**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Week 9 Lab: Play Calling and Decision Making**

In the Lab Worksheets folder on Oncourse, download the file:  
 Week09\_StatesAndValuesAnd2006Colts.xlsx  
…and open it in Excel.

The tab StatesAndValues contains a calculation of the average point value any team might expect to earn from a given state, when given infinite time.

The tab 2006Colts contains a description of each individual play carried out by the Indianapolis Colts during their 2006 season, which ended with a Superbowl victory.

1. Calculate the value of each startstate and each endstate using vlookup.
2. Make a PivotTable out of the 2006Colts play-by-play data, and answer the following questions:

What was the percentage of rush plays called on first and 10? \_\_\_\_\_\_\_\_\_\_\_

On first and 10, is running more effective than passing? \_\_\_\_\_\_\_\_\_\_\_

With how many yards to go is running more effective than passing on 2nd down?

Who generated more points per carry: Joseph Addai or Dominique Rhodes? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Who is better: Marvin Harrison or Reggie Wayne? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Is it better to throw deep or short? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Nearly all NFL teams gain more “value” from passing plays than for running plays. Why don’t teams pass the ball all the time?

Note: If you’re interested in exploring states and playcalling, advancednflstats.com has play-by-play spreadsheets of the past 8-or-so seasons online for free.