

# Analysis of USAir97 network

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## General information

US Air 97 Network has **332** nodes and **2126** edges.

Nodes represent Airports in the United States and edges represent routes between these airports.

Each edge has weights with indicated how many flights are on given route.

## Top US airports

### **Top ten airports with flights to/from most other airports:**

- ▶ Chicago O'hare Intl
- ▶ Dallas/Fort Worth Intl
- ▶ The William B Hartsfield Atlan
- ▶ Pittsburgh Intl
- ▶ Lambert-St Louis Intl
- ▶ Charlotte/Douglas Intl
- ▶ Stapleton Intl
- ▶ Minneapolis-St Paul Intl/Wold-
- ▶ Detroit Metropolitan Wayne Cou
- ▶ San Francisco Intl

# Top US airports



Figure 1: Airports with flights to/from most other airports - map

## Top US airports

### Top ten airports with most flights:

- ▶ Chicago O'hare Intl
- ▶ Dallas/Fort Worth Intl
- ▶ Los Angeles Intl
- ▶ Minneapolis-St Paul Intl/Wold-
- ▶ The William B Hartsfield Atlan
- ▶ Seattle-Tacoma Intl
- ▶ Stapleton Intl
- ▶ San Francisco Intl
- ▶ Lambert-St Louis Intl
- ▶ Newark Intl

# Top US airports

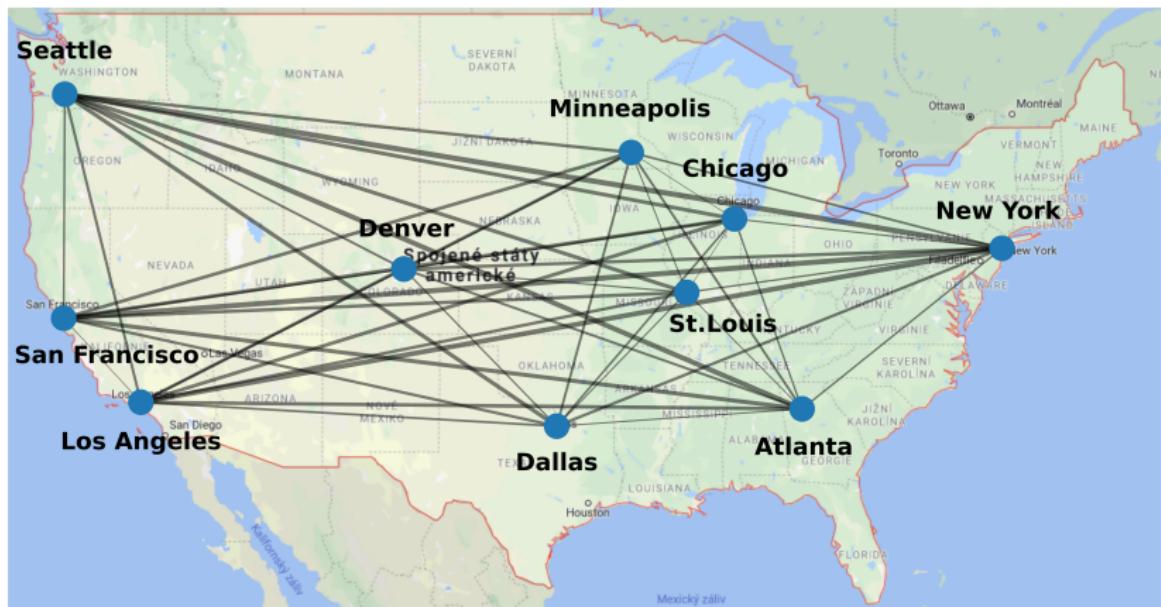


Figure 2: Airports with most flights - map

## Centralities

### Degree centrality:

- ▶ **Chicago O'hare Intl: 0.4199395770392749**
- ▶ Dallas/Fort Worth Intl: 0.3564954682779456
- ▶ Los Angeles Intl: 0.1782477341389728
- ▶ Minneapolis-St Paul Intl/Wold-: 0.23564954682779457
- ▶ The William B Hartsfield Atlan: 0.30513595166163143
- ▶ Seattle-Tacoma Intl: 0.17220543806646527
- ▶ Stapleton Intl: 0.256797583081571
- ▶ San Francisco Intl: 0.2054380664652568
- ▶ Lambert-St Louis Intl: 0.283987915407855
- ▶ Newark Intl: 0.20241691842900303

## Centralities

### Closeness centrality:

- ▶ **Chicago O'hare Intl: 0.6073394495412844**
- ▶ Dallas/Fort Worth Intl: 0.5544388609715243
- ▶ Los Angeles Intl: 0.5245641838351822
- ▶ Minneapolis-St Paul Intl/Wold-: 0.5399673735725938
- ▶ The William B Hartsfield Atlan: 0.5355987055016181
- ▶ Seattle-Tacoma Intl: 0.5262321144674086
- ▶ Stapleton Intl: 0.5245641838351822
- ▶ San Francisco Intl: 0.533011272141707
- ▶ Lambert-St Louis Intl: 0.5287539936102237
- ▶ Newark Intl: 0.4932935916542474

## Other properties

- ▶ Radius of the graph: **3**
- ▶ Diameter of the graph: **6**

## Power law degree

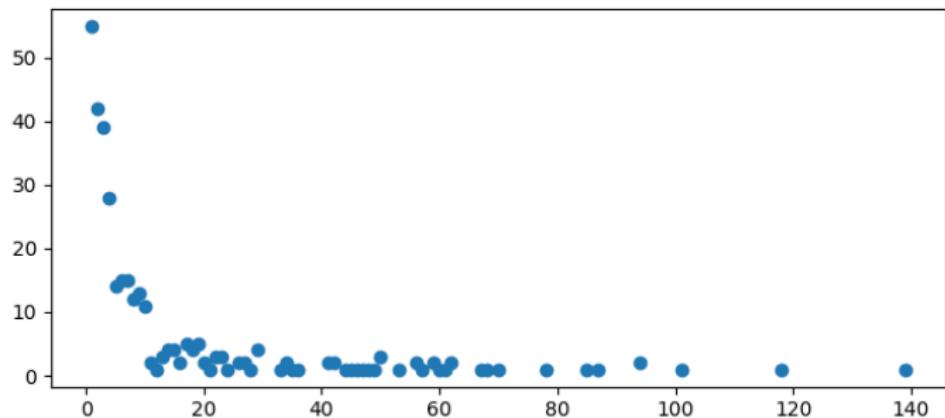


Figure 3: