

**Oracle Business Intelligence  
Enterprise Edition**  

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**Dashboards and Answers  
Training Guide**

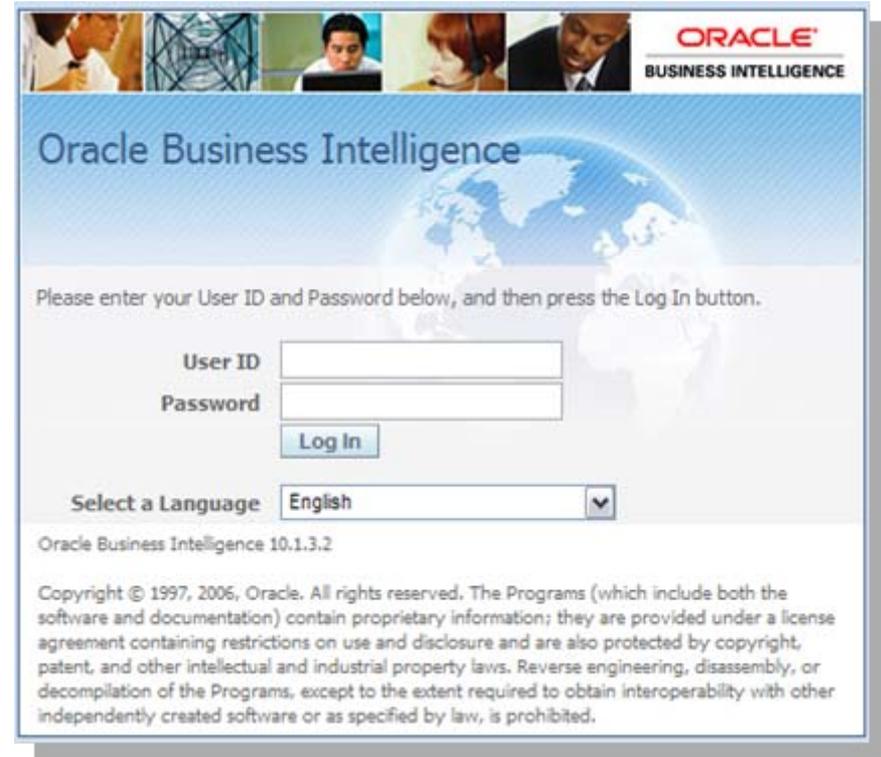


1. Introduction (5 min)
2. Module 1: Understanding the HIP Data Structure (90 min)
3. Module 2: Working with Answers (145 min)
4. Module 3: Working with Dashboards (40 min)
5. Module 4: Working with Delivers (25 min)



1. Understanding the HIP Data Structure – Appendix A Page 95: Advanced Training Model (90 min)

- Answers is the ad-hoc tool for OBIEE
- Answers used to create or modify reports.
- Allow user to create queries or requests
- No plug-ins or additional applications needed to use Answers
- Go to the following URL to access answers  
<http://phmhqnwas036:9704/analytics/saw.dll?Answers>
- In the login page use your regular (LDAP) user name and password and click on the Log In button to login to the system



Oracle Business Intelligence

Please enter your User ID and Password below, and then press the Log In button.

User ID

Password

Select a Language

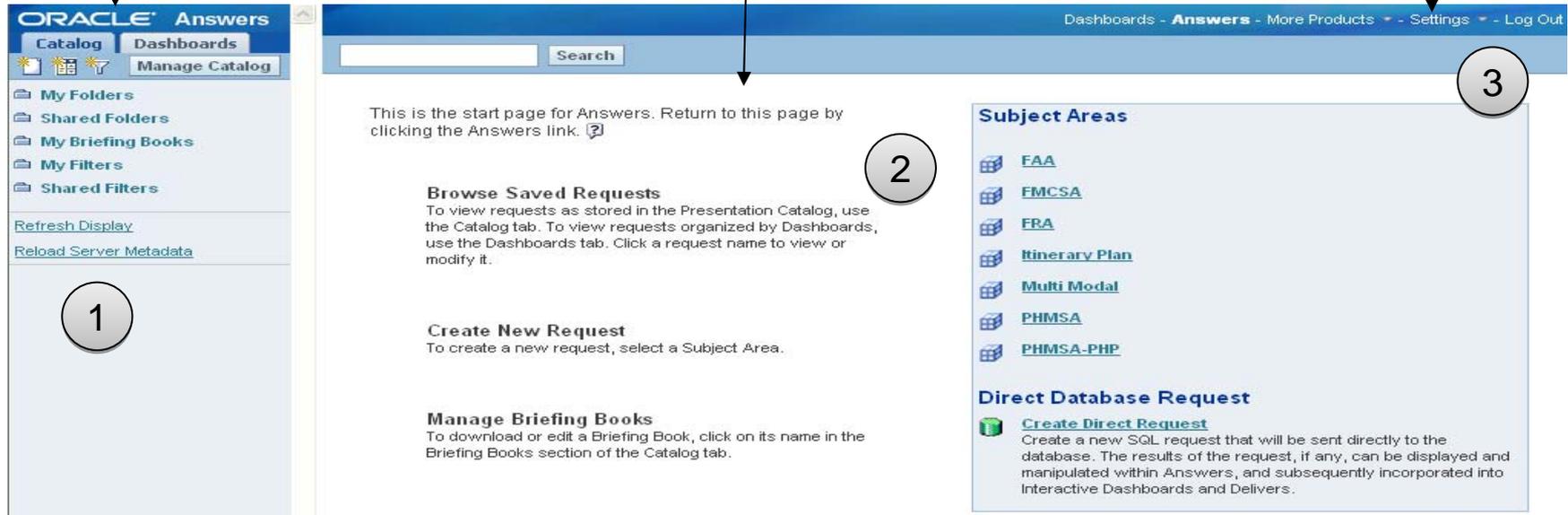
Oracle Business Intelligence 10.1.3.2

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Selection Pane

Workspace

Links



The screenshot shows the Oracle BI Answers interface. On the left is the Selection Pane (1) with tabs for Catalog and Dashboards, and a list of folders and filters. The main Workspace (2) contains a search bar, a welcome message, and sections for Browse Saved Requests, Create New Request, and Manage Briefing Books. On the right is the Links (3) section, which includes Subject Areas (FAA, FMCSA, FRA, Itinerary Plan, Multi Modal, PHMSA, PHMSA-PHP) and a Direct Database Request section with a 'Create Direct Request' link.

1. Selection Pane on left stores reports, dashboards and filters. Contains catalog tab and dashboards tab
2. Workspace on right contains list of possible actions and existing subject areas
3. At the top right links to access different functions and other portions of the Analytics environment

- ✓ *First Step to building an ad-hoc query or report.*
- ✓ *Subject Areas separate data based on business function or end user*
- ✓ *Subject Areas help to secure data based on user roles*
- ✓ *Subject Areas are maintained by OBIEE Administrators*



**Subject Areas**

- FAA
- FMCSA
- FRA
- Multi Modal**
- PHMSA
- Pipeline

**Direct Database Request**

- Create Direct Request**  
Create a new SQL request that will be sent directly to the database request, if any, can be displayed and manipulated within Answers incorporated into Interactive Dashboards and Delivers.

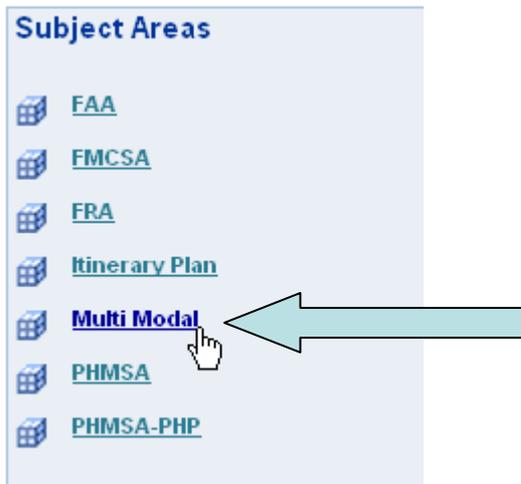


**ORACLE Answers**

**Multi Modal**

- Columns
  - Company
  - Company Search View
  - Contact
  - Mode
  - Mode Of Transportation
  - Product
  - Source
  - Approval Attributes and Facts
  - Census Attributes and Facts
  - Incidents/Inspections Location
  - Intermodal Attributes and Facts
  - Incident Occured Year Attributes and Facts
  - Inspection Attributes and Facts
  - Penalties Attributes and Facts
  - Registration Attributes and Facts
  - FRA Registrations
  - Fact - Registrations
  - Special Permits Attributes and Facts
  - IIRC Incidents Attributes
  - IIRC Incidents Facts
  - IIRC Incidents Detail Attributes and Facts
  - Violations/Defects Attributes and Facts
  - 5800 Incidents Attributes
  - 5800 Incidents Facts
  - 5800 Incident Detail Attributes
  - 5800 Incident Detail Facts
  - RAM Certification Attributes and Facts
  - Cargo Tank Attributes and Facts
  - Enforcement Violation Attributes and Facts
  - Pipeline Incident Attributes and Facts
- Filters

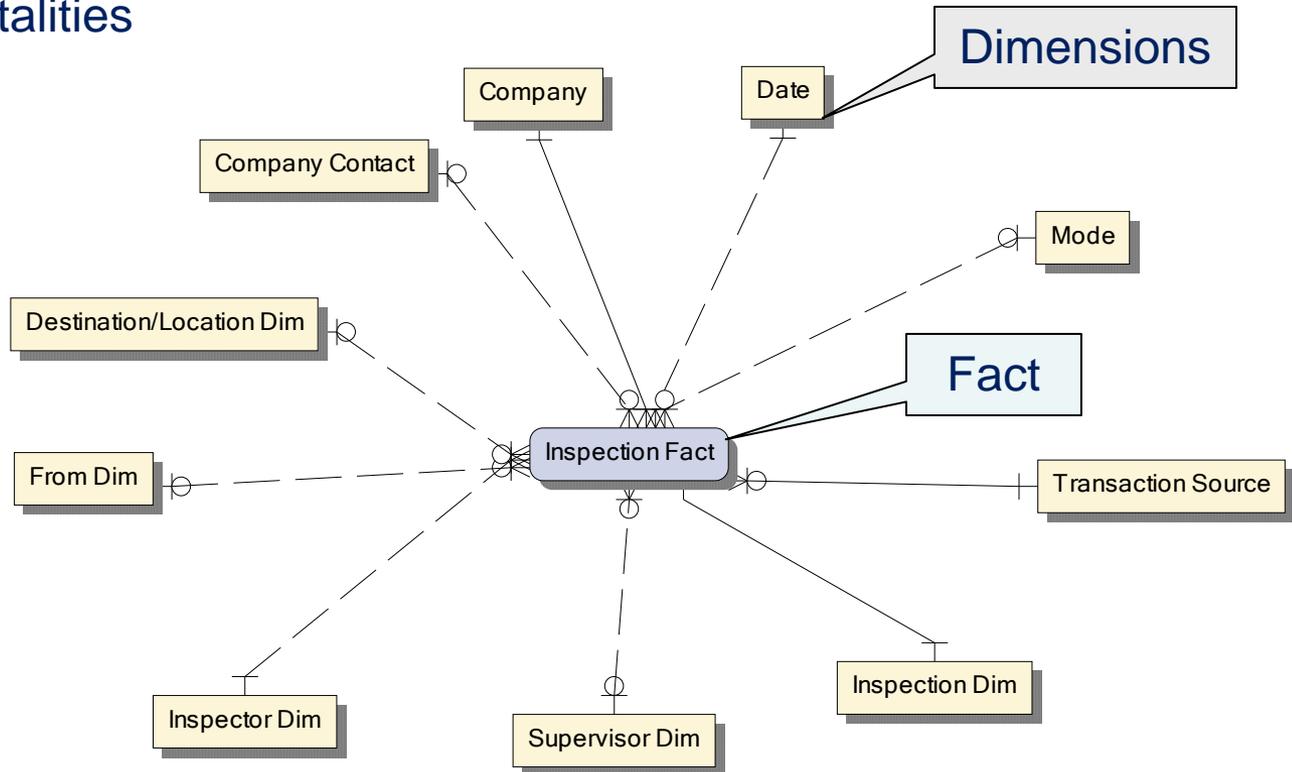
- The HIP data model is the foundation for building ad-hoc reports
- The model is organized into Subject Areas and Common Analysis Areas called dimensional star schemas



## High Level Analysis Areas

- Inspections
- Incidents
- Registrations
- Special Permits
- Approvals
- Penalties
- Violations
- Complaints
- Inspection Details

- The folders in the subjects area contain dimensions and facts which together make up a dimensional model
- A dimension contains attributes that describe an analysis. Examples: company name, state , region, Incident Occurred Date
- A fact is a measure. Examples: Number of Incidents, Number of Inspections, # of Fatalities
- OBIEE Ad-hoc reporting works best when using a single fact table with one or more dimensions
- This Inspection star is an example of a dimensional model



- The HIP Answers Model User Guide is broken down into 3 basic areas:

- Analysis Area:** This is a general business description of concepts that can be analyzed with HIP

- Answers Location:** This directs users where to find the outlined data

- Attributes and Notes:** This describes what columns are available for this analysis area and tips on their purpose. When partial sets of columns in a folder will work they are listed individually.

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
Incident Data Aggregated by Year - Actual vs. Projected	Incident Occurred Year Attributes and Facts		Folder		This folder and sub folders only work together, and with no other dimensions or Facts
		Incident Occurred Year	Dimension	All fields in the Dimension	The Year the incident occurred or is projected to occur
		Fact - Incident Year Aggregate	Facts	All fields in the Fact	Measures about HAZMAT and Pipeline incidents rolled up to a year level

## ORACLE Answers

### Multi Modal

#### Columns

- + Company
- + Company Search View
- + Contact
- + Mode
- + Product
- + Source
- + Approval Attributes and Facts
- + Census Attributes and Facts
- + Incidents/Inspections Location
- + Intermodal Attributes and Facts
- + Incident Occured Year Attributes and Facts
- + Inspection Attributes and Facts
- + Penalties Attributes and Facts
- + Registration Attributes and Facts
- + FRA Registrations
- + Fact - Registrations
- + Special Permits Attributes and Facts
- + IIRC Incidents Attributes
- + IIRC Incidents Facts
- + IIRC Incidents Detail Attributes and Facts
- + Violations/Defects Attributes and Facts
- + 5800 Incidents Attributes
- + 5800 Incidents Facts
- + 5800 Incident Detail Attributes
- + 5800 Incident Detail Facts
- + RAM Certification Attributes and Facts
- + Cargo Tank Attributes and Facts
- + Enforcement Violation Attributes and Facts
- + Pipeline Incident Attributes and Facts

- The multimodal subject area contains incident data as well as data for cross agency analysis
- The modal based subject areas contain all data related specifically to each separate agency

### Subject Areas

-  [FAA](#)
-  [FMCSA](#)
-  [FRA](#)
-  [Itinerary Plan](#)
-  [Multi Modal](#) 
-  [PHMSA](#)
-  [PHMSA-PHP](#)

## When to use detail data or pre defined aggregates

- Two aggregate packages have been implemented for phase 1
  - Incident Data Aggregated by Year with projected targets
  - Multimodal Data Aggregated by State, Agency of transportation, and Month
- If your query contains only fields available in an aggregate it is the best solution

Incident Data Aggregated by Year with PHMSA provided projected targets for 2009.

- [-] Incident Occured Year Attributes and Facts
  - [-] Incident Occurred Year
    - ROW\_WID
    - Calendar Year
    - Julian Year Number
    - Year
    - Calendar Year Start Date
    - Calendar Year End Date
  - [-] Fact - Incident Year Agg
    - # Incidents
    - # Serious Incidents
    - # Serious Incidents Target
    - Total Incidents Resulting in Death or Major Injury
    - # Pipeline Incidents Resulting in Death or Major Injury
    - # Hazmat Incidents Resulting in Death or Major Injury

Analysis Area	Analysis Specific Columns	Notes
Incident Data Aggregated by Year - Actual vs. Projected		This folder and sub folders only work together, and with no other dimensions or Facts
	All fields in the Dimension	The Year the incident occurred or is projected to occur
	All fields in the Fact	Measures about HAZMAT and Pipeline incidents rolled up to a year level

- Multimodal Data Aggregated by State, Mode of transportation (agency), and Month
  - Allows for cross agency analysis quickly if the query generated contains only the dimensions of State (Region), Month (Year, Quarter), and Agency

[-] <b>Intermodal Attributes and Facts</b>
[-] <b>InterModal Month</b>
▪ Month
▪ Quarter
▪ Year
▪ Month Name
[-] <b>Intermodal States</b>
▪ Country
▪ State Name
▪ PHMSA Region
▪ FMCSA Region
▪ FAA Region
▪ PHMSA Region Name
▪ FAA Region Name
▪ FMCSA Region Name
[-] <b>Fact - Intermodal Counts</b>
▪ State
▪ Mode Name
▪ Incident Count
▪ Incident Count - Shipper
▪ Serious Incident Count - Location
▪ Serious Incident Count - Shipper
▪ Registrations Count
▪ Special Permit Count
▪ Approval Count
▪ Inspection Count
▪ Violations Count
▪ Penalties Count
▪ Incident Fatality Count - Location
▪ Incident Major Injury Count - Location
▪ Incident Minor Injury Count - Location
▪ Major Injury Fatality Trend Count - Location

Intermodal Attributes and Facts	Folder	This folder and sub folders only work together, and with no other dimensions or Facts.
Intermodal Month	All fields in the Dimension	A month and year dimension that allows a user to see aggregates by month
Intermodal States	All fields in the Dimension	Allows analysis of data by State or regional breakdown.
Fact - Intermodal Counts	State	Quick State Dimension
	Agency Name	The Agency or Agency of transportation associated to the grouped transactions
	Incident Count	5800 Incident count geographically based on the location of the incident
	Incident Count - Shipper	5800 Incident count geographically based on the location of the shipper

- 5800 Incident Fact or Incident Detail Fact
  - Incident fact is designed for counting incidents regardless of the number of products, packages, or shipper involved and summing the correct number
  - Incident detail adds dimensions for package, package layer, and package failure, but could contain multiple records for incidents with multiple shippers, products, packages, or inner and outer package layers.

Incident Detail is good for:

- Analysis of package, package layer, or package failure attributes
- Listing all attributes of a 5800 form

Incident Fact is good for:

- Counting the number of injuries, serious incidents, deaths, etc by Company, Product, or other incident level dimension

- Inspections, Violations, and Penalties are captured in different formats from all four Agencies

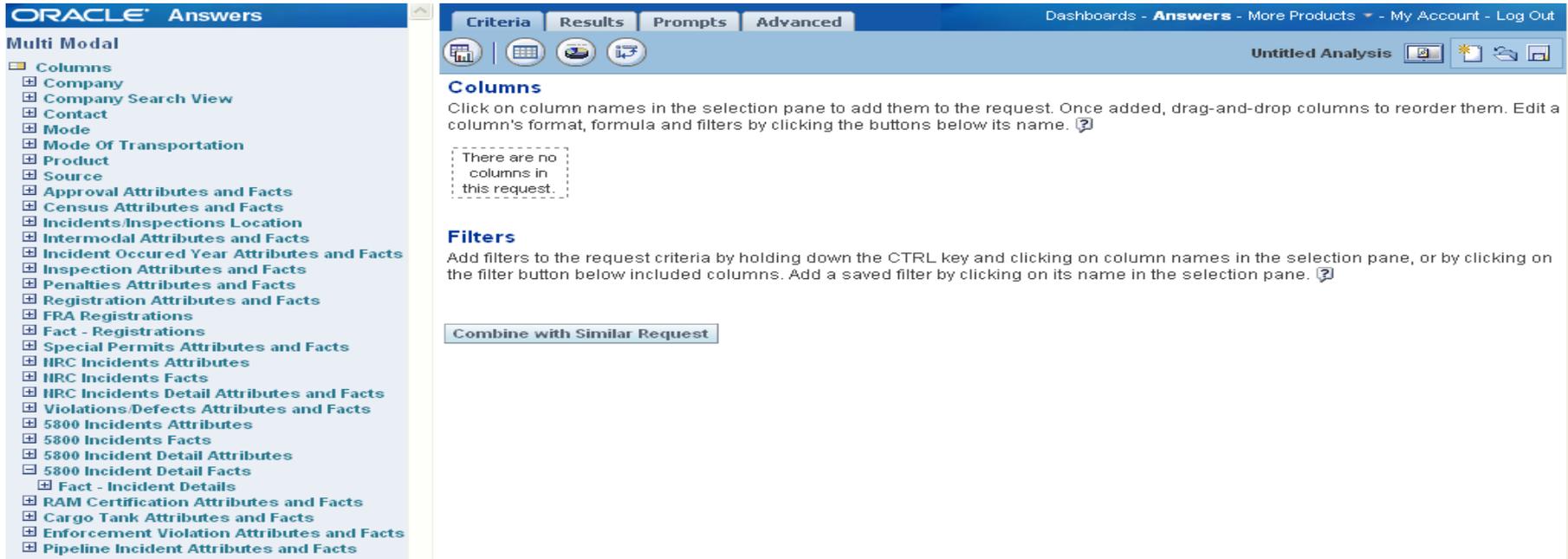
- ⊕ Incidents/Inspections Location
- ⊕ Inspections
- ⊖ Inspection Attributes and Facts
  - ⊕ Company - Inspections
  - ⊕ Contact - Inspections Company Contact
  - ⊕ Contact - Inspections Principal Contact
  - ⊕ Date - Inspection Created
  - ⊕ Date - Inspections Assessment or Reported
  - ⊕ Inspection Activities
  - ⊕ Inspector
  - ⊕ Supervisor
  - ⊕ Fact - Inspections
  - ⊕ Fact - Inspection Activities

- ⊖ Violations/Defects Attributes and Facts
  - ⊕ Violation Type
  - ⊕ Violations
  - ⊕ Violation Issued to Company
  - ⊕ Fact - Violations

- ⊖ Penalties Attributes and Facts
  - ⊕ Date - Penalty Close Date
  - ⊕ Date - Penalty Final Date
  - ⊕ Date - Penalty Open Date
  - ⊕ Fact - Penalties
  - ⊕ Penalties

1. Creating a New Report (20 min)
2. Creating Pivot Tables (20 min)
3. Updating the 5800 Incidents Report (20 min)
4. Refining Queries (20 min)
5. Formatting Reports (15 min)
6. Creating Graphs (20 min)
7. Additional Views (30 min)

# Creating a New Report



**ORACLE Answers**

Multi Modal

- Columns
  - Company
  - Company Search View
  - Contact
  - Mode
  - Mode Of Transportation
  - Product
  - Source
  - Approval Attributes and Facts
  - Census Attributes and Facts
  - Incidents/Inspections Location
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  - Inspection Attributes and Facts
  - Penalties Attributes and Facts
  - Registration Attributes and Facts
  - FRA Registrations
  - Fact - Registrations
  - Special Permits Attributes and Facts
  - HRC Incidents Attributes
  - HRC Incidents Facts
  - HRC Incidents Detail Attributes and Facts
  - Violations/Defects Attributes and Facts
  - 5800 Incidents Attributes
  - 5800 Incidents Facts
  - 5800 Incident Detail Attributes
  - 5800 Incident Detail Facts
  - Fact - Incident Details
  - RAM Certification Attributes and Facts
  - Cargo Tank Attributes and Facts
  - Enforcement Violation Attributes and Facts
  - Pipeline Incident Attributes and Facts

Criteria Results Prompts Advanced

Dashboards - Answers - More Products - My Account - Log Out

Untitled Analysis

**Columns**

Click on column names in the selection pane to add them to the request. Once added, drag-and-drop columns to reorder them. Edit a column's format, formula and filters by clicking the buttons below its name. ?

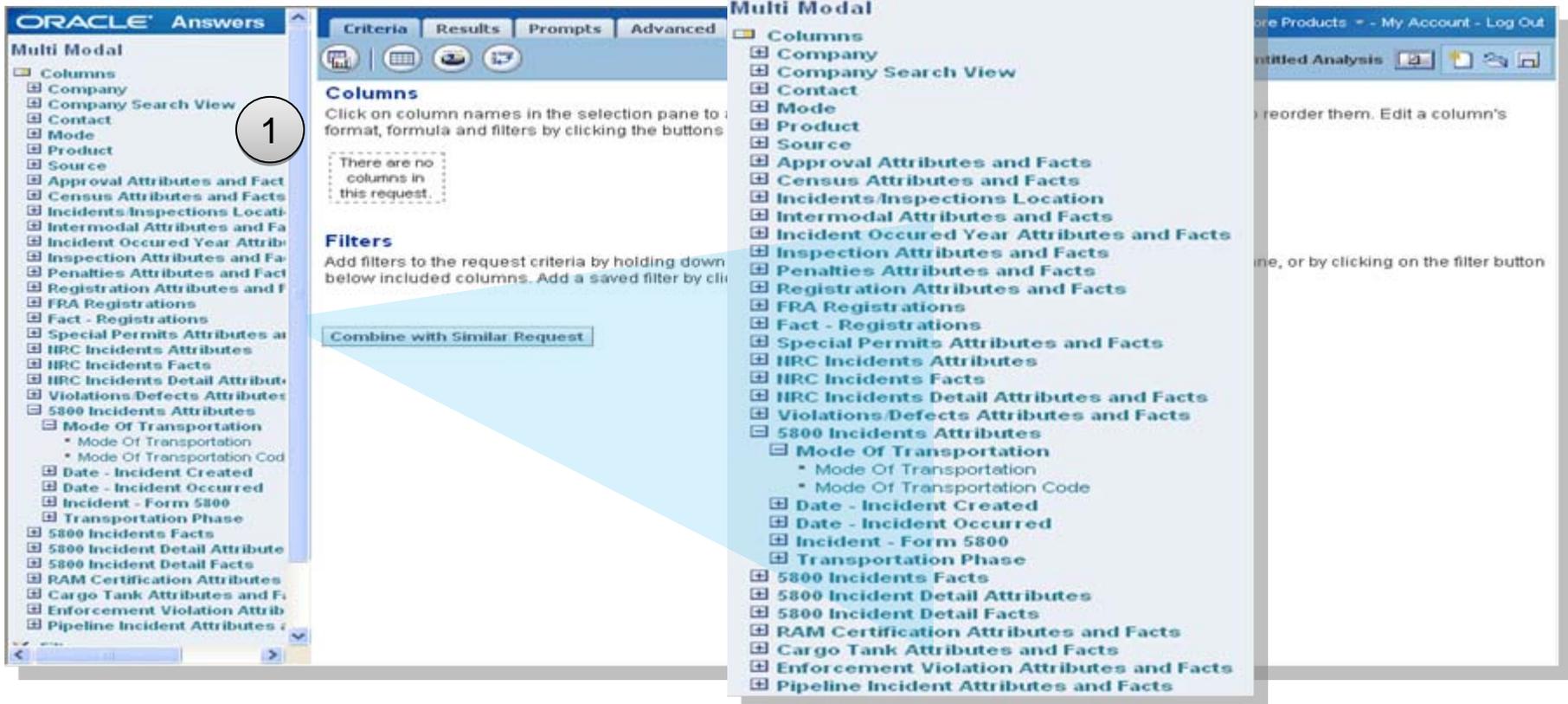
There are no columns in this request.

**Filters**

Add filters to the request criteria by holding down the CTRL key and clicking on column names in the selection pane, or by clicking on the filter button below included columns. Add a saved filter by clicking on its name in the selection pane. ?

Combine with Similar Request

- ✓ Selecting a Subject Area opens the Selection Pane and Workspace where a new report is created.
- ✓ The Workspace is controlled by the tabs displayed at the top of the Workspace.
- ✓ Both the Selection Pane and the Workspace remain open while the query or report is being edited.



1. Fields are contained within table folders.
2. Holding the mouse over a field will pop-up a description of the field if available
3. Go to 5800 incidents Attributes->Mode of Transportation and click on Mode Transportation field to select it
4. In 5800 Incidents Attributes-> Date – Incident Occurred select Incident Occurred Month Name and Incident Occurred Year
5. In 5800 Incidents Facts->Fact - Incident Form 5800 select # of Incidents Occurred and Serious Incident Count



## Columns

Click on column names in the selection pane to add them to the request. Once added, drag-and-drop columns to reorder them. Edit a column's format, formula and filters by clicking the buttons below its name. 

Mode Of Transportation	Date - Incident Occurred		Fact - Incident Form 5800	
Mode Of Transportation 	Incident Occurred Month Name 	Incident Occurred Year 	# of Incidents Occured 	Serious Incident Count 
   	   	   	   	   

**Display Results** **Remove All**

Criteria Results Prompts Advanced Dashboards - Answers - More Products - My Account - Log

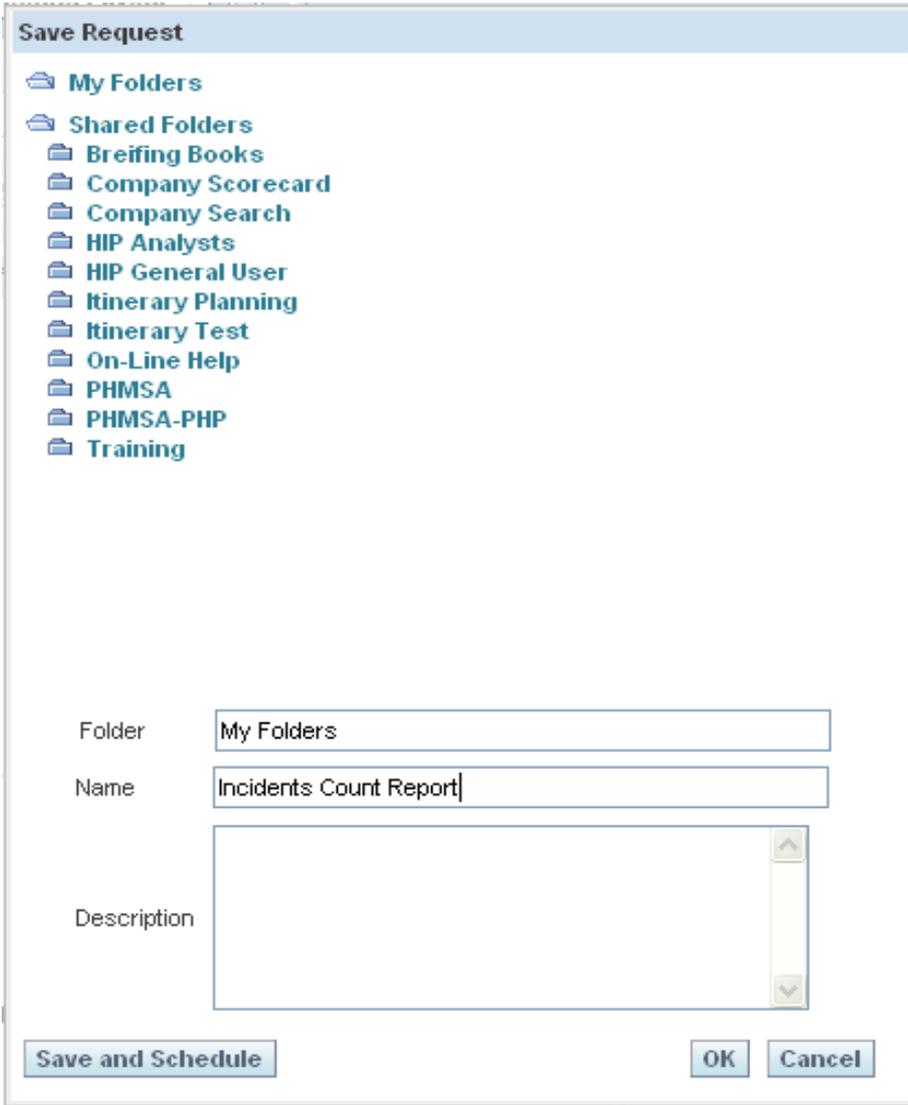
Compound Layout    

Untitled Analysis   

Add View:     

Mode Of Transportation	Incident Occurred Month Name	Incident Occurred Year	# of Incidents Occured	Serious Incident Count
FAA-AIR	April	2007	107	1
	August	2007	169	2
	December	2007	97	0
	February	2007	105	0
	January	2007	149	1
	July	2007	172	2
	June	2007	164	0
	March	2007	142	0
	May	2007	123	1
	November	2007	109	3
	October	2007	105	1
	September	2007	110	3
FMCSA-HIGHWAY	April	2007	1408	33
	August	2007	1862	39
	December	2007	918	33
	February	2007	1166	30
	January	2007	1219	27
	July	2007	1629	34
	June	2007	1704	31
	March	2007	1438	42
May	2007	1627	37	

After selecting all the fields in your report click on the Display Results button to see the data in your report



The image shows a 'Save Request' dialog box. It has a tree view on the left under 'My Folders' and 'Shared Folders'. The 'Folder' field is set to 'My Folders'. The 'Name' field contains 'Incidents Count Report'. The 'Description' field is empty. At the bottom, there are three buttons: 'Save and Schedule', 'OK', and 'Cancel'.

**Save Request**

- My Folders
- Shared Folders
  - Briefing Books
  - Company Scorecard
  - Company Search
  - HIP Analysts
  - HIP General User
  - Itinerary Planning
  - Itinerary Test
  - On-Line Help
  - PHMSA
  - PHMSA-PHP
  - Training

Folder: My Folders

Name: Incidents Count Report

Description:

Save and Schedule OK Cancel

1. Click on the Save icon on the top right corner of the screen – The Save Dialog box opens.
2. Give your report a name “Incidents Count Report” and click on OK Save
3. The name of the report shows at the top of the page and in the report title



- ✓ Sorting is a simple task with the sort buttons
- ✓ It is a 3 way toggle: Sort Ascending, Sort Descending, No Sort
- ✓ Multiple sorts can be created, the sort order is indicated on the sort button itself
- ✓ The default is to order column from left to right in alphabetical order

Criteria Results Prompts Advanced

Incidents Count Report

### Columns

Click on column names in the selection pane to add them to the request. Once added, drag-and-drop columns to reorder them. Edit format, formula and filters by clicking the buttons below its name. (?)

Mode Of Transportation	Date - Incident Occurred	Fact
Mode Of Transportation	Incident Occurred Month Name	Incident Occurred Year
Incident Occurred Month	Incident Occurred Year	Incident Occurred Month

Display Results Remove All

### Filters

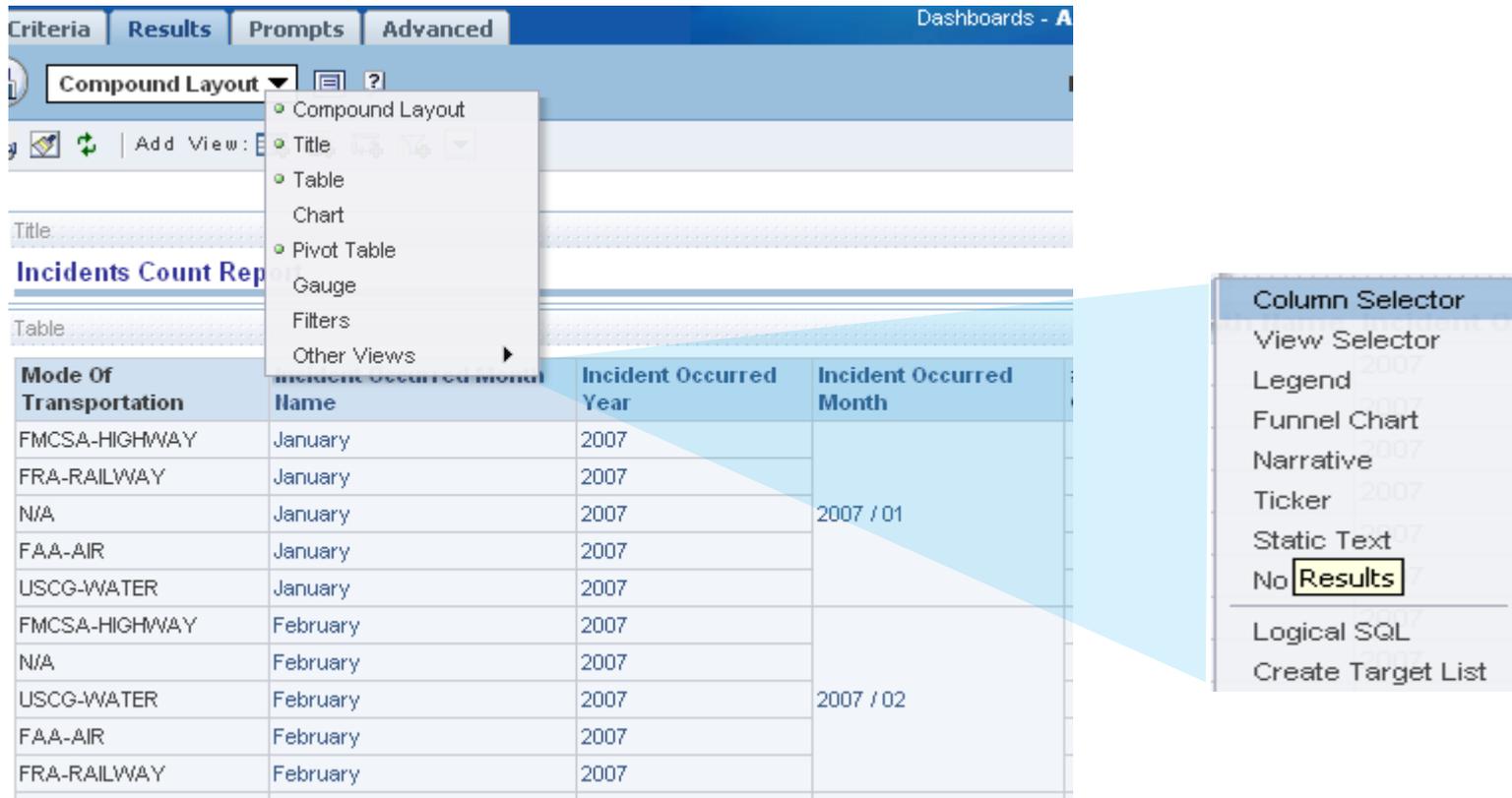
Add filters to the request criteria by holding down the CTRL key and clicking on column names in the selection pane, or by clicking below included columns. Add a saved filter by clicking on its name in the selection pane. (?)

Combine with Similar Request

Incident Occurred Month

Go back to the Criteria Tab

- ✓ In the Selection Pane, select the Incident Occurred Month to add it to the report
- ✓ Click on the sort icon  next to the Incident Occurred Month
- ✓ The icon changes to show that the data is sorted ascending based on that column

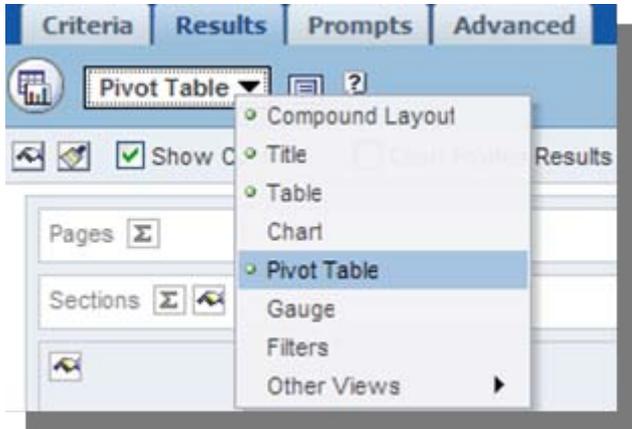


The screenshot shows a software interface with a navigation bar at the top containing tabs for 'Criteria', 'Results', 'Prompts', and 'Advanced'. The 'Results' tab is selected. Below the navigation bar, there is a 'Compound Layout' dropdown menu that is open, showing a list of view options: Compound Layout, Title, Table, Chart, Pivot Table, Gauge, Filters, and Other Views. A light blue arrow points from the 'Table' option in the dropdown to a 'Column Selector' menu on the right. This menu lists various visualization options: View Selector, Legend, Funnel Chart, Narrative, Ticker, Static Text, No Results (highlighted with a red box), Logical SQL, and Create Target List. Below the dropdown menu, a data table is visible with the following columns: Mode Of Transportation, Incident Occurred (Name), Incident Occurred Year, and Incident Occurred Month. The table contains 12 rows of data, grouped by month (January and February).

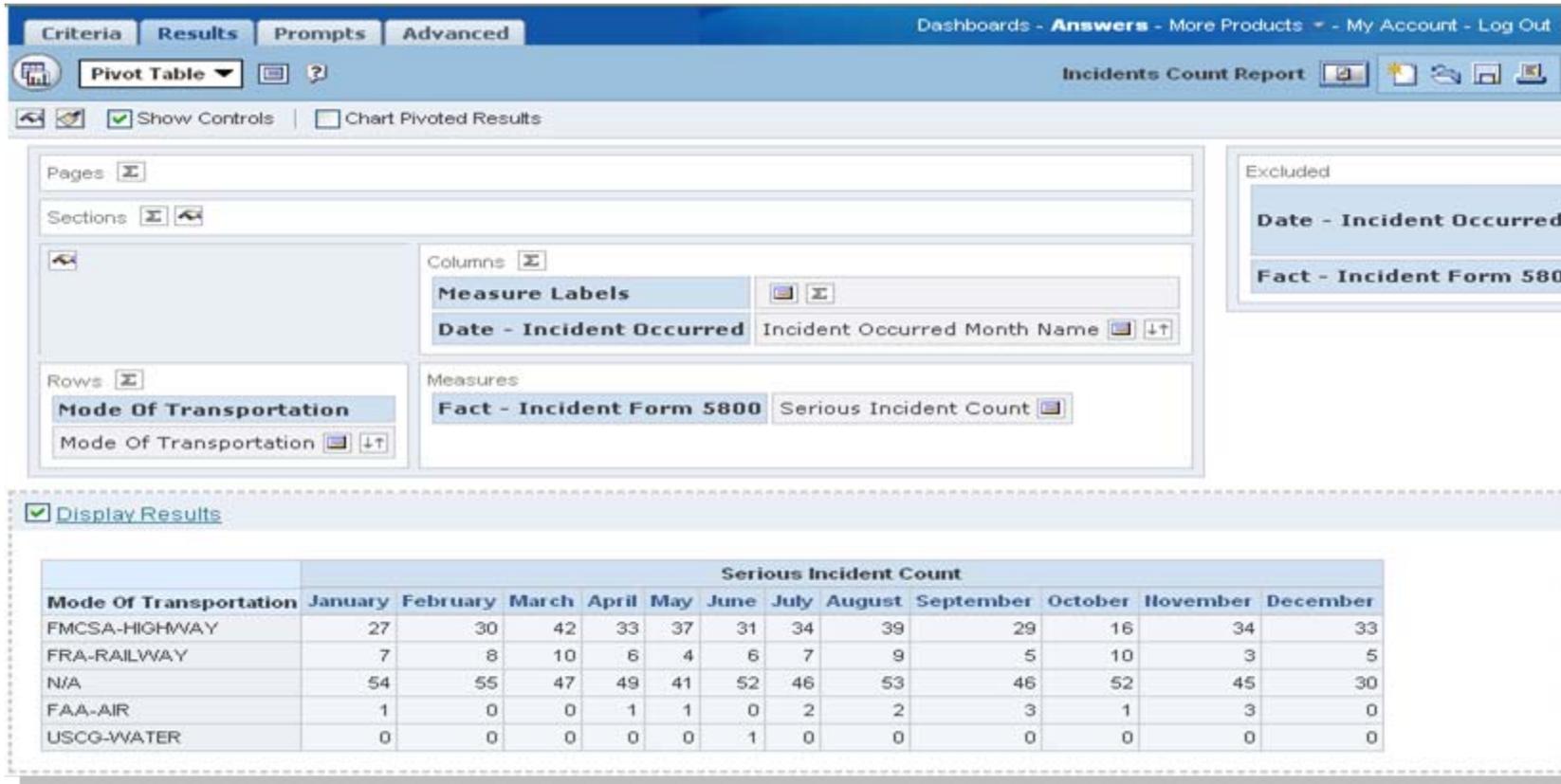
Mode Of Transportation	Incident Occurred (Name)	Incident Occurred Year	Incident Occurred Month
FMCSA-HIGHWAY	January	2007	2007 / 01
FRA-RAILWAY	January	2007	
N/A	January	2007	
FAA-AIR	January	2007	2007 / 02
USCG-WATER	January	2007	
FMCSA-HIGHWAY	February	2007	
N/A	February	2007	2007 / 02
USCG-WATER	February	2007	
FAA-AIR	February	2007	
FRA-RAILWAY	February	2007	

- ✓ Clicking the Results tab will show results of the request
- ✓ Defaults to Compound Layout view
- ✓ There are many views available for the same request
- ✓ Views allow you to have different ways to visualize your data

# Creating Pivot Tables



- ✓ Pivot tables especially useful for trend reports.
- ✓ Aggregations and calculations are available
- ✓ Pivot tables let you view your data from many angles



Criteria Results Prompts Advanced Dashboards - Answers - More Products - My Account - Log Out

Pivot Table Incidents Count Report

Show Controls Chart Pivoted Results

Pages

Sections

Columns

Measure Labels

Date - Incident Occurred Incident Occurred Month Name

Rows

Mode Of Transportation

Mode Of Transportation

Measures

Fact - Incident Form 5800 Serious Incident Count

Excluded

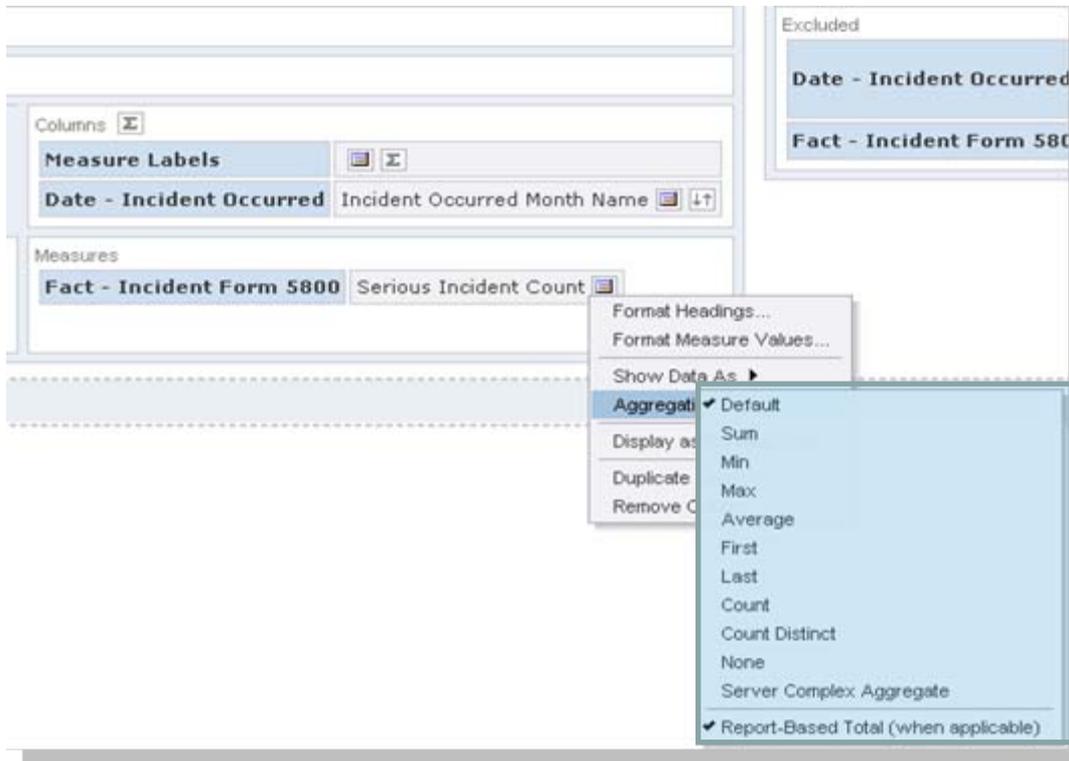
Date - Incident Occurred

Fact - Incident Form 5800

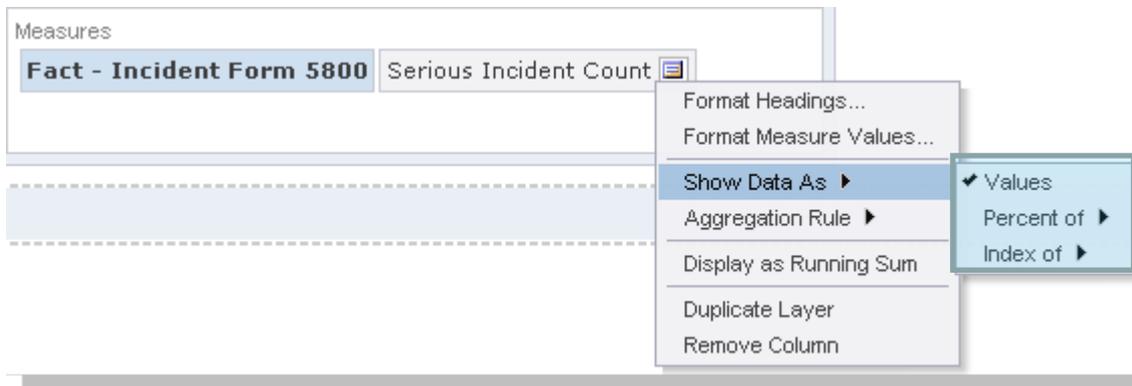
Display Results

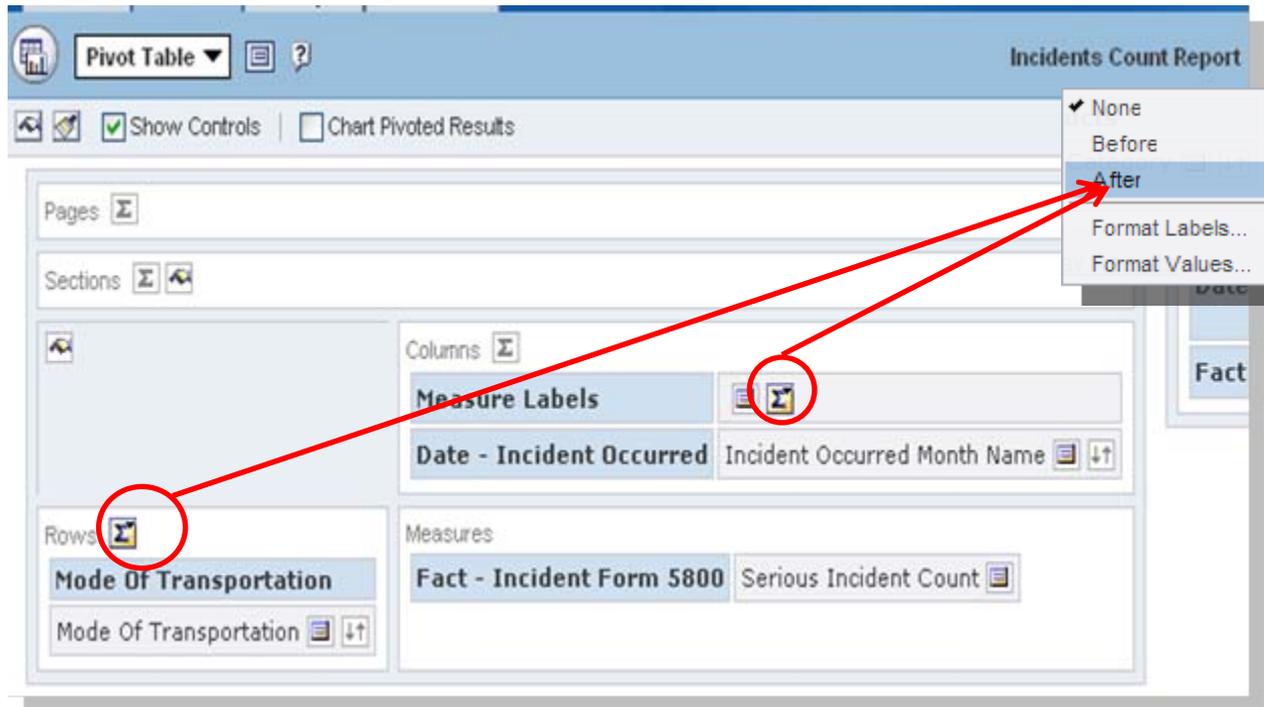
Mode Of Transportation	Serious Incident Count											
	January	February	March	April	May	June	July	August	September	October	November	December
FMCSA-HIGHWAY	27	30	42	33	37	31	34	39	29	16	34	33
FRA-RAILWAY	7	8	10	6	4	6	7	9	5	10	3	5
N/A	54	55	47	49	41	52	46	53	46	52	45	30
FAA-AIR	1	0	0	1	1	0	2	2	3	1	3	0
USCG-WATER	0	0	0	0	0	1	0	0	0	0	0	0

- ✓ Click the arrow on the Compound Layout View and Select the Pivot Table View
- ✓ Drag the Incident Occurred Year, Incident Occurred Month and the # of Incidents Occurred in the Excluded Area at the top right of the page to remove them from the cross tab
- ✓ Drag the Incident Occurred Month Name in the Measure Labels area



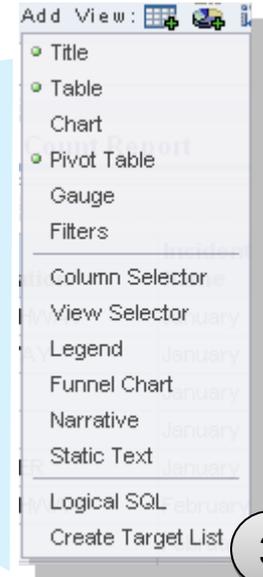
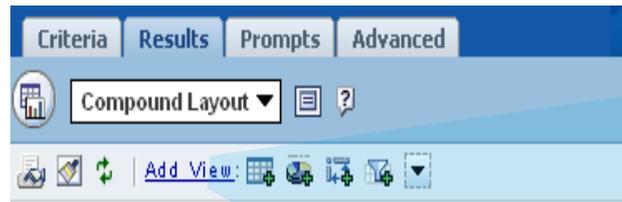
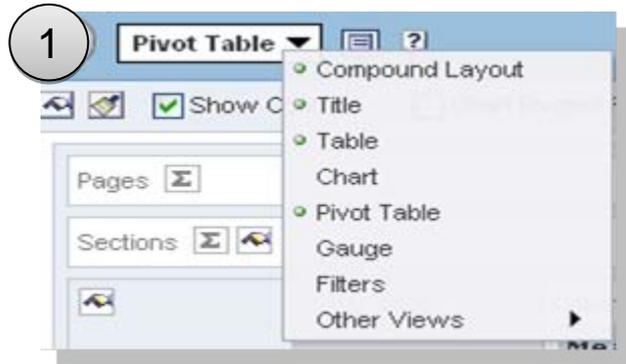
- ✓ For each measure, there are many options available for aggregating the results
- ✓ You can also view the results as a % or index of the column, row, section, and page





- ✓ Add Totals to Pages, Sections, Columns, and Rows
- ✓ Totals can be displayed before or after the data results

Mode Of Transportation	Serious Incident Count												Serious Incident Count Total
	January	February	March	April	May	June	July	August	September	October	November	December	
FAA-AIR	1	0	0	1	1	0	2	2	3	1	3	0	14
FMCSA-HIGHWAY	27	30	42	33	37	31	34	39	29	16	34	33	385
FRA-RAILWAY	7	8	10	6	4	6	7	9	5	10	3	5	80
N/A	54	55	47	49	41	52	46	53	46	52	45	30	570
USCG-WATER	0	0	0	0	0	1	0	0	0	0	0	0	1
<b>Grand Total</b>	<b>89</b>	<b>93</b>	<b>99</b>	<b>89</b>	<b>83</b>	<b>90</b>	<b>89</b>	<b>103</b>	<b>83</b>	<b>79</b>	<b>85</b>	<b>68</b>	<b>1050</b>



1. The Compound Layout view can include multiple other views - To get to the Compound Layout select the arrow next to the Pivot Table view to open the other view
2. Select Compound Layout view and click on the Add View hyperlink
3. Select the Pivot Table View. The Pivot Table View is added to your Compound Layout
4. Save your report. When the system asks you if you want to overwrite the existing report click Ok

- ✓ Create a new report based on registration information (for example count registrations by expiration/end year and month)
- ✓ Create a pivot table for your report and add some calculations on your table

## Editing an Existing Report



- ✓ Click on Answers at top left of page
- ✓ Make sure you are in the Catalog Tab
- ✓ Open the Shared Folders and click on the In HIP Analysts subfolder
- ✓ Locate the Incident Summary Report (HAZREP): Subset of Form 5800 fields
- ✓ Select the modify link at the bottom of the Incident Summary Report (HAZREP): Subset of Form 5800 Fields



1. Click on the Remove Filter button to eliminate the existing report filters
2. In the Incident Date column click the Filter button 
3. Select 'between' in the operator Dropdown List
4. Values to filter on can be manually entered or chosen from a list of values. Enter 05/01/2007 in first value and 05/31/2007 in second value and click on OK

1

Company - Incident Carrier	Incident - Form 5800					Fact - Incident Details
Carrier Name ↓↑	Incident Route ↓↑	Incident City ↓↑	Incident State ↓↑	Incident date ↓↑	Incident Time ↓↑	Quantity Released ↓↑

2

Column Properties [Help](#)

Style | Column Format | Data Format | Conditional Format

3

Create/Edit Filter [Help](#)

Column **Quantity Released**

Operator **is greater than**

Value

4

Column Properties [Help](#)

Style | Column Format | Data Format | Conditional Format

**Edit Format**

Font

Family **Default** Size

Color  Style **Default** Effects **Default**

Cell

Horizontal Alignment **Default** Background Color

Vertical Alignment **Default** Image

Border

Position **Default** Border Style **Default**

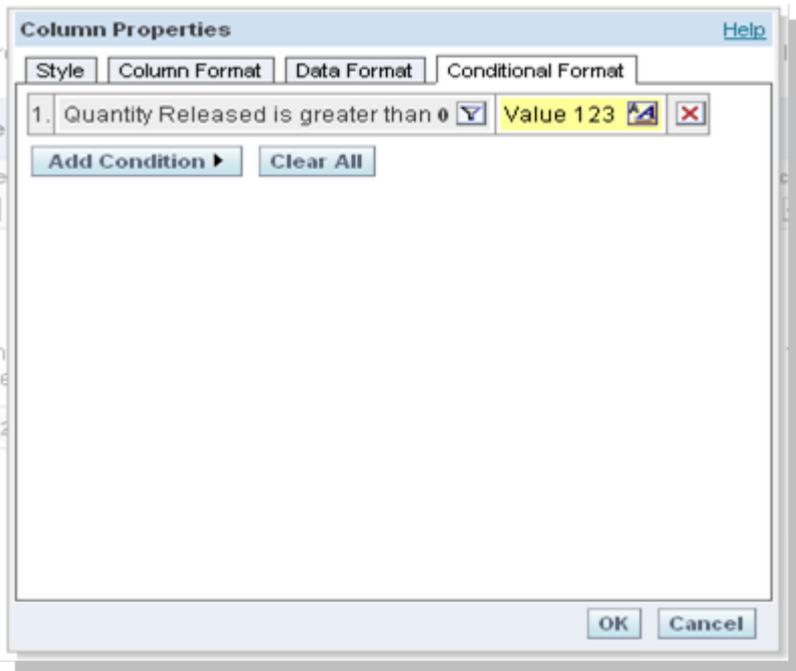
Border Color

Additional Formatting Options

Custom CSS Style Options (HTML Only)

1. In the criteria tab click on the columns properties of the Quantity Released
2. In the Conditional Format Tab, click Add Condition button and select the Quantity Released field
3. Select the Operator greater than and in the Value box enter 0 and click on Ok
4. In the Edit Format window select the box next to the Background Color and select the yellow color and click Ok

1



**Column Properties** Help

Style | Column Format | Data Format | Conditional Format

1. Quantity Released is greater than 0  Value 123

1. Click Ok to apply the condition
2. In the Results tab, the report shows all the Quantity Released greater than 0 highlighted in yellow

2

Title

**Incident Summary Report (HAZREP): subset of form 5800 fields**

Time run: 9/12/2008 9:36:13 AM

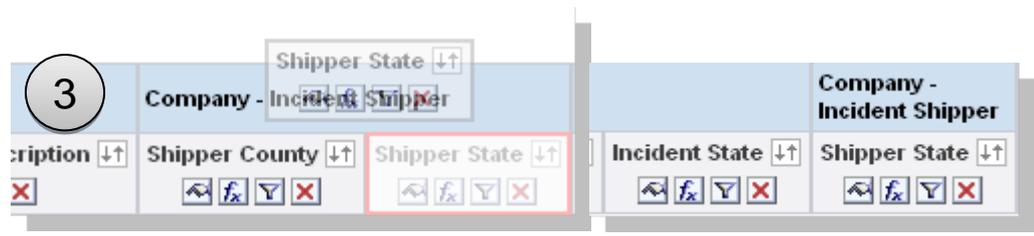
---

Table

Report Source	Report Number	Carrier Name	Incident Route	Incident City	Incident State	Incident date	Incident Time	Quantity Released	Unit of Measure	UH Number	Commodity Name
P	I 2007050480	UNTD PARCEL SVC	5757 CLYDE PARK AVENUE S.W.	WYOMING	MI	05/01/2007	0500	1	LGA	UN1888	CHLOROFORM



1. Columns can be added to a report whether you are in the Results tab or the Criteria tab
2. To add a column click on the desired column in the Selection Pane – Click on the Incident Shipper State to add it to the report
3. To move the placement of the Shipper State field click on the fields in the Criteria tab on drag it next to the Incident State
4. View the data for the field in the Results tab and save your Report
5. If you want to delete a field from a query you can just click on the delete icon 



1

Incident Summary Report (HAZREP): Subset of Form 5800 Fields    

**Save Request**

- My Folders**
  - Incidents Current year All Modes by State
- Shared Folders**
  - Briefing Books
  - Company Scorecard
  - Company Search
  - HIP Analysts
  - HIP General User
  - Itinerary Planning
  - Itinerary Test
  - On-Line Help
  - PHMSA
  - PHMSA-PHP
  - Training

Folder:

Name:

Description:

2

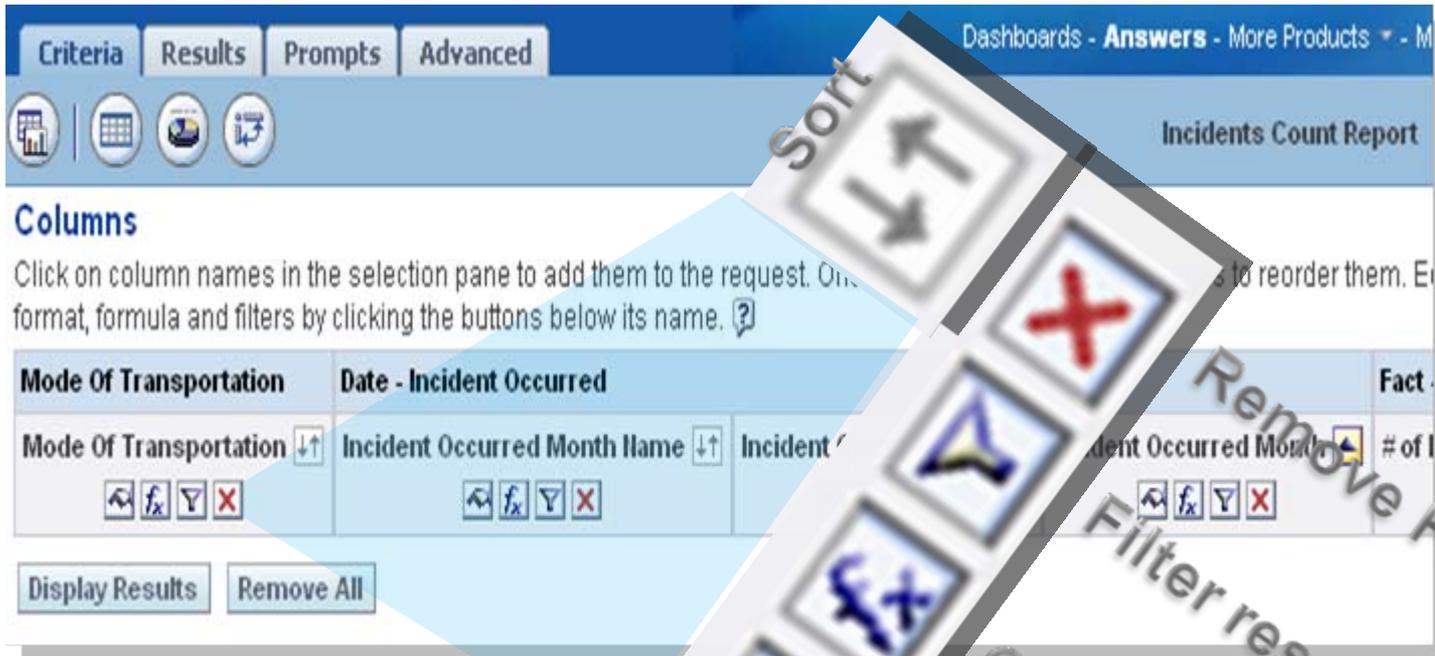
3

1. Click on the Save button at the top right of the screen to save the changes made to the Incident Summary Report
2. Select 'My Folders' and in the Name field type in 'Incident Summary Report (HAZREP): Training'
3. In the Description field type in 'This report shows incidents for May 2007' and click on OK

- ✓ Modify the 'Incident Summary Report (HAZREP): Training' in 'My Folder'
- ✓ Add additional filters to your report to get a subset of data you are interested in
- ✓ We want to answer the question: 'Were the **incidents serious?**'  
Modify your report to show the serious incident indicator information

# Refining Queries

## Use the Criteria tab to:



Criteria Results Prompts Advanced

Dashboards - Answers - More Products - M

Incidents Count Report

### Columns

Click on column names in the selection pane to add them to the request. On... to reorder them. E

format, formula and filters by clicking the buttons below its name. ?

Mode Of Transportation	Date - Incident Occurred	Fact
Mode Of Transportation ↓↑	Incident Occurred Month Name ↓↑	Incident Occurred Month # of I
  	  	  

Display Results Remove All

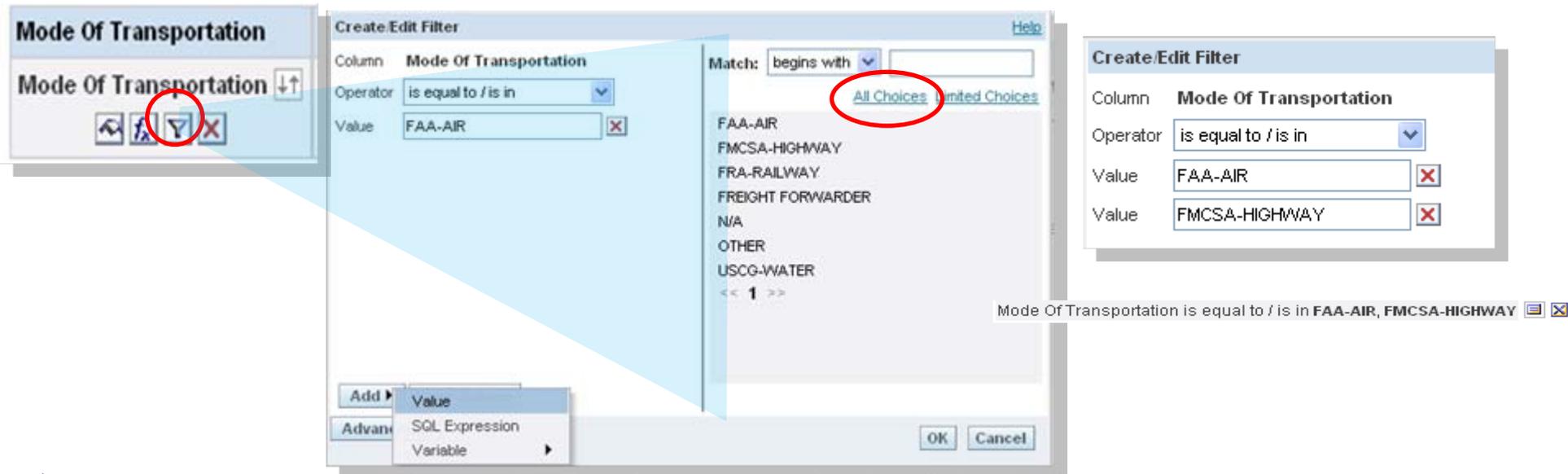
Sort

Remove Fields

Filter results

Create Formulas

Format data



- ✓ Open the Incidents Count Report for editing. In the Criteria tab click the Filter icon in the Mode of Transportation field
- ✓ In the Filter window click on All Choices to view all the values that you can choose for this field - If you filter on a field that can have a lot of values you can click on Limited Choices to view the subset of the data
- ✓ Click on the FAA-AIR to add the value to the left
- ✓ More than one value can be used in each filter - By selecting the Add button, then the value option as shown, an additional value can be added
- ✓ Hitting Enter after typing in a value will also add a new space to enter another value
- ✓ Type in or select FMCSA-HIGHWAY and click on Ok
- ✓ The filter is then shown in the Criteria tab

## Filters

Add filters to the request criteria by holding down the CTRL key and clicking on column names below included columns. Add a saved filter by clicking on its name in the selection pane. ?

Incident Occurred Year is equal to / is in 2007  

**AND** Mode Of Transportation is equal to / is in FAA-AIR, FMCSA-HIGHWAY  

## Filters

Add filters to the request criteria by holding down the CTRL key and clicking on column names below included columns. Add a saved filter by clicking on its name in the selection pane. ?

Incident Occurred Year is equal to / is in 2007  

**OR** Mode Of Transportation is equal to / is in FAA-AIR, FMCSA-HIGHWAY  

- ✓ More than one filter can be used on a query by selecting the Filter symbol for each field that requires a filter
- ✓ Conditions can use AND/OR logic by toggling the AND/OR link in the Filters section
- ✓ Complex nested logic can also be applied

## Fact - Incident Form 5800

# of Incidents Occured



- ✓ Use the Formula options to create calculation measures using Answers
- ✓ Select the **fx** in the # of Incidents Occurred
- ✓ Select the Minus (-) operator. In the Column dropdown select the Serious Incident Count

**Edit Column Formula** [Help](#)

Column Formula **Bins**

Table Heading

Column Heading

Custom Headings

Column Formula

Aggregation Rule

Operator: + - x / % ( ) || **Function...** **Filter...** **Column**

Select any field from the left panel to insert it into the formula.

- Mode Of Transportation
- Incident Occurred Month Name
- Incident Occurred Year
- Incident Occurred Month
- Serious Incident Count**

**OK** **Cancel**

**Edit Column Formula** Help

Column Formula  Bins

Table Heading

Column Heading

Custom Headings

Column Formula

Aggregation Rule

*Select any field from the left panel to insert it into the formula.*

- ✓ Your formula is as shown
- ✓ Select the Custom Headings check box in order to edit the column heading
- ✓ In the Column Heading box type in the new name 'Non Serious Incident Count'
- ✓ Click on OK
- ✓ In the Results Tab you will see now the Non Serious Incident Count instead of the # of Incident Occurred
- ✓ Save your Report

Title **Incidents Count Report**

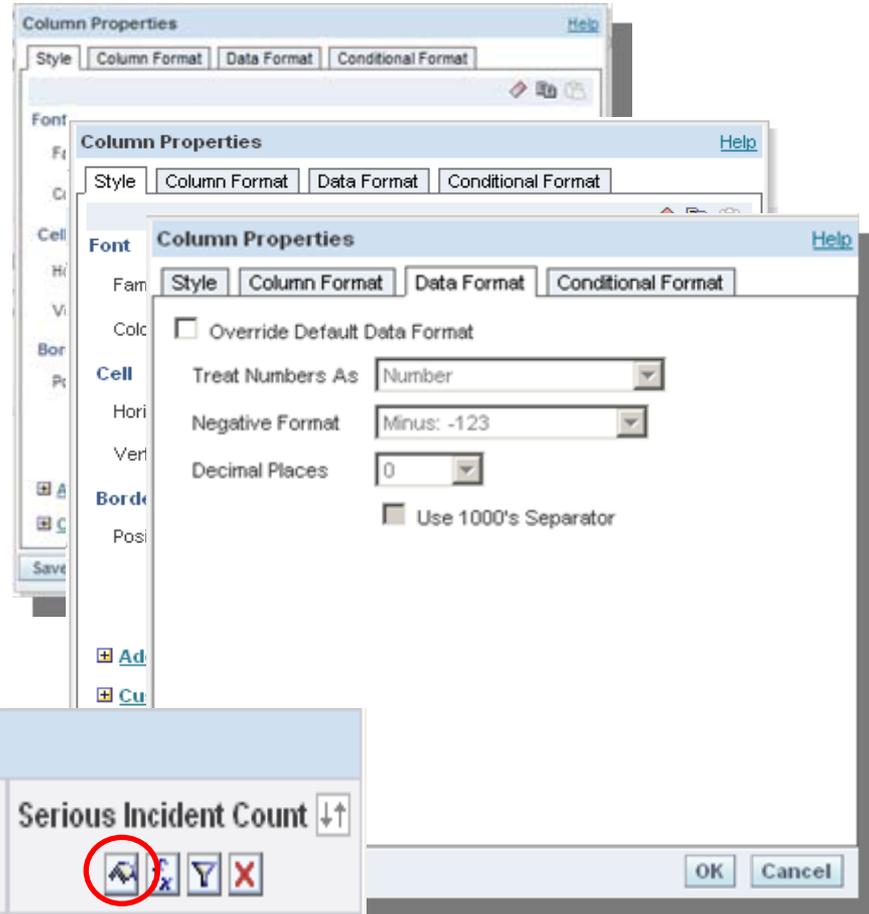
Table

Mode Of Transportation	Incident Occurred Month Name	Incident Occurred Year	Incident Occurred Month	Non Serious Incident Count	Serious Incident Count
FMCSA-HIGHWAY	January	2007		1192	27
FAA-AIR	January	2007	2007 / 01	148	1
FMCSA-HIGHWAY	February	2007		1136	30
FAA-AIR	February	2007	2007 / 02	105	0
FMCSA-HIGHWAY	March	2007		1396	42
FAA-AIR	March	2007	2007 / 03	142	0
FMCSA-HIGHWAY	April	2007		1375	33
FAA-AIR	April	2007	2007 / 04	106	1
FAA-AIR	May	2007		122	1
			2007 / 05		

- ✓ Add filter for :
  - Serious Incident Count greater than 10
  - OR Non Serious Incident greater than 1000
- ✓ Add field **# of Incidents Occurred** to your report. Modify the field's formula to get the ratio of the non serious/serious incident count
- ✓ Save the report as Incidents Count Report 2

## Formatting Reports

Style Column Format Data Format Conditional Format

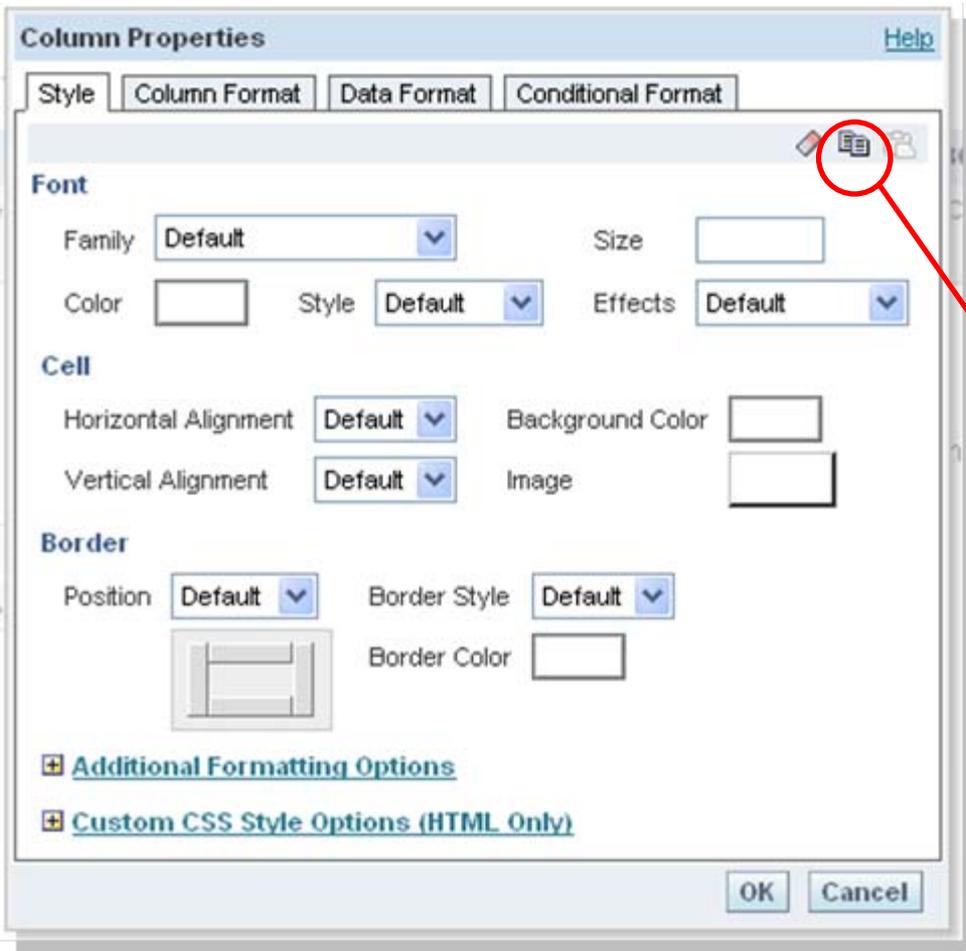


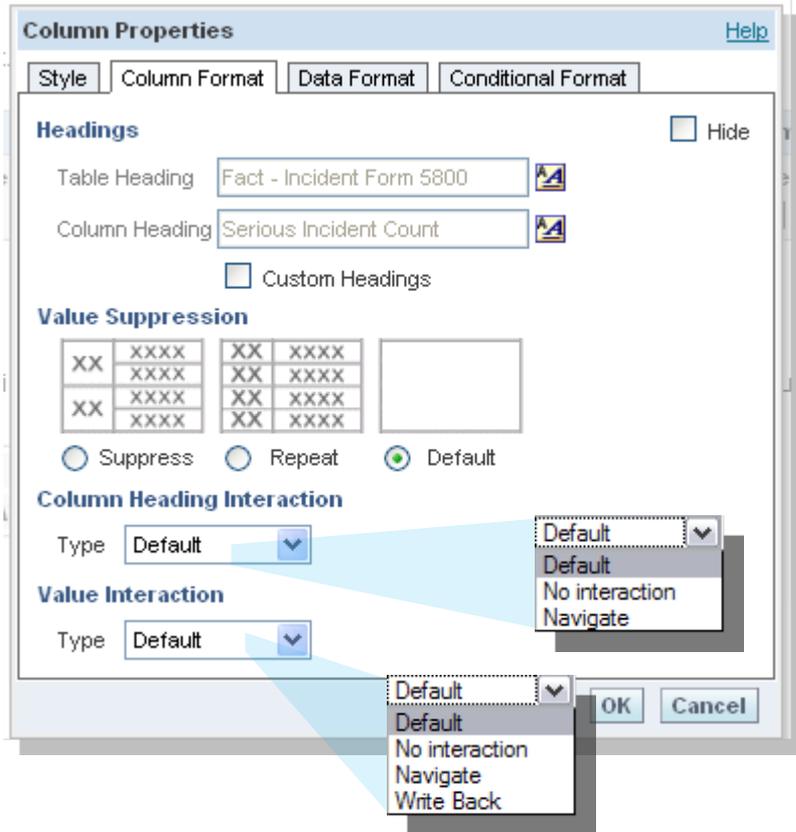
To format the Serious Incident Count column in the Incidents Count Report, in the Criteria tab select the format icon 

The formatting window opens with the following tabs:

- ✓ **Column Style** – font, cell alignment, background colors, borders
- ✓ **Column Format** – heading name changes, hiding a column, repeating group and page headings, interactions
- ✓ **Data Format** – format the display of the data value, such as numbers, dates, text, and time zone options
- ✓ **Conditional Format** – allow format based on specific values

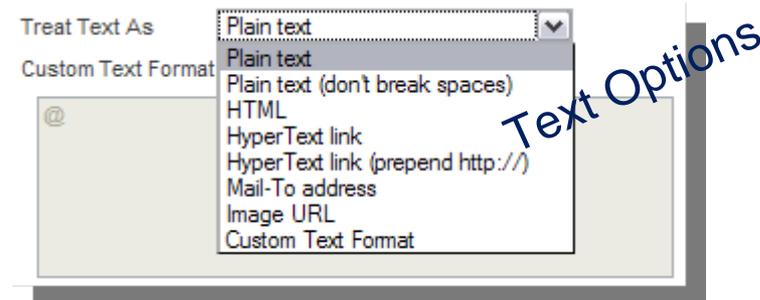
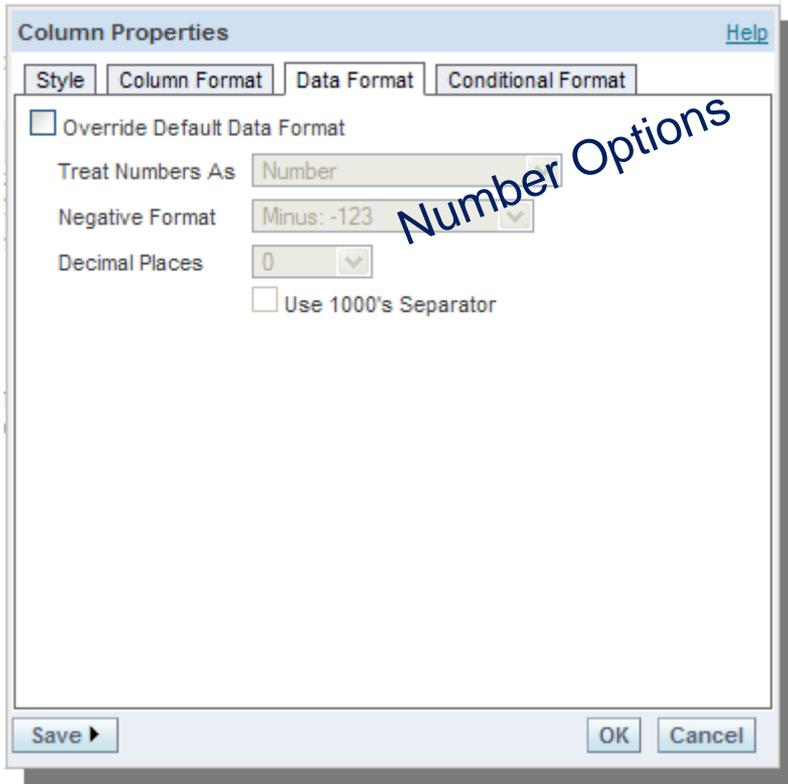
- ✓ Set the Font, including Font Family, Size, Style, Effects, Alignment, and Background
- ✓ Set the Border Position, Style, and Color
- ✓ Use the Copy and Paste Functionality to speed up formatting across multiple fields



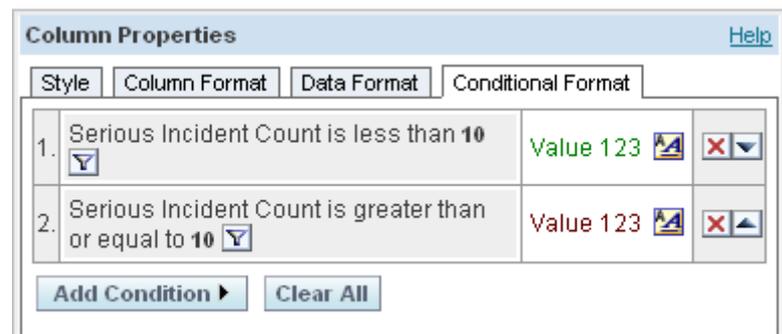
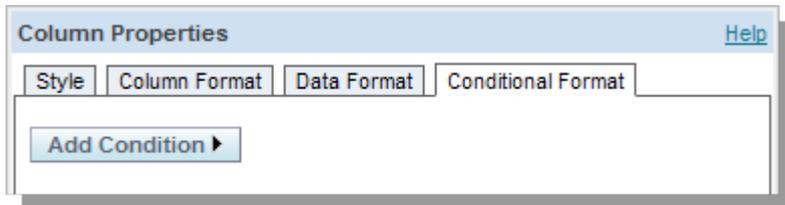


- ✓ Set the Heading Information if not using the defaults, including Style formatting
- ✓ Hide columns from displaying in the results
- ✓ Use Column Properties to define when to suppress repeating groups
- ✓ Define how the user can interact, such as defining navigation to another report.

- ✓ The Data Format tab allows you to set the options for the actual data value
- ✓ Different options for Dates, Numbers, and Text
- ✓ You can embed HTML in Text fields
- ✓ You can define Time Zones for Date fields

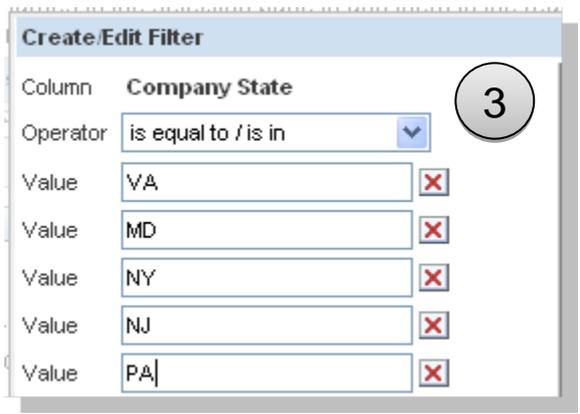
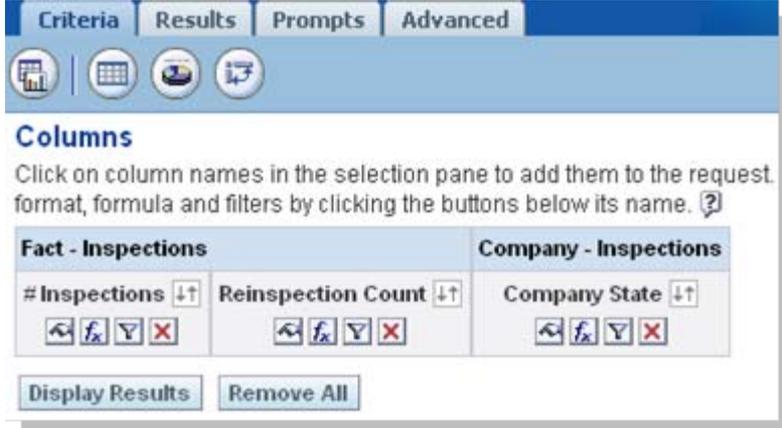
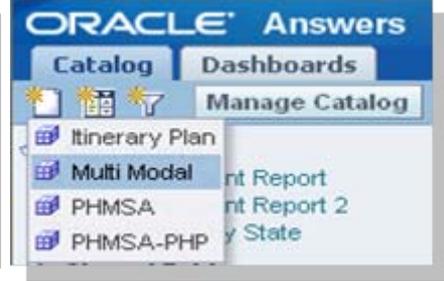


- ✓ Conditional Column formatting is used to Define **Visual Representation of the Data**
- ✓ You can change Font and Background Colors or Custom Images, such as Gauges, Arrows, Stars, and Bar Indicators



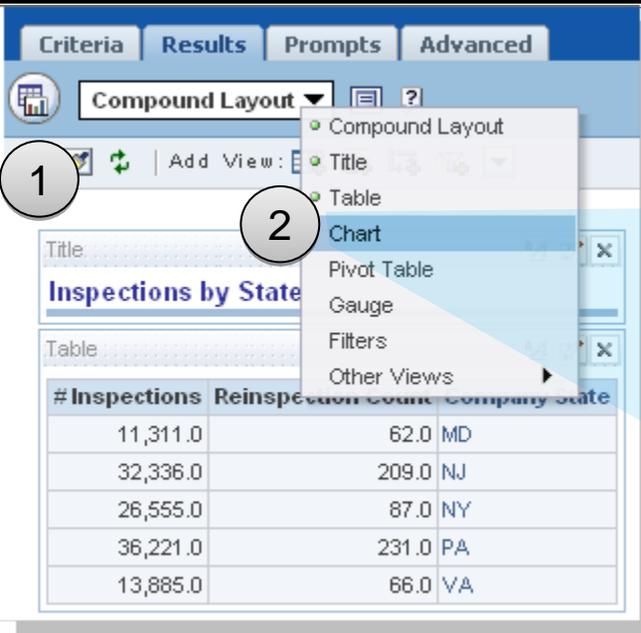
Mode Of Transportation	Incident Occurred Month Name	Incident Occurred Year	Incident Occurred Month	Non Serious Incident Count	Serious Incident Count
FMCSA-HIGHWAY	January	2007	2007 / 01	1192	27
FAA-AIR	January	2007		148	1
FMCSA-HIGHWAY	February	2007	2007 / 02	1136	30
FAA-AIR	February	2007		105	0
FMCSA-HIGHWAY	March	2007	2007 / 03	1396	42
FAA-AIR	March	2007		142	0
FMCSA-HIGHWAY	April	2007	2007 / 04	1375	33
FAA-AIR	April	2007		106	1

## Creating Charts



First, create a new request the chart will be based on:

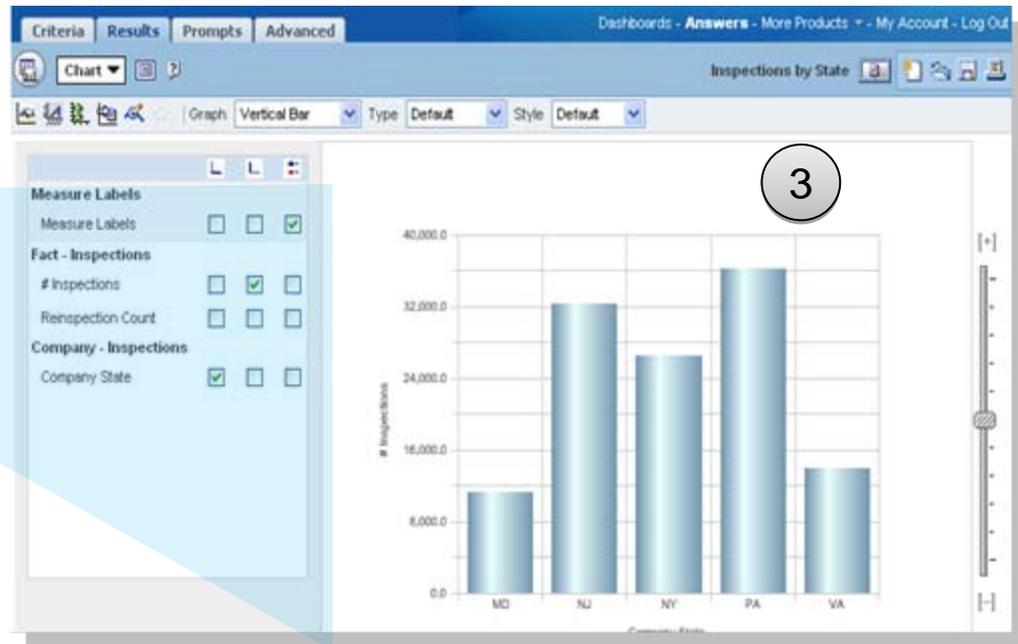
1. In Answers click on the new report icon at the top of the page
2. From the Inspection Attributes and Facts, select the following fields:
  - a) In Fact – Inspections select **# Inspections**
  - b) In Fact – Inspections select **Reinspection Count**
  - c) In Company – Inspections select **Company State**
3. Filter on the Company State. Type in VA, MD, NY,NJ,PA – to add a new filter value press on enter or click on add ->value



1

2

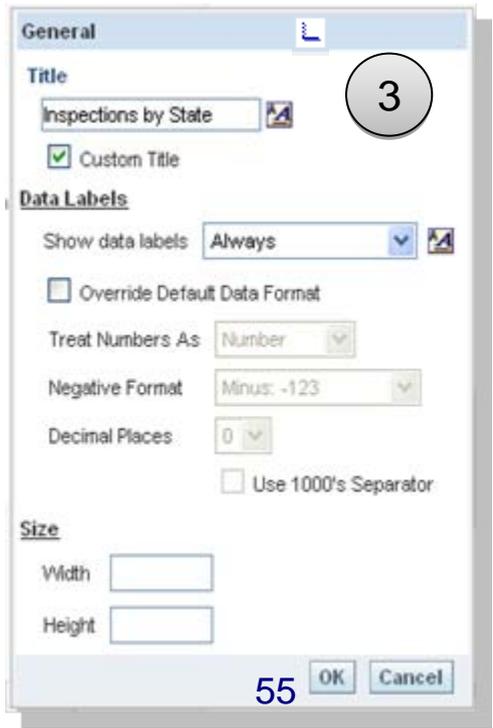
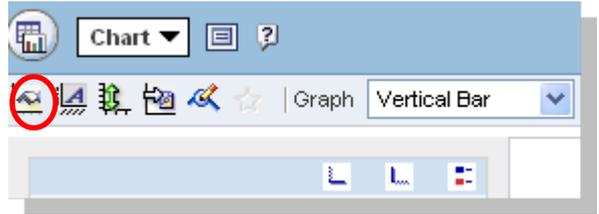
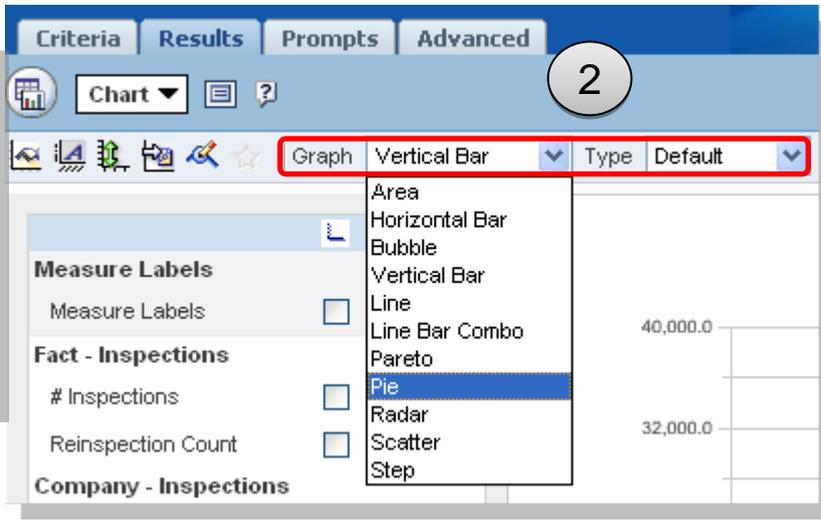
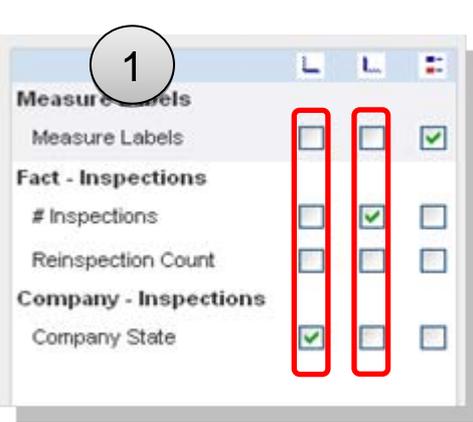
# Inspections	Reinspection Count	Company State
11,311.0	62.0	MD
32,336.0	209.0	NJ
26,555.0	87.0	NY
36,221.0	231.0	PA
13,885.0	66.0	VA



3

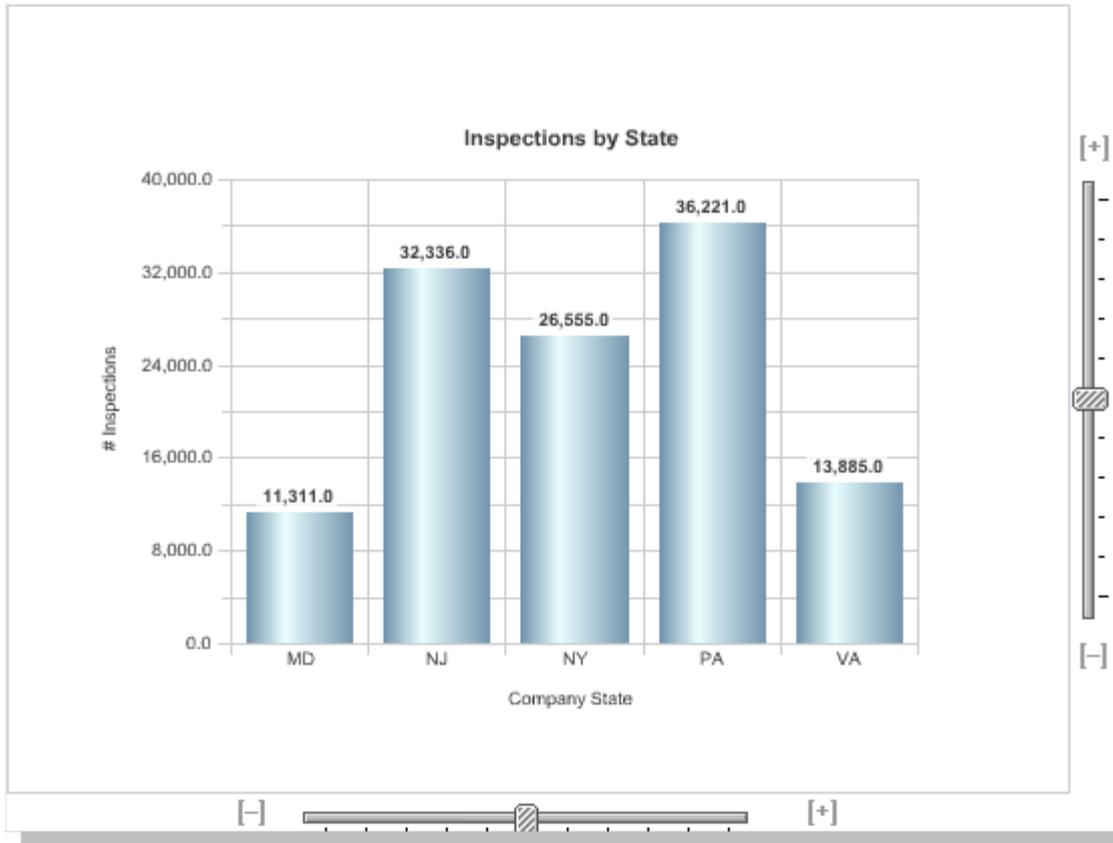
Company State	# Inspections
MD	11,311.0
NJ	32,336.0
NY	26,555.0
PA	36,221.0
VA	13,885.0

1. In the Results Tab click on the dropdown to view the list of views
2. Select the Chart view
3. A default Vertical Bar Graph is now displayed



1. You can check different fields you want to see in the x axis or the y axis and click on the Redraw button
2. The graph type can be changed by clicking on the dropdown and selecting a type
3. To specify chart properties select properties icon  and type in the graph title Inspection by State and in choose Show Data Label select Always

Once you have made the changes your graph is as follows:



Compound Layout

Add View:

Title



**Inspections by State**

Table



# Inspections	Reinspection Count	Company State
11,311.0	62.0	MD
32,336.0	209.0	NJ
26,555.0	87.0	NY
36,221.0	231.0	PA
13,885.0	66.0	VA

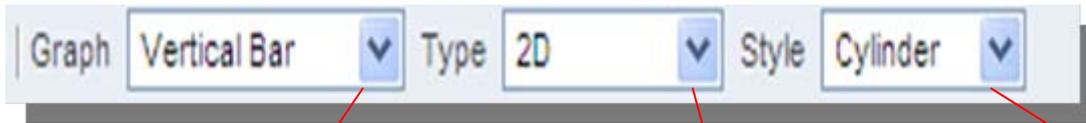
Chart



**Inspections by State**



1. In the Results tab, select the compound Layout View
2. Click on the Add View link and select Chart
3. Now the Compound Layout shows both the table and the chart
4. Once you have made the changes to the graph click on the save icon at the top of the report
5. Save the report under 'My Folders' and call it 'Inspections by State'



## ✓ Other kinds of Graphs

- Area
- Horizontal Bar
- Bubble
- Vertical Bar
- Line
- Line Bar Combo
- Pareto
- Pie
- Radar
- Scatter
- Step

## ✓ Other kinds of Graph Types

- 2D
- 3D Stacked
- 2D Stacked

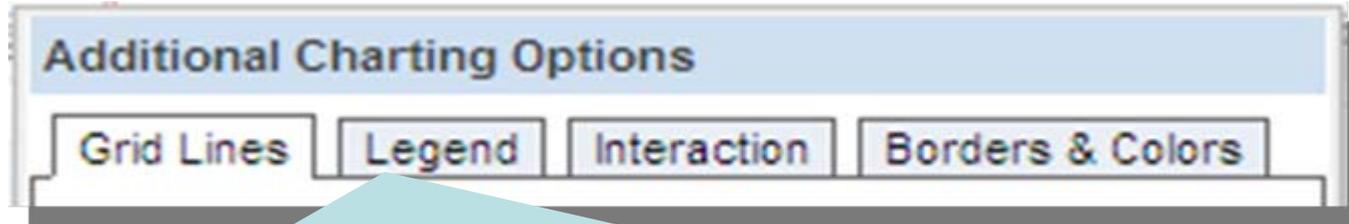
## ✓ Other kinds of Graph Styles

- Rectangular
- Cylindrical
- Gradient
- Triangle
- Diamond
- Pattern Fill

✓ Additional Charting Options Dialog Box had 4 tabs

- Grid Lines
- Legend
- Interaction
- Borders & Colors





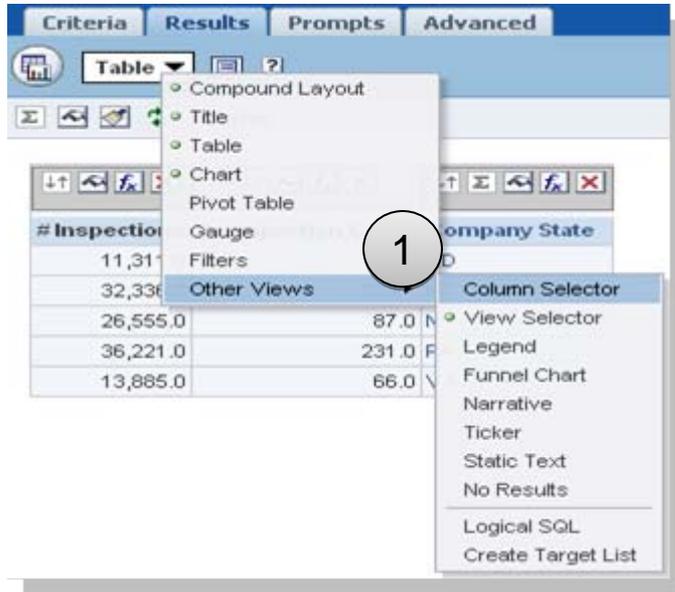
## ✓ Additional Charting Options Dialog Box

- Grid Lines allow control on the chart grid lines
- Legend gives the option to change the default legend format
- Interaction allows user to specify whether chart allows drilling, or linking to another report
- Borders & Colors give additional styling options.

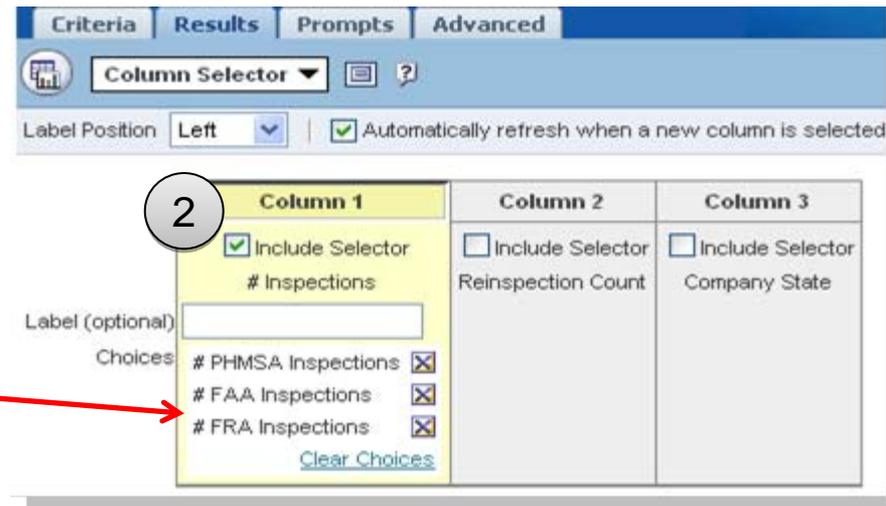
- ✓ Modify the Inspections by State Report to show the Reinspections Count by State in the y axis
- ✓ Change the graph type from a Vertical Bar to a Pie Chart
- ✓ Save your Reinspections by State report

## Additional Views

- ✓ Column Selector
- ✓ View Selector
- ✓ Narrative



- ✓ Use the column selector view to allow users to dynamically change which columns appear in a request.
- ✓ If you do not need to see all columns at once, you can significantly **Preserve Dashboard Real Estate** with the Column Selector



1. Open the Inspections by State report and select the Column Selector view from the Result Tab
2. Check the Include Selector checkbox for the column for which you want to display a Column Selector (select the # Inspections column)
3. Select the columns to add from your Subject Area by double clicking on it – Click on # PHMSA Inspections, # FAA Inspections, # FRA Inspections in the Selection Pane



**Inspections by State**

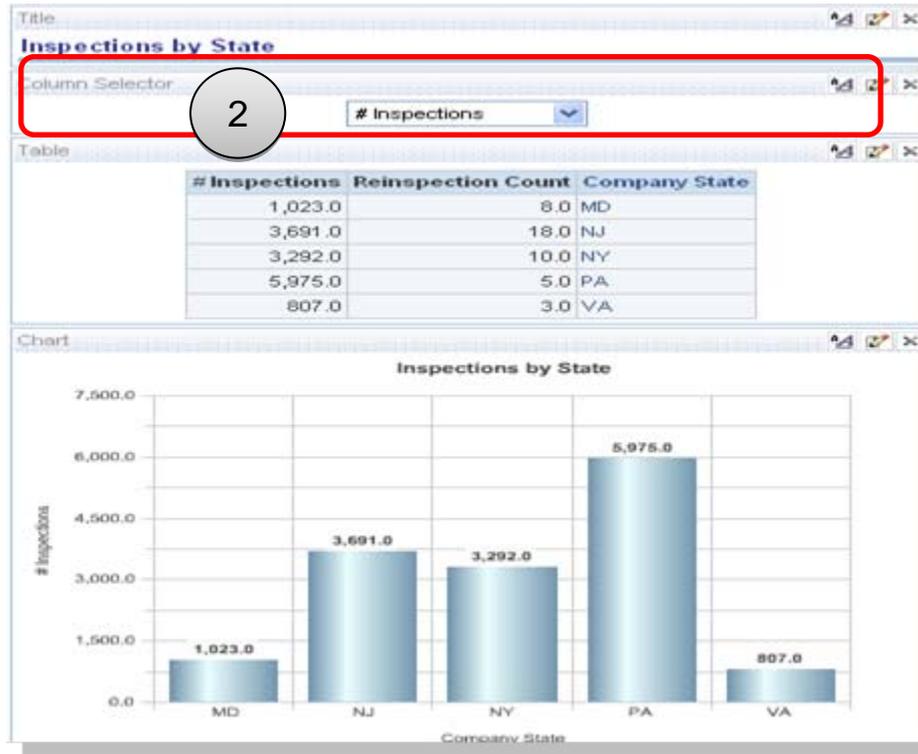
# FRA Inspections	Reinspection Count	Company State
124	62.0	MD
153	209.0	NJ
219	87.0	NY
706	231.0	PA
262	66.0	VA

**Inspections by State**

# FRA Inspections

Company State

Column Selector: # FRA Inspections



**Inspections by State**

Column Selector: # Inspections

# Inspections	Reinspection Count	Company State
1,023.0	8.0	MD
3,691.0	18.0	NJ
3,292.0	10.0	NY
5,975.0	5.0	PA
807.0	3.0	VA

**Inspections by State**

# Inspections

Company State

1. In the Inspections by State Results tab select the Compound Layout view , then click on Add View link and select the Column Selector
2. Click on the Column Selector and drag it on top of the table

Criteria Results Prompts Advanced

Compound Layout

- Compound Layout
- Title
- Table
- Chart
- Pivot Table
- Gauge
- Filters
- Other Views
  - Column Selector
  - View Selector
  - Legend
  - Funnel Chart
  - Narrative
  - Ticker
  - Static Text
  - No Results
  - Logical SQL
  - Create Target List

Table

# Inspections	Reinspection Count	Company State
11,311.0	62.0	MD
32,336.0	209.0	NJ
26,555.0	87.0	NY
36,221.0	231.0	PA
13,885.0	66.0	VA

- ✓ Use the View Selector to select a specific view of the results from among the saved views
- ✓ When placed on a dashboard, the view selector appears as a drop-down list from which users can choose the specific results view they want to see
- ✓ The example below allows the user to view the report as either chart or table

[Download - Copy](#)

Caption

Caption Position

Available Views

- Compound Layout
- Title
- Pivot Table
- Column Selector
- None

Views Included

- Table
- Chart

Select View

# Inspections	Reinspection Count	Company State
11,311.0	62.0	MD
32,336.0	209.0	NJ
26,555.0	87.0	NY
36,221.0	231.0	PA
13,885.0	66.0	VA



**Preserves Dashboard**  
**Real Estate!!!**

<b>Fact - Inspections</b>	<b>Company - Inspections</b>
# Inspections ↓↑	Reinspection Count ↓↑
Company State ↓↑	

@1

@2

@3

Compound Layout

- Compound Layout
- Title
- Table
- Chart
- Pivot Table
- Gauge
- Filters
- Other Views
  - Column Selector
  - View Selector
  - Legend
  - Funnel Chart
  - Narrative**
  - Ticker
  - Static Text
  - No Results
- Logical SQL
- Create Segment
- Create Target List

- ✓ **Narrative Views** let you embed columns into an **HTML** formatted view of the result set.
- ✓ You can enter text and reference values from a field
- ✓ Columns can be **referenced** by using the @ symbol

Narrative

Prefix

There were @2 reinspections in @3 [br]

Narrative

Row separator

Rows to display

Postfix

Display Results

There were 8 reinspections in MD  
 There were 18 reinspections in NJ  
 There were 10 reinspections in NY  
 There were 5 reinspections in PA  
 There were 3 reinspections in VA

- ✓ Add a view selector to the report you created in exercise 1 to allow information to be viewed in 2 different ways (example: a table and a graph)

1. Adding Content to a Dashboard (20 min)
2. Working with Dashboard Prompts (20 min)

- ✓ A dashboard is a page or collection of pages that displays results of Oracle BI reports and other content such as link to documents and websites
- ✓ Multiple pages in a dashboard are viewed as tabs across top of dashboard
- ✓ Dashboards are highly intuitive and ideally contain highly summarized and graphical information
- ✓ Filters can be applied to a dashboard or a specific page within a dashboard
- ✓ Users can view dashboards based on their permission
- ✓ Every user have a personal dashboard call 'My Dashboard' where he/she can add content



In this module we are going to add content to a personal dashboard

1. To access the dashboards page from Answers , click on the Dashboards link at the top of the page
2. When the dashboard opens, click on the My Dashboard link
3. The Empty dashboard opens

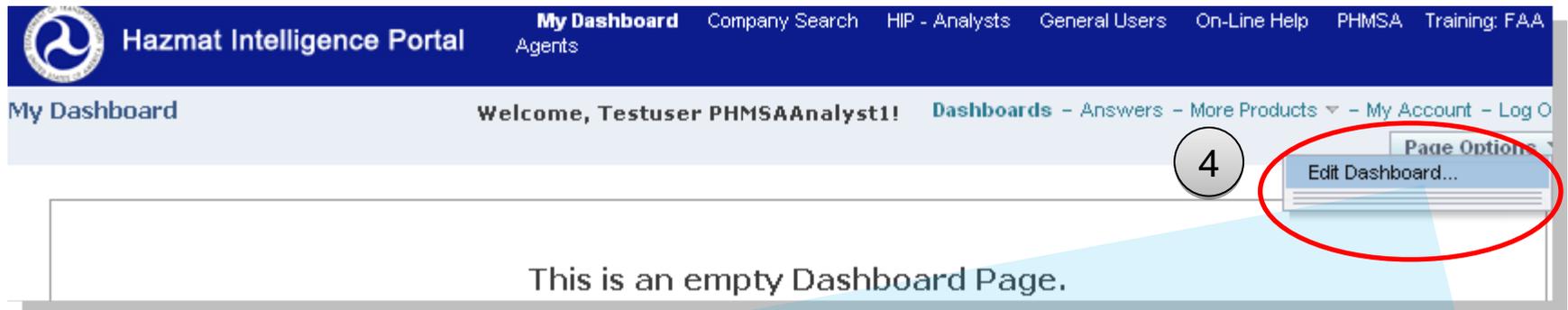


Welcome, Testuser PHMSAAAnalyst1! Dashboards - Answers - More Products - My Account

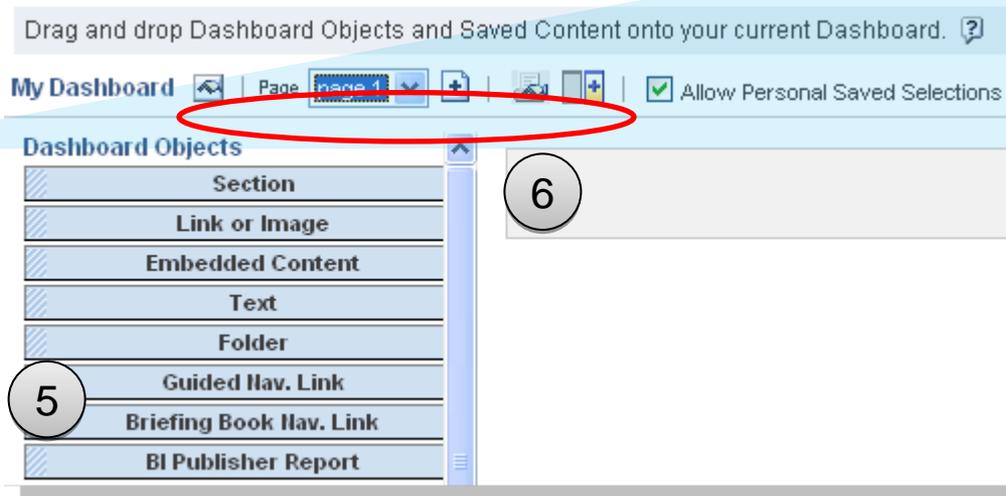


This is an empty Dashboard Page.  
Click [here](#) to add content.

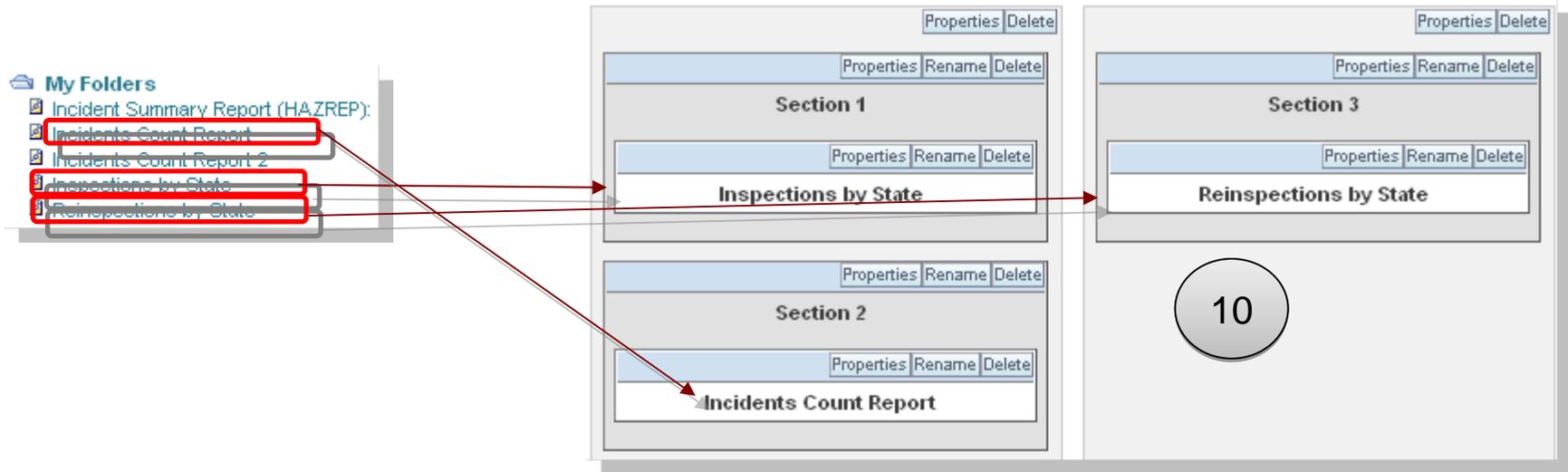




This is an empty Dashboard Page.

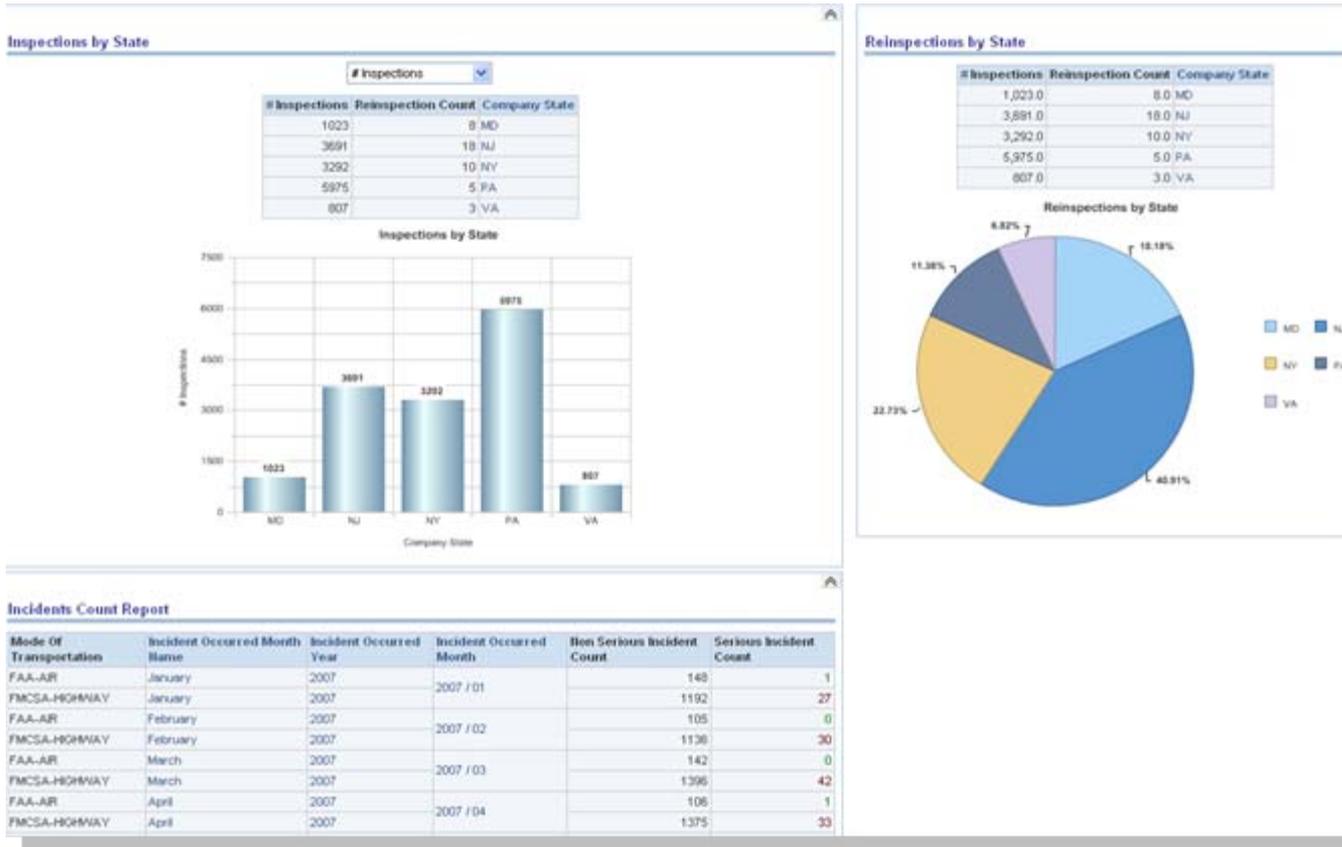


4. To open the dashboard for editing click on the arrow next to the Page Options button and click on Edit Dashboard
5. The dashboard opens for editing. The left side of the screen shows the types of dashboard objects that can be used
6. At the top there are icons that allow users to specify dashboard properties, add page to a dashboard, add a column to a dashboard



7. Drag a section object in your dashboard, then click on the 'add column icon'  to add a new column and drag in another section to your new column
8. In the "Dashboard Editor" a saved content can be dragged from the Presentation Catalog directly into the dashboard. An example is shown in the next few steps
9. Drag "Inspections by State" report into your first section. The layout area is highlighted in blue to indicate that you have an insertion point for the object.
10. Drag in the reports in your folders as shown on the graph

10. The Section Header can be renamed by clicking on the Rename Option.
11. Similarly the sections can be formatted using the properties button
12. Click on the Save button on top of the page
13. Dashboard layout should look like this



- ✓ Add a new page to your dashboard
- ✓ Add additional reports you created in previous exercises to your new dashboard page
- ✓ Navigate between the 2 pages of your dashboard

## Dashboard Prompts

✓ Dashboard prompts are used to allow users to filter results of embedded requests in a dashboard

To Create a Dashboard Prompt,

1. Click the Answers link. In the Selection Pane, click the “**New Dashboard Prompt**”  icon and in the drop-down Subject Area menu, select Multi Modal subject area
2. In the Selection Pane, click on the Mode of Transportation name to add it to the prompt



The prompt should look like this. In the example the Dashboard Prompt will filter the Incidents Mode of Transportation column in reports within the dashboard that contain Incidents Mode of Transportation

Group	Column	Operator	Control	Show	Default to	Set Variable	Label
	Mode Of Transportation	 is equal to / is in	Drop-down List	All Values	Report Defaults	None	
				<input checked="" type="checkbox"/> (All Choices)			
				<input type="checkbox"/> Constrain			

### Dashboard Prompt

Prompts for values which filter results on either an entire Dashboard or the current Dashboard page.

Scope Dashboard

3

### Prompts

Click on columns in the selection pane to add them to the Dashboard Prompt. On a Dashboard, multiple column prompts are allowed. Checking the "Group" option, however, will allow a stacked presentation.

Group	Column	Operator	Control	Show	Default to
	Mode Of Transportation	 is equal to / is in	Drop-down List	All Values	Report Defaults
				<input checked="" type="checkbox"/> (All Choices)	
				<input type="checkbox"/> Constrain	

3. Select **“Dashboard”** from the Scope drop-down menu. The filter will now be applied to all pages in any dashboard with which it is associated
4. Click the **“Save”** icon and save the prompt.

**Columns**  
Click on column names in the selection pane to add the format, formula and filters by clicking the buttons below

<b>Mode Of Transportation</b>	<b>Date - Incident Occurred</b>
<b>Mode Of Transportation</b> ↑↓	<b>Incident Occurred Month</b>
   	   

**Filters**  
Add filters to the request criteria by holding down the Ctrl key below included columns. Add a saved filter by clicking on the filter icon below.

**Create/Edit Filter**

Column **Mode Of Transportation**

Operator **is equal to / is in**

Value

- is equal to / is in
- is not equal to / is not in
- is less than
- is greater than
- is less than or equal to
- is greater than or equal to
- is between
- is null
- is not null
- is in top
- is in bottom
- contains all
- contains any
- does not contain
- begins with
- ends with
- is LIKE (pattern match)
- is not LIKE (pattern match)
- is prompted

**Add ▶**

**Advanced ▶**

**Create/Edit Filter** [Help](#)

Column **Mode Of Transportation**

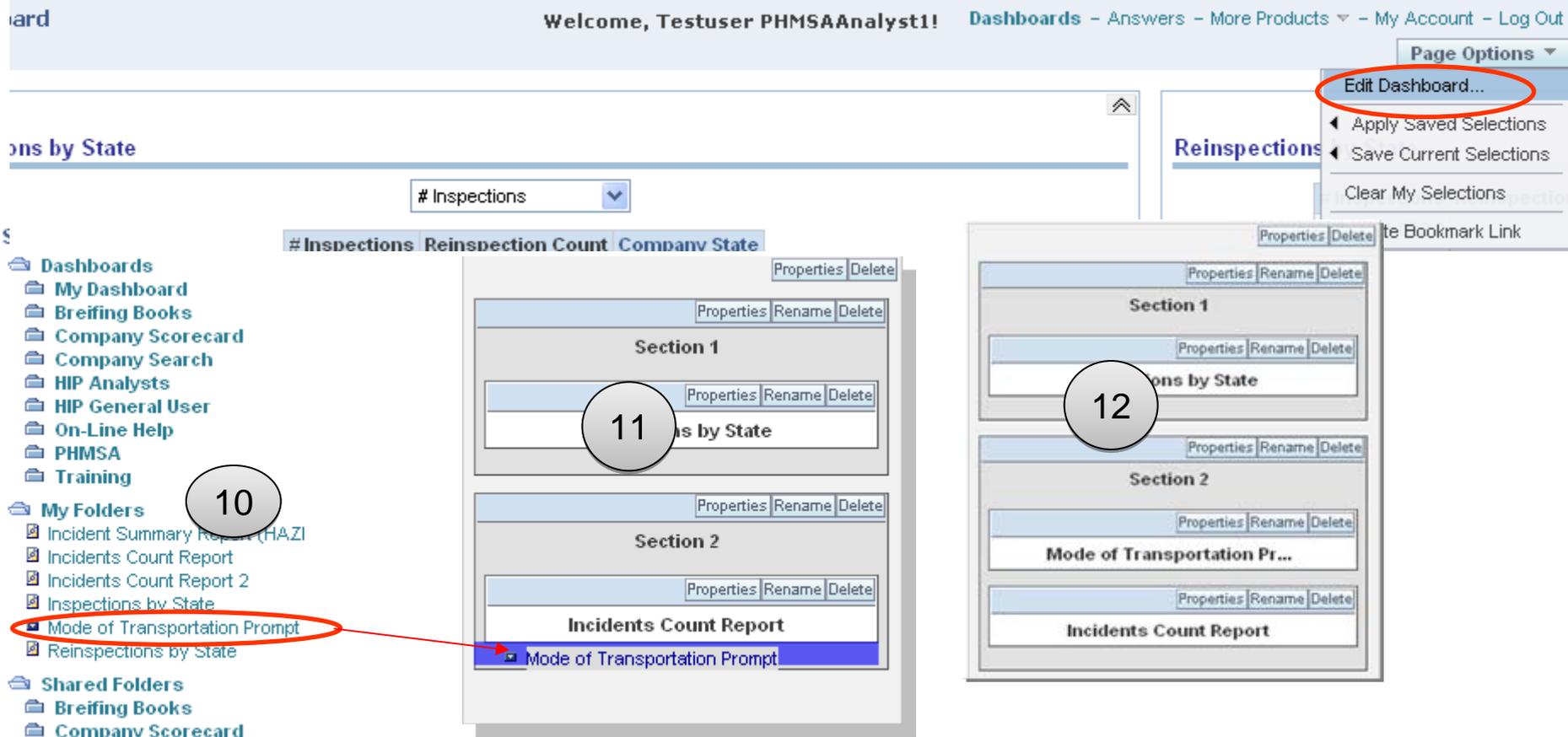
Operator **is prompted**

**Add ▶** **Clear Values**

**Advanced ▶**

**OK** **Cancel**

5. In order to use a dashboard prompt to filter a report, the report must contain a filter that is telling it to get the value passed from the dashboard prompt
6. Open the Incidents Count Report for editing . If you have a filter on the Mode of Transportation delete it by clicking on the X next to the filter
7. Create a new filter based on the Mode of Transportation. When the Create Filter dialog box opens, select the 'is prompted' operator. This will allow the report to pick up values passed from the dashboard prompt
8. Click Ok and save the report



9. Click on **Dashboards** link to navigate to your dashboard, then click **Page Options>Edit Dashboard** to open the Dashboard Editor
10. From the left hand Selection Pane, drag the Mode of Transportation Prompt to Section 2. This area is highlighted in blue when you have found the insertion point
11. Click and drag the Mode of Transportation prompt above the Incidents Count Report and save your dashboard

12. Select a Mode of Transportation in your dashboard prompt and see how the data changes

**Mode Of Transportation**

▼ Go

- (All Choices)
- FAA-AIR
- FMCSA-HIGHWAY
- FRA-RAILWAY
- FREIGHT FORWARDER
- N/A
- OTHER
- USCG-WATER

### Incidents Count Report

Mode Of Transportation	Incident Occurred Month Name	Incident Occurred Year	Incident Occurred Month
FAA-AIR	January	2007	2007 / 01
FMCSA-HIGHWAY	January	2007	2007 / 01
FRA-RAILWAY	January	2007	2007 / 01

**Mode Of Transportation**

FMCSA-HIGHWAY ▼ Go

### Incidents Count Report

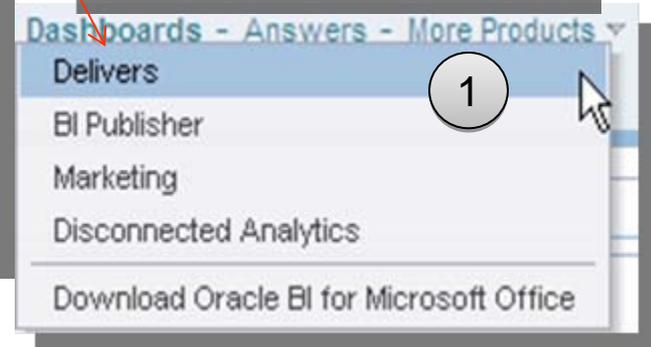
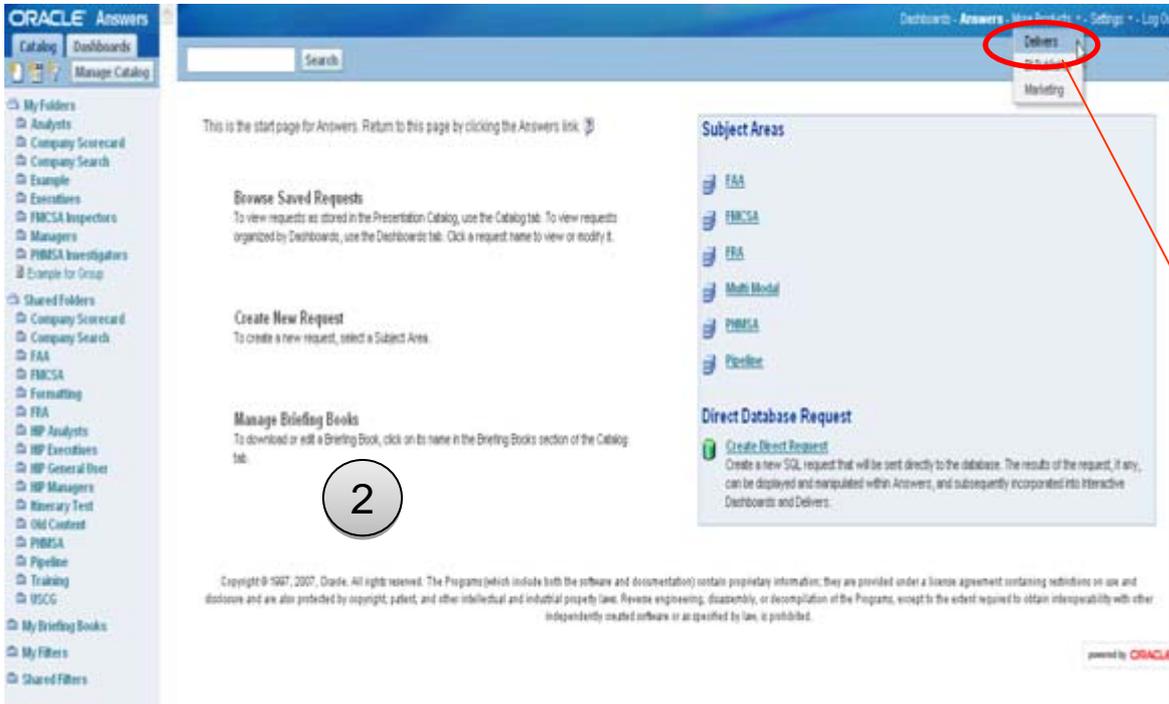
Mode Of Transportation	Incident Occurred Month Name	Incident Occurred Year	Incident Occurred Month	Non Serious Incident Count	Serious Incident Count
FMCSA-HIGHWAY	January	2007	2007 / 01	1192	27
FMCSA-HIGHWAY	February	2007	2007 / 02	1136	30
FMCSA-HIGHWAY	March	2007	2007 / 03	1396	42
FMCSA-HIGHWAY	April	2007	2007 / 04	1375	33

- ✓ Create a dashboard prompt that allows the users to select which month they want to see information for

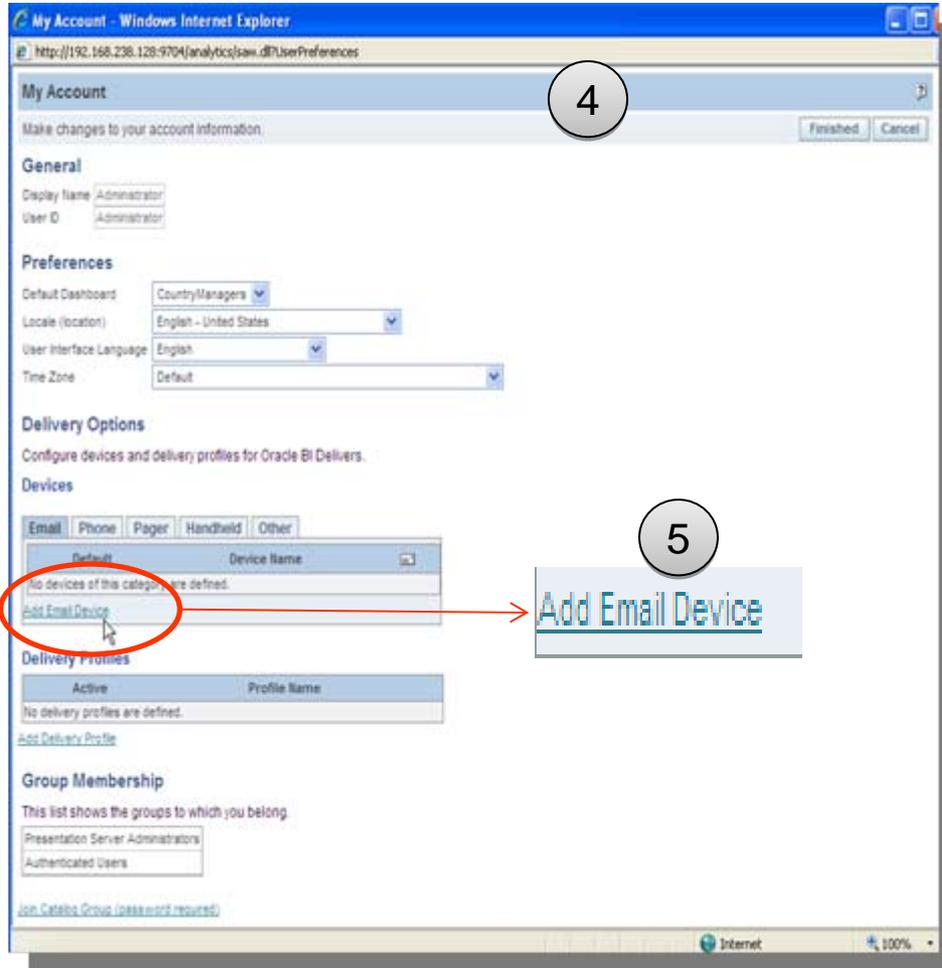
1. Introduction to Oracle Delivers (5 min)
2. Configuring User Device (10 min)
3. Creating an Alert (10 min)

- ✓ Oracle Business Intelligence Delivers is the interface used to create alerts based on Oracle Business Intelligence Answers results
- ✓ Delivers can be used to detect specific results and notify the appropriate person or group through Web, wireless, mobile, and other voice communication channels
- ✓ iBots deliver reports and alerts to end users. iBots are configured and submitted for execution using Delivers

## ✓ Accessing Oracle BI Delivers



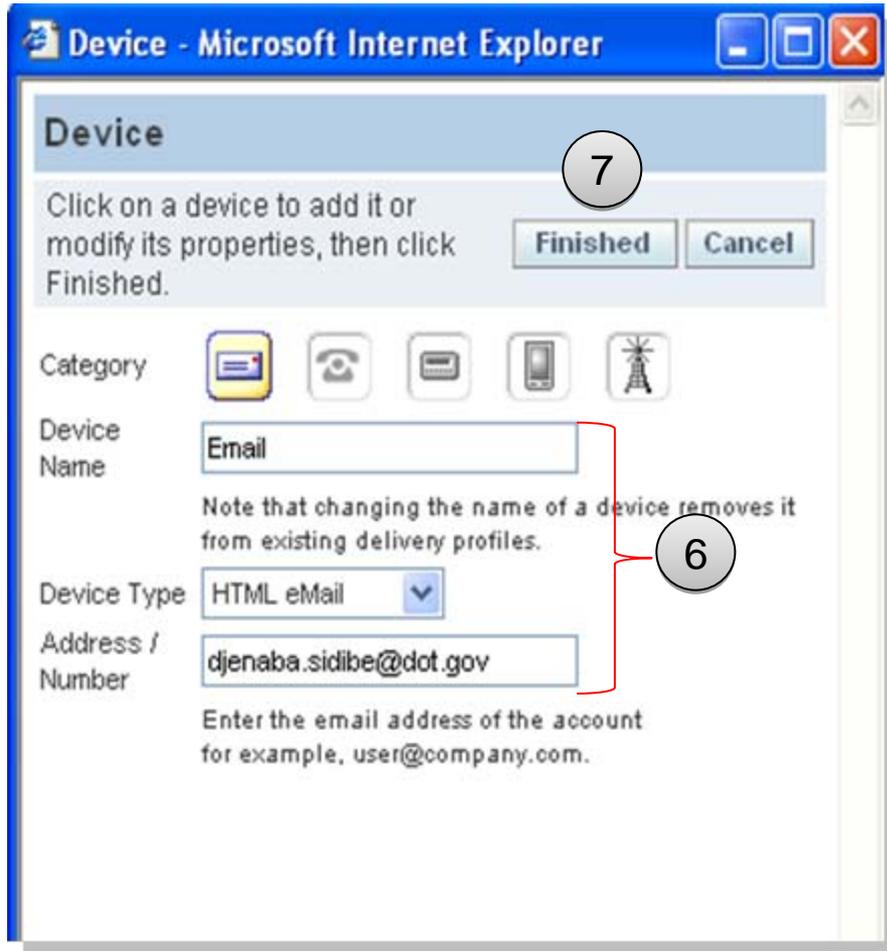
1. Log Into Oracle Business Intelligence & Click on **Delivers** option below More Products tab
2. The Delivers Page appears



✓ Configure Devices & Delivery Profiles

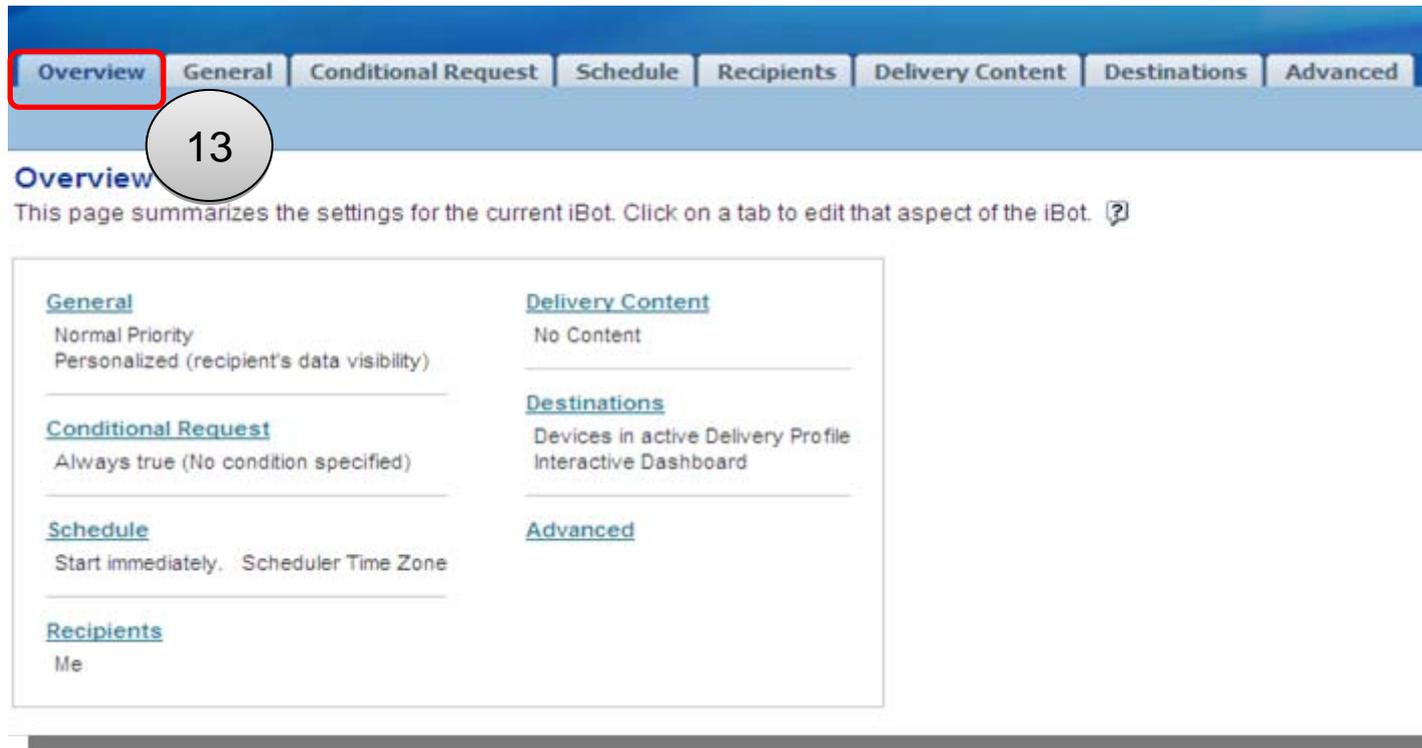
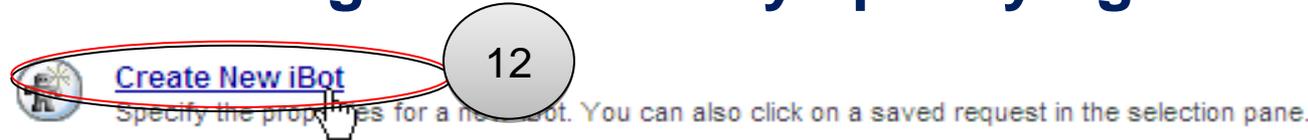
-  [Create New iBot](#)  
Specify the properties for a new iBot. You can
-  [Edit My Account](#) 3  
Customize default devices and profiles.
-  [Show iBots Acting on My Behalf](#)  
Review the iBots I own, or am the recipient of.

3. Click on Edit My Account to set up the device profile for iBot on the Delivers Page
4. The My Account Page appears
5. Click the Add Email Device Link to specify devices to receive the content

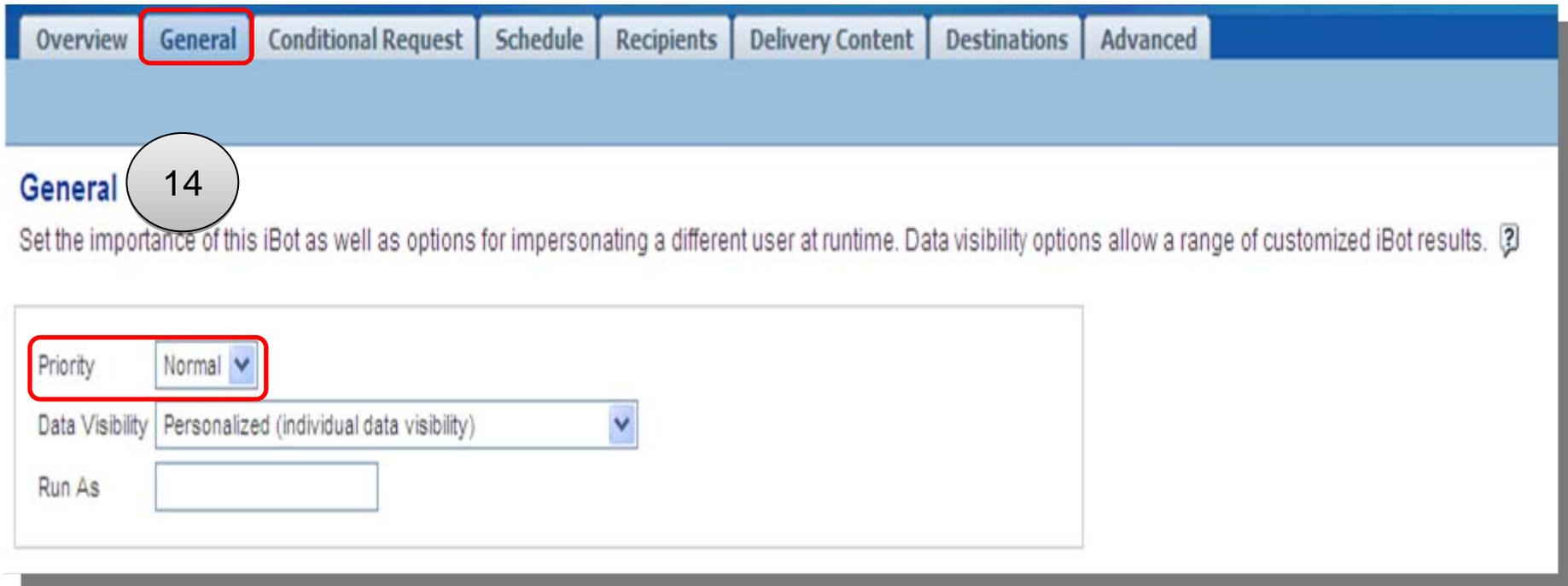


6. The Device dialog box appears. Enter Device Name , select Device Type and Address
7. Click Finished
8. The email device appears
9. Click “Finished” again to close the My Account window

## ✓ Creating a new iBot by specifying iBot Properties



12. Click Create New iBot to deliver the request to your dashboard based on a specified schedule
13. The Overview page appears



Overview **General** Conditional Request Schedule Recipients Delivery Content Destinations Advanced

**General** 14

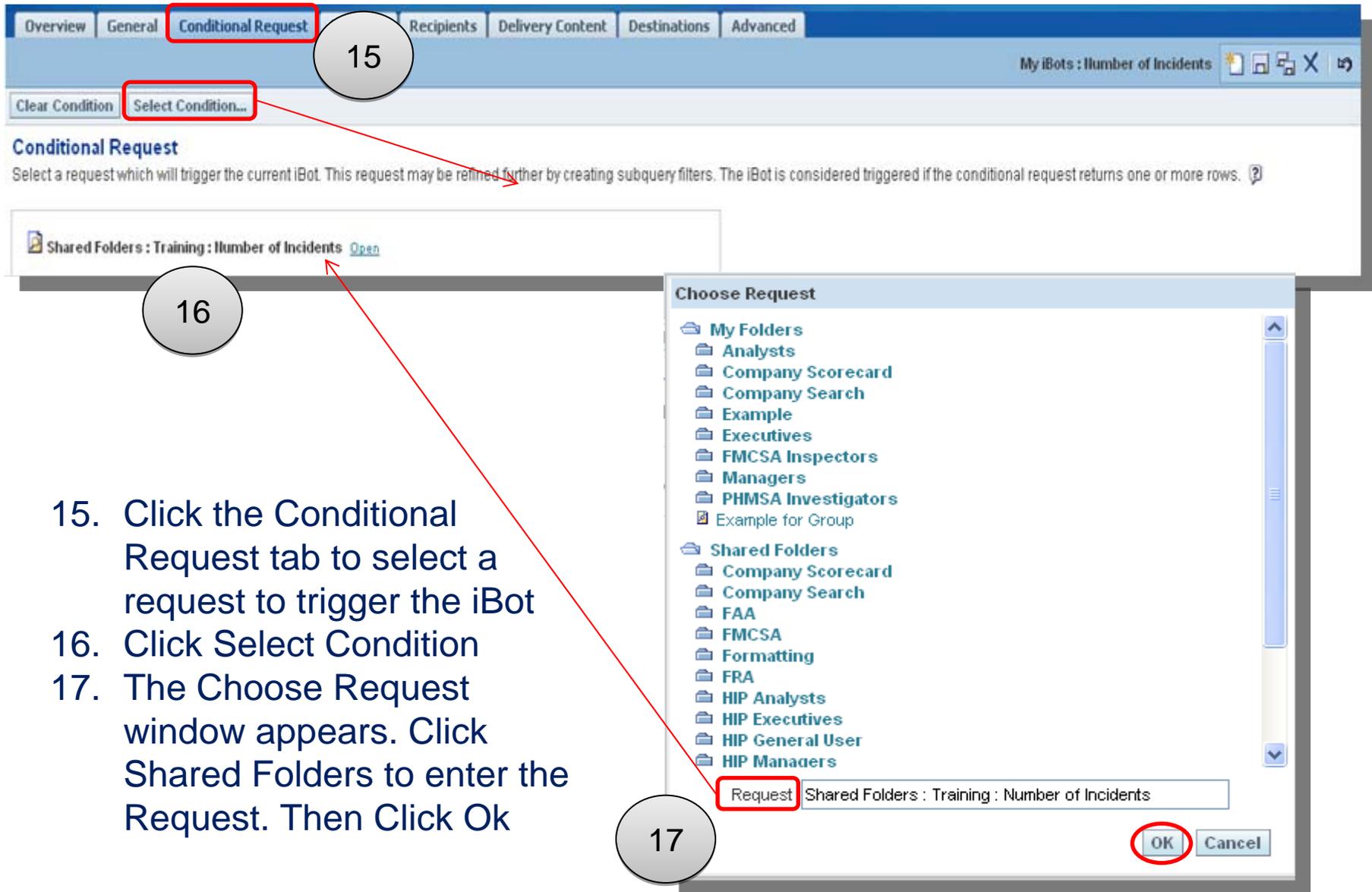
Set the importance of this iBot as well as options for impersonating a different user at runtime. Data visibility options allow a range of customized iBot results. ?

Priority Normal ▼

Data Visibility Personalized (individual data visibility) ▼

Run As

14. Click the General tab to specify the iBot priority and how to send the delivery content. Set Priority to Normal, High or Low based on your preference



Overview General **Conditional Request** Recipients Delivery Content Destinations Advanced

My iBots : Number of Incidents

Clear Condition **Select Condition...**

### Conditional Request

Select a request which will trigger the current iBot. This request may be refined further by creating subquery filters. The iBot is considered triggered if the conditional request returns one or more rows. ?

Shared Folders : Training : Number of Incidents [Open](#)

#### Choose Request

- My Folders
  - Analysts
  - Company Scorecard
  - Company Search
  - Example
  - Executives
  - FMCSA Inspectors
  - Managers
  - PHMSA Investigators
  - Example for Group
- Shared Folders
  - Company Scorecard
  - Company Search
  - FAA
  - FMCSA
  - Formatting
  - FRA
  - HIP Analysts
  - HIP Executives
  - HIP General User
  - HIP Managers

Request: Shared Folders : Training : Number of Incidents

OK Cancel

15. Click the Conditional Request tab to select a request to trigger the iBot
16. Click Select Condition
17. The Choose Request window appears. Click Shared Folders to enter the Request. Then Click Ok

Overview General Conditional Request **Schedule** Recipients Delivery Content Destinations Advanced

**Schedule**  
Create or edit the schedule this iBot will follow. ?

Set schedule

Start immediately

Start Date  

Time of Day  (e.g. 12:00:00 AM)

Set Time Zone Scheduler Time Zone

**Recurrence**

Once Run once (or on one day if repeating)

Daily

Weekly

Monthly

Repeat every  minutes until  (e.g. 11:59:59 PM)

**End Date**

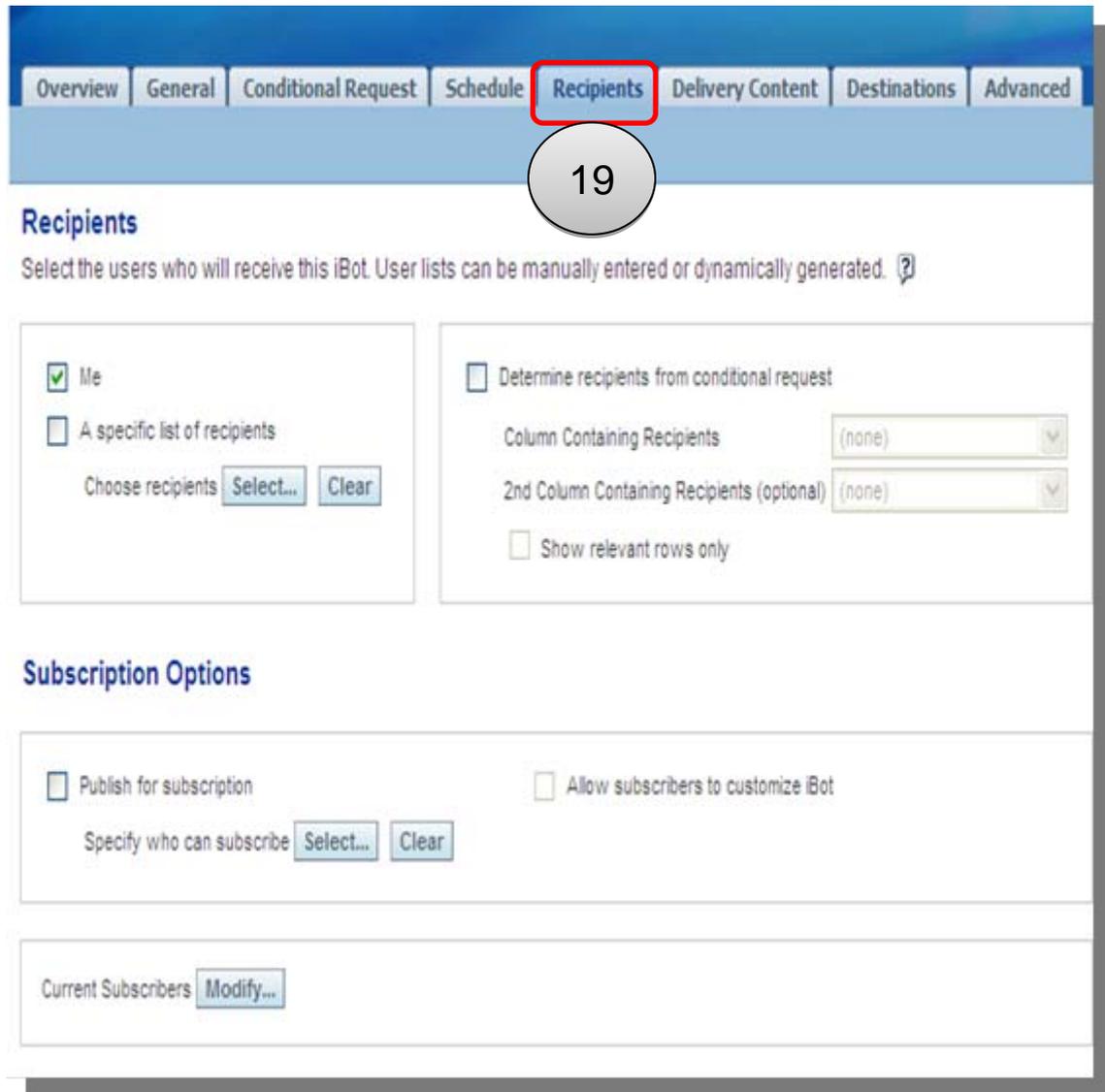
None

End by  

18

18. Click on Schedule tab and create a schedule for the iBot to follow – Set your iBot to start immediately

19. Click on Recipients tab to select the users and groups to receive delivery content of iBot



Overview | General | Conditional Request | Schedule | **Recipients** | Delivery Content | Destinations | Advanced

19

### Recipients

Select the users who will receive this iBot. User lists can be manually entered or dynamically generated. ?

Me  
 A specific list of recipients  
Choose recipients

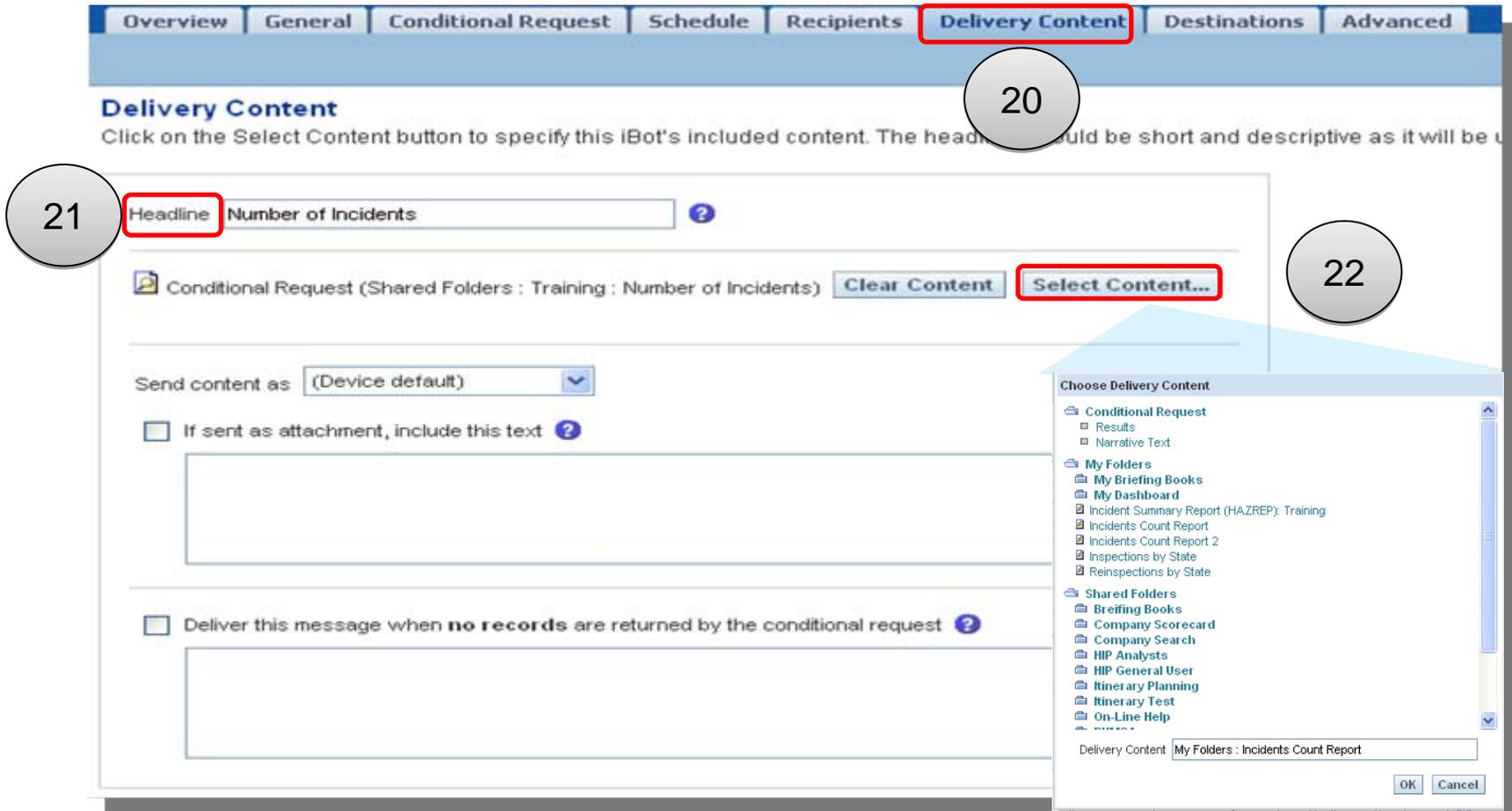
Determine recipients from conditional request  
Column Containing Recipients   
2nd Column Containing Recipients (optional)   
 Show relevant rows only

### Subscription Options

Publish for subscription  
Specify who can subscribe

Allow subscribers to customize iBot

Current Subscribers



Overview | General | Conditional Request | Schedule | Recipients | **Delivery Content** | Destinations | Advanced

### Delivery Content

Click on the Select Content button to specify this iBot's included content. The headline should be short and descriptive as it will be used in the alert.

**21** Headline

Conditional Request (Shared Folders : Training : Number of Incidents)  **22**

Send content as: (Device default) [v]

If sent as attachment, include this text

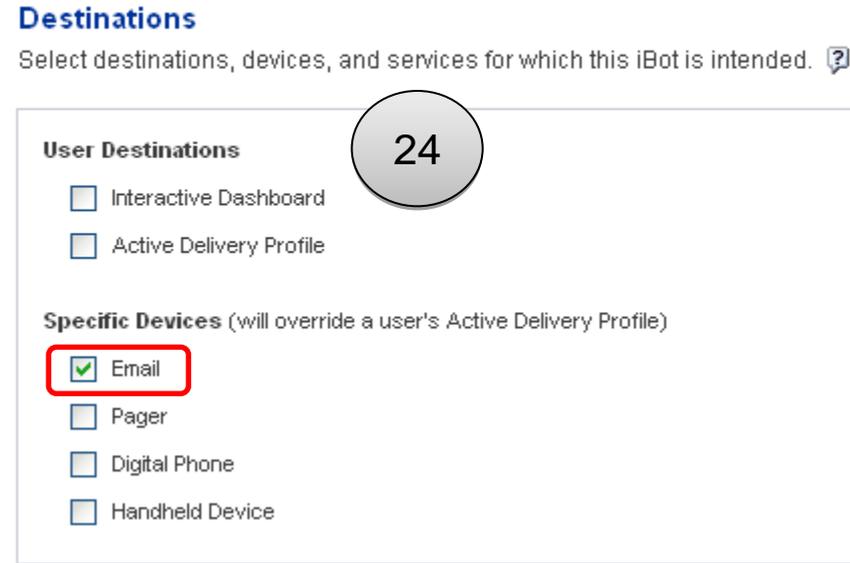
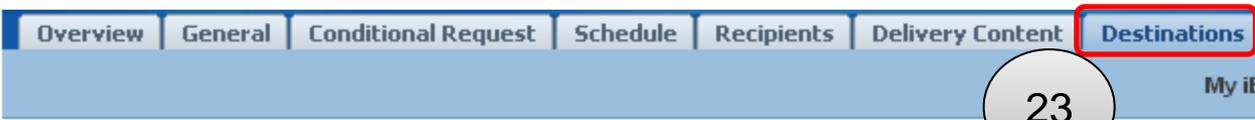
Deliver this message when **no records** are returned by the conditional request

**Choose Delivery Content**

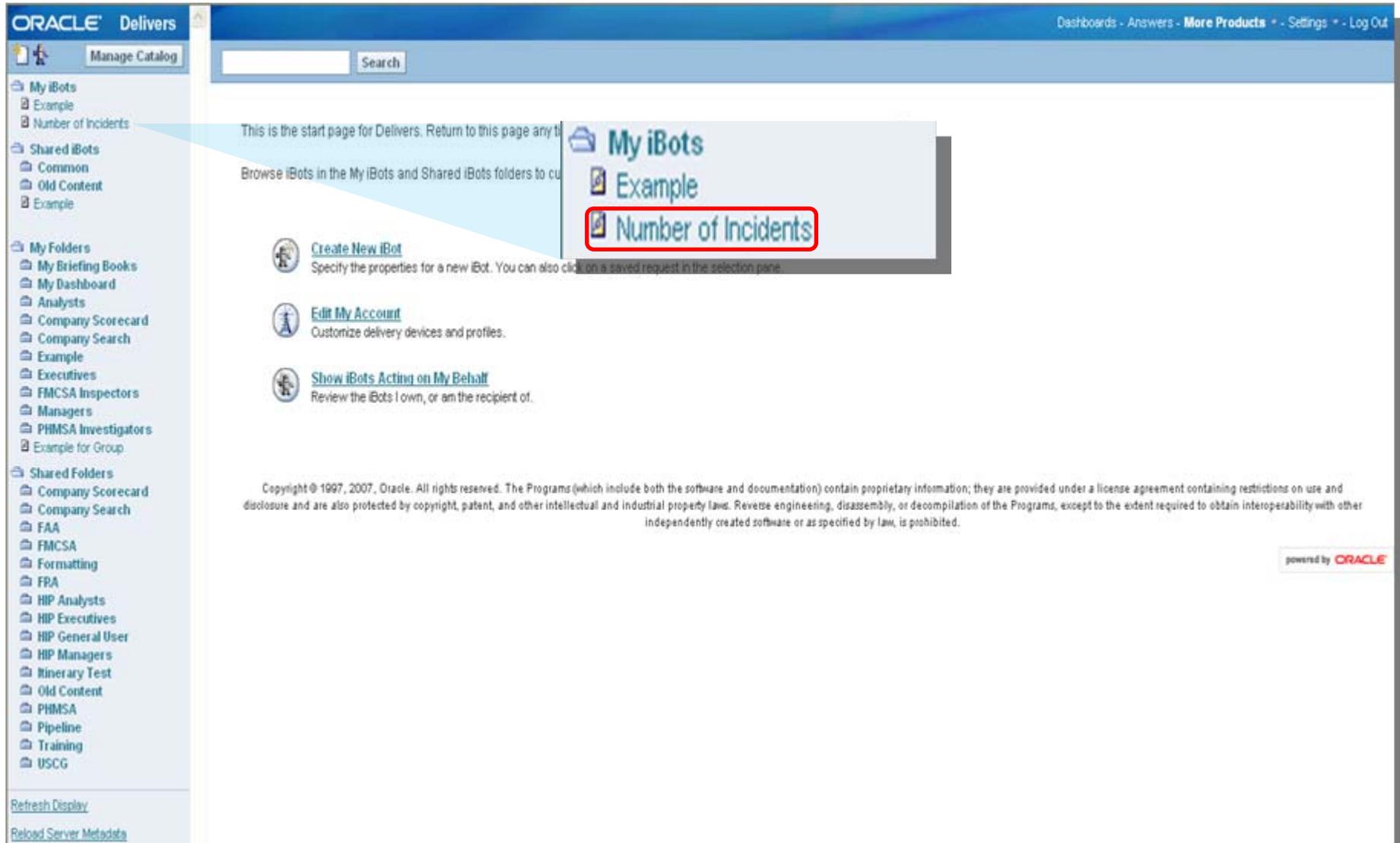
- Conditional Request
  - Results
  - Narrative Text
- My Folders
  - My Briefing Books
  - My Dashboard
  - Incident Summary Report (HAZREP): Training
  - Incidents Count Report
  - Incidents Count Report 2
  - Inspections by State
  - Reinspections by State
- Shared Folders
  - Briefing Books
  - Company Scorecard
  - Company Search
  - HIP Analysts
  - HIP General User
  - Itinerary Planning
  - Itinerary Test
  - On-Line Help

Delivery Content: My Folders : Incidents Count Report

20. Use the Delivery Content tab to specify the type of content to deliver with the iBot
21. Enter a Headline
22. Select content by clicking on Select Content button



23. Click on Destinations tab to specify a range of desired devices and destinations for iBots
24. If Interactive Dashboards is selected, the active iBots will appear in a Dashboard Alerts! Section – If Email is selected in the Devices the iBot will be sent to the specified email address
25. Click on Save button to save the iBot. Click Ok
26. The saved iBot will notify you by email that your iBot has run



ORACLE Delivers

Dashboards - Answers - More Products - Settings - Log Out

Manage Catalog

Search

My iBots

- Example
- Number of Incidents

Shared iBots

- Common
- Old Content
- Example

My Folders

- My Briefing Books
- My Dashboard
- Analysts
- Company Scorecard
- Company Search
- Example
- Executives
- FMCSA Inspectors
- Managers
- PHMSA Investigators
- Example for Group

Shared Folders

- Company Scorecard
- Company Search
- FAA
- FMCSA
- Formatting
- FRA
- HIP Analysts
- HIP Executives
- HIP General User
- HIP Managers
- Itinerary Test
- Old Content
- PHMSA
- Pipeline
- Training
- USCG

My iBots

- Example
- Number of Incidents

Create New iBot

Specify the properties for a new iBot. You can also click on a saved request in the selection pane.

Edit My Account

Customize delivery devices and profiles.

Show iBots Acting on My Behalf

Review the iBots I own, or am the recipient of.

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Refresh Display

Reload Server Metadata



## HIP Answers Model User Guide

**Version: 1.0**

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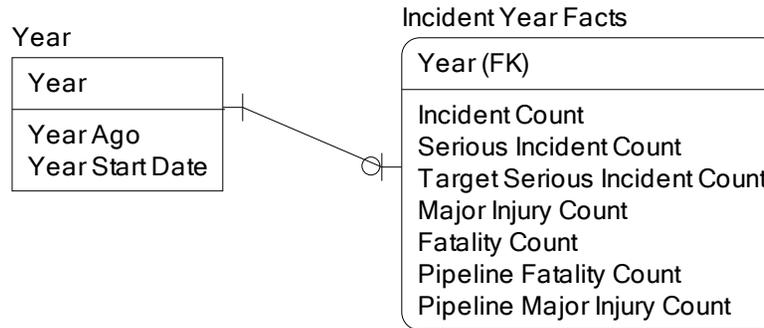
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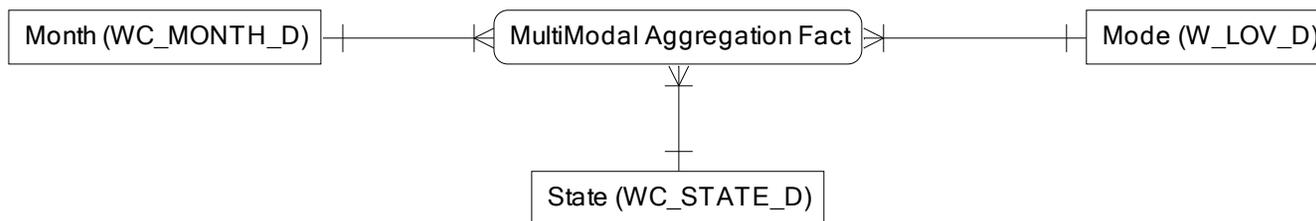
# 1 MULTIMODAL SUBJECT AREA

## 1.1 Incident Data Aggregated by Year - Actual vs. Projected



Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
Incident Data Aggregated by Year - Actual vs. Projected	Incident Occurred Year Attributes and Facts		Folder		This folder and sub folders only work together, and with no other dimensions or Facts
		Incident Occurred Year	Dimension	All fields in the Dimension	The Year the incident occurred or is projected to occur
		Fact - Incident Year Aggregate	Facts	All fields in the Fact	Measures about HAZMAT and Pipeline incidents rolled up to a year level

## 1.2 Multimodal Data Aggregated by State, Agency of transportation, and Month



Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
Multimodal Data Aggregated by State, Agency of transportation, and Month	Intermodal Attributes and Facts		Folder		This folder and sub folders only work together, and with no other dimensions or Facts. This group of folders allows users to compare trends in various types of transaction captured by the HIP.
		Intermodal Month	Dimension	All fields in the Dimension	A month and year dimension that allows a user to see aggregates by month
		Intermodal States	Dimension	All fields in the Dimension	Allows analysis of data by State or regional breakdown.
		Fact - Intermodal Counts	Dimension	State	Quick State Dimension
			Dimension	Agency Name	The Agency or Agency of transportation associated to the grouped transactions
			Facts	Incident Count	5800 Incident count geographically based on the location of the incident
				Incident Count - Shipper	5800 Incident count geographically based on the location of the shipper
				Serious Incident Count - Location	5800 Serious Incident count geographically based on the location of the incident
				Serious Incident Count - Shipper	5800 Serious Incident count geographically based on the location of the shipper
				Registrations Count	The number of Registrations across Modes
				Special Permit Count	Number of PHMSA Special Permits
				Approval Count	Number of PHMSA Approvals
				Inspection Count	Number of inspections across Modes
				Violations Count	The number of violations across Modes
				Penalties Count	The number of penalties, discrepancies, and warning letters issues across Modes.
Incident Fatality Count - Location	5800 Incident count geographically based on the location of the incident				
Incident Major Injury Count - Location	5800 Incident count geographically based on the location of the incident				
Incident Minor Injury Count - Location	5800 Incident count geographically based on the location of the incident				
Major Injury Fatality Trend Count - Location	5800 Incident count geographically based on the location of the incident				

### 1.3 High Level analysis of 5800 Incidents

High Level analysis of 5800 Incidents - Will provide unique counts for incident regardless of number of shippers or products

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
High Level analysis of 5800 Incidents - Will provide unique counts for incident regardless of number of shippers or products	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.	
	Contact		Dimension	All fields in the Dimension	The company contact listed	
	Incidents/Inspections Location	Geography - Location	Dimension	All fields in the Dimension	The location of the incident when the data allowed for matching to a City and State, or Zip code.	
	5800 Incidents Attributes			Folder		Attributes specific to only 5800 incidents.
		Date - Incident Created		Dimension	All fields in the Dimension	Date the incident was created
		Date - Incident Occurred		Dimension	All fields in the Dimension	Date the incident Occurred
		Transportation Phase		Dimension	All fields in the Dimension	
		Incident - Form 5800		Dimension	All fields in the Dimension	Contains all non numerical data from the 5800 incident
		Agency Of Transportation		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.
	5800 Incidents Facts			Folder		
		Fact - Incident Form 5800		Fact	# of Incidents Occurred	Count the total number of incidents
					Incidents With Fatalities Count	Count of incidents with Fatalities
					All other Fact columns	

### 1.4 Detail Level analysis of 5800 Incidents

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
Detail Level analysis of 5800 Incidents - Unique record for each package, package layer, products, and shipper in an incident	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.	
	Contact		Dimension	All fields in the Dimension	Carrier Company Contact	
	Incidents/Inspections Location	Geography - Location	Dimension	All fields in the Dimension	The location of the incident when the data allowed for matching to a City and State, or Zip code.	
	5800 Incidents Attributes		Folder		All fields in the Dimension	Attributes specific to only 5800 incidents.
		Date - Incident Created		Dimension	All fields in the Dimension	Date the incident was created
		Date - Incident Occurred		Dimension	All fields in the Dimension	Date the incident Occurred
		Incident - Form 5800		Dimension	All fields in the Dimension	
		Transportation Phase		Dimension	All fields in the Dimension	
	5800 Incident Detail Attributes	Company - Incident Carrier		Dimension	All fields in the Dimension	Carrier associated with the Incident
		Company - Incident Shipper		Dimension	All fields in the Dimension	
		Incident Destination		Dimension	All fields in the Dimension	
		Incident Origin		Dimension	All fields in the Dimension	
		Incident Details		Dimension	All fields in the Dimension	
		Package		Dimension	All fields in the Dimension	
		Package Failure		Dimension	All fields in the Dimension	
		Package Layer - Inner		Dimension	All fields in the Dimension	
	Package Layer - Outer		Dimension	All fields in the Dimension		
	5800 Incident Detail Facts			Folder	All fields in the Dimension	
		Fact - Incident Details		Fact	# Incidents	This is a count of distinct incidents.
					# of Incident Details	Some incidents have more then 1 product, shipper, package, or package layer, this counts the number of records in the fact

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
				Total Damages	Summing from this fact could result in double counting based on the number of shipper, products, or packages.
				All other fields in the Fact	

### 1.5 Pipeline Incidents

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
Pipeline Incidents	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.	
	Incidents/Inspections Location	Geography - Location	Dimension	All fields in the Dimension	Location of the incident	
	Pipeline Incident Attributes and Facts			Folder	All fields in the Dimension	Attributes specific to only pipeline incidents
		Pipeline Incidents		Dimension	All fields in the Dimension	
		Date - Incident Occurred		Dimension	All fields in the Dimension	
		Fact - Pipeline Incidents		Fact	All fields in the Fact	

### 1.6 NRC Incidents – Telephonic and URI

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
NRC Incidents	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of NRC incidents	
	Incidents/Inspections Location	Geography - Location	Dimension	All fields in the Dimension		
	NRC Incidents Attributes			Folder		
		Company - Incident Reporting		Dimension	All fields in the Dimension	Company that reported the incident

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
		Company - Incident Responsible	Dimension	All fields in the Dimension	Company responsible for the incident
		Incident - Telephonics	Dimension	All fields in the Dimension	
	NRC Incidents Facts		Folder		
		Fact - Incident Telephonics	Fact	All fields in the Fact	

**1.7 NRC Incidents details - including products and vehicles involved.**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
NRC Incidents details - including products and vehicles involved.	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.	
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of NRC incidents	
	Incidents/Inspections Location	Geography - Location	Dimension	All fields in the Dimension		
	NRC Incidents Attributes			Folder		
		Company - Incident Reporting		Dimension	All fields in the Dimension	Company that reported the incident
		Company - Incident Responsible		Dimension	All fields in the Dimension	Company responsible for the incident
		Incident - Telephonics		Dimension	All fields in the Dimension	
	NRC Incidents Detail Attributes and Facts			Folder		
		Contact - Incident Initial Reporting		Dimension	All fields in the Dimension	
		Contact - Incident Reporting		Dimension	All fields in the Dimension	
		Contact - Incident Responsible		Dimension	All fields in the Dimension	
		Notifications		Dimension	All fields in the Dimension	
		Fact - Incident Vehicle Details		Fact	All fields in the Fact	

### 1.8 PHMSA Approvals

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
PHMSA Approvals	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.	
	Agency		Dimension	All fields in the Dimension	Will be PHMSA-HAZMAT for approval records	
	Contact		Dimension	All fields in the Dimension		
	Source		Dimension	All fields in the Dimension		
	Approval Attributes and Facts		Folder		All fields in the Dimension	
		Approvals	Dimension		All fields in the Dimension	
		Date - Approval Approved Date	Dimension		All fields in the Dimension	
		Date - Approval Start Date	Dimension		All fields in the Dimension	
	Fact - Approvals	Fact		All fields in the Fact		

### 1.9 PHMSA Special Permits

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
PHMSA Special Permits	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.
	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.
	Agency		Dimension	All fields in the Dimension	Will be PHMSA-HAZMAT for approval records
	Contact		Dimension	All fields in the Dimension	
	Source		Dimension	All fields in the Dimension	

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
	Special Permits Attributes and Facts	Date - Special Permits Approval Date	Folder	All fields in the Dimension	
		Date - Special Permits End Date	Dimension	All fields in the Dimension	
		Date - Special Permits Start Date	Dimension	All fields in the Dimension	
		Special Permits	Dimension	All fields in the Dimension	
		Fact - Special Permits	Fact	All fields in the Fact	

**1.10 PHMSA Registrations**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
PHMSA Registrations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.	
	Agency		Dimension	All fields in the Dimension	Will be PHMSA-HAZMAT for approval records	
	Source		Dimension	All fields in the Dimension		
	Registrations Attributes			Folder	All fields in the Dimension	
		Date - Registrations End Date		Dimension	All fields in the Dimension	
		Date - Registrations Start Date		Dimension	All fields in the Dimension	
		Previous Registrations		Dimension	All fields in the Dimension	If a previous registration was recorded connections can be made between registrations
		Registrations		Dimension	All fields in the Dimension	
	Registrations Facts			Folder	All fields in the Dimension	
		Fact Registrations		Fact	# of FRA Registrations	One Time Movements

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
			Fact	# of PHMSA Registrations	
			Fact	# of Registrations	Total Registrations across Modes
			Fact	Amount Due	
			Fact	Amount Received	
			Fact	Bad Credit Card Amount	
			Fact	Batch Refund Amount	
			Fact	Certificate Sent Count	
			Fact	Expedited Amount	
			Fact	Processing Amount	
			Fact	Refund Amount	
			Fact	Registration Amount	
			Fact	Underpayment Amount	
			Dimension	Registration Short Description	

**1.11 FRA One time movements**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
FRA One time movements	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	Will be PHMSA-HAZMAT for approval records	
	Source		Dimension	All fields in the Dimension	FRA	
	Registrations Attributes			Folder	All fields in the Dimension	
		Date - Registrations End Date		Dimension	All fields in the Dimension	
		Date - Registrations Start Date		Dimension	All fields in the Dimension	
	FRA Registrations			Dimension	All fields in the Dimension	
Transaction Type			Dimension	All fields in the Dimension		

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
	Registrations Facts		Folder		
		Facts - Registrations	Folder		
			Fact	# of FRA Registrations	One Time Movements
			Fact	# of PHMSA Registrations	
			Fact	# of Registrations	Total Registrations across Modes

**1.12 RAM Certifications**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
RAM Certifications	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	Will be PHMSA-HAZMAT for approval records	
	Source		Dimension	All fields in the Dimension		
	Contact		Dimension	All fields in the Dimension		
	RAM Certification Attributes and Facts			Folder	All fields in the Dimension	
		Date - RAM Certificates Approval Date		Dimension	All fields in the Dimension	
		Date - RAM Certificates Expiration Date		Dimension	All fields in the Dimension	
		Fact - RAM Certificates		Fact	All fields in the Fact	
		RAM Certificates		Dimension	All fields in the Dimension	

**1.13 FMCSA Cargo Tank Registrations**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
FMCSA Cargo Tank Registrations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.
	Source			All fields in the Dimension	Shows the source of cargo tank registrations
	Cargo Tank Attributes and Facts		Folder	None	Cargo Tank specific dimensions
		Cargo Tank Applications	Dimension	All fields in the Dimension	
		Cargo Tank Registration Details	Dimension	All fields in the Dimension	
		Cargo Tank Registrations	Dimension	All fields in the Dimension	
		Cargo Tank Stamps	Dimension	All fields in the Dimension	
		Date - Cargo Tank Effective Date	Dimension	All fields in the Dimension	
		Date - Cargo Tank Expiration Date	Dimension	All fields in the Dimension	
		Date - Cargo Tank Stamp Authorization Date	Dimension	All fields in the Dimension	
		Date - Cargo Tank Stamp Expiration Date	Dimension	All fields in the Dimension	
		Fact - Cargo Tank Registrations	Facts	All fields in the Fact	

**1.14 FMCSA Census**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
FMCSA Census	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.
	Cargo Tank Attributes and Facts		Folder	None	
		Census	Dimension	All fields in the Dimension	
		Date - Census Start Date	Dimension	All fields in the Dimension	
		Fact - Census	Facts	All fields in the Fact	

**1.15 Multi-Modal Inspections**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
Multi-Modal Inspections	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific enforcement types.	
	Inspections		Dimension	All fields in the Dimension	Fields in this dimension are mode specific so selecting some fields may not produce results across all modes.	
	Inspection Attributes and Facts			Folder		
		Company - Inspections		Dimension	All fields in the Dimension	Available for PHMSA inspections only
		Contact - Inspections Company Contact		Dimension	All fields in the Dimension	
		Contact - Inspections Principal Contact		Dimension	All fields in the Dimension	Available for PHMSA inspections only
		Date - Inspection Created		Dimension	All fields in the Dimension	

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
		Date - Inspections Assessment or Reported	Dimension	All fields in the Dimension	
		Inspector	Dimension	All fields in the Dimension	Available for PHMSA inspections only
		Supervisor	Dimension	All fields in the Dimension	Available for PHMSA inspections only
		Fact - Inspections	Fact	All fields in the Fact	

**1.16 Multi-Modal Inspection Activities: Exhibits, Interviews, Drivers, Railroad Activities, etc**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
Multi-Modal Inspection Activities: Exhibits, Interviews, Drivers, Complaints, etc	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific enforcement types.	
	Contact		Dimension	All fields in the Dimension	Driver information for FMCSA inspections Driver activities.	
	Inspections		Dimension	All fields in the Dimension	Fields in this dimension are mode specific so selecting some fields may not produce results across all modes.	
	Inspection Activity Attributes & Facts			Folder		
		Date - Inspection Created		Dimension	All fields in the Dimension	
		Inspection Units		Dimension	All fields in the Dimension	FMCSA Activities only
		Inspection Activities		Dimension	Activity Type	Displays the type of activity or inspection detail being tracked. Use this to filter reports for different types of inspections
	Fact - Inspections Activities		Fact	All fields in the Fact		

**1.17 PHMSA Complaints**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
PHMSA Complaints	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Complaints	
	Contact		Dimension	All fields in the Dimension	Driver information for FMCSA inspections Driver activities.	
	Inspections		Dimension	All fields in the Dimension	Fields in this dimension are mode specific so selecting some fields may not produce results across all modes.	
	Inspection Activity Attributes & Facts			Folder		
		Date - Inspection Created		Dimension	All fields in the Dimension	
		Inspector		Dimension	All fields in the Dimension	Inspector assigned to the complaint
		Inspection Units		Dimension	All fields in the Dimension	
		Inspection Activities - Complaints		Dimension	Activity Type	Displays the type of activity or inspection detail being tracked.
	Fact - Inspections Activities - Complaints		Fact		All fields in the Fact	

**1.18 Multi-Modal Inspection Violations and Defects: FRA Defects, and other Agency violations**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
Multi-Modal Inspection Violations and Defects: FRA Defects, and other Agency violations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
					transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific violation types.	
	Inspections		Dimension	All fields in the Dimension	Fields in this dimension are mode specific so selecting some fields may not produce results across all modes.	
	Violations/Defects Attributes and Facts			Folder		
			Violations/Defects	Dimension	All fields in the Dimension	
			Violation Type	Dimension	All fields in the Dimension	
			Fact - Violations/Defects	Fact	All fields in the Fact	

**1.19 Multi-Modal Penalties, Warning Letters, and Discrepancies**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
Multi-Modal Penalties, Warning Letters, and Discrepancies	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific enforcement types.	
	Penalties Attributes and Facts			Folder	All fields in the Dimension	
			Date - Penalty Close Date	Dimension	All fields in the Dimension	
			Date - Penalty Final Date	Dimension	All fields in the Dimension	
			Date - Penalty Open Date	Dimension	All fields in the Dimension	
			Fact - Penalties	Fact	All fields in the Fact	

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
		Penalties	Dimension	All fields in the Dimension	

### 1.20 Enforcement Violations

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
Enforcement violations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension		
	Enforcement Violation Attributes and Facts			Folder	All fields in the Dimension	
		Enforcement Violations		Dimension	All fields in the Dimension	
		Date - Enforcement Violations Final Date		Dimension	All fields in the Dimension	
		Fact - Enforcement Violations		Fact	All fields in the Fact	

## 2 FAA SUBJECT AREA

### 2.1 FAA Inspections

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
FAA Inspections	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
					zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	FAA Inspections		Dimension	All fields in the Dimension		
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of inspections	
	Incidents/Inspections Location	Geography - Location	Dimension	All fields in the Dimension		
	Inspection Attributes and Facts			Folder	None	
			Date - Inspections Reported	Dimension	All fields in the Dimension	
			Date - Inspection Created	Dimension	All fields in the Dimension	
		Fact - FAA Inspections	Facts	# of FAA Inspections		

## 2.2 FAA Violations

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
FAA Violations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of violations	
	FAA Inspections		Dimension	All fields in the Dimension	Only this subfolder in Inspections will work properly	
	Violations Attributes and Facts			Folder	None	
			Date - Violation Issued	Dimension	All fields in the Dimension	Date tracked in the source record with the violation

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
		Violation Type	Dimension	All fields in the Dimension	Use to determine the violation type for shipper and carrier violations
		FAA Violations	Dimension	All fields in the Dimension	Attributes Specific to only FMCSA Shipper/Carrier Violations
		Fact - FAA Violations	Facts	Violation ID Number	Unique id number for source system
				# of FAA Violations	

### 2.3 FAA Enforcements

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
FAA Penalties	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific enforcement types.	
	FAA Penalties/Discrepancies/ Warning Letter Attributes and Facts			Folder	None	
		Date - Penalty Final Date	Dimension	All fields in the Dimension		
		Date - Penalty Known Date	Dimension	All fields in the Dimension		
		Penalties	Dimension	All fields in the Dimension		
		Fact - Penalties/ Discrepancies/ Warning Letters	Facts	Penalty Amount		
				FAA Penalties #		
				# of Companies with FAA Penalties		
	# of Companies with Other Penalties					
FAA Penalty Indicator		A count of 1 for transactions that are penalties				
FAA Any Enforcement Indicator						

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
				FAA Any Enforcement Count		
FAA Discrepancies	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific enforcement types.	
	FAA Penalties/Discrepancies/ Warning Letter Attributes and Facts			Folder	None	
		Date - Penalty Final Date		Dimension	All fields in the Dimension	
		Discrepancies		Dimension	All fields in the Dimension	
		Fact - Penalties/Discrepancies/Warning Letters		Facts		FAA Discrepancies #
					FAA Discrepancy Indicator	
					FAA Any Enforcement Indicator	
				FAA Any Enforcement Count		
FAA Warning Letters	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific enforcement types.	
	FAA Penalties/Discrepancies/ Warning Letter Attributes and Facts			Folder	None	
		Date - Penalty Final Date		Dimension	All fields in the Dimension	
		Discrepancies		Dimension	All fields in the Dimension	
		Fact -		Facts	FAA Warning Letters #	

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
		Penalties/Discrepancies/Warning Letters		FAA Warning Letter Indicator	
				FAA Any Enforcement Indicator	
				FAA Any Enforcement Count	

### 3 FMCSA SUBJECT AREA

#### 3.1 FMCSA Inspections

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
FMCSA Carrier Inspections	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of inspections	
	FMCSA Carrier Inspections		Dimension	All fields in the Dimension	Only this subfolder in Inspections will work properly	
	Incidents/Inspections Location	Geography - Location	Dimension	All fields in the Dimension		
	Inspection Attributes and Facts			Folder	None	
		Date - Inspections Reported		Dimension	All fields in the Dimension	
		Date - Inspection Created		Dimension	All fields in the Dimension	
		Geography - Inspection Origin		Dimension	All fields in the Dimension	
		Fact - FMCSA Inspections			Facts	# FMCSA Carrier Inspections
				# Inspections		
				Driver OOS Total		
			Driver Violations Total			

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
				Drug Introduction Arrests		
				Hazmat OOS Total		
				Hazmat Placard Required		
				Hazmat Violations Totals		
				OOS Total		
				Total Vehicle Violations		
				Vehicle OOS Total		
				Total Violations		
				Inspections with Violations Not Sent Count		
				Reported Quantity		
				# OOS Not Sent		
				Total HAZMAT Sent		
				# of Inspection with Drug Arrests		
				Gross Combination Vehicle Weight		
Report Waste Amount						
FMCSA Carrier Inspection Details	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of inspections	
	FMCSA Carrier Inspections		Dimension	All fields in the Dimension	Only this subfolder in Inspections will work properly	
	Inspection Activities Attributes and Facts			Folder	None	
		Date - Inspection Activity Created		Dimension	All fields in the Dimension	
		Date - Inspection Activity Received		Dimension	All fields in the Dimension	
Contact - Driver			Dimension	All fields in the Dimension		
		Inspection Unit	Dimension	All fields in the Dimension	Use to determine the violation type for	

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
					shipper and carrier violations	
		FMCSA Carrier Inspection Activities	Dimension	All fields in the Dimension	Attributes Specific to only FMCSA Shipper/Carrier Violations	
		Fact - Inspection Activities	Facts	Inspection Activity Type		Groups the different types of actions or details found in some inspections. For FMCSA Carrier these in Inspection Units, Drivers, Carriers, and Studies.
				Sequence Number		
				# FMCSA Carrier Inspection Activities		
Inspection Study Count						
FMCSA Reviews	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.	
	FMCSA Reviews		Dimension	All fields in the Dimension		
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of inspections	
	Inspection Attributes and Facts			Folder	None	
		Company - Review Shipper		Dimension	All fields in the Dimension	
		Date - Inspections Reported		Dimension	All fields in the Dimension	
		Date - Inspection Created		Dimension	All fields in the Dimension	
		Fact - Inspections	Facts	# FMCSA Reviews		
				# Inspections		
				# of Reviews w/ Interstate Within 100 Miles		Used to count the number of inspections with the condition true
	# of Reviews w/ Interstate Beyond 100 Miles				Used to count the number of inspections with the condition true	
	# of Reviews w/ Intrastate Within 100 Miles		Used to count the number of inspections with the condition true			

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes		
				# of Reviews w/ Intrastate Beyond 100 Miles	Used to count the number of inspections with the condition true		
				CDL Total			
				Avg Drivers Leased Per Month			
				Total Drivers			
FMCSA Reviews Details	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures		
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.		
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.		
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of inspections		
	FMCSA Reviews		Dimension	All fields in the Dimension	Only this subfolder in Inspections will work properly		
	Inspection Activities Attributes and Facts			Folder	None		
		Date - Inspection Activity Created		Dimension	All fields in the Dimension		
		Date - Inspection Activity Received		Dimension	All fields in the Dimension		
		Contact - Driver		Dimension	All fields in the Dimension		
		FMCSA Security Review Activities		Dimension			
		Fact - Inspection Activities			Facts	Inspection Activity Type	Groups the different types of actions or details found in some inspections. For FMCSA Reviews these are: Interviews and Reasons
						Sequence Number	
	# FMCSA Security Review Activities						
Interview Count							
FMCSA HMPIP Inspections	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures		
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.		

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.	
	FMCSA HMPIP Inspections		Dimension	All fields in the Dimension		
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of inspections	
	Inspection Attributes and Facts			Folder	None	
		Date - Inspections Reported		Dimension	All fields in the Dimension	
		Date - Inspection Created		Dimension	All fields in the Dimension	
		Geography - Inspection Origin		Dimension	All fields in the Dimension	
		Fact - Violations			Facts	# FMCSA HMPIP Inspections
	# Inspections					
	Packing Quantity					
Total Packages						
				Total Violations		

### 3.2 FMCSA Violations

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
FMCSA Carrier Violations or Shipper Violations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.
	Mode Of Transportation		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of violations
	FMCSA Carrier Inspections		Dimension	All fields in the Dimension	Only this subfolder in Inspections will work properly

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
	Violations Attributes and Facts		Folder	None		
		Date - Violation Issued	Dimension	All fields in the Dimension	Date tracked in the source record with the violation	
		Inspection Unit	Dimension	All fields in the Dimension		
		Citations	Dimension	All fields in the Dimension		
		Violation Type	Dimension	All fields in the Dimension	Use to determine the violation type for shipper and carrier violations	
		FMCSA Shipper/Carrier Violations	Dimension	All fields in the Dimension	Attributes Specific to only FMCSA Shipper/Carrier Violations	
		Fact - FMCSA Violations	Facts	Violation ID Number		
				Violation Records Total		
				Post Crash Count		
				Violations Discovered Count		
				Shipper Violations		
Carrier violations						
FMCSA Reviews Violations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of violations	
	FMCSA Reviews		Dimension	All fields in the Dimension	Only this subfolder in Inspections will work properly	
	Violations Attributes and Facts			Folder	None	
			Date - Violation Issued	Dimension	All fields in the Dimension	Date tracked in the source record with the violation
			Violation Type	Dimension	All fields in the Dimension	Use to determine the violation type for review violations
			FMCSA Review Violations	Dimension	All fields in the Dimension	Attributes Specific to only FMCSA Review Violations
			Fact - Violations	Facts	Violation ID Number	

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes		
				Violation Records Total			
				Violations Discovered Count			
				Review Violations			
				# of Drivers Checked			
				# of Drivers in Violation			
				Total Number Checked			
FMCSA HMPIP Violations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures		
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.		
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.		
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of violations		
	FMCSA HMPIP Inspections		Dimension	All fields in the Dimension	Only this subfolder in Inspections will work properly		
	Violations Attributes and Facts			Folder	None		
		Date - Violation Issued		Dimension	All fields in the Dimension	Date tracked in the source record with the violation	
		Citations		Dimension	All fields in the Dimension		
		Violation Type		Dimension	All fields in the Dimension	Use to determine the violation type for review violations	
		FMCSA Review Violations		Dimension	All fields in the Dimension	Attributes Specific to only FMCSA Review Violations	
		Fact - Violations			Facts	Violation ID Number	
						Violation Records Total	
	Violations Discovered Count						
HMPIP Violations							
Enforcement Amount							
Total Number Checked							

### 3.3 FMCSA Census

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
FMCSA Census Records	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Shows the source of FMCSA Census	
	Census Attributes and Facts			Folder	None	
		Census		Dimension	All fields in the Dimension	
		Date - Census Start Date		Dimension	All fields in the Dimension	
		Fact - Census		Facts	# of FMCSA Census	

### 3.4 FMCSA Cargo Tanks

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
FMCSA Cargo Tank Registrations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Shows the source of cargo tank registrations	
	Cargo Tank Attributes and Facts			Folder	None	
		Cargo Tank Applications		Dimension	All fields in the Dimension	
Cargo Tank Registration Details			Dimension	All fields in the Dimension		

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
		Cargo Tank Registrations	Dimension	All fields in the Dimension	
		Cargo Tank Stamps	Dimension	All fields in the Dimension	
		Date - Cargo Tank Effective Date	Dimension	All fields in the Dimension	
		Date - Cargo Tank Expiration Date	Dimension	All fields in the Dimension	
		Date - Cargo Tank Stamp Authorization Date	Dimension	All fields in the Dimension	
		Date - Cargo Tank Stamp Expiration Date	Dimension	All fields in the Dimension	
		Fact - Cargo Tank Registrations	Facts	All fields in the Fact	

### 3.5 FMCSA Penalties

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
FMCSA Penalties	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Penalty Source	
	Penalties Attributes and Facts			Folder	All fields in the Dimension	
		Date - Penalty Occurred Date	Dimension	All fields in the Dimension		
		Fact - Penalties	Facts	All fields in the Fact		
		Penalties	Dimension	All fields in the Dimension		

## 4 FRA SUBJECT AREA

### 4.1 FRA Inspections

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
FRA Inspections	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of inspections
	Contact - Company Contact		Dimension	All fields in the Dimension	Available for the inspection, violation, and One time movement analysis
	FRA Inspections		Dimension	All fields in the Dimension	
	Incidents/Inspections Location	Geography - Location	Dimension	All fields in the Dimension expect Zip code	
	Inspection Attributes and Facts		Folder	None	
		Date - Inspections Reported	Dimension	All fields in the Dimension	
		Date - Inspection Created	Dimension	All fields in the Dimension	
		Geography - Inspection Origin	Dimension	All fields in the Dimension expect Zip code	
		Fact - FRA Inspections	Facts	# of FRA Inspections	

### 4.2 FRA Inspections Activities

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
FRA Inspection Activities	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
	Agency Of Transportation		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of violations	
	FRA Inspections		Dimension	All fields in the Dimension	Only this subfolder in Inspections will work properly	
	Inspection Attributes and Facts			Folder	None	
		Date - Inspection Activity Date		Dimension	All fields in the Dimension	Date tracked in the source record with the violation
		Fact - FRA Inspection Activities		Facts	# FRA Inspection Activities	
			Inspection Activity Unit Amount		Number of Activities per Type	
Activity Unit Type	Activity Codes from the FRA Inspection Report					

### 4.3 FRA Violations and Defects

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
FRA Violations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	This is a combination of Agency of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	Use to break down facts by the different sources of violations	
	Contact - Company Contact		Dimension	All fields in the Dimension	Available for the inspection, violation, and One time movement analysis	
	FRA Inspections	FRA Inspections	Dimension	All fields in the Dimension	Only this subfolder in Inspections will work properly	
	Violations Attributes and Facts			Folder	None	
		Date - Violation Issued		Dimension	All fields in the Dimension	Date tracked in the source record with the violation
		FRA Violations and	Dimension	All fields in the Dimension		

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
		Defects			
		Fact - FRA Violations/Defects	Facts	Item Number	
	# Recommend Violation				
	# of FRA Defects				

#### 4.4 FRA Enforcements

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes		
FRA Penalties	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures		
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.		
	Agency		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.		
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific enforcement types.		
	Contact - Company Contact		Dimension	All fields in the Dimension	Available for the inspection, violation, and One time movement analysis		
	Penalties Attributes and Facts			Folder	None		
		Date - Penalty Close Date		Dimension	All fields in the Dimension	Date tracked in the source record with the violation	
		Date - Penalty Open Date					
		FRA Penalty		Dimension	All fields in the Dimension		
		Fact - FRA Penalty		Facts		Final Assessed Penalty	
					Final Penalty Paid		
			Penalty Amount				
			FRA Penalties #				
			FRA Penalty Indicator				

### 4.5 FRA One Time Movements

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
FRA One Time Movements	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Mode Of Transportation		Dimension	All fields in the Dimension	This is a combination of Mode of transportation and Agency so data incidents and other sources can be analyzed together.	
	Source		Dimension	All fields in the Dimension	One Time Movements Source code 20	
	Contact - Company Contact		Dimension	All fields in the Dimension	Available for the inspection, violation, and One time movement analysis	
	One Time Movements Attributes and Facts			Folder	None	
		One Time Movements		Dimension	All fields in the Dimension	
		Date - Input		Dimension	All fields in the Dimension	
		Date - Closed		Dimension	All fields in the Dimension expect Zip code	
		Transaction Type		Dimension	All fields in the Dimension	
		Fact-One Time Movements		Facts	# of FRA One Time Movements	

## 5 PHMSA SUBJECT AREA

### 5.1 PHMSA Approvals

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
PHMSA Approvals	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures
		Company -	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
		Geography			address that can not be resolved in the master zip code file.	
	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.	
	Agency		Dimension	All fields in the Dimension	Will be PHMSA-HAZMAT for approval records	
	Contact		Dimension	All fields in the Dimension		
	Source		Dimension	All fields in the Dimension		
	Approval Attributes and Facts			Folder	All fields in the Dimension	
		Approvals		Dimension	All fields in the Dimension	
		Date - Approval Approved Date		Dimension	All fields in the Dimension	
		Date - Approval Start Date		Dimension	All fields in the Dimension	
		Fact - Approvals		Fact	All fields in the Fact	

## 5.2 PHMSA Special Permits

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
PHMSA Special Permits	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.	
	Agency		Dimension	All fields in the Dimension	Will be PHMSA-HAZMAT for approval records	
	Contact		Dimension	All fields in the Dimension		
	Source		Dimension	All fields in the Dimension		
	Special Permits Attributes and Facts	Date - Special Permits Approval Date		Folder	All fields in the Dimension	
		Date - Special Permits End Date		Dimension	All fields in the Dimension	
		Date - Special		Dimension	All fields in the Dimension	

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
		Permits Start Date			
		Special Permits	Dimension	All fields in the Dimension	
		Fact - Special Permits	Fact	All fields in the Fact	

### 5.3 PHMSA Registrations

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
PHMSA Registrations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Product		Dimension	All fields in the Dimension	Products from the CFR172 file as well as products related to Incidents.	
	Agency		Dimension	All fields in the Dimension	Will be PHMSA-HAZMAT for approval records	
	Source		Dimension	All fields in the Dimension		
	Registrations Attributes			Folder	All fields in the Dimension	
		Date - Registrations End Date		Dimension	All fields in the Dimension	
		Date - Registrations Start Date		Dimension	All fields in the Dimension	
		Previous Registrations		Dimension	All fields in the Dimension	
		Registrations		Dimension	All fields in the Dimension	
	Registrations Facts			Folder	All fields in the Dimension	
		Facts - Registrations		Fact		
				Fact	# of FRA Registrations	One Time Movements
				Fact	# of PHMSA Registrations	
				Fact	Amount Due	
			Fact	Amount Received		
	Fact	Bad Credit Card Amount				

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
			Fact	Batch Refund Amount	
			Fact	Certificate Sent Count	
			Fact	Expedited Amount	
			Fact	Processing Amount	
			Fact	Refund Amount	
			Fact	Registration Amount	
			Fact	Underpayment Amount	
			Fact	Registration Short Description	

### 5.4 RAM Certifications

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
RAM Certifications	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension	Will be PHMSA-HAZMAT for approval records	
	Source		Dimension	All fields in the Dimension		
	Contact		Dimension	All fields in the Dimension		
	RAM Certification Attributes and Facts			Folder	All fields in the Dimension	
		Date - RAM Certificates Approval Date		Dimension	All fields in the Dimension	
		Date - RAM Certificates Expiration Date		Dimension	All fields in the Dimension	
		Fact - RAM Certificates		Fact	All fields in the Fact	
		RAM Certificates		Dimension	All fields in the Dimension	

### 5.5 PHMSA Complaints

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
PHMSA Complaints	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension		
	Source		Dimension	All fields in the Dimension	Complaints	
	Complainer - Person		Dimension	All fields in the Dimension	Driver information for FMCSA inspections Driver activities.	
	Complaint Intermediary Contact		Dimension	All fields in the Dimension		
	Inspections		Dimension	All fields in the Dimension		
	Complaints			Folder		
		Complaint Attributes		Dimension	All fields in the Dimension	
		Company - Complainee		Dimension	All fields in the Dimension	
		Complainer - Person		Dimension	All fields in the Dimension	
		Complaint Intermediary Contact		Dimension	All fields in the Dimension	
		Complaint Date		Dimension	All fields in the Dimension	
		Inspector		Dimension	All fields in the Dimension	
Inspection Activity Contact			Dimension	All fields in the Dimension		
Complaints		Fact/Dimension	All fields in the Fact			

### 5.6 PHMSA Inspections

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
PHMSA Inspections	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension		
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific enforcement types.	
	Inspections		Dimension	All fields in the Dimension		
	Inspection Attributes and Facts			Folder		
			Company - Inspections	Dimension	All fields in the Dimension	
			Contact - Inspections Company Contact	Dimension	All fields in the Dimension	
			Contact - Inspections Principal Contact	Dimension	All fields in the Dimension	
			Date - Inspection Created	Dimension	All fields in the Dimension	
			Date - Inspections Assessment or Reported	Dimension	All fields in the Dimension	
			Inspector	Dimension	All fields in the Dimension	
			Supervisor	Dimension	All fields in the Dimension	
	Fact - Inspections	Fact	All fields in the Fact			

**5.7 PHMSA Violations**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
PHMSA Violations	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.
	Agency		Dimension	All fields in the Dimension	

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes
	Inspections		Dimension	All fields in the Dimension	Fields in this dimension are mode specific so selecting some fields may not produce results across all modes.
	Violations/Defects Attributes and Facts		Folder		
		Violations/Defects	Dimension	All fields in the Dimension	
		Citations	Dimension	All fields in the Dimension	Citations issued in the violation
		Violation Issued to Company	Dimension	All fields in the Dimension	
		Violation Type	Dimension	All fields in the Dimension	
		Fact - Violations/Defects	Fact	All fields in the Fact	

**5.8 PHMSA Inspection Activities: Exhibits, Interviews, etc.**

Analysis Area	Folder	Sub folder	Type	Analysis Specific Columns	Notes	
Multi-Modal Inspection Activities: Exhibits, Interviews, etc	Company		Dimension	All fields in the Dimension	Company fields will have more data as the Master Company Hub Matures	
		Company - Geography	Dimension	All fields in the Dimension	A Company with 'N/A' as a region has an address that can not be resolved in the master zip code file.	
	Agency		Dimension	All fields in the Dimension		
	Source		Dimension	All fields in the Dimension	Identifies the source of the transaction record. Becomes useful when filtering for specific enforcement types.	
	Inspection Activity Contact		Dimension	All fields in the Dimension		
	Inspections		Dimension	All fields in the Dimension		
	Inspection Activity Attributes & Facts			Folder		
		Date - Inspection Created		Dimension	All fields in the Dimension	
		Inspection Activities		Dimension	Activity Type	Displays the type of activity or inspection detail being tracked.
		Fact - Inspections Activities		Fact	All fields in the Fact	

