

## **Narrative for the Joint COR PowerPoint Presentation**

### **Highlights**

***This is ONLY select text from the PowerPoint narrative. You must refer to the complete narrative AND the PowerPoint presentation for a complete understanding of the subject.***

#### **Slide #**

**6.** COR stands for “Carrier Optimal Routing.” Essentially, it is a computer software application that utilizes *Maptitude* as a Geographical Information System [GIS], a mapping software program created by the Caliper Corporation, which allows users to view, edit, and integrate maps. Additional software was developed and added for routing.

COR uses geographic information from *Maptitude* and route information supplied by DOIS and, based on other information and preference settings controlled by the COR Technician, it realigns territory within a delivery zone and adjusts lines of travel.

Using COR in the correct manner, the Postal Service attempts to “optimize” a zone by eliminating unnecessary travel time [travel to, travel from, travel within, and relay time] that may not be necessary after realigning routes and lines of travel, as determined by the COR Technician in a non-MIARAP environment or by the DEAT in a MIARAP environment, when realigning routes and lines of travel. Care needs to be taken so that legitimate time is not eliminated.

**7.** In simple terms, COR does not adjust routes by itself. It merely takes the information about the routes in a zone (DOIS, 3999, mail volumes, etc) and based upon certain internal programming and various parameters that must be set by a human being; it produces what the Postal Service calls a “solution.”

A solution is a starting point... it is a suggested or proposed realignment of route boundaries and travel patterns, along with proposed route adjustments. It is not, nor should it necessarily be construed to be, a final product.

The most optimal “solution”, as determined by the District Evaluation and Adjustment Team, is then modified, adjusted or “tweaked,” by the COR Technician *at the direction* of the District Evaluation and Adjustment Team, into a zone having routes as near a possible to 8 hours that are compact, with efficient lines of travel and compliant with the M-39 handbook. A current National issue on relay time is currently being discussed.

**10.** One way that COR optimizes a zone is by reporting actual Allied Time and then recalculating the Travel and Relay times on each route. Allied Times are times that a carrier spends on the street doing functions other than actually delivering, sorting, or arranging letters and flats. Some examples of Allied Time are:

1. Travel To and Travel From the route which are self explanatory.
2. Loading and Unloading the vehicle and gassing the vehicle—also self-explanatory.
3. Travel Within which is travel that occurs within the route and is not part of Travel To or Travel From the route. Some examples of Travel Within are moving the vehicle from park point to park point or driving from one geographic location to another without delivering.
4. Parcel and Accountable Time which is time spent delivering these items.
5. Relay Time which is time spent loading relays into a satchel from a vehicle or Relay Box.
6. Personal Time, Customer Contact, and Street Breaks which are self explanatory.

**11.** COR reports the Allied Time from the 3999 in the Existing Route Summary. COR does not change any of the times except for Travel To, Travel From, Travel Within, and Relay Time. Those times change if COR reconfigures a route. Travel To, Travel From, and Travel Within time changes need to be validated.

COR recalculates the time for Travel To, Travel From, and Travel Within on a route based on parameters set during the Database Preparation of the COR zone and routing algorithms within the software.

**14.** The Lead Team is responsible for making sure that there are *valid* 3999's available for the DEAT Team to work with and that all necessary time validations have been completed so that there are no delays in the process.

**15.** Now let's look at some of the responsibilities of the District Evaluation and Adjustment Teams.

They will review all of the information provided to them for anomalies (an inconsistency or abnormality) as well as data integrity issues (such as incomplete or inaccurate recording of data) and they will verify that the 3999's they have been provided are current, accurate and representative. They will notify the local office contacts if they need a valid and representative 3999 completed.

In short, their job is to consider all information, including the actual times, bases times, fixed office times, 3999's, the mail volumes and the carrier's comments, to arrive at an evaluated time for each of the routes in that unit and to adjust them as necessary.

**17.** Frequently COR makes changes to relays. It may eliminate relays from a route through consolidation or it may change the relay time and the number of deliveries when it is moved from one route to another.

The relay times from the existing route's 3999's will be noted as "E-X-R" and new relay times computed by COR will be listed as "A-D-J" on the back of each route's 1840. The time will be listed by each relay as well as total relay time.

The DEAT team will generate or will have generated any relevant reports in COR and will review the specifics of the proposed changes to relays or relay time. This will assist them in making decisions about these changes and will provide documentation to be shared with the affected carriers at the adjustment consultations.

**18.** COR generates a report called the Allied Time Report which will be used by the DEAT as a tool to review proposals regarding the transfer of Allied Time. After the DEAT jointly agrees which Allied Time will be transferred with the territory, the Allied Time Report will be used to document any agreed to changes on the back of the PS 1840 during the adjustment consultations.

**19.** If there are changes in travel time due to a new travel pattern proposed by COR, the new times must be validated and then reviewed by the DEAT team so they can make an informed decision about the change. The Route Summary Report produced by COR will be used to aid in the validation.

**20.** MIARAP is to be a joint process at every level: local, district, area/regional and Headquarters. As such, any decisions regarding the evaluations and adjustments of routes, including any deductions or changes, whether proposed by COR or done manually, are to be made JOINTLY by the District Evaluation and Adjustment Team.

**22.** During the “Prep” process, all of the addresses and the delivery points for those addresses have to be geo-coded. Someone has to actually verify the existence of address ranges and mark on a map the delivery location for any anomalies and central delivery locations.

Someone must also verify such things as one-way streets, no-turn intersections, parking restrictions, dead ends, bridges, street crossing penalties, etc. They also must document speed limits for each class of street in the zone.

**23.** A DPS density End of Run (EOR) report is requested from the Plant and the Technician inputs the DPS volumes into COR by sector segment.

**24.** It is best if the Team can review the 3999 data before it is input to COR, obtain a copy of the original Form 3999 [*prior to input into DOIS*], and the *Form 3999 Audit Report*. The Team should also review the carrier’s comments from the initial consultation and compare it with the 3999’s.

The Team should also get input from someone familiar with the zone. It could be the steward, the supervisor, a light duty carrier or anyone who has current accurate knowledge of the zone. In certain situations the Team might want to check with the carrier on the route.

**25.** It is extremely important to note that COR will only use the most recent 3999 for a route. So it’s best to catch and correct any errors in the 3999 before it’s input to COR.

However, sometimes the 3999 may have been done correctly, but it is not representative. Perhaps it was done on a Saturday on a business route with lots of closures. ..or was done on the Carrier Technician, not the regular, for any number of reasons.

Again, if the DEAT cannot agree on whether a 3999 is representative, they should elevate the dispute to the Lead Team.

**26.** One of the first things that the DEAT should do is to make sure that the data going into COR is complete and accurate. 3999's should be checked to make sure that they are complete and were done on a representative day. For example, the 3999 for a business route with a lot of Saturday closures should not be done on a Saturday or, for that matter, on a Monday.

The Team should check to see that time recorded as "Travel Within" was really "Travel Within" and not delivery time. The Team should also check to make sure that loading time is reasonable.

Relay time appearing on a mounted portion of a route would be a red flag as would all relay time entries of over five minutes per relay. Travel to and from the route that did not make sense...such as one minute when the beginning of the route is 5 miles from the post office, should be questioned.

**27.** Travel Within in COR is defined as time spent moving the vehicle from one park point to another park point or from one geographical section to another without delivery. Travel Within is not collected between curblin deliveries unless there is a significant geographical distance between those deliveries without servicing any stops.

Other examples of what is sometimes wrongly recorded as Travel Within are when the carrier is moving the vehicle from CBU to CBU on an apartment complex or business route or when moving from dismount to dismount on a car-hop portion (getting out to service boxes behind the sidewalk or car-hopping inside delivery to businesses) .

**28.** Let's talk about RELAY TIME:

Relay Time should only appear on Park and Loop or foot delivery portions of routes.

Relay Time begins when Travel Within the route ends and the Carrier begins the relay process, *[relay time includes reloading mail time]*

...or when the Carrier arrives back at the Vehicle (or relay box) to reload the satchel for the next Park and Loop Relay and unlocks the Vehicle or relay box.

Relay Time ends when the Carrier locks the Vehicle or the relay box.

Relay Time is not:

Any time that the Carrier Spends Replenishing Mail on a motorized portion of a Route.

That Time is considered Replenishment Time and Must be Entered Under

"Miscellaneous Time Other" and documented as Replenishment Time on the 3999.

What is Replenishment Time? Replenishment Time is any Time that the Carrier Spends Replenishing Mail (Including Changing or Moving Trays) on a Motorized Route.

In order for COR to recognize any data on dismount and curblin route sections as Replenishment Time, the route inspector must collect this time under Miscellaneous Other and notate it as Replenishment Time. This data includes replenishing trays and moving trays in the vehicle on curblin and dismount routes.

**32.** The original Form 3999 should be printed out prior to any changes being made by a manager or technician in Operations. Sometimes that Form 3999 will add or deduct time for reasons that may be valid and for other reasons that may not be. The Team should get a copy of the original Form 3999. If the original Form 3999 is augmented in any way, the changes will appear of the *3999 Audit Trail Report*.

**36.** In addition to making sure the 3999's are accurate and representative, the Team should verify that the information collected on from the work hour workload reports for the evaluation period is also accurate and representative.

Local office contacts should make the DEAT aware of any data integrity issues such as altered time records, MODs code changes, improper transfer of work hours, auxiliary assistance has not been counted, etc.

**37.** The District Evaluation and Adjustment Team will be working with a COR Technician who should know how to utilize the system. The Technician conducts his or her duties at the joint direction of the Team.

**38.** There are a number of Reports that are generated by COR that the Team should use when evaluating and adjusting routes. These are:

Existing Route Summary

Route Relations Summary

Territory Transfer Summary Report

Adjusted Route Summary

Line of Travel Report

Allied Time Report

**39.** The Existing Route Summary is one of the first reports the Team should request. It is, as it's title suggests, a summary of each route in the zone, as they currently exist... prior to any changes being made. It is the BEFORE picture of each route and the totals for the zone.

**43.** After all of the data has been imported to COR, and the Existing Route Summary has been populated with the MIARAP data, COR requires a number of options and

preferences be chosen before it can begin the process of adjusting routes. These selections set the parameters which COR will apply when realigning the zone.

**53.** For purposes of COR, there is no deadheading on the walking portion of a route. The time spent walking from one house to another or walking complete blocks or longer distances without making any deliveries is counted as service time

**55.** Remember, COR is not intended to produce a finished product all by itself. It is only meant to offer a proposal or what the Postal Service calls “a solution” which generally needs to be edited and adjusted by the COR technician. The Team should not expect either COR to do all of the work for them or for the COR Technician to make any of these decisions on which parameters to set in COR.

Since MIARAP is a joint process, the Team must jointly agree how and what will be changed and the COR Technician must then make it happen.

**56.** After the button is pushed, COR is going to realign the zone by adjusting routes based upon the route information from the Form 3999 and the MIARAP selected time, plus the COR parameters the Team selected.

One of the first things the Team should do is to have COR display a zone map so you can see what it did. In all likelihood, COR will not produce a solution that needs no revision.

**58.** After looking at the map, the Team should request and review the Route Relations Summary report. This report shows how much each route was changed and where the territory came from.

**60.** The Territory Transfer Summary Report shows how many deliveries were on the existing route, how many were retained and what percentage of the old deliveries this represents. It also shows how much delivery time existed on the “old” route, how much remains and what percentage of the “old” route this represents.

**63.** After working with COR and having come up with a solution that the Team can work with, it can then begin to make adjustments to the routes by moving territory around.

**70.** Now that the route boundaries have been set, the routes’ lines of travel should be made. Once the line of travel is created, the Team may want to adjust or change it.

The Line of Travel procedure will produce a solution for the park and loop deliveries that have a walking mode, and will include the parking locations in a path that also services the deliveries that have a driving mode. The line of travel generation can be used for all walking routes or all driving routes as well.

**71.** Under the Generate Line of Travel screen COR will ask which routes should be selected to create lines of travel for. It is recommended that this should be done one route at a time.

For instance, the Team may determine that the *Maximum Round Trip Walking Time Between Service* needs to be increased because of a lot of vacant buildings. The Team may want to decrease the *Maximum Volume of Mail Per Relay* to accommodate a carrier's medical restriction.

This screen also asks the Team to choose the *Maximum time separation between opposite sides of the street*. For all routes, this setting controls the maximum amount of time between servicing one side of the street and the other side of the street. Making this setting too low can cause the line of travel to be longer.

## **72. Maximum Volume of Mail Per Relay (in pounds)**

The setting allows the Team to determine the maximum number of pounds that COR will allow per relay when it sets up the line of travel. When it is necessary, you can change the setting due to a letter carrier's restrictions or when there is a necessity to reduce the length of swings in a low volume area. Obviously, the greater the volume selected, the longer the service time will be on that relay. This effects how the routes are structured.

The initial setting is 25 lb. The setting for non-push cart routes should not be set above 25 lbs, due to heavy volume days and days with saturation mailing.

**73.** Additionally, the Team should consider the impact a full coverage will have on a satchel. The default setting is 25 lbs. If the Team wants a different amount, they will have to have the COR Tech change it.

**76.** In order to get a general sense of how the route is serviced, one can trace the line of travel using the "VCR-like" trace tool. To do so, click *Menu* in the [COR] menu window to display the [COR: Route Adjustment] window.

**77.** In this example, you can see that the first relay has a calculated weight of 20 pounds and 78 possible deliveries. The second relay is calculated to be 22.08 pounds and 83 possible deliveries.

You can see from this example that the setting of 25 pounds for the *Maximum volume of mail per relay* has resulted in the first four relays being pretty long and having between 78 and 93 possible deliveries. Lowering that setting would create more relays with less volume and fewer possible deliveries.

**78.** As you might imagine, the computer generated line of travel may not always take into account some of your real world considerations. The Line of Travel editing tool allows one to modify or even create from scratch a Line of Travel.

**79.** The Line of Travel should be verified by printing the Line of Travel Report. This will tell you what the map can't. This is the *text version* of the line of travel.

**80.** Printing the Route Summary Report will show one the possible deliveries, allied, total street, office, priority and total time for each route as well as other details.

**81.** The Route Summary Report continues with a list of the number of park points for each route. It also lists their specific locations and the beginning point of each relay.

**82.** One thing COR changes is relay time. Instead of giving actual time, it gives an average time based on the performance of each carrier. Here's how it calculates relay time.

The total time for all of the relays appearing on a route's 3999 is divided by the number of relays to determine the average time per relay. *[It is important that the Team is confident that only relay time was included in the 3999 relay time, and not sorting mail or delivery time]*

All relays and their times are eliminated and new relays are calculated based on the "optimal travel path," the satchel weight assigned in COR, the projected volume and the weight of that mail, and the carrier's average relay time on Form 3999.

**83.** Here's what COR does, when relays are eliminated or are moved from one route to another.

For example: Route #1 has 20 relays, which COR has averaged at 3 minutes per relay.

Some of Route #1 gets transferred to Route #2, whose average relay time is 4 minutes.

COR optimizes Route #1 and figures that it needs only 15 relays after the adjustment. COR would credit each relay with 3 minutes.

**84.** Remember the Existing Route Summary? We called that the BEFORE picture of the routes and the Zone... well this is the AFTER picture. It's called the Adjusted Route Summary. This report shows the same information about each route that was on the Existing Route Summary, but shows it after COR adjusted the routes, after you have moved territory or changed the lines of travel.

**85.** Bottom line: The DEAT should compare the Adjusted Route Summary with the Existing Route Summary to see how many hours were taken from the zone to see if that makes sense or if there may be too much time credit that was lost.

**86.** Another essential report is the Allied Time Details report. This report lists the allied time that adjustments were made and territory was moved from one route or another. It details the loading, travel to, travel from and travel within for each route as they appear after the adjustment.

**87.** The *Allied Time Report* shows the block ranges where parcel and accountable deliveries were made on the existing route's 3999 and the allied time that was associated

with each. It also shows which of these block ranges have been moved to other routes and which ones remain in the existing route.

The Allied Time that falls within the range of a blockface that is moved to another route does not go with the Delivery time to the gaining route; it remains with the existing route. The Team will have to decide if the Allied Time should be transferred to the gaining route as well.

Here's why this does not happen automatically. On most routes, parcel and accountable deliveries are random. Few homes get parcels or accountables every day. Although a given route may consistently get between 15 and 20 parcels and 3-5 accountables every day, they are not delivered to the same addresses each time.

However, some routes may have business deliveries that receive parcels and/or accountables every day and others that do not. There is no consistent rule that can be applied.

**90.** Remember that we said earlier that COR reports allied time. Whether generating routes or creating lines of travel, COR recalculates driving times based upon the distance and the speed limit set for the road when the zone was prepped for COR. This includes, Travel to and From the route as well as Travel Within the route such as driving from park point to park point.

COR will also attempt to reduce relays and vehicle moves based on satchel weight.

COR does not transfer time used for parcels or accountables when moving sector segments from one route to another.

Teams will need to verify that these allied time changes are legitimate and documented on the back of the 1840 or recredited when necessary

**92.** When territory is transferred in COR, whether by the route generation process, when using the transfer toolbox, or when creating or changing lines of travel; changes in street credit occur.

Any changes to a carrier's street time from the actual time used on the 3999 must be shown by sector segment on the back of PS Form 1840. This includes any changes to relay time, travel time, such as travel to, Travel From, and Travel Within the route, or any other allied times.

**93.** The process for entering comments on the 1840 Reverse explaining why changes were made to Allied time are done like this:

Go to Reports and Plots window and select the command Edit Allied Time Comments.

**97.** Travel to and from the route as well as travel within the route must be validated and documented prior to the adjustment consultation and discussed with the carrier during the consultation.

The actual time should be taken from the 3999 unless a new pattern is created during the adjustment process and that must be validated.

The intent is for the letter carrier to be aware of any proposed time adjustments to the route's base street time and/or to the street time being transferred.

It is not necessary for travel times to be jointly validated. However, if the Team cannot agree, they should immediately elevate the dispute to the District Lead Team.

The DEAT should insure that new times are validated on a representative day and time.

**98.** When you have completed the adjustments, you will need to create new route maps for the Local Contacts to have at the adjustment consultation with the carrier.

**99.** When the Team has completed the adjustments for the Zone, they will need to prepare a package for each route in the unit. This must include:

The 1840 Reverse showing all of the changes made to the route.

The new Line of Travel Report, which is the text version line of travel

A New Route map

A copy of the Full Route Summary Report showing the complete breakdown of Street times, Allied times, Travel Time, park points, relays, etc.

Territory Transfer Report showing the percentage of the former route that remains on the newly created route.

A new map of the Zone

**101.** All of these materials are sent to the Local Contacts at the unit where the adjustments took place.

The Local contacts will then conduct the adjustment consultations using the materials provided. When completed, the Local Contacts will return the adjustment consultation forms and the 1840 reverse, along with any relevant comments made by the carrier, to the District Evaluation and Adjustment Team.

The DEAT will review the carrier comments and if warranted, make additional changes.