Moving Truck Rentals



Web Scraping Project Aug 09, 2018 Xu Huang

MOVING 101

The guide to everything you need to know before you go get moving company quotes



Overview

Moving Cost Calculator

Options Comparison

Company Guides

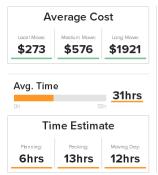
Reviews

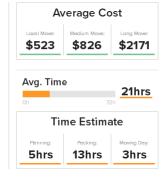
MOVING OPTIONS COMPARISON













HYBRID™ & DIY MOVING COMPANY GUIDES











MOVING OPTIONS COMPARISON









MOVING OPTIONS COMPARISON



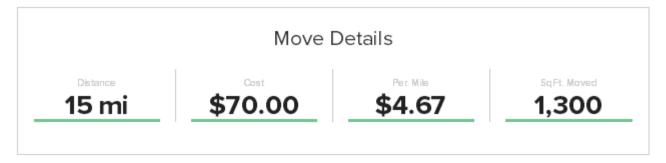






U-Haul Truck Customer Reviews





- Scraping method: Slow process...
- Analyzing methods: R & Python



 U-Haul, Penske and Budget are the main focus

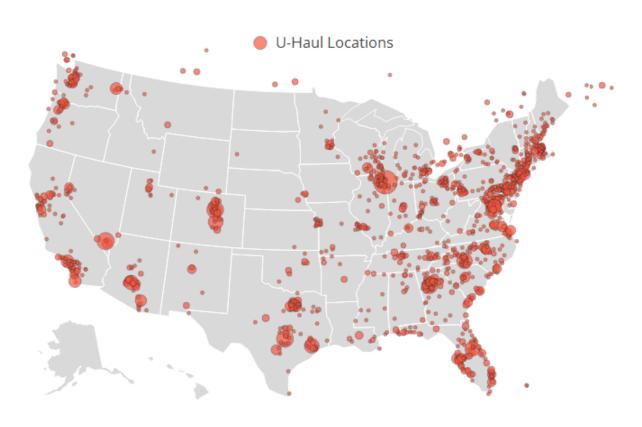


Enterprise and Ryder are mainly for testing purpose



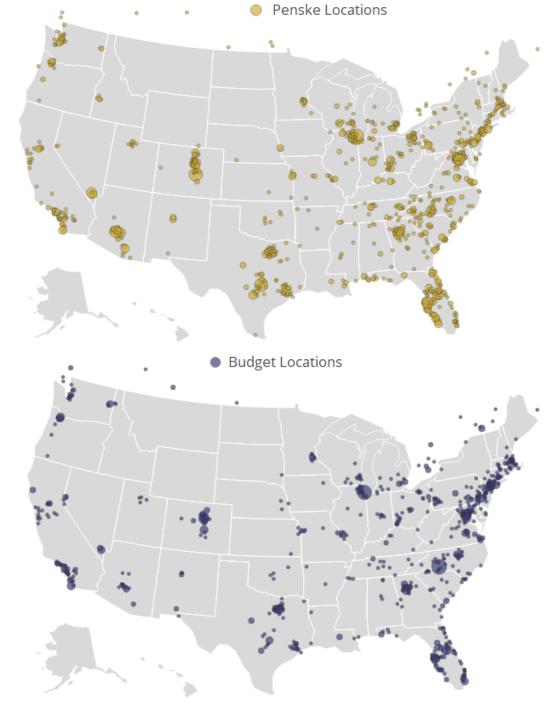




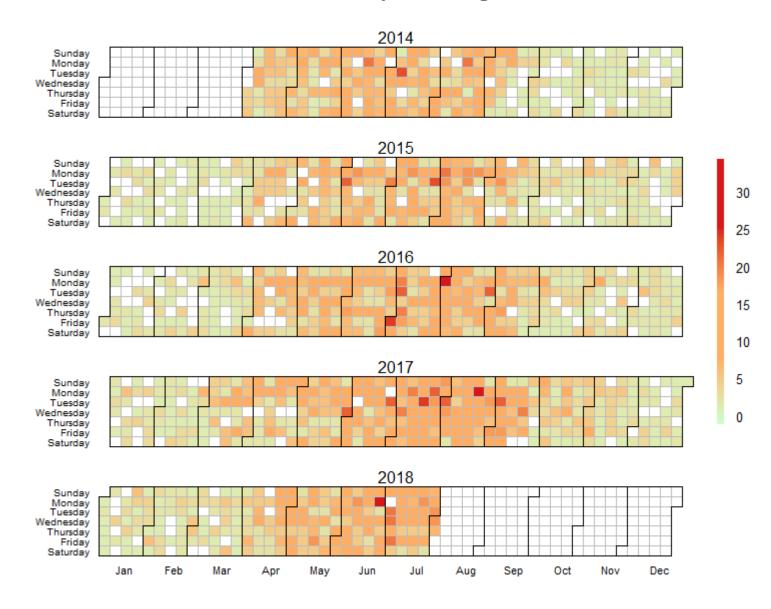


Geopy bubble map requires geocoders

GeocoderQuotaExceeded: ('HTTP Error 429: Too Many Requests', 'occurred at index 2348')



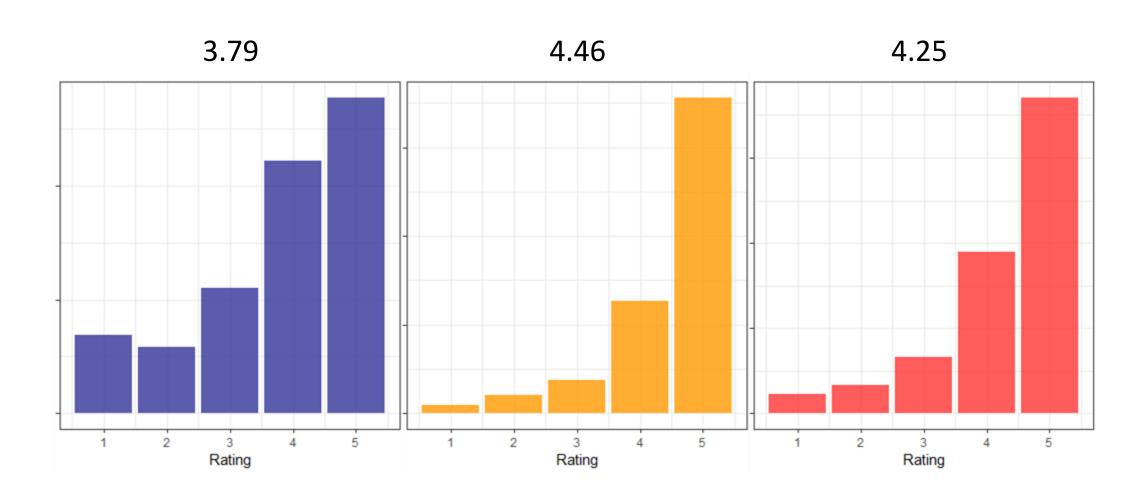
Calendar Heat Map of Moving Count

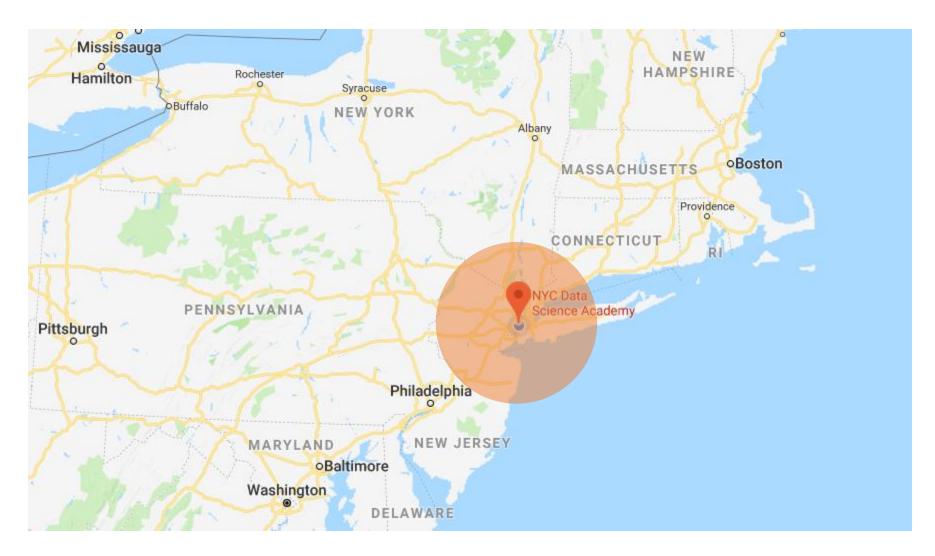


- Moving business reaches peak in high summer
- Weekly pattern is not very clear



Average Rating:

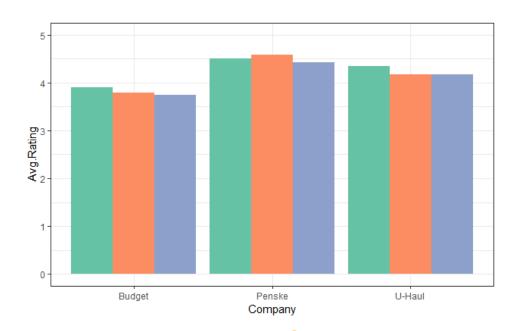


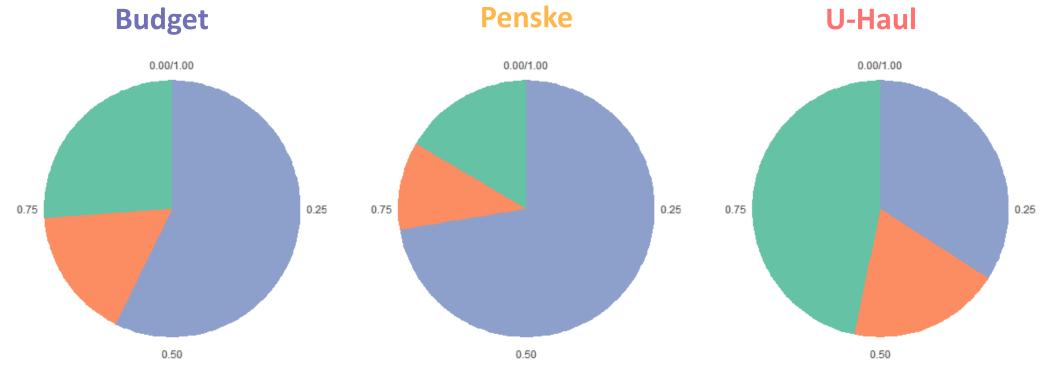


Distance: Local (< 50 miles), Medium (50 ~ 250 miles), Long (> 250 miles)

Rating by Distance:







Local 0.0020 -Medium Long 0.0015 density 0.0010 0.0005 -0.0000 2000 4000 6000 Sqft.Moved

MOVING LABOR GUIDE





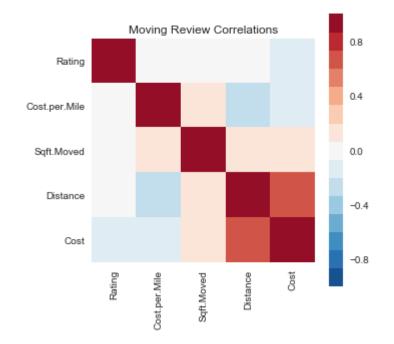






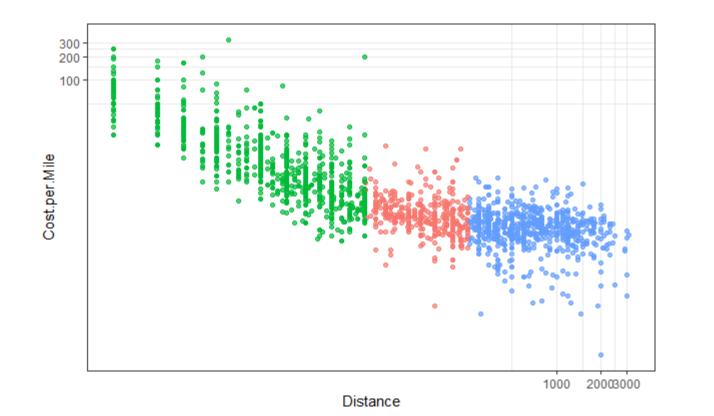
2-3 Bedroom Apt/House are the peak choices for truck rental

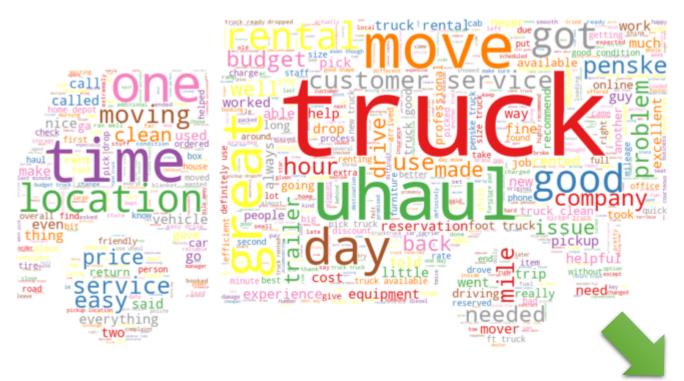
Only Distance & Cost show strong positive correlation



Average Cost per Mile in \$:

	Budget	Penske	U-Haul
Local	21.1	19.4	16.6
Medium	1.98	2.78	2.18
Long	1.13	1.30	1.39





 Some words need to be removed from the cloud

```
my_stopwords=
['truck', 'uhaul',
'penske', 'budget']
```





All happy families are alike; each unhappy family is unhappy in its own way......







Penske

U-Haul



Author: Francesca Di Meglio

Editor's conclusions:



- Get a price break if U-Haul® changes your reservation on you
- Flexible policy for changes you make to your reservation
- Same-day rental
- Special offers for customers
- Safety features on the equipment



- Sly tactics could cause you to spend more than you want (or need to)
- Unreliable online customer service
- High possibility of being unable to pick up at your preferred location



U-Haul



Author: Francesca Di Meglio

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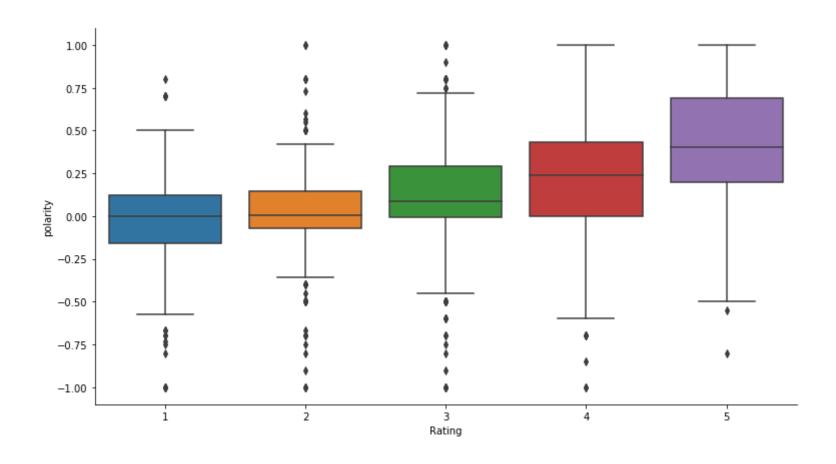


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Sentiment Analysis



Co-Occurrence Probabilities: Word Embedding

 $window_size = 2$

```
In [61]: word_NN('truck'), word_NN('uhaul'), word_NN('great')
Out[61]: ('move', 'penske', 'good')
In [64]: word NN('locate'), word NN('service'), word NN('rental'), word NN('easy')
Out[64]: ('extend', 'customer', 'drop', 'quick')
In [63]: word NN('get'), word NN('day'), word NN('time'), word NN('would')
Out[63]: ('someone', 'late', 'several', 'recommend')
In [70]: word NN('clean'), word NN('drive'), word NN('got'), word NN('issue')
Out[70]: ('ran', 'driving', 'one', 'problem')
In [71]: word_NN('charge'), word_NN('cost'), word_NN('reservation'), word_NN('tire')
Out[71]: ('additional', 'mileage', 'confirmed', 'repair')
In [99]: word_NN('phone'), word_NN('deal'), word_NN('price'), word_NN('job')
Out[99]: ('call', 'with', 'best', 'wonderful')
```

Future Work



VS



Rental Trucks



Moving Containers









