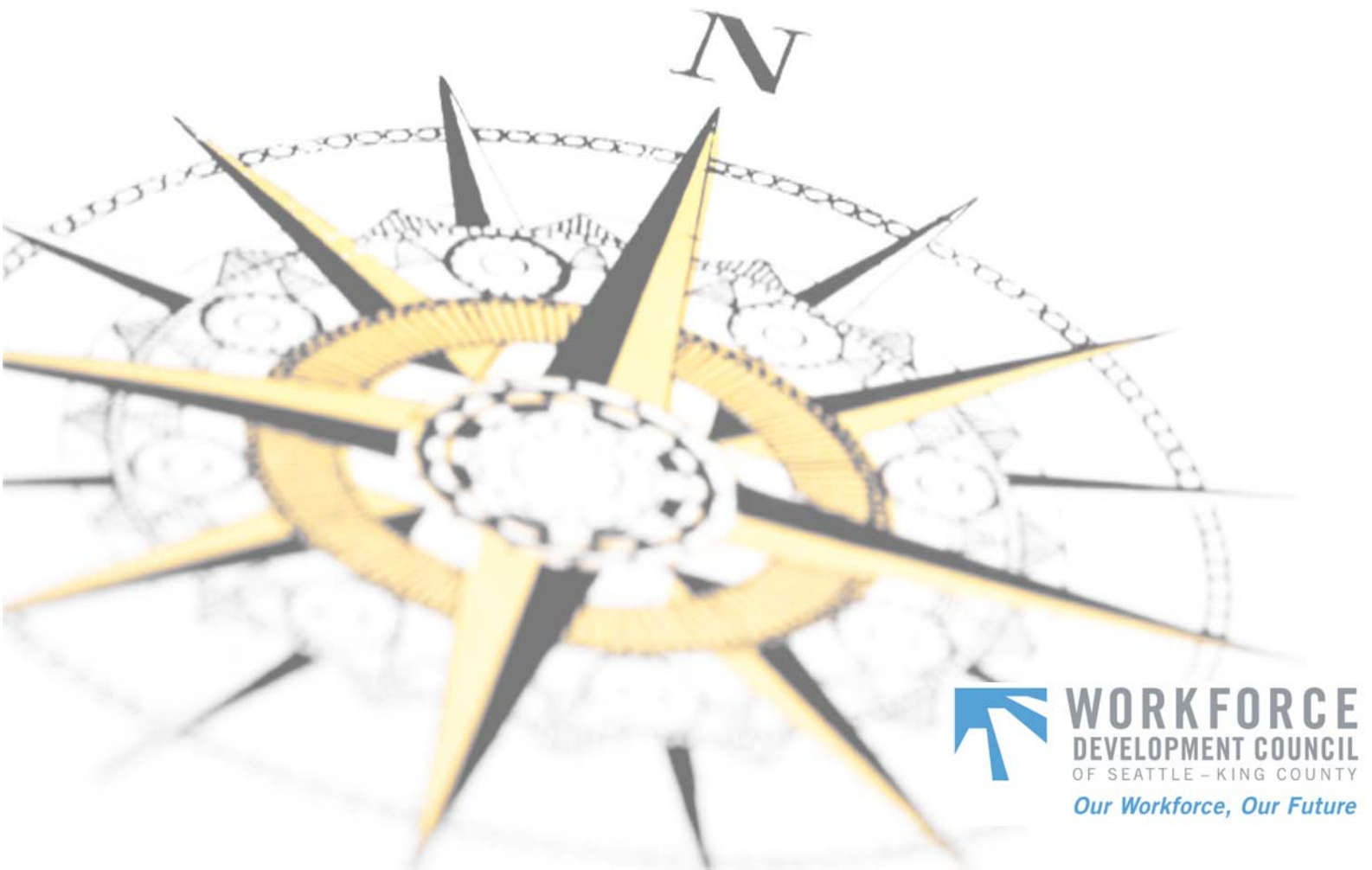


Map Your Career

Understanding career pathway options – whether you are in a particular industry already or exploring which one to enter – can be very helpful for career planning. Career pathway diagrams illustrate the occupations and industry-wide pathways available in a particular sector. This can be invaluable help for both job seekers and workers as they consider how to advance in a career.

Learn about career pathways in five key industries in Seattle-King County: **Construction, Healthcare, Information Technology, Manufacturing, and Life Sciences**. For each industry see the current trends, sample wages and career pathways offered. Finally, take some time to “map your career” by using the template provided in this packet.

If you would like additional career services, feel free to access resources at your local Seattle-King County WorkSource offices. Go to: www.worksourceskc.org for locations and information on the wide range of employment resources available. For additional career planning resources, visit www.go2worksource.com, and see the last page of this booklet.



WORKFORCE
DEVELOPMENT COUNCIL
OF SEATTLE-KING COUNTY
Our Workforce, Our Future

Career Paths in Construction

| Wage Ranges* | |
|-----------------------|-----------------------------------|
| | Starting → + Experience/Education |
| Electrician | \$17.24 → \$45.83 |
| Heating, AC | \$16.90 → \$39.76 |
| Carpenter | \$14.91 → \$37.12 |
| Cost Estimator | \$18.49 → \$48.90 |
| Drywall Installer | \$13.68 → \$36.91 |
| First Line Supervisor | \$23.81 → \$51.75 |
| Civil Engineer | \$26.45 → \$56.19 |
| Urban Planner | \$22.52 → \$45.18 |
| Construction Manager | \$34.77 → \$80.30 |

For apprenticeship programs in WA state, go to: www.lni.wa.gov, click on "Trades and Licensing", and then click on "Apprenticeship Programs in WA".

A wide range of certificates and degrees are offered by the 11 community and technical colleges located throughout King County. To locate a college near you and learn more about the programs available, visit www.sbctc.ctc.edu and click on "Colleges". Or visit www.checkoutcollege.com.

* Average hourly wages in the Seattle-Bellevue-Everett MSA, March 2009, www.workforceexplorer.com

Company Owner
Site/Corporate Manager
Senior Project Manager

Construction Manager

First-Line Supervisor

Apprenticeship
*Trained by Master Craftsperson
2-6 yrs.:*

- Journeyman (ex: carpenter, electrician, mason, plumber, painter, drywall installer)

Associates Degree
*Community/Technical College
up to 2 yr. Certification or Degree:*

- Architectural Drafter
- Building Inspector
- Carpenter
- Plumber
- Real Estate Appraiser
- Cost Estimator

**On-the-Job/
Pre-Apprenticeship
Training**

Short-Term, up to 1-month:

- Craft Helper
- Craft Laborer
- Flagger

Moderate-Term, 1-12 mos.:

- Roofer
- Title Examiner

Long-Term, 12 mos. plus:

- Heating, AC
- Tile & Marble Setter
- Painter

**Bachelors/Masters
Degree**
*College/University
4 + yrs.:*

- Architect
- Auditor
- Civil Engineer
- Construction Manager
- Interior Designer
- Landscape Architect
- Urban Planner

Secondary Education

- Middle School
- High School
- GED
- Vocational School

Construction

Trends

The construction industry had been a leading source of job growth in Washington State prior to the most recent recession. Growing predictions have reversed, however, with King County's construction industry average annual growth rate from 2007-2012 estimated at -1.3%. A return growth is predicted for 2012 to 2017, with a 1.9% annual growth rate over that period (Washington State Employment Security Department).

Occupations associated with construction and extraction have a predicted employment in 2017 that is narrowly higher than construction employment in 2007 (a 0.3 percent increase per year over the ten year period).

Training for construction occupations is primarily offered through apprenticeship programs or on the job. To learn more about apprenticeship programs, visit www.lni.wa.gov and click on Trades & Licensing and then click on Apprenticeships.

Increasing county population, continued desirability of the area and the demand for more energy efficiency in buildings will help support growth in the sector over time.

Wages

The average annual wage in King County for construction in 2009 quarter 1 was \$58,808 (source: Washington State Employment Security Department).

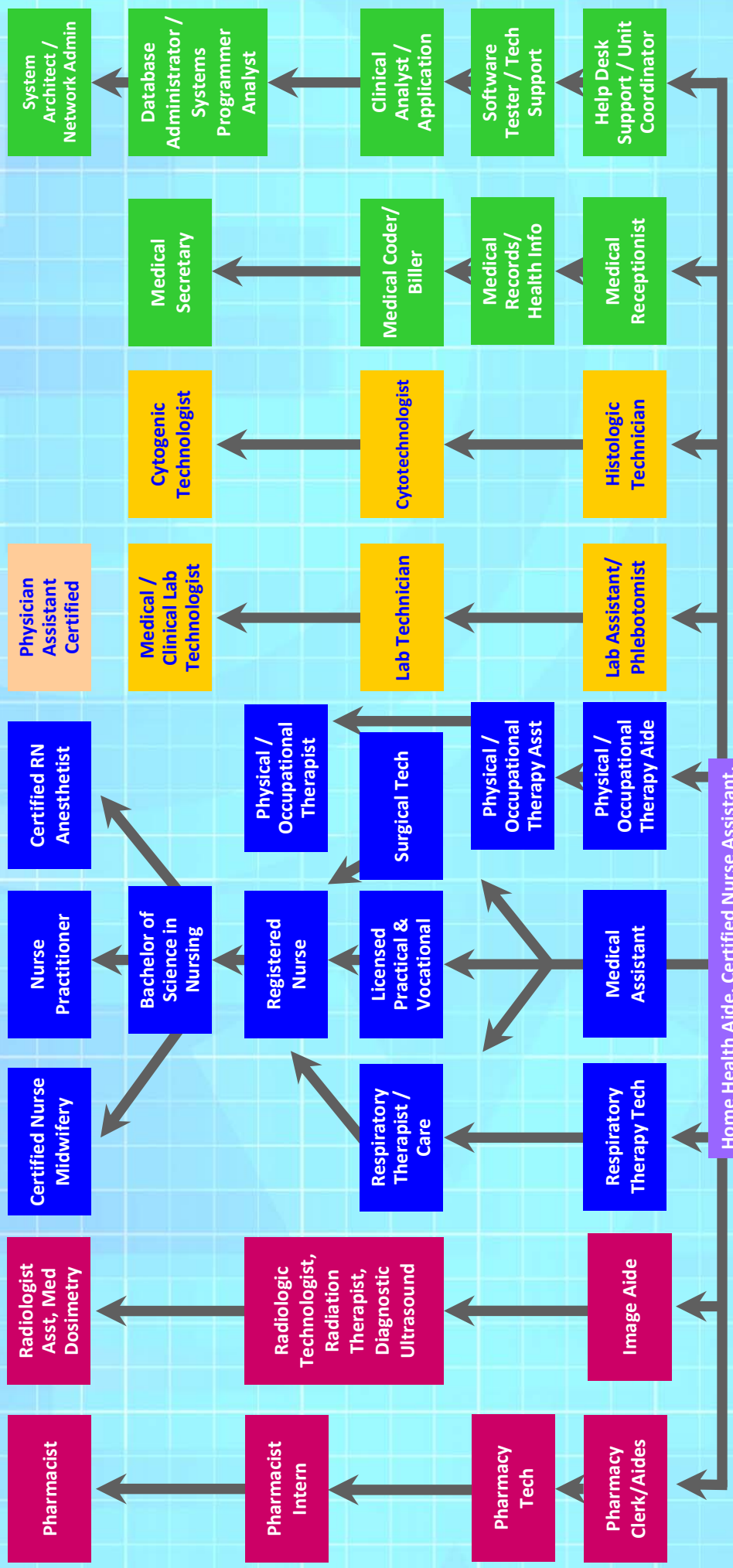
[Note: Wages are averages of all occupations within the sector – including entry level and high level positions.]

For detailed information about occupations within this sector (e.g. current wage ranges per occupation, training schools, employment projections, and a link to jobs listed at WorkSource):

1. Go to www.workforceexplorer.com,
2. Click on the 'Wage and Benefit Information' link, and
3. Click on the 'Occupation Explorer' link to start your search.



Career Paths in Health Care



| Wage Ranges* | |
|-----------------------------|------------------------|
| Starting | + Experience/Education |
| Medical Assistant | \$13.31 → \$20.56 |
| Pharmacy Clerk/Aide | \$8.72 → \$16.10 |
| Physical/Occ. Therapy Asst. | \$19.27 → \$30.02 |
| Lab Technician | \$13.49 → \$24.80 |
| Medical Secretary | \$13.19 → \$24.50 |
| Registered Nurse | \$26.05 → \$48.99 |
| Respiratory Therapist | \$22.81 → \$38.27 |
| Radiologic Technologist | \$22.41 → \$42.50 |

Source: Career Path adapted from www.HealthCareWork.info, a project of the Northwest Alliance for Health Skills and NW WDC

A wide range of certificates and degrees are offered by the 11 community and technical colleges located throughout King County. To locate a college near you and learn more about the programs available, visit www.sbctc.ctc.edu and click on "Colleges."

Or visit www.checkoutcollege.com.

* These are average hourly wages in the Seattle-Bellevue-Everett MSA, March 2009, www.workforceexplorer.com

Health Care

Trends

Health care has become one of the largest employment sectors in Washington State. Statewide, the health care industry has consistently led other industries in terms of job openings (*Washington State Job Vacancy Survey Report*, Washington State Employment Security Department, June 2009). In King County, employment growth in the health care sector was steady during the last decade, with more than 14,000 new jobs added between 2000 and 2007. Despite a slowdown with the economic recession that began in 2008, employment growth in health care has remained positive, and the industry is expected to see average annual growth of 1.9% from 2007 to 2017 (Washington State Employment Security Department).

Employers in King County and across the state continue to report job vacancies for health care practitioners and support personnel. Of the total job vacancies reported in King County in October 2009, the largest concentration (representing 16% of total vacancies) was in the health care industry (*Job Vacancy Survey*, Washington State Employment Security Department, October 2009).

In particular, hospital vacancies have remained high or increased in most professions for three straight years, most notably in nursing, imaging, rehabilitation, operating rooms, and laboratory departments (*Results of the 2008 Hospital Work Force Survey*, Washington State Hospital Association/Health Workforce Institute, June 2009). This trend, combined with the expected convergence of an aging population (increasing the demand for health care services) and an aging workforce (accelerating attrition) on the horizon, ensures that jobs in nursing and allied health will continue to be in demand.

Wages

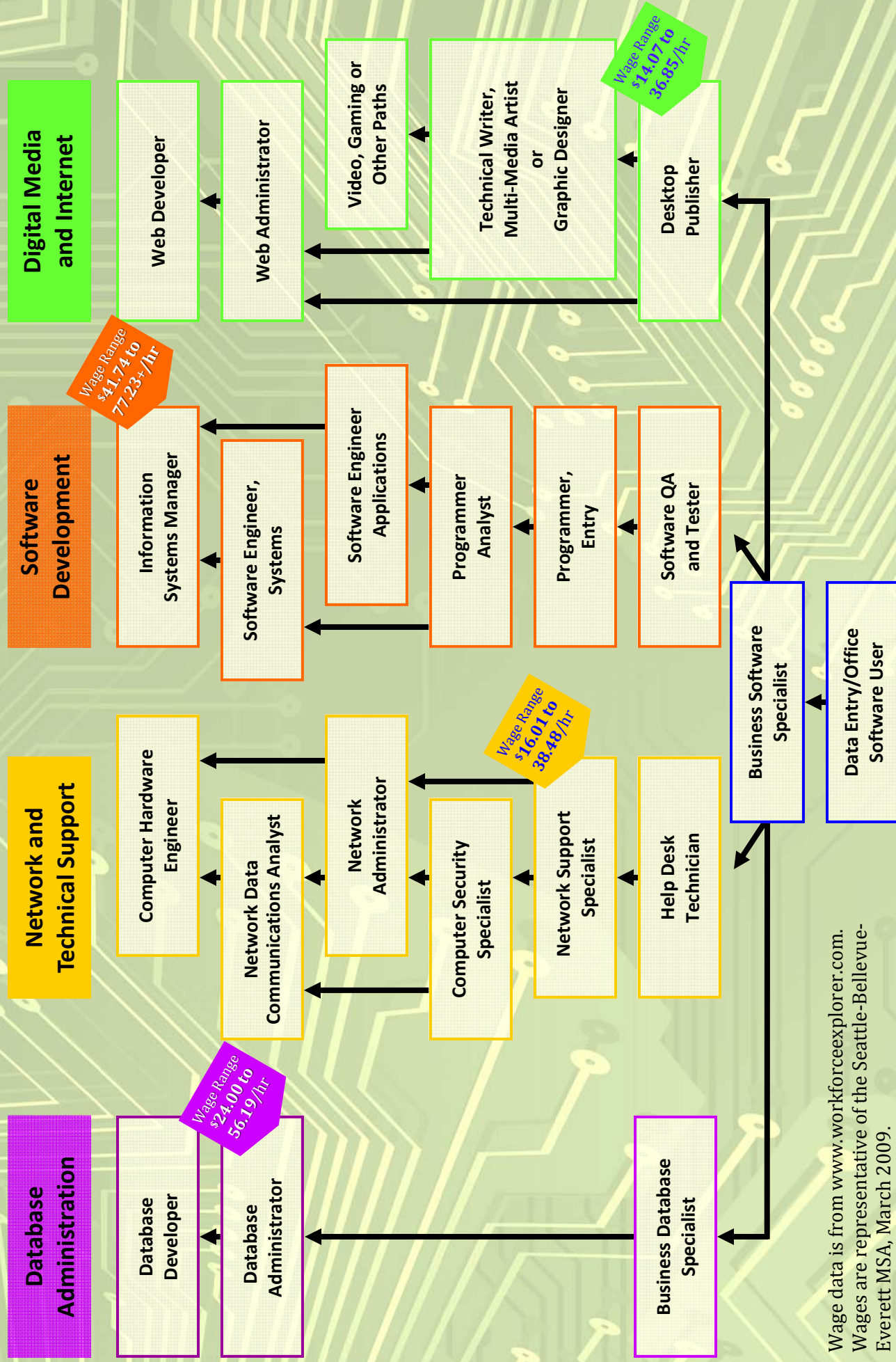
The average annual wage in King County for Healthcare and Social Assistance in 2009 quarter 1 was \$46,118 (source: Washington State Employment Security Department).

[Note: Wages are averages of all occupations within the sector – including entry level and high level positions.]

For detailed information about occupations within this sector (e.g. current wage ranges per occupation, training schools, employment projections, and a link to jobs listed at WorkSource):

1. Go to www.workforceexplorer.com,
2. Click on the 'Wage and Benefit Information' link, and
3. Click on the 'Occupation Explorer' link to start your search.

Career Paths in Information Technology



Wage data is from www.workforceexplorer.com.
Wages are representative of the Seattle-Bellevue-Everett MSA, March 2009.

A wide range of certificates and degrees are offered by the 11 community and technical colleges located throughout King County. To locate a college near you and learn more about the programs available, visit www.sbctc.ctc.edu and click on "Colleges." Or visit www.checkoutcollege.com.

Information Technology

Trends

In our technology-based economy, core technology skills are increasingly a critical skill set for a broad spectrum of occupations and sectors, not just those traditionally considered to be high-tech positions. Examples of some current in-demand IT jobs in King County include database administrators, computer systems analysts, computer software engineers, and computer programmers.

Looking long term, King County is projected to employ over 100,000 workers in computer and mathematical occupations by 2017, with an average annual growth rate of 2.7% between 2007 and 2017 (WA State Employment Security Department). Some of the most recognizable names in the information technology industry make their home in King County, including Amazon, Expedia, Nintendo, and Microsoft.

Wages

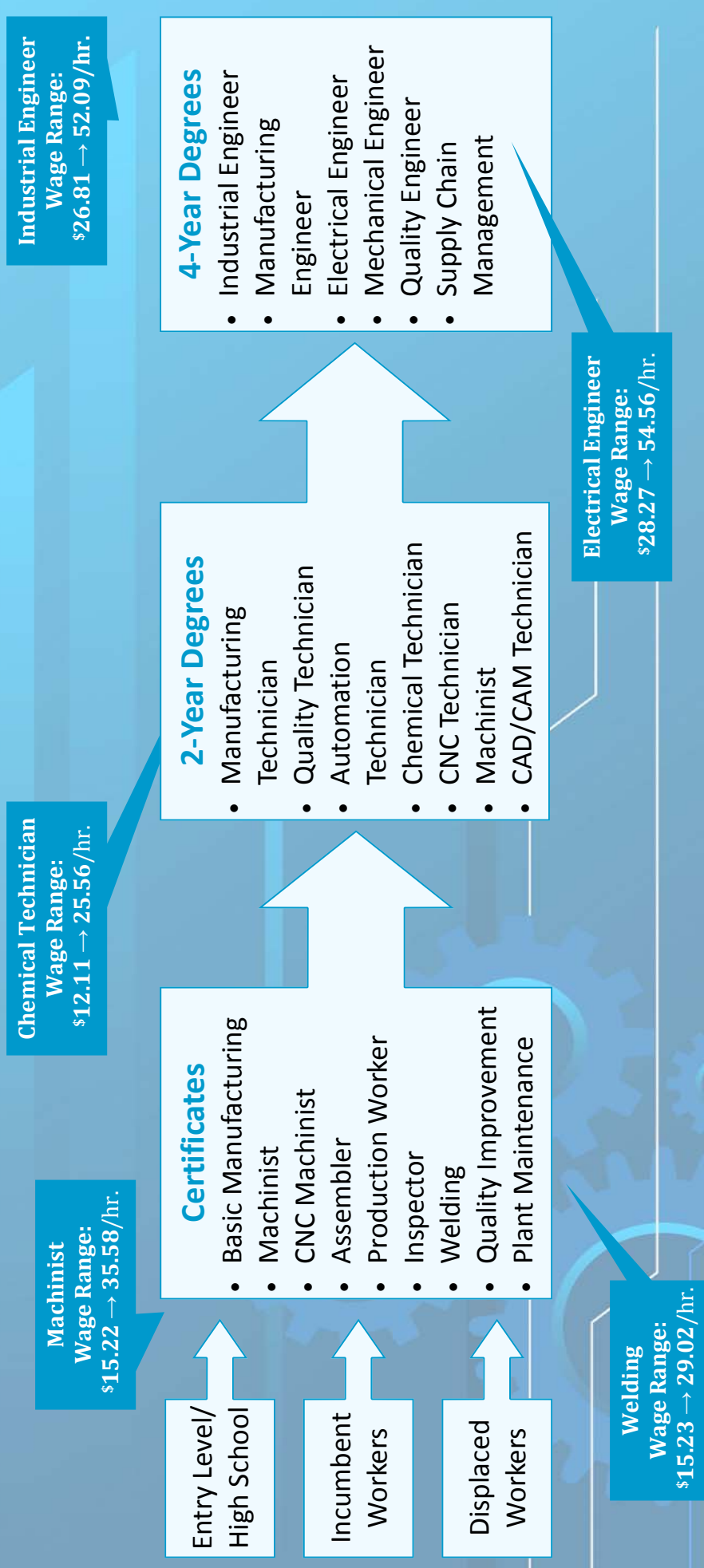
The average annual wage for the Information Publishing Industry (including Software Publishing) in King County in 2009 quarter 1 was \$117,854 (source: Washington State Employment Security Department).

[Note: Wages are averages of all occupations within the sector – including entry level and high level positions.]

For detailed information about occupations within this sector (e.g. current wage ranges per occupation, training schools, employment projections, and a link to jobs listed at WorkSource):

1. Go to www.workforceexplorer.com,
2. Click on the 'Wage and Benefit Information' link, and
3. Click on the 'Occupation Explorer' link to start your search.

Career Paths in Manufacturing



- Certificates**
- Basic Manufacturing Machinist
 - CNC Machinist
 - Assembler
 - Production Worker
 - Inspector
 - Welding
 - Quality Improvement
 - Plant Maintenance

- 2-Year Degrees**
- Manufacturing Technician
 - Quality Technician
 - Automation Technician
 - Chemical Technician
 - CNC Technician
 - Machinist
 - CAD/CAM Technician

- 4-Year Degrees**
- Industrial Engineering
 - Manufacturing Engineer
 - Electrical Engineer
 - Mechanical Engineer
 - Quality Engineer
 - Supply Chain Management

A wide range of certificates and degrees are offered by the 11 community and technical colleges located throughout King County. To locate a college near you and learn more about the programs available, visit www.sbctc.ctc.edu and click on "Colleges." Or visit www.checkoutcollege.com.

Chart Source: Shoreline Community College. Wage data is from www.workforceexplorer.com. Wages are representative of the Bellevue-Everett-Seattle MSA, March 2009.

Manufacturing

Trends

For many decades, the manufacturing industry in King County has been an important part of our local economy and workforce. Although the sector is subject to cyclical dips and has had overall flat employment during the last decade, it remains a significant industry in terms of volume of jobs, quality of jobs and wages, and contribution to the local economy. The projected average annual growth rate for manufacturing in King County from 2007-2017 is 0.7% (Washington State Employment Security Department).

The manufacturing industry in the Puget Sound region is a diverse composition that includes food processing, printing and publishing, fabricated metal products, industrial machinery, transportation equipment, textiles and apparel. In King County, approximately 35% of manufacturing employment in 2009 quarter 1 was in transportation equipment (WA State Employment Security Department), with aerospace – including big companies like Boeing and a large number of smaller aerospace businesses – representing the largest portion of the sector.

Examples of current manufacturing jobs in King County include industrial engineers, production workers, electrical engineers, and team assemblers. Engineering is a position commonly associated with the manufacturing industry; the engineering occupation as a whole is expected to grow at 0.6% per year between 2007 and 2017.

Wages

The average annual wage for manufacturing in King County in 2009 quarter 1 was \$70,982 (source: Washington State Employment Security Department).

[Note: Wages are averages of all occupations within the sector – including entry level and high level positions.]

For detailed information about occupations within this sector (e.g. current wage ranges per occupation, training schools, employment projections, and a link to jobs listed at WorkSource):

1. Go to www.workforceexplorer.com,
2. Click on the 'Wage and Benefit Information' link, and
3. Click on the 'Occupation Explorer' link to start your search.

Career Paths in Biomedical Research + Biotechnology

Salary Information

Hourly Wage Ranges:

- Biological Technicians \$14.11 → \$27.61
- Technical Writer \$20.70 → \$50.95
- Biological Scientists \$19.22 → \$60.41
- Marketing Managers \$35.31 → \$75.39+

Source: www.workforceexplorer.com

Doctorate Degree

Career Opportunities:

- Scientist (Lab Director)
- Research Scientist
- Regulatory Affairs Director
- University Professor

Master of Science Degree

Career Opportunities:

- Teacher
- Lab Manager
- Clinical Research Manager
- Product & Marketing Manager

Community College

Areas of Study:

- Math
- Chemistry
- Biotechnology
- Biological Sciences

Degree:

- Associate of Science
- Associate of Technology

Career Opportunities:

- Lab Technician
- Lab Assistant
- Research Assistant
- Manufacturing
- Media Prep Specialist

To Community College

To expand
hands-on
skills and
training

To University

To
complete a
four-year
degree

University

Areas of Study:

- Math
- Physics
- Chemistry
- Biological Sciences

Degree:

- Bachelor of Science

Career Opportunities:

- Medical or Technical Writer
- Bioinformatics
- Clinical Research Assoc
- Imaging Specialist
- Research Associate
- Environmental Health & Safety

High School

Areas of Study:

- Math
- Biology
- Chemistry
- Physics
- Biotechnology

Career Opportunities:

- Lab Glass Worker
- Animal Care
- Lab Assistant

A wide range of certificates and degrees are offered by the 11 Community and Technical Colleges located throughout King County. To locate a college near you and learn more about the programs available, visit www.sbctc.ctc.edu and click on "Colleges." Or visit www.checkoutacollege.com.

Source: *Biotechnology & Biomedical Skills Standard and Shoreline Community College, 2001*

Life Sciences/Biotechnology

Trends

Life sciences encompass a broad spectrum of industries from bioinformatics, biotechnology, research, healthcare, medical devices, genome sciences, and chemistry to manufacturing, nanotechnology, and engineering. In addition to creating better treatments to improve and lengthen our quality of life, the life science sector is generating a slow but positive economic impact on our region. Over 26,000 people are employed in this sector in Washington State and another 40,000 provide services and products that feed into the life sciences economy; nearly 160 bioscience companies, with over 12,500 employees, make their home in King County (enterpriseSeattle).

The life sciences sector has the potential to impact thousands of jobs in King County. The breakthroughs in this sector not only provide new treatments for disease, but also help to create innovations in computer sciences, information technology bioprocessing, health care and manufacturing.

Wages

There is no single, official average wage for Biotechnology. Some examples of subsector wages include the following:

- Pharmaceutical Preparation Manufacturing \$124,524
 - Analytical Laboratory Instrument Manufacturing \$74,884
 - Research and Development in Biotechnology \$97,274
 - Testing Laboratories \$48,058
- (source: Washington State Employment Security Department).

[Note: Wages are averages of all occupations within the sector – including entry level and high level positions.]

For detailed information about occupations within this sector (e.g. current wage ranges per occupation, training schools, employment projections, and a link to jobs listed at WorkSource):

1. Go to www.workforceexplorer.com,
2. Click on the 'Wage and Benefit Information' link, and
3. Click on the 'Occupation Explorer' link to start your search.

Map Your Career in

!

Add the industry you are planning a career in here

As you plan your career in one industry, identifying your **transferable skills** is important.

What skills do you bring with you from another industry/occupation that can be transferred to this industry, and may be helpful as you move into a different industry in the future?

1. _____
2. _____
3. _____
4. _____

For detailed information about occupations within a sector (such as schools, employment projections, current wage ranges and a link to jobs listed at WorkSource):

- go to www.workforceexplorer.com
- Click on the “wage and benefit information” link, and
- Click on the “occupation explorer” link to start your search.

| |
|--------------------------------|
| Occupation |
| Average starting wage per hour |
| Required training/experience |
| Training institution |
| Length of training |
| Training cost |



| |
|--------------------------------|
| Occupation |
| Average starting wage per hour |
| Required training/experience |
| Training institution |
| Length of training |
| Training cost |



| |
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| Occupation |
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| |
|--------------------------------|
| Occupation |
| Average starting wage per hour |
| Required training/experience |
| Training institution |
| Length of training |
| Training cost |

Start here



Source: Modified from Utah's Job Connection, Dept. of Workforce Services, Sample Career Ladders

Resources for Education and Career Planning

O*NET Online

<http://online.onetcenter.org>

A nation-wide career exploration resource, the O*NET database contains information about hundreds of occupations, including job tasks, education requirements, and wages.

Washington Workforce Explorer

<http://workforceexplorer.com>

Workforce Explorer provides career and economic information for Washington State. You will find career assessment and planning tools in the Career Center section and find occupation wage information by county in the Wage and Benefit information section.

Washington Career Bridge

www.careerbridge.wa.gov

Career Bridge is a one-stop, searchable database of education and training programs throughout Washington state where you'll discover:

- Available training programs.
- Average earnings and employment outlook for each career choice.
- Hot jobs for the future.
- What you'll need to learn to get those jobs.

This site was created by the Workforce Training and Education Coordinating Board, a partnership of labor, business and government.

Self-Sufficiency Calculator

www.thecalculator.org

The Calculator includes a variety of resources, including the Self Sufficiency Standard. The Self Sufficiency Standard for Washington measures how much income is needed for a family of a given composition - ranging from a one person household to a large family - in a given place, to adequately meet basic needs without any public or private assistance. The Self Sufficiency Calculator can help you:

- Plan and develop career goals so you can work towards a better paying job.
- Decide if a job you are considering will pay enough to meet your family's needs.
- Determine if you might be eligible for public benefits that can help with expenses like health care or child care.
- Test and compare different work or living options and see how they affect your bottom line.

WorkSource

www.go2worksource.com (Statewide) • www.worksourceskc.org (Seattle-King County)

Washington's career and employment website offering information about career services available at local WorkSource offices as well as a number of career planning and job search tools and links.



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Workforce Development Council of Seattle-King County
2003 Western Ave., Ste. 250 • Seattle, WA 98121-2162
206.448.0474 • www.seakingwdc.org

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