Preliminary Findings Regarding the Nevada SNAP FDaaS Implementation

Overview

On July 26, 2016, Pondera Solutions implemented its Fraud Detection as a Service (FDaaS) platform for the Supplemental Nutrition Assistance Program (SNAP) operated by the Nevada Division of Welfare and Supportive Services (DWSS). This platform employs modern analytics solutions to assist in detecting potential fraud, waste, and abuse. This report summarizes preliminary findings identified in the initial FDaaS rollout. A second deployment including additional alerts, maps, network analyzer, and case management is scheduled for August 30, 2016.

Flag Alert Summary

A review of the FDaaS Nevada SNAP Dashboard revealed that SNAP retailers and recipients tripped a total of 350,087 separate flag alerts for recipients and retailers during the claims data time period of January 31, 2011 to March 31, 2016. An alert is generated in the Dashboard each time a flag is tripped. Flags are tripped and alerts are identified when thresholds are exceeded in each batch of Nevada SNAP claims data processed by Pondera. Each batch typically contains claims submitted to Nevada SNAP for a one-month period. A flag alert summary for the entire claims data period is included in the tables below.

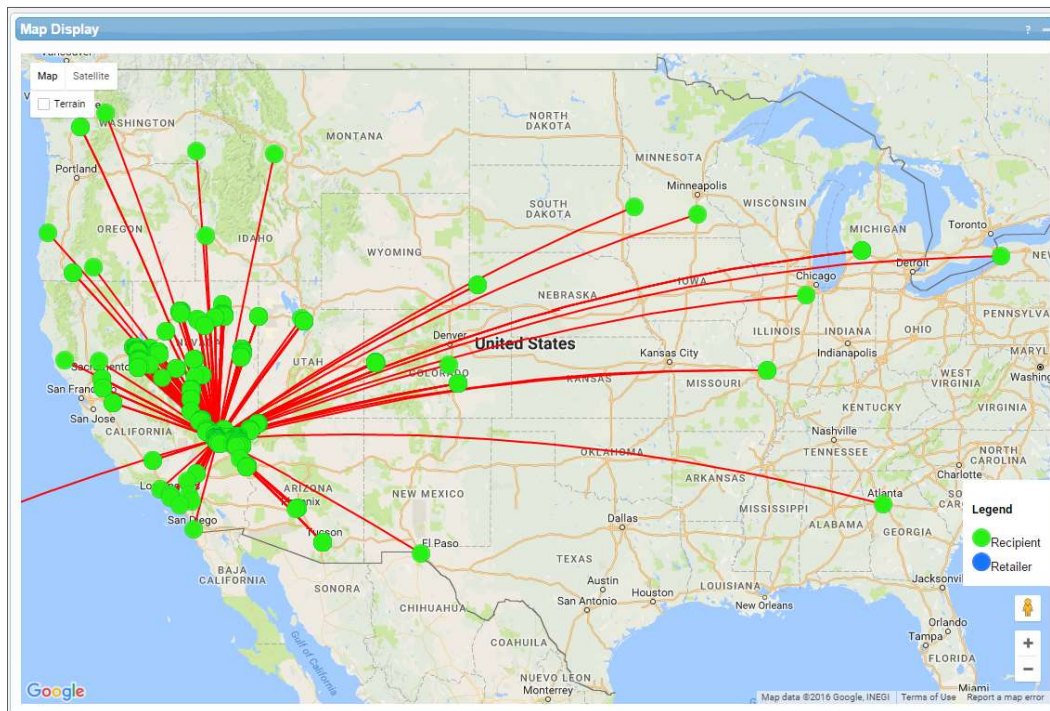| Distinct Recipient Case Counts for Recipient Flags		
Recipient Flag Descriptions	**Flag Count**	**Distinct Recipient Case Count**
Recipients traveling 10 miles or more	239,848	239,848
Exclusive out-of-state EBT utilization	67,200	26,631
Recipient residing in shelter with distant transactions	30,200	2,685
PARIS match	2,200	2,200
IRIS referral	2,026	1,968
Recipients who are currently incarcerated	1,340	1,340
Recipient transaction spike at superclub	1,289	1,289
Deceased recipient	1,944	762
PARIS/out-of-state combo	91	91
Single transaction full allotment use	4	4
	346,142	**276,818**

Distinct Retailer Count for Retailer Flags

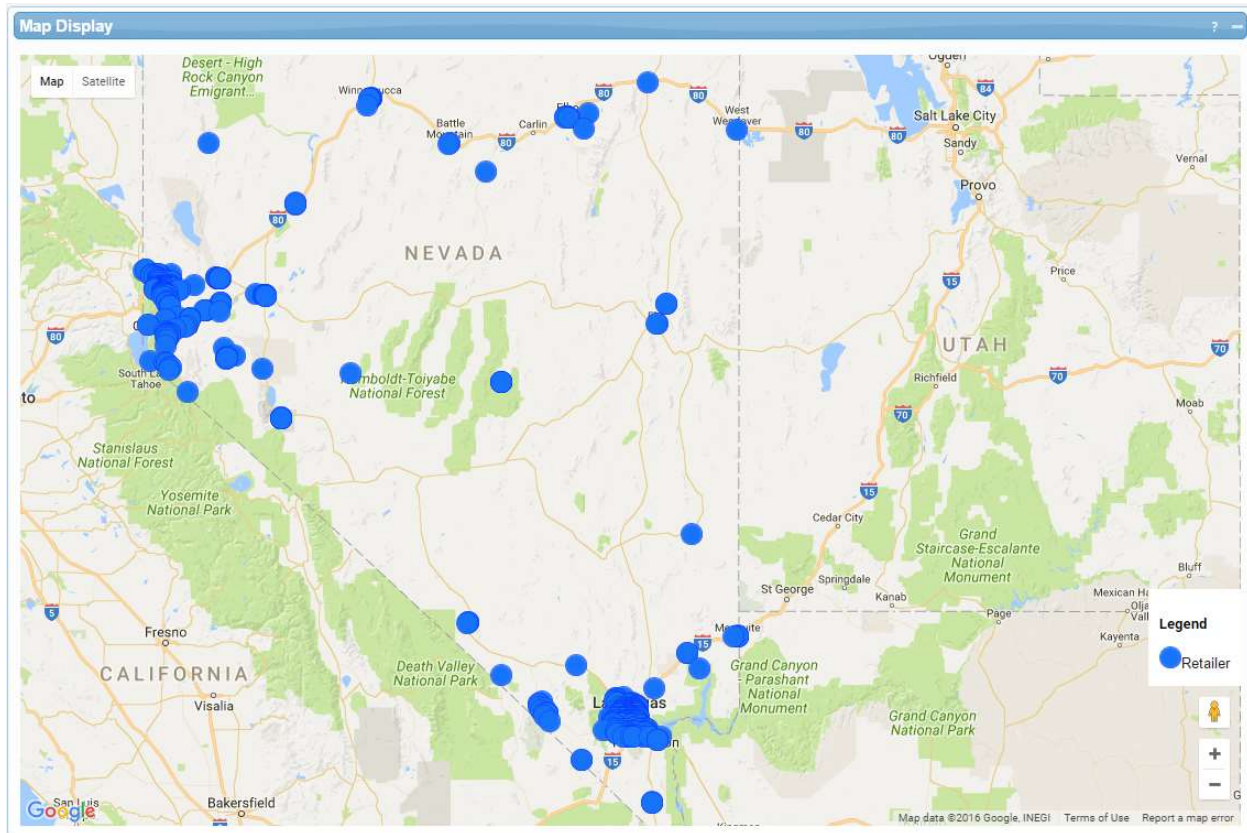| Retailer Flag Descriptions	Flag Count	Distinct Retailer Count
Transaction volume spike indicator	1,767	1,767
Recipient volume spike indicator	1,517	1,517
Convenience stores which exceed peer average for transactions	488	466
Smash and grab alert	155	155
Transaction amount spike indicator	7	7
Convenience stores with high dollar transactions	11	2
	3,945	**3,914**

Geospatial Map Summary

The FDaaS Dashboard includes geospatial mapping capability to visualize (1) recipients who to visit a particular retailer; (2) recipients who travel excessive distances (greater than 50 miles) to visit a retailer; and (3) convenience stores exceeding peer averages for individual transactions. This tool furnishes the ability to provide a snapshot of recipient and retailer activity that might be indicative of trafficking in SNAP benefits.

The geospatial map below provides an example of recipients traveling excessive distances to transact business at retailers in zip code area 89048.

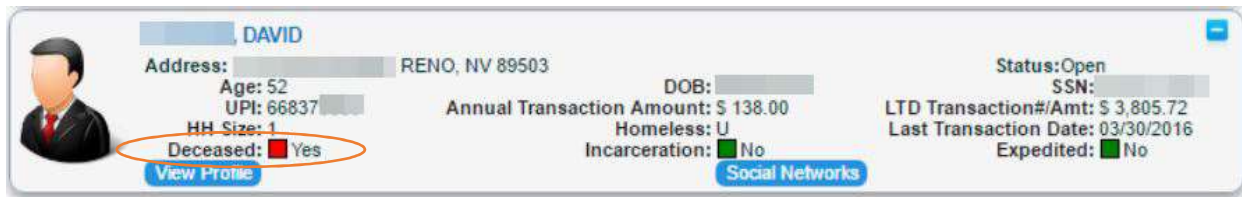The geospatial map below provides an example of convenience stores exceeding peer averages for individual transactions.[1]

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[1] The convenience store retailer exceeds peer transaction amount average by 20 percent or more.

Flag Alert Examples

The following examples provide illustrations of flags that alerted subsequent to the implementation of the FDaaS platform for Nevada SNAP:
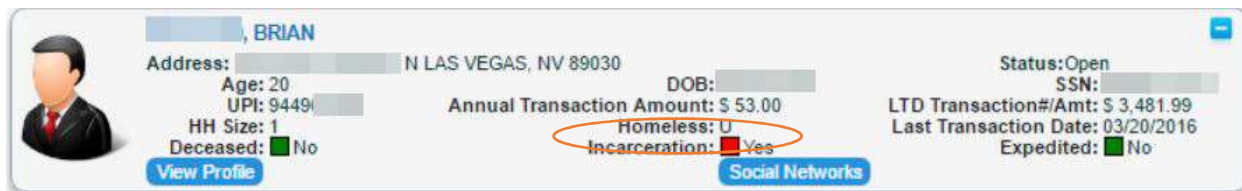
DECEASED RECIPIENT EXAMPLE

The FDaaS Dashboard identified David XXXXX (Name Redacted) as an active Nevada SNAP recipient, who died on March 2, 2016. A review of the FDaaS Dashboard Flag Details disclosed a total of 26 SNAP transactions occurring after his date of death at four different retailers.

INCARCERATED RECIPIENT EXAMPLE

The FDaaS Dashboard identified Brian XXXXX (Name Redacted) as an active Nevada SNAP recipient, who currently is incarcerated and has been so since November 13, 2015. Open-source research disclosed that XXXXX plead guilty to murder during February 2016 for shooting and killing a 17-year-old in Washington state during 2015. FDaaS Dashboard data determined a last SNAP transaction date of March 20, 2016 for XXXXX, which occurred during his period of incarceration.

VALIDATION EXAMPLE

Public news reports identified the arrests of three individuals during May 2015 for SNAP fraud charges associated with activity at two convenience stores in XXXXX County, Nevada. According to the published reports, law enforcement authorities made three arrests and uncovered a loss of $376,000 through the fraudulent use of SNAP funds at the XXXXX Convenience Store and XXXXX Mart.

Both convenience stores were analyzed through the FDaaS Dashboard. This analysis sought to determine if any suspicious behaviors/activity would have been identified through flag alerts if the Pondera platform had been active at the time of the perpetrated fraud. Analysis determined the following flag alerts would have been identified for activity occurring prior to the arrests, and the analytics could have assisted in identifying the ongoing suspicious activity at the stores.

For XXXXX Convenience Store:
- Recipient volume increased 159 percent during a three-month period
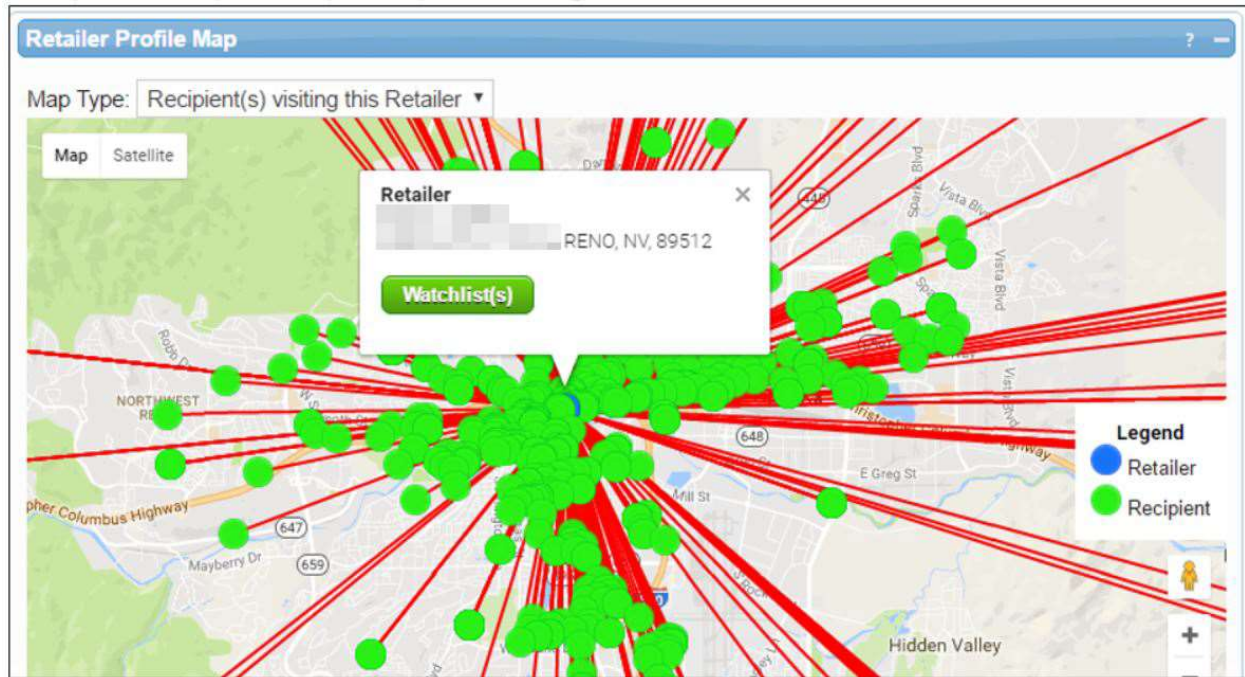- Transaction volume increased 320 percent during a three-month period

For XXXXX Mart:
- Recipient volume increased 241 percent during a three-month period
- Transaction volume increased 178 percent during a three-month period
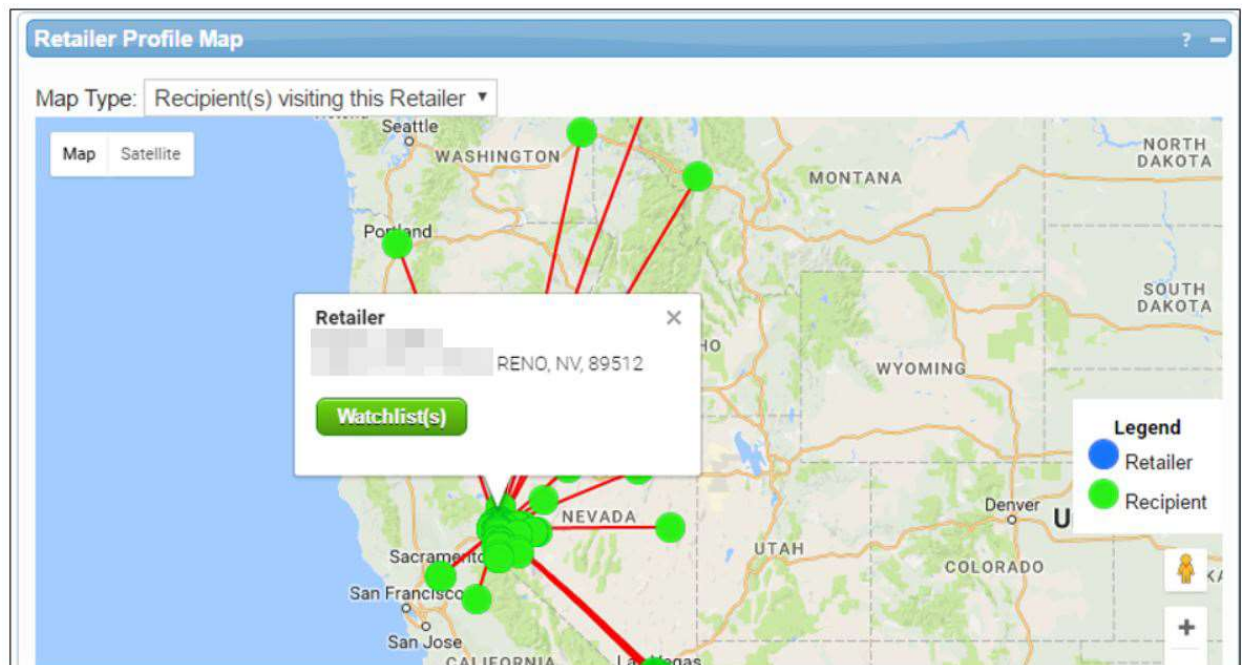- Transaction amounts exceeded Nevada SNAP convenience store peer average by 22 percent

Not only were recipient and transaction spikes found at these two convenience stores, but both also had recipients traveling significant distances to conduct SNAP transactions. This is illustrated through the geospatial maps below.[2]

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[2] The incarceration and validation examples herein are compiled from public source data and further investigation would be required to confirm the details set forth above.

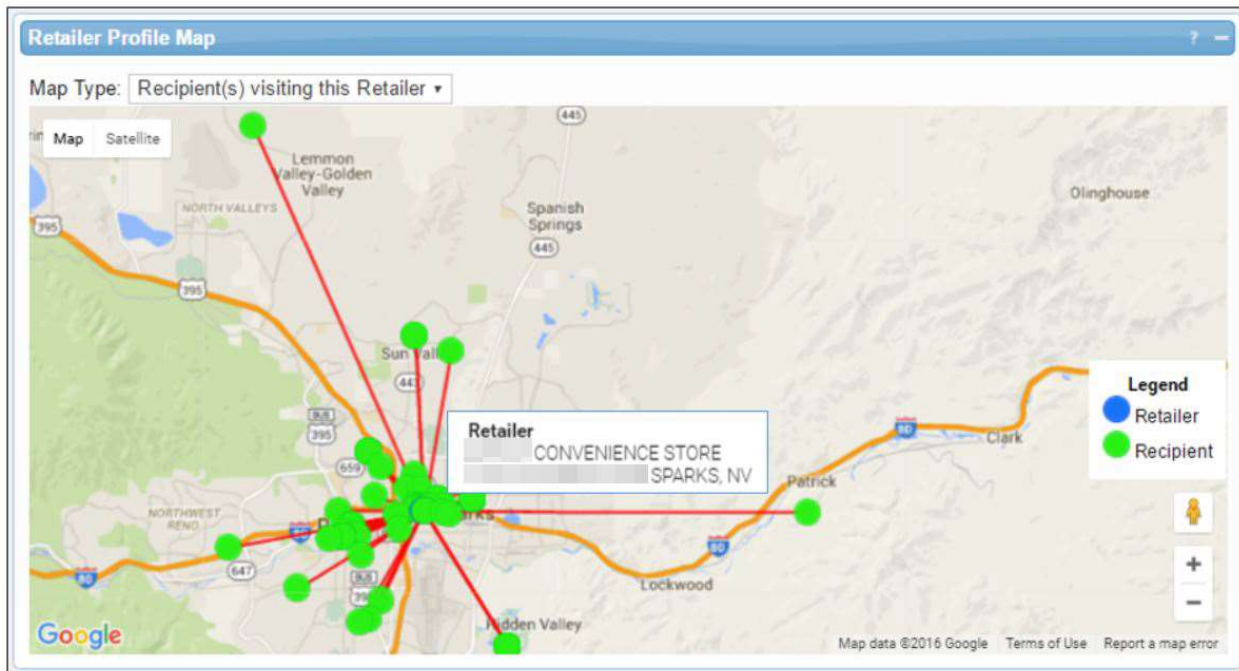XXXXX Mart Geospatial Map – Recipients Visiting Retailer

Zoom View

Bird's Eye View

XXXXX Convenience Store Geospatial Map – Recipients Visiting Retailer

Bird's Eye View