



Key Demand Occupations – 2012 – Saginaw-Bay-Midland

College Degree Required

Education	Title / Description / Key Skills	Projected Job Growth	% Job Growth 2002 - 2012	Hourly Wage
Management Occupations				
General and Operations Managers (11-1021)		220	12.9%	\$33.93
Work Exp. + Bachelor's	Plan, direct, or coordinate the operations of companies or public and private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources. Key Skills: Active Listening, Management of Personnel Resources, Time Management, Judgment & Decision Making, Monitoring.			
Sales Managers (11-2022)		70	21.3%	\$36.80
Work Exp. + Bachelor's	Direct the actual distribution or movement of a product or service to the customer. Coordinate sales distribution by establishing sales territories, quotas, and goals and establish training programs for sales representatives. Analyze sales statistics gathered by staff to determine sales potential and inventory requirements and monitor the preferences of customers. Key Skills: Active Listening, Speaking, Mathematics, Time Management, Service Orientation			
Computer and Information Systems Managers (11-3021)		60	17.3%	\$42.29
Work Exp. + Bachelor's	Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming. Key Skills: Reading Comprehension, Critical Thinking, Active Listening, Judgment & Decision Making, Active Learning			
Financial Managers (11-3031)		55	8.2%	\$37.13
Work Exp. + Bachelor's	Plan, direct, and coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment. Key Skills: Management of Financial Resources, Mathematics, Critical Thinking, Judgment & Decision Making, Reading Comprehension			
Medical and Health Services Managers (11-9111)		60	19.7%	\$38.09
Work Exp. + Bachelor's	Plan, direct, or coordinate medicine and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations. Key Skills: Active Listening, Reading Comprehension, Critical Thinking, Monitoring, Speaking			
Professional Occupations				
Training and Development Specialists (13-1073)		50	20.0%	\$22.79
Bachelor's	Conduct training and development programs for employees. Key Skills: Active Listening, Speaking, Time Management, Reading Comprehension, Writing			
Management Analysts (13-1111)		35	8.2%	\$40.18
Work Exp. + Bachelor's	Conduct organizational studies and evaluations, design systems and procedures, conduct work simplifications and measurement studies, and prepare operations and procedures manuals to assist management in operating more efficiently and effectively. Includes program analysts and management consultants. Key Skills: Critical Thinking, Judgment & Decision Making, Active Listening, Coordination, Time Management			
Accountants and Auditors (13-2011)		140	10.6%	\$34.67
Bachelor's	Examine, analyze, and interpret accounting records for the purpose of giving advice or preparing statements. Install or advise on systems of recording costs or other financial and budgetary data. Key Skills: Mathematics, Active Listening, Critical Thinking, Monitoring, Judgment & Decision Making			
Computer Software Engineer, Applications (15-1031)		140	15.0%	\$35.73*
Bachelor's	Develop, create, and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. Design software or customize software for client use with the aim of optimizing operational efficiency. May analyze and design databases within an application area, working individually or coordinating database development as part of a team. Key Skills: Programming, Critical Thinking, Complex Problem Solving, Active Listening, Troubleshooting			
Computer Systems Analysts (15-1051)		155	20.3%	\$34.51*
Bachelor's	Analyze science, engineering, business, and all other data processing problems for application to electronic data processing systems. Analyze user requirements, procedures, and problems to automate or improve existing systems and review computer system capabilities, workflow, and scheduling limitations. Key Skills: Active Learning, Reading Comprehension, Complex Problem Solving, Critical Thinking, Active Listening			

OJT = On-the-job Training

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Page 1 of 4

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Network and Computer Systems Administrators (15-1071)				
		45	20.9%	\$28.24*
Bachelor's	Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet system or a segment of a network system. Maintain network hardware and software. Monitor network to ensure network availability to all system users and perform necessary maintenance to support network availability. Key Skills: Reading Comprehension, Troubleshooting, Active Listening, Complex Problem Solving			
Market Research Analysts (19-3021)				
		30	13.7%	\$24.61
Master's	Research market conditions in local, regional, or national areas to determine potential sales of a product or service. May gather information on competitors, prices, sales, and methods of marketing and distribution. May use survey results to create a marketing campaign based on regional preferences and buying habits. Key Skills: Reading Comprehension, Time Management, Writing, Active Listening, Coordination			
Child, Family, and School Social Workers (21-1021)				
		100	15.4%	\$25.68
Bachelor's	Provide social services and assistance to improve the social and psychological functioning of children and their families and to maximize the family well-being and the academic functioning of children. May assist single parents, arrange adoptions, and find foster homes for abandoned or abused children. In schools, they address such problems as teenage pregnancy, misbehavior, and truancy. May also advise teachers on how to deal with problem children. Key Skills: Speaking, Active Listening, Monitoring, Social Perceptiveness, Service Orientation			
Public Relations Specialists (27-3031)				
		60	20.5%	\$19.22
Bachelor's	Engage in promoting or creating good will for individuals, groups, or organizations by writing or selecting favorable publicity material and releasing it through various communications media. May prepare and arrange displays, and make speeches. Key Skills: Writing, Critical Thinking, Reading Comprehension, Active Listening, Judgment & Decision Making			
Health Care Occupations				
Registered Nurses (29-1111)				
		715	17.3%	\$25.91
Associate's	Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required. Key Skills: Active Listening, Reading Comprehension, Critical Thinking, Instructing, Speaking, Time Management			
Physical Therapists (29-1123)				
		40	22.7%	\$35.26
Master's	Assess, plan, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and decrease or prevent deformity of patients suffering from disease or injury. Key Skills: Active Listening, Instructing, Time Management, Speaking, Critical Thinking			
Respiratory Therapists (29-1126)				
		50	25.3%	\$22.14*
Associate's	Assess, treat, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment. Key Skills: Active Listening, Instruction, Reading Comprehension, Critical Thinking, Monitoring			
Cardiovascular Technologists and Technicians (29-2031)				
		45	25.6%	\$21.47*
Associate's	Conduct tests on pulmonary or cardiovascular systems of patients for diagnostic purposes. May conduct or assist in electrocardiograms, cardiac catheterizations, pulmonary-functions, lung capacity, and similar tests. Includes vascular technologists. Key Skills: Active Listening, Reading Comprehension, Instruction, Active Learning, Speaking			
Medical Records and Health Information Technicians (29-2071)				
		80	28.4%	\$16.23
Associate's	Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. Process, maintain, compile, and report patient information for health requirements and standards. Key Skills: Active Listening, Reading Comprehension, Time Management, Speaking, Writing			
Service Occupations				
Recreation Workers (39-9032)				
		45	16.5%	\$11.54
Bachelor's	Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members. Key Skills: Service Orientation, Active Listening, Speaking, Instruction, Judgment and Decision Making			

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Page 2 of 4

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Professional Occupations				
	Cost Estimators (13-1051)	45	16.1%	\$23.68
Work Exp. in Related Occupation	Prepare cost estimates for product manufacturing, construction projects, or services to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured. Key Skills: Active Listening, Reading Comprehension, Mathematics, Time Management, Writing			
	Preschool Teachers, Except Special Education (25-2011)	70	30.5%	\$14.40*
Post-Secondary Vocational Training	Instruct children (normally up to 5 years of age) in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold State certification. Key Skills: Active Listening, Instructing, Speaking, Reading Comprehension, Learning Strategies			
	Self-Enrichment Education Teachers (25-3021)	65	37.9%	\$16.18*
Work Exp. in Related Occupation	Teach or instruct courses other than those that normally lead to an occupational objective or degree. Courses may include self-improvement, nonvocational, and nonacademic subjects. Teaching may or may not take place in a traditional educational institution. Key Skills: Instructing, Speaking, Active Listening, Learning Strategies, Social Perceptiveness			
Health Care Occupations				
	Surgical Technologists (29-2055)	40	18.0%	\$17.63*
Post-Secondary Vocational Training	Assist in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. May help set up operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeon's assistants, hold retractors, cut sutures, and help count sponges, needles, supplies, and instruments. Key Skills: Active Listening, Active Learning, Critical Thinking, Equipment Selection, Coordination			
	Licensed Practical & Licensed Vocational Nurses (29-2061)	50	4.7%	\$16.71
Post-Secondary Vocational Training	Care for ill, injured, convalescent, or disabled persons in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required. Key Skills: Active Listening, Reading Comprehension, Time Management, Writing, Active Learning			
Service Occupations				
	Fire Fighters (33-2011)	85	15.5%	\$17.85
Long-Term OJT	Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster management. Key Skills: Active Listening, Coordination, Equipment Selection, Critical Thinking, Equipment Maintenance			
	Police and Sheriff's Patrol Officers (33-3051)	100	18.8%	\$23.25
Long-Term OJT	Maintain order, enforce laws and ordinances, and protect life and property in an assigned patrol district. Perform combination of following duties: patrol a specific area on foot or in a vehicle; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts. Key Skills: Judgment & Decision Making, Active Listening, Critical Thinking, Writing, Speaking			
	Cooks, Restaurant (35-2014)	105	12.9%	\$8.96
Long-Term OJT	Prepare, season, and cook soups, meats, vegetables, desserts, or other foodstuffs in restaurants. May order supplies, keep records and accounts, price items on menu, or plan menu. Key Skills: Active Listening, Reading Comprehension, Speaking, Active Learning, Instructing			
	Hairdressers, Hairstylists, and Cosmetologists (39-5012)	100	11.0%	\$14.43
Post-Secondary Vocational Training	Provide beauty services, such as shampooing, cutting, coloring, and styling hair, and massaging and treating scalp. May also apply makeup, dress wigs, perform hair removal, and provide nail and skin care services. Key Skills: Active Listening, Speaking, Time Management, Coordination, Social Perceptiveness			
	Fitness Trainers and Aerobics Instructors (39-9031)	35	19.3%	\$10.40
Post-Secondary Vocational Training	Instruct or coach groups or individuals in exercise activities and the fundamentals of sports. Demonstrate techniques and methods of participation. Observe participants and inform them of corrective measures necessary to improve their skills. Those required to hold teaching degrees should be reported in the appropriate teaching category. Key Skills: Instructing, Speaking, Coordination, Learning Strategies, Monitoring			

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Page 3 of 4

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Sales Occupations				
	First-Line Supervisors/Managers of Retail Sales Workers (41-1011)	205	8.6%	\$15.16
Work Exp. in Related Occupation	Directly supervise sales workers in a retail establishment or department. Duties may include management functions, such as purchasing, budgeting, accounting, and personnel work, in addition to supervisory duties. Key Skills: Management of Personnel Resources, Active Listening, Service Orientation, Time Management, Instructing			
	Real Estate Sales Agents (41-9022)	35	16.8%	\$13.23
Post-Secondary Vocational Training	Rent, buy, or sell property for clients. Perform duties, such as study property listings, interview prospective clients, accompany clients to property site, discuss conditions of sale, and draw up real estate contracts. Includes agents who represent buyer. Key Skills: Active Listening, Time Management, Negotiation, Speaking, Reading Comprehension			
Construction and Repair Occupations				
	Managers of Construction Trades & Extraction Workers (47-1011)	100	9.9%	\$25.79
Work Exp. in Related Occupation	Directly supervise and coordinate activities of construction or extraction workers. Key Skills: Coordination, Management of Personnel Resources, Time Management, Speaking, Active Listening			
	Carpenters (47-2031)	190	12.1%	\$17.15
Long-Term OJT	Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; wood stairways, window and door frames, and hardwood floors. May also install cabinets, siding, drywall and batt or roll insulation. Includes brattice builders who build doors or brattices (ventilation walls or partitions) in underground passageways to control the proper circulation of air through the passageways and to the working places. Key Skills: Mathematics, Time Management, Active Listening, Critical Thinking, Judgment & Decision Making			
	Electricians (47-2111)	165	14.9%	\$29.14
Long-Term OJT	Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. Key Skills: Installation, Active Listening, Reading Comprehension, Troubleshooting, Equipment Selection			
	Managers of Mechanics, Installers, and Repairers (49-1011)	65	11.0%	\$30.71
Work Exp. in Related Occupation	Supervise and coordinate the activities of mechanics, installers, and repairers. Excludes team or work leaders. Key Skills: Management of Personnel Resources, Reading Comprehension, Active Listening, Equipment Selection, Installation			
	Automotive Service Technicians and Mechanics (49-3023)	130	16.1%	\$15.75
Post-Secondary Vocational Training	Diagnose, adjust, repair, or overhaul automotive vehicles. Key Skills: Troubleshooting, Repairing, Equipment Selection, Active Listening, Critical Thinking			
Production Occupations				
	Supervisors of Production & Operating Workers (51-1011)	110	8.6%	\$29.62
Work Exp. in Related Occupation	Supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators. Excludes team or work leaders. Key Skills: Active Listening, Management of Personnel Resources, Reading Comprehension, Instructing, Monitoring			
	Machinists (51-4041)	40	10.9%	\$16.62
Long-Term OJT	Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures. Key Skills: Operation & Control, Operation Monitoring, Mathematics, Equipment Selection, Troubleshooting			
	Welders, Cutters, Solderers, and Brazers (51-4121)	65	13.0%	\$21.20
Long-Term OJT	Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Key Skills: Operation & Control, Equipment Selection, Equipment Maintenance, Mathematics, Operation Monitoring			

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Page 4 of 4