

Data Acquisition

1. Visit this link:
http://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=236&DB_Short_Name=On-Time
2. Select "Prezipped File"
3. Select October 2008.
4. Press Download and save the file.
5. Repeat steps 2-4 for November 2008, December 2008, January 2009, February 2009, March 2009.

Database Preparation

Object: Reduce database size for easier manipulation.

Tools: Microsoft Excel 2007. Earlier versions of Excel are unable to open files with greater than 64K records. The monthly performance data files contain over 500K records each.

1. Open Excel, create a new working file.
2. Open October 2008 zip file.
3. Filter on Diverted=1
4. Filter on DivReachedDest = 1
5. Copy results to working file.
6. Repeat steps 2-4 for November 2008, December 2008, January 2009, February 2009, March 2009, April 2009, May 2009.

October 2008 – 768 records

November 2008 – 653 records

December 2008 – 1629 records

January 2009 – 882 records

February 2009 – 632 records

March 2009 – 1067 records

April 2009 – 1351 records

May 2009 – 1079 records

Total – 8061 records

Data Filtering and Processing

1. In a new column, create a flag to indicate whether the data shows whether the flight visited a gate at the diverted airport. =IF(BN2=BO2, "NoGate", "YesGate"). If Div1TotalGTime is equal to Div1LongestGTime, this means implicitly that the flight did not visit a gate and/or give passengers the opportunity to deplane. See Section "XII. Diversions" in DOT/RITA Technical Directive #17

http://www.bts.gov/programs/airline_information/accounting_and_reporting_directives/technical_directive_17.html for additional details.

2. Filter on the gate flag, "YesGate", to show only records for flights that returned to a gate.
3. One airline at a time, filter on UniqueCarrier, and record the number of YesGate records for each carrier.
4. Clear filters
5. Filter on the gate flag, "NoGate", to show only records for flights that did not return to a gate. Only a subset of the airlines will show in the filter, because some airlines have no records of flights that did not return to the gate.
6. One airline at a time, filter on UniqueCarrier, and record the number of NoGate records for each carrier.
7. Final results appear below:

TOTAL OF 5631 diversions that reached final destination for Oct 2008 through March 2009.

Airline	Diverted Flights that gave passengers option to deplane at diverted airport	Diverted Flights that did not give passengers option to deplane at diverted airport
9E - Pinnacle	308	0
AA - American	267	395
AS - Alaska	150	0
B6 - JetBlue	309	1
CO - Continental	272	0
DL - Delta	192	174
EV - AltAtlantic SE	224	0
F9 - Frontier	24	2
FL - AirTran	164	0
HA - Hawaiian	35	0
MQ - American Eagle	281	91
NW - Northwest	215	8
OH - Comair	113	0
OO - SkyWest	463	0
UA - United	197	75
US - US Airways	289	0
WN - Southwest	718	0
XE - ExpressJet	457	0
YV - Mesa	207	0

| Totals

| 4885

746