

Cloud-Based Analytics in Action

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Neustar

The Neustar logo is displayed in white lowercase letters on a green rectangular background. The background of the slide is a dark grey with a repeating pattern of the word "neustar" in a lighter grey font.

neustar®

CLOUD BASED ANALYTICS IN ACTION

Making the complex look easy

What's it take

What's it look like

What's next



COMPANY OVERVIEW

NYSE: NSR
\$905 Million
in 2013 Revenue (Est)
1500+ Employees
14,000+ Customers

Manage Almost **7 Billion** Physical And Virtual Addresses

Enable **6 Billion** Daily Text Messages

Enable **4 Billion** Daily Phone Calls

Geo-Locate nearly **2.8 Billion** IP Addresses

Enable **5 Billion** Daily Internet Location Searches

Answer **2 Billion** Daily Customer Client Queries

Ensuring a Stringent **Privacy by Design** Philosophy to Protect Your Customers.

MAKING IT LOOK EASY



DODGERS VS. PADRES



vs.



REALLY!!!!



ARE THEY THAT DIFFERENT?

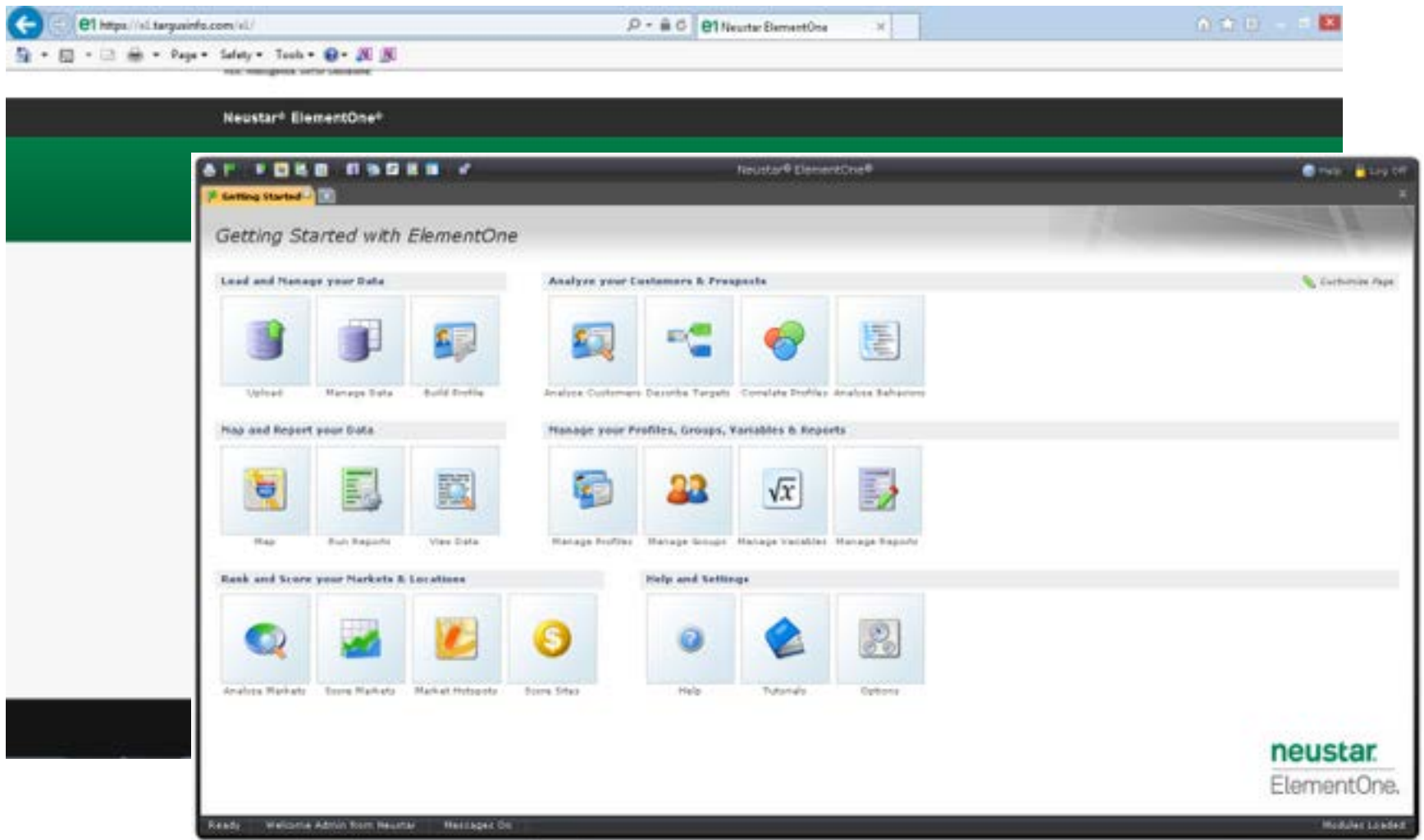
San Diego



Los Angeles



WEB BASED ANALYTICS PLATFORM



45-MINUTE DRIVE TIME

Padres Fan Base



Dodgers Fan Base



MLB TARGET AUDIENCES

Neustar® ElementOne®

Getting Started | Group Manager

Group: San Diego Padres Fans
 Description: A description for the new group.

Navigation | Demographics | Profiles Selection | Report | Export | Dependency

Groups	Attend MLB Baseball Regular Season	Demographics			
Code	Analysis Index	Average Income	Average Age	Children	Home Owners
G1	183	\$128,402	45.8	25%	55%
S6	225	\$180,949	47.7	29%	76%
S14	206	\$135,487	39.8	0%	67%
S48	200	\$81,859	39.9	51%	21%
S84	179	\$42,726	36.9	78%	10%
S12	152	\$160,178	46.1	29%	51%
S49	134	\$90,921	34.2	31%	100%

Demographics

Age	Children	Home Owners
45.8	24.7%	55.8%
47.7	29.4%	76.3%
39.8	0.0%	66.0%
39.9	51.1%	21.0%
36.9	77.7%	9.7%
46.1	28.6%	51.2%
34.2	30.7%	100.0%
62.7	14.3%	38.2%
51.6	33.3%	57.0%
29.5	47.6%	0.0%
27.9	0.0%	0.0%

Ready | Welcome Admin from Neustar | Messages On | Modules Loaded

AUDIENCE COMPARISON

	SAN DIEGO PADRES	LOS ANGELES DODGERS
2014 Q2 Pop	2,894,393	12,612,519
2014 Q2 HHs	1,029,103	4,121,802
2014 Q2 Median HH Age	49.2	49.2
2014 Q2 Median HH Income	\$62,112	\$57,999
2014 Q2 Median HU Value	\$416,999	\$443,564
2014 Q2 Beer and ale per HH	\$118.05	\$120.46
2014 Q2 Wine per HH	\$121.46	\$113.36
2014 Q2 Admission to sporting events per HH	\$71.66	\$66.97
2014 Q2 Social, recreation, health club membership per HH	\$205.37	\$192.78
2014 Q2 Wigs and hairpieces per HH	\$2.71	\$3.42
2014 Q2 Cosmetics, perfume, bath preparations per HH	\$192.24	\$194.18
2014 Q2 Bananas per HH	\$51.41	\$55.73

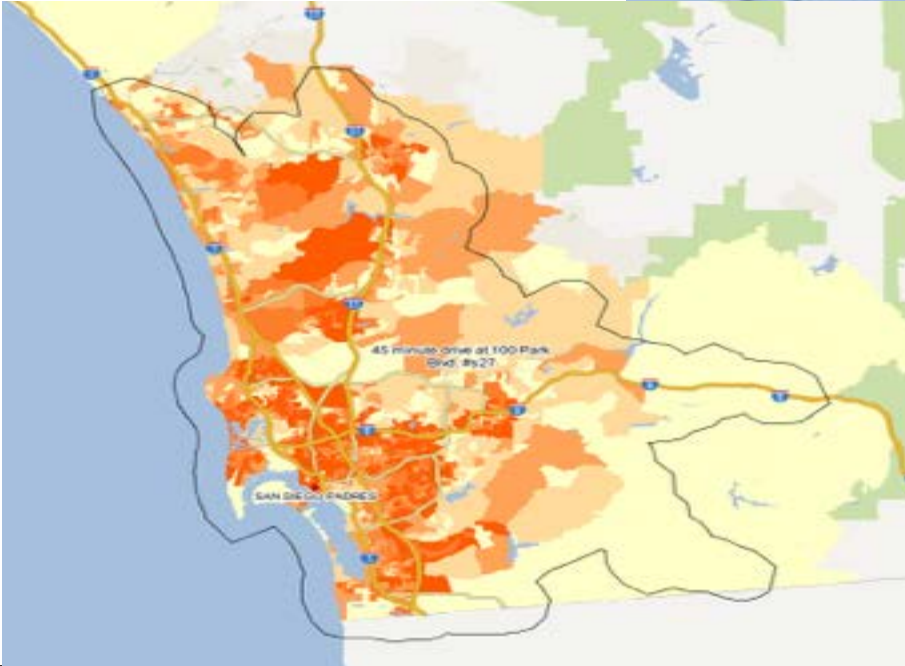
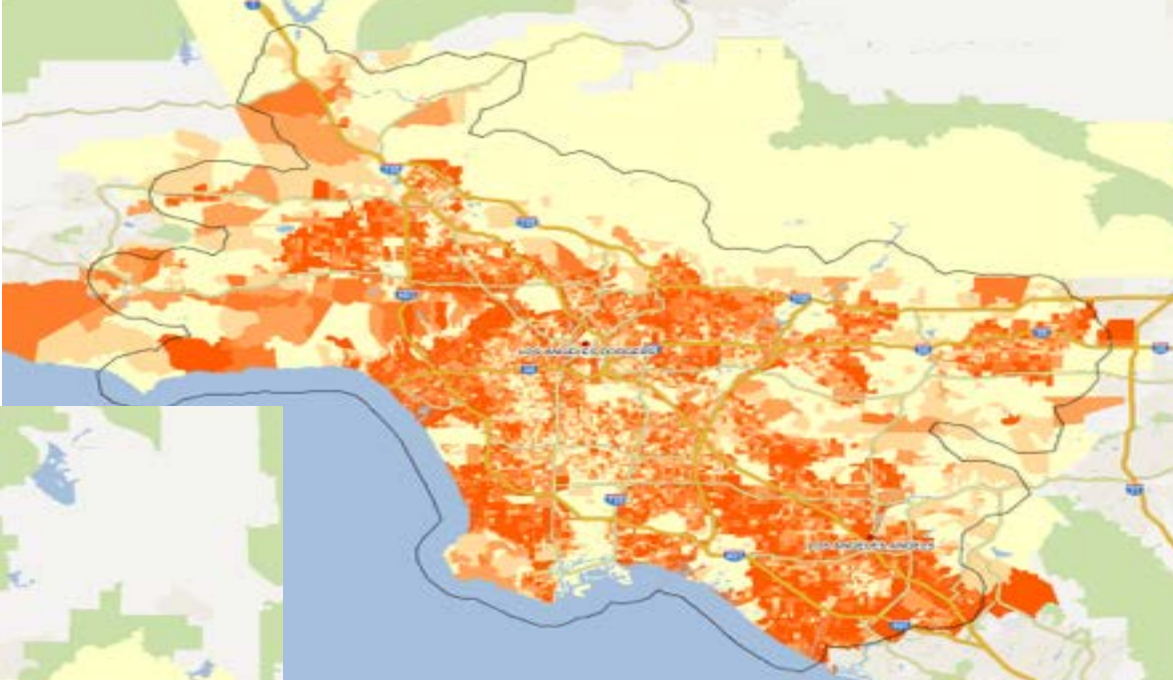
AUDIENCE COMPARISON

Top 50% of MLB fans in market

Los Angeles Dodgers	San Diego Padres
<i>Attend NBA, MLB, NHL</i>	<i>Attend NBA, MLB, NFL</i>
<i>Boxing and Tennis</i>	<i>Tennis and Yoga</i>
<i>French/Spanish Red Wine</i>	<i>French/Italian Red Wine</i>
<i>Boardwalk Empire</i>	<i>Daily Show with Jon Stewart</i>
<i>Real Estate, Professional/ Scientific/Technical</i>	<i>Real Estate, Professional/ Scientific/Technical</i>

Marginal differences
Enough to Cause a Fight?????

WHERE ARE THEY

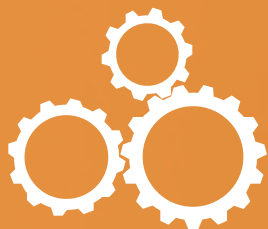


SITE SCORE FOR LOS ANGELES AND SAN DIEGO

Team	Site Score	Demand Index	Demographic Index	Customer Index	Retail Index
<i>New York</i>	<i>107</i>	<i>99</i>	<i>109</i>	<i>97</i>	<i>136</i>
<i>Los Angeles</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
<i>Anaheim</i>	<i>99</i>	<i>100</i>	<i>101</i>	<i>100</i>	<i>96</i>
<i>Washington DC</i>	<i>94</i>	<i>111</i>	<i>150</i>	<i>101</i>	<i>42</i>
<i>Oakland</i>	<i>93</i>	<i>107</i>	<i>141</i>	<i>101</i>	<i>46</i>
<i>San Francisco</i>	<i>91</i>	<i>107</i>	<i>141</i>	<i>101</i>	<i>38</i>
<i>San Diego</i>	<i>84</i>	<i>102</i>	<i>108</i>	<i>100</i>	<i>21</i>
<i>Cleveland</i>	<i>77</i>	<i>100</i>	<i>84</i>	<i>83</i>	<i>19</i>
<i>St. Louis</i>	<i>77</i>	<i>101</i>	<i>95</i>	<i>83</i>	<i>17</i>
<i>Pittsburgh</i>	<i>77</i>	<i>105</i>	<i>90</i>	<i>79</i>	<i>17</i>
<i>Cincinnati</i>	<i>77</i>	<i>104</i>	<i>94</i>	<i>82</i>	<i>14</i>
<i>Kansas City</i>	<i>76</i>	<i>101</i>	<i>98</i>	<i>83</i>	<i>12</i>
<i>Milwaukee</i>	<i>76</i>	<i>99</i>	<i>91</i>	<i>85</i>	<i>12</i>

WHAT DOES IT TAKE?

AN INTEGRATED SOLUTION



Engineering

- Data and Information
- System Integration
- Implementation



Analytics

- Customer Analytics Framework
- Spatial Analytics Framework

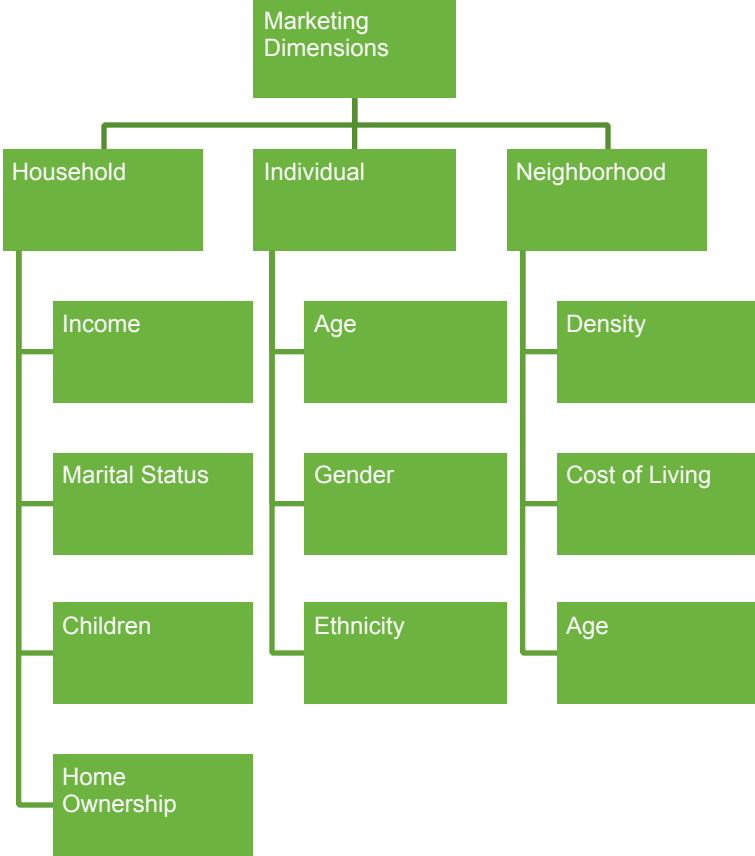
ENGINEERING

Cloud Based Geo-spatial Analytics Platform

- ▶ Oracle Database 12c, Enterprise Edition
- ▶ Oracle Partitioning
- ▶ Oracle Advanced Security
- ▶ Oracle Real Application Clusters
- ▶ Oracle Data Guard
- ▶ Oracle Spatial and Graph
- ▶ Oracle WebLogic Server 12c
- ▶ Oracle Enterprise Manager 12c
- ▶ Oracle VM Server 3.0
- ▶ Oracle Linux 6.5

ORACLE®

CUSTOMER ANALYTICS FRAMEWORK



PROVIDES LINKAGES

- ▶ Connect internal information with external world
 - Paints bigger picture of who you are targeting
 - Stay ahead of the competition; everyone has data but how do you use it?



CROSSES MARKETING CHANNELS



- ▶ Consistent messaging regardless of touch point
 - Online and offline, Web site and call center, etc.
 - Target the same services/offers regardless of the channel.
- ▶ Bottom line: Thinking about the customer's profile outside of who they are within your four walls **EMPOWERS** your organization

SPATIAL ANALYTICS FRAMEWORK

Consistent analytics framework

- ▶ Across Markets: Which DMA or Region
 - Demand, Supply, Customers, Scale, Demographics
- ▶ Within a Market: Where within a given Region
 - Hot spot thematic maps
- ▶ Specific Sites: What address or location
 - Site specific factors

MAKING IT LOOK EASY

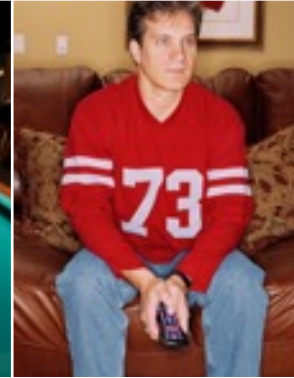


WHAT DOES IT LOOK LIKE

CORE CUSTOMERS

POWER PLAYERS 25% of HH's

Young professionals out on their own and getting their career going. Have higher incomes and are not shy about spending money on the things they want. They enjoy going out and hanging with their friends.



Demo Profile

- **Average Age: 27**
- **Average Income: \$94k**
- **Children: 7%**
- **Homeownership: 63%**
- **Found in urban/suburban areas of major metro regions**
- **Most with professional careers**

Lifestyles/Hobbies

- **Major life events – college graduation, marriage and job changes**
- **Driven and want to get to the top of their career**
- **Enjoy bars, nightclubs, comedy clubs and playing pool**
- **Athletic activities include tennis, jogging and weight training**

Media Profile

- **Highest radio penetration of all segments and consider listening to music an important part of life**
- **Watch professional sporting events including football and basketball**
- **Heavy internet users. Online at home, work and on the go.**

SAME PRODUCT, DIFFERENT MESSAGE

I Can't Believe You Don't Have Life Insurance!



10-Yr Level Term Life Insurance \$500,000 Policy (monthly premiums)

age	male	female
35	\$16.19	\$14.00
40	\$21.88	\$18.81
45	\$33.69	\$28.00
50	\$50.75	\$38.94

Click Here
Get A Free Quote

ACCUQUOTE

I Just Saved A Fortune On My Life Insurance!

Did You?



10-Yr Level Term Life Insurance \$500,000 Policy (monthly premiums)

age	male
40	\$21.88
45	\$34.50
50	\$56.00

Click Here
for a FREE QUOTE!

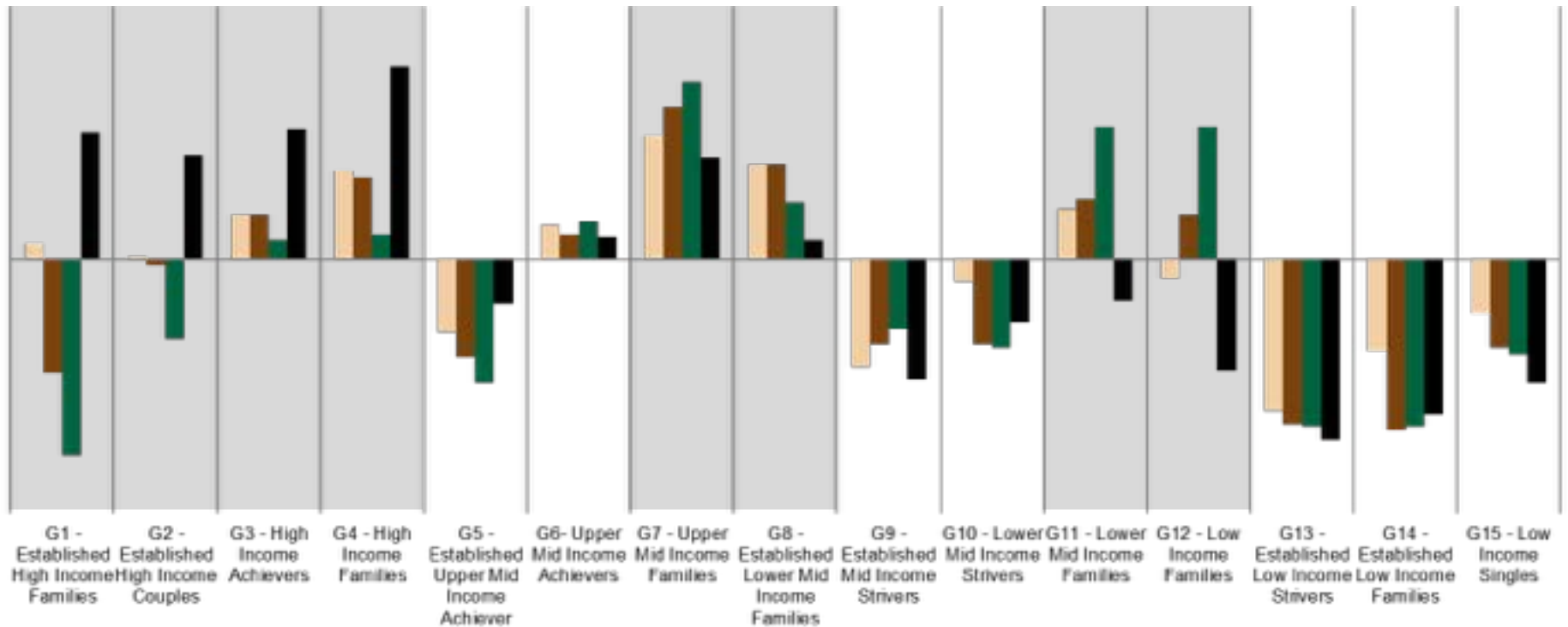
ACCUQUOTE

GALAXY S5 BY CARRIER

High Income Couples and Families

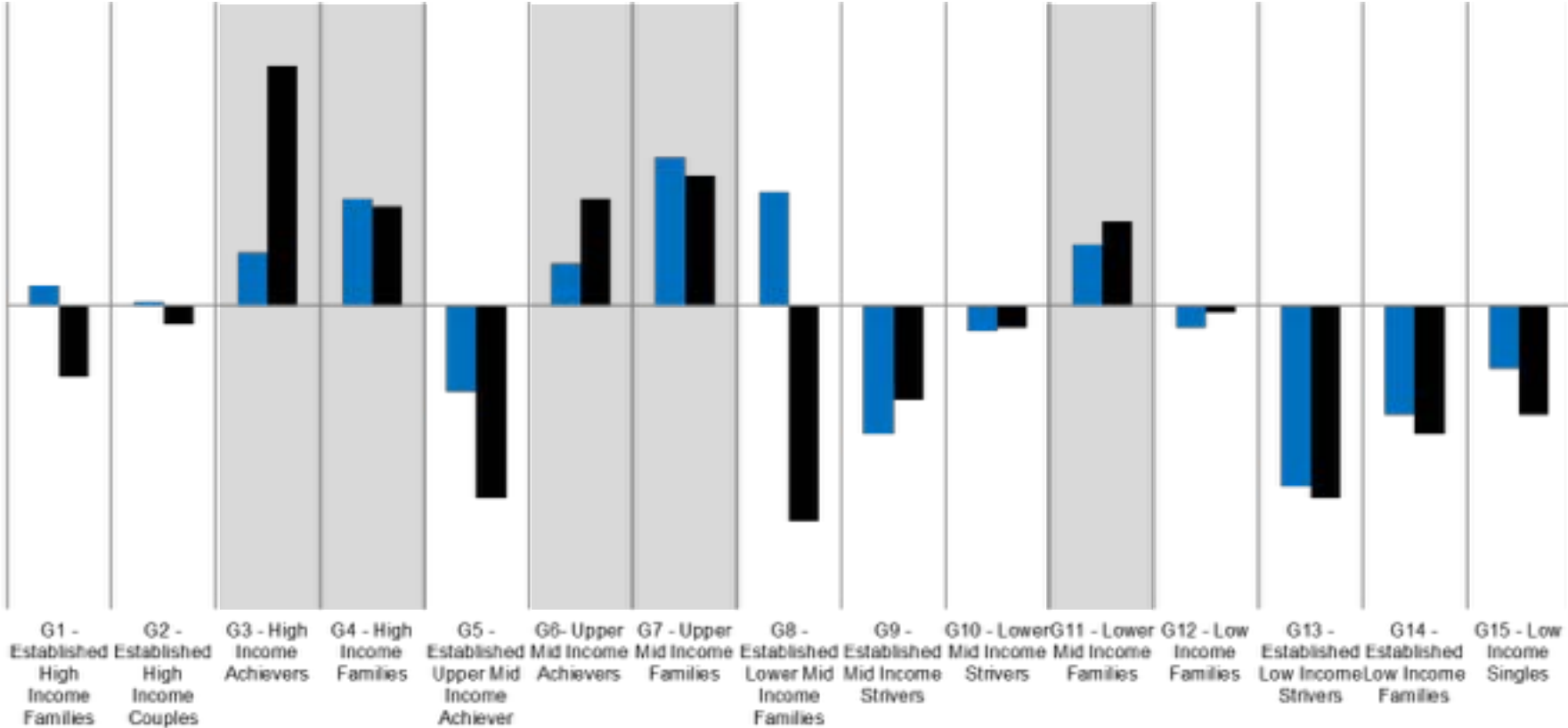
Middle Income Families

Lower Income Families

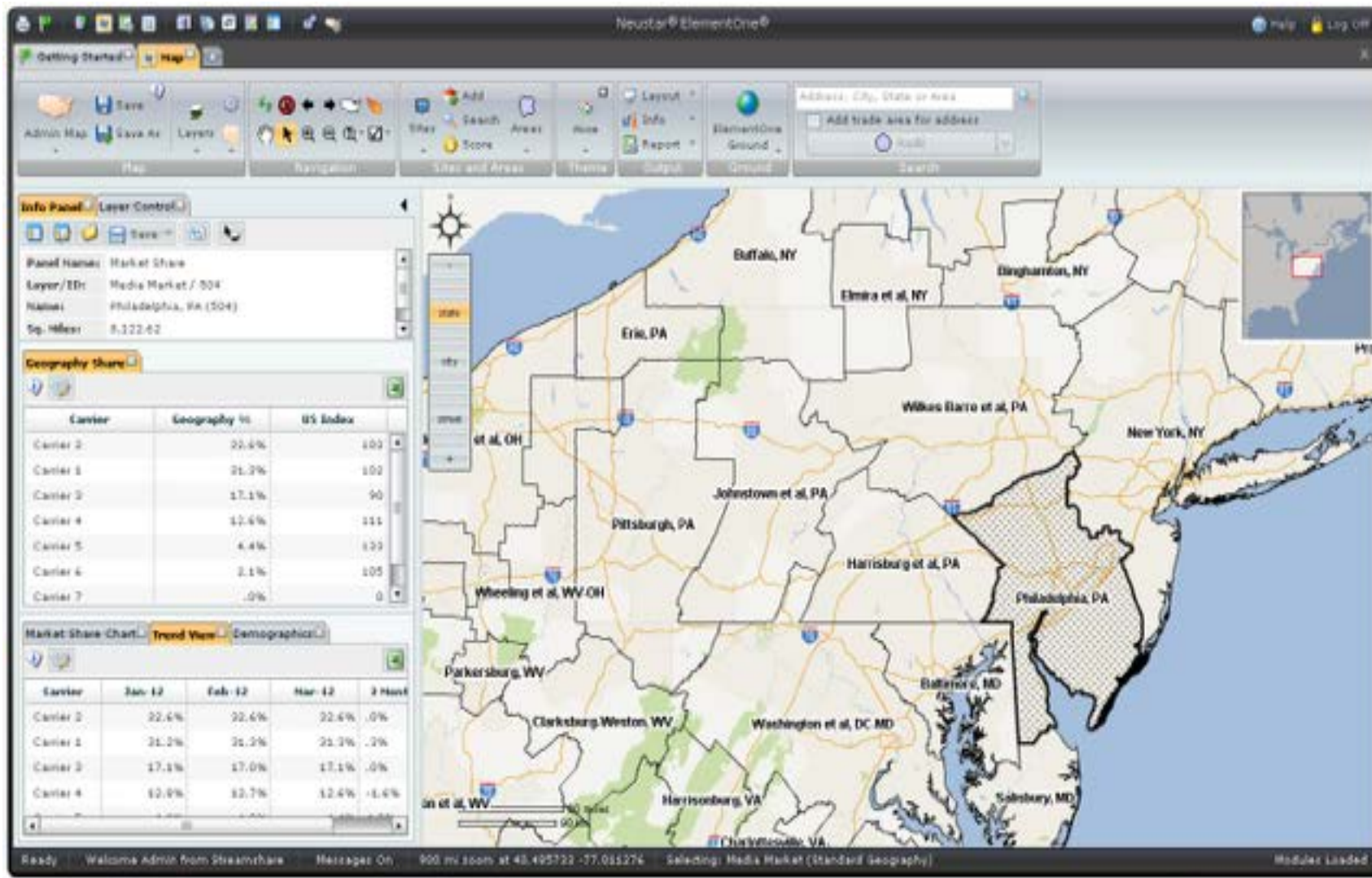


IPHONE SWITCHERS AND GALAXY S5 USERS

Galaxy S5 Users
iPhone Switchers



WIRELESS MARKET SHARE



CARRIER 3 FLOWS FROM/TO CARRIER 1

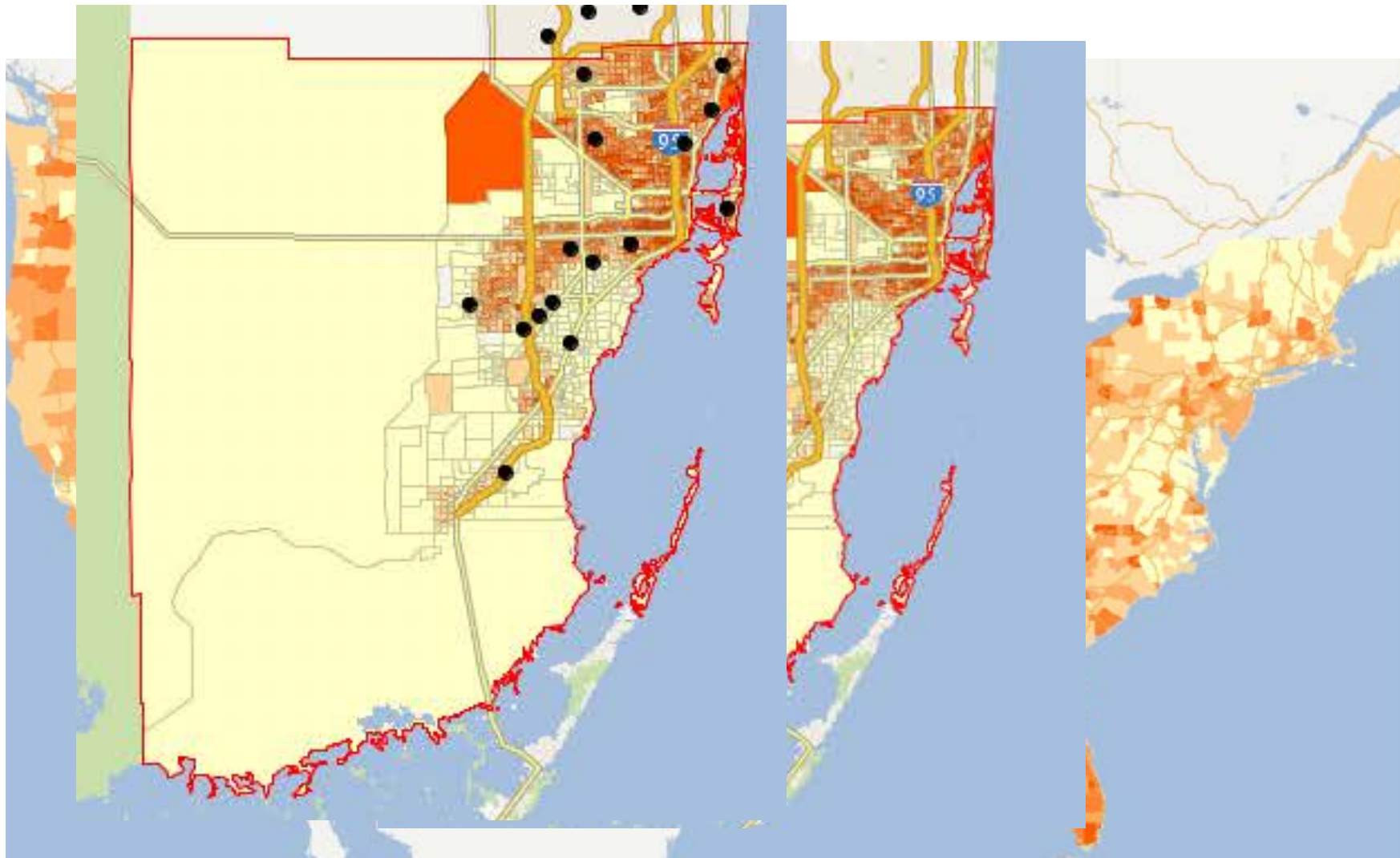
All Switchers		To Carrier 3 From 1				Demographics			
Base	% Comp	Analysis	% Comp	Pen	Index	Average Income	Average Age	Children	Home Owners
519	0.32%	116	0.54%	22.35%	169	\$19,782	21.0	73%	6%
711	0.44%	146	0.68%	20.53%	155	\$15,750	36.2	82%	13%
4,468	2.77%	906	4.24%	20.28%	153	\$67,276	32.8	17%	16%
1,642	1.02%	327	1.53%	19.91%	150	\$16,503	56.8	9%	13%
2,290	1.42%	436	2.04%	19.04%	144	\$56,906	35.5	73%	24%

HISPANIC SWITCHERS

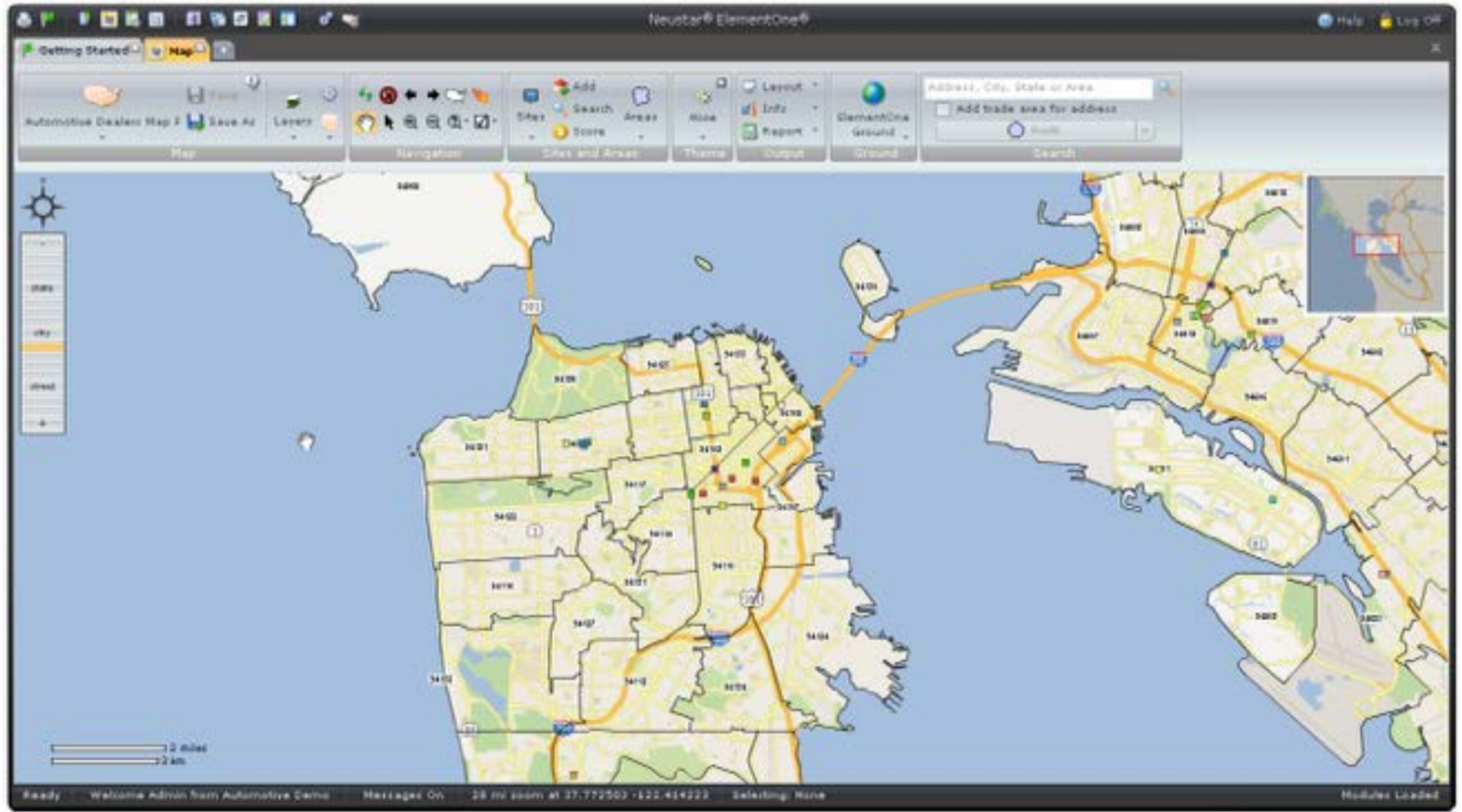
Flows To	Ethnicity	Language
1	<i>Non-Hispanic</i>	<i>English Only</i>
2	<i>Non-Hispanic</i>	<i>Mostly English</i>
4	<i>Hispanic</i>	<i>English, Some Spanish</i>
5	<i>Hispanic</i>	<i>English, Some Spanish</i>
6	<i>Hispanic</i>	<i>Spanish Only</i>

TV Media Most Watched
Sábado Gigante, Aquí y Ahora

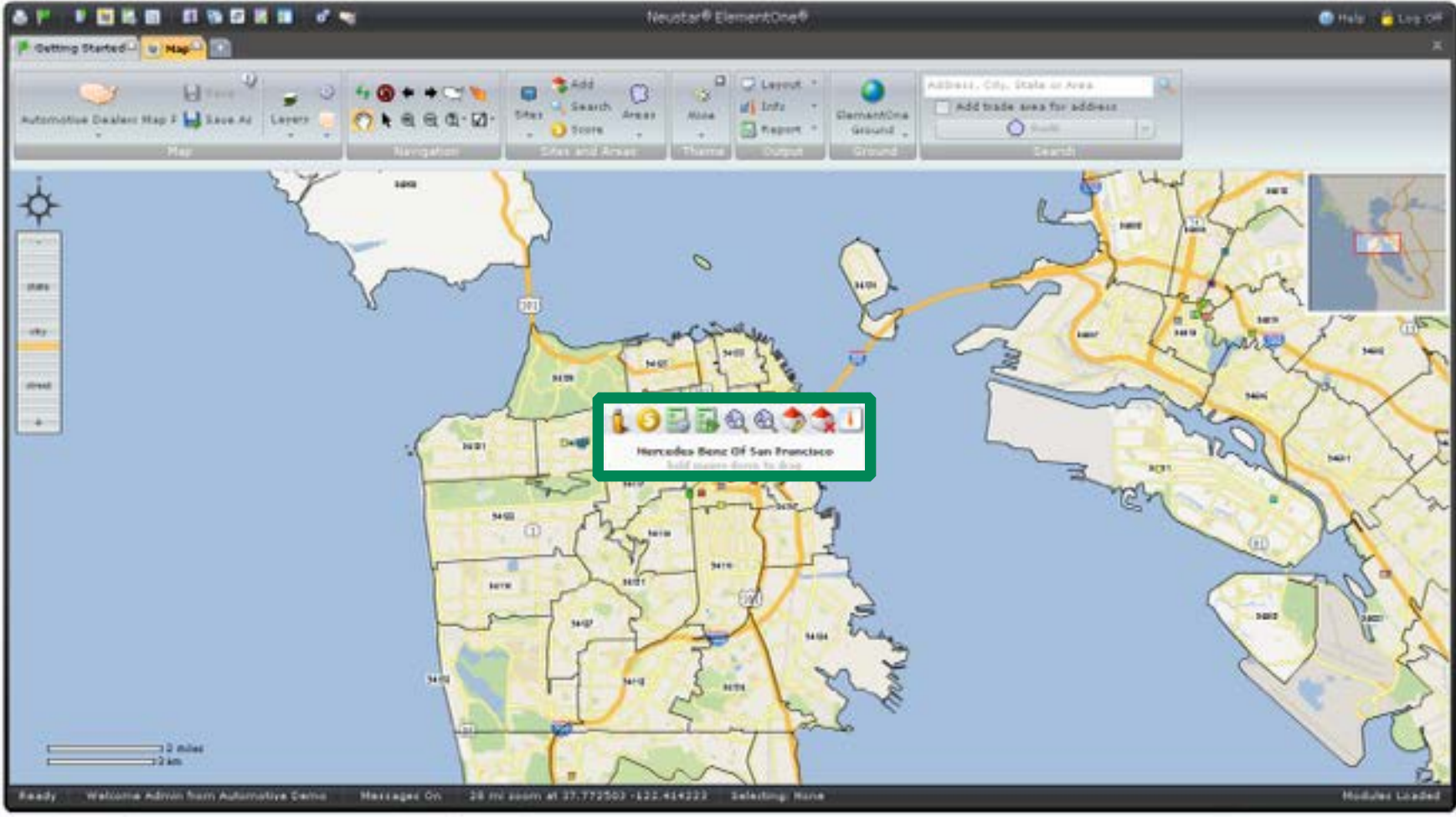
WHERE ARE THE SWITCHERS



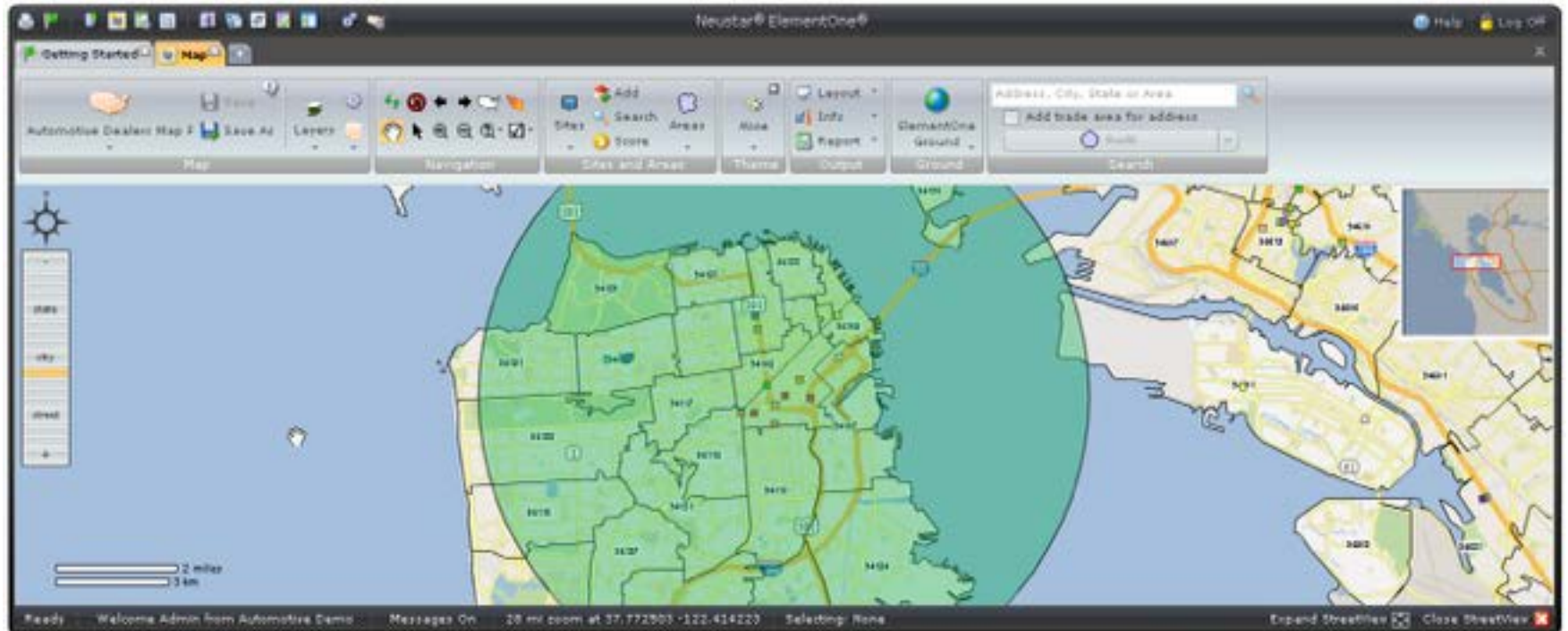
SAN FRANCISCO AUTO DEALERSHIPS



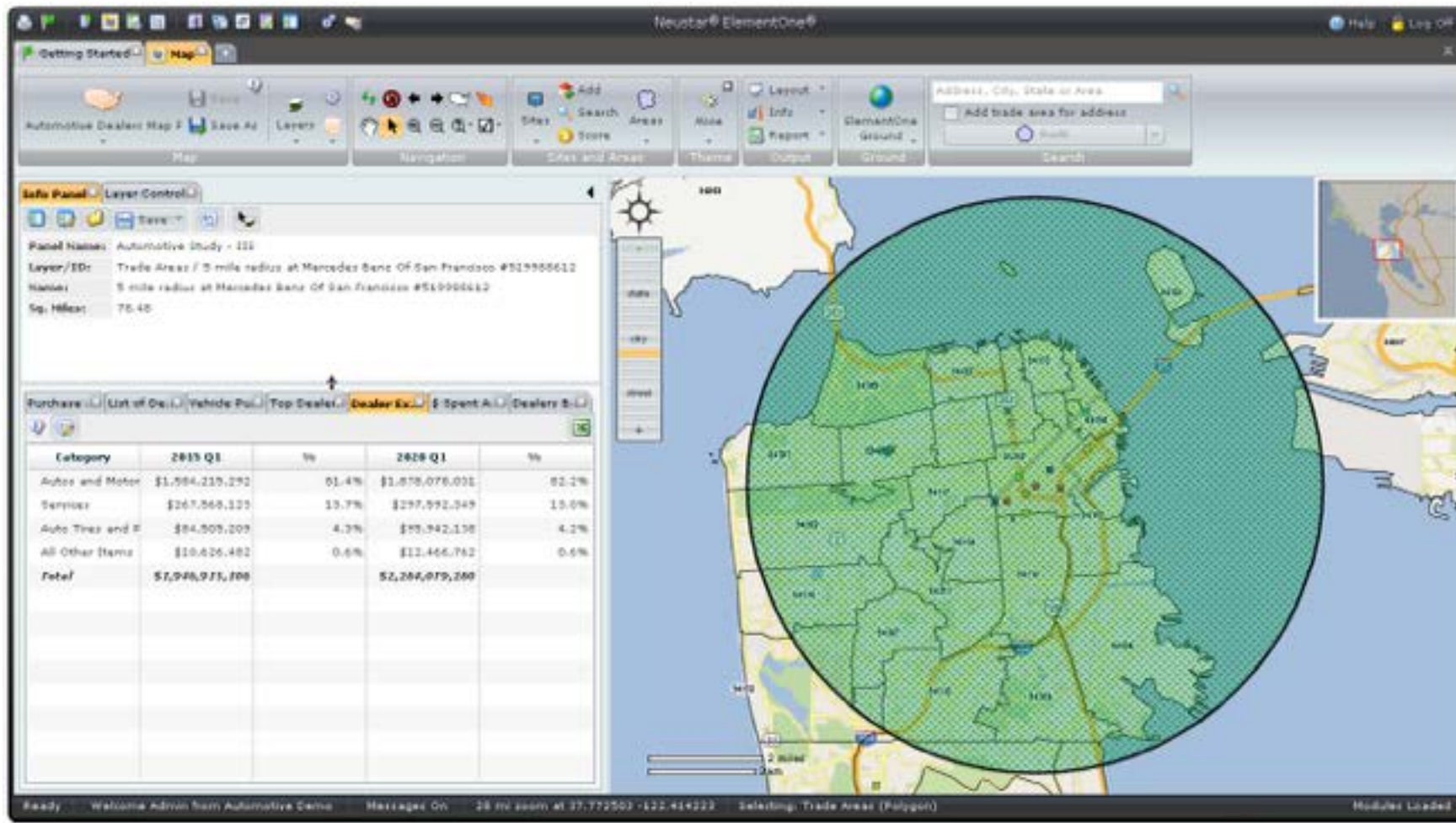
SITE HOVER BAR



TRADE AREA AND STREET VIEW



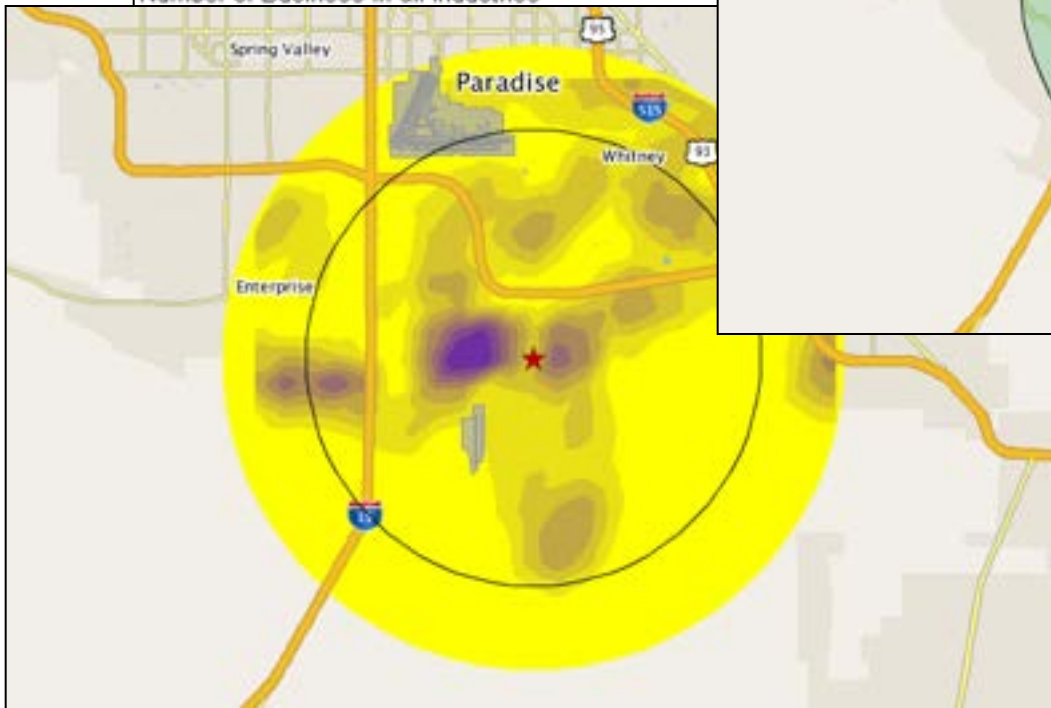
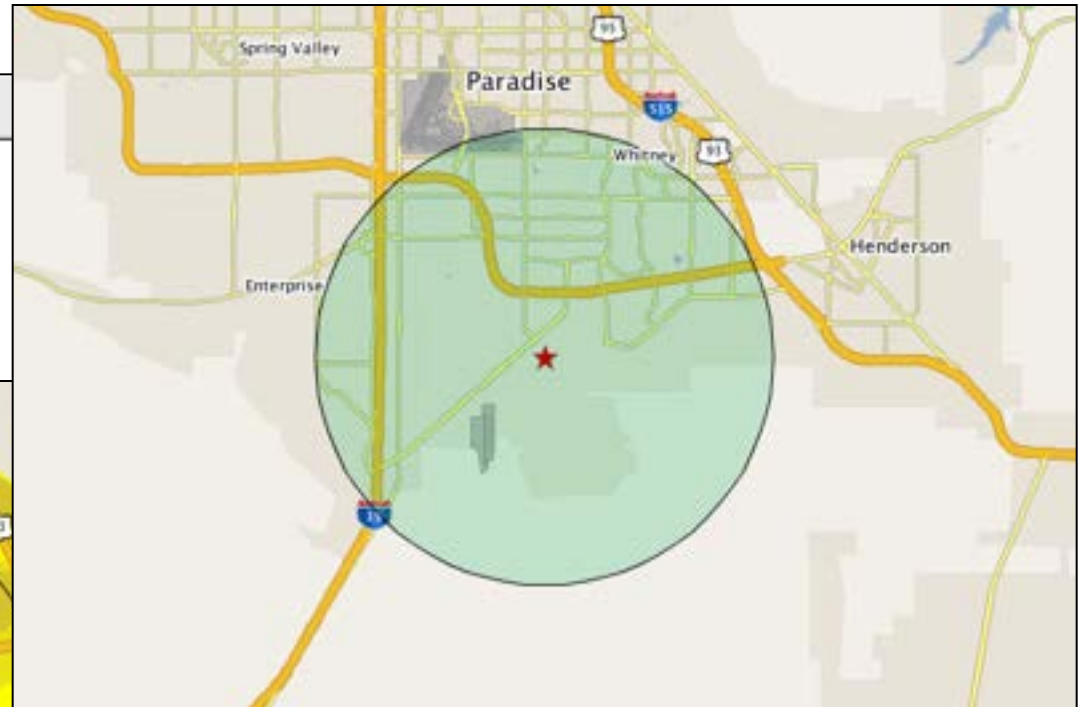
DASH BOARD REPORTING



AUTOMATED REPORTING

Demographic Summary

Total Core Customers
 Primary Core Customer
 Secondary Core Customer
 Tertiary Core Customers
 Number of Business in all Industries



1,155	88	\$87,150	87
2,196	76	\$285,338	79
815	245	21,302	167
68%	122	7.36%	115
790	242	20,825	164
66%	119	7.19%	111
812	199	34,163	139

MAKING IT LOOK EASY



WHAT'S NEXT?

Cloud Based Security



WHAT'S NEXT

Open Application Architecture



WHAT'S NEXT

Big Data and Data Lakes



WHAT'S NEXT

Access anywhere, anytime, any device



MAKING IT LOOK EASY







Oracle BIWA
with
Oracle Spatial
Summit 2015
(Jan 27-Jan 29 2015)

Oracle Business Intelligence Warehousing and Analytics Summit

Oracle HQ Conference Center
Redwood City, California

Speaker Bio

Ken Inman, PhD

Vice President, Analytics

Neustar

Ken oversees analytics based services and research and development of new analytics technologies at Neustar. He has extensive experience in the use and application of predictive analytic solutions and platforms for real-time targeting and marketing applications. This includes development of analytic frameworks for consumer behavior targeting, audience creation, and predictive analytics for both online and offline applications. Prior to Neustar, Ken served as Vice President of Analytics at Claritas and Assistant Professor of Economics at Claremont McKenna College.

Abstract

Making it look easy, that's why Neustar leverages Oracle in our cloud based marketing analytics platform. Enabling leading users in telecom, retail, financial services, media and advertising to get what they need most -- marketing insights -- quickly and efficiently, backed by a 2 TB database with 4.3 billion geo-spatially enabled rows of information. Oracle technologies also make our lives as application developers much easier, providing a core infrastructure that frees us to focus on creation of value added workflow solutions such as audience target optimization and retail network planning.

This session will highlight several key business intelligence applications delivered through Neustar's cloud based platform as well as directions for future enhancements. Applications covered include geospatial analytics for market potential or retail site analysis, estimation of products propensities, creation of marketing campaigns, and customer profiling. Explaining how they work and the value they deliver each and every day to users. Oracle plus cloud based delivery -- truly the best of both worlds, providing a robust foundational framework for analytics with flexible and efficient application delivery.