Cross Tab Reports Exercises



Cross Tab Report Exercises

A cross-tab query counts something by two variables. One variable is be listed in a row and the other in a column, with the counts filling the corresponding cells in the rows and columns. The count can be:

- Number of Crashes
- Number of Persons
- Number of Vehicles/Drivers

The process for creating a report with 2010 data differs from using data from previous years. Therefore, each exercise is repeated using the two different processes.

In the following exercises, a superscript letter next to a variable indicates the table in which it appears:

2010	2009 and Earlier
C = Crash	C = Crash
V = Vehicle	V = Vehicle
R = Precrash	D = Driver
D = Driver	P = Person
O = Occupant	
N = Non-Occupant	
B = Bike	
W = Pedestrian	
P = Person	

Exercise 1: For 2010 Data

Report Title: Fatalities by County and Crash Month

Year: 2010

Variables: Crash Month^C, County^C, Injury Severity^P

Condition Criteria: State = [your state]

Injury Severity = Fatal Injury (K)

Cross Tab Variable: Column = Crash Month

Row = County

Count: Number of Persons

Grouping Options: None

Step-by-Step Directions

1. On the **Step 1: Choose a Year** screen, select **2005** and then click the **Submit** button.

- 2. The variables Crash Month and County are in the Crash table. We are counting fatalities for Occupants and Non-Occupants. On the Step 2: Choose the Tables to Query screen, select Option 3, which includes the Crash table and also Occupant and Non-Occupant tables grouped together in a Person table. Then, click the Submit button
- 3. On the **Step 3: Choose Variables to Use** screen, select **Crash Month**^C, **County**^C, and **Injury Severity**^P, and then click the **Submit** button.
- 4. On the **Step 4: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - Leave Crash Month at the default, All.
 - From Injury Severity, select Fatal Injury (K).
 - Click the **Cross Tab** button.
- 5. On the **Step 5: Choose Report Format Options** screen:
 - From the **Column** drop-down list, select **Crash Month**.
 - From the **Row** drop-down list, select **County**.
 - From the **Select Data to Count** drop-down list, select **Number of Persons**.

- In the Report Title box, type Fatalities by County and Crash Month.
- Click the **Submit** button.
- 6. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 1: For 2009 (or Earlier) Data

Report Title: Fatalities by County and Crash Month

Year: 2009

Variables: Crash Month^C, County^C, Injury Severity^P

Condition Criteria: State = [your state]

Injury Severity = Fatal Injury (K)

Cross Tab Variable: Column = Crash Month

Row = County

Count: Number of Persons

Grouping Options: None

- 1. On the **Step 1: Choose a Year** screen, select **2009** and then click the **Submit** button.
- 2. On the **Step 2: Choose Variables to Use** screen, select **Crash Month**^C, **County**^C, and **Injury Severity**^P, and then click the **Submit** button.
- 3. On the **Step 3: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - Leave **Crash Month** at the default, **All**.
 - From Injury Severity, select Fatal Injury (K).
 - Click the **Cross Tab** button.
- 4. On the **Step 4: Choose Report Format Options** screen:
 - From the **Column** drop-down list, select **Crash Month**.
 - From the **Row** drop-down list, select **County**.

- From the **Select Data to Count** drop-down list, select **Number of Persons**.
- In the Report Title box, type Fatalities by County and Crash Month.
- Click the **Submit** button.
- 5. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 2: For 2010 Data

Report Title: Total 15-20 Year Old Driver Fatalities by Restraint Use and County

Year: 2010

Variables: County^C, Age^P, Injury Severity^O, Person Type^O, Restraint

System/Helmet UseO

Condition Criteria: State = [your state]

Injury Severity = Fatal Injury (K)

Person Type = Driver of Motor Vehicle in Transport

Age = (15, 16, 17, 18, 19, 20)

Cross Tab Variable: Column = Restraint System/Helmet Use

Row = County

Count: Number of Persons

Grouping Options: None

- 1. On the **Step 1: Choose a Year** screen, select **2010** and then click the **Submit** button.
- 2. The variable **County** is in the **Crash** table and the variables **Age**, **Injury Severity**, **Person Type**, and **Restraint System/Helmet Use** are in the **Occupant** table. Therefore, on the **Step 2: Choose the Tables to Query** screen, select **Option 1** and then click the **Submit** button.
- 3. On the **Step 3: Choose Variables to Use** screen, select **County**^C, **Age**^O, **Injury Severity**^O, **Person Type**^O, and **Restraint System/Helmet Use**^O, and then click the **Submit** button.
- 4. On the **Step 4: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.

- Leave the **County** field blank so it defaults to **All**.
- From **Age**, select **15-20** (select **15**, press and hold the **Shift** key, scroll down and then click **20**).
- From **Injury Severity**, select **Fatal Injury (K)**.
- From Person Type, select Driver of Motor Vehicle in Transport.
- Leave **Restraint System/Helmet Use** at the default, **All**.
- Click the **Cross Tab** button.
- 5. On the **Step 4: Choose Report Format Options** screen:
 - From the Column drop-down list, select Restraint System/Helmet Use.
 - From the **Row** drop-down list, select **County**.
 - From the **Select Data to Count** drop-down list, select **Number of Persons**.
 - In the Report Title box, type Total 15-20 Year Old Driver Fatalities by Restraint Use and County.
 - Click the **Submit** button.
- 6. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 2: 2009 (or Earlier) Data

Report Title: Total 15-20 Year Old Driver Fatalities by Restraint Use and County

Year: 2009

Variables: County^C, Age^P, Injury Severity^P, Person Type^P, Protection System

Use^P

Condition Criteria: State = [your state]

Injury Severity = Fatal Injury (K)

Person Type = Driver of Motor Vehicle in Transport

Age = (15, 16, 17, 18, 19, 20)

Cross Tab Variable: Column = Protection System Use

Row = County

Count: Number of Persons

Grouping Options: None

- 1. On the **Step 1: Choose a Year** screen, select **2009** and then click the **Submit** button.
- 2. On the **Step 2: Choose Variables to Use** screen, select **County**^C, **Age**^P, **Injury Severity**^P, **Person Type**^P, and **Restraint System Use**^P, and then click the **Submit** button.
- 3. On the **Step 3: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - Leave **County** at the default, **All**.
 - From **Age**, select **15-20** (select **15**, press and hold the **Shift** key, scroll down and then click **20**).
 - From Injury Severity, select Fatal Injury (K).
 - From Person Type, select Driver of Motor Vehicle in Transport.
 - Leave **Protection System Use** at the default, **All**.
 - Click the **Cross Tab** button.
- 4. On the **Step 4: Choose Report Format Options** screen:
 - From the **Column** drop-down list, select **Protection System Use**.
 - From the **Row** drop-down list, select **County**.
 - From the **Select Data to Count** drop-down list, select **Number of Persons**.
 - In the Report Title box, type Total 15-20 Year Old Driver Fatalities by Restraint Use and County.
 - Click the **Submit** button.
- 5. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen..

Exercise 3: For 2010 Data

Report Title: Fatal Automobile Occupants by Seating Position and Restraint

System/Helmet Use

Year: 2010

Variables: Injury Severity^O, Person Type^O, Restraint System/Helmet Use^O,

Seating Position^O, Body Type^V

Condition Criteria: State = [your state]

Injury Severity = Fatal Injury (K)

Person Type = 1, 2, 9

Body Type = 1, 2, 3, 4, 5, 6, 7, 8, 9

Cross Tab Variable: Column = Restraint System/Helmet Use

Row = Seating Position

Count: Number of Persons

Grouping Options: None

Step-by-Step Directions

1. On the **Step 1: Choose a Year** screen, select **2010** and then click the **Submit** button.

- 2. The variables **Injury Severity**, **Person Type**, **Restraint System/Helmet Use**, and **Seating Position** are in the **Occupant** table. **Body Type** is in the **Vehicle** table. Therefore, on the **Step 2: Choose the Tables to Query** screen, select **Option 1** and then click the **Submit** button.
- 3. On the Step 3: Choose Variables to Use screen, select Injury Severity^O, Person Type^O, Restraint System/Helmet Use^O, Seating Position^O, and Body Type^V, and then click the Submit button.
- 4. On the **Step 4: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - From Injury Severity, select Fatal Injury (K).
 - From **Person Type**, select **1**, **2**, **9**.
 - Leave **Restraint System/Helmet Use** at the default, **All**.
 - Leave **Seating Position** at the default, **All**.
 - From **Body Type**, select **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**.

- Click the **Cross Tab** button.
- 5. On the **Step 5: Choose Report Format Options** screen:
 - From the Column drop-down list, select **Restraint System/Helmet Use**.
 - From the **Row** drop-down list, select **Seating Position**.
 - From the **Select Data to Count** drop-down list, select **Number of Persons**.
 - In the Report Title box, type Fatal Automobile Occupants by Seating Position and Restraint System/Helmet Use.
 - Click the **Submit** button.
- 6. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 3: For 2009 (or Earlier) Data

Report Title: Fatal Automobile Occupants by Seating Position and Protection

System Use

Year: 2009

Variables: Injury Severity^P, Person Type^P, Protection System Use^P, Seating

Position^P, Body Type^V

Condition Criteria: State = [your state]

Injury Severity = Fatal Injury (K)

Person Type = 1, 2, 9

Body Type = 1, 2, 3, 4, 5, 6, 7, 8, 9

Cross Tab Variable: Column = Protection System Use

Row = Seating Position

Count: Number of Persons

Grouping Options: None

- 1. On the **Step 1: Choose a Year** screen, select **2009** and then click the **Submit** button.
- 2. On the **Step 2: Choose Variables to Use** screen, select **Injury Severity**^P, **Person Type**^P, **Protection System Use**^P, **Seating Position**^P, and **Body Type**^V, and then click the **Submit** button.

- 3. On the **Step 3: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - From Injury Severity, select Fatal Injury (K).
 - From **Person Type**, select **1**, **2**, **9**.
 - Leave Protection System Use at the default, All.
 - Leave **Seating Position** at the default, **All**.
 - From **Body Type**, select **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**.
 - Click the **Cross Tab** button.
- 4. On the **Step 4: Choose Report Format Options** screen:
 - From the **Column** drop-down list, select **Protection System Use**.
 - From the **Row** drop-down list, select **Seating Position**.
 - From the **Select Data to Count** drop-down list, select **Number of Persons**.
 - In the Report Title box, type Fatal Automobile Occupants by Seating Position and Protection System Use.
 - Click the **Submit** button.
- 5. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 4: For 2010 Data

Report Title: Crash Counts by County and Roadway Function Class

Year: 2010

Variables: County^C, Roadway Function Class^C

Condition Criteria: State = [your state]

Cross Tab Variable: Column = Roadway Function Class

Row = County

Count: Number of Crashes

Grouping Options: None

Step-by-Step Directions

1. On the **Step 1: Choose a Year** screen, select **2010** and then click the **Submit** button.

- 2. The variables **County** and **Roadway Function Class** are in the **Crash** table. Therefore, on the **Step 2: Choose the Tables to Query** screen, select any option and then click the **Submit** button.
- 3. On the **Step 3: Choose Variables to Use** screen, select **County**^C, and **Roadway Function Class**^C, and then click the **Submit** button.
- 4. On the **Step 4: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - Leave County blank to default to All.
 - Leave Roadway Function Class at the default, All.
 - Click the **Cross Tab** button.
- 5. On the **Step 5: Choose Report Format Options** screen:
 - From the Column drop-down list, select Roadway Function Class.
 - From the **Row** drop-down list, select **County**.
 - From the **Select Data to Count** drop-down list, select **Number of Crashes**.
 - In the Report Title box, type Crash Counts by County and Roadway Function Class.

- Click the **Submit** button.
- 6. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 4: For 2009 (or Earlier) Data

Report Title: Crash Counts by County and Roadway Function Class

Year: 2009

Variables: County^C, Roadway Function Class^C

Condition Criteria: State = [your state]

Cross Tab Variable: Column = Roadway Function Class

Row = County

Count: Number of Crashes

Grouping Options: None

- 1. On the **Step 1: Choose a Year** screen, select **2009** and then click the **Submit** button.
- 2. On the **Step 2: Choose Variables to Use** screen, select **County**^C, and **Roadway Function Class**^C, and then click the **Submit** button.
- 3. On the **Step 3: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - Leave **County** at the default, **All**.
 - Leave **Roadway Function Class** at the default, **All**.
 - Click the **Cross Tab** button.
- 4. On the **Step 4: Choose Report Format Options** screen:
 - From the Column drop-down list, select Roadway Function Class.
 - From the **Row** drop-down list, select **County**.
 - From the **Select Data to Count** drop-down list, select **Number of Crashes**.

- In the Report Title box, type Crash Counts by County and Roadway Function Class.
- Click the **Submit** button.
- 5. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 5: For 2010 Data

Report Title: Occupant Count by Injury Severity and Ejection

Year: 2010

Variables: Ejection^O, Injury Severity^O, Person Type^O

Condition Criteria: State = [your state]

Person Type = Driver of a Motor Vehicle in transport (1), Passenger of a Motor Vehicle in Transport (2), Unknown Occupant Type in a

Motor Vehicle in Transport (9)

Cross Tab Variable: Column = Ejection

Row = Injury Severity

Count: Number of Persons

Grouping Options: None

- 1. On the **Step 1: Choose a Year** screen, select **2005** and then click the **Submit** button.
- 2. The variables **Ejection, Injury Severity**, and **Person Type** are in the **Occupant** table. Therefore, on the **Step 2: Choose the Tables to Query** screen, select **Option 1** and then click the **Submit** button.
- 3. On the **Step 3: Choose Variables to Use** screen, select **Ejection**^O, **Injury Severity**^O, and **Person Type**^O, and then click the **Submit** button.
- 4. On the **Step 4: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - Leave **Ejection** at the default, **All**.
 - Leave **Injury Severity** at the default, **All**.
 - From Person Type, select 1, 2, 9

- Click the **Cross Tab** button.
- 5. On the **Step 5: Choose Report Format Options** screen:
 - From the **Column** drop-down list, select **Ejection**.
 - From the **Row** drop-down list, select **Injury Severity**.
 - From the **Select Data to Count** drop-down list, select **Number of Persons**.
 - In the Report Title box, type Occupant Count by Injury Severity and Ejection.
 - Click the **Submit** button.
- 6. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 5: For 2009 (or Earlier) Data

Report Title: Occupant Count by Injury Severity and Ejection

Year: 2009

Variables: Ejection^P, Injury Severity^P, Person Type^P

Condition Criteria: State = [your state]

Person Type = Driver of a Motor Vehicle in transport (1), Passenger of a Motor Vehicle in Transport (2), Unknown Occupant Type in a

Motor Vehicle in Transport (9)

Cross Tab Variable: Column = Ejection

Row = Injury Severity

Count: Number of Persons

Grouping Options: None

- 1. On the **Step 1: Choose a Year** screen, select **2005**9and then click the **Submit** button.
- 2. On the **Step 2: Choose Variables to Use** screen, select **Ejection**^P, **Injury Severity**^P, and **Person Type**^P, and then click the **Submit** button.
- 3. On the **Step 3: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.

- Leave **Ejection** at the default, **All**.
- Leave **Injury Severity** at the default, **All**.
- From Person Type, select 1, 2, 9
- Click the **Cross Tab** button.
- 4. On the **Step 4: Choose Report Format Options** screen:
 - From the **Column** drop-down list, select **Ejection**.
 - From the **Row** drop-down list, select **Injury Severity**.
 - From the **Select Data to Count** drop-down list, select **Number of Persons**.
 - In the Report Title box, type Occupant Count by Injury Severity and Ejection.
 - Click the **Submit** button.
- 5. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 6: For 2010 Data

Report Title: Motorcycle Occupant Fatalities by Person Type and Helmet Use

Year: 2010

Variables: Injury Severity^O, Person Type^O, Restraint System/Helmet Use^O,

Body TypeV

Condition Criteria: State = [your state]

Injury Severity = Fatal Injury (K)

Person Type = 1, 2, 9

Body Type = 80, 81, 82, 83, 88, 89

Cross Tab Variable: Column = Restraint System/Helmet Use

Row = Person Type

Count: Number of Persons

Grouping Options: None

Step-by-Step Directions

1. On the **Step 1: Choose a Year** screen, select **2010** and then click the **Submit** button.

- 2. The variables **Injury Severity**, **Person Type**, and **Restraint System/Helmet Use** are in the **Occupant** table and **Body Type** is in the Vehicle table. Therefore, on the **Step 2: Choose the Tables to Query** screen, select **Option 1** and then click the **Submit** button.
- 3. On the Step 3: Choose Variables to Use screen, select Injury Severity^O, Person Type^O, Restraint System/Helmet Use^O, and Body Type^V, and then click the Submit button.
- 4. On the **Step 4: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - From **Injury Severity**, select **Fatal Injury (K)**.
 - From **Person Type**, select **1**, **2**, **9**.
 - Leave **Restraint System/Helmet Use** at the default, **All**.
 - From **Body Type**, select **80**, **81**, **82**, **83**, **88**, and **89**.
 - Click the Cross Tab button.

- 5. On the **Step 5: Choose Report Format Options** screen:
 - From the **Column** drop-down list, select **Restraint System/Helmet Use**.
 - From the **Row** drop-down list, select **Person Type**.
 - From the **Select Data to Count** drop-down list, select **Number of Persons**.
 - In the Report Title box, type Motorcycle Occupant Fatalities by Person Type and Helmet Use.
 - Click the **Submit** button.
- 6. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 6: For 2009 (or Earlier) Data

Report Title: Motorcycle Occupant Fatalities by Person Type and Helmet Use

Year: 2009

Variables: Injury Severity^P, Person Type^P, Protection System Use^P, Body

Type^V

Condition Criteria: State = [your state]

Injury Severity = Fatal Injury (K)

Person Type = 1, 2, 9

Body Type = 80, 81, 82, 83, 88, 89

Cross Tab Variable: Column = Protection System Use

Row = Person Type

Count: Number of Persons

Grouping Options: None

- 1. On the **Step 1: Choose a Year** screen, select **2009** and then click the **Submit** button.
- 2. On the **Step 2: Choose Variables to Use** screen, select **Injury Severity**^P, **Person Type**^P, **Protection System Use**^P, and **Body Type**^V, and then click the **Submit** button.
- 3. On the **Step 3: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.

- From Injury Severity, select Fatal Injury (K).
- From **Person Type**, select **1**, **2**, **9**.
- Leave Protection System Use at the default, All.
- From **Body Type**, select **80**, **81**, **82**, **83**, **88**, and **89**.
- Click the **Cross Tab** button.
- 4. On the **Step 4: Choose Report Format Options** screen:
 - From the Column drop-down list, select Protection System Use.
 - From the **Row** drop-down list, select **Person Type**.
 - From the **Select Data to Count** drop-down list, select **Number of Persons**.
 - In the Report Title box, type Motorcycle Occupant Fatalities by Person Type and Helmet Use.
 - Click the **Submit** button.
- 5. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 7: For 2010 Data

Report Title: Fatal Crashes by Roadway Function Class and Atmospheric

Condition

Year: 2010

Variables: Atmospheric Condition^C, Roadway Function Class^C

Condition Criteria: State = [your state]

Cross Tab Variable: Column = Atmospheric Condition

Row = Roadway Function Class

Count: Number of Crashes

Grouping Options: None

Step-by-Step Directions

1. On the **Step 1: Choose a Year** screen, select **2005** and then click the **Submit** button.

- 2. The variables **Atmospheric Condition** and **Roadway Function Class** are in the **Crash** table. Therefore, on the **Step 2: Choose the Tables to Query** screen, you can select any option and then click the **Submit** button.
- 3. On the **Step 3: Choose Variables to Use** screen, select **Atmospheric Condition** (1)^C and **Roadway Function Class**^C, and then click the **Submit** button.
- 4. On the **Step 4: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - Leave **Atmospheric Condition** (1) at the default, **All**.
 - Leave Roadway Function Class at the default, All
 - Click the **Cross Tab** button.
- 5. On the **Step5: Choose Report Format Options** screen:
 - From the Column drop-down list, select Atmospheric Condition (1).
 - From the **Row** drop-down list, select **Roadway Function Class**.
 - From the **Select Data to Count** drop-down list, select **Number of Crashes**.
 - In the Report Title box, type Fatal Crashes by Roadway Function Class and Atmospheric Condition.

- Click the Submit button.
- 6. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.

Exercise 7: For 2009 (or Earlier) Data

Report Title: Fatal Crashes by Roadway Function Class and Atmospheric

Conditions

Year: 2009

Variables: Atmospheric Conditions^C, Roadway Function Class^C

Condition Criteria: State = [your state]

Cross Tab Variable: Column = Atmospheric Condition

Row = Roadway Function Class

Count: Number of Crashes

Grouping Options: None

- 1. On the **Step 1: Choose a Year** screen, select **2009** and then click the **Submit** button.
- 2. On the **Step 2: Choose Variables to Use** screen, select **Atmospheric Conditions** (1)^C and **Roadway Function Class**^C, and then click the **Submit** button.
- 3. On the **Step 3: Choose Condition Criteria** screen:
 - From **State**, your state should be selected by default.
 - Leave **Atmospheric Conditions** (1) at the default, **All**.
 - Leave Roadway Function Class at the default, All
 - Click the **Cross Tab** button.
- 4. On the **Step 4: Choose Report Format Options** screen:
 - From the **Column** drop-down list, select **Atmospheric Condition**.
 - From the **Row** drop-down list, select **Roadway Function Class**.
 - From the **Select Data to Count** drop-down list, select **Number of Crashes**.

- In the Report Title box, type Fatal Crashes by Roadway Function Class and Atmospheric Conditions.
- Click the **Submit** button.
- 5. Review your report and then click the **Back to Step 1** button to return to the **Step 1: Choose a Year** screen.