



Population Projections

for the St. John's
Census Metropolitan Area

June 2014

ST. JOHN'S

Newfoundland
Labrador

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About the Economic Research and Analysis Division

Economic Research and Analysis (ERA) is one of two divisions in the Economics and Statistics Branch of the Department of Finance. The other is the Newfoundland and Labrador Statistics Agency. The Economic Research and Analysis Division is the central point within Government for economic and demographic analysis. The division's mandate is to provide macroeconomic analysis and forecasting; demographic analysis and projections; analysis of the provincial, national and international economies; and policy and project impact assessments. It is responsible for the Newfoundland and Labrador Econometric and Input/Output Models, as well as, the Population Projection Model. ERA is also responsible for the publication of the budget document, *The Economy* and the mid-year report, *The Economic Review*. As part of its mandate, ERA is responsible for monitoring and briefing Government on demographic developments in the province, and preparing long-term population projections for planning purposes. Population projections for various regions within Newfoundland and Labrador are produced annually and are available on ERA's website (economics.gov.nl.ca).

Introduction

This report outlines population and household projections to 2036 for the St. John's Census Metropolitan Area (CMA).¹ These projections were prepared by the Economic Research and Analysis Division (ERA) of the Department of Finance as part of its regular update of the regional population projections. This document was prepared at the request of the City of St. John's.

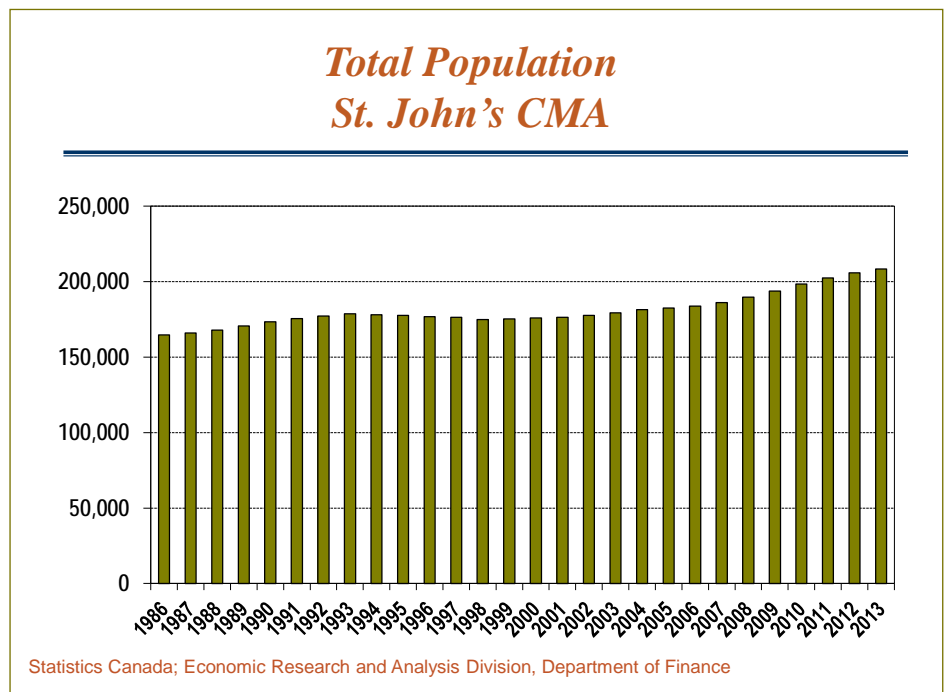
These projections are based on historical population data for the St. John's CMA produced by Statistics Canada. This is the most reliable information available on the population of the St. John's CMA and provides the benchmark for the projections. Population estimates for the St. John's CMA, combined with assumptions involving fertility rates, life expectancy and migration were used to project the region's population to 2036. Three population scenarios were developed (high, medium and low) by varying the projection assumptions.

Recent Trends

Population Levels

From 1986 to 1993 the St. John's CMA experienced an 8.5 per cent increase in population as natural population gains were bolstered by strong total net in-migration.² From 1993 to 1998 the population declined by 2.1 per cent from 178,767 to 175,009, reflecting in part the impact of the collapse of the groundfish fishery. Since then the St. John's CMA population has increased steadily, making especially strong gains over the last five years because of rising birth rates and strong net in-

migration. In 2012 the population grew by 1.7 per cent to 205,891 and in 2013 it climbed another 1.2 per cent to 208,372. Provincially, population grew 0.3 per cent in 2012, while 2013 saw no change. Further population growth is expected in the St. John's CMA in 2014 and beyond.

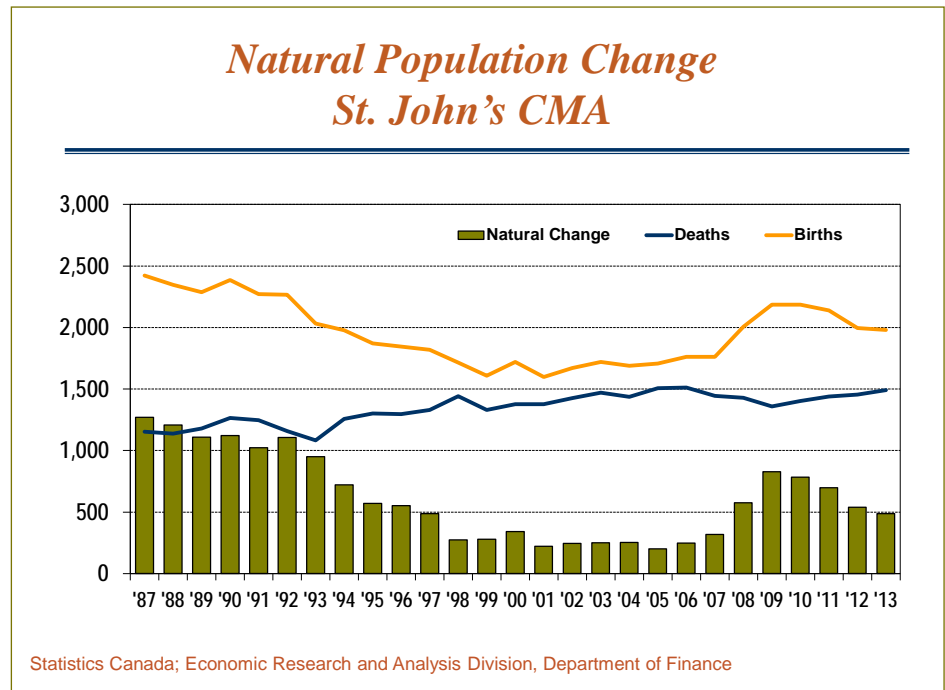


¹ The St. John's Census Metropolitan Area (CMA) includes the municipalities of Bauline, Bay Bulls, Conception Bay South, Flatrock, Logy Bay-Middle Cove-Outer Cove, Mount Pearl, Paradise, Petty Harbour-Maddox Cove, Portugal Cove-St. Phillip's, Pouch Cove, St. John's and Torbay.

² This includes international net migration, interprovincial net migration and intraprovincial net migration as well as the residual deviation.

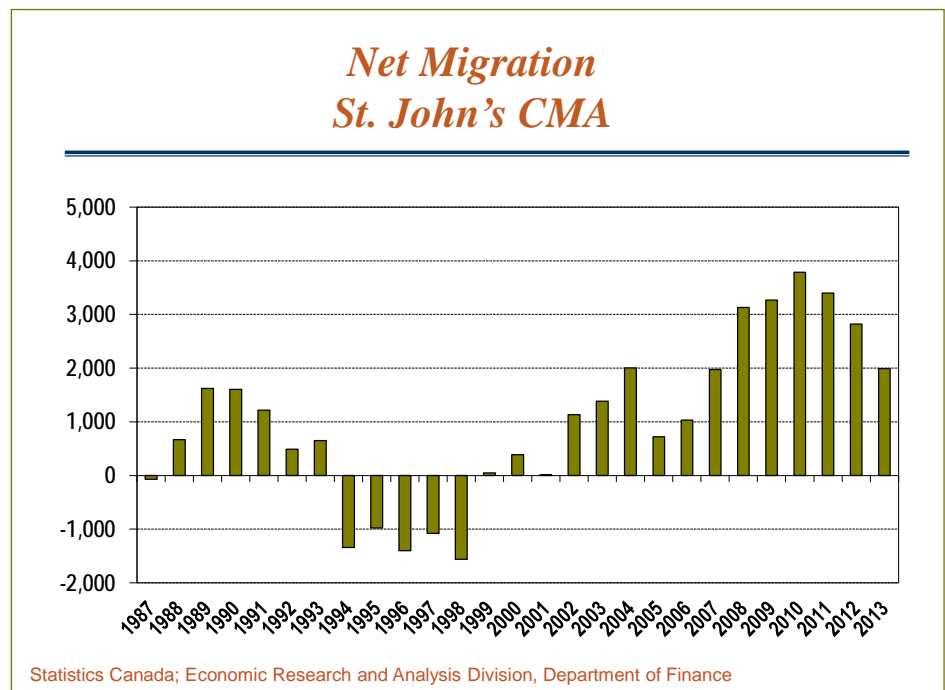
Natural Change

Between 1986 and 2013, the number of births in the St. John's CMA displayed three distinct periods of trend (see chart to the right). From 1986 to 2001, births fell roughly 34 per cent from around 2,400 in 1986-1987 to about 1,600 in 2000-2001, as fertility rates declined. This was followed by a period of relative stability from 2001 to 2006. From 2007 onwards net in-migration and a modest rebound in fertility rates caused the number of births to increase considerably, averaging over 2,000 during the time period. Over the last 27 years the number of deaths in the St. John's CMA has trended upwards as the population increased in size and aged. From 1986 to 2013, deaths in the region increased by roughly 30 per cent, reaching 1,492 in 2012-2013.



Migration

For the majority of the years since 1986, the St. John's CMA has experienced net in-migration (see chart to the right). The only noteworthy break in this pattern occurred around the time when the economy was adjusting to negative economic impacts of the groundfish moratoria introduced in the early 1990s. Between 1993 and 1998 the St. John's CMA recorded a net migration loss averaging almost 1,300 per year. From 1998 to 2001 total net migration was marginally positive, but at levels on average much lower than those seen prior to 1993. From 2001 onwards, total net migration began to increase as the economy improved, peaking at almost 3,800 in 2009-2010. In 2013 total net in-migration was roughly 2,000.



Projections

Population projections for the St. John's CMA were produced using POPPS, the Population Projection System, a custom-built projection system housed in the Department of Finance which projects the population by age and gender for Newfoundland and Labrador and sub-provincial regions.

The system uses information/assumptions about fertility, mortality and migration to produce the three different population projection scenarios. Low, medium and high population scenarios were developed for consideration. The assumptions for each scenario are explained in the next section.

Assumptions

Fertility Rates

For the low scenario, it was assumed that the total fertility rate for the St. John's CMA will gradually trend down from a current average of roughly 1.4 to 1.2 by 2036. This results in annual births trending down from around 2,000 in recent years to just below 1,700 in 2036.

For the medium scenario, it was assumed that the total fertility rate remains stable at approximately 1.4 over the remainder of the projection period. This results in annual births increasing slightly from around 2,000 in recent years to approximately 2,200 in 2021, but returning to around 2,000 by 2036.

For the high scenario, it was assumed that the region's total fertility rate gradually trends up from an estimated rate of 1.4 in 2013 to 1.6 in 2036 as economic conditions continue to improve. This results in annual births trending up from around 2,000 in recent years to approximately 2,500 in 2036.

Mortality and Migration

For the low scenario, life expectancies continue to increase but at rates slightly below historical trends. Male life expectancy increases by 2.1 years between 2013 and 2036. Female life expectancy increases by 0.9 years over the same period. Net in-migration is assumed to continue to slow from 2014 to 2016 when net out-migration is expected for two years (2017 and 2018) as several major projects, including the Hydromet facility in Long Harbour, Hebron, Kami, and the Lower Churchill are completed. Net in-migration resumes temporarily from 2019 to 2023 as construction of the Bay du Nord oil project occurs, but slows in 2023. Net out-migration is assumed to occur in 2024 as construction of Bay du Nord is completed. Net in-migration resumes in 2025 and gradually increases thereafter to fill new jobs that are expected to be created as well as to replace baby boomers as they retire. Net in-migration averages roughly 680 per year over the entire projection period from 2014 to 2036.

For the medium scenario, life expectancies continue to increase in line with recent historical trends. Male life expectancy increases by 3.7 years between 2013 and 2036. Female life expectancy increases by 2.1 years over the same period. Modest net in-migration is assumed for the next three years, but then net out-migration occurs in 2017 and 2018 as several major projects, including the Hydromet facility in Long Harbour, Hebron, Kami, and the Lower Churchill are completed. Strong net in-migration is assumed to resume temporarily from 2019 to 2023 as construction of the Bay du Nord oil project occurs, but net out-migration is assumed in 2024 as construction of Bay du Nord is completed. Net in-migration resumes in 2025 and gradually increases thereafter to fill new jobs that are expected to be created as well as to

replace baby boomers as they retire. Net in-migration averages roughly 1,020 per year over the entire projection period from 2014 to 2036.

For the high scenario, life expectancies continue to increase, but at a slightly faster pace than recent trends. Male life expectancy increases by 5.1 years between 2013 and 2036. Female life expectancy increases by 3.3 years over the same period. Net in-migration is assumed to occur over the entire projection period; however, it fluctuates with economic activity. Net in-migration is assumed to increase temporarily from 2019 to 2023 as construction of the Bay du Nord oil project occurs, but slows again in 2024 as construction is completed. Higher levels of net in-migration resume in 2025 and gradually increase thereafter to fill new jobs that are expected to be created as well as to replace baby boomers as they retire. Net in-migration averages roughly 1,370 per year over the entire projection period from 2014 to 2036.

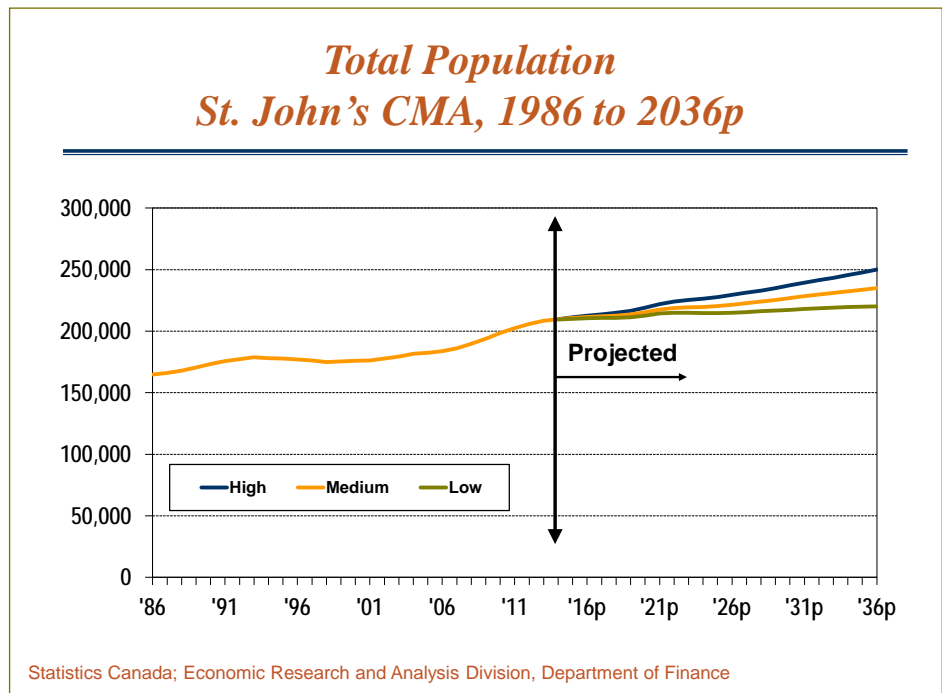
Results

Total Population

The results from the three population projection scenarios are illustrated in the chart to the right. In the low scenario, population increases by 5.7 per cent from 208,372 people in 2013 to 220,165 in 2036. The medium and high scenarios predict population will increase to 235,077 (12.8 per cent) and 249,924 (19.9 per cent) respectively by 2036.

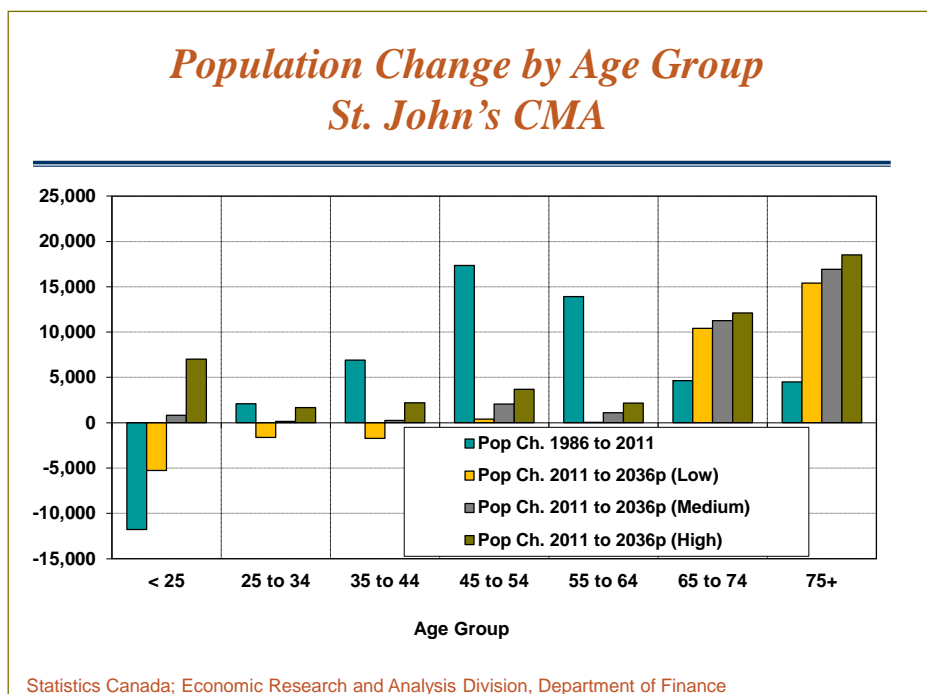
In all three scenarios the population structure continues to age, with the proportion of the population 65 years of age and over in the medium scenario

increasing from 13.2 per cent in 2013 to almost 23 per cent in 2036 (detailed population projections by age for the St. John’s CMA can be found in Appendix A).



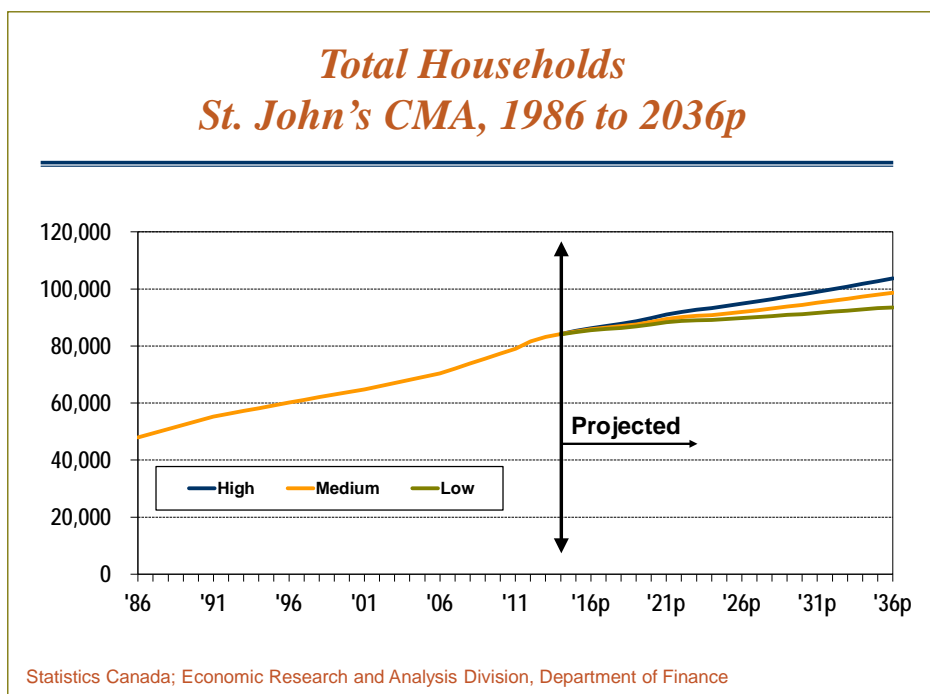
Age Distribution of Population Gains

As the population ages the distribution of population gains will change. As can be viewed in the chart to the right, between 1986 and 2011 the largest population gains were in the 45 to 54 and 55 to 64 year age groups, while those under 25 showed the sharpest decline. In all three projection scenarios those aged 25 to 34 years show the weakest growth. However, in the low and medium scenarios all cohorts less than 65 years show declines or only modest growth with most of the population growth occurring in 65 years and over age groups. In the high scenario, there is growth in the less than 25 age group but nonetheless the 65 years and older age groups show the largest population increases.



Households

The number of households in the St. John's CMA has risen steadily over the past 27 years (see chart to the right). This can be partially attributed to the fact that the portion of the population heading households (known as the headship rate) tends to rise with an aging population. Thus the growth in the population aged 45 to 64 from 1986 to 2013 contributed to an increase in the number of households while the decline in young population, which has very low household headship rates, exerted a



small drag on household formation. From 1986 to 2013³ the number of households in the St. John's CMA increased from 47,905 to approximately 83,200 (or 73.6 per cent), even as the overall population in the region only increased from 164,806 to 202,533 (or 26.4 per cent).

Household projections are produced by applying assumed future headship rates by age and gender to the population projections. Headship rates are assumed to stay constant at 2011 levels over the projection period in all three scenarios.

In the low population scenario the total number of households increases by 12.5 per cent from 83,178 in 2013 to 93,530 in 2036 as population increases 5.7 per cent over the same period.

In the medium scenario the number of households increases by 18.6 per cent from 83,178 in 2013 to 98,633 in 2036 as population increases by 12.8 per cent over the same period.

In the high scenario, population growth together with aging produces further increases in the number of households. The number of households increases by 24.6 per cent from 83,178 in 2013 to 103,657 in 2036 as population rises by 19.9 per cent over the same period.

As household formation outpaces population growth there is a natural decline in average household size. This occurs as the incidence of one-person and two-person households increase in the community. As the baby boomers continue to age and their children mature and leave home, two-person households become more common. In addition, the death of a spouse in an older household will result in more one-person households as the population ages.

³ The latest historical household estimate available from Statistics Canada is for 2011. Data from 2012 and 2013 are estimates by ERA.

Appendix A

Population and Household Projections For the St. John's CMA Low, Medium, and High Scenario

**Number of Households
St. John's CMA, 1986-2036**

| | <u>Low</u> | <u>Medium</u> | <u>High</u> |
|-------|------------|---------------|-------------|
| 1986 | 47,905 | 47,905 | 47,905 |
| 1991 | 55,235 | 55,235 | 55,235 |
| 1996 | 60,175 | 60,175 | 60,175 |
| 2001 | 64,830 | 64,830 | 64,830 |
| 2006 | 70,352 | 70,352 | 70,352 |
| 2011 | 79,025 | 79,025 | 79,025 |
| 2012e | 81,555 | 81,555 | 81,555 |
| 2013e | 83,178 | 83,178 | 83,178 |
| 2014p | 84,052 | 84,157 | 84,191 |
| 2015p | 84,901 | 85,095 | 85,290 |
| 2016p | 85,542 | 85,879 | 86,248 |
| 2017p | 85,962 | 86,434 | 87,008 |
| 2018p | 86,314 | 86,943 | 87,790 |
| 2019p | 86,834 | 87,601 | 88,684 |
| 2020p | 87,527 | 88,473 | 89,812 |
| 2021p | 88,329 | 89,454 | 91,053 |
| 2022p | 88,801 | 90,121 | 91,977 |
| 2023p | 89,022 | 90,529 | 92,675 |
| 2024p | 89,117 | 90,846 | 93,261 |
| 2025p | 89,439 | 91,386 | 94,055 |
| 2026p | 89,767 | 91,952 | 94,848 |
| 2027p | 90,110 | 92,536 | 95,656 |
| 2028p | 90,509 | 93,169 | 96,404 |
| 2029p | 90,872 | 93,803 | 97,255 |
| 2030p | 91,187 | 94,411 | 98,102 |
| 2031p | 91,626 | 95,123 | 98,987 |
| 2032p | 92,000 | 95,802 | 99,921 |
| 2033p | 92,416 | 96,545 | 100,786 |
| 2034p | 92,834 | 97,259 | 101,749 |
| 2035p | 93,219 | 97,969 | 102,722 |
| 2036p | 93,530 | 98,633 | 103,657 |

Source: Statistics Canada; ERA e: estimated p: projected