

risks_per_mile

```
CREATE TABLE risks_per_mile AS
```

```
SELECT driverid, events as risky_events, totmiles as total_miles, 1000000*events/totmiles as  
risks_per_million_miles  
FROM riskfactor;
```

driver_risk

```
CREATE TABLE driver_risk AS
```

```
SELECT driverid, risks_per_million_miles, 1+(9*((risks_per_million_miles)-(min(risks_per_million_miles)  
over())))/((max(risks_per_million_miles) over())-(min(risks_per_million_miles) over())) as scaled_risk  
FROM risks_per_mile;
```

truck_mpg

```
CREATE TABLE truck_mpg AS
```

```
SELECT truckid, sum(miles) as total_miles, sum(gas) as total_gas, sum(miles)/sum(gas) as overall_mpg  
FROM truck_mileage  
GROUP BY truckid;
```

fulldata

```
CREATE TABLE fulldata AS
```

```
SELECT geolocation.truckid, geolocation.driverid, model, event, latitude, longitude, city, state, velocity,  
event_ind, idling_ind, totmiles as total_miles, avgmpg as avg_mpg, overall_mpg, scaled_risk  
FROM geolocation
```

```
JOIN trucks ON geolocation.truckid = trucks.truckid AND geolocation.driverid = trucks.driverid
```

```
JOIN driver_mileage ON geolocation.driverid = driver_mileage.driverid
```

```
JOIN average_mpg ON geolocation.truckid = average_mpg.truckid
```

```
JOIN truck_mpg ON geolocation.truckid = truck_mpg.truckid
```

```
JOIN driver_risk ON geolocation.driverid = driver_risk.driverid;
```

Tableau - Big Data Project - Group2

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10.182.131.215
Cloudera Hadoop

Schema
project

Table
fulldata [+](#)

☒ Exact ☐ Contains ☐ Starts with

[fulldata \(project.fulldata\)](#)

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project

Connection
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Extract includes all data. 11/13/2019 10:29:13 AM

Filters
0 [Add](#)

Sort fields Data source order

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#	fulldata Longitude	fulldata City	fulldata State	# fulldata Velocity	# fulldata Event Ind	# fulldata Idling Ind	# fulldata Total Miles	# fulldata Avg Mpg	# fulldata Overall Mpg	# fulldata Scaled Risk
44047	-122.714	Santa Rosa	California	17	0	0	646,020	5.12208	5.10522	2.39766
37717	-121.899	Aptos	California	27	0	0	631,496	4.43464	4.39005	2.91234
35770	-121.291	Stockton	California	77	1	0	643,126	5.81993	5.65649	1.47862
40961	-123.356	Willits	California	22	0	0	668,620	5.18663	5.16114	1.44326
38395	-117.795	Irvine	California	43	0	0	672,026	4.61759	4.58846	4.10115
40765	-122.948	Occidental	California	0	0	1	640,069	4.51540	4.47135	4.74427
33910	-120.997	Modesto	California	0	0	1	622,764	5.71087	5.67620	2.94545
36215	-122.346	San Pablo	California	25	0	0	663,403	5.70887	5.60269	3.69779
48494	-119.966	Mariposa	California	0	0	1	618,049	5.78769	5.65197	3.92869

Data Source Risky Drivers Low MPG Trucks Risky Events Idling Trucks Risky Models