

Route Optimization Setup

Last Modified on 01/12/2026 12:02 pm PST

The following article details how to use Route Optimization in Dispatch. Route optimization is an added feature in Navusoft that balances and reorganizes stops among routes to enhance operational efficiency.



IMPORTANT - Submit a Ticket Request to Navusoft for Route Optimization setup review, assistance and licensing.

DISPATCH										
FROM		TO	DIVISION			LINE OF BUSINESS				
02/17/23		02/17/23	CORPUS, DAYTON, HEARNE, HILLSBORO, HOUSTON, QAWASTE			Commercial				
Standard			Select Route Sheet							
<input type="checkbox"/>	ROUTE ↑	TRUCK	DRIVER			PRE TRIP	POST TRIP	OPTIMIZED	SCHEDULED	SERVICED
Friday Feb 17, 2023 (0 of 15 Completed)										
<input type="checkbox"/>	COR 201	951	Moses Espinoza - Driver						125	0
<input type="checkbox"/>	COR 202	952	Rudy Espinosa - Driver						91	0
<input type="checkbox"/>	COR 203	953	Marco Hurtado - Driver						132	0
<input type="checkbox"/>	COR DUMPSTER DELUREM								1	0
<input type="checkbox"/>	DAY 201	971	Perry Evans - Driver						102	0
<input type="checkbox"/>	DAY 202	972	Curtis Thulin - Driver						73	0
<input type="checkbox"/>	DAY 203	905	Albert Taylor - Driver						92	0
<input type="checkbox"/>	DAY 204								4	0
<input type="checkbox"/>	DAY 205								2	0
<input type="checkbox"/>	DAY CO SUB OUT								14	0
<input type="checkbox"/>	HOU 201	2003	William Trejo - Driver						122	0
<input type="checkbox"/>	HOU 202	2001	Ismael Fuentes - Driver						122	0
<input type="checkbox"/>	HOU 203	2002	David Vasquez - Driver				6:00 am - 7:39 pm		114	0
<input type="checkbox"/>	HOU 204	2000	Gyasi Edmond - Driver				6:00 am - 9:30 pm		105	0
<input type="checkbox"/>	HOU 206	2004	Michael Burrell - Driver				6:00 am - 6:55 pm		102	0

Permissions

The following permissions are required for route optimization setup:

Permission ID	Permission Name
5	View Account
6	View Site
24	Setup / Operations
87	Route Management

Setup: Facility

Pathway: Setup > Operations > Facility

When adding a facility, the address MUST BE geocoded to ensure route optimization uses the closest facility to the truck at the point on the route the truck is expected to be full. When entering an address, the system will begin to recommend addresses that match the current entry. Continue with the address entry until the correct address is populated in the results and select it from the list. Upon selection, any remaining address fields will be auto-populated and the disposal location geocoded.

FACILITY SETUP

+

TYPE

All

DIVISION

All

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Search

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ID	NAME	ABBREV	DIVISION	TYPE	ACTIVE	ADDRESS LINE 1	CITY	STATE	POSTAL CODE	SCALE UOM	WEIGHT UOM	VOLUME UOM	OWNERSHIP	SIGNATURE BY	SIGN	ICON
1001	CITY OF ALICE LF	AL														
1002	CEFE LF	CE														
1003	GULLEY HURST LF	GU														
1004	RSG-MAT & RECYCLING	MA														
1005	WM-BAYTOWN LF	WM														
1006	WM-ATASCOCITA LF	WM														
1007	RSG-EL CENTRO LF	EL														
1008	WM-SECURITY LF	WM														
1009	WCA-RALSTON ROAD...	WA														
1010	CITY OF KINGSVILLE LF	KIN														
1011	WCN-HARDY ROAD TS	WCN														
1012	CHAMBERS COUNTY LF	CH														
1013	DOLPHIN RECYCLING	DO														
1014	RSG-McCARTY ROAD LF	MA														

Business Hours

Division

+

TYPE

UPDATE FACILITY

Basic Settings

Label Scale Settings

NAME

RSG-EL CENTRO LF

ACTIVE

Active

ABBREVIATION

ELCNT

ENABLE INBOUND ORDER

No

TYPE

Landfill

ENABLE OUTBOUND ORDER

No

OWNERSHIP

DEFAULT SCALE UOM

ton

DIVISION

CORPUS

WEIGHT UOM

ton

ADDRESS LINE 1

69

VOLUME UOM

cubic yard

ADDRESS LINE 2

DEFAULT TRANSPORTATION METHOD

Truck

CITY

Robstown

DEFAULT SCALE TICKET FORMAT

STATE

TX

ONLINE ICON

Select Icon...

BROWSE...

POSTAL CODE

78380

SIGNATURE

Select Signature

BROWSE...

PHONE

🇺🇸

(361) 698-5000

MANIFEST SIGNATURE NAME

CONTACT NAME

EPA ID

Automatic Transfer Work Order

?

×

SITE ID

SITE NAME

SERVICE CODE

EVENT TYPE

STATE ID

GEOFENCE RADIUS (METERS)

100

AVERAGE DURATION (MINS)

0

Field Setup

Field	Description
Address Fields	Select the Geocoded address that displays when entering the address for the facility.

Setup: Truck

Pathway: Setup > Operations > Truck

Truck Setup helps route optimization determine where on the route to place a disposal trip based on where the truck is calculated to be full.

TRUCK SETUP

SETUP > OPERATIONS > TRUCK

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DIVISION

All

LINE OF BUSINESS

All

☐ Show Inactive

Search

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NAME	LICENSE PLATE	DIVISION	LINE OF BUSINESS	TRUCK TYPE	FUEL TYPE	VOLUME CAPACITY	COMPACTION RATIO	WEIGHT CAPACITY	TARE WEIGHT	INSPE... TYPE	CAMERA SYSTEM	CAMERA ID	ONBOARD SCALE	LAST ODOMETER	STATUS
1401		HOUSTON	Medical W...	Diesel		0 yd³		0 tons		DVIR	None		None	13,753 km 04/03/2024	Active
151	GNV3838	CORPUS	Residential	Other		0 yd³		7,100 lbs		DVIR	None		None	99 km 11/19/2024	Active
160	MYH6													5 km 02/24/2023	Active
2000	XYZ12													8,964 km 07/24/2024	Active
2001														5,650 km 07/19/2024	Active
2002														7,407 km 07/19/2024	Active
2003	H675A													6,667 mi 07/22/2024	Active
2004														5,560 km 07/22/2024	Active
2005															Active
2006														1,100 km 01/01/2024	Active

EDIT TRUCK

NAME

2001

TRUCK TYPE

TEST

DIVISION

HOUSTON

FUEL TYPE

Other

LINE OF BUSINESS

Commercial

VEHICLE INSPECTION TYPE

DVIR

OWNERSHIP

Internal

LICENSE PLATE

ODOMETER UOM

VIN

SPEED UOM

Capacity

Onboard Scale

Camera System

Maintenance Plan

Attributes

VOLUME CAPACITY

28.00

UOM

cubic yard

COMPACTION RATIO

WEIGHT CAPACITY

54900.00

UOM

pound

TARE WEIGHT

UOM

MARK INACTIVE

Field Setup

Field	Description
Volume Capacity	<p>Indicates how much waste the truck can hold before needing to be emptied. This helps route optimization plan the placement of a disposal trip on the route.</p> <p>⚠️ To prevent optimization from failing, the Volume Capacity entered here must match the equipment's Capacity Planning Volume in Equipment Type Setup.</p>
Compaction Ratio	<p>Numeric value that represents the ratio of how much one load of waste is reduced by because of a compactor.</p> <p>Example: If the Compaction Ratio to Volume Capacity is 4, it would mean that for every 4 truckloads of loose waste taken to the landfill, the same quantity of compacted waste would only require 1 trip.</p>
UOM	The Unit of Measure to measure the waste and calculate capacity.

Setup: Equipment Type

Pathway: Setup > Services > Equipment Type

To improve route optimization accuracy, the Service Seconds Per Unit field in Equipment Type setup is important for charge code based equipment (i.e. Medical Waste Containers) estimated service duration. Fields here help specifically in calculating stop duration based on average charge code collected quantities.

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LOB

All

ID	NAME	ABBREV.	LOB
10YD-FL	10 Yard FL	10FL	Commercial
10YDRO	10 Yard Roll Off		
15YD	15 Yard Roll Off		
18GAL-REC	18 Gallon Recycle		
18GLB	18 Gal Box		
18GLS	18 Gal Sharp		
200GLC	200 Gal Cart		
20YD	20 Yard Roll Off		
20YD-CP	20 Yard Compactor		
25YD	25 Yard Roll Off		
25YD-CP	25 Yard Compactor		
2QTS	2 Quart Sharps		
2YD	2 Yard FL		
2YD-RL	2 Yard RL		
2YD-VIP	2 Yard FL VIP		
30GLB	30 Gal Box		
30YD	30 Yard Roll Off		
30YD-CP	30 Yard Compactor		
32YD-CP	32 Yard Compactor		
35YD-CP	35 Yard Compactor		
3YD	3 Yard FL		
3YD-RL	3 Yard RL		
3YD-VIP	3 Yard FL VIP		

Work Type Equipment

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WORK TYPE

ADD EQUIPMENT TYPE

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EQUIPMENT ID

NAME

ABBREVIATION

LOB

VOLUME

0.00

VOLUME UOM

CAPACITY PLANNING VOLUME

CAPACITY PLANNING VOLUME UOM

EQUIPMENT CLASS

DISPLAY ON SCAN MANIFEST

No

MAX WEIGHT

TARE WEIGHT

TARE WEIGHT UOM

IS SERIALIZED

No

EXTERNAL ID

SERVICE SECONDS PER UNIT

ENABLE AS GROUP LABEL

No

SAVE

Field Setup

Field	Description
Service Seconds Per Unit	Enter the average amount of time (in seconds) it takes to collect one unit of equipment.
Capacity Planning Volume	Indicates how much loose waste the equipment can hold before needing to be emptied. This helps route optimization plan the placement of a disposal trip on the route. ⚠ To prevent optimization from failing, the Capacity Planning Volume entered here must match the truck's Volume Capacity in Truck Setup.
Capacity Planning Volume UOM	The Unit of Measure used to measure capacity volume.

Setup: Yard

Pathway: Setup > Operations > Yard

Yards are used by Route Optimization to sequence stops based on the truck's start and end locations when the **Route Start Yard** and **Route End Yard** are defined as the Start Location and End Location during optimization.

After a yard is created, it will populate as a selection option in the 'Start Yard' and 'End Yard' drop down fields

located in the Route Setup screen.

YARD SETUP

ID	NAME
1002	HOMEBASE

ADD YARD

NAME

ABBREVIATION

ADDRESS LINE 1

Enter a location

ADDRESS LINE 2

CITY/STATE/POSTAL CODE

GEOFENCE RADIUS (METERS)

AVERAGE DURATION (MINS)

SAVE

Field Setup

Field	Description
Name	Identifies the Name of the Yard.
Abbreviation	Displays the abbreviated name of the yard.
Address Information	Enter the address of where the yard is located. This is required for geocoding, route optimization and affects the Geofence Radius.
Geofence Radius	Creates a virtual perimeter around the yard to more accurately track a trucks arrival and departure. Enter (in meters) the radius that should be used.
Average Duration (MINS)	Enter the average amount of time a truck will spend at a yard for disposal/yard time. This is used in optimization calculations if disposal trips are tracked.

Setup: Route

Pathway: Setup > Operations > Route

In most cases, trucks begin and end each day at a yard. Yards are used in Route Optimization to sequence stops based on the truck's start location and end location for a route. Assign a daily default Start Yard and End Yard for a route using the days of the week tabs.

Yards previously created in *Yard Setup* populate the list of options for the Start Yard and End Yard fields.

ROUTE SETUP

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DIVISION

All

LOB

All

Search

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NAME	DIVISION	LOB	DEFAULT TRUCK	DEFAULT DRIVER	DEFAULT HELPER 1	DEFAULT DISPOSALLOCATION	DEFAULT TRANSPORTER	SUPERVISOR	ACTIVE
ALVARO	CORPUS	Roll Off	Alvaro	Dave Pike				Samantha Trevino	Yes
COR 101	CORPUS	Residential	324	Pedro Hernandez				Samantha Trevino	Yes
COR 102	CORPUS	Residential						Samantha Trevino	Yes
COR 102	CORPUS	Residential						Samantha Trevino	Yes
COR 201	CORPUS	Comm							
COR 202	CORPUS	Comm							
COR 203	CORPUS	Comm							
COR 203R	CORPUS	Comm							
COR 204	CORPUS	Comm							
COR 205	CORPUS	Comm							
COR 301	CORPUS	Comm							
COR 302	CORPUS	Roll C							
COR 303	CORPUS	Roll C							
COR 304	CORPUS	Roll C							
COR 305	CORPUS	Roll C							
COR 306	CORPUS	Roll C							
COR 307	CORPUS	Roll C							
COR 308	CORPUS	Roll C							
COR 401	CORPUS	Resid							

ADD ROUTE

NAME

ACTIVE

Yes

DIVISION

LINE OF BUSINESS

EXTERNAL ID

DEFAULT DISPOSAL LOCATION

DEFAULT TRUCK

DEFAULT TRANSPORTER

DEFAULT DRIVER

SUPERVISOR

DEFAULT HELPER 1

HOLIDAY SCHEDULE

DEFAULT HELPER 2

EXCLUDE HEALTH SCORE

No

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

MAP AREA

START YARD

END YARD

START TIME

MAXIMUM HOURS

SAVE

Field Setup

This section applies to the Monday-Sunday tab set displayed on the Add Route popup editor.

Field	Description
NOTE: Setup is specific to the day of the week selected from the tab sets above.	
Map Area	
Start Yard	Select a default Start Yard the truck will leave from at the start of the selected day.
End Yard	Select a default End Yard the truck will return to at the end of the selected day.
Start Time	Set a default Start Time for the route for the selected day.
Maximum Hours	Indicates the maximum amount of hours a route is allowed to run for that day. Used in optimization calculations if a value is entered.

Setup: Line of Business

Pathway: Setup > Services > Line Of Business

The Mobile/Optimization/Online Order tab for a Line of Business allows configuration setup for optimization type based on the Route Smart license setup.

LINE OF BUSINESS SETUP

SETUP > SERVICES > LINE OF BUSINESS

ID	NAME	SCREEN TYPE	ENABLE MANIFEST PROCESSING	GL SEGMENT	WORK ORDER MINIMUM CHARGE CODE	OVER MAX-WEIGHT CHARGE CODE	UNEARNED REVENUE GL ACCOUNT	ENABLE USED OIL COLLECTION	AUTO COMPLETE SECONDS	DAYS AVAILABLE TO DRIVER	RECEIPT HEADER TEXT	ACKNOWLEDG... TEXT	ACTIVE
DOCDEST	Document Destruc...	1	No	DOC			Unearned Rev...	No	5	Today Only			Yes
FEL	Commercial	1											
HAZ	Hazardous Material	1											
INACTIVE	INACTIVE LOB	1											
LF	Inbound and Out...	1											
MEDICAL	Medical Waste	1											
MISC	Miscellaneous	1											
RESI	Residential	1											
RO	Roll Off	1											
SCALE	Scale	1											
UO	Used Oil Collection	1											

Service Frequencies

NavuNav Available Ex

FREQUENCY TYPE

TYPE

FREQUEN

UPDATE LINE OF BUSINESS

LOB ID

FEL

NAME

Commercial

ACTIVE

Yes

Settings

Mobile

Optimization

Self-Service Ordering

Productivity and Profitability

Optimization

ROUTE OPTIMIZATION TYPE

Standard

ROUTE OPTIMIZATION OVERRIDES

Side Loader

HEALTH OVERRIDES

Health Score Weights

BALANCING

34

COMPACTNESS

33

INTERLACING

33

Field Setup

Field	Description
Route Optimization Type	Standard - optimization is processed through the Dispatch screen. Roll Off - optimization is processed through Active Dispatch, dependent on license setup. Geared towards active dispatching.
Route Optimization Overrides	Overrides the default settings configured at Route Smart and indicates how the route will be serviced (right/left side of street, etc.) Leave blank and route optimization will use your Route Smart's unique account settings.

Setup: Work Type

Pathway: Setup > Operations > Work Type

To improve route optimization accuracy, the 'Order Baseline Seconds' and 'Default Seconds Per Unit' fields in Work Type setup are important for Route Optimization calculations for service-based estimated service duration. - e

WORK TYPE SETUP

SETUP > OPERATIONS > WORK TYPE

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LINE OF BUSINESS

All

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ID	NAME	LOB	ACTION CATEGORY	INVENTORY MOVE TYPE	MANIFEST NOTIFICATION TEMPLATE	ORDER BASELINE SECONDS	DEFAULT SECONDS PER UNIT	CREATE ONE SERVICE RECORD PER QUANTITY	ENABLE DISPOSAL ENTRY	ENABLE DRIVER ENTERED LABEL WEIGHTS	ENABLE DRIVER PHOTO PROMPT	PRODUCTIVITY UNITS	ENABLE DRIVER TO SET IN PROGRESS
DDSV	Document Destruct...	Document ...	Swap	None			0	No	No	No	Yes	1	No
DEL_HAZ	Deliver HAZ	Hazardous ...	Delivery	N								1	No
DUMPONLY	Dump Only	Roll Off		N								1	No
FL_DELIVER	FL Delivery	Commercial	Delivery	D								1	No
FL_EXCHANGE	FL Exchange	Commercial	Swap	E								1	No
FL_EXTRAPU	FL Extra Pick Up	Commercial	Pick Up	N								1	No
FL_MISSED	FL Missed Pick Up	Commercial		N								1	No
FL_MOVE	FL Move	Commercial		N								1	No
FL_RELOCAT	FL Relocate	Commercial		N								1	No
FL_REMOVE	FL Removal	Commercial	Removal	R								1	No
FL_REPAIR	FL Repair	Commercial	Repair	N								1	No
FL_SERVICE	FL Service	Commercial		N								1	No
INBOUNDLD	Inbound Load	Inbound an...	Inbound / R...	N								1	No

Alerts

Surcharges

NOTIFICATION	TYPE	SCHEDULE
Order Creation		Immediate

UPDATE WORK TYPE

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Details

NavuNav Settings

Add/Remove Default Charge Code

ID

FL_MISSED

NAME

FL Missed Pick Up

SELF-SERVICE LABEL

LINE OF BUSINESS

Commercial

INVENTORY MOVE TYPE

None

ACTION CATEGORY

MANIFEST NOTIFICATION TEMPLATE

CREATE ONE SERVICE RECORD PER QUANTITY

No

ENABLE DISPOSAL ENTRY

No

ENABLE CONSOLIDATION BATCH LINK

No

PRODUCTIVITY UNITS

1.00

DESTRUCTION DATE TRACKING

Disabled

Route Optimization

ORDER BASELINE SECONDS

DEFAULT SECONDS PER UNIT

0

SAVE

Field Setup

Field	Description
Order Baseline Seconds	Enter the average amount of time (in seconds) to service the location of the specific work type.
Default Seconds Per Unit	Enter the average amount of time (in seconds) it takes to service one unit of the work type. This multiplies against the scheduled service quantity on the work order for route optimization to more accurately calculate service duration.

Setup: Site Details (Customer Service)

Pathway: Accounts > Customer Service Screen

For sites that are expected to require longer servicing times, enter the estimated time in the the Additional Service Minutes field of Edit Site. When Route Optimization is run, minutes added here are included in calculations.



Additional Service Minutes is useful for gated communities, security checkpoints, locked enclosures and etc.

41898001 Navusoft - Demo

1 of 3

Post Oak Blvd

Houston, TX 77057

(O) +1 626-777-7777

Inactive

HOUSTON

Aliena Somers

COMMERCIAL

HOU-COMMERCIAL ARREARS

MONTHLY Billed Thru Date Dec 19, 2023

DUE DATE Jan 31, 2024 BATCH-25689 (in progress) - Not included on...

Cold Call

Not Applicable

ACCESS

Gate Code 1234

NOTE

Site Notes

DIVISION

CORPUS

SERVICE REGION

CORPUS OPEN MARKET

SALES REP

House Acct non System

SOURCE

Cold Call

GENERATOR

Not Applicable

SURCHARGE GRP

Fuel Surcharge - Commercial

TAX REGION

CC CITY-NUECES COU-CC MTA-CC CRIME CON

TAX EXEMPT

No

LEED REPORTABLE

No

91-120

120+

TOTAL

0.00

0.00

0.00

Auto Pay Not Enabled

ENDING

1298 test Isabel

1299 test Isabel

Edit

View

EDIT SITE

Basic Settings

Billing Settings

BIC Profile

Required Capabilities

NAME

Navusoft - Demo

DIVISION

CORPUS

NAME 2

SERVICE REGION

CORPUS OPEN MARKET

ADDRESS LINE 1

Post Oak Blvd

TAX REGION

CC CITY-NUECES COU-CC MTA-CC

ADDRESS LINE 2

ORIGIN

CITY/STATE/POSTAL CODE

Houston TX 77057

SOURCE

Cold Call

PHONE 1

(626) 777-7777 Office

SALES REP

House Acct non System

PHONE 2

(999) 999-9999

SITE CLASS

OLD ID

GENERATOR

Not Applicable

PO#

EPA

SIGNATURE REQUIRED

LEED REPORTABLE

STATE ID

ADDITIONAL SERVICE MINUTES

NOTE

Site Notes

WARNING ON OPEN

Site warning

ACCESS INFORMATION

Gate Code 1234

BUSINESS HOURS / SERVICE WINDOW

SAVE

Field Setup

The following field setup is optional and only required if a site is known to have a longer servicing time.

Field	Description
Additional Service Minutes	Enter the additional amount of time to be expected to service the site.
Business Hours/Service Window	Times entered here are hard limits and help determine best placement on the route.

Related Articles:

[Route Optimization](#) -Route Optimization in Dispatch.

[Renumber / Sequence Stops](#) - Route Optimization in Route Management

