

# DIGITALIZATION AND THE AMERICAN WORKFORCE

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# APPENDIX B. TABLES

TABLE A

## Digital scores for detailed occupations, 2002 and 2016

Occupation	Digital score, 2002	Digital score, 2016
Software Developers, Applications	97	94
Computer Programmers	93	94
Computer Network Support Specialists	81	93
Computer and Information Systems Managers	79	92
Computer Hardware Engineers	97	91
Information Security Analysts	90	91
Software Developers, Systems Software	97	91
Electronics Engineers, Except Computer	67	90
Astronomers	51	85
Computer Science Teachers, Postsecondary	83	84
Database Administrators	90	84
Mathematicians	59	81
Computer Operators	77	79
Sound Engineering Technicians	42	79
Audio-Visual and Multimedia Collections Specialists	30	79
Computer Systems Analysts	96	79
Instructional Coordinators	32	78
Operations Research Analysts	61	78
Actuaries	40	78
Art Directors	74	78
Physics Teachers, Postsecondary	41	77
Aerospace Engineers	64	77
Surveying and Mapping Technicians	51	77
Electrical Engineers	78	77
Nuclear Engineers	55	76
Surveyors	34	76
Audio and Video Equipment Technicians	30	75
Atmospheric and Space Scientists	54	75
Sales Engineers	44	75

Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	61	74
Technical Writers	42	74
Desktop Publishers	73	74
Statistical Assistants	63	74
Broadcast Technicians	37	74
Avionics Technicians	49	74
Radio and Television Announcers	36	73
Cartographers and Photogrammetrists	31	73
Electrical and Electronics Drafters	49	73
Film and Video Editors	43	73
Prepress Technicians and Workers	22	73
Statisticians	66	73
Mechanical Engineering Technicians	33	73
Financial Analysts	59	73
Electrical and Electronics Repairers, Commercial and Industrial Equipment	58	73
Computer, Automated Teller, and Office Machine Repairers	59	72
Computer Network Architects	81	72
Electrical and Electronics Engineering Technicians	59	72
Court Reporters	56	72
Producers and Directors	24	72
Agricultural Engineers	38	71
Economists	44	71
Engineering Teachers, Postsecondary	53	70
Photographers	17	70
Radio, Cellular, and Tower Equipment Installers and Repairers	37	70
Mechanical Engineers	70	70
Cost Estimators	46	70
Graphic Designers	71	70
Agricultural Sciences Teachers, Postsecondary	36	69
Forestry and Conservation Science Teachers, Postsecondary	36	69
Chemical Engineers	47	69
Materials Scientists	33	69
Medical and Health Services Managers	67	69
Petroleum Engineers	39	69
Epidemiologists	44	68
Reservation and Transportation Ticket Agents and Travel Clerks	40	68
Geographers	25	68
Materials Engineers	38	68

Biochemists and Biophysicists	29	68
Geoscientists, Except Hydrologists and Geographers	44	68
Legal Secretaries	54	67
Police, Fire, and Ambulance Dispatchers	51	67
Securities, Commodities, and Financial Services Sales Agents	34	67
Nuclear Medicine Technologists	58	67
Mechanical Drafters	51	67
Electronic Equipment Installers and Repairers, Motor Vehicles	36	67
Architectural and Engineering Managers	45	67
Lodging Managers	37	67
Radiation Therapists	54	67
Traffic Technicians	42	67
Sociology Teachers, Postsecondary	36	66
Hydrologists	41	66
Compliance Officers	26	66
Architectural and Civil Drafters	57	66
Market Research Analysts and Marketing Specialists	45	66
Chemists	49	66
Librarians	52	66
Medical Equipment Repairers	40	66
Gaming Managers	14	66
Landscape Architects	55	65
Archivists	29	65
Career/Technical Education Teachers, Middle School	30	65
Biological Science Teachers, Postsecondary	36	65
Education Administrators, Elementary and Secondary School	39	65
Library Assistants, Clerical	39	65
Postmasters and Mail Superintendents	28	65
Airline Pilots, Copilots, and Flight Engineers	33	65
Mathematical Science Teachers, Postsecondary	47	65
Animal Scientists	32	65
Zoologists and Wildlife Biologists	23	64
Mining and Geological Engineers, Including Mining Safety Engineers	33	64
Purchasing Agents, Except Wholesale, Retail, and Farm Products	37	64
Environmental Engineers	56	64
Advertising and Promotions Managers	42	64
Travel Agents	57	64
Administrative Services Managers	53	64
Audiologists	27	64
New Accounts Clerks	52	64

First-Line Supervisors of Office and Administrative Support Workers	39	64
Industrial Engineers	46	64
Radiologic Technologists	55	64
Medical Assistants	35	64
Civil Engineering Technicians	39	64
Order Clerks	33	64
Paralegals and Legal Assistants	39	64
Anthropologists and Archeologists	29	64
Architects, Except Landscape and Naval	69	64
Chemistry Teachers, Postsecondary	47	64
Accountants and Auditors	48	63
Political Science Teachers, Postsecondary	36	63
Camera Operators, Television, Video, and Motion Picture	25	63
Insurance Appraisers, Auto Damage	21	63
Economics Teachers, Postsecondary	36	63
Civil Engineers	66	63
Credit Counselors	42	63
Dispatchers, Except Police, Fire, and Ambulance	25	63
Medical Secretaries	61	63
Private Detectives and Investigators	21	63
Tax Preparers	32	63
Pharmacists	52	63
Medical and Clinical Laboratory Technicians	36	62
Editors	41	62
Meeting, Convention, and Event Planners	21	62
Police and Sheriff's Patrol Officers	27	62
Medical Scientists, Except Epidemiologists	44	62
Foresters	52	62
Library Technicians	46	62
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	55	62
Appraisers and Assessors of Real Estate	27	62
Tax Examiners and Collectors, and Revenue Agents	30	62
Industrial Engineering Technicians	51	62
Area, Ethnic, and Cultural Studies Teachers, Postsecondary	36	62
Personal Financial Advisors	30	61
Probation Officers and Correctional Treatment Specialists	26	61
First-Line Supervisors of Police and Detectives	59	61
Cardiovascular Technologists and Technicians	48	61
Sociologists	42	61

Commercial and Industrial Designers	27	61
Procurement Clerks	30	61
Set and Exhibit Designers	21	61
Human Resources Assistants, Except Payroll and Timekeeping	47	61
Financial Managers	41	61
Graduate Teaching Assistants	40	61
Marketing Managers	33	61
General and Operations Managers	50	61
Wholesale and Retail Buyers, Except Farm Products	43	61
Career/Technical Education Teachers, Secondary School	30	61
Public Relations Specialists	33	61
Customer Service Representatives	25	61
Special Education Teachers, Secondary School	27	61
Bill and Account Collectors	35	60
Respiratory Therapy Technicians	50	60
Special Education Teachers, Kindergarten and Elementary School	27	60
Industrial Production Managers	47	60
Property, Real Estate, and Community Association Managers	25	60
Middle School Teachers, Except Special and Career/Technical Education	30	60
Anthropology and Archeology Teachers, Postsecondary	36	60
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	29	60
Budget Analysts	40	60
Sales Managers	70	60
Loan Officers	42	60
Chiropractors	16	60
Real Estate Sales Agents	31	60
Electro-Mechanical Technicians	34	60
Secondary School Teachers, Except Special and Career/Technical Education	30	60
Construction Managers	17	60
Occupational Health and Safety Specialists	28	60
Transportation, Storage, and Distribution Managers	23	60
Environmental Scientists and Specialists, Including Health	40	60
Agricultural and Food Science Technicians	18	60
Detectives and Criminal Investigators	23	60
Human Resources Specialists	37	60
First-Line Supervisors of Mechanics, Installers, and Repairers	16	60
First-Line Supervisors of Non-Retail Sales Workers	23	60
Receptionists and Information Clerks	55	60

Billing and Posting Clerks	43	59
Tellers	47	59
Educational, Guidance, School, and Vocational Counselors	32	59
Farm and Home Management Advisors	29	59
Medical Records and Health Information Technicians	59	59
Buyers and Purchasing Agents, Farm Products	24	59
File Clerks	33	59
Claims Adjusters, Examiners, and Investigators	29	59
Social and Community Service Managers	14	59
Executive Secretaries and Executive Administrative Assistants	45	59
Training and Development Specialists	63	59
Real Estate Brokers	54	59
Industrial-Organizational Psychologists	38	59
Cargo and Freight Agents	25	59
Judicial Law Clerks	37	59
Respiratory Therapists	55	59
Brokerage Clerks	45	59
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	35	59
Power Distributors and Dispatchers	31	59
Education Administrators, Postsecondary	39	59
Parts Salespersons	36	59
Camera and Photographic Equipment Repairers	25	58
Substance Abuse and Behavioral Disorder Counselors	28	58
Environmental Science and Protection Technicians, Including Health	40	58
Elementary School Teachers, Except Special Education	45	58
Lawyers	34	58
Geological and Petroleum Technicians	29	58
Psychology Teachers, Postsecondary	36	58
Internists, General	27	58
Food Scientists and Technologists	22	58
Switchboard Operators, Including Answering Service	36	58
Nursing Instructors and Teachers, Postsecondary	31	57
Court, Municipal, and License Clerks	26	57
Production, Planning, and Expediting Clerks	36	57
Insurance Claims and Policy Processing Clerks	35	57
Purchasing Managers	30	57
Chemical Equipment Operators and Tenders	15	57
Bookkeeping, Accounting, and Auditing Clerks	52	57
Pharmacy Aides	54	57

Diagnostic Medical Sonographers	51	57
Special Education Teachers, Middle School	27	57
Podiatrists	13	57
Natural Sciences Managers	45	57
Correspondence Clerks	36	57
Fire Inspectors and Investigators	23	57
Museum Technicians and Conservators	25	57
Counter and Rental Clerks	27	57
Forensic Science Technicians	41	57
English Language and Literature Teachers, Postsecondary	40	56
Nuclear Technicians	42	56
Directors, Religious Activities and Education	17	56
Art, Drama, and Music Teachers, Postsecondary	30	56
Administrative Law Judges, Adjudicators, and Hearing Officers	27	56
Payroll and Timekeeping Clerks	32	56
Computer-Controlled Machine Tool Operators, Metal and Plastic	40	56
Historians	29	56
History Teachers, Postsecondary	36	56
Foreign Language and Literature Teachers, Postsecondary	40	56
Forest and Conservation Workers	0	56
Hotel, Motel, and Resort Desk Clerks	41	56
Physician Assistants	27	56
First-Line Supervisors of Fire Fighting and Prevention Workers	21	56
Surgeons	22	56
Telecommunications Line Installers and Repairers	25	56
Pharmacy Technicians	41	56
Urban and Regional Planners	59	55
Biological Technicians	11	55
Writers and Authors	34	55
Advertising Sales Agents	33	55
Financial Examiners	37	55
Automotive Service Technicians and Mechanics	39	55
First-Line Supervisors of Construction Trades and Extraction Workers	8	55
Emergency Medical Technicians and Paramedics	40	55
Registered Nurses	38	55
Mental Health and Substance Abuse Social Workers	24	55
Judges, Magistrate Judges, and Magistrates	14	55
Office Clerks, General	53	55
Chemical Technicians	35	55
Correctional Officers and Jailers	13	55



Parking Enforcement Workers	10	55
Farmers, Ranchers, and Other Agricultural Managers	15	55
Conservation Scientists	19	55
Public Address System and Other Announcers	18	55
Dietitians and Nutritionists	57	54
Pediatricians, General	27	54
Interior Designers	25	54
Oral and Maxillofacial Surgeons	14	54
Eligibility Interviewers, Government Programs	25	54
Interpreters and Translators	23	54
Social and Human Service Assistants	16	54
Curators	31	54
Agricultural Inspectors	19	54
Aircraft Mechanics and Service Technicians	14	53
Air Traffic Controllers	39	53
Fish and Game Wardens	5	53
Management Analysts	39	53
Insurance Underwriters	28	53
Nuclear Power Reactor Operators	30	52
Postal Service Clerks	28	52
Health Specialties Teachers, Postsecondary	37	52
Motorcycle Mechanics	10	52
Credit Analysts	51	52
Healthcare Social Workers	42	52
Dental Assistants	40	52
Locksmiths and Safe Repairers	12	52
Water and Wastewater Treatment Plant and System Operators	35	52
Speech-Language Pathologists	27	52
Shipping, Receiving, and Traffic Clerks	22	52
Commercial Pilots	33	52
Compensation, Benefits, and Job Analysis Specialists	44	52
Motorboat Mechanics and Service Technicians	8	52
Marine Engineers and Naval Architects	40	52
Orthotists and Prosthetists	13	51
Psychiatrists	24	51
Power Plant Operators	23	51
Stationary Engineers and Boiler Operators	13	51
Fabric and Apparel Patternmakers	4	51
Child, Family, and School Social Workers	53	51
Tool and Die Makers	3	51

Proofreaders and Copy Markers	27	51
Reporters and Correspondents	44	51
Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	5	51
Insurance Sales Agents	59	51
Farm Equipment Mechanics and Service Technicians	19	51
Medical Equipment Preparers	21	50
Orthodontists	14	50
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	8	50
Dentists, General	17	50
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	11	50
Photographic Process Workers and Processing Machine Operators	14	50
Licensed Practical and Licensed Vocational Nurses	30	50
Recreational Therapists	39	50
Anesthesiologists	24	50
Chief Executives	41	50
Health Educators	23	50
Psychiatric Technicians	15	50
Medical and Clinical Laboratory Technologists	43	50
Occupational Therapists	38	50
Veterinarians	13	49
Clinical, Counseling, and School Psychologists	34	49
Mobile Heavy Equipment Mechanics, Except Engines	6	49
Adult Basic and Secondary Education and Literacy Teachers and Instructors	30	49
Dental Hygienists	38	49
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	24	49
Gaming Cage Workers	46	49
Ophthalmic Laboratory Technicians	19	49
Construction and Building Inspectors	17	49
Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	7	48
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	31	48
Opticians, Dispensing	17	48
Prosthodontists	14	48
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	15	48
Athletic Trainers	3	48
First-Line Supervisors of Production and Operating Workers	28	48
Meter Readers, Utilities	16	48

Clergy	8	48
Bus and Truck Mechanics and Diesel Engine Specialists	17	48
Occupational Therapy Assistants	17	47
Residential Advisors	4	47
Education Administrators, Preschool and Childcare Center/Program	39	47
Mental Health Counselors	28	47
Physical Therapist Aides	20	47
Optometrists	50	46
Obstetricians and Gynecologists	27	46
Family and General Practitioners	27	46
Interviewers, Except Eligibility and Loan	42	46
Veterinary Assistants and Laboratory Animal Caretakers	4	46
Retail Salespersons	35	46
Chefs and Head Cooks	3	46
Industrial Machinery Mechanics	49	45
Model Makers, Metal and Plastic	29	45
Railroad Conductors and Yardmasters	20	44
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	12	44
First-Line Supervisors of Personal Service Workers	11	44
Captains, Mates, and Pilots of Water Vessels	20	44
Merchandise Displayers and Window Trimmers	7	44
Physical Therapists	38	44
Ship Engineers	14	44
Physical Therapist Assistants	20	44
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	9	44
Chemical Plant and System Operators	28	44
Inspectors, Testers, Sorters, Samplers, and Weighers	38	43
Forging Machine Setters, Operators, and Tenders, Metal and Plastic	6	43
Coaches and Scouts	5	43
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	2	43
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	3	42
Gaming Supervisors	14	42
Amusement and Recreation Attendants	15	42
Surgical Technologists	8	42
Teacher Assistants	16	42
Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	6	41
Automotive and Watercraft Service Attendants	13	41

Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	8	41
Machinists	36	41
Adhesive Bonding Machine Operators and Tenders	5	41
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	9	41
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	6	40
Recreation Workers	21	40
Firefighters	19	40
Bailiffs	3	40
Medical Appliance Technicians	13	40
Musical Instrument Repairers and Tuners	4	40
Embalmers	5	40
Athletes and Sports Competitors	3	38
Arbitrators, Mediators, and Conciliators	27	38
Bicycle Repairers	0	38
Mail Clerks and Mail Machine Operators, Except Postal Service	13	38
Automotive Body and Related Repairers	14	38
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	8	38
Maintenance Workers, Machinery	9	38
Floral Designers	3	38
Molders, Shapers, and Casters, Except Metal and Plastic	3	37
Engine and Other Machine Assemblers	21	37
Electricians	43	37
First-Line Supervisors of Retail Sales Workers	36	37
Gaming and Sports Book Writers and Runners	18	37
Tool Grinders, Filers, and Sharpeners	9	37
Electrical Power-Line Installers and Repairers	21	37
Cutting and Slicing Machine Setters, Operators, and Tenders	3	37
Funeral Attendants	0	37
Tire Repairers and Changers	8	37
Self-Enrichment Education Teachers	30	37
Waiters and Waitresses	22	37
Stock Clerks and Order Fillers	21	36
Print Binding and Finishing Workers	4	36
Animal Trainers	0	36
Transportation Inspectors	20	36
Food Batchmakers	0	36
First-Line Supervisors of Food Preparation and Serving Workers	14	36

Hairdressers, Hairstylists, and Cosmetologists	12	36
Cashiers	35	36
Electrical and Electronic Equipment Assemblers	60	35
Helpers--Installation, Maintenance, and Repair Workers	15	35
First-Line Supervisors of Farming, Fishing, and Forestry Workers	11	35
First-Line Supervisors of Housekeeping and Janitorial Workers	10	35
Occupational Therapy Aides	17	35
Service Unit Operators, Oil, Gas, and Mining	5	35
Dental Laboratory Technicians	10	35
Flight Attendants	9	35
Recreational Vehicle Service Technicians	9	35
Crane and Tower Operators	0	35
Millwrights	29	34
Driver/Sales Workers	9	34
Ushers, Lobby Attendants, and Ticket Takers	7	34
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	6	34
Mechanical Door Repairers	11	33
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	3	33
Hazardous Materials Removal Workers	5	33
Food Cooking Machine Operators and Tenders	8	33
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	5	33
Industrial Truck and Tractor Operators	2	33
Fitness Trainers and Aerobics Instructors	17	33
Costume Attendants	3	33
Grinding and Polishing Workers, Hand	10	33
Packers and Packagers, Hand	0	32
Dining Room and Cafeteria Attendants and Bartender Helpers	0	32
Maintenance and Repair Workers, General	23	32
Highway Maintenance Workers	4	32
Mixing and Blending Machine Setters, Operators, and Tenders	5	32
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	7	32
Locomotive Engineers	9	32
Security Guards	28	31
Helpers--Production Workers	1	31
Machine Feeders and Offbearers	2	31
Demonstrators and Product Promoters	22	31
Cooks, Institution and Cafeteria	4	31

Umpires, Referees, and Other Sports Officials	9	31
Printing Press Operators	11	31
Tour Guides and Escorts	19	31
Pesticide Handlers, Sprayers, and Applicators, Vegetation	0	31
Vocational Education Teachers, Postsecondary	39	30
Bakers	4	30
Painters, Construction and Maintenance	0	30
Commercial Divers	5	30
Heavy and Tractor-Trailer Truck Drivers	7	30
Musicians and Singers	3	30
Painters, Transportation Equipment	7	30
Psychiatric Aides	13	30
Bartenders	18	29
Preschool Teachers, Except Special Education	22	29
Cooks, Fast Food	3	29
Butchers and Meat Cutters	8	29
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	8	29
Baggage Porters and Bellhops	6	29
Locomotive Firers	5	29
Dietetic Technicians	8	28
Laundry and Dry-Cleaning Workers	2	28
Nursing Assistants	20	28
Kindergarten Teachers, Except Special Education	24	28
Automotive Glass Installers and Repairers	2	27
Boilermakers	4	27
Light Truck or Delivery Services Drivers	5	27
Combined Food Preparation and Serving Workers, Including Fast Food	27	27
Sheet Metal Workers	44	27
Sailors and Marine Oilers	6	26
Parking Lot Attendants	3	26
Operating Engineers and Other Construction Equipment Operators	3	26
Pest Control Workers	2	26
Orderlies	20	26
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	16	26
Laborers and Freight, Stock, and Material Movers, Hand	5	25
Rail-Track Laying and Maintenance Equipment Operators	5	25
Carpenters	0	24
Bus Drivers, Transit and Intercity	2	24

Upholsterers	4	23
Structural Metal Fabricators and Fitters	4	23
Welders, Cutters, Solderers, and Brazers	3	23
Manicurists and Pedicurists	0	23
Home Health Aides	3	23
Couriers and Messengers	10	23
Packaging and Filling Machine Operators and Tenders	16	22
Roofers	0	22
Cabinetmakers and Bench Carpenters	5	22
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	14	22
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	0	22
Paving, Surfacing, and Tamping Equipment Operators	2	22
Postal Service Mail Carriers	6	22
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	7	22
Continuous Mining Machine Operators	4	21
Dishwashers	0	20
Plasterers and Stucco Masons	0	20
Foundry Mold and Coremakers	5	20
Nonfarm Animal Caretakers	11	20
Refuse and Recyclable Material Collectors	2	20
Helpers--Carpenters	2	20
Excavating and Loading Machine and Dragline Operators	1	19
Pipelayers	0	19
Sawing Machine Setters, Operators, and Tenders, Wood	5	19
Cooks, Restaurant	5	18
Childcare Workers	8	18
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	3	18
Reinforcing Iron and Rebar Workers	0	17
Cement Masons and Concrete Finishers	5	17
Construction Laborers	2	17
Cooks, Short Order	3	17
Glaziers	0	17
Gaming Dealers	18	17
Crossing Guards	0	16
Landscaping and Groundskeeping Workers	0	16
Taxi Drivers and Chauffeurs	0	16
Transportation Attendants, Except Flight Attendants	9	16
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	2	16
Locker Room, Coatroom, and Dressing Room Attendants	10	15
Brickmasons and Blockmasons	0	15

Food Preparation Workers	0	15
Roustabouts, Oil and Gas	0	15
Cleaners of Vehicles and Equipment	0	15
Insulation Workers, Floor, Ceiling, and Wall	0	14
Personal Care Aides	16	14
Drywall and Ceiling Tile Installers	1	14
Bus Drivers, School or Special Client	3	14
Maids and Housekeeping Cleaners	0	14
Helpers--Electricians	24	13
Plumbers, Pipefitters, and Steamfitters	0	13
Carpet Installers	0	12
Food Servers, Nonrestaurant	8	12
Terrazzo Workers and Finishers	5	10
Tile and Marble Setters	0	10
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	0	9
Structural Iron and Steel Workers	5	9
Tapers	0	2



TABLE B

**Mean digital scores for states, 2002 and 2016**

States	Mean digital score, 2002	Mean digital score, 2016
District of Columbia	32	51
Massachusetts	27	47
Maryland	27	47
Connecticut	26	47
Virginia	26	46
Delaware	26	46
Utah	24	46
Arizona	24	46
Colorado	27	46
Washington	25	46
New Jersey	26	46
New York	25	46
California	25	46
Georgia	25	46
New Hampshire	26	46
Illinois	25	45
Texas	25	45
Minnesota	25	45
Rhode Island	24	45
Michigan	24	45
Nebraska	24	45
Ohio	24	45
Missouri	24	45
Oklahoma	25	45
North Carolina	24	45
Oregon	24	45
Pennsylvania	25	45
Kansas	24	45
Florida	25	45
Vermont	24	45
Alaska	25	45
Alabama	24	45
Tennessee	23	44
Idaho	24	44

Wisconsin	23	44
Maine	23	44
South Carolina	23	44
Iowa	23	44
New Mexico	25	44
Kentucky	23	44
South Dakota	23	44
Arkansas	22	44
West Virginia	23	44
Indiana	23	44
Montana	23	43
Mississippi	22	43
North Dakota	23	43
Hawaii	23	43
Louisiana	24	43
Wyoming	22	42
Nevada	21	41

TABLE C

**Mean digital scores for top 100 largest metropolitan areas, 2002 and 2016**

States	Mean digital score, 2002	Mean digital score, 2016
San Jose-Sunnyvale-Santa Clara, CA	32	47
Boston-Cambridge-Newton, MA-NH	28	44
Austin-Round Rock, TX	30	43
Hartford-West Hartford-East Hartford, CT	27	43
Salt Lake City, UT	25	43
Raleigh, NC	28	43
Bridgeport-Stamford-Norwalk, CT	28	43
Seattle-Tacoma-Bellevue, WA	27	43
San Francisco-Oakland-Hayward, CA	27	43
Madison, WI	27	42
Provo-Orem, UT	25	42
Albany-Schenectady-Troy, NY	26	42
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	26	42
Baltimore-Columbia-Towson, MD	27	42
Rochester, NY	24	42
Charleston-North Charleston, SC	25	42
Palm Bay-Melbourne-Titusville, FL	28	42
Harrisburg-Carlisle, PA	26	42
Worcester, MA-CT	25	42
Birmingham-Hoover, AL	25	42
Phoenix-Mesa-Scottsdale, AZ	25	42
Oklahoma City, OK	26	42
Atlanta-Sandy Springs-Roswell, GA	27	42
Dallas-Fort Worth-Arlington, TX	27	42
Des Moines-West Des Moines, IA	27	42
Sacramento--Roseville--Arden-Arcade, CA	27	42
Washington-Arlington-Alexandria, DC-VA-MD-WV	30	42
Columbus, OH	25	42
Columbia, SC	27	42
New York-Newark-Jersey City, NY-NJ-PA	26	42
Akron, OH	24	42
Pittsburgh, PA	25	42
Richmond, VA	25	42
Kansas City, MO-KS	26	42

Tucson, AZ	25	42
Little Rock-North Little Rock-Conway, AR	24	42
Omaha-Council Bluffs, NE-IA	25	42
Jackson, MS	24	42
New Haven-Milford, CT	25	42
Houston-The Woodlands-Sugar Land, TX	26	41
Tampa-St. Petersburg-Clearwater, FL	26	41
Springfield, MA	24	41
Buffalo-Cheektowaga-Niagara Falls, NY	24	41
Cleveland-Elyria, OH	25	41
Denver-Aurora-Lakewood, CO	28	41
Cincinnati, OH-KY-IN	25	41
Minneapolis-St. Paul-Bloomington, MN-WI	26	41
Tulsa, OK	26	41
Syracuse, NY	25	41
Boise City, ID	25	41
Charlotte-Concord-Gastonia, NC-SC	24	41
Detroit-Warren-Dearborn, MI	25	41
San Diego-Carlsbad, CA	26	41
Chattanooga, TN-GA	24	41
Colorado Springs, CO	28	41
San Antonio-New Braunfels, TX	25	41
Miami-Fort Lauderdale-West Palm Beach, FL	25	41
St. Louis, MO-IL	25	41
Chicago-Naperville-Elgin, IL-IN-WI	25	41
Nashville-Davidson--Murfreesboro--Franklin, TN	24	41
Milwaukee-Waukesha-West Allis, WI	25	41
Providence-Warwick, RI-MA	24	41
Los Angeles-Long Beach-Anaheim, CA	25	41
Albuquerque, NM	26	41
Dayton, OH	25	41
Augusta-Richmond County, GA-SC	23	41
Jacksonville, FL	26	41
Wichita, KS	24	40
Lakeland-Winter Haven, FL	23	40

Allentown-Bethlehem-Easton, PA-NJ	25	40
Knoxville, TN	24	40
Spokane-Spokane Valley, WA	24	40
Virginia Beach-Norfolk-Newport News, VA-NC	25	40
Scranton--Wilkes-Barre--Hazleton, PA	23	40
Toledo, OH	23	40
Indianapolis-Carmel-Anderson, IN	25	40
Ogden-Clearfield, UT	25	40
Winston-Salem, NC	24	40
Greenville-Anderson-Mauldin, SC	23	40
Oxnard-Thousand Oaks-Ventura, CA	26	40
Portland-Vancouver-Hillsboro, OR-WA	26	40
Orlando-Kissimmee-Sanford, FL	25	40
Memphis, TN-MS-AR	23	39
Cape Coral-Fort Myers, FL	24	39
Grand Rapids-Wyoming, MI	24	39
Deltona-Daytona Beach-Ormond Beach, FL	24	39
Louisville/Jefferson County, KY-IN	24	39
New Orleans-Metairie, LA	25	39
Youngstown-Warren-Boardman, OH-PA	22	39
Greensboro-High Point, NC	24	39
North Port-Sarasota-Bradenton, FL	25	39
McAllen-Edinburg-Mission, TX	24	39
El Paso, TX	24	39
Urban Honolulu, HI	24	39
Baton Rouge, LA	25	39
Riverside-San Bernardino-Ontario, CA	21	38
Fresno, CA	22	38
Stockton-Lodi, CA	22	37
Las Vegas-Henderson-Paradise, NV	21	36
Bakersfield, CA	22	36

TABLE D

**Mean digital scores for all metropolitan areas, 2002 and 2016**

Metropolitan area	Mean digital score, 2002	Mean digital score, 2016
San Jose-Sunnyvale-Santa Clara, CA	32	47
Boston-Cambridge-Newton, MA-NH	28	44
Olympia-Tumwater, WA	30	44
California-Lexington Park, MD	–	44
Huntsville, AL	33	44
Boulder, CO	31	43
Austin-Round Rock, TX	30	43
Logan, UT-ID	–	43
Hartford-West Hartford-East Hartford, CT	27	43
Salt Lake City, UT	25	43
Ithaca, NY	–	43
Durham-Chapel Hill, NC	28	43
Raleigh, NC	28	43
Bridgeport-Stamford-Norwalk, CT	28	43
Bloomington, IL	–	43
Sierra Vista-Douglas, AZ	–	43
Seattle-Tacoma-Bellevue, WA	27	43
San Francisco-Oakland-Hayward, CA	27	43
Tallahassee, FL	28	43
Madison, WI	27	42
Jefferson City, MO	–	42
Provo-Orem, UT	25	42
Ann Arbor, MI	26	42
Albany-Schenectady-Troy, NY	26	42
Charlottesville, VA	27	42
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	26	42
Bloomsburg-Berwick, PA	–	42
Baltimore-Columbia-Towson, MD	27	42
Trenton, NJ	29	42
Rochester, NY	24	42
Cedar Rapids, IA	23	42
Charleston-North Charleston, SC	25	42
Topeka, KS	27	42
Palm Bay-Melbourne-Titusville, FL	28	42
Harrisburg-Carlisle, PA	26	42

Pittsfield, MA	24	42
Columbus, GA-AL	26	42
Sioux Falls, SD	24	42
Charleston, WV	26	42
Manchester-Nashua, NH	–	42
Worcester, MA-CT	25	42
Birmingham-Hoover, AL	25	42
Phoenix-Mesa-Scottsdale, AZ	25	42
Oklahoma City, OK	26	42
Lincoln, NE	26	42
Atlanta-Sandy Springs-Roswell, GA	27	42
Dallas-Fort Worth-Arlington, TX	27	42
Morgantown, WV	–	42
Des Moines-West Des Moines, IA	27	42
Sacramento--Roseville--Arden-Arcade, CA	27	42
Portland-South Portland, ME	27	42
Washington-Arlington-Alexandria, DC-VA-MD-WV	30	42
Columbus, OH	25	42
Bismarck, ND	28	42
Macon, GA	25	42
Columbia, MO	24	42
Columbia, SC	27	42
New York-Newark-Jersey City, NY-NJ-PA	26	42
Akron, OH	24	42
Pittsburgh, PA	25	42
Pocatello, ID	25	42
Richmond, VA	25	42
Kansas City, MO-KS	26	42
Tucson, AZ	25	42
Little Rock-North Little Rock-Conway, AR	24	42
Victoria, TX	24	42
Omaha-Council Bluffs, NE-IA	25	42
Jackson, MS	24	42
New Haven-Milford, CT	25	42
Rochester, MN	23	41
Niles-Benton Harbor, MI	23	41
Lake Havasu City-Kingman, AZ	–	41
Lansing-East Lansing, MI	24	41
Albany, GA	25	41
Houston-The Woodlands-Sugar Land, TX	26	41

Florence, SC	23	41
Tampa-St. Petersburg-Clearwater, FL	26	41
Springfield, MA	24	41
Buffalo-Cheektowaga-Niagara Falls, NY	24	41
Athens-Clarke County, GA	22	41
Cleveland-Elyria, OH	25	41
Denver-Aurora-Lakewood, CO	28	41
Johnson City, TN	23	41
Wichita Falls, TX	25	41
Lubbock, TX	24	41
Cincinnati, OH-KY-IN	25	41
Minneapolis-St. Paul-Bloomington, MN-WI	26	41
Tyler, TX	24	41
Tulsa, OK	26	41
Syracuse, NY	25	41
Boise City, ID	25	41
Charlotte-Concord-Gastonia, NC-SC	24	41
Dover, DE	26	41
Detroit-Warren-Dearborn, MI	25	41
Iowa City, IA	24	41
Champaign-Urbana, IL	25	41
Jackson, MI	24	41
San Diego-Carlsbad, CA	26	41
Midland, MI	–	41
Chattanooga, TN-GA	24	41
Colorado Springs, CO	28	41
Binghamton, NY	25	41
Roanoke, VA	24	41
Corvallis, OR	26	41
Sherman-Denison, TX	24	41
Saginaw, MI	24	41
Amarillo, TX	25	41
Santa Fe, NM	27	41
Johnstown, PA	24	41
Dothan, AL	24	41
Rapid City, SD	24	41
San Antonio-New Braunfels, TX	25	41
Miami-Fort Lauderdale-West Palm Beach, FL	25	41
Hattiesburg, MS	26	41
Cumberland, MD-WV	22	41



State College, PA	23	41
Redding, CA	24	41
Rome, GA	–	41
St. Louis, MO-IL	25	41
Chicago-Naperville-Elgin, IL-IN-WI	25	41
Wheeling, WV-OH	23	41
Flagstaff, AZ	24	41
Nashville-Davidson--Murfreesboro--Franklin, TN	24	41
Flint, MI	24	41
Barnstable Town, MA	24	41
Burlington, NC	24	41
Cape Girardeau, MO-IL	–	41
San Angelo, TX	26	41
Abilene, TX	24	41
Milwaukee-Waukesha-West Allis, WI	25	41
Springfield, IL	28	41
Reading, PA	24	41
Lewiston, ID-WA	–	41
Lawton, OK	27	41
Blacksburg-Christiansburg-Radford, VA	–	41
Providence-Warwick, RI-MA	24	41
Los Angeles-Long Beach-Anaheim, CA	25	41
Albuquerque, NM	26	41
Lynchburg, VA	24	41
Bay City, MI	24	41
Mobile, AL	24	41
Idaho Falls, ID	–	41
Gainesville, FL	26	41
Killeen-Temple, TX	26	41
Dayton, OH	25	41
St. George, UT	–	41
Peoria, IL	24	41
Norwich-New London, CT	24	41
Augusta-Richmond County, GA-SC	23	41
Jacksonville, FL	26	41
Carson City, NV	–	41
Greenville, NC	26	41
Hot Springs, AR	–	41
Hagerstown-Martinsburg, MD-WV	23	41
Wichita, KS	24	40

Kennewick-Richland, WA	26	40
Kingsport-Bristol-Bristol, TN-VA	23	40
Fargo, ND-MN	25	40
Lakeland-Winter Haven, FL	23	40
Waco, TX	24	40
Kokomo, IN	23	40
Bloomington, IN	23	40
Fort Collins, CO	26	40
Prescott, AZ	–	40
Muskegon, MI	24	40
Allentown-Bethlehem-Easton, PA-NJ	25	40
Eau Claire, WI	24	40
Wilmington, NC	26	40
Anchorage, AK	26	40
Bangor, ME	26	40
Utica-Rome, NY	24	40
Kingston, NY	–	40
Green Bay, WI	24	40
Carbondale-Marion, IL	–	40
Knoxville, TN	24	40
Monroe, MI	–	40
La Crosse-Onalaska, WI-MN	23	40
Coeur d'Alene, ID	–	40
Gadsden, AL	23	40
Spokane-Spokane Valley, WA	24	40
Sebring, FL	–	40
Grand Junction, CO	24	40
Longview, TX	24	40
Crestview-Fort Walton Beach-Destin, FL	–	40
South Bend-Mishawaka, IN-MI	24	40
Springfield, MO	24	40
Kalamazoo-Portage, MI	23	40
Pueblo, CO	22	40
Midland, TX	24	40
Panama City, FL	25	40
Fort Wayne, IN	23	40
Virginia Beach-Norfolk-Newport News, VA-NC	25	40
Las Cruces, NM	23	40
Appleton, WI	23	40
East Stroudsburg, PA	–	40

Huntington-Ashland, WV-KY-OH	24	40
Elmira, NY	23	40
Terre Haute, IN	23	40
Beaumont-Port Arthur, TX	24	40
Ames, IA	–	40
Lexington-Fayette, KY	25	40
Lima, OH	22	40
Santa Cruz-Watsonville, CA	26	40
Grand Island, NE	–	40
Walla Walla, WA	–	40
Weirton-Steubenville, WV-OH	22	40
Pine Bluff, AR	25	40
Greeley, CO	25	40
Missoula, MT	25	40
Savannah, GA	24	40
Billings, MT	23	40
Wausau, WI	23	40
Vineland-Bridgeton, NJ	24	40
Hilton Head Island-Bluffton-Beaufort, SC	–	40
Scranton--Wilkes-Barre--Hazleton, PA	23	40
Glens Falls, NY	22	40
Chico, CA	24	40
Toledo, OH	23	40
Brunswick, GA	–	40
Janesville-Beloit, WI	22	40
Indianapolis-Carmel-Anderson, IN	25	40
Duluth, MN-WI	24	40
Sebastian-Vero Beach, FL	–	40
Ogden-Clearfield, UT	25	40
Cheyenne, WY	25	40
Muncie, IN	23	40
Laredo, TX	24	40
Altoona, PA	23	40
Goldsboro, NC	22	40
Gulfport-Biloxi-Pascagoula, MS	22	40
Waterloo-Cedar Falls, IA	24	40
Texarkana, TX-AR	23	40
Florence-Muscle Shoals, AL	25	40
Montgomery, AL	27	40
Bellingham, WA	23	40

Fayetteville-Springdale-Rogers, AR-MO	25	40
Beckley, WV	–	40
Erie, PA	24	40
Evansville, IN-KY	23	40
Pensacola-Ferry Pass-Brent, FL	26	40
Lancaster, PA	23	40
Winston-Salem, NC	24	40
Punta Gorda, FL	25	40
Asheville, NC	24	40
Parkersburg-Vienna, WV	24	40
Greenville-Anderson-Mauldin, SC	23	40
Oxnard-Thousand Oaks-Ventura, CA	26	40
Portland-Vancouver-Hillsboro, OR-WA	26	40
York-Hanover, PA	23	40
Decatur, IL	24	40
Mansfield, OH	23	40
The Villages, FL	–	40
Lawrence, KS	23	40
Orlando-Kissimmee-Sanford, FL	25	40
Valdosta, GA	–	40
Daphne-Fairhope-Foley, AL	–	40
Williamsport, PA	25	39
Oshkosh-Neenah, WI	23	39
Memphis, TN-MS-AR	23	39
Staunton-Waynesboro, VA	–	39
Santa Maria-Santa Barbara, CA	–	39
Danville, IL	–	39
St. Cloud, MN	25	39
Decatur, AL	24	39
Sheboygan, WI	23	39
Joplin, MO	24	39
College Station-Bryan, TX	25	39
Canton-Massillon, OH	23	39
Grand Forks, ND-MN	25	39
Cape Coral-Fort Myers, FL	24	39
Grand Rapids-Wyoming, MI	24	39
Myrtle Beach-Conway-North Myrtle Beach, SC-NC	22	39
Mount Vernon-Anacortes, WA	–	39
Deltona-Daytona Beach-Ormond Beach, FL	24	39
Jacksonville, NC	25	39

Vallejo-Fairfield, CA	23	39
Fairbanks, AK	–	39
Port St. Lucie, FL	24	39
Santa Rosa, CA	25	39
Jackson, TN	21	39
Kankakee, IL	23	39
Owensboro, KY	25	39
Anniston-Oxford-Jacksonville, AL	22	39
Bend-Redmond, OR	–	39
Racine, WI	24	39
Watertown-Fort Drum, NY	–	39
Wenatchee, WA	–	39
Louisville/Jefferson County, KY-IN	24	39
Springfield, OH	25	39
New Orleans-Metairie, LA	25	39
Youngstown-Warren-Boardman, OH-PA	22	39
St. Joseph, MO-KS	25	39
Sioux City, IA-NE-SD	25	39
Casper, WY	24	39
Corpus Christi, TX	25	39
Jonesboro, AR	24	39
Winchester, VA-WV	–	39
Greensboro-High Point, NC	24	39
North Port-Sarasota-Bradenton, FL	25	39
Dubuque, IA	23	39
Michigan City-La Porte, IN	–	39
McAllen-Edinburg-Mission, TX	24	39
Ocala, FL	24	39
El Paso, TX	24	39
Rockford, IL	24	39
Davenport-Moline-Rock Island, IA-IL	24	39
San Luis Obispo-Paso Robles-Arroyo Grande, CA	24	39
Yuba City, CA	25	39
Mankato-North Mankato, MN	–	39
Alexandria, LA	23	39
Spartanburg, SC	23	39
Monroe, LA	25	39
Gainesville, GA	–	39
Houma-Thibodaux, LA	23	39
Warner Robins, GA	25	39

Battle Creek, MI	23	39
Fayetteville, NC	24	39
Hinesville, GA	–	39
Cleveland, TN	–	39
Homosassa Springs, FL	–	39
Urban Honolulu, HI	24	39
Baton Rouge, LA	25	39
Shreveport-Bossier City, LA	23	39
Salisbury, MD-DE	–	38
Lebanon, PA	26	38
Reno, NV	22	38
Chambersburg-Waynesboro, PA	–	38
Farmington, NM	–	38
Fond du Lac, WI	–	38
Modesto, CA	23	38
Odessa, TX	24	38
Auburn-Opelika, AL	25	38
New Bern, NC	–	38
Sumter, SC	24	38
Lafayette, LA	24	38
Naples-Immokalee-Marco Island, FL	23	38
Lake Charles, LA	24	38
Bowling Green, KY	–	38
Fort Smith, AR-OK	21	38
Rocky Mount, NC	22	38
Morristown, TN	–	38
Eugene, OR	25	38
Bremerton-Silverdale, WA	25	38
Brownsville-Harlingen, TX	22	38
Clarksville, TN-KY	23	38
Great Falls, MT	26	38
Hanford-Corcoran, CA	–	38
Grants Pass, OR	–	38
Harrisonburg, VA	–	38
Medford, OR	24	38
Riverside-San Bernardino-Ontario, CA	21	38
Elizabethtown-Fort Knox, KY	–	38
Fresno, CA	22	38
Salem, OR	24	38
Columbus, IN	–	38

Napa, CA	23	38
Lafayette-West Lafayette, IN	–	38
Tuscaloosa, AL	25	38
El Centro, CA	–	37
Longview, WA	–	37
Hammond, LA	–	37
Yakima, WA	21	37
Atlantic City-Hammonton, NJ	–	37
Gettysburg, PA	–	37
Hickory-Lenoir-Morganton, NC	20	37
Yuma, AZ	20	37
Manhattan, KS	–	37
Merced, CA	23	37
Stockton-Lodi, CA	22	37
Ocean City, NJ	–	37
Kahului-Wailuku-Lahaina, HI	–	37
Albany, OR	–	37
Las Vegas-Henderson-Paradise, NV	21	36
Bakersfield, CA	22	36
Madera, CA	22	36
Dalton, GA	–	35
Visalia-Porterville, CA	20	34
Salinas, CA	21	34
Elkhart-Goshen, IN	19	33
Burlington-South Burlington, VT	27	–
Lewiston-Auburn, ME	23	–

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## For More Information

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