# Arline Safety Executive Summary

Goal of this exercise is to prepare a presentation for executive summary related to airline safety.

## Data Sources:

1. Main data: Airline Safety

Data for 56 airlines that were in the global top 100 as of December 2012 and which have operated continuously since Jan. 1, 1985.

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| --- | --- |
| **Column** | **Details** |
| airline | Airline (asterisk indicates that regional subsidiaries are included) |
| avail\_seat\_km\_per\_week | Available seat kilometers flown every week |
| incidents\_85\_99 | Total number of incidents, 1985–1999 |
| fatal\_accidents\_85\_99 | Total number of fatal accidents, 1985–1999 |
| fatalities\_85\_99 | Total number of fatalities, 1985–1999 |
| incidents\_00\_14 | Total number of incidents, 2000–2014 |
| fatal\_accidents\_00\_14 | Total number of fatal accidents, 2000–2014 |
| fatalities\_00\_14 | Total number of fatalities, 2000–2014 |

Data Details:

1. Supplemental data: Auto Fatalities

Data showing number of people killed and injured in fatal collisions.

|  |  |
| --- | --- |
| **Colum** | **Details** |
| Year | Year of incident |
| Killed | Number of fatalities |

Data Details:

1. Supplemental data: Airline Fatalities

Data showing number of people killed in fatal crashes.

|  |  |
| --- | --- |
| **Column** | **Details** |
| Year | Year of incident |
| Fatalities | Number of fatalities |

Data Details:

1. Supplemental data: Combined Fatalities

Data showing the number of people killed due to both auto and airline crashes in an year.

|  |  |
| --- | --- |
| **Column** | **Details** |
| Year | Year of incident |
| Fatalities | Number of fatalities |
| Category | Category of the crash - airline/auto |

Data Details:

## Executive Summary Details:

### Overview:

I have used power point presentation to prepare the executive summary. I have considered the primary goal to show the trend of the airline crashes to show that the airline travel is safe today compared to early days of airline travel. I have also used auto crash data to show how low the airline crash fatalities are compared to the auto crash fatalities.

Below are details about several statistics included in the dashboard.

1. 3 bar charts - I have used bar charts to show the trend of airline fatalities as well as the top 5 airlines with more number of fatalities and incidents.
2. Two Scatter plots - I have used scatter plots to show the relation between the fatalities before 2000 vs, fatalities after 2000, and fatal incidents before 2000 vs. fatal incidents after 2000. I have noticed that there is no correlation that can be established for fata incidents, which makes sense to some extent as each crash is different and can lead to different number of fatalities depending on conditions. But, we can establish come correlation between the fatal incidents themselves, so the airlines that had incidents before 2000 continued to have incidents in the recent years as well after 2000.
3. Four metric cards - These are used to reflect the average number of fatalities and incidents happened per year as well as the total number of fatalities and incidents happened from auto crashes compared to the number of fatalities and incidents happened for airlines.

## References:

* airline\_fatalities.xlsx - Downloaded from <http://www.baaa-acro.com/statistics/death-rate-per-year>, found from one of the supporting links provided.
* auto\_Fatalities.XLS - Downloaded from <https://cdan.nhtsa.gov/SASStoredProcess/guest>, found from one of the supporting links provided.