



# Improving Efficiency

## An Interactive Exercise

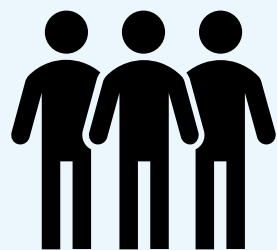


# The Problem(s)

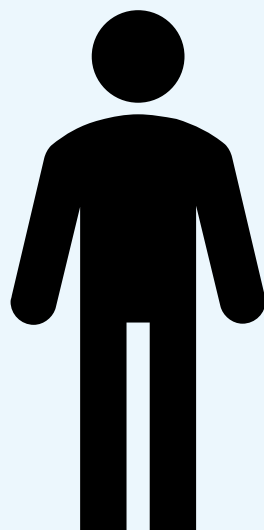
1. We must compete on price (significant).
2. Prices are competitive (too cheap!)
3. Good staff is hard-to-find.

How can we make a **healthy profit?**

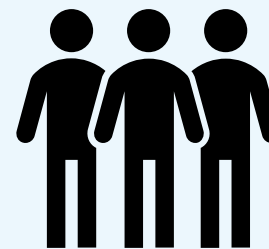




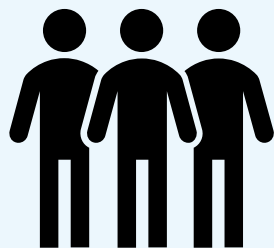
Staff



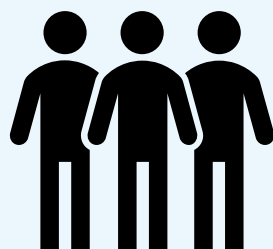
Owner



Staff

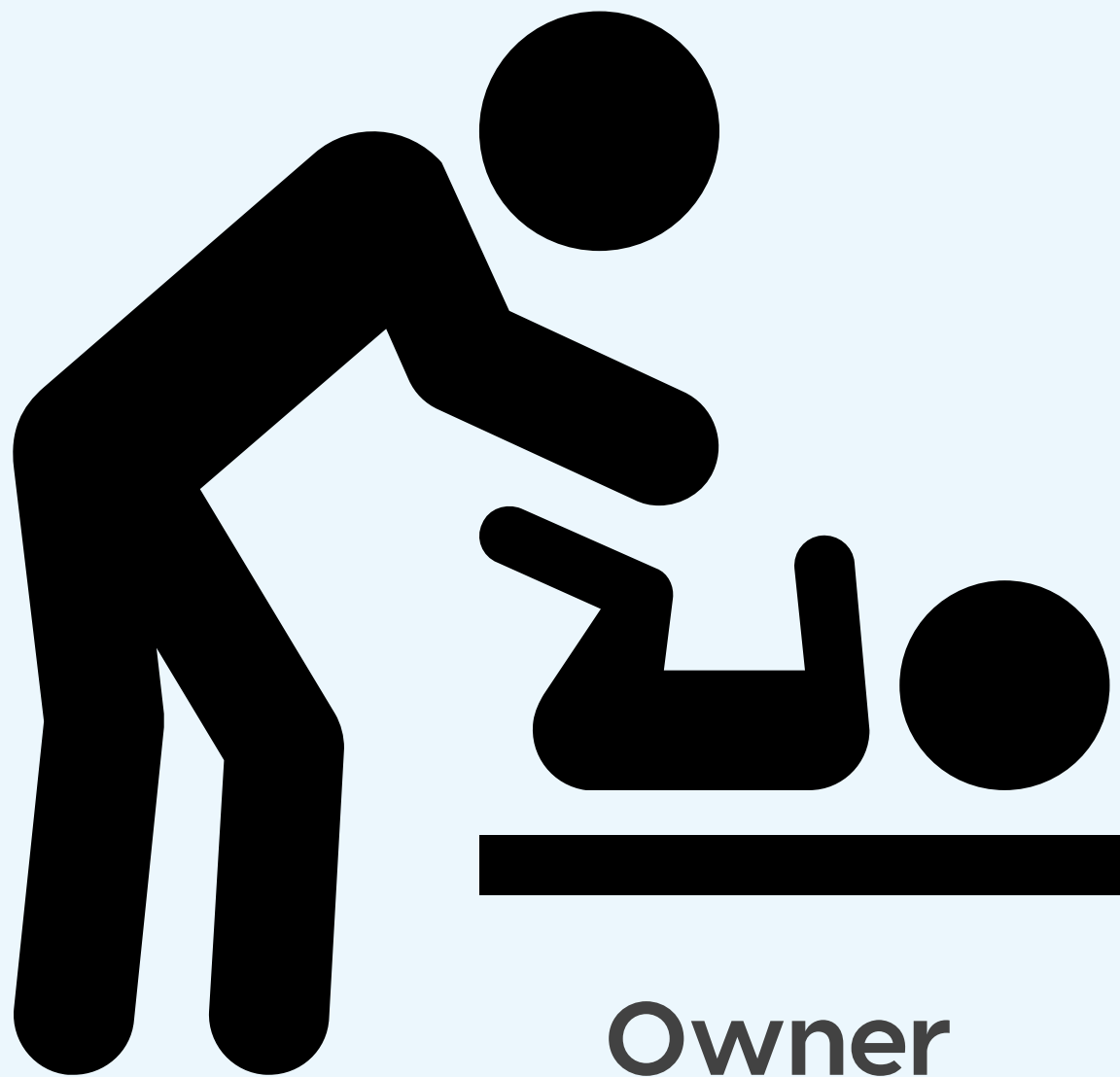


Staff



Staff





Owner



## Scenario:

Your crew gets to site, realizes they forgot fuel. The foreman returns to the shop to get some.

## Question:

What did that mistake cost?





**Foreman wages**  
Time lost returning to shop

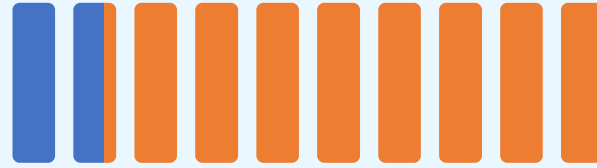


2h

\$40



**Crew wages**  
Slowed productivity  
unsupervised



2h

\$35



**Fuel**  
Fuel costs returning to shop



2h

\$10



**Lost opportunity!**  
Lost revenue potential

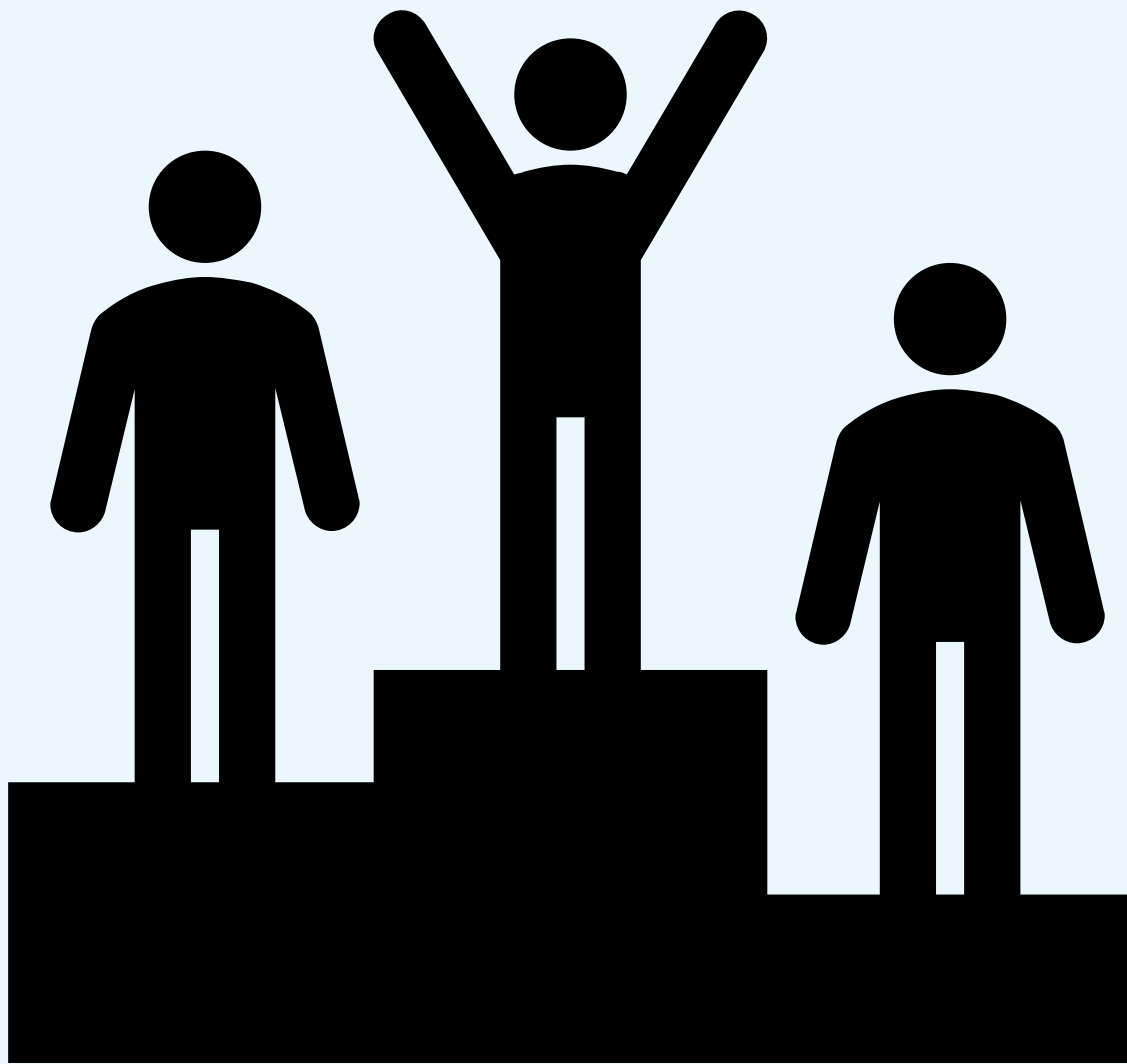


4h

\$240

---

**\$325**



The Game



# The Goal

The winning crew will generate  
the most **revenue per minute**

*(you can finish early)*





# The Rules

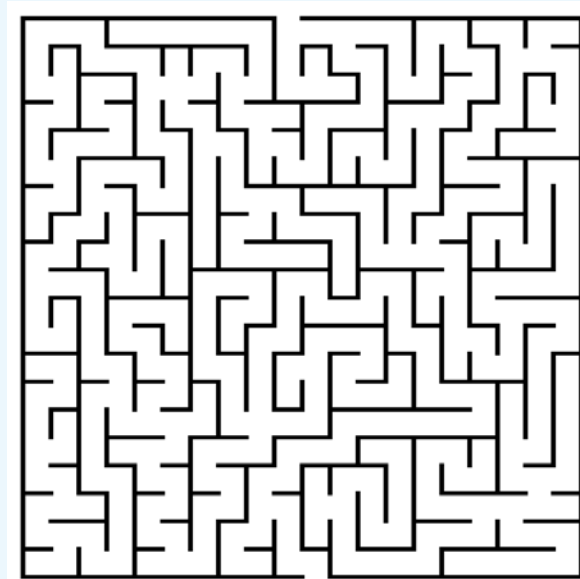
- Complete a maze to drive to site
- Complete 'site' as per specs
  - *Basically, a coloring book page*
- Only work on 1 site at a time
- Once a site is finished, hand it to your customer
- Repeat for 3 sites



# The “Trailer”



# The Drive(s)



# The ‘Specs’

## Crew Instructions

Foreman Name: \_\_\_\_\_

### General Instructions

1. Your crew has been assigned a route today consisting of **3** sites
2. Play Rock/Paper/Scissors to pick your crew's foreman
3. Start from the 'shop' and grab your trailer
  - a. Your pencil case is your trailer - it has your tools + equipment
4. Next, leave the shop - use with Maze 1 to 'drive' to the first site
5. The site specs for each site are listed in the section below
6. To move to the next site, you must grab the next maze and drive there

### Rules

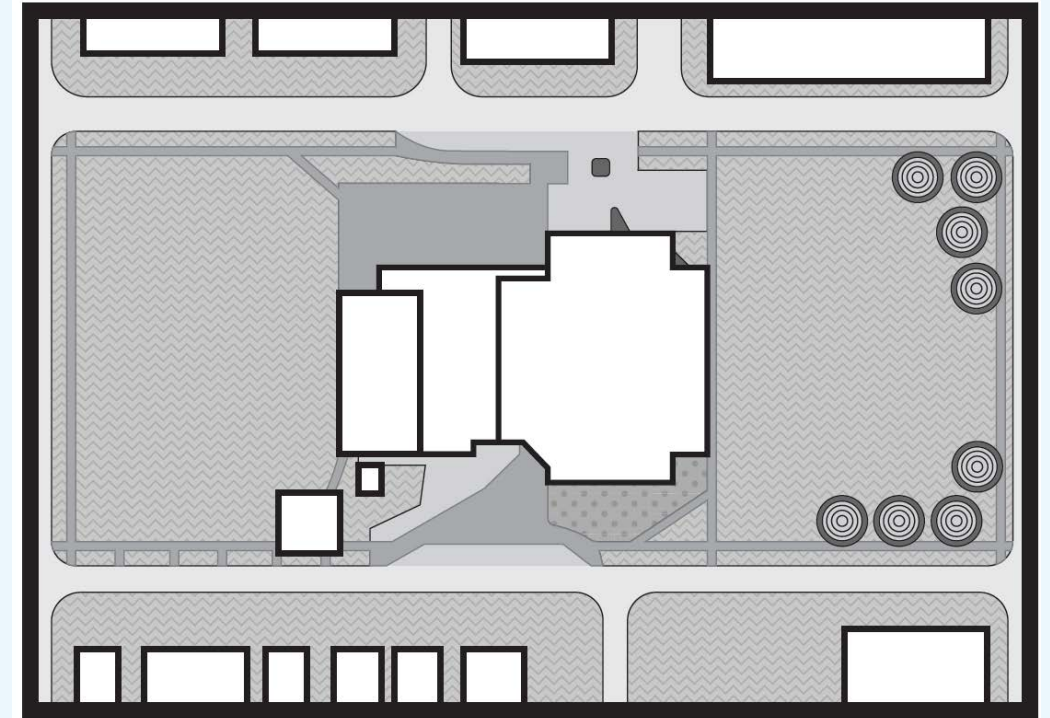
- You may **only** work on 1 site at a time!
  - But you can all work on the same paper at once
  - No one can go to the next site/map until you're complete the one you're working on
- You may **not** return to site once you've moved on to another site

### Job Specifications

- Tend the garden beds at the mowing site by filling the bed areas with an orange highlighter
- Prune shrubs at the cleanup site by cutting out the shrub shapes and sticking them to the site in the locations provided (you can put any shrub in any location marked 'S')
- Edge the walks and tree rings at the mowing site by drawing a dark line using a crayon
- Only use tall grasses (green plantings) for the Cleanup job in the straight bed at front of building
- Only use **yellow** on the snow site entrance walks. Mark 'salt' on those walks with a checkmark.
- Make piles of snow at the snow site in the spots marked as circles. Use the green highlighter to fill only 2 of the pile locations on the map.
- Mow the high school east lawn at the mowing site using green highlighter on turf areas
- Plow the snow site using the blue highlighter to cover the parking lot areas
- Use yellow plantings in the very small bed near the front of the building at the cleanup site
- Tend all the beds at the mowing site by filling the bed areas with an orange highlighter
- Plow the sidewalks at the snow site by using a green highlighter to cover the sidewalk areas
- "Salt" the lot and sidewalks at the snow site by drawing small x's all around where the salt should be
- The Cleanup site customer wants no orange plants in the west bed and wants the east bed to have a mix of green grasses, yellow & red. Only orange and tall grasses (green) in SE bed.
- Mulch the garden beds at the cleanup site by coloring all the beds with the brown pencil crayon

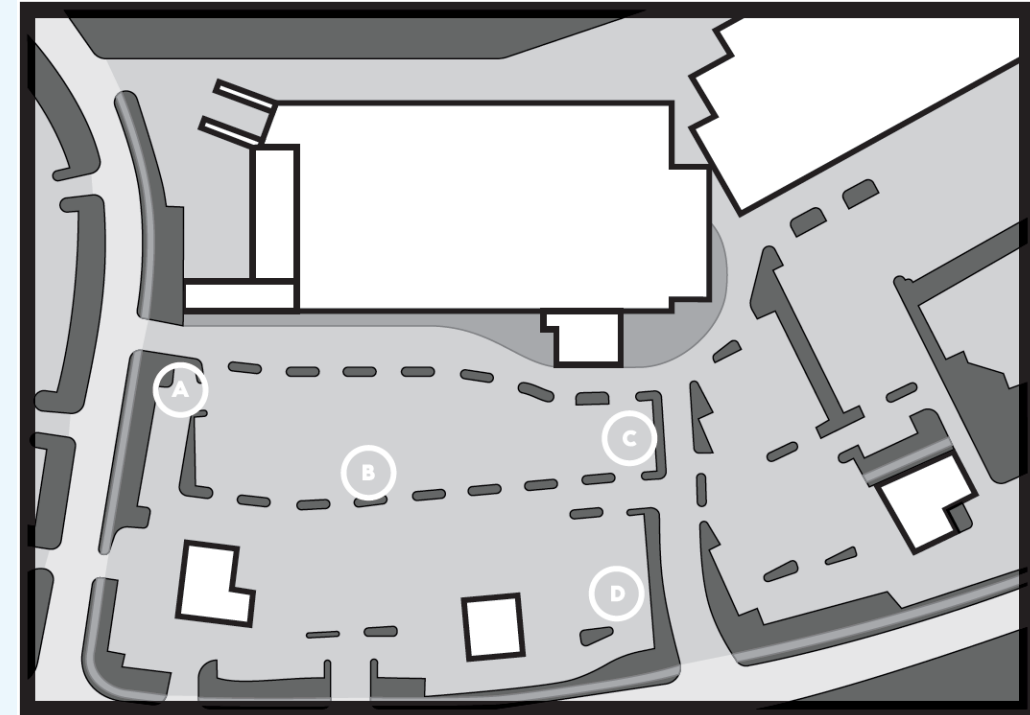


# Site 1 Mowing



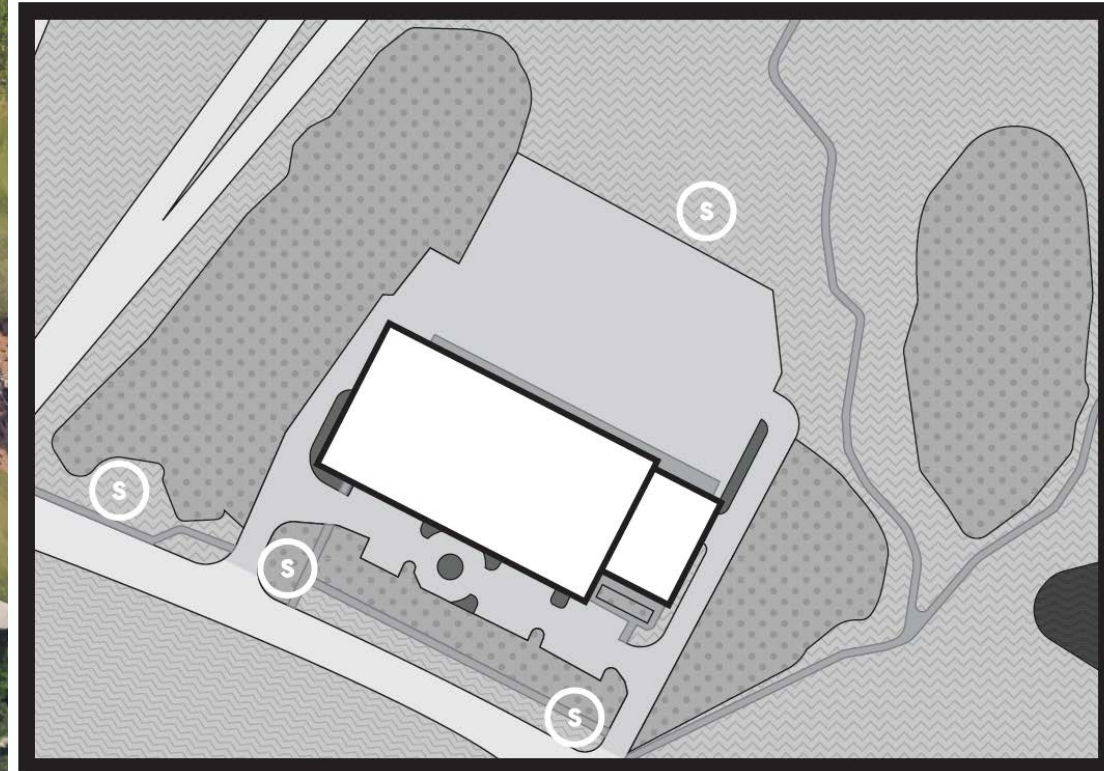


# Site 2 Plowing

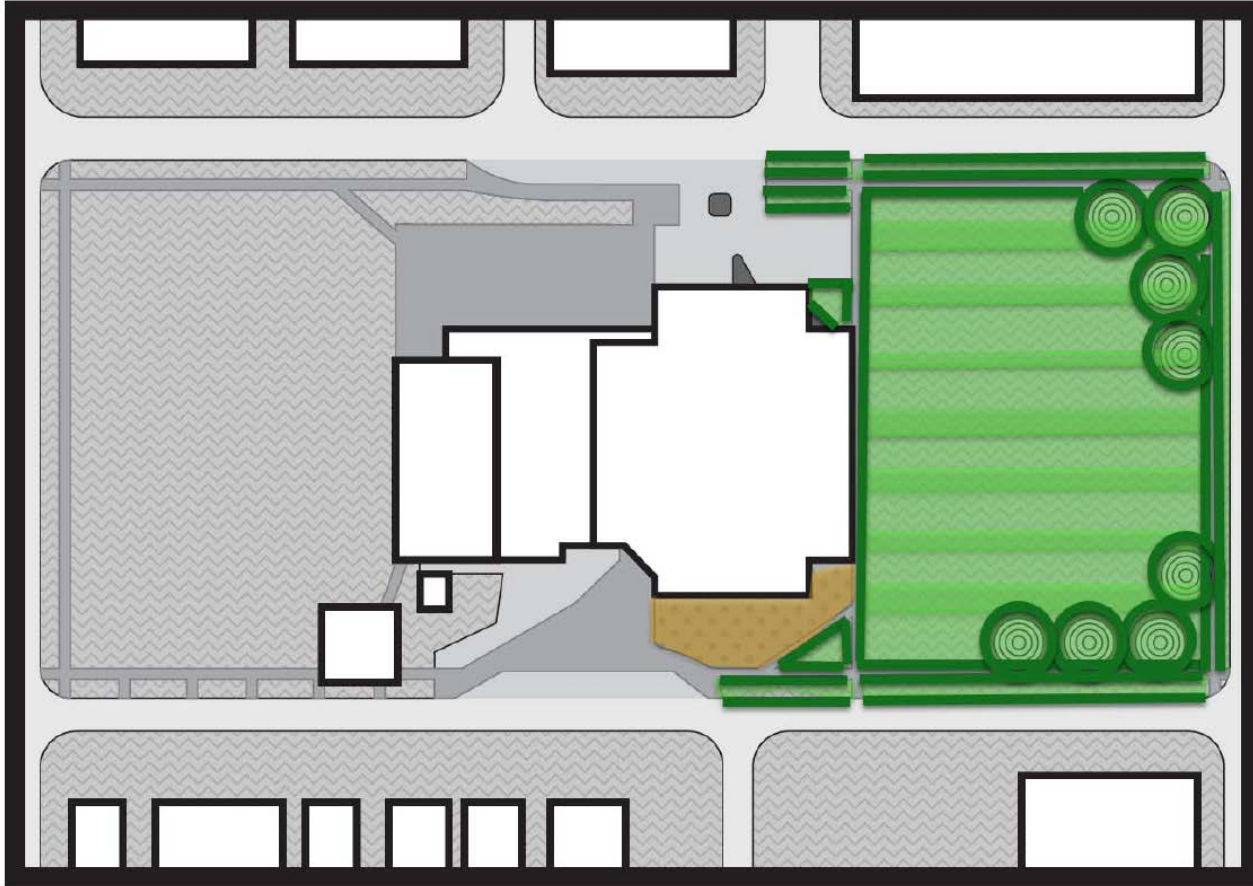




# Site 3 Cleanup and Enhancements



# Customer Specs



MOWING SITE SCORECARD	Y	N	😊	🚫
Did the crew do the mowing site 3rd in their route?	😊 +1	😊 -2		
Are designated turf areas highlighted green? – be sure no areas are missed and that they only mowed the <b>high school</b> lawn.	😊 +1 🚫 +3	😊 -1 🚫 +1		
Did they 'stripe' the turf with nice neat highlighter lines?	😊 +1	😊 -1		
Did they 'edge' <u>bedlines</u> around all beds and trees and sidewalks? (crayon)	😊 +1	😊 -2		
Are the bed areas neatly highlighted with mulch?	😊 +1 🚫 +2	😊 -2 🚫 -1		
Did they remove the 'garbage' stickers off the map?	😊 +1	😊 -2 🚫 -2		
Total Site Score:				
TOTAL CREW SCORE (COPY SITE SCORES FROM ABOVE)	😊			🚫
Snow Site				
Cleanup Site				
Mowing Site				
Total (All Sites)				
Total Minutes Worked (use start & end time above to calculate – add scissor + mulch penalty)				
🚫 Earned Per Minute (divide total \$ by # of minutes)				





# Customer Specs



CLEANUP SITE SCORECARD	Y	N	😊	👁️
Did the crew do the cleanup site 2 <sup>nd</sup> in their route?	😊 +1	😊 -1		
Are the shrubs trimmed exactly to specifications ( <b>no black lines visible on shrub borders</b> )	😊 +1 👁️ +3	😊 -2		
Are the plantings installed neatly in a visually appealing pattern? <i>You be the judge! Planting patterns not have to match picture.</i>	😊 +2 👁️ +5	😊 -1 👁️ +1		
Are annuals planted correctly – do beds have correct <u>colors?</u> Did they plant (approx.) the correct # of plants?	😊 +1	😊 -2 👁️ -2		
Did the crew accurately replace red plantings with orange plantings?	😊 +1	😊 -2 👁️ -2		
Green plantings (tall grasses) are either at the back, or in the middle of gardens. No more than 6 planted in front bed.	😊 +1	😊 -2 👁️ -2		



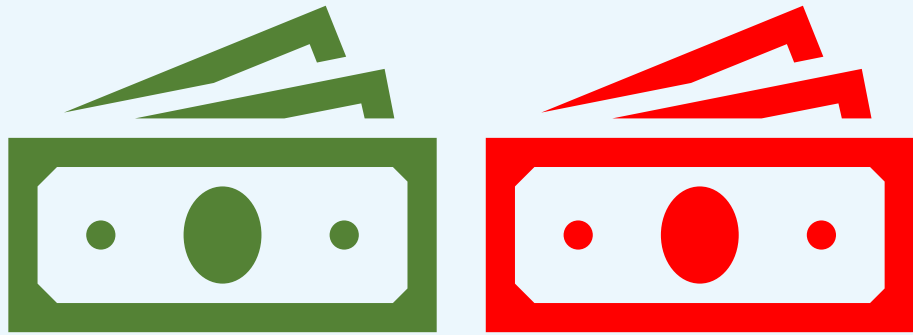
# Customer Scoring

- Leave with everything they needed?
- Sites in the right order?
- Mowing 'striped' (or done neatly)?
- Right order of operations?
- Over-service? Under-service?
- Ask questions?





# The Scoring



revenue  
or cost



customer  
satisfaction



# Go!

- Owners
- Account Managers
- Ops Managers
- Foreman
- Accounting officers



# Lesson One: Plan Our Routes

100% didn't ask  
which site to do first.

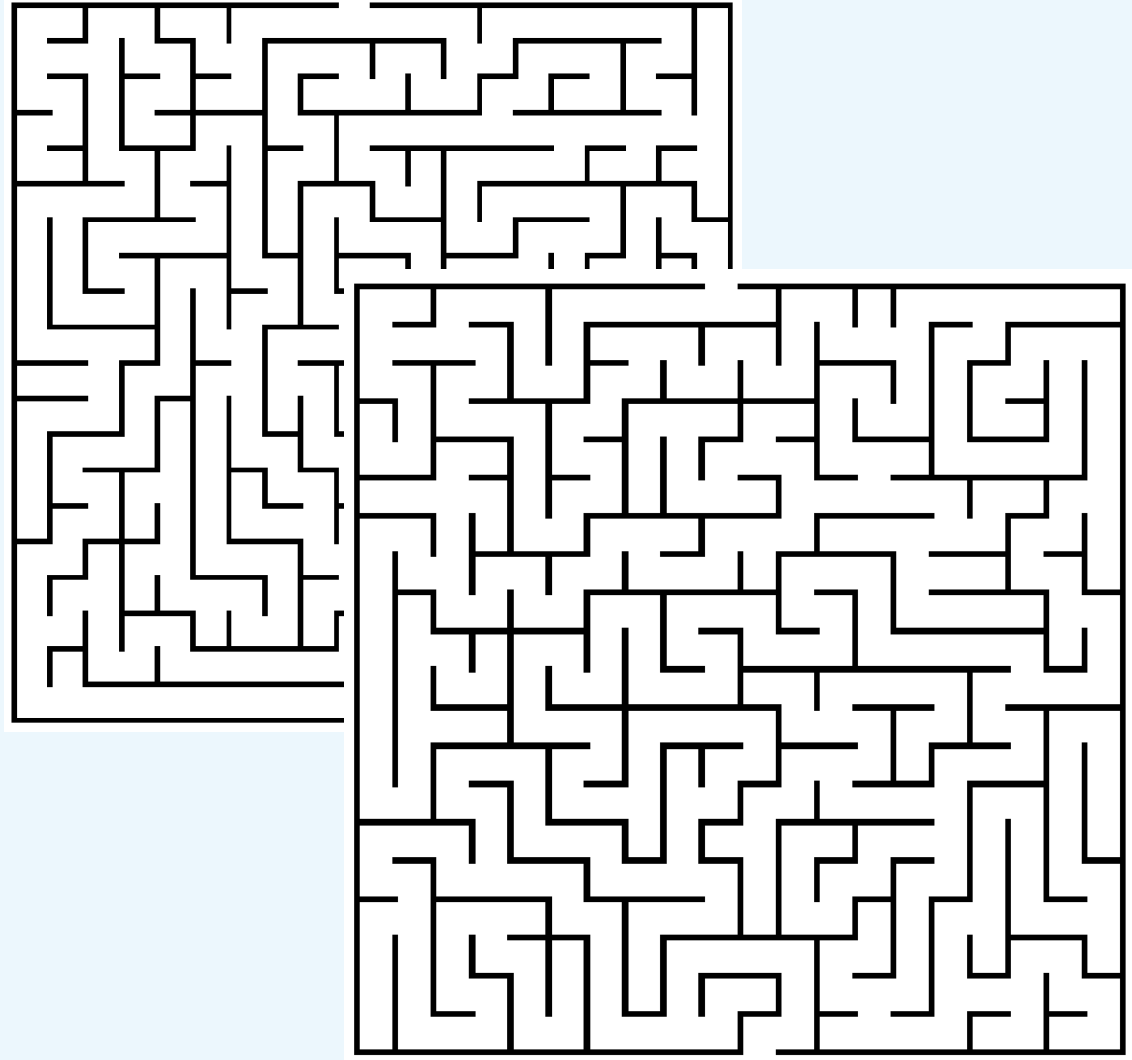
100% guessed **wrong**.



**Where are  
you?!?!?!?**



# The Penalty



# Lesson One: Setup Job Groups or Schedule, Verify

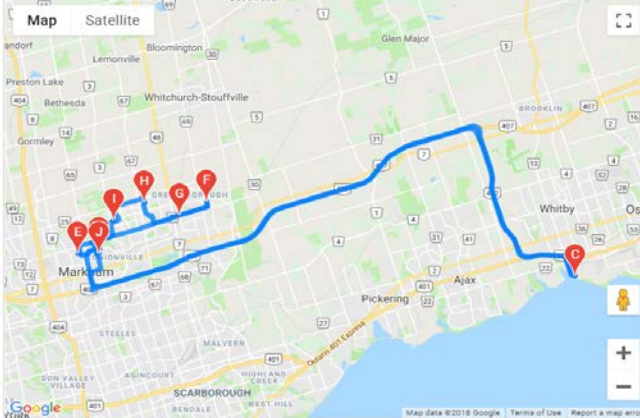
**lmntime** time schedule jobs staff invoices settings reports logout

active jobs  
inactive jobs  
all jobs  
**job groups**  
live map  
jobsite history  
jobsite watch

SNO-A03

GROUP  
MAP

Click this button to view this route on a map



14 Wentworth Ct, Unionville, ON L3R 7N5, Canada

1 m. About 1 min

1. Head on Wentworth Ct 1 m

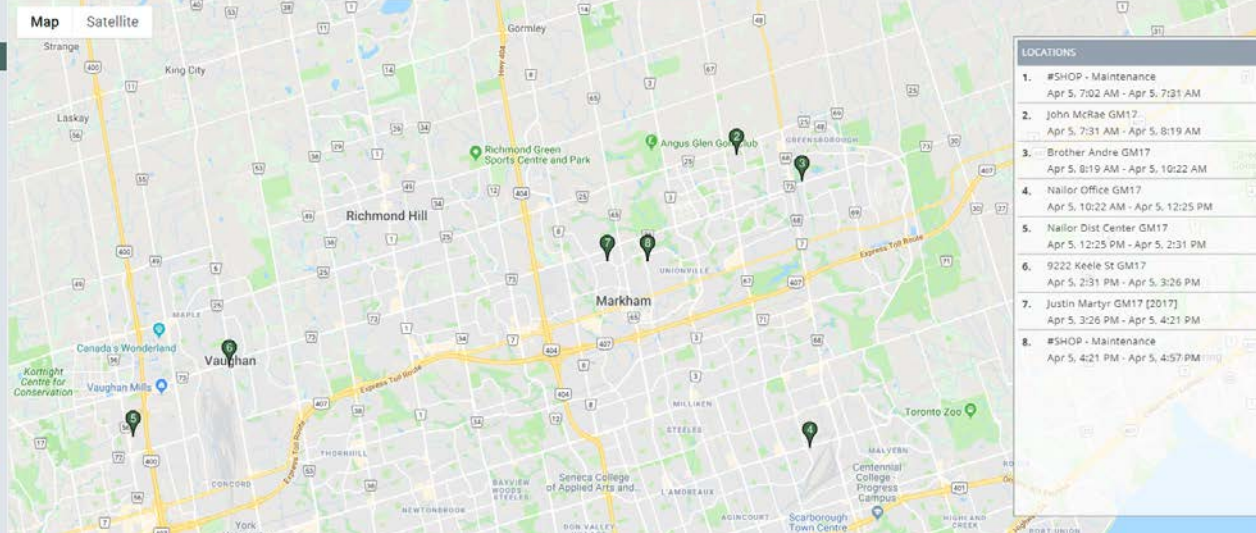
47.3 km. About 39 mins

1. Head west on Wentworth Ct toward Village Pkwy 0.1 km
2. Turn left onto Village Pkwy 0.8 km
3. At the roundabout, continue straight to stay on Village Pkwy 0.3 km
4. Turn right onto Hwy 7/York Regional Rd 7 0.8 km
5. Turn left onto Warden Ave/York Regional Rd 65 1.3 km
6. Take the ramp onto Express Toll Route/ON-407 E Continue to follow ON-407 E Partial toll road 28.4 km
7. Take exit 112 for Ontario 412 toward Ontario 401 1.1 km

time schedule jobs **staff** invoices settings reports logout

Supervisor: Ron Dugay Date: Thu Apr 5 2018 Show: Job Location **Show Progress** ☒ Show Legend?

Map Satellite



LOCATIONS

1. #SHOP - Maintenance  
Apr 5, 7:02 AM - Apr 5, 7:31 AM
2. John McRae GM17  
Apr 5, 7:31 AM - Apr 5, 8:19 AM
3. Brother Andre GM17  
Apr 5, 8:19 AM - Apr 5, 10:22 AM
4. Nailor Office GM17  
Apr 5, 10:22 AM - Apr 5, 12:25 PM
5. Nailor Dist Center GM17  
Apr 5, 12:25 PM - Apr 5, 2:31 PM
6. 9222 Keele St GM17  
Apr 5, 2:31 PM - Apr 5, 3:26 PM
7. Justin Martyr GM17 [2017]  
Apr 5, 3:26 PM - Apr 5, 4:21 PM
8. #SHOP - Maintenance  
Apr 5, 4:21 PM - Apr 5, 4:57 PM



# Lesson One: Plan Our Routes

Problems	How To Fix
<ul style="list-style-type: none"><li>• Upset customers</li></ul>	<ul style="list-style-type: none"><li>• Job Groups as Routes</li></ul>
<ul style="list-style-type: none"><li>• Interrupt 'flow' – 2x driving</li></ul>	<ul style="list-style-type: none"><li>• Schedule / Whiteboard</li></ul>
<ul style="list-style-type: none"><li>• Wasted time &amp; fuel</li></ul>	<ul style="list-style-type: none"><li>• Optimize your routes</li></ul>
	<ul style="list-style-type: none"><li>• Real-time verification</li></ul>





# Lesson Two: Prepare Better

**95%** left without the required tools.



# Lesson Two: Prepare Better

Problems	How To Fix
<ul style="list-style-type: none"><li>• Lost opportunity</li></ul>	<ul style="list-style-type: none"><li>• Job Planners</li></ul>
<ul style="list-style-type: none"><li>• Lost fuel costs</li></ul>	<ul style="list-style-type: none"><li>• Crew notes in estimates</li></ul>
<ul style="list-style-type: none"><li>• Job done incorrectly</li></ul>	<ul style="list-style-type: none"><li>• Crew notes in templates</li></ul>
<ul style="list-style-type: none"><li>• Unsupervised labor</li></ul>	<ul style="list-style-type: none"><li>• 5S trailers &amp; shop</li></ul>
<ul style="list-style-type: none"><li>• Frustrated staff &amp; mgmt</li></ul>	





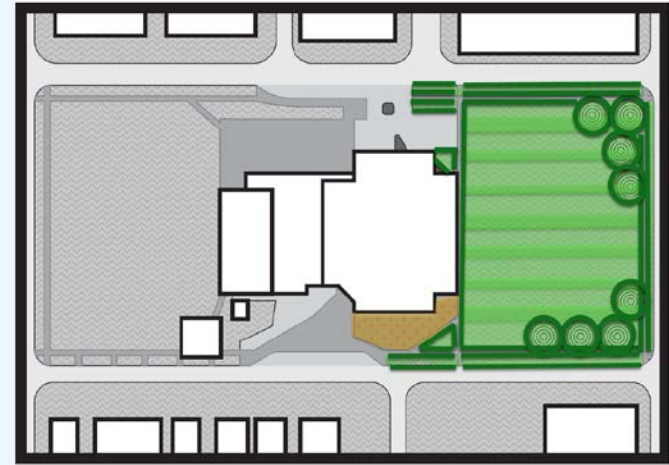
# Lesson Two: 5S Your Trailers and Shop



# Lesson Three: Scope The Job

90% **over-serviced** the sites

- Areas outside scope
- Missed areas in scope
- Planted too much
- Pruned improperly



# Lesson Three: Scope the Work

Problems	How To Fix
<ul style="list-style-type: none"><li>• Unrecovered costs</li></ul>	<ul style="list-style-type: none"><li>• Make notes on estimate</li></ul>
<ul style="list-style-type: none"><li>• Lost profit</li></ul>	<ul style="list-style-type: none"><li>• Import notes to LMN Time</li></ul>
<ul style="list-style-type: none"><li>• Lost opportunity</li></ul>	<ul style="list-style-type: none"><li>• Task Notes on clock in</li></ul>
<ul style="list-style-type: none"><li>• Liability (snow)</li></ul>	<ul style="list-style-type: none"><li>• Upload site maps</li></ul>
<ul style="list-style-type: none"><li>• Upset customers</li></ul>	<ul style="list-style-type: none"><li>• Default material qty</li></ul>



## Lesson Three: Scope The Job

**“Every hour spent planning jobs saves 10 hours of problems in the field.”**





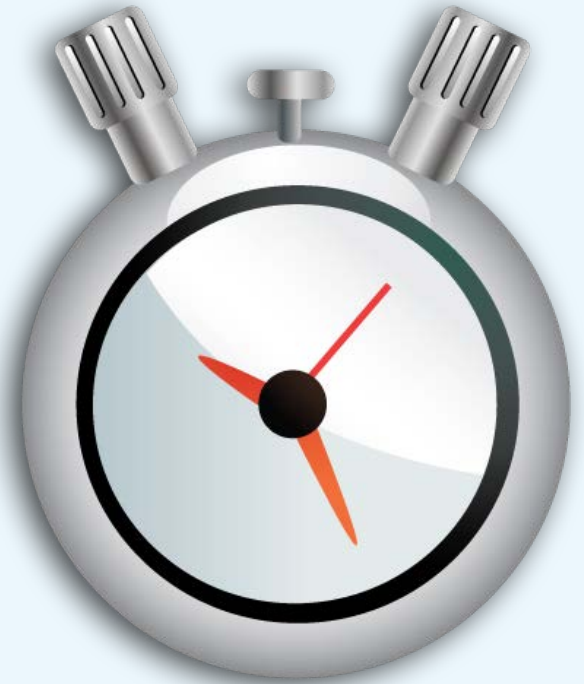
# Lesson Three: Upload Site Maps



# Lesson Four: **Manage Time**

**90% didn't manage their **time**.**

- **Took too long**
- **Did not finish in allotted time.**



Problems	How To Fix
<ul style="list-style-type: none"><li>• Lost profit</li></ul>	<ul style="list-style-type: none"><li>• Estimates based on man hrs</li></ul>
<ul style="list-style-type: none"><li>• Lost opportunity</li></ul>	<ul style="list-style-type: none"><li>• Estimated hours in LMN Time</li></ul>
<ul style="list-style-type: none"><li>• Future poor estimates</li></ul>	<ul style="list-style-type: none"><li>• Task Notes</li></ul>
	<ul style="list-style-type: none"><li>• Monitor &amp; give feedback</li></ul>
	<ul style="list-style-type: none"><li>• Foreman Daily Review</li></ul>



# Lesson Four: Use Estimated Hours, Task Notes

Review Task

Acme Plaza (Contract)

103 Victoria St E, Whitby, ON L1N 9L8

Task: Weekly Maintenance

Jun 18, 9:38 AM - Jun 18, 11:24 AM

Status: 10%

Estimated/Actual Hrs: 78.00 / 7.68

Estimated Man Hrs/Visit: 2h 31m

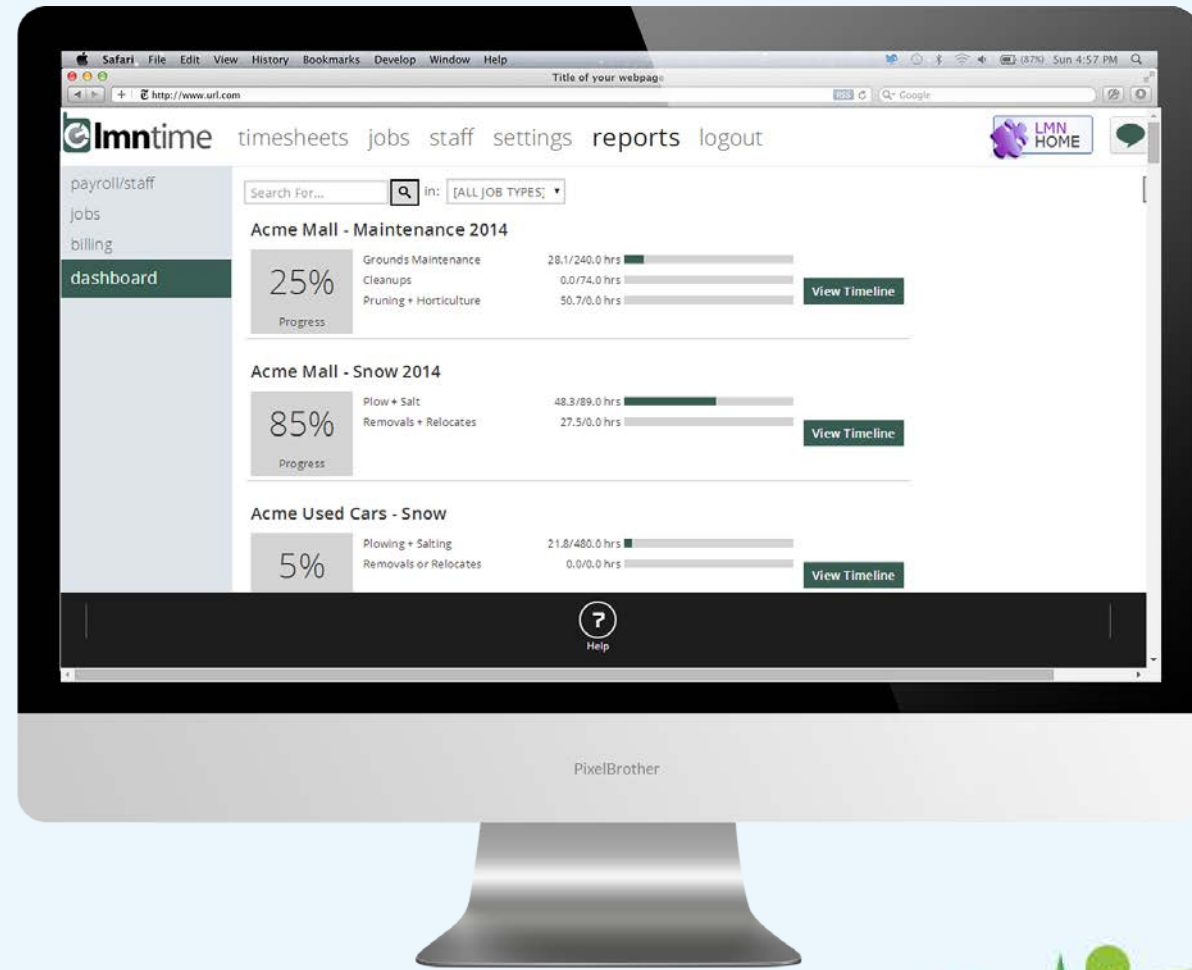
Job Notes

Be sure to cut the blvd and blow the walks.  
Asegúrese de cortar el blvd y soplar las caminatas.

Map Site Other

Task Notes

Cancel Delete OK





# Lesson Five: Don't Rely on Memory

Immediately after the end of the 20 min game, crews were asked to fill out a timesheet for their jobs.

Employee: Dave Smith Week Ending: 16/05/2007

Shift: Day ☒ Night ☐ Arvo ☐

	Work Times						Office Use Only				
	Date	Job Description	Start	Break	Finish	Total Hours	Total Norm	Total T*1.50	Total Dble	Crib	Meals
Monday	12-05	Gold job	07:00	30	17:00	1.0					
Tuesday	13-05	Lendlease	07:00	45	17:30	10.15					
Wednesday	14-05	Traffic control	07:00	30	14:00	1.0					
Thursday	15-05	King Street	07:00	30	17:00	1.0					
Friday	16-05	Lendlease	07:00	30	17:00	1.0					
Saturday											
Sunday											
TOTAL HOURS WORKED:						50.15					

Important Note: Time sheet to be faxed mailed or emailed to the office no later than 9am Monday. Fax 03 9781 2009

Employee Signature: [Signature] Supervisor's Signature: \_\_\_\_\_



# Lesson Five: Don't Rely on Memory

100% messed up paperwork

- Incorrect start/end times
- Incorrect date
- No employee names
- No am/pm

Employee: Dave Smith Week Ending: 16/05/07

Shift: Day ☒ Night ☐ Arvo ☐

	Work Times						Office Use Only				
	Date	Job Description	Start	Break	Finish	Total Hours	Total Norm	Total T*1.50	Total Dble	Crib	Meals
Monday	12-05	Gold job	07:00	30	17:00	10					
Tuesday	13-05	Lendlease	07:00	45	17:30	10.15					
Wednesday	14-05	Traffic control	07:00	30	14:00	10					
Thursday	15-05	King Street	07:00	30	17:00	10					
Friday	16-05	Lendlease	07:00	30	17:00	10					
Saturday											
Sunday											
TOTAL HOURS WORKED:						50.15					

Important Note: Time sheet to be faxed mailed or emailed to the office no later than 9am Monday. Fax 03 9781 2009

Employee Signature: [Signature] Supervisor's Signature: \_\_\_\_\_



# Lesson Five: Don't Rely on Memory

Problems	How To Fix
<ul style="list-style-type: none"><li>• Unreliable jobcosting</li></ul>	<ul style="list-style-type: none"><li>• Real-time monitoring</li></ul>
<ul style="list-style-type: none"><li>• Time wasted entering data</li></ul>	<ul style="list-style-type: none"><li>• Verify &amp; enforce</li></ul>
<ul style="list-style-type: none"><li>• Future poor estimates</li></ul>	<ul style="list-style-type: none"><li>• Give feedback</li></ul>
<ul style="list-style-type: none"><li>• Worse customer service</li></ul>	
<ul style="list-style-type: none"><li>• Payroll cheating</li></ul>	



# Lesson Five: Don't Rely on Memory



time schedule jobs **staff** invoices settings reports logout

staff

staff groups

crew locations

crew progress

**where are they?**

daily dashboard

Period: Last 48 hours

Sorted By: Employee Name

## Clocked In

EMPLOYEE NAME	SUPERVISOR	TIME IN	CURRENT TASK	DIST	
Chico Resch	Chris Terreri	Sep 17, 2:50 pm	6160 16th Ave E [SNO18] : Snowplowing Lot	7.9 km	
Chris Terreri	Chris Terreri	Sep 17, 2:50 pm	6160 16th Ave E [SNO18] : Snowplowing Lot	7.9 km	
Dave Sanders	Gino Odjick	Sep 17, 4:07 pm	3450 McNicoll GM17 : Mowing	10.7 km	
Jay Way	Chris Terreri	Sep 17, 2:50 pm	6160 16th Ave E [SNO18] : Snowplowing Lot	7.9 km	
Jeff Polonus	Gino Odjick	Sep 17, 4:07 pm	3450 McNicoll GM17 : Mowing	10.7 km	
John Doe	Ron Dugay	Sep 17, 3:49 pm	201 Hollingham Rd [SNO18] : Snow + Ice Control	14.8 km	
Lonny Bohonos	Ron Dugay	Sep 17, 3:49 pm	201 Hollingham Rd [SNO18] : Snow + Ice Control	14.8 km	
Ron Dugay	Ron Dugay	Sep 17, 3:49 pm	201 Hollingham Rd [SNO18] : Snow + Ice Control	14.8 km	



## Round #2

**We then play the game again... but this time, crews are given the app with:**

- **Mazes with solutions (routes) in the correct order**
- **Color coded 'solution sheets' (site maps)**
- **Estimated time goals + important notes**



# The Final Scores

Game Subjects	\$/min Round 1	\$/min Round 2
Group #1	\$4.00	\$14.00
Group #2	<b>\$-5.00</b>	\$15.00
Group #3	\$2.00	\$15.00
Group #4	\$1.00	\$13.50
Group #5	\$0.50	\$14.50



What's the cost of  
assuming **common**  
**sense**?



# The Cost of Assuming Common Sense

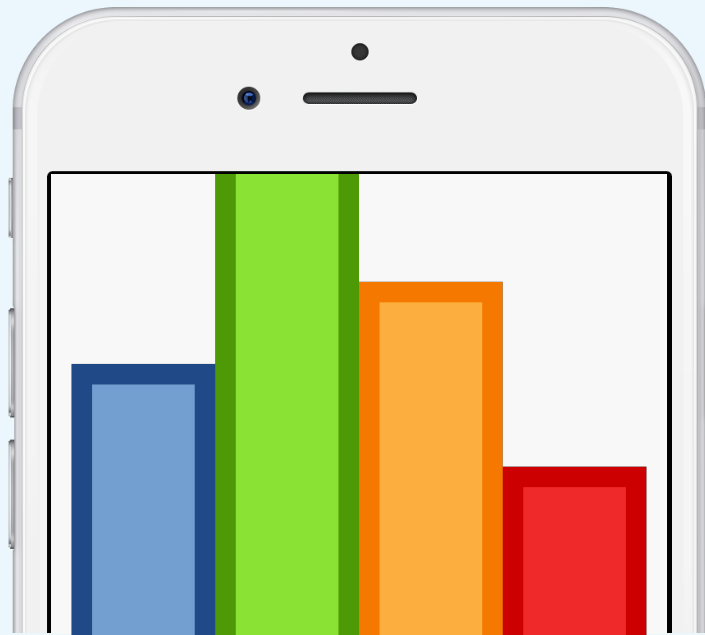
Problem	Hrs/Week	Cost/Wk	Cost/Yr
Getting lost/traffic/wrong turns	.5 hrs	\$165	\$5,950
Forgetting tools & equip	2 hrs	\$650	\$23,400
Rework / Fixing Mistakes	1.5 hrs	\$490	\$17,640
Waiting for Instructions/Ppl	.75 hrs	\$245	\$8,820
Payroll rounding/cheating (10 min)	2.5 hrs	\$815	\$29,340
Waiting for whole crew to finish	1 hr	\$325	\$11,700
Loading truck & trailer	1.75 hrs	\$570	\$18,240





[www.menti.com](https://www.menti.com)

82 11 01





**Trade 1 idea for 100...**

**Share your best idea(s) from last year that:**

- **Increased revenue**
  - **Reduced costs**
- **Increased productivity**





# Improving Efficiency

## Question + Answers

