



**Routing & Navigation Solution for
Refuse Collection Services**

City of Broken Arrow

RFP #17.166 Refuse Route Software

- Routeware Company Overview
- Main Features and Equipment
- Hardware and Equipment Photos
- On-board Computer Screen Shots
- Control Center
- Control Center Tools and Reports
- Benefits of

Routeware Overview



- 18 Years Focused Exclusively on the Waste Hauling Industry
- Headquartered in Portland, OR
- Thousands of Trucks at Hundreds of Locations Throughout the U.S. and Canada
- Municipalities include Chicago, Denver, Lexington, Minneapolis, San Francisco
- American Made



Main Features



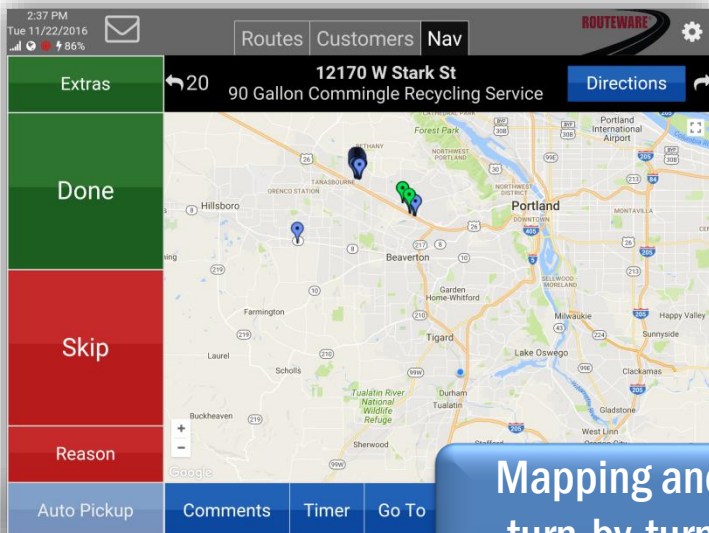
OGDEN KRISTINA & DEREK (Acct: 1617)
2715 HOLLY PL
2/1/2012 7:24:45 AM (40.56621 -105.128)

**Pictures AND
Video**

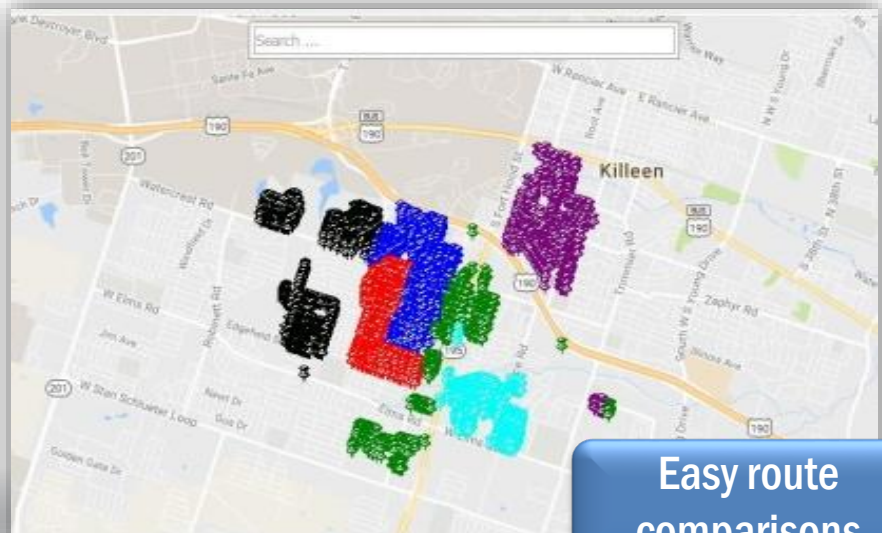
66 Vehicles

Vehicle	Driver	Vehicle Type	Route	Heat Index	Miles	Idle Time	Park Time	Time	Max Speed	
335	RAMOS, VIVIANO	Commercial ...	CF1-TUE-2	30	132	01:17		09:22	70	04:00
327	GOLAN, GLENN	Greeley Fro...	CF10-TUE-2	0						
349	KUBIS, DEAN	Greeley Fro...	CF11-TUE-2	0						
336	CRAWFORD, JAMIE	Commercial ...	CF2-TUE-2	0						
341	STERLING, JAMES	Commercial ...	CF2-TUE-2 (h1)	36	67	02:51		09:25	61	
528	BEEKS, ROBERT	Greeley Fro...	CF20-TUE-2	0						
335	CORIO, BRAD	Commercial ...	CF3-TUE-2	0						
336	SWEDBERG, JUSTIN	Commercial ...	CF3-TUE-2 (h1)	27	116	01:28		09:34	70	
358	STEINHAUER, RYAN	Commercial ...	CR1-TUE-2	32	54	02:34		08:00	60	
359	POTTER, JERRY	Commercial ...	CR2-TUE-2	30	82					
337	THOMAS, DONALD	Commercial ...	CR3-TUE-2	35	70					
329	BEHM, KALEB	Residential ...	CR3-TUE-2	0						
344	SMITH, MERCURY	Commercial ...	CR4-TUE-2	33	70					
343	BATEMAN, WILL	Commercial ...	CR5-TUE-2	24	60					
339	DIROCCO, JOHN	Commercial ...	CR6-TUE-2	29	55					
340	SAGERT, CAMERON	Commercial ...	CR7-TUE-2	21	75	01:34		08:41	55	

**Truck
Monitoring/Alerts**



**Mapping and
turn-by-turn**



**Easy route
comparisons**

In- Cab Hardware and Equipment Photos

ROUTEWARE®

In-Cab Accessories (Mount, Cradle, Cabling)



Windows Tablet



Smart Truck Feature: RFID Reader



Routeware On-Board Technology



- Includes an on-board computer in the truck and a back-office software
- Provides automation and operations efficiency through fleet management and GPS routing solutions



Options Mail:1 Status Customer Nav 8:38 THU 8/18

Auto Pickup

Done

Skip

6230 AVIATION CIR, LOVELAND
BRAYDEN AUTOMATION CORP
Customer: 975744
Container: N/A
2Y BIN 1XW FL

>Make sure you put the dumpster back in the enclosure< (KNA 06/02/09)
*PLEASE LOG RECYCLE CART
THANKS BKD

0	✓	5803 LOCKHEED / 3Y BIN 2XW FL
10	✗	3825 E COUNTY R 4Y BIN 2XW FL
20	✓	6230 AVIATION CIR 2Y BIN 1XW FL
50		6350 AVIATION CIR 2Y FL MONTHLY
60		5840 BYRD DR 2Y BIN 2XW FL

Extras Skips Comments Timers Jump Filter Directions Cameras

Regularly Scheduled Route Screen



Options

Mail: 1

Status

Customer

Nav

9:36 THU 4/27

Auto Pickup

Done

Skip

2607 ANTELOPE RD, FORT COLLINS
BUSSELL TRISHA
Customer: 881394
Container: N/A
65-GALLON RESIDENTIAL CART

110 2618 WAPITI RD
95-GALLON RESID

140 2600 WAPITI RD
65-GALLON RESIDENTIAL CART

150 2607 ANTELOPE RD
65-GALLON RESIDENTIAL CART

160 2613 ANTELOPE RD
65-GALLON RESIDENTIAL CART

170 2619 ANTELOPE RD
35-GALLON RESIDENTIAL CART

QUIT BFI DUE TO BAD
SERVICE/THEY WEREN'T
GETTING P/U/ELA 1-21-05
*DRIVER PLEASE MAKE
SURE CART IS EMPTY*CT
11-6-6

Extras

Skips

Comments

Timers

Jump

Filter

Directions

Cameras

Mapping Screen



Easily Enter Extras



Back

Extras

9:35 THU
4 / 27

2163850

Pick Up

0

ARMOUR ALAN
3113 RED MOUNTAIN DR, FORT COLL
65G RES RECYCLE (1960785)

Extra Can(s) or Bag(s)

BOX(ES) <= 32GAL

BOX(ES) 64 GAL

BOX(ES) 100 GAL

BOX(ES) 100+ GAL

Large Item(s)

Extra Trash - Please list

Branches/Limbs

Xtra - Yardwaste

Overweight

Special Pickup

Enter Quantity

1

2

3

4

5

6

7

8

9

.

0

Del

Cancel

Save

▼

▲

Pictures: Improve Customer Service



LEDDER DRU (Acct: 146390)
3027 LUCINDA CT
9/12/2011 9:07:02 AM (40.55122 -105.13325)



OGDEN KRISTINA & DEREK (Acct: 1617110)
2715 HOLLY PL
2/1/2012 7:24:45 AM (40.56621 -105.12862)

Photos eliminate doubt about extras or “cart not out” and are easily e-mailed or attached to customer statements.

11

Target Setting: "Raise the Bar" Every Month



Idle

Idle Events 0 To 10 Min



Idle Events 10 To 20 Min



Idle Events Greater Than 20 Min



Idle Event Count



Idle Time 0 To 10 Min



Idle Time 10 To 20 Min



Idle Time Greater Than 20 Min



Idle Now Minutes



Idle Percentage



Idle Time Minutes

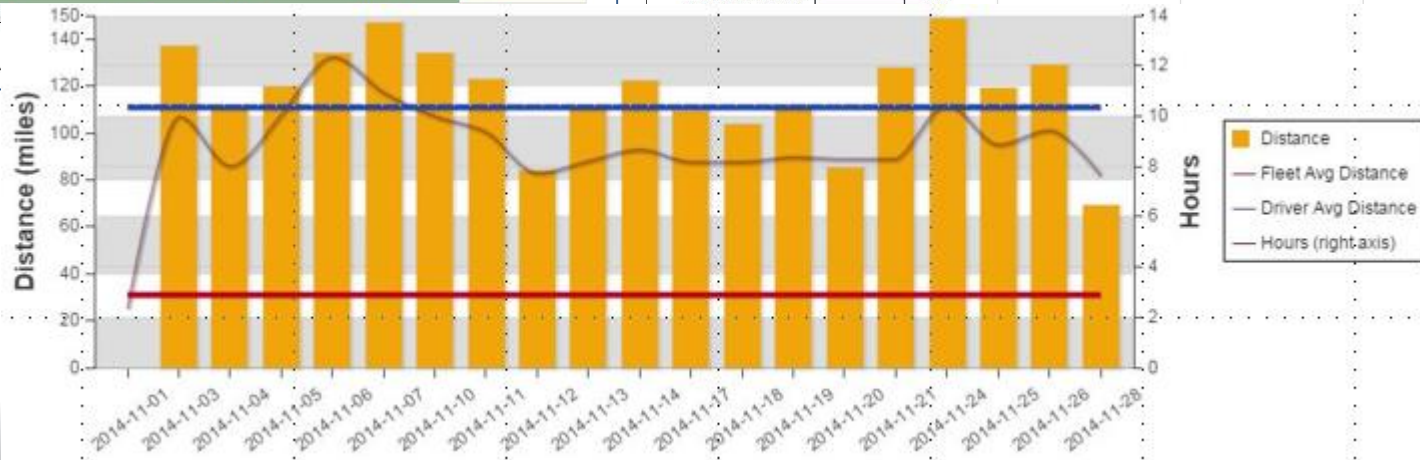
Over 1000 *Prebuilt* Report Views



Trend Idle Time Per Month

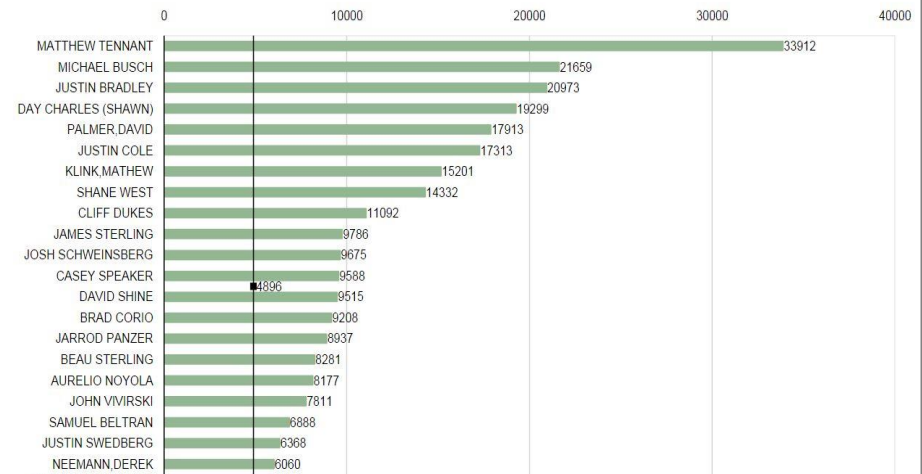
Driver Name	OCT	NOV	DEC	Average	Trend
AARON MCCOY	95.23	125.72	167.13	129.36	
ANTHONY HAMLET	104.15	112.83	95.03	104.00	
ARNOLD ATENCIO	104.25	153.10	244.46	167.27	
AURELIO NOYOLA	137.43	170.54	406.47	238.15	
AUSTIN SELF	0.00	9.92	6.01	5.31	
BATEMAN, WILL	88.84	116.21	115.76	106.94	
BEAU STERLING	144.45	101.53	103.76	116.58	
BEHM, KALEB	77.84	83.59	81.59	81.01	
BRAD CORIO	123.47	129.96	131.90	128.44	
BRANDEN KLYCZEK	529.65	115.61	94.88	246.71	
BRANDEN KLYCZEK	5.32	12.50	7.52	8.45	
BRETT GILBERT	93.69	99.22	98.15	97.02	
BRUCE WASSERBURGER	104.39	109.26	97.20	103.62	
CAMERON SAGERT	130.35	136.56	141.37	136.09	
CARLOS MOLINA	64.11	116.40	117.18	99.23	
CASEY SPEAKER	115.48	423.52	153.20	230.74	
CLIFF DUKES	100.60	107.72	91.24	99.85	
COLBERT, NATE	94.90	72.26	56.13	74.43	
COLE, JUSTIN	5.79	5.02	5.27	5.36	
CONTRERAS, JOSE	127.53	84.41	90.02	100.65	
DANIEL TAYLOR	126.24	89.76	94.90	103.63	
DAVID SHINE	125.53	111.97	124.30	120.60	
DAY CHARLES (SHAWN)	133.82	88.97	125.45	116.08	
DEHERRERA, JOHN	91.14	105.60	106.06	100.93	

DEREK NEEMANN 66



Total Speed Events

Start Date 10/1/2013 End Date 10/21/2013 Company Gallegos,joe,WDS Sort By Total Speed Events Detail Report



Benefits Gained Using Route Software



- Electronic routing in (OBC) On Board Computer
 - Assisting drivers and crews in maximizing route efficiency
 - Improve routing for both new and seasoned drivers with driver interface and real-time GPS and route maps
- Service verifications: pickups, skips, extras, timers, landfill trips, comments, ...
- Visibility of routes and trucks in real time data
- Data that can be used to improve operations
- Provides division capability to add additional services
- Can be installed in other utility vehicles to manage their routes

Recap of Benefits and Features



Department Goals

- Significantly higher employee productivity
- Higher efficiency



Drivers

- Routes easier to run
- New drivers learning curve greatly enhanced



Dispatchers

- More control, awareness
- Helper routes, simplicity, speed



Supervisors and Managers

- Improved documentation of service
- Faster starts, actionable data for driver coaching



I.T. Department

- Familiar technologies
- Easy deployments.



Customer Service

- Pictures and GPS tracking helps defend the division
- Keeps customer service at high levels and documents activities

Questions