TSA Insurance claim

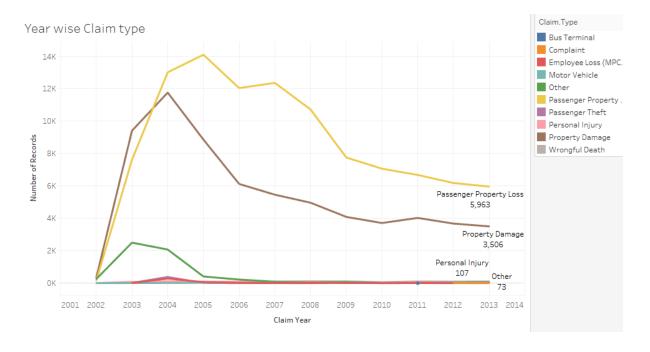
TSA dataset is Property and injury claims filed from 2002 – 2015.

Context: Claims are generally filed against TSA for personal injuries and lost or damaged property during screenings and they keep records of every claim!

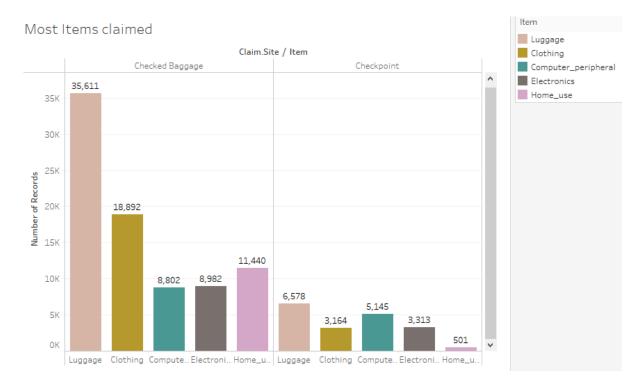
Features: Claim Number, Date Received, Incident Date, Airport Code, Airport Name, Airline Name, Claim Type, Claim Site, Item, Claim Amount, Status, Close Amount, Disposition

```
> str(train)
'data.frame':
              130353 obs. of 13 variables:
$ Airport.Code : Factor w/ 426 levels "ABE", "ABI", "ABQ",..: 130 366 389 266 254 69 312 65 25
                    : Factor w/ 426 levels "Aberdeen Regional Airport",..: 274 355 206 247 288 4 3
$ Airport.Name
                   : Factor w/ 194 levels "Aer Lingus", "Aero California",..: 73 138 41 41 80 29 1
$ Airline.Name
                  : Factor w/ 7 levels "Employee Loss (MPCECA)",..: 7 7 7 7 7 4 4 3 4 4 ...
$ Claim.Type
                   : Factor w/ 5 levels "Bus Station",..: 3 2 2 3 3 2 2 3 3 2 ..
$ Claim.Site
$ Item
                    : Factor w/ 31 levels "Artificial flowers & Fruits",..: 23 20 24 20 13 23 21 7
                   : num 19755 4281 15961 25313 32792 ..
$ Claim.Amount
                   : Factor w/ 6 levels "Approved", "Denied", ...: 1 6 6 1 1 6 1 1 2 1 ...
$ Status
                 : num 9643 12191 6426 12191 15887 ...
: Factor w/ 3 levels "Approve in Full",..: 1 3 3 1 1 3 1 1 2 1 ...
$ Close.Amount
$ Disposition
$ Date.Received_new: Date, format: "2002-01-04" "2002-02-02"
$ Incident.Date_new: Date, format: "2002-12-12" "2004-01-16" ...
                   : Factor w/ 15 levels "1994", "1996", ...: 4 4 4 4 4 4 4 4 4 4 ...
$ claim_year
```

Exploratory Data Analysis:



There are 4 different Claim Sites, out of which "Checked Baggage" and "Checkpoint" constitute the most. Out of these 2, the top items claimed in these sites are:



We have noticed that most of the claims are applied from 3 main Airports –

 $LA\ International, JFK\ \&\ Newark\ International.\ There\ are\ 4\ top\ Airlines\ which\ explains\ the\ maximum\ items\ applied\ for\ claim\ -$



There are multiple Airline accidents / incidents since 2000:

American Airlines Flight 587, an Airbus A300 crashed a few kilometers away from JFK airport, while en route to Santo Domingo in the Dominican Republic. The crash killed all 260 people on the plane and five people on the ground.

Alaska Airlines Flight 261 went down on January 31, 2000, in the Pacific Ocean about 2.7 miles (4.3 km) north of Anacapa Island, California. The two pilots, three cabin crew members, and 83 passengers on board were killed, and the aircraft was destroyed

Southwest Airlines Flight 1248 slid off the runway while landing in a snowstorm at Chicago Midway Airport on December 8, 2005. The aircraft crashed into automobile traffic, killing a 6-year-old boy in a car.

Northwest Airlines Flight 253 was the target of the attempted al-Qaida "Christmas Day bombing" on December 25, 2009.

American Airlines Flight 587 crashed in Belle Harbor, Queens, New York City after takeoff from John F. Kennedy International Airporton 12 November 2001.

American Airlines Flight 723 crashed in Colonie, New York, while attempting to land at Albany Airport. All 28 people on board perished.

JetBlue Airways Flight 292 executed an emergency landing on September 21, 2005, in Los Angeles International Airport after the nose wheels of the landing gear jammed in an abnormal position.

