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## Wisconsin Technical College System District



Wisconsin Technical College System [http://www.wtcsystem.edu/reports/pdf/biennial2009\\_11.pdf](http://www.wtcsystem.edu/reports/pdf/biennial2009_11.pdf), July 18, 2012.

# Section 1

## Environmental Scanning



## Environmental Scanning

Environmental Scanning is a necessary tool for planning the long-term strategic direction of Moraine Park Technical College. This process can help proactively define the opportunities, potential threats, or areas of change that will impact the college from internal and external environmental factors. This trend information can help the college overall, as well as individual teams, and support the development and implement goals and strategies. Further detailed information is contained in the Details section.

### POPULATION/DEMOGRAPHICS/SOCIETAL/HOTTEST TRENDS

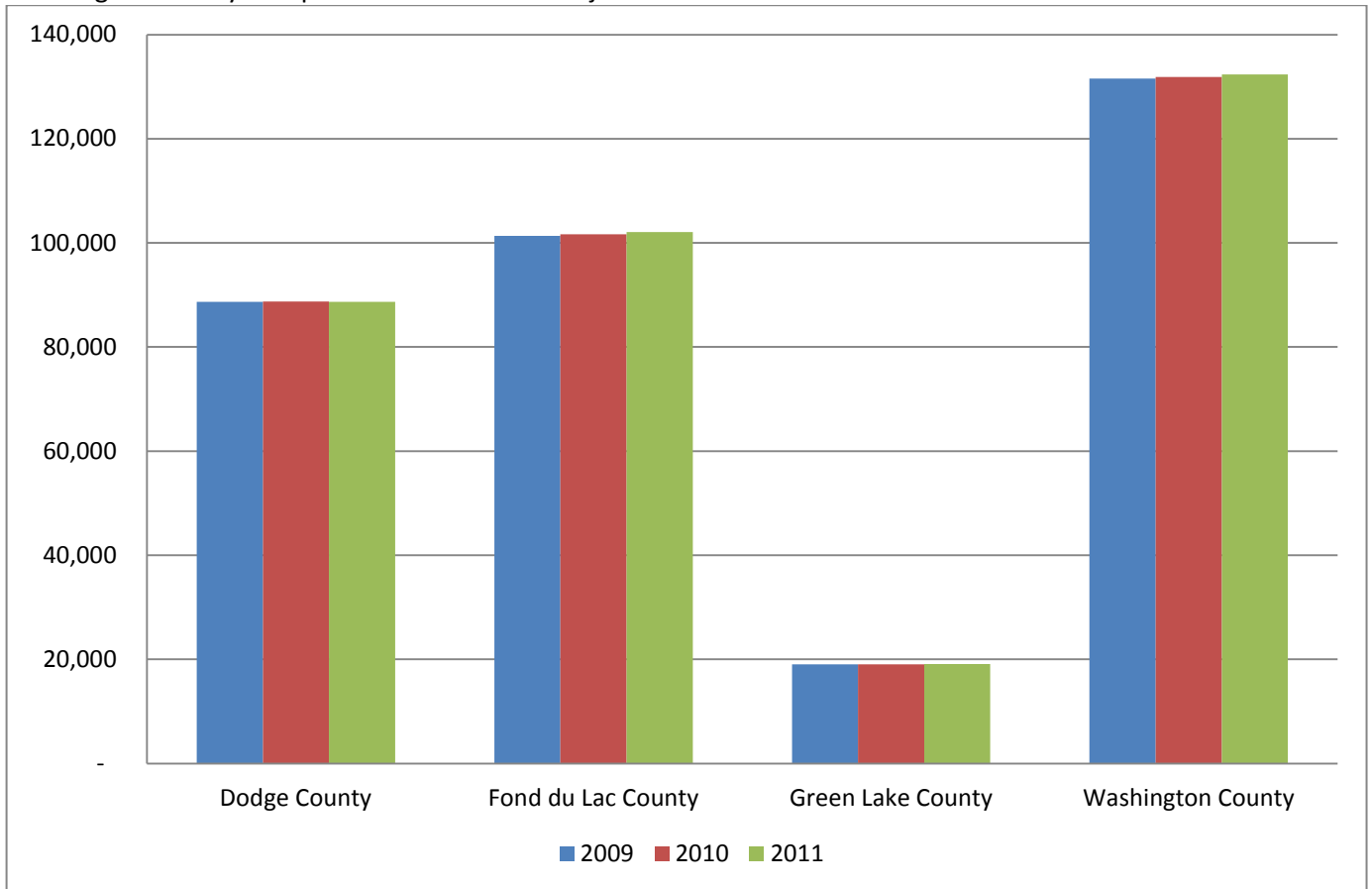
External influences play a major factor in the direction of the College. Understanding the population, demographics, and societal trends for the MPTC District will provide guidance for institutional and strategic planning. Literature defines the following generations as to certain attributes.

	Attributes
Generation X	<ul style="list-style-type: none"> <li>• Generation born after World War II baby boom ended usually defined for the period from early 1960s to the early 1980s.</li> <li>• Generation is marked by the substantial changes during the period including the Vietnam War, the space exploration, and the digital technology revolution.</li> </ul>
Generation Y	<ul style="list-style-type: none"> <li>• Generation known as the Millennials, the We, the Echo Boomers, the Next, and the Entitlement Generation; generally defined as the period from the late 70s to early 2000</li> <li>• Generation grew up during the digital communication era, are closer to their parents, and were also subjected to considerably higher rates of unemployment</li> </ul>
Generation Z	<ul style="list-style-type: none"> <li>• Generation Z is the “connected” generation defined within the last decade of the 20<sup>th</sup> century and the beginning of the 21<sup>th</sup> century.</li> <li>• Many of this generation have had lifelong use of digital communications including the Web, texting, instant messaging, video gaming, mobile phones, etc., earning the nickname “digital natives”</li> </ul>

As there are many “generations,” there has been a change between Generation Y and Generation Z in regards to education, financial saving, and outlook on life. Generation Z takes more time to analyze and prepare as they have seen what Generation X and Y have encountered previously. The Generation Z has a decreasing birth rate. In parallel through the transition of “generations,” the mix of minorities has substantially changed. The Hispanic population was previously the greatest minority; however, Asians have now surpassed and are the greatest minority group. The Asian population comes to the United States educated or attains further education in the United States. Asians contribute to the workforce as engineers, scientists, or doctors. Scientists and engineers are needed to maintain technological progress.

### Population by County 2009 through 2011

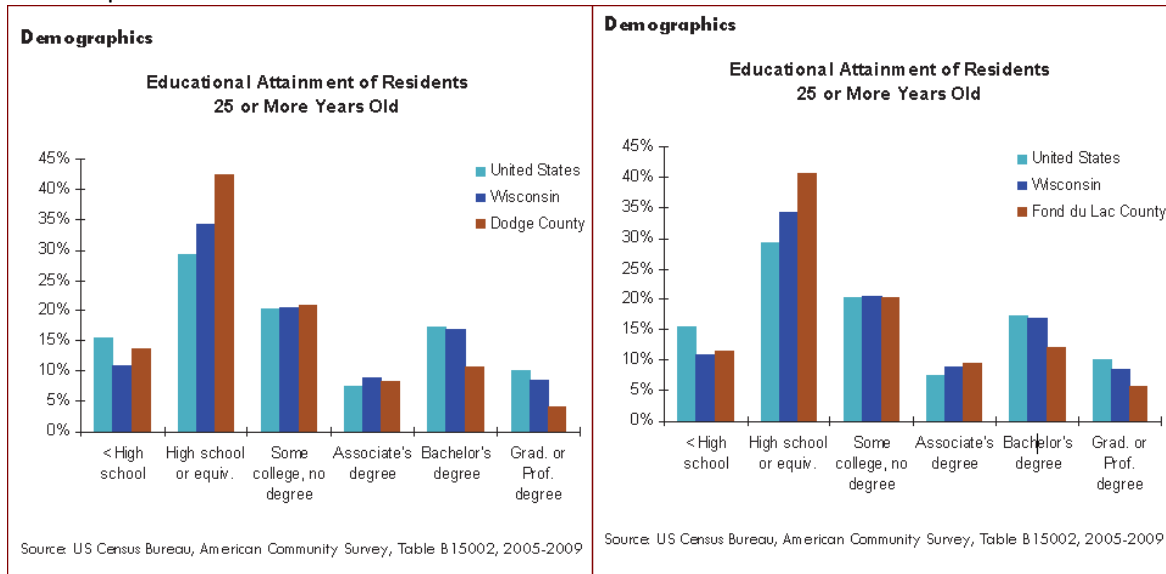
Washington County is depicted as whole and not just the MPTC District.



*(Wisconsin Department of Workforce Development, Bureau of Workforce Training – Labor Market Information, <http://WORKnet.Wisconsin.gov>, July 10, 2012)*

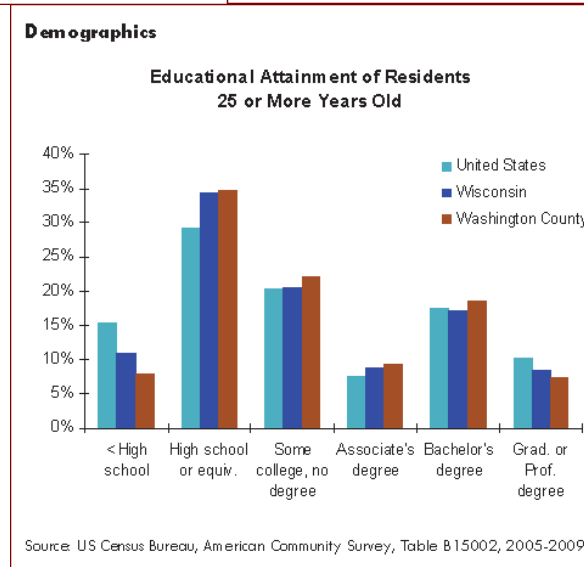
## Demographics of those 25 and older regarding education status

The following charts depict the educational status in Dodge, Fond du Lac and Washington counties in comparison to the state and national results. Green Lake information was unavailable.



(Dodge County Workforce Profile 2011, [http://dwd.wisconsin.gov/oea/county\\_profiles/current/dodge\\_profile.pdf](http://dwd.wisconsin.gov/oea/county_profiles/current/dodge_profile.pdf))

(Fond du Lac County Workforce Profile 2011, [http://dwd.wisconsin.gov/oea/county\\_profiles/current/fond\\_du\\_lac\\_profile.pdf](http://dwd.wisconsin.gov/oea/county_profiles/current/fond_du_lac_profile.pdf))



(Washington County Workforce Profile 2011, [http://dwd.wisconsin.gov/oea/county\\_profiles/current/washington\\_profile.pdf](http://dwd.wisconsin.gov/oea/county_profiles/current/washington_profile.pdf))

## RETIREMENT STUDIES

An extreme labor shortage throughout Fond du Lac County and Washington County is looming. Fond du Lac County is facing over 19,000 unfilled jobs by 2026. Similar to the Fond du Lac findings, an extreme labor shortage is also looming throughout Washington County. By 2026, the area will be faced with over 23,500 unfilled jobs. This alarming statistic and many more have been compiled and explored in the Retirement and Departure Intentions Study for both Counties. However, more than just facts, the reports identify areas for improvement and provide numerous recommendations. The recommendations include building relationships between employers and academic institutions; redefining the definition of success for students by exploring the many rewarding careers in abundance in Wisconsin; encouraging high school students to explore training

available in high school; and having employers develop a flexible and future focused approach to recruitment and retention. A study specific to health care employees was conducted in conjunction with the Fox Valley Health Care Alliance. The health care study followed the same methodology as the Fond du Lac and Washington County studies and found that roughly 48 percent of healthcare employees intend to retire within the next 15 years; much higher than the historical average of 33.3 percent. All three studies identify occupation retirement intentions for workforce demand planning.

Following are links to the Fond du Lac County and Fox Valley Health Care Alliance study results, with the Washington County study still being reviewed.

*Fond du Lac County Retirement Study*

*Fox Valley Health Care Alliance Study*

### **MPTC DISTRICT/COMPETITION/MARKETPLACE**

Competing colleges in the Fond du Lac area that include the University of Wisconsin – Fond du Lac and Marian University now offer certificates. As these universities are trying to capitalize on a market that is known to MPTC, other technical colleges also serve students within the MPTC district. Waukesha County Technical College (WCTC) has also merged with local school districts, Workforce Development office, and companies to cut down on the “unskilled” workforce. WCTC has established an Associate’s of Applied Science degree in general manufacturing to help address the skill gap. This degree will help with the transition from high to technical school to attain the associate degree program. These factors will help decrease the unemployment rate for their districts and the State of Wisconsin. The unemployment figures are presented in this section for the four counties in our district and the state. Those with higher educational attainment have a lower unemployment rate.

Academic Programs offered at other WTCS districts that had the highest enrollments by Moraine Park residents are listed below for fiscal year 2010-2011 with FTE 10 or greater.

<u>Program Number</u>	<u>Program Name</u>	<u>Headcount</u>	<u>FTE</u>
10-504-1	Criminal Justice - Law Enforcement	191	124.30
10-102-3	Business Management - Marketing *	86	45.93
10-503-2	Fire Protection Technician	60	36.06
20-800-2	Liberal Arts – Associate of Sciences	74	35.90
10-543-1	Nursing – Associate Degree *	65	28.77
20-800-1	Liberal Arts – Associate of Arts	64	28.60
10-150-2	IT-Network Specialist *	35	24.90
10-104-3	Marketing*	40	22.80
10-106-6	Administrative Professional *	27	18.86
10-101-1	Accounting *	32	18.53
10-508-1	Dental Hygienist	46	17.40
10-304-1	Interior Design	30	16.70
10-520-3	Human Services Associate	28	15.80
10-201-1	Graphic Design	26	15.30
10-110-1	Paralegal *	26	13.97
10-307-1	Early Childhood Education *	25	13.53
10-602-3	Automotive Technology *	15	13.37

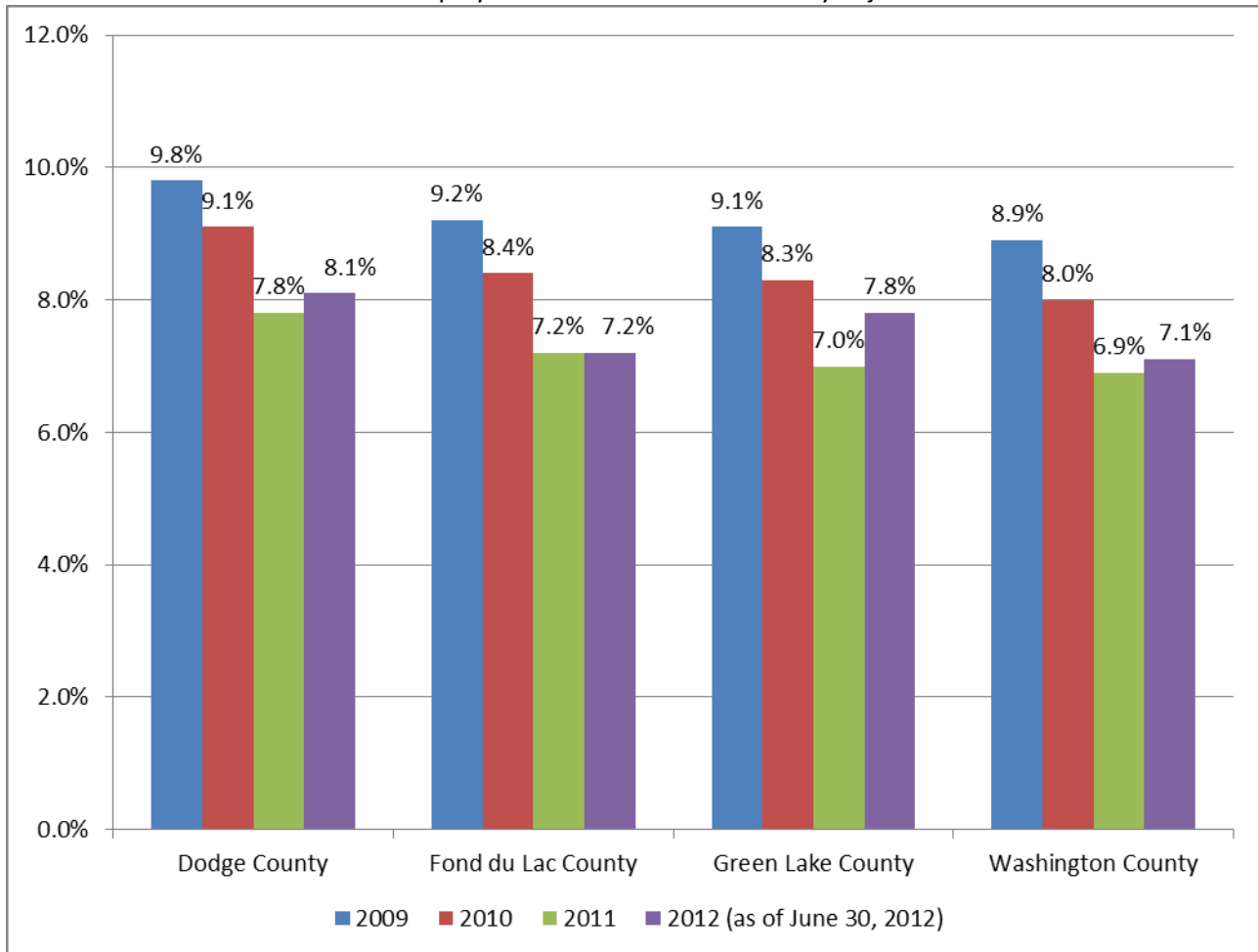


10-057-1	Natural Resources Technician	16	12.90
10-152-1	IT-Programmer/Analyst	25	12.27
30-504-1	Criminal Justice – Law Enforcement	37	11.80
10-412-1	Diesel Equipment Technology	17	11.60
31-412-1	Diesel Equipment Mechanic	11	11.23
	Leadership Development		
10-196-1	(Supervisory Management) *	18	11.17
31-509-1	Medical Assistant *	23	10.37
10-154-3	IT-Computer Support Specialist	18	10.27

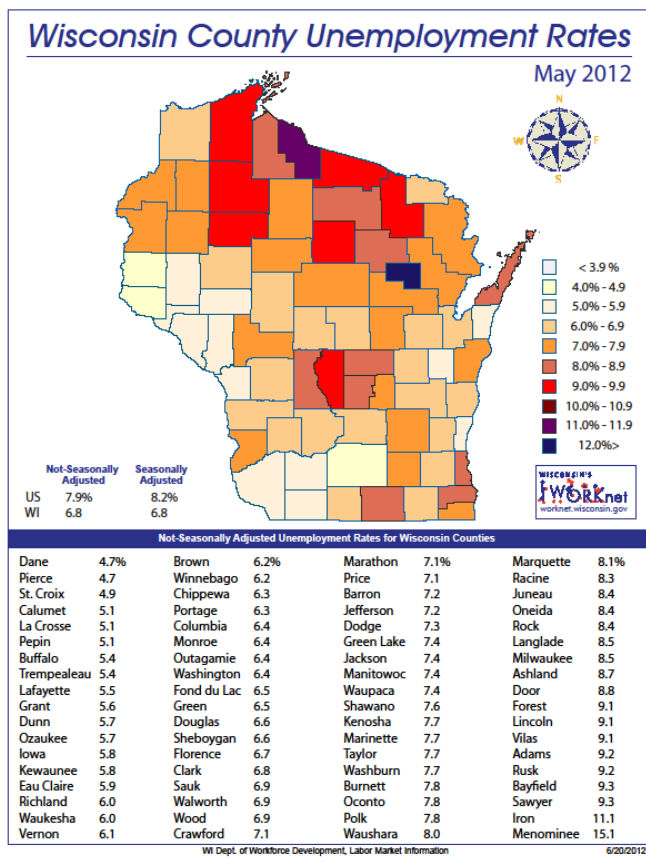
\*Indicates programs that MPTC offers. (Wisconsin Technical College System Client Reporting, VE215585A, October 11, 2011)

### Local Area Unemployment Statistics 2009 through 2012

The unemployment rates are not seasonally adjusted.



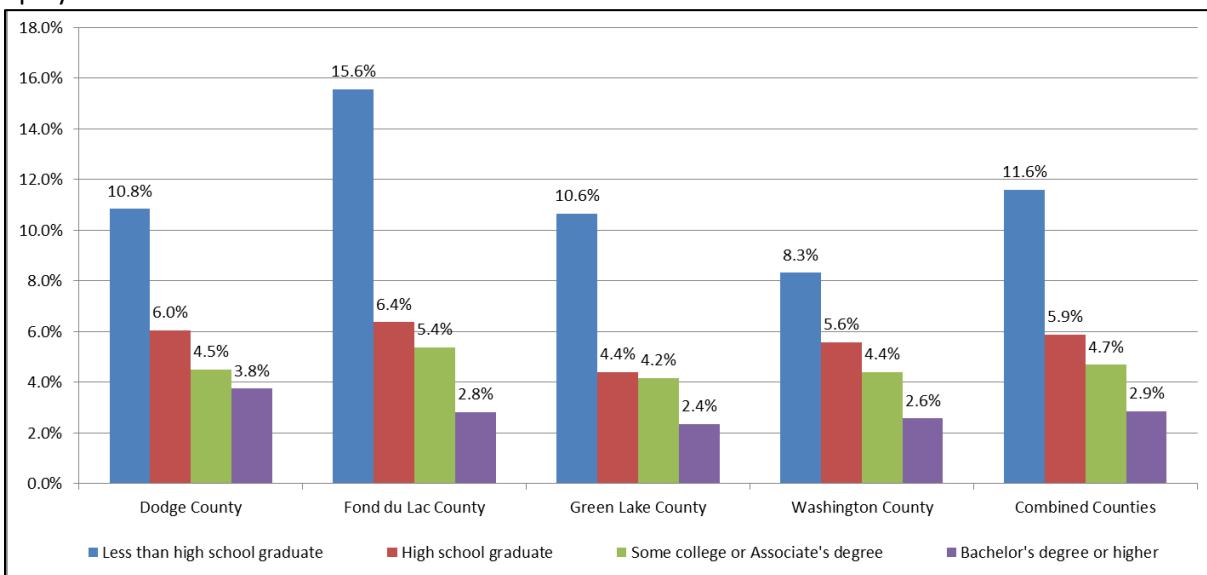
(Wisconsin Department of Workforce Development, Bureau of Workforce Training – Labor Market Information, <http://WORKnet.Wisconsin.gov>, July 10, 2012)



(Wisconsin Department of Workforce Development, Bureau of Workforce Training – Labor Market Information, <http://WORKnet.Wisconsin.gov>, June 20, 2012)

### Unemployment Rate by Education Attainment

The unemployment rate by education attainment demonstrates that as education attainment increases, unemployment decreases.

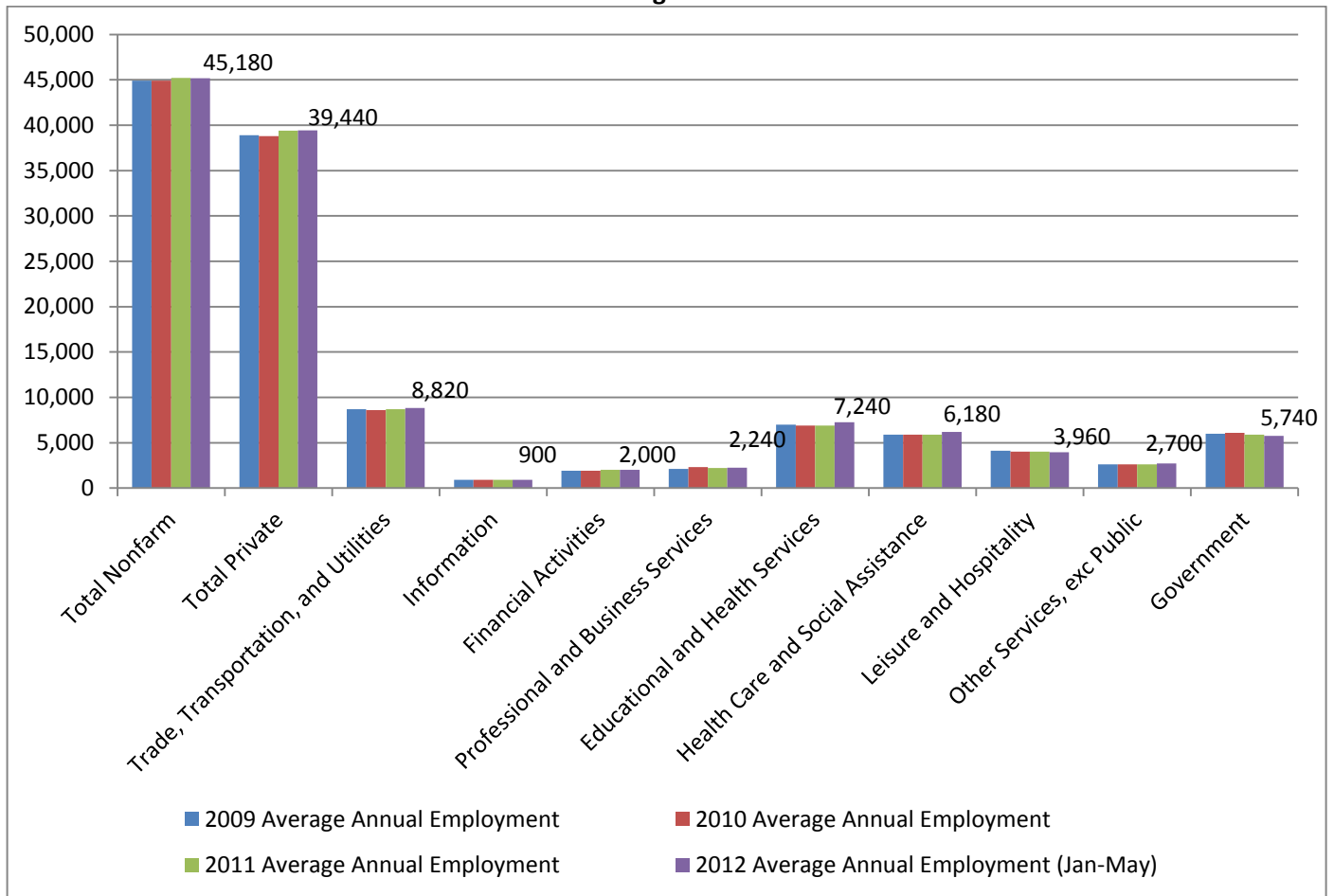


(U.S. Census Bureau, 2006-2010 American Community Survey, <http://www.census.gov/acs/www/>.)

**ECONOMIC/BUSINESS/WORKPLACE TRENDS**

A major focus for the manufacturing industry is filling positions with “skilled” workers. Jobs positions are available; however, many companies are struggling to find the “skilled” workforce even though unemployment is high. Due to the recession, more workers are remaining longer in the workforce to recover from the recession. In recognizing the fact that degrees are valuable in receiving a position in an organization, many for-profit colleges are booming. For-profit colleges offer great flexibility and a faster turnaround time in awarding a degree. However, studies indicate that graduates from for-profit institution have higher educational debt levels and do not find employment paying the wages that were advertised by the respective institutions. Among the top growing careers are jobs in the health care field, fabrication, and manufacturing.

**Current Employment for Fond du Lac  
2009 through 2012**



(Wisconsin Department of Workforce Development, Bureau of Workforce Training – Labor Market Information, <http://WORKnet.Wisconsin.gov>, July 12, 2012.)

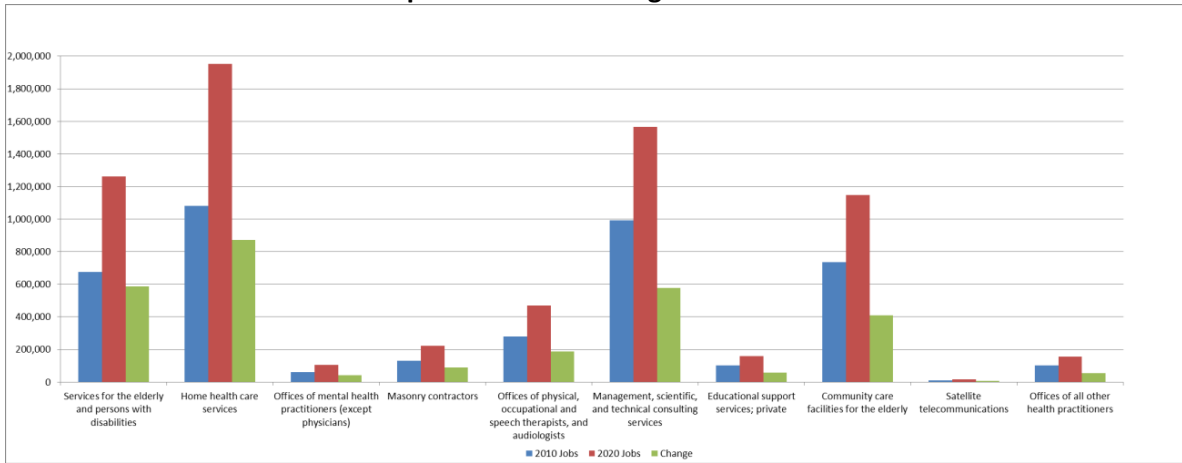
### Wisconsin's Top 25 Largest Employers in MPTC District

This table includes ownership in both privately and publicly owned businesses in all sectors.

Rank	Dodge County Employer Name	Fond du Lac County Employer Name	Green Lake County Employer Name	Washington County Employer Name
1	QUAD/GRAPHICS INC	BRUNSWICK CORP	COMMUNITY HEALTH NETWORK INC	WAL-MART
2	DEPARTMENT OF CORRECTIONS	AGNESIAN HEALTHCARE INC	CITATION BROWNTOWN	QUAD/GRAPHICS INC
3	DEERE & CO	ALLIANCE LAUNDRY SYSTEMS LLC	BERLIN AREA SCHOOL DISTRICT	WEST BEND JOINT SCHOOL DISTRICT #1
4	BEAVER DAM COMMUNITY HOSPITALS INC	FOND DU LAC SCHOOL DISTRICT	COUNTY OF GREEN LAKE	COUNTY OF WASHINGTON
5	WAL-MART	COUNTY OF FOND DU LAC	CITY OF BERLIN	WEST BEND MUTUAL INSURANCE CO
6	COUNTY OF DODGE	CHARTER COMMUNICATIONS	MARKESAN PUBLIC SCHOOL	CEDAR COMMUNITY
7	MAYVILLE ENGINEERING CO INC	MORAINES PARK TECHNICAL COLLEGE	MARKESAN RESIDENT HOME INC	BROAN-NUTONE LLC
8	WATERTOWN REGIONAL MEDICAL CENTER I	J F AHERN CO	RIPON ATHLETIC	GERMANTOWN PUBLIC SCHOOL
9	GRANDE CHEESE CO	SAPUTO CHEESE USA INC	FLASH	SIGNICAST LLC
10	MICHELS CORPORATION	TAYCHEedah CORRECTIONAL INSTITUTION	WAL-MART	SAINT JOSEPH'S COMMUNITY HOSPITAL
11	BEAVER DAM UNIFIED SCHOOL DISTRICT	CITY OF FOND DU LAC	PRECISION METALSMITHS	WEST BEND CLINIC INC
12	METALCRAFT OF MAYVILLE INC	WAL-MART	DEL MONTE CORP	TECSTAR MFG CO
13	WILLOW FOODS LLC	MARIAN COLLEGE	THE HEIDEL HOUSE	SERIGRAPH INC
14	AGNESIAN HEALTHCARE INC	RIPON PUBLIC SCHOOL	GREEN LAKE SCHOOL DISTRICT	AURORA MEDICAL CENTER
15	JOHN DEERE SHARED SERVICES INC	BRENNER TANK LLC	THE SCHOOL DISTRICT OF PRINCETON	HELGESEN INDUSTRIES INC
16	MARQUARDT MEMORIAL MANOR INC	RIPON PRINTERS	WILSON-HURD	SYSCO EASTERN WISCONSIN LLC
17	QPS	WELLPOINT COMPANIES INC	LION	AURORA MEDICAL
18	WAUPUN AREA SCHOOL DISTRICT	SOCIETY INSURANCE A MUTUAL CO	FARMERS & MERCHANTS BANK	SCHOOL DISTRICT OF SLINGER
19	SCHOOL DISTRICT OF MAYVILLE	BAKER CHEESE FACTORY INC	LASER EXCEL	REGAL WARE INC
20	SPUNCAST INC	CAMPBELLSPORT SCHOOL DISTRICT	FIRST NATIONAL BANK	WEASLER ENGINEERING INC
21	CITY OF BEAVER DAM	WELLS MFG LP	HYPRO INC	KREILKAMP TRUCKING INC
22	KONDEX CORP	C D SMITH CONSTRUCTION INC	WISCONSIN SPICE INC	CITY OF WEST BEND
23	KRAFT FOOD NORTH AMERICA	BADGER LIQUOR CO., INC.	GREENINGS UNITED FOODS	J W SPEAKER CORP
24	KWIK TRIP	AURORA MEDICAL	BADGER MINING CORP	SEEK INC
25	TAB PRODUCTS CO LLC	T T I INC	TED'S PIGGLY WIGGLY	ULTRA MART FOODS LLC

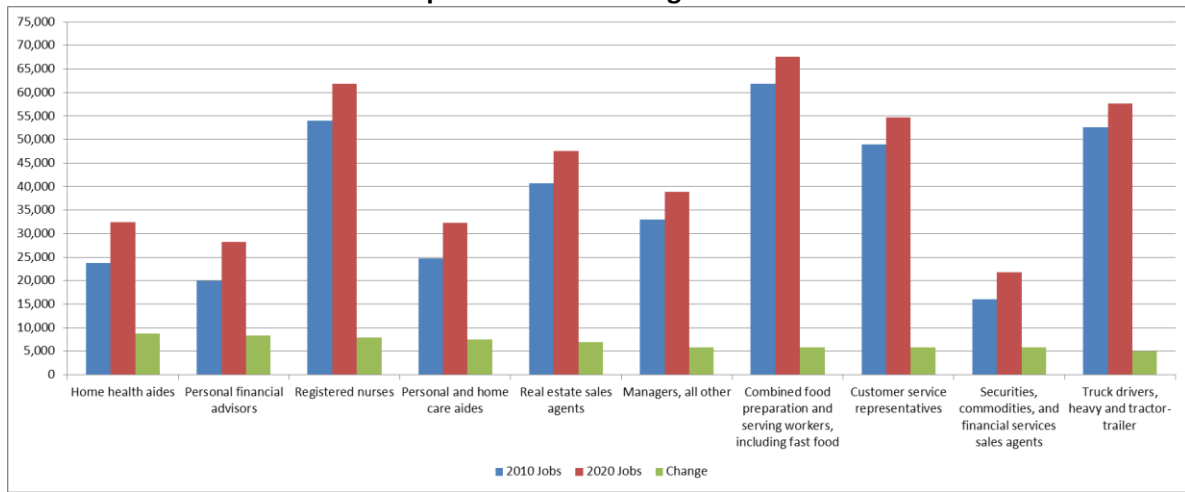
(Wisconsin Department of Workforce Development, Bureau of Workforce Training – Labor Market Information, April 2011.)

### National Top 10 Fastest Growing Careers 2010 to 2020



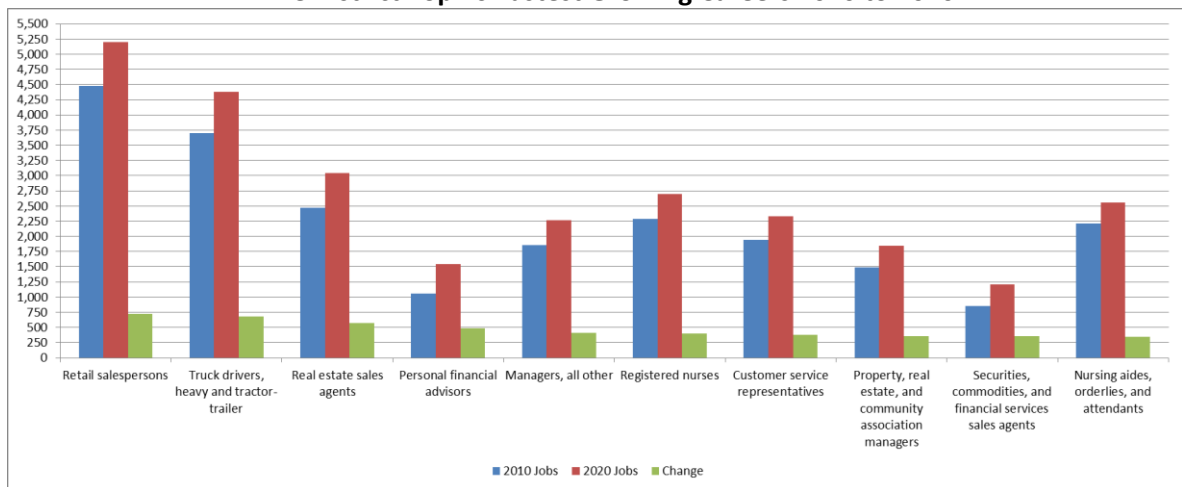
(Huffington Post, Khadeeja Safdar, April 19, 2012, supported by original article in [www.ibisworld.com](http://www.ibisworld.com).)

### Wisconsin's Top 10 Fastest Growing Careers 2010 to 2020



(EMSI, <https://east.economicmodeling.com/analyst>, July, 2012.)

### MPTC District Top 10 Fastest Growing Careers 2010 to 2020



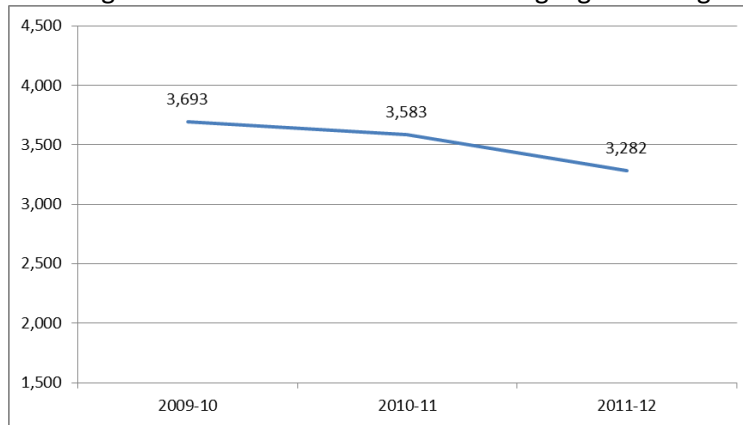
(EMSI, <https://east.economicmodeling.com/analyst>, July, 2012.)

**EDUCATION TRENDS**

Expectations for institutional accountability, including degree completion, continue to rise. To receive funding through grants or other means, colleges must provide evidence for student learning outcomes. In today’s economy the student debt total reached historical highs and is for several reasons, unemployment or underemployment, cost of education, educational loan interest rates, and the accumulation of past graduate loans. Data is proving that more colleges are offering certificate or accelerated programs as students are interested in completing course work in a shorter amount of time with less

**District High School Graduate Counts  
2009-10 through 2011-12**

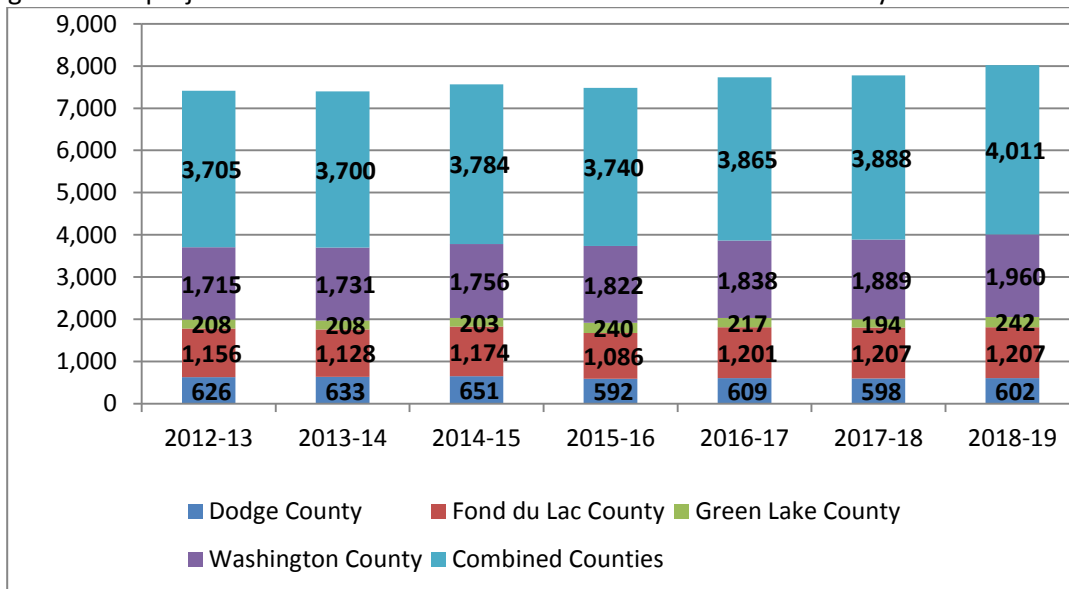
A three-year trend of high school graduates demonstrates a decreasing high school graduate population.



(WTCS Client Reporting, VE216646, July 2012.)

**County High School Graduate Projections  
2012-13 to 2018-19**

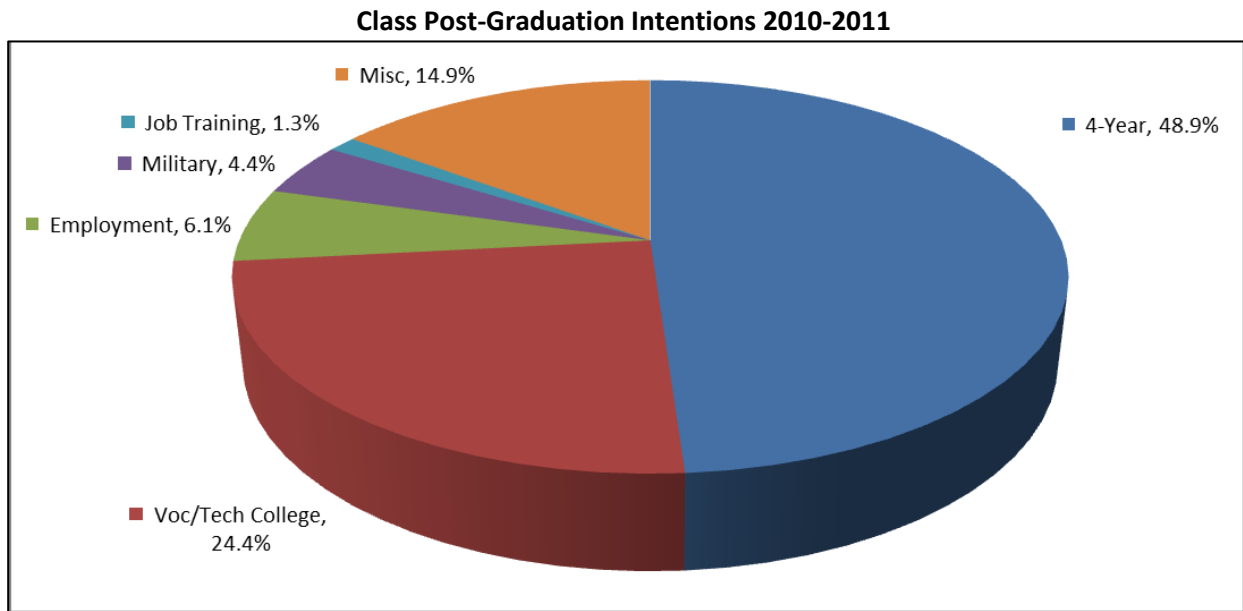
High school graduation projections demonstrate a slow increase over the next seven years.



(Wisconsin High School Graduate Projections 2008-2019 - Report prepared by the Applied Population Laboratory at the University of Wisconsin—Madison, July 2012.)

## High School Graduation Intentions

Note: Counts of post-graduation plans and counts of graduates are used together in calculating the percentages however; these counts come from different data sets. Post-graduation plans are derived from the School Performance Report (SPR) aggregate collection. Graduates are collected from the Individual Student Enrollment System (ISES). For some schools or student groups, the number of submitted for graduating seniors is not equal to the number of graduates. At best, plans reported as a percent of graduates must be interpreted as estimates.



\*\*Based on our 22 districts excluding Ripon (*Website: <https://apps2.dpi.wi.gov/sdpr/spr.action>, July 2012.*)

- A) Post-graduation plans are plans 12th graders say they will follow after graduation.
- B) Post-graduation plans are collected and summarized by districts and submitted to DPI by school and by ethnic/gender category for all graduates as part of the SPR Collection.
- C) Graduates included in the "miscellaneous" category on WINSS include students in the "seeking employment," "other," "undecided," and "no response" categories.

## Untapped Potential in Wisconsin

According to [The National Center for Higher Education Management Systems](#), of those who enter a 4 year college 58 percent will graduate within 6 years (deemed completers), and nearly 35 percent (34.7%) of two year attendees will complete within 3 years (deemed completers). Let's do the math based on actual 2010-11 data.

67,981	Entering high school freshman in 2010-11
58,260	Entering freshman who will graduate (85.7%)
14,448	Two-year college bound (24.8%)
30,295	Four-year college bound students (52%)
5,013	Two-year bound students who graduate (35% on average)
17,571	Four-year bound students who graduate (58% on average)
45,397	Entering freshman who will not secure a post-secondary degree directly out of high school

- Over 74% of entering high school freshman will not graduate with a 4-year degree directly out of high school.
- Nearly 67% will secure NO post-secondary education directly out of high school.

(*MPTC Strategic Advancement, The National Center for Higher Education In management Systems, July 2012.*)

### **FOOD AND AGRICULTURE INDUSTRY TRENDS**

Trends and forecasts in food and agriculture point to opportunities for the U.S. as well as in Moraine Park's district where agriculture plays a vital economic role and one that will remain vital for the future. In major cities, urbanized farming is becoming a new trend.

### **THE NEW MEGATREND: SUSTAINABILITY**

Megatrends or the rapid consolidation within industries are significantly changing the environment for business and the employment market. Such transformations arise from technological innovation, industry consolidation, changing markets, and consumer demands. Business megatrends may emerge from or be accelerated by financial crises, shifts in the social realities that define the marketplace, or the threat of conflict over resources. Examples of past megatrends are globalization, the IT revolution, and the quality movement. An example of innovation based on megatrends and the focus for sustainability is that of wind energy that ultimately leads to an increased need for maintenance of the wind turbines.

### **TECHNOLOGY TRENDS**

Educational institutions are incorporating the use of technology at an accelerated rate. Students prefer to use their "smart" devices to enhance their educational journey. Mobile learning is setting the precedence as the preferred delivered method. Coinciding with this emerging technology, the need for hard cover text books is decreasing as the demand for digital textbooks is increasing.



## Section 2

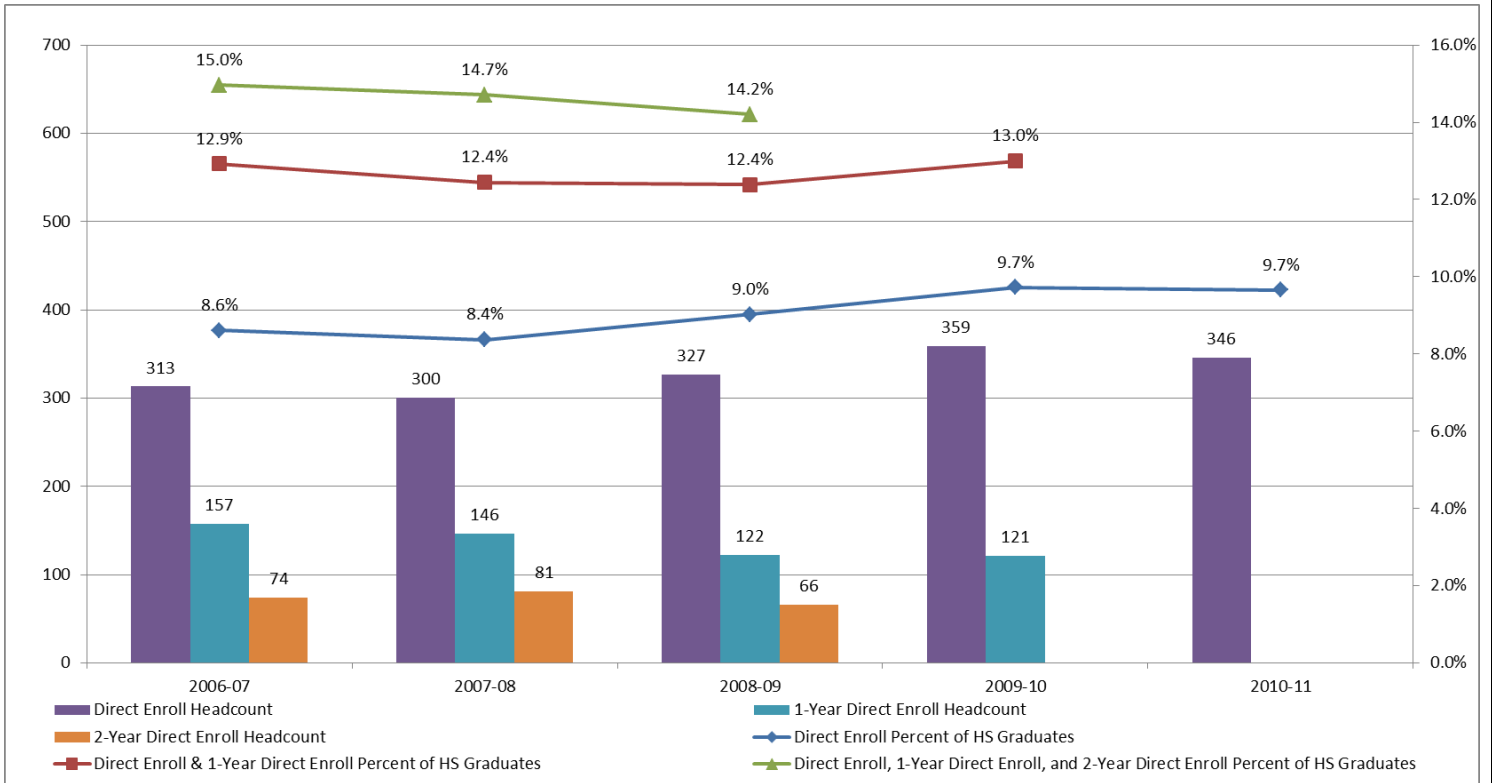
### Moraine Park Technical College (MPTC) Data



## STUDENT DEMOGRAPHICS

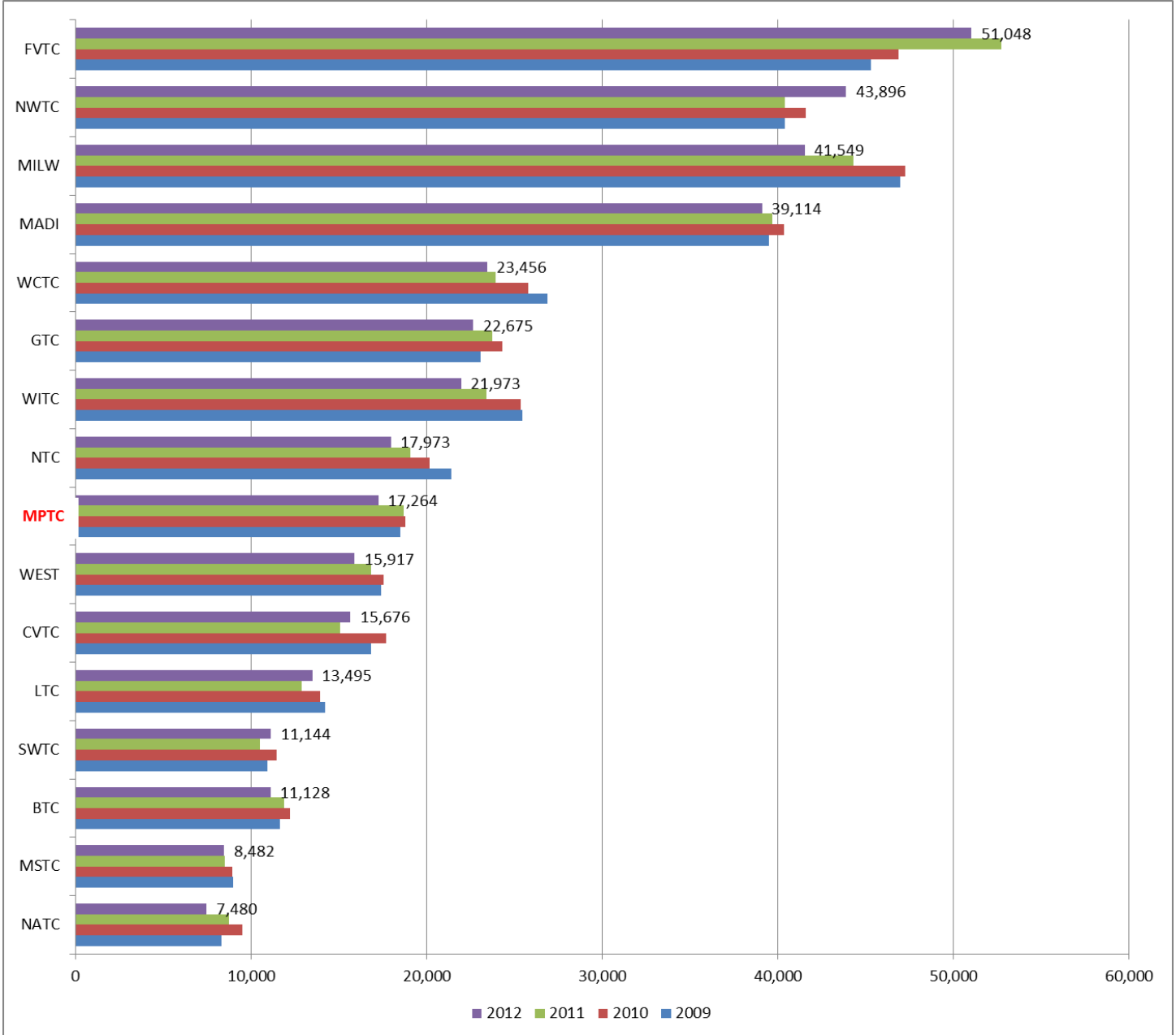
### District High School Direct Enrolls 2006-07 through 2010-11

A percent of high school graduates in the MPTC District. Number of high school graduates enrolling in occupational (aid codes 10, 30, 31, 32, 50) programs or courses.



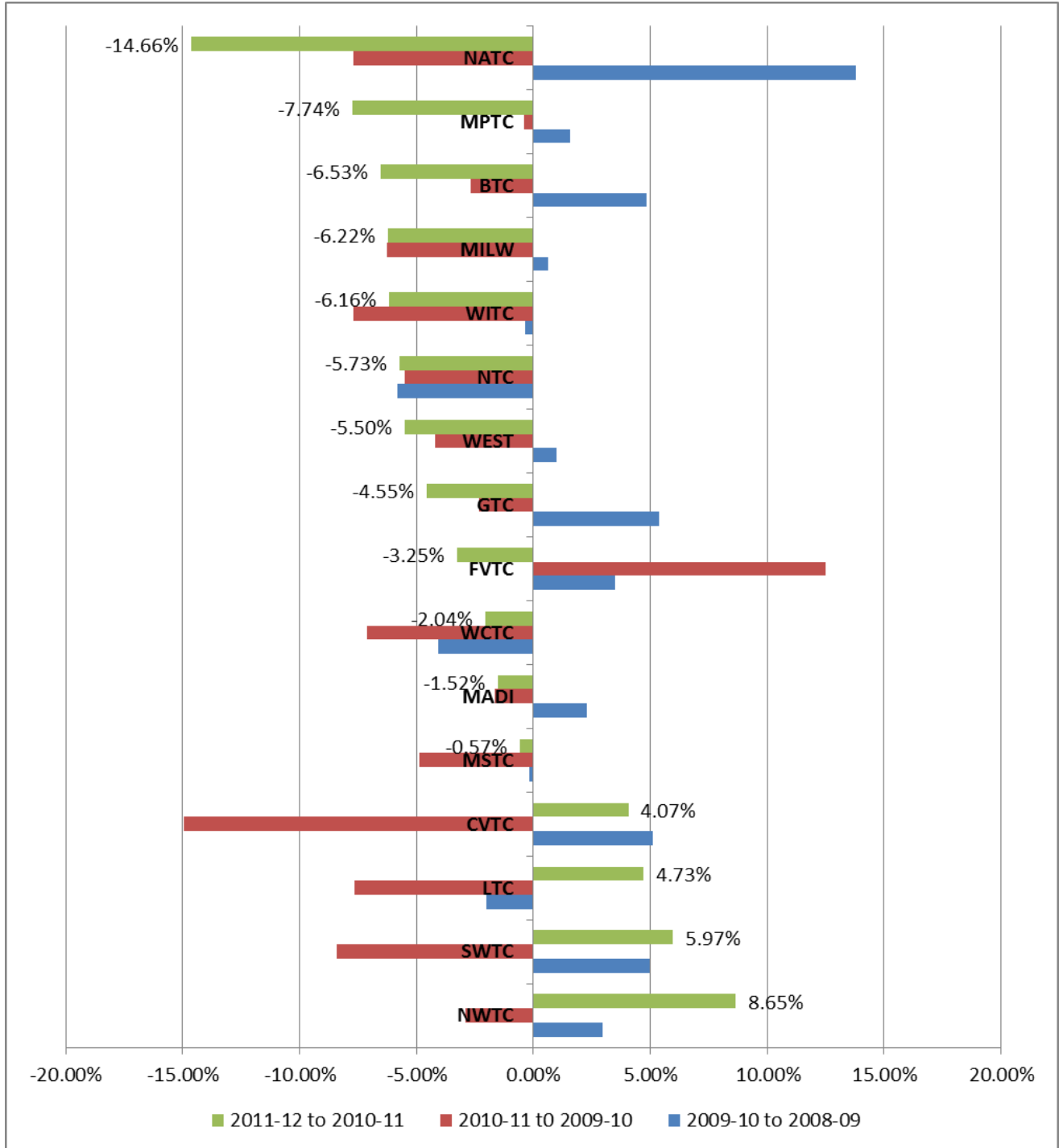
(WTCS Client Reporting, VE216646, July 2012.)

**Wisconsin Technical College System – Headcount by District  
2009 through 2012 (as of July 26, 2012)**



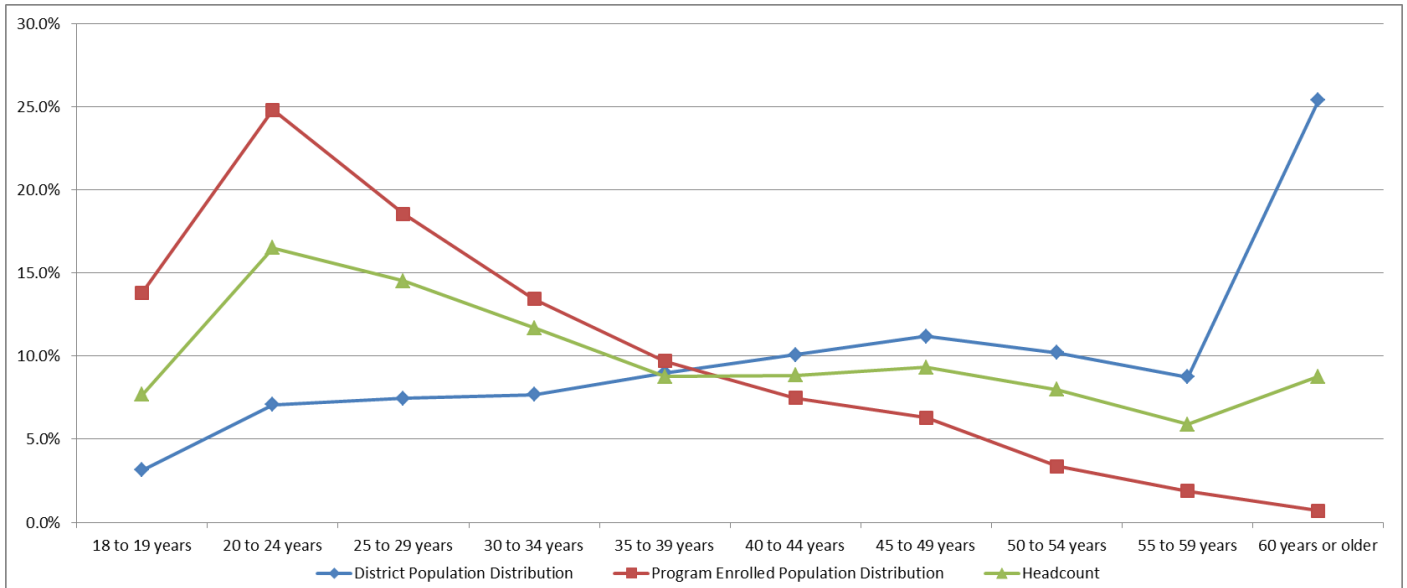
(WTCS Lemon Client, July 26, 2012.)

**Moraine Park Technical College  
Headcount Change Percent  
2009-10 to 2011-12 (as of July 26, 2012)**



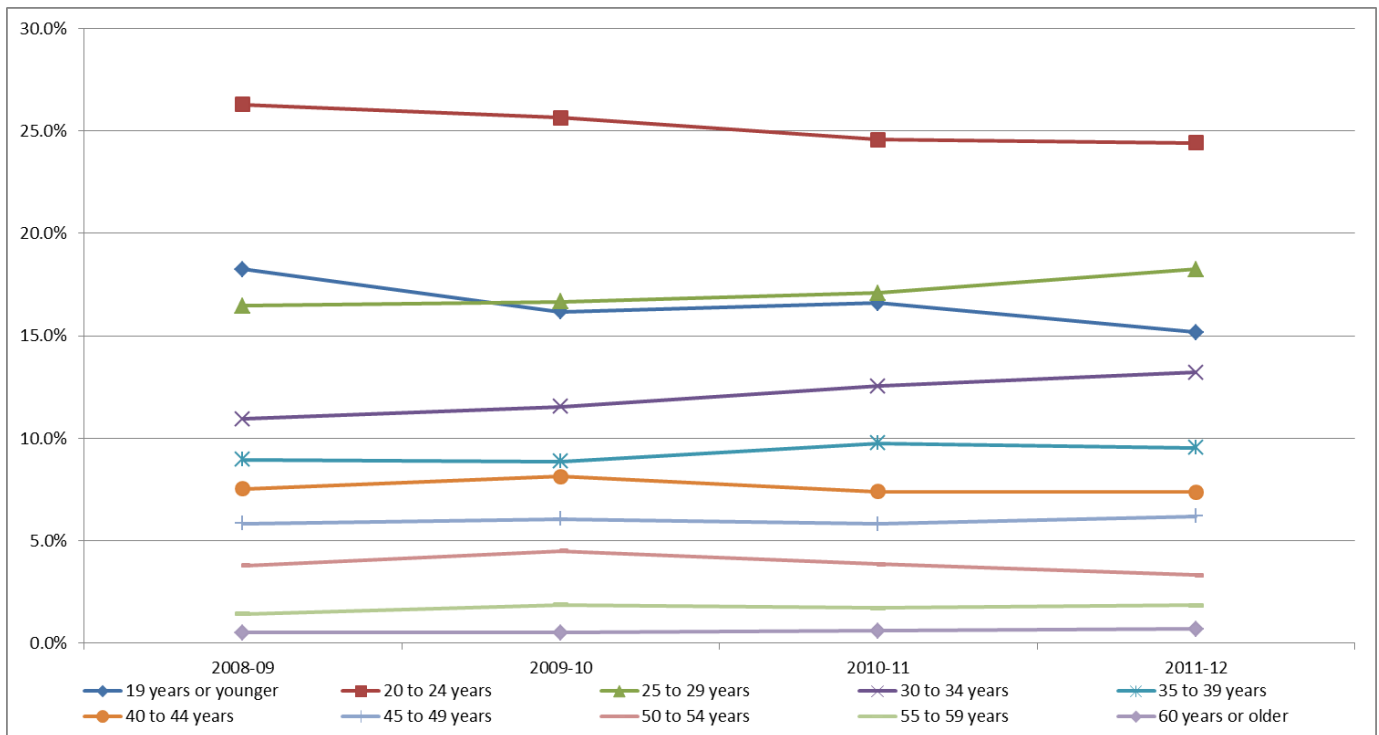
(WTCS Lemon Client, July 26, 2012.)

### MPTC District Population & MPTC Program Enrolled & Headcount Population Age Distribution



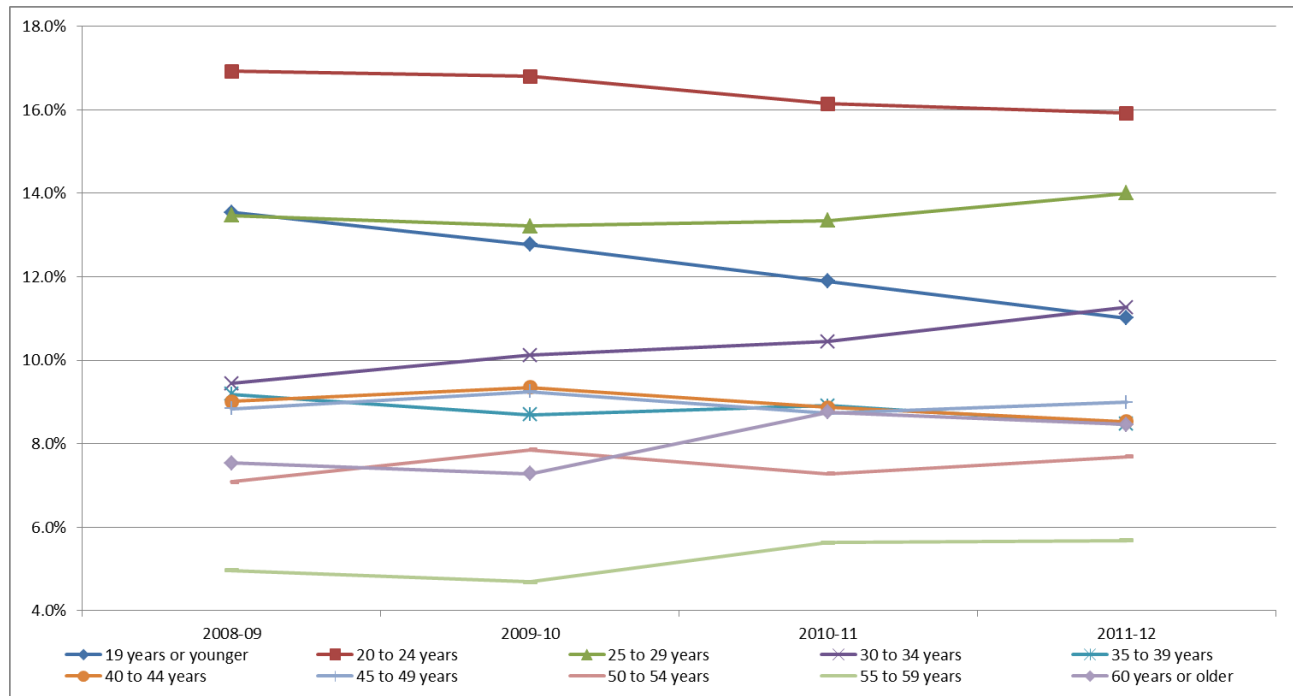
(WTCS Lemon Client, July 26, 2012, US Census Bureau, <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>, July, 2012.)

### MPTC Program Enrolled Population Age Distribution 2008-09 through 2011-12



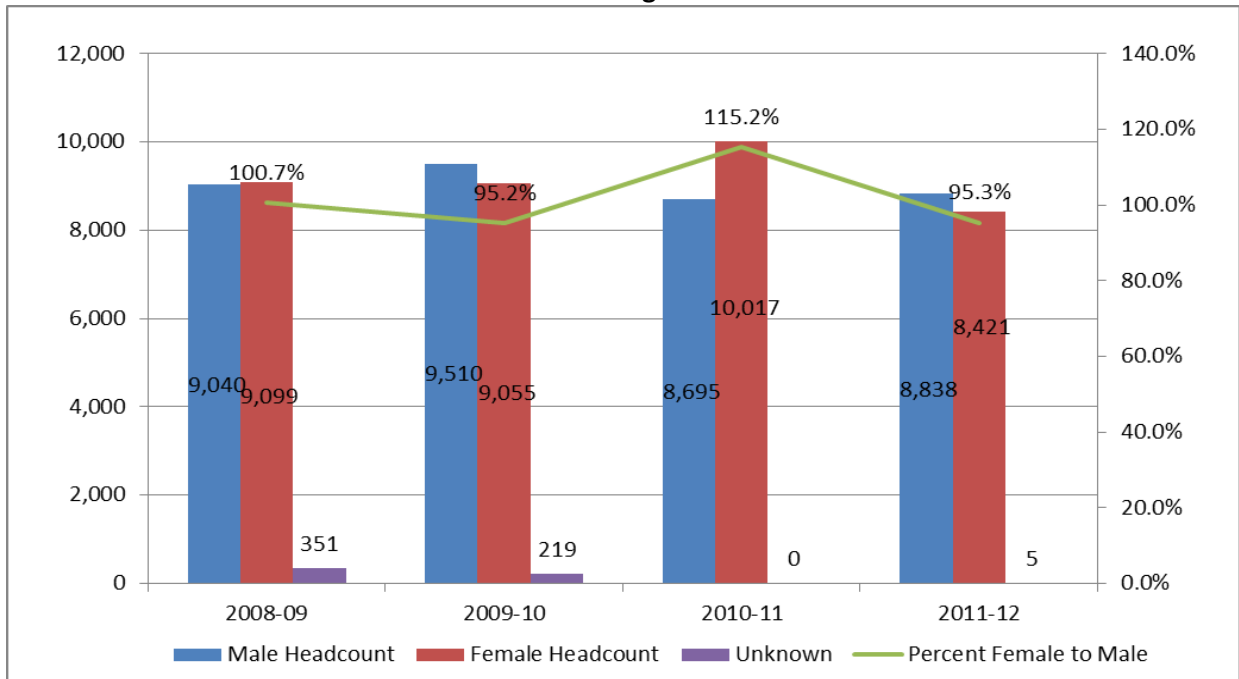
(WTCS Lemon Client, July 26, 2012.)

**MPTC Headcount  
Population Age Distribution  
2008-09 through 2011-12**



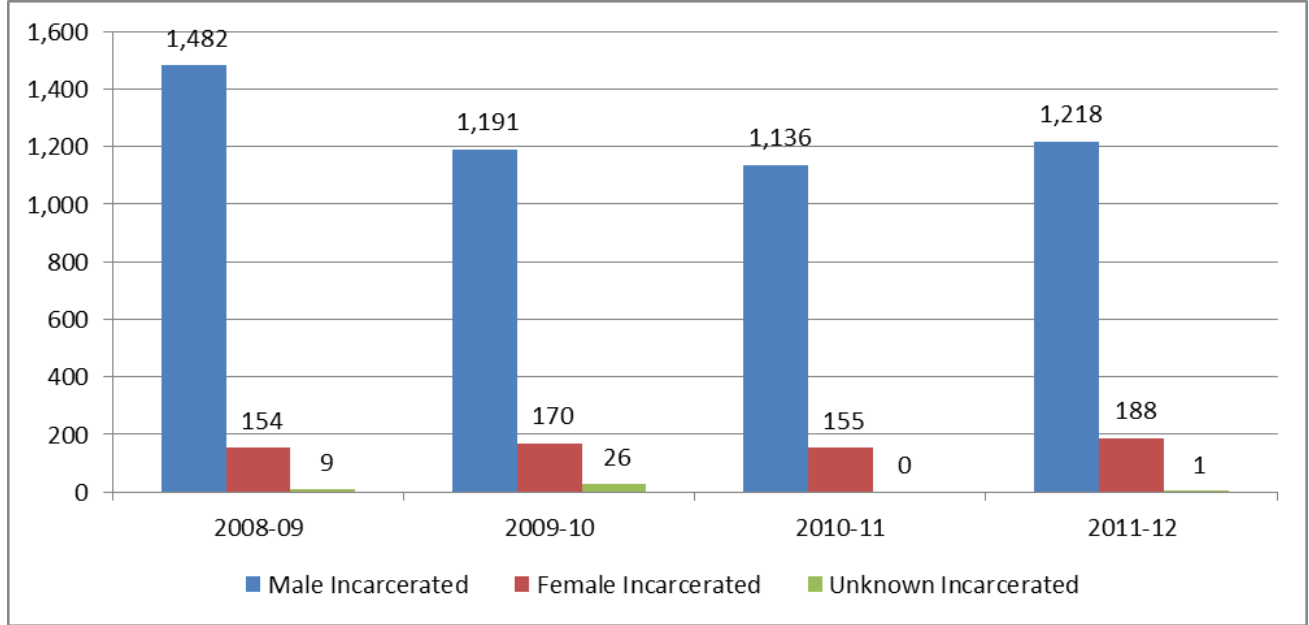
(WTCS Lemon Client, July 26, 2012.)

**Gender Counts & Percent Female to Male  
2008-09 through 2011-12**



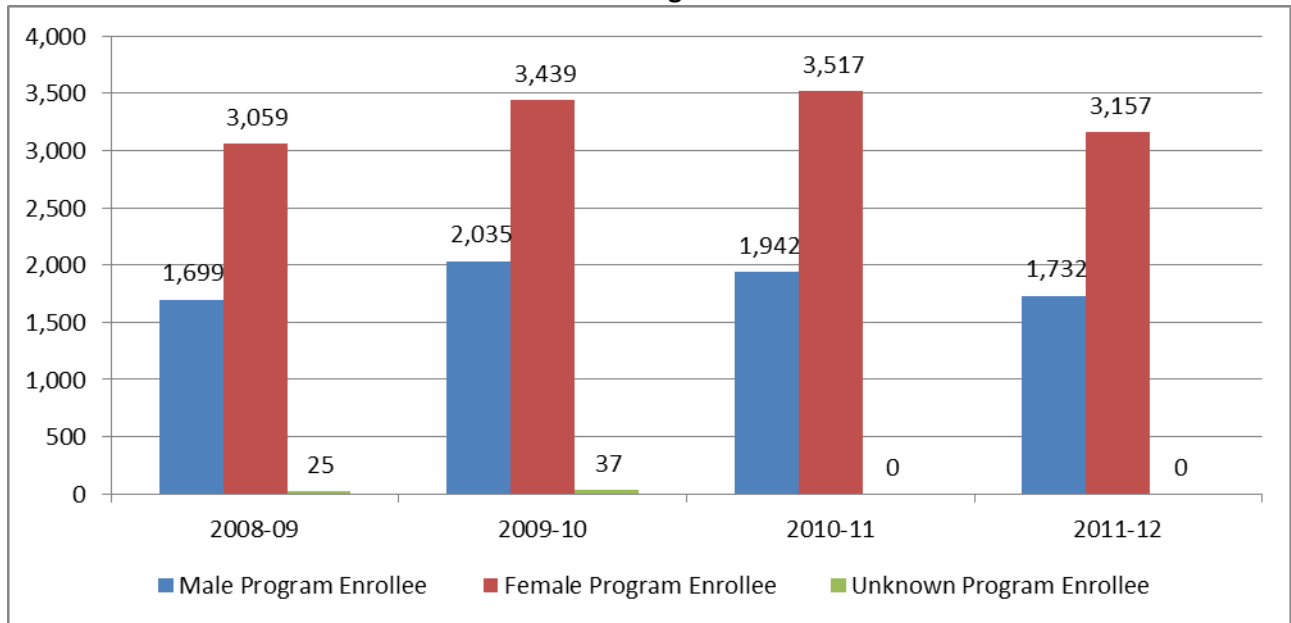
(WTCS Lemon Client, July 26, 2012.)

**Incarcerated by Gender  
2008-09 through 2011-12**



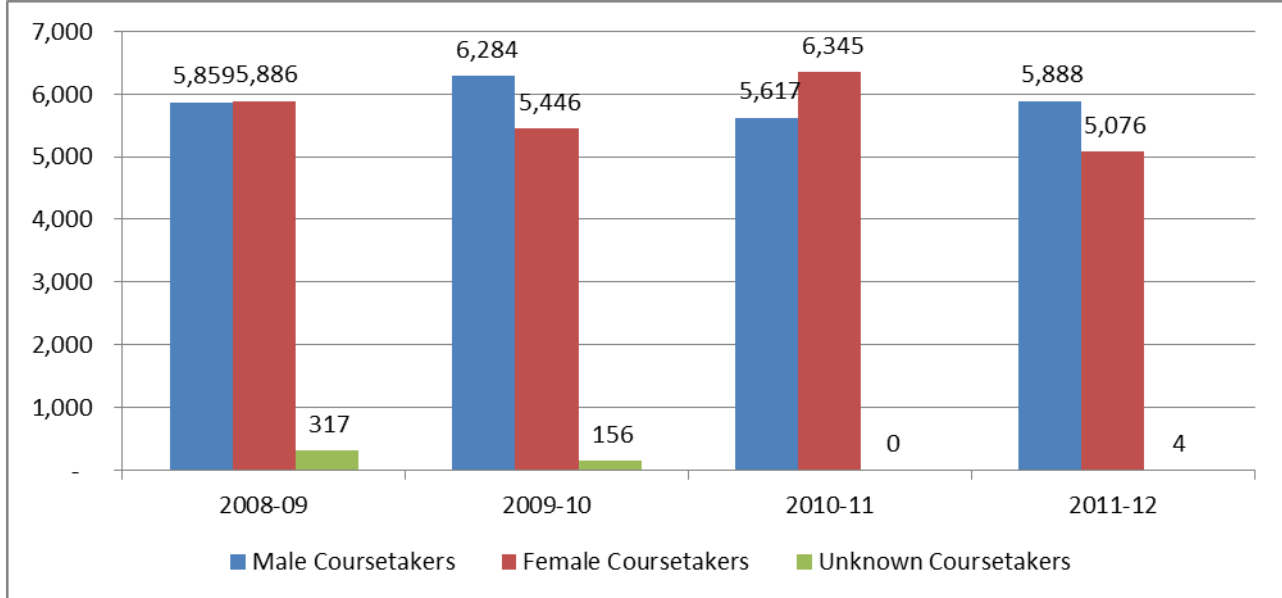
(WTCS Lemon Client, July 26, 2012.)

**Program Enrollee by Gender  
2008-09 through 2011-12**



(WTCS Lemon Client, July 26, 2012.)

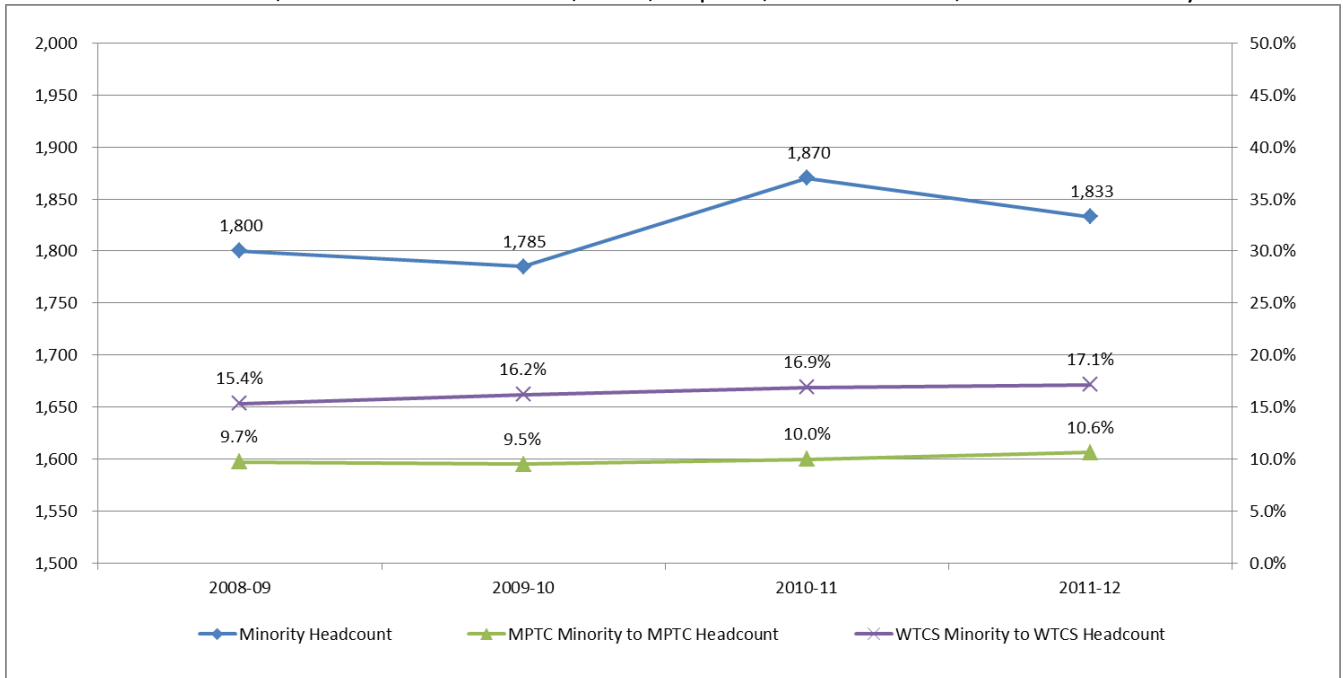
**Course Takers by Gender  
2008-09 through 2011-12**



(WTCS Lemon Client, July 26, 2012.)

**Count of Minority  
2008-09 through 2011-12**

Sum of American Indian, Asian or Pacific Islander, Black, Hispanic, Pacific Islander, and Multi-Ethnicity

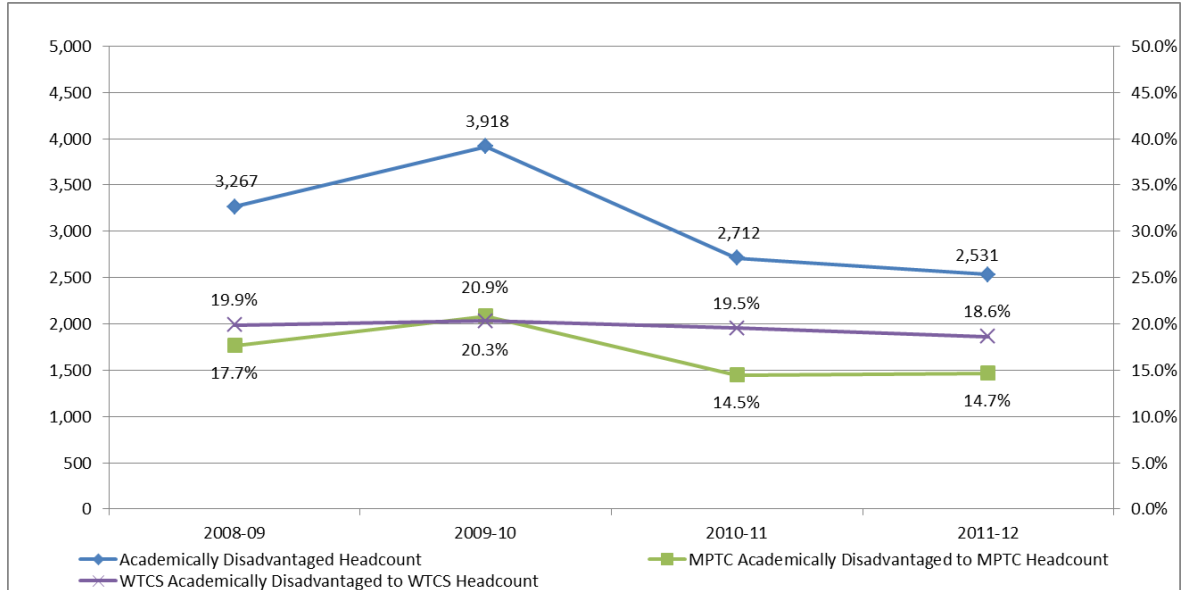


(WTCS Lemon Client, July 26, 2012.)



### Count of Academically Disadvantaged 2008-09 through 2011-12

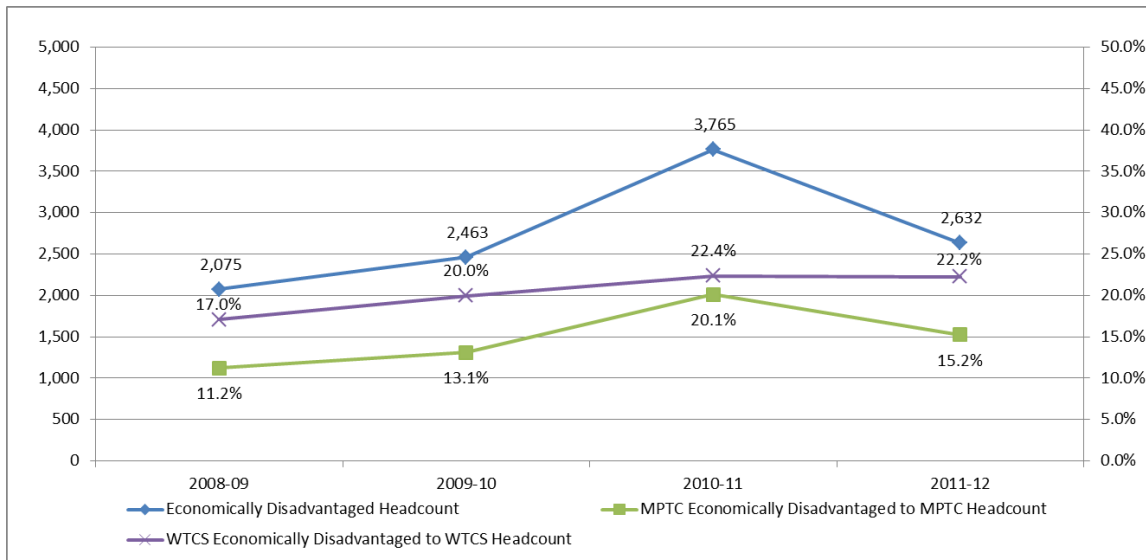
Enrollment in a Basic Education course may qualify a client as *Academically Disadvantaged* if the service is necessary for them to succeed in vocational education. For those clients, the district should report those enrolled in Basic Education courses in Aid Codes 73, 74, 76, 77, and 78 in Instructional Areas 851 through 859. Do not report courses in Aid Code 75 or in Instructional Areas 861, 862, 871, 872, 873 or 890. Also, do not report courses in any Basic Education Aid Code in Occupational Instructional Areas.



(WTCS Lemon Client, July 26, 2012.)

### Count of Economically Disadvantaged 2008-09 through 2011-12

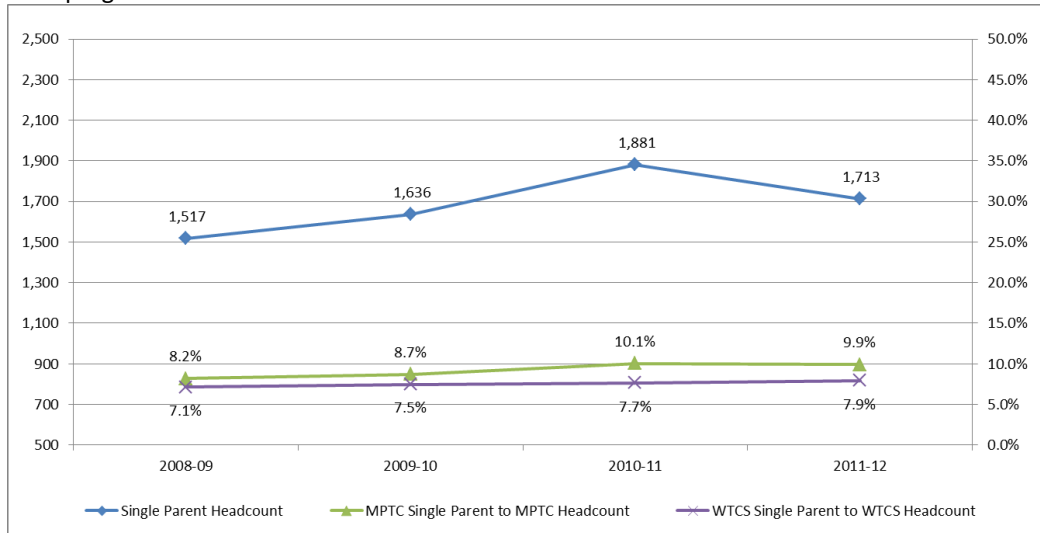
Economically Disadvantaged includes any individual or member of a family who receives need-based financial assistance, or whose income is at or below the poverty level as defined by the U.S. Department of Health and Human Services



(WTCS Lemon Client, July 26, 2012.)

### Count of Single Parent 2008-09 through 2011-12

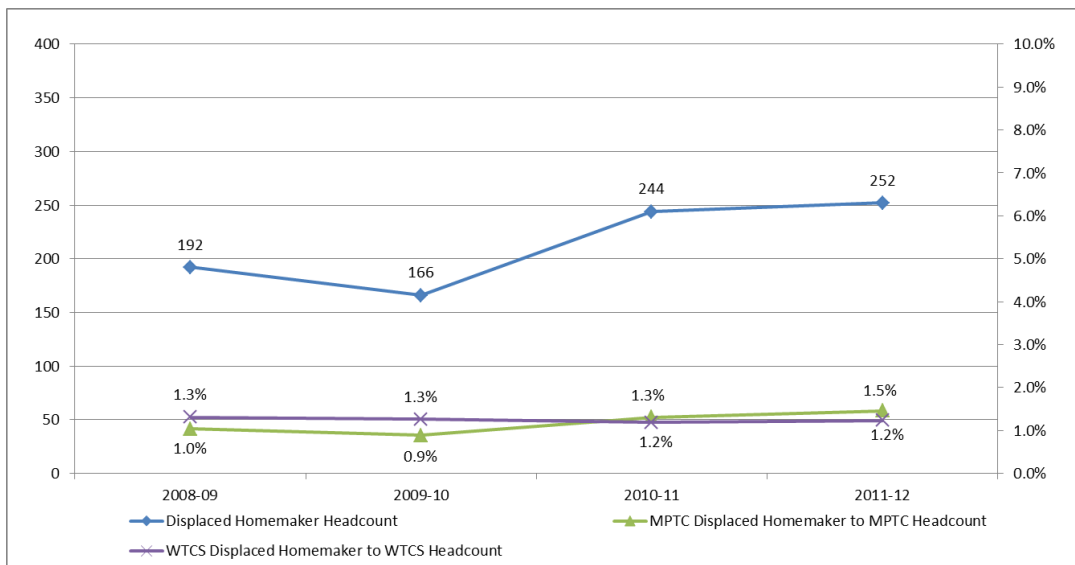
Single Parents are Clients who are unmarried or legally separated and have custody or joint custody of one or more minor children or who are pregnant.



(WTCS Lemon Client, July 26, 2012.)

### Count of Displaced Homemaker 2008-09 through 2011-12

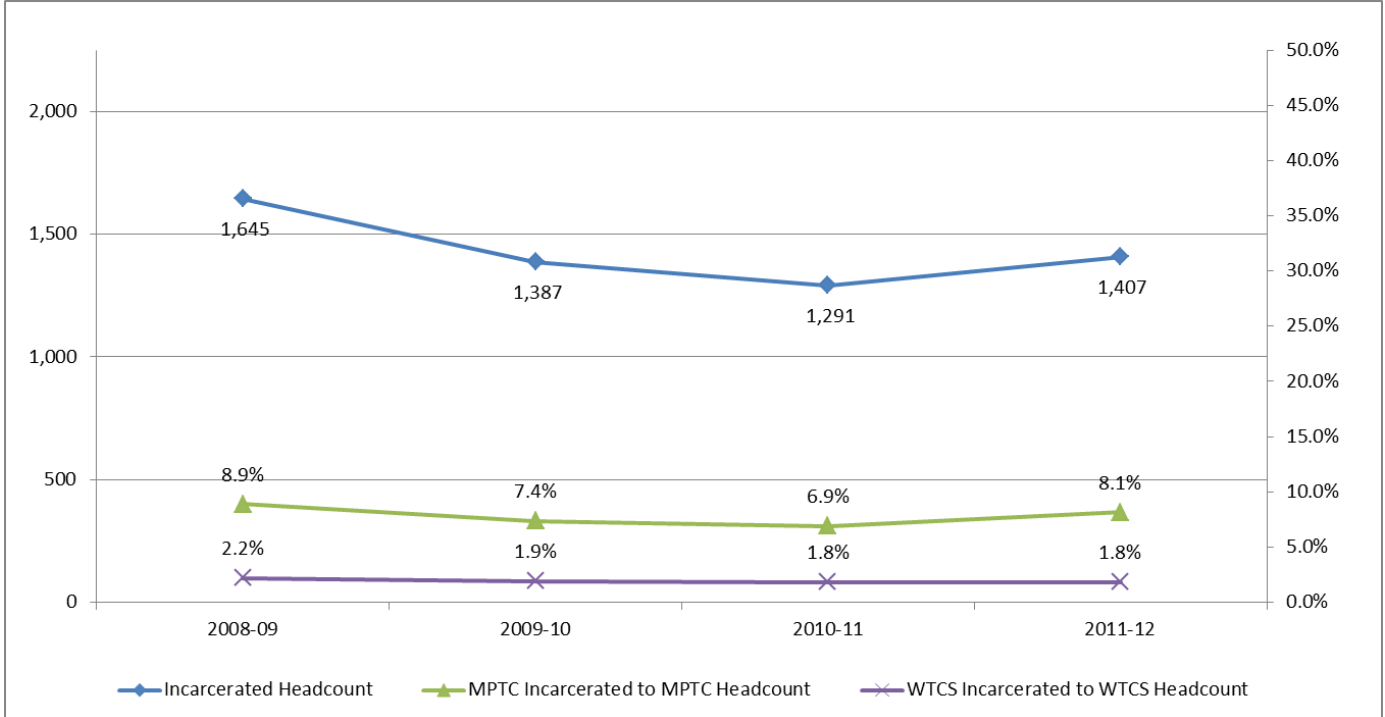
Clients who are adults and have worked for a substantial number of years providing unpaid household services for family members, is not gainfully employed, including unemployed or underemployed and who has had or would have difficulty in securing employment, and: has been dependent on the income of another household member but is no longer supported by such income; or has been dependent on public assistance but is no longer eligible for such assistance or who may be terminated from such assistance; or is the parent of a minor child who is supported by public assistance or child support but whose children are within two years of termination from such support. Clients may self-identify with the exception of clients enrolled in grant activities for which displaced homemaker status is required. Signed and dated identification by a district staff member who is authorized in writing by the district board or director to certify displaced homemaker status will also be acceptable.



(WTCS Lemon Client, July 26, 2012.)

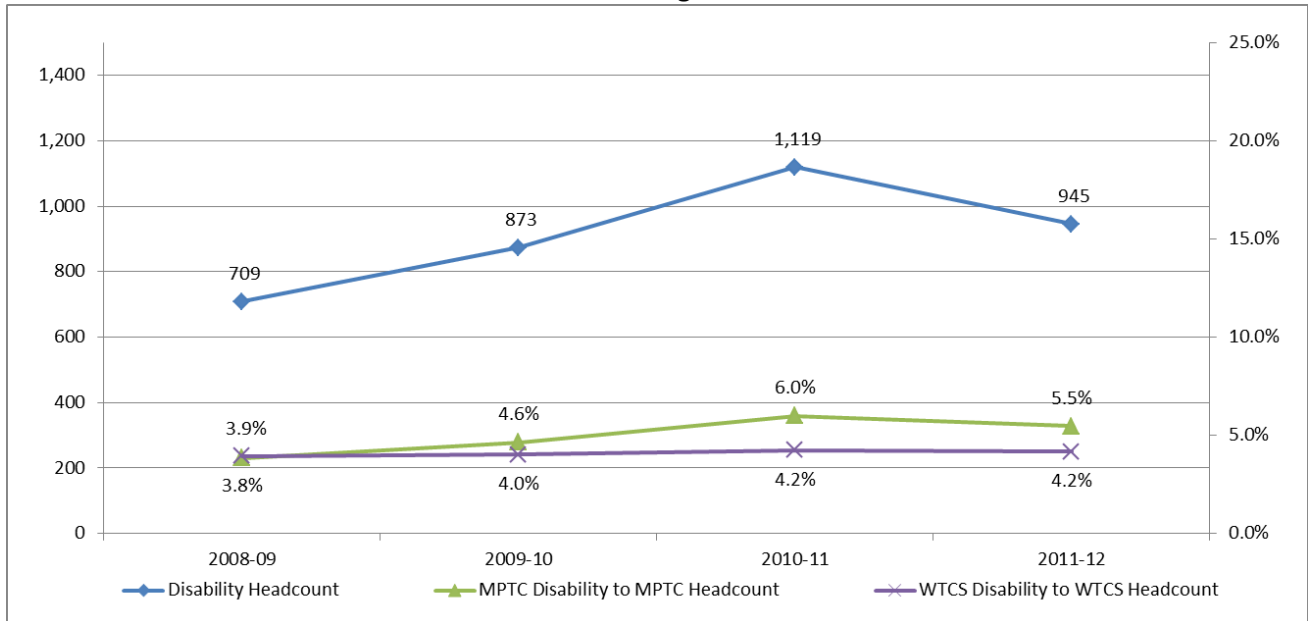
### Count of Incarcerated 2008-09 through 2011-12

This identifies clients in a prison, jail, detention center, halfway house, etc.



(WTCS Lemon Client, July 26, 2012.)

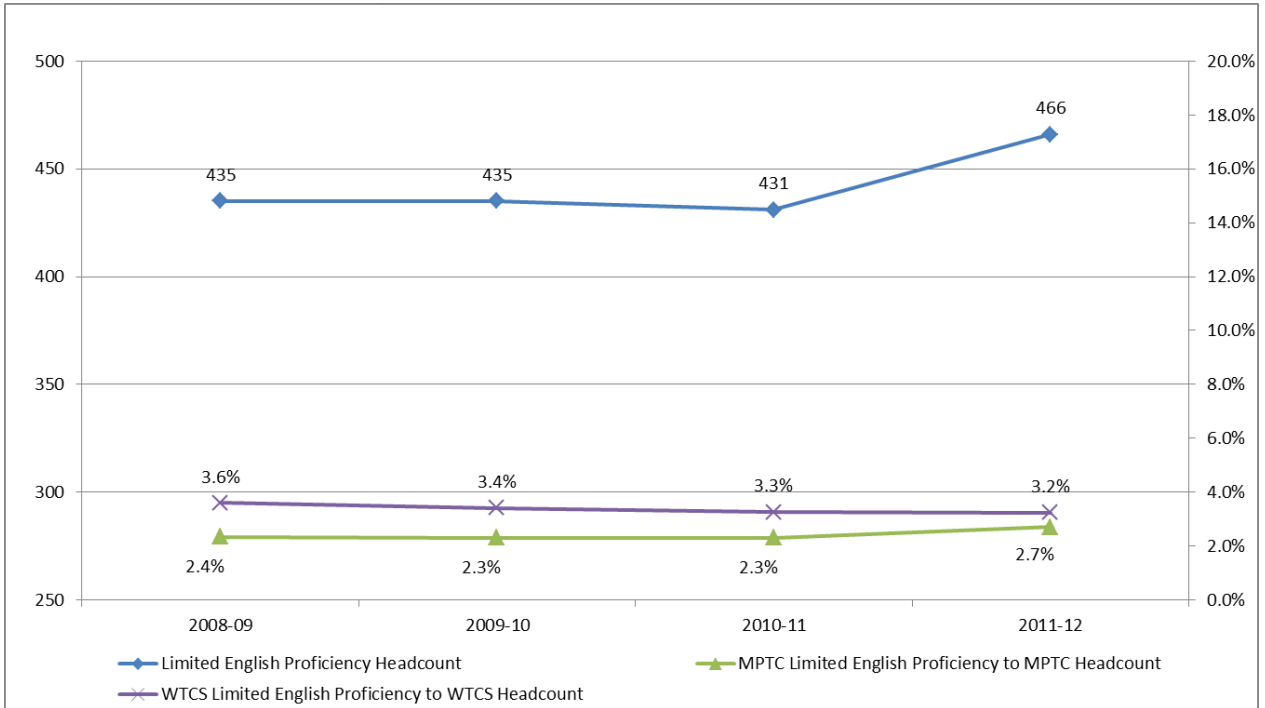
### Count of Disability 2008-09 through 2011-12



(WTCS Lemon Client, July 26, 2012.)

**Count of Limited English Proficiency  
2008-09 through 2011-12**

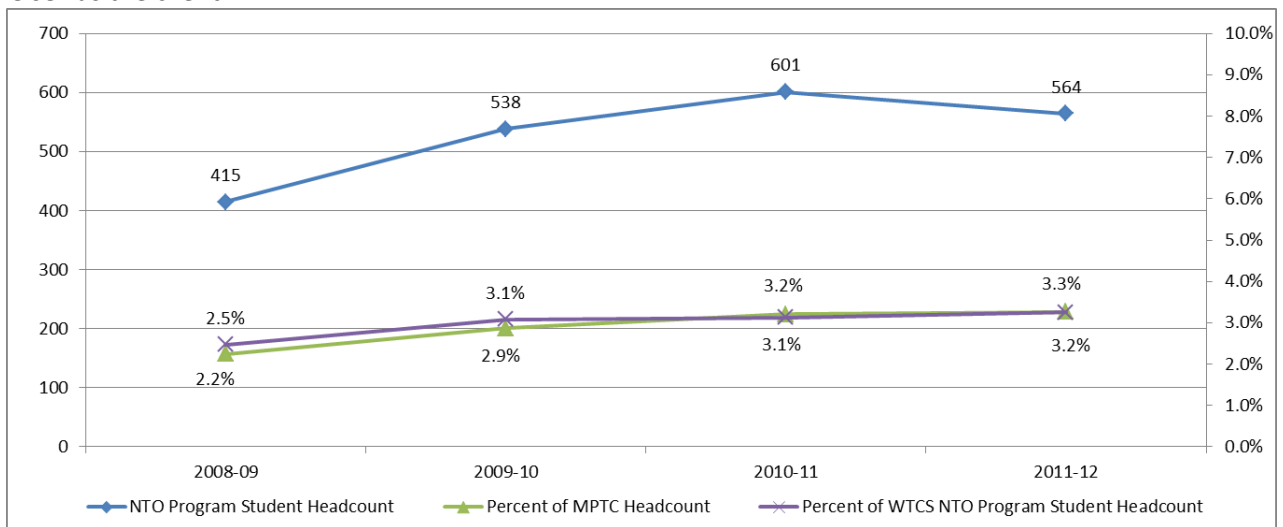
Report an individual who has limited ability in speaking, reading, writing, or understanding the English language, and – Whose native language is a language other than English; or who live in a family or community environment in which a language other than English is the dominant language; or Who is enrolled in English Language Learners (ELL) courses (instructional area 861).



(WTCS Lemon Client, July 26, 2012.)

**Count of NTO Program Students  
2008-09 through 2011-12**

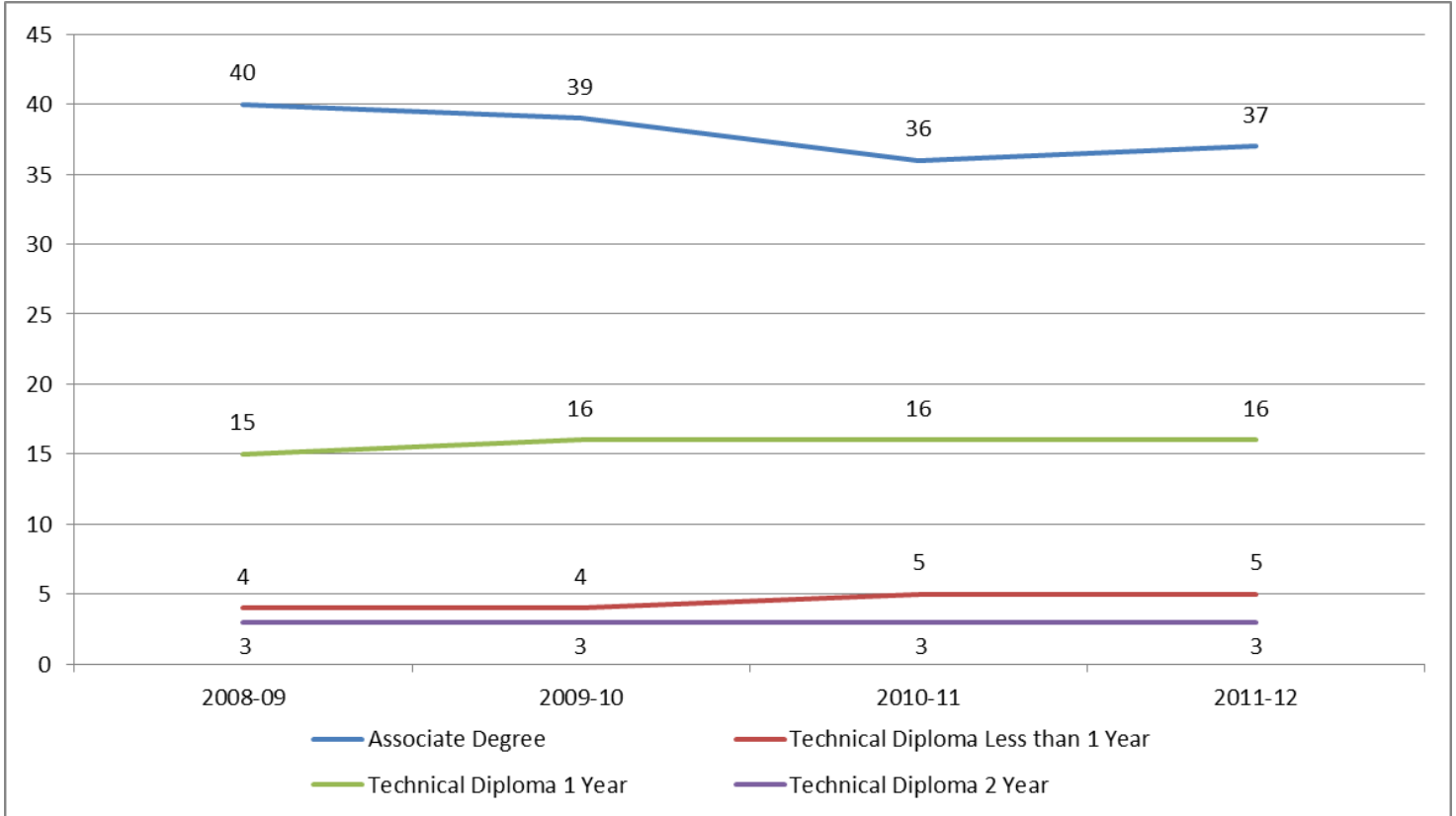
Client enrolled in a WTCS program or course(s) where less than 25% of the employees in related fields are of the same sex as the client.



(WTCS Lemon Client, July 26, 2012.)

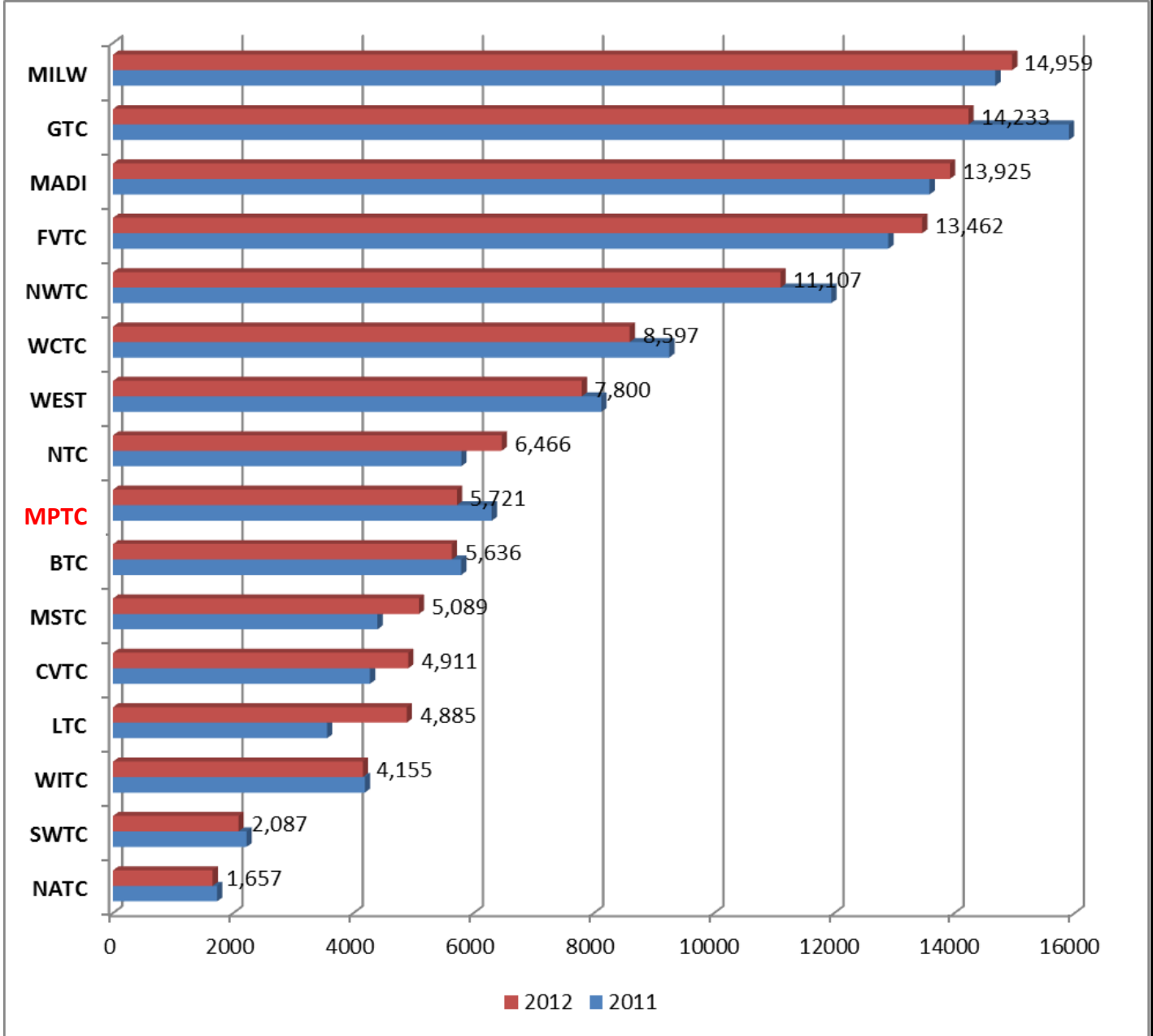
**PROGRAM AND FTE COUNTS**

**Moraine Park Technical College  
Number of Programs by Degree Level  
2008-09 through 2011-12**



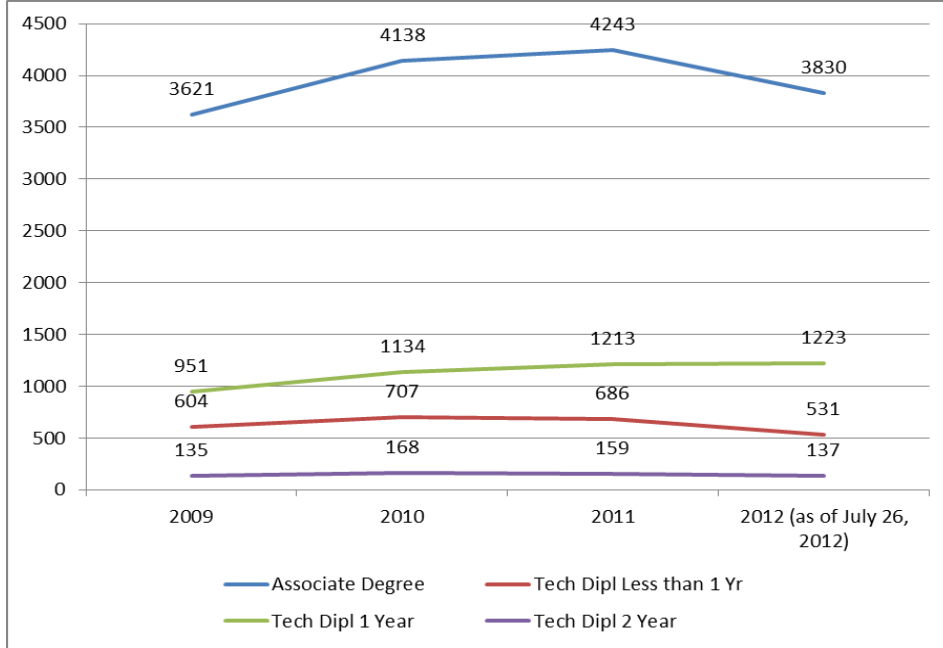
*(MPTC Program and Evaluation, July, 2012.)*

Wisconsin Technical College System - Program Enrollments - (Associate Degree and Technical Diploma Levels)  
2010-11 and 2011-12 (as of July 26, 2012)



(WTCS Lemon Client, July 26, 2012.)

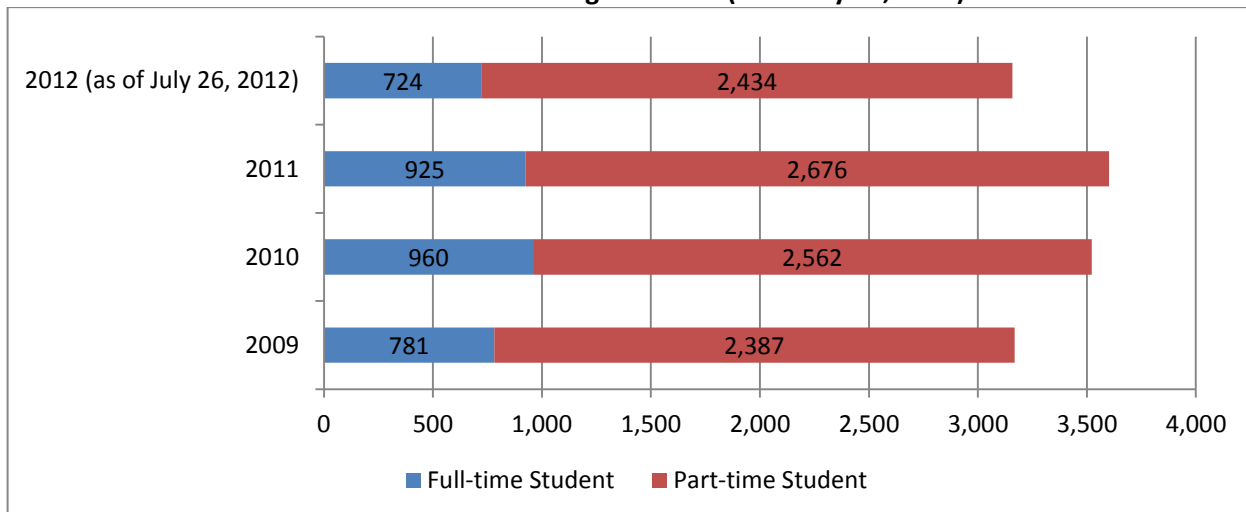
**Moraine Park Technical College - Program Enrollments by Degree Level  
2008-09 through 2011-12 (as of July 26, 2012)**



Aid Code Category	2008-09	2009-10	2010-11	2011-12 (as of July 26, 2012)
Associate Degree	3,621	4,138	4,243	3,830
Technical Diploma Less than 1 Year	604	707	686	531
Technical Diploma 1 Year	951	1134	1,213	1,223
Technical Diploma 2 Year	135	168	159	137

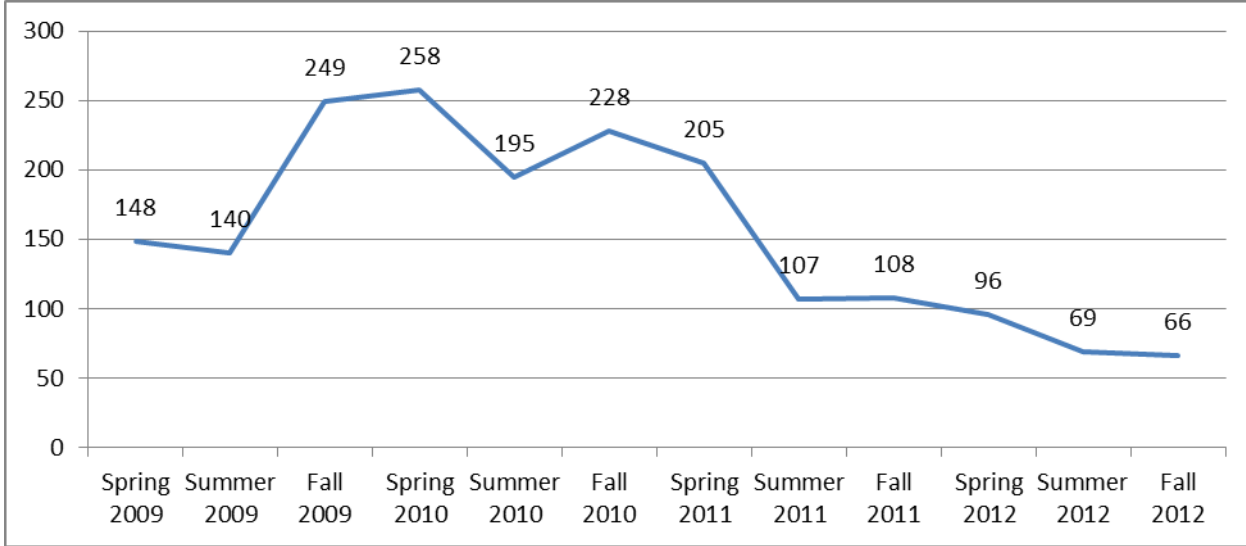
(WTCS Lemon Client, July 26, 2012.)

**Moraine Park Technical College - Full-time versus Part-time Program Students  
2008-09 through 2011-12 (as of July 26, 2012)**



(WTCS Lemon Client, July 26, 2012.)

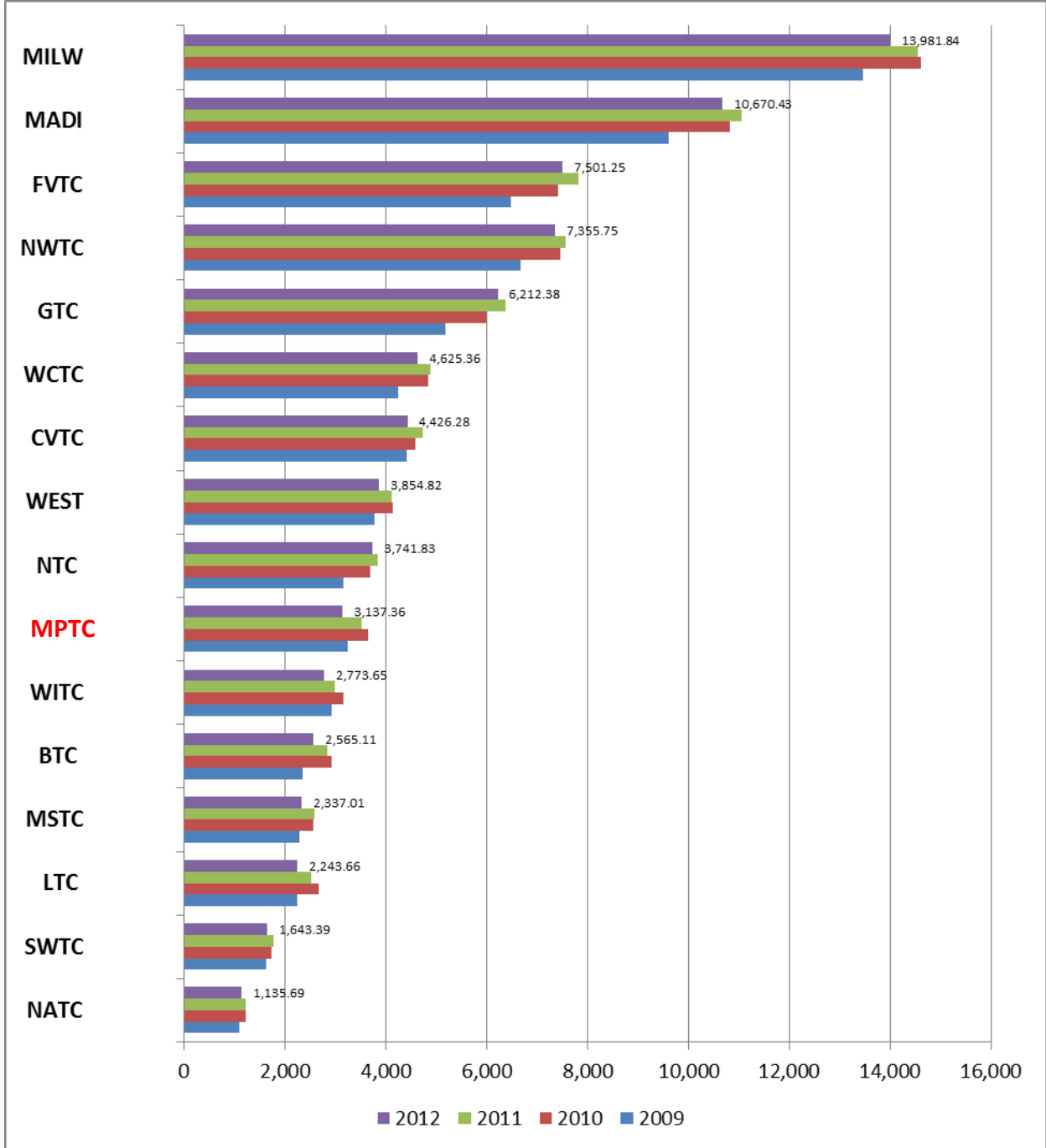
**Moraine Park Technical College - TRA/TAA Funded Students - By Term  
Spring 2009 through Fall 2012 (as of July 26, 2012)**



*(WTCS Lemon Client, July 26, 2012.)*

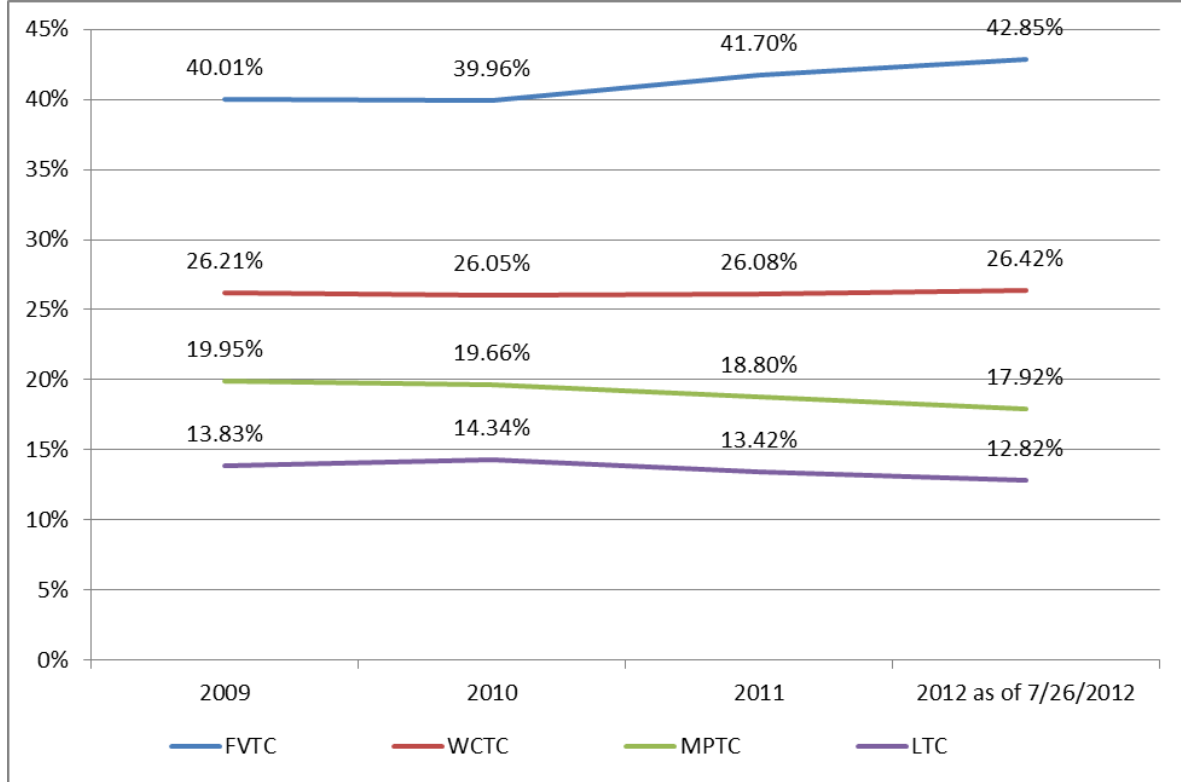


**Wisconsin Technical College System - FTE's by District  
2008-09 through 2011-12 (as of July 26, 2012)**



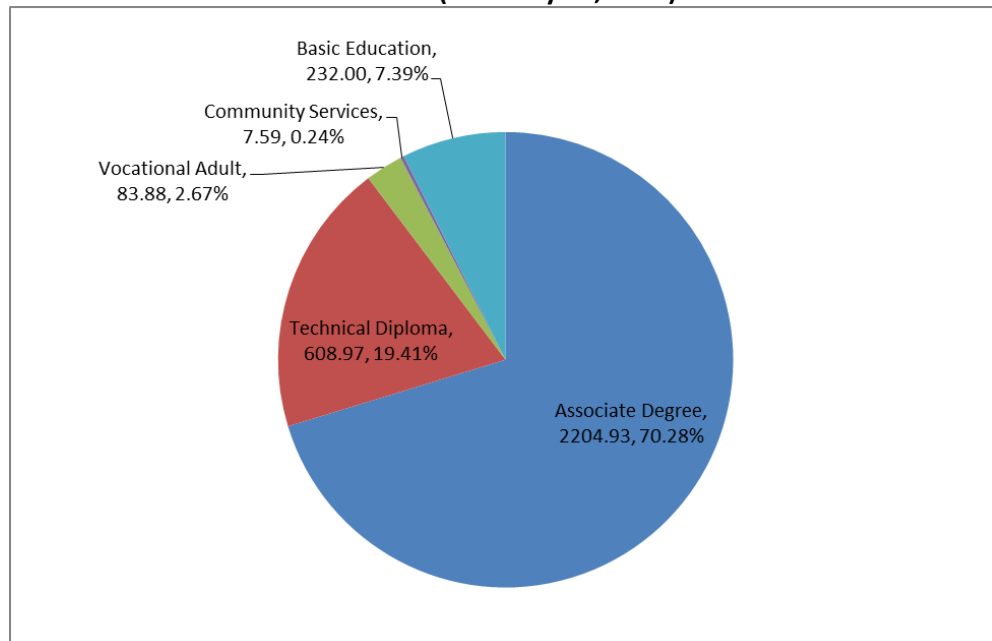
(WTCS Lemon Client, July 26, 2012.)

**Moraine Park Technical College - FTE's by Adjoining WTCS Colleges (FVTC, LTC, WCTC, MPTC)  
2008-09 through 2011-12 (as of July 26, 2012)**



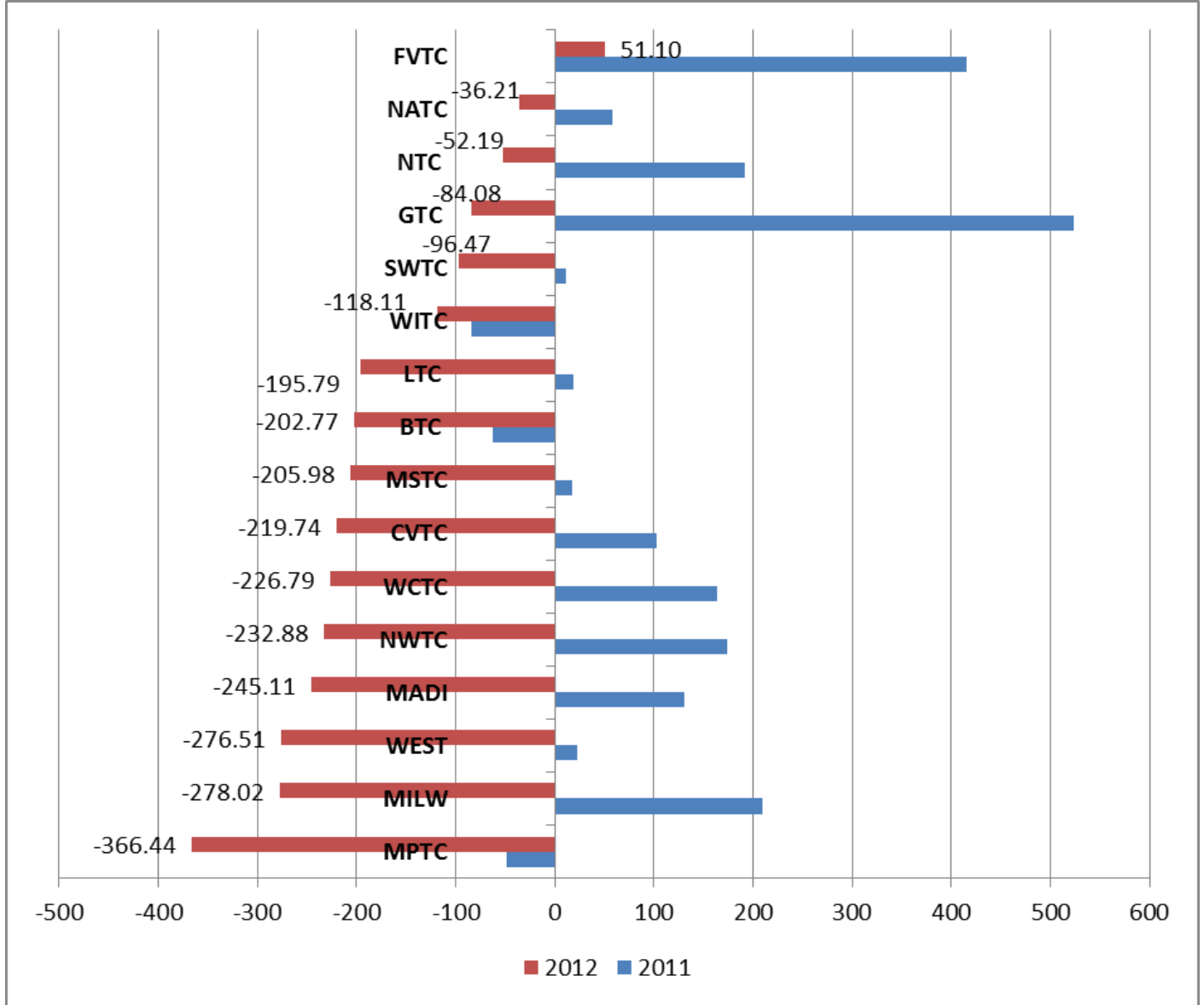
(WTCS Lemon Client, July 26, 2012.)

**Moraine Park Technical College - FTEs by Aid Code Category  
2011-12 (as of July 26, 2012)**



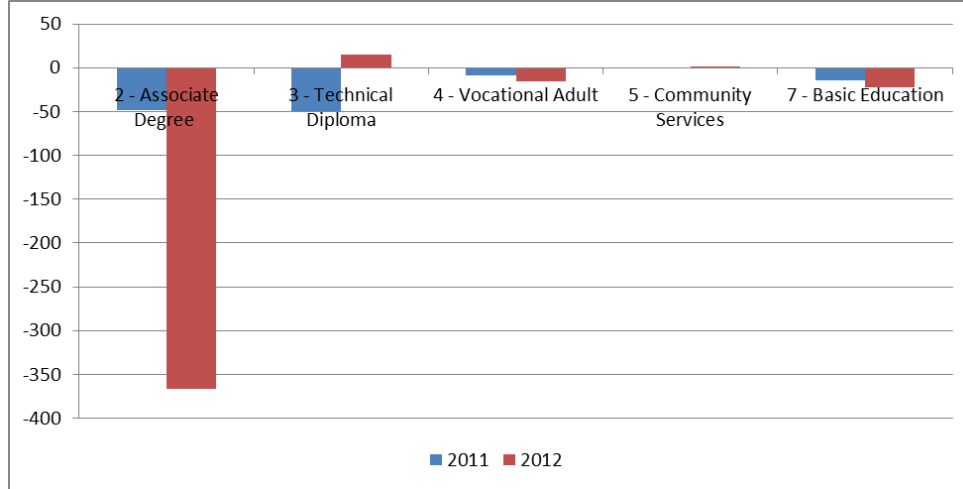
(WTCS Lemon Client, July 26, 2012.)

**Wisconsin Technical College System - FTE's Change - Associate Degree Level Courses  
2010-11 and 2011-12 (as of July 26, 2012)**



(WTCS Lemon Client, July 26, 2012.)

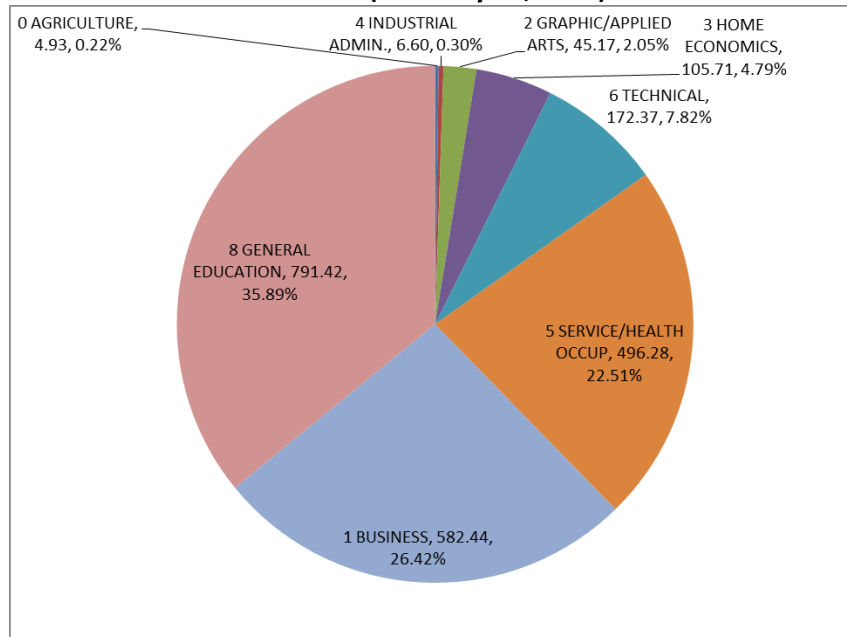
**Moraine Park Technical College - FTE's Change by Aid Code Category  
2010-11 compared to 2011-12 (as of July 26, 2012)**



Aid Code Category	2008-09	2009-10	2010-11	2011-12 (as of 7/26/2012)
Associate Degree	2,239.90	2,619.43	2,571.37	2,204.93
Technical Diploma	646.58	642.40	593.38	608.97
Vocational Adult	108.51	108.08	99.64	83.88
Community Service	.50	8.50	7.57	7.59
Basic Education	237.46	269.26	254.48	232.00

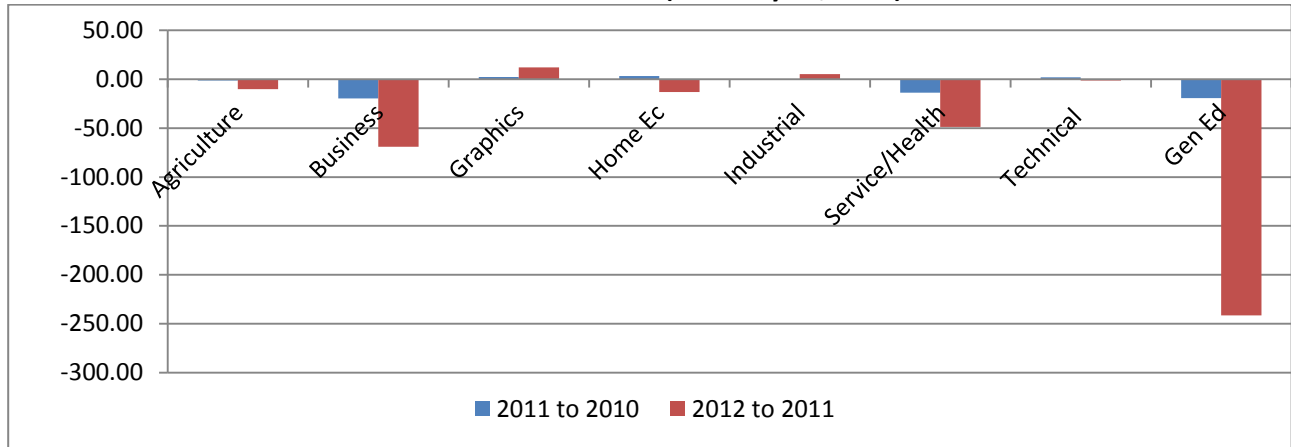
(WTCS Lemon Client, July 26, 2012.)

**Moraine Park Technical College - Associate Degree FTEs - By Division  
2011-12 (as of July 26, 2012)**



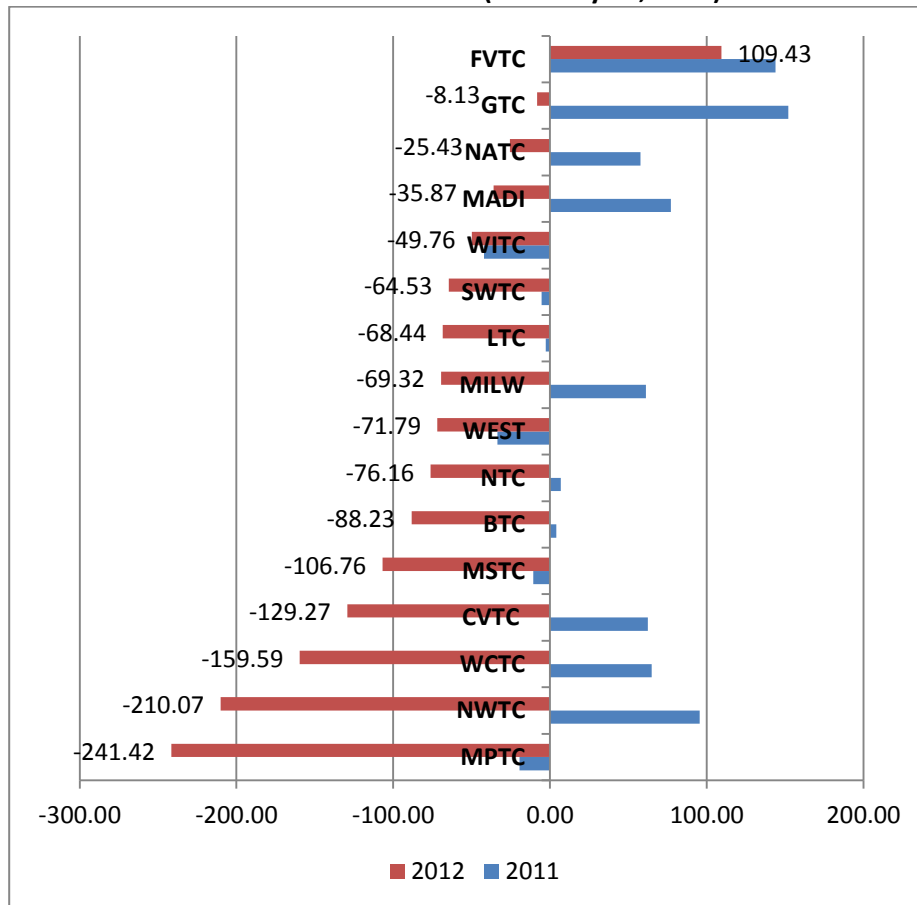
(WTCS Lemon Client, July 26, 2012.)

**Moraine Park Technical College - FTE's Change by Division - Associate Degree Level Courses  
2010-11 and 2011-12 (as of July 26, 2012)**



(WTCS Lemon Client, July 26, 2012.)

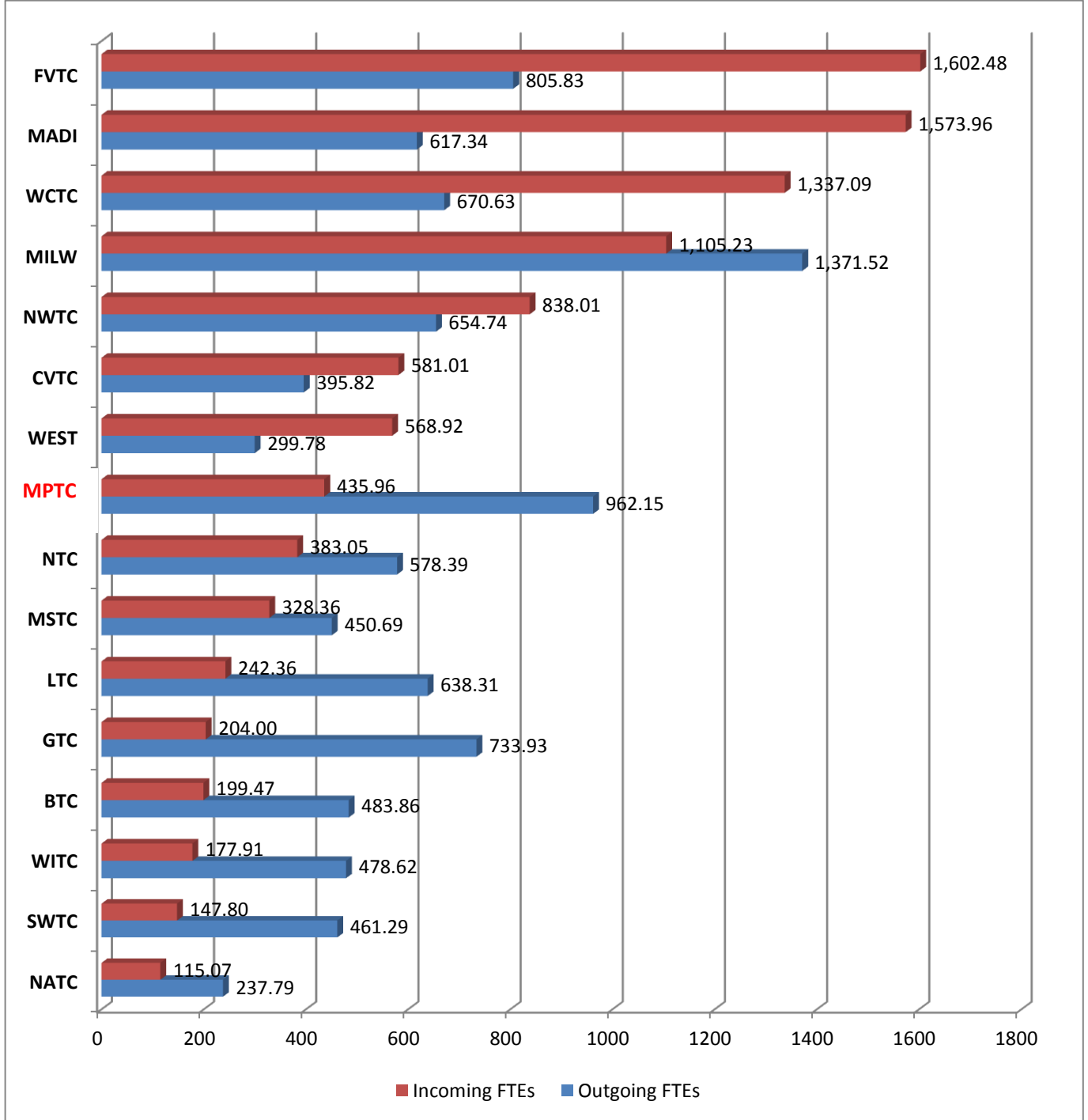
**Wisconsin Technical College System - FTE's Change - Associate Degree  
General Education Level Courses  
2010-11 and 2011-12 (as of July 26, 2012)**



(WTCS Lemon Client, July 26, 2012.)

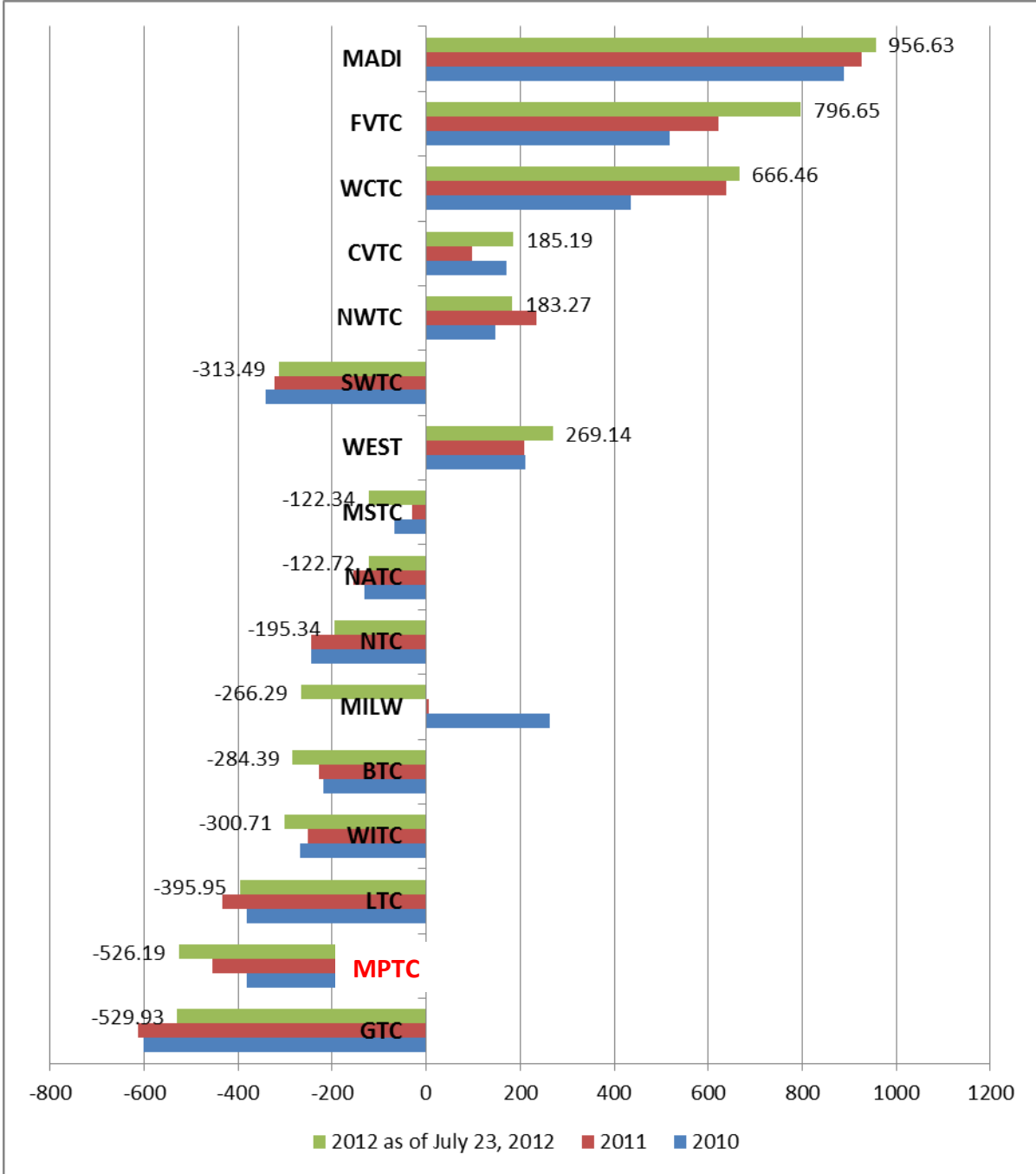
(Note: See Details for details of FVTC as FVTC experienced the only increase for Associate Degree level FTEs)

**Wisconsin Technical College System - Incoming and Outgoing FTE's  
2011-12 (as of July 26, 2012)**



(WTCS Lemon Client, July 26, 2012.)

**Wisconsin Technical College System - FTEs Net Gain/Loss - By Academic Year  
2009-10 through 2011-12 (as of July 26, 2012)**

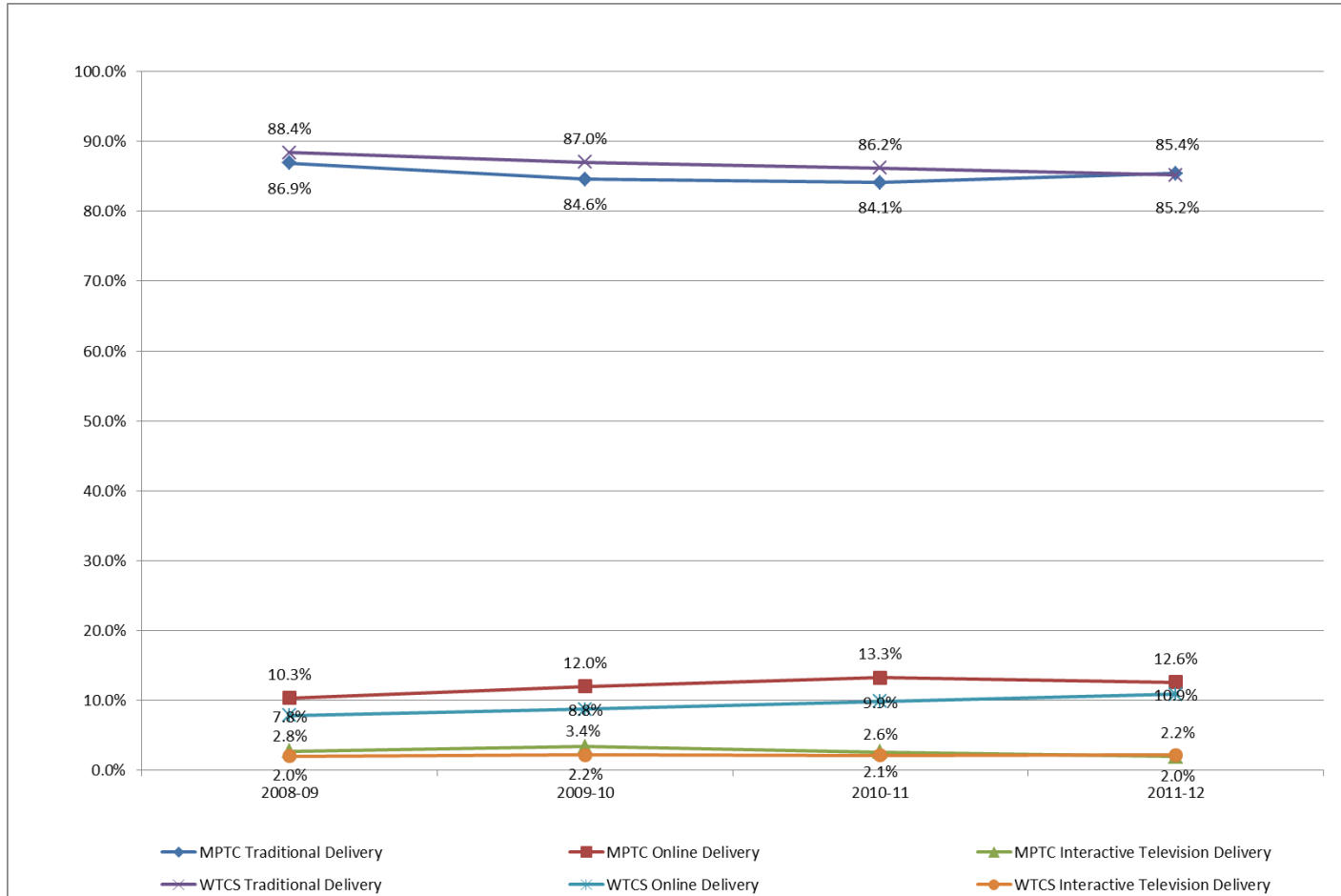


(WTCS Lemon Client, July 26, 2012.)

## COMPLETION RATE BY INSTRUCTIONAL METHOD

### Delivery Method Enrollment 2008-09 through 2011-12

As a percent of enrollment, the traditional delivery method greatly leads online and interactive television delivery. Remaining WTCS percent's comprised of Computer Delivered, Satellite Video Conference, Computer Conferencing, and Print-Based Correspondence delivery methods.

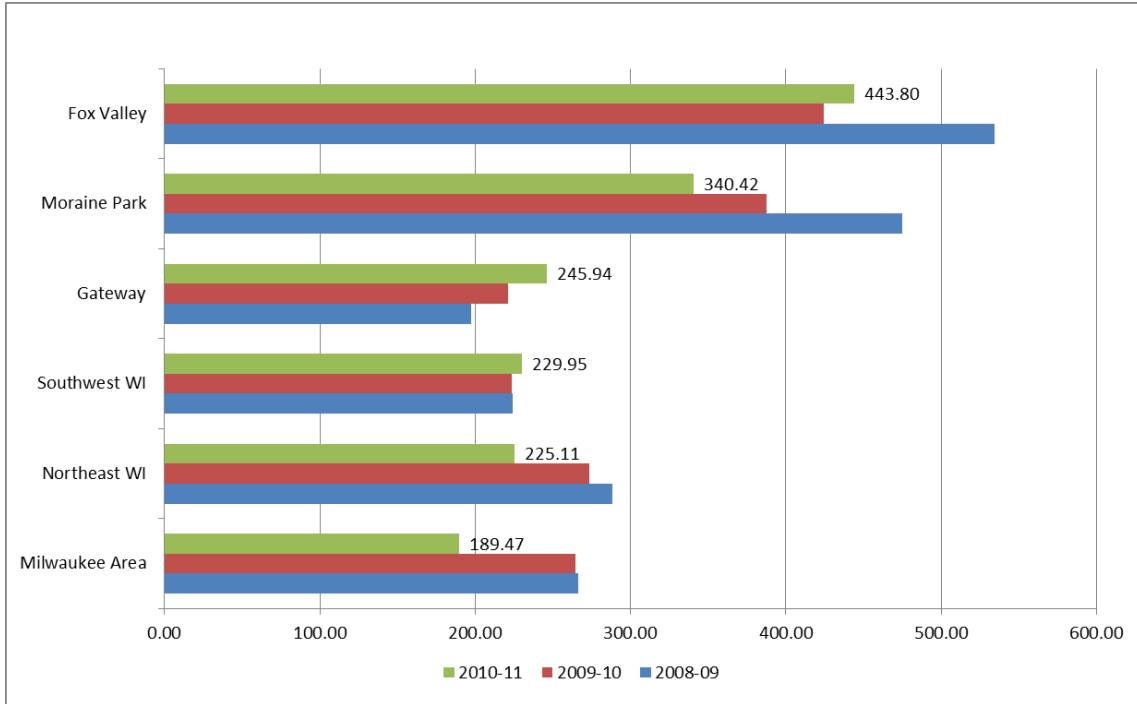


(WTCS Lemon Client, July 26, 2012.)



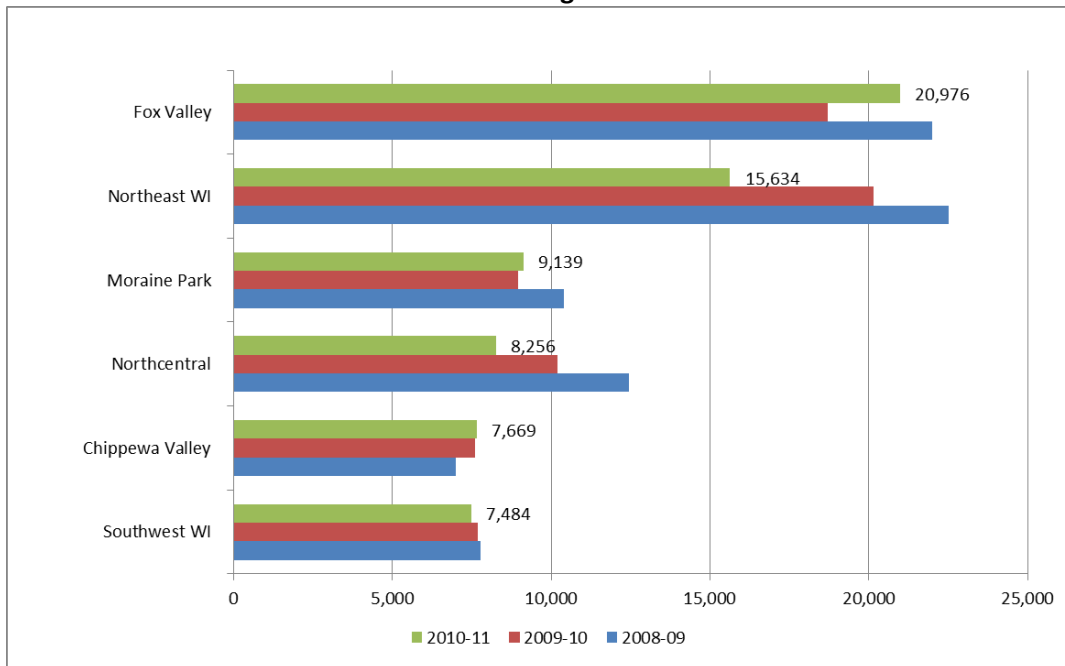
**ECONOMIC WORKFORCE AND DEVLEOPMENT DATA**

**Top Six Instructional Contract & Professional Development FTE Combined  
2008-09 through 2011-12**



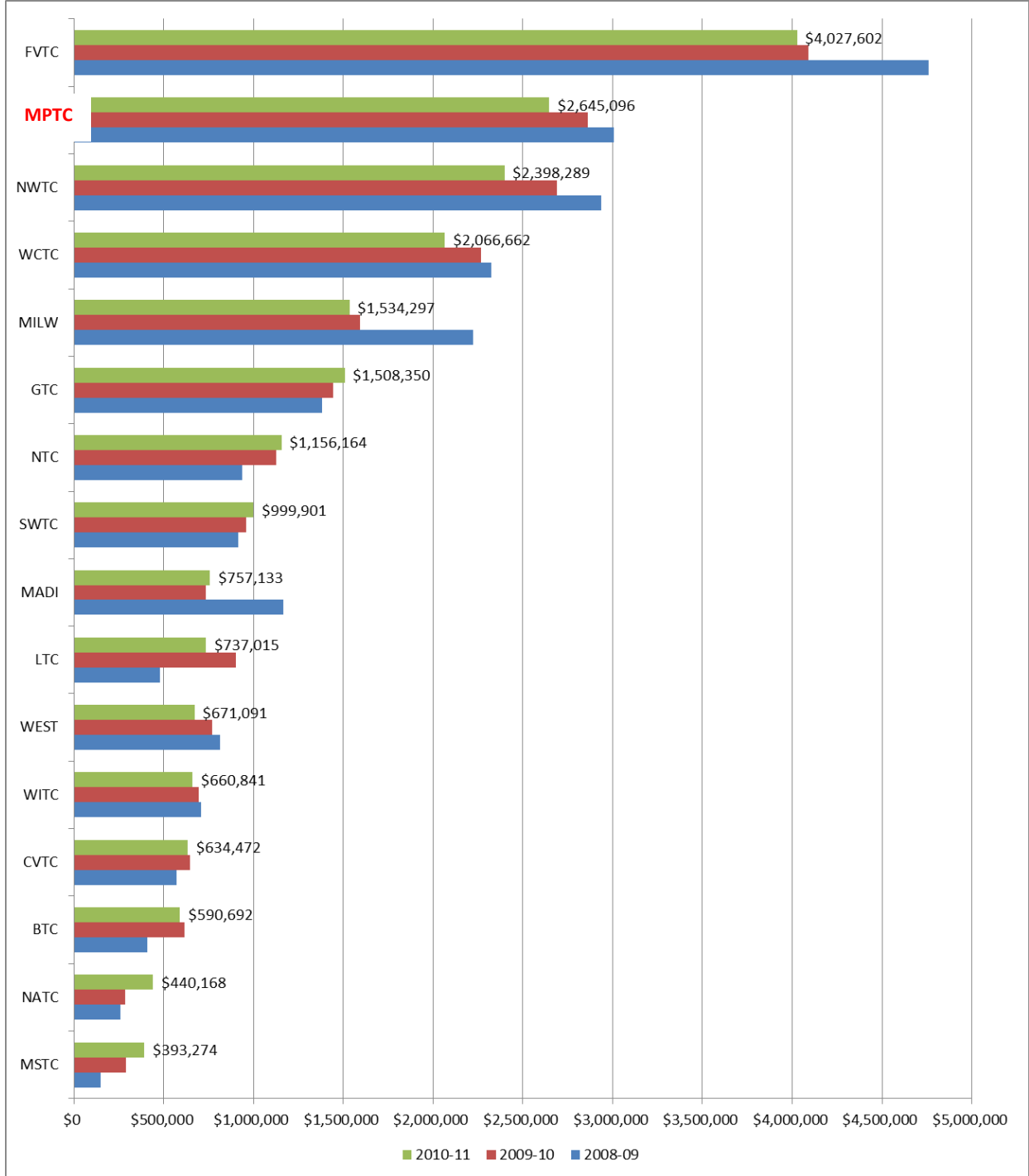
(WTCS Contracting/Professional Development/Mandated Training FTEs, [www.wtcsystem.edu](http://www.wtcsystem.edu), July, 2012.)

**Top Six Instructional Contract & Professional Development Number Served  
2008-09 through 2011-12**



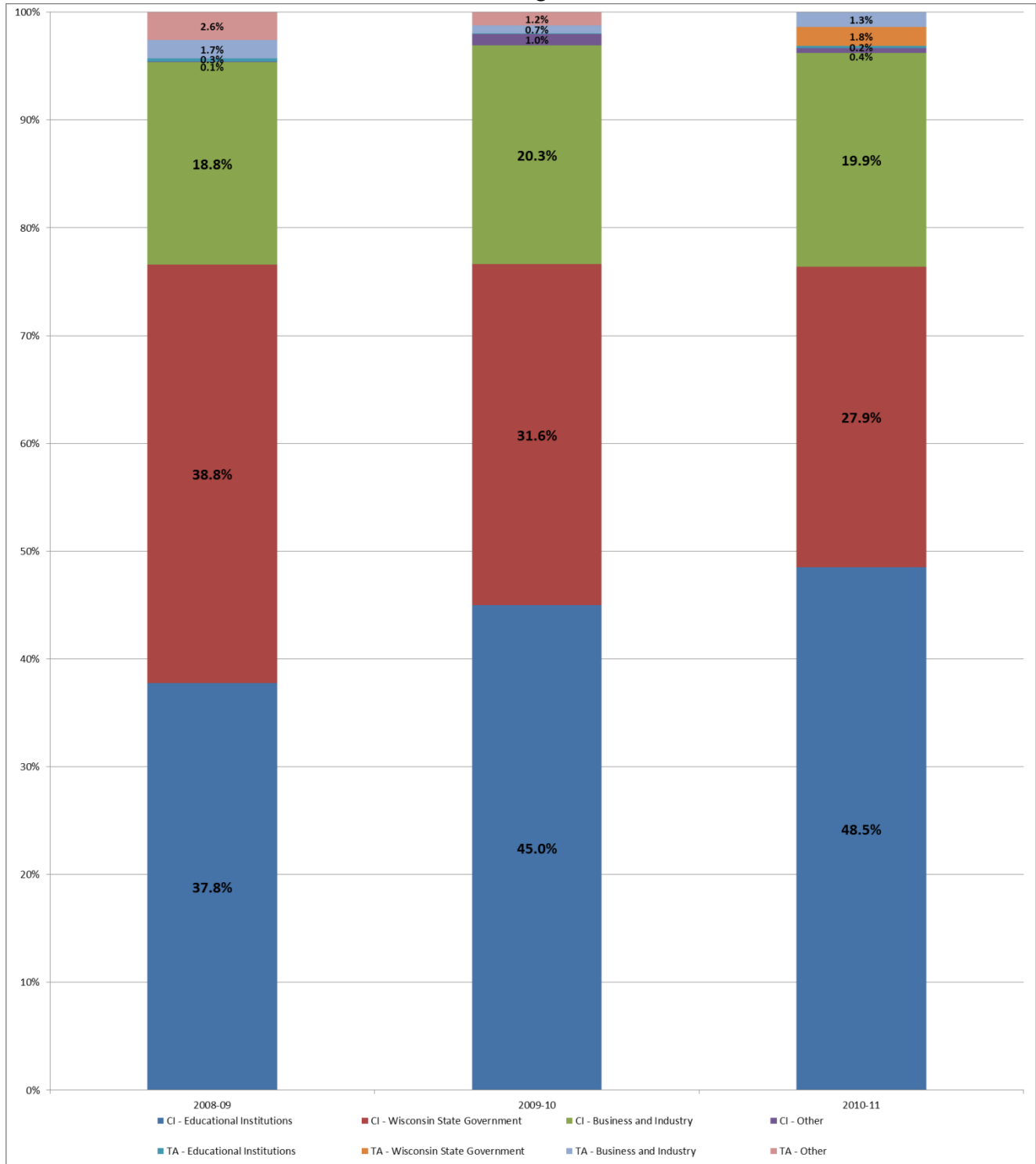
(WTCS Contracting/Professional Development/Mandated Training FTEs, [www.wtcsystem.edu](http://www.wtcsystem.edu), July, 2012.)

### Customized Instruction Contract Revenue 2008-09 through 2010-11



(WTCS Contracting, [www.wtcsystem.edu](http://www.wtcsystem.edu), July, 2012.)

**Customized Instruction and Technical Assistance Revenue as a Percent of Contract Revenue  
2008-09 through 2010-11**

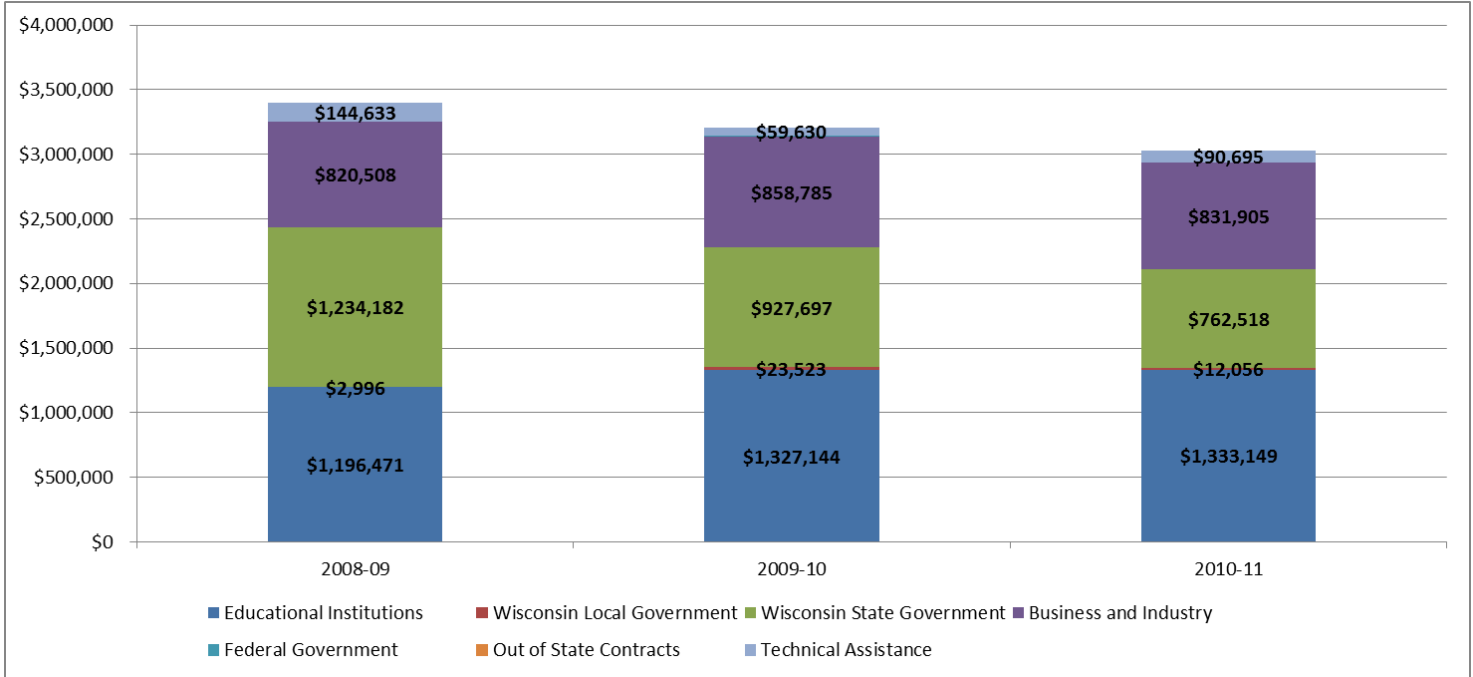


(WTCS Contracting, [www.wtcsystem.edu](http://www.wtcsystem.edu), July, 2012.)

Other is: Wisconsin Local Government, Federal Government, and Out of State Contracts

Note: CI = Customized Instruction TA = Technical Assistance

**Customized Instruction and Technical Assistance Contract Revenue  
2008-09 through 2010-11**



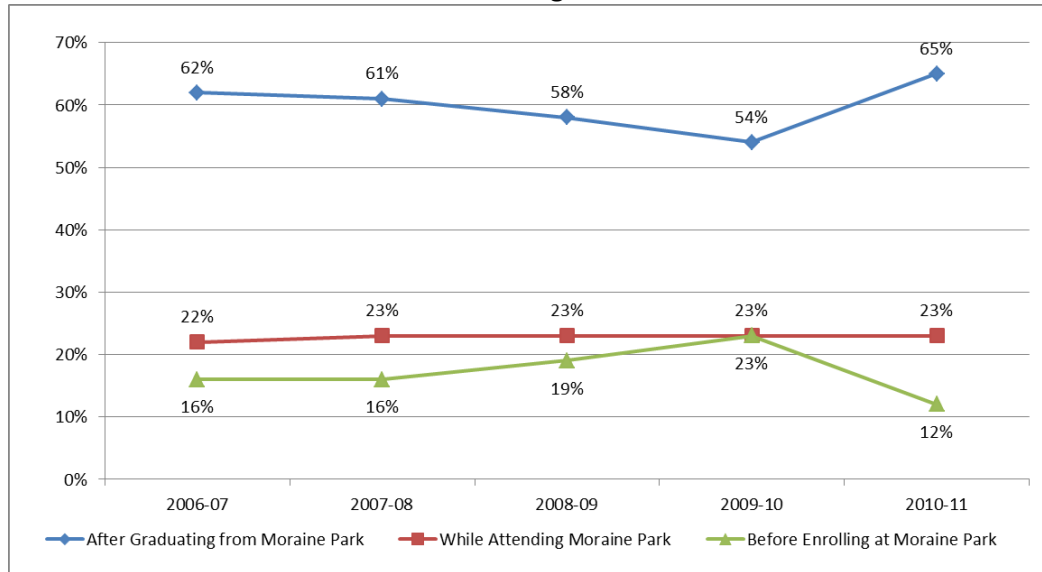
*(WTCS Contracting, www.wtcsystem.edu, July, 2012.)*

**SURVEY INFORMATION**

**Graduate Follow-up**

Based on trend data from the annual Graduate Follow-Up Survey, the majority of responding graduates have indicated finding employment after graduating from Moraine Park. [Click here](#) for the complete Graduate Follow-up Report. In 2010-11, 781 responded out of 1,080 graduates for a response rate of 72.3%.

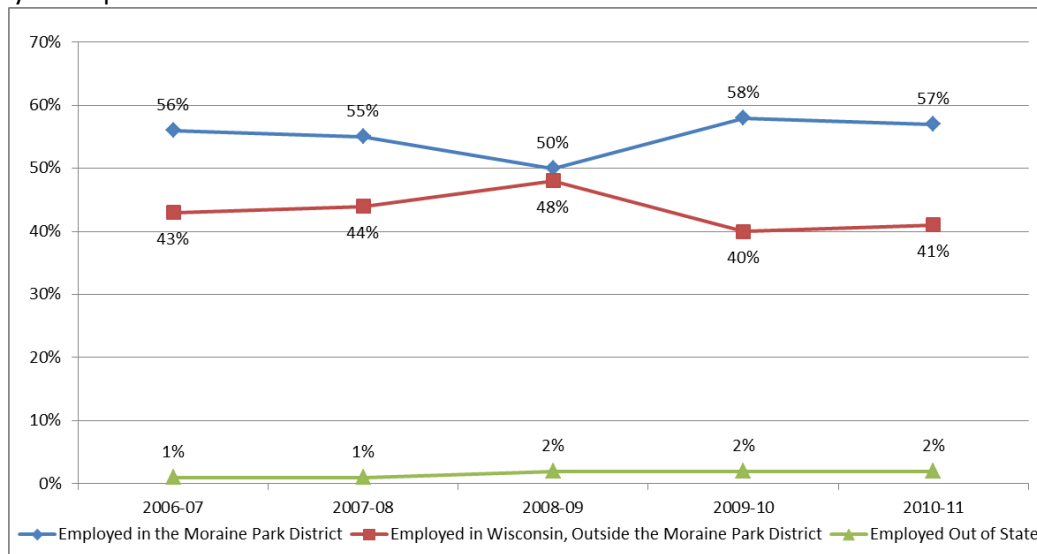
**Time of Hire in Related Occupation  
2006-07 through 2010-11**



*(MPTC Institutional Research, Graduate Follow-up Survey, April, 2012.)*

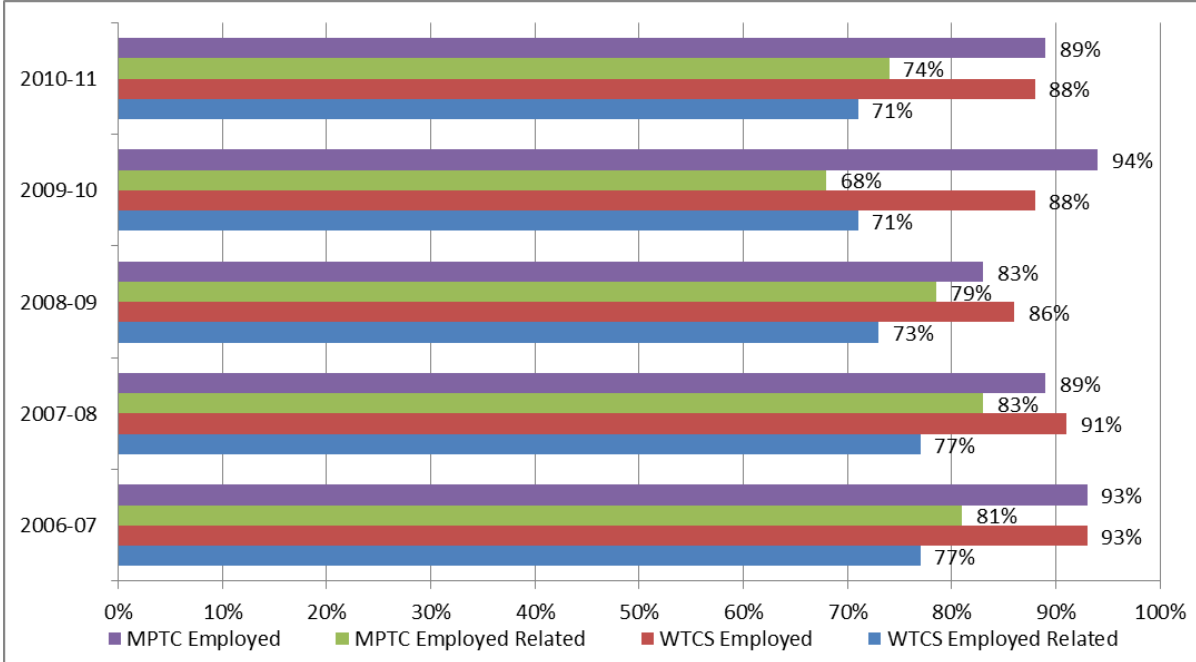
**Location of Employment  
2006-07 through 2010-11**

Of respondents to the Graduate Follow-Up Survey, the majority of graduates are employed in the Moraine Park district. Nearly all respondents have remained in Wisconsin.



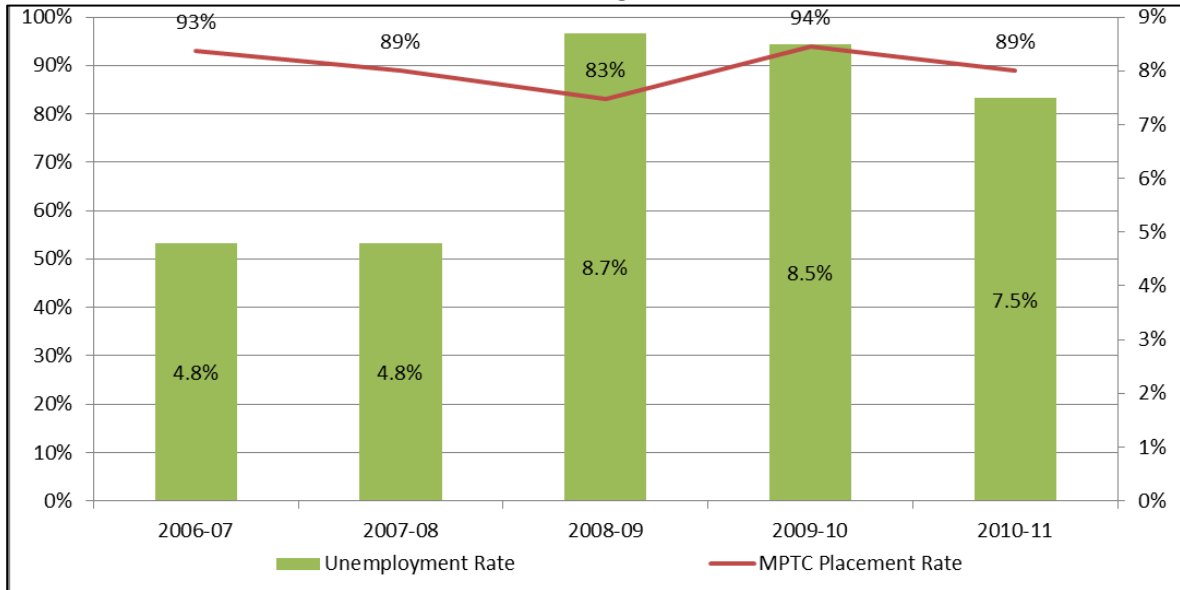
*(MPTC Institutional Research, Graduate Follow-up Survey, April, 2012.)*

**Job Placement MPTC vs. WTCS  
2006-07 through 2010-11**



(MPTC Institutional Research, Graduate Follow-up Survey, April, 2012.)

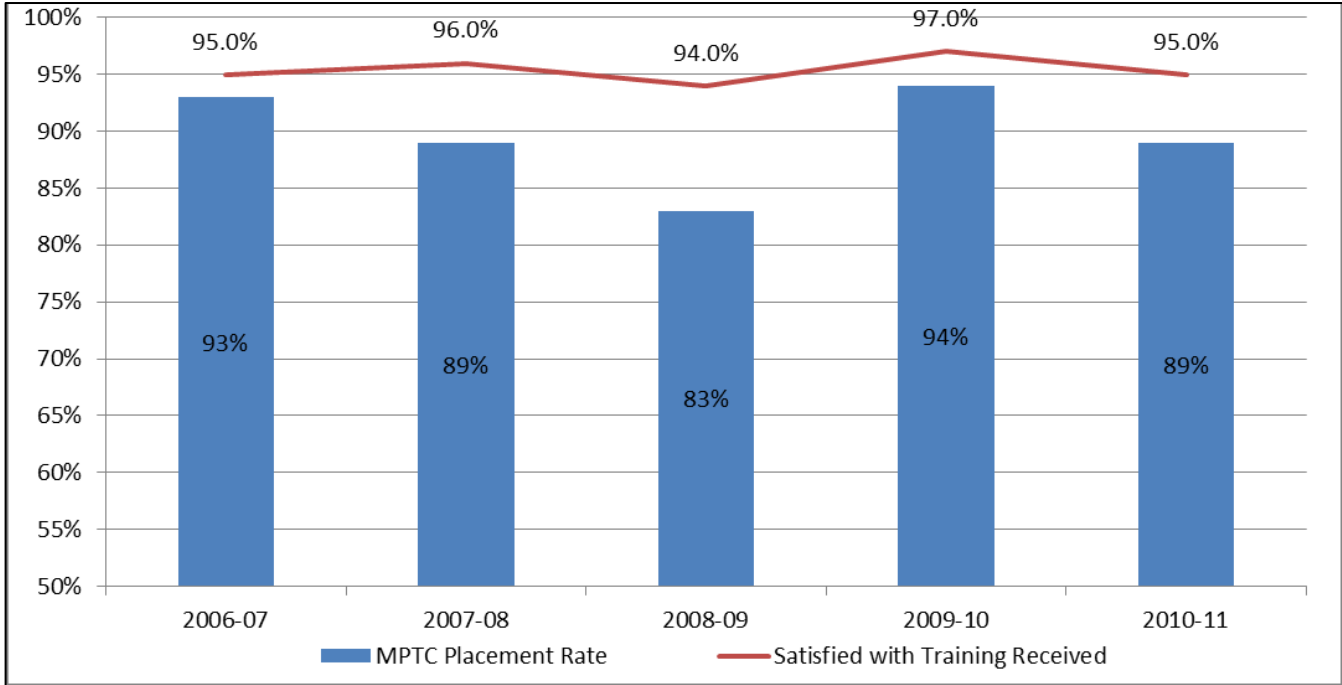
**Job Placement and WI Unemployment  
2006-07 through 2010-11**



(Graduate Follow- Up and WorkNet <http://worknet.wisconsin.gov/worknet/>, April, 2012.)

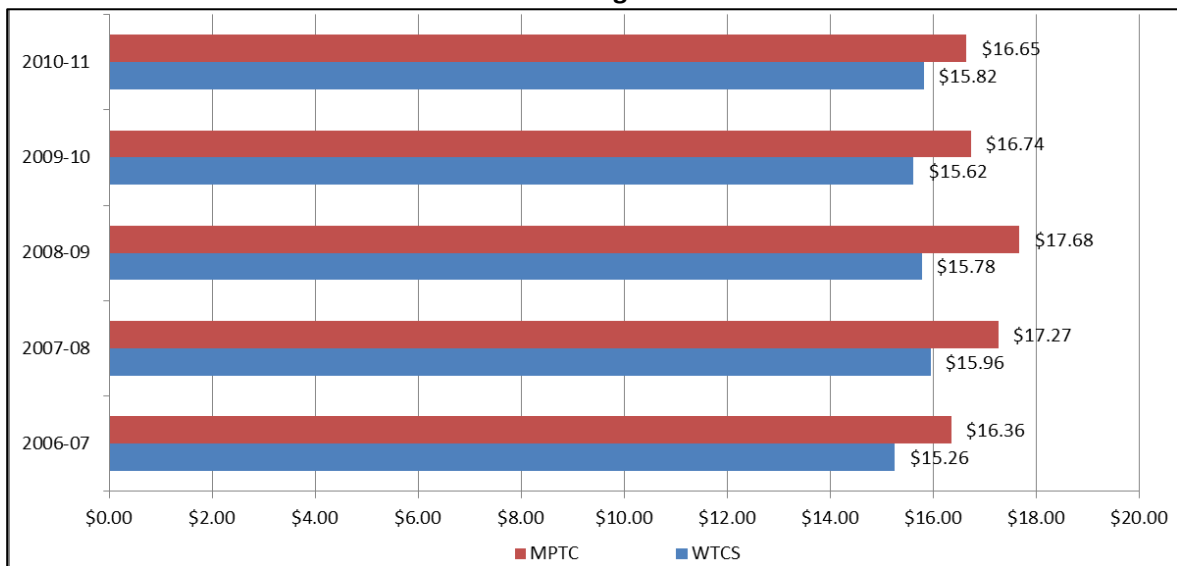
**Job Placement and Satisfaction  
2006-07 through 2010-11**

Trend results to the Graduate Follow-Up Survey demonstrate that placement rate and satisfaction with training received have a positive relationship. As placement decreases, satisfaction tends to decrease, and as placement increases, satisfaction tends to increase.



*(MPTC Institutional Research, Graduate Follow-up Survey, April, 2012.)*

**Graduates' Mean Hourly Wage  
2006-07 through 2010-11**



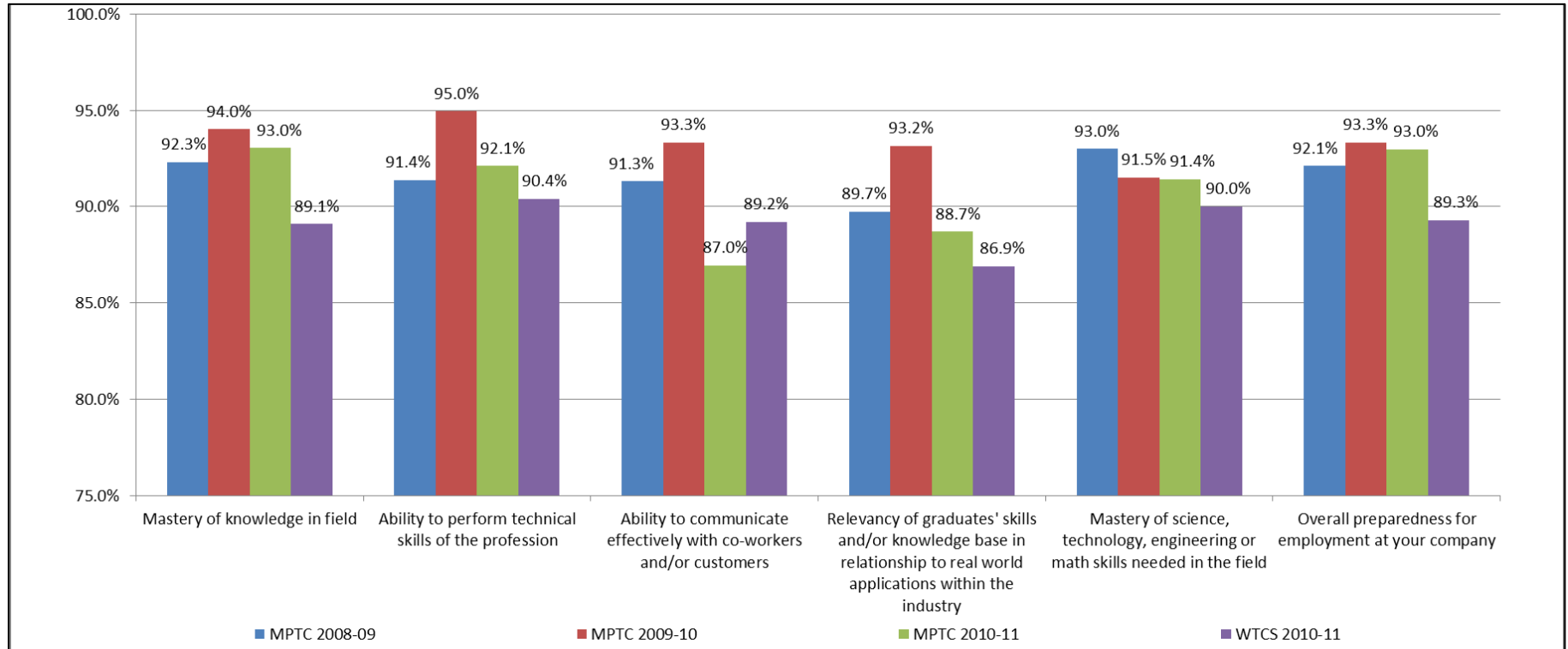
Note: Employed in a related field and working 35 or more hours per week.

*(MPTC Institutional Research, Graduate Follow-up Survey, April, 2012.)*

### Employer Follow-up

Sum of Exceeds Expectations and Meets Expectations. In 2010-11, 115 responded out of 158 employers for a response rate of 72.8%.

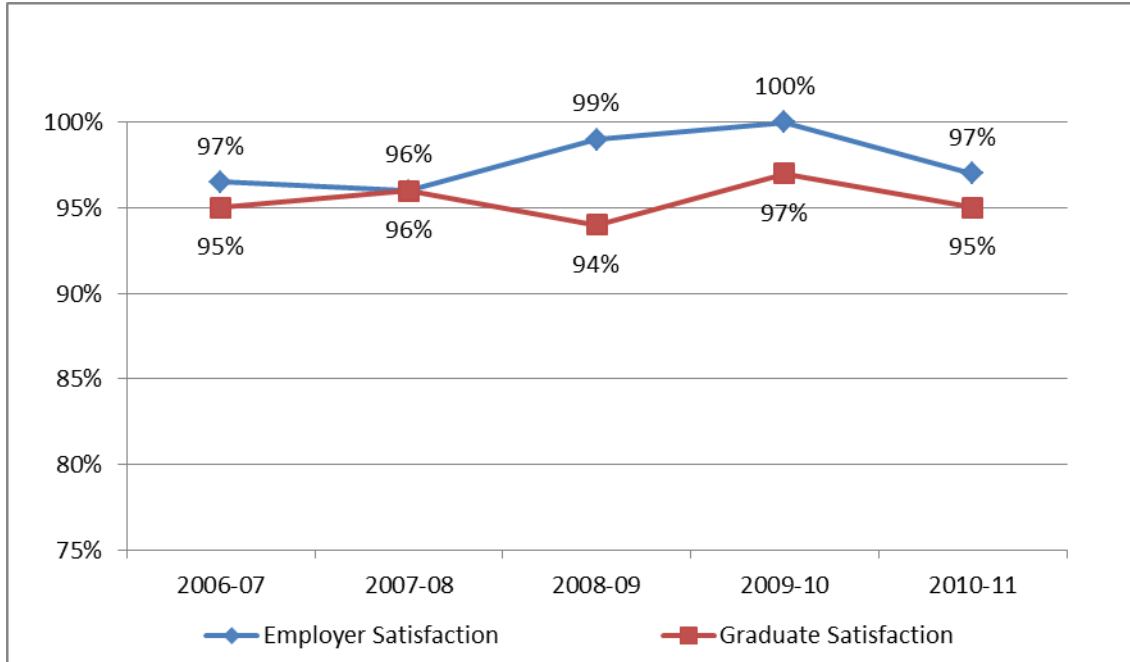
**Percent of Graduates Meeting or Exceeding Employer Expectations  
2008-09 through 2010-11**



*(MPTC Institutional Research, Employer Follow Survey, May, 2012.)*



**Employer and Graduate Satisfaction  
2006-07 through 2010-11**



*(Employer & Graduate Follow-up Surveys, May, 2012.)*

**GRANTS**

**Perkins IV: MPTC 3 year Cohort Outcomes  
FINAL AGREED UPON PERFORMANCE LEVELS (FAUPL)**

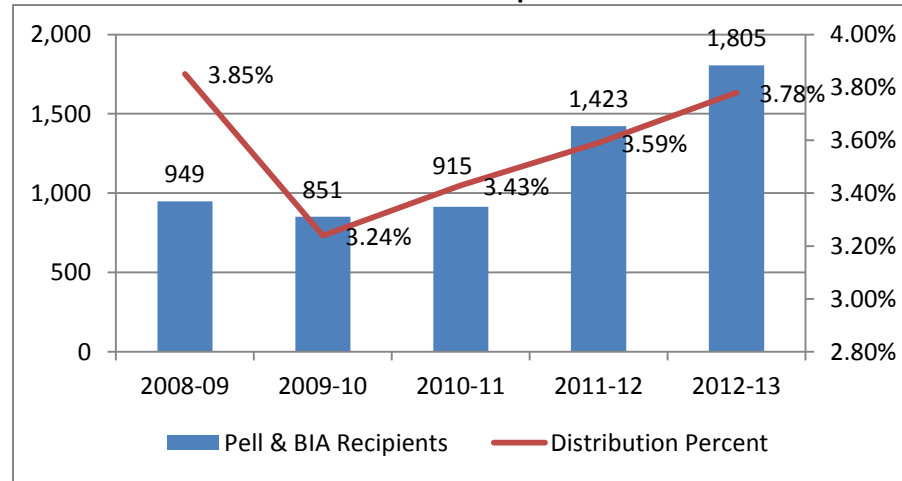
<b>Indicator</b>	<b>Year One 7/1/07- 6/30/08</b>	<b>Year Two 7/1/08- 6/30/09</b>	<b>Year Three 7/1/09- 6/30/10</b>	<b>Year Four 7/1/10- 6/30/11</b>	<b>Year Five 7/1/11- 6/30/12</b>	<b>Year Six 7/1/12- 6/30/13</b>
<b>1P1 Technical Skill Attainment</b>	L: 83.90% A: 82.70% 832/1006	L: 84.28% A: 82.17% 705/858	L: 84.70% A: 80.77% 672/832	L: 84.85% A: 79.19% 898/1134	L: 84.95% A:	L: 85.00% A:
<b>Improvement Plan Required</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>Proposed</b>	<b>Proposed</b>
<b>1P2 Academic Skill Attainment</b>	L: 76.72% A: 77.94% 710/911	L: 77.03% A: 76.93% 587/763	L: 77.49% A: 78.73% 585/743	L: 77.57% A: 78.20% 825/1055	L: 77.65% A:	L: 77.73% A:
<b>Improvement Plan Required</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>Proposed</b>	<b>Proposed</b>
<b>2P1 Credential, Certificate, or Diploma Attainment</b>	L: 40.37% A: 45.69% 472/1033	L: 40.73% A: 41.68% 363/871	L: 41.04% A: 41.72% 350/839	L: 41.14% A: 40.57% 471/1161	L: 41.29% A:	L: 41.79% A:
<b>Improvement Plan Required</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>Proposed</b>	<b>Proposed</b>
<b>3P1 Student Retention or Transfer</b>	L: 31.63% A: 26.82% 277/1033	L: 31.88% A: 30.65% 267/871	L: 32.13% A: 29.56% 248/839	L: 32.47% A: 35.23% 409/1161	L: 32.93% A:	L: 33.43% A:
<b>Improvement Plan Required</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>NO</b>	<b>Proposed</b>	<b>Proposed</b>
<b>2P1 + 3P1 Combination of Graduation and Retention/Transfer</b>	L: 72.00% A: 72.51% 624/1033	L: 72.61% A: 72.33% 630/871	L: 73.17% A: 71.28% 598/839	L: 73.61% A: 75.80% 880/1161	L: 74.22% A:	L: 75.22% A:
<b>Improvement Plan Required</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>Proposed</b>	<b>Proposed</b>
<b>4P1 Student Placement 113(b)(2)(B)(iv)</b>	L: 92.00% A: 95.07% 347/365	L: 92.00% A: 94.69% 446/471	L: 92.00% A: 93.64% 383/409	L: 92.00% A: 91.12% 431/473	L: 92.00% A:	L: 92.00% A:
<b>Improvement Plan Required</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>Proposed</b>	<b>Proposed</b>
<b>5P1 Nontraditional Participation</b>	L: 9.89% A: 9.87% 279/2826	L: 10.04% A: 10.78% 398/3692	L: 10.23% A: 11.35% 466/4105	L: 10.27% A: 13.46% 535/3976	L: 11.58% A:	L: 11.63% A:
<b>Improvement Plan Required</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>Proposed</b>	<b>Proposed</b>
<b>5P2 Nontraditional Completion</b>	L: 6.93% A: 7.27% 50/688	L: 7.19% A: 8.77% 52/593	L: 7.54% A: 7.07% 43/608	L: 7.64% A: 8.48% 53/625	L: 8.56% A:	L: 8.66% A:
<b>Improvement Plan Required</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>Proposed</b>	<b>Proposed</b>

Indicates you missed the target, but no improvement plan required

*(MPTC Resource Department, Carl D. Perkins Grant, July 2012.)*

**PELL/BIA RECIPIENTS INFORMATION**

**CARL D. PERKINS CAREER AND TECHNICAL EDUCATION ACT OF 2006  
Moraine Park Technical College  
FY 2008-13 Basic Grant Planning Amounts  
Pell & BIA Recipients**

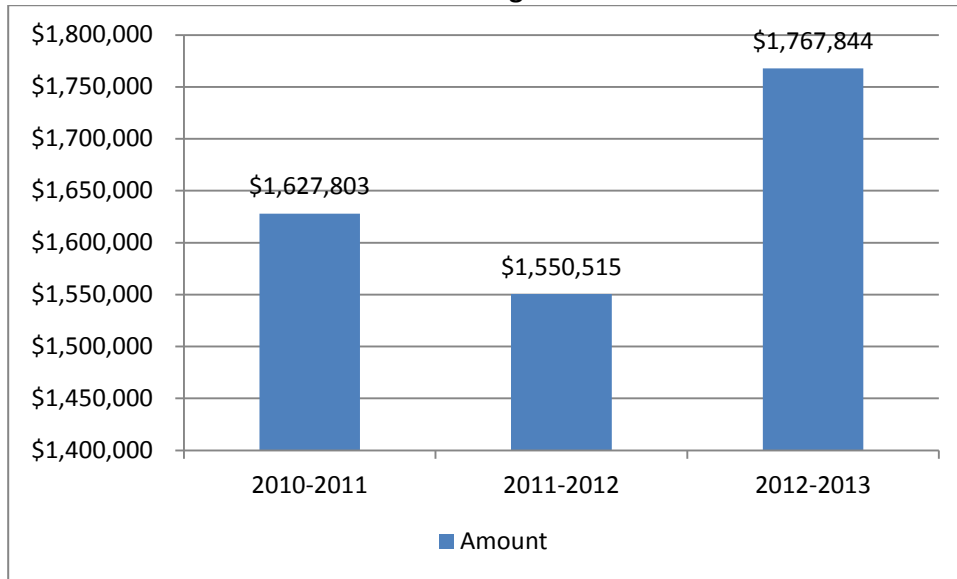


CARL D. PERKINS CAREER AND TECHNICAL EDUCATION ACT OF 2006								
Moraine Park Technical College								
FY 2008-13 Basic Grant Planning Amounts								
Fiscal	Pell & BIA	Distribution	Student	Strengthening	Nontraditional	Flexible	Planned	Reserve
Year	Recipients*	Percent	Success	Programs	Occupations	Funds	Maintenance	Funds**
			(50%)**	(20%)**	(5%)**	(25%)**	of Effort	
2008-09	949	3.85%	\$175,503	\$70,201	\$17,550	\$87,752	\$260,100	
2009-10	851	3.24%	\$147,700	\$59,100	\$14,800	\$73,800	\$260,100	
2010-11	915	3.43%	\$155,800	\$62,300	\$15,600	\$77,900	\$260,100	
2011-12	1,423	3.59%	\$161,600	\$64,600	\$16,200	\$80,800	\$260,100	
2012-13	1,805	3.78%	\$156,797	\$62,719	\$15,680	\$78,398	\$238,900	
<b>Total</b>	<b>5,943</b>	<b>17.89%</b>	<b>\$797,400</b>	<b>\$318,920</b>	<b>\$79,830</b>	<b>\$398,650</b>	<b>\$1,279,300</b>	

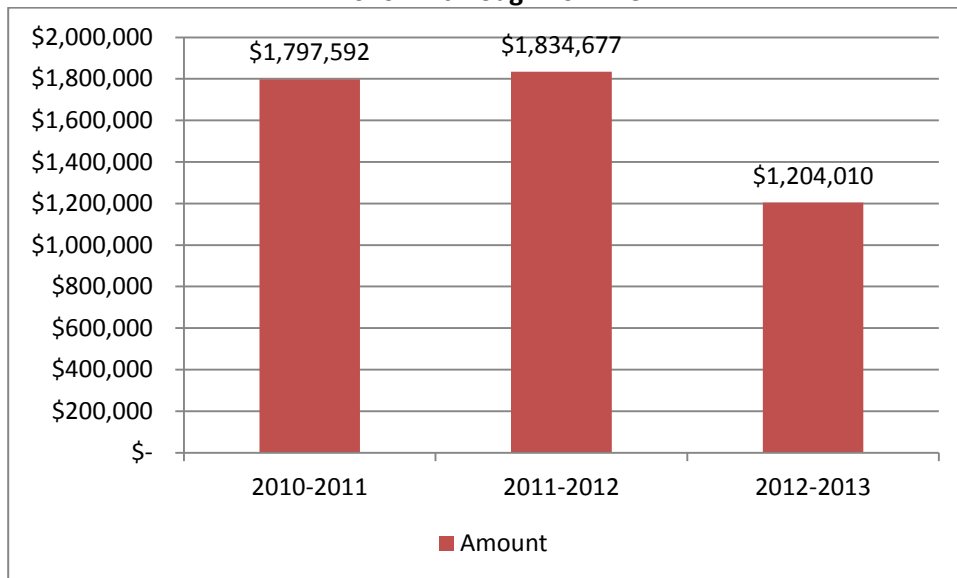
*(MPTC Resource Department, Carl D. Perkins Grant, July 2012.)*

## Moraine Park Technical College Grant Projects 2010-2013

### WTCS Grants Awarded 2010-11 through 2012-13



### Federal Grants Awarded 2010-11 through 2012-13



(MPTC Resource Department, Grants, July 2012.)

## INFORMATION TECHNOLOGY AND WEBSITE DATA

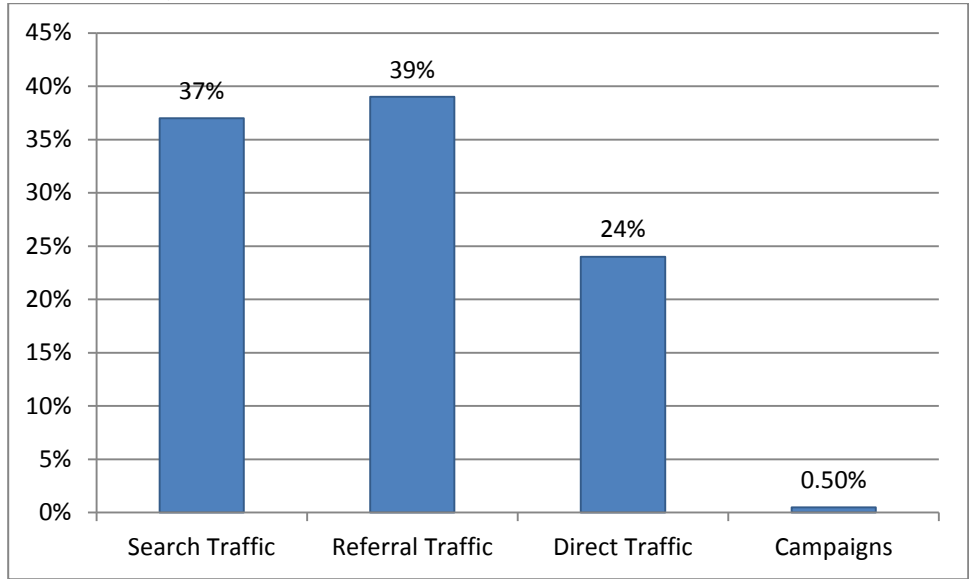
Americas 10 Largest Websites:

Rank	Company	MPTC Presence or Advertising	Visits *
1.	Google	Moraine Park has advertised on Google AdWords, but only a few select times. Currently investigating more opportunities with the Statewide Marketing Group for Google AdWords.	4,336
2.	YouTube	Not currently advertising, but MPTC has a YouTube Channel.	0
3.	Facebook	Moraine Park has an official Facebook page, along with several other groups within the college that have approved Facebook pages (Techniques Salon, The Edge Program at MPTC, Office Plus – West Bend, Moraine Park Community Education). There are other unapproved MPTC Facebook Pages as well. We also advertise on Facebook periodically throughout the year.	1,282 (84 from m.facebook.com, their mobile site)
4.	Amazon	Not currently advertising	14
5.	Yahoo	Advertise a couple times a year on Yahoo in MPTC's district with geo-targeted/behavioral targeted opportunities.	396 (a lot of visits from mail.yahoo.com domains)
6.	Twitter	MPTC has an official Twitter page for the college. Not currently advertising on Twitter.	23 visits (it's hard to get a good number from Twitter since a lot of the time a URL shortening service is used, which skews our referrer data as the URL no longer contains "twitter.com.")
7.	MSN	Not currently advertising.	0
8.	Wikipedia	Not currently advertising.	0
9.	Wordpress	Not currently advertising or using Wordpress. MPTC has several blogs on Blogger (three student blogs, two past student blogs, President Dr. Ruhland's blog and International Education blog.	15 (all from wistechcolleges.wordpress.com)
10.	Microsoft	Not currently advertising.	0
*A visit is one "session" from a user. This could include multiple page views. None of these numbers include visitors from Paid Search.			

([http://bottomline.msnbc.msn.com/\\_new/2012/03/25/10760486-americas-10-largest-websites?lite](http://bottomline.msnbc.msn.com/_new/2012/03/25/10760486-americas-10-largest-websites?lite), MPTC Marketing and MPTC Administrative Computing, July 2012.)

### Users Finding the MPTC Website 07/01/2011 to 06/30/2012

The main two methods for users finding the MPTC website is dwelling from a search engine (search traffic) through a link (referred traffic).

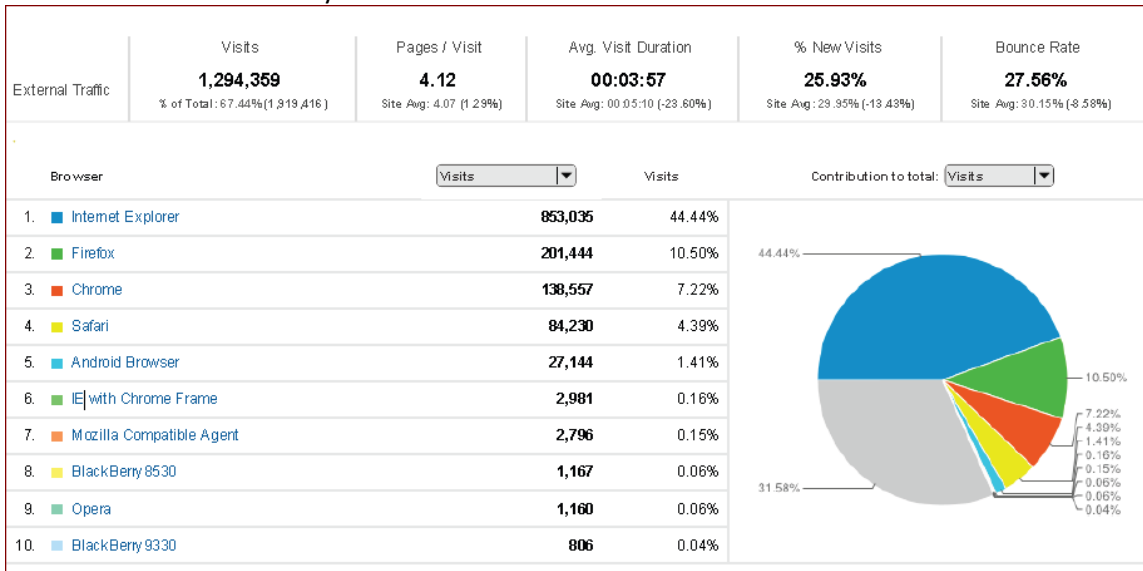


(MPTC Administrative Computing, July 19, 2012.)

- Search Traffic - directly from a search engine.
- Referral Traffic - through a link somewhere, not on a search engine.
- Direct Traffic - through a favorite or bookmark or just typed it in the URL.
- Campaigns - clicking on an ad that Marketing includes on Facebook or other site.

### Browser Usage for Moraine Park Technical College .edu site 07/01/2011 to 06/30/2012

Shows what browsers people are using based on 13% out of 1,294,359 visits. MPTC supports the top four web browsers which does not include any mobile devices.



(MPTC Administrative Computing, Analytics morainepark.edu Browser & OS 20110701-20120630, July 2012.)

**Top 25 Mobile Device Usage and Their Popularity for Moraine Park Technical College .edu site  
07/01/2011 to 06/30/2012**

Users based on 13% out of 1,294,359 visits. Mobile traffic accounts for 2.88% of our total traffic of 1,294,539 visits.

External Traffic	Visits <b>55,234</b> % of Total: 2.88% (1,919,416)	Pages / Visit <b>3.46</b> Site Avg: 4.07 (-14.93%)	Avg. Visit Duration <b>00:02:55</b> Site Avg: 00:05:10 (-43.66%)	% New Visits <b>37.71%</b> Site Avg: 29.95% (25.91%)	Bounce Rate <b>36.01%</b> Site Avg: 30.15% (19.45%)
Mobile Device Info	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
1. Apple iPad	<b>11,447</b>	4.15	00:03:14	35.70%	24.23%
2. Apple iPhone	<b>9,419</b>	3.40	00:02:29	37.85%	34.01%
3. (not set)	<b>5,424</b>	3.56	00:02:56	45.18%	31.87%
4. SonyEricsson LT15i Xperia Arc	<b>3,157</b>	3.17	00:02:28	46.72%	37.96%
5. Samsung SCH500 Fascinate	<b>2,658</b>	3.98	00:03:20	41.91%	31.79%
6. Apple iPod Touch	<b>2,258</b>	3.57	00:02:40	44.56%	34.69%
7. LG VS660 Vortex	<b>1,997</b>	1.17	00:00:35	1.92%	91.15%
8. Samsung SC-02B GALAXY S	<b>1,598</b>	3.54	00:02:48	40.87%	33.65%
9. HTC EVO 4G	<b>1,344</b>	3.15	00:03:03	39.43%	39.43%
10. HTC Desire	<b>1,321</b>	3.92	00:03:32	36.05%	39.53%
11. RIM BlackBerry 8530 Curve	<b>1,167</b>	3.55	00:08:57	15.13%	19.08%
12. LG Vortex	<b>1,114</b>	1.43	00:00:39	3.45%	86.90%
13. RIM BlackBerry 9330 Curve	<b>806</b>	1.99	00:01:43	5.71%	28.57%
14. Samsung SCH-R880 Acclaim	<b>722</b>	3.04	00:03:24	36.17%	42.55%
15. LG US670 Optimus U	<b>699</b>	3.59	00:04:49	50.55%	27.47%
16. HTC Inspire	<b>630</b>	3.01	00:01:16	21.95%	37.80%
17. HTC ADR6350 Droid Incredible 2	<b>507</b>	2.26	00:02:03	21.21%	48.48%
18. Motorola Xoom	<b>507</b>	4.70	00:05:33	15.15%	33.33%
19. HTC ADR6325 Merge	<b>468</b>	4.44	00:06:41	19.67%	32.79%
20. LG LS670	<b>391</b>	4.10	00:03:23	37.25%	31.37%
21. Motorola DroidX	<b>368</b>	3.23	00:02:05	64.58%	54.17%
22. HTC ADR6300 Incredible	<b>315</b>	3.66	00:02:16	56.10%	43.90%
23. HTC 001HT Desire HD SoftBank	<b>307</b>	2.98	00:01:44	50.00%	52.50%
24. LG US740 Apex	<b>307</b>	2.95	00:03:30	55.00%	22.50%
25. Samsung SPHD700 Epic 4G	<b>261</b>	5.06	00:03:40	58.82%	26.47%

*(MPTC Administrative Computing, Analytics morainepark.edu Devices 20110701-20120630, July 2012.)*

(not set) is defined as "unknown". Unknown would mean that the user-agent (mobile device) was unknown. The user-agent either was unspecified, or it did not match known user-agents.

**◆ MPTC Interactive Media Program Survey**

Enrolled program course students completed a survey regarding the Interactive Media Program. The following question was asked: "Select the factors that would help motivate you to complete coursework? The response of "use of smart devices, iPads, etc." was 31.6 percent of 56 respondents. *(MPTC End of Course survey administered, May 2012.)*

### Frequency and Recency for Moraine Park Technical College .edu site 07/01/2011 to 06/30/2012

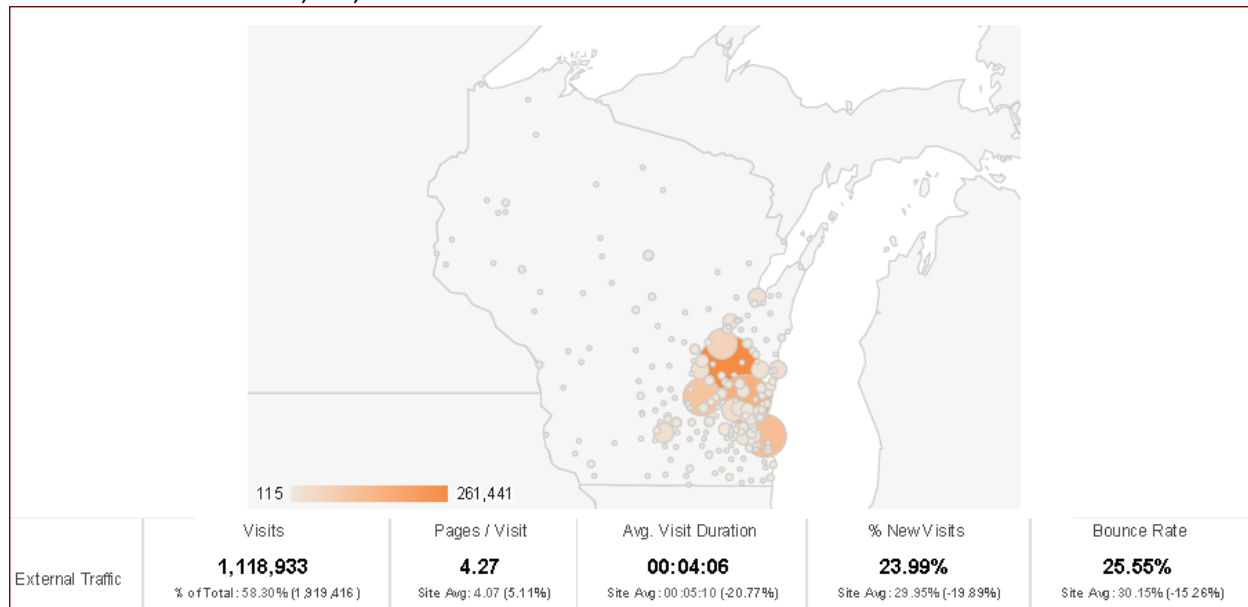
Shows how many times individual people visited the site. For example, 22,104 people visited the site a total of 7 times – based on 13% of 1,294,359 visits.

Count of Visits	Visits		Pageviews	
	Visits	Pageviews	Percentage of total	Percentage of total
	<b>1,294,359</b>	<b>5,330,176</b>		
External Traffic	% of Total: 67.44% (1,919,416)	% of Total: 68.30% (7,803,584)		
Count of Visits	Visits	Pageviews	Percentage of total	Percentage of total
			Visits	Pageviews
<b>1</b>	<b>345,356</b>	<b>1,492,341</b>	26.27%	27.11%
<b>2</b>	<b>100,579</b>	<b>472,274</b>	7.65%	8.38%
<b>3</b>	<b>56,601</b>	<b>271,260</b>	4.31%	4.33%
<b>4</b>	<b>39,852</b>	<b>193,807</b>	3.03%	3.32%
<b>5</b>	<b>31,301</b>	<b>144,834</b>	2.38%	2.63%
<b>6</b>	<b>26,114</b>	<b>122,937</b>	1.99%	2.23%
<b>7</b>	<b>22,104</b>	<b>101,486</b>	1.68%	1.84%
<b>8</b>	<b>19,453</b>	<b>86,742</b>	1.48%	1.58%
<b>9-14</b>	<b>85,643</b>	<b>376,581</b>	6.51%	6.34%
<b>15-25</b>	<b>97,614</b>	<b>405,269</b>	7.43%	7.36%
<b>26-50</b>	<b>127,055</b>	<b>508,869</b>	9.66%	9.24%
<b>51-100</b>	<b>129,821</b>	<b>500,494</b>	9.87%	9.09%
<b>101-200</b>	<b>106,365</b>	<b>388,482</b>	8.09%	7.06%
<b>201+</b>	<b>126,787</b>	<b>439,060</b>	9.64%	7.38%

(MPTC Administrative Computing, Analytics morainepark.edu Frequency & Recency 20110701-20120630, July 2012.)

### Geographical Demographics – Wisconsin Only for Moraine Park Technical College .edu site 07/01/2011 to 06/30/2012

Users based on 13% of 1,294,359 visits.



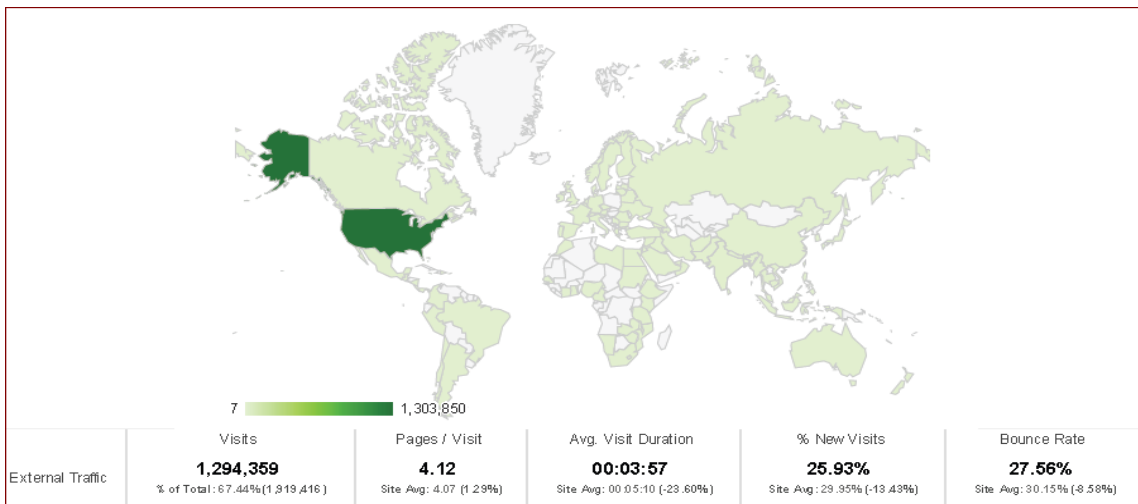


City	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
1. Fond du Lac	261,441	4.07	00:03:43	19.47%	26.23%
2. West Bend	158,925	4.48	00:04:26	21.25%	22.81%
3. Milwaukee	116,583	4.36	00:04:09	27.30%	26.36%
4. Beaver Dam	97,145	4.42	00:04:04	17.76%	21.24%
5. Oshkosh	58,261	3.89	00:03:47	24.28%	28.60%
6. Hartford	30,525	4.65	00:04:21	21.29%	22.00%
7. Madison	27,244	4.23	00:03:51	37.17%	28.14%
8. Sheboygan	19,207	4.10	00:03:08	31.60%	26.32%
9. Fairwater	18,815	4.16	00:04:12	25.85%	26.75%
10. Plymouth	18,408	4.57	00:04:22	23.25%	27.13%
11. Green Bay	17,409	3.44	00:03:56	26.65%	41.79%
12. Elm Grove	15,397	4.43	00:03:47	27.45%	25.50%
13. Appleton	14,329	4.19	00:03:39	40.64%	25.90%
14. Slinger	12,423	4.73	00:04:45	26.04%	22.70%
15. Ripon	10,564	5.06	00:11:28	14.55%	22.33%
16. Menomonee Falls	9,258	4.34	00:03:52	24.65%	20.41%
17. Oconomowoc	8,374	4.56	00:04:13	20.37%	17.61%
18. Germantown	7,982	4.48	00:04:13	30.41%	22.52%
19. Jackson	7,345	4.23	00:03:30	17.78%	22.70%
20. Cedarburg	7,275	4.15	00:03:42	21.12%	17.21%
21. Waukesha	7,014	4.63	00:03:47	41.95%	25.52%
22. Kewaskum	6,861	4.99	00:05:08	29.23%	20.27%
23. Sussex	5,762	4.92	00:05:03	15.73%	19.87%
24. Mayville	5,577	3.72	00:04:19	21.63%	30.17%
25. Waupun	5,209	4.75	00:03:55	27.43%	21.24%

(MPTC Administrative Computing, Analytics morainePark.edu Location WI 20110701-20120630, July 2012.)

### Geographical Demographics – Worldwide for Moraine Park Technical College .edu site – 07/01/2011 to 06/30/2012

Users based on 13% of 1,294,359 visits.



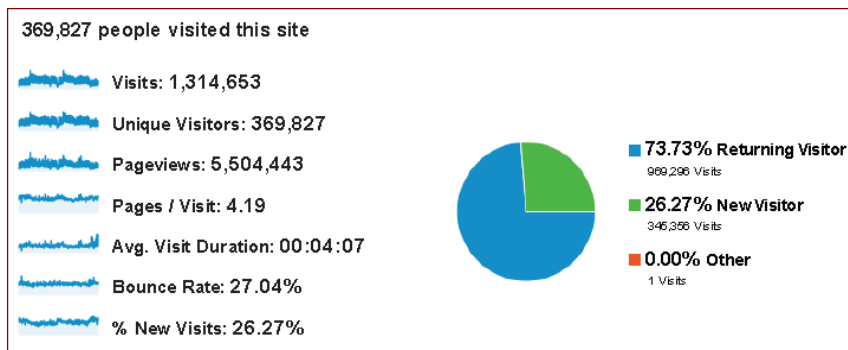
Country / Territory	Visits	Pages / Visit	Avg. Visit Duration	% New Visits	Bounce Rate
1. United States	1,303,850	4.20	00:04:08	25.93%	26.79%
2. India	2,612	2.50	00:01:36	47.65%	53.82%
3. (not set)	1,559	3.21	00:02:44	51.72%	42.36%
4. Canada	952	2.36	00:01:17	80.65%	63.71%
5. Philippines	530	1.84	00:01:58	91.30%	75.36%
6. United Kingdom	468	1.79	00:00:41	90.16%	78.69%
7. Germany	384	3.42	00:02:24	60.00%	58.00%
8. Spain	261	4.76	00:08:06	20.59%	17.65%
9. France	261	8.91	00:11:01	17.65%	17.65%
10. Australia	230	1.23	00:00:05	96.67%	86.67%
11. China	169	2.64	00:02:26	63.64%	31.82%
12. Mexico	169	5.00	00:05:48	54.55%	27.27%
13. Nigeria	161	3.33	00:05:40	76.19%	52.38%
14. South Africa	130	2.00	00:00:38	94.12%	58.82%
15. Saudi Arabia	122	2.00	00:00:25	93.75%	81.25%
16. Pakistan	99	2.77	00:02:39	92.31%	61.54%
17. Iran	92	1.75	00:02:20	91.67%	75.00%
18. Malaysia	92	1.67	00:02:24	91.67%	58.33%
19. Indonesia	84	1.64	00:00:17	90.91%	81.82%
20. Israel	84	3.55	00:03:34	54.55%	45.45%
21. Brazil	76	1.20	00:00:13	70.00%	90.00%
22. Puerto Rico	76	9.50	00:17:04	60.00%	50.00%
23. Thailand	76	1.20	00:00:23	80.00%	90.00%
24. Russia	69	1.22	00:00:04	88.89%	88.89%
25. Ireland	61	2.50	00:00:47	62.50%	62.50%

(MPTC Admin Computing, Analytics morainepark.edu Location 20110701-20120630, July 2012.)

(not set) is defined as "unknown". Unknown would mean that the browser did not have a geographic location set.

### Visitors Overview for Moraine Park Technical College .edu site 07/01/2011 to 06/30/2012

Users based on 13% of 1,294,359 visits which shows an overview of all external traffic. This is good to use as a baseline for other statistics, like for comparing percentages to total visits/visitors/page views. Visitors can make multiple visits. According to MPTC Administrative Computing, the average visit duration is less than one minute on typical websites and the MPTC average visit duration is 4 minutes and 7 seconds.



(MPTC Administrative Computing, Analytics morainepark.edu Overview 20110701-20120630, July 2012.)

**Most Visited MPTC .edu Web Pages  
07/01/2011 to 06/30/2012**

Listed are the top 14 .edu web pages for Moraine Park Technical College. Sixty-eight (68%) percent makes up off-site campus traffic to the .edu pages.

<b>Rank</b>	<b>MPTC .edu Web Page</b>	<b>Page Views</b>
<b>1</b>	Index (Main)	1,104,578
<b>2</b>	Programs & Courses - Programs of Study	236,141
<b>3</b>	Programs & Courses - Index	220,502
<b>4</b>	Admissions & Registration - Index	67,257
<b>5</b>	Employment - Index	54,522
<b>6</b>	Programs & Courses - Class Schedule	49,698
<b>7</b>	About MPTC - Index	47,338
<b>8</b>	Services - Index	38,453
<b>9</b>	Programs & Courses - Online Learning	29,446
<b>10</b>	Admissions & Registration - Enroll In A Program - Apply	26,421
<b>11</b>	Financial Aid - Index	25,219
<b>12</b>	Admissions & Registration - Enroll In A Program	19,026
<b>13</b>	Staff Directory - Index	16,303
<b>14</b>	Admissions & Registration - Important Dates	15,993

(MPTC Administrative Computing, Analytics morainepark.edu Pages 20110701-20120630, July 2012.)

## FINANCIAL AID INFORMATION

### Financial Aid Applicants, Recipients, and Disbursements

Summary: Overall, financial aid applications listing Moraine Park's school code are up over the last award year. Students who are admitted into an aid eligible program (10, 31, and 32 program codes) and have completed financial aid applications and requirements receive a financial aid award. The number of awarded students is also up over 2010-2011. Fewer students received federal and state grants as part of their financial aid award; however, dollars borrowed by students (both federally and privately) was up.

	2010-2011	2011-2012 (as of July 30, 2012)
Number of Pell Grant Recipients (Awarded)	1886	1675
Pell Grant Funds Disbursed	\$5,196,017.02	\$4,581,221.79
FAFSA Applications received versus eligible program students awarded.	4628 FAFSA applications 2447 students awarded	4709 FAFSA applications 2672 students awarded
Supplemental Grants (SEOG) recipients	107	160
SEOG Dollars received	\$59,807	\$74,250
Academic Competitiveness Grant (ACG) Recipients	49	0 (program no longer funded)
ACG Dollars Received	\$34,017	\$0 (program no longer funded)
Direct Stafford Loan Recipients	2011	1820
Direct Stafford Loan Dollars Received	\$7,644,637	\$7,729,360
State Funds (Wisconsin Higher Education Grant (WHEG), Talent Incentive Program, Handicap Grant, Minority Retention Grant, and Wisconsin Nurse Loan) Recipients	843	731
State Funds Received	\$779,922	\$675,927
Alternative (Private) Education Loan Recipients	14	15
Alternative (Private) Education Loan Dollars Received	\$57,289.00	\$75,040.00

### Cohort Default Rate Changes

Each year a cohort of students, who graduated, dropped below half time, or stopped out of each school is measured as they enter federal loan repayment. The group is followed to determine who is repaying their loan and who has defaulted. The cohort default rate measures the percentage of those borrowers that go into default for each institution. Moraine Park's cohort default rate, although low, has been increasing over the past three years. The most recent official rate for FY 2009 is 7.1. Official cohort default rates for WTCS schools for FY 2009 range from a high of 16.5 to a low of 6.1. Moraine Park's cohort default rate is fourth lowest in the WTCS.

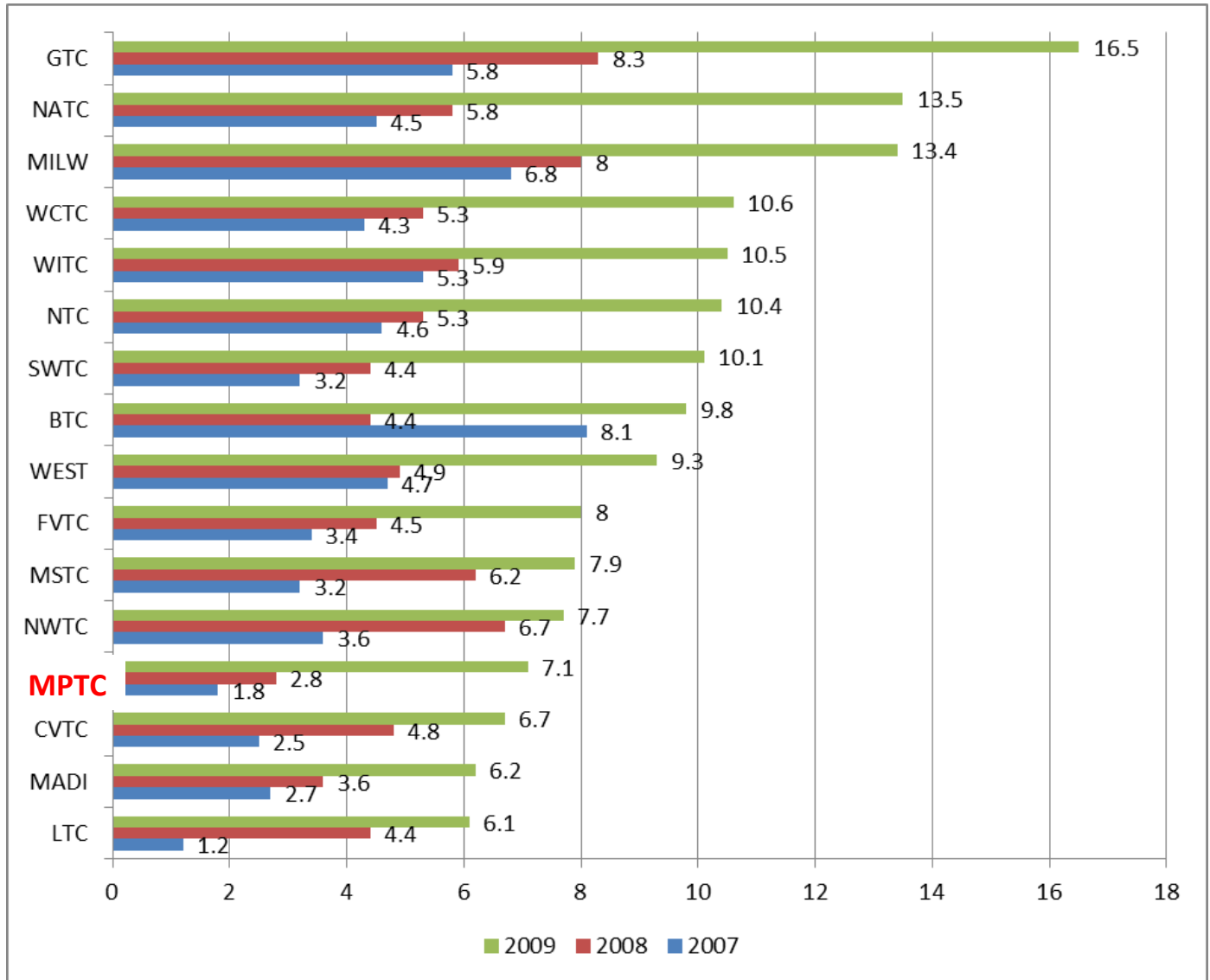
Becoming final in 2014, the measurement will change from borrowers who default in or in the year after they enter repayment, to measure those who default in the year or two years after they enter repayment. This lengthened measurement period will increase rates for all schools. The official rate for FY 2009 will not be

Moraine Park Technical College 2012 Environmental Scan and College Data

released until mid-September 2012; however, schools won't be officially measured on that rate until September 2014. Moraine Park's current DRAFT 3 year cohort default rate for FY 2009 is 8.2.

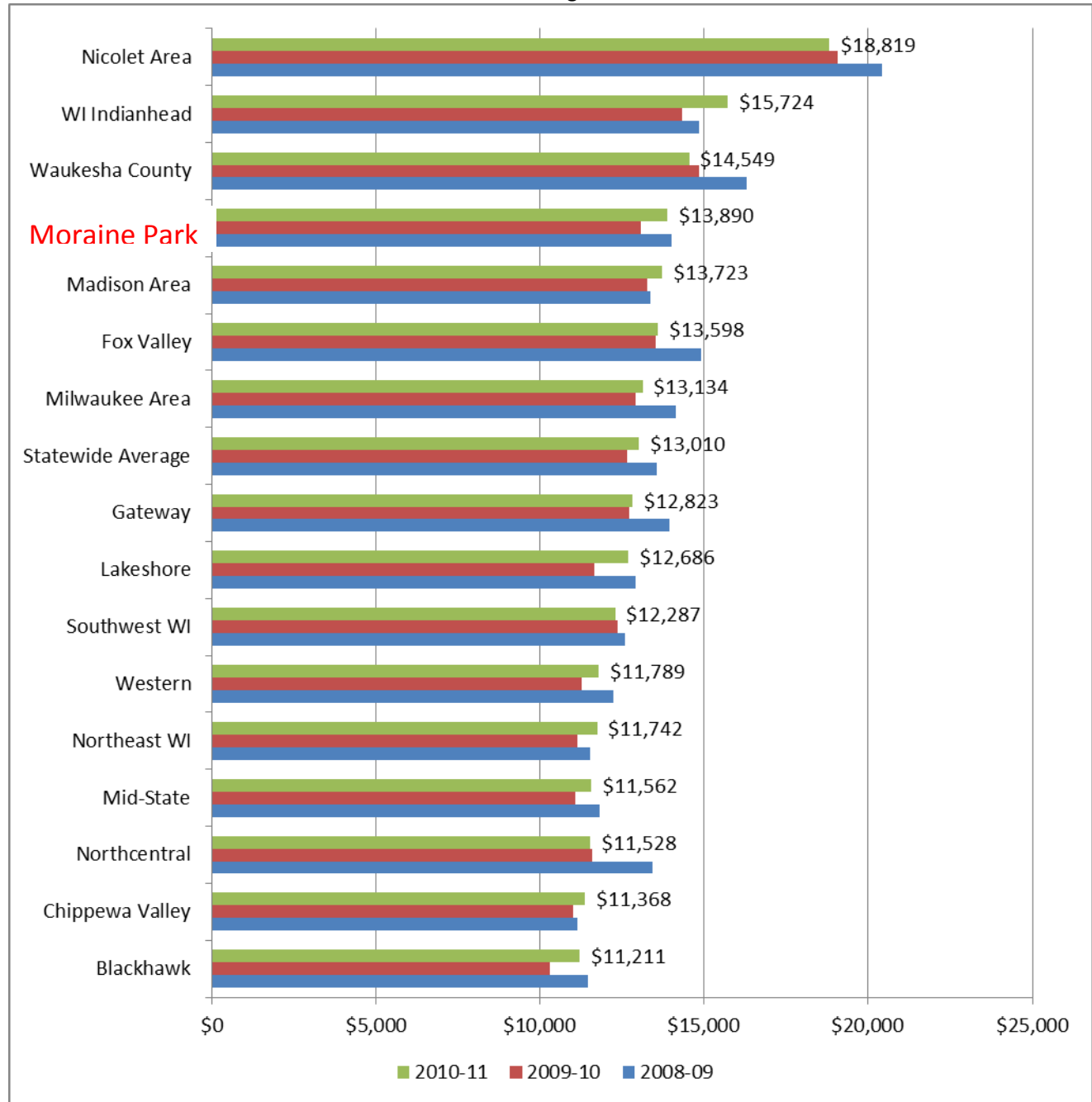
Schools are required to keep their cohort default rates under certain thresholds to prevent sanctions from the Department of Education regarding Title IV financial aid eligibility. These sanctions can include temporary or permanent loss of institutional Title IV eligibility.

**Wisconsin Technical College System Cohort Default Rate Changes  
2007 to 2009**



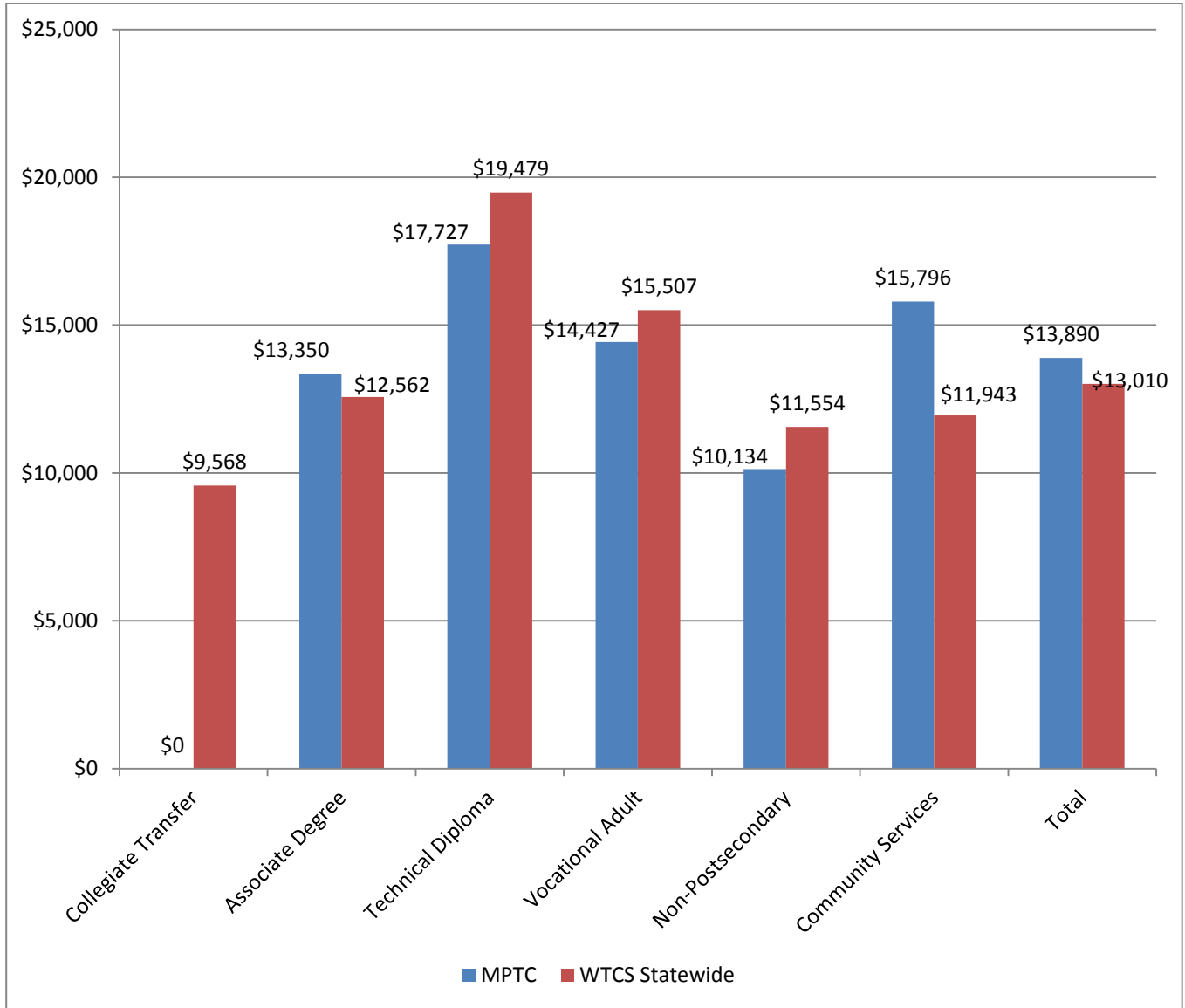
(MPTC Financial Aid Office, July, 2012.)

**Mean Operational Cost per FTE**  
2008-09 through 2010-11



(Schedule A-5 WTCS Cost Allocation, July, 2012.)

**Mean Operational Cost per FTE by Aid Code  
MPTC Compared to WTCS Statewide  
2010-11**



(Schedule A-5 WTCS Cost Allocation, July, 2012.)

# Section 3

## Details





## POPULATION/DEMOGRAPHICS/SOCIETAL/HOTTEST TRENDS

### ◆ **Why make diversity so hard to achieve**

If your company is like practically every company I've known, it's been working for years to add diversity to its leadership ranks. Recruitment teams focus on hiring goals, but they aren't accountable for how well new employees perform or how many remain after two years. Diversity departments, which do track new hires' success (and, unlike recruiting, can commit funds to programs beyond the current budget cycle), are disconnected from recruitment strategies.

Instead you should think about performance as strategically as you do in your core operating businesses: Be very clear about what success will look like in five years. Define metrics to track progress toward that vision. Prioritize among competing tactics, and drive increased investment toward initiatives that produce results. Use feedback to make refinements along the way.

Your focus is on fixing the culture. Changing the organizational culture to level the playing field is important. But culture change happens very slowly - and usually not at all until new faces have appeared in your company's leadership ranks and new perspectives have begun to reshape its strategies. Your first priority should be to improve performance and promotion rates in underrepresented groups.

A company that wants its diversity executives to advocate for bold new approaches should think about rotating high-performing line executives (whether minority or nonminority) into diversity roles. Having already established their reputations internally as revenue producers, they can navigate any setbacks that come from new approaches. (*Harvard Business Review, John Rice, Page 40, June, 2012.*)

### ◆ **Survey shows Generation Z worries about finances - affording college and having student loans are big concerns**

Much of Generation Z, or those roughly ages 13 to 22, show a high understanding of those financial and economic truths in a survey out today on the financial habits and concerns of Gen Z and their parents by TD Ameritrade. Both Gen Z and their parents listed jobs and unemployment first when asked to identify their biggest concerns about the economy, mentioned by roughly a quarter of both groups.

Thirty-nine percent (39%) of Gen Z said they are concerned about affording college and having student loans, though the top concern was having their identity stolen, indicated by 40% of Gen Z respondents. Though they indicated being concerned about student loans, when asked how they pay or expect to pay for college, only 25% said they rely on or will need student loans.

The most concerning results were Gen Z's credit card habits, Braxdale says. While Gen Z kids are good savers - more than half have a savings account and 76% say it's important to save money at this stage in their life - there isn't the "same diligence" when it comes to credit cards, she says. A little more than a quarter of Gen Z indicated having a credit card, but more than half of those carry a balance on the card for at least six months.

Where they are:

56% have a savings account

40% have a checking account

41% carefully follow a budget  
\$300 average Gen Z has saved

Source: TD Ameritrade

(*USA Today, Hadley Malcom, Page 1B, Wednesday, June 20, 2012.*)

◆ **Study: Asian Americans value work and family - outlook is more positive**

Positive stereotypes about Asian Americans are rooted in reality: They are more educated and wealthier, and they value work, marriage and family more than Americans as a whole, according to a Pew Research Center report out today.

The study, which includes a survey of 3,511 Asians, shows that more than 60% of recent Asian immigrants have at least a college degree. Many work in high-paying fields such as science, engineering, medicine, and finance. The USA's 18.2 million Asians are the fastest-growing racial group and have surpassed Hispanics as the largest group of new immigrants. They make up 6% of the population.

The survey says Asian Americans are more satisfied with their lives, personal finances and the general direction of the country than Americans as a whole. Indians have the highest share of the college-educated and the highest median household income (\$88,000) among the largest Asian-American groups. Asians as a whole have a median household income of \$66,000 (half make more, half less), compared with US median of \$49,800. (*USA Today, Hay El Nasser, Page 3A, Tuesday, June 19, 2012.*)

◆ **Aging Workforce poses a problem, wmc report says**

The 2011 Growing Wisconsin report compares state performance across a number economic and policy areas. Wisconsin had a 65% higher manufacturing job concentration than a typical state economy in 2001. That percentage has increased to 88% in 2011, according to the report.

"Wisconsin's population distribution by age is beginning to look top-heavy, with high levels of residents above age 75." With higher than average numbers of residents in their 50s." The report also says efforts must be increased to attract younger people into the state. (*Journal Interactive of the Journal Sentinel, October 17, 2011.*)

◆ **Generation jobless: young men suffer worst as economy staggers**

The unemployment rate for males between 25 and 34 years old with high-school diploma is 14.4 percent - up from 6.1 percent before the downturn four years ago and far above today's 9 percent national rate. The picture is even bleaker for slightly younger men: 22.4 percent for high-school graduates 20 to 24 years old. That's up from 10.4 percent four years ago.

The share of men age 25-34 living with their parents jumped to 18.6 percent this year, up from 14.2 percent four years ago and the highest level since at least 1960, according to the Census Bureau. (*The Wall Street Journal, November 7, 2011.*)

◆ **Open for business - walker administration makes job creation top priority; opponents see**

Three of the statistics commonly used to measure the health of an economy are:

Tax Revenue, Gross Domestic Product (GDP), Employment

Let's start with employment: The latest state employment numbers available at press time said there were 2,330,700 private-sector jobs in Wisconsin in December 2011, an increase of 13,500 since Walker took over the governor's office in January 2011. So far, so good, except for a campaign promise. That 250,000 thing. As part of the early optimism about what his administration would accomplish, Walker uttered a new-jobs number that may haunt him forever: 250,000.

Three percent GDP growth a year is considered the sustainable ideal to aim for - any higher and inflation can become a problem; any lower and the economy isn't keeping up with population growth. Wisconsin could be in the sweet spot: IHS Global Insight forecasted an increase of 3.2 percent of real GDP in 2011, after 2.9 percent growth in 2010.

#### *Still looking for work*

Wisconsin's seasonally adjusted unemployment rate in November 2011 was 7.3 percent, a major one-month fall from 7.7 percent, after holding roughly steady for 4 months and increasing in the first half of the year.

#### *Taxing matters*

When the economy is good, more people have jobs and pay more taxes. Total general purpose revenue (GPR) tax collections increased 6.4 percent in Wisconsin's fiscal year 2011 (July 2010 to June 2011) compared to FY2010, or by \$780 million, a little less than forecast.

#### *Measuring success*

"We're offering manufacturing tax credits, relocation tax credits, and tax credits for those doing some long-term investing in Wisconsin businesses." It is also cited that several more ranking improvements were made. A key part of Wisconsin Working involves beefing up the Department of Workforce Development's ability to connect to job seekers to jobs. DWD will hold at least 100 job fairs throughout the state, twice as many as last year.

#### *No shortage of nay-sayers*

Looking at the funding cuts in Walker's two-year budget, Steven Deller, a UW-Madison professor of agriculture and applied economics, predicted a loss of 20,000 jobs, according to a Wisconsin State Journal article. One of the most contentious parts of Walker's budget is the increased percentage most public workers must now pay into their pensions and for health insurance.

Democratic state assembly member Brett Hulse of Madison still can't believe that Walker turned down \$800 million in federal funding for a high-speed rail link between Madison and Milwaukee. "That cost us thousands of construction jobs," Hulse says. He also decries any cuts to education. "To get Wisconsin working again, we need to invest in our K-12 schools, the UW System and building projects to get people back to work and really balance our budget." (*Corporate Report Wisconsin, Paul Zukowski, Pages 23-25, March 2012.*)

#### ◆ **Economic downturn means fewer babies**

The downturn in the economy has had people delaying doctor visits for years and is now also slowing pregnancy. After steadily increasing for decades, there has been a decrease in the number of babies born at Milwaukee-area hospitals over the past three years. Newborn deliveries first plunged in 2009, and continued to decline in 2010 and 2011, according to HCTrends, a Milwaukee health care data tracking firm. (*The Business Journal, Page A3, March 2, 2012.*)

## ◆ Hottest 2013 – 2014 Trends

### **Highly flexible touch sensors are appearing in a range of gadgets**

Highly flexible, film-based touch sensors are entering the smartphone and tablet markets.\* They are also extending touch capabilities into a range of new consumer and industrial products. Using roll-to-roll metal mesh technology, they provide a high-performance alternative to existing touch sensors. Larger, lighter, sleeker, curved and edgeless designs can now be developed for handheld devices. Thinner sensor stacks with flawless touch performance, excellent optical clarity, low sheet resistance and low power consumption are enabling designers to turn unique, futuristic concepts into functional designs at lower total system costs compared to previous market alternatives. (<http://futuretimeline.net/21stcentury/2013.htm#flexible-touch-sensors>, July 24, 2012).

### **Launch of the PS4 and Xbox 720**

2012 saw the launch of Nintendo's Wii U - the first of the eighth generation games consoles.\* By late 2013, it is joined by the PS4 and Xbox 720. These new machines offer substantial improvements in graphical power. The PS4, codenamed "Orbis", is built around an AMD x64 CPU and AMD Southern Islands GPU, handling screen resolutions of up to 4000 x 2000 pixels, as well as 3D gaming in full 1080p.\* The Xbox 720, codenamed "Durango", is powered by a state-of-the-art IBM Power PC CPU, featuring 16 cores, alongside a Radeon HD 7000-series graphics card.\* (<http://futuretimeline.net/21stcentury/2013.htm#flexible-touch-sensors>, July 24, 2012).

### **14 nanometer chips enter mass production**

The next generation of microprocessor technology is released by Intel, with transistors now based on a 14nm manufacturing process.\* For comparison, a carbon atom is 0.34nm wide.\* The 4GHz barrier in stock CPU is finally being passed, thanks to the performance and energy efficiency of these new chips. (<http://futuretimeline.net/21stcentury/2013.htm#flexible-touch-sensors>, July 24, 2012).

### **Terabyte SD cards are available**

SD cards and other memory devices continue to grow exponentially this decade, with storage capacities doubling roughly every year. A terabyte is equal to 1000 gigabytes. (<http://futuretimeline.net/21stcentury/2014.htm#robotic-pack-mules>, July 24, 2012.)

### **Personalized DNA sequencing for under \$100**

DNA sequencing technology is now so fast and cheap that an entire human genome can be read in a matter of hours for less than \$100. This has been made possible by a revolutionary new device called a nanofluidic chip.\*

Medical treatments can now be delivered on a highly personalized level, tailored to a patient's exact genetic code. For example, a doctor can biopsy a cancer patient's tumor, sequence all of its DNA, and use that information to determine a prognosis and prescribe treatment - all for less than the cost of a chest X-ray.

In the case of lung cancer, the doctor can determine the precise genetic changes in the tumor cells and order the chemotherapy best suited to that variant. Meanwhile, parents of newborns now have the option of determining if their baby is susceptible to conditions like diabetes, and then modifying the baby's diet and medication from day one to reduce the chance of it ever manifesting. (<http://futuretimeline.net/21stcentury/2014.htm#personaliseddna>, July 24, 2012.)

### **Eight Mobile Trends for 2013**

1. Improved 4G Performance
2. HTML5-Capable Phones
3. More Advanced Operating Systems
4. PC Replacement
5. The Mobile Cloud
6. Projection & Augmented Reality
7. "Green" Mobiles
8. Waterproof Mobile Phones



(<http://www.coolstech.com/8-mobile-phone-trends-watch-out-2013>, Emily Green, July 18, 2012.)

### **MPTC DISTRICT/COMPETITION/MARKETPLACE**

#### **◆ Local Educational Competition**

According to the UW-Fond du Lac web-site, they currently offer three certificate programs which include American Indian Studies, Business, and Women's Studies. A second local competitor, Marian University, offers undergraduate certificate programs in Health Care Administration, Homeland Security Leadership, and Palliative Care – Grief of Bereavement. ([www.uwfdl.edu](http://www.uwfdl.edu) and [www.marianuniversity.edu](http://www.marianuniversity.edu), July 2012.)

#### **◆ WCTC fills skills gap with associate degree**

Waukesha County Technical College is taking steps that it hopes will address what many Milwaukee-area manufacturers claim is a major shortage of skilled workers needed to fill an array of open jobs.

The college plans to introduce an associate of applied science degree in general manufacturing to help address the skills gap.

"There's something missing along the road to addressing the manufacturing skills gap, and that's to get workers the training they need quickly but also encourage them to build a career path." Waukesha County Technical College president Barbara Prindiville said.

The new degree will be driven by the need of business and will incorporate certificate programs at the school. WCTC hopes to launch the associate degree program by fall. For example, in about six to 10 weeks, a worker could earn a certificate in welding that would include credits in several different disciplines such as blueprint reading-fabrication, thermal cutting processes and metal fabrication welding. That certificate could then be applied toward an associate degree in general manufacturing.

WCTC also will pursue the transferability of the degree to some of its partner four-year institutions, such as Marquette University, Milwaukee School of Engineering, the University of Wisconsin-Milwaukee and the University of Wisconsin-Stout so students can work toward bachelor's degrees at each of those institutions, Prindiville said.

WCTC also is pursuing new partnerships with Waukesha County school districts. As school districts deal with ever-tightening budgets and the need for state-of-the-art equipment and qualified instructors to train students on the equipment, WCTC is offering to serve as their manufacturing classroom. The partnership is a joint initiative of the Wisconsin Technical College System and the Wisconsin Department of Workforce Development, and funded in part through a grant from The Joyce Foundation in Chicago. (*The Business Journal*, Rich Rovito, Page 7, June 8, 2012)

## **ECONOMIC/BUSINESS/WORKPLACE TRENDS**

### **◆ Top 10 Fastest Growing Industries**

According to *IBIS World* magazine, the following are the top 10 fastest growing industries by revenue:

1. Generic Pharmaceuticals
2. Solar Panel Manufacturing
3. For-profit Universities
4. Pilates & Yoga Studios
5. Self-Tanning Product Manufacturing
6. 3D Printer Manufacturing
7. Social Network Game Developers
8. Hot Sauce Production
9. Green & Sustainable Building Construction
10. Online Eyeglasses & Contact Lens Sales

*(www.ibisworld.com, L. Setar & M. MacFarland, April 2012.)*

### **◆ Employers complain, but don't train**

Employers complain they can't find skilled workers, but they're demanding too much and refusing to train new workers, Peter Cappelli, a management professor at the University of Pennsylvania's Wharton School and director of Wharton's Center for Human Resources.

To get America's job engine revving again, companies need to stop pinning so much of the blame on our nation's education system. They need to drop the idea of finding perfect candidates and look for people who could do the job with a bit of training and practice.

The Help that's Most Wanted - Hardest jobs for US Employers to Fill in 2011:

1. Skilled trades
2. Sales representatives
3. Engineers
4. Drivers
5. Accounting & finance staff
6. IT staff
7. Management/executives
8. Teachers
9. Secretaries/administrative assistants
10. Machinists/machine operators

*(Community College Spotlight, November 1, 2011.)*

### **◆ The strategic value of virtual meetings and events**

Face-to-face meetings are still seen as relevant for networking, team building, sensitive issues, and celebrations. Virtual meetings are best for company updates and routine meetings. *(The Business Journal, Jenise Fryatt; Rosa Garriga; Ruud Janssen, CMM; ..., Pages 6-8, March 23, 2012.)*

### **◆ Manufacturers search for skilled workers**

Overall economic conditions are far from robust, but jobs abound at some Milwaukee-area companies. But even with a significant number of people out of work, employers continue to be faced with challenges in filling open positions, which has forced them to get aggressive in their efforts to find workers. The town of Genesee-based company announced in November plans to hire as many as 400 employees. To this point, about 150 have been hired, chief executive officer Aaron Jagdfeld said.

Finding candidates for entry-level factory positions has been easier than filling high-skill jobs on the plant floor and white collar jobs, particularly in engineering, Jagdfeld said. Super Steel LLC has reported to a radio advertisements, among other tactics, to attract employees. The Milwaukee contract manufacturer serves a variety of industries, including rail, construction, agriculture, military and general industrial.

The company is seeking to fill open jobs for assemblers, welders and other skilled manufacturing positions. Jobs are being added as a result of continued growth in business with existing and new customers, said Dirk Smith, Super Steel's president and chief operating officer. Super Steel, too, has struggled to fill some open manufacturing positions, particularly those requiring higher skill levels.

As a result, it has entered into a partnership with a local temporary agency and Milwaukee Area Technical College to train candidates who "are close" to possessing the necessary skills needed for the jobs, Smith said. Super Steel also is using online job boards to attract candidates, as well as advertisements in small, local newspapers within a 40-mile radius, Smith said. (*The Business Journal, December 16, 2011.*)

#### ◆ **The aging workforce**

An April Gallup survey has similar findings: 534 working people were asked whether, when they reach retirement age, "you think you will continue working and work full-time; continue working and work part-time; or stop working altogether?" Those who answered that they would continue to work were then asked, "Would you do it because you want to, or because you will have to?"

- 18% said they would work full-time, and a third of those said it was because they wanted to, not because they would have to.
- 63% said they would work part-time; almost two-thirds of those said they would do it because they wanted to.
- 18% said they would retire and stop working altogether.

(*USA Today, Cover Page, January 24, 2012.*)

#### ◆ **Perception vs. reality: measuring the business value of meetings**

Both executives and business travelers estimate that almost 30 percent of current business would be lost without in-person meetings.

The top two reasons:

According to decades of industry research, the top two reasons people attend meetings are education and networking, and, in most studies, these two are interchangeable.

The business meetings:

Measurement is at the heart of all business imperatives. We set goals, assess performance, report results and make adjustments.

*(The Business Journal, John Nawn, Pages 10-11; 31, March 23, 2012.)*

◆ **Skill gap still plagues manufacturers**

Industrial firms throughout southeastern Wisconsin continues-to-face a major dilemma in finding skilled workers to fill open factory jobs.

The challenge has long frustrated manufacturers, especially in light of sustained high levels of unemployment brought on by the extended economic downturn.

Many companies have launched internal training programs to address worker shortages. At the same time, local political leaders have pledged to take action with initiatives they claim will better match training with the work force needs of local employers.

The problem with our schools is that they don't know if they are running an educational facility or a social program. Meeusen said. I always thought that the purpose of schools was to give the kids an education so that they could someday create a good life for themselves and add to our economy.

Creating appropriate training and educational programs is crucial in addressing the pronounced skills mismatch, said Brinkman, who leads the Madison-based organization that works with small and midsize manufacturers to make them more competitive and efficient. *(The Business Journal, Page A11, March 2, 2012.)*

◆ **Private sector employers add more jobs in 2010-2011, revised BLS data reveal**

Private sector employers added 140,000 more jobs than previously reported over the 12 months ended in March, according to preliminary figures accounted Sept. 29 by Department of Labor's Bureau of Labor Statistics.

In addition, the government shed 52,000 fewer jobs during the same period, BLS said in announcing its preliminary estimate of the upcoming annual benchmark revision to employment data.

If confirmed, the net increase of 192,000 jobs would raise the total number of nonfarm payroll jobs added during the 12-month period to 1.5 million from 1.3 million, BNA's analysis shows.

By industry, job gains would improve in the whole-sale trade, retail trade, transportation, and utilities sector, (134,000) and in professional and business services (123,000), but would be revised downward in education and health services (120,000) and miscellaneous services (107,000.) *(BNA-Human Resources Report, Volume 29, N, October 3, 2011.)*

◆ **Jobs are there, but workforce lacks skills**

There are good, family supporting jobs out there, but the state, our education system, and employers need to collectively focus on matching the availability of our workforce with those job needs. *(The Business News, Page 32, January 30, 2012.)*

◆ **Advanced manufacturing: help wanted**

About 80 percent of America's manufacturers are having trouble finding the right people with the right skills to work in their companies and on their factory.



In the 21st century, it takes more than just a high school diploma to work in many manufacturing fields. Companies are looking for well-trained workers to operate cutting-edge equipment, machines and tools.

Minnesota is leading the way with a pilot program announced last week called Right Skills Now. Right Skills Now will be a combination of a 16-week curriculum and an eight-week apprenticeship at a local manufacturer. (*Star Tribune, October 30, 2011.*)

◆ **Cost of health care coverage increased sharply in 2011, Kaiser survey finds**

The cost of family health insurance premiums rose 9 percent in 2011, according to findings from a Kaiser Family Foundation/Health Research and Educational Trust survey released Sept 27. Of the \$15,073 premium cost for family coverage in 2011, employees paid \$4,129, up 3.3 percent from \$3,997 in 2010, the survey found. Family coverage cost \$13,770 in 2010.

Benefits consulting firm Mercer said Sept 21 that the cost of employee health coverage is expected to rise 5.4 percent in 2012, which would be the lowest annual increases in 15 years (29 HRR 1021, 9/26/11). "We found an estimated 2.3 million young adults received coverage as a result of the [PPACA], which is at the height end of the original estimates of how many might be covered as a result of the law."

'The Quiet Revolution.' Altman's short-term outlook for employer-sponsored health care plans included an increased offering of high-deductible health plans and higher deductibles. The survey found that 31 percent of workers are enrolled in high-deductible health plans, with self-only coverage deductibles of at least \$1,000. Twenty-three percent of employers offering health plans have a high-deductible plan option, up from 15 percent of employers in 2010, the survey found.

- 60 percent of employers offered health insurance to employees in 2011, down from 2010's 69 percent, but more consistent with pre-2010 numbers.
- 26 percent of large companies offered retiree health coverage in 2011, the same percentage as in 2010.
- 56 percent of workers are still in grandfathered health plans.

(*BNA-Human Resources Report, Volume 29 N, October 3, 2011.*)

◆ **Executives to new grads: shape up!**

Note to recent college grads and the Class of 2012: You may not be as ready for the working world as you think you are. At least that is the opinion of about 500 senior managers and C-suite executives in a study by Global Strategy Group, on behalf of worldwide architectural firm Woods Bagot.

In all, a 65% majority of business leaders say young people applying for jobs at their companies right out of college are only "somewhat" prepared for success in business, with 40% of C-suite executives saying they are "not prepared at all". Not only that, but even those who get hired anyway may not rise very far. Almost half (47%) of C-suite executives believe that fewer than one-quarter (21%) of new grads have the skills they'll need to advance past entry-level jobs.

And what skills might those be? The most sought-after are problem-solving (49% ranked it No.1), collaboration (43%), and critical thinking (36%). Also, in demand is the ability to communicate clearly and persuasively in writing (31%). Technology and social media skills came in at rock bottom on the

list, valued highly by only a tiny 5% minority of senior managers. The kicker: According to the poll, new grads fall far short of the mark in every one of these areas--except tech savvy, the least desired.

The executives surveyed overwhelmingly believe that academia has failed to keep up with the breakneck pace of change in the business world: More than three-quarters (77%) blame educators for new grad's lack of readiness. (*CNN Money, Page 1, February 1, 2012.*)

#### ◆ **Great thanking**

Hand-written thank you notes are still needed as this will set you apart from others. This will make an impact and you will gain the respect from staff and fellow co-workers. Providing a digital thank you note is not everything. According to *The Business Journal*, a bureau president noted, "I want my thanks to stand out, be counted, and make an impact." That bureau president is highly respected in his industry.

There are two great keys to Great Thanking: be physical and be specific. Buy a box of thank-you cards, and each time someone does something thoughtful or helpful, write out a quick note by hand. Mail it right away, when the experience is fresh. (*The Business Journal, Tim Sanders, Page 16, March 23, 2012.*)

#### ◆ **Most manufacturing executives report a shortage of qualified workers, survey shows**

A recent national survey from the Manufacturing Institute. Of the thousand manufacturing executives who completed the Manufacturing Institute's survey, nearly 70 percent reported that they have a moderate or severe shortage of available, highly-qualified workers. Over half expect the shortage to worsen within the next five years. Further, over 60 percent of executives stated that shortages and skill deficiencies are having a profound impact on their companies; ability to expand and improve.

Many executives reported that available jobs are in the areas of "skilled production," such as machinists, operators, distributors, and technicians. (*Manufacturing Institute Survey 2011.*)

#### ◆ **Employers' expectations of employees are growing**

The percentage of employees who agree with each statement:

- 91% - Our company is asking employees to take on more responsibilities and to use a broader set of skills than in the past.
- 90% - Employees are expected to work harder to coordinate with other departments than in the past.
- 88% - The challenges employees face within our company are more complex today than they were in the past.
- 88% - To succeed in our company, employees need higher levels of learning and knowledge today than they did in the past.

Source: "Raising the Bar: Employers' Views on College Learning in the Wake of the Economic Downturn" Hart Research Associates for Association of American colleges and Universities. (*universitybusiness.com, March, 2010.*)

#### ◆ **Hard at work in the jobless future**

The Future of Work: Emerging Trends

Work will always be about finding what other people want and need, and then creating practical solutions to fulfill those desires.

The new trends for the workplace have significantly less built-in certainty. We will all need to rethink, redefine, and broaden our sources of economic security. To the extent that people are developing a broader range of skills, we will also become more resilient and capable of adapting to change.

Finally, we can expect that people will redefine what they truly need in a physical sense and find better ways of fulfilling their needs. This involves sharing and making smarter use of the assets we already have. Businesses are doing the same.

#### Co-Working:

There are now more alternatives to either working at home alone or being part of a much larger office.

#### Opting Out:

In a recent survey by Ogilvy and Mather, 76% of respondents reported that they would rather spend more time with their families than make more money. Similarly, the Associated Press has reported that less than half of all Americans say they are happy with their jobs.

A shift back toward one income households can happen when the costs of taxes, commuting, and child care consume a large portion of earnings. People who opt out are not considered unemployed, as they are no longer actively looking for paid work. Their focus often reflects a shift in values toward other activities, such as raising kids, volunteer work, or living simply.

#### The Future of Work, Personified:

The career path for younger generations more closely resembles a patchwork quilt, as people attempt to stitch together multiple jobs into something that is flexible and works for them. In today's environment, they sometimes can't find a single job that is big enough to cover all of their expenses so they find themselves working multiple jobs simultaneously. The future of work is less secure and less stable than it was. (*The Futurist, Pages 32-35, March/April 2012.*)

#### ◆ **By the numbers**

Wisconsin exports in 2011: \$22 billion

Nearly 70 percent of U.S. R&D relates to manufacturing and manufacturers perform 45 percent of all private R&D in the United States, according to the National Science Foundation. Manufacturing accounted for 93 percent of Wisconsin's exports, according to the National Association of Manufacturers. (*INSIGHT on Manufacturing, Page 18-19, March, 2012.*)

#### ◆ **Forecasters expect employment growth to continue at moderate pace over 2011**

Nonfarm payroll employment will grow at a moderate pace in the first half of 2011 before picking up slightly in the second half, but the nation's unemployment rate will remain elevated throughout the year, as the slow economic recovery that began in 2009 continues in earnest.

Employers in health care are suddenly facing hiring freezes, potentially putting a damper on one of the sectors that has continued to add jobs over the course of the recession. However, once more and more changes required by the recent health care overhaul are put into place, demand for health care services will grow again.

Much of the employment growth in recent months has been in temporary help positions, which he said was "not a good sign," since it indicates a reluctance on the part of employers to hire permanent workers. "Government employment is now likely to have a steady drip of small declines."

The construction industry will "turn positive" in terms of job growth in both the residential and nonresidential sectors. But some 1.5 million construction workers still "will either be idle, retired or working on other industries." Many construction workers "have been out of work so long that it will be hard for the industry to find skilled workers" in 2011, but by 2013, the industry may rebound such that there could be "worker shortages." (*BNA Report, January 17, 2011.*)

◆ **USA TODAY Snapshots**

Is involvement in office politics necessary to get ahead?

YES - 56%

NO - 42%

Don't know - 2%

(*USA Today, Jae Yang and Sam Ward, Page 1B, May 2, 2012.*)

◆ **Welders, other skilled workers in high demand - employers expect shortages**

A hiring frenzy at Oshkosh Corp. and Marinette Marine Corp. could put a strain on companies seeking welders and other industrial employees. Hiring of 650 to 750 assemblers, welders, and other skilled-trades positions could begin as early as this month (Feb. 2011).

Oshkosh expects to build more than 23,100 trucks and trailers in the next two years and is gearing up to produce nearly 40 a day. The effort is expected to employ several thousand people.

Marinette Marine is hiring hundreds of people for a US Navy contract to build combat ships. Construction of the ships could result in several thousand jobs at the company and its suppliers in Wisconsin and Michigan.

The starting average hourly wage for a welder ranges from \$18 to \$19.50, according to NEW North Inc., a business development organization for northeast Wisconsin.

Two out five manufacturers in northeast Wisconsin plan to hire in 2011, based on a survey of 378 companies with at least \$3 million in annual revenue and 25 or more employees, according to the Northeastern Wisconsin Manufacturing Alliance. (*Journal Interactive (Journal Sentinel), February 7, 2011.*)

◆ **Gen Y grads more likely to launch start-ups**

Generation Y is the most entrepreneurial generation ever. This generation feels a general sense of distrust for large organizations and government. These two factors seem to have led Generation Y to follow their entrepreneurial pursuits. The best way to become a successful entrepreneur is to find ways to expose yourself to the lifestyle before you do it. Intern or apprentice at a small start-up. (*USA Today, Rebecca Walker, Page 5B, May 8, 2012.*)

◆ **Generation jobless: for those under 24, a portrait in crisis**

Teens and adults under the age of 24, especially those with little or no college education, are faring the worst, economists say. The 16.7 percent unemployment rate among Americans in that group is more than twice the rate for workers 25 and older.

In the downturn of 1982 to 1983, unemployment among young adults topped 16 percent for 23 straight months. The current slump has been longer and deeper: The unemployment rate has been above 16 percent for 32 months -- and counting. For 29 of those months, the rate has been above 17 percent, reaching a record 19.5 percent in April of last year.

Unemployment is particularly acute for young men. In the 16 to 24 age group, 18 percent of males lacked jobs last month, compared with 15.3 percent of females.

Select Unemployment Figures from October 2011\*

4.2% - With college degree, 25 and older

7.7% - With college degree, 24 and under

21.1% - High school graduate, without college degree, 16 -24

24.8% - Without high school diploma, 16-24

\*not seasonally adjusted.

*(The Wall Street Journal, November 7, 2011.)*

◆ **Workers wanted**

Supply and Demand: Manufacturers are optimistic about how things are going in business, according to the second annual Manufacturing Vitality Index, which was put together by the NEW Manufacturing Alliance. Orders and profits are up, but 45 percent of manufacturing predict trouble finding the workers they need with the right set of skills.

Likewise, a survey of U.S. manufacturers by Deloitte and The Manufacturing Institute last year found that as many as 600,000 jobs are vacant nationwide because there aren't enough skilled workers to go around.

IN DEMAND:

Here's a list of the most difficult-to-fill occupations, according to a survey by the Northeast Wisconsin Manufacturing Alliance:

- Machinist/CNC
- Machinist/Tool and Die
- Team Assembler
- Welder
- Engineers/Engineering technicians
- Machine operators and sales representatives

Nearly half of all manufacturers - 48 percent - plan to add workers in 2012.

SURVEY SAYS:

- Almost 1 out of 2 companies will experience difficulty finding local talent in 2012
- Skills shortage increased from 29 percent in 2011 to 45 percent in 2012
- 2 out of 5 manufacturers plan to hire in 2012

*(INSIGHT on Manufacturing, MaryBeth Matzek, Pages 8-12, March, 2012.)*

### ◆ **A flight plan for the American economy**

We are producing the same amount of goods and services as in 2007 with 7 million fewer workers. Two years into the recovery, growth is about two percent and job creation has reached around 250,000 a month, which might sound high but is actually barely enough to keep pace with all the news workers entering the job market for the first time.

The "new normal" of slower growth and job creation means lower tax revenues and more unemployment and health benefits to be paid out, hence a much larger deficit. Studies show that after a few years of not working, people lose the talents, skills, and work habits that make it possible for them to work productively.

Two powerful drivers have allowed for this new productivity. The first is technology, which is producing massive efficiencies across industries. It has already transformed manufacturing and is now beginning to transform white-collar professions, with computer programs able to do, for example, the basic discovery work performed by expensive lawyers.

The second force is, of course, globalization. There is now a single world market for many goods and services, and over the past 10 to 15 years, about 400 million people - from China, India, South Africa, Indonesia and elsewhere - have entered the global labor force, offering to make the same things Americans make for a tenth the price.

The image we all have in our heads when we think of bringing back good jobs is manufacturing. Focus on technical education, technical institutes and polytechnics, as well as apprenticeship programs. We need to create retraining programs for an entire generation of workers. It would have to be a program in which government paid a large share of the costs while educational institutions provided the services.

The Kauffman Foundation has found that from 1980 to 2005, nearly all net job creation in the US occurred in firms that were less than five years old.

The American Society of Civil Engineers gave US infrastructure a grade of D and estimated that we need to spend \$2.2 trillion to fix our airports, bridges, highways and trains systems. (*Time - In Partnership with CNN, May 23, 2011.*)

### ◆ **Manufacturers search for workers to sustain revival**

Manufacturers have been a bright spot in the nation's slow economic recovery by adding jobs, from February 2010 to February 2012, at a faster pace than the rest of the economy, according to the U.S. Labor Department. As the industry sees growth, policymakers and educators are scrambling to train workers fill a growing number of manufacturing jobs. But kids can come out of technical college in two years and have a job that pays more than their parents. Students right out of technical college are making nearly \$55,000 a year, sometimes more in his state. (*USA Today, Michael Diamond and Alesha Williams Boyd, Page 5B, May 8, 2012.*)

### ◆ **Top 10 dying industries**

The U.S. economy is recovering from a severe recession, but some industries are unlikely to ever fully bounce back.

Wired telecom carriers are among the industries seen on the decline.

A new analysis by research firm IBIS World looks at 10 industries that appear to be dying. The list isn't exactly shocking, but it represents a mix of sectors that are being left behind by technology or have been hurt by cheaper overseas competition.

The biggest industry profiled by IBISWorld is wired telecom carriers, largely being supplanted by cellphones and the Internet. The dominance of the Web and digital media also puts Newspaper publishers, record stores and video-rental companies on the list. Meanwhile, photofinishing also takes its place among the top 10 dying industries thanks to the growing influence of digital photography.

Cheap imports are blamed for a decline in mills and apparel manufacturers. Companies that rent formal wear are also counted among dying industries amid both competition from abroad and lower prices making owning your own formal wear a more attractive option than renting.

The only clear recession casualty that makes the list is manufactured home dealers. The housing boom led to a surge in the industry, but now years after the bubble burst the sector has continued to struggle.

1. Wired Telecommunications Carriers
2. Mills
3. Newspaper Publishing
4. Apparel Manufacturing
5. DVD, Game & Video Rental
6. Manufactured Home Dealers
7. Video Postproduction Services
8. Record Stores
9. Photofinishing
10. Formal Wear & Costume Rental

*(Wall Street Journal, March 28, 2011.)*

#### ◆ **Scarcity of skills: manufacturing survey: 29 percent can't find qualified workers**

Nearly half of those polled in the Northeastern Wisconsin Manufacturing Alliance 2011 Manufacturing Vitality Index said they're making some kind of investments in capital expansion and modernization. About 41 percent of firms said they planned some kind of capital expansion within two years. And 48 percent planned a plant modernization with a median investment of \$225,000.

The center questioned 358 New North manufacturing employers (those with 25 or more employees and more than \$3 million in sales and had completed 183 surveys. The findings:

- Almost 38 percent of employers said they needed qualified operators and machine operators, machinists and skilled machinists, and qualified welders.
- More than 21 percent said they need qualified managers, buyers, purchasers, supervisors, and quality control technicians.
- The kind of skills that employers say are most desirable have little to do with technical know-how-they want people with so-called "soft" skills. That includes "personal attributes" such as intelligence, interpersonal and communications skills, strategic thinking and problem solving skills.

Most difficult positions to fill with qualified workers:

- Operators/machine operators, 15.8 percent
- Machinist/skilled machinists, 12.3 percent
- Welders, 10.5 percent
- Engineers, 9.9 percent

Most desired skills:

- 26.1 percent say the most desired skills - even more desirable than experience - were personal attributes, including intelligence, communication, interpersonal and problem-solving skills.

Least available skills:

- Experience, 30.2 percent
- Personal attributes such as communication skills, 23.2 percent
- Strong work attributes, including dependability and reliability, 19.5 percent

*(INSIGHT on Manufacturing, Pages 15-18, June, 2011.)*

#### ◆ **For-profit colleges are booming**

Whether they are called for-profits, private-sector or proprietary colleges, these post-secondary institutions have grown significantly in the last decade. More than 10 percent of the nation's almost 30 million college students now attend one of the dozens of for-profit colleges. Who attends for-profits? Adults who seek to prepare themselves for careers. Some 62% are 24 or older, 41% are minorities, 76% are self-supporting, 47% have children of their own and 39% work at least 30 hours per week. *(Corporate Report Wisconsin, Nancy A. Herrick, Pages 19-21, May, 2012.)*

#### ◆ **Need for nurses outpaces growth in those entering field**

As Baby Boomers age, the need for nurses will increase. Even though the number of licensed registered nurses in the United States has grown from 1.7 million in 1980 to 3.1 million today, the total is not enough to meet the expected demand. Registered nurses remain at the top of the list when it comes to employment growth, so hospital systems are being proactive in trying to retain older employees. Recruiting more male nurses, now only 7% of the workforce, could help ease the shortage. While nursing schools are graduating highly skilled individuals, the experience of older workers is impossible to teach in a classroom. Each generation also brings different skills, all needed to best serve patients. Tech savviness, a given for new nursing graduates and necessary for survival in the health care field today, can be difficult for older nurses to embrace. *(USA Today, Maria Sonnenberg, Page 5B, Monday, May 14, 2012.)*

#### ◆ **Time is the enemy**

Four of every ten public college students are able to attend only part-time. Seventy-five percent of today's students are juggling some combination of families, jobs, and school while commuting to class; according to the U.S. Department of Education, only a quarter go full-time, attend residential colleges, and have most of their bills paid by their parents. Even when given twice as long to complete certificates and degrees, no more than a quarter ever make it to graduation day. *(Complete College America, September, 2011.)*

#### ◆ **Nursing tops list of high-paid jobs of the future**

10. Personal financial advisors:  
 Total new jobs (2008-2018): 62,800  
 Median income: \$64,750



9. Dental hygienists

Total new jobs (2008-2018): 62,900

Median income \$68,250

8. Civil engineers

Total new jobs (2008-2018): 67,600

Median income \$77,650

7. Market research analysts

Total new jobs (2008-2018): 70,100

Median income \$60,570

6. Computer systems analysts

Total new jobs (2008-2018): 108,100

Median income \$77,740

5. Physicians and surgeons

Total new jobs (2008-2018): 144,100

Median income \$94,000-\$153,000

4. Computer applications software engineers

Total new jobs (2008-2018): 175,100

Median income: \$94,180

3. Management analysts

Total new jobs (2008-2018): 178,300

Median income \$78,160

2. Accountants and auditors

Total new jobs (2008-2018): 279,400

Median income: \$61,690

1. Registered nurses

Total new jobs (2008-2018): 581,500

Median income: \$64,690

By 2018, the number of nurses is truly set to explode. (*msnbc.msn.com, September 2, 2011.*)

◆ **Auto plants roar into overdrive - demand drives overtime, hiring**

Automakers are pushing factories and workers to the limit to try to meet burgeoning demand for new vehicles. Ford Motor and Chrysler Group are cutting out or reducing the annual two-week July shutdown at several plants this summer to add thousands of vehicles to their output.

The automakers' problem now is one they welcome: hot demand. Sales for 2012 are estimated at 14.3 million vehicles, according to HIS Automotive, up from 12.8 million last year. Since the boom years when the industry made about 16 million vehicles a year, automakers have slimmed down for the new reality. They have no excess capacity but don't want to open new plants and risk having to repeat the recent painful and expensive closings if demand falters. (*USA Today, Chris Woodyard, Page 1A, Wednesday, May 23, 2012.*)

#### ◆ **Skilled workers needed in state**

Jim Golembeski, executive the Bay Area Workforce Development Board in Green Bay, said a manufacturer that wanted to fill 134 entry-level jobs, paying \$15 per hour, received 850 applications but hired only 17 people. Many applicants lacked a high school diploma, could not pass basic reading, math or dexterity tests, or failed drug and alcohol tests.

The shortage of skilled workers could get worse as older people retire.

"If we don't plan for the future, we aren't going to have one," said Kurt Bauer, president and chief of Wisconsin Manufacturers & Commerce. "Without a skilled workforce, we can say goodbye to those jobs."

Golembeski said there is a gap between high schools and the working world. Many times, schools can't afford to create workshops that have factory machines, and some schools place little emphasis on manufacturing-career skills. (*fdlreporter.com, September 5, 2011.*)

#### ◆ **Demand high for skilled workers - job prospects bright for nurses, metal workers**

Career outlooks are sunny for those with skills in nursing or metalworking and fabrication. In manufacturing, a historically strong manufacturing base has been buoyed in part by large government contracts to companies such as Oshkosh Corp. and Marinette Marine. Companies in the 18-county Northeast Wisconsin area were projected to need to fill 10,000 production and manufacturing jobs by 2016, according to a 2010 survey of the 18-county New North region.

Meanwhile, an aging population is driving the growing need for an array of skilled health care workers. The New North survey found numbers are expected to trend upward in health care, too, expanding by almost 4,000 jobs in 2016. According to an annual jobs study by New North, Companies in the 18-county Northeast Wisconsin area were projected to need to fill 10,000 production and manufacturing jobs by 2016. The health care field's numbers were expected trend upward as well, expanding by almost 4,000 jobs by 2016. And the need for welders is expected to increase 26 percent by 2015, according to the new North survey.

The welding/metal fabrication program at Fox Valley Technical College, which works with Muza Metal and Marinette Marine, has a very high job placement rate after graduation. Ninety percent of last year's graduates found jobs. Some of the students in the program were even hired before they finished their degrees. Aurora gets a lot of applicants for positions from those in the Fox Cities and Green Bay, and starts working with potential future health care workers while they are still in school. Back at FVTC, graduating from the nursing program find a hot job market upon graduation. (*The Reporter, Terry Licht, Page A1-A8, Sunday, June 24, 2012.*)

#### ◆ **Modest salary increases projected in 2012**

The one-two punch of a weak job market and a sluggish economy will deep most salary increases at a bare minimum in 2012, continuing a pattern of incremental wage growth in recent years.

Salaries will increase by a median of just 2.8 percent in 2012, up slightly from 2.6 percent in 2011 and 2010, according to Towers Watson Data Services.

When recent inflationary trends are factored in- the Consumer Price Index rose 3.6 percent during the 12-month period from August 2010 to July, for example - the projected median bump in paychecks is essentially a wash.

While most workers are likely to see their salaries remain fairly flat in 2012, employees in the South Central and West Coast regions may get slightly higher increases, as reported by Towers Watson Data Services and shown in the table accompanying this article. (*HR Magazine, Page 26, October, 2011.*)

## EDUCATION TRENDS

### ◆ **Even at 6.8%, federal student loans are a good deal**

Student loan rates are as high as they are in part because they're risky. For one thing, there's no collateral, no home or car a lender can repossess if the borrower defaults. The government can hardly take back someone's education. And student borrowers do default; about 23% of recipients stop making payments on the subsidized Stafford loans Congress is fighting over. (*USA Today, Page 9A, May 4, 2012.*)

### ◆ **Why companies aren't getting the employees they need**

To get America's job engine revving again, companies need to stop pinning so much of the blame on our nation's education system. They need to drop the idea of finding perfect candidates and look for people who could do the job with a bit of training and practice.

#### The Big Myths:

ManpowerGroup, for instance, reports that 52 percent of US employers surveyed say they have difficulty filling positions because of talent shortages. But the problem is an illusion. Some of the complaints about skill shortages boil down to the fact that employers can't get candidates to accept jobs at the wages offered.

#### A Training Shortage:

And make no mistake: There are plenty of people out there who could step into jobs with just a bit of training - even recent graduates who don't have much job experience. Unfortunately, American companies don't seem to do training anymore. Data are hard to come by, but we know that apprenticeship programs have largely disappeared.

- 52% of US companies report difficulty filling jobs
- 47% of employers blame prospect's lack of "hard" job skills or technical skills
- 35% of companies cite candidates' lack of experience
- 25% of companies blame lack of business knowledge or formal qualifications
- 28% of companies are increasing staff training and development

#### The Way Forward:

Here are three ways in which employees can get the skills they need without the employer having to invest in a lot of upfront training.

1. Work with education providers.
2. Bring back aspects of apprenticeships.
3. Promote from within.

(*The Wall Street Journal, October 24, 2011.*)

◆ **How much you pay now depends on what you study**

There is an unwritten policy known as differential tuition, is seeing a resurgence nationwide, and it's neither fair to students nor good for America's economic competitiveness. Administrators should - and can - look elsewhere to fill holes in their budgets. But charging higher tuition for more popular majors such as business just punishes students for choosing a popular field. And it's shortsighted to discourage them from pursuing certain lines of study. Does the economy really need more liberal arts majors and fewer STEM (science, technology, engineering and mathematics) majors? As for charging more for upper-year courses, that's just a tax on perseverance.

Almost a third of public universities charge some undergraduates higher tuition rates than others, according to a new study from the Cornell Higher Education Research Institute. The other area where universities are charging more is for their most sought after major - business - a field where costs aren't that different from the average. Taxing what's popular looks like an effort by administrators to go after money wherever they can find it. In addition, colleges' more popular majors subsidize less popular ones because they bring in more tuition dollars.

Before colleges impose differential tuition, they should trim administrative costs, increase faculty teaching loads, drop money-losing sports, boost private fundraising and call a truce in the amenities arms race. (*USA Today, Page 6A, Tuesday, June 5, 2012.*)

◆ **Colleges take varied approaches to iPad experiments, with mixed results**

When observing classrooms with and without iPads, the difference ranged from barely noticeable to a stark contrast, said Dana K. Hoover, assistant CIO for communications and planning at Pepperdine. The most noticeable difference was how students in the iPad classes moved around the classroom more and seemed to be more engaged in the material.

At Cincinnati, where the study is also exclusive to faculty members, researchers say the experience has been useful so far, particularly in science and engineering courses because there are a number of useful, interactive apps available for these subjects as compared with the humanities courses. (*The Chronicle of Higher Education, October 18, 2011.*)

◆ **How do we fix the college debt problem? Five proposals to give students fighting chance**

Outstanding student loans topped \$1 trillion last year, exceeding the total credit card debt. Thousands of borrowers are postponing getting married, buying a home or having children until their debts are paid off. Defaults are rising, which typically leads to larger loan balances. And the problem isn't limited to young adults. Some borrowers are older adults who when back to school. Others are parents who co-signed loans for their children. Here's a look at five proposals to provide relief for existing borrowers or prevent the crisis from getting worse.

1. Bankruptcy reform
2. Loan forgiveness
3. Increase Pell grants
4. Link aid to affordability
5. Educate borrowers

(*USA Today, Sandra Block and Christine Dugas, Page 1B, Tuesday, May 22, 2012.*)

◆ **For-profit colleges have an increasing presence on the higher education landscape with quadrupled enrollments over the last ten years. Disingenuous recruitment practices, false promises of job**

placement, high dropout rates and a higher percentage of student loan defaults is heightening the scrutiny of related practices at all colleges. Specifically, the "gainful employment" regulation, yet to be finalized, is likely to increase accountability for program majors to link to verifiable job prospects in a much more cohesive and unprecedented way than most of higher education has experienced to date. (*Gainful Employment Regulation, Department of Education <http://www.ed.gov/news/press-releases/department-track-implement-gainful-employment-regulations>*).

◆ **Colleges look at immigrants**

So as the school began to get more applications where Social Security numbers weren't provided, there was never a question of turning qualified undocumented students away. This year, the school pulled together \$274,000 in financial aid for 17 undocumented students. Despite pushback from some donors and alumni, Carroll says her only regret is that she can't help more students.

Is it controversial? Yes. But, it's against the law to discriminate against any student group. You need to start from that premise. Each year, about 65,000 undocumented students graduate from U.S. high schools. Between 5% and 10% go on to college. A study last year involving 447 colleges found that 57% of private and 29% of public schools provide undocumented students with aid. That suggests some schools "are trying to work with students to resolve this problem." (*USA Today, Mary Beth Marklein, Page 3A, May 8, 2012.*)

◆ **In 2020, schools will carve out non-digital preserves for students to read and write with books, pens, and paper**

Educators and students will see non-digital space as a crucial part of the curriculum, recognizing that aspects of intelligence are best developed with a mixture of digital and non-digital tools. (*Mark Bauerlein, "Literary Learning in the Hyperdigital Age," Jan-Feb, 2010, p. 24.*)

◆ **The rise of teaching machines**

Summer's debut of Knewton, a new computerized-learning program that features immediate feedback and adaptation to student's learning curves.

Large numbers of students who need remedial courses and drop out, drive the appeal of software that offers individualized attention to get students through basic math and other courses that are essential to college success. "These are high-risk, low-socioeconomic-status students -exactly the kind we have to reach out to," says Mr. Regier.

Note one crucial problem: Few good studies have been done on the outcomes of these programs, particularly at the community-college level, which serve the kind of vulnerable students they are supposed to help most.

MyLabs, a series of learning programs from Pearson Education. The open learning initiative, like other programs, has a "dashboard" that gives a professor a view of the class or of a single student. (*The Chronicle of Higher Education, Page B12, May 13, 2011.*)

◆ **How this job market could scar a generation - Millennials' attitudes about family, work and security are being formed in the wake of the Great Recession**

Megan Silsby earned a biology degree last month from Virginia Tech, and she considers herself a full-time worker even though she hasn't landed a job in this rough economy. Every day at 8 a.m., Silsby, 22, heads to a basement office in her parents' home in Chantilly, VA. All day, she searches

the internet for openings, applies for jobs, and follows up with phone calls. She has applied for more than 80 jobs, with no luck so far.

For the moment, Silsby finds compensation elsewhere, especially in the reconnection with her parents and two younger siblings. Meanwhile, almost \$30,000 in college loans waits to be repaid. And one by one, generational attitudes are being formed about work, security and even family, particularly among people younger than 25 who have entered the job market since 2008.

The national unemployment rate rose to 8.2% in May as Silsby was graduating as one of 2.6 million who got bachelors, masters or doctoral degrees in the school year now ending. The non-partisan Economic Policy Institute called their labor market, "grim" and said that over the previous year, unemployment among college graduates younger than 25 had averaged 9.4% with an additional 19.1% in jobs for which they were overqualified.

Social scientists say these young adults are a lot like the Americans who came of age in the early 1930s, both in the economic upheaval they confront and in the attitudes toward success, contentment and risk aversion that they are forming.

However, she says the recession has reconfirmed the value of having a college degree in a globally competitive job market. And she argues that things are looking up. Citing Labor Department statistics, she says that at the beginning of the recession, there were seven applicants for every job opening. Now, she says, there are 3.4. Some recent graduates say they have landed jobs by starting early, networking, taking multiple internships and breaking through Internet screens with personal connections. (*USA Today, Chuck Raasch, Page 1-2A, Tuesday, June 19, 2012.*)

#### ◆ **More students seeking job certificates**

Labor economists and some educators believe career-driven degrees should become an increasingly common choice and are advising students to pursue skills-oriented fields of study they feel offer better job opportunities.

A new report based on Florida State's employment data shows that students who earn certificates or associate of science degrees make more money in their first year out of college than four-year graduates of Florida's university system. Nationally, 27% of people with licenses and certificates also earn more than the average bachelor's degree recipient, (*Georgetown University Center on Education and the Workforce.*)

Middle-skills jobs require more than a high school diploma but less than a college degree, along with significant education and training - and they make up roughly half of all US jobs. Such jobs require strong math, communications and science knowledge, in addition to "soft skills" like the ability to solve problems in teams. They do not necessarily require a four-year, or even a two-year college degree. (*Milwaukee Journal Sentinel, January 24, 2011.*)

#### ◆ **College retention rates improving at two-year schools, declining at four-year schools**

The first-to-second-year retention rate at US two-year public colleges has risen to its highest level in 27 years of research, while the retention rate at four-year private college has dropped to its lowest level in that time, according to data from ACT, Inc.

Colleges are increasingly using learning assistance measures such as remedial courses, study groups and tutoring) to help students stay in school. Those measures have moved ahead of academic advising and first-year transition programs to become the top-ranked cluster of retention practices used at four- and two-year colleges. ([www.act.org/news/2011/01/20/college-retention/](http://www.act.org/news/2011/01/20/college-retention/), January 20, 2011.)

◆ **The briefing - report calls for focus on job training, not just college**

According to a report by the Harvard Graduate School of Education, Americans "place far too much emphasis on a single pathway to success; attending and graduating from a four-year college," even though only 30% of young adults attain that goal. The report also notes that of the 47 million jobs expected to be created in the United States by 2018, only 1/3 will require a bachelor's degree. (*The Chronicle of Higher Education*, [www.chronicle.com](http://www.chronicle.com), February 2, 2011.)

◆ **2011 National Freshman Attitudes Report - special focus: attitudes that may limit academic engagement**

More than 44% of incoming freshmen nationally agreed with the statement, "Math has always been a challenge for me," with even higher percentages agreeing among first-generation freshmen (48%) and adult, nontraditional-age freshmen (53%). "I am capable of writing a very clear and well-organized paper," a percentage that was lower among students at two-year public and private institutions (55%) than at four-year public and private institutions (65-67%).

Reflecting the uncertain economy, nearly one-third of incoming freshmen (31%) and even more first-generation freshmen (40%) arrived on campuses last fall indicating they had "very distracting and troublesome" financial problems.

Percent of freshmen students at 2-year institutions public and private in agreement:

- I would like to receive some help in improving my study habits - 56.4%
- I have a hard time understanding and solving complex math problems - 52.4%
- Math has always been a challenge for me - 53.0%
- I have difficulty organizing my ideas in a paper, and I tend to make a lot of punctuation and grammar mistakes - 39.8%
- I would like to receive some instruction in the most effective ways to take college exams - 73.6%
- I would like to receive some help in improving my study habits. - 56.4%
- I would like to receive some individual help in improving my math skills. - 52.2%
- I would like to receive some individual help in improving my writing skills - 42.7%
- I would like to receive tutoring in one or more of my courses. - 39.9%
- I would like to receive some training to improve my reading skills - 28.8%
- I would like some help selecting an educational plan that will prepare me to get a good job- 61.2%
- I would like to talk with someone about the qualifications needed for certain occupations - 56.9%
- I would like to talk with someone about the advantages and disadvantages of various occupations - 40.3%
- I would like to meet an experienced student who can show me around and give me some advice. - 38.3%

(2011 National Freshman Attitudes Report, 2011.)

◆ **Boosting paychecks without a degree**

It seems as though every day we hear bad news about higher education. Tuition is rising, nearly 40% of all college students fail to graduate even in six years, and many of those who do graduate can't find jobs - yet are saddled with debt.

While young people continue to be pushed to get a college degree, some are finding alternatives that suit them better. One of those alternatives is "certificates." These are credentials awarded for vocational programs that prepare students for specific jobs, in fields ranging from metal working to office management. Getting a certificate usually takes two years or less. It is cheaper than a four-year degree, for both students and taxpayers, (federal grants and loans are available for certificate programs.)

They are offered mostly by community colleges and for-profit schools, they operate under the radar of the higher-education establishment, and they aren't even listed in most official statistics. (Two-year associate's degrees differ from certificates in that they generally are academic degrees and can be transferred to four-year programs.)

On average, getting a certificate increases wages by 20% about what a high school graduate would earn. And many certificate holders earn more than graduates who have associate's or bachelor's degrees. In computer and information services, average earnings for certificate holders are \$72,498 per year for men and \$56,664 for women. Certificates offer those with a vocational interest opportunities for solid job prospects for less time and money (and thus lower debt) than do many four-year degrees. They show that people have more opportunities to pursue their self-interest than we often think. (*USA Today, Jane Shaw, Page 11A, Friday, June 15, 2012.*)

◆ **As the web goes mobile, colleges fail to keep up**

Half of all college students used mobile gear to get on the Internet every day last year, compared with 10% of students in 2008, according to Educause (2010), the educational-technology consortium. But many colleges still treat their mobile Web as low-stakes experiments. Colleges often do not realize how far their Web services have fallen behind what students are used to. For instance, a mobile app could recommend courses based on what students with similar interests have liked taking. Mobile devices, give colleges the chance to bring together all of their key services into one portal that students always have with them. (*The Chronicle of Higher Education, January 23, 2011.*)

◆ **USA Today Snapshots**

Is going to college worth the cost if it'll help you to have a secure job?

Yes - 50%

No - 50%

Source: TD Ameritrade survey of 1,001 respondents 13-22 years old. (*USA Today, Page 1B, Thursday, June 21, 2012.*)

◆ **More working women than men have college degrees, census bureau reports**

Among the employed population 25 and older, 37 percent of women had attained a bachelor's degree or more as of 2010, compared with 35 percent of men, according to new data from the U.S. Census Bureau. In contrast, among all adults 25 and older, 29.6 percent of women and 30.3 percent of men had at least a bachelor's degree.



The data come from tabulations on Educational Attainment in the United States: 2010 and not only examine gender differences in attainment but also provide the most detailed information on years of school completed ever presented by the Census Bureau, showing for each level of attainment exactly how many years of education adults have.

"The tabulations permit one to see not only the broad levels of educational attainment adults experienced, but also, for instance, if they did not receive a high school diploma, the specific level of schooling they did reach," said Sonia Collazo, a Census Bureau demographer.

In 2010, 36 percent of the nation's population 25 and older left school before obtaining a degree. This includes 15 percent of the population that didn't earn a regular high school diploma — a group sometimes labeled "dropouts." Among this group were about 1 percent of the population who reached the 12th grade, 2 percent who reached the 11th grade but still did not graduate, and 2 percent who earned a GED.

An even greater share of the 25-and-older population — 17 percent — attended some college but left before receiving a degree. At the graduate school level, 4 percent of the population left before obtaining an advanced degree.

The majority of adults (64 percent), however, finished their schooling with a regular high school diploma or college degree. The most common of these is a high school diploma, which was the highest level attained by 30 percent of those 25 and older. Another 9 percent left school with an associate's degree, and 15 percent finished with a bachelor's degree (not statistically different from those who did not earn a high school diploma). Eleven percent of the population attained an advanced degree in 2010.

Data also include levels of education cross-referenced by a wide range of demographic and socioeconomic characteristics, including age, sex, race, Hispanic origin, marital status, household relationship, citizenship, nativity and year of entry. Historical tables provide data on mean earnings by attainment level, sex, race and Hispanic origin, with data dating back to 1975 and tables on attainment levels dating back to 1940.

- In 2010, 87 percent of adults 25 and older had at least a high school diploma or equivalent, up from 84 percent in 2000.
- Of the 200 million people 25 and older in 2010, 26 million had not completed high school, while 174 million had attained at least a high school education.
- In 2010, 30 percent of adults 25 and older, or 60 million people, had at least a bachelor's degree, compared with 26 percent in 2000.
- More than half (52 percent) of Asians 25 and older had a bachelor's degree or more, higher than the level for non-Hispanic whites (33 percent), blacks (20 percent) and Hispanics (14 percent).
- Women 25 and older were more likely than men 25 and older to have completed at least high school, at 87.6 percent versus 86.6 percent.
- Among the population 25 to 29, 36 percent of women had a bachelor's degree or more, compared with 28 percent of men.
- Thirty percent of foreign-born residents of the U.S. had less than a high school diploma, compared with 10 percent of native-born residents. Nineteen percent of naturalized citizens

had less than a high school diploma. At the same time, 29 percent of the foreign-born population had a bachelor's or higher degree, compared with 30 percent of the native-born population. (The percentage of native-born residents with at least a bachelor's degree was not statistically different from the percent of foreign-born residents with less than a high school diploma.) Thirty-five percent of naturalized citizens had a bachelor's or higher degree.

These data come from the Current Population Survey's Annual Social and Economic Supplement, which is conducted in February, March and April at about 100,000 addresses nationwide. (*Census.gov, April 26, 2011.*)

◆ **Students are drowning in debt**

In 2011 American student-loan debt surpassed credit-card debt for the first time. More students are borrowing more money than ever before in order to buy a commodity that is often of dubious value. They are borrowing the money from increasingly dodgy lenders. This 2009 briefing, "Drowning in debt: the emerging student loan crisis", from Kevin Carey and Erin Dillon.

Higher education has never been more expensive. The price of attending a public university doubled, after inflation, over the last two decades, and family income and student financial aid haven't kept pace. As a result, students have no choice but to borrow, and more college students are borrowing more money than ever before.

But a new analysis of federal financial aid records reveals more than just surging debt levels. Students are taking on more of the riskiest debt: unregulated private student loans. Here, students have the least protection and pay the highest rates. For-profit colleges are leading the way in this trend, and minority college students appear to be borrowing a disproportionate share. If this continues, the consequences will be severe: reduced access to higher education, diminished life choices, and increasing rates of catastrophic loan default. (*The Economist, April 15, 2011.*)

◆ **Colleges offer degrees in 3 years - some students like option of saving time and money**

A 25% tuition break first offered three years ago by Hartwick College in Oneonta, NY, paid off this spring for a dozen new graduates. All they had to do was squeeze four years of study into three. Hartwick, a small private liberal arts college, is at the forefront of a recent upswing in colleges that, spurred by the recession and concerns over crushing college debt, are encouraging students to save money by shortening the time it takes to earn a degree. This fall, three-year degrees will be an option at Wesleyan University in Middletown, Conn. Minnesota State University in Mankato plans to make them available in 2013. Missouri's Office of Economic Development is reviewing applications for grants to offer three-year bachelor's degrees this fall in high-demand fields such as health care and information technology. (*USA Today, Mary Beth Marklein, Page 3B, Friday, June 22, 2012.*)

◆ **Actually going to class, for a specific course? How 20th- century. New learning technologies prompt a rethinking of traditional course structure.**

At Worcester Polytechnic Institute, administrators run seven-week immersion projects with no lecture component, in which students work in teams on projects that benefit nonprofit organizations.

"There is definitely a broader array of options available to students who wish to forgo the commute to class altogether in exchange for online classes altogether in exchange for online classes that essentially provide the same content that professors regurgitate to students in lecture."

That leads to a big question: Why even have a traditional college course? Learning outside of this structure engages students more deeply, recent data indicate. Professors talking for 16 weeks or so, assigning readings, and then testing students often appear to yield a bunch of quickly memorized facts that are soon forgotten. In an era when students can easily grab material online, including lectures by gifted speakers in every field, a learning environment that avoids courses completely - or seriously reshapes them - might produce a very effective new form of college. (*Author: Jeffrey R. Young, Date Unknown.*)

#### ◆ **Survey says 80 percent of faculty use social media in their teaching**

More than 80 percent of college faculty use some form of social media in their teaching, with online video by far the most popular application.

The survey, *Teaching, Learning, and Sharing: How Today's Higher Education Faculty Use Social Media for Work and for Play*, sought to learn exactly how higher education faculty use social media and makes distinctions across personal, in class, and professional (on the job but not while teaching) uses. The survey included questions on Facebook, Twitter, MySpace, LinkedIn, SlideShare, and Flickr, as well as blogs, wikis, video (both on YouTube and elsewhere), and podcasts.

- More than three-quarters of all faculty visited a social media site within the past month for personal use, and nearly one-half posted some content during that period.
- Faculty with more than 20 years of teaching experience are less likely to visit and less likely to post than are faculty with less than five years of teaching experience.
- Just over 90 percent of faculty use social media either for professional purposes or in their classes—or both, although in some cases the frequency is only monthly (20 percent) or rarely (19 percent).
- Nearly two-thirds of faculty has used social media in their courses— either during class or as part of an assignment— and those who teach online are more likely to do so.

However, despite the broad awareness and varied use of social media, many faculty are unconvinced it has a place in the college classroom and have concerns regarding its instructional value, privacy, and the time commitment. (*Faculty Focus, April 22, 2011.*)

#### ◆ **Job outlook and starting salaries for new grads**

Employers plan on hiring 9.5% more new graduates in 2011-12 than they did in 2010-11. Those companies planning on increasing their number of hires are doing so for a number of reasons. Some simply report having more business, others are experiencing company growth, and some need to replace retiring workers.

Attributes employers look for on a resume:

- Team Player
- Leadership
- Communication Styles
- Problem Solving
- Strong Work Ethic

73.4% of employers plan to screen candidates by GPA in 2012  
65% of employers reported a GPA cutoff of 3.0

At the end of the day, receiving a paycheck is crucial. Here are some of the top-paying industries, as well as those planning to hire the most grads in 2012.

Top-Hiring Industries: # of New Grads Entrants for 2012

Education Services - 298,000

Health Care & Social Assistance - 180,000

Professional, Scientific & Technical Services - 153,000

Finance & Insurance - 124,000

Manufacturing - 120,000

Top-Paying Industries - Average starting salaries

Utilities - \$64,400

Information - \$54,392

Manufacturing - \$53,006

Management of Companies & Enterprises - \$51,874

Finance & Insurance - \$51,110

([www.onlinecolleges.net](http://www.onlinecolleges.net) ([www.fluency21.com](http://www.fluency21.com)), Ross Crockett, June 13, 2012.)

#### ◆ **Students say tablets will transform college, though most don't own tablets**

More than two-thirds of a large group of college students say that tablet computers will change the way students learn.

Only 7 percent of the college students and 4 percent of the high school seniors owned one. Still, 69 percent of the college students said that tablets will transform higher education, and 48 percent said tablets will replace textbooks—at least as we currently understand textbooks—within the next five years.

As for the actual tablet owners in the survey, 73 percent said they liked digital formats more than print for reading textbooks. Only 32 percent of non-owners felt the same way.

That attitude may change once they try to study with tablets for an exam. Several pilot projects with tablets have found that students are frustrated with the difficulties in adding notes to digital books. But they still liked the machines. Nearly 20 percent of college students said they intend to buy a tablet in the next six months. (*Chronicle of Higher Education*, May 25, 2011, 12:01 a.m.)

#### ◆ **Nine high-paying jobs you can get with an associate's degree**

If school isn't your thing, but you would love a big salary, consider a job that requires only a two-year degree. By training for a specialized healthcare, technology or trades job or heading for the police academy, you can be out of school and quickly working at a high-paying job where Monster's Salary Wizard puts the median salary at \$45,000 or more.

Test-drive the occupation by doing informational interviews and internships as soon as you're eligible. Among the high-paying jobs you can land with an associate's degree are:

### Registered Nurse

Registered nurses have more career flexibility than other associate's-level healthcare workers, but there's a catch. "You can break into the nursing field with an associate's degree, but nurses with bachelor's degrees are becoming so plentiful that there will be fewer jobs for those looking with an associate's degree," Szytko says. Seek an employer that will pay for additional education, and plan to go on for a four-year nursing degree if you want job security.

### Dental Hygienist

Like many high-paying jobs you can get with an associate's degree, you'll perform the same tasks over and over when you're a dental hygienist. You'll clean teeth, talk to patients about brushing and flossing, and assist the dentist. Many dental hygienists work part time.

### Respiratory Therapist

You may need only a two-year degree, but you'll have to take tough courses, like chemistry and anatomy to graduate with an associate's degree in respiratory therapy. Most respiratory therapists work in hospitals, which means evening or weekend shift work, testing and treating patients with breathing issues.

### Programmer

Within IT there are a number of highly paid positions where experience and certifications can stand in for a degree. Programmers who know .Net, Visual Basic, C# or Java see salaries above the \$50,000 mark after two or three years in the field, says Ashley Waggoner, vice president of Robert Half Technology in Menlo Park, California, a professional placement firm.

### Telecom Installer

This job may sound simple, but it takes a lot of technical know-how, so you'll need a two-year degree or trade-school certificate in electronics. You'll boost your salary by joining the Communications Workers of America or the International Brotherhood of Electrical Workers.

### Industrial Engineering Technician

If you love math, but not enough to go to college for a four-year degree, consider an associate's degree in mechanical, electrical or industrial engineering from a program accredited by ABET. Industrial engineering techs earn the most, but salaries for electrical engineering techs aren't far behind.

### Police Officer

You can get hired onto a local force if you have a high school diploma and can pass an agility test, but federal law-enforcement jobs require a college degree. Not only do police officers and sheriff's officers make good salaries (especially with overtime options), but they can also retire after 20 or 25 years in some jurisdictions.

### HVAC Mechanic

While you can get HVAC training from a technical school or community college, you can get into this field with just a high school diploma by doing an apprenticeship -- in fact some states require HVAC professionals to do an apprenticeship before sitting for a licensing exam. You'll also need to become certified to handle refrigerants. An HVAC job with local government may be your best bet for a solid salary.

### Paralegal

Most paralegals get into the field by earning an associate's degree or a certificate. To be happy as a paralegal, you should enjoy reading, writing and organizing paperwork for attorneys. The highest-paying jobs for paralegals are usually at large law firms located in high-cost areas. (*Career-advice.monster.com, Date Unknown.*)

### ◆ **Across the great divide - perspectives of CEOs and presidents on America's higher education and skills gap**

#### Executive Summary:

Nearly two-thirds of job openings in the next decade will require some post-secondary education. To fill these jobs, the US will need to accelerate its progress and produce 3 million more students who graduate with a post-secondary degree by the end of this decade.

#### A Career Readiness Gap:

- More than half (53%) of business leaders say their companies face a very or fairly major challenge in recruiting on-managerial employees with the skills, training, and education their company needs, despite unemployment close to 10% and millions of Americans seeking jobs at the time of our survey.
- Most business leaders (98%) believe the term "college" means a four-year degree. Just 13% of business leaders also think of a two-year associate's degree, and only 10% say "college" includes a career or technical credential.
- The majority of business leaders (63%) believe a four-year bachelor's degree is the important degree to achieve success in the workplace, while only 18% believe a career or technical credential and 14% believe a two-year associate's degree are important to achieve such success.
- Almost half (47%) of business leaders believe a four-year bachelor's degree offers the best return on investment for their companies and for students, and 35% felt the same way for career and vocational education. Only 18% of business leaders felt two-year associate's degrees offered a good return on investment for students and only 15% believed such a degree was a good return on investment for their companies.
- Business leaders place the greatest premium on preparing individuals for success in the workplace (56%), then providing individuals with core academic knowledge and skills (51%), and providing individuals with the workforce knowledge and skills for success in a specific career (50%).

#### The Path Forward:

- Credentials count. Employers value credentials and view them as reliable indicators of career knowledge and skills. Reimagining the associate's degree as inclusive of competency-based credentials, particularly industry certifications, would increase the value of the degree.

#### Business and Educational Institutions Support Reforms:

- When asked to select the most compelling argument for improving post-secondary completion rates, 75% of education leaders and 67% of business leaders identified the fact that we are falling behind our economic competitors as a grave concern.

(*Source Unknown, March, 2011.*)

◆ **Around the state - UW-Madison participating in e-text pilot**

The University of Wisconsin-Madison is offering five classes this semester that will roll out the use of digital textbooks instead of their printed counterparts. The digital textbooks can be read on computers or smart phones, and they allow students and professors to make notes in the digital text, which then show up in the online versions of texts being read by others in the class. UW-Madison joins four other higher education institutions that are participating in the national eText Pilot Trial Pack offered by publisher McGraw-Hill, Courseload and Internet 2. (*Corporate Report Wisconsin, Page 13, February 2012.*)

◆ **Keep students hooked on your school**

Just 20 percent of two-year and 40 percent of four-year college students persist to graduation.

Four-year schools, 45 percent work more than 20 hours a week. At community colleges, 60 percent of students work more than 20 hours a week. More than a quarter work 35 or more hours weekly. Twenty-three percent of all college students have dependent children.

In his 2008 book, *Four Simple Truths*, Charles Murray argues that most young people are just not smart enough to go to college "as we know it" and should be encouraged to pursue vocational training.

Thirty-five factors were sifted to ten for the final model; Carroll's Ten Retention Factors:

1. High school record.
2. Out-of-pocket dollars paid by family.
3. Midterm grades.
4. Term grades.
5. Accessed late fees.
6. Total hours per week student is employed.
7. Open holds on student accounts.
8. Student alert form (anyone can submit.)
9. Freshman seminar survey.
10. English 170 survey.

The software runs the retention model each night against every student. Based on the day's results each student is tagged very concerned, concerned or no concern.

The primary reason community colleges (CC's) students fail to persist is the inability to balance work schedules with school demands. Gates Foundation data tell us that 60 percent of CC students work more than 20 hours a week. More than a quarter work 35 hours or more. The CC student mix is older. Family responsibilities exceed family financial support. A student's time often has non-negotiable time constraints.

Allocating 20 percent of retention efforts upstream by partnering with families, communities, and feed employers and schools. Standard formulas in use today do not accurately reflect student success and non-success at community colleges, around 20 percent. (*Today's Campus, Pages 5-12, Date Unknown.*)

◆ **2011 ACT scores show problems with college readiness**

Newly released ACT scores on tests used for college admissions show that only 1 in 4 graduates of the class of 2011 who took the exam met four key benchmarks that supposedly show readiness for success in the first year of college.

The scores, being released today, show that the achievement gap between the top-scoring students — Asians and whites — and the lowest scoring — African Americans, Hispanics and American Indians — has grown slightly between 2007 and 2011. Taken together, the snapshot of the 2011 graduating class revealed by the scores shows huge college readiness issues — that is, if you believe that a high-stakes college admissions tests can adequately tell that story. The national average composite score for 2011 was 21.1 out of a possible 36.

Only 25 percent of the graduates in the class of 2011 who took the ACT exam met or surpassed all four of the ACT College Readiness Benchmarks in English, math, reading and science. The 2010 figure was 24 percent, which ACT calls progress but others might consider relatively flat. The college readiness benchmarks are the minimum ACT test scores required for students to have a high probability of success in credit-bearing college courses — English composition, social sciences courses, college algebra or biology. They are based on grades earned by students in college.

Here are the ACT benchmarks (out of a possible score of 36 in each subject): for English, a score of at least 18, for reading a score of at least 21, for math a score of at least 22 and for science a score of at least 24. Twenty-eight percent of test takers in the 2011 high school graduating class did not meet any of the readiness benchmarks, which remained the same from 2010. (*Washington Post, August 17, 2011.*)

◆ **What the lost decade of wages means for colleges and their graduates**

A snapshot of American living standards from the Census Bureau offered plenty of statistics to show just how bad the last decade was for the paychecks of most Americans. For higher education, the report was mixed: good news for students on the degree payoff, but another healthy dose of reality for colleges that believe current upward trends in tuition prices will continue unabated.

First for students, the report underscored yet again the lifetime economic benefits of getting a college degree. The poverty rate for Americans in their 20s with a college degree in 2010 was 8 percent, compared to 23 percent for those in the same age group with just a high-school diploma (the poverty line was set at \$22,314 for a family of four in 2010).

While the poverty rate for those in their 20s with a bachelor's degree has increased by two percentage points since 2002, it jumped by six points for those with a high-school diploma during the same time period. For both groups, the poverty rate has improved as they moved into their 30s, but those with a high-school diploma are still much more likely to live in poverty even 10+ years after high-school graduation.

For jobless college graduates, their degree and the time, effort, and money invested in it seems like a convenient punching bag. If colleges want to continue to sell themselves as a ticket to success in the future, they need to do a better job at defending their degrees against the rising chorus of the "Don't Go to College" crowd.



The jobless young are an angry band not just in the United States, but around the world, as shown by the protests in Europe and the Middle East this past year. This pain is the result of a changing global economy, not a bad college education.

Rising family wealth during the 2000s, helped greatly by inflated home prices, allowed colleges to continue to pump up their prices. The census numbers and the nonstop bad news on housing show those days are over. Add to that the fact that there are likely to be substantial cuts in federal student aid in the name of deficit reduction in the coming years. (*The Chronicle of Higher Education, September 18, 2011.*)

◆ **Is a college degree worth the price? Census bureau has the answer**

A new study from the Census Bureau, Education and Synthetic Work-Life Earnings Estimates.

According to the study, education levels had more effect on earnings over a 40-year span in the workforce than any other demographic factor such as race or gender. The estimated impact on annual earnings between a person with a professional degree versus one without a high school diploma was about \$72,000 a year. (*www.dailyfinance.com, September 3, 2011.*)

◆ **Bachelor's degree loses its luster**

According to The New York Times, almost two out of every 25 people older than 25 have a master's degree. The master's is the most rapidly growing degree in the country with the number of such degrees awarded more than doubling since the 1980s.

According to a report from the US Census Bureau, those with a master's degree can expect to earn \$2.5 million throughout their adult working life. This figure is not significantly higher than the \$2.1 million those with bachelor's degrees can expect.

Additionally, both of the estimated earnings for master's and bachelor's holders are much higher than the figure for a person with only a high school degree, who can expect to earn \$1.3 million over the course of his or her adult working life. (*www.eaglenews.org, September 7, 2011.*)

◆ **Tomorrow's academic libraries: maybe even some books**

But what those crowds of students need and want from the library has changed. They don't come for books. They come for study space and company. "Bookless learning center."

Called the Library Learning Terrace, the center will be open around the clock to give students access to the library's digital resources as well as a place to gather.

Many colleges and universities have replaced some stack space with a learning commons, a dedicated spot within the library where students can come to work and study together. Most academic libraries have a social-media presence too, with the aim of interacting with students and serving them virtually. (*The Chronicle of Higher Education, Page B19, May 13, 2011.*)

◆ **Learning today: the lasting value of place**

To help students keep down costs and facilitate their transition to professional life, a number of four-year institutions have established three-year degree options. More institutions are adopting experiential education in response to calls from students and employers for a model that prepares students to navigate the world economy successfully. Cooperative education opportunities.

Peer-learning environments. - By its very nature, place-based education promotes peer learning because students can easily share their perspectives, disagreements, and emotions about what they are learning in the physical classroom.

Exposure to diversity, research opportunities, campus and community engagement, and chance encounters. (*The Chronicle of Higher Education, Page B25, May 13, 2011.*)

◆ **Enrollment up at UW colleges**

Enrollment at the University of Wisconsin Colleges is up 1.6 percent this year over last year. The tally includes 1,595 students enrolled at UW Colleges Online. That's a 19 percent increase. (*West Bend Daily News, Page A8, September 22, 2011.*)

◆ **College admissions report predicts US enrollment increases through decade's end**

These are just some of the realities revealed in "2011 State of College Admission," a new report from the National Association for College Admission Counseling, or NACAC.

Based on an annual survey of secondary and post-secondary institutions, the report predicts that, while high school graduation rates have essentially leveled off, college enrollment is expected to rise—from the 20.4 million students currently enrolled in degree-granting institutions of higher education to 23 million in the 2019-20 school year.

The increase will be due primarily to an increase in non-traditional age students, the report's authors say. However, underrepresentation continues among racial and ethnic minorities in the traditional college-aged population. Specifically, the report says, while Black and Hispanic students constituted about 34 percent of the traditional college-aged population, they represented only about 27 percent of enrolled college students.

Given these disparities, high school counselors should look for ways to involve others in their schools to bring greater equality in college enrollment for fresh high school graduates from diverse segments of the population, said David Hawkins, director of public policy and research at NACAC.

While the traditional 18- to 24-year-old population will continue to be the largest portion of college students, enrollment among 25- to 34-year-olds and those 34 and older will rise 21 and 16 percent, respectively. In order for the demographics to shift more rapidly among the traditional college-aged population, it has to change at the high school level, starting with the curriculum, the survey suggests.

Among other things, the NACAC report also found that:

- The number of students applying to college grew in 2010. Seventy-three percent of colleges saw growth in the number of applications in 2010, while 19 percent saw decreases.
- 25 percent of fall 2010 freshmen had submitted seven or more applications for admission, up from 23 percent in fall 2009 and 22 percent the year before.
- 48 percent of colleges put students on wait lists last fall, versus 39 percent the year before.
- Acceptance rates were down one percentage point to 65.5 percent last fall, whereas in previous years the acceptance rates were all above 66 percent.

- 38 percent of colleges reported increases in the number of early decision applications, whereas, in previous years, half of all colleges reported such increases.
- Online applications grew, with colleges and universities getting an average of 85 percent of their applications online for the fall 2010 admission cycle, versus 80 percent the year before and 72 percent the year before that.

*(Diverse – Issues in Higher Education, October 24, 2011.)*

◆ **New data shows undergraduate degree likely worth no more than a technical college degree**

Average hourly rate rises with education - except an undergraduate degree is worth no more than a technical college degree:

Technical College - \$55 (n=1,952)

Undergraduate - \$55 (n=4,138)

The United States is a service company premised on the ideal that more education always means a higher income. However, this data calls that ideal into questions. However, it is very clear from our data that an undergraduate degree is, in strictly financial terms, often a poor investment.

According to the College Board, the tuition and fees of an undergraduate degree amount to about \$40,000 to public schools. This implies that Thumtack's service professionals have spent at least \$3.2 billion on degrees that have not boosted their earnings above workers with only a technical degree.

There are at least 20 million service professionals in the United States, which suggests that the current service sector workforce has spent at least \$240 billion on undergraduate degrees that have resulted in incomes no different than individuals with a technical degree. (*www.thumtack.com, November 14, 2011.*)

◆ **Leaving college with a degree and thousands in debt**

Americans are graduating from college today with mountains of debt that will take years to dig out from under. Two-thirds of 2011 graduates of four-year colleges accumulated an average of \$34,000 in debt each, according to FinAid.org - more than triple the amount of a 1992 graduate. For those who went on to medical or law school, the final cost could be 10 times that amount.

Until they get rid of the debt, "it is inconceivable that they'll ever be able to buy a home," said Steven M. Dunne, a Philadelphia consumer-bankruptcy lawyer who last year paid \$36,000 to chip away at his student loans, \$5,000 of that interest. "In the last 20 years, tuition has risen 130 percent, four times the rate of inflation," Dunne said. "Private colleges typically cost \$38,000 a year with room and board.

"It is putting the economy in a dangerous position, delaying life-cycle events like homeownership, marriage, and having children," he said. The result has been fewer household formations, on which the demand for housing - both existing homes and new construction - depends.

With fewer first-time buyers in the pool, current owners who want to move cannot sell. With so many heavily indebted graduates moving back with their parents, people who thought they had emptied the nests cannot buy smaller houses.

William E. Brewer Jr., president of the National Association of Consumer Bankruptcy Attorneys, said that the amount of student borrowing crossed the \$100 billion threshold for the first time in 2010, and that total outstanding loans exceeded \$1 trillion for the first time in 2011.

Part of the problem is that most students do not know what they are getting into. The new Consumer Financial Protection Bureau is working on a one-page financial-aid shopping sheet (see it at <http://consumerfinancial.gov>) to help students figure out how much in federal loans and private loans they should consider taking on, and what kind of loan repayments will follow after graduation.

"They need to start teaching a course in high school about the hidden provisions of student loans and credit cards and how to make it financially in the world. It would be the most important class anyone ever took," Dunne said. Many of these struggling graduates are employed, but they are not earning what some of the schools had promised. (*The Inquirer, February 17, 2012.*)

#### ◆ **Community-college students perform worse online than face-to-face**

Community-college students enrolled in online courses fail and drop out more often than those whose coursework is classroom based, according to a new study released by the Community College Research Center at the Teachers College at Columbia University.

The study, which followed the enrollment history of 51,000 community-college students in Washington State between 2004 and 2009, found an eight percentage-point gap in completion rates between traditional and online courses.

Students in an online course had an 82 percent chance of completing the course, compared with a 90 percent chance in face-to-face courses. Among students in remedial courses, the gap was even wider - 85 percent of students completed their face-to-face courses, but only 74 percent completed the same course online. (*The Chronicle of Higher Education, July 18, 2011.*)

#### ◆ **Student Loan Debt**

The total student loan debt outstanding exceeded total credit card debt for the first time in June 2010. If one were to include capitalized interest, total federal and private student loan debt hit the \$1 trillion milestone in late 2011. But since there is not a reliable source of data concerning capitalized interest, the student loan debt clock does not include it. The student loan debt clock reached the \$1 trillion milestone on May 8, 2012, at 6:40 a.m. ET. As of July 10, 2012, the student loan debt clock total was:

**\$1,015,606,816,974**

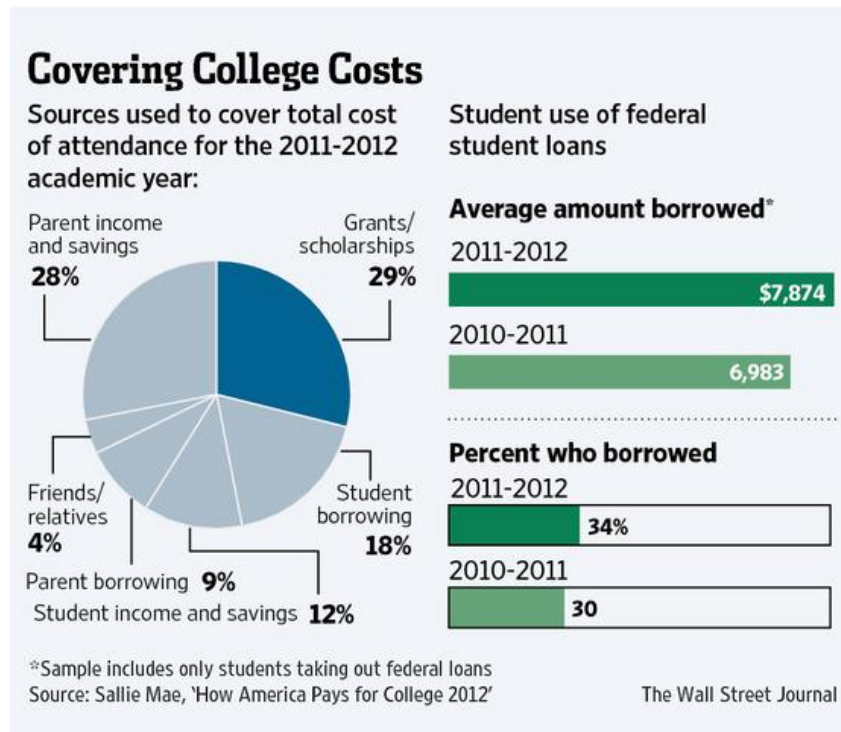


<http://www.finaid.org/loans/studentloandebtclock.phtml>, 2012.)

#### ◆ **Some Schools Cut Student Grants, Scholarships**

Grants and scholarships fell 15% during the just-completed academic year, according to a study to be released Monday by student-loan provider Sallie Mae. On average, U.S. undergraduates received \$6,077 in grants and scholarships in the 2011-2012 academic year, down from \$7,124 a year earlier, according to the study, which polled 1,601 undergraduates and their parents. While college aid typically accounts for a big chunk of grants and scholarships, the category also includes scholarships from outside organizations and federal funding, such as Pell Grants. The average amount borrowed by families—a calculation that includes parents and students who didn't borrow

at all—rose nearly 17% last year to \$5,551. That was up from \$4,753 in the 2010-2011 academic year. Meanwhile, the percentage of families with college students taking out federal student loans grew to 34%, up from 25% in 2008-2009, according to the report. And only one in five parents said they strongly agreed that children should attend college for the experience, no matter their future earnings potential, down from one in three in the 2009-10 academic year, when the question was first asked.



(The Wisconsin Journal, <http://online.wsj.com/article/SB10001424052702303612804577528770015146982.html>, July 16, 2012.)

## FOOD AND AGRICULTURE INDUSTRY TRENDS

### ◆ Food for the world

Agriculture is the largest economic engine in the state. (*Corporate Report Wisconsin, Jen Bradley, Pages 38-41, May 2012.*)

### ◆ Indoor vertical farming will make cities more self-sustaining

“Living” skyscrapers with entire floors dedicated to growing food could soon appear in city skylines. In an increasingly urbanized future, they will bring food growers and consumers closer together, and also extend “farmland” into a third dimension: skyward. A 30-story skyscraper on one city block could potentially feed 50,000 Manhattanites, using technologies available now. (*Cynthia G. Wagner, “Vertical Farming: An Idea Whose Time Has Come Back,” Mar-Apr 2010, pp. 68-69.*)

## THE NEW MEGATREND SUSTAINABILITY

- ◆ **The building industry is going through a sweeping transformation to be “green”.** The LEED (Leadership in Energy and Environmental Design) program through the US Green Building Council is increasingly being adopted for new construction. Retrofitting existing buildings to be energy efficient is also a significant trend, fueled in part by readily available government grants and rebates.

Sustainable technologies - also called cleantech or greentechy - improve financial performance by using less energy and materials, having less waste and toxins. Cleantech is now an established investment category in the public markets, and Greentech companies reportedly now receive a third of all equity investments. New market sectors include thin-film solar, biofuels, bio-plastics, carbon trading, wetlands banking and water quality trading. (Progressive Investor, Sustainable business.com.) New occupations are being recognized whose purpose is support green economy growth. (<http://www.onetonline.org>)

- ◆ **Putting old tires to new uses**

In January 2011, Hottinger rolled out the Flat Tire buckets, marketing them as an environmentally friendly home and garden product that can be used for potted plants or hauling tools or as decorative baskets. We buy our tires from Chicago; we bring them up here to Milwaukee. Everything is very, very close. The buckets are sold for between \$12 and \$27, depending on their size, by more than 50 retailers, ranging from gardening shop Weeds in Cedarburg, a new customer, to Murdoch's Ranch & Home Supply, a Montana-based retailer with 22 locations. (*The Business Journal, Sean Ryan, Page 17, May 11, 2012.*)

- ◆ **Mukwonago company to specialize in repairing wind turbine gears**

As the wind industry expands across the country, so will the need to repair the inner workings - the gearboxes - inside turbines. A new Wisconsin company, Gearbox Express, has been formed to specialize in the repair and remanufacturing of wind turbine gearboxes that could need replacing every five to 10 years.

The company is retrofitting a 43,000-square-foot industrial building in Mukwonago. The company has raised \$1.8 million from investors. Aided with a \$1.8 million Small Business Administration loan and a \$3.4 million loan from the State of Wisconsin.

The company will focus on wind turbines but will also fabricate gearboxes for a variety of industries, he said. The gearboxes can weigh 35,000 pounds or more and require a crane to change out. (*Journal Interactive of the Journal Sentinel, October 30, 2011.*)

## TECHNOLOGY TRENDS

- ◆ **Trends in higher education**

Digital technology now makes it easier for instructors to write their own 'flexbooks', incorporating text, simulations, video, and more. (*Argus Leader, June 7, 2010.*)  
(*Planning for Higher Education, Oct-Dec, 2010.*)

According to PEW Internet, 94% of community college students have cell phones, with 65% of that group using their cell phones to access the Internet or send and receive emails. (*The Source on Community College Issues, Trends & Strategies, Page 10, August 7, 2011.*)

The simple answer is that no one "killer app" has emerged that fits every professor's teaching style, every research discipline, or every administrative office on campus, according to several people who attended the meeting. Turn the devices into so-called "clickers," using an app that lets students use their phones during classes to buzz in answers to quiz questions or discussion prompts. (*The Chronicle of Higher Education, Pages B6-B7, May 13, 2011.*)

More germane to the classroom, however, Google Docs simplifies the process of collaborative writing. During peer workshops, each group's members share their documents. They can work simultaneously on one author's document at a time; any comments or edits made by one group member are immediately seen by the entire group. There's a chat system built in, so collaborators can discuss the changes they're making. (*The Chronicle of Higher Education, Pages B8-B10, May 13, 2011.*)

Whatever tools you use, it is "cloud" computing that truly changes the game for classroom teaching. In a nutshell, cloud services store copies of your files on their servers while the files are simultaneously stored on your machines' hard drive. (*The Chronicle of Higher Education, Page B28, May 13, 2011.*)

Columbus State University in Georgia, more than 70 percent of CSU students prefer to use their cell phones as their primary way to access and receive university information. (*Campus Technology, November 1, 2011.*)

#### ◆ **Smart grid model standard: smart idea**

Homes, commercial and institutional buildings, and industrial facilities are about to get "smarter" when it comes to electrical use. The, ASHRAE/NEMA Standard 201P, Facility Smart Grid Information Model, will control systems in homes, buildings, and industrial facilities to manage electrical loads and generation sources in response to communication with a "smart" electrical grid, as well as to communicate information about those electrical loads to utility and other electrical service providers. The creation of this standard is a strategic element in driving development of a nation-wide smart electrical grid while increasing energy efficiency, occupant productivity, and cost-effectiveness in safe secure buildings." (*Buildings, September, 2010.*)

#### ◆ **Amazon announces digital-textbook rentals**

Amazon has rolled out an e-textbook-rentals program, which could bring more attention to the emerging model of treating textbooks like online subscriptions.

Students can now download temporary copies of textbooks on Amazon's Web site for reading on a Kindle e-book reader or on a computer, tablet, or smartphone running free Kindle software. The system lets customers specify rental periods lasting anywhere from a month to a year. Amazon argues that the digital rentals can save students up to 80 percent compared with traditional print textbooks.

Students will also be able to refer to any margin notes and highlights they made in their digital textbooks after the rental period is over. Amazon has tens of thousands of titles available for digital rental from major publishers like John Wiley & Sons and Elsevier and Taylor & Francis. CourseSmart, a digital-textbook seller started by major textbook publishers, allows rentals but only for periods of six months or more. (*The Chronicle of Higher Education, July 20, 2011.*)

◆ **QuickWire: MIT to open center on 'mobile learning,' with Google's backing**

The Massachusetts Institute of Technology's Media Lab has announced the creation of the New Center for Mobile Learning, with start-up support from Google. The research center, to be led by three professors at MIT, is focused on building innovative mobile technologies in education, such as interactive games for children that use GPS. The first project involves creating new features and versions of Google's App Inventor for Android, which allows programmers to easily build applications for the company's smartphone operating system. (*The Chronicle of Higher Education, August 18, 2011.*)

◆ **Smartphones have influenced higher education**

According to a May 2011 survey by the Nielson Company, about 37% of mobile consumers have a smartphone, with a majority of these individuals using either an Android or an Apple model. Bloomberg BusinessWeek reports that one of the most useful apps for degree seeking smartphone users is MyPocketProf. Using this tool, students can sync their class notes to their phone. This will allow them to review their course material on the go. (*US News University Directory, August 10, 2011.*)

◆ **Technology replacing books?**

All educators in North Fond du Lac are equipped with iPad2s and have been trained to use them in a variety of ways. Teachers are using them in the classroom to help deliver curriculum, engage students more in the learning process and make use of mobile technology to become more efficient and effective professionals, said Superintendent Aaron Sadoff.

The Oakfield School District handed out netbooks to all high school students on the first day of school, with plans to expand the technology into the middle school as well. Students are required to take their netbooks to class. "Instead of needing funds to go on field trips, we can take virtual tours of places around the globe. We can chat with business professionals and people from different cultures."

Students can lease the netbooks for a \$50 annual fee and will be able to take them with them when they graduate. School administrators say that even in hard economic times, it is worth the \$60,000 investment.

"The goal of the 21st Century learning initiative is to prepare our students for the global society that they will encounter after graduation and to keep them abreast of the ever-changing technology that they face on a daily basis," Klassy said.

Ripon High School began issuing netbooks to all freshmen a year ago. The district's Lumen Charter High has MacBook's, and every student in Grades 3 to 5 has a netbook, said Administrator Richard Zimman.

"Now that half to two-thirds of our students are equipped with a mobile device, teachers and students alike have similar expectations about how to use the technology and what for.



The Campbellsport School District purchased 60 netbooks last year and another 30 this year, using Library Common School Funds. The Wisconsin Department of Public Instruction allows schools to use up 25 percent of their common School fund allocation on computers.

A relaxed policy at Fond du Lac High School also allows students to use their laptops, iPads and iPods in school for educational purposes. As for providing students with netbooks, Superintendent James Sebert says, "It is on the horizon for us, but we are not there yet."

New Holstein is working on BYOD (Bring Your Own Device) program. Two years ago, the district moved from the typical work-station computer to laptop wireless computers. All teachers are issued laptops for school use, said District Administrator Bill Van Meer.

Laconia High School provided all its students with netbooks last year. While some classes are able to be taught using exclusively online resources, other classes may use a blended approach using a text and online resources, said Principal Wayne Weber.

As with all change, keeping up with today's technology is an adjustment for Oakfield students, parents, and educators, Klassy said. "The most rewarding result thus far is the increased motivation in the students due to the use of technology which is relevant to their everyday lives," she said. (*The Fond du Lac Reporter, Page D1, September 18, 2011.*)

#### ◆ **Inventing the cleanweb**

The number of networked devices is expected to grow to 100 billion in the next 10 years. Utilities across the United States had installed 26 million smart meters on homes by the end of last year, and something similar is occurring in China and Europe. These meters, combined with sensors in dishwashers or thermostats, will produce much more detailed information about a home's patterns of energy use, and this information will help consumers shift energy to times when it's least expensive. (*Technology Review, Sunil Paul and Nick Allen, Pages 74-75, June 2012.*)

#### ◆ **The slow-motion mobile campus**

Getting iPads and iPhones in the hands of college students is the easy part; rebuilding campus infrastructure to support mobile devices is expensive. And as Stanford's experience shows, getting professors, students, and staff to work together to explore the educational potential of mobile devices is a slow, uneven process, more suitable in some fields than others.

It will be up to students, not college officials, to decide how to learn. "We're just trying to make sure that the iPad is working well for the students who are using it," he says. "They're going to come up with great new ways of using the iPad in curriculum and education. They're going to be the ones who find out what is most useful for them. We're not going to be the ones to tell them that." (*The Chronicle of Higher Education, Pages B4-B5, May 13, 2011.*)

#### ◆ **Information technology on campuses: by the numbers**

##### Ownership of Handheld Devices That Access the Internet in 2010:

27% own and use daily

15% own and use weekly

##### How Students Like to Use Technology to Learn in 2010:

1) Listening to audio or watching video content

- 2) Running internet searches
- 3) Using controllable programs like video games, simulations
- 4) Engaging in text-based conversations, e.g. text messaging
- 5) Contributing to Web sites, blogs, wikis, etc.
- 6) Creating audio or video content

Most Students Own Laptops in 2010:

63% Internet-capable handheld device

84% Laptop computer

*(The Chronicle of Higher Education, Pages B22-B23, May 13, 2011.)*

◆ **In his 1938 book world brain**

The Digital Public Library of America- the DPLA- has big goals, big names, and big contributors. The Berkman Center set an ambitious goal of having the digital library begin operating, at least in some rudimentary form, by April of 2013. Over the past year and a half, the project has moved quickly on several fronts. *(Technology Review, Pages 55-59, June 2012.)*

◆ **Campus & industry - innovators awards 2012 - mobile learning report**

Mobile Learning Report:

Now in the fourth academic year of its ACU Connected mobile learning initiative, Abilene Christian University (TX) has issued a 36-page report (available at [acu.edu/technology/mobile learning](http://acu.edu/technology/mobile%20learning)) that documents its research projects, shares responses from members of the campus community, and divulges results from multiple student and faculty surveys regarding the mobility work.

According to the results of a fall 2010 survey referenced in the report, 80 percent of faculty members bring mobile devices to class: 84 percent regularly use the devices in class; and half of faculty reported using the devices in every class. Between 80 and 90 percent of students responded that mobile device usage has improved collaboration their academic experience, improved communication with teachers, and provided them with increased control of their learning environment. *(Campus Technology, Page 10, December, 2011.)*

◆ **Apple looks to transform e-textbooks**

Tech innovator introduces iBooks, iBooks Author apps. Apple also announced iBooks Author, a free software application for Macintosh computers with custom templates to help authors create and publish their own digital textbooks.

Apple is broadening its iTunes U program beyond audio and video lectures by adding an app for the iPad, iPhone and iPod Touch that allows professors to create full online courses, with assignments, books, quizzes and syllabi. Previously available only for the higher-education market, Apple is letting K-12 schools participate for the first time. E-books represent less than 10% of the textbook market for the K-12 market, according to Simba Information, a market research firm.

Though Apple is targeting the new textbooks at any age or grade level, the initial emphasis is on high school textbooks. Books will be priced at \$14.99 or less. Early publishing partners include Pearson, McGraw-Hill and Houghton Mifflin Harcourt, which collectively control 90% of the market, with some titles available immediately. *(USA Today, Cover Page, January 20, 2012.)*

◆ **Mobile strategies: does your company need an app?**

With the growing popularity of mobile tablets and smart phones, more businesses must recalibrate how they interact with customers and prospective customers.

The mobile devices are changing the way business is conducted.

Nearly 50 percent of all web traffic will come through mobile devices by 2013, according to Sara Santiago, president of Milwaukee-based Roll Mobile, a mobile marketing agency. "Mobile devices are going to continue to become more sophisticated and will be the definitive connection between our offline and online lives," Santiago said. "Mobile is not just

Changing how we connect online; it also changes how we work, how we shop, how we connect with other people and how we share experiences." Most mobile web traffic originates from a search engine, and 71 percent of smartphone users who see or hear a television, radio or print advertisement will do a mobile search to find your business, Santiago said.

Because the mobile web and smartphone app development industry is an emerging, changing realm, the costs for a company to obtain its own app are all over the board. There are no established norms in the market yet. Local developers said they have quoted projects ranging in costs from \$5,000 to \$45,000, depending upon the functionalities that are needed.

Budget will play a determining role in where a business starts with its mobile strategy and where it can grow, she said. (*Buztimes.com Milwaukee and www.biztimes.com, December 9, 2011.*)

◆ **Books, cds, dvds, photos - going, going...**

The digitization of our lives is exploding:

Last year, music downloads surpassed CD sales for the first time; e-books went from novelties to a billion-dollar market in a flash; and streaming is becoming the preferred way to take in films and TV shows. Two things happened in the past year: Technology improved, and the economy got worse," says Theodore Garcia, managing director of PwC's entertainment, media and communications practice. Maybe the record or CD collection is gone in physical form, but people listen to more music than ever. What you must remember is that digital representations don't necessarily totally replace the real thing. (*USA Today, Marco R. della Cava, Page 1-2A, March 16, 2012.*)

◆ **Rethinking mobile in higher ed: an argument for an admissions-first approach**

The study surveyed nearly 2,300 college-bound students and found a whopping 52% have viewed a school's website on a mobile device before. The study also showed just 4% of the 94% of students who use a mobile device reported looking at college websites on an iPad or Android tablet.

The following six items topped the list of wants by those surveyed.

1. Academic program listing
2. Cost/scholarship calculators
3. A calendar of important dates and deadlines
4. Specific details about academic programs
5. An application process summary
6. Online application forms

Just 2% of survey respondents said mobile site experience negatively affected their opinion of school. But when past surveys have shown 20-25% of prospective students have dropped a school from their list due to a bad experience on their website, we have to ask, is it only a matter of time before a bad mobile website experience will get you dropped from a prospective students list? (HIGHER ED LIVE, date unknown.)

◆ **Several noted - light-field photography; solar microgrids; 3-d transistors; a faster fourier transform**  
*Light Field Photography*

Lytro's camera does all that, but also records the angle at which rays of light arrive (see graphics). The resulting files aren't images but mini-databases capturing the three-dimensional pattern of light, called a light field, at a particular moment. Software can mine that database to produce many different possible photos and visual effects from one press of the shutter.

*Solar Microgrids*

Taking advantage of the falling cost of solar panels and LEDs, the company aims to build and operate low-cost solar powered microgrids that can provide clean light and charge phones.

*3-D Transistors*

Intel has begun mass-producing processors based on 3-D transistors. Could help significantly increase the energy efficiency and speed of processors. The on-and-off flow of current in conventional chips is controlled by an electric field generated by a so-called gate that sits on top of a wide, shallow conducting channel embedded in a silicon substrate.

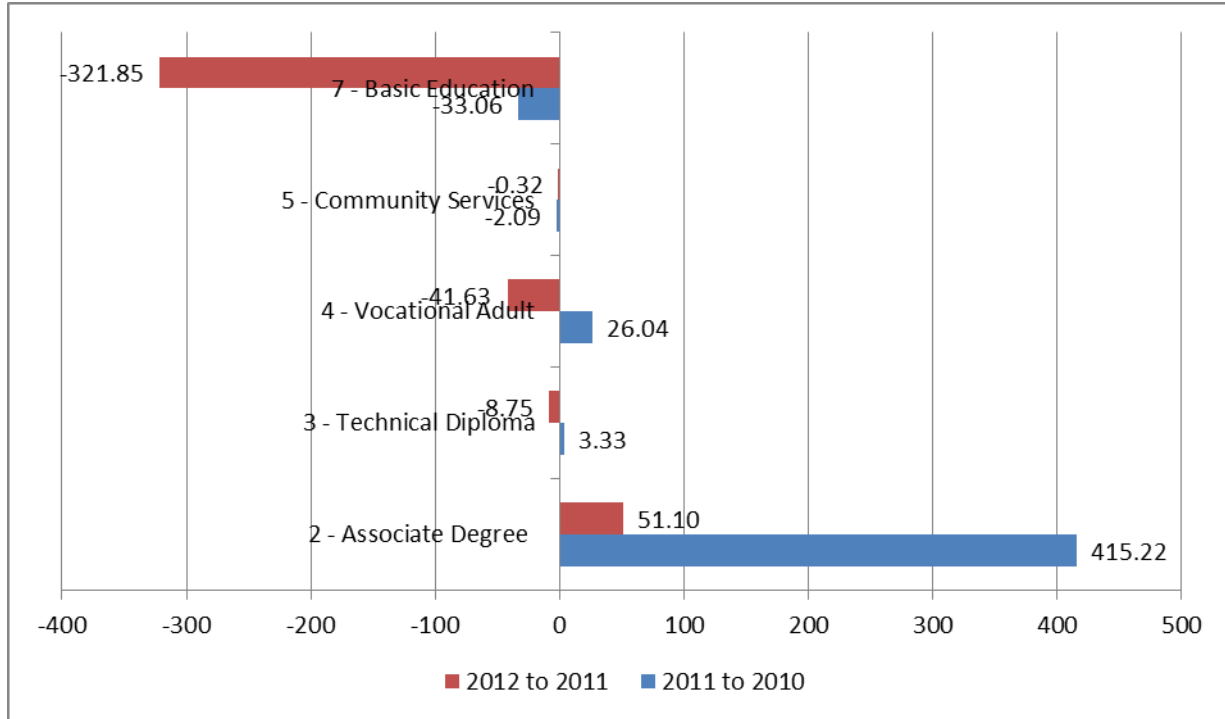
*A Faster Fourier Transform*

A speedier digital world. The principles of the Fourier transform, which dates back to the 19th century, is that any signal, such as a sound recording, can be represented as the sum of a collection of sine and cosine waves with different frequencies and amplitudes. This collection of waves can then be manipulated with relative ease-for example, allowing a recording to be compressed or noise to be suppressed. With the new algorithm, called the sparse Fourier transform (SFT), streams of data can be processed 10 to 100 times faster than was possible with the FFT. A faster transform means that less computer power is required to process a given amount of information- a boon to energy-conscious mobile multimedia devices such as smart phones. Or with the same amount of power, engineers can contemplate doing things that the computing demands of the original FFT made impractical. (*Technology Review, Page 38-43, June 2012.*)

**PROGRAM AND FTE COUNTS**

**Fox Valley Technical College - FTEs by Aid Code Category  
2010-11 and 2011-12 (as of July 26, 2012)**

As Fox Valley Technical College experienced the only growth in Associate Degree FTEs, the following is a review of their overall FTE's by aid code category. Due to a change in their offerings, the FTE's from Basic Education decreased and the Associate Degree level increased.



Aid Code Category	2009-10	2010-11	2011-12 (as of 7/26/2012)
Associate Degree	5,578.78	5,994.00	6,045.10
Technical Diploma	655.35	658.67	649.93
Vocational Adult	554.71	580.75	539.12
Community Service	12.15	10.06	9.74
Basic Education	612.28	579.21	257.36

(WTCS Lemon Client, July 26, 2012.)

**NON-TRADITIONAL OCCUPATIONS**

<b>Male Identified NTO Programs</b>	<b>Female Identified NTO Programs</b>
Accounting Assistant	Air Conditioning, Heating and Refrigeration Technology
Administrative Professional	Automotive Technician
Barber/Cosmetologist	Automotive Technology
Child Care Services	Building Trades Construction Worker
Chiropractic Technician	Civil Engineering Technician – Structural
Clinical Laboratory Technician	CNC/Tool and Die Technologies
Early Childhood Education	Criminal Justice – Corrections
Food Service Production	Electrical Power Distribution
Health Information Technology	Electricity
Instructional Assistant	Emergency Medical Technician – Basic
Judicial Reporting	Emergency Medical Technician – Intermediate Technician
Legal Administrative Professional	Graphic Communications
Medical Assistant	Industrial Maintenance Technician
Medical Office Specialist	Information Technology – Network Specialist
Medical Transcription	Information Technology – Technical Support Specialist
Medication Assistant	Mechanical Design Technology
Nursing	Mechatronics
Nursing Assistant	Metal Fabrication
Office Assistant	Paramedic Technician
Paralegal	Printing and Publishing
Pharmacy Technician	Process Engineering Technology
Radiography	Technical Studies – Journey Worker
Respiratory Therapist	Tool Design Engineering Technology
Surgical Technology	Water Quality Technology
	Welding
	Wind Energy

*(MPTC Admissions & Advising, July, 2012.)*