Overview:

A truck drives over a lane from one origin zipcode (1st 3 numbers) to a destination zipcode.

A truck driving across a lane is a transaction and transactions have sellers, truckers and agents (see exact terms below)

A lane comprises multiple routes (highways)

Each highway traverses multiple zip codes (1st 3 numbers).

Each day a number of transactions occurs.

We are computing a set of measurements for a transactions which are demoed below.

In summary, we compute other like transactions by expanding a catchment circle around origin and destination and once having increased the size of the catchment circles a number of computations are made.

These computations are bound to the actual lane (Point A to Point B) in that point in time.

We need to incorporate into the model the computations for that lane for that day.

We need to incorporate into the model the other lanes that were part of the catchment for that specific day.

Each day new computations are made for that days transactions.

The data used in the transactions are a rolling 30 day set.

The job is to show that your graph schema actually can support storing data that:

a. ties zip code to highway

b. ties a truck route transaction to a zip code OR highway

c. ties a truck route transaction to a specific route or lane

Access:

Database for ETL is hosted in AWS and You can connect to it using psql command-line tool.

psql -h [ed17mkr0mnf2c01.cztweyujn8gx.us-east-1.rds.amazonaws.com](http://ed17mkr0mnf2c01.cztweyujn8gx.us-east-1.rds.amazonaws.com/) -p 5432 -U echouser -W echodb

Password is pragmas0ft

Demo:

Demo #1:: <http://echo.us-east-1.elasticbeanstalk.com/>.

Demo #2: :<http://echo-tracking.s3-website-us-east-1.amazonaws.com/app/index.html>

Test Data:

There are 5 test data sets. The bulk of the test data sets provide data:

1. Showing the number of trucks that drove between two zip codes for a specific period of time, and the cost, the profit, and other route properties

2. Shows highways that go through zip codes

Sample Queries

Based on the ability to store this data in the schema, here are some queries:

1. How many trucks originating from Point A between August 1 and August 10

2. How busy is the truck lane between Point A and Point B on Highway 123 from August 1 to August 10

3. What is the Cost of Goods for all truck routes that drive through zipcode 12345