

# The Changing Landscape of IT in Solid Waste & Recycling

By: Horacio Marmolejo Jr.

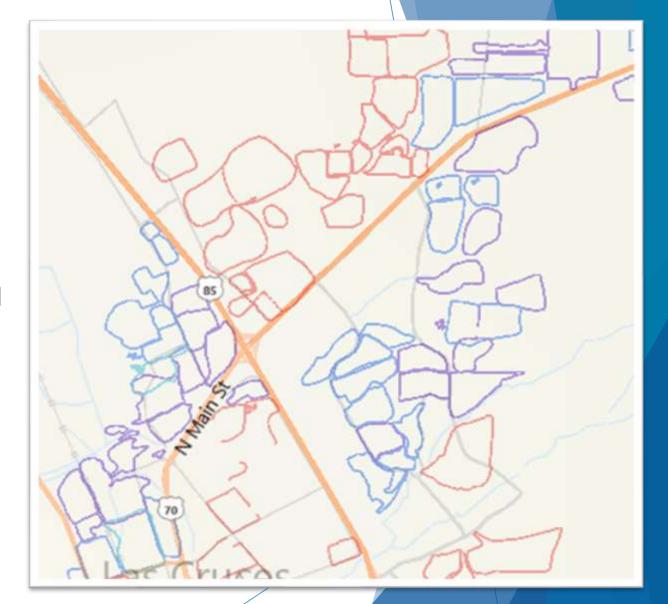
Network Administrator

South Central Solid Waste Authority



# **Imagine**

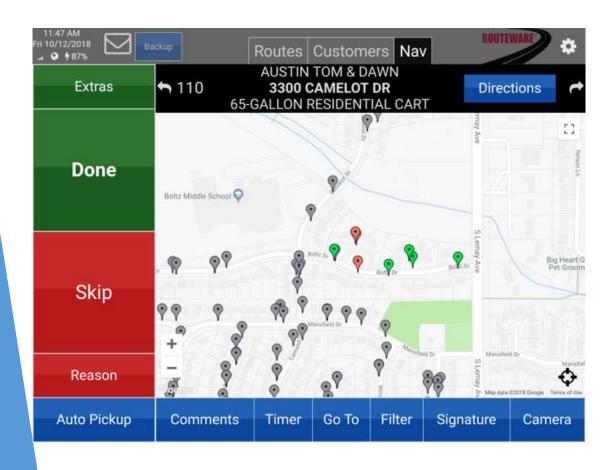
- ➤ You are a truck driver, and you receive this printed paper map displaying your route.
- Mid way through your shift you're told that a co-worker's truck broke down and you need to help with their route.
- What do you do to remember your new pick ups?
- How do you remember what addresses you didn't pick up and why?





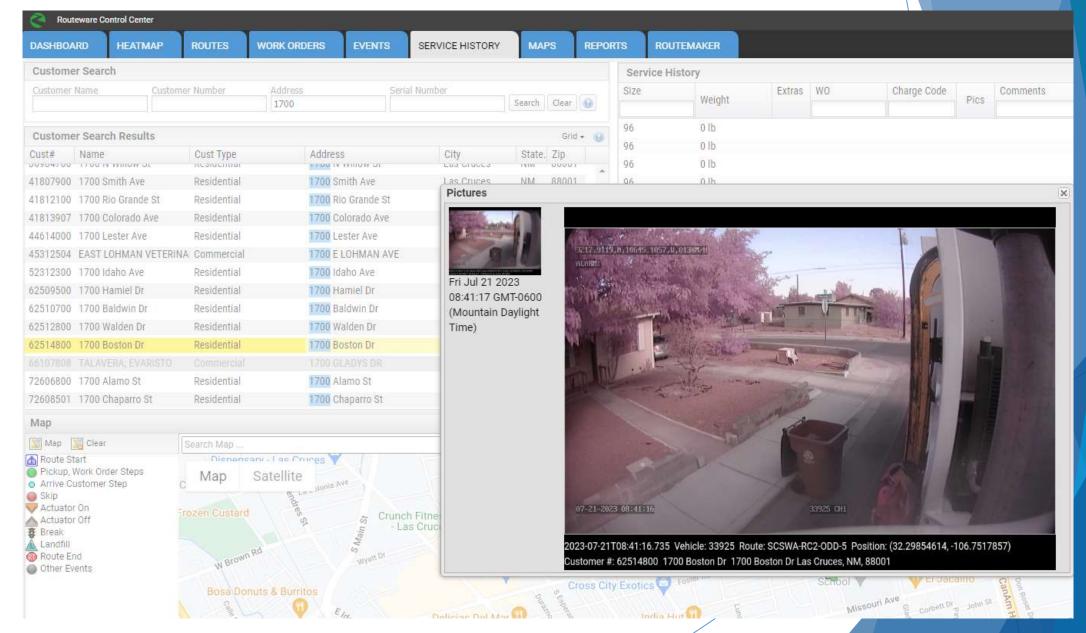
#### **ROUTING SOFTWARE- DRIVER**

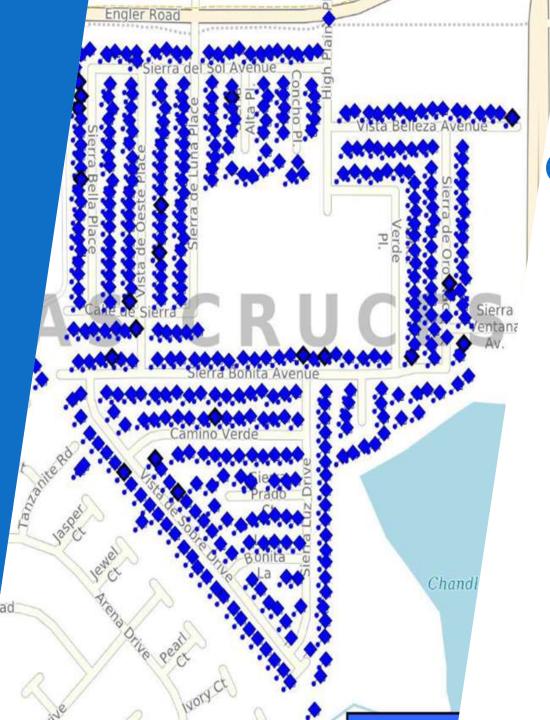
- Navigation
- Completion status
- Report Issues



11:46 AM Sat 4/21/2018 ■ Ba	ckup	Routes	Custome	ers Nav	ROUTE	WARE .		
Extras	10	Bob Evans #2043  New Philadelphia  Customer: 271446 Container: 06F014003  06 YD Front Load Container						
	20 Red Lobster #564 06 YD Front Load Container							
Done	30	Lee's Famous Recipe 06 YD Front Load Container						
	40		About Childre Front Load Co					
Skip	50 First Baptist Church 08 YD Front Load Container							
	55 Piedmont Gas 02 YD Front Load Container							
Reason	60 Hog Heaven 08 YD Front Load Container							
TCGGGT	Super 8							
Auto Pickup	Comments	Timer	Go To	Filter	Signature	Camera		







#### CUSTOMER SERVICE

- ▶ Create efficient routes
- ► Easily see and adjust
- ▶ Reliable
- Customer Services
- ▶ Vehicle statistics





33532

SUV - 2020 Ford EcoSport - MAJ3S2FE3LC332710 - 10473G

12,790 mi

- Active
- Administration ե

Horacio Marmolejo

@ Edit Labels

Overview

Specs

Financial

Inspection History

Work Orders

Issues

Meter History

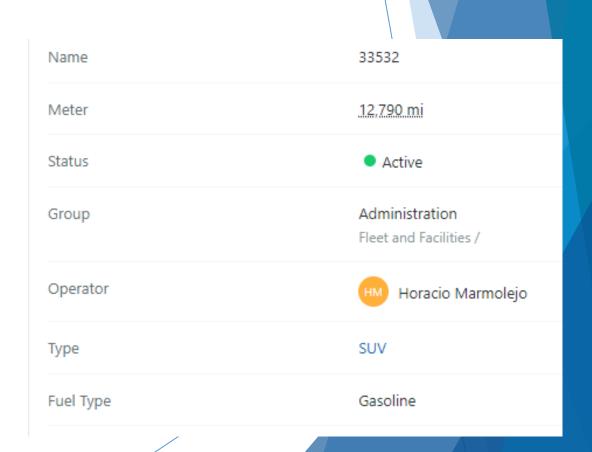
Fuel History

Assignment History

Parts History

#### FLEET SOFTWARE

- ► Reliable
- One stop shop
- Routine maintenance
- Update instantly and sends notices
- Trailers and generators





42	Cooling system Exhaust system Oil, water, windshield solvent Leaks-water, oil, fuel, grease eits-Fan, alternator, empressor etc. I CAB 2 Cab condition - locks, coors mountings etc. 2 Mirrors, windshield, windows 2 Wipers and washers	0 0000 0000	0 0000 000	53 Emergency equipment-fire extinguisher, triangles, fuses 02 Seat belta - sleeper restrain 15 Steering 12 Brakes-service, parking 22 Clutch EXTERIOR 34 Lights, flashers, signale 34 Reflectors 17 Tires
43   45   60   60   60   60   60   60   60   6	Exhaust system Oil, water, windshield solvent I Leaks-water, oil, fuel, grease eits-Fan, alternator, empressor etc. I CAB 2 Cab condition - locks, cors mountings etc. 2 Mirrors, windshield, windows 2 Wipers and washers	0000 0000	0000 0000	02 Seat belta - sleeper restrain 15 Steering 13 Brakes-norvice, parking 22 Clutch EXTERIOR 34 Lights, flashers, signals 34 Reflectors
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44     86   10   02   03   04   05   05   05   05   05   05   05   05	Leaks-water, oil, fuel, grease aits-Fan, alternator, empressor etc. 4 CAB 2 Cab condition - locks, cors mountings etc. 2 Mirrors, windshield, windows 2 Wipers and washers	00 0000	00 000	23 Clutch EXTERIOR 34 Lights, flashers, signals 34 Reflectors
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de   de   de   de   de   de   de   de	oors mountings etc. 2 Mirrors, windshield, windows 2 Wipers and washers	1000		Contract of the Contract of th
	2 Mirrors, windshield, windows 2 Wipers and washers			Section 1
	2 Wipers and washers			T. Hiss
·		The second second	-0	18 Wheels, lugs, studs, drums
	a market because		0	16 Chassis - Irame, tanks,
W	1 Defroster, heater			32 Battery
	4 Horn			16 Suspension
	3 Low air warning device			49 Fifth Wheel & Components
	3 instruments and gauges			NO DEFECTS FOUND
7-100	TOWED UNIT(S) MAR	RK (X)	FDEF	ECTIVE
0 0	9 Fifth wheel & Components			71 Cargo area condition
Secret Secret	3 Brake hoses & connections	- 0		71 Cargo Security Egpt.
	4 Electrical line, plug, receptacle			77 Landing gear
	4 Regrend protection			59 Kingpin/upper plate
	9 5th Wheel (Dolly) & Couplers			18 Wheels, Rims, Lugs
	& Suspension	0	I	NO DEFECTS FOUND
-	17 Tires Con Course	200	46	s some com
Truck Regis	tration 1997	STEWE ST	6	Deux ruls on
Explanation of I		OW	A F F	TO ALL COLOR
	The Later Land	50		- K-15-15
Driver	ENGINEE FARE OF	-		Date 13
Maintenance:	All repairs made (Circle made	ked iten	ts abov	e NOT needing repairs.)
Certified by			ation _	The same of
	Next to			
Date	Duty D			
	WHITE - MAINTENANCE - CA			

Inspection Items	
Odometer Reading	12,705 mi
Item Checklist	
Engine	✓ Pass
Transmission	✓ Pass
Steering Mechanism	✓ Pass
Horn	✓ Pass
Windshield Wipers/Washers	✓ Pass
Rear Vision Mirrors	✓ Pass
Lighting Devices and Reflectors	✓ Pass
Parking Brake	✓ Pass
Service Brakes	✓ Pass
Tires	✓ Pass
Wheels and Rims	✓ Pass
Emergency Equipment	✓ Pass
Sign-Off	
Vehicle condition OK This must be checked if there are no defects.	✓ Pass
Reviewing Driver's Signature	$\mathcal{M}$



## Learning Management Solution

(LMS)

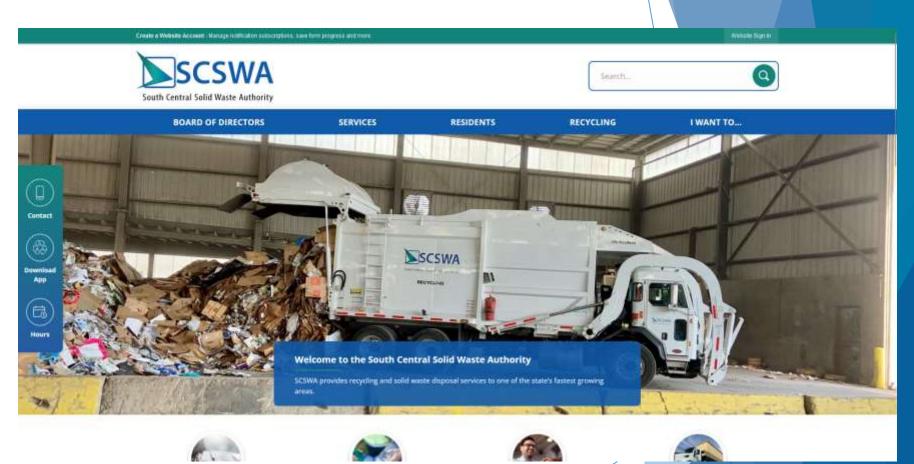
- ► Can be done at any time in any place
- Keeps track of who has completed each training
- Keeps employees safe
- Prevents down time

▼ CREDENTIAL
23-24 Admin
23-24 Cybersecurity
23-24 Defensive Driving
New LMS Administrator Site Training
OSHA Training
SCSWA Asbestos Training
SCSWA Coronavirus Training
SCSWA Cyber Security Training for IT Staff
SCSWA Defensive Driving Training
SCSWA Staff General Training



#### **WEBSITE**

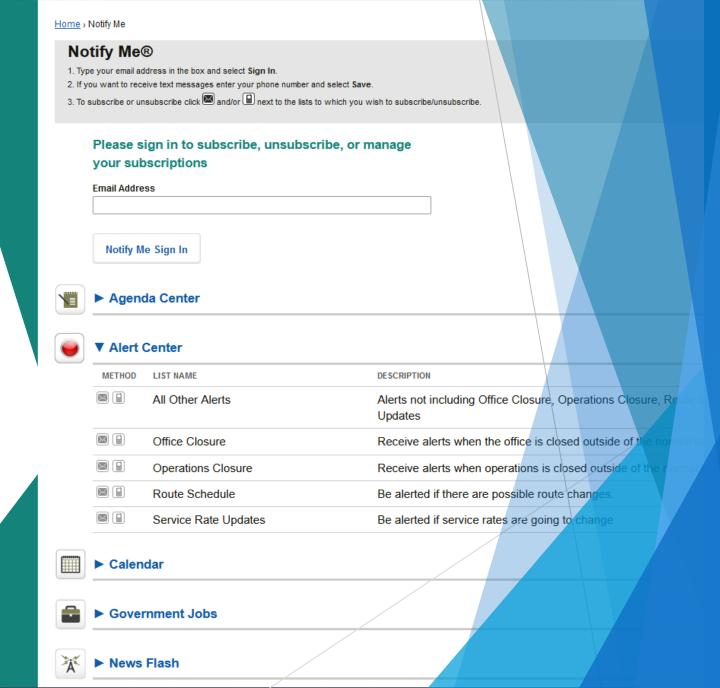
- Articles
- **▶** Job opportunities
- Recycling app
- scswa.net





# WEBSITE CUSTOMER VIEW

- ▶ Alerts
- Find information
- ► Submit Questions/forms





# ARTIFICIAL INTELLIGENCE- AI

- > AI- artificial intelligence simulation of human intelligence processes by computer systems.
- Identify contaminants in recycling
- Notify customer and send flyer



s://www.techtarget.com/searchenterpriseai/definition/Al-Artificial-Intelligences://www.colorado.edu/ecenter/2022/04/06/ai-robotics-

cling#:-:text=Al%20and%20AMP%20Robotics&text=One%20of%20the%20most%20widely,papers%2C%20plastics%2C%20and%20metals ://techcrunch.com/2022/08/12/trashbot-uses-ai-to-sort-recyclables/



### **CONTACT INFORMATION**

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