

# The Fiscal Returns to Completing High School and Additional Years of Schooling Beyond High School in the U.S. and Massachusetts

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# What goes into calculating the cost: Lost taxes

## A Listing of the Income, Payroll, and Property Tax Payments to the Federal Government and State and Local Governments

<b>(A)</b> <b>Federal Government</b>	<b>(B)</b> <b>State and Local Governments</b>
Federal income tax payments	State income tax liability
Federal retirement payroll deductions	Property tax liability
Social Security retirement payroll taxes	State sales tax

# What goes into calculating the cost: “Transfers” or government payments and supports

## Cash and Non-Cash Transfers Received by Individuals or Households that are Used in the Computation of the Net Fiscal Impacts

Cash Transfers	Non-Cash Transfers (In-Kind Benefits)
Unemployment benefits	Market value of food stamps
Worker's compensation	Market value of Medicare insurance benefits
Social Security payments	Market value of Medicaid benefits
Supplemental Security Income for the disabled and aged	Family market value of housing subsidies
Public assistance income (TANF, general relief)	Family market value of school lunch subsidies
Veteran's payments	Energy assistance payments
Survivor's income benefits	
Other disability income	
Federal Earned Income Tax Credits	

# Factoring lost taxes and transfer costs into the equation

## A Listing of the Tax Payments, Cash Transfers, Non-Cash Transfers, and Jail/Prison Cost Items Used in the Computation of the Net Fiscal Contributions of Individuals

- **A) Total Tax Payments**
  - + Mean Federal Income Tax Payments
  - + Mean State Income Tax Payments
  - + Mean Federal Government Retirement Contributions
  - + Mean Social Security Payroll Taxes (Including Employer Contribution)
  - + Mean Expected Property Tax Payment
  - + Mean Sales Taxes
- **(B) Total Transfers/Jail or Prison Costs**
  - + Mean Non-Cash Transfers
  - + Mean Cash Transfers
  - + Mean Jail/Prison Costs (for ages 18-60)
- **Taxes Paid -Transfers/Jail or Prison Costs (A-B)**
- **Ratio of Taxes Paid to Transfer/Jail or Prison Costs (A/B)**

# U.S. Findings:

Fiscal Returns to Completing High School and  
Postsecondary Schooling in the U.S., 2009-2010

# Lost Taxes

Percent of 18-64 Year Old Adults in the U.S. Who Paid Various Types of Federal, State, and Local Taxes During 2009-2010 by Educational Attainment and Type of Tax

<b>Taxes Paid</b>	<b>All</b>	<b>&lt;12 or 12, No HS Diploma (Dropouts)</b>	<b>HS Graduate or GED</b>	<b>Bachelor's Degree</b>	<b>Graduate - Dropout</b>
<b>Federal Income Tax</b>	65.5	42.6	59.8	76.3	+17.2
<b>State Income Tax</b>	59.6	43.8	56.3	66.8	+12.5
<b>Social Security Payroll Tax</b>	77.3	60.8	74.5	84.2	+13.7
<b>Federal Government Retirement Contributions</b>	1.1	0.2	0.8	1.5	+1.3
<b>Local Property Taxes</b>	59.0	37.3	54.8	68.8	+17.5

# Lost taxes

Estimates of Mean Annual Tax Payments of Adult (18-64) U.S. Residents, by Type of Tax Paid and Educational Attainment (2009-2010 Averages in 2009 Dollars)

Type of Taxes	All	<12 or 12, No HS Diploma	HS Graduate or GED	Bachelor's Degree	Graduate - Dropout
<b>Federal Income Tax Payments</b>	\$5,338	\$1,850	\$3,176	\$8,078	\$1,326
<b>State Income Tax Payments</b>	1,458	558	946	2,140	\$388
<b>Federal Government Retirement Contributions</b>	65	7	35	94	\$28
<b>FICA (Includes Employer Contribution)</b>	4,995	2,124	3,644	6,984	\$1,520
<b>Mean Expected Property Tax Payment*</b>	1,808	807	1,267	2,587	\$460
<b>Mean Sales Taxes**</b>	423	298	352	539	\$54
<b>Total Tax Payments</b>	14,088	5,643	9,419	20,422	\$3,776

# Transfer costs

Percent of 18-64 Year Old U.S. Adults Who Received Various Cash and In-Kind Transfers During 2009-2010 (Excluding 16-24 Year Olds Enrolled in School)

Type of Cash or In-Kind Transfer	All	<12 or 12, No HS Diploma	HS Graduate or GED	Bachelor's Degree	Graduate - Dropout
Unemployment benefits	5.6	5.8	7.2	4.1	+1.4
Workers Compensation	0.6	0.8	0.8	0.3	0
Social Security income	5.6	9.2	6.9	2.8	-2.3
Public assistance income	0.9	2.6	1.1	0.2	-1.5
Veteran's payments	0.9	0.3	0.9	0.8	+0.6
Survivor's income	0.5	0.5	0.5	0.5	0
Disability income	0.8	1.1	0.8	0.4	-0.3
EITC	10.9	21.3	13.2	4.8	-7.1
Supplemental Security income	2.3	6.5	2.9	0.6	-3.6
Cash Transfers	17.3	39.7	22.1	6.2	-17.6
Food Stamp*	9.4	27.9	12.6	2.0	-15.3
Energy Assistance*	3.0	7.5	4.0	0.8	-3.5
Housing Subsidy*	3.9	11.3	5.3	1.0	-6.0
Medicare	3.9	7.5	5.0	1.6	-2.5
Medicaid	9.1	21.1	11.2	3.4	-9.9
Non-Cash Transfers	11.7	29.6	15.3	3.8	-14.3

# Transfer costs

Estimates of the Mean Annual Value of the Cash and In-Kind Transfer Payments Received U.S. Adults 18-64 Years Old by Educational Attainment (2009-2010 Averages in Dollars)

<b>Educational Attainment</b>	<b>Cash Income Benefits</b>	<b>In-Kind Benefits</b>	<b>Total Transfer Payments</b>
<b>All Adults (18-64)</b>	\$1,788	\$1,443	\$3,231
<b>&lt;12 or 12, No HS Diploma</b>	2,599	3,462	6,061
<b>HS Graduate or GED</b>	2,061	1,824	3,885
<b>Bachelor's Degree</b>	1,085	463	1,548
<b>Graduates – Dropouts</b>	-538	-1638	-2,176

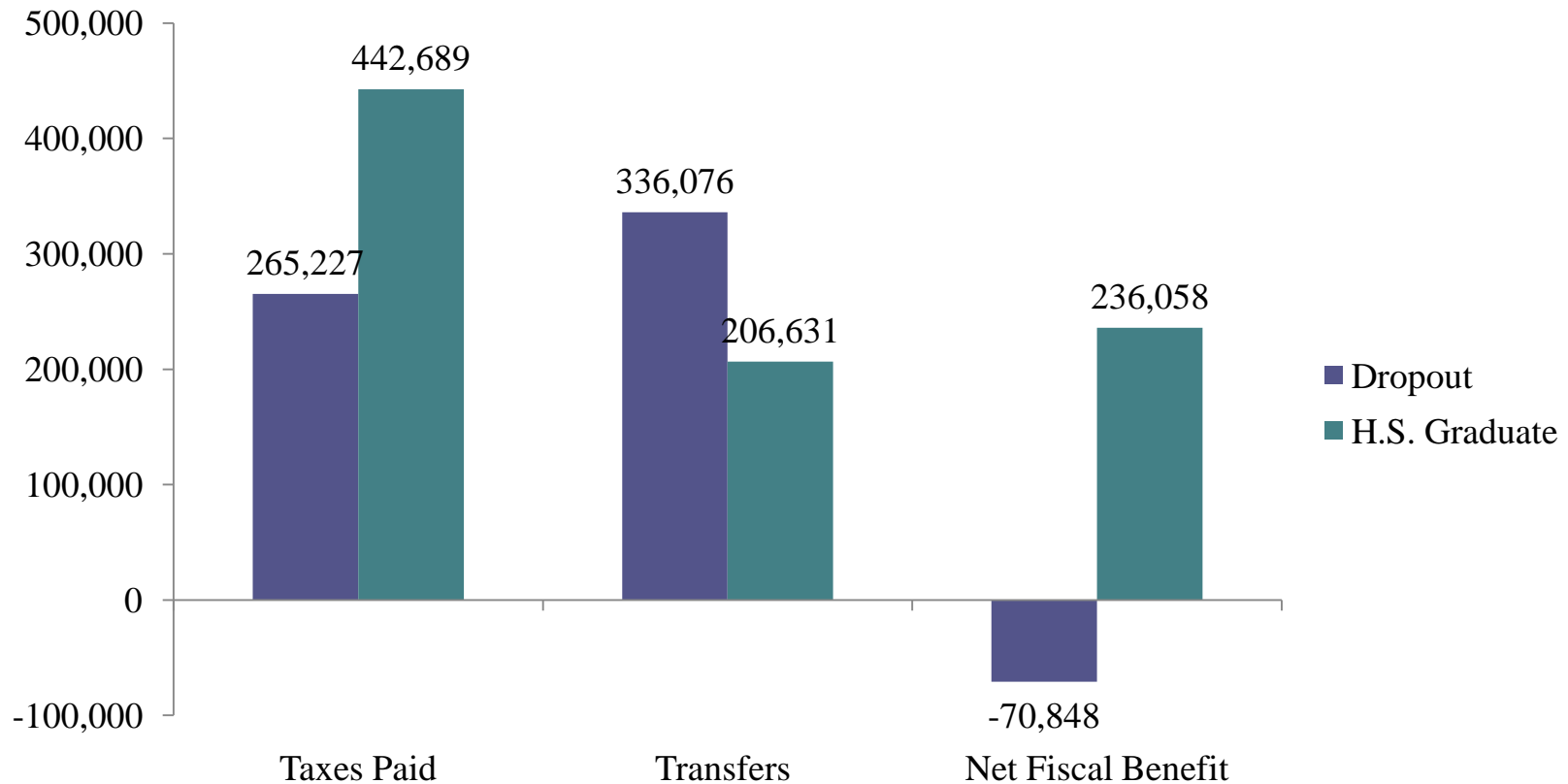
## Putting lost taxes and transfer costs together for a year

The Mean Net Annual Fiscal Contributions of 18-64 Year Old U.S. Adults by Educational Attainment, Annual Averages, 2009-2010 (Dollars)

<b>Education</b>	<b>Total Tax Payments</b>	<b>Total Transfers/ Jail or Prison Cost</b>	<b>Taxes Paid - Transfer/Jail or Prison Cost</b>
<b>&lt;12 or 12, No HS Diploma</b>	5,643	7,151	-1,507
<b>HS Graduate or GED</b>	9,419	4,396	5,023
<b>1-3 Years of College</b>	12,513	3,382	9,131
<b>Bachelor's Degree</b>	20,422	1,593	18,829
<b>Master's or Higher</b>	29,830	1,397	28,432
<b>Total</b>	14,088	3,596	10,491

# The lifetime cost of a dropout, US data (\$306,906)

Lifetime Mean Taxes Paid - Transfers Received Plus Institutionalization Costs of 18-64 Year Old Adult High School Dropouts and High School Graduates in the U.S., March 2009 and 2010 CPS Supplements, (2009 dollars)



# Net fiscal impact by educational attainment

Mean Lifetime Net Fiscal Contributions of U.S. Adults from Ages 18-64 by Educational Attainment, 2009-2010 Averages (In Dollars)

<b>Educational Attainment</b>	<b>Mean Lifetime Net Fiscal Contribution</b>
<b>&lt;12 or 12, No HS Diploma</b>	-70,848
<b>HS Graduate or GED</b>	236,058
<b>1-3 Years of College</b>	429,139
<b>Bachelor's Degree</b>	884,941
<b>Master's or Higher</b>	1,336,308
<b>Total</b>	493,099

# Findings for Massachusetts:

Fiscal Returns to Completing High School and Postsecondary  
Schooling in Massachusetts

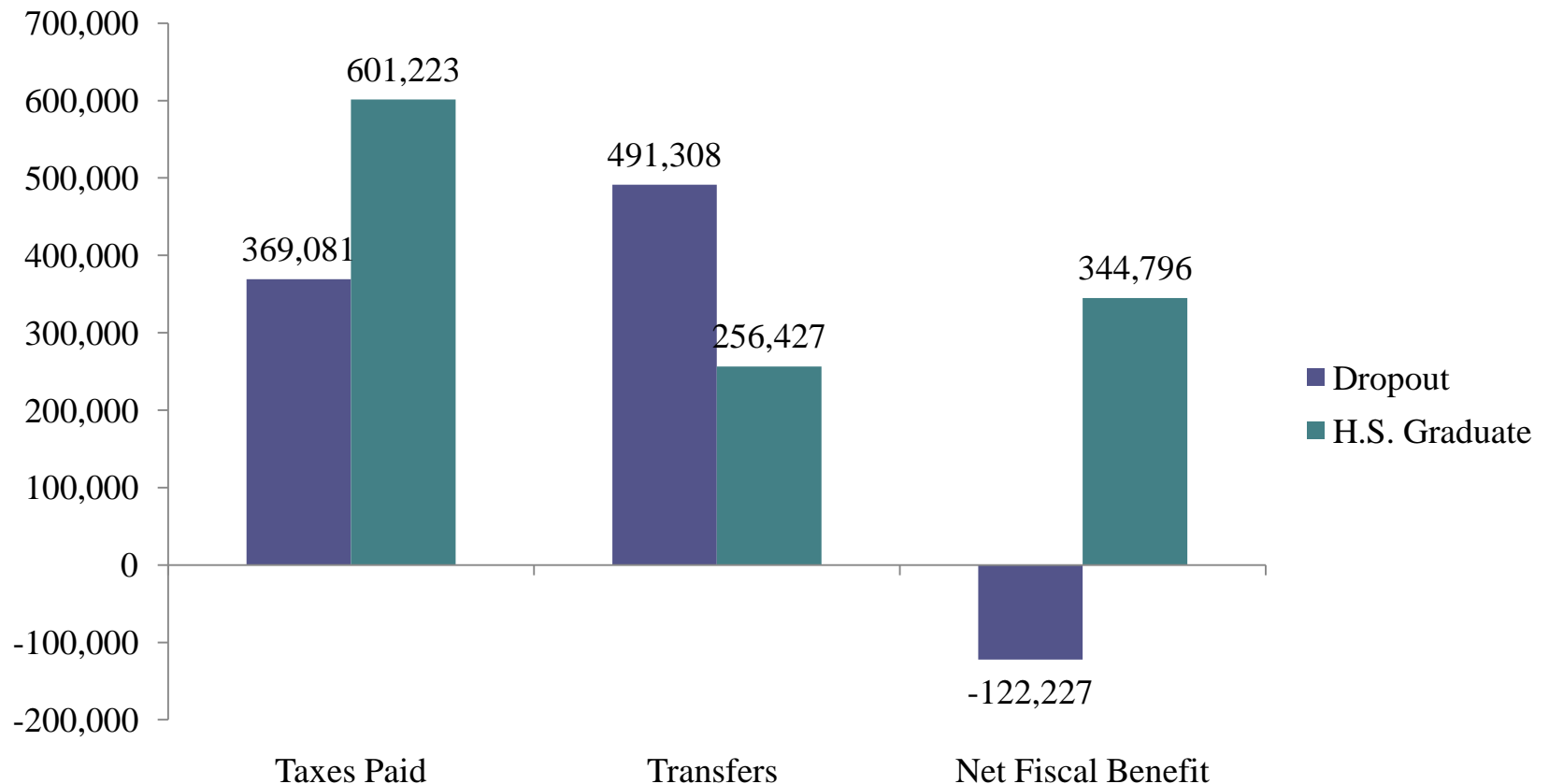
# Putting lost taxes and transfer costs together for one year

The Mean Net Annual Fiscal Contributions of 18-64 Year Old Massachusetts Adults by Educational Attainment, Annual Averages, 2009 (Dollars)

Education	Total Tax Payments	Total Transfers/ Jail or Prison Cost	Taxes Paid - Transfer/Jail or Prison Cost
<12 or 12, No HS Diploma	7,853	10,453	-2,601
HS Graduate or GED	12,792	5,456	7,336
1-3 Years of College	15,622	3,969	11,654
Bachelor's Degree	24,097	1,525	22,572
Master's or Higher	34,103	912	33,192
<b>Total</b>	19,480	3,780	15,700

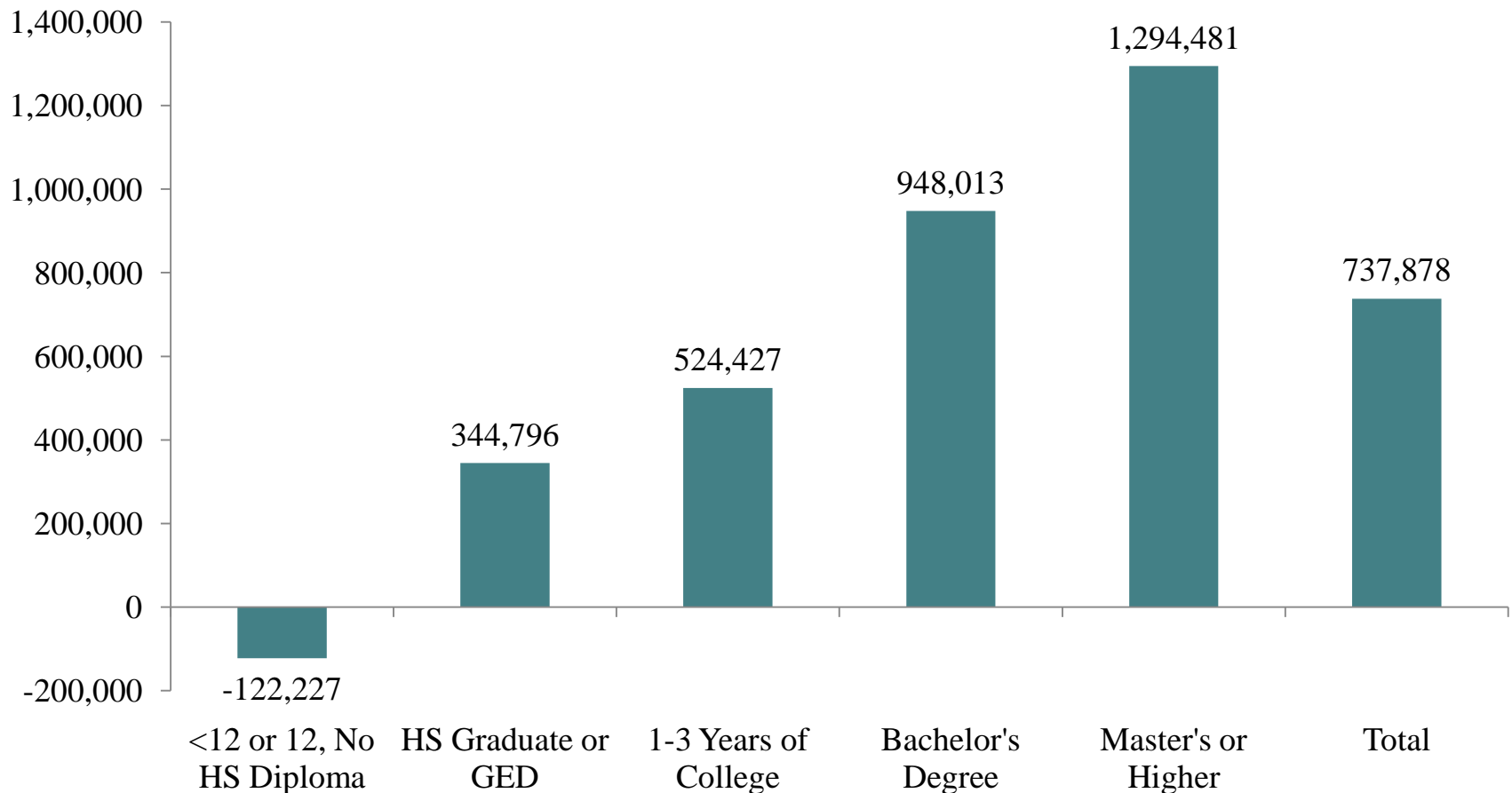
# The lifetime cost of a dropout, MA data (\$467,023)

Lifetime Mean Taxes Paid - Transfers Received Plus Institutionalization Costs of 18-64 Year Old High School Dropouts and High School Graduates, Massachusetts, (in 2009 Dollars)



# Net fiscal impact by educational attainment

Lifetime Mean Taxes Paid Minus Transfers Received By Non-Enrolled, 18-64 Year Olds in Massachusetts, 2005-2008 March CPS, In 2009 Dollars



## Differences Between the Estimated Mean Lifetime Net Fiscal Contributions of Massachusetts and U.S. Adults in Selected Educational Groups

Groups Being Compared	Massachusetts	U.S.
High school graduate vs. dropout	467,023	306,906
13-15 years vs. high school graduate	179,631	193,081
B.A. degree vs. high school graduate	603,217	648,883
B.A. degree vs. high school dropout	1,070,240	955,789