

Narrative for the Joint COR PowerPoint Presentation

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2. In 2008, the NALC and the Postal Service entered into an Interim Alternate Route Adjustment Process or "IARAP." This process, which basically adjusted routes using the carrier's demonstrated performance from the months of May and September 2008, resulted in the evaluation and adjustment of some 70,000 routes across the county.

It became clear to both parties *almost immediately* that more routes needed to be looked at and that many of those recently evaluated and adjusted routes were already in need of further adjustments.

Although a stable and consistent mail volume environment and an historical review of data over a longer period of time may be preferred, it is recognized that the current environment has resulted in a significant and continued decline in mail volume.

Therefore, in April of this year the National parties agreed to a Modified Interim Route Adjustment Process (MIARAP) to be utilized for 2009. Part of this agreement requires that when available, the Carrier Optimal Routing process (COR) will be utilized as a tool for route optimization and adjustment.

3. Some of you are probably already familiar with the COR process and may even have participated locally in using COR to adjust routes in your office[s]. But there are many areas in the country where COR remains a mystery.

The objective of this training segment is to remove some of the mystique about the COR process by providing a basic understanding of what, if and how it works.

It is intended to help District Evaluation and Adjustment Teams, as well as others involved in MIARAP, to use COR when adjusting routes, to recognize where COR users may make time deductions. Always keep in mind, COR is a tool, the mechanic is a person.

4. Here's what we'll cover today:

We will begin with a basic introduction to COR ... what it is, where it came from, what it does and can do.

The national parties have made certain agreements which Area/Regional, District and local parties are required to follow under MIARAP and COR. We will review the highlights of those agreements and focus on the roles of the Lead Teams and the District Evaluation and Adjustment Teams as they relate to the COR process.

We will then go over how COR works... what must be done to prepare a zone to use COR to adjust routes, how the data and settings input into the COR software are used by COR to propose adjustments, or what COR calls "Solutions" to a zone.

5. So, let's begin by talking about COR, what it is, where it came from, and what it can do.

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. We will talk about this a little later on.

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.

Remember that the MIARAP agreement states, "This agreement is without prejudice to the position of either party in this or any other matter. The procedures described in this agreement will be utilized solely for the purpose of implementing the Modified Interim Alternate Route Adjustment Process, and may be cited only for purposes of enforcing the terms of the [*MIARAP*] agreement."

8. COR is just the latest in a long line of Postal Service attempts to automate route adjustments and create more time efficient routes. Many of you will recognize some of its previous efforts:

RES – Route Evaluations System

GEO Limited – (Geo Mod) which used a mapping tool that was GIS based with Maptitude to adjust routes manually.

Of course there is the DCD, or the Data Collection Device - which has been around in various version since the early 1990's - that management still uses on the floor and out on the street used to collect information about the routes and,

DOIS – which stands for: Delivery Operations Information System, which replaced the Decision Support Information System (DSIS), the Route Examination System and the Projected Office and Street Time (POST) application.

In addition to providing data to Delivery Unit managers to assist them in the daily managing of office and street activities, the information collected within DOIS can also be used for route inspections and adjustments.

9. Where COR differs from previous programs is that it is not just a computerized mapping tool used to move territory around on a map.

COR has a programmed task. It is programmed to “optimize” a delivery zone.

What that means is that COR uses algorithms* to configure compact, contiguous, city carrier routes. It also uses *algorithms and volume data imported from DOIS to try to create more efficient travel paths for city carriers while reducing park points and relays.

* Algorithm >noun a process or set of rules used in calculations or other problem-solving operations.

-DERIVATIVES algorithmic >adjective.

-ORIGIN Latin algorismus, from an Arabic word meaning 'the man of 4w rizm', referring to a 9th-century mathematician.

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.

Allied Times can be reviewed by looking at the Existing Route Summary. Those Allied Times listed should match exactly the times received from DOIS from the 3999 for the route.

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. Relay time is also recalculated, but we will discuss how that is done and the method that is used later in this presentation.

Any other changes to Allied Times in COR are done manually by the COR technician, and all changes are automatically reported on the back of the PS 1840 with appropriate comments. Changes can be made to allied time on the 3999, prior to it being entered into COR, which we'll discuss later.

12. As previously mentioned, after reviewing and analyzing the results of the IARAP process implemented in the Fall of 2008, the NALC and the Postal Service agreed to continue to use the interim alternative route adjustment process with some modifications. This became known as the MIARAP agreement.

One of the key changes to the earlier process was in the process and personnel that would be used to adjust routes. Under IARAP, routes were adjusted by local joint teams. This led to some problems.

To deal with this, the MIARAP agreement created District Evaluation and Adjustment Teams and shifted the responsibility to analyze and adjust routes to the DEATs and the District Lead Teams [LTs]. Furthermore, the MIARAP agreement provided that *“When available Carrier Optimal Routing (COR) will be jointly used by the District Evaluation and Adjustment Team as a tool for route optimization and adjustment.”*

The parties also carried forward the principles of the July 2007 National Settlement on the COR Dispute that *“no components of the COR program or application of the COR process shall be inconsistent with the route inspection, evaluation and adjustment process found in Chapter 2 of the M-39 Handbook.”*

13. In addition to the MIARAP agreement, the parties jointly developed a document to help explain their shared understanding of the issues and processes. This included how COR would be utilized in the adjustment process.

Let's go over the highlights of this document as it pertains to the use of COR. Remember, this is just a review of how COR is to be used in the MIRAP process, the details of *how* it's done will be described later in the presentation.

Copies of this presentation, as well as the National COR Settlement, the National DOIS Settlement, and the MIARAP Agreement and Joint Training Guide are contained in your training packet.

14. Let's first talk about the roles of the District Lead Team as well as the District Evaluation and Adjustment Teams (or DEATs for short), each consisting of one manager and one NALC representative.

There is one District Lead Team per district that oversees MIARAP in the entire District. It prioritizes which units will be looked at and determines which District Evaluation and Adjustment Team will be assigned to which unit. The Lead Team is responsible for maintaining good lines of communication with its DEAT teams and should contact them at least weekly. Working with district officials, the Lead Team schedules COR Technicians to work with the DEAT Teams when COR is going to be utilized in the evaluation and adjustment of the routes in a unit.

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. The Lead Team is responsible for tracking and recording the DEAT's progress in the units and will compile the results of the evaluation and adjustment process by unit, installation and district and forward this information to the Area/Regional and National Oversight Teams.

The Lead team will also attempt to resolve any issues advanced to them by the Evaluation and Adjustment Team. If the Lead Team cannot resolve it, they are to elevate it to the Area/Regional Team. The Lead Teams will also participate in training the DEAT teams in the evaluation and adjustment process.

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

They are responsible for analyzing the data, evaluating the routes and making the necessary adjustments to the units they are assigned as well as overseeing the jointly conducted consultations with the carriers in those units.

They are to contact the local offices to obtain whatever information they need to adjust those routes.

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.

16. When Territory is Transferred

Consistent with the COR agreement, when territory is transferred, the back of the 1840 must indicate by sector segment, any changes in street credit from what was the actual time used and documented on the 3999. This includes any and all relay, travel or other allied time.

Any proposed adjustment to the carrier's street time must be documented and explained by appropriate comments on the back of the 1840. For example:

Let's suppose COR has proposed to transfer some territory from Route #2 to Route #4. In such a scenario, the territory in question would be listed by sector segment in the "relief" column on the back of Route #2's 1840 and the same territory would be listed in the "addition" column on the back of the 1840 for Route #4.

There could be some allied (non-delivery) time associated with this territory. During the adjustment process, the DEAT Team will review this time to determine what allied time function should be transferred in whole or in part to Route #4, what should remain on Route #2, or what should be eliminated if the route had been eliminated.

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.

When this happens:

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 difference between the existing and the adjusted relay times is noted in the relief or addition column on the back of the 1840.

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.

If there is any new or changed “Travel to”, “Travel From” or “Travel Within” the route, times must be validated, documented and discussed with the carrier during the adjustment consultation. If there was any differences between the time on the 3999 and the new time proposed by COR or any change in travel pattern, the new time will be validated and the DEAT will make a decision regarding the change prior to the second consultation with the carrier.

Travel To, Travel From, and Travel Within times must be validated, documented, and discussed during the carrier consultation. If there is a different credit of time proposed for travel within or travel to and from the route other than what existed as reflected by PS Form 3999, such new time will be validated and a decision made by the District Evaluation and Adjustment Team regarding the proposed change, prior to the second consultation with the letter carrier. It is not necessary that the validation itself be done jointly in order to satisfy the District Evaluation and Adjustment Team.

We will talk more about the Allied Time Report, 3999’s and the 1840 later in the presentation.

19. All *Travel To*, *Travel From* and the total of *Travel Within* times from the 3999 are noted on the back of the 1840 as E-X-R [*Existing Route Summary*]. New times are noted on the back of the 1840 as A-D-J [*Adjusted Route Summary*]. The difference between them is noted as an addition or relief in the appropriate column.

Before making any decisions regarding changes in travel times, the DEAT must be provided all relevant reports generated by COR to review the specifics of the proposed changes so they can jointly make these decisions AND... have this necessary documentation available for the adjustment consultations.

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. We will look at this report in depth later on.

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.

The DEAT Team will forward copies of the data and adjustments to the District Lead Team who will monitor the implementation of the agreed to adjustments and ensure that the route data is accurately recorded.

However, the DEAT's may find that some issues need discussion before agreement can be reached or they may want to get more information from the Local Contacts or other local individuals. But if they cannot reach agreement, the items in dispute will be identified and documented by the DEAT Team and immediately forwarded to the District Lead Team.

The Lead Team will have two days to resolve the issue in dispute. If they cannot resolve the issue, they must advance it to the Area/Regional Team who will then have three days to resolve it.

If the Area/Regional Team is unable to resolve it, they will refer the matter to the National Oversight Team for final resolution.

21. Okay, now that we've gone over what the MOU's require the parties to do, let's shift gears and talk about *how* COR works and how it is used.

For purposes of this presentation we are going to break the COR process down into four areas and look at each one of them in depth. These are:

Preparing the Zone for COR – in this section we will discuss what information collection and programming management must do in order to prepare a zone for the COR process and the role of each of the Teams (Lead Team, DEAT , and Local Contacts) in making sure that the data input to COR is current, accurate and representative.

Generating Routes - how COR takes the information and creates proposed zone realignments called “Solutions” and how the DEAT can alter COR settings to produce different “solutions”

Transferring Territory Here we will talk about how the DEAT can use COR to move territory to create route adjustments that are appropriate for the zone and so each route is as close to 8 hours as possible

Creating Lines of Travel in this section we will show you how COR can be used to create or adjust lines of travel that are safe, efficient and make sense.

So let's begin by talking about what must be done to prep a zone for COR...

22. The MIARAP agreement provides that COR will be used where it's “available” to use. That means that the prep work that needs to be done to use COR has been completed and the unit is “COR ready.”

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.

All of this information must be collected and input into COR to create a data base for the zone before COR can be used.

The Team should check to see when the data base was last updated and to make sure that no significant changes, such as delivery to a new housing development... or demolition of existing deliveries... has occurred since the last update.

23. In preparation for the adjustment process, the COR Technician will import the route information data from DOIS including the 3999, 1840 office and street times, mail volumes and so forth.

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. COR is only as useful as the data input to it. It is bound to follow it’s programming and utilize the data that is provided. Just like the old saying, Garbage in –Garbage out, if the data going in is incomplete or inaccurate, the solutions coming out will be unworkable.

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.

This should be done regardless of whether COR is utilized or not, however it is more crucial in COR because of the way COR uses the data.

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.

Once a 3999 is input into COR, it cannot be deleted but it can be replaced as the Form 3999 COR relies on, by an updated [more valid and representative] 3999. If the 3999 data was already input and the 3999 was not valid or representative, the DEAT will have to ensure that a representative 3999 with a more recent date is used.

The preferred way is to require the completion of a new 3999.

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 that the Allied Times are accurate... believe it or not, sometimes people make errors entering data into a handheld DCD. 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.

Teams should also look to see what function time was recorded (as when a carrier had to walk several blocks from the relay box before beginning a swing or, when on a mounted route, a carrier had to drive from one geographic area of the zone to another one 3 miles away).

27. Lets talk a little bit about Travel Within time

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 curblines deliveries unless there is a significant geographical distance between those deliveries without servicing any stops. It is not collected for walking deadhead segments which have a separate code.

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.

Again, DCD data collection for this time should be recorded as Miscellaneous Other and notated since the DCD does not have a Replenishment Time designation. Time associated as Replenishment Time is retained as a permanent part of the route.

29. Here's an example of a 3999 that has coding errors in it. This is just one page of the 3999 for his route and I know you can't see it very well, so let's zoom in a bit.

30. OK, take a look at the bracketed entries. Notice that the top section shows that the carrier spent from about 10:34 to 10:52, 18 minutes, servicing 52 deliveries at 2365 NE 173rd , which we can see was an CBU or some type of centralized delivery.

He then is charged with 43 seconds of travel Time and 52 seconds of Relay time.

The next entries show that he then spent from 10:54 to 11: 16, 22 minutes servicing 52 more deliveries at 2375 NE 173rd. If you were on the DEAT, would you see anything that might be a red flag here?

The Travel within and relay times are suspect. From looking at the 3999, it seems pretty obvious that the carrier is servicing CBU's and the time spent going from 2365 to 2375 NE 173rd was driving from one CBU to the next and should not have been recorded as travel within, if it is in the same complex.

Additionally, the time marked as Relay time was most likely when the carrier gathered up the mail from the trays to deliver to the next CBU and if not just left as service time, would have been more accurately recorded as Miscellaneous Other and notated as replenishment time.

You might be thinking, what's the big deal? We're only talking about 95 seconds here. But as you will see on the next slide, 95 seconds here, 95 seconds there, and after awhile, it adds up to some significant amounts.

31. Here you can see what happens when a DEAT misses the improper entries on a 3999. This is the 1840 reverse for that same route that was generated after COR adjusted the zone. Take a look at the Relay and Travel within Times at the top... The data imported to COR (the 3999 you just looked at, had nearly 17 minutes (16:56) of it's street time recorded as Relay time. After COR, it was left with a minute and a half (1:32).

You can also see that the 3999 had almost 29 minutes (28:54) of street time that was recorded as Travel Within. COR took all but 23 seconds of this out as well. What that means is that approximately 45 minutes of the street time for this route, time that should have been recorded as delivery time was taken out, making the street time look 45 minutes shorter than it really was.

You can also see in the lower part of the form that the 1840 Reverse documented 52 seconds and a minute and forty seconds of "relief" given the route for two "relays" that might have been incorrectly recorded on the 3999 at 2365 and 2375 NE 173rd... when in fact, there were no relays at those location.

These mistakes can be corrected in COR. The point is, that it is far better to correct these errors before they are input to COR. As you will see in this presentation, even with "perfectly accurate" data, the Team will have enough changes to make as it is.

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*. The Team should get a copy of this Report also. Once changes are made and the new Form 3999 is entered into DOIS, a new Form 3999, which includes any changes made to the original, can be printed out. The Team should also get a copy of that new Form 3999.

In the sample Audit Trail report we can see that in the Woodward Ave. blocks, there were 6 business deliveries credited. The far left column shows Ver [version] 1 and Ver 2. Ver 1 is what appeared on the original Form 3999. Ver 2 indicates what the Form 3999 was changed to reflect. As you can see, the time wasn't changed, but the 6 business deliveries were taken away. This would have an effect on any ratio of time per delivery that may later be used to apply time credit for street delivery. This change was probably done because 6 business deliveries were erroneously entered on Form 3999 originally, which

would be legitimate. In either case the Team should not guess, but find out.
[continued on next slide]

33. For the Lakeview Ave. block, 43 seconds were credited with no possible deliveries entered on the original Form 3999. There is no version 2 of that block. Also note that 43 additional seconds appear between version 1 and version 2 of the “*vehicle unload*” entries. Was there a legitimate reason for apparently transferring credit from a delivery function to an unload vehicle function. The Team would want to find out.

The street break was increased by 9 seconds to exactly 10 minutes. That could be to give the carrier total credit for his/her full ten minute break, which would be OK. But, if the real break only took 9:51 [minutes:seconds] and one were to add 9 seconds to the break, was an equivalent 9 seconds added to the total street, time. It doesn’t appear so but the Team should compare the total time on the original Form 3999 with the new and edited Form 3999.

If any allied time [excluding travel allied time] were augmented before the new Form 3999 was generated from DOIS, the Audit Trail Report should show that.

34. Again, here you see the entry for #1 - There are no “Business Deliveries Made” entries for 36663 Woodward Ave.

This should be compared with the original 3999 and the Audit Trail.

35. Again, this page of the 3999 shows the rest of the changes that were made. #2 shows the time used on 701-799 Lakeview Ave as 3:35. #3 and #4 show the street break and vehicle unload times. These should be compared to the original 3999 and the Audit Trail.

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.

Such errors may have resulted from unrecorded volume, work hours that were not transferred or were erroneously transferred from one route to another MODS codes may have been improperly entered or changed, such as putting carriers on stand-by or training time when they are actually casing or delivering mail.

The Team will exclude days that contain errors or days that are not representative of the normal range of volume, office and street time for that day on the route.

37. The District Evaluation and Adjustment Team will be working with a COR Technician who should know how to utilize the system.

The Technician is there to make the necessary inputs, generate the necessary reports and to explain any aspect of the COR program and process that the Team needs to make decisions regarding changes or adjustments to routes.

The Technician conducts his or her duties at the joint direction of the Team.

Any problems or issues should be elevated to the Lead Team if not resolved by the DEAT.

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

These reports can be a little confusing to those not familiar with them. As we proceed through this presentation on the COR adjustment process we will discuss each of these reports as they become relevant to our subject matter.

Since we are talking about preparing the data for COR prior to adjusting the routes, it's a good idea to take a look at what the zone and the routes look like as they exist prior to making any changes.

39. So, let's talk about the Existing Route Summary. I apologize for the faintness of the example here, but this should give you an idea of what it looks like.

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.

Looking across the columns you can see that for each route, is displayed the number of deliveries... the street time... which is split into Allied Time and total time...the net and standard office time ... and the office time factor. The Zone totals for each of these categories are shown at the bottom of the report.

It is suggested the DEAT review these figures and jointly come to an agreement on the number of full-time and auxiliary routes that the zone can support. This figure will be used as a reference point when reviewing solutions generated by COR.

Let's take a closer look:

40. This is a little bit better example of an Existing Route Summary. You can see the evaluated times listed for each route in the right hand column. These came from data manually entered from the MIARAP process. Note the total time for the 40 routes in the zone was 301.22 hours. This is underlined in red at the bottom of the right hand column.

One way to get a rough estimate of how many full time (8 hour) routes the zone can support would be to divide the total route time for the zone by 8 (hours).

301.22 divided by 8 equals 37.66 .

So, it appears that this zone could possibly stand to lose 3 routes. Again, this is just a starting point... something to give you an idea of what to expect will happen when COR begins generating solutions. But at this point the DEAT team should recognize that the Zone looks like it may support 37 full-time routes and perhaps a 4-5 hour auxiliary.

Note that the total Allied Time for the Zone is 59.30 hours. This is where COR is going to focus. Remember that we are going to compare this report with another one generated AFTER the zone is re-worked and adjusted by COR. You will want to see how much Allied time was taken out and where it went.

41. These times should be whatever the DEAT team has agreed the evaluated office and street times should be.

These times should match the times agreed to by the DEAT team for each route in the zone.

The Existing Route Summary Report should be printed.

If changes are made at this point, a new Existing Route Summary report should be generated and that is the report that will be compared with the one created after the routes are adjusted by COR.

Use this report to see if allied representative time for each route is needed.

42. Okay, lets talk about the process of generating routes... that is, how COR adjusts the routes and reconfigures 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.

Prior to MIARAP, these parameters were unilaterally set by management. Under MIARAP, each selection is made jointly by the DEAT's and input by the COR Technician at the Team's direction. Parameters are initially set for 8 hours for each route, but can be changed on a legitimate guess that more allied time will have to be built back into the routes or for other circumstances.

Based upon these selections, COR will produce a "solution"... which is a possible adjustment to the routes and a possible realignment to the zone. As stated previously, the solution is not meant to be a final product. The Team will still have to "fine tune" the adjustments, move territory around and adjust lines of travel.

The Team is not stuck with one solution. The Team can "save" a solution, go back and change some of the parameter settings, and have COR generate a new solution and see if it's better. Multiple changes and solutions can be made until the Team gets a solution that appears workable.

More on that later. First, let's look at the parameters that must be set.

44. Office Transfer Mode

COR asks you to set the mode COR is to use when transferring office time associated with the street territory being transferred from one route to another. The office time mode is set for the entire zone and is applied to all routes and transfers in the zone. Office time is rounded up to the nearest minute with a minimum value of one minute. COR supports four different methods for transferring office time when territory is moved from one route to another. These methods are: "Average Office Time Per Delivery" ..., "Standard" office time..., ... "Demonstrated Performance by Relieved Carrier", and using the percent that average office time is to total time.

Average Office Time: The office time to be transferred will be computed as follows. The number of possible deliveries for each blockface being transferred is multiplied by the office time factor for the existing route associated with that blockface. That is, the office time transferred is based upon the office time factor for the relieved carrier. The office time factor is determined by dividing the agreed to office time for the route by the total number of deliveries on the route.

For example, if the route had 400 deliveries and an agreed to office time of 120 minutes (2 hours) the office time factor would be .3 minutes (18 seconds) office time per delivery ($120 \div 400 = .3$). If 100 deliveries were transferred to another route, there would be 30 minutes of office associated with the street time transferred.

[Narrative continues next page; move ahead one slide –it is a duplicate of this one.]

45. Standard Office Time: When the zone was set up for COR, a standard office time was already computed for each blockface. Here's how that is done:

The cased volume for each sector segment based upon a ratio of total cased volume to total DPS volume. This factor is applied to the known DPS volume for each sector segment, which comes from the end of run report, to arrive at a cased volume for each segment.

For example: A 400-stop route had 2000 pieces of DPS, 200 cased letters and 400 cased flats. The ratio of DPS to cased is .1 for letters (one cased letter for every 10 pieces of DPS) and .2 for flats (two flats for every 10 pieces of DPS).

So, if a sector segment had 20 pieces of DPS, it would also get credit for 4 cased flats and 2 cased letters. The standard office time allowance of 18- 8 – 70 is then applied to the cased volume totals for each of the sector segments being transferred.
(about 42 seconds for this one segment)

Demonstrated Performance of the Relieved Carrier: In this method, the standard office time associated with each sector segment being transferred (as determined above) is then multiplied by the demonstrated performance of the relieved carrier.

The demonstrated performance of the relieved carrier is the ratio of the Net Office Time to the Standard Office Time as entered in the existing route summary form.

% Office – Percent that the Average Office Time is of Average Total Time: For example: 165 minutes office time divided by 486 minutes total time equals 34 percent. Therefore, the allowance of 34 percent of the total time value of any territory to be added or taken away from a route must be allowed for office time to prepare the mail for delivery.

46. Volume Coverage.

The volume associated with a street segment is important in forming new park and loop routes. The length of a relay is limited by the volume a carrier can carry. The volume can be determined by using the full coverage method which adds a flat and its weight to every possible delivery, or by using non-full coverage method.

If the route receives a full coverage on 3 or more days during the week, full coverage should be selected, in which case COR will add one flat to every possible delivery on the route which will add to the weight for each delivery. The result will most likely be that COR will generate more relays than it would if the non-full coverage method were selected.

Another consideration would be to decrease the maximum volume per relay, which could increase the amount of relays created in COR, which we will discuss shortly.

47. If it appears that the zone will likely end up with an auxiliary route, the Team can select the location where it wants COR to put it. For example, the Team might agree to place the aux route close to the post office to make covering it easier... or they might agree to place it in an area where new growth and new deliveries are anticipated so that

when the deliveries increase sufficiently to cause the creation of a full time route, there wouldn't have to be a "domino effect" to the other routes to accomplish that.

In the Territory Realignment category, the COR Technician at the direction of the Team, selects the command *Select Auxiliary Location* and then clicks the street segment in the area where they want the auxiliary route to go. Pretty simple.

The decision should be made based on the zone and the location in the zone.

48. Vacant/Auxiliary Routes

If it is anticipated that the zone is going to lose a route (or routes) the Team can use this setting to choose the order in which routes are eliminated.

In most circumstances, auxiliary routes should be eliminated first followed by vacant routes, such as routes being withheld pending excessing.
If routes encumbered by regular carriers are going to be eliminated, the Team would want to select them by juniority, in order to protect more senior carriers' routes. This also prevents the displacement that might occur with an Article 41.3.O implementation, should that language exist in the Local Memorandum of Understanding.

49. Territory Realignment

Since COR will be adjusting and realigning routes within the zone, one of the first things to be determined is whether COR considers all of the routes in the zone, or just those selected by the Team.

This setting allows the Team to choose whether all routes or just selected routes will be included in the mix when COR adjusts and realigns the zone.

In most MIARAP scenarios, the selection will be "ALL" routes. However there may be some situations where the Team decides to leave a particular route or routes untouched by the process, if that won't effect the optimization of routes within the zone.

50. The next field allows the Team to select a number of settings they want COR to use when generating routes.

These are:

Whether routes are going to be created based on a selected time or based on the number of routes.

Whether an auxiliary route will be created.

Whether COR should add an extra route

The maximum volume COR should allow on relays

And...the maximum walking time between service

Let's look at each of these in detail...

51. Create Routes Based On:

This setting allows the Team to decide whether they want COR to create routes based on a specific amount of time that the Team has agreed to such as 7:40, 7:50, 8:00, 8:10, etc. or on an agreed to number of routes for the unit.

If the Team agrees to generate routes based on "time," all routes, including auxiliary routes, will be adjusted as near as possible to the time selected and the remaining time left over may become an auxiliary route. *This will include any allied time taken out during the use of COR, because it is an estimate of time.*

Because the DEAT may be adding some allied time back into the routes that remain, it may want to set the time at less than 8:00 so that when allied time is added back in, the actual route time will be closer to 8:00.

If the DEAT chooses to generate routes based on "number of routes," COR will divide this number into the total time for the zone and adjust all routes at or very near that time.

The DEAT may have to experiment a bit to find which setting produces a more workable solution. As was already noted, in COR, if the DEAT doesn't like a solution, they can ask the COR Technician to save it, change some parameters, and try again.

52. Add an Extra Route? Yes or No?

This setting can only be used if you chose to create routes based on time and choose "No" to *Use an Auxiliary Route*. If you chose to create routes on number of routes, this setting will be grayed out and you can't use it.

If the Team has agreed that it will not put an auxiliary route in the zone, then it will have to tell COR how to handle the additional work that would have been an auxiliary route. The Team has two choices.

One choice (No) is to have COR distribute this "extra" time over the already full routes. This will have the effect of creating each one higher than the desired route time. Whether this impact is minimal or significant depends upon how much work we are talking about and how many routes it will be spread over. This might be reasonable when the "extra" time is not worth making an auxiliary route.

The other choice (Yes) is to have an extra full time route added to the solution which would cause each of the routes to have slightly less time than the desired route time. This selection might be reasonable when an auxiliary route would be fairly close to 8 hours already and COR would only need to shave a bit from some other routes for it to reach the desired route time.

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

This setting lets the Team set the maximum amount walking without service time (in minutes and seconds) that is preferable to returning to the vehicle on a park and loop or walking portion of a route

54. After these parameters have been selected, COR is ready to generate a solution.

The “OK” button is clicked and the process is started.

55. Expectations

At this point, before looking at what COR has done to the zone, it’s probably a good idea to recall a few things we’ve already touched upon:

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.

As noted earlier, if the Team can’t agree on a particular issue or issues, those issues should be elevated to the District Lead Team immediately.

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. The map should look something like this.

In all likelihood, COR will not produce a solution that needs no revision.

57. This is a little bit better slide of a zone map. As you can see, each route is color-coded. There’s a map legend showing which color corresponds to each route and a tool bar for the Technician to use. There’s an icon on the tool bar that enables one to view this.

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.

As you can see in this example, COR assigns temporary numbers to each of the newly reconfigured routes. These are displayed in the far left column titled *RS Route*. They are simply noted as 101, 102, 103 and so on. Even though an existing route may have retained most of its existing territory, COR does not assign the existing route number to it for the purpose of this report. Why it does this will be explained later. But for now, just accept the fact that COR has created a certain number of routes and has assigned them temporary route numbers for its own recognition, for the purpose of this report.

The second column shows which routes contributed territory to the make up of the new route. In this example, Temporary Route #101 is made up of deliveries from existing routes 30, 96 and 97. You will also note that there is an asterisk next to existing route #30. This is the route number that appears on the map. So, in this example, RS Route 101 is listed on the map as Route C030.

The third column shows the number of deliveries that came from those routes. Again, in the case of route 101, it is made up of 343 deliveries from existing route 30, 119 deliveries from Route 96 and 14 deliveries from Route 97.

[Narrative continued on next page]

59. The last column shows the percentage that these numbers of deliveries represent on the existing (old) route. In this scenario, the 343 deliveries from route 30 represented 59.76 % of the deliveries on Route 30. The 119 deliveries it picked up from Route 96 represented 14.35% of route 96... and the 14 stops it picked up from Route 97 were just 3.5% of Route 97.

Looking down the list you will see each of the proposed routes and what they are made up of. This information will be used to decide what actual route numbers will be assigned to each of the routes.

It should be pointed out that this slide shows only the first page of the 4-page summary. Your handout packet has the complete report.

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.

For example, looking at the inset on this slide, we see that Route 30 used to have 574 deliveries. After the adjustment, 363 of them were retained, the rest were picked up by other routes. This means that Route 30 retained 63.2% of the deliveries it had before the adjustment.

We also see that the delivery time on the old Route 30 was 3:59 and that the 2:35 (or 64.9%) of that delivery time remains. So the number of deliveries and the street time they represent happens to be about equal in this example. Of course, this will not always be the case, especially in mixed routes where walking portions usually represent less deliveries but more street time.

This information is useful when determining what route number to give the newly created route 30. In this solution, whether you are looking at the number of deliveries or the amount of time, nearly 2/3 of the existing Route 30 would be retained on the proposed one.

Don't print this Report until the entire zone adjustment is complete.

61. But take a look at the proposed Route 60 which is the next one on the report.

In this solution, only 22 of the old deliveries (or 6.6%) amounting to 28 minutes of the delivery time was retained from the existing route C060. This route is obviously made up with massive chunks from other routes. Even though this proposed route is called C060 on the map and in the reports, the Team can decide to call it something else.

In such cases, the Team should look at the Route Relations Summary report which will tell them what routes the territory making up the proposed Route 60 came from. If a significant portion came from an eliminated route, say Route 60, the Team could choose to re-name Route C060 to be called C078. So why did COR not do that already? Why would COR call it Route #60 instead of #78?

Remember when you selected the order in which routes would be eliminated? If C078 was "targeted" as one of the first routes to be eliminated, perhaps because it was held by the junior carrier, COR followed the instructions and did so.

However, because the changes to Route 60 are so great, the Team may still choose to name it something else.

62. There may be situations when the Team wants to change route numbers. That can be done by using the Edit Route Assignments screen, but only before any manual transfers have taken place using the transfer tool box.

To change a route number, the COR Tech, under the direction of the Team, can just click and hold the *Exist Route* number and drag it to the new position and release it.

A box will appear asking if the swap should be confirmed. If the Team wants to, the COR Tech should then click "Yes."

Before using this option, much thought should be given to any issues that this may cause with allied time. An alternative solution to this problem may be to use the transfer tool

box to manually move territory, because the allied times remain with the original route number.

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.

This is done using the “*Transfer Toolbox*.” This is probably the best way to make adjustments to route boundaries as one can have absolute control over what territory is moved and where it goes.

64. In the Transfer Toolbox function, go to the *Route Adjustment Toolbox* screen.

Using the example on the screen, let’s say the Team decided to see what happens when territory is moved from Route C019 to C016.

The Team would then locate an area where it seems reasonable to swap some territory between these routes. Using the tools, the COR Tech, under the direction of the Team, would create a box in the area in the upper left corner containing routes C009, C016 and C019. This is indicated by a dashed box which you can see on the slide.

By clicking on the plus-sign magnifying glass icon, the COR Tech can zoom in the area indicated by the dashed box.

65. You can see that we’ve zoomed in on the highlighted area.

Under the Team’s direction, to move territory, the COR Tech clicks on the streets the Team wants to move. A box will pop up showing the Form 3999 time, not including allied time [*pure service time*] for the selected territory just clicked. If more than one block face has been selected, the combined totals for the segments to be transferred appear in parentheses.

In this example you can see in the long narrow box that moving the 1000-1098 block of Plato Ave to Route C016 will add 5 more deliveries and 5 minutes and 2 seconds of route time. This brings the total for the segments selected to 20 deliveries and a total time of 24 minutes and 43 seconds.

The *Route Statistics* window shown in the lower right corner displays the Street Time, Office Time, Route Time, Priority Time and Possible Deliveries that each route will have if you make the swaps in the blockface transfer list.

Here we see that if the swap is made, C016 will end up with 410 deliveries and a total route time of 8 hours and 2 minutes. Not bad.

66. The Team would then select which segments they wanted to transfer from the *Selected Blockface Transfer List* which shows the number of deliveries, street times and office times for each.

If the Team decided to move the territory, the COR Tech would click on the green light *Apply Changes* icon and then click “OK” to confirm that the Team wanted to make the swap.

67. To review what has been done, go to the *Route Statistics* window. This shows the current deliveries, street, office, priority and total (route) time for each route, times for each route and other relevant data. This information includes the territory that was just transferred.

The Team will need to verify that, if they have split 100-block ranges between routes, that they are acceptable. If any plus-4’s have been tagged to more than one, they must be corrected.

Plus 4’s are the sector that has been assigned by AMS that results in the last four numbers of the zip code. To verify that no plus 4’s have been split, select territory realignment from the COR menu and verify plus 4’s. Hit “OK.” A report will appear, listing any plus 4’s that have been split between routes. These splits must be corrected. Print the report and exit. The territory that shows plus 4 splits will be highlighted in yellow on the map. These splits must be corrected by using the territory transfer tool.

A 100 block split is any address range from 1 to 99, 2 to 98, 101 to 199, 102 to 198, etc., that are divided over more than one route. To review the 100 block ranges that have been split, select Territory Realignment and Verify 100 Blocks. Select OK. A report will appear that will list the 100 blocks that have been split. Print the report and exit. The territory will appear in red on the map. It is not necessary that these be corrected but they should be reviewed to see if they are acceptable.

68. Click *Menu* in the [COR] menu window to display the [COR: Route Adjustment] window, this in the upper right corner of the slide. Choose *Territory Realignment* from the Category menu and click *verify plus four on single route* from the Command menu in the [COR: Route Adjustment] window and hit “OK.”

When this procedure is complete, if there are problems, then the “Verify Plus4 on Single Route” report, which is on the slide, will appear. The reason that the same Street ID is repeated many times is that there are multiple Alternate Address records (multiple possible deliveries) associated with the street segment. The COR Tech should be directed to print a copy of this report and the Team should refer to it while they address the problems.

The Team should direct the COR Tech to display a route map and zoom to the selected set of streets. The conflicts will be the highlighted (in yellow) street segments.

The Team should look for street segments which contain the same Plus4, but are on different routes. The Team can resolve the Plus4 conflicts by directing the COR Tech to transfer the streets onto the same route.

Once you have successfully resolved all of the conflicts, rerun the process and the “no conflicts” window, seen here in the lower right corner of the slide, should appear.

69. “100-blocks” split between two routes might create a problem for clerks hand sorting mail so it’s best not to do it. To see if there are any 100-block splits, the Team can direct the COR Tech to click *Menu* in the [COR] menu window to display the [COR: Route Adjustment] window which is on the upper right corner of this slide. Some 100 block splits may be desirable because of huge volumes, usually attributed to business deliveries.

The COR Tech can be directed to choose *Territory Realignment* from the Category menu and click *Verify Hundred Block on Single Route* from the Command menu in the [COR: Route Adjustment] window.

When this procedure is completed, the “Verify Hundred Blocks on a Single Route” report will appear. There is an example of this report in the lower left of the report. These conflicts can be resolved by using the Transfer Toolbox and moving territory. The 100 block splits appear in red.

NOTE: If there are no Hundred Blocks that are split between routes, you will not see a report. In that case, you do not have any Hundred Block splits to consider.

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.

Let’s look at how it’s done.

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.

After a route has been selected and “OK” has been clicked, the *Relay and Line of Travel Parameters* screen will appear. This screen asks some of the same questions that were asked prior to generating the new routes as well as a few new ones. However, where the previous settings were applied to the entire zone, these settings will be applied only to the route(s) selected. This allows one to make adjustments to the settings for an individual route if the need arises.

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.

[Narrative continues next page]

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.

Although the M-39 limits relays to a maximum of 35 lbs., it's extremely difficult to imagine that the 35 pound limit wouldn't be exceeded on one or more days during a week if the maximum setting is selected. 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.

There are other factors to consider as well. Longer relays which take the carrier far away from the park point could present a problem when it comes to finding an available comfort stop or a place to eat lunch and get a hot meal.

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

Additionally it asks if it is wanted to *Generate line of Travel with priority*. This is a drop down Yes or No option. Yes means that the line of travel must visit every delivery with priority and prior to servicing *any* walking relays or *any* driving blockfaces without priority. Generating with priority may not be a good idea because it could create a route with a disjointed line of delivery.

The setting of priority is derived from the delivery types of each delivery point that is address matched to the blockface. If there are some deliveries along a blockface that are priority and some that are not priority, COR will set the blockface to be priority. Improper settings of priority will cause the line of travel to have unnecessary deadhead travel in an effort to visit every priority blockface early on the route. Generally speaking, routes should be done without selecting "priority."

The decisions as to which addresses are designated priority should be reviewed prior to performing the route adjustment. If choosing "Yes" results in a line of travel with a lot of deadheading, then you may wish to regenerate the line of travel and select "No."

74. To generate the line of travel for a route, on the Generate Adjust lines of Travel screen. Click “OK” to start line of travel generation.

The *Show Line of Travel* window will pop up. The Team directs the COR Tech to select the route they want to generate a line of travel for, in this case, C009, and the COR Tech clicks “Ok”.

All routes that you have generated a line of travel for will appear. Click one to see the line of travel.

75. This is an example of a line of travel map. There is a lack of quality that comes from trying to reproduce actual computer screens into this presentation, but you should be able to follow the delivery sequencing of this route as it goes from a driving section in the lower right corner of the screen towards a concentrated park and loop area in the upper left corner.

Again, we’ve highlighted this area with a dashed box so we can zoom in for a closer look.

Note: To edit a line of travel, select “*line of travel*” on the left side of the menu and select “*edit line of travel*” on the right side.

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.

Choose *Line of Travel* from the Category menu and double click *Trace Line of Travel* from the Command menu in the [COR: Route Adjustment] window.

The [Trace Line of Travel] control window along with the [Trace Status Bar] window will appear. This controls how the line of travel is traced.

Click the Forward button to move ahead one step or blockface.

Click the Back button to move back one step.

Clicking the Fast Forward button will begin to automatically trace the line of travel through the entire route at the speed selected.

77. Here we see the zoomed in area of the Line of Travel map

While this example isn’t much clearer, you should be able to see that each relay appears in a different color. The park points are noted with a little blue truck symbol and each segment is numbered in the order of delivery.

In the box on the lower right, you can see the list of relays with the color code, the calculated weight and the number of possible deliveries for each.

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.

Within the Edit Line of Travel function one can do a number of things to change the sequence of delivery on a route, including:

Move and add relays, move and add park points.

Reverse travel direction

Change a segment from walking to driving, or vice versa.

The DEAT team can direct the COR technician to do all of those things.

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.

To print this report, the DEAT can direct the COR Tech to choose Reports and Plots and click on the Line of Travel Report. The report appears with all deliveries in the correct sequence of the travel path. To view deliveries in sequenced order without travel directions, print the Resequenced Delivery Report.

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.

On this slide, you can see that Route C009 has 346 deliveries, 3 hours and 24 minutes of allied time, a total street time of 6 hours and 34 minutes, 1 hour and 31 minutes of office time, no priority time for a total route time of 8 hours and 5 minutes.

The bottom half of the slide you can see a breakdown of some of Route C009's allied time. 14 minutes and 47 seconds of loading, 5 minutes and 52 seconds travel to the route, 6 minutes 25 seconds of Travel From the route, and so on.....

[*you can finish reading the entries if you wish*]

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.

In the example, you will note that Route C009 has 3 park points from which a total of five relays are done. The first park point is at “*the end of Dickens street after 1099.*”

There are 3 relays from that point. As you can see, the first one begins at “1105 Chesterton Ave.”

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.

The average time per relay of the carrier on the route that the relay is created for is applied to each relay that is created on the route. For example, the 3999 shows there 10 relays at 5 mins and 10 relays at 3 mins.

Average relay time $(10 \times 5) + (10 \times 3) = 80$ min, which is Divided by the total number of relays $20 = 4$ minutes per relay.

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.

COR computes that Route #2 will need 3 relays on the territory picked up from Route #1. COR would credit each of those relays with 4 minutes because that’s the average relay time for the carrier on the gaining route.

If Relay time is being transferred to a newly created route, the average relay time for the entire zone will be used.

The Local Contacts should provide the DEAT with the apropos info if there is some idiosyncrasy on a route that would prevent that estimation from being accurate so that the DEAT can appropriately adjust the time[s], where needed.

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. Looking at the report, you can see the "new" data for each route: How many deliveries, the allied and total street times, the office times and office time factors and the total route time for each route. The totals for the zone appear at the bottom of the report.

Some of the routes no longer exist. These are the routes that show ZERO possible deliveries. In this example you can see that routes 66, 81, 96 and 98 no longer exist. The COR adjustment process has eliminated these routes and their territory has been placed on other routes. To see where they went, you would look at the Scheme Change Report. You will also notice that even though these routes no longer exist, some of them still show some office and or street time. For example: Route C081 shows 45 minutes of delivery and 43 minutes of office time remaining on the route. This is the office time remaining after COR has transferred the rest to the other routes using the method selected in the office transfer mode. Most likely this is fixed office time that would not be moved to the routes anyway. Some of the eliminated routes still show street time. Some of this is loading time, travel to and from the route or breaks time which would no longer be necessary.

85. Another place to look is at the totals for the zone. These should be compared with the totals from the Existing Route Summary. You may recall that on the Existing Route Summary slide, this zone had about 59 hours of allied time 220 hours total street time and 301 hours of total time. As you can see, these totals are each about 8-9 hours less. That's a little over 2 hours for each of the eliminated routes... which in this scenario is probably pretty close to what would be expected. However, if the report showed that 20 or 30 hours had been removed, the Team would want to take a closer look to find out where it went.

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. In this example, Route C030 has:
30:00(minutes and seconds) for loading
6:21 to *travel to* the route
6:19 to *travel from* the route and

8:44 of travel within the route.

There is no deadheading or relay time associated with this route.

Proposed changes in these allied times from what there were on the Existing Route Summary must be documented on the back of the 1840 and verified.

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. So the COR default leaves the time on the existing route, but shows addresses where parcel and accountable time was recorded and allows it to be manually moved to the gaining route. Let's show you how it's done.

[Continues next slide]

88. Here's a close up of the last slide. You can see that several block ranges that received parcels and accountables were transferred from Route 30 ... some went to Route 79 and some went to Route 78.

We can see that Route 79 picked up territory from Route 30 that had 4 minutes of accountable delivery (120 secs+120 secs) and 3 minutes of parcel delivery (60 secs+120 secs) – a total of 7 minutes of allied time within those segments. Although the segments (and the delivery service time) were transferred to Route 79, COR will not transfer the 7 minutes of Allied Time; it remains on Route 30. The Team will have to decide if they want to transfer some or all of this Allied Time from Route 30 to Route 79.

Let's say that the Team decides that the sector segment 2690 which is the block face 2200-2298 SW 135th Ave includes a business that receives parcels and accountables almost every day so they decide to transfer this 3 minutes of allied time to Route 79. Whereas the other segments are residential and the deliveries were most likely random they decide to leave this time on Route 30.

In order to transfer the allied time from route 30 to Route 79, the Team must use the adjusted route summary editor.

89. To move this allied time from Route 30 to Route 79...

The Technician, upon direction from the DEAT, clicks on the Adjusted Route Summary editor and then clicks on the Allied Time Box for Route 79 which you can see the arrow pointing to in the lower left hand corner of the slide.-marked "A"

The Allied Time window will appear and the Tech clicks on "Other Time"... which is marked "B"... this will cause the Other Time window, marked "C" to appear.

Click on the Parcel Del: time box and 1 minute...click on Accountable Del: and add 2 minutes.... See arrows.... And then click on "OK."...

The same process for Route 30 would have to be done, only the COR Tech will subtract, rather than add, the same time values ...one minute for parcels and two minutes for accountables.

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

91. To generate the back side of an 1840 for a particular route, in the COR route adjustment menu, the COR Tech goes to *Reports and Plots*, and selects *Print Back Side of 1840*.

A *Select Route* window will appear ... the route that is wanted is selected and "OK" is clicked.

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.

You can see a copy of that on the screen.

94. The Allied Time Comments Editor window will appear. Click on one of the Allied Time categories on the left and enter the appropriate explanation for the changes.

In this example you can see that all of the Travel to From loading and unloading was eliminated because the existing route (C002) was eliminated. Street break and Management Time was also eliminated as would be expected.

You can also see that all of the accountable and parcel delivery time was transferred from this route to the other routes as would be expected since this route was eliminated and the territory where these deliveries occurred was moved to other routes.

The DEAT would want to check the other routes to verify that this allied time was transferred to them.

95. Here's a close up of an 1840 Reverse following route adjustments. Note the changes to Allied Times that have occurred

Before the adjustments this route had 13:59 of Relay Time.

Afterwards it had only 4:17.

Before the Adjustments Travel to the Route was 9:45... after 5:56

Before the adjustments Travel from the Route was: 13.47.... after it was only 4:57...almost 9 minutes difference

Before the adjustments, the Travel within the Route was 43:09 ... after only 3:00.

All of these changes need to be validated by to the Team's satisfaction! Perhaps many of the relays were lost in the adjustment and only one or two remain. Maybe the line of travel was changed so that the travel to and travel from routes were significantly changed and the times are valid. But the loss of over 43 minutes of Travel Within should be reviewed.

Whatever the reasons for the changes, they each must be validated before the Team proceeds. If the Team needs to adjust them, they can do so using the Route Adjusted Summary Editor.

96. When the *Allied Time* box for a route is clicked, the Allied Time window will appear. This is the box in the lower left side of the screen.

Notice that the Relay Time, Travel To, and Travel From values have been provided by the COR routing process. The load time is from the 3999.

Click on the *Other Time* box and the [Other Time] window will appear. This is the middle box.

Click on the *Additional Time* box and the [Additional Time] window will appear. This is the lower right hand box.

Adjustments to these times should be entered when the DEAT believes it would be appropriate, based on their experience and or/valid input to them from other sources including the carrier or the local contacts.

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. A good way to accomplish this quickly would be to *print the route map by zooming into the route and selecting print.*

You can also create a route map by having the COR Tech, at the direction of the Team, Choose *Reports and Plots* from the Category menu and double click on *Create New Route Map* from the Command menu in the [COR: Route Adjustment] window. However, it would be easier to just print.

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

The adjustment consultation script.

100. Allied (or other) times can be adjusted by the Team by directing the COR Tech on using the Adjusted Route Summary Editor. This is a tool that will possible be used at several different times during the route adjustment process. Each time changes are made to a route, whether during the route generation, territory adjustment or line of travel phase, the DEAT will have to review the Adjusted Route Summary Report and 1840 reverse to check for changes and to direct the COR Tech to use the editor if they are going to make any adjustments to allied time.

To use the editor, the COR Tech just clicks on the time box for the route the DEAT wants to change.

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.

The COR technician will then be directed to transfer all this data back into DOIS where it will be sent to AMS.