WORKFORCE OUTCOMES IN MARYLAND: PATTERNS AMONG STUDENTS BY ACHIEVEMENT TYPE

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Roadmap

- Why are we interested in understanding workforce outcomes for youth who do not go on to college?
- What are the specifice research questions being examined?
- What are the percentages of seniors and GED earners that go on to college?
  - How does college attendance and non-college attendance differ by race/gender or does it differ at all?
- What are the percentages of wage earners by achievement type for seniors and GED earners that do not go on to college?
  - How does wage attainment differ by race/gender or does it differ at all?
- What are the wages by achievement type?

Understanding Workforce Outcomes

- Health, Crime & Welfare Costs
    - The social cost of high school non-completers was estimated to be $4.75 trillion over a cohort of these "opportunity youth." (Belfield, Levin & Rosen, 2012).
    - Annual health care costs for high-school non-completers were an average of $20,000 higher than for college graduates and over a lifetime the health related costs for non-completers compared to diploma earners is $83,000.
    - The lifetime fiscal burden of crime per opportunity youth is $13,700 per person, which amounts to $92.4 billion across a cohort (Belfield, Levin & Rosen, 2012).
    - Over the lifetime, a high school dropout will receive $9,660 more in welfare payments than a high school graduate. The aggregate burden is $65.1 billion (Belfield, Levin, & Rosen, 2012).

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Understanding Workforce Outcomes

- Non-Completion Affects Marginalized Social Groups Disproportionately
  - High school dropouts are more likely to be male, African American or Hispanic, receive welfare, and have a family income less than $20,000 and live in a non-metropolitan area (Maynard, Salas-Wright, & Vaughn, 2014).
- Less revenue generated (i.e., income lost)
  - Loss calculations have varied from $235,680 to $260,000 per high school dropout over a lifetime.
  - Annually, losses exceed $50 billion for all high school dropouts ages 18-67 (Levin, 2005).

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Research Questions

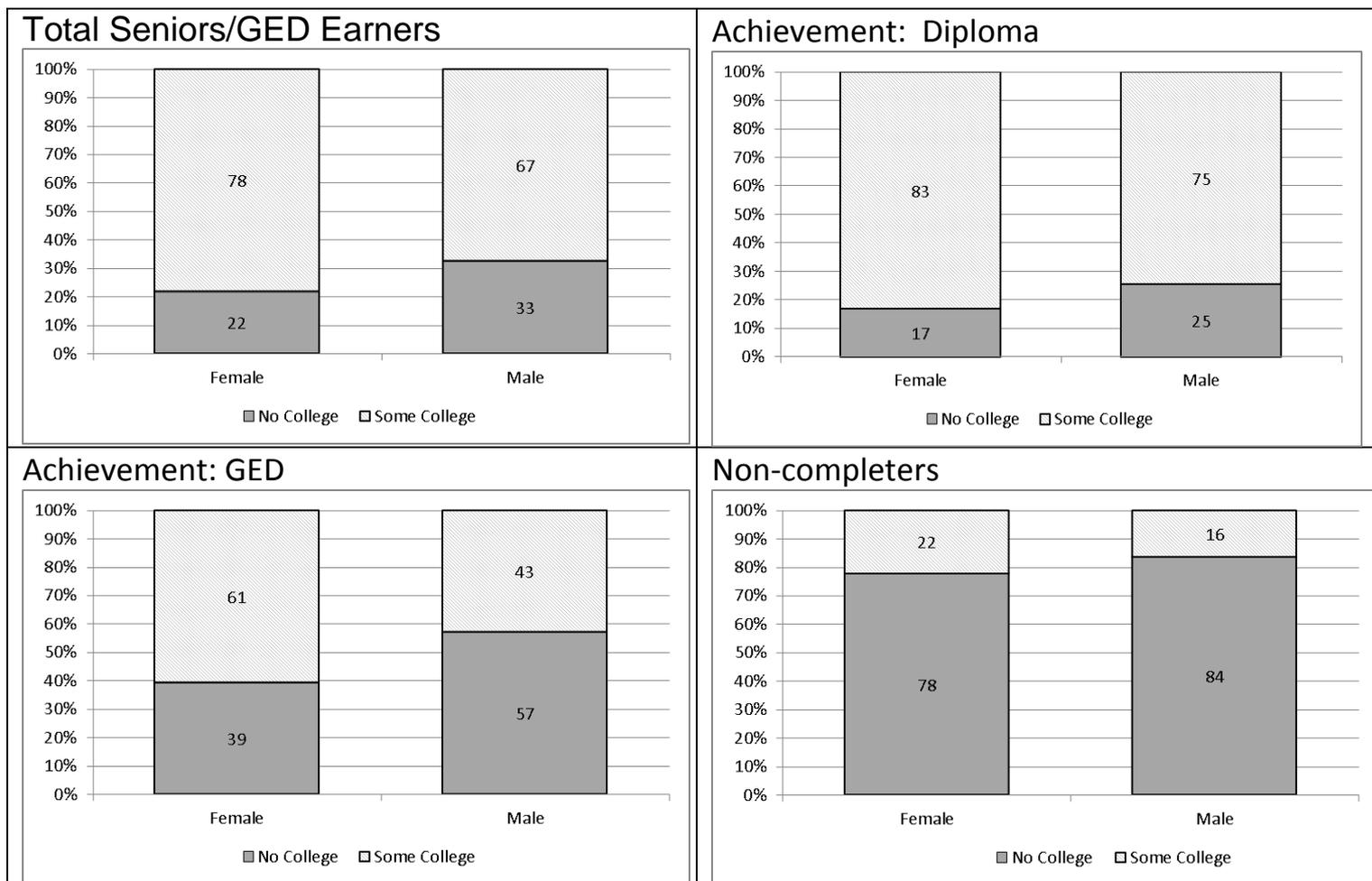Data from the MLDS were used to answer 2 research questions:

- What are the patterns in total wages among students who did not go on to college by achievement type?

- What are the annualized and four-quarter wages among students who did not go on to college by the top industries?

Base Population

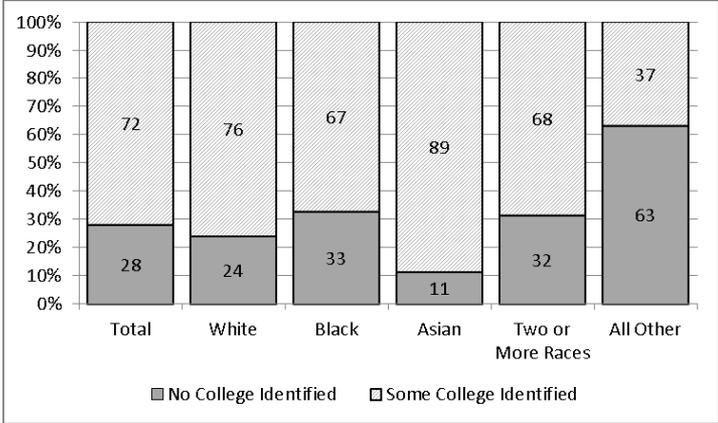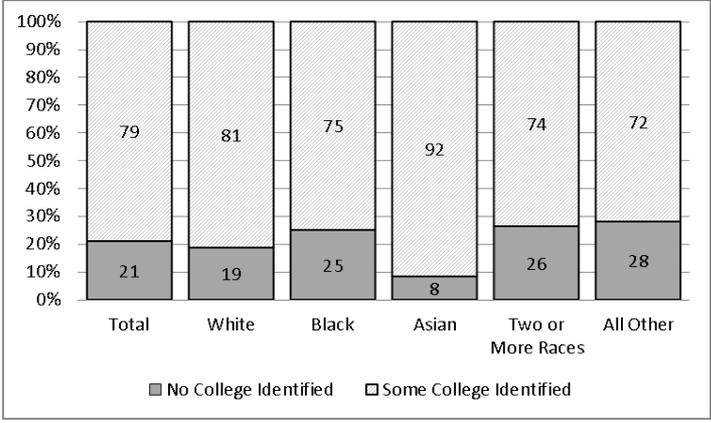|	2009-2010 School Year[1]	Some College after 09-10 Senior Year	No College Identified
Total High School Seniors/Graduate Equivalency Degree Completers	68,000	72%	28%
Diploma	59,000	79%	21%
Graduate Equivalency Degree (GED)	3,000	38%	62%
Certificate of Completion	700	9%	91%
- Persist to Diploma	1,000	36%	64%
- Persist to GED/Certification	1,000	15%	85%
Non-completers[2]	3,000	21%	79%
[1]The total numbers have been rounded to the nearest large number value. [2]Non-completers include transfers, withdrawals, and all others including unknown.			

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Some/No College Identified by Gender

Total Seniors/GED Earners — No College: Female 22, Male 33; Some College: Female 78, Male 67

Achievement: Diploma — No College: Female 17, Male 25; Some College: Female 83, Male 75

Achievement: GED — No College: Female 39, Male 57; Some College: Female 61, Male 43

Non-completers — No College: Female 78, Male 84; Some College: Female 22, Male 16

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Some/No College Identified by Race

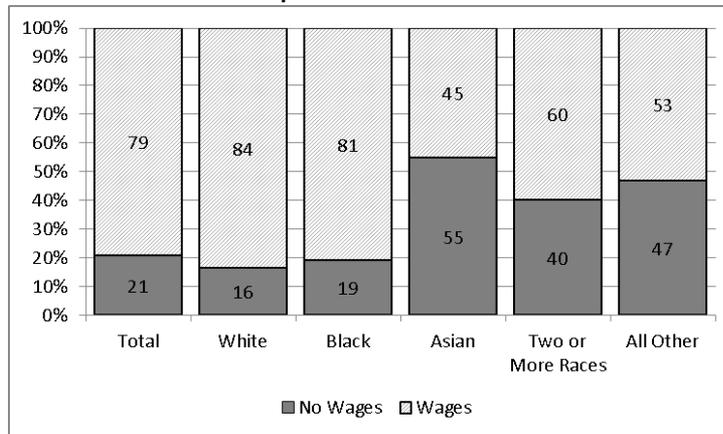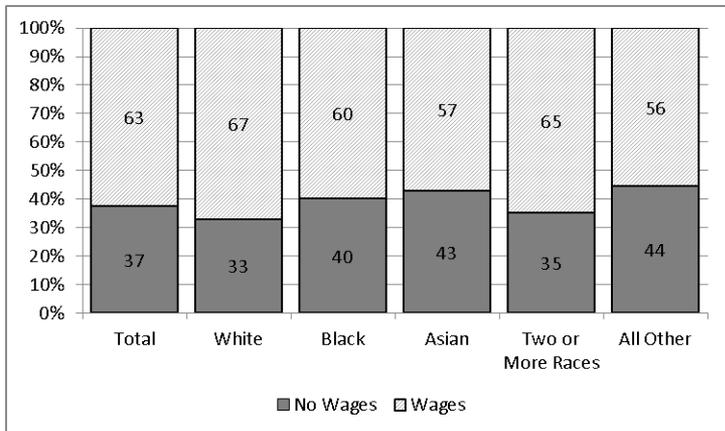Total Seniors/GED Earners

Achievement: Diploma

Achievement: GED
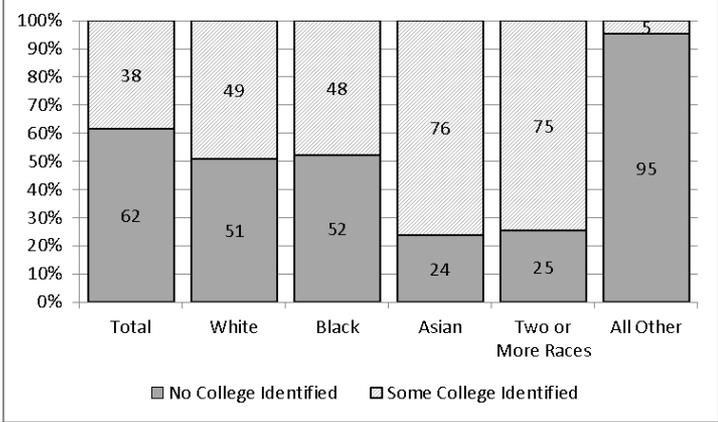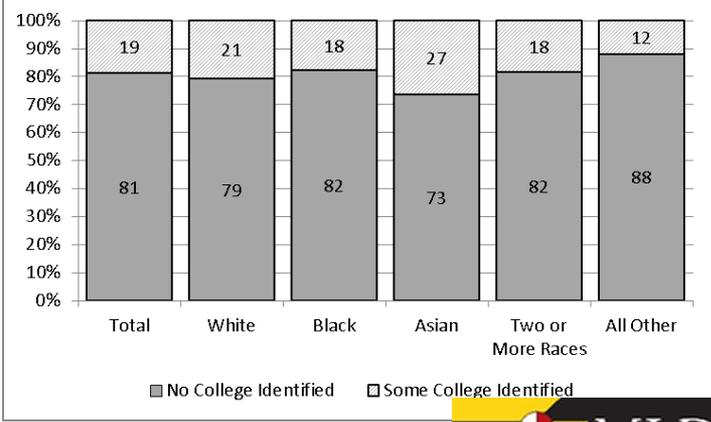
Non-Completers

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Base Population with Some Wages

	2009-2010 School Year Seniors[1]	Some Wages after 09-10 Senior Year	No Wages Identified
Total High School Seniors/Graduate Equivalency Degree Completers	19,000	72%	28%
Diploma	12,000	79%	21%
Graduate Equivalency Degree (GED)	2,000	63%	37%
Certificate of Completion	600	24%	76%
- Persist to Diploma	600	78%	22%
- Persist to GED/Certification	1,000	37%	63%
Non-completers[2]	700	68%	32%
[1]The total numbers have been rounded to the nearest large number value. [2]Non-completers include transfers, withdrawals, and all others including unknown.			

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Wage Information by Gender

Total Seniors/GED Earners

Achievement: Diploma

Achievement: GED

Non-completers

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Wage Information by Race

Total Seniors/GED Earners
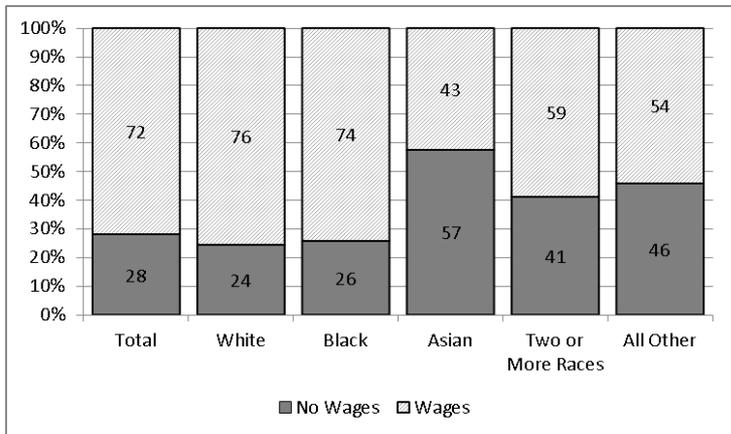
Achievement: Diploma

Achievement: GED

Non-completers
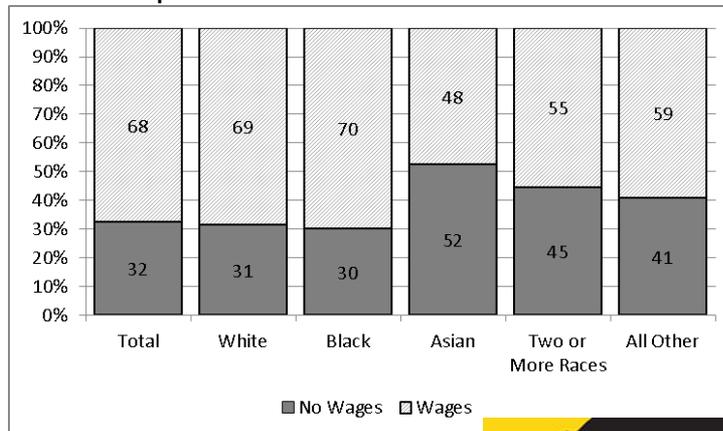
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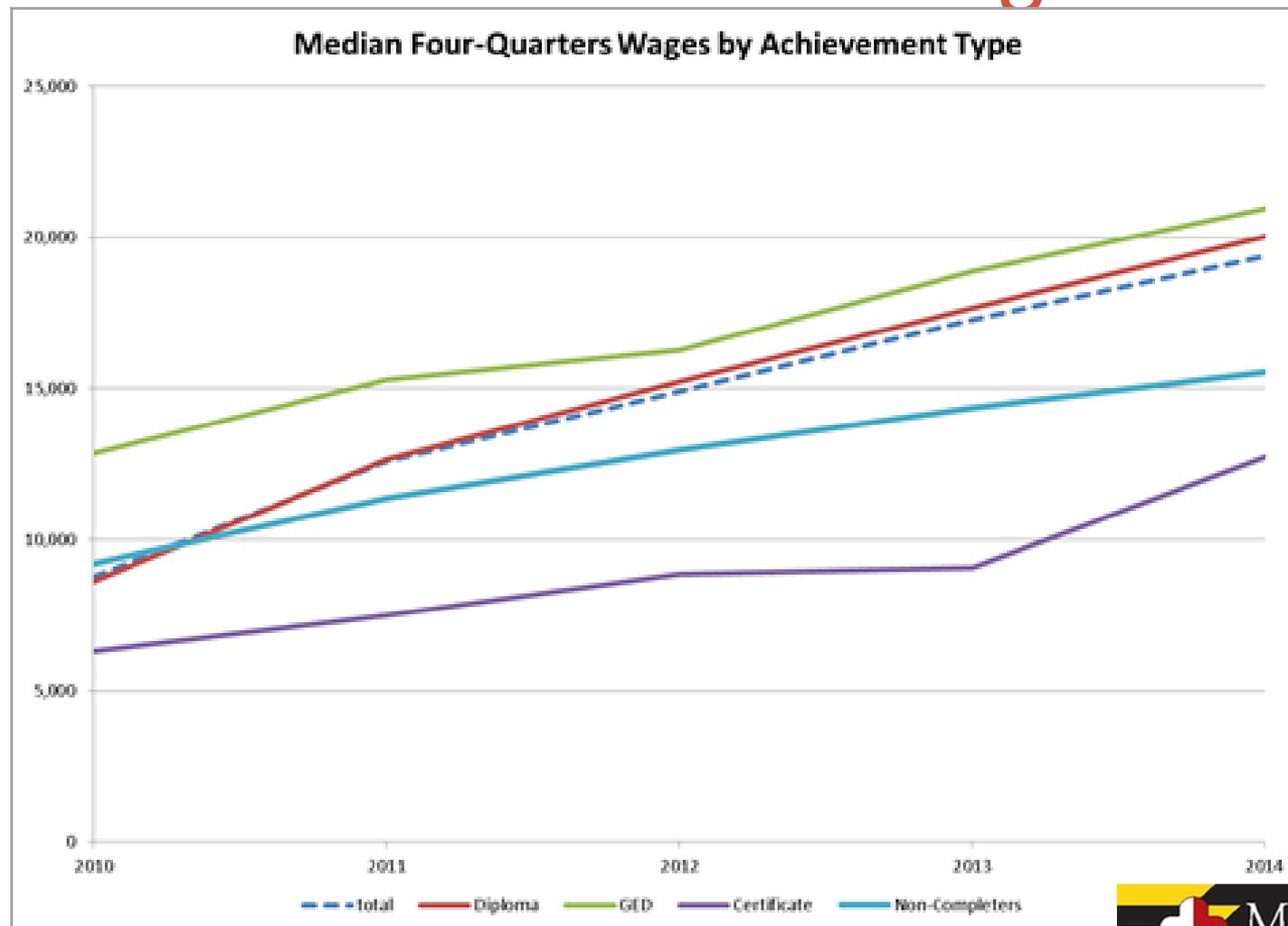
Method for Calculating Wages

- Annualized Wages were calculated by dividing the total amount of wages earned in the year by the number of quarters worked and multiplying by four.

Figure 1: Calculating annualized wages

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Wages	$5,000		$5,000	$2,000

Total Wages during year: $12,000 over 3 quarters
Total average wages per quarter $4,000 ($12,000 total / 3 quarters)
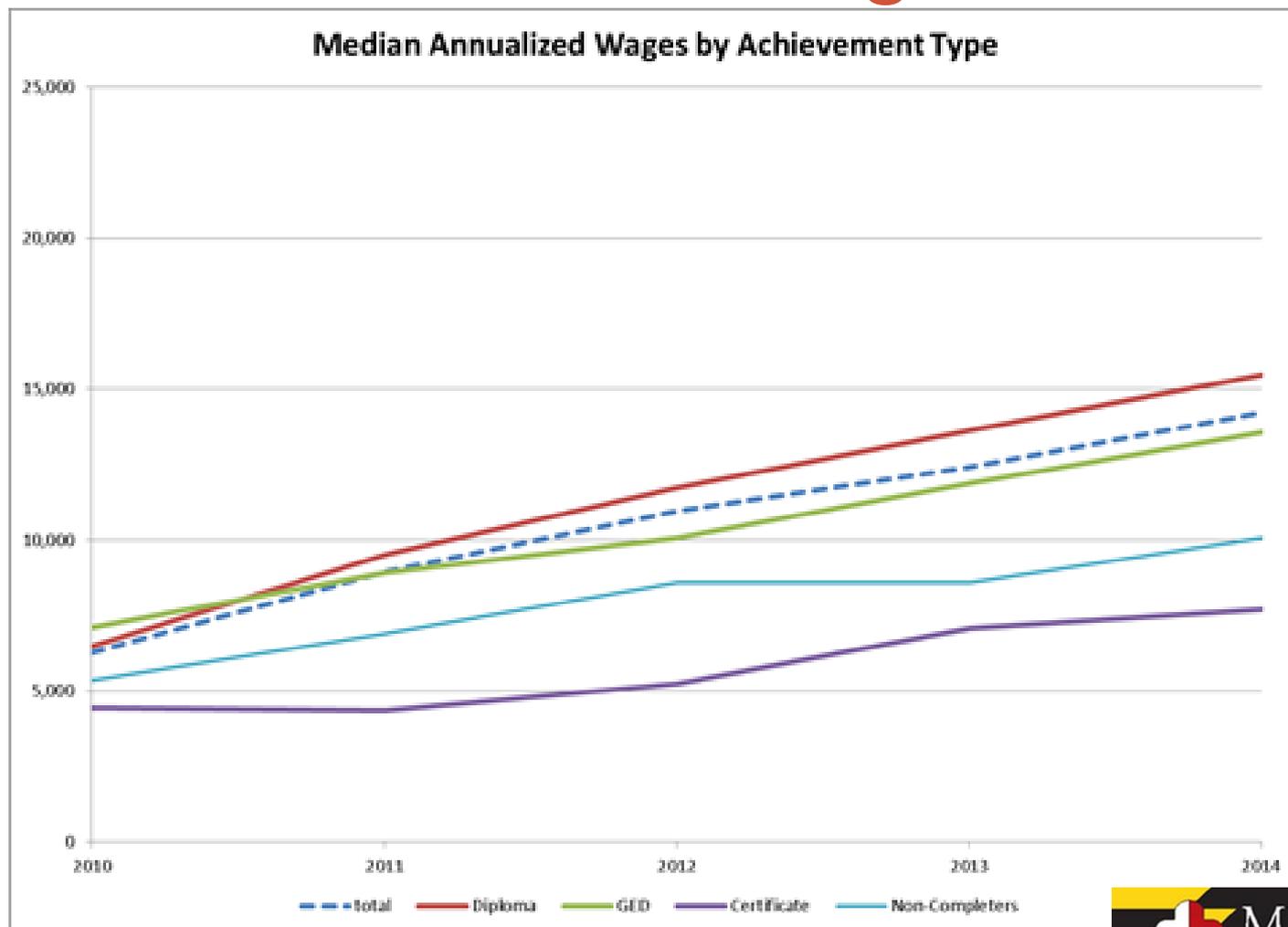Annualized wage = average wage per quarter X 4 quarters
= $4,000 X 4 = $16,000

- Four-Quarter wages were calculated by summing all four-quarters of wages.

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Median Four-Quarters Wages

Median Four-Quarters Wages by Achievement Type

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Median Annualized Wages

Median Annualized Wages by Achievement Type

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Wages by Top 5 Industries
All Achievement Types

Median Four-Quarter Wages by Top 5 Industries

Median Annualized Wages by Top 5 Industries
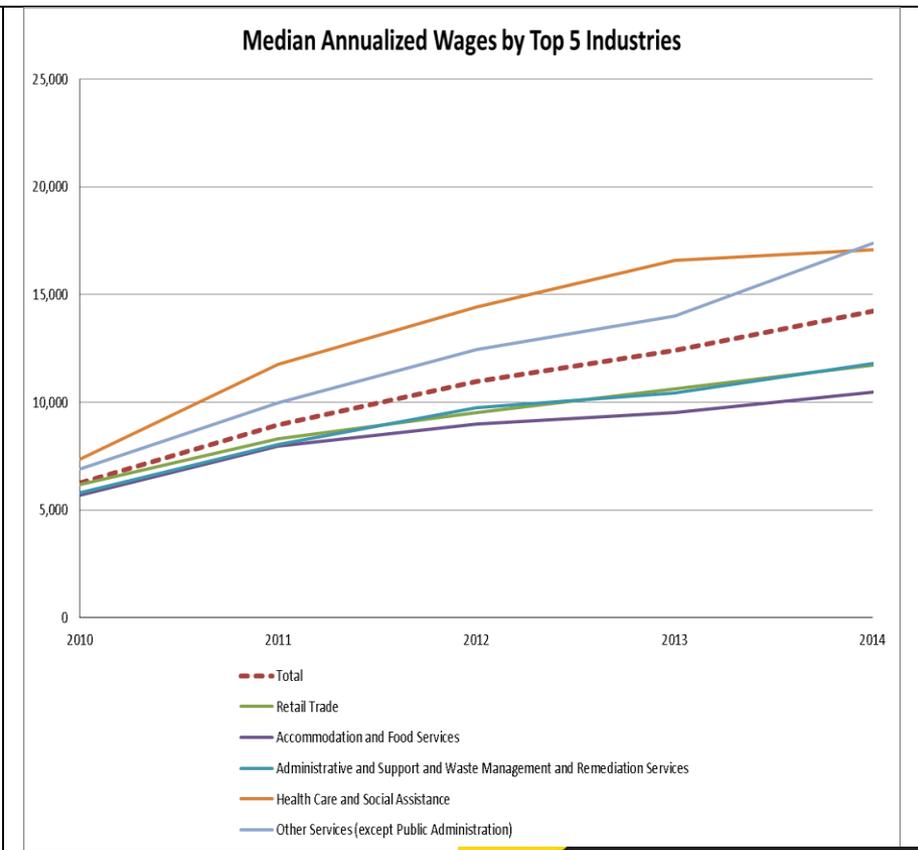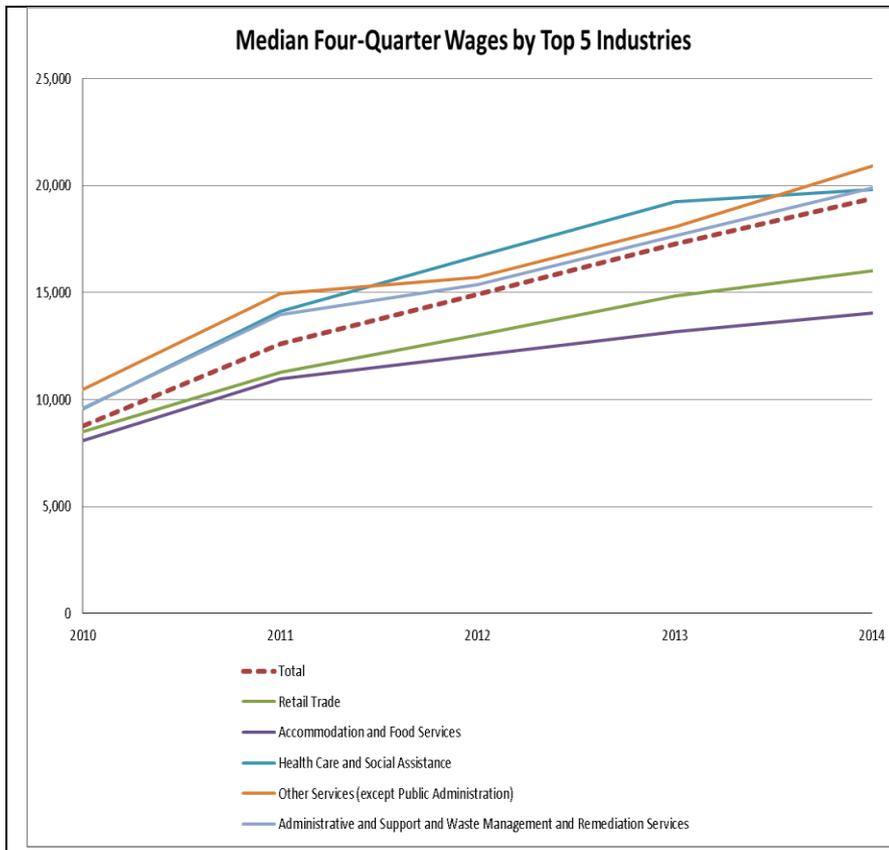
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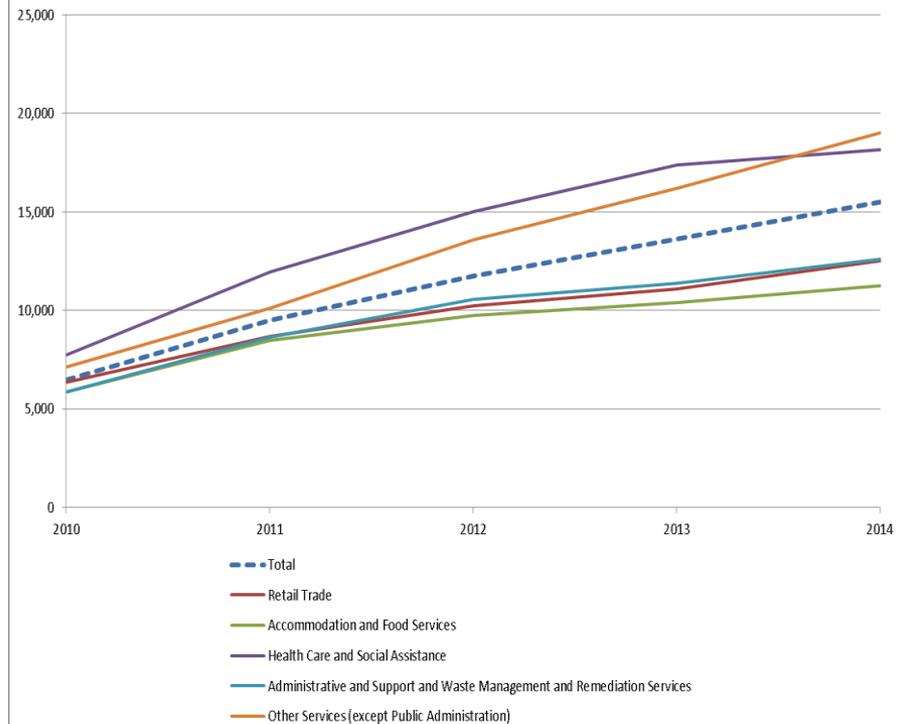
Wages by Top 5 Industries
Achievement Type: Diploma
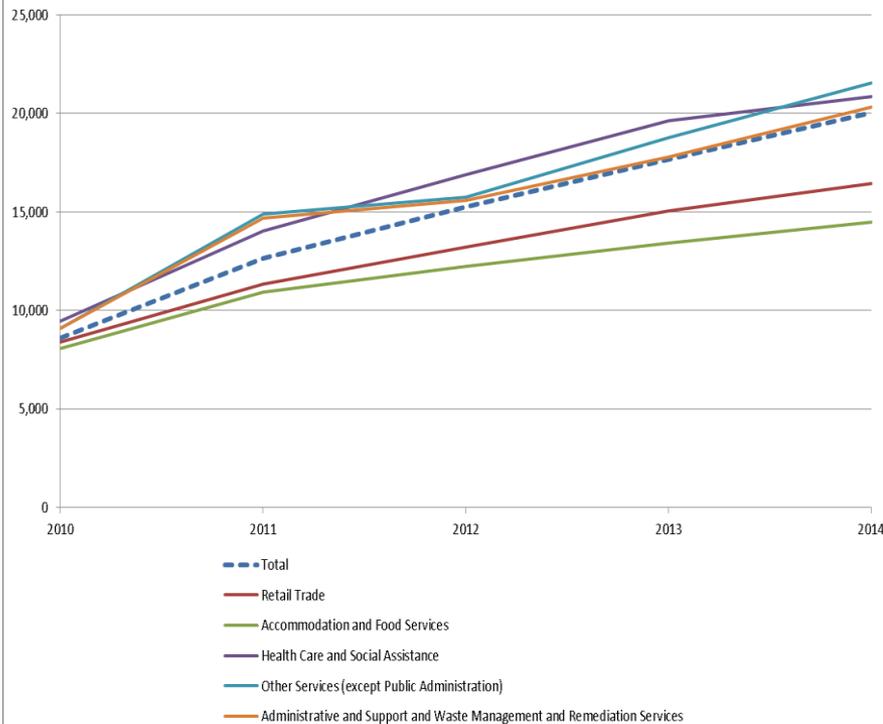
Wages by Top 5 Industries Achievement Type: GED

Median Four-Quarter Wages for Students Obtaining a GED by Top 5 Industries

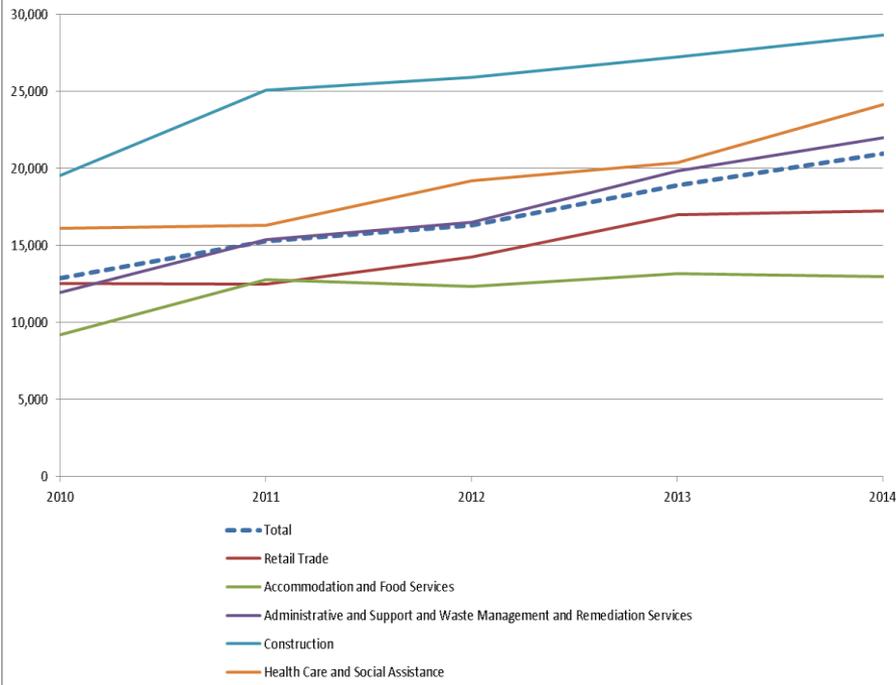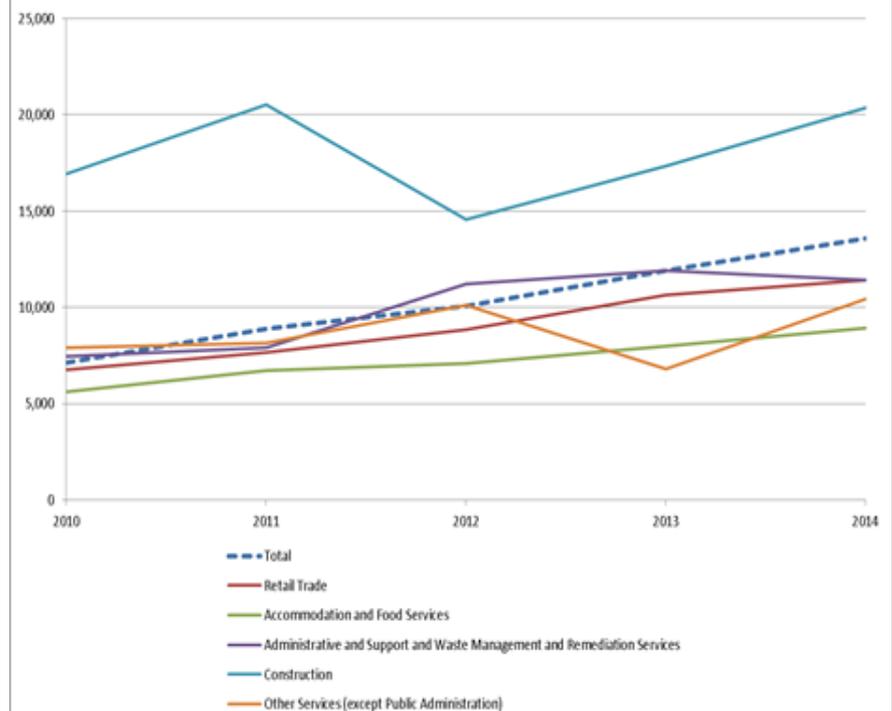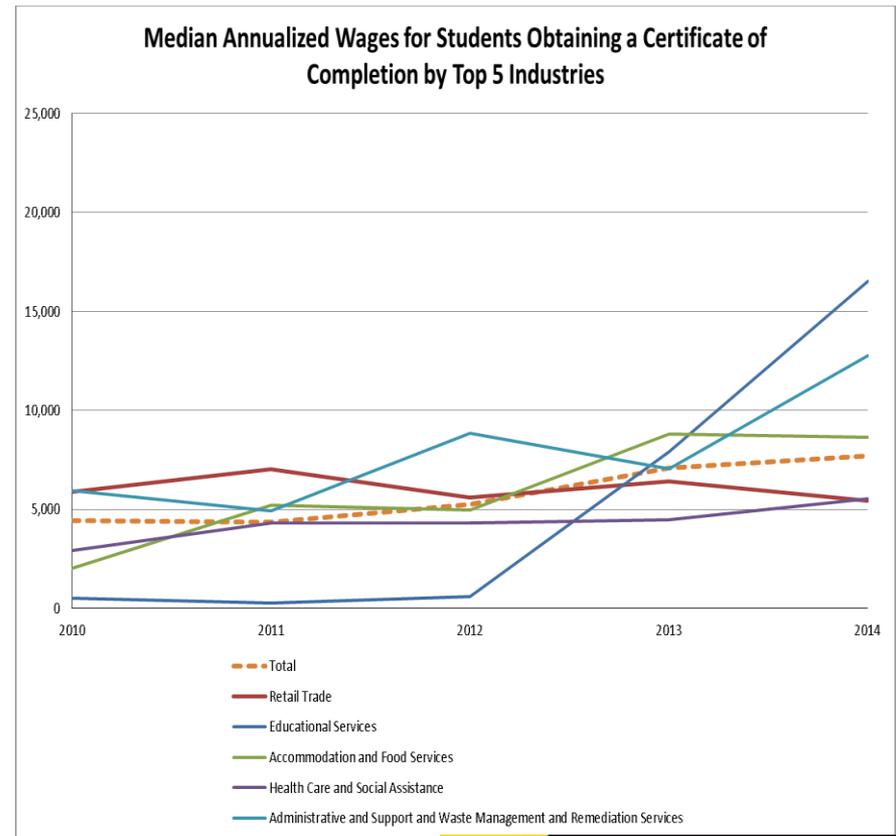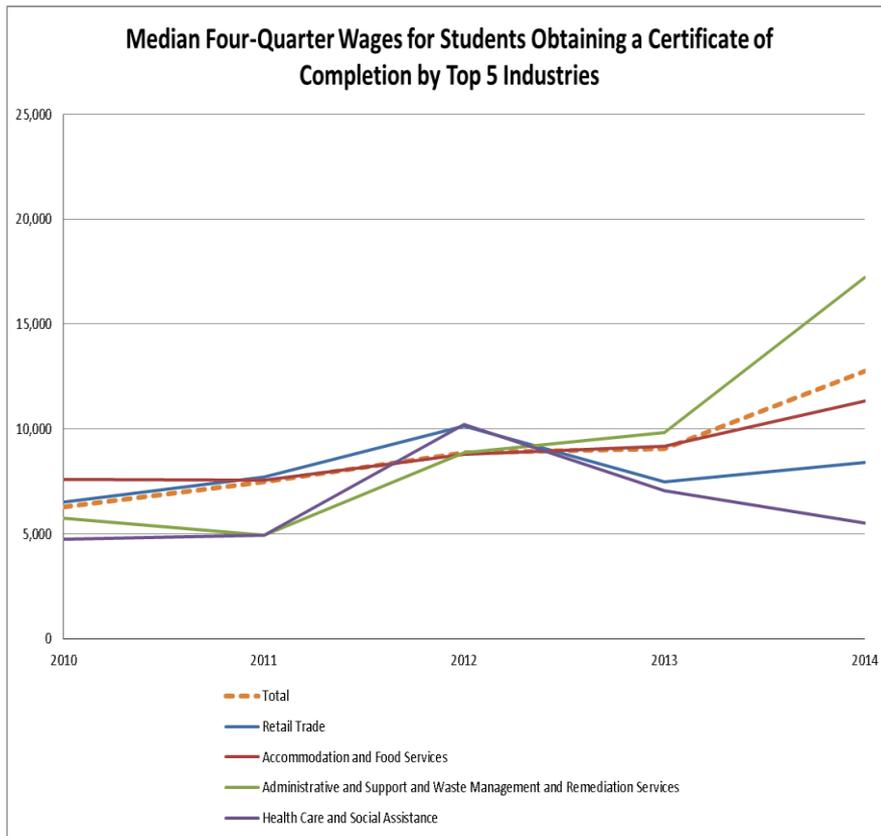Median Annualized Wages for Students Obtaining a GED by Top 5 Industries

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Wages by Top 5 Industries Achievement Type: Certificate

Median Four-Quarter Wages for Students Obtaining a Certificate of Completion by Top 5 Industries

Legend:
- Total
- Retail Trade
- Accommodation and Food Services
- Administrative and Support and Waste Management and Remediation Services
- Health Care and Social Assistance

Median Annualized Wages for Students Obtaining a Certificate of Completion by Top 5 Industries

Legend:
- Total
- Retail Trade
- Educational Services
- Accommodation and Food Services
- Health Care and Social Assistance
- Administrative and Support and Waste Management and Remediation Services
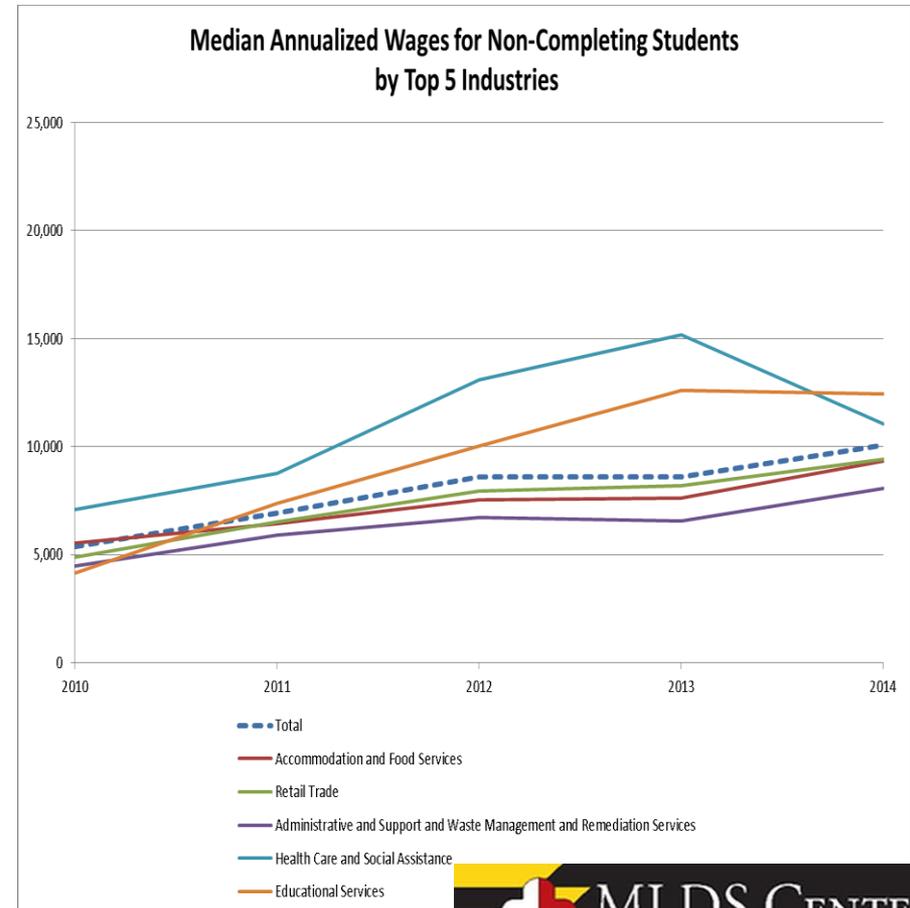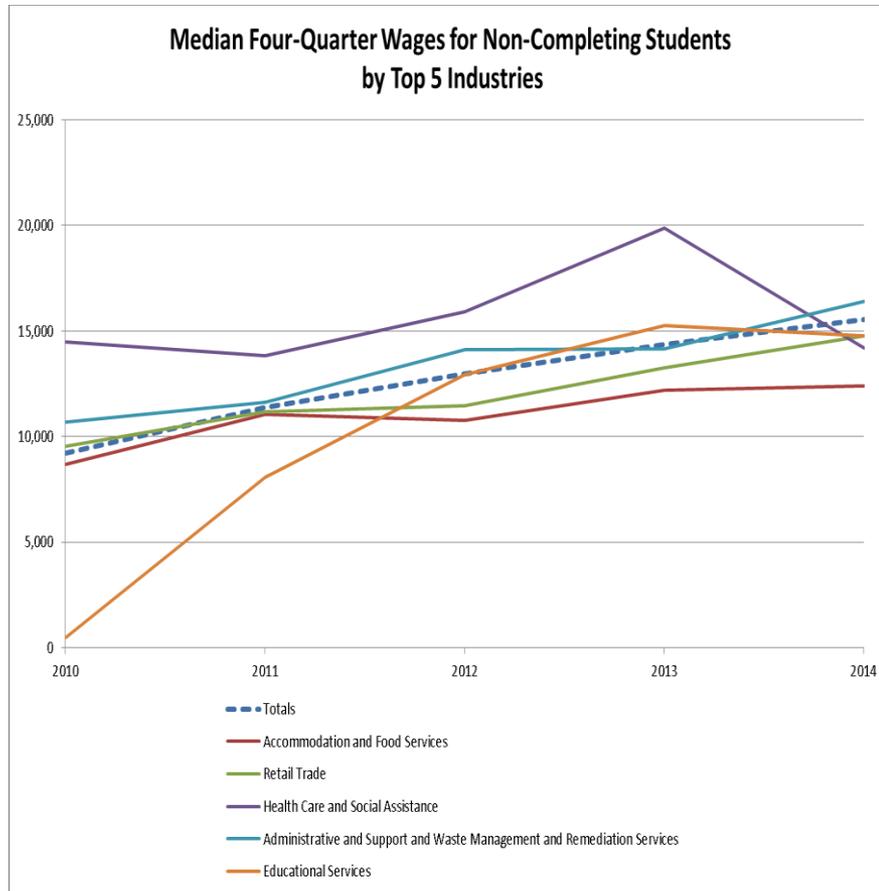
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Wages by Top 5 Industries Achievement Type: Non-completers

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Summary of Results

- The most consistent industries across achievement types were: Retail; Health Care and Social Assistance; and Administrative and Support and Waste Management and Remediation Services.

- Diploma earners had the highest wages in the areas of Health Care and Social Assistance and Other Services.

- GED earners had the highest wages in the areas of Construction and Health Care and Social Assistance

- Certificate of Completion earners had the highest wages in the areas of Administrative and Support and Waste Management and Remediation Services and Accomodation and Foor Services

Summary of Results/Discussion

- Non-completers had the highest wages in the areas of Health Care and Social Assistance and Administrative and Support and Waste Management and Remediation Services

- Obtaining a Diploma or a GED (and not going on to attend college) will yield almost equivalent wages over the first 5 years post achievement. With GED wages being higher at first and Diploma wages catching up over time.

- The achievement type of Certificate of Completion has the lowest wages.

- Overall, the wage trends show a steady increase with the most volatility shown for Certificate of Completion earners and those who earned a GED.

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Implications & Next Steps

- Encourage Seniors to graduate with a Diploma (best option) or get a GED (2nd best option).
  - Research by Levin (2005) suggested that by increasing the high school completion rate by one percent for men could could save $1.4 billion annually
- Non-completers could benefit from completing their GED or better still getting a Diploma.

Implications & Next Steps

- Next steps – examine the difference, by achievement type, for those who do not initially move on to college, but do so over time. How does their wage trajectory change and how does their original achievement type impact their eventual wage trajectory?

- Next steps – focus in on the GED area more, is there a wage differential for those who are seniors and receive their GED vs those who have been in the workforce for awhile?

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Thank you!

Questions, comments...

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