## Fox, Eleanor S

From: ient: o: Cc: Subject: Fox, Eleanor S Saturday, November 21, 2009 3:09 PM Reif, Steven J; Stanbrough, Beverly J; Mathews, David L; Crews, Lloyd C Showers, Nancy C; Wang, Zheng Royal Oak 10-Mile Radius Projections

Hello All,

As promised, attached are the new and improved projections that are referencing only RO 10-mile radius. I referenced 3<sup>rd</sup> Quarter 2009 data (as recent as Sept 2009 employment stats) for these projections. Please print these off and insert them in your RO Expansion Binders we provided you in May 2009.

Attachments:

- RO Campus 10-Mile Radius Map (Buffer) .
- **Projected Demographics**
- Industry Projections
  - Industry Unemployment (could only get down to county detail)
  - Industry Overview
  - Highest Ranked / Fastest Growing Industries 0
- **Occupation Projections** 
  - Occupation Unemployment (could only get down to county detail)
  - Occupation Overview
  - Highest Ranked / Fastest Growing Occupations







**RO** Demographics Report esf11.2...



s\_11.21.09.pd...



Let me know if you have any questions! Regards, Eleanor

## Eleanor Swanke For

Office of Institutional Research Auburn Hills Campus Ph: (248) 232-4521 Fax: (248) 232-4520 E-mail: esfox@oaklandcc.edu Institutional Research: Progress Through Knowledge Check out IR's websites: ublic: www.oaklandcc.edu/IR ifoMart: http://infomart/ir/



OAKLAND COMMUNITY COLLEGE®

## Oakland Community College Royal Oak Expansion – Support Documents 2009

Requested by Steven Reif, Royal Oak Campus President Oakland Community College

Prepared by Eleanor Fox, Research Analyst Mark Woods, Ph.D., Research Analyst The Office of Institutional Research

May 2009

#### Oakland Community College Royal Oak Expansion - Support Documents 2009

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ROYAL OAK STUDENT RESIDENCY MAP 2006-07 THROUGH 2008-09

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#### Oakland Community College Royal Oak Expansion - Support Documents 2009

## **ROYAL OAK/SOUTHFIELD OCCUPATION PROJECTIONS**

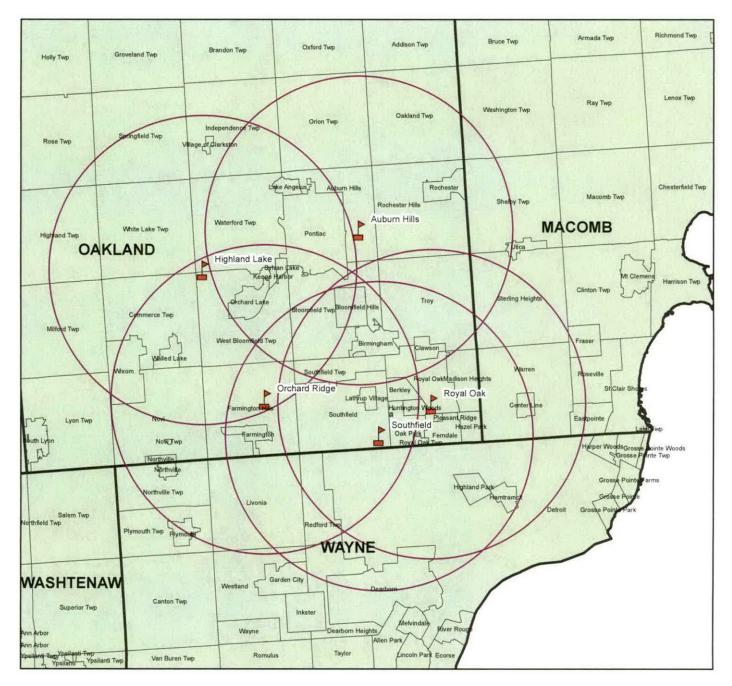
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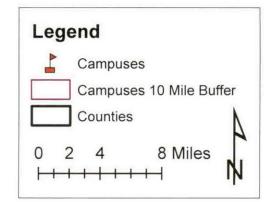
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# OCC Campuses 10 Mile Radius



A ten (10) mile radius was applied to a map of OCC's five (5) county-wide campuses. According to this map, counties that would be studied within the ten (10) mile radius are: Macomb, Oakland, and Wayne Counties.



## Research Project Proposal (RPP)

Project Name:	Royal Oak Employer Survey
Requestor:	Royal Oak Expansion Committee
Research Staff:	Zheng Wang and Eleanor Swanke Fox
Supervisor:	Nancy Showers
Date:	<u>11/25/2009</u>

#### **Project Summary**

In a meeting held in September 2009 with Nancy Showers and Dr. Steve Reif of the Royal Oak Expansion Committee, this project was requested to be conducted through the Office of Institutional Research to gather current and future hiring information from employers in the Royal Oak vicinity.

This project is a supplement to the Royal Oak expansion project. The survey result will be included in a Board of Trustees presentation about plans for the RO expansion project in Fall 2010.

### **Research goals**

- Project the fastest growing occupations in the next 10 year in the Royal Oak area.
- Gauge the hiring/employment growth of the area employers that have the fastest growing occupations.
- Use the research results to adjust the Royal Oak expansion plan.

### Proposed Research Method(s)

Economic forecasting, and a combination of web-based and phone questionnaire will be used as the research methods in this project.

- Project the fastest growing occupations within Royal Oak 10-mile radius using EMSI.
- Select companies within Royal Oak 10-mile radius that have the fastest growing occupations.
- Obtain contact information of selected companies.
- Create a SNAP employer survey.
- Conduct the employer survey.

Source: OCC, Office of Institutional Research Research Project Proposal (RPP)

## **Project Deliverables (check all that apply)**

Research Findings Report Research Findings Report

MS Access Database

SPSS Output only

Other (please specify)

## **Proposed Project Timing**

Final deliverable date: March 19, 2010

The following is the preliminary timeline:

- 1. Draft the survey in early December 2009.
- 2. Conduct occupation and industry projection and compile a list of companies in December 2009.
- 3. Finalize the survey by January 12th, 2010.
- 4. Administrate the survey in late January and early February 2010.
- 5. Complete the final report by March 2010.

Please signify your agreement or request for additional discussion with this research proposal by checking the appropriate box below, completing the requested information, and e-mail to Nancy Showers: ncshower@oaklandcc.edu.

I agree with this research proposal as outlined above.

<u>Please fill in you name here</u> Requestor Name <u>11/25/2009</u> Date

Source: OCC, Office of Institutional Research Research Project Proposal (RPP)

RO Expansion RD 10 mile Radius Querrel modified Sent data Report + Reports to Nancy PDF ror committee V Ro Demostaphic/ Reput 11:20,09 e-mailel 11/21 V RO Inewstry e-mailed 11/21 Vne mploy ment 11/20/09 11/21 RO Ind Overner 1 tri e-marked 11/20/09 11/21 RO Histi Ranhed 121 e-mailed 11/20/09 Thewshire 11/21 Ro occupation 1 ilr e mailed Dremptoyment 1/20/09 11/21 e-mailed Ro Occupation merinte 12 11/20/09 11/21 e-mailed 11/21 1 1/21 RO Occepatri 11/20/09 high vanied 20 Find propans reput

## Office of Institutional Research Project Summary:

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## **MI AIR Presentation 2009**

## Project ID Number: 3397

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<b>Requester:</b>	Fox, Eleanor	IR Category: Supportive & Misc. St
Date Requested	l: 01-Jul-09	Project Type: Ad Hoc
Expected Compl	etion: 11-Nov-09	Charles Consults d
		Status: Completed
Actual Completi	ion: 09-Nov-09	Assigned To: Fox, E.
I Drive Location	: I:\Ad Hoc Studies\Ad Hoc Active & Pe AIR Conference 2009	ending\Economic Crisis Data Team\MI
Description:	Create MI AIR presentation re Job Wat projection tool can support OCC's adm	•
ŕ.	Exploring Employment Opportunities in In these trying times, how do college a their program offerings? How do displ their jobs searches? Learn how OCC's supports their administrators and the l economic uncertainty.	Idministrators know where to focus laced workers know where to focus Office of Institutional Research
Methodology:	Provide EMSI Projections along with ot be helpful to institutional researchers.	
	· · ·	
Maior Findings:	Supporting College Administrators: Cu offering analysis; and projects for Worl	
	Supporting Displaced Workers: Job Wa jobs; jobs to avoid; green sector; and f	

<sup>-</sup>riday, November 20, 2009

## Economic Modeling Specialists, Inc. (formerly CC Benefits)

#### www.economicmodeling.com

- Complete vs Covered data  $\checkmark$
- Data versions (3<sup>rd</sup> Quarter 2009, available 9/23/09) includes Employment stats through June 2009
- Royal Oak 10-Mile Radius Region
- Projection Limitations: The further out you project, the less accurate the data could be. Does not take into account any current events that might impact data (ex. future stockmarket crashes; future stimulus money, future legislation, drought)

#### **Demographic Projection Report:**

- How detailed of a region?
- What years to project (2009 2019)
  - Population 0
    - 0 Age
  - Gender 0
- ccupating Download data into Word document for easiest modifications (header, footer, format edits)

#### **Industry Projections:**

#### Industry Unemployment

- Industry  $\rightarrow$  Unemployment  $\rightarrow$  Lowest Unemployment  $\rightarrow$  All Industries 0
- 0 2009 - 2019
- Growth (6-digist, which will correspond with Selectory database) 0
- Top 20 list 0

#### Industry Overview

- Economic Overview -> Industry Overview 0
- 2009 2019 0

#### Highest Ranked / Fastest Growing Industries

- Industry → Highest Ranked 0
- 2009 2019 0
- Growth (6-digist, which will correspond with Selectory database) 0
- Top 20 list 0

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- add Street address

occupation, then

look at industry for those

talk to sim

Selecting databases

- isolate RO 10 mile

#### **Executive Summary**

The following report contains demographic and geographic information regarding the Royal Oak campus, including 2006-07 through 2008-09. Trend analyses for enrollment (headcount), gender, reported race, educational goals, and city of residence are contained within the report. Among the key findings include:

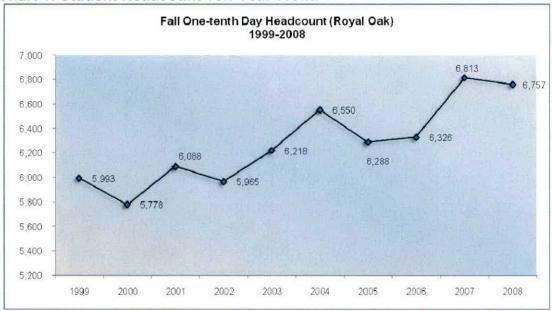
- A 12.7% increase in enrollment from Fall 1999 to Fall 2008
- A mostly female population (59.4%)
- Caucasians and African Americans make up 78.4% of the student body
- Most Royal Oak students overall intend to transfer without obtaining an OCC degree or certificate (29.1%), though Fall One-tenth data show that most Royal Oak students intend to obtain a degree from OCC
- Top programs of study include Liberal Arts, General Studies, and Business Administration, though most students are Undecided
- Royal Oak, Southfield, and Troy are the top cities of residence

Charts, tables, and analyses follow.

#### **Demographic Analysis**

Data for Royal Oak students were collected from July 1, 2006 through May 4, 2009. The following charts provide unduplicated counts for that time period. That is, there have been 33,788 unduplicated students who've attended courses at the Royal Oak campus in this time period.

In addition, Fast Facts data are provided for trend analysis. Note the differences between Fast Facts and 2006-09 data collected may be due to data collection method. Fast facts only looks at Fall term data from the One-Tenth Day of Session, while queried data represents all terms from July 2006 through May 2009.



#### Chart 1: Student Headcount Ten-Year Trend

The chart above shows the Fall One-Tenth Day student headcount for the Royal Oak campus. After a low of 5,778 students in 2000, there has been a steady increase in enrollment at the Royal Oak campus, with a high of 6,813 students in 2007. From 1999 to 2008, there's an increase of 12.7% in headcount.

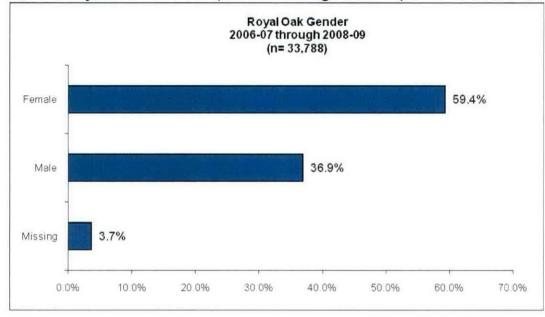


Chart 2: Royal Oak's Gender (2006-07 through 2008-09)

Of these students, Royal Oak has nearly a 60% female population. This number might be slightly higher, as there are 3.7% of students whose gender was unreported/ missing.

#### Table A: Gender by One-Tenth Day Fall Term

Gender - Royal Oak	2006 (N= 6,326)	2007 (N= 6,813)	2008 (N= 6,757)
Female	57.7%	58.2%	57.9%
Male	38.8%	38.1%	38.0%
Unreported	3.4%	3.7%	4.1%

Looking at the Fast Facts report for the fall terms, Royal Oak has remained stable in terms of gender, with about 58% female students at the Fall one-tenth day.

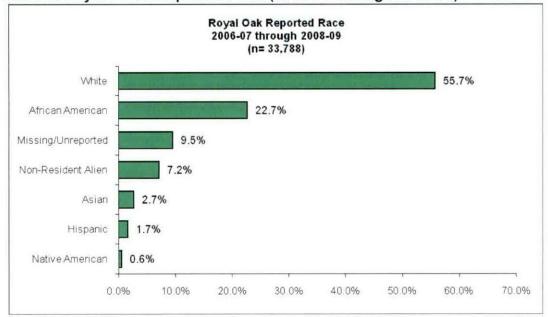
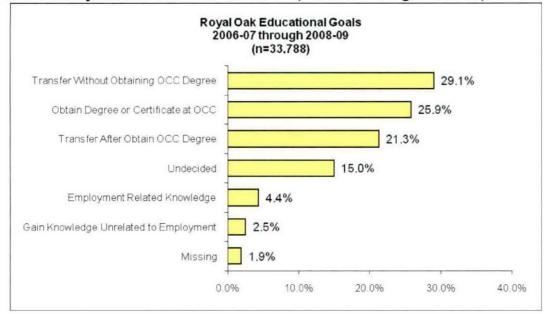


Chart 3: Royal Oak's Reported Race (2006-07 through 2008-09)

A clear majority (55.7%) of Royal Oak students are Caucasian, followed by African Americans (22.7%), and Missing/unreported (9.5%), fairly consistent with Fall One-tenth day data.

	2006 (N= 6,326)	2007 (N= 6,813)	2008 (N= 6,757)
White	60.7%	59.9%	59.1%
African American	16.8%	18.0%	18.6%
Missing/Unreported	9.1%	9.5%	9.7%
Asian	2.5%	2.5%	2.6%
Hispanic	1.7%	1.6%	1.9%
Native American	0.7%	0.6%	0.7%
Non-Resident Alien	8.5%	8.0%	7.4%

#### Table B: Reported Race by One-Tenth Day Fall Term



#### Chart 4: Royal Oak's Educational Goals (2006-07 through 2008-09)

Most students wish to transfer to another college (50.4%), though 29.1% stated that they do not intend to get a degree before transferring. Just over a fourth (25.9%) intend solely to obtain a degree from OCC.

Educational Goals - Royal Oak	2006 (N= 6,326)	2007 (N= 6,813)	2008 (N= 6,757)
Obtain Degree or Certificate at OCC	24.9%	26.4%	28.3%
Transfer After Obtain OCC Degree	26.1%	26.7%	27.5%
Transfer Without Obtaining OCC Degree	24.1%	23.9%	21.8%
Employment Related Knowledge	3.6%	3.2%	2.9%
Gain Knowledge Unrelated to Employment	2.2%	2.3%	1.9%
Undecided	15.3%	14.8%	15.3%
Missing	3.8%	2.6%	2.4%

#### Table C: Educational Goal by One-Tenth Day Fall Term

In 2008, Royal Oak students who intended to get a degree or certificate (28.3%) outnumbered those who intended to transfer after obtaining a degree and shows a steady climb since 2006 (24.9%). It is interesting to note that overall (see Chart 4), most Royal Oak students intend to transfer without obtaining a degree (29.1%), conflicting with the results of Table C. A possible explanation includes an increase in students who intend to transfer without a degree in Winter and Summer terms.

Top 5 Programs - Royal Oak (N = 33,788)	Frequency	per cent
Undecided	6,835	20.2%
Liberal Arts	2,998	8.9%
Guest Student	2,792	8.3%
General Studies	2,754	8.2%
<b>Business Administration</b>	2,362	7.0%

### Table D: Top Programs Enrolled (2006-07 through 2008-09)

Most students were Undecided (20.2%), followed by Liberal Arts (8.9%). Guest Students make up 8.3% of Royal Oak students.

#### Table E: Top Credit Programs & Non-Degree Programs by One-Tenth Day

Top Credit Programs	2006 (N= 6,326)	2007 (N= 6,813)	2008 (N= 6,757)
General Studies (GEN.AGS)	447	432	771
Liberal Arts (ALA.ALA)	464	634	643
Business Administration (BUS.ABA)	548	566	541
Undecided (UND.NON)	1,784	1,791	1,377
Non-Degree Seeking (NDS.NON)	201	175	135
Guest Students (GUE)	178	163	188

General Studies seems to be the most prevalent program of study, with enrollment nearly doubling from 432 in the Fall of 2007 to 771 in 2008 (78.5% increase).

#### Geographic Analysis

Top Cities - Royal Oak (N = 33,788)	Frequency	Per Cent
Royal Oak	3296	9.8%
Southfield	2871	8.5%
Troy	2869	8.5%
Detroit	2433	7.2%
Oak Park	1713	5.1%
Rochester Hills	1649	4.9%
Madison Heights	1571	4.6%
Ferndale	1299	3.8%
Farmington Hills	1292	3.8%
West Bloomfield	903	2.7%

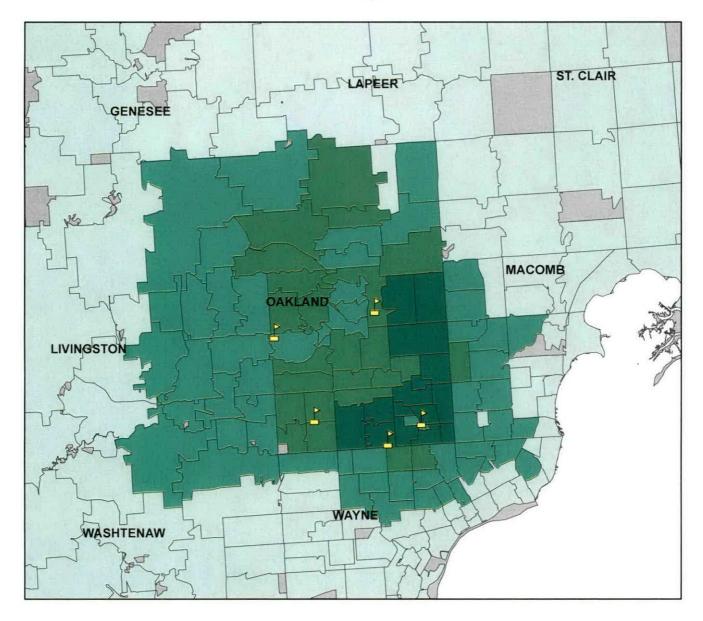
Table F: Top Ten Cities of Residence 2006-07 through 2008-09

Students attending Royal Oak's campus are largely concentrated around the campus (see Royal Oak Student Residency Map). Most Royal Oak campus students hail from Royal Oak (9.8%), Southfield (8.5%), and Troy (8.5%).

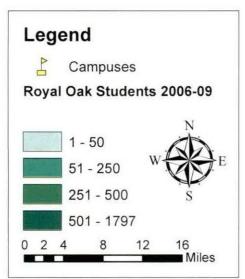
#### Table G: Residence by One-Tenth Day Fall Term

Top 5 Cities of Residence	2006 (N= 6,326)	2007 (N= 6,813)	2008 (N= 6,757)
Royal Oak	886	851	869
Troy	659	725	683
Southfield	457	516	545
Madison Heights	427	487	482
Oak Park	391	408	391

Fall One-tenth day numbers reveal similar information: Royal Oak, Troy, and Southfield are the top three cities of residence, with Southfield showing an increase in each of the three terms from 2006 to 2008.



## Oakland Community College Royal Oak Student Residency Map 2006-07 through 2008-09



A total of 33,788 students were enrolled at OCC from Summer II 2006 through Winter 2009.

Due to data and software limitations, 31,758 of 33,614 valid cases or 94.5% are represented on this map.

Source: OCC, Office of Institutional Research

#### Oakland Community College Credit Hours and Headcount Predictions (Royal Oak) Summer I 2009 – Winter 2010

Term	Predicted	Observed	Difference	Per Cent Error
Summer I 2008	17,150.5	17,130.0	20.5	0.1%
Summer II 2008	4,191.7	5,382.0	-1,190.3	-22.1%
Fall 2008	38,919.6	39,588.0	-668.4	-1.7%
Winter 2009	37,576.6	42,376.0	-4,799.4	-11.3%
Overall	97,838.4	104,476.0	-6,637.6	-6.4%

#### Table 1: Credit Hours Predictions for Summer I 2008 - Winter 2009 for Royal Oak

Data going back to Summer II 1995 to Winter 2008 were used to predict credit hours for Summer I 2008 through Winter 2009 for the Royal Oak campus. The mathematical models used to derive the predictions were determined by Decision Pro's proprietary software (here Log Theta).

Table 1 shows the predicted credit hours and the actual credit hours (observed). Differences (Predicted from Observed) ranged from as many as -4,799.4 (-11.3%) short to 20.5 (0.1%) credit hours over. Predictions for Summer II 2008 were short 22.1%, or 1,190.3 credit hours. Overall, the forecast was off by 6,637.6 credit hours.

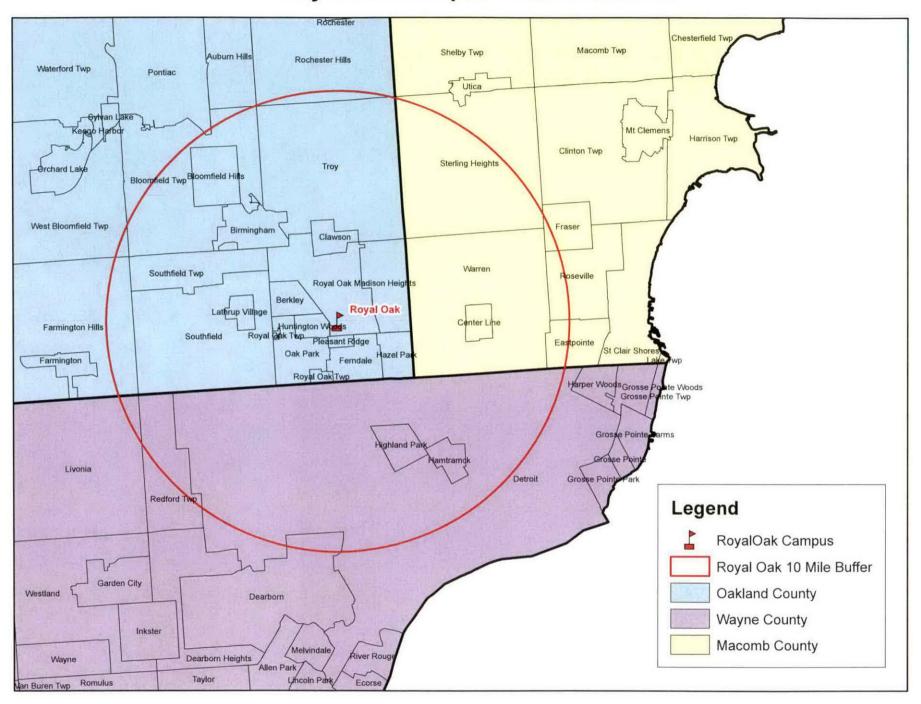
Given the historical data going back to 1995, the expectation was for 6.4% fewer credit hours overall than was registered for in that time period.

#### Table 2: Credit Hours Predictions for Summer I 2009 - Winter 2010 for Royal Oak

Term	Predicted	
Summer I 2009	18,226.5	
Summer II 2009	4,554.6	
Fall 2009	41,626.9	
Winter 2010	40,623.3	
Overall	105,031.	

Additional data help to increase the accuracy of predictions. Given the observed credit hours for Summer I 2008 through Winter 2009, new predictions can be made for Summer I 2009 through Winter 2010 (Table 2, using the Vanguard Dampened Trend model). The overall expectation is for 105,031.2 credit hours for the given time period.

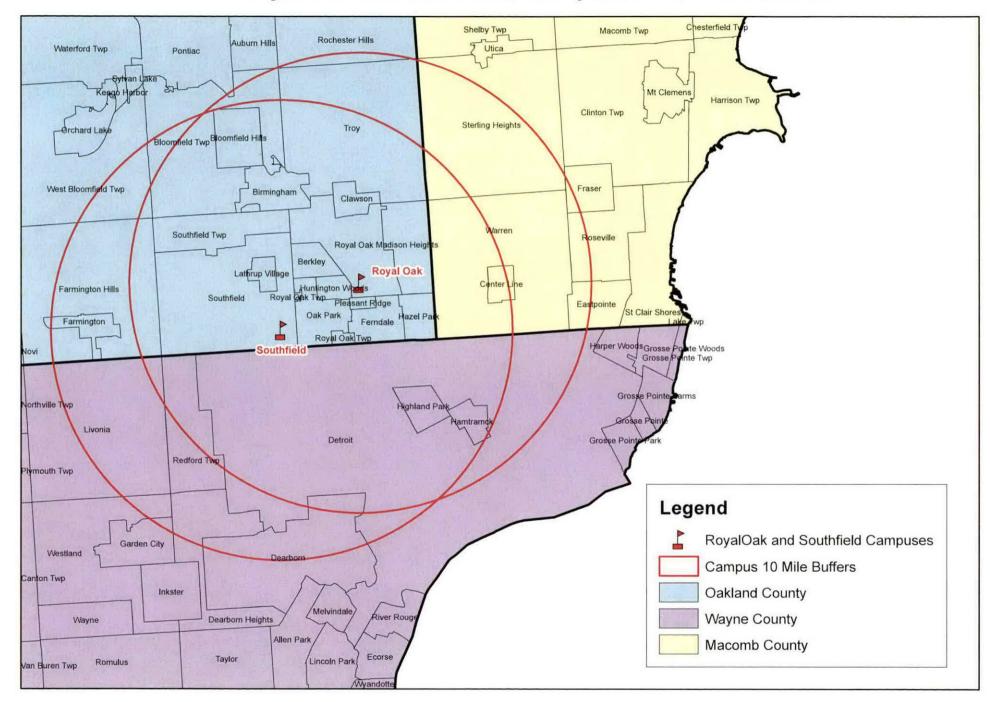
## **Royal Oak Campus - Ten Mile Buffer**



## Zip Codes within Royal Oak Campus 10 Mile Radius

Campus 10 Mile Radius	City / Cities	Zip Code
RO	Berkley	48072
RO	Birmingham	48009
RO	Bloomfield, Bloomfield Hills, Bloomfield Township, Bloomfield Village	48301, 48302, 48304
RO	Clawson	48017
RO	Dearborn	48126
RO	Detroit	48201, 48202, 48204, 48205, 48206 48207, 48208, 48210, 48213, 48219 48221, 48223, 48227, 48228, 48234 48235, 48238
RO	Hamtramck, Detroit	48211, 48212
RO	Farmington, Farmingtn Hls, Farmington Hills, Farmington Hls	48334, 48336
RO	Ferndale, Detroit	48220
RO	Franklin, Beverly Hills, Bingham Farms	48025
RO	Fraser	48026
RO	Highland Park, Detroit	48203
RO	Huntington Woods, Huntington Wds	48070
RO	Livonia	48152
RO	Madison Heights, Madison Hts	48071
RO	Oak Park, Detroit	48237
RO	Pleasant Ridge, Pleasant Rdg	48069
RO	Redford, Detroit	48239, 48240
RO	Rochester, Rochester Hills, Rochester His	48309
RO	Roseville	48066
RO	Royal Oak	48067, 48073
RO	Southfield	48034, 48037, 48075
RO	Southfield, Lathrup Village, Lathrup Vlg	48076
RO	Sterling Heights, Sterling Hts	48310, 48312, 48313, 48314
RO	Troy	48083, 48084, 48098
RO	Warren	48089, 48091, 48092, 48093
RO	West Bloomfield, W. Bloomfield	48322

## **Royal Oak and Southfield Campuses - Ten Mile Buffer**



## Zip Codes within Southfield Campus 10 Mile Radius

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Campus 10 Mile Radius	City / Cities	Zip Code
SF	Berkley	48072
SF	Birmingham	48009
SF	Bloomfield, Bloomfield Hills, Bloomfield Township, Bloomfield Village	48301; 48302; 48304
SF	Centerline	48015
SF	Clawson	48017
SF	Dearborn	48126, 48128
SF	Dearborn Heights, Dearborn Hts	48124, 48127, 48128
SF	Detroit	48202, 48204, 48208, 48210, 48219, 48221, 48227, 48228, 48234, 48235, 48238
SF	Detroit, Hamtramck	48211, 48212
SF	Farmington, Farmingtn Hls, Farmington Hills, Farmington Hls	48331, 48334, 48335, 48336
SF	Ferndale, Detroit	48220
SF	Franklin, Beverly Hills, Bingham Farms	48025
SF	Fraser	48026
SF	Hazel Park	48030
SF	Highland Park, Detroit	48203
SF	Huntington Woods, Huntingtn Wds	48070
SF	Livonia	48150, 48152, 48154
SF	Madison Heights, Madison Hts	48071
SF	Oak Park, Detroit	48237
SF	Pleasant Ridge, Pleasant Rdg	48069
SF	Redford, Detroit	48239, 48240
SF	Royal Oak	48067, 48073
SF	Southfiled, Lathrup Village, Lathrup Vlg	48034, 48075, 48076
SF	Sterling Heights, Sterling Hts	48310
SF	Тгоу	48083, 48084, 48098
SF	Warren	48091, 48092
SF	West Bloomfield, Orchard Lake, W Bloomfield	48322, 48323
SF	Westland	48185

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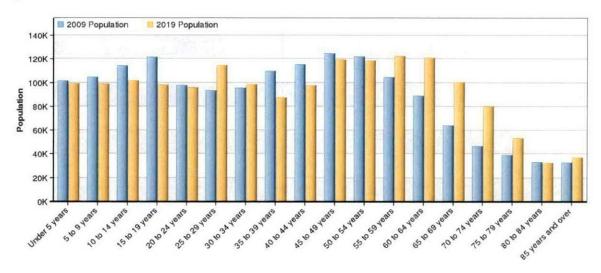
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## Demographic Report Region: RO Campus – 10 Mile Radius

## **Cohort Totals**

Area	2009 Population	2019 Population	Change	% Change
RO – 10 Mile Radius Region	1,608,937	1,675,529	66,592	4%
State	10,058,598	10,493,777	435,179	4%
Nation	307,142,743	338,205,387	31,062,644	10%

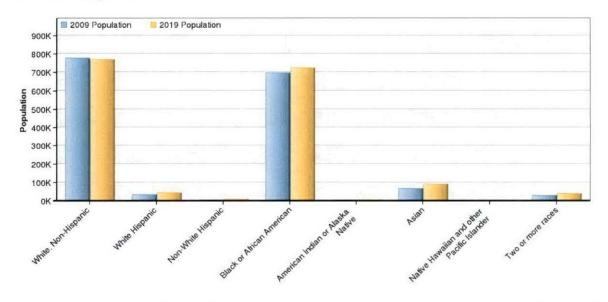
## Age Breakdown



Age	2009 Population	2019 Population	Change	% Change	2009 % of Cohort
Under 5 years	101,470	99,104	-2,366	-2%	6.31%
5 to 9 years	104,722	98,582	-6,140	-6%	6.51%
10 to 14 years	114,369	101,659	-12,710	-11%	7.11%
15 to 19 years	121,648	98,102	-23,546	-19%	7.56%
20 to 24 years	97,646	95,961	-1,685	-2%	6.07%
25 to 29 years	93,267	114,722	21,455	23%	5.8%
30 to 34 years	95,519	98,513	2,994	3%	5.94%
35 to 39 years	109,763	87,475	-22,288	-20%	6.82%
40 to 44 years	115,230	97,495	-17,735	-15%	7.16%
45 to 49 years	124,448	119,535	-4,913	-4%	7.73%
50 to 54 years	121,945	118,743	-3,202	-3%	7.58%
55 to 59 years	104,787	122,333	17,546	17%	6.51%
60 to 64 years	88,887	120,826	31,939	36%	5.52%
65 to 69 years	64,046	100,353	36,307	57%	3.98%
70 to 74 years	46,414	80,130	33,716	73%	2.88%
75 to 79 years	38,965	52,998	14,033	36%	2.42%
80 to 84 years	33,053	32,335	-718	-2%	2.05%
85 years and over	32,756	36,662	3,906	12%	2.04%
	1,608,937	1,675,529	66,593	4%	100%

Source: EMSI Complete Employment - 3rd Quarter 2009

## Race/Ethnicity Breakdown

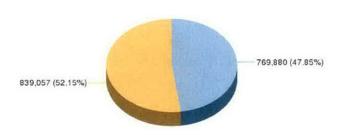


Race/Ethnicity	2009 Population	2019 Population	Change	% Change	2009 % of Cohort
White, Non-Hispanic	776,656	769,159	-7,497	-1%	48.27%
White Hispanic	32,434	43,783	11,349	35%	2.02%
Non-White Hispanic	4,599	6,117	1,518	33%	0.29%
Black or African American	696,205	724,179	27,974	4%	43.27%
American Indian or Alaska Native	3,710	3,917	207	6%	0.23%
Asian	65,591	89,983	24,392	37%	4.08%
Native Hawaiian and other Pacific Islander	528	678	150	28%	0.03%
Two or more races	29,213	37,714	8,501	29%	1.82%
	1,608,937	1,675,529	66,594	4%	100%

Source: EMSI Complete Employment - 3rd Quarter 2009

#### Gender Breakdown

-	
Males	
E Females	



Gender	2009 Population	2019 Population	Change	% Change	2009 % of Cohort	
Males	769,880	804,334	34,454	4%	47.85%	
Females	839,057	871,195	32,138	4%	52.15%	
	1,608,937	1,675,529	66,592	4%	100%	

Source: EMSI Complete Employment - 3rd Quarter 2009

#### **Data Sources and Calculations**

#### **Demographic Data**

The demographic data in this report is compiled from several sources using a specialized process. Sources include US Census Bureau annual estimates, birth and mortality rates from the US Health Department, and projected regional job growth.

#### State Data Sources

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This report uses state data from the following agencies: Michigan Department of Labor and Economic Growth, Bureau of Labor Market Information and Strategic Initiatives.

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#### **Data Sources and Calculations**

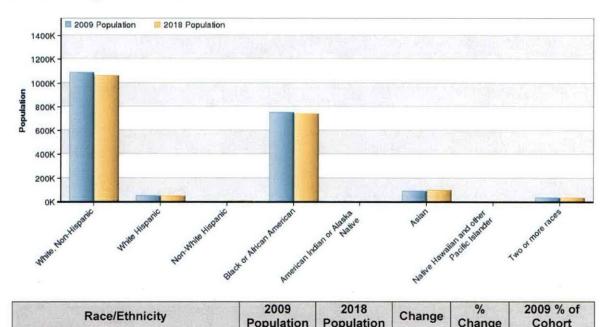
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#### Race/Ethnicity Breakdown

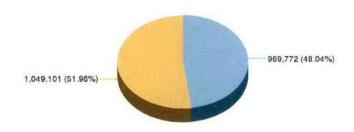


Race/Ethnicity	2009 Population	2018 Population	Change	% Change	2009 % of Cohort
White, Non-Hispanic	1,088,071	1,065,727	-22,344	-2%	53.89%
White Hispanic	46,577	52,662	6,085	13%	2.31%
Non-White Hispanic	5,181	5,638	457	9%	0.26%
Black or African American	751,119	742,758	-8,361	-1%	37.2%
American Indian or Alaska Native	4,882	4,950	68	1%	0.24%
Asian	87,458	100,476	13,018	15%	4.33%
Native Hawaiian and other Pacific Islander	602	661	59	10%	0.03%
Two or more races	34,981	37,448	2,467	7%	1.73%
	2,018,873	2,010,320	-8,551	0%	100.00%

Source: EMSI Complete Employment - Spring 2009

#### Gender Breakdown

Males Females



2009 Population	2018 Population	Change	% Change	2009 % of Cohort
969,772	968,667	-1,105	-0%	48.04%
1,049,101	1,041,654	-7,447	-1%	51.96%
2,018,873	2,010,320	-8,552	0%	100.00%
	Population 969,772	Population Population   969,772 968,667   1,049,101 1,041,654	Population Population Change   969,772 968,667 -1,105   1,049,101 1,041,654 -7,447	Population Population Change % Change   969,772 968,667 -1,105 -0%   1,049,101 1,041,654 -7,447 -1%

Source: EMSI Complete Employment - Spring 2009

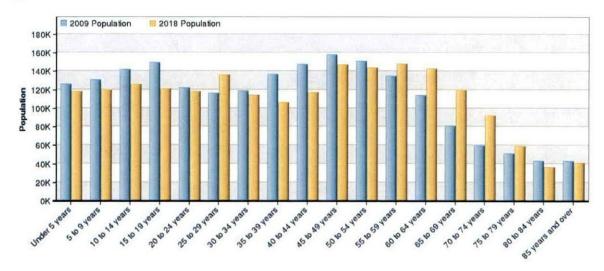
#### **Demographics Report**

## Region: RO & SF Campuses - 10 Mile Radius

#### **Cohort Totals**

Area	2009 Population	2018 Population	Change	% Change
RO / SF – 10 Mile Radius Region	2,018,873	2,010,320	-8,553	-0%
State of Michigan	10,150,788	10,237,386	86,598	1%
Nation	307,435,913	320,951,153	13,515,240	4%

#### Age Breakdown



Age	2009 Population	2018 Population	Change	% Change	2009 % of Cohort
Under 5 years	125,679	118,447	-7,232	-6%	6.23%
5 to 9 years	130,438	119,678	-10,760	-8%	6.46%
10 to 14 years	141,657	125,900	-15,757	-11%	7.02%
15 to 19 years	149,092	121,099	-27,993	-19%	7.38%
20 to 24 years	121,664	118,490	-3,174	-3%	6.03%
25 to 29 years	116,085	136,220	20,135	17%	5.75%
30 to 34 years	118,643	114,638	-4,005	-3%	5.88%
35 to 39 years	136,310	106,637	-29,673	-22%	6.75%
40 to 44 years	147,314	117,309	-30,005	-20%	7.3%
45 to 49 years	157,554	147,096	-10,458	-7%	7.8%
50 to 54 years	150,795	143,856	-6,939	-5%	7.47%
55 to 59 years	134,368	148,136	13,768	10%	6.66%
60 to 64 years	113,640	143,104	29,464	26%	5.63%
65 to 69 years	80,665	120,044	39,379	49%	4%
70 to 74 years	59,292	92,528	33,236	56%	2.94%
75 to 79 years	50,487	59,315	8,828	17%	2.5%
80 to 84 years	42,700	36,468	-6,232	-15%	2.12%
85 years and over	42,490	41,354	-1,136	-3%	2.1%
	2,018,873	2,010,320	-8,554	0%	100.00%

Source: EMSI Complete Employment - Spring 2009

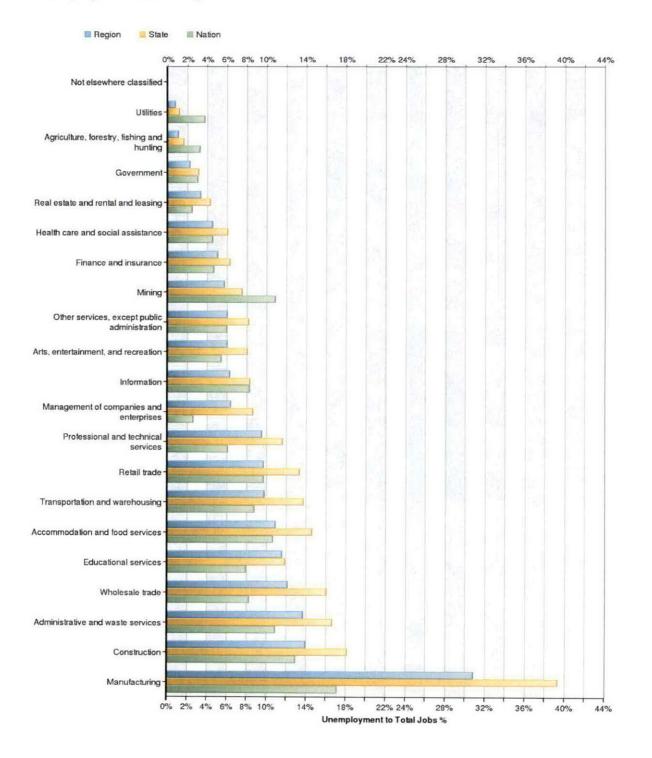
# **Regional Industry Projections (2009 – 2019)**

- Industry Unemployment
- Industry Overview
- Highest Ranked / Fastest Growing Industries

#### **Unemployment by Industry Report**

### Region: Oakland County

## **Unemployment Summary**



NAICS Code	Description	2009 Jobs	July Unemp	% Total Jobs	State %	National %
99	Not elsewhere classified	0	0	0%	0%	0%
22	Utilities	1,469	11	0.7%	1.2%	3.7%
11	Agriculture, forestry, fishing and hunting	1,301	14	1.1%	1.6%	3.3%
90	Government	53,328	1,203	2.3%	3.1%	3%
53	Real estate and rental and leasing	43,818	1,471	3.4%	4.3%	2.5%
62	Health care and social assistance	109,476	4,941	4.5%	6.1%	4.5%
52	Finance and insurance	53,088	2,680	5%	6.3%	4.6%
21	Mining	1,176	67	5.7%	7.5%	10.8%
81	Other services, except public administration	36,478	2,194	6%	8.2%	6%
71	Arts, entertainment, and recreation	16,469	991	6%	8.1%	5.4%
51	Information	18,128	1,138	6.3%	8.3%	8.3%
55	Management of companies and enterprises	11,602	737	6.4%	8.6%	2.6%
54	Professional and technical services	106,168	10,064	9.5%	11.6%	6.1%
44-45	Retail trade	86,418	8,353	9.7%	13.3%	9.7%
48-49	Transportation and warehousing	12,682	1,234	9.7%	13.7%	8.8%
72	Accommodation and food services	50,223	5,479	10.9%	14.6%	10.6%
61	Educational services	16,238	1,877	11.6%	11.9%	7.9%
42	Wholesale trade	41,561	5,033	12.1%	16%	8.2%
56	Administrative and waste services	62,678	8,548	13.6%	16.6%	10.8%
23	Construction	33,411	4,644	13.9%	18.1%	12.9%
31-33	Manufacturing	52,324	16,139	30.8%	39.3%	17.1%
		808,036	88,109	10.9%		

Source: EMSI Complete Employment - 3rd Quarter 2009

\*Note: Industries with fewer than ten unemployed workers are not shown.

### **Data Sources and Calculations**

#### **Unemployment Data**

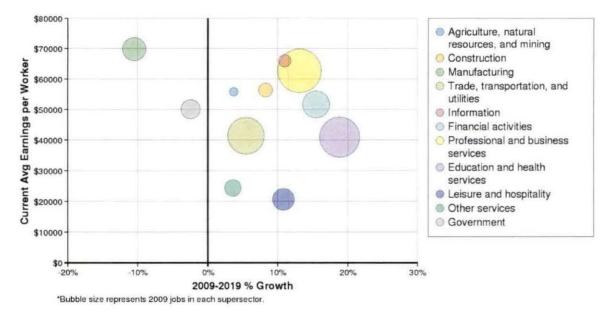
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#### State Data Sources

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#### **Industry Overview Report**

#### Region Info: Royal Oak Campus – 10 Mile Radius



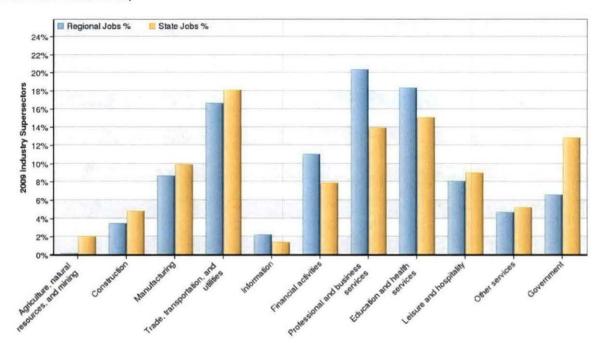
## Industry Size and Growth

2009 - 2019 Size and Growth

Description	2009 Jobs	2019 Jobs	Growth	% Growth	Current EPW
Agriculture, natural resources, and mining	1,117	1,158	42	4%	\$55,850
Construction	30,066	32,539	2,473	8%	\$56,464
Manufacturing	75,323	67,420	-7,904	-10%	\$69,885
Trade, transportation, and utilities	145,052	152,946	7,893	5%	\$41,468
Information	19,496	21,637	2,141	11%	\$66,006
Financial activities	96,326	111,219	14,893	15%	\$51,656
Professional and business services	177,854	201,195	23,342	13%	\$62,734
Education and health services	160,352	190,607	30,255	19%	\$40,970
Leisure and hospitality	70,397	78,020	7,623	11%	\$20,747
Other services	40,565	42,004	1,438	4%	\$24,411
Government	57,359	55,926	-1,433	-2%	\$50,085
	873,908	954,671	80,763		

Source: EMSI Complete Employment - 3rd Quarter 2009

#### 2009 Industrial Makeup



Description	2009 Regional Jobs	% Regional Jobs	2009 State Jobs	% State Jobs
Agriculture, natural resources, and mining	1,117	0.1%	100,256	2%
Construction	30,066	3.4%	237,948	4.8%
Manufacturing	75,323	8.6%	488,068	9.9%
Trade, transportation, and utilities	145,052	16.6%	893,440	18.1%
Information	19,496	2.2%	69,030	1.4%
Financial activities	96,326	11%	389,748	7.9%
Professional and business services	177,854	20.4%	686,850	13.9%
Education and health services	160,352	18.3%	744,088	15.1%
Leisure and hospitality	70,397	8.1%	442,428	9%
Other services	40,565	4.6%	256,207	5.2%
Government	57,359	6.6%	632,690	12.8%

Source: EMSI Complete Employment - 3rd Quarter 2009

#### **Data Sources and Calculations**

#### Industry Data

In order to capture a complete picture of industry employment, EMSI basically combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available EMSI industry data, 15-year past local trends in each industry, growth rates in statewide and (where available) sub-state area industry projections published by individual state agencies, and (in part) growth rates in national projections from the Bureau of Labor Statistics.

#### **State Data Sources**

This report uses state data from the following agencies: Michigan Department of Labor and Economic Growth, Bureau of Labor Market Information and Strategic Initiatives.

#### **Highest Ranked Industries Report**

## Region Info: Royal Oak Campus – 10 Mile Radius

## 2009 Jobs 2019 Jobs 60000 50000 40000 30000 20000 10000 Orrel achilles tealership Ful-serice resources 0 services Care al rest in the transfer care services sources rearrangers of the sources o Temporari help Janiforial

## **Fastest Growing Industries**

NAICS Code	Description	2009 Jobs	2019 Jobs	Change	Change %	Current EPW
561320	Temporary help services	20,349	29,750	9,401	46%	\$31,948
622110	General medical and surgical hospitals	43,188	49,260	6,072	14%	\$51,932
621610	Home health care services	14,549	19,626	5,077	35%	\$29,221
541380	Testing laboratories	6,083	9,121	3,038	50%	\$109,808
621111	Offices of physicians, except mental health	16,458	19,197	2,739	17%	\$75,962
531210	Offices of real estate agents and brokers	9,120	11,824	2,704	30%	\$18,526
624190	Other individual and family services	4,850		2,533		\$25,589
561720	Janitorial services	6,603	8,997	2,394		\$16,469
531390	Other activities related to real estate	4,904	7,174	2,270	46%	\$29,353
722110	Full-service restaurants	21,466	23,560	2,094	10%	\$15,126
611110	Elementary and secondary schools	8,123		2,091	26%	\$24,089
523930	Investment advice	6,441	8,523	2,082	32%	\$48,909
541611	Administrative management consulting services	3,743		1,994		\$101,854
311812	Commercial bakeries	2,329	4,091	1,762	76%	\$18,144
624410	Child day care services	10,168	11,909	1,741	17%	\$9,607
713210	Casinos, except casino hotels	2,782		1,431	51%	\$42,456
484121	General freight trucking, long-distance TL	2,246		1,412	63%	\$40,774
531311	Residential property managers	4,596	and the second sec	1,308		\$27,354
623110	Nursing care facilities	8,542		1,303		\$29,879
541511	Custom computer programming services	4,868		1,261		\$75,316

Source: EMSI Complete Employment - 3rd Quarter 2009

#### **Industry Data**

In order to capture a complete picture of industry employment, EMSI basically combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available EMSI industry data, 15-year past local trends in each industry, growth rates in statewide and (where available) sub-state area industry projections published by individual state agencies, and (in part) growth rates in national projections from the Bureau of Labor Statistics.

#### **State Data Sources**

#### **Industry Data**

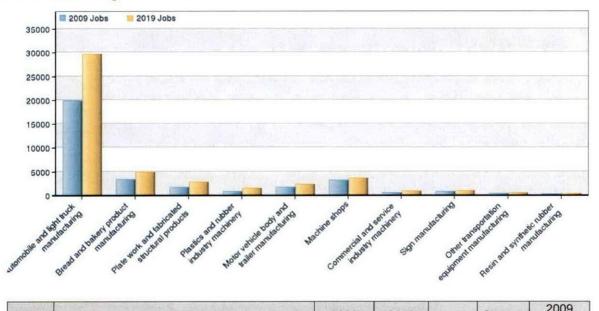
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#### **State Data Sources**

# **Highest Ranked Industries Report**

Region: RO & SF Campuses - 10 Mile Radius

## **Fastest Growing Industries**



NAICS Code	Description	2009 Jobs	2019 Jobs	Change	Change %	2009 Earnings per Worker
33611	Automobile and light truck manufacturing	19,768	29,750	9,982	50%	\$101,387
31181	Bread and bakery product manufacturing	3,355	5,004	1,649	49%	\$20,019
33231	Plate work and fabricated structural products	1,688	2,864	1,176	70%	\$50,101
33322	Plastics and rubber industry machinery	736	1,574	838	114%	\$64,228
33621	Motor vehicle body and trailer manufacturing	1,655	2,405	750	45%	\$89,832
	Machine shops	3,171	3,703	532	17%	\$50,901
33331	Commercial and service industry machinery	506	904	398	79%	\$71,214
	Sign manufacturing	696	1,052	356	51%	\$60,226
33699	Other transportation equipment manufacturing	258	585	327	127%	\$133,259
	Resin and synthetic rubber manufacturing	157	362	205	131%	\$98,421
	Medical equipment and supplies manufacturing	1,568	1,751	183	12%	\$48,686
	Other electrical equipment and component mfg.	339	504	165	49%	\$56,444
	Material handling equipment manufacturing	670	810	140	21%	\$54,948
	Hardware manufacturing	316	445	129	41%	\$84,993
	Metal valve manufacturing	576	697	121	21%	\$57,283
	Nonferrous metal, except CU and AL, shaping	167	281	114	68%	\$38,311
	Magnetic media manufacturing and reproducing	1,530	1,643	113	7%	\$35,398
	Office furniture and fixtures manufacturing	593	701	108	18%	\$59,494
32222	Paper bag and coated and treated paper mfg.	107	201	94	88%	\$55,642
32799	All other nonmetallic mineral products mfg.	120	209	89	74%	\$33,706
33261	Spring and wire product manufacturing	291	379	88	30%	\$50,182
	Agricultural implement manufacturing	126	213	87	69%	\$56,407
32616	Plastics bottle manufacturing	279	358	79	28%	\$79,959
32615	Urethane and other foam product manufacturing	144	217	73	51%	\$39,186
31511	Hosiery and sock mills	25	94	69	278%	\$6,728
32721	Glass and glass product manufacturing	71	139	68	96%	\$59,260
31141	Frozen food manufacturing	122	187	65	53%	\$42,185
33341	HVAC and commercial refrigeration equipment	232	293	61	26%	\$44,963
32192	Wood container and pallet manufacturing	75	134	59	79%	\$43,405
31192	Coffee and tea manufacturing	116	173	57	49%	\$32,296

Source: EMSI Complete Employment - Spring 2009

Source: Economic Modeling Specialists, Inc.

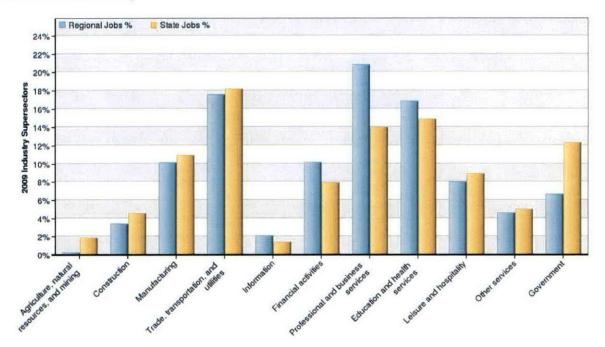
OCC, Office of Institutional Research

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#### **State Data Sources**

#### 2009 Industrial Makeup

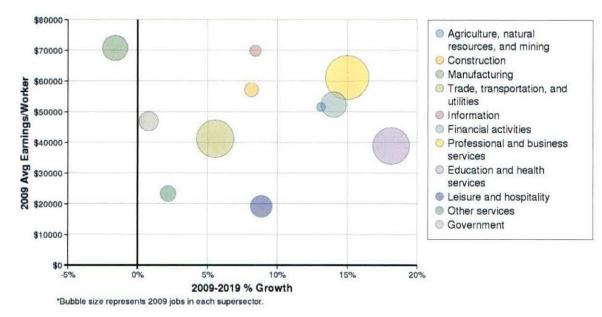


Description	2009 Regional Jobs	% Regional Jobs	2009 State Jobs	% State Jobs
Agriculture, natural resources, and mining	2,176	0.2%	94,749	1.9%
Construction	36,315	3.3%	230,323	4.5%
Manufacturing	109,581	10.1%	553,019	10.9%
Trade, transportation, and utilities	190,620	17.5%	921,087	18.2%
Information	22,498	2.1%	71,143	1.4%
Financial activities	110,373	10.1%	401,075	7.9%
Professional and business services	226,100	20.8%	709,485	14%
Education and health services	182,830	16.8%	753,028	14.9%
Leisure and hospitality	86,621	8%	451,250	8.9%
Other services	49,404	4.5%	253,521	5%
Government	71,933	6.6%	625,411	12.3%

Source: EMSI Complete Employment - Spring 2009

#### Industry Overview Report

#### Region Info: Royal Oak and Southfield Campuses – 10 Mile Radius



## Industry Size and Growth

2009 - 2019 Size and Growth

Description	2009 Jobs	2019 Jobs	Growth	% Growth	2009 Avg Earnings per Worker
Agriculture, natural resources, and mining	2,176	2,462	285	13%	\$51,508
Construction	36,315	39,263	2,948	8%	\$57,163
Manufacturing	109,581	107,800	-1,781	-2%	\$70,665
Trade, transportation, and utilities	190,620	201,191	10,571	6%	\$41,122
Information	22,498	24,386	1,888	8%	\$69,866
Financial activities	110,373	125,856	15,483	14%	\$52,225
Professional and business services	226,100	260,001	33,901	15%	\$61,167
Education and health services	182,830	215,950	33,119	18%	\$38,924
Leisure and hospitality	86,621	94,291	7,671	9%	\$19,079
Other services	49,404	50,472	1,068	2%	\$23,274
Government	71,933	72,491	557	1%	\$46,899
	1,088,451	1,194,163	105,712	10%	Standing and the

Source: EMSI Complete Employment - Spring 2009

NAICS Code	Description	2009 Jobs	February Unemp	% Total Jobs	State %	National %
99	Not elsewhere classified	0	6,890	0%	0%	0%
22	Utilities	1,480	11	0.7%	1.4%	3.4%
90	Government	54,065	1,057	2%	3.2%	2.6%
62	Health care and social assistance	110,060	2,276	2.1%	3.2%	3.1%
53	Real estate and rental and leasing	45,870	1,025	2.2%	3.2%	2.4%
11 ,	Agriculture, forestry, fishing and hunting	1,235	28	2.3%	4.2%	5.5%
52	Finance and insurance	52,332	1,561	3%	4.2%	4.2%
81	Other services, except public administration	36,421	1,325	3.6%	5.8%	4.7%
61	Educational services	15,082	583	3.9%	4.2%	3.5%
51	Information	18,544	719	3.9%	5.8%	7.3%
54	Professional and technical services	111,316	6,144	5.5%	7.7%	4.8%
44-45	Retail trade	92,230	5,540	6%	9.9%	9.1%
72	Accommodation and food services	51,889	3,465	6.7%	10.5%	9%
48-49	Transportation and warehousing	13,854	1,089	7.9%	12.9%	7.1%
42	Wholesale trade	43,195	3,640	8.4%	12.4%	7.4%
21	Mining	1,282	137	10.7%	17.4%	8.8%
71	Arts, entertainment, and recreation	16,022	1,727	10.8%	15.7%	7.1%
56	Administrative and waste services	70,910	9,549	13.5%	19.3%	11.8%
55	Management of companies and enterprises	13,197	1,864	14.1%	21%	3%
31-33	Manufacturing	62,697	12,650	20.2%	30.7%	15.5%
23	Construction	32,744	7,133	21.8%	33.2%	18.4%
		844,424	68,412	8.1%		

Source: EMSI Complete Employment - Spring 2009

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\*Note: Industries with fewer than ten unemployed workers are not shown.

#### **Data Sources and Calculations**

#### Unemployment Data

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The unemployment data in this report comes from the Bureau of Labor Statistics' Local Area Unemployment Statistics and is updated every two months.

#### State Data Sources

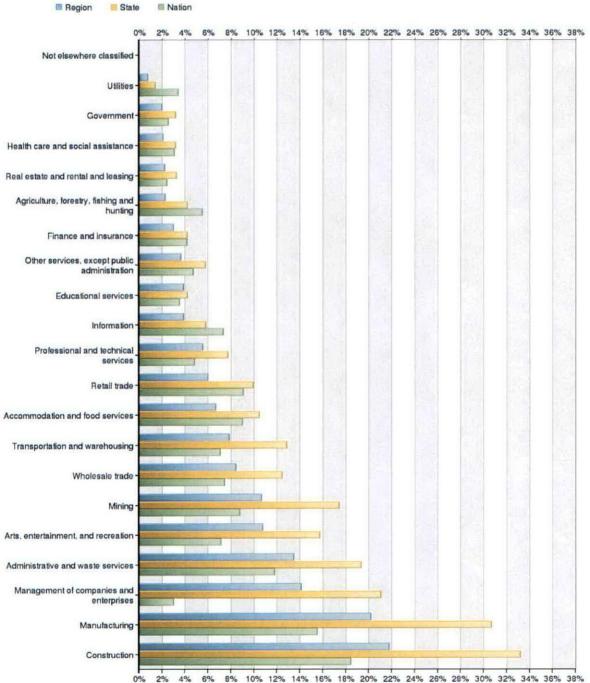
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Source: Economic Modeling Specialists, Inc. OCC, Office of Institutional Research

## **Unemployment by Industry Report**

## Region: Oakland County

## **Unemployment Summary**



Unemployment to Total Jobs %

Source: Economic Modeling Specialists, Inc. OCC, Office of Institutional Research

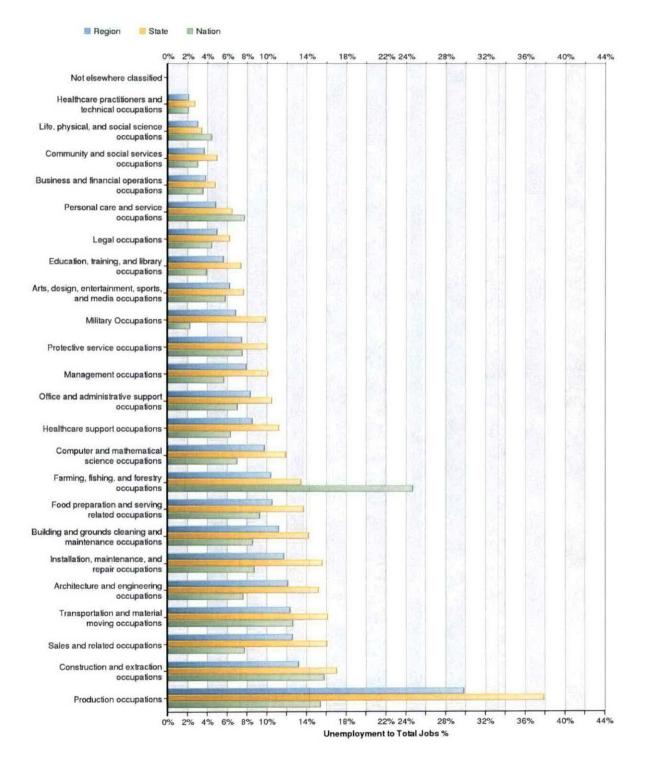
# **Regional Occupation Projections (2009 – 2019)**

- Occupation Unemployment
- Occupation Overview
- Highest Ranked / Fastest Growing Occupations

## **Unemployment by Occupation Report**

## Region Info: Oakland County

## **Unemployment Summary**



Source: Economic Modeling Specialists, Inc. OCC, Office of Institutional Research

SOC Code	Description	2009 Jobs	July Unemp	% Total Jobs	State %	National %
	Not elsewhere classified	0	0	0%	0%	0%
29-0000	Healthcare practitioners and technical occupations	42,298	899	2.1%	2.7%	2.1%
19-0000	Life, physical, and social science occupations	7,007	213	3%	3.4%	4.4%
21-0000	Community and social services occupations	11,598	430	3.7%	4.9%	3%
13-0000	Business and financial operations occupations	51,992	1,996	3.8%	4.8%	3.6%
39-0000	Personal care and service occupations	28,545	1,384	4.8%	6.5%	7.7%
23-0000	Legal occupations	10,025	498	5%	6.2%	4.5%
25-0000	Education, training, and library occupations	33,206	1,867	5.6%	7.4%	3.9%
	Arts, design, entertainment, sports, and media occupations	23,865	1,485	6.2%	7.6%	5.8%
55-0000	Military Occupations	2,367	163	6.9%		2.2%
33-0000	Protective service occupations	11,656	868	7.4%	10%	7.5%
11-0000	Management occupations	51,931	4,100	7.9%	10.1%	5.7%
43-0000	Office and administrative support occupations	123,023	10,240	8.3%	10.5%	7%
31-0000	Healthcare support occupations	24,105	2,059	8.5%	11.2%	6.3%
	Computer and mathematical science occupations	30,727	2,993	9.7%	11.9%	7%
45-0000	Farming, fishing, and forestry occupations	805	84	10.4%	13.4%	24.7%
35-0000	Food preparation and serving related occupations	49,874	5,255	10.5%	13.7%	9.3%
	Building and grounds cleaning and maintenance occupations	24,227	2,718	11.2%	14.2%	8.5%
49-0000	Installation, maintenance, and repair occupations	25,374	2,972	11.7%	15.6%	8.8%
	Architecture and engineering occupations	28,571	3,457	12.1%	15.2%	7.6%
53-0000	Transportation and material moving occupations	35,673	4,400	12.3%	16.1%	12.6%
41-0000	Sales and related occupations	119,401	14,990	12.6%	16%	7.7%
47-0000	Construction and extraction occupations	26,865	3,544	13.2%	17%	15.8%
	Production occupations	44,900	13,397	29.8%		15.4%
		808,036	88,109	10.9%		Territori Contradi

Source: EMSI Complete Employment - 3rd Quarter 2009

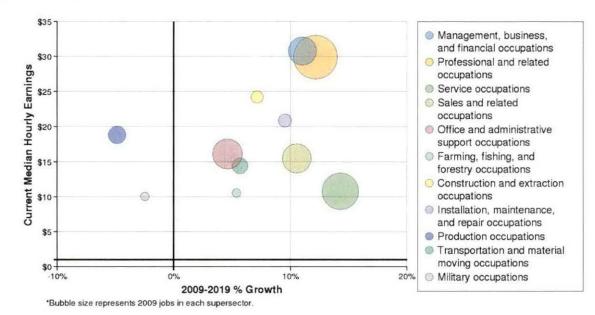
\*Note: Occupations with fewer than ten unemployed workers are not shown.

## **Data Sources and Calculations**

#### **Occupation Overview Report**

#### Region Info: Royal Oak Campus - 10 Mile Radius

## **Occupation Size and Growth**

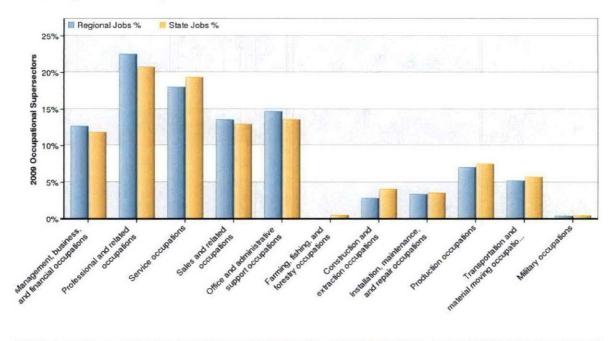


#### 2009 - 2019 Size and Growth

Description	2009 Jobs	2019 Jobs	Growth	% Growth	Current Median Hourly Earnings
Management, business, and financial occupations	110,020	122,133	12,113	11%	\$30.80
Professional and related occupations	196,121	219,965	23,844	12%	\$29.93
Service occupations	156,891	179,292	22,401	14%	\$10.81
Sales and related occupations	117,996	130,418	12,423	11%	\$15.53
Office and administrative support occupations	128,070	133,967	5,897	5%	\$16.11
Farming, fishing, and forestry occupations	670	706	36	5%	\$10.57
Construction and extraction occupations	24,655	26,410	1,755	7%	\$24.27
Installation, maintenance, and repair occupations	29,213	31,996	2,783	10%	\$20.86
Production occupations	61,614	58,619	-2,995	-5%	\$18.82
Transportation and material moving occupations	45,485	48,071	2,585	6%	\$14.41
Military occupations	3,173	3,094	-79	-2%	\$10.07
	873,908	954,671	80,763	9%	

Source: EMSI Complete Employment - 3rd Quarter 2009

#### 2009 Occupational Makeup



Description	2009 Regional Jobs	% Regional Jobs	2009 State Jobs	% State Jobs
Management, business, and financial occupations	110,020	12.6%	581,371	11.8%
Professional and related occupations	196,121	22.4%	1,024,492	20.7%
Service occupations	156,891	18%	956,184	19.4%
Sales and related occupations	117,996	13.5%	639,314	12.9%
Office and administrative support occupations	128,070	14.7%	670,021	13.6%
Farming, fishing, and forestry occupations	670	0.1%	23,604	0.5%
Construction and extraction occupations	24,655	2.8%	199,775	4%
Installation, maintenance, and repair occupations	29,213	3.3%	172,781	3.5%
Production occupations	61,614	7.1%	371,297	7.5%
Transportation and material moving occupations	45,485	5.2%	280,907	5.7%
Military occupations	3,173	0.4%	21,007	0.4%

Source: EMSI Complete Employment - 3rd Quarter 2009

#### **Occupation Data**

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional staffing patterns taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics)<sup>||</sup> Wage information is partially derived from the American Community Survey. The occupation-to-program (SOC-to-CIP) crosswalk is based on one from the U.S. Department of Education, with customizations by EMSI.

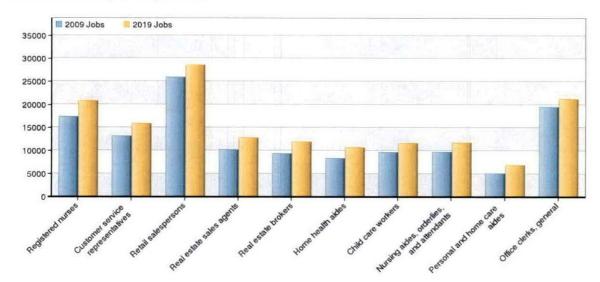
#### State Data Sources

This report uses state data from the following agencies: Michigan Department of Labor and Economic Growth, Bureau of Labor Market Information and Strategic Initiatives.

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## **Highest Ranked Occupations Report**

## Region Info: Royal Oak Campus – 10 Mile Radius



## Fastest Growing Occupations

SOC Code	Liecontion	2009 Jobs	2019 Jobs	Growth	Growth %	Current Median Hourly Earnings
29-111	1 Registered nurses	17,306	20,825	3,519	20%	\$31.86
43-405	1 Customer service representatives	13,167	15,911	2,744	21%	\$17.06
41-203	1 Retail salespersons	25,862	28,595	2,733	11%	\$9.81
41-902	2 Real estate sales agents	10,197	12,737	2,540	25%	\$12.53
41-902	1 Real estate brokers	9,371	11,890	2,519	27%	\$12.58
31-101	1 Home health aides	8,326	10,718	2,392	29%	\$9.56
39-901	1 Child care workers	9,659	11,669	2,010	21%	\$8.46
31-101	2 Nursing aides, orderlies, and attendants	9,718	11,710	1,992	20%	\$12.65
39-902	1 Personal and home care aides	5,098	6,928	1,830	36%	\$10.07
43-906	1 Office clerks, general	19,521	21,234	1,713	9%	\$12.68
11-914	Property real estate and community	6,638	8,317	1,679	25%	\$13.74
13-119		9,983	11,660	1,677	17%	\$34.72
37-201	lanitors and cleaners, except maids and	10,716	12,279	in and		\$11.11
13-205	2 Personal financial advisors	4,937	6,490	1,553	31%	\$18.88
35-302	Combined food preparation and serving workers, including fast food	12,341	13,743	1,402	11%	\$8.00
31-909		4,848	6,097	1,249	26%	\$13.88
17-219	9 Engineers, all other	5,826	6,965	1,139	20%	\$44.28
53-303		7,601	8,734	1,133	15%	\$18.58
13-201		9,777	10,904	1,127	12%	\$25.63
35-303	1 Waiters and waitresses	11,179	12,274	1,095	10%	\$7.97

Source: EMSI Complete Employment - 3rd Quarter 2009

#### **Occupation Data**

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional staffing patterns taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics). Wage information is partially derived from the American Community Survey. The occupation-to-program (SOC-to-CIP) crosswalk is based on one from the U.S. Department of Education, with customizations by EMSI.

#### **State Data Sources**

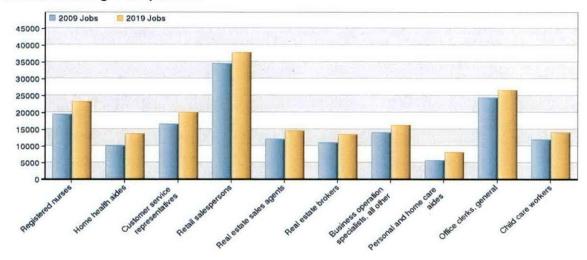
#### **Occupation Data**

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#### **State Data Sources**

## **Highest Ranked Occupations Report**

## Region: RO & SF Campuses - 10 Mile Radius



## **Fastest Growing Occupations**

SOC Code	Description	2009 Jobs	2019 Jobs	Growth	Growth %	2009 Avg Hourly Earnings
29-1111	Registered nurses	19,387	23,346	3,959	20%	\$30.68
	Home health aides	9,948	13,683	3,735	38%	\$9.37
43-4051	Customer service representatives	16,408	20,127	3,719	23%	\$16.80
	Retail salespersons	34,466	37,920	3,454	10%	\$9.72
	Real estate sales agents	11,903	14,643	2,740	23%	\$13.97
41-9021	Real estate brokers	10,832	13,526	2,694	25%	\$13.71
13-1199	Business operation specialists, all other	13,834	16,342	2,508	18%	\$36.90
	Personal and home care aides	5,621	8.104	2,483	44%	\$9.86
43-9061	Office clerks, general	24,337	26,747	2,410	10%	\$12.24
	Child care workers	11,811	14,142	2,331	20%	\$8.19
31-1012	Nursing aides, orderlies, and attendants	11,250	13,439	2,189	19%	\$12.25
	Team assemblers	7,995	10,179	2,184	27%	\$13.06
15-1031	Computer software engineers, applications	5,011	7,049	2,038	41%	\$37.19
37-2011	Janitors and cleaners, except maids and housekeeping cleaners	13,381	15,379	1,998	15%	\$11.23
15-1051		6,907	8,778	1,871	27%	\$37.91
11-9141	Property, real estate, and community association managers	7,308	9,082	1,774	24%	\$14.60
17-2112	Industrial engineers	5,790	7,522	1,732	30%	\$39.99
35-3021	Combined food preparation and serving workers, including fast food	16,933	18,608	1,675	10%	\$7.69
51-2099	Assemblers and fabricators, all other	8,005	9,595	1,590	20%	\$25.21
	Lawyers	8,621	10,199	1,578	18%	\$41.27
13-2052	Personal financial advisors	5,030	6,492	1,462	29%	\$18.98
35-3031	Waiters and waitresses	14,677	16,069	1,392	9%	\$7.69
25-1099	Postsecondary teachers	7,391	8,756	1,365	18%	\$33.77
13-2011	Accountants and auditors	10,229	11,558	1,329	13%	\$24.72
53-3032	Truck drivers, heavy and tractor-trailer	9,160	10,474	1,314	14%	\$18.75
43-3031	Bookkeeping, accounting, and auditing clerks	12,196	13,450	1,254	10%	\$16.63
	Medical assistants	5,172	6,339	1,167	23%	\$13.59
37-2012	Maids and housekeeping cleaners	6,753	7,888	1,135	17%	\$9.90
15-1081	Network systems and data communications analysts	2,855	3,975	1,120	39%	\$29.78
41-3099	Sales representatives, services, all other	4,752	5,777	1,025	22%	\$22.82

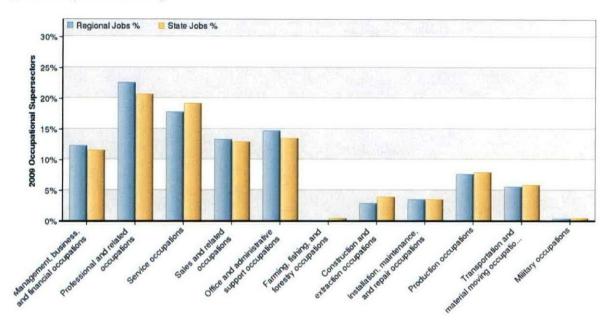
4,752 5,777 1,025 22% \$22.82 Source: EMSI Complete Employment - Spring 2009

#### **Occupation Data**

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional staffing patterns taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics). Wage information is partially derived from the American Community Survey. The occupation-to-program (SOC-to-CIP) crosswalk is based on one from the U.S. Department of Education, with customizations by EMSI.

#### **State Data Sources**

## 2009 Occupational Makeup

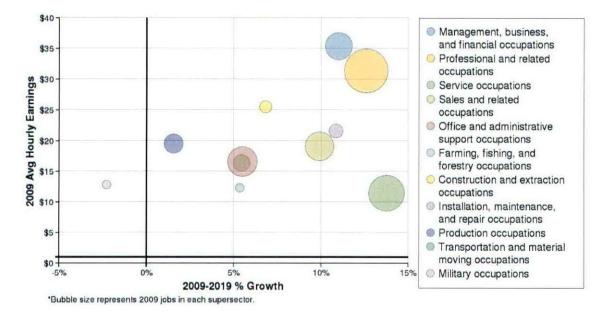


Description	2009 Regional Jobs	% Regional Jobs	2009 State Jobs	% State Jobs
Management, business, and financial occupations	132,949	12.2%	586,693	11.6%
Professional and related occupations	245,287	22.5%	1,048,905	20.7%
Service occupations	192,838	17.7%	974,650	19.2%
Sales and related occupations	143,831	13.2%	653,335	12.9%
Office and administrative support occupations	159,029	14.6%	684,705	13.5%
Farming, fishing, and forestry occupations	990	0.1%	23,405	0.5%
Construction and extraction occupations	30,636	2.8%	197,848	3.9%
Installation, maintenance, and repair occupations	37,576	3.5%	177,781	3.5%
Production occupations	82,479	7.6%	400,478	7.9%
Transportation and material moving occupations	59,520	5.5%	295,539	5.8%
Military occupations	3,317	0.3%	20,752	0.4%

Source: EMSI Complete Employment - Spring 2009

#### **Occupation Overview Report**

#### Region Info: Royal Oak and Southfield Campuses – 10 Mile Radius



## **Occupation Size and Growth**

2009 - 2019 Size and Growth

Description	2009 Jobs	2019 Jobs	Growth	% Growth	2009 Avg Hourly Earnings
Management, business, and financial occupations	132,949	147,594	14,645	11%	\$35.37
Professional and related occupations	245,287	276,140	30,853	13%	\$31.38
Service occupations	192,838	219,352	26,514	14%	\$11.40
Sales and related occupations	143,831	158,100	14,268	10%	\$19.07
Office and administrative support occupations	159,029	167,774	8,745	5%	\$16.56
Farming, fishing, and forestry occupations	990	1,043	53	5%	\$12.29
Construction and extraction occupations	30,636	32,728	2,093	7%	\$25.47
Installation, maintenance, and repair occupations	37,576	41,660	4,084	11%	\$21.56
Production occupations	82,479	83,767	1,289	2%	\$19.52
Transportation and material moving occupations	59,520	62,763	3,243	5%	\$16.34
Military occupations	3,317	3,242	-75	-2%	\$12.77
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Source: EMSI Complete Employment - Spring 2009

SOC Code	Description	2009 Jobs	February 2009 Unemployment	% Total Jobs	State %	National %
	Not elsewhere classified	Ö	4,970	0%	0%	0%
29-0000	Healthcare practitioners and technical occupations	43,552	-	1.3%	1.8%	
25-0000	Education, training, and library occupations	34,786	538	1.5%	2.3%	
55-0000	Military Occupations	2,244	44	2%	3.1%	1.8%
19-0000	Life, physical, and social science occupations	7,112	142	2%	2.7%	4.4%
21-0000	Community and social services occupations	10,526	223	2.1%	3.1%	2.6%
13-0000	Business and financial operations occupations	53,519		2.4%	3.4%	
23-0000	Legal occupations	10,458	307	2.9%	4.1%	3.3%
39-0000	Personal care and service occupations	28,282	897	3.2%	4.8%	5.5%
27-0000	Arts, design, entertainment, sports, and media occupations	25,157	1,000	4%	5.5%	4.7%
33-0000	Protective service occupations	11,905	546	4.6%	7%	5.9%
31-0000	Healthcare support occupations	24,659	1,256	5.1%	7.5%	5.3%
43-0000	Office and administrative support occupations	128,314	6,697	5.2%	7.5%	5.9%
15-0000	Computer and mathematical science occupations	31,432	1,886	6%	8.1%	5.8%
	Management occupations	52,356	3,155	6%	8.9%	5.2%
33-0000	Food preparation and serving related occupations	53,686	3,846	7.2%	10.6%	7.1%
	Architecture and engineering occupations	32,721	2,390	7.3%	10.3%	6.4%
41-0000	Sales and related occupations	124,860	9,456	7.6%	11.1%	6.4%
53-0000	Transportation and material moving occupations	37,606	4,051	10.8%	16%	11.3%
49-0000	Installation, maintenance, and repair occupations	26,653	3,065	11.5%	17.2%	9.1%
37-0000	Building and grounds cleaning and maintenance occupations	25,377	3,951	15.6%	22.2%	11.4%
47-0000	Construction and extraction occupations	27,254	5,394	19.8%	29.1%	20.5%
	Farming, fishing, and forestry occupations	1,126		21.3%	32.6%	37.8%
51-0000	Production occupations	50,839		24.6%	35.8%	16.7%
		844,424		8.1% FMSI Complet		

Source: EMSI Complete Employment - Spring 2009

\*Note: Occupations with fewer than ten unemployed workers are not shown.

## **Data Sources and Calculations**

#### State Data Sources

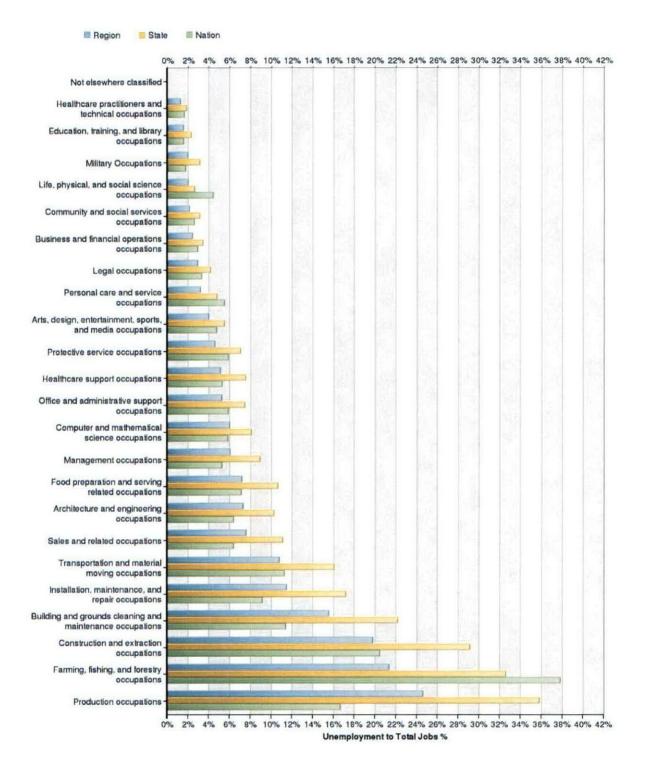
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Source: Economic Modeling Specialist, Inc. OCC, Office of Institutional Research 5/4/2009 2 of 2 ٢

#### **Unemployment by Occupation Report**

## Region: Oakland County

#### **Unemployment Summary**



Source: Economic Modeling Specialist, Inc. OCC, Office of Institutional Research 5/4/2009 1 of 2