#### **From Pixels to Presses:**

# Career Statistics and Opportunities in Modern Prepress Departments

**Graphic**<sup>Ed</sup>

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### **Executive Summary**

Prepress professionals play a vital role in the graphic communication industry, acting as the bridge between graphic design and marketing teams and the reality of professional print manufacturing. Yet, the path to becoming a prepress operator — along with the opportunities, salaries, and skills employers seek for these roles — has not always been well understood. This report looks to fill that gap, offering a detailed examination of prepress job postings collected during 2024.

Our findings reveal key insights about what employers are currently seeking in this specialized field: From hybrid skill sets (such as graphic design skills in addition to traditional prepress skills) to advanced knowledge of software tools uniquely utilized by print manufacturing operations. The salaries for the reviewed prepress roles averaged around \$57,000 CAD annually, or approximately \$27.40 per hour. This is less than the average hourly wage of the Ontario workforce as a whole, which was \$37.10 per hour in the same time period (\$77,168 per year based on a 40 hour work week), per the Ontario Government Labour Market Report. These salary comparisons do not include the impact of overtime payment, which is an option in many Prepress roles. Many Prepress positions being offered requested three or more years of direct previous experience. A small percentage of postings call for managerial skills, often in "working manager" capacities where supervisors still undertake hands-on production duties.

While the print industry's scope in Ontario remains significant — at \$3.8 billion in market size and over 2,400 businesses — factors such as workflow automation, web-to-print portals, and the influx of files produced by "user-friendly design tools" (e.g., Canva) contribute to ongoing changes in the demand for prepress labour. This whitepaper concludes with a set of actionable recommendations for employers, educators, and job seekers.

**GraphicEd.org** is dedicated to bridging industry and academia in the graphic arts.

### Introduction

Ontario's print manufacturing industry encompasses a wide range of products and services, from packaging and large-format displays to books, magazines, catalogues, and promotional materials.

Integral to this production pipeline is the prepress operator—a technical specialist role which ensures graphic files are properly formatted, verified, and optimized for the intended print process. Without their expertise and review, printed materials can suffer significant issues with final output quality, leading to costly reprints, wasted time, and loss of client confidence.

Despite its important role, prepress has often been overlooked and sometimes blurred together with graphic design or production management positions by those outside of the industry. Employers, educators, and prospective job seekers alike may wonder: **What is the current state of prepress employment in Ontario?** This paper seeks to help answer that question.

Drawing from prepress job postings collected through online job board *Indeed.ca* between July and November of 2024, we examine the educational requirements, desired years of experience, salary ranges offered, and commonly requested technical proficiencies that employers are seeking.

We also integrate industry context data to help situate these findings within the larger economic landscape of Ontario's print sector.

Without their expertise and review, printed materials can suffer significant issues with final output quality, leading to costly reprints, wasted time, and loss of client confidence.



## Data Collection and Methodology

To establish a focused dataset, we searched exclusively on **Indeed.ca**, a job aggregator that compiles listings from thousands of websites, company career pages, and staffing firms.

#### Search Terms and Scope

We used broad variations of "prepress," "pre-press," "prepress technician," and similar terms to ensure we captured any listings where prepress comprised the primary job function.

#### Time Frame

Data were gathered at biweekly intervals between **July 2024** and **November 2024**.

Final Sample Size (N)

We arrived at 135 postings that matched our criteria.

#### Inclusion and Exclusion Criteria

Not all listings mentioning "prepress" or related search-terms were relevant to this study. We excluded:

Machine-only Operators: Positions focusing almost exclusively on press operation with minimal file preparation / review duties. These postings would occasionally show in our search results when phrases like "Must communicate issues and needs to prepress department" were present.

**Graphic Designers** with only passing references to prepress. We specifically wanted roles where prepress was the primary function, not graphic design roles that listed "prepress skills are an asset" or similar.

**Duplicate Postings** appearing multiple times over the collection period were excluded, possibly due to the positions remaining unfilled or the company hiring multiple employees for the same role over time.

#### **Data Analysis**

Once our dataset was finalized, each posting was reviewed for specific information:



#### **Job Title and Subcategory**

For instance, "Prepress Operator," "Prepress + Graphic Designer," "Prepress + Structural Design," "Prepress Supervisor/Manager".



#### **Education and Experience Requirements**

Minimum level of education (if any) required for applicants, and years of related experience requested.



#### **Salary Ranges**

Hourly or annual wages, when stated.



#### **Skills and Tools**

Commonly mentioned software and print technologies relevant to the role (e.g., Adobe Creative Cloud Products, Esko Automation Engine, Imposition, SilkScreen Printing, Trapping, etc.).

We then compiled these findings into numerical summaries (averages, percentages) and performed comparisons with external benchmarks, such as federal data from the Government of Canada's Labour Market Information.



### **Industry Context**

#### **Ontario's Printing Landscape**

Ontario's print manufacturing market has an annual market value of approximately \$3.8 Billion, with 2,456 businesses and 17,257 employees according to IBISWorld (2024). Ontario holds a significant share of Canada's overall print manufacturing capabilities and annual output. Historically, print manufacturing has evolved in tandem with technological innovations, from offset lithography to digital and large-format solutions. Yet, as new workflow automation tools proliferate and changes in market conditions around the relevance of printed media, the shape of the workforce continues to shift, particularly in areas like prepress where software-based automation tools can have significant workflow impacts.

#### Where Prepress Fits in

Prepress is a central role in the print manufacturing process that ensures the creative concepts from graphic design and marketing teams translate effectively onto the printed page or package with the highest possible fidelity and quality of output, maximizing the potential results on the print-output device being used. While many designers have a working knowledge of printing technologies and techniques, specific guidance for workflows and even individual presses within a print shop may require an additional layer of knowledge in order to ensure design files translate to printed items consistent with the intended design-vision, keeping clients happy and production smooth on the manufacturing floor. Some projects will require more adjustment than others, depending on the nature of the work and the technical aptitude of the designer(s) supplying the files to be printed.

Prepress works to normalize the formatting and configuration of client supplied job-files so that projects output in consistent, predictable and reliable ways. In a province with thousands of print-service providers — ranging from retail quick-print shops to large factories run by multinational packaging corporations — prepress operators are in demand for their ability to review, troubleshoot, adjust, and finalize files prior to production on-press. However, the growth of automation threatens to shrink the number of prepress technicians needed if overall print volumes remain relatively flat, as automation tools allow fewer operators to process a greater number of jobs in the same amount of time.



## **Key Findings**

#### **Job Subcategories**

Our analysis revealed five main subcategories commonly falling under the "prepress" umbrella:

- Prepress Specialist / Operator 54% of Job Postings
  These roles focus exclusively on Prepress duties ("Pure" Prepress).
- Prepress + Graphic Design 26% of Job Postings

  This hybrid role calls for strong prepress skills as a core function, along with the ability to also take on creative design projects of varying complexity as a regular job function as well.
- Prepress + Structural Design 8% of Job Postings
  This role combines traditional prepress skills with the structural design skills required to build corrugate display stands (like those found in retail stores), folding cartons, and other structural designs as a main focus of work and output.
- Prepress + Machine Operator 7% of Job Postings

  This hybrid role requires the ability to prepare and preflight files in a traditional prepress fashion as well as run those prepared projects on an output device such as a digital press or largeformat inkjet.
- Prepress Supervisor / Manager 5% of Job Postings
  A supervisory role responsible for the management of a prepress department. Typically a "working manager' position.

#### **Years of Experience**

In the job postings reviewed, employers seldom sought entry-level candidates with no previous prepress experience:

- Most postings mentioned a baseline of 2 to 3 years of experience.
- Some roles demanded as many as 10 years of experience.
- 17% did not specify any previous experience requirements at all.

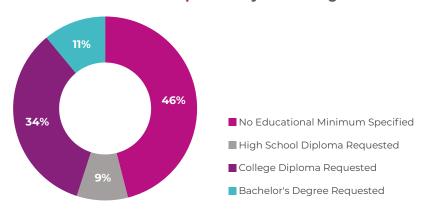
The average minimum experience requested hovered around 3.4 years.



#### Education

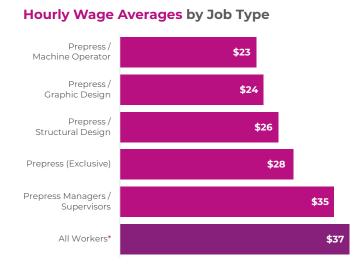
Most postings did **not** require a formal degree. Among the postings:

#### Minimum Education Requested by Percentage of Job Postings



While **Toronto Metropolitan University's Graphic Communications Management program** remains Canada's only dedicated degree-level program specific to the print and packaging industry, various Ontario based colleges — including George Brown, Seneca, St. Clair, and Mohawk — offer some amount of prepress modules or courses within their broader graphic design or communications curricula.

#### **Salary Ranges**



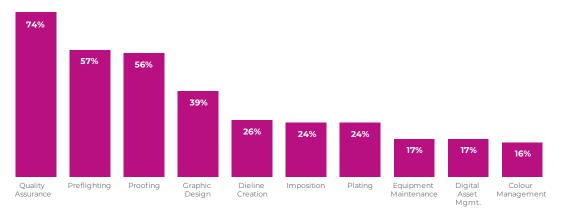
<sup>\*</sup> All workers here refers to the average wage of all working individuals in Ontario — not specific to prepress or print related careers.

#### Overall Prepress Average:

Approx. \$57,000 per year.

These findings correlate with the Government of Canada's Labour Market Information data, which lists the average prepress wage at \$27.36/hour (roughly \$56,900 per year).

#### **Prepress Skills in Demand**



Percentages show the portion of job postings that mentioned each skill as important for the role.

#### Skills in Demand

Quality assurance, pre-flighting, and proofing topped the list of key competencies most commonly mentioned by employers as key skills.

74% of job postings specifically referenced **quality assurance**, emphasizing the role's central mission of avoiding costly mistakes through thorough review of project details and proofing before large-scale printing.

#### **Graphic Design Skills**

Even outside the roles listed specifically as **Prepress + Graphic Design** hybrids, many other postings ask for *some* degree of graphic design competency, especially for file edits or layout adjustments. Approximately 40% of job postings overall here.

### Dieline Creation, Imposition and Plating

Commonly requested in larger printing companies that handle multi-page document printing, particularly in combination with offset lithography printing processes.

#### **Equipment Maintenance**

Some postings, especially in smaller shops, wanted prepress operators capable of basic machine upkeep and maintenance. It was often unclear if this maintenance was for equipment related directly to the prepress department (such as workstations, servers and proofing devices) or adjacent print manufacturing equipment in the business.

#### **Colour Management**

Surprisingly, only about 16% of postings explicitly asked for colour management expertise. This suggests that some companies rely on either external consultants or a small subset of in-house experts for their advanced colour calibration and colour maintenance needs.

#### Variable Data Printing (VDP)

Requested in only about 13% of listings, indicating that while VDP is important for personalized print marketing (such as mailings), it remains a specialized skill not always required.



#### **Software Proficiencies**

Predictably, the **Adobe Creative Cloud** suite was the most mentioned software application across all job postings, with **Illustrator** and **Photoshop** specifically mentioned in most listings, and **InDesign** and **Acrobat** referenced significantly as well.

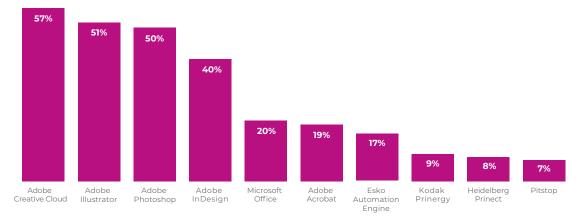
Competency with **Microsoft Office** was also commonly requested as a skill-set, with 20% of job postings requesting capabilties in the business productivity suite. **CorelDRAW** and **QuarkXPress** did appear, but with exceptionally limited frequency, confirming that they have largely fallen out of common industry usage.

For dedicated prepress workflows, no single platform dominated:

- Esko Automation Engine, Kodak Prinergy and Heidelberg Prinect led in terms of most frequently listed prepress specific systems and software.
- Other prepress tools like PitStop, Fiery, and Onyx trailed in specific references but were still present in the data.

Despite automation gains, the array of niche tools indicates that many employers want individuals with versatile software expertise or, at least, the adaptability to learn new systems quickly.

#### **Prepress Skills in Demand (Software Specific)**



Percentages show the portion of job postings that mentioned each skill as important for the role.

## Trends, Challenges, and Further Considerations

#### **Automation and its Impact**

While the data in this study only occasionally touched on automation, the **U.S. Bureau of Labor Statistics** projects an overall decline in the number of prepress technicians over the coming decade. We lack Ontariospecific data here to corroborate, but anecdotal evidence suggests that Canadian businesses are following a similar trend. As individual prepress operators become more productive, and as more routine tasks become automated, fewer prepress technicians may be needed if the overall demand for print remains stable or declines.

#### **Web-to-Print Portals**

Online ordering portals have streamlined job intake for many printers, but they can also shift additional burden to prepress operators to quickly assess and correct any file issues in the digitally submitted projects. This can intensify the pace of the work while demanding better customer communication and file troubleshooting expertise to interpret the customer's goals and intent - questions like "Did the person preparing the design file here intend to use two different shades of red in their text?" become more prevalent when the variety of jobs and customers submitting them increases.

#### **Hybrid Roles and Small Shops**

The lower average salaries associated with hybrid roles underscore a long-standing challenge: many smaller print providers cannot afford separate specialists and thus often require a single employee to manage design, prepress, printing, and even finishing in some cases. This can yield broad experience for employee but may offer lower pay than more specialized positions in larger organizations.

## The Rise of Online-Accessible Design Tools

Increasingly, prepress operators receive files generated by platforms like Canva or Adobe Express. These applications, though powerful, are primarily designed for graphic design novices looking to quickly produce a variety of graphics on an ad hoc basis using templated assets, and have been shown to frequently result in files that do not conform to best practices for print manufacturing (e.g., missing bleed, incorrect colour profiles, or incorporating lower-than-desirable image resolutions). Many career postings highlight the need for strong troubleshooting skills and the ability to "fix" or optimize files that originate from a variety of sources, which may include these consumer-focused tools.



## Actionable Recommendations

The following recommendations are offered for Employers, Educators and Job Seekers:

#### **Employers**

proof your team.

- Invest in Ongoing Training
  Upfront training on current workflow software reduces errors
  and staff turnover. Consider rotating employees through
  advanced colour management or VDP courses to help future-
- Define Clear Role Expectations

  If you seek a "hybrid" operator, clarify the percentage of time spent on prepress vs. running equipment or performing design tasks. This transparency can attract more appropriate candidates.
- Leverage Mentorship
  In shops where senior operators are nearing retirement,
  encourage knowledge transfer to junior staff before they move
  on, securing continuity of vital prepress skills.

#### **Educators**

- Emphasize Real-World File Preparation
  Incorporate modules in design programmes that focus on prepress fundamentals, including proper bleed setup, font management, image resolution, and imposition.
- Highlight Automation and Workflow
  Ensure students gain exposure to workflow and automation
  tools like Esko or Kodak Prinergy, even if only at a conceptual
  level, so they understand modern print production pipelines.
- Bolster Graphic Design Skills alongside Technical Skills
  Offer coursework that prepares students for graphic design
  tasks in addition to prepress-based file review and preparation.
  This additional skill set is highly valued by employers and
  diversifies the range of roles students may qualify for.

#### **Job Seekers**

Demonstrate Versatility

Learn key Adobe tools plus at least one dedicated prepress workflow system (e.g., Prinergy or Esko) to help set yourself apart and show your ability to utilize these specialized tools. Even if your employer uses an alternate tool, your knowledge of one system will often benefit you when learning another.

Highlight Communication Skills

Many postings cite the need to occasionally liaise directly with production managers, internal design teams, or even clients, troubleshooting file issues and explaining technical constraints in everyday language to a wide variety of contacts. Be sure to emphasize communication skills to demonstrate these abilities.

Showcase Hands-On Projects

A portfolio featuring real or simulated prepress projects or case studies — complete with annotated proofs or imposition layouts of the final, corrected results, can impress employers who value practical readiness.



## Further Opportunities for Research

Several areas emerged from this study where deeper investigation would be beneficial:

#### **Comparing Posted vs. Actual Wages**

The final compensation package may differ from posted salaries, particularly when you bring in factors like workplace benefits or retirement plans. Studies have shown that many employees negotiate higher pay upon hiring or job changes, meaning incumbent staff may see slower wage growth.

#### Influence of New, Popular Graphic Design Tools

Platforms like **Canva** and **Adobe Express** expand graphic design access to more users, but how do they affect file quality, error rates, and time spent in preflight and file correction steps? How can print providers approach these issues giving the increasing popularity of these tools?

#### **Quantifying Throughput Gains from Automation**

As new software, workflows and equipment reduce manual adjustments to submitted design files, a single operator may be able to handle more tasks or projects per day. Further research could quantify how many more jobs per day or hour a modern prepress operator can handle compared to past metrics.

Exploring these areas in future academic-industry collaborations will shed more light on the true trajectory of prepress roles in Canada and beyond.



### **Conclusion**

Ontario's prepress landscape remains robust and dynamic, offering varied roles that extend well beyond the stereotypical "Mac operator" title used decades ago. Our analysis of job postings highlights significant demand for individuals who can bridge creativity with technical acumen — both in traditional print manufacturing environments and newer, automated digital workflows.

Yet challenges persist: automation is poised to continue reducing staffing needs, particularly if print volumes plateau, while the influx of non-traditional design tools may increase prepress complexity on a per-project basis.

Educators can play a pivotal role by training students in current workflow tools and real-world problem-solving.

Employers, meanwhile, must define roles clearly and invest in upskilling to keep pace with evolving industry demands.



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