

Career Exploration Centre

Online



 **SAIT**
**YOUNG
ORIGINALS**

Construction Project Management

Career Description

Construction project managers plan, organize and direct the activities of a construction company or a construction department within a company. They work under the direction of a general manager or senior manager.

They are employed by:

- residential, commercial, and industrial construction companies
- construction departments of companies outside of the construction industry

Working conditions:

Project management professionals usually spend a large portion of their time working in office environments, but may also perform worksite or field visits to construction sites. These sites may be subject to various weather conditions. Travel is sometimes required. Project managers must occasionally work long hours, weekends, and overtime in order to meet project deadlines.

Skills and abilities:

Project managers must have:

- Leadership, initiative, and customer service skills
- Strong communication skills
- The ability to make important decisions

Stats:

Average salary in Alberta: \$98,643.00*

Average wage: \$47.41*

Minimum education: 2 years post-secondary

*Statistics from 2018, alis.alberta.ca

For more Alberta career information and stats:

<https://alis.alberta.ca/occinfo/wages-and-salaries-in-alberta/construction-managers/0711/>

Activity Mission

Your company has a new home construction project. You will complete two duties of a construction project manager:

1. Create a project schedule
2. Calculate the project cost

Task 1: Create a Project Schedule

Background

The schedule may change throughout the project, but the construction project manager must determine an overall expected timeline for the project.

Instructions

On the next 4 pages, there are 3 sets of cards.

1. If possible, print the cards and cut them out; there are 16 cards on each page.
2. If you don't have a printer, use a pen and paper to make your schedule.
3. Start with the **TIMELINE** cards. Place them in order (Before Work Starts, Week 1, Week 2, Week 3, etc...).
4. Next, organize the **PROJECT TITLE** cards. Take your best guess and place the cards in the logical order underneath the timeline cards.
5. Finally, match the **PROJECT DETAILS** to the project title cards.
6. Your timeline should have the same layout as the example to the right.
7. Check the answer key at the end of the activity.

Before
Work
Starts

Layout/
Stake-out of
the lot



Timeline Cards

Before Work Starts	Week 1	Week 2	Week 3-4
Week 5-6	Week 7	Week 8	Week 9
Week 10-11	Week 12	Week 13	Week 14
Week 15	Week 16	Week 17	Week 18

Project Title Cards

Layout/ stake-out of the lot	Excavation	Footing	Framing
Mechanics	Foundation	Insulation	Drywall
Flooring	Interior trim	Final finishing, part 1	Paint
Final finishing, part 2	Third party inspections	Final walk through	

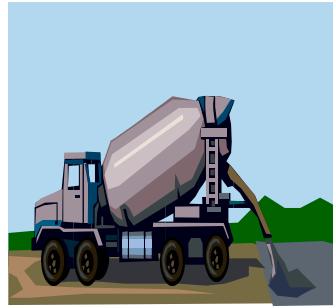
Project Details Cards



Surveying
Cost: \$10,000



Digging
Cost: \$40,000



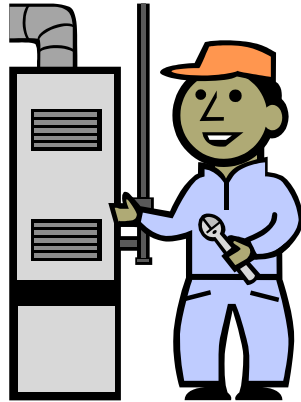
Pouring concrete base
Cost: \$12,000



Building basement walls
Cost: \$35,000



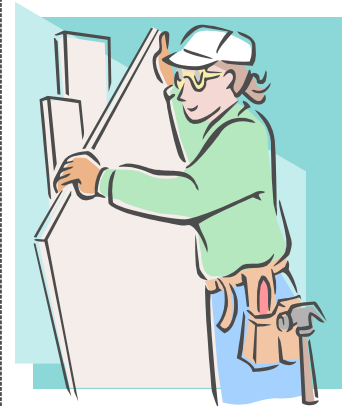
Building wooden skeleton
Cost: \$40,000



Adding heating/cooling, plumbing, & electrical systems
Cost: \$45,000



Adding insulation
Cost: \$10,000

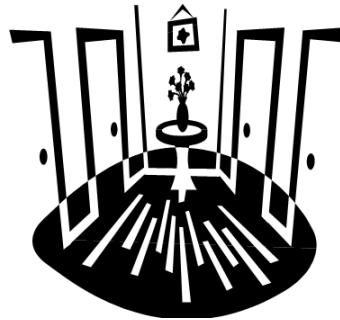


Adding the walls
Cost: \$15,000

Project Details Cards continued



Adding tile or vinyl flooring
Cost: \$10,000



Adding doors, cabinets, etc.
Cost: \$12,200



Painting
Cost: \$8,899



Final electrical and plumbing
Cost: \$13,000



Final carpet
Cost: \$13,000



Inspections
Cost: \$2,000



Home owner and builder inspection before closing
Cost: \$1,000

Task 2: Calculate the Project Cost

Instructions



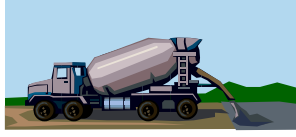





1. Add up the costs on all of the project detail cards to calculate the starting budget cost.
2. Check the answer key at the end of the activity.
3. The starting budget is what the project would cost without any problems or delays.
4. As a bonus task, think of all of the things in the project that could go wrong and where added costs might show up in the budget.



For information on the SAIT programs connected to this activity, please visit:




<https://www.sait.ca/programs-and-courses/full-time-studies/bachelor-degrees/bachelor-of-science-construction-project-management>

Task 1 Answer Key

Timeline Cards	Project Title Cards	Project Cards
Before work starts	Layout/stakeout of the lot (surveying)	
Week 1	Excavation (digging)	
Week 2	Footing (pouring concrete base)	
Week 3-4	Foundation (building basement walls)	
Week 5-6	Framing (building wooden skeleton)	
Week 7-8	Mechanics (heating/cooling, electrical & plumbing)	
Week 9	Insulation	
Week 10-11	Drywall (adding the walls)	

More answers on the next page.

Task 1 Answer Key continued

Timeline Cards	Project Title Cards	Project Cards
Week 12	Flooring (adding tile or vinyl)	
Week 13	Interior trim (adding doors, cabinets, etc.)	
Week 14	Paint	
Week 15	Final finishing, part 1 (Electrical and plumbing)	
Week 16	Final finishing, part 2 (Carpet)	
Week 17	Third party inspections	
Week 18	Final walk through: with home owner and builder inspector	

Task 2 Answer Key



\$267,099