



# Construction Sector Council

## Skill and Labour Shortages – Myth or Reality?

Canadian Apprenticeship Forum

June 6 - 8, 2004

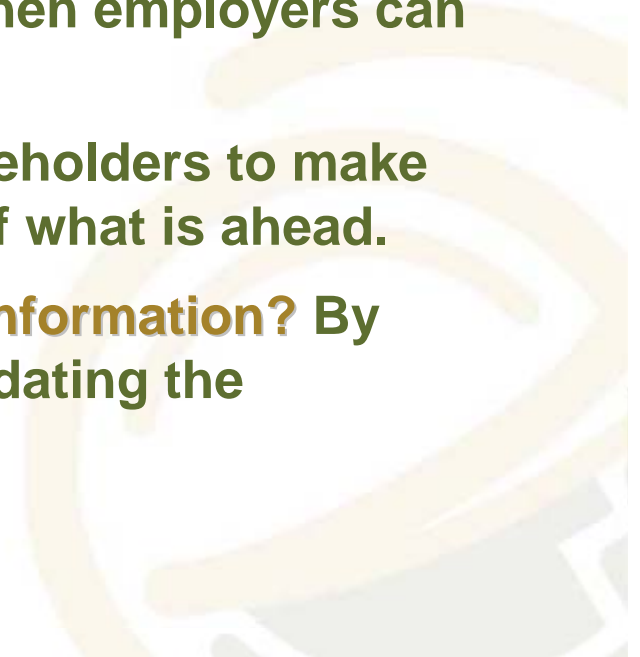
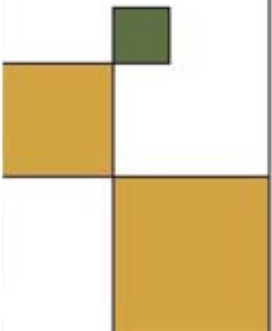
Halifax, NS





# LABOUR MARKET INFORMATION IS THE KEY

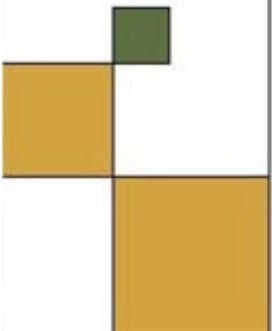
- **Economic Cycles** create huge imbalances between the supply of new apprentices and the hiring by firms.
- **There is a lag** between economic cycles and apprentice enrolment cycles. Delay may be one, two or even three years, which means catch-up mode becomes the norm.
- **Economic losses are huge** when trained and qualified apprentices cannot find work or when employers can not find the workers they need.
- **Reliable LMI** enables industry stakeholders to make strategic decisions with a notion of what is ahead.
- **How can we produce reliable LMI information?** By analysing the whole forest but validating the information at the tree level.





## Specific Goals of an LMI Program

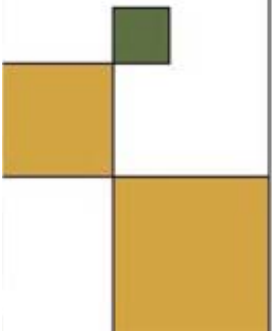
- **Increase the productivity over the long term, by:**
  - **Maintaining the experienced workforce;**
  - **Attracting experienced workers back to the industry;**
  - **Adjusting the flow of new apprentices to meet industry needs, so that fewer apprentices need to leave for lack of work; and**
  - **Recruiting better qualified new apprentices by offering more stable employment.**





## Who is involved?

- To make forecasts, prior information on who is out there is critical:
  - Labour
  - Contractors
  - Owners
  - Training Providers
  - Government LMI Analysts
  - Government Policy Decision Makers
- To understand relationships between the different actors, an analogy with industry that has been devastated might help.

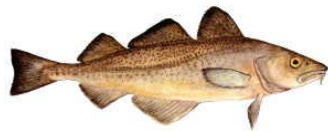




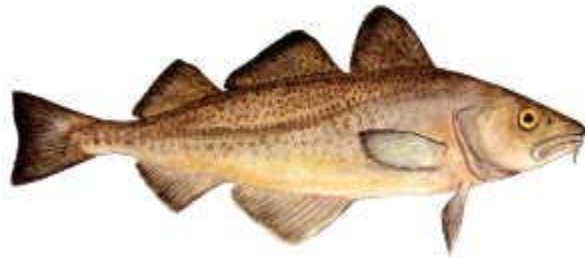
# LABOUR SUPPLY



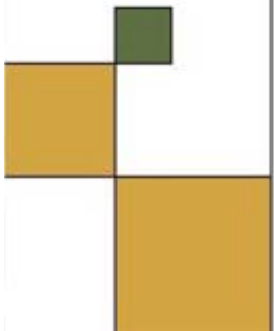
***Small cod (apprentice):*** usually less than 2 years old, very low survival rate, will suit some fishermen.



***Medium cod (journeyperson):*** 5 years old, more versatile, acquired many specialized skills, not sexually mature, migrates, will suit some fishermen.



***Reproductive cod (mentor):*** more than 7 or 8 years old, specialized in many skills, migrates, will suit some fishermen.





# LABOUR DEMAND



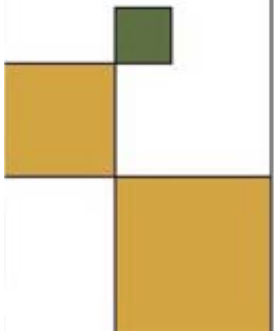
**Small boats:** Most numerous group but impact small because of limited crew size and fishing is occurring over a wide costal area. More frequent in residential and commercial sectors.



**Medium boats:** Have more efficient fishing techniques and bigger crews. Will fish some distance away from coast. Impact on fishing stocks is higher but not critical. Most of them are in residential, commercial and institutional but they are more representative of industrial and civil engineering boats.



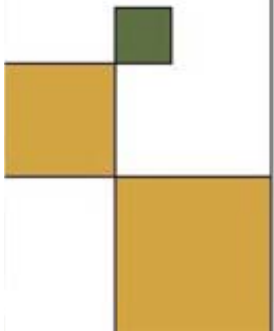
**Large boats:** Use very efficient techniques in high seas. Sometimes foreign owned (out of province). Can take in a whole cod bank in one sweep. Huge impact on stocks. More representative of industrial and civil engineering boats.





# What can we learn from the fishing industry?

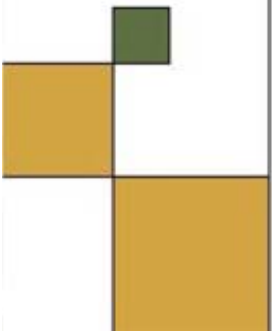
- **Fish are a common-property resource:** Until they are caught, nobody owns the fish. If the fish is put back into the water (apprentice training or layoff) there is no guarantee he will be caught by the same fisherman.
- **When fish are plentiful:** Additional boats can be put out without any cost to other fishermen.
- **If stock reproduction rate equals total fishing:** Each additional boat lowers the average catch of other boats.
- **Fishermen will fish until they no longer make a profit:** A modern fishing fleet can still be profitable even though lower stocks make traditional fishing unprofitable.
- **When fishermen no longer make a profit:** They no longer have means to overcome the shortages.





## FISHING FACTS (1)

- **Cods have reproductive patterns that change over time. Over-fishing, winter fishing and water temperature all seem to have an impact but the extent of the delay between the time these actions happen and the time required for the consequences to become manifest is unknown.**
  - **Factors determining the supply of workers are complex and numerous. Construction labour demand, in particular, may grow over several years without any supply shortage showing up then, all of a sudden, shortages happen.**
  - **Five years are required before an apprentice becomes a qualified journeyman. Factors determining today's shortage may have occurred several years ago.**

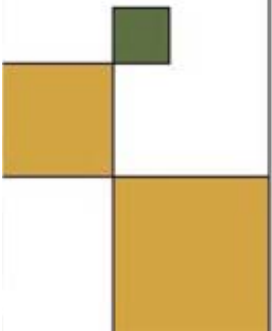




## FISHING FACTS (2)

- During the recession, at the beginning of the eighties, the subsidised high seas fishing industries almost collapse. The Kirby report recommended more government support to save it and make it grow. By 1985, coastal fishermen were already saying that catches were down.
  - Policy decisions aimed at solving short-term problems in one segment of an industry could have long-term adverse spill over effects in other segment of the that industry.

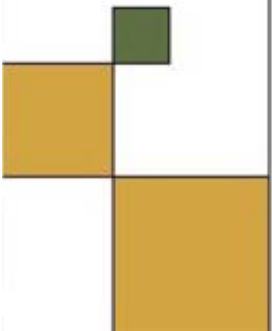
**Example:** Increased enrolment to meet a short term increase in construction demand may mean less work for all construction workers later if there is a recession.





## FISHING FACTS (3)

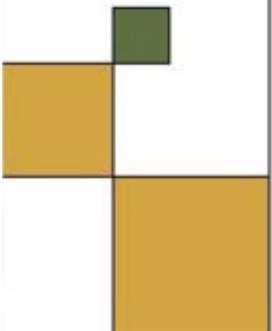
- In the eighties, government representatives overestimated cod stocks because more efficient high seas fishing techniques enabled an increased in total catches.
  - Labour supply is a dynamic process. Understanding the structure of the industry and the workforce, the impact of cycles, seasons, technological and organization changes on labour requirements and first hand information are all critical to accurate shortage diagnostics.





## FISHING FACTS (4)

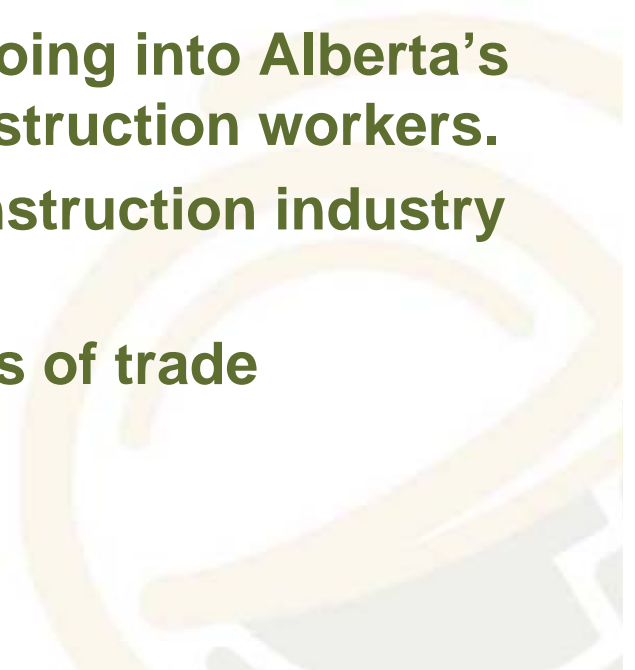
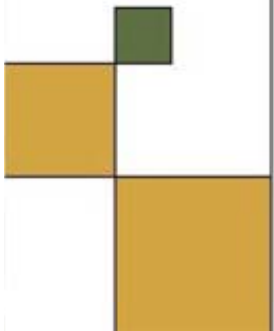
- **Even when fishermen knew that catches and stocks were down, individual fisherman had no incentive to reduce their activities because they would then have incurred an additional revenue loss.**
  - **Construction labour market can be seen as a common-property resource. We can't see how many workers are out there or how big they are.**
  - **Contractors pull required workers out of the global stock without a cost if there is no shortage. Apprentice nurturing at a cost has limited value.**
  - **Labour shortages means everybody loses. Need concerted actions to keep hatcheries going, especially when the industry slows down.**





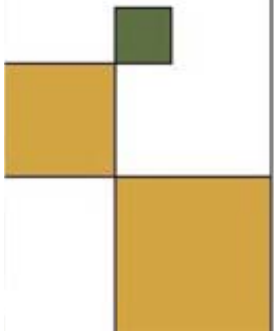
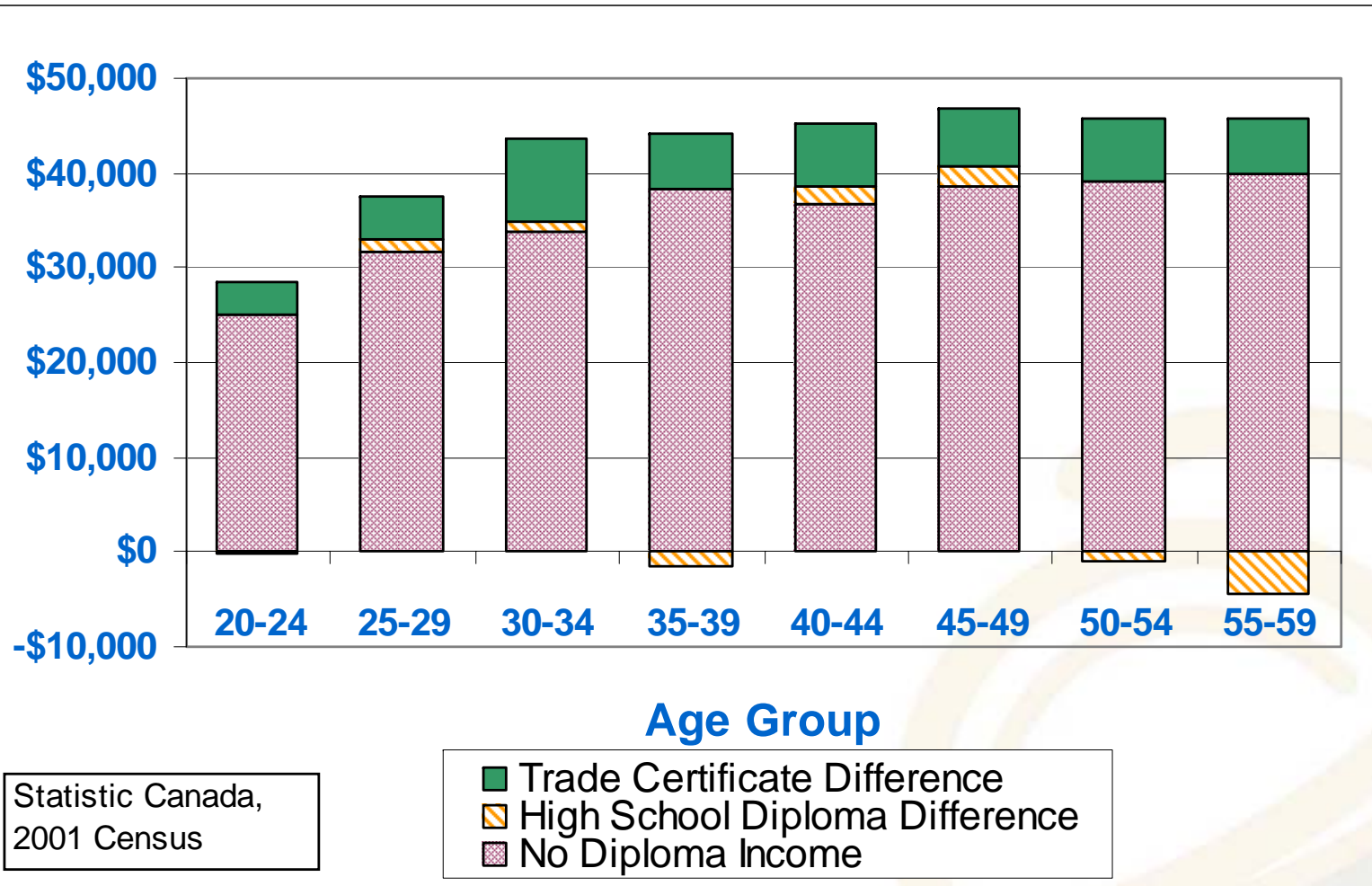
## Myth or reality?

- There are labour shortages in the construction industry.
- There is a shortage of commercial plumbers in Windsor.
- Residential construction firms have a higher labour turnover rates.
- Most out-of-province workers going into Alberta's construction industry were construction workers.
- Most workers that leave the construction industry go to manufacturing.
- We can not evaluate the benefits of trade certification.





## Impact of Diploma on Earnings, Male Non-Student, Employed Full-Time, Full-Year, All Industries, Trade, Transportation and Equipment Operators Occupations, Ontario, 2000, by Age Group

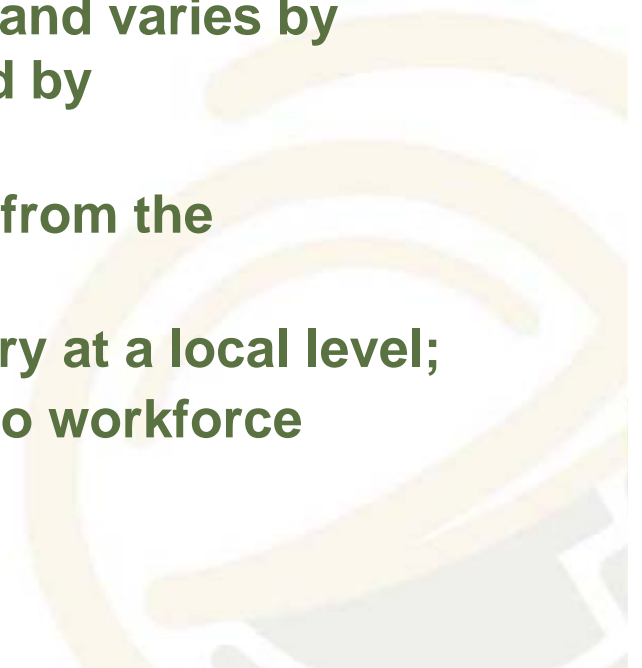
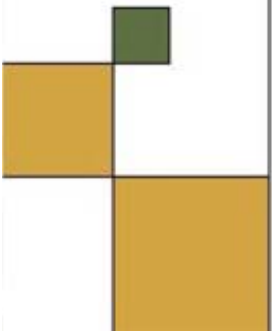




## Concluding Remarks (1)

- **Labour shortages are a complex issue.**

- **The construction industry, in particular, requires a comprehensive labour market information system that:**
  - **Accommodates the complexity of the issue;**
  - **Recognizes that labour demand varies by province/territory/region and by trade/occupation;**
  - **Is built on solid information from the provinces/territories;**
  - **Has direct input from industry at a local level;**
  - **Can translate investment into workforce numbers;**

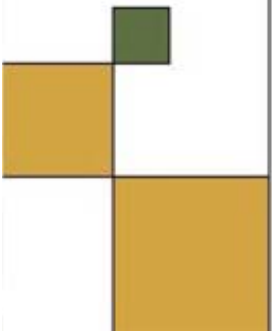




## Concluding Remarks (2)

- Understands and factors in the movement of workers from job to job, province to province, sector to sector, industry to industry;
- Understands the impact of changing variables such as business cycles and new technology on labour requirements; and
- Understands that an increase in demand does not always equate to a need for more labour.

**To overcome shortages all stakeholders need to get involved.**





# THANK YOU

For more information on the LMI Program please contact:

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