

The Benefits to Taxpayers from Increases in Students' Educational Attainment

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Overview

- **The policy issue**
- **Research objectives and methods**
- **Effects of increases in attainment on:**
 - ▶ Tax revenues
 - ▶ Social support and insurance program costs
 - ▶ Incarceration costs
- **Costs of increases in educational attainment**
- **Conclusions**

The Policy Issue

- **Level of education needed to succeed in labor market increasing rapidly**
- **Budget constraints limit growth in capacity and programs to induce increases in attainment**
 - ▶ Objections to tax increases
 - ▶ Objections to reductions in support for other program areas

The Policy Issue

The debate typically overlooks an important concern

- **The debate generally focuses on benefits of increased attainment on students**
 - ▶ Society owes students educational opportunity
 - vs.**
 - ▶ If students are the beneficiaries, let them and their families pay the costs

- **But increased educational attainment increases income which:**
 - ▶ Increases tax revenues
 - ▶ Reduces social support and insurance program costs
 - ▶ Reduces incarceration costs

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Research Objectives

- **Estimate effects of increased educational attainment on**
 - ▶ Tax revenues
 - ▶ Social support and insurance program costs
 - ▶ Incarceration costs

- **Estimate effects of increased level of education, not “better” education**
 - ▶ Less Than High School (LTHS)
 - ▶ High School Graduate or GED (HSG)
 - ▶ Some College (SC)
 - ▶ Bachelor’s Degree (BD)

Research Approach

- **Data: 2002 Survey of Income and Program Participation (native born)**
- **Predict tax payments, social program costs, incarceration costs, for individual by age (18 – 79), education level, gender, and race/ethnicity**
- **Discount to 2002 (3% / year) using appropriate survival rates**
- **Subtract costs of providing an increase in attainment to estimate net benefits to taxpayers**
- **Calculate differences in discounted present values by education level**
- **Sensitivity analyses: Redo estimates assuming all estimated effects of attainment on public revenues and costs are 25% lower**

Scope and Limitations

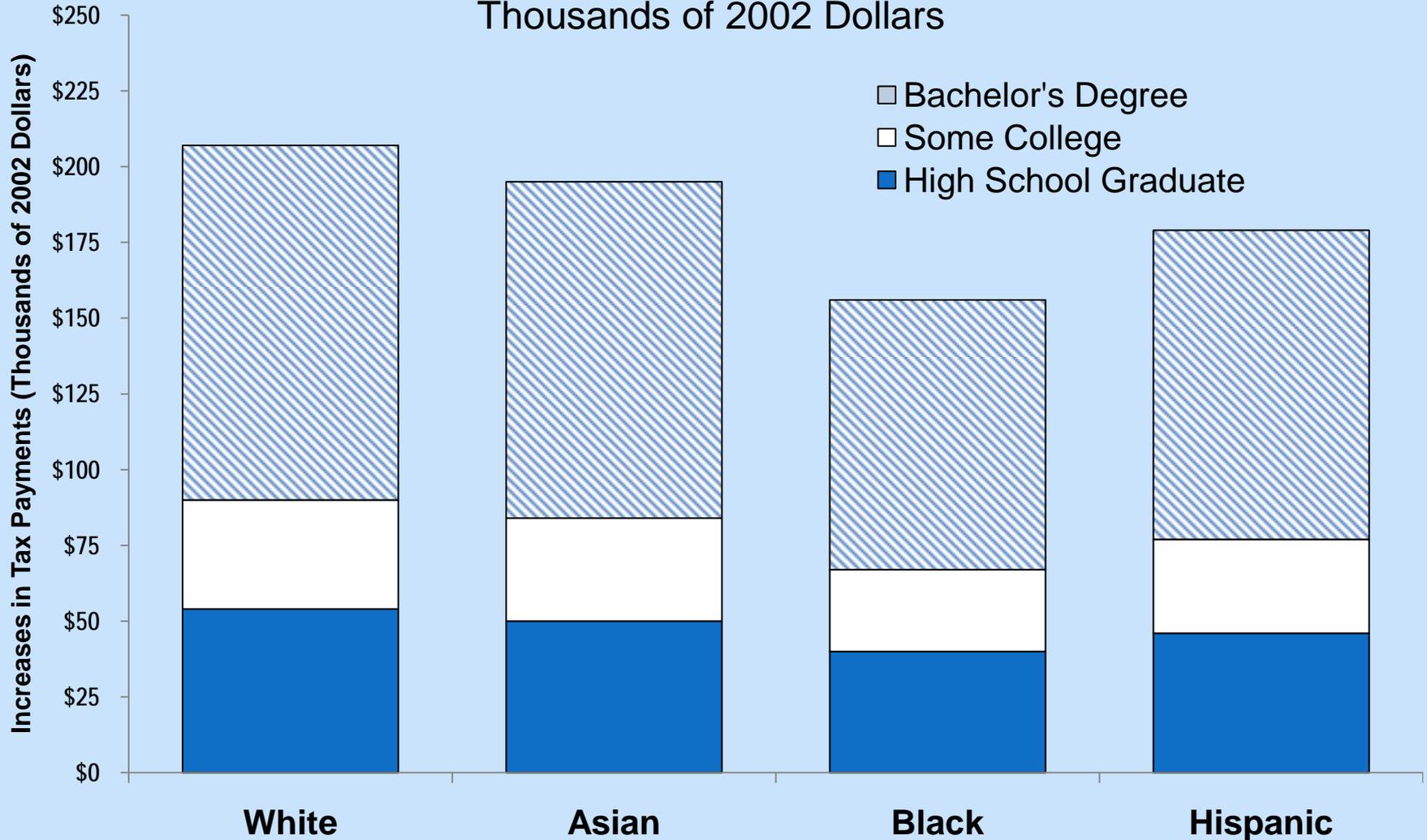
- **All estimates are national averages**
- **Assumes 2002 relationships continue into the future**
 - ▶ Effects of educational attainment on income
 - ▶ Tax structures
 - ▶ Social support and insurance program parameters
 - ▶ Incarceration rates and costs
- **Estimates do not consider costs of programs aimed at inducing increases in attainment**
- **Estimates do not consider effects of increases in attainment on**
 - ▶ Inheritance taxes
 - ▶ Federal prison costs
 - ▶ Police and adjudication costs

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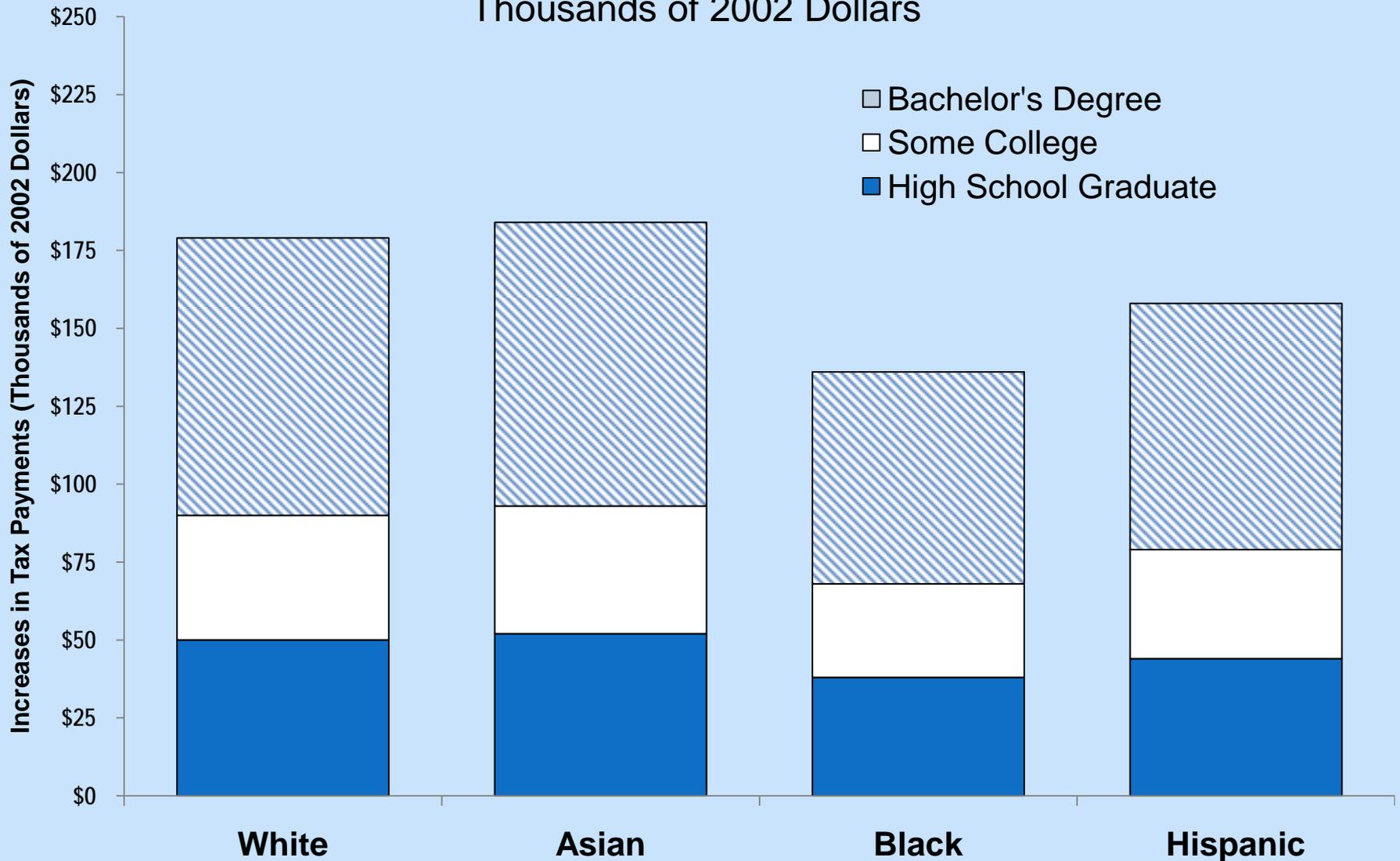
Increases in Tax Revenues Resulting from Increased Educational Attainment, Men

Thousands of 2002 Dollars



Increases in Tax Revenues Resulting from Increased Educational Attainment, Women

Thousands of 2002 Dollars



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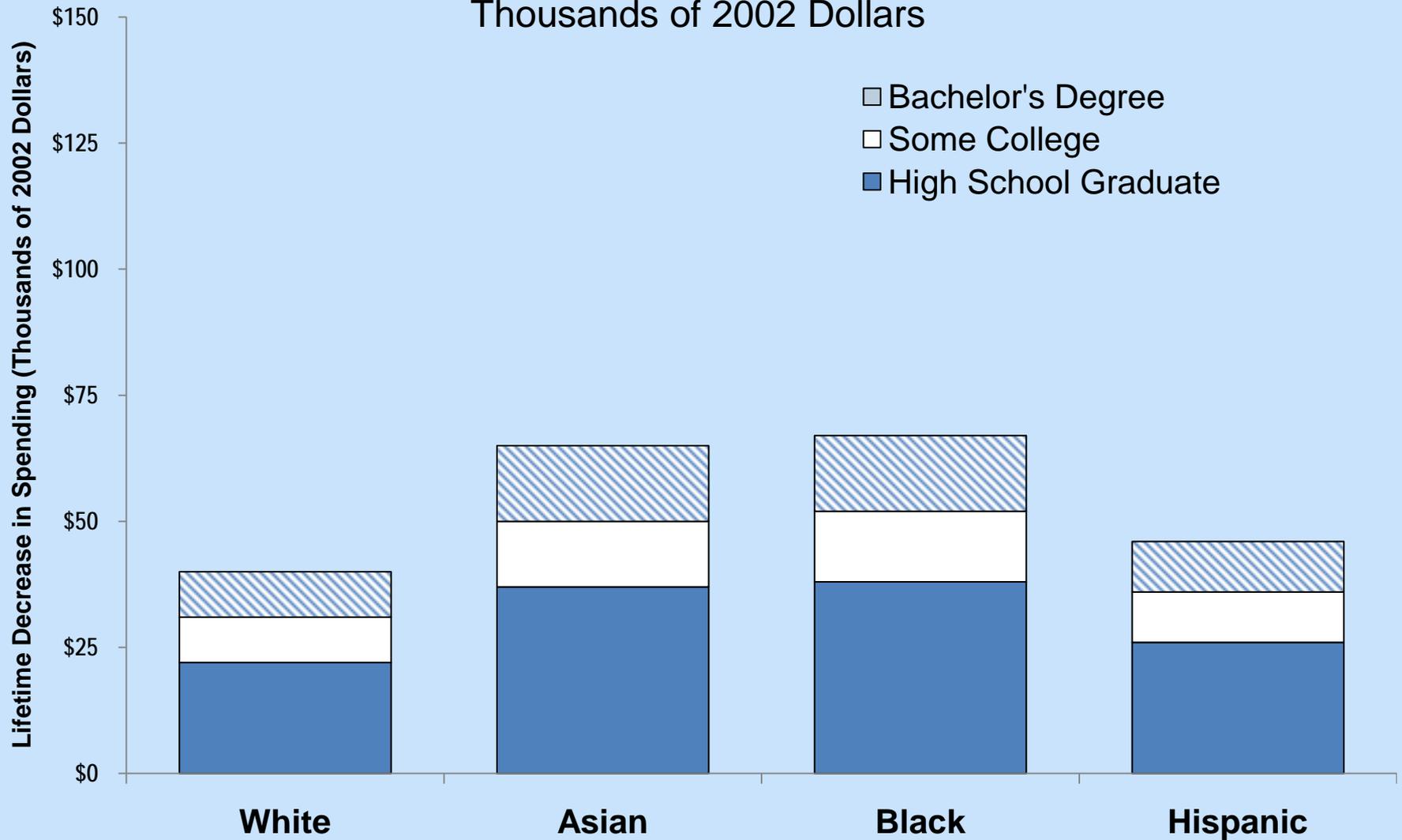
Social Support and Insurance Programs Included in Estimates

- **Social support programs**
 - ▶ **Welfare programs***
 - ▶ **Subsidized housing**
 - ▶ **Food stamps***
 - ▶ **Supplemental Security Income***
 - ▶ **Medicaid**

- **Social Insurance Programs**
 - ▶ **Medicare**
 - ▶ **Unemployment Insurance***
 - ▶ **Social Security***

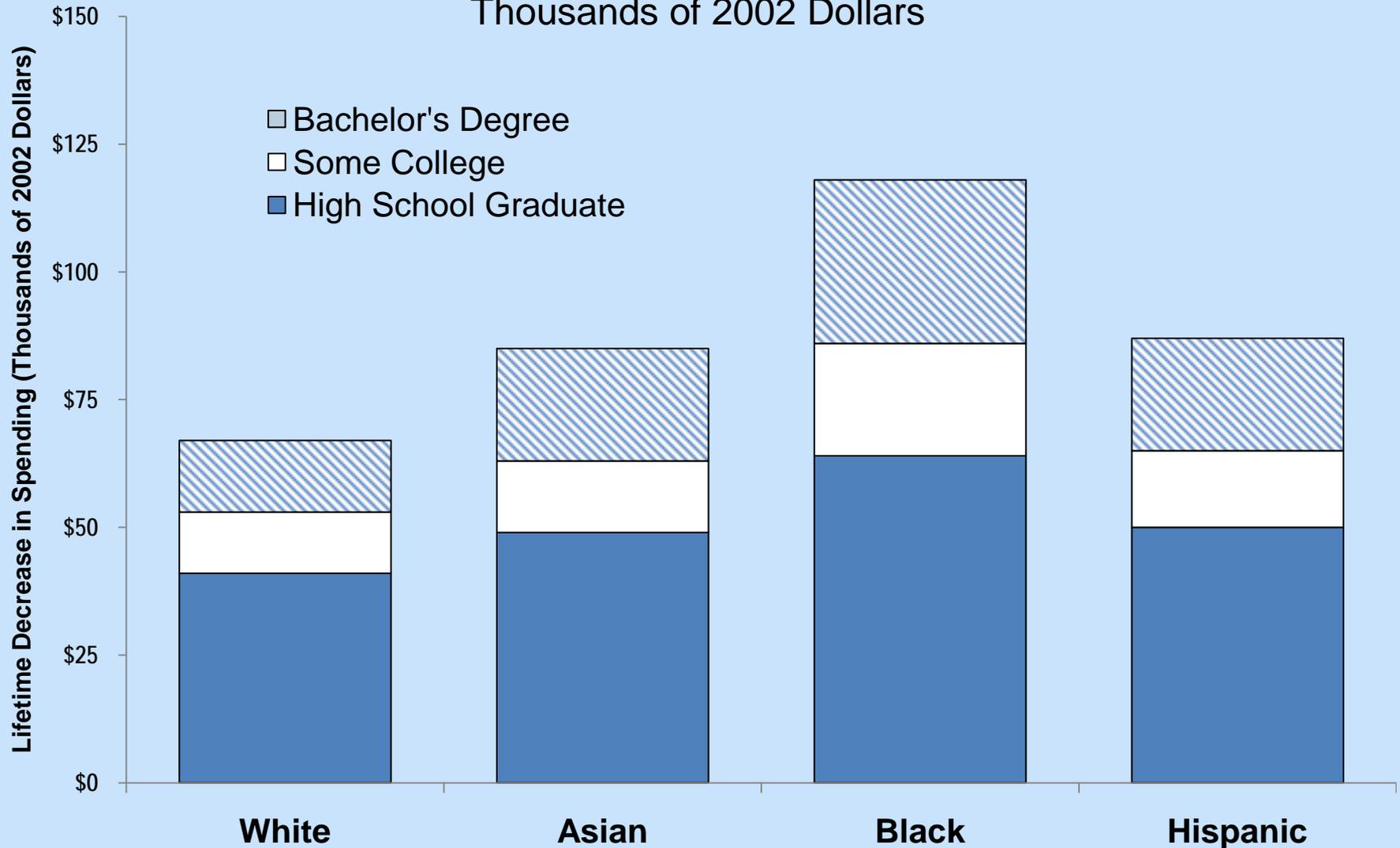
Reductions in Social Program Costs Resulting from Increased Education Attainment, Men

Thousands of 2002 Dollars



Reductions in Social Program Costs Resulting from Increased Education Attainment, Women

Thousands of 2002 Dollars

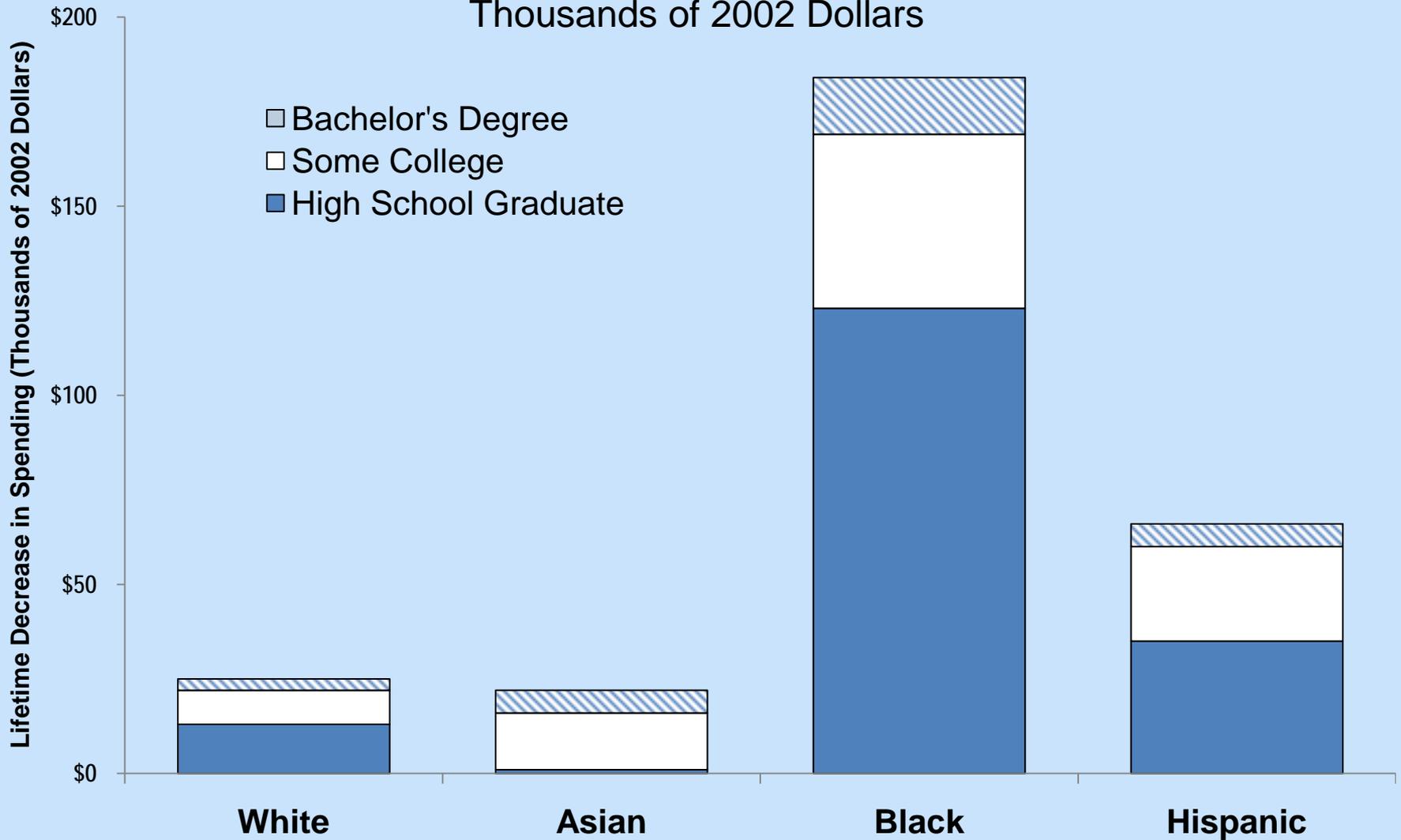


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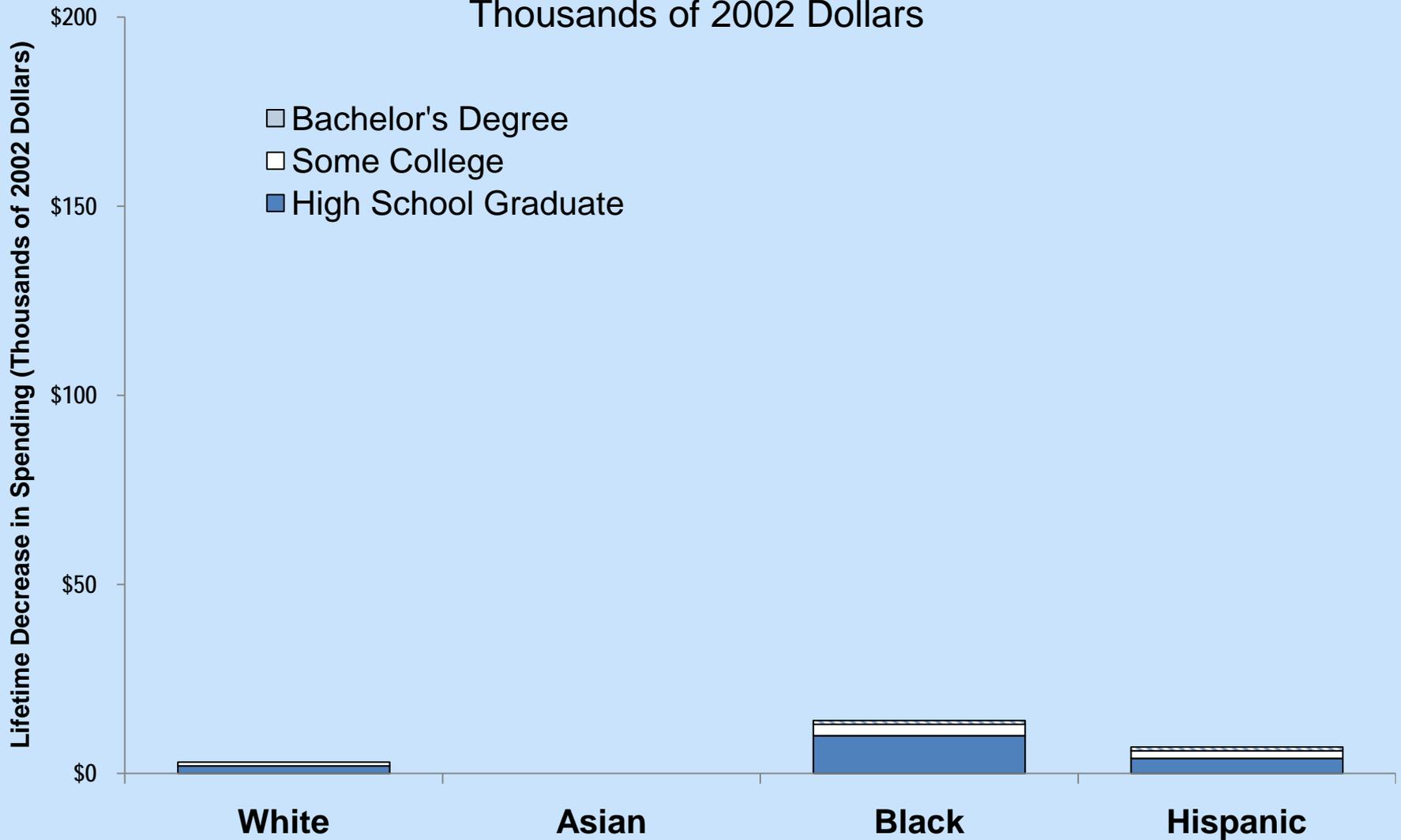
Reductions in Incarceration Costs Resulting from Increased Educational Attainment, Men

Thousands of 2002 Dollars



Reductions in Incarceration Costs Resulting from Increased Educational Attainment, Women

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Annual Average Operating Costs per Pupil in Public High Schools and Colleges (2001-2002 school year)

- **K-12: Current expenditures (ADA) = \$7,727**
- **Community colleges (FTE)**
 - ▶ **Current expenditures (\$9,400) – tuition and fees (\$1,800) = \$7,600**
- **Four-year colleges and universities (FTE)**
 - ▶ **Current expenditures (\$28,000) – expenditures for non-education activities (\$10,100) - tuition and fees (\$7,800) = \$10,100**

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- **Effects of increasing education attainment vary by group**
- **Increasing educational attainment results in significant net benefits to taxpayers for all groups.**
 - ▶ LTHS - HSG > \$74,000 (Asian and White men)
 - ▶ HSG – SC > \$37,000 (White and Hispanic Women)
 - ▶ SC – BA > \$82,000 (Black and Hispanic Women)

- **If estimated effects of increased educational attainment are 25% too high, effects are**
 - ▶ LTHS - HSG > \$51,000 (Asian and White men)
 - ▶ HSG – SC > \$24,000 (White and Hispanic Women)
 - ▶ SC – BA > \$53,000 (White and Hispanic Women)