CRASH DATA

INTRODUCTION TO THE FATALITY ANALYSIS REPORTING SYSTEM

Module 1: Crash Prevention

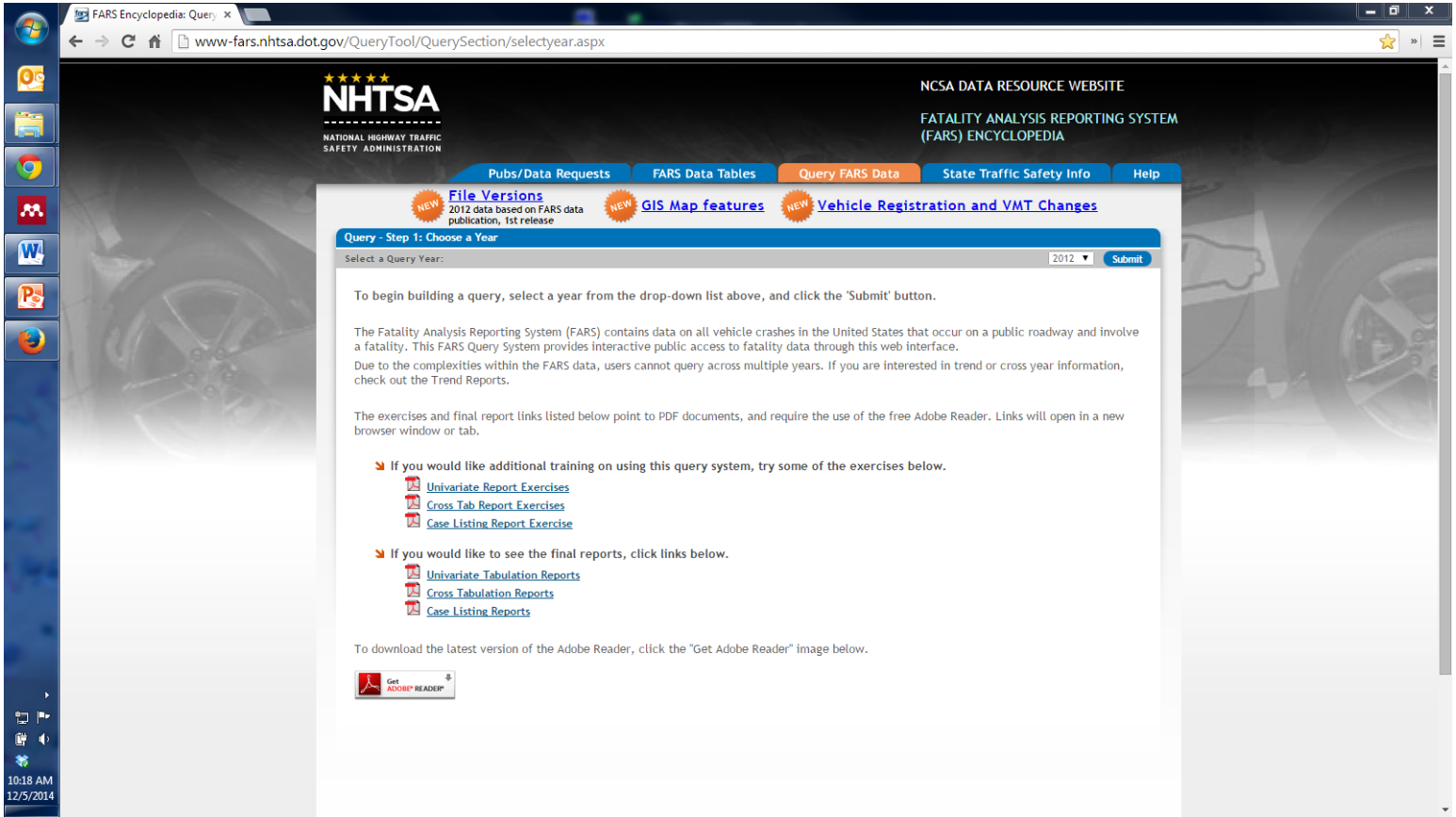
Lesson 3: Road Weather Information Systems

Discussion

- Do you think more crashes happen when the roads are dry or wet?
- What about when the roads are icy?
- What other types of weather may contribute to crashes?

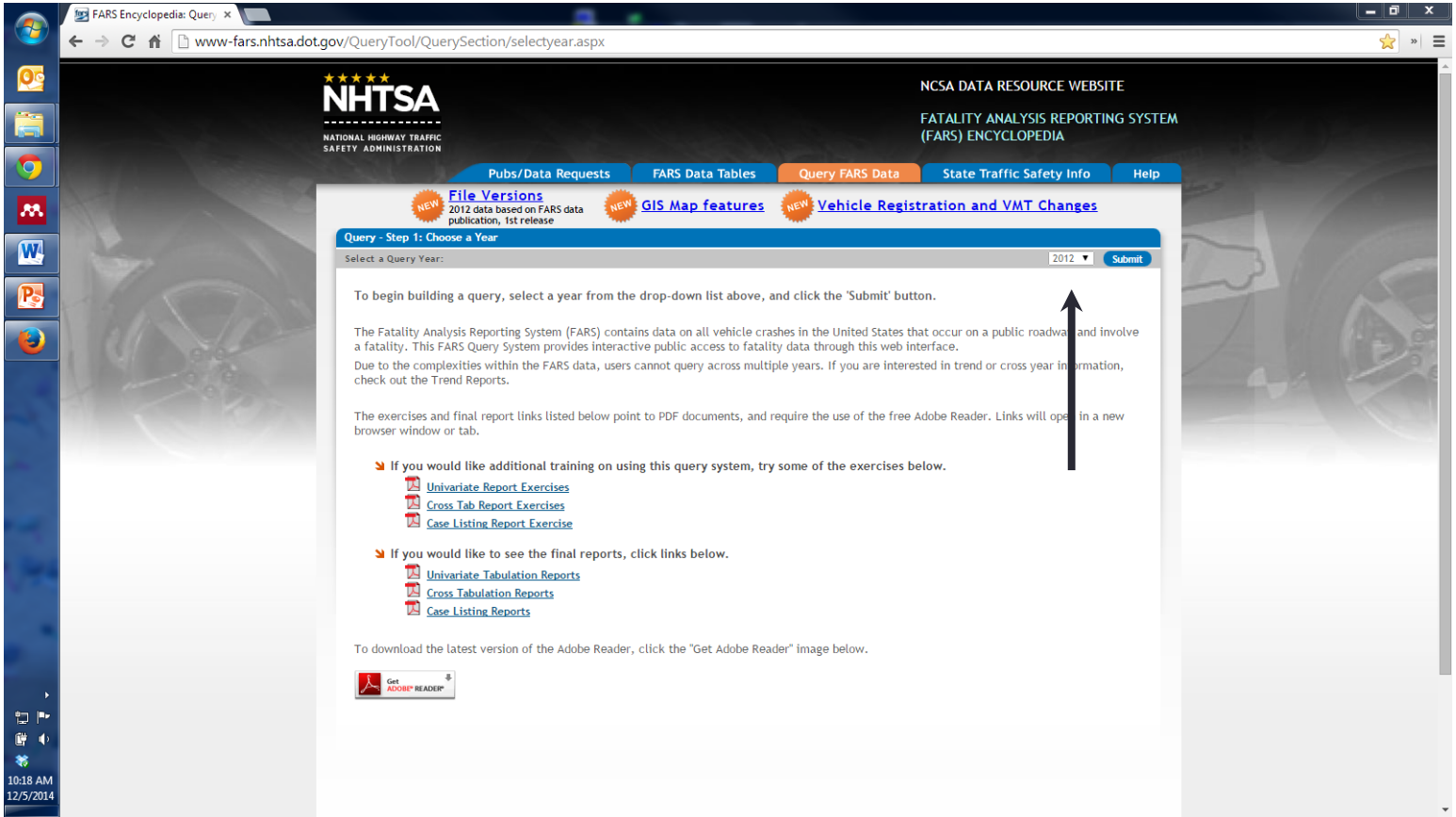
Using Crash Statistics

- Fatality Analysis Reporting System (NHTSA)
  - http://www-fars.nhtsa.dot.gov/QueryTool/QuerySection/selectyear.aspx



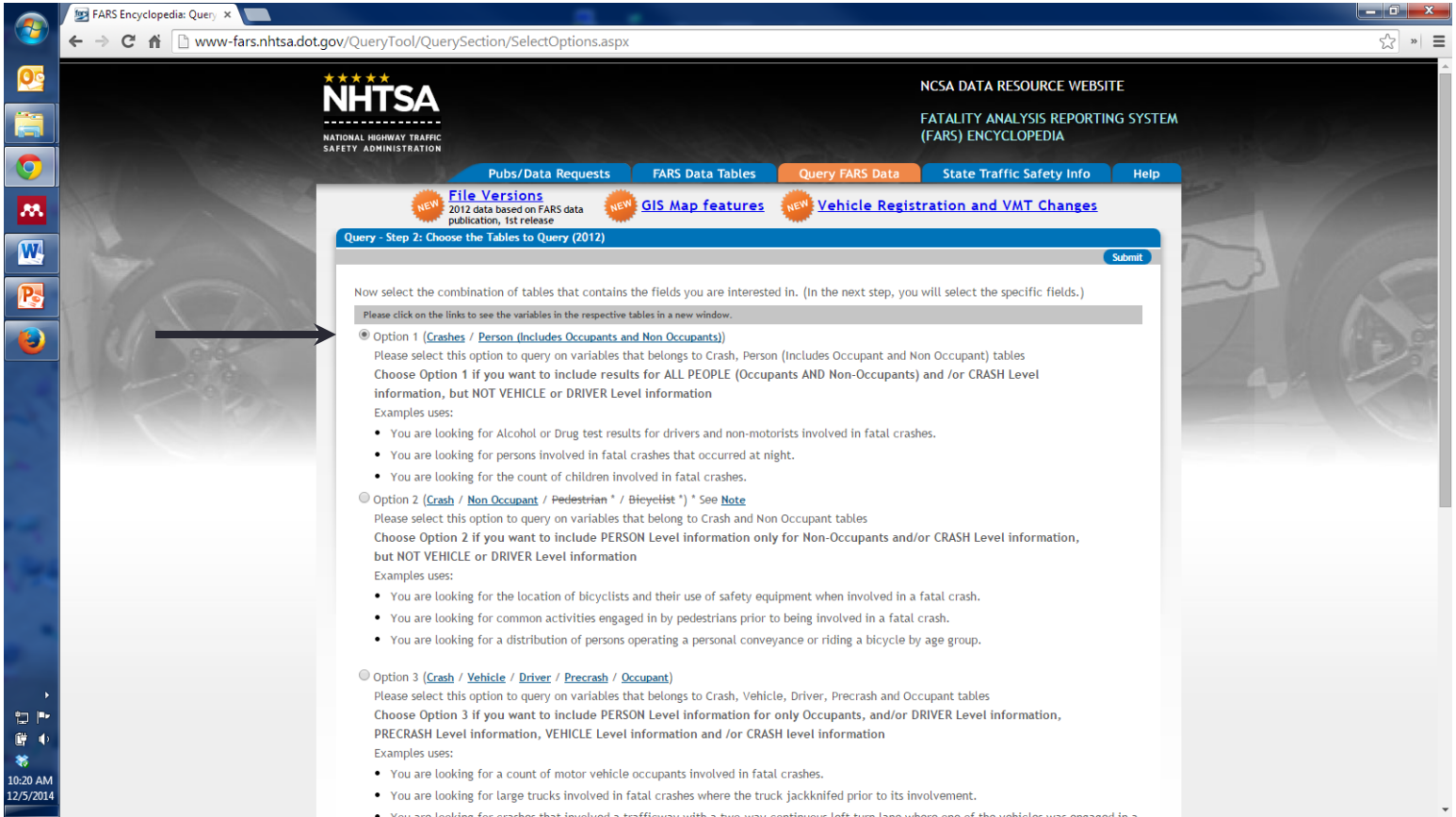
Using Crash Statistics

- Select Year



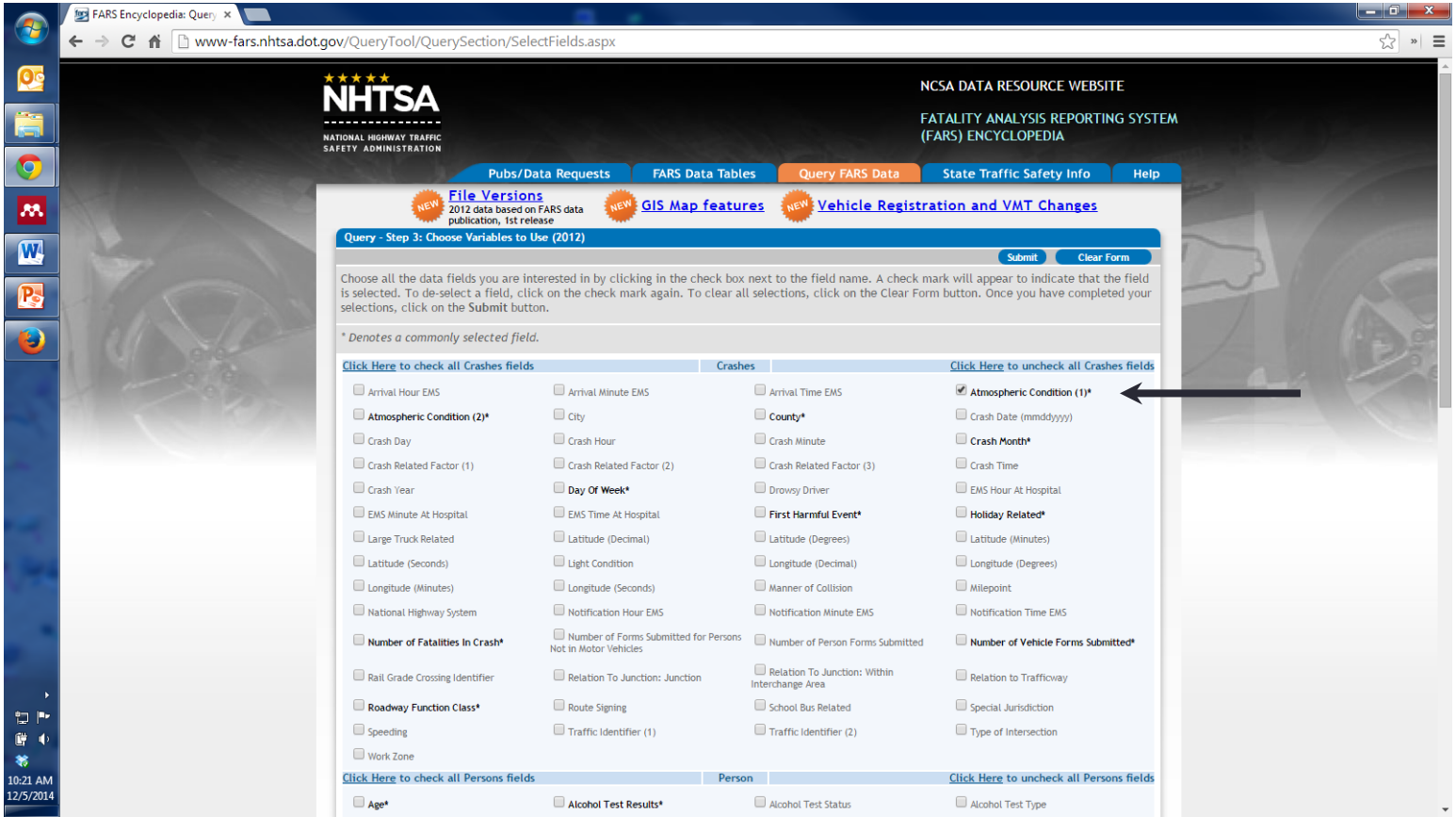
Using Crash Statistics

- Pick Tables to Query (2010 - present)



Using Crash Statistics

- Pick variables to research

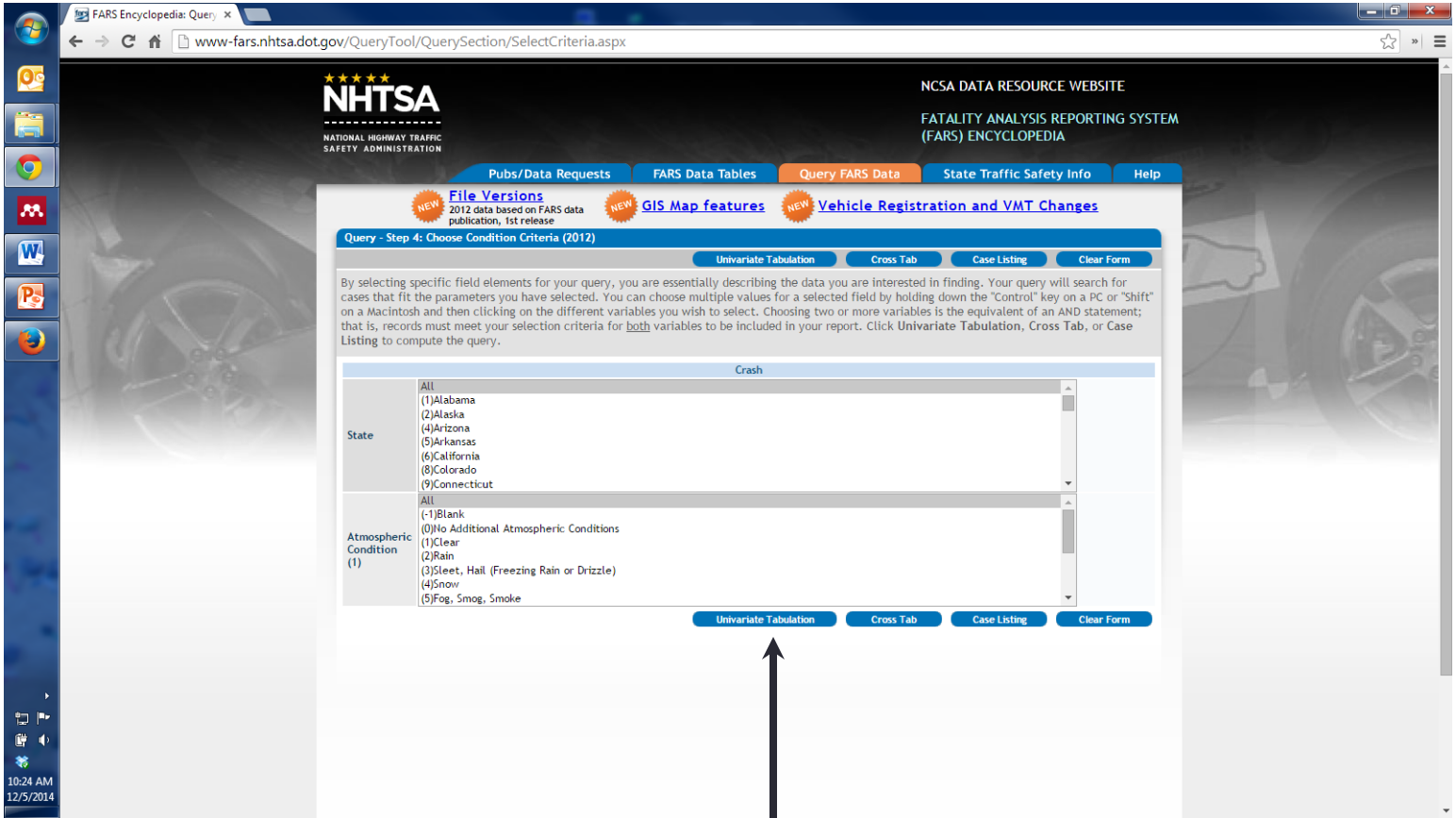


Using Crash Statistics

- Narrow down your field (hold down ctrl to select multiple crash characteristics)

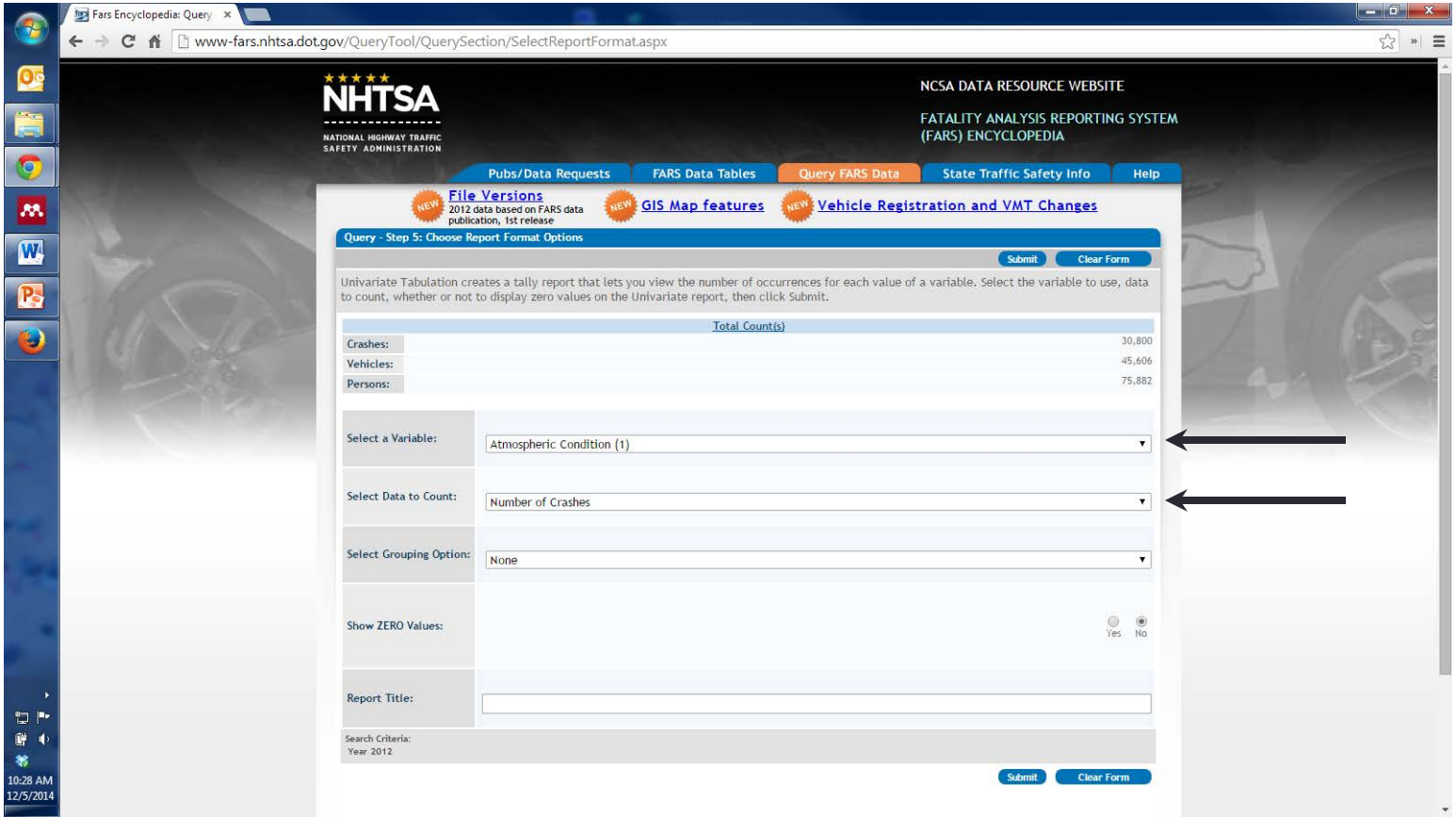
Using Crash Statistics

- Select “Univariate Tabulation”



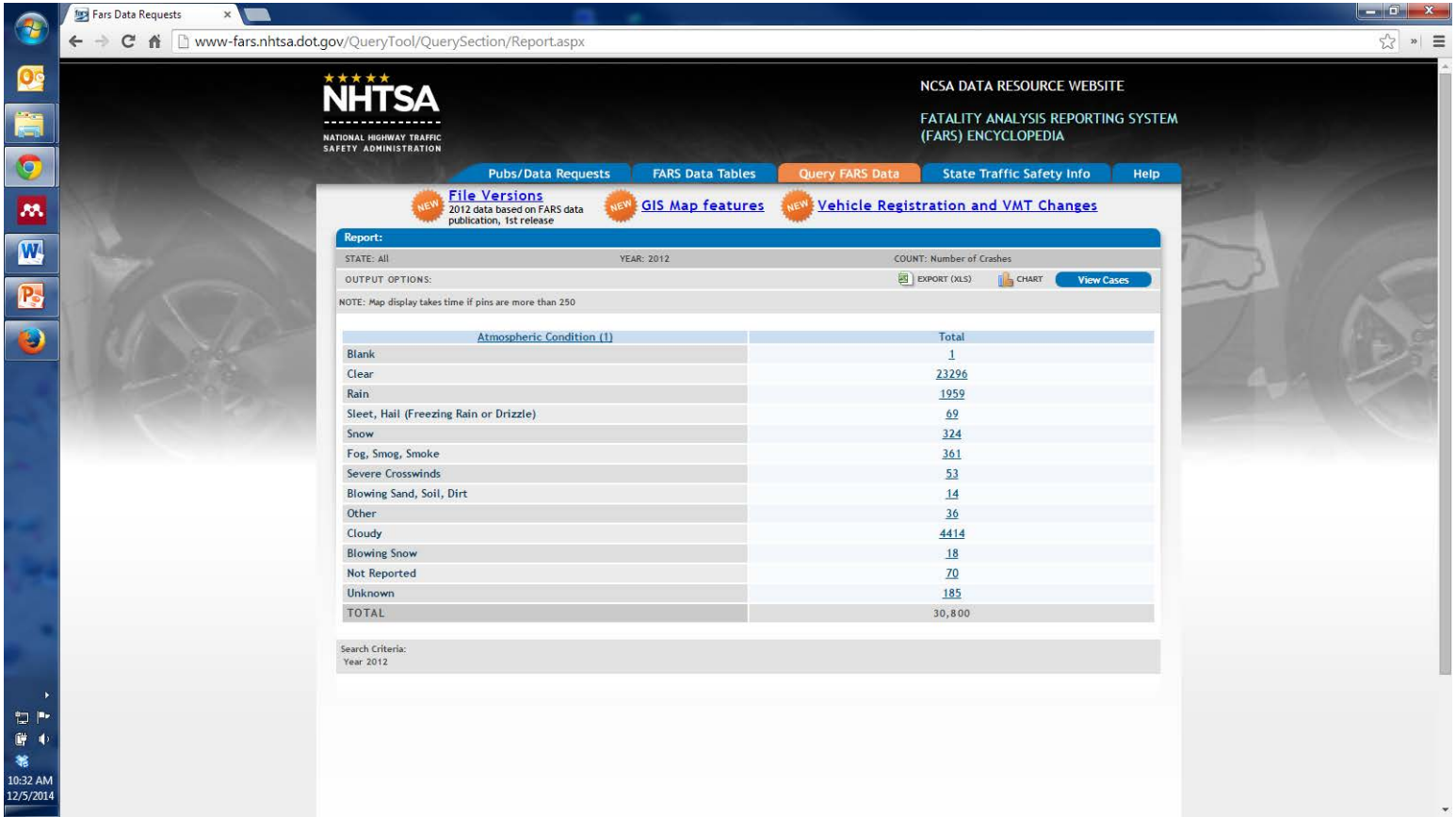
Using Crash Statistics

- Build your table
  - Select a Variable - “Atmospheric Conditions (1)”
  - Number of Crashes



Using Crash Statistics

- View Results



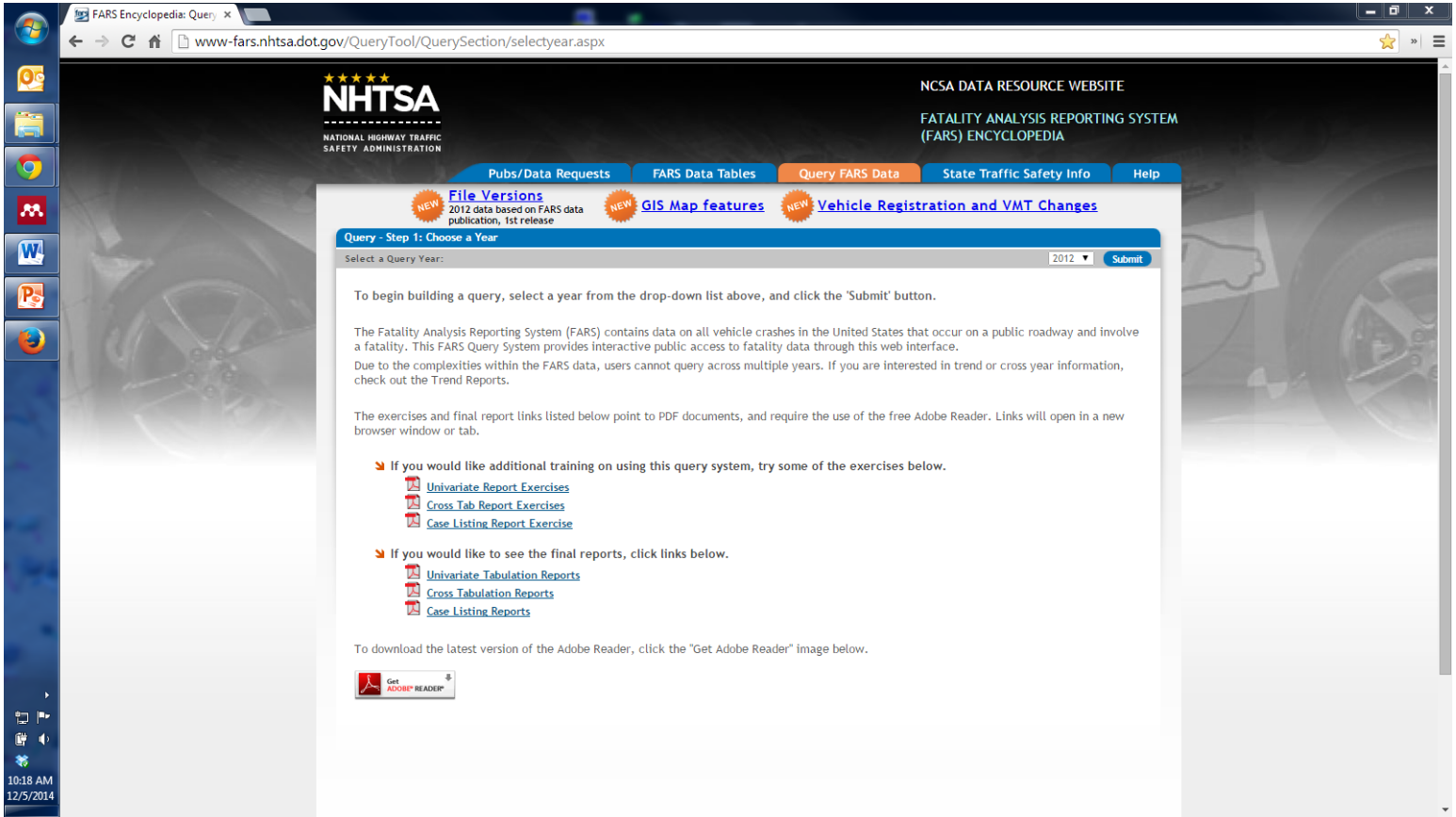
Discussion

- Why do a majority of the crashes happen during clear weather conditions?

- Some weather conditions (like snow or freezing rain) are considered dangerous driving conditions. Why are there so few crashes that happen in snow or freezing rain?

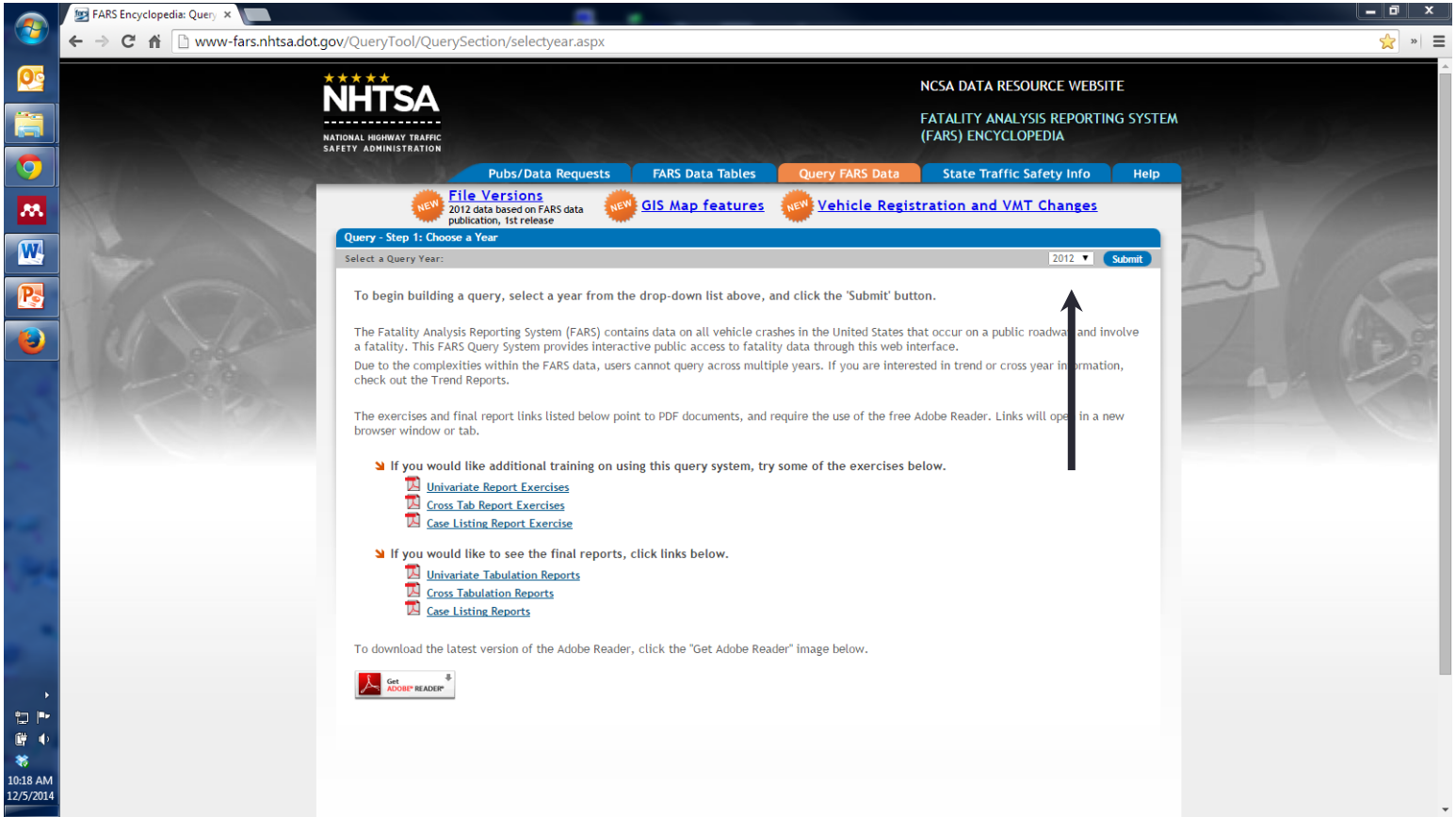
Using Crash Statistics – Advanced

- Fatality Analysis Reporting System (NHTSA)
  - http://www-fars.nhtsa.dot.gov/QueryTool/QuerySection/selectyear.aspx



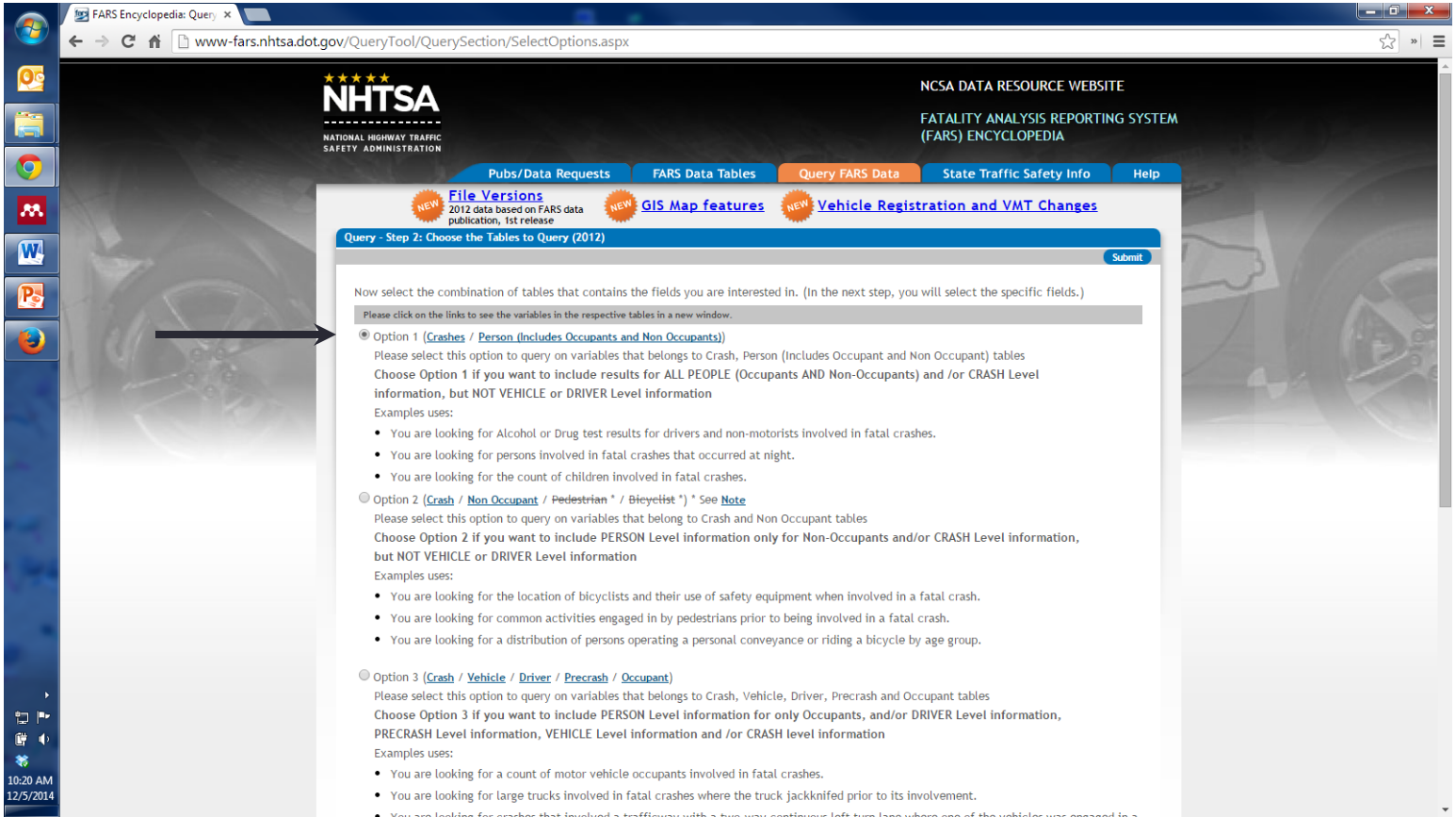
Using Crash Statistics – Advanced

- Select Year



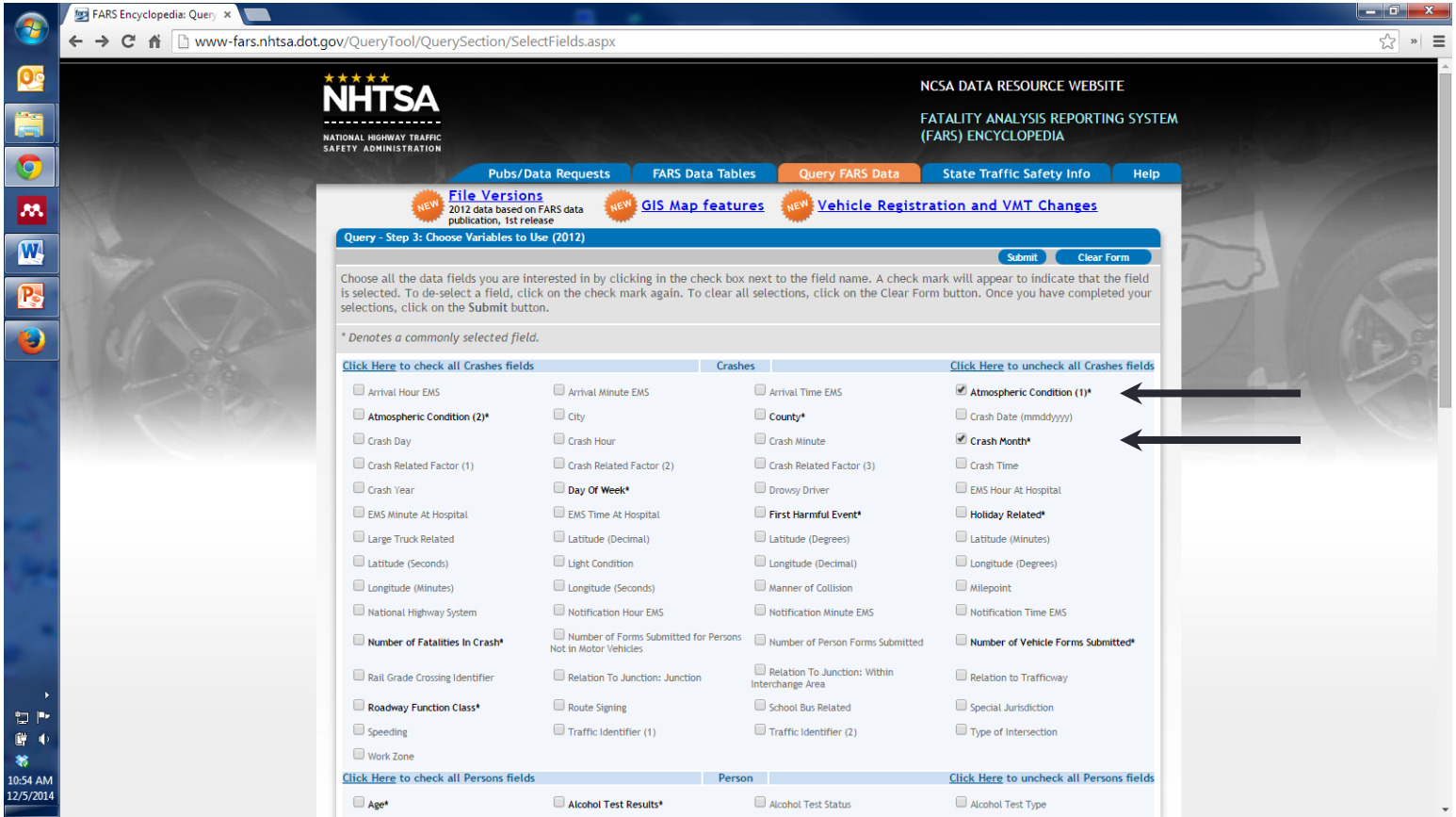
Using Crash Statistics – Advanced

- Pick Tables to Query (2010 - present)



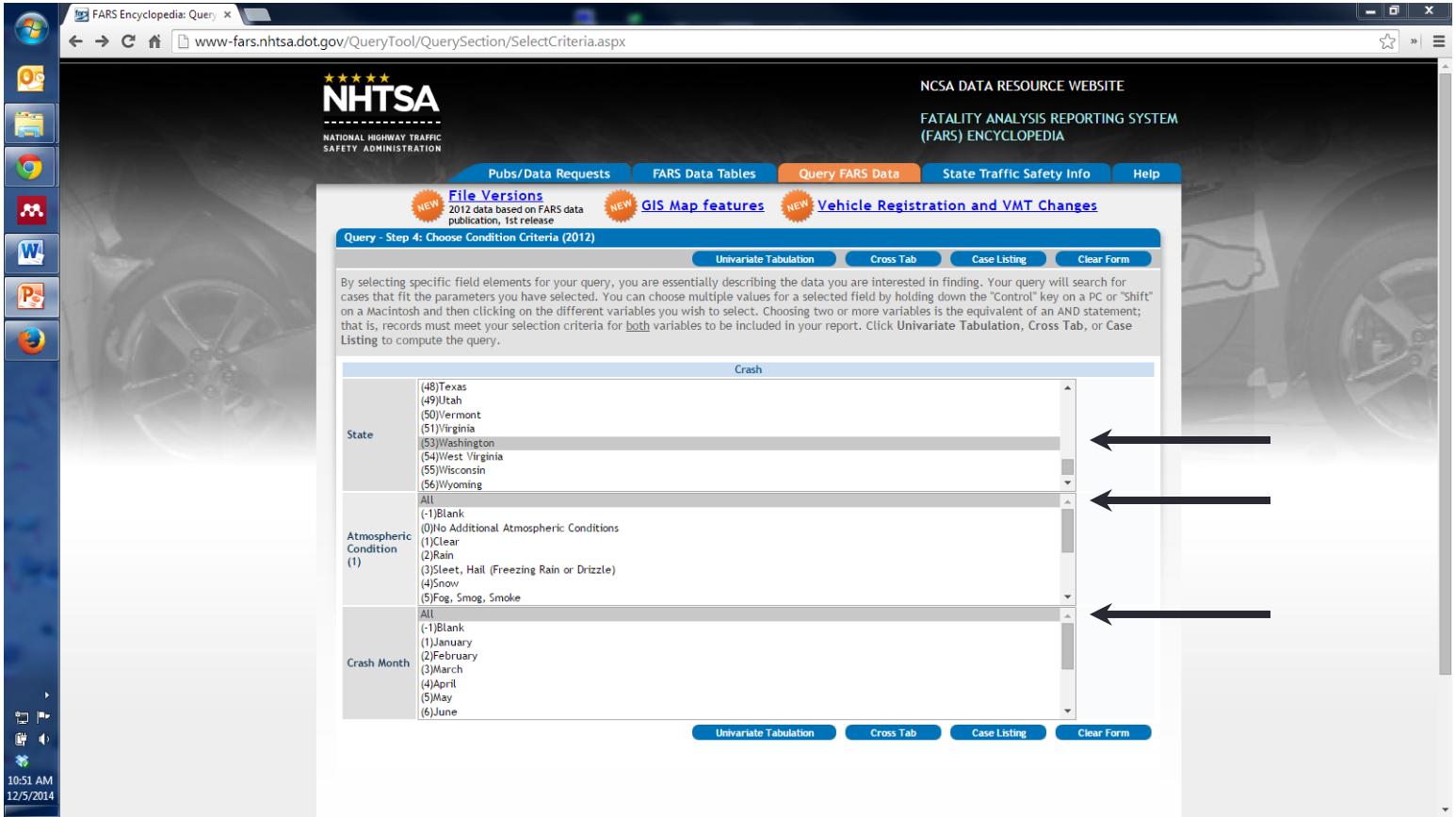
Using Crash Statistics – Advanced

- Pick variables to research



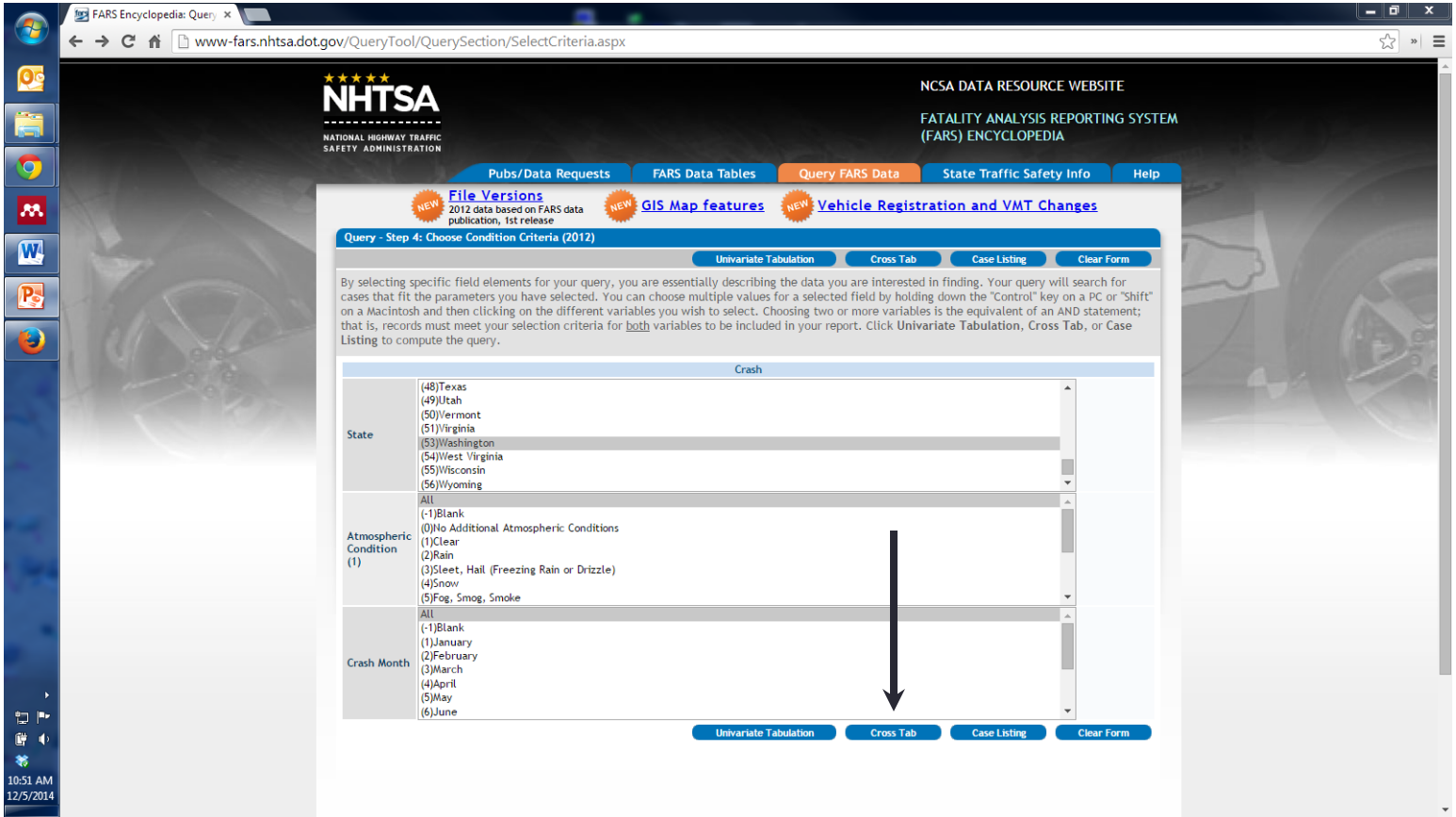
Using Crash Statistics – Advanced

- Narrow down your field



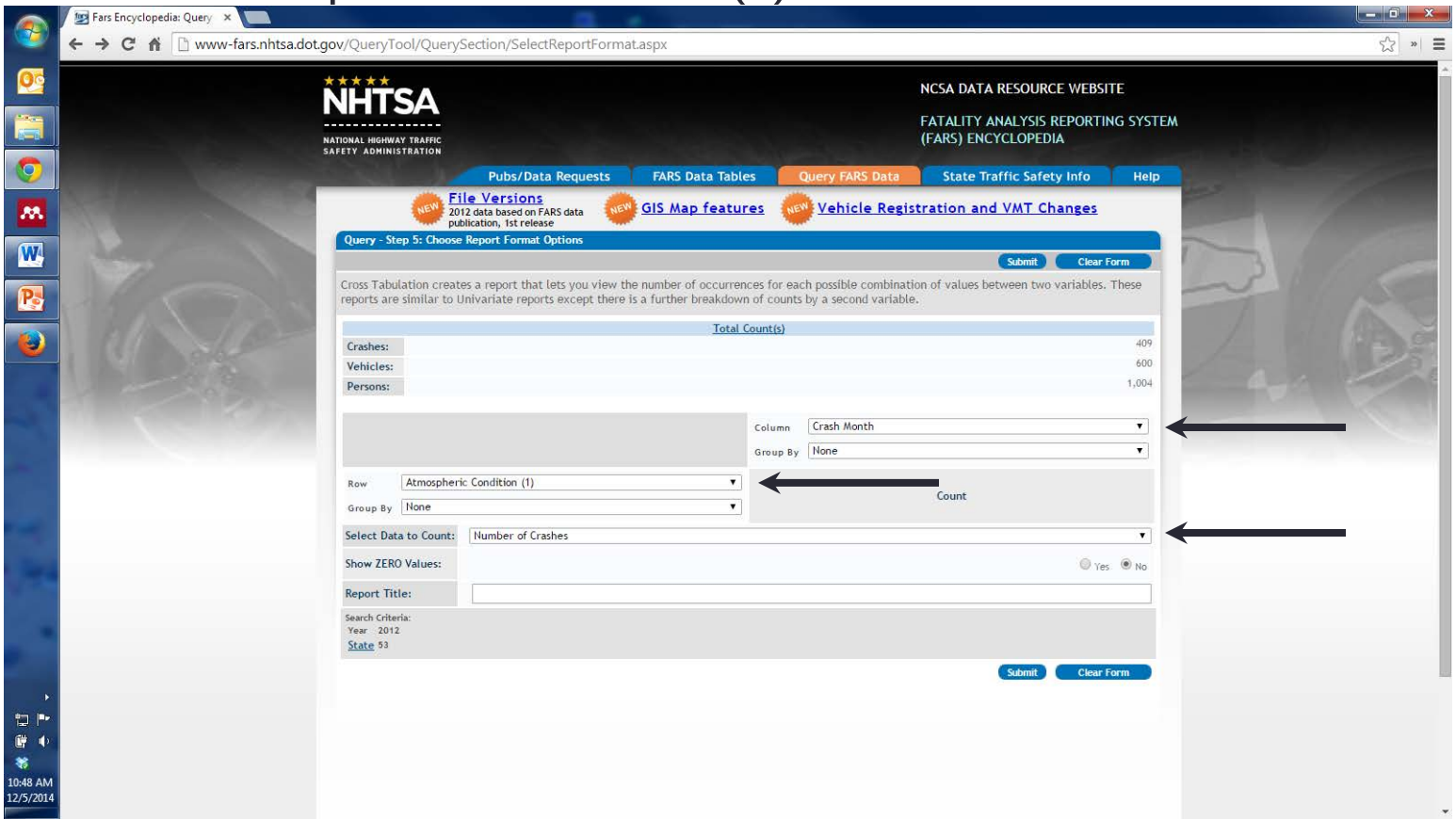
Using Crash Statistics – Advanced

- Select “Cross Tab”



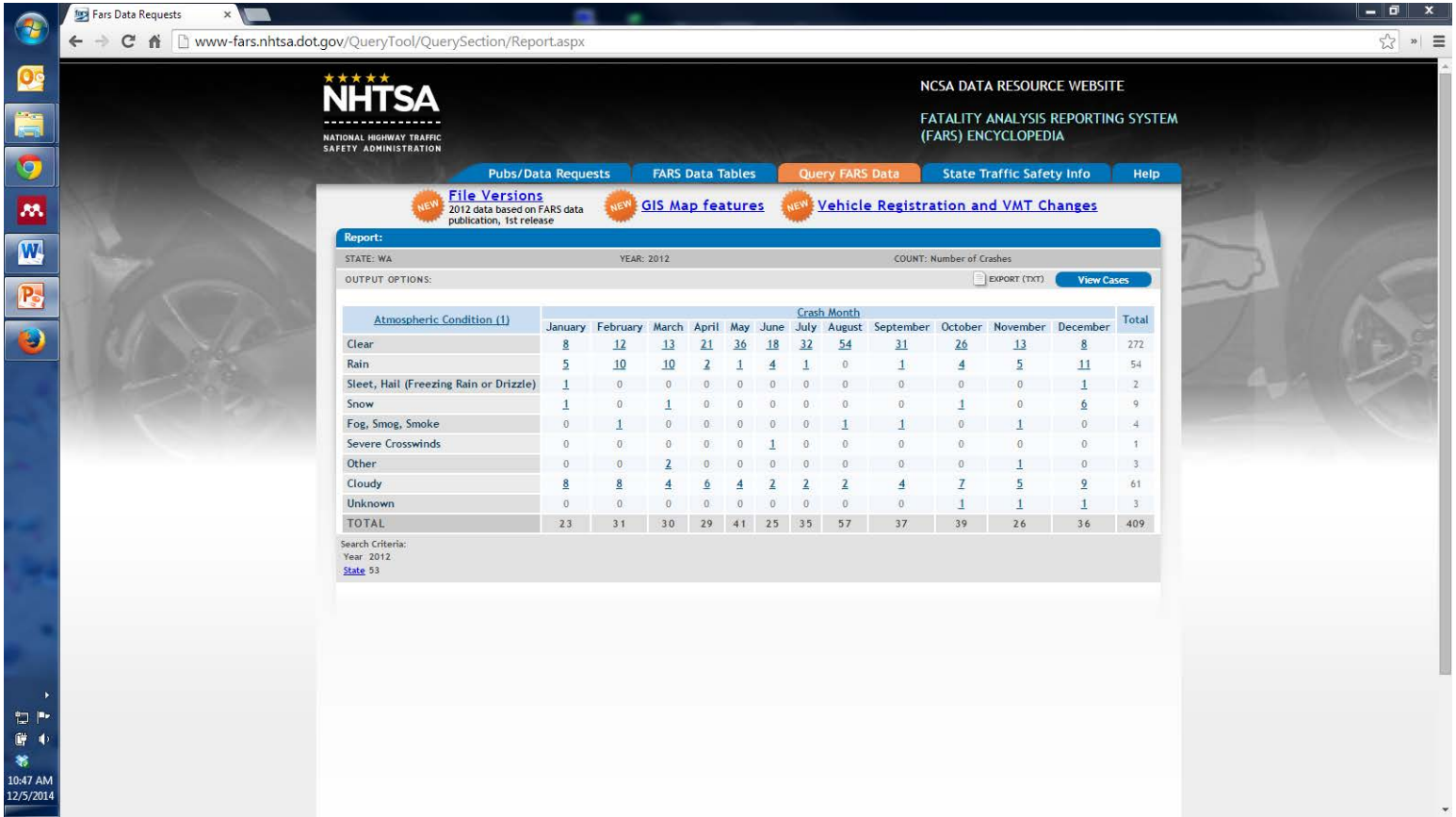
Using Crash Statistics – Advanced

- Build your table
  - Column - “Crash Month”
  - Row - “Atmospheric Conditions (1)”



Using Crash Statistics – Advanced

- View Results



Atmospheric Condition (1)	Crash Month												
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Clear	8	12	13	21	36	18	32	54	31	26	13	8	272
Rain	5	10	10	2	1	4	1	0	1	4	5	11	54
Sleet, Hail (Freezing Rain or Drizzle)	1	0	0	0	0	0	0	0	0	0	0	1	2
Snow	1	0	1	0	0	0	0	0	0	1	0	6	9
Fog, Smog, Smoke	0	1	0	0	0	0	0	1	1	0	1	0	4
Severe Crosswinds	0	0	0	0	0	1	0	0	0	0	0	0	1
Other	0	0	2	0	0	0	0	0	0	0	1	0	3
Cloudy	8	8	4	6	4	2	2	2	4	7	5	9	61
Unknown	0	0	0	0	0	0	0	0	0	1	1	1	3
TOTAL	23	31	30	29	41	25	35	57	37	39	26	36	409

Discussion

- Which month had the most fatal crashes during snowy weather?
  - Is this what we would expect?
  - How does snow contribute to crash risk?

- Why is it important to consider the month when making assumptions about crash risks?