Work Management System (WMS) for the Transportation Mobility and Safety Division (TMSD)

Step-by-Step

Table of Contents

Introduction

The Transportation Mobility and Safety Division (TMSD) is implementing the SAP standard work order solution as a Work Management System (WMS). This will allow them to use SAP to log, create and track customer requests (Notifications), approvals and work orders. In addition, standard notification related and work order related reports can be generated. The Work Management for the Transportation Mobility and Safety Division guide provides you with step-by-step instructions for creating business partners, work requests, work orders and reports.

Document Conventions

The following document conventions are used in this document:

Italicized Text

Italicized text indicates text that must be entered in a field.

Example:

Enter your *new password* in the **New password** field.

Procedures and Bold/Italicized Text

Procedures are numbered steps that list how to perform a task.

- **Bold text** in a procedure step indicates application elements that you select, choose, press or enter text.

- ***Italicized and bolded text*** in a procedure indicates the name of a screen or dialog box that displays.

Example:

1.   Enter */NZTE1* in the **Command** field.

2.   Click or press **Enter**. The ***Maintain User Profile*** screen displays.

3.   Click to return to the ***SAP Easy Access*** screen.

Graphic Conventions

The following graphics indicate important information such as a note, hint, or warning:

	Note – a guideline or practice that applies to a procedure

	Helpful Hint – a tip or hint that helps improve your efficiency
	Warning – a notification of important information about a procedure
	Example – an example that applies to a procedure

Training Materials & Courses

Training materials, the course catalog and course schedules are published on the BSIP Training page of the NCDOT Intranet Portal.

Overview

The Transportation Mobility and Safety Division (TMSD) will use SAP standard functionality as a Work Management System (WMS). This process will be used to log, create and track request notifications and work orders. After having entered work requests and work orders, standard notifications related and work order related reports can be generated.

What is the Work Management System for TMSD?

The TMSD Work Management System contains several different operational functions. Each has a different purpose and must be conducted in the proper order to avoid errors in recording request notifications, creating work orders, charging time and generating reports. The TMSD process involves the following steps:

- Create TMSD Customer – administrators only

- Create Work Centers

- Record request – process notification

- Create work order – description, work scheduling and assignment

- Charge time – enter time worked

- Reporting

Key Terms

The following is a list of key terms and acronyms used throughout this guide. Refer to this section if you encounter an unfamiliar term.

Term	Acronym	Description
Business Partner		Internal, external and citizen customers and customer contacts
Confirmation		Any time entry against a cost object on a work order is a confirmation
Final Confirmation		indicator flag set to denote the completion of an activity or activity element
Functional Area		code that represents the job function or task performed
Functional Location		Number which identifies a physical location, site or place (i.e., county,

Term	Acronym	Description
		division or state wide location)
Internal Note		Memo entered into SAP to provide information internally to others
Main Work Center		Work center that is in charge of performing the work.
Maintenance Activity Type		Categories of service orders used to perform cost and work order analysis.
Master Data		Information that is centrally stored and maintained which defaults into certain SAP transactions based on other associated data. Used to reduce data entry and potential key stroke errors.
Mode		Category used to identify the channel or method by which a message or issue is received.
Notification		Process to record and track requests.
Planner Group		Organizational group within a plant that represents a unit, section, or group within TMSD.
Settlement		Process performed by fiscal to physically move costs from TMSD orders to the funding source (either Cost Center or WBS Element).
Task (operation)		Work that is planned for a service, maintenance or quality notification.
Work Center		Unique number that contains information on the equipment and personnel used to perform production tasks including operation time, cost and capacity
Work Order		Formal documentation of work to be performed and means to record activities
Work Request		Notification of request

Process

The TMSD WMS contains several interlinked functions. Each function has a sub-process. The overall TMSD process is represented by the diagram below. It is explained in greater detail in sections for each sub-process.

```
Issue reported
by TMSD
Customer
     |
     v
Check for          One Exists    Update            Update Work
previous       ------------>      Notification  --> Order
notification                     (IW22)            (IW32)
(IW23)                                                 |
     |                                                 |
Does not Exists                                        |
     |                                                 |
     v                                                 v
Enter          Process          Process Work      Enter Time     Track Work
Master Data, if Notification --> Order        -->  (CAT2)    -->  Order            --> Complete
needed         (IW21)           (IW31)                             Confirmation          Notification /
                                                                  (IW32 & IW41)          Work Order
                                                                                         (IW32)
                                                                                            ^
                                                                                            |
                                                                                            v
                                                                                         Generate
                                                                                         Reports
```
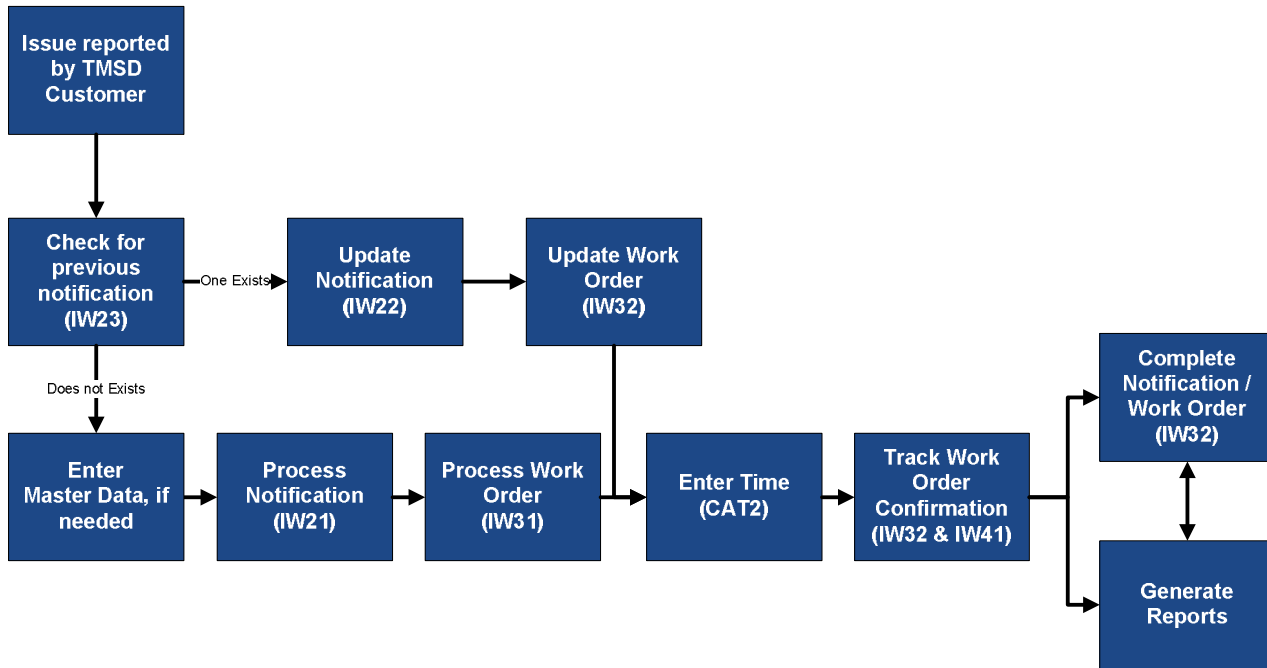
Customer Master Data

The Transportation Mobility and Safety Division (TMSD) interacts with various persons and organizations. These people and organizations report various issues and concerns related to traffic mobility and safety conditions throughout the state and are therefore considered TMSD customers. Customers report issues either by mailing, calling or walking into the TMSD office. Customers are grouped or classified in SAP as one of the following Business Partner Types.

- Citizen – one time customers
  Citizens are not affiliated with NCDOT or other media or governmental agency. This type of business partner is considered a one time only customer

- Internal – departmental affiliates within NC DOT
  Departments, divisions, units and other NCDOT sections (examples include GHSP, SHP, DMV, Turnpike, Transportation Planning, etc)

- External – organizations outside of NCDOT
  Media and other governmental agencies excluding NCDOT (examples include News & Observer, consultants, counties Governor, etc)

> Each business partner has to have an associated contact person. Their information must be entered in order to connect the two. Internal and external business partner contacts should be entered as master data. These types of contacts will be used more than once. However, citizens and their contacts are entered when creating the notification. This will be discussed in greater detail in the **Process Notification** section of this document.

Customers can be created and maintained by users with proper authorizations in SAP. This small group of administrators can create and change customer information. Once created, customers or multiple customers can be associated with notifications and work orders. TMSD customers are non-billable and are simply created to retain contact details.

VD01 – Create Customer Master Data

Use transaction code VD01 to create new customer information in SAP. Creating customer information can only be made if the user has adequate permissions in SAP.

1. Enter *VD01* in the **Command** field on the *SAP Easy Access* screen.

2. Click or press **Enter**. The *Customer Create: Initial Screen* displays.

3. Enter an a*ccount group* in the **Account group** field.

> Use account group "Z010" for TMSD Internal and External customers.

4.   Leave the **Customer** field blank.

5.   Click ✅. The *Create Customer: General Data* screen displays with the **Address** tab open.

> The **Address** tab is separated into 5 sections:
> - Name – customer title and/or name
> - Search Terms – identifier (TMSD internal or external)
> - Street Address – customer address
> - PO Box Address – PO information, if applicable
> - Communication – contact information (Telp, Fax, E mail)

6.   Enter the following information in the **Name** section, if known:
   - Title
   - Name

> Click 🔲 to expand the **Name** field to enter additional name details.

7.   Enter the **Search term 1/2** in the **Search Terms** section.

> Search Term 1 = Type of customer "Internal", or "External"

8.   Enter the following information in the **Street Address** section, if known:
   - Street/House number
   - Postal Code/City
   - Country
   - Region - State

> Click 🔲 to expand the **Street Address** section field to enter additional name details.

9.   Enter the *post office address* in the **PO Box Address** section, if applicable.

10.   Enter the following information in the **Communication** section, if known:

> Entering communication information will save time when creating work request. Information entered as master data will automatically be recalled in the notification for applicable fields.

> If you have additional communication information, click
> **Other communication...** . Double-click the *communication type* and enter the information in the dialog box that appears.

- Language – default English

- Telephone – primary telephone number

- Extension – if applicable

- Mobile Phone – cellular phone number

- Fax – facsimile number

- E-Mail – electronic mail

- StandardComm.Mtd – Standard Communication Method (preferred method of communication)

> Click in the **StandardComm.Mtd** field to select from the drop-down box. Most common choices are E mail, Telephone or Fax.

11. Enter any *additional comments* in the **Comments** field, if applicable.

12. Select **Contact** tab to edit or add contact information for the business partner contact person.

> The **Contact Person** tab contains the following contact information for the person the business partner has designated as their point of contact. There may be multiple contact persons for the same business partner.
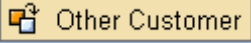
13. Enter *last name* in the **Name** column.

14. Enter *first name* in the **First name** column.

15. Click **Home Address** . The Contact Persons: Home Address Create dialog box is displayed.

16. Enter *name title* in the **Title** field.

17. Enter *physical address* in the **Street Address** section.

18. Enter *post office box information* in the **PO Box Address** section.

19. Enter *phone and email information* in the **Communication** section.

> Entering communication information will save time when creating work request. Information entered as master data will automatically be recalled in the notification and work order for some fields.

20. Click ✅ or press **Enter** to return to the *Create Customer: General Data* window.

> Click 🔲 Other Customer to add additional customers. Then repeat steps 1-20 for each new customer to be added. Once all customers are added proceed to step 21.

21. Click 💾 to save the customer and exit this transaction.

VD02 – Change Master Data and/or add Contact Person

Customer information may change from time to time. If so, use transaction code VD02 to make changes or add a contact person to internal or external business partners.

1. Enter *VD02* in the **Command** field on the *SAP Easy Access* screen.

2. Click 🟢 or press **Enter**. The *Customer Change: Initial Screen* displays.

3. Click 🔲 next to the **Customer** field to search for a customer. The *Customer Account Number* window displays.

4. Enter the *Search term* in the **Search Terms** field on the **Customers (general)** tab.

> Enter *internal* to locate an internal business partner or *external* to locate an external business partner.

5. Click ✅ or press **Enter**.

6. Locate and double-click *internal customer* to be changed. The customer number is displayed in the **Customer** field on the *Customer Change: Initial Screen*.

7. Click ✅ or press **Enter**.

8. Change the **Name** and/or **Street Address** as needed.

9. Change the **Communication** information as needed.

> The **Communication** section contains the following contact information for the business partner.
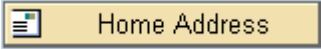>
> - Telephone
> - Mobile Phone
> - Fax

• Email

10. Select **Contact Person** tab to edit or add contact information for the business partner contact person.

> The **Contact Person** tab contains the following contact information for the person the business partner has designated as their point of contact. There may be multiple contact persons for the same business partner.
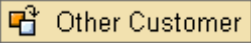
11. Enter *last name* in the **Name** column.

12. Enter *first name* in the **First name** column.

13. Click [Home Address]. The *Contact Persons: Home Address Create* dialog box displays.

14. Enter *name title* in the **Title** field.

15. Enter *physical address* in the **Street Address** section.

16. Enter *post office box information* in the **PO Box Address** section.

17. Enter *phone and email information* in the **Communication** section.

> Entering communication information will save time when creating work request. Information entered as master data will automatically be recalled in the notification and work order for some fields.

18. Click ✔ or press **Enter** to return to the *Create Customer: General Data* window.

> Click [Other Customer] to add additional customers. Then repeat steps 3-18 for each new customer to be added. Once all customers are added proceed to step 19.

19. Click 💾 to save the customer and exit this transaction.

VD03 – Display Customer Master Data

Use transaction code VD03 to view customer information in SAP. No special rights are required to view this information. However, changes to customer information can only be made if the user has the TMSD Administrator Role in SAP.

1. Enter *VD03* in the **Command** field on the *SAP Easy Access* screen.

2. Click 🗸 or press **Enter**. The *Customer Display: Initial Screen* displays.

3. Enter required information in the fields or click 🗗 next to the **Customer** field to search for a customer.

4.   Click ✅. The *Display Customer: General Data* screen displays.

5.   Review the customer data on the **Address** tab:

> 📋   The **Address** tab is separated into 5 sections:
>
> - Name
>
> - Search Terms
>
> - Street Address
>
> - PO Box Address
>
> - Communication

6.   Click 🔼 to exit this transaction.

Workcenter Master Data

One of the most important functions required of a TMSD Administrator is to maintain Workcenters in SAP. These Workcenters reflect the TMSD organization and are required as master data on Network Activities and Elements as well as PM Orders. The primary things the TMSD Administrators will do to maintain the Workcenters is adjust the number of capacities and assign the appropriate people to the workcenter.

This Step-by-Step describes how to create and maintain Workcenters for use in the TMSD WMS. Normally, it is not necessary to create work centers for a new network or PM Order. The Schedule Management Office will be responsible for creating, renaming, and adjusting the Workcenter Hierarchies.   It is rare to need to change a work center's number or create a new work center hierarchy. The procedures are included in this document because there is a possibility new work centers will be needed as the result of organizational changes. New work centers and/or work center hierarchies are created in the SAP QAS client, then tested and manually recreated in the production client by the Schedule Management Office.

This section describes how to create and maintain work center master data, including its number, classification, and the person responsible for it.   Additionally, it shows how to adjust the number of capacities in the workcenter and to add / remove personnel from the workcenter. Classification is the method used to determine if the responsible person receives workflow messages when certain key project events occur. Classification may also be used to determine if a Work Center Manager name displays on the NCDOT data tab of a project definition for TIP projects.

S_ALR_87004628 – Add Name to Person Responsible List

Two steps are needed in order to ensure the name of the person responsible for a work center is recorded correctly in the Workcenter master data record. Normally, the Schedule Management Office will maintain the Person Responsible table.

- Use transaction code *CNR3 – Display Work Center Details* to determine the number of the person responsible assigned to the work center. The number displays in the **Person responsible** field. This number does not correspond to a personnel number, but is unique to the work center.

- Use transaction code *S_ALR_87004628 – Add Name to Person Responsible List* to change the name associated with the number of the person responsible. The work center master data record will be updated with the new name.

> If you are the person responsible and are transferred to another work center, be sure the name on your old work center is changed to a place holder or the name of the new person. Otherwise, your name will continue to display on reports as being responsible for your old work center.

Currently, your old work center displays: *[your SAP logon id]*

Change to placeholder: *Vacant – [work center number]*

Accuracy of this list is important because the names show on reports used by upper level management.

1. Enter *S_ALR_87004628* in the **Command** field on the *SAP Easy Access* screen.

2. Click or press **Enter**. The *Change View "Person responsible for work center": Overview* screen displays.

3. Scroll through the list to locate the number in the **Pers. respons**. column that corresponds to the number in the **Person responsible** field on the work center master record.

> All work centers for TIP projects, IT projects and TMSD PM orders belong to plant 1595.
>
> The numbers in the **Pers. respons**. column are not work center or personnel numbers. They are unique to a work center.
>
> | Plant | Pers. respons. | Person responsible for work center |
> |-------|----------------|------------------------------------|
> | 1595 | 603 | Vacant − 227132 |
> | 1595 | 604 | bwright |
> | 1595 | 605 | dbest |

> Click Position... to search by person responsible number.
> Enter **Plant** *1595* and the *person responsible number*. Click to continue. The appropriate line is highlighted and displays at the top of the list.

4. Change the entry in the **Person responsible for work center** field to the name of the designated work center manager.

> If there is no longer a person designated as Work Center Manager, enter *Vacant – [work center number]*, as in the above example.

5. Click to save the change. The following message displays:
    "Data saved"

> Not all work center manager names will display on the **NCDOT data** tab in a project definition.

Click 🏠 to exit this transaction.

CNR1 – Create Work Center

New work centers may need to be created when

- A new squad is formed

- A person is hired in areas where each person is a work center

- Organizational changes occur

> Do not create a new work center if an existing work center is moving within the same work center hierarchy. Refer to procedure **CNR2 – Change Work Center.**

> If an entirely new unit is formed, new work centers must be created before the unit's work center hierarchy can be created.

No matter the reason for creating a work center, its number must reflect its position within its work center hierarchy.

> You must determine the Person responsible number for the new work center and assign a name to it prior to starting this procedure. Use the transaction code *S_ALR_87004628*. You must also use the transaction code *CL6B* to determine where the person's name would appear in the list of key project personnel.

1. Enter *CNR1* in the **Command** field on the *SAP Easy Access* screen

2. Click ✅ or press **Enter**. The **Create Work Center: Initial Screen** displays.

3. Enter the *number of the new work center* in the **Work center** field.

> Be sure the number accurately represents the work center's place in the work center hierarchy to which it belongs. Use transaction code *CR23* to verify the numbering convention for the hierarchy.

4. Enter *0006* in the **Work center cat**. field.

5. Click ✅ to continue. The **Create Work Center: Basic Data** screen displays the following message:
   "Values were copied from the default work center"

Enter a *description of the work center* in the field to the right of the new work center number.

> 📋 The description must be in the format of those for the existing work centers.

Enter *003* in the usage field if the work center will only be used for Networks. Enter *009* in the usage field if the work center will be used for Networks and PM Orders.

Enter the *number for the person responsible* for the work center in the **Person responsible** field.

> 🔔 If this is a brand new work center, number of the person responsible must have already been determined using the transaction code *S_ALR_87004628*.

> 📋 If the name of the person responsible for the work center does not need to display in the list of key project personnel, and/or if they are not to receive workflow messages when certain milestones are reached, there is no need to enter classifications. Proceed to step 22.

> 📋 Only certain TIP related work centers require classification data. If you are unsure whether a new work center requires classification data, call the Schedule Management Office to inquire. If classification is not required, proceed to step 24.

Click ⬜ Classification . The ***Create Work Center: Classification*** screen displays.

Click 🔲 in the **Class** field. The ***Restrict value range*** dialog box displays.

> 📋 If the **Assignments** section is grayed out, click 🔳 to open the fields.

Enter one of the following searches in the **Class description** field:

- ∗**WORKFLOW**∗ – if you want the Work Center Manager to receive system information messages when certain milestones are achieved

- ∗**PERSONNEL**∗ – if you want the name of someone associated with the work center to display with other key project personnel in project definitions

Click ✅ to continue. The dialog box displays classes that meet the description criterion.

Double-click the *appropriate class* to select it. The ***Change Work Center: Classification*** screen updates.

Enter *1* in the **Status** column to activate the class for the work center.

Click 🟢 to display the **Values for Class [class name] – Object 1595 [work center number]** section and the **General** tab.

> The name and content of the section reflects the selected class.

Click 🔲 in the **Value** field. The *PMii Workflow Include Parent* dialog box displays.

Select one of the following radio buttons as applicable:

- **NO ENTRY** – only the person responsible should receive the messages

- **ALWAYS** – the person responsible and the manager of the superior work center will receive messages

- **ACTIVE ONLY** – the person responsible and the manager of the superior work center will receive messages. The *Create Work Center Capacity: Header* screen displays.

Click ✅ to continue. The *Create Work Center: Classification* screen updates.

> A green check mark displays in the **Icon** column and a number displays in the **Item** column.
>
> If you selected the personnel class, proceed to step 18.
>
> If you want to add another class, return to step 9.
>
> If you have finished entering classes, proceed to step 23.

Double-click the appropriate unit in the **Person Responsible Unit** list to select it. The selected unit will change color.

> If the wrong unit was selected, double-click the correct unit.

Scroll to the **Project Position** list on the **General** tab.

Double-click the *position title* of the Work Center Manager in the **Project Position** list to select it. The selected position will change color.

Scroll to the **Sort Order for Project Co** list on the **General** tab.

Enter the *number* found by running the *CL6B – Object List* report in the **Sort Order for Project Co** field.

> This number determines where the unit and name of the person responsible for the work center display in the list of key personnel on a project definition.

> Click ⬛ to create another session to run the report concurrent with creating the work center.

Click 🔙 to return to the *Create Work Center: Basic Data* screen.

> 📋 The *PMii Workflow Include Parent* dialog box may display. Select the applicable radio button, then click ✅ to continue.

6. Select the **Capacities** tab. The *Create Work Center Capacity: Header* screen displays.

7. Enter *001* in the **Capacity planner grp** field.

8. Enter the *number of people performing the work* in the new work center in the **No. of indiv. cap**. field.

> 📋 The number of authorized positions may not reflect the actual number of individuals in the work center. There is the option to enter the number of authorized persons in the unit for that work center.

9. Click ✅ to continue. The *Create Work Center: Capacity Overview* screen displays.

10. Ensure that *SAP008* displays in the **Other formula** field.

11. Select the **Scheduling** tab. The *Create Work Center: Scheduling* screen displays the following message:
    "Values were set from the default work center"

Ensure that *002* displays in the **Capacity category** field.

Ensure that *SAP004* displays in the **Other formula** field.

Select the **Costing** tab. The *Create Work Center: Cost Center Assignment* screen displays.

Enter the *cost center number of the new work center* in the **Cost center** field.

Enter *PMii* in the **ActType Int. proc**. field.

Enter *SAP008* in the field to the right of the **ActType Int. proc**. field.

> 📋 This is the costing formula that will be used for the work center.

Enter *0* in the **Rec. type group** field.

Click 💾 to save the new work center. The following message displays:
"Work center XXXXXX in plant 1595 was created"

Click 🏠 to exit this transaction.

CNR2 – Change Work Center Number

The most common reason to change a work center assigned number is to reflect a change in organizational structure. Use this procedure only when the work center will not be in a different work center hierarchy. This type of change is called renaming, and it should rarely be used because of the immediate impacts in the following areas:

- The work center assignments are updated in all current projects using that work center

- Reports contain only the new work center number

- Standard networks containing assignments to the work center are changed, if applicable

- The work center position in the work center hierarchy does not change

- Capacity planning uses the new work center number

> If the work center is moving to another unit, the work center cost center, person responsible, the number of people in the capacity calculation and/or the classification(s) may also need to be changed.

1. Enter *CNR2* in the **Command** field on the *SAP Easy Access* screen.

Click ✅ or press **Enter**. The *Change Work Center: Initial Screen* displays.

Enter *1595* in the **Plant** field.

Enter the *work center number that is to be changed* in the **Work center** field.

Click ✅ to continue. The *Change Work Center Data: Basic Data* screen displays.

Follow the menu path **Work center** → **Rename**. The *New Name* dialog box displays.

Enter the *new work center number* in the **Work center** field.

Click 📄 to continue. The *Change Work Center: Basic Data* screen displays the new work center number and the old work center number master data.

Enter a *description of the new work center* in the field to the right of the work center number, if appropriate.

Click 💾 to save the change. The following message displays:
"Work center [new work center number] in plant 1595 was changed"

Click ⚓ to exit this transaction.

CNR2 – Change Persons assigned to the Workcenter

If the TMSD workcenter will have individual people assigned to tasks in the PM Orders, the Administrator will need to maintain them as personnel changes are made. Personnel numbers will need to be added or subtracted from the Work Center quickly after the change is made to allow proper assignment of work to the individuals involved.

To add a new person to the Work Center, take the following steps:

1. Enter *CNR2* in the **Command** field on the *SAP Easy Access* screen.

Click ✅ or press **Enter**. The *Change Work Center: Initial Screen* displays.

Enter *1595* in the **Plant** field.

Enter the *work center number that is to be changed* in the **Work center** field.

Click ✅ to continue. The *Change Work Center Data: Basic Data* screen displays.

2. Click on the 🔗 HRMS button.

3. Click on the 📄 HR work center button.

4. Ensure the proper Work Center is in the Object abbr. Field.

5. Ensure the proper Work Center description is in the Name Field.

6. Click ✅ or press **Enter**.

7. Click the Workcenter number and then ▽ to expand the Workcenter assignment tree.

8. Click 🗁 Person to select adding personnel numbers to the Work Center.
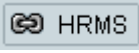
9. Click 📄 to change Work Center assignment of person.

10. Click on the drop down menu for the Person field to select the person to add to the Work Center.

11. Click 📋 to choose Last Name – First Name.

12. Enter the last name and first name (optional) and click ✅ to find the appropriate person. Ensure that the validity dates of the personnel record include the current timeframe. It should have an end date of 12/31/9999.

To delete a person from the Work Center, take the following steps:

1. Enter *CNR2* in the **Command** field on the *SAP Easy Access* screen.

Click or press **Enter**. The *Change Work Center: Initial Screen* displays.

Enter *1595* in the **Plant** field.

Enter the *work center number that is to be changed* in the **Work center** field.

Click to continue. The *Change Work Center Data: Basic Data* screen displays.

2. Click on the [GⓈ HRMS] button.

3. Click the Workcenter number and then [⍗] to expand the Workcenter assignment tree.

4. Click [👥] beside the person's name to select it for deletion.

5. Click [🗑] to delete the relationship between the person and the Work Center.

CR21 – Create Work Center Hierarchy

A work center hierarchy is an organizational structure made up of NCDOT branches, divisions, and units. Hierarchies will normally be maintained by the Schedule Management Office. The hierarchy gives a structural view of the organization and a means of reporting at different levels/rollups.

This procedure is used when organizational changes occur at NCDOT, a branch or unit.

> All the work centers that will make up the new hierarchy must already exist. If moving a work center from an existing hierarchy, first rename the work center using the procedure *CNR2 – Change Work Center Number*. To create a new work center, use the procedure *CNR1 – Create Work Center*.

Work center hierarchies currently fall into one of four number groups that represent each of the four divisions. Each branch has its own number group within the division grouping. If the size or structure of the branch is complex, a third tier of numbers is assigned to each unit.

- Planning and Environmental – H_100000 to H199999

  – H_110000 – PDEA
  – H_120000 – Transportation Planning Branch
  – H_130000 – Program Development

- Construction and Operations – H_200000 to H_299999

  – H_210000 – Maintenance Branch

- − H_220000 – Construction
- − H_230000 – Divisions

- Pre-Construction – H_3000000 to H_3999999

  - − H_310000 – Right of Way
  - − H_320000 – Transportation Mobility and Safety Branch
  - − H_332000 – Structure Design
  - − H_333000 – Roadway Design
  - − H_334000 – Location and Survey
  - − H_335000 – Photogrammetry
  - − H_336000 – Hydraulics
  - − H_337000 – Geotechnical Engineering

- Fiscal – H_400000 to H_499999

A new hierarchy would normally fit within the above four groups unless an entirely new branch is being formed.

6. Enter *CR21* in the **Command** field on the *SAP Easy Access* screen.

Click 🟢 or press **Enter**. The *Create Hierarchy* screen displays.

7. Enter the *new hierarchy number* in the **Name of hierarchy** field.

> All hierarchy names start with H_ followed by the top-level work center number. This would be the lowest six-digit number representing the new division, branch, and/or unit.

8. Enter *1595* in the **Plant** field.

9. Click 🟢 to continue. The *Create Hierarchy: Header Data* screen displays.

10. Enter a *description of the new hierarchy* in the field to the right of the hierarchy name.

11. Enter the *number that represents the person responsible* for the the new organization in the **Person responsible** field.

> Click 🔲 to search for the number. Click the title of the **Name** column to sort the names/logon IDs in alphabetical order.

12. Click 🔳 to access a blank *Create Hierarchy: Graphic* screen.

Create the First Hierarchy Level

13. Click 🔲 to insert a work center graphic.

14. Double-click the **Work center box** in the bottom part of the screen. The *Insert work center* dialog box displays.

15. Enter the highest <u>level</u> *work center number* in the **Work center** field.

> The work center number must be six digits. This is the number of the work center that will be at the top of the hierarchy.

16. Click ✅ to continue. The *Create Hierarchy: Graphic* screen updates and displays the following message:
    "Node inserted"

> The highest level work center displays at the top of the screen. The system will build the hierarchy starting at the left side of the screen. Each time you add a work center, the graphic will be adjusted. The new structure will not be centered until you save the hierarchy.
>
> The work center number displays at the top of the graphic, its description in the center, the work center type at the bottom left and the plant number at the bottom right.

Create the Second Hierarchy Level

> The procedures for creating the lower levels in the hierarchy differ from creating the highest level.

17. Click 🗅 to add the first work center on the second level. A blank work center graphic displays at the bottom of the screen.

18. Click the work center graphic. A green box displays in the upper section of the screen.

19. Move the cursor (without clicking the mouse) so that the vertical line of the box touches the <u>underside</u> of the highest level work center, then click to attach the box to the work center. The *Insert work center* dialog box displays.

20. Enter the *number of the work center* in the **Work center** field.

21. Click ✅ to continue. The *Create Hierarchy: Graphic* screen updates.

> This document assumes that there are at least two second-level work centers. If there is only one second-level work center, proceed to step 24.

22. Click 🗅 to add a work center to the second level. A blank work center graphic displays at the bottom of the screen.

23. Click the work center graphic. A green box displays in the upper section of the screen.

24. Move the cursor (without clicking the mouse) so that the vertical line of the box touches the underside of the higher-level work center, then click to attach the box. The *Insert work center* dialog box displays.

> Always attach work centers to the underside of their superior work center. Attaching the vertical line to the side of another work center does not always work.

25. Enter the *number of the work center* in the **Work center** field.

26. Click ✅ to continue. The *Create Hierarchy: Graphic* screen updates.

> If a work center is on the wrong level, delete it from the graphic then add it again correctly. To delete a work center, select it, then click 🗑.
>
> Work centers can only be moved within the same level. Click the box, then drag it to the appropriate location.

27. Return to step 18 for each second-level work center, as needed.

Create the Third Hierarchy Level

28. Click 📄 to add the first work center to the third level. A blank work center graphic displays at the bottom of the screen.

29. Click the work center graphic. A green box displays in the upper section of the screen.

30. Move the cursor (without clicking the mouse) so that the vertical line of the box touches the underside of the work center to which it will report, then click to attach the box. The *Insert work center* dialog box displays.

31. Enter the *number of the work center* in the **Work center** field.

32. Click ✅ to continue. The *Create Hierarchy: Graphic* screen updates.

33. Repeat steps 24 through 28 until all third-level work centers have been entered.

> Always attach work centers to the underside of their superior work center. Attaching the vertical line to the side of another work center does not always work.

Create the Remaining Hierarchy Levels

34. Repeat steps 24 through 28 for each of the remaining levels in the hierarchy.

> If a work center is on the wrong level, delete it then add it again correctly. To delete a work center, select it then click 🗑.
>
> Work centers can only be moved within the same level. Click the box, then drag it to the appropriate location.

35. Click 💾 to save the hierarchy. The following message displays:
    "Hierarchy H_XXXXXX plant 1595 is created"

Click 🏠 to exit this transaction.

Record Work Request

The Transportation Mobility and Safety Division will record work request notifications using the SAP work request functionality. A work request is a notification recoding process which tracks who is requesting or assigning the work and capturing information from the person who is informing TMSD of the issue. Notifications can be created based on several different points of contact; walk-ins, emails, telephone calls, letters, or other communication methods.

Work request notifications are used for any request made to TMSD that requires a work order. Notifications do not require approval. However, emails sent from the work request must be completed prior to closing the request and order. Once an order has been created from the notification it must be released prior to charging time against it. TMSD personnel do not need special authorizations to record or release work requests.

IW21 – Create Work Request (Notification)

Use this procedure to create a work request (notification) when a customer submits mobility and/or safety issues.

1.   Enter *IW21* in the **Command** field on the *SAP Easy Access* screen.

2.   Click ✅ or press **Enter**. The *Create PM Notification: Initial screen* displays.

3.   Enter *T1* in the **Notification type** field to create a TMSD request.

> 📋   "T1" is a specific notification type defined for TMSD.

4.   Click ✅ or press **Enter**. The *Create PM Notification: TMSD* screen displays.

5.   Enter a brief description of the service or study requested in the **Notification** field.

> 📋   The system automatically generates a reference number which is displayed in the **Notification** field next to T1 (the notification type). The notification number can be used as a reference number when returning to view or change the notification. However, a short text description is also required. The description displays on report lists, shop papers and work orders. This field is limited to 40 characters of text. If a more detailed description is required, click 📝 or enter it under the **Subject** section in the **Mode** field.

6.   Enter the *functional location number* (statewide/division/county) of the work request will be assigned in the **Functional loc.** field in the Reference Object section.
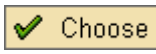
> For TMSD a separate functional location hierarchy list is created consisting of Statewide - Divisions - Counties. Enter *NC* in functional location and then click 🖥 to see the Functional Location Hierarchy for TMSD. Select the appropriate node in the Functional Location Hierarchy that best applies to the request.

7. Enter a *request mode* in the **Mode** field, then use the open text field to enter a more *detailed description* to document the request.

> Modes are categories used to identify the channel or method by which a message or issue is received. Click 🗗 in the **Mode** field to select one of the following request modes:
>
> *   CU – contact us
> *   EM – email
> *   FB – folder (blue)
> *   FR – folder (red)
> *   FW – folder (white)
> *   FX – fax
> *   IP – in-person
> *   LM – letter/memo
> *   PH – phone call
>
> Then click ✔ Choose to close the dialog box.

8. Enter the following required information in the **Responsibilities** section.

    *   Planner group - Click 🗗 in the field to see the list of available options. See **Appendix A** for a list of planner groups.

    *   Main WorkCtr – use the workcenter that is responsible for managing the order.

    *   Notif. date – date TMSD is notified by the customer. It defaults to the date the notification is created.

9. Check the defaults in the **Start/End Dates** section. Make corrections as needed.

> **Required Start** – the date the work is requested to begin. It defaults to the notification creation date but should change to accurately reflect when work will begin.
>
> **Required End** – the date the customer request the work be completed.

> There are two possible options for **Priority**.
>
> - **1 Normal** – indicates the request should be handled according to normal protocol.
>
> - **2 Expedite** – indicates the request requires a more immediate response than normal and should be considered high priority.

10. Press **Enter** to validate entries.

Assign Business Partners

Each notification is can have a business partner(s) (customer) assigned. The business partner represents the person or organization for which the notification is being created. There are three types of partners (customers): Internal, External and Citizen (one-time customer).

Internal and external business partners have already been defined as customers. They have also designated a contact person. They can be searched using Account Group (Z010) and Search term (either internal or external). They can also be searched using Account Group (Z010) and customer name. If the customer for whom the requisition is created is a Citizen then a contact person must also be created. Unlike internal and external business partners, citizens are categorized as one-time customers and have not been previously stored in the system. Therefore, no contact person will already exist.

1. Click 🏢 to enter partner (customer) information.

2. Click 📄 in the **Funct** field to select one of the following partner types. Following are the steps for the selected partner type.

Business Partner is Citizen

Contact information is required to be entered for each citizen since information is not stored as master data for each citizen that exists.

- Select **Z6 Citizen** in the **Funct** field.

- Type *TMSD* in the **Partner** field.

- Press **Enter**. The *Address Maintenance: Create "Address for One-time Customer"* dialog box appears.

- Enter as much information as is known.

- Enter the following information for the citizen submitting the notification in the **Name** section, if known:

  - Title

  - Name – enter *TMSD* on the first line and the *customer name* on the second line.

> Click ⊞ to expand the **Name** field to enter additional name details.

- Enter *TMSD* and *customer name* the two **Search term 1/2** fields in the **Search Terms** section.

> The **Search Term** is always "TMSD". This identifies them as Citizens (one-time customers).

- Enter the following information in the **Street Address** section, if known:

  - Street/House number

  - Postal Code/City

  - Country

> Click ⊞ to expand the **Street Address** section field to enter additional name details.

- Enter the *post office address* in the **PO Box Address** section, if applicable.

- Enter the following information in the **Communication** section, if known:

> Entering communication information will save time when creating work request. Information entered as master data will automatically be recalled in the notification and work order for some fields.

> If you have additional communication information, click
> [Other communication...]. Double-click the *communication type* and enter the information in the dialog box that appears.

  - Language – default English

  - Telephone – primary telephone number

  - Extension – if applicable

  - Mobile Phone – cellular phone number

  - Fax – facsimile number

  - E-Mail – electronic mail

  - StandardComm.Mtd – Standard Communication Method (preferred method of communication)

> Click 🗒 in the **StandardComm.Mtd** field to select from the drop-down box. Most common choices are E mail, Telephone or Fax.

- Enter any *additional comments* in the **Comments** field, if applicable.

- Click ✅ to close the dialog box.

- Continue to step 13.

Business Partner is External

External partners are governmental and other affiliates that are not a part of the Government. A Contact Person must be associated with external customers.

- Select **Z7 External** in the **Funct** field.

- Enter the *partner* in the **Partner** field.

> Click 🔲 in the **Partner** field to search for the partner number.
>
> Type **external** and *customer name* in the **Search Term** field to search for external partners.
>
> Enter as much search criteria as is available to you to narrow the search. Press **Enter** to see a list of matching results.
>
> Double-click the partner to select it.
>
> The name and other information default into the table.

- Press **Enter** to validate the customer number.

- Click 🗒 in the **Funct** field.

- Select **CP Contact Person**.

- Enter the Partner number from the line above.

- Press **Enter** to validate the customer number.

> The following warning message may appear at the bottom of the screen, *"No contact person has been entered for the specified customer"*
>
> Bypass the message by selecting the contact person in the next step.

- Click 🔲 in the **Name** field to search for the contact person name.

- Double-click the *contact name*.

- Press **Enter** to validate the contact person information.

- Continue to step 13.

Business Partner is Internal

Internal partners are any customer from within NC State Government. A Contact Person can be associated with an internal customer.

- Select **Z8 Internal** in the **Funct** field.

- Enter the *partner* in the **Partner** field.

> Click [image] in the **Partner** field to search for the partner number.
>
> Type **internal** and *customer name* in the **Search Term** field to search for internal partners.
>
> Enter as much search criteria as is available to you to narrow the search. Press **Enter** to see a list of matching results.
>
> Double-click the partner to select it.
>
> The name and other information default into the table.

- Press **Enter** to validate the customer number.

- Click [image] in the **Funct** field.

- Select **CP Contact Person**.

- Enter the Partner number from the line above.

- Press **Enter** to validate the customer number.

> The following warning message may appear at the bottom of the screen, *"No contact person has been entered for the specified customer"*
>
> Bypass the message by selecting the contact person in the next step.

- Click [image] in the **Name** field to search for the contact person name.

- Double-click the *contact name*.

- Press **Enter** to validate the contact person information.

- Continue to step 13.

3.   Repeat step 12 for each partner associated with the notification.

4.   Click [image] to return to the ***Create PM Notification: TMSD*** screen.

5.   Click the **Schedule Overview** tab.

6.   Review the information for accuracy.

7.   Locate the **Action box**.

Refer to the **IW22 – Change Work Request** section for details on creating an internal note, logging a call and sending e-mail, fax and printout confirmations.

8.   Click 🖫. The following message displays:
      "Notification XXXXXXXXX saved"

If you are ready to create the work order, do NOT exit this transaction. In order to create a work order with a cross reference link to the notification it must been created from within the work request. Use the steps below to create a work order with a cross reference to the work notification just created. Proceed to the **IW21 – Create Work Order** section.

If you need to create the work order later, click 🏠 to exit this transaction.
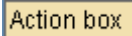
Create Internal Note

Internal notes are informational notes for anyone that may be working in tandem on a notification. They are used to document information that may need to be shared internally among the TMSD team. This information is printed on the work request shop papers. Internal notes are created from within the Action Box located in the far right of the Change PM Notification: TMSD window. Every internal note written is automatically displayed on the **Notes/Calls** tab. A detailed history of all internal notes is displayed with details.

1.   Locate [Action box] on the far right of the window.

2.   Click [Create Internal Note]. The Internal Note dialog box displays.

3.   Enter a *brief description* in the **Description** field.

4.   Enter *descriptive text* in the blank box below the **Description** field.

5.   Click ✅ to close the dialog box and return to the *Change PM Notification: TMSD* screen.

6.   Click **Notes/Calls** tab to review the note.

7.   Continue making changes as needed using the [Action box] to log a call, send an e-mail, fax or printout or skip pass any section where changes are not required.

Log Telephone Call

The calls are logged to capture telephone contact between TMSD and the customer. Detailed histories of all incoming and outgoing calls for a notification are logged. A detailed call history can be viewed on the **Notes/Calls** tab. The calls documented on the notification also print on the shop papers.

1.   Locate Action box on the far right of the window.

2.   Click ☎ Log Telephone Call . The **Outgoing Call** dialog box displays.

> 📋 To log an incoming call, click Incoming call to display the Incoming Call dialog box.

3.   Enter *the date and time* the call was made/received in the **Start** field.

4.   Enter *the date and time* the call ended in the **End** field.

5.   Enter *name of person* making the call in the **Call From** field.

6.   Enter *name of person to receive the call* in the **Call for** field.

7.   Select a **Conversation Status**.

8.   Enter a *description of the conversation* in the **Subject of conversation** field.

9.   Click ✅ to close the dialog box and return to the *Change PM Notification: TMSD* screen.

10. Click **Notes/Calls** tab to review the call log.

11. Continue making changes as needed using the **Action box** to send an e-mail, fax or printout or skip pass any section where changes are not required.

Send E Mail Confirmation

E-mail is electronic mail sent via the internet. Emails concerning notifications including confirmation of recording an issue/concern can be sent from SAP to a customer contact. When mail is sent through SAP, it automatically generates a record of the email correspondence. A detailed history of emails can be displayed on the **Emails** tab. Emails are identified on the **Email** tab with the words, "*Notice sent by e-mail*" in the **Task text** column.

1.   Locate Action box on the far right of the window.

2.   Click 📠 Send E Mail Confirmation . The **Send Notice: Select Partner** dialog box displays.

> 📋 This is a list of all of the Business Partners entered for this notification.

3.   Click ☐ to the left of the *business partner* to select it.

4.   Click ✅ to display the *Send Email, fax* dialog box.

5.   Select the **E-mail** radio button.

6.   Enter *confirmation notice text* in the **Notice Text** field.

7. Click ✔. The *Internet Address* dialog box displays.

8. Enter *the email address of the intended recipient* in the **Internet address** field.

> 📋 The E mail address will be automatically populated if it was entered in the customer master. If it is missing then it can be entered in the **Internet address** field.

9. Click ✔ to send the email and return to the *Send Email, fax* dialog box.

10. Click ✔ to close *Send Email, fax* dialog box.

> 📋 Email is sent once Notification is saved

11. Click the **E-Mail** tab to see a detailed history of e-mails, printouts and faxes.

> 📋 Emails are identified on the **Email** tab with the words, "*Notice sent by e-mail*" in the **Task text** column.

12. Click ☐ left of the line representing the just email sent then click 🏁 to close this task.

> 🔔 Each task should be closed immediately upon completion. All tasks on the Email tab must be completed prior to setting the status to Complete (Technically) on the associated work order.
>
> Prior to closing a task, the **Status** field will read TSRL (task released). If a task was properly closed the **Status** field will read TSCO (task completed). After it has been closed and saved the **Status** will read TSCO FUAC (Follow-up action completed).

13. Continue making changes as needed using the **Action box** to log a call, send a fax or printout or skip pass any section not required.

IW22 – Change Work Request (Notification)

Use this procedure to change a work request notification. This transaction can be used after the creation of a notification to change dates, add internal notes, email confirmations, and log calls.

1. Enter *IW22* in the **Command** field on the *SAP Easy Access* screen.

2. Click ⊘ or press **Enter**. The *Change PM Notification: Initial screen* displays.

3. Enter *notification number* in the **Notification type** field to create a TMSD request.

4. Click ![icon] or press **Enter**. The *Change PM Notification: TMSD* screen displays.

5. Change the description of the repair needed or service requested in the **Notification** field.

6. Enter a more detailed description and any other additional information in the **Mode** field.

7. Change the **Start/End Dates** and **Priority**, as needed.

8. Add or update business partners.

> To add or update business partners, refer to **Assign Business Partners** in the **IW21 – Create Work Request** section.

9. Create internal notes, log telephone calls and send emails.

> To create internal notes, log telephone calls, send email, printout and fax confirmation refer to the respective sections in the **IW21 – Create Work Request** section.

10. Click ![icon] to exit this transaction.

IW23 – Display Work Request

1. Enter *IW23* in the **Command** field on the *SAP Easy Access* screen.

2. Click ![icon] or press **Enter**. The *Display PM Notification: Initial screen* displays.

3. Enter the *notification number* in the **Notification** field.

> By default, SAP displays the notification number of the last notification you created or displayed. If this is not the notification you want to view, enter the notification number of the desired work request.
>
> If the notification number for the TMSD work request is unknown, perform the following to search for it:
>
> 1. Click ![icon] to the right of the **Notification** field. The *Display Notifications: Selection of Notifications* screen displays.
>
> 2. Enter *T1* in **Notification type** field.
>
> 3. Enter a *date range* in **Notification date** field (optional).
>
> 4. Enter *your SAP User ID* in the **Created by** field (optional)
>
> 5. Click ![icon]. A list of notifications that match the given search criteria displays.

6. Double-click the desired notification.

4.   Click ✅ or press **Enter**. The ***Display PM Notification: TMSD*** screen displays.

5.   Review the notification header details.

- Notification – number assigned, notification type and short text

- Status – there are 4 system status codes for a notification:

  - NOPR – Notification in progress

  - ORAS – Order assigned

  - OSNO – Outstanding notification

  - OSTS – Outstanding task(s) exist(s)

> There are 3 TMSD defined user statuses for Notification Type T1.
>
> - Auth – Authorized -default status will allow assignment of an order to the Notification
>
> - Nt Au – Not Authorized -prevents assignment of an order to this Notification
>
> - Urev – Under Review -prevents assignment of an order to this Notification

- Order – associated work order number

> Additional Information can be viewed using the icons on the tool bar.
>
> - 👫 **– Partners** displays the name of the person responsible for the functional location entered on the PM notification
>
> - 📄 **– Address** displays address/contact information for the functional location entered on the PM notification
>
> - 📑 **– Document Flow** – displays the SAP document flow for the notification
>
> - 📜 **– Action Log** – displays history log for the notification

In addition to the header information, there are four tabs.

- Request tab – contains four sections

  - Reference Object – Functional loc. (county)

  - Subject - Mode (long text)

  - Responsibilities – Planner group, Main WorkCtr and Notif. date

- – Start/End Dates – date work order will begin and end and Priority

- Schedule Overview tab– dates entered on the Request tab default here

- Emails tab – record of email correspondence, printouts and faxes

- Notes/Calls tab – detailed history of all internal notes and calls logged. Internal notes are informational notes for anyone else that may be working in tandem on the notification. Call logs are for all calls made and received for this notification. The call log is used to capture telephone contact between TMSD and the customer. A detailed history of all incoming and outgoing calls for a notification is logged and can be viewed on this tab.

> The Work Order can be viewed from the notification. Click next to the **Order** field to display the associated work order.

6.   Click to exit this transaction.

Process Work Order

Work request notifications are required to create work orders. Work orders can then be created from within the work request notification creating a cross reference. TMSD will use the work orders to create tasks along with planned work efforts. Individual tasks can then be assigned to an individual or to work centers. Supporting documentation can be attached to saved work orders.

Work orders for TMSD must be created from within the associated work request notification to create a cross reference link between the two. If an order is created without starting with the Notification, it will build a new Notification and associate it with the order. After, a work request notification and a work order is created, you can toggle between the two. The work order can be created when creating or modifying a notification using transaction code IW21 and IW22, respectively. Use one of the two processes outlined below to create a work order.

IW21 – Create Work Order

If you are ready to create the work order when creating the work request, do not exit the notification.

Use the steps outlined in *IW21 – Create Work Request Notification* steps 1-18 to create the notification. Then proceed with the steps outlined below to create a cross referenced work order link to it.

The work order screen is separated into tabs: HeaderData, Operations, Components, Costs, Objects, Addit. Data, Location, Planning, Control and Enhancement. If needed, it can be changed on the work order. TMSD will not use all of the tabs. Since information entered on the work request notification will automatically be transferred to the work order, most of the fields will be pre-populated. The following steps are organized by tabs that are to be completed when creating a TMSD work order.

1. Click next to the **Order** field to create an associated TMSD order. The **Create Order** dialog box displays.

2. Enter *TS01* in the **Order Type** field.

3. Enter *1595* in the **Planning Plant** field.

4. Enter *work center in charge of performing task* in the **Main work center** field.

5. Click The **Create Transportation Mobility & Safety Divisio : Central Header** screen displays the following message
    "*No profile determined*"

> All of the information entered on the work request notification automatically displays on the cross referenced work order.

Header Tab

Most of the information required for the Header tab will be pre-populated based on what was entered on the work request notification.

6.   Select the **Header** tab.

7.   Enter the following information in the **Person Responsible** section.

- PlannerGrp – planner group

- Mn.wk.ctr – main workcenter

- PMActType – project maintenance activity types are categories of service orders used to perform cost and work order analysis and are independent of planner groups. See **Appendix B – Maintenance Activity Types** for a list.

8.   Enter the *date information* in the **Dates** section.

- Bsc start – the date work is scheduled to start

- Basic fin. – the date work is scheduled to end

- Priority – select 1 for normal or 2 for expedite

9.   Enter a *functional location* in the **Func. Loc** field in the **Reference object** section.

10.   Press **Enter**.

Operations Tab

11.   Select the **Operations** tab.

12.   Enter in the following columns.

- **OpAc** – Use the next available number that represents a task or group of task required to complete the PM order. The system automatically assigns these numbers in increments of 10.

- **Workcenter**- The main workcenter entered on the Notification will be populated in all operations as a default. If a different workcenter is needed, replace it with the appropriate TMSD workcenter.

- **Work**– enter estimated number of hrs to required to complete the task

- **Unit**- Unit of measure for Work will always be H(hours).

- **Durat** – enter a planned duration of the task used to calculate the end date given the start date. Days are the default unit of measure.

- **Unit** – Unit of measure for Duration will always be D(day)

- **CcKey** – Always 0 – Maintain Manually.

If you are going to plan at the work center level move to step 13. If you are going to plan at individual person level follow the steps below.

- Click ☐ to the left of the line to select it.

- Click 　Internal　. The **Create Transportation Mobility & Safety Divisio 41XXXXXXX: Internal** screen displays.

- Select the **Reqmnts Assignment** tab to enter individual resources.

- Click 🔲 in the **Person** field to select a resource in that work center then enter the *number of hrs* in the **Work** field for that person.

- Repeat the above step for each individual resource.

- Click 🔙 to return to the **Create Transportation Mobility & Safety Divisio 41XXXXXXX: Operation** screen.

Cost Tab

The Cost tab is used for information only. It shows the calculated planned cost and any actual cost charged to order (planned hrs at planning rate) and is used primarily for reporting.

13.   Click the **Cost** tab and review the planned and actual cost information.

Additional Data Tab

This tab is only used for entering the functional area associated with orders settling to a WBS Element.

14.   Functional Area should be populated if the PM Order will be settled to a WBS Element.

Location tab

15. Click the **Location** tab and complete the **Account assignment** section.

16. Choose one of the following:

- If the work will be assigned to a person in an admin cost center enter *150149* in the **Cost Center** field.

- If the work will be assigned to a field cost center enter a *WBS Element* in the **WBS element** field that is funded for this PM order.

> 📋 The settlement rules will be built based on the information you enter on the **Location** Tab. If a cost center is entered you will be required to build the settlement rules manually. If a WBS element is entered the settlement rules will be built automatically.

Control Tab

17. Click the **Control** tab and review the **Administrative data** section.

> The **Administrative data** section on the **Control** tab shows who created the work order and when. It also displays the last person that changed it and when it was changed.

Enhancement Tab

The Enhancement tab is a customized group of fields specific to the TS01 order type. Information on this tab is recommended. If this information is not known at the time of creation, enter it as it becomes available.

18. Click the **Enhancement** Tab and complete the fields.

- Signal Inventory Number - reserved for the signal inventory number

- Case Number - reserved for case (request) numbers from the Governor's Office, the Secretary's Office, and the Administrator's Office

- Spot Safety Number - reserved for the spot safety number

- Special Number - can be used for the PH Number (HSIP Program), the Fatal Slip number (from the Highway Patrol), the Special Commercial (SC) project numbers, Special Project (SP) numbers, Control of Access (CA) project numbers, Special Sign project numbers, Logo project numbers, or any other business unit tracking numbers

- Study Name - can be used for the TEAAS study name or for any other cross-reference purposes by individual business units

Maintain Settlement Rule

Settlement rules must be built prior to releasing the PM order. Rules are based on the account assignment entered on the **Location** tab.

19. Click ⬚. The ***Maintain Settlement Rule: Overview*** screen displays.

> If a WBS element was entered on the **Location** tab, two settlement rules are built, Ful (full) and PER (periodic), will display. TMSD will only use Ful settlement. However, the PER rule does not need to be deleted.
>
> Skip to step 22.

20. Enter *CTR* in the **Cat** column to indicate cost center as the account assignment object type.

> 📋 If a Cost Center was entered on the **Location** tab, the Cat column will be left blank. Enter CTR to designate settlement to a Cost Center.

21. Enter *cost center providing funding* in the **Settlement Receiver** column. The Admin Cost Center in TMSD is 150149. That is the only Cost Center used to settle TMSD orders.

> 📋 If a WBS element was entered on the **Location** tab, the *WBS number* will appear in the **Settlement Receiver** column.

22. Enter *percentage (1 – 100%)* in the **%** column.

> 📋 Ensure full settlement equals a total of exactly 100% in the **%** column.

23. Enter *FUL* in the **Settlement type** column.

> 📋 Always use FUL (full) settlement for both cost center and WBS elements.

24. Click 🔄 to return to the ***Create Transportation Mobility & Safety Divisio 41XXXXXXXX: Operation*** screen.

> 🔔 If a warning message is displayed, ensure there is FUL settlement at a total of exactly 100% in the **%** column. Click ✅ to exit and correct the **%** column to be exactly 100% to avoid additional settlement errors.

Release PM Order

Notice the new system status in the header in the **Sys. Status** field. *SETC* appears representing a settlement rule has been created. This indicates settlement rules are active and the PM order can be released.

There are 2 options for releasing work orders. The first option simply allows you to release the order to accumulate charges. The second option releases the order but it also allows you to print shop papers as well. Shop papers document the work or task required for work order completion.

> 📋 To simply release work order, click 🏴. The following message appears: "*Order 41xxxxxxxxx will be released after update*".
>
> The **Sys. Status** field has been changed to *REL* indicating the work order has been released and time can now be charged to it.

Release and Print Shop Papers

14. Click ⚙ to put in process. A **Order: Put in Process** dialog box displays.

15. Choose one of the following:

- Print w/o online window

- Print with online window

- W/o print

16. Click ✅ to return to the **Create Transportation Mobility & Safety Divisio: Initial** Screen. The following message appears:
"*Order 41XXXXXXX saved with notification XXXXXXXXXXX*

> 📋 The **Sys. Status** field has been changed to *REL* indicating the work order has been released and time can now be charged to it.

IW32 – Change Work Order

Most of the master data information on the Work Order header is static and will not likely change. However, work order changes are usually additional information that needs to be added or updated.

1. Enter *IW32* in the **Command** field on the *SAP Easy Access* screen.

2. Click ✅ or press **Enter**. The *Change Order: Initial screen* displays.

3. Enter *Order number* in the **Order** field to open an existing TMSD Order.

4. Click ✅ or press **Enter**. The *Change Transportation Mobility & Safety Divisio 4XXXXXXXX* screen displays.

Header Tab

25. Select the **Header** tab.

26. Update the *date information* in the **Dates** section.

- Bsc start – the date work is scheduled to start

- Basic fin. – the date work is scheduled to end

- Priority – select 1 for normal or 2 for expedite

27. Press **Enter**.
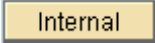
Operations Tab

28. Select the **Operations** tab.

29. Update the information in the following columns.

- **OpAc** – Use the next available number that represents a task or group of task required to complete the PM order. The system automatically assigns these numbers in increments of 10.

- **Work center**- The main work center entered on the Notification will be populated in all operations as a default. If a different work center is needed, replace it with the appropriate TMSD work center.

- **Work**– enter estimated number of hrs to required to complete the task

- **Unit**- Unit of measure for Work will always be H(hours).

- **Durat** – enter a planned duration of the task used to calculate the end date given the start date

- **Unit** – Unit of measure for Duration will always be D(day)

- **CcKey** – Always 0 Maintain Manually.

If you are going to plan at Work Center level, move to **Location** tab. If you are going to plan at individual person level follow the steps below.

- Click ☐ to the left of the line to select it.

- Click Internal . The *Create Transportation Mobility & Safety Divisio 41XXXXXXX: Internal* screen displays.

- Select the **Reqmnts Assignment** tab to enter individual resources.

- Click 🔲 in the **Person** field to select a resource in that work center then enter the *number of hrs* in the **Work** field for that person.

- Repeat the above step for each individual resource.

- Click 🔙 to return to the *Create Transportation Mobility & Safety Divisio 41XXXXXXX: Operation* screen.

Location tab

30. Click the **Location** tab and update the **Account assignment** section.

31. Choose or change the following:

- If the work will be assigned to a person in an admin cost center enter *150149* in the **Cost Center** field.

- If the work will be assigned to a field cost center enter a *WBS Element* in the **WBS element** field that is funded for this PM order.

> The settlement rules will be built based on the information you enter on the **Location** Tab. If a cost center is entered you will be required to build the settlement rules manually. If a WBS element is entered the settlement rules will be built automatically.

Enhancement Tab

32. Click the **Enhancement** Tab and complete or update the following fields:

- **Signal Inventory Number** - reserved for the signal inventory number

- **Case Number** - reserved for case (request) numbers from the Governor's Office, the Secretary's Office, and the Administrator's Office

- **Spot Safety Number** - reserved for the spot safety number

- **Special Number** - can be used for the PH Number (HSIP Program), the Fatal Slip number (from the Highway Patrol), the Special Commercial (SC) project numbers, Special Project (SP) numbers, Control of Access (CA) project numbers, Special Sign project numbers, Logo project numbers, or any other business unit tracking numbers

- **Study Name** - can be used for the TEAAS study name or for any other cross-reference purposes by individual business units

Maintain Settlement Rule

Settlement rules are not required when creating the work order but must be built prior to releasing the order. Rules are based on the account assignment entered on the **Location** tab.

33. Click 🔧. The ***Maintain Settlement Rule: Overview*** screen displays.

> If a WBS element was entered on the **Location** tab, two settlement rules are built, Ful (full) and PER (periodic), will display. TMSD will only use Ful settlement. However, the PER rule does not need to be deleted.
>
> Skip to step 22.

34. Enter *CTR* in the **Cat** column to indicate cost center as the account assignment object type.

> If a Cost Center was entered on the **Location** tab, the Cat column will be left blank. Enter CTR to designate settlement to a Cost Center.

35. Enter *cost center providing funding* in the **Settlement Receiver** column. The Admin Cost Center in TMSD is 150149. That is the only Cost Center used to settle TMSD orders.

> 📋 If a WBS element was entered on the **Location** tab, the *WBS number* will appear in the **Settlement Receiver** column.

36. Enter *percentage (1 – 100%)* in the **%** column.

> 📋 Ensure full settlement equals a total of exactly 100% in the **%** column.

37. Enter *FUL* in the **Settlement type** column.

> 📋 Always use FUL (full) settlement for both cost center and WBS elements.

38. Click 🔙 to return to the ***Create Transportation Mobility & Safety Divisio 41XXXXXXXX: Operation*** screen.

> 🔔 If a warning message is displayed, ensure there is FUL settlement at a total of exactly 100% in the **%** column. Click ✅ to exit and correct the **%** column to be exactly 100% to avoid additional settlement errors.

Print Order

5. Follow the menu path, **Order → Print → Order**. The ***Select Shop Papers*** dialog box appears.

6. Click 🖨 Print Preview . The ***Print Preview of DOT_ITSAP_XXXXXXX*** window displays an image of the document queued for printing.

7. Click 🔙 to return to the ***Select Shop Papers*** dialog box.

8. Click ❌ to return to the ***Change Transportation Mobility & Safety Divisio 41XXXXXXXX*** screen.

Release PM Order

9. Click 🚩. The following message appears:
   "*Order 41xxxxxxxxx will be released after update*".

10. Click 🔙 to exit this transaction.

Technically Complete and Final Confirmation

Using confirmations, TMSD will be able to track work order progress. Confirmations allow users to assign final confirmations. Although confirmations are not used to close a work order, it removes any demand for work from the work center associated with that task or operation from that work order.

Work orders may involve only one operation while others may involve several. Each operation represents a key task or deliverable for the work order. TMSD orders with only one operation per work order do not require extensive planning or scheduling. Single operation orders will have a basic start and basic finish date. These work orders will be managed at the header level. Due to the simplicity of planning these orders, they will not use confirmations.

Multiple operation work orders require more a more detailed plan and additional scheduling.   Each operation (task or deliverable) will likely be assigned to different work centers with varying durations and resources. As each operation is finished a confirmation of completion is assigned at the task level. After all operations on an order are complete, a final confirmation is required.

IW32 – Complete Work Orders with One Operation

Technically complete a single task order at the header level when the task is finished. This will change the status of the order to TECO. Time can still be charged to orders that have the TECO status. After an order has the status of TECO for 180 days, SAP will change the status to CLSD (closed). Orders with the status of CLSD are not active and no time can be charged to them.

1.   Enter *IW32* in the **Command** field on the *SAP Easy Access* screen.

2.   Click ☑ or press **Enter**. The *Change Order: Initial screen* displays.

3.   Enter *Order number* in the **Order** field to change a TMSD Order.

4.   Click ☑ or press **Enter**. The *Change Transportation Mobility & Safety Divisio 4XXXXXXXXX* screen displays.

5.   Follow the menu path, **Order → Functions → Complete → Complete (technically)**.

6.   Enter the *date completed* in the **Reference date** field.

> This date should either be the current date or a date in the past when the work was completed.

7.   Check the **Complete Notifictns** box.

8. Click ✅. The *Change Order: Initial screen* displays the message *"Order 4XXXXXXXXX saved with notification 2XXXXXXXXXXX."*

> A warning message will display if there are outstanding notification task (open email, fax, etc notifications). All tasks on the Email tab must be completed and closed prior to releasing the associated work order.

9. Click 🏠 to exit this transaction.

IW41 – Final Confirmation for Work Orders with Multiple Operations

Other groups that require more detailed planning will have multiple operations on each order. Each operation will represent a key task or deliverable for the order. These orders will typically have a different work center on each operation with durations, planned hours and possibly individual people assigned to the task. As each operation is completed, a final confirmation will be applied at the operation level using transaction IW41. The user will populate the start and finish date both as the date the operation was completed. They should always be the same date. On the IW41 screen, the final confirmation checkbox should also be populated. Once all operations have been finally confirmed, the actual end date on the header will populate with the latest final confirmation date. Then after the last final confirmation has been entered on the order, the system status on the header should be changed to TECO.

1. Enter *IW41* in the **Command** field on the *SAP Easy Access* screen.

2. Click ✅ or press **Enter**. The *Create PM Order Confirmation: Initial screen* displays.

3. Enter *order number* in the **Order** field.

4. Click ✅ or press **Enter**. The *Create PM Order Confirmation: Operation Overview* screen displays.

5. Click ☐ to the left of the operation to be confirmed to select it.

> To confirm multiple operations at once, click ☐ to the left of the first operation. Hold the Ctl key and click ☐ to select the additional operations.

6. Click 🖼. The *Create PM Order Confirmation: Actual Data* screen displays.

7. Click the **Final Confirmtn** checkbox.

8. Enter the **Work Start on** and **Work Ends on** dates.

> Always use the same date to represent both the **Work Start on** and **Work End on** dates. This date represents the date work was actually completed.

9.   Click ⊞ to return to the ***Create PM Order Confirmation: Initial screen***. The following message displays
     "Number of confirmations saved for 4XXXXXXXXXX: 1".

10. Click 🔼 to exit this transaction.

IW32 – Technically Complete Work Orders with Multiple Operations

1.   Enter *IW32* in the **Command** field on the ***SAP Easy Access*** screen.

2.   Click ✅ or press **Enter**. The ***Change Order: Initial screen*** displays.

3.   Enter *notification number* in the **Notification type** field to create a TMSD request.

4.   Click ✅ or press **Enter**. The ***Change Transportation Mobility & Safety Divisio 4XXXXXXXXX*** screen displays.

5.   Follow the menu path, **Order → Functions → Complete → Complete (technically)**.

6.   Enter the *date completed* in the **Reference date** field.

7.   Check the **Complete Notifictns** box.

8.   Click ✅. The ***Change Order: Initial screen*** displays the message
     "Order 4XXXXXXXXXX saved with notification 2XXXXXXXXXX."

> A warning message will display if there are outstanding notification task (open email, fax, etc notifications). All tasks on the Email tab must be completed and closed prior to releasing the associated work order.

9.   Click 🔼 to exit this transaction.

Reports

TMSD will be able to run work request notification and related work order reports.

IW29 - Display Work Request (Notifications)

Use the following reports to collect and analyze work request and related data.

1. Enter transaction code *IW29* in the **Command** field on the *SAP Easy Access* screen.

2. Click ✅ or press **Enter**. The *Display Notifications: Selection of Notifications* screen displays.

3. Click the checkboxes for **Outstanding**, **In process** and **Completed** in the **Notification status** field.

4. Enter or select a value for any or all of the following fields:

    - **Notification type** –T1

    - **Functional location** – used when creating the notification

    - **Notification date** – date or date range when work requests were created

    - **Created by** – person that entered the request in the system

    - **Planner group** – number for area of interest

    - **Main work center** – number of the Work Center for the Operation

5. Click 🕒. The *Display Notifications: List of Notifications* screen displays a list of notifications that match the specified search criteria.

6. Review the list of work request.

    > Changes can be made from the report display. To make changes to a work request, click 🖊.

7. Click 🔼 to exit this transaction.

IW39 – Display PM Orders

Use the following reports to collect and analyze work order and related data.

1. Enter transaction code *IW39* in the **Command** field on the *SAP Easy Access* screen.

2. Click ✅ or press **Enter**. The *Display PM Orders: Selection of Orders* screen displays.

3.   Click the checkboxes for **Outstanding**, **In process** and **Completed** in the **Notification status** field.

4.   Enter or select a value in any or all of the following fields:

- **Order type** –TS01

- **Functional location**

- **One Time Partner Name** – citizen name

- **Period** – date or date range for the work order

- **Entered by** – person that entered the request in the system

- **Work center**

- **Cost Center**

- **WBS**

- **Planner Group for order**

5.   Click ![icon]. The ***Display PM Order: List of Orders*** screen displays a list of notifications that match the specified search criteria.

6.   Double-click ![icon] to the left desired order. The ***Display Transportation Mobility & Safety Diviso: 4XXXXXXXXX*** screen displays.

> Changes can be made from the report display. To make changes to a work request, click ![icon].

7.   Review the work order information.

8.   Click ![icon] to return to the ***Display PM Order: List of Orders*** screen.

9.   Repeat steps 6-8 for each order to be reviewed.

> To select multiple orders at once,
>
>   1. Click ![icon] to the left of the first operation.
>
>   2. Hold the Ctl key and click ![icon] to select the additional operations.
>
>   3. Click ![Order] to open the first of the orders selected.
>
>   4. Review the order information then click ![icon] to move to the next order.

10.   Click ![icon] to exit this transaction.

IW49 – Display Operations

Use the following reports to extract a list of operations assigned to a user or workcenter. These transactions will allow you to view and change multiple operations.

1.   Enter transaction code *IW49* in the **Command** field on the *SAP Easy Access* screen.

2.   Click ![icon] or press **Enter**. The *Display Operations: Selection of Order Operations* screen displays.

3.   Select either or both of the checkboxes for **Current** and **Historical** in the **Operations** section as needed.

4.   Enter or select a value in any or all of the following fields:

   - **Work center**
   - **Plant**
   - **Order**
   - **Order type** –TS01
   - **Functional location**
   - **Planner Group**

5.   Click ![icon]. The *Display Operations: List of Order Operations* screen displays a list of notifications that match the specified search criteria.

> Changes can be made from the report display. To make changes to a work request, click ![icon] to the left desired order then click ![icon].

6.   Double-click ![icon] to the left desired order. The *Display Transportation Mobility & Safety Diviso: 4XXXXXXXXX* screen displays.

> To select multiple orders at once,
>
>   1. Click ![icon] to the left of the first operation.
>
>   2. Hold the Ctl key and click ![icon] to select the additional operations.
>
>   3. Click ![Order] to open the first of the orders selected.
>
>   4. Review the order information then click ![icon] to move to the next order.

7.   Review the work order information.

8.   Click ![icon] to return to the *Display Operations: Selection of Order Operations* screen.

9.   Click ![icon] to exit this transaction.

IW49N – Display Orders and Operations

Use the following report to extract a list of operations assigned to a user or workcenter. This report has all the master data from the order header as well as the operation data (including the TMSD specific custom fields). These transactions will allow you to view and change multiple operations.
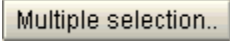
1.   Enter transaction code *IW49N* in the **Command** field on the *SAP Easy Access* screen.

2.   Click ![icon] or press **Enter**. The *Display Orders and Operations: Selection of Orders and Operations* screen displays.

3.   Select either or both of the checkboxes for **Current** and **Historical** in the **Operations** section as needed.

4.   Enter or select a value in any or all of the following fields:

- **Order Header Tab**
  - Order
  - Order type –TS01
  - Functional location
  - Work center
  - Plant
  - Partner
- **General Administration**
  - Description
  - Entered By
  - Created On
  - Status Inclusive
  - Status Exclusive
  - Basic Start Date
  - Basic Finish Date
  - Actual Start Date

      − Actual Finish Date

- **Location/Account Assignment**

      − Maint Activity Type

      − Work Center

      − Cost Center

      − Activity Type

      − Planner Group

      − Customer

- **Operation**

      − Operation/Activity

      − Operation Short Text

      − Work Center

      − Status Inclusive

      − Status Exclusive

      − Personnel No. for Operation (for orders assigned to a person at the operation level)

      − Personnel No for Split (for orders assigned to a person at the capacity split level)

- **Dates (operation level)**

      − Earliest Start Date

      − Earliest Finish Date

      − Actual Start Date

      − Actual Finish Date

      − Start Constraint

      − Finish Constraint

5. Click . The ***Display Orders and Operations: List of Orders and Operations*** screen displays a list of notifications that match the specified search criteria.

> Changes can be made from the report display. To make changes to a work request, click to the left desired order then click .

6. Double-click to the left desired order and operation. The ***Display Transportation Mobility & Safety Diviso: 4XXXXXXXXX*** screen displays.

To select multiple orders at once,

1. Click [ ] to the left of the first operation.

2. Hold the Ctl key and click [ ] to select the additional operations.

3. Click **Order** to open the first of the orders selected.

4. Review the order information then click [icon] to move to the next order.

7.   Review the work order information.

8.   Click [icon] to return to the Display Operations: Selection of Order Operations screen.

9.   Click [icon] to exit this transaction.

CADO – Display Time Sheet Data

The CADO report is a complete listing of all time entered for employees. This includes approved, unapproved and changed time. Use the drill down capability to view supporting documents that display the WBS element, cost center or internal order that was charged.

Timekeepers and Paymasters can run the report for a cost center or for an individual employee; both procedures are outlined below.

View Time for a Cost Center

1. Enter *CADO* in the **Command** field on the *SAP Easy Access* screen.

2. Click [icon] or press **Enter**. The *Display Time Sheet Data* screen displays.

3. Click [icon] to the right of the **Personnel no**. field. The *Multiple Selection for Personnel no.* dialog box displays.

4. Click **Multiple selection..**. The *Restrict Value Range (1)* dialog box displays.

5. Select the **Organizational assignment** tab.

6. Enter a *cost center number* in the **Cost Center** field.

7. Click [icon]. All active personnel numbers assigned to the cost center display.

8. Click [icon] to select all employees in the cost center.

9. Click [icon]. The *Multiple Selection for Personnel no.* dialog box displays the personnel numbers.

10. Use */TMSDTNG* as the Layout.

> The /TMSDTNG layout is created for training purposes only. Individual users should create layouts as needed for specific purposes.

11. Click ⏱. The ***Display Time Sheet Data*** screen displays the first employee's number in the **Personnel no**. field.

12. Enter the *pay week beginning and ending dates* in the **Data selection period** fields.

13. Click ⏱ to generate the report. The ***Display Time Sheet Data*** screen displays.

14. Click the column heading **Exception** to select the column, then click 🖨 to sort the data by status.

15. Review the status indicators for any problems.

> A green signal light indicates the data has been transferred to CO. A yellow light indicates that it has not. Red indicates an error.
>
> Select a line, then click 🔍 to view additional information such as the cost center, WBS element or internal order that was charged.

16. Sort the data to compare the totals to manual totals:

17. Click the column heading **Hours** to select the column, then click Σ to total the hours.

18. Click the column heading **A/A type** to select the column, then click ⅀ to total the hours by A/A type.

19. Compare the system's totals by A/A type code to manually generated totals to verify accuracy.

> Remember, the totals may contain time for inactive employees as well as those who have transferred out of the cost center but whose master records have not yet been updated.

20. Click 🏠 twice to exit this transaction.

View Employee Time

Enter *CADO* in the **Command** field on the *SAP Easy Access* screen.

1. Click ![icon] or press **Enter**. The *Display Time Sheet Data* screen displays.

2. Enter the *personnel number of the employee* in the **Personnel no.** field.

3. Enter or delete a *range of dates* in the **Data selection period** fields.

4. Use */TMSDTNG* as the Layout.

> The /TMSDTNG layout is created for training purposes only. Individual users should create layouts as needed for specific purposes.

5. Click ![icon] to generate the report. The *Display Time Sheet Data* screen displays.

> - A green signal light indicates the data has been transferred to CO. A yellow light indicates that it has not. Red indicates an error.
>
> - Select a line, then click ![icon] to view additional information such as the cost center, WBS element or internal order that was charged.

6. Click ![icon] twice to exit this transaction.

IW47 – Display Confirmations

1. Enter transaction code *IW47* in the **Command** field on the *SAP Easy Access* screen.

2. Click ![icon] or press **Enter**. The *Display Confirmations* screen displays.

3. Select either or both of the checkboxes for **In Process** and **Completed** in the **Order Status** section, as needed.

4. Enter or select a value in any or all of the following fields:

   - Order

   - Order type –TS01

   - Work center

   - Plant

   - Activity Type

   - Entered on

   - Entered by

5. Click ![icon]. The *Display Confirmations* screen displays a list of notifications that match the specified search criteria.

6. Double-click ![icon] to the left desired order. The *Display PM Order Confirmation Actual Data* screen displays.

7. Review the work order confirmation information.

8. Click ![icon] to return to the *Display Confirmation* screen.

9. Click ![icon] to exit this transaction.

Display Actual Cost Line Items for Orders

1. From the **SAP R/3 System** screen, enter transaction code *KOB1*.

2. Click ![icon] or press **Enter**. The *Display Actual Cost Line Items for Orders: Initial Screen* displays.

3. Enter the *PM Order number* or *range of order numbers* in the **Internal Order** field.

> You can enter the PM Order range to find all TMSD orders as 41000000000 – 41999999999. This is the number range for all TMSD PM Orders.
>
> Delete any data that may default into the **Cost element** field.
>
> Click ![Further selection criteria...] to further refine the information displayed. Possible choices pertinent to the TMSD are:
>
> - Period
> - Personnel No.
> - Document Date
> - Functional Area

4. Enter the *date range* in the **Posting date** field.

5. Delete any data that may default into the **Display variant** field.

> You can select a variant or create your own. Variants control which columns display and the order in which they are displayed on a report.

6. Click ![icon]. The *Display Actual Cost Line Items for Orders* screen displays.

7. Review the postings.

8. Double click any line item to drill down to the supporting documentation.

> Depending on the type of line item, you may need to drill down several levels to get to the original document. The screen you are taken to will vary, depending upon the type of posting.

9. Click ![icon] as often as needed to return to the *Display Commitment Line Items for Cost Centers* screen.

10. Click ![icon]. The *Display Actual Cost Line Items for Orders* dialog box displays.

11. Click [Yes]. The *Display Actual Cost Line Items for Orders: Initial Screen* displays.

12. Click ![icon] to exit the transaction.

CM01 – Capacity Planning

1. Enter transaction code *CM01* in the **Command** field on the *SAP Easy Access* screen.

2. Click ![icon] or press **Enter**. The *Capacity Planning: Selection* screen displays.

3. Enter a value in any or all of the following fields:

    - Work center

    - Capacity planner group

    - Plant

4. Click [Standard overview]. The *Display Capacity Planning : Standard Overview* screen displays.

5. Review the **Available Capacity**, **Capacity Load** and **Remaining Available Capacity**.

> To see more details, click ☐ to the left of the desired time frame. Click [Cap. details/period]. Click ![icon] to return and continue.

6. Review the capacity information.

7. Click ![icon] to exit this transaction.

CR05 – Display Work Center List

1.   Enter transaction code *CR05* in the **Command** field on the *SAP Easy Access* screen.

2.   Click ✅ or press **Enter**. The *Work Center List* screen displays.

3.   Enter *1595* in the **Plant** field.

4.   Click 🕐. The *Work Center List* screen displays a list of work centers that match the specified search criteria.

5.   Review the work center list to find the person responsible for the project work center. This information is helpful for Project Stars Reporting.

6.   Click 🔼 to exit this transaction.

CR06 – Display Assignment of Work Centers to Cost Centers

1.   Enter transaction code *CR06* in the **Command** field on the *SAP Easy Access* screen.

2.   Click ✅ or press **Enter**. The *Assignment of Work Centers to Cost Centers* screen displays.

3.   Enter *1595* in the **Plant** field.

4.   Click 🕐. The *Assignment of Work Center to Cost Center* screen displays a list of work centers for the plant entered.

5.   Review the following information:

- Validity Dates

- Cost Centers

- Activity Type

- Description

6.   Click 🔼 to exit this transaction.

Tips & Tricks

IW21 – Move Actions Box

1.   Enter *IW21* in the **Command** field on the *SAP Easy Access* screen.

2. Click ☑ or press **Enter**. The *Create PM Notification: Initial screen* displays.

3. Enter *T1* in the **Notification type** field to create a TMSD request.

4. Click ☑ or press **Enter**. The *Create PM Notification: TMSD* screen displays.

5. Follow the menu path, **Extras → Settings → Control/default values.** The *User Default Values* window displays.

6. Click the **Action box** tab.

7. Click the **Action box: Table** checkbox.
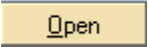
8. Click ✓.

9. Click 🔼 to exit this transaction.

IW21 – Set up System Defaults

1.   Enter *IW21* in the **Command** field on the *SAP Easy Access* screen.

2. Click ☑ or press **Enter**. The *Change Notification: Initial screen* displays.

3. Enter *Notification number* in the Notification field to open an existing TMSD Notification.

4. Click ☑ or press **Enter**. The *Change Transportation Mobility & Safety Divisio 21XXXXXXXX* screen displays.

5. Follow the menu path, **Extras → Settings → Default values.** The *User Default Values* window displays.

6. Complete the following fields on the **General** tab:

   - **Order Type** = TS01

   - **Notifictn Type** = T1

   - **Planning Plant** = 1595

   - **Work center** (optional) = 320000 / 1595

7. Complete the following fields on the **Ref. Object** tab:

   - **Functional Location** = NC

8. Complete the following fields on the **Action Box** tab:

- **Action Box Table** = (check mark)

9. Click ✅.

10. Click 🏠 to exit this transaction.

IW32 – Create an Attachment

1. Enter *IW32* in the **Command** field on the *SAP Easy Access* screen.

2. Click ✅ or press **Enter**. The *Change Order: Initial screen* displays.

3. Enter *Order number* in the Order field to open an existing TMSD Order.

4. Click ✅ or press **Enter**. The *Change Transportation Mobility & Safety Divisio 4XXXXXXXX* screen displays.

5. Click the right side of the 📋 icon. The *Choose an object* dialog box displays.

6. Click ☐ to the left of **Maintenance order.**

7. Click ✅.

8. Follow the path **Create→ Store business document.** The *Archive from Frontend* dialog box displays.

9. Double-click a *document type* from the list that represents the type of document to be attached to the order. The **Storing Files in Documents** dialog box displays.

10. Locate and select the document.

11. Click   Open . The file location for the document displays in the right side of the **Achieved from Frontend** dialog box.

12. Click ✅ to return to the *Change Transportation Mobility & Safety Divisio 4XXXXXXXX* screen.

13. Click 🏠 to exit this transaction.

IW32 – Attach Documents to Orders

1. Enter *IW32* in the **Command** field on the *SAP Easy Access* screen.

2. Click ✅ or press **Enter**. The *Change Order: Initial screen* displays.

3. Enter *Order number* in the Order field to open an existing TMSD Order.

4. Click ✅ or press **Enter**. The *Change Transportation Mobility & Safety Divisio 4XXXXXXXX* screen displays.

5. Click the right side of the ⬜️ icon. The **Choose an object** dialog box displays.

6. Click ⬜ to the left of **Maintenance order.**

7. Click ✅.

8. Select **Attachment List** from the dropdown menu. The **Service: Attachment list** dialog box displays.

> 📋 If no attachments have been created, **Attachment List** will be grayed out.

9. Select a document from the list of available documents.

10. Click ✅ to return to the **Change Transportation Mobility & Safety Divisio 4XXXXXXXX** screen.

11. Click 🔼 to exit this transaction.

IW32 – Display Documents Attached to Orders

1. Enter *IW32* in the **Command** field on the **SAP Easy Access** screen.

2. Click ✅ or press **Enter**. The **Change Order: Initial screen** displays.

3. Enter *Order number* in the Order field to open an existing TMSD Order.

4. Click ✅ or press **Enter**. The **Change Transportation Mobility & Safety Divisio 4XXXXXXXX** screen displays.

5. Click the left side of the ⬜️ icon. The **Choose an object** dialog box displays.

6. Click ⬜ to the left of **Maintenance order.**

7. Click ✅. The **Maintenance order XXXXXXXXXX** toolbar displays.

8. Click 📥. The **Service: Attachment list** dialog box displays.

> 📋 If no attachments have been created, 📥 will be grayed out.

9. Double-click a document from the list of available documents. The document will open in the appropriate application. Close the document and return to SAP.

10. Click ✅..

11. Click ⊠ to return to the **Change Transportation Mobility & Safety Divisio 4XXXXXXXX** screen.

12. Click to exit this transaction.

Use of Template Orders

SAP allows users to copy an existing order to create a new one. The primary benefit of doing this is when there are multiple operations with very detailed data that occurs on a repeated basis. At the same time, the description, planner group, mn wk center, plant, PM ActType, account assignment information, and all information on the Enhancement tab do not populate when copied from a template.

As well, the TMSD standard work process is to first create the Notification, and from there create the PM Order. That way, all master data originally entered on the Notification will flow to the order and it will be consistent on both. If the order is created without the Notification, either the Notification will have blank master data or it will have to be entered manually. This process does not promote consistency of master data between the partner Notification and PM Order.

In order to designate the PM Order as a template order, change the user status to TEMP.

> When the initial screen comes up for the user statuses, TEMP will not be shown. Click on the down arrow to expose it.

With the TEMP status an order can not be released or charged to. It will only be used for making copies.

It is up to the individual user to determine whether your work process makes the use of template orders worthwhile or not. You must make that choice.

Appendix A – Planner Groups

Planner groups are assigned to work request and work orders to separate the notification and orders within the various TMSD groups. Each planner group is identified by a three characters. Planner groups are separated and independent of maintenance activity types.

Planner Group Abbreviations	Planner Group Names
IS1	ITS & Signals
IS2	Signals Mgt
IS3	Signals & Gmtrcs
MS1	Administration
OP1	OSOW Permits
SD1	Signing & Del
SD2	Standards
SD3	Programs
SD4	TIP
SO1	Systems Ops
SO2	Traveler Info
SO3	Incident Mgt
SO4	Systems Timing
TM1	Traffic Mgt
TM2	Work Zone
TM3	Congestion Mgt
TM4	MSTA
TS1	Traffic Safety
TS2	M&S Information
TS3	HSIP
TS4	Evaluation

Planner Group Abbreviations	Planner Group Names
TS5	Planning
TS6	M&S Field Ops

Appendix B – Maintenance Activity Types

Maintenance activity types are used to categorize service orders. They are not assigned to work request and are separate and independent of planner groups.

PMActType	Description of Project Maintenance
077	Administration
078	Comprehensive Safety Review
079	Data Collection
080	Evaluation (Program)
081	Evaluation (Topic)
082	Fatal
083	Feasibility Study
084	HSIP (Intersection)
085	HSIP (Other)
086	HSIP (Section)
087	Request (ADA)
088	Request (External)
089	Request (Internal)
090	Request (Legal)
091	Road Safety Review
092	Special Project
093	STAA (Designation)
094	STAA (Reasonable Access)
095	Field Investigations, Research
096	Meetings, Committees, Teams
097	Safety Programs