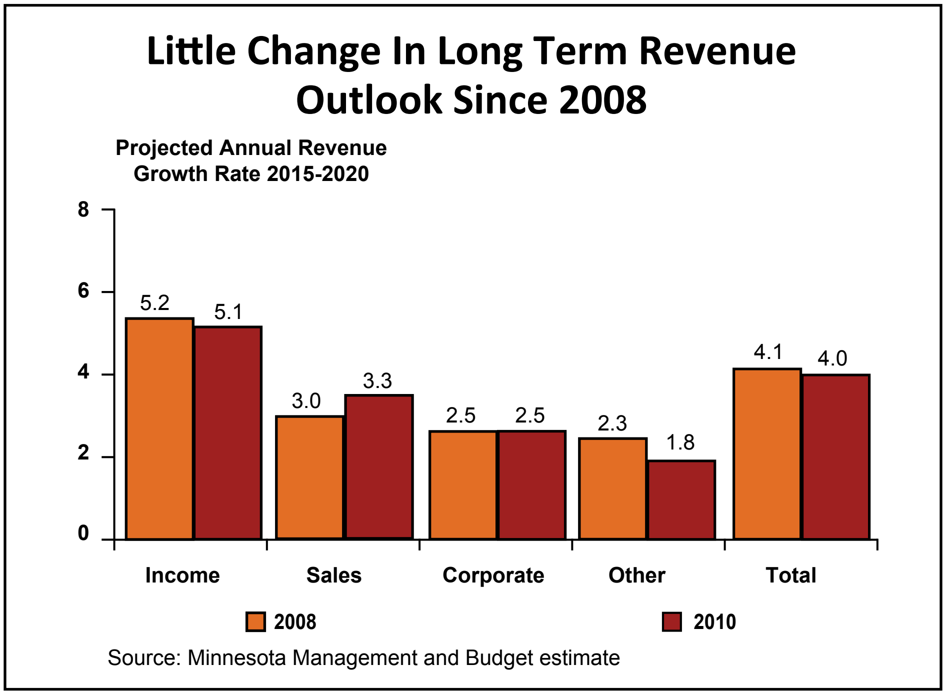
The Great Recession substantially lowered the base on which future state revenue growth builds. Now that the full extent of the Great Recession and its impact on state revenues is apparent, it is clear that the extended period of national economic weakness spanning 2008-10 is likely to prevent state General Fund revenues from reaching the levels projected in the 2008 Budget Trends report. The starting point for 2008's 25-year projections, the most recent revenue data available, was state revenue received in FY 2007; the starting point for the current long-term forecast was state receipts in FY2010. As is apparent in the graph below, actual receipts in FY 2010 were 15 percent lower than projected in 2008.



But while the starting point and ending level of state General Fund revenues are lower in this 10-year forecast than in the Budget Trends report, differences in projected revenue growth rates are small. Total revenues are now projected to grow at an annual rate of 4.1 percent between 2010 and 2020 and 4.0 percent between 2015 and 2020. The Budget Trends study anticipated revenue growth rates of 4.0 percent and 4.1 percent, respectively.

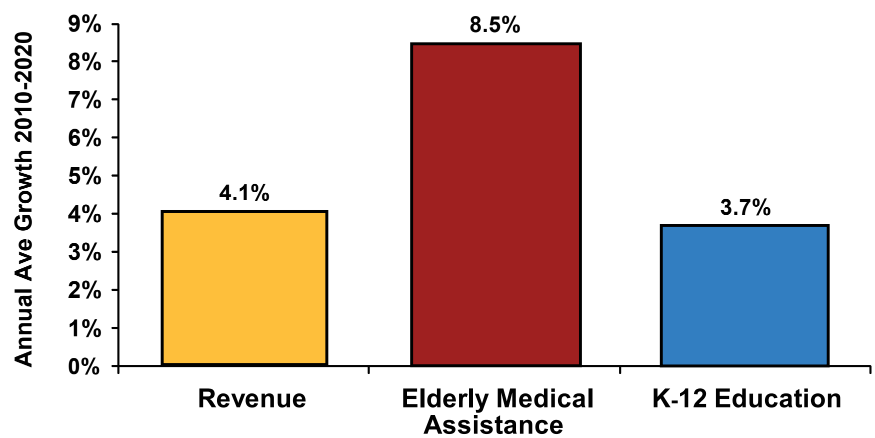


While there was little difference in the expected growth rate for total revenue between 2010 and 2020, corporate tax revenue is now expected to grow noticeably faster over the 10-year forecast horizon than was previously anticipated in 2008. Projected growth rates for income and sales tax receipts increased only slightly and other revenues are now expected to grow more slowly. Over the 2015-2020 period, changes in the growth rates for general fund revenues and for the major revenues were very small. In the Budget Trends report, receipts from the three major taxes were projected to grow at an annual rate of 4.4 percent between 2015 and 2020, which is unchanged in this report.



The large gap between 2020 revenue as projected in 2008 and today illustrates the difficulty in accurately forecasting the economy five or 10 years into the future and relying too heavily on longer-term projections. But while no one can accurately forecast the path of the economy five or more years into the future, these longer term projections, when combined with similar expenditure trend projections, offer a guide to how serious the future financial problems for the state may be.

Minnesota State Government Revenue Growth Will Be Challenged By Growth In Two Major Expenditure Groups



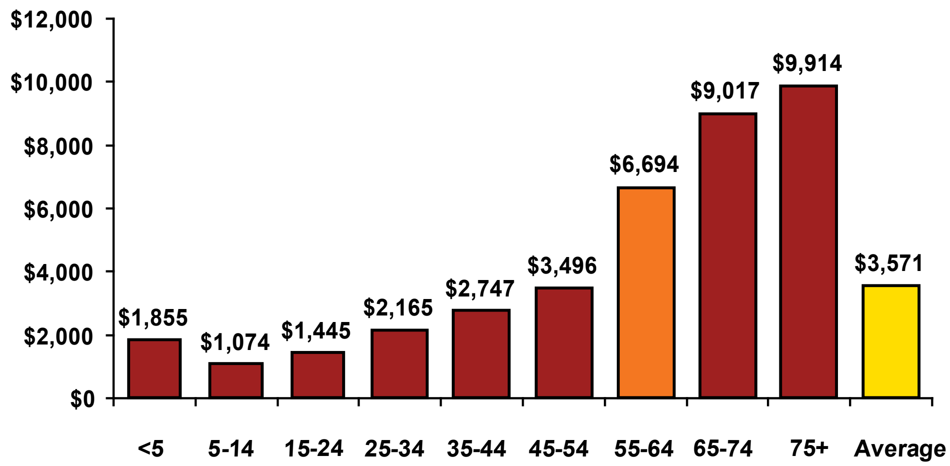
Source: Minnesota State Economist, Minnesota State Demographic Center

A Major Spending Driver – Elderly Medical Assistance

> *"The crisis we face is one of numbers and demographics but also of attitudes. Promises were made in an earlier time, when they seemed more affordable. Like homeowners borrowing against the value of their homes in the expectation that the values would go up forever, the American government borrowed against the future and assumed that the economy would grow fast enough to make that debt affordable."*
>
> *David Walker, Former Comptroller General,*
> *President of Peterson International Economics Foundation*
> *October 2008*

Health Care Spending Jumps After 55

U.S. Health Care Spending By Age, 2004

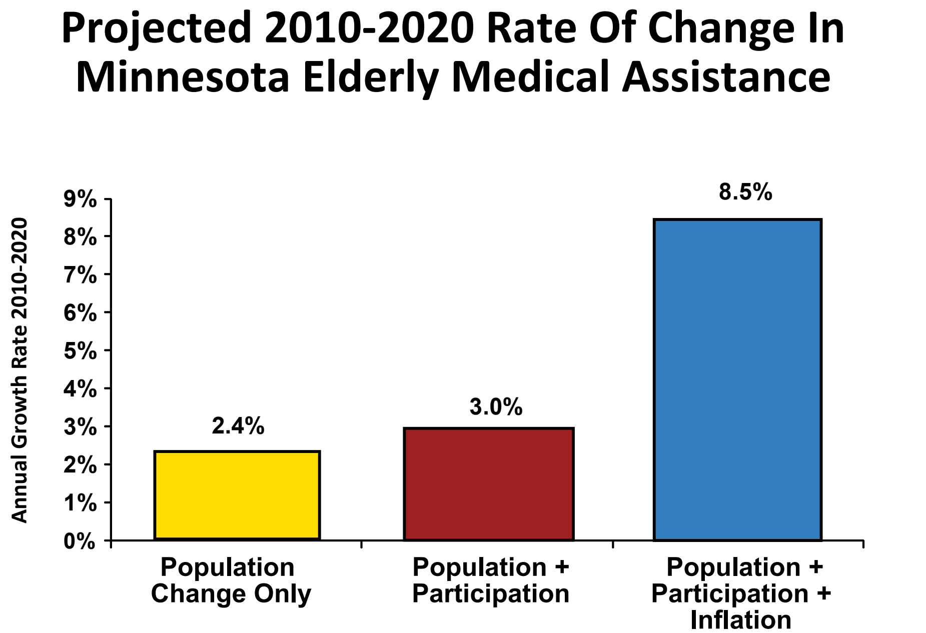


Source: Agency for HealthCare Research and Quality, Medical Expenditure Panel Survey, data for per capita spending by age group in the Midwest. Excludes spending for long-term care institutions.

Medical Assistance is one of the larger and more rapidly growing components of Minnesota's General Fund budget. Medical Assistance currently accounts for nearly one-fourth of total General Fund expenditures. Medical Assistance (MA) includes programs serving the health and long-term care needs of the poor, elderly and people with disabilities. Three programs – MA Long Term Care, MA Long Term Care Waivers and MA Elderly and Disabled – account for nearly three-fourths of total Medical Assistance expenditures.

Medical Assistance expenditures related to the elderly are expected to grow rapidly for the remainder of this decade and well into the future. The combination of healthcare cost inflation and expanding caseload as the population ages and the need for long-term care increases will force overall costs higher. Healthcare inflation will be the predominant factor in spending growth this decade, while caseload gains will be increasingly important in the 2020s. Medical Assistance expenditures for the elderly are projected to increase by about 8.5 percent per year this decade and 9 percent per year during the 2020s.

Over the next 10 years, elderly medical assistance caseload is projected to add about 35 percent to the costs of the programs. However, total costs of the programs are projected to increase by 125 percent, with three-fourths of the increase due to healthcare cost inflation.



Source: Minnesota State Demographic Center with assistance of the Minnesota Department of Human Services

K-12 Expenditures Will Continue To Grow

"Education: the Best Investment"

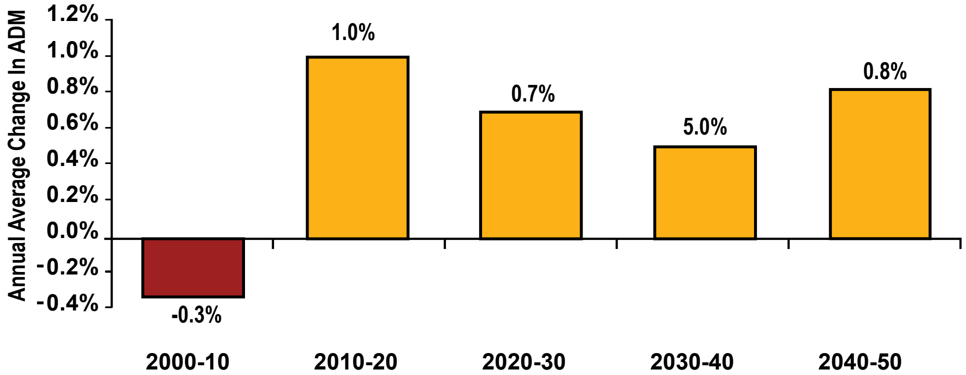
Title of a chapter in William Gates' book The Road Ahead, 1996

After a decade-long hiatus during which K-12 enrollments increased minimally, enrollments will begin to rise again during the 2010s. Enrollments already are increasing in the lower grades. By mid-decade, secondary schools will also begin to experience higher enrollments. The number of high school graduates will continue to decline during the decade but then improve soon after 2020.

Over the next 10 years, Average Daily Membership (ADM), the measure of enrollment used in funding formulas, is projected to increase at about 1 percent per year. While not rapid, this rate of increase will be faster than the rate of increase in Minnesota's population.

K-12 expenditures, however, will increase at a faster rate than enrollment due to general inflation, employee health benefits inflation and special education costs.

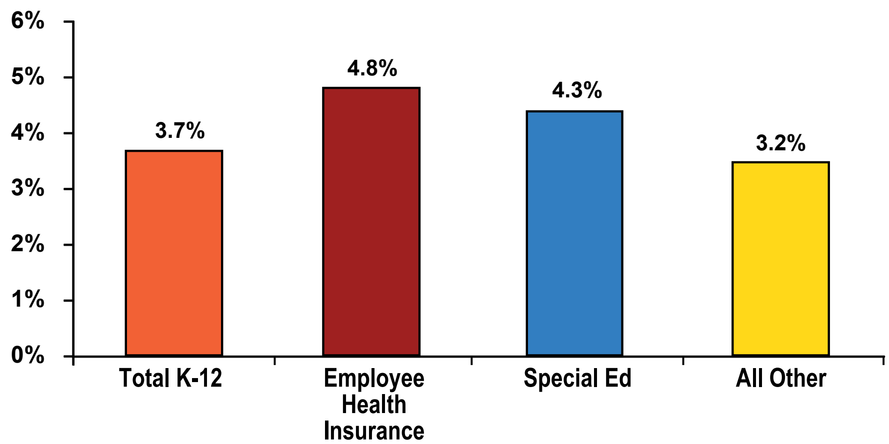
After A Decade Of Little Change, Minnesota K-12 Enrollments Will Grow At A Moderate Pace



Source: Minnesota Department of Education, Minnesota State Demographic Center projection

Over the next 10 years, overall K-12 expenses will increase at an annual rate of 3.7 percent, while one of its components, education employee insurance benefits, will increase at 4.8 percent per year. Another component, special education costs, will increase at 4.3 percent per year. While employee insurance benefits and special education currently account for about 21 percent of total K-12 education costs, they will account for 30 percent of the increase in costs over the next decade.

Special Education and Employee Health Insurance Will Continue To Grow More Rapidly In The 2010s Than Other Components Of K-12 Spending



Source: Minnesota State Demographic Center Projection, with assistance from Minnesota Management & Budget, Minnesota Department of Education and House Research

Trends in Urban and Rural Minnesota

"Kids go away to college and they never come back. There is nothing to come back to."

Smith County, Kansas Commissioner Arthur Kuhlmann
Kansas county at U.S. geographical center is dying, Reuters, Jan 8, 2011

Aging, population decline and economic decline are not new to many counties in the nation's heartland. Counties in southern and western Minnesota have experienced these trends for decades. Similar long-run trends are observed in the Dakotas, Iowa, Nebraska, Kansas, eastern Colorado, eastern Montana, rural Oklahoma, the Texas Panhandle, rural Wisconsin, Appalachia and, indeed, much of rural America. Over a long period of time, young people have left after high school for the big city. Much of the population and economic growth of metro areas like the Twin Cities can be traced to this movement of bright, hard-working young people from the rural Upper Midwest to the region's metropolitan areas. The migration of youth out of rural areas has largely ended as few young people remain on the prairie and those who moved earlier are themselves aging.

Nineteen of Minnesota's 87 counties, mostly along the southern and western border of the state, have a median age over 45. More than half (47) of Minnesota's counties lost population during the last 10 years, and an increasing number (25 in the past decade) are experiencing chronic natural decrease, in which more people die each year than are born. Some counties have bucked this trend, largely through the addition of new industry that requires more labor than is available locally. This results in a net in-migration to the county from other parts of the nation or world, infusing youth into the population. For many rural communities, however, long-term population decline is the expectation.

Questions about school funding, school consolidations, staffing to provide basic course offerings, infrastructure maintenance, joint powers agreements and county consolidations, provisions of basic county services and other similar concerns will grow during this and the next decade.

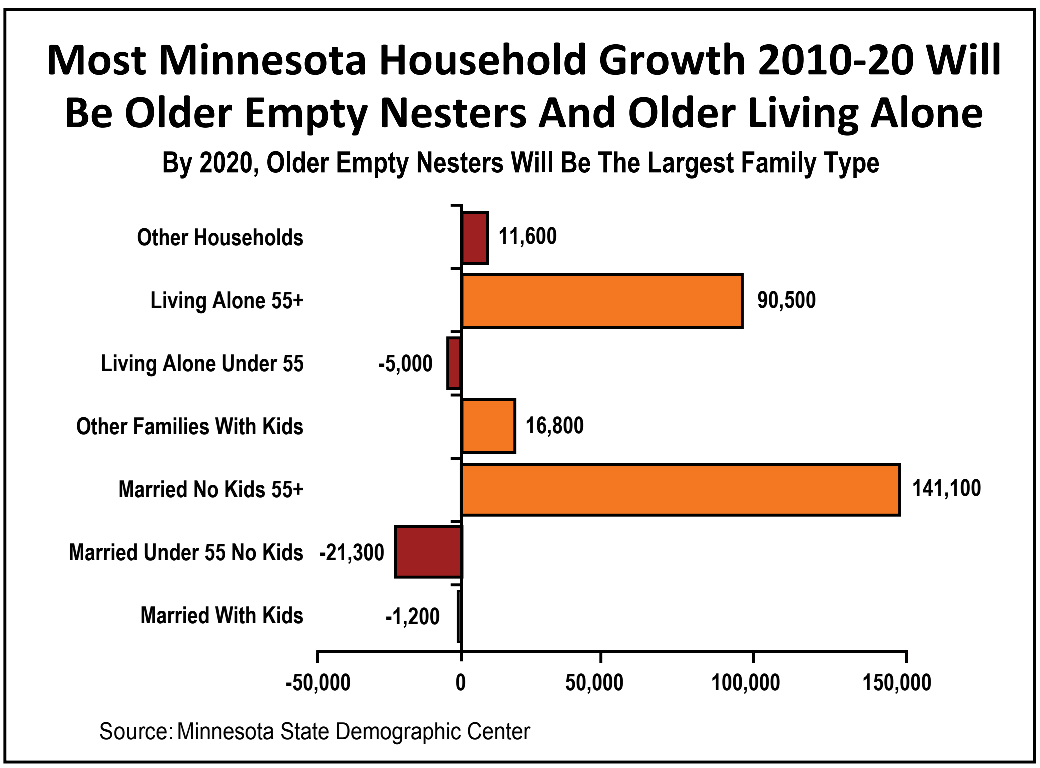
Also over the next decade, most of the growth of the 65 and older population of Minnesota over the next decade will be in the metropolitan areas, especially the Twin Cities suburban communities. Some suburban communities are concerned about being prepared for this change, especially in the areas of public transportation, social services and access to health care.

Changing Households and Families and Care-giving

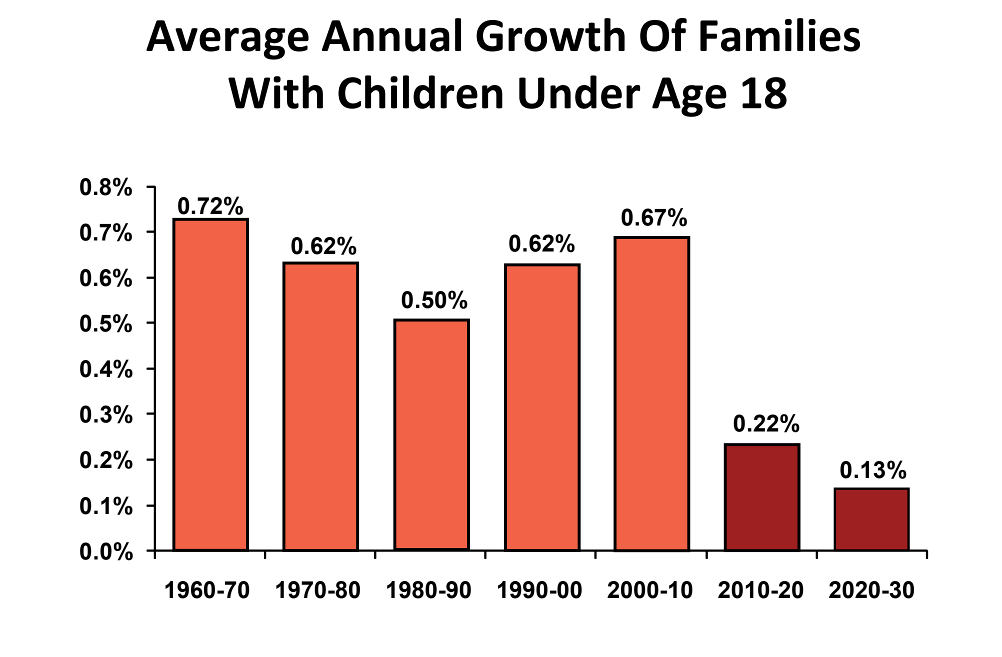
"A family with an old person has a living treasure of gold."

Chinese proverb

Households will undergo dramatic changes in the next 20 years. Some of the implications of these changes include reduced importance of schools in housing decisions, more social isolation, more use of purchased eldercare facilities, more elderly without family care support within the community, and more dependence on government and non-government organizations to provide basic services.



The most common type of family today is no longer a married couple with children. The older "empty nester" couple is now the largest type of family; most of the increase in households over the next 20 years will be "empty nesters." The next most rapidly growing group will be older people living alone. The number of families with children will experience dramatically slower growth over the next 20 years.



Source: Decennial census. Minnesota State Demographic Center projection

Over the past 40 years, during which the Baby Boom Generation left parents' households and formed their own, families have changed in other ways. The Baby Boom Generation had fewer children than did their parents – two instead of three – and a higher proportion of Baby Boom Generation women were childless than was true for their parents' generation. The Baby Boom Generation also experienced a much higher rate of divorce than previous generations.

The Baby Boom Generation also saw a substantial increase in workforce participation by women. By the 1980s, most women were in the workforce, most families were two-earner families and most children lived in families in which all adult relatives worked. This trend led to replacing with purchased services many of the functions that families had historically provided, such as childcare and eldercare *(Stone and Weiner)*.

The average caregiver for elderly relatives age 85 and older is between the ages of 50 and 64. The caregiver ratio for Minnesota currently stands relatively high at 9.0 potential caregivers per elder age 85 and older. This ratio will remain relatively constant through 2020 but then begin to decline, falling to 6.3 in 2030 and 4.2 in 2040. However, age of caregivers is not the only variable. Adult children of divorced parents are less likely to be caregivers and stepchildren even less so. This lower level of care is true even for custodial parents, though it is substantially lower for non-custodial parents (Schone and Pezzin).

Robyn I. Stone with Joshua M. Wiener, "Who Will Care For Us? Addressing the Long-Term Care Workforce Crisis," U.S. Department of Health and Human Services, The Urban Institute, May 2001.

L.E. Pezzin and B.S. Schone, "Parental Marital Disruption and Intergenerational Transfers: An Analysis of Lone Elderly Parents and Their Children," Demography 36.3:287-297, 1999.

We Are Not Alone

"Though the challenges here seem great, the necessary adjustments will likely be smaller than those required in most other developed countries. But how we adjust will also matter."

Alan Greenspan, February 2003

Many European countries face the dilemma of an aging society more acutely today than here. Europe is older than Minnesota and the United States and is experiencing difficulties sooner. Economic growth is slowing, largely due to aging and slower labor force growth. Productivity increases there have been inadequate to overcome the difference. Many European countries have made commitments for pensions, retirement age, health care and other social and economic programs that they now find they may not be able to keep. Some countries have been forced into severe austerity programs, some aspects of which (such as sharp rises in college tuition in England) may actually aggravate the situation by reducing future productivity increases. Europe is older than Minnesota and the United States and is experiencing these difficulties earlier. However, the path that Minnesota is on, at this time, appears similar to the one followed by Europe. The difference in time is approximately a decade. Sometime between 2020 and 2025, Minnesota and the United States will see a demographic situation similar to the one facing Europe today.

Europe is not alone in the aging process. Japan is older, with a declining labor force and a declining population. China will see rapid aging and their labor force will begin to decline by approximately 2017. Much of the rest of the world will see declines or slowing rates of growth of the labor force. Labor force growth in Minnesota, though it will slow dramatically, will exceed growth rates in most of the world's larger economies. This may offer an opportunity for a stronger competitive position in Minnesota vis-à-vis its international trading partners.

Beyond 2020

"The aging of the population is bound to bring with it many changes to our economy – some foreseeable, many probably not."

Alan Greenspan, February 2003

Longer run forecasts are notoriously inaccurate, largely due to unanticipated changes. Over the next 50 years, unanticipated, disruptive changes are certain to occur that will change much in forecasts. Some of these unanticipated changes or events will be related to human behavior.

For example, international migration streams may change. There will almost certainly be wars and disputes. Other changes will be related to technological advances, including new ways of producing things, new sources of energy and cures for terrible diseases. Some change will occur in the interaction between humans and the environment. New diseases will emerge or old ones will return. Two examples from the past half-century are HIV and wheat rust, both with dramatic impact on human societies. Disruptive events and innovations, which by their very nature are difficult to predict, will shape the future. Though they are difficult to predict, the frequency of disruptive innovations tends to increase during times of social and economic upheaval. Disruptive events and innovations will likely become more frequent.

But about some trends we are almost certain. Aging, for example, will continue. Minnesota's projected increase in the 65 and older population will be even larger in the 2020s than in the 2010s. The Baby Boom Generation will continue to grow older, entering its 70s and 80s by 2030. Disability rates, especially mobility, vision and hearing, will increase rapidly. Unless cures for Alzheimer's and other disorders of advanced age are discovered, the first waves of the Baby Boom generation will begin to crowd into long-term care facilities in the late 2020s.

Labor force growth will likely continue to slow, with virtually all economic growth achieved due to increases in per-worker productivity. Without major efforts to invest in human and physical capital, we will not see the productivity growth necessary to counter the slowing growth of the labor force. Economic growth will slow.

Based on what we know today and can anticipate, government revenues will grow more slowly in the future, even more slowly than the overall economy. At the same time, demand for government services and entitlements will increase and grow more rapidly than revenues; perhaps as much as twice as fast. Healthcare and long-term care costs will be the primary factors in increasing demands on government.

The current structural imbalance between revenues and expenditures is not sustainable. When asked what would happen in a situation that was clearly unsustainable, Herb Stein, former Chair of the Council of Economic Advisors under President Nixon, responded, "If something can't go forever, it will stop." The choice remaining is whether to find a solution ourselves or to have one imposed.

The budgetary conflict of investing in future growth with education and training, infrastructure and research, versus spending for health care, pensions and similar programs, will likely be an increasing issue at both the state and national levels. This dilemma will be shared by most of the economically developed regions of the world. Competition for immigrants from poorer nations that are still experiencing strong labor force growth will increase. This immigrant pool of labor will be sought out to provide care for the aged and to perform necessary but lower-skill, lower-wage jobs. The immigrant community will likely represent an increasing proportion of Minnesota's younger population.

Conclusions of the 2080 Budget Trends Commission Are Still Accurate

"The challenges of the future are not insurmountable but they are real….The long-term budget trends of the state will require strong fiscal discipline to ensure that we recognize problems and capitalize on opportunities so that we can pass along our current economic success to future generations."

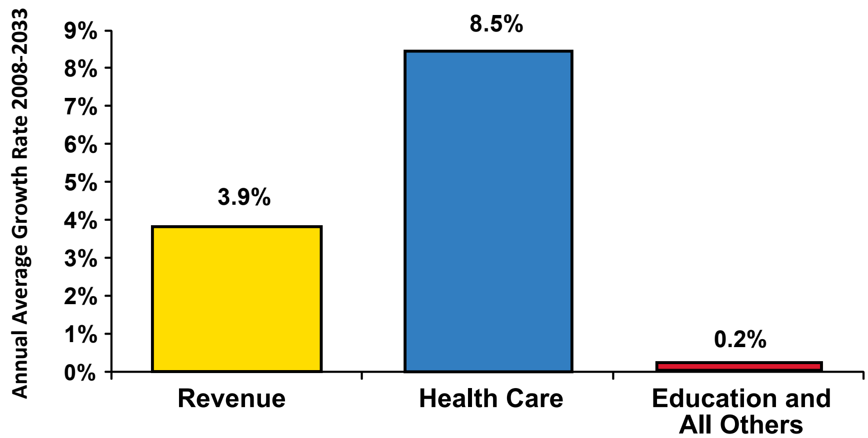
2008 Budget Trends Commission Report, Executive Summary

Conclusions of the 2008 Minnesota Budget Trends Commission are, for the most part, still accurate and appropriate. The anticipated fiscal challenge has materialized, resulting from a combination of the impact of the Great Recession and unprecedented but predicted demographic changes.

The Budget Trends Commission concluded that while government revenues would grow at a slower pace in the future, demands on government expenditures would grow faster, largely as the result of rapidly increasing costs of healthcare. The most obvious components of the rapid rise in healthcare costs resulting from demographic change are Medical Assistance related to the growing elderly population, primarily regarding long-term care. This, however, is not the only place where healthcare costs enter into government budgets. For K-12 education, rapidly rising costs of health insurance for employees reduces the dollars available for classroom instruction. Rising costs of healthcare for other government employees and inmates in state penal institutions will continue to erode an ever-larger portion of the budget, threatening effective delivery of vital government services.

If State Health Care Costs Continue Their Current Trend, State Spending On Other Services Can't Grow

Graphic From The 2008 Budget Trends Commission Report



Source: General Fund Spending Outlook, presenation to the Budget Trends Commission, August 2008, Dybdal, Reitan and Broat

Looking 25 years into the future, the Budget Trends Commission concluded that the current financial situation for Minnesota state government is not sustainable. This conclusion has not changed with the passage of two years and the availability of more data.

Is There Hope?

"We are all in the gutter, but some of us are looking at the stars."

Oscar Wilde

Minnesota's experience since World War II has been remarkable. Minnesota went from a below-average education and below-average income state to a national leader in both measures. This relationship is not coincidental. Improving educational outcomes improved the quality of the workforce, matching the demands of the late 20th century economy. Minnesota's achievement was in creating a well-educated, hard-working, easily trained, highly productive workforce that produces quality goods and services. By 2009, Minnesota ranked fifth in the nation in employment ratio, 13th in median earnings of full-time year-round workers, 10th in median family income and third-highest in cost of living adjusted income (Aten and D'Souza, Survey of Current Business, Nov 2008). Minnesota also ranks 11th in the percent of the adult population with at least a bachelor's degree and second in the percent with at least a high school diploma. Minnesota has performed well, with rising incomes led by rising education achievement levels.

In the next 20 years, disruptive changes will take hold in Minnesota, in the United States and in most of the economically prosperous world. While this period will pose difficult and complex problems for leaders in both the public and private arenas, it will also offer a unique set of opportunities. The challenge will be to focus on identifying and seizing the opportunities while dealing with the challenges. And once again, rising productivity will be at the core of successful economies.

The most successful organizations and economies face a special difficulty during times of great disruptive change – the tyranny of success. The smugness that comes from past success can be a great pitfall. Often, the very factors that lead to past success can be the source of failure. Failures of leadership, vision, strategic focus and policy that lead to past success can become the Achilles' heel as technological and market conditions change over time, according to Paap and Katz in their 2004 award-winning article, "Anticipating Disruptive Innovation." Minnesota, as a successful economy, must avoid the tyranny of success if it is to be successful in the future.

Future changes, led largely by demographic shifts, will be so disruptive that businesses and governments will require a new business model. Paap and Katz argue that the organizational focus in time of great disruptive change should be primarily on the customer and operational needs and not on the change itself. The focus for the customer, however, should not be on what the customer wants, but rather what the customer needs. The private sector has a means of dealing with organizations that do not get the wants/needs equation right. Not so the government sector. Market forces do not directly give governments clues about whether the government is on the right course. For this, constant monitoring of progress towards a commonly accepted vision is necessary. As the 2008 Budget Trends Commission concluded, "The challenges of the future are not insurmountable but they are real."

Selected Minnesota Demographic Forecasts – Short-, Medium- and Long-run

2011 & 2012 – the Next Two Years

1. The first wave of the **Baby Boom Generation turns 65** in 2011. More people will enter the Medicare program and begin to receive Social Security benefits.
2. **Population growth** in Minnesota will remain **steady** at between 0.7% and 0.8% per year. The state will add nearly 81,000 people to its population over the next two years.
3. **Immigration will continue** to be a major contributor to population growth. Immigration will add approximately 10,000 people to Minnesota's population each year.
4. **Retirements will rise** in both the public and private sector, but state and local government will be especially affected because the government workforce is older. The wave of government worker retirements offers an opportunity to restructure the public sector, but will also pose challenges in replacing some employees with unique knowledge, skills and abilities.
5. As more people retire, there will be an expansion in the number of **replacement openings** in the job market. This should **increase opportunities** for the currently underemployed or unemployed and for new labor market labor market entrants.
6. Household formation and the housing market will continue to be sluggish, resulting in **slower growth**, especially in the previously rapidly growing **suburban ring** around the Twin Cities Metropolitan area.
7. The number of **high school graduates will decline** by more than 3 percent over the next two years, a trend that will continue throughout the decade. This will reduce the number of new entrants to the workforce. It may also have an impact on higher education enrollments by reducing the college age population, although other factors may counteract that trend.

2013 to 2020 – Remainder of the Decade

1. The population **65 and older will rise rapidly**, increasing as much this decade as in the past four combined.
2. The workforce will experience sluggish growth as more people retire and the working-age population grows slowly. As a result, **economic growth will slow** unless there are substantial gains in per worker productivity.
3. Slower workforce growth could **improve opportunities for workers**, but another possibility is that employers will resort more to alternatives to hiring such as labor-saving devices, downsizing, and moving to labor markets with more qualified labor. The match between the skill sets of available workers and the requirements of employers will be crucial in determining how employers react to the shifts in the labor market.
4. Total personal **income growth will slow** as more people retire and their incomes become more dependent on Social Security and pensions. Though there will still be "good" years and "bad" years for economic growth, average income growth will be substantially below what it was in the past.

5. **State government will face chronic structural deficits** and adjustments will be needed to balance the budget. This perennial crisis will be produced by slower revenue growth coupled with increasing pressure on expenditures for major state programs such as health care and education.
6. **Health-care costs** will play a major role in future state budget **challenges**. Medical inflation has exceeded the overall inflation rate for many years and is expected to continue to do so. This dilemma affects not only health care programs such as Medicaid, but has a major indirect influence on the costs of other programs. For example, one reason K-12 expenditures are expected to go up is the rapid increase in health care costs for employees. Health-care costs for other government employees will also contribute to strain on public expenditures.
7. Retirements in health care professions, coupled with long-run inadequate numbers of graduates from medical and nursing schools, will create a **growing problem in the provision of health services** at the same time that demand for health care will rise sharply.
8. **Most** of Minnesota's **population increase this decade** will be **minority persons**, with most of the increase under age 30. An increasing proportion of Minnesota's K-12 enrollments and work force under age 30 will be nonwhite or Latino, especially people born in other countries. Unfortunately graduation rates and college attendance rates for minority and foreign-born students continue to lag well behind those of white students. With the overall number of graduates expected to decline, this could exacerbate the mismatch between the needs of employers and the skill sets of young workers.
9. **Household growth will return to pre-recession levels** of 20,000 to 25,000 per year by 2013 or 2014, but the types of household will change. Families with children under age 18 will grow at a much slower pace, at approximately a third of the rate of growth over the past five decades. Most of the growth in households will be among older married couples who have empty-nested and among older people living alone. These trends have implications for construction, school financing, and delivery of social services.
10. **Most of the increase** in 65 and older population in Minnesota during the 2010s will occur in the **Twin Cities metro area**, especially in the **suburban** counties.
11. An increasing number of **rural counties** will **experience** chronic **natural decrease** (more deaths than births) and long-run population decline. In general, these counties already have high proportions of elderly and few children.

Beyond 2020, Toward 2060

Long-run forecasts are always, at best, highly speculative. Policy actions and disruptive changes will have a magnified effect as the forecast period expands. Long-run forecasts should always be view skeptically. That said, there are some things that are fairly predictable. Most notably, age progresses at the same rate for all people and cohorts that are alive today can be reasonably projected through their lifetime.

1. The decade of the **2020s will see an even greater increase in the 65 and older population** than the 2010s. From 2010 to 2030, Minnesota will add nearly 600,000

people age 65 and older. By 2030, the biggest increases in the 65 and older population will be over. After 2030, the elderly population will grow at a much slower rate as the Baby Boom effect plays itself out.

2. **Long-term care will be a challenging issue** as the leading edge of the Baby Boom Generation moves into its late 70s in the 2020s. Long-term care is extremely expensive. Simple solutions, such as turning to children or other family members to provide care for older family members will prove largely fruitless. Lower fertility rates, family disruptions, high rates of female labor force participation (women have historically been the main caregivers for the elderly), and high rates of geographic mobility mean that many older people will have no one available locally to assist with their care.
3. Aging of the population, coupled with rising energy prices, may contribute to a movement back to the central cities or inner-ring suburbs at the expense of suburbs built from 1990 to 2008. In other words, **"urban sprawl" may end or diminish**. Differentials in housing prices could moderate the trend to re-centralization.
4. Population growth in most of the world is expected to decline. Rising educational levels and urbanization are already lowering birth rates in much of the world, especially Asia and Latin America. **Slower worldwide population growth could reduce immigration**, dampening population growth in the U.S. and Minnesota. However, differences in economic opportunity in different countries will still produce substantial amounts of international migration.
5. **Worldwide aging and rising income** will increase the demand for higher quality food, while continued **population increases** will place increasing demand on basic food items. These trends will combine to place **upward pressure on commodity prices**, most notably food and energy. Any adverse crop events in critical agriculture areas will place even more upward pressure on commodity prices. This may improve Minnesota's competitive position.
6. Many of the **fastest growing areas of the nation today are in water deficit areas**. This includes both the Southwest as well as the Southeast regions of the nation. Unless a disruptive technology alters the current course, growth in many of the states in these regions will be constrained by 2020. Minnesota, with a more ample supply of this vital and most precious resource, will be in a more competitive position for economic and population growth, but only if water resources are carefully preserved and managed.

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