CARRIER OPTIMAL ROUTING

WebCOR

Database Preparation Users Manual

Table of Contents

Opening WebCOR

Below is the Welcome Page that you will see when you open WebCOR.

UNITED STATES POSTAL SERVICE.

WebCOR

User's Guide | Report Problems

Welcome to COR - Carrier Optimal Routing

Carrier Optimal Routing (COR) is a computer modeling program that utilizes specifically designed algorithms to configure compact contiguous carrier routes, determine safe and efficient lines of travel, and to determine Park Points and Relays based on actual volume. The program makes objective decisions based on data to reduce unnecessary travel, Park Points, Relays, and mileage. The benefits include improved safety, and a reduction in fuel and energy. COR also provides accurate carrier route maps and efficient lines of travel.

Important Information

Application Access

COR uses your ACE ID to authenticate. Any ACE USER **authorized** to use COR will be able to access the COR web application. If you are not an authorized user, please request access through eAccess.

Enter Application

Need approval to use this application?
Forgot Your Password?
Click Here to Reset it

Help

For questions and feedback, please contact your District or Area COR Coordinator. For technical help with the COR application, call 1-800-877-7435.

This page intentionally left blank

Chapter 1

Getting Started in WebCOR

Click Enter Application, and you are directed to the COR Log On screen. Enter your Logon ID and Password, and click Log On.

The Zone Selection screen appears. Launch the application by first selecting a role or utilizing the role for which you have been approved.

WebCOR Roles and Data Access

COR users are assigned one or more roles that determine what functionality is accessible to them in the system.

If you are assigned the role of Data Preparation, you will have access to the data preparation component of COR and in the Zone Selection screen, Data Preparation will be the only option available.

If you are assigned the role of Route Adjustment, you will have access to the route adjustment component, and Route Adjustment will be the only option in the Zone Selection screen.

Some users may be assigned access to both Data Preparation and Route Adjustment. In this case, a drop-down menu will appear in the Zone Selection screen to allow you to choose one or the other. You cannot access both at the same time.

An additional Executive role provides some users read-only access to display routes for zones that have been set up in COR.

Role	Responsibilities and Privileges
Data Preparation	Responsible for data preparation. Read / write privileges.
Route Adjustment	Responsible for route adjustment. Read / write privileges.
Executive (Viewer)	Utilized by Executives for viewing only. Read only privilege.

Data Access Privileges

Data access privileges are user-specific and identify the data to which you have access, based on geographic regions, typically defined by Districts or Areas.

Roles and Data Access privileges are determined by user ID in the USPS network. You will only have access to zones that are within your assigned district or Area.

Understanding the Screen Display

The COR screen display consists of three main navigational elements: The Toolbar, the Map, and the COR Menu Sidebar.

The Toolbar is positioned horizontally along the top of the COR application window and provides a link to the Help Guide as well as to the Tools and Buttons for utilizing the COR system.

The Map provides a graphic display of the geographic zone or display area.

The COR Menu Sidebar is positioned vertically on the left side of the application window, and provides expandable menu items and procedures for interacting with the map.

Using the COR Menu Sidebar

You can expand and collapse items in the COR Menu Sidebar menu items as needed**. Click the down arrow to expand a menu item, and click the up arrow to collapse it.**

The content of the menu item is hidden but not deleted. Expand the menu item to see the content again.

Some menu items may be moved around the window, collapsed, and closed. To make a menu item moveable, click the right-facing double arrow , and the menu item appears in its own pop-up window.

Click the gray arrows in the upper right corner of the sidebar to expand or collapse the sidebar.

*Web**COR** Tools*

Name	Icon	Description
Zoom In		**Click and drag a rectangle:** Click and hold the left mouse button down on the map. Drag the mouse to the other corner of the rectangle, and release the mouse button. The map will zoom in to the area of the rectangle. (*Note*: You must click and drag; simply clicking on the map will not work).
Zoom Out		**Click and drag a rectangle:** The map will zoom out so that the current map area will fit into the rectangle. The smaller the rectangle you draw, the more the map will zoom out. (*Note*: You must click and drag; simply clicking on the map will not work).
Pan		**Click and drag the map:** Click and hold the left mouse button on the map, and drag the map. The map is recentered, to the location where you release the mouse button.
Full Extent		**Full extent**: Immediately zooms the map out to the full extent of the area for all features and layers. The active tool does not change.
Measure		**Measure distance or area**: The Measure function allows you to measure a line or an area.
Extents (Back)		**Navigates** the map back one view in the extent history for this session.
Extents (Forward)		**Navigates** the map forward one view in the extent history for this session.
Print		**Prints** the map of the current zone. Click the icon with the left mouse button.
Layer Menu	Street	**All operations are performed in the Working Layer. The Layer selected in the drop down menu is the Working Layer and determines what operation is current. It also allows you to edit on the current Working Layer. Map layers are Street, Blockface, Delivery Location, or Post Office.**
Edit Information Tool		**Click to edit info**: Click with the left mouse button and edit the information from the working layer that you select in the Layer Menu. See below for more information on the Edit Info tool.
Change Zone	Change Zone	**Click** to return to the Zone Selection screen and select or extract another zone.
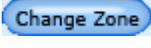
9

Edit Information ⓔ

The Edit Information tool allows you to view and edit information in any layer (street, delivery location, blockface, post office) in the current zone.

1. Select a layer from the Layer drop-down menu in the toolbar.

2. Click the Edit Information Tool ⓔ to select it.

3. With the Edit Info tool selected, click an object in the map layer. The Pop Up Menu displays, showing the attributes for that object.

4. In the Pop Up Menu, view and edit information for the selected object. At the bottom of the window, **you must click Save to save your edits.**

5. This tool replaces the former ⓘ tool from the COR Desktop software.

Using Tools

The Tool Icons in the toolbar allow you to interact with the map by clicking on the map and performing that function with the selected tool. For example, if you click on the Zoom In Tool 🔍 in the toolbar, then click and drag a rectangle in the map, the map will zoom in around where you have drawn.

- In the toolbar, click the tool you want to use.

- Move the cursor over the map. The cursor changes into the tool you selected.

- Click the map with the left mouse button. (***Note***: Some tools work by depressing the mouse and dragging the cursor to draw a rectangle, line or polygon, then releasing the mouse button.)

- The results of your action depend on the tool you chose. The map appearance may change, as with zooming in or out.

IMPORTANT: *USING the WebCOR MANUAL*

This manual was prepared with ease of use in mind. The menu selections and application instructions have been simplified to ensure that they could easily be utilized by all levels of COR users.

At the beginning of each new process listed in the manual, a "Menu Procedure" is displayed to provide the correct menu selection for the user. An example of this is:

⇨ **Zone Selection → Data Preparation → Extract Zone**

Directly below the "Menu Procedure" is a brief explanation of the process that will be executed in the COR software.

Map Layers

Menu Procedure:

⇨ **COR Menu Sidebar → Map Layers**

The Map Layers menu item allows you to view all the contents contained in the current map, turn on and off the view of map layers, and examine the symbols associated with layers.

Examine the Map Layers

In the sidebar, click the down-arrow in the Map Layers menu item. The map layers of the current zone appear below the menu item. Only the top-level content items are visible.

Click the plus button ⊞ next to a content item to display the layers within it.

Select or deselect the check-box ☑ next to the layer to toggle the layer's visibility. The map automatically redraws to reflect the changes in layer visibility.

Some layers may not be visible at the current map scale (zoom level). These layers are scale-dependent. You may need to zoom the map in or out to see a particular layer displayed, even if its check-box is selected. Layers that are scale-dependent will appear disabled in the Map Layers menu item, until you have zoomed to the scale at which they may be displayed. For example, Streets and National Streets are disabled unless you are zoomed out to a high elevation.

Streets are the streets within the zone and the buffer area that you extract; National Streets are the streets outside of the area.

This page intentionally left blank

DATBASE PREPARATION

Chapter 2

Extract Zone

Menu Procedure:

⇨ **Zone Selection → Data Preparation → Extract Zone**

When you log into COR, the Zone Selection screen displays (*note*: if you are logged in with access to both Data Preparation and Route Adjustment, select Data Preparation from the drop-down menu). For more information see Getting Started in COR.

In the Zone Selection screen, enter a five-digit ZIP code in the Zone field, and then click Extract Zone. The Data Preparation—Extract Zone screen appears, and the streets whose ZIP Code matches the zone you selected are highlighted in the map. The Extract Zone pop-up window appears over the map.

Setting up the Zone

1. You will want to add additional streets to the zone as a buffer. Select the radio button that says 'add' and include streets around the entire zone that represent a buffer to that Zip Code. **NOTE: If the delivery unit Post Office is not within the zone you will need to include all streets that the carriers traverse to reach the zone.**

2. To add/remove areas of the zone, use either the Pointer Tool, the Rectangle, or the Select by Shape tool to select the area you want to add or remove.

3. **If after selecting areas in the map to add-to or remove from your zone, you want to start over you can revert to your original selected zone by clicking Reselect.**

4. Once you have completed all edits, click Zoom to zoom in to the selected zone.

5. Click Extract to extract the zone.

6. A pop-up message will appear saying the zone has already been extracted. Click OK to replace the original extraction.

This page intentionally left blank

Chapter 3

DOIS Import

Menu Procedure:

⇨ **COR Menu Sidebar → Utilities → DOIS Import**

The DOIS Import utility allows you to import the most current delivery addresses and NDSS records directly from DOIS. COR and DOIS communicate and automatically download the delivery address data and NDSS records for your zone. You will be notified with a report that either indicates the transfer was successful or that the data could not be transferred.

Importing from DOIS

1. In the COR Menu Sidebar, click Utilities to expand the menu items.
2. Click DOIS Import. The DOIS Import pop-up window appears over the Map window.
3. Click Yes to perform the DOIS Import, and No to exit without importing DOIS data.

You will be advised whether your import was successful or not.

This page intentionally left blank

Chapter 4

Understanding Topology

Menu Procedure:

⇨ **COR Menu Sidebar → Map Layers → Network Layers → Street Topology**

Understanding the concept of Topology is one of the most important skills for successfully completing COR Databases. For the purposes of COR, topology refers to the way that the graphic database was originally digitized or drawn. It is not related to the carrier's Line of Travel or to One Way streets. Instead, it refers to the way the streets were drawn by the individual who originally created the graphic database.

When a street is drawn, the person creating the database draws the street from one Node to another Node. As the line is created, the direction that the street is drawn to and from indicates which side of the street is the left and which side of the street is the right.

A simple method for understanding this concept is to picture someone being instructed to draw a line being between two dots on a piece of paper. The dot, or point, where the person begins drawing the line is the "From" point and the point that it is being drawn to is the "To" point. As the line is drawn, one side is the Right side and one side is the Left side. By placing arrows on the line in the direction that it is being drawn, the Left and Right sides become even more identifiable. That is how Topology is indicated.

In WebCOR, displaying the topology is accomplished by using the down arrow in the Map Layers section and clicking the Plus (+) sign next to Network Layers. Place a check mark ☑ in the box next to Street Topology and the topology for the zone will be displayed on the map. Arrows showing in what direction the streets were drawn for the zone database appear on all streets and blockfaces. These arrows display which side of the street is the Right side and which side is the Left side by viewing the direction in which the arrows are pointing. By displaying the Nodes for each blockface, you can also determine the Begin Right, Begin Left, End Right and End Left for each blockface.

This page intentionally left blank

Chapter 5

Delivery Location Procedures

Open Alternate Address Table (AAT)

Menu Procedure:

⇨ **COR Menu Sidebar → Delivery Location Procedures → Open Alternate Address Table**

An Alternate Address Table (AAT) is a database table with an entry for every delivery address. This table allows you to indicate the actual physical delivery location for each delivery address as well as the assigned municipal address.

Some deliveries are made at CBUs or other Central Delivery locations such as apartment complexes. Since the location of the CBU, NDCBU, or other Central Delivery location is not the actual physical location of the delivery point address, the AAT allows you to route delivery service to the location on the map where the actual delivery takes place.

Setting up the Alternate Address Table (AAT)

In the COR Menu Sidebar, click Delivery Location Procedures to expand the menu item. Then click Open Alternate Address Table. The Alternate Address Table pop-up window displays.

The Alternate Address Table provides you with the following information for each address: the existing route for which the address is currently assigned to in the zone, the delivery sequence number, the Plus4 code, the delivery type, the street number, the address type, the Apt/Suite number, the street name, the delivery location number, and the delivery location street The CBU, BLDG, or group ID is also included and in addition it will be in notes: whether the address was modified, the model route number, the model sequence, the delivery location ID, and the No Stat Default indicator.

Edit Alternate Address Table

Columns with editable information in the AAT have a white background; all other columns are read-only with gray backgrounds. The columns that may be edited are:

> ➢ Delivery Location Number
> ➢ Delivery Location Street
> ➢ CBU BLDG

These are the fields that allow you to create alternate addresses. To make changes to one of these for a selected delivery address, click the field in the appropriate column, and make the changes as needed. These line item edits are particularly useful when delivery occurs on the opposite side of the street.

Edit CBUs, NDCBUs, & Other Types of Central Delivery

As you scroll down through the AAT, you will see in the CBU BLDG field some entries with C and some with numbers. The C is an indication that the delivery point is part of a CBU or NDCBU and must have further information entered.

The entries with numbers are Central Delivery (such as apartment complexes) where the building number is the same for all the addresses and the actual deliveries are all at one location. For these central boxes, COR determines a unique BLDG value. This will ensure that all these deliveries are represented by a single delivery location.

For the CBU or NDCBU values, you must determine which addresses belong together in the same CBU or NDCBU and at what address the CBU or NDCBU is physically located. When manually editing the CBU/BLDG field you must use a leading C to depict a CBU or NDCBU or a number to indicate a bldg number. This field cannot include any leading zeros. *Note:* The delivery unit can assist in providing CBU or NDCBU diagrams for these delivery addresses to determine their actual delivery locations.

1. Locate the addresses in the AAT that belong in the same CBU or NDCBU.

2. Click and hold the left mouse button in the Del Loc Number field of the first address that belongs in the CBU or NDCBU.

3. Drag the cursor over the Del Loc Street and CBU BLDG fields, and down until you reach the last address that belongs in the CBU.

4. Release the mouse button. The three fields for the addresses that belong in the CBU or NDCBU are highlighted.

5. Edit AAT fields appear at the bottom of the AAT, for changing the delivery location number, delivery location street, and CBU BLDG.

6. Click Next CBU # or Next BLDG # and COR sets the next available CBU value or BLDG value.

Click OK, and each highlighted delivery record will have an alternate address matching what you typed in and a CBU BLDG value as determined by COR. You can edit the CBU BLDG value. However, you do not want to reuse a value that is already in use and you must keep the same value for all deliveries in the same CBU.

Use the same process for grouping Central Delivery addresses. **Note***: If a CBU is located in a parking lot area that is not represented by a street in your street database, you can add a new street using Edit Streets. The new street that you add must be given a street name and address range that is different from the actual street. Then, you may use an alternate address for the CBU that will cause it to be located on the new street that represents the parking area. You may not know this until after the street validation has been performed. If you know this now, you can add the new street. If you do not learn this until after street validation, the new street can be added at the time you are making other modifications based on the results of your street validation. *(See Adding a Street).*

Chapter 6

Selection Tools

Menu Procedure:

⇨ **COR Menu Sidebar → Utilities → Selection Tools**

Selection tools allow you to select streets and delivery locations in the corresponding layers. Once a street is selected, you can edit the selection in the Street Table. However, delivery locations are not editable.

Also, you may use the Selection Tools to zoom to a selected street, by using Field, Operator and Value.

Select Streets or Delivery Locations Using Tools

1. In the COR Menu Sidebar, click Utilities to expand the menu item.

2. Click Selection Tools. The Selection Tools pop-up window appears over the map.

3. In the Selection Tools pop-up window, choose Street or Delivery Location from the Layer drop-down menu.

4. You may create a new selection, add to an existing selection, or remove a selection, by choosing the New, Add, or Remove radio button, and using either the Select by Pointing, Select by Rectangle, or Select by Shape tool.

5. To create a new selection, choose the New radio button, and then choose one of the selection tools with which to select an area of the current zone.

6. Once a street or delivery location is selected, you may add to the selection by choosing the Add radio button, and then using a tool to add to the selection.

7. You may remove selected streets or delivery locations by choosing the Remove radio button, and then using a tool to remove streets or delivery locations from the selection.

Select Streets or Delivery Locations Using Field, Operator, Value

1. You may select a street or delivery location by choosing a field object from the Field drop-down menu and an operator from the Operator drop-down menu, and entering a value in the Value field.

2. For example, with Streets selected in the Layer drop-down menu, in the Field drop-down menu, choose Street Name. In the Operator drop down menu, choose Contains. In the Value field, enter Park, and click Select. All streets with names that contain Park are selected in the current zone.

Clear, Zoom, and Toggle

> ➢ Click Clear to clear the selection from the current zone.

> ➢ Click Zoom to zoom in on a selection.

> ➢ Click Toggle to reverse the selection; that is, if a specific street is selected and you click Toggle, the street is deselected and all other streets in the zone are selected.

Chapter 7

Address Match Delivery Locations

Menu Procedure:

⇨ **COR Menu Sidebar→ Delivery Location Procedures→ Address Match Delivery Locations**

Address Match Delivery Locations combines the individual addresses into delivery locations, and adds a point to the map for every delivery location whose corresponding street is located in the current zone. For a delivery location to be address matched, a street with the same ZIP Code and street name must exist in the zone. Also, the street must contain an address range that includes the delivery location's street number.

Setting up the Address Match Delivery Locations Procedure

1. In the COR Menu Sidebar, click Delivery Location Procedures to expand the menu item.

2. Click Address Match Delivery Locations. The Address Match Delivery Locations pop-up window appears over the map, and displays the number of matched and unmatched delivery locations.

3. Click Match, and COR automatically attempts to match the unmatched delivery locations in the current zone, and the Delivery Location Layer is visible in the map.

The Delivery Location Table will have a record for every delivery location that is successfully matched. Unmatched delivery locations are found in a table of unmatched delivery locations, in the Delivery Location Toolbox. To view the unmatched records, you will need to open the Delivery Location Toolbox. Go to the COR Menu Sidebar, click on the down arrow for Delivery Location Procedures, and select Delivery Location Toolbox. A list of the unmatched records will appear. You will need to print this list of unmatched records by clicking on the print button at the bottom of the pop-up window.

Procedures to resolve unmatched deliveries are listed below.

Resolving Unmatched Delivery Locations

Deliveries might not match for a number of reasons. For example; the address was not located in any of the existing address ranges or the address exists in more than one address range. Another reason for unmatched deliveries could be that the street is not correctly spelled or does not exist in the current zone. This could also occur if no street name exists that matches the unmatched deliveries or if a street name is misspelled.

The following information lists the most likely reasons that Deliveries are unmatched:

➢ Incorrect Zip Codes on the Streets
➢ Incorrect or Missing Address Ranges on the Streets
➢ Overlapping Address Ranges on the Streets
➢ Missing or Incorrect Street Names
➢ Missing Streets

The Existing Sequence listed in the Delivery Location Toolbox can be of assistance in locating where a delivery belongs. Deliveries just before or after the unmatched record may be located on the map and may also provide information to assist in matching the deliveries.

To utilize the Existing Sequence process to assist in resolving unmatched deliveries, follow these procedures: Go to the COR Menu Sidebar, click on the down arrow of the Delivery Location Procedures, and select Delivery Location Toolbox. When the popup menu appears, click in the box next to Label and a check mark will appear. In the box directly to the right of Label, choose Existing Sequence by clicking on the down arrow and highlighting Existing Sequence. Labels for the Existing Sequence of the route deliveries will appear. This process will assist you in locating any unmatched deliveries.

Below is a brief explanation for each of the above problems and information on how they can be resolved:

Menu Procedure:

⇨ **COR Menu Sidebar → Street and Office Layer Procedures → Open Street Table**

Incorrect Zip Codes on Streets

In the Delivery Location Toolbox Unmatched Record List, view the Zip Codes for all of the unmatched records. Go to the Street Table and open it. Select those records that had Zip Codes that did not match the Zip Code for the Zone that you are currently working on. Click on the records that you want to resolve by making a Check Mark next to the Record. Change from All Records to Selected Records and Click on the Edit Selected button and those records that you selected will appear. This will activate the Field and Value options in the table below. All the records that appear can be changed by typing the correct information in that table. Click on the OK and the changes will be made. Once you have resolved all of the Unmatched Records, Re-Address Match by following the Address Matching procedure.

Incorrect or Missing Address Ranges on the Street

In the Delivery Location Toolbox Unmatched Record List, view all of the unmatched records. Review records that have a street name that matches any of the unmatched records.   Go to the Street Table and open it. Select those records with matching street names that have address ranges that encompass the house numbers of the delivery locations that you are trying to match. If none encompass the correct address range then either the necessary block of the street is missing or a particular segment of the

street has wrong or missing address range information. Once you have determined the problem, Click on the records that you want to resolve by making a Check Mark next to the Record. Change from All Records to Selected Records and Click on the Edit Selected button and those records that you selected will appear. This will activate the Field and Value options in the table below. All the records that appear can be changed by typing the correct information in that table but the address ranges will probably have to be selected one at a time for the corrections. Click on the OK button and the changes will be made. Once you have resolved all of the Unmatched Records, Re-Address Match by following the Address Matching procedure.

Overlapping Ranges on the Streets

In the Delivery Location Toolbox Unmatched Record List, view all of the unmatched records. Review records that have a street name that matches any of the unmatched records.   Go to the Street Table and open it. Select those records with matching street names that have address ranges that encompass the house numbers of the delivery locations that you are trying to match. Click on the records that you want to resolve by making a Check Mark next to the Record. Change from All Records to Selected Records and Click on the Edit Selected button and those records that you selected will appear. This will activate the Field and Value options in the table below. All the records that appear can be changed by typing the correct information in that table but the address ranges will probably have to be selected one at a time for the corrections. Click on the OK button and the changes will be made. Once you have resolved all of the Unmatched Records, Re-Address Match by following the Address Matching procedure.

Missing or Incorrect Street Names

In the Delivery Location Toolbox Unmatched Record List, view all of the unmatched records. Review records that have a street name that matches or is similar to any of the unmatched records.   Go to the Street Table and open it. Select those records with matching or similar street names of the delivery locations that you are trying to match. Click on the records that you want to resolve by making a Check Mark next to the Record. Change from All Records to Selected Records and Click on the Edit Selected button and those records that you selected will appear. This will activate the Field and Value options in the table below. All the records that appear can be changed by typing the correct information in that table but the address ranges will probably have to be selected one at a time for the corrections. Click on the OK button and the changes will be made. Once you have resolved all of the Unmatched Records, Re-Address Match by following the Address Matching procedures.

Missing Streets

Missing Streets requires a new additional skill set. Below is an explanation of the process and the necessary tools:

Edit Selected Streets

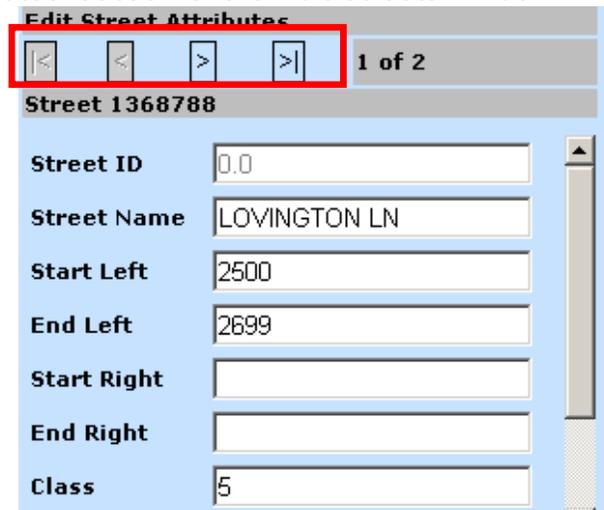You may edit street attributes of selected streets in the Street Table.

Edit Streets

Menu Procedure:

> ⇨ **COR Menu Sidebar → Utilities → Edit Streets**

Edit Streets allows you to add a street, split a street, or modify the geography of a street, so that you may resolve unmatched delivery locations.

Split Streets

1. In the sidebar, click Utilities to expand the menu item.

2. Click Edit Streets. The Edit Streets pop-up window appears over the map.
   Important: Select CorWorkspaceEdit: SDE DEFAULT from the drop-down menu under Select a version ID. Click on the Start Editing button to expand the Edit Streets window.

3. Using the select street tool in the Edit Streets window, (   ), select the street you wish to edit. Once your street has been selected, the attribute section of the window will appear.

4. Activate the split feature tool, (   ), it the Edit Streets window. Click on the selected street where you want the split to occur. After splitting the street you will need to edit the attributes for both sections of the split street. You may toggle between selected segments of the street using the arrows shown underneath the 'Edit Street Attributes' section of the Edit Streets window.

Edit Street Attributes

| |< | < | > | >| | 1 of 2 |

Street 1368788

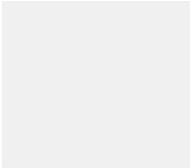| Street ID | 0.0 |
Street Name	LOVINGTON LN
Start Left	2500
End Left	2699
Start Right	
End Right	
Class	5

5. Ensure your topology is visible by clicking on the + sign next to the Network Layers section in the Map Layers section of the side bar. Click in the box next to the street topology option.

6. Edit the Start Left > End Left > Start Right > End Right fields of the street attributes and click on the save edits icon in the Edit Streets window.

Create Streets

1. In the sidebar, click Utilities to expand the menu item.

2. Click Edit Streets. The Edit Streets pop-up window appears over the map.
    Important: Select CorWorkspaceEdit: SDE DEFAULT from the drop-down menu under Select a version ID. Click on the Start Editing button to expand the Edit Streets window.

3. Click Settings in the lower right of the Edit Streets window, and the Settings pop-up window displays. In the Settings pop-up window, you must deselect the Vertex and Edge check boxes in the Street Layer, as they are not necessary for the Edit Streets tool. Leave End selected.

4. You may adjust the Snapping Tolerance, and Tolerance and change the Selection Color, in the Settings window. After you have made your adjustments, click Apply, and close the Settings window.

5. In the Edit Streets window, click the Add Line tool ⌒. With the Add Line tool selected, move the cursor over the end of a street and it turns into a target to indicate that you may snap to the street. Click once on the end of the street.

6. Move the cursor in the direction you want the new street to extend. Click once to create a vertex (turn) and double-click to end the street.

7. After double-clicking to end the street, go to the Edit Streets window, and enter a name for the street you just created, in the Street Name field.

8. Click the Save Edit icon ⬛. The new street you created appears in the Map widow.

Modify Street Geography

1. In the sidebar, click Utilities to expand the menu item.

2. Click Edit Streets. The Edit Streets pop-up window appears over the map.
    Important: Select CorWorkspaceEdit: SDE DEFAULT from the drop-down menu under Select a version ID. Click on the Start Editing button to expand the Edit Streets window.

3. Using the select street tool in the Edit Streets window, (◂), select the street you wish to modify. Once your street has been selected, the attribute section of the window will appear.

4. In the Edit Streets window, click the Show Vertices tool, (   ), to display the vertices on the street you wish to modify. The three Vertices tools will be
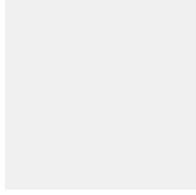
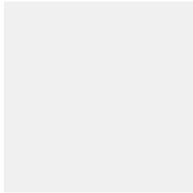activated.   Add Vertex ,   Delete Vertex, and
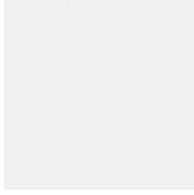
Move Vertex.

5. Vertices may be added, deleted, or moved to change the shape of the street you wish to modify. To change the length of the street, click the Move Vertex tool to activate the tool then click the vertex you want to move. After clicking, a line follows the cursor, indicating the move action. Click the new location for the vertex.

Street Editing Tools

Name	Icon	Description
Select Feature		With the Select Feature tool selected, single-click an area or click or click and drag a rectangle on the map. Selection is shown with a cyan (blue-green) color (see Settings to change selection color). Features must be selected before they can be modified or deleted.
Clear Feature(s)		Clears any selected features so that no features are selected.
Show Vertices		If feature(s) are selected, displays their vertices in red. Vertices are the points that define the shape of a feature.
Undo		Reverses the last editing operation. If pressed again, works its way backward to undo actions done. Once you Save your work, you cannot undo operations done prior to the save.
Redo		After an Undo, reinstates the action that had been reversed.
Save Edit(s)		Saves all changes to the data in the edit session. You must Save before exiting the browser in order to preserve your changes to the data.
Discard Edit(s)		Discard all changes to the data in the edit session.
Add Line		Use to create a street. Click once at each vertex (point), and double-click at the last vertex.
Split feature		Splits a selected feature into two features. Select the tool, then click once at the location to split the line. Each feature takes the attributes of the existing feature.
Merge features		Merges two or more selected lines into a single feature.
Delete feature		Deletes the entire point, line or polygon feature(s) that are selected. No warning message is shown, but you can use the Undo button to undo the delete.
Add vertex		For a line or polygon, adds a vertex along the edge where you click.
Delete vertex		Deletes the vertex on which you click. You cannot delete the last two vertices of a line.
Move vertex		Moves a vertex. First, click the vertex you want to move. After clicking, a line follows the cursor, indicating the move action. Click the new location for the vertex.

This page intentionally left blank

Chapter 8

Open Delivery Location Table

Menu Procedure:

⇨ **COR Menu Sidebar → Delivery Location Procedures → Open Delivery Location Table**

A Delivery Location Table is a table that has **one unique record for every physical delivery location** that has been successfully address-matched. For example, for every entry in the AAT that has the same CBU BLDG value, a single record is created in the Delivery Location Table. This represents the one location where the letter carrier will deliver the mail to all of the delivery points associated with that one location.

Procedures for Opening Delivery Location Table

In the COR Menu Sidebar, click Delivery Location Procedures to expand the menu item. Click Open Delivery Location Table. The Delivery Location Table displays.

The Delivery Location Table displays data on delivery locations within the current zone. The default table is sorted in ascending order by Delivery ID. You may re-sort the table by any of the categories in the column headers, in ascending or descending order, by clicking the column header.

Select the check box in the Select column to select a delivery location in the map. In the View drop-down menu, choose either All Records, or Selected Records to change the view of the records in the Delivery Location Table.

Delivery Location Toolbox

Menu Procedure:

⇨ **COR Menu Sidebar → Delivery Location Procedures → Delivery Location Toolbox**

In addition to editing the Street Table and Alternate Address Table, there are manual tools available to locate delivery locations on the map. The Match Delivery Location tool allows you to manually move a delivery location that you otherwise could not address match. ***NOTE: The Match Delivery Location tool should only be used when no other resolution can be made.***

The Move Delivery Location tool allows you to relocate a delivery location that has already been address matched. The Unmatch Delivery Location tool allows you to unmatch a delivery location.

Select the Label check box and choose either House Number or Existing Sequence from the Label drop-down menu, to view the house numbers or sequence numbers for delivery addresses in the map of the current zone.

Match an Unmatched Delivery Location

1. In the sidebar, click Delivery Location Procedures to expand the menu item.

2. Click Delivery Location Toolbox. The Delivery Location Toolbox appears over the map.

3. Click the Match Delivery Location tool .

4. The Delivery Location Toolbox displays a summary table of unmatched delivery locations.

5. Select an unmatched delivery location in the summary table by single-clicking on it. You may locate the delivery location in the map using Selection Tools (Sidebar → Utilities → Selection Tools).

6. With the unmatched delivery location selected in the summary table, click the location in the map where the delivery location belongs.

7. Now click the street on which you placed the delivery location. The unmatched delivery location is matched to the location you selected.

Move a Delivery Location

1. Select the Move Delivery Location tool in the Delivery Location Toolbox, and click the delivery location you wish to move. You may locate the delivery location in the map using Selection Tools (Sidebar → Utilities → Selection Tools).

2. Click the new location in the map, where you want the delivery location to go.

3. Click the street associated with the new location. The delivery location is moved to the new place you selected.

Unmatch a Delivery Location

1. Select the Unmatch Delivery Location tool in the Delivery Location toolbox.

2. In the map, click the delivery location you wish to unmatch.

3. The delivery location is removed from the map.

After you match or unmatch a delivery location, the number of Unmatched Delivery Location records showing at the bottom of the Delivery Location Toolbox is modified to reflect the change.

Chapter 9

Street and Office Layer Procedures

Open Street Table

Menu Procedure:

 ⇨ **COR Menu Sidebar → Street and Office Procedures → Open Street Table**

The Street Table provides an editable summary table of all the data in the Street layer of the current zone. Use the Street Table to select streets and edit street attributes, and to resolve streets with incorrect ZIP Codes, incorrect or missing address ranges, and overlapping address ranges as well as incorrect street names and route codes, and route tag errors.

Procedures for Opening the Street Table

1. In the sidebar, click Street and Office Procedures to expand the menu item.
2. Click Open Street Table. The Street Table displays over the map.
3. In the Street Table, all white fields are editable and all gray fields are not. You can sort the data in the table by clicking any column header. Click the header a second time to reverse the sort-order (Ascending and Descending).

Selecting Streets in the Street Table

To select streets in the Street Table, simply select the corresponding check box for the street, in the leftmost column of the table. The street is highlighted in the map of the current zone. *NOTE: Ctrl + F can be used as a find tool to locate records in the Street Table.*

Edit Selected Streets

You may edit street attributes of selected streets in the Street Table. Editing street attributes in the Street Table is especially useful for batch edits, as well as editing data for a single record. *(A Batch Edit is one where the data for a number of records can be corrected with identical data simultaneously).*

1. Select the check box in the leftmost column of the table, for the streets you wish to edit. You may choose Selected Records from the View drop-down menu, to view only the records you selected.
2. Click Edit Selected. In the lower part of the Street Table window, the Attributes drop-down menu, Value field, and Apply and Cancel buttons appear
3. Make a selection from the Attributes drop down menu. For example, you may want to batch edit an incorrect street name. Select Street Name, then in the Value field, enter the new or corrected name for the streets you selected.
4. Click Apply. The selected streets in the Street Table are updated to reflect the edits, and the changes appear on the map.

Street Attribute Defaults

Menu Procedure:

⇨ **COR Menu Sidebar → Street and Office Procedures → Street Attribute Defaults**

The default street attribute information must be applied to the Streets layer in order to set each street segment's average driving time, street crossing difficulty, and parking restrictions. Apply the default street attributes prior to making specific changes for particular street segments.

The Street Attribute Defaults pop-up window contains five columns: Class, Occurrence, Drive Rate (MPH), Crossing Difficulty, and No Parking.

Class tells you the NAVTEQ Class of the street, the definitions of which are in Street Class Definitions.

Occurrence tells you the number of times that a particular class of streets occurs in the current zone.

Drive Rate in MPH represents an average speed for driving on this class of streets. The Drive Rate should be set to 5 to 10 miles per hour below the posted speed limit to allow for traffic and required stops. The speed is not the speed limit but instead is the average achievable speed that the vehicle is able to travel on these class of streets within the zone during the window of operations.

The Crossing Difficulty value is the relative difficulty of walking across a street of this type with 1 being easiest and 5 being restricted. Crossing Difficulty should indicate the complexity or danger involved in walking across a street of the particular class.

Parking restrictions should be set to either Yes or No, with Yes indicating that parking is allowed, and No indicating that parking is not allowed.

Edit Street Attribute Defaults

1. In the sidebar, click Street and Office Procedures to expand the menu item.
2. Click Street Attribute Defaults. The Street Attribute Defaults pop-up window appears over the Map window.
3. In the Drive Rate (MPH), Crossing Difficulty, and Parking columns, enter new default values in the fields for street classes.
4. **Click Save**. Your changes are saved and the Street Attribute Defaults pop-up window closes.

Apply Street Attribute Defaults

Once you have edited the default street attributes, click Apply, and the values you set are applied to the street layer in the current zone.

Edit Turn Defaults

Menu Procedure:

⇨ **COR Menu Sidebar → Street and Office Procedures → Edit Turn Defaults**

The driving portion of the line of travel follows the path with the least amount of traveling time. However, in order to discourage less desirable turns (left and U-turns), a time penalty can be added for each turn made in the path. The end result can be to reduce the number of left and U-turns used in forming the line of travel.

The turn defaults are not amounts of time literally added into the total route time. They cause the lines of travel to consider driving differently to avoid certain types of movement through an intersection. For example, a U-turn penalty of 60 seconds should be interpreted as being willing to travel 60 seconds out of the way to avoid making the U-turn. Turn defaults are relative to each other. A 60 second penalty for making a U-turn at an intersection is four times less preferred than a 15 second penalty for moving straight through and intersection.

Procedure to Edit Turn Defaults

1. In the sidebar, click Street and Office Procedures to expand the menu item.

2. Click Edit Turn Defaults. The Edit Turn Defaults pop-up window appears over the Map window.

3. In the Edit Turn Defaults pop-up window, edit the penalty values in seconds in the Right Turn, Straight Through, Left Turn, and U-Turn fields (**Note**: While these penalties can affect the actual path that the line of travel follows, the penalty time is not added to the travel time.)

4. Click Save to exit the window.

NOTE: The recommended Values for Turn Defaults are:

TURNS:	RECOMMENDED PENALTY VALUE:
Right Turn	**0 Seconds**
Straight	**15 Seconds**
Left Turn	**30 Seconds**
U-Turn	**60 Seconds**

These recommendations should be used for every zone unless there is a compelling reason not to utilize them.

Edit Network Attributes

Menu Procedure:

⇨ **COR Menu Sidebar → Street and Office Procedures → Edit Network Attributes**

The Edit Network Attributes window allows you to make changes to turn exceptions, one-way streets, and overpasses in the current zone.

Turn Exceptions

The driving portion of the line of travel follows the path with the least amount of traveling time. In order to discourage specific turns, a time penalty can be added for any turn that is prohibited or difficult. However, turn exception information may not be available during data preparation. The COR route adjustment user may have to enter turn exceptions; this section is provided if turn exception information is available for you to enter.

Note: To view turn exceptions, go to Map Layers and make sure the check box next to Turn Exception is selected (Sidebar → Map Layers → Network Layers → Turn Exception). You may already have some turn exceptions provided with NAVTEQ street data. These will be visible when you turn on Turn Exception in Map Layers.

Add Turn Exceptions

1. In the sidebar, click Street and Office Procedures to expand the menu item.
2. Click Edit Network Attributes. The Edit Network Attributes window appears over the Map window.
3. To add a turn exception, select Turn Exceptions from the Layer drop-down menu.
4. Select a penalty value for the turn from the Penalty Value drop-down menu.
5. Select the Add tool ◀⁺ , and click in the map on the street from which the turn will be made. A blue line highlights the street.
6. With the Add Turn Exceptions tool still selected, click the street onto which the turn will be made. The turn exception appears on the map as a line and arrowhead, with the penalty value in the middle of the line.
7. To add a U-turn, click in the street on which the U-turn will be made.
8. Click again in the same street, then click in the intersection in which the U-turn will be made.

Remove Turn Exceptions

1. In the sidebar, click Street and Office Procedures to expand the menu item.
2. Click Edit Network Attributes. The Edit Network Attributes window appears over the Map window.
3. To remove a turn exception, select Turn Exceptions from the Layer drop-down menu.
4. To remove the turn exception, select the Remove tool ◀ , and click on the turn exception.

Overpasses

The driving portions of the line of travel must adhere to geographic differences in street elevation that make turns impossible from one street to another. To differentiate between normal intersections where turns are possible, and intersections where there is an overpass or underpass, use the Overpass tool in Edit Network Attributes. (***Note***: The COR route adjustment user may have to enter edit overpasses; this section is provided if overpass information is available for you to enter.)

Add Overpasses

1. In the sidebar, click Street and Office Procedures to expand the menu item.
2. Click Edit Network Attributes. The Edit Network Attributes window appears over the Map window.
3. To add an overpass, select Overpass from the Layer drop-down menu.
4. Select a value of 1 to add an overpass, and -1 to add an underpass (the default value of streets in the zone is 0; you may add 2 or -2 for overpasses and underpasses with more than one level).
5. Select the Add tool ◀⁺ , and click the street on which the overpass belongs, on one side of the intersection. The number 1 is added to the map.
6. Click the street on the other side of the intersection, and a second 1 is added to the map, indicating that the street you selected is elevated over the cross street and no turns can be from it at the intersection.

Remove Overpasses

1. In the sidebar, click Street and Office Procedures to expand the menu item.
2. Click Edit Network Attributes. The Edit Network Attributes window appears over the Map window.
3. To remove an overpass, select Overpass from the Layer drop-down menu.
4. To remove the overpass, select the Remove tool ◀ and click the numbers on either side of the intersection.

One-Way Streets

The driving portions of the line of travel need to respect one-way street restrictions. In COR the Street layer stores the one-way restriction information. You are able to edit one-way streets in the Street and Office Layer Procedures section of COR Data Preparation.

Edit One-Way Streets

1. In the sidebar, click Street and Office Procedures to expand the menu item.

2. Click Edit Network Attributes. The Edit Network Attributes window appears over the Map window.

3. To edit a one-way street, select One-way from the Layer drop-down menu.

4. One-way streets in the current zone appear in the map highlighted by a blue line and black arrowheads, pointing in the direction of the one-way street as it is stored in the Street layer (***Note:*** It may be necessary to zoom in to see the displayed one-way streets).

5. Select the Add tool ◀⁺ . Click once on a section of the highlighted one-way street. The highlighted blue line and arrowheads disappear, and the street is changed into a two-way street.

6. Click in the same section of the street a second time, and the highlight blue line and arrowheads reappear, pointed in the opposite direction. The direction of the one-way street has been changed. If you click a third time, the street is restored to its original direction.

7. You may click a two way street to change it to a one-way street, using the same method.

Build Travel Network

Menu Procedure:

⇨ **COR Menu Sidebar → Street and Office Procedures → Build Travel Network**

The travel network represents a snap shot of how the streets are connected, the driving and walking travel speeds, parking restrictions, and street crossing penalties. The travel network is needed for Route Adjustment route generation and line of travel. It is important to build the travel network during data preparation in order to check that the streets are properly connected.

Building a Travel Network

1. In the sidebar, click Street and Office Procedures to expand the menu item.

2. Click Build Travel Network. The Build Travel Network pop-up window appears over the Map window.

3. The Build Travel Network window displays information on when the travel network was last built.

4. Click Yes to build the travel network, or No to exit without building it.

COR DATABASE PREPARATION USERS MANUAL

If areas of the travel network are disconnected, the Display Network Disconnects pop-up window appears. Select the type of network disconnects to display, and click OK.

Note: There is only one travel network maintained at a time for a zone. Therefore, there is no requirement for naming the travel network.

Display Network Disconnects

Menu Procedure:

⇨ **COR Menu Sidebar → Street and Office Procedures → Display Network Disconnects**

It is important to build the travel network during data preparation in order to check that the streets are properly connected. Once you have built your travel network, utilize Display Network Disconnects to view areas of your network that are not connected in the current zone.

Procedure to Display Network Disconnects

1. In the sidebar, click Street and Office Procedures to expand the menu item.

2. Click Display Network Disconnects. The Network Disconnects pop-up window appears.

3. Select the type of network disconnect you want to display. Click OK. The map of the current zone displays the disconnected areas of your network with a highlighted color line.

Note: To view network disconnects, be sure that Disconnect Layers is selected in Map Layers (Sidebar → Map Layers→ Disconnect Layers).

NOTE: All Network Disconnectivities must be resolved before proceeding. Utilize the Street Editing tools to resolve all occurrences before continuing.

4. Disconnects can also be viewed from the street table window. In the sidebar, click Street and Office Procedures to expand the menu item.

5. Click Open Street Table. The Street Table window opens. Scroll to the far right of the Street Table window to view the three disconnect columns. Disconnect Geographic, Disconnect One-Way, and Disconnect Self-Loop. Once the streets within the zone that have disconnect have been identified and selected in the Street Table, the selection tool can be used to zoom to the selected streets.

COR DATABASE PREPARATION USERS MANUAL

This page intentionally left blank

Chapter 10

Post Office Toolbox

Menu Procedure:

⇨ **COR Menu Sidebar → Street and Office Procedures → Post Office Toolbox**

A Post Office identifies where on the map the line of travel for each route starts and ends. Find the address of the post office you want to add, and where on the map it belongs.

Note: To view post offices in the map of the current zone, click <u>Map Layers</u> in the sidebar, and make sure the check box next to the Post Office layer is selected under Cosmetic Layers (COR Menu Sidebar → Map Layers → Cosmetic Layers → Post Office).

Add a Post Office

1. In the Data Preparation sidebar, click Street and Office Procedures to expand the menu item.

2. Click Post Office Toolbox. The Post Office Toolbox pop-up window appears over the Map window.

3. To add a post office, select the Add Post Office tool ◀⁺ and click the map where you want to add the post office.

4. With the Add Post Office tool selected, click the street on which the new post office is located. The Attribute Page pop-up window displays.

5. In the Attribute window, enter a name in the Facility Name field, and click Save. The new post office is added to the current zone.

Delete a Post Office

1. In the Data Preparation sidebar, click Street and Office Procedures to expand the menu item.

2. Click Post Office Toolbox. The Post Office Toolbox pop-up window appears over the Map window.

3. To delete a post office, select the Delete Post Office tool ◀ and click the post office you want to delete. The post office is deleted from the current zone.

This page intentionally left blank

Chapter 11

Utilities

Blockface Toolbox

Menu Procedure:

➩ **COR Menu Sidebar → Utilities → Blockface Toolbox**

All route adjustment is done by side of the street, or blockface. You can create a blockface layer that defines the left and right side of each street segment.   Be sure to have the Blockface layer visibility selected in Map Layers.

Create the Blockface Layer

1. In the sidebar, click Utilities to expand the menu item.
2. Click Blockface Toolbox. The Blockface Toolbox appears over the Map window.
3. Select either Existing Route or Model Route from the Classify drop-down menu.
4. Click Create. COR processes the Blockface layer, which displays in the map.

Tag Route Values

Menu Procedure:

➩ **COR Menu Sidebar → Utilities → Tag Route Values**

For the purpose of plotting maps, you can assign Existing Route values to Streets and Blockfaces in your database. The route values are assigned to the streets based on the address matched delivery records.

Procedure to Tag Route Values

1. In the sidebar, click Utilities to expand the menu item.

2. Click Tag Route Values. The Tag Route Values pop-up window displays. If you wish to proceed, click Yes, and COR begins to tag route values in the current zone.

3. At the end of the route tagging process, the pop-up window displays a route tagging conflict report. (**Note**: If no delivery location layer or blockface layer has been created, then an error message displays, stating "No delivery location records were found."

4. To determine what the route tagging conflicts are, go to Open Street Table (Data Preparation sidebar → Street and Office Procedures → Open Street Table) and sort the table by the Route Tag Error column. Any street records where the Route Tag Error field = Y will have 1 or more tagging conflicts.

Solution Manager

Menu Procedure:

⇨ **COR Menu Sidebar → Utilities → Solution Manager**

The Solution Manager allows you to save a version, or "snapshot" of the prepared data in the current zone at any point in the data preparation process. Once the version is saved, you may revert to it at any time, simply by returning to the Solution Manager and selecting the version state, and loading it. The Solution Manager also provides you with an effective way to back up your work.

Using Solution Manager

1. In the sidebar, click Utilities to expand the menu item.

2. Click Solution Manager. The Solution Manager window displays.

3. Click Save. The current state of the prepared data in the zone populates the Solution Manager table, and the description column. Once the solution has been saved, you may edit the name of the saved version in the description column..

4. To delete a solution, click the solution in the table and click Delete. Click OK to confirm you want to delete the selected solution.

At any time you may reopen the Solution Manager and revert to an earlier saved state of the zone. Select the state by clicking on it in the solution table, and clicking Load. The current zone reverts to the selected state.

Note: **You may only save up to five solutions per zone.**

Change Route Color

Menu Procedure:

⇨ **COR Menu Sidebar → Utilities → Change Route Color**

All routes are color coded within COR. If it is necessary to change the color of a route (for example, when two routes have similar colors and are very close to each other in the map) use Change Route Color.

Procedure to Change Route Color

1. In the sidebar, click Utilities to expand the menu item.
2. Click Change Route Color. The Change Route Color pop-up window appears over the Map window.
3. Select a route from the Route drop-down menu. The route's color appears in the color swatch next to the drop-down menu.
4. Click Select. The color selector opens. In the color selector, choose a new color for the route you selected, and click OK. The color swatch in the Change Route Color window changes to the new color.
5. Click Apply. The route's color changes to the new color you selected.

Chapter 12

Reports

NDSS by Street Name

Menu Procedure:

⇨ **COR sidebar → Reports → NDSS by Street Name**

NDSS by Street Name lists the AMS street name and address range that is associated with every street Plus4 in the current zone. The entries in this report are ordered by street name and address. For reference, you can create a printable list of all street names sorted alphabetically, that are found in the NDSS file for the current ZIP Code.

1. In the sidebar, click Reports to expand the menu item.

2. Click NDS by Street Name. The NDS Report by Street Name displays in a new browser window.

3. To print the report select Print from the File menu in the Internet Explorer tool bar.

4. To close the report, select File → Exit, or File → Close.

AAT Street Name Conflicts

Menu Procedure:

⇨ **COR Menu Sidebar → Reports → AAT Street Name Conflicts**

AAT Street Name Conflicts lists every blockface in the zone in which the associated non-CBU and non-central delivery type AAT records are assigned more than one street name. For each blockface in the report, the street number, street name and delivery location ID values of all the corresponding AAT records are listed. You should review this report, to verify that each of the AAT records were properly address matched.

1. In the sidebar, click Reports to expand the menu item.

2. Click AAT Street Name Conflicts. The AAT Street Name report displays in a new browser window.

3. To print the report select Print from the File menu in the Internet Explorer tool bar.

4. To close the report, select File → Exit, or File → Close.

Manually Moved/Matched Deliveries

Menu Procedure:

> ⇨ **COR sidebar → Reports → NDS by Street Name**

Manually Moved/Matched Deliveries lists every delivery location in the zone that you have manually moved or matched. The report entries represent all of the delivery locations not placed in a location that was determined by the automatic address matching procedure.

1. In the sidebar, click Reports to expand the menu item.

2. Click Manually Moved/Matched Deliveries. The Manually Moved Delivery Location report displays in a new browser window.

3. To print the report select Print from the File menu in the Internet Explorer tool bar.

4. To close the report, select File → Exit, or File → Close.

Chapter 13

COR to WebCOR Import

Menu Procedure:
   ⇨ **COR sidebar → Utilities → COR to WebCOR Import**

The directions below will appear.

Desktop COR 1.5 Menu Procedure:
   ⇨ **COR Menu Bar → Tools → Export**

   How to package COR 1.5 Data for WebCOR

1. Load a Zone, in COR 1.5
2. Set the layer to Streets
3. Choose Tools\Export
4. The Export Streets Geography Window will appear
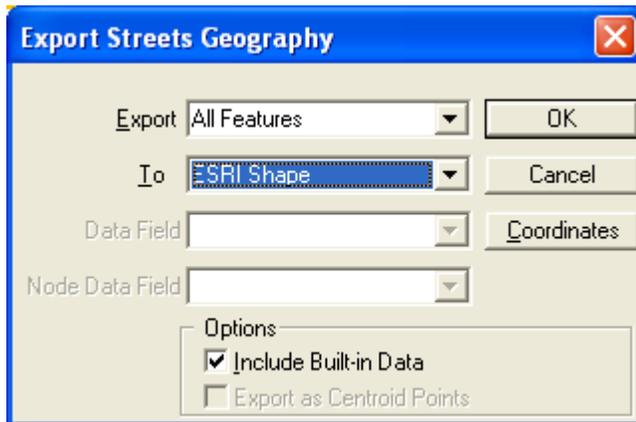
5. Make sure Export shows All Features
6. Click the drop down arrow next to To and select ESRI Shape
7. Click OK
8. The Save As window will appear
9. Change the Look In to be
   c:\program files\cor\map\XXXXX\db\   (where XXXXX is the 5-digit ZIP)
10. Set the File name to be XXXXXstr.shp
11. In the folder c:\program files\cor\map\xxxxx\db you will find 4 the files:
      • XXXXXstr.trn
      • XXXXXstr.dbf
      • XXXXXstr.shp
      • XXXXXstr.shx
12. Zip these files using WinZip and Upload the zip file by clicking the link below.

Upload Zone

You can check on the status of your zone by clicking on the link below.

Check Zone Import Status

This page intentionally left blank

Chapter 14

Printing Maps

Menu Procedure:

⇨ **Toolbar → Print Icon** 🖨

The Print tool allows you to print your current Map display.

1. Click the Print icon. The Print Settings pop-up window appears over the Map window.

2. The Title is automatically set to your Zone. You may select the text and edit the title.

3. Create a Subtitle if necessary.

4. Click the Resolution dropdown arrow and choose the resolution you want for the map. Higher resolution is better for printing large maps.

5. Click Create. A pdf will open once the Map is created.

This page intentionally left blank

Appendix A

Street Class Definitions

Determine a template of the street classifications that you will use and consistently use the same codes to represent the same types of streets for each zone that you work on.

NAVTEQ CLASS	CLASSIFICATION
1	**Major highways**
2	**Major highways used to channel traffic to and from CLASS 1 roads**
3	**Secondary highways, roads that interconnect CLASS 2 roads**
4	**Roads that provide high volume of traffic at moderate speeds between neighborhoods**
5	**Residential roads**

NOTE: You can add any number of additional Classes for other types of streets such as School Zones or other streets that do not meet the current categories of Classes.

This page intentionally left blank

Appendix B

*Web**COR** On-Line Help Guide*

Using the COR Help Guide This help guide is embedded within the COR system to provide overview, reference and procedural instruction on each of the steps needed to complete data preparation and route adjustment using COR.

The COR Help Guide provides context sensitive help so that relevant help topics display when the Help Guide is accessed from different parts of the COR application. It also provides you with keyword search, a comprehensive index, and a table of contents listing all topics and tasks within COR.

What is COR? The COR application is a tool to enable the adjustment of letter carrier route territory and the planning of efficient lines of travel. COR is based on a Geographic Information System (GIS) and supports a user by enabling them to visually see the street territory for a ZIP Code that is being adjusted.

Minimum System Requirements A reasonably equipped business computer running Windows 98, 2000, XP or Vista; 512 MB RAM; Internet Explorer (IE) 6 or later with pop-up blocker disabled.

This page intentionally left blank

Appendix C

Data Preparation Checklist   ZONE: _____

Data Preparation involves the collection, aggregation and preparation of data to support the route adjustment process. Below is a checklist of tasks that must be performed to prepare data for route adjustment.

Setting Up a Zone:
☐ 1. SELECT A ZONE

To prepare data from an existing zone, go to the Zone Selection screen and enter a five-digit ZIP Code in the Zone field.

Click Open Zone.

The COR Data Preparation screen appears, displaying your selected zone.

☐ 2. EXTRACT A ZONE

In the Zone Selection screen, enter a five-digit ZIP code in the Zone field, then click Extract Zone. The Data Preparation—Extract Zone screen appears, and the streets whose ZIP Code matches the zone you selected are highlighted in the map, and the Extract Zone pop-up window appears over the map.

In the Extract Zone pop-up window, you may rename the zone you are extracting, by entering a new ZIP Code in the Zone field.

If you want to add to the zone, or remove an area of the zone, select the appropriate radio button.

To add/remove areas of the zone, use either the Polyline Select, Rectangle Select, or Polygon Select tool to select the area you want to add or remove.

After selecting areas in the map to add-to or remove from your zone, you can revert to your original selected zone by clicking Reselect.

Click Zoom to zoom in to the selected zone.

Click Extract to extract the zone.

☐ 3. DOIS IMPORT

Import from DOIS by clicking the Down Arrow under Utilities to expand the menu. Select DOIS Import. A pop-up menu will appear asking whether you wish to Perform a DOIS Import. Click Yes to Import from DOIS and No to Exit.

Preparing the Data:

☐ 4. OPEN ALTERNATE ADDRESS TABLE

In the COR Menu Sidebar, click Delivery Location Procedures to expand the menu item.

Click Open Alternate Address Table. The Alternate Address Table pop-up window displays.

For more information see [Open Alternate Address Table](#) in the COR Data Preparation section of the Help Guide.

Delivery Locations and Address Matching:

☐ 5. EDIT THE AAT

Edit Alternate Address Table

Columns with editable information in the AAT have a white background; all other columns are read-only with gray backgrounds. The editable columns are Delivery Location Number, Delivery Location Street, and CBU BLDG. These are the fields that allow you to create alternate addresses.

To make changes to one of these for a selected delivery address, click the field in the appropriate column, and you may make changes as needed.

Edit CBUs

As you scroll down through the AAT, you will see in the CBU BLDG field some entries with C and some with numbers. The C is an indication that the delivery point is part of an CBU and must have further information set.

The entries with numbers are Central Box Units where the building number is the same for all the addresses and the actual deliveries are all at one location. For the central boxes, COR determines a unique CBU BLDG value. This will ensure that all these deliveries are represented by a single delivery location.

☐ 6. ADDRESS MATCH DELIVERY LOCATIONS

In the COR Menu Sidebar, click Delivery Location Procedures to expand the menu item.

Click Address Match Delivery Locations. The Address Match Delivery Locations pop-up window appears over the map, and displays the number of matched and unmatched delivery locations.

Click Match Locations, and COR automatically matches the unmatched delivery locations in the current zone, and the Delivery Location Layer is visible in the map.

See [Address Match Delivery Locations](#) for more information.

☐ 7. RESOLVE UNMATCHED DELIVERY LOCATION ADDRESSES

Delivery Location Toolbox

In the sidebar, click Delivery Location Procedures to expand the menu item.

Click Delivery Location Toolbox. The Delivery Location Toolbox appears over the map.

Click the Match Delivery Location tool 📌 .

The Delivery Location Toolbox displays a summary table of unmatched delivery locations.

Select an unmatched delivery location in the summary table by single-clicking on it. You may locate the delivery location in the map using [Selection Tools](#) (Sidebar → Utilities → Selection Tools).

With the unmatched delivery location selected in the summary table, click the location in the map where the delivery location belongs.

Now click the street on which you placed the delivery location. The unmatched delivery location is matched to the location you selected.

See [Delivery Location Toolbox](#) for more information.

Blockfaces and Route Maps:

☐ 8. CREATE BLOCKFACE LAYER

In the sidebar, click Utilities to expand the menu item.

Click Blockface Toolbox. The Blockface toolbox appears over the Map window. (***note:*** Change Classification and Model Route are not used in COR Data Preparation).

Click Create. COR processes the Blockface layer, which displays in the map (be sure to have the Blockface layer visibility selected in [Map Layers](#)).

See [Blockface Toolbox](#) for more information.

☐ 9. TAG EXISTING ROUTE NUMBERS

For the purpose of plotting maps, you can assign Existing Route values to Streets and Blockfaces in your database. The route values are assigned to the streets based on the address matched delivery records.

Tag Route Values

In the sidebar, click Utilities to expand the menu item.

Click Tag Route Values. The Tag Route Values pop-up window displays. If you wish to proceed, click Yes, and COR begins to tag route values in the current zone.

At the end of the route tagging process, the pop-up window displays a route tagging conflict report. (***Note***: If no deliver location layer or blockface layer has been created, then an error message displays, stating "No delivery location records were found."

To determine what the route tagging conflicts are, go to [Open Street Table](#) (Data Preparation sidebar → Street and Office Procedures → Open Street Table) and sort the table by the RouteTag Error column. Any street records where the Route Tag Error field = Y will have 1 or more tagging conflicts.

☐ 10. FIELD VERIFY STREETS

Please refer to your USPS Field Verification Form.

Street Preparation

☐ 11. UPDATE STREETS

In the sidebar, click Street and Office Procedures to expand the menu item.

Click Open Street Table. The Street Table displays over the map.

In the Street Table, all white fields are editable and all gray are not. You can sort the data in the table by clicking any column header. Click the header a second time to reverse the sort-order.

Use the Street Table to resolve streets with incorrect ZIP Codes, incorrect or missing address ranges, overlapping address ranges, incorrect street names and route codes, and route tag errors.

See Open Street Table for more information.

12. EDIT ONE-WAY STREETS

Edit One-Way Streets

In the sidebar, click Street and Office Procedures to expand the menu item.

Click Edit Network Attributes. The Edit Network Attributes window appears over the Map window.

To edit a one-way street, select One-way from the Layer drop-down menu.

One-way streets in the current zone appear in the map highlighted by a blue line and black arrowheads, pointing in the direction of the one-way street as it is stored in the Street layer (*Note:* It may be necessary to zoom in to see the displayed one-way streets).

Select the Add tool◀⁺ . Click once on a section of the highlighted one-way street. The highlighted blue line and arrowheads disappear, and the street is changed into a two-way street.

Click in the same section of the street a second time, and the highlight blue line and arrowheads reappear, pointed in the opposite direction. The direction of the one-way street has been changed. If you click a third time, the street is restored to its original direction.

You may click a two way street to change it to a one-way street, using the same method.

See Edit Network Attributes for more information.

13. EDIT OVERPASSES

Add Overpasses

In the sidebar, click Street and Office Procedures to expand the menu item.

Click Edit Network Attributes. The Edit Network Attributes window appears over the Map window.

To add an overpass, select Overpass from the Layer drop-down menu.

Select a value of 1 to add an overpass, and -1 to add an underpass (the default value of streets in the zone is 0; you may add 2 or -2 for overpasses and underpasses with more than one level).

Select the Add tool◀⁺ , and click the street on which the overpass belongs, on one side of the intersection. The number 1 is added to the map.

Click the street on the other side of the intersection, and a second 1 is added to the map, indicating that the street you selected is elevated over the cross street and no turns can be from it at the intersection.

Remove Overpasses

In the sidebar, click Street and Office Procedures to expand the menu item.

Click Edit Network Attributes. The Edit Network Attributes window appears over the Map window.

To remove an overpass, select Overpass from the Layer drop-down menu.

To remove the overpass, select the Remove tool ◄ and click the numbers on either side of the intersection. See <u>Edit Network Attributes</u> for more information.

☐ 14. EDIT STREET ATTRIBUTE DEFAULTS

In the sidebar, click Street and Office Procedures to expand the menu item.

Click Street Attribute Defaults. The Street Attribute Defaults pop-up window appears over the Map window. In the Drive Rate (MPH), Crossing Difficulty, and Parking columns, enter new default values in the fields for street classes.

Click Save. Your changes are saved and the Street Attribute Defaults pop-up window closes. See <u>Street Attribute Defaults</u> for more information.

☐ 15. BUILD TRAVEL NETWORK

In the sidebar, click Street and Office Procedures to expand the menu item.

Click Build Travel Network. The Build Travel Network pop-up window appears over the Map window. The Build Travel Network window displays information on when the travel network was last built.

Click Yes to build the travel network, or No to exit without building it.

To display any network disconnectivities, click Street and Office Procedures and select Display Network Disconnects. The Display Network Disconnects pop-up window appears. Select the type of network disconnects to display, and click OK.

☐ 16. SET TURN DEFAULTS

In the sidebar, click Street and Office Procedures to expand the menu item.

Click Edit Turn Defaults. The Edit Turn Defaults pop-up window appears over the Map window.

In the Edit Turn Defaults pop-up window, edit the penalty values in seconds in the Straight Through, Right Turn, Left Turn, and U-Turn fields (**Note**: While these penalties can affect the actual path that the line of travel follows, the penalty time is not added to the travel time.)

Click Save to exit the window.

Revise Address Matching (repeat the following steps):
Address Match
Create Blockface Layer
Tag Existing Route Numbers
Add Post Office

This page intentionally left blank

Glossary

A

Address Match: The process of locating street addresses on a digital street map.

Alternate Address Table (AAT): A table of each individual delivery point. Alternative delivery location addresses may be entered in the AAT to locate one or more deliveries at the location where the mail is delivered.

Area Layer: A database layer containing boundary information for a two dimensional object like a parcel of land or a ZIP Code zone.

Attribute: A distinguishing feature or characteristic of a geographic feature. For example some attributes of a street segment are its name, address range, route id, etc.

B

Backup: Making a copy of a file or a whole disk for safe keeping in case the original is lost or damaged.

Blockface: A single side of a single street segment.

Buffer: The area or objects around an object such as the streets adjacent to a ZIP Code area.

C

CBU: Collection Box Unit

CDS File: ASCII file containing the CLASS records.

Coordinates: A set of numbers that specifies the location of a point either on a two-dimensional X-Y plane, or in a three-dimensional X-Y-Z space.

Cursor: A movable marker that is used to indicate a position on the display screen.

D

Data: A value or a set of values that represents information.

Database: A collection of information that is systematically organized within an integrated structure.

DCD: Data Collection Device. A hand held computer used by USPS to capture route inspection data.

Default: Refers to the value that will be used or stored if one is not specified.

Delivery Data: Same as Route Inspection Data. Includes possible and observed deliveries, delivery time, mode of delivery, delivery type, route id, and ZIP+4.

Delivery Location Layer: A layer that contains the actual letter carrier delivery locations. Deliveries in a CBU are grouped together to form single delivery locations.

DPF: An alternative ASCII file to the CDS containing all the CLASS records.

DPS: Refers to the automated sorting equipment's capability to sort mail into route delivery sequence. This mail is referred to as Delivery Point Sequenced mail.

E

Element: One entry in the database. Also known as a Data Element.

ESRI: Environmental Systems Research Institute is responsible the GIS software utilized for WebCOR.

F

Feature: A geographic entity that occupies or is referenced to a specific location or area on the earth's surface

Field: A location in the database that stores information associated with a data element of a geographic feature.

File: A collection of related information in a computer that can be accessed by a unique name.

G

Geographic Coordinates: Coordinates specifying a point on the surface of the earth. See also Coordinates.

Geographic Database: A database which integrates spatial and non-spatial attribute data for geographic features.

GeoLimited: A Delivery Routing System deployed in the USPS for managing territory route adjustments.

GIS: Geographic Information System. A computer system used to collect, integrate, store, analyze, retrieve, manipulate, and display geographic data.

H

Hardware: The physical components of a computer system - the computer, plotters, printers, display screen, hard drives, mouse, etc.

I

Input: To enter data into a computer or the data entered into a computer.

Intersection: The point at which two or more streets cross on a map and street segments start or end.

L

Latitude: The distance on the Earth's surface north or south of the Equator measured in degrees. In COR all Y coordinate values are stored in millionths of degrees north of the Equator.

Layer: A database storing one type of geographic feature. There are three types of layers: points, lines, and areas. For example, Streets is a layer of lines that represent street segments, and ZIP Code is a layer of areas that represent zone boundaries.

Line: One of the three basic geographical elements, defined by at least two pairs of X,Y coordinates called nodes. Also known as an arc, link or segment.

Longitude: The distance on the Earth's surface east or west of Greenwich, England measured in degrees. In COR all X coordinate values are stored in millionths of degrees west of Greenwich. These values are always negative since the USA is west of Greenwich.

M

Maptitude: The GIS software developed by Caliper Corporation and utilized in COR. This software provides the ability to display and manipulate geographic data. It is not used in WebCOR.

Master Database: A large Streets database containing many zones.

Menu: A user friendly list of available commands from which a user can select any one command at a time.

Mouse: A hand steered device used to enter data into a computer .

N

NDS File: An AMS file containing street segment and address range data for Plus4 values in a zone

Node: A point defining either end of a street segment.

Non-graphic Data: Attribute data which do not have intrinsic spatial characteristics. For example, delivery time and observed deliveries.

O

Overlay: The process of stacking or layering digital representations of various spatial data on top of each other so that all the information can be viewed and analyzed together.

P

Plot: A hard copy graphic representation of a drawing or map produced on a computer plotter or printer.

Plotter: A device used for converting digital maps into hardcopy output.

Polygon: A multi-sided figure used to represent the boundary of a ZIP Code zone.

Program: A precise sequential set of instructions directing the computer to perform a task.

Q

Query: The process of making a database inquiry.

R

Record: A set of attributes in a database describing a particular feature. For example, all the data in the database for one street segment would be called a street record.

Route: A collection of street segments to be serviced by a letter carrier within one workday.

S

Scale: To change the representation of a quantity, expressing it in other units, so that its range is brought within a manageable size. Also the ratio of a map to the real world.

Segment: A data record in the Streets layer. It holds all the data for one street segment.

Shape Point: A coordinate point used to define shape to a street segment between its end points

Software: A general name for computer programs and programming languages.

Symbol: A standardized graphical image representing a particular feature or class of features.

T

Tagging: The process of entering the attribute information relating to the street segments in the database, such as tagging the existing route values.

Theme: A representation of data using graphical elements such as color, shading, or symbols to provide information about database elements. Its use is known as thematic mapping.

Topology: The way in which geographic features are related to each other in terms of adjacency, connectivity, and containment. These relationships are automatically stored for each feature in the COR databases. For the purpose of COR, topology refers to the direction in which streets were drawn on the Map.

Travel Network: A snapshot of the street database used by the routing algorithms and containing street topology, one-way street information and travel speeds.

Turn Defaults: A value in seconds for the movement through an intersection to influence the preference for certain types of movement while in the vehicle.

Turn Exceptions: Intersection specific values in seconds to encourage or discourage turns. Turn exceptions override turn defaults.

V

Value: The entry in one attribute field.

W

Window: A rectangular area on the computer's screen. A window could contain a map display, attribute tables, status message, DRS menu, or any other process.

INDEX