OFFICE OF BUSINESS INTELLIGENCE

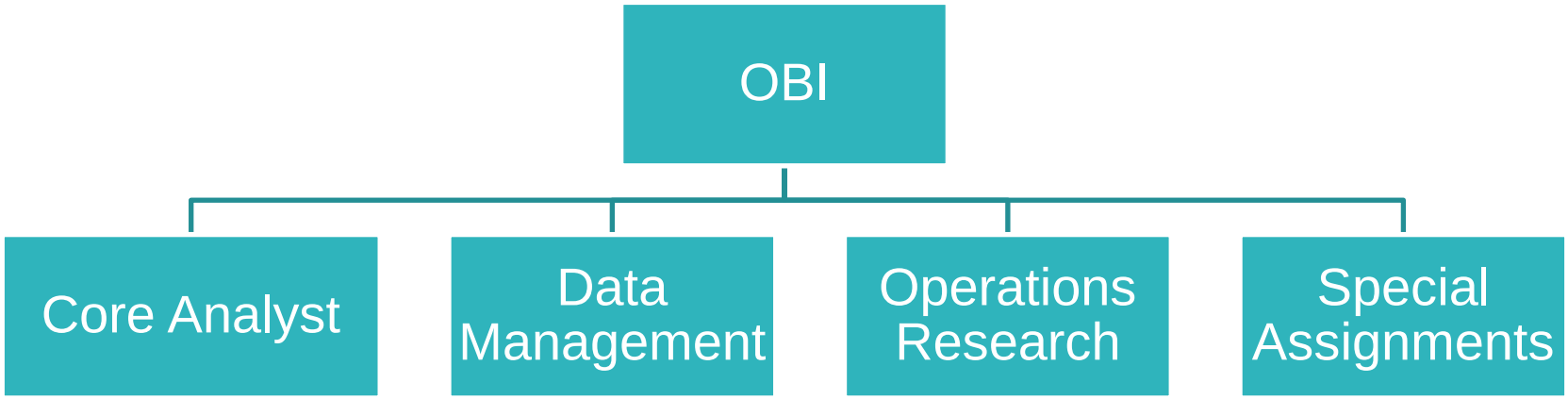
Explaining the past, optimizing the present, and forecasting the future. OBI provides decision makers timely information, concise risk analysis and predictive analytics to support Live Well San Diego

LIVE WELL SAN DIEGO

OFFICE OF BUSINESS INTELLIGENCE

- Formed in 2013
- SSAB Recommendation
- Supports all Agency Programs

OBI ORGANIZATION



WHAT IS BUSINESS INTELLIGENCE?

Business Intelligence transforms raw data into meaningful and useful information.

OFFICE OF BUSINESS INTELLIGENCE FUNCTIONS

LIVE WELL SAN DIEGO

- Data Reporting, Querying
- Data Visualization
- Geospatial Analysis
- Evaluation
- Analysis
- Project Management

DATA REPORTING & QUERYING

LIVE WELL SAN DIEGO

Available Databases

- *CalWIN*
- *CWS/CMS*
- *Anasazi*
- *Authmed*
- *PHIS*
- *SANWITS*
- *ALEX*
- *CMS Supervisor*
- *PeopleSoft*
- *Oracle Financials*
- *Cobblestone*
- *CORI/CLETS*
- *U.S. Census*

The use of various processes with one or more reporting tools to provide detailed operational and informational reports with up-to-date information.

Extracting

Sorting

Validating

Classifying

Summarizing

Reporting

DATA ANALYSIS

The use of statistics and operations research for discovering useful information to suggest solutions and support decision-making. Commonly used to describe, predict, and improve performance.

Health Care Reform *Reviewed legislation requirements to forecast population need and County resources to implement legislation.*

GWOW Pilot Evaluation *Provide support, suggested metrics to collect data and determine efficiency.*

EO Quality Control *Reviewed historical data to provide optimal statistical sampling model.*

Statistical Analysis

- Used to understand relationships, analyze current, and historical data to make predictions on future or unknown events.
  - *What will happen next?*
  - *How should I prepare?*
  - *How can I optimize this?*

Data Mining

- Identifies trends and discovers useful information (patterns) within data sets.
  - *What is happening now?*
  - *Why did it happen?*

DATA VISUALIZATION

LIVE WELL SAN DIEGO

Available Dashboards

BHS Central Region Population

CalFresh Population

CalWORKs Population

Central Region Serviced Population

County Medical Services Population

CWS Population

General Relief Population

HHSA Serviced Population by Language

Medi-Cal Population

North Inland Serviced Population

Probation Population

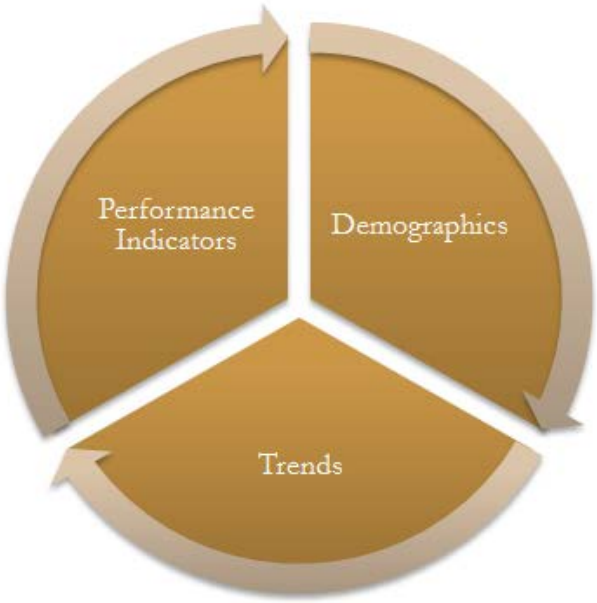
Refugee Population

Veteran Services Population

WTW Population

Graphical representation of current status and historical trends that enable informed decisions at a glance, provide better understanding of demographics of our customers and identify opportunities for collaboration.

Components



Elements

Age

Country of Origin

Eligibility Program

Ethnicity

Gender

HHSA Department

Homeless Location

Income

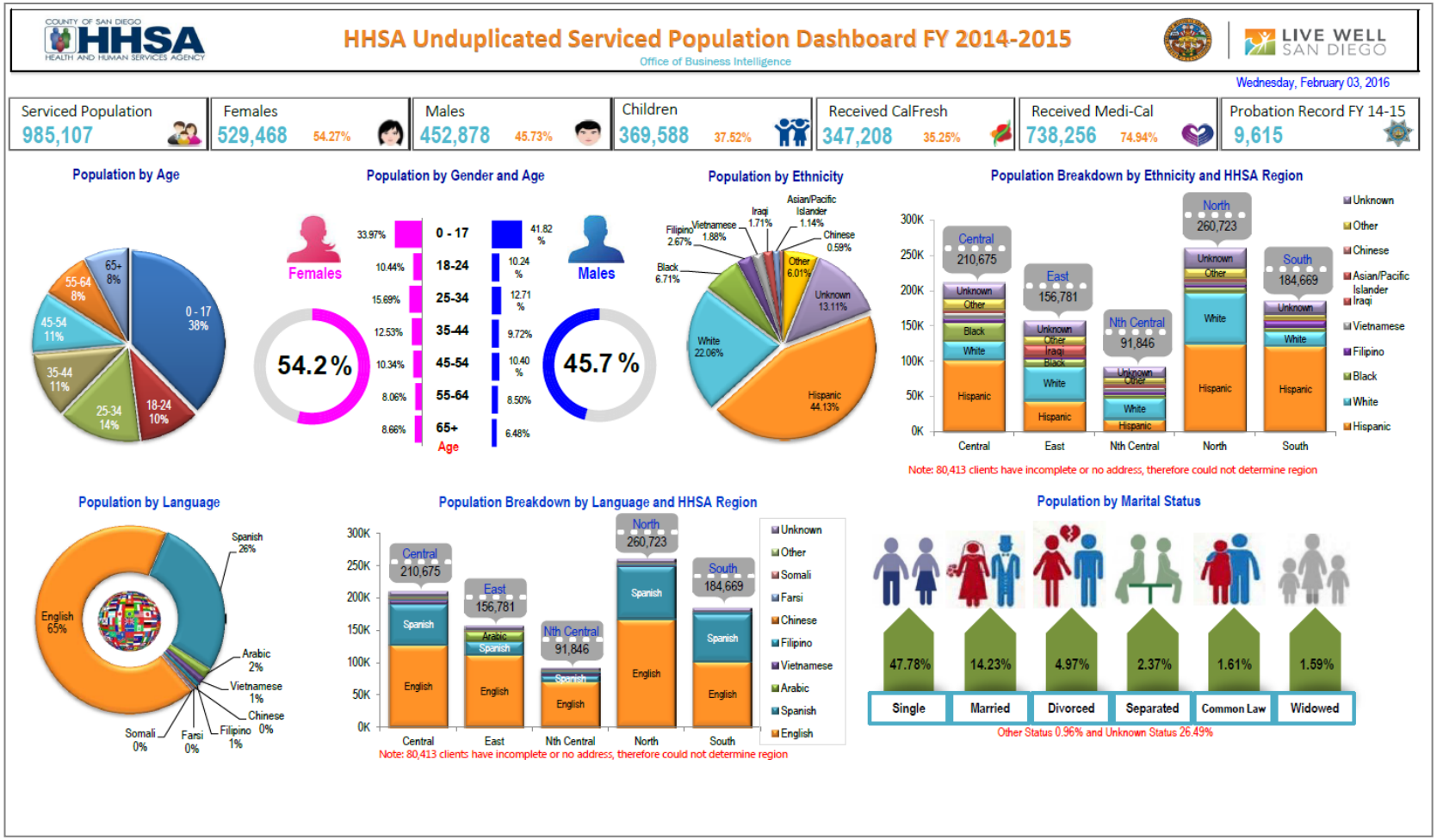
Language

Location

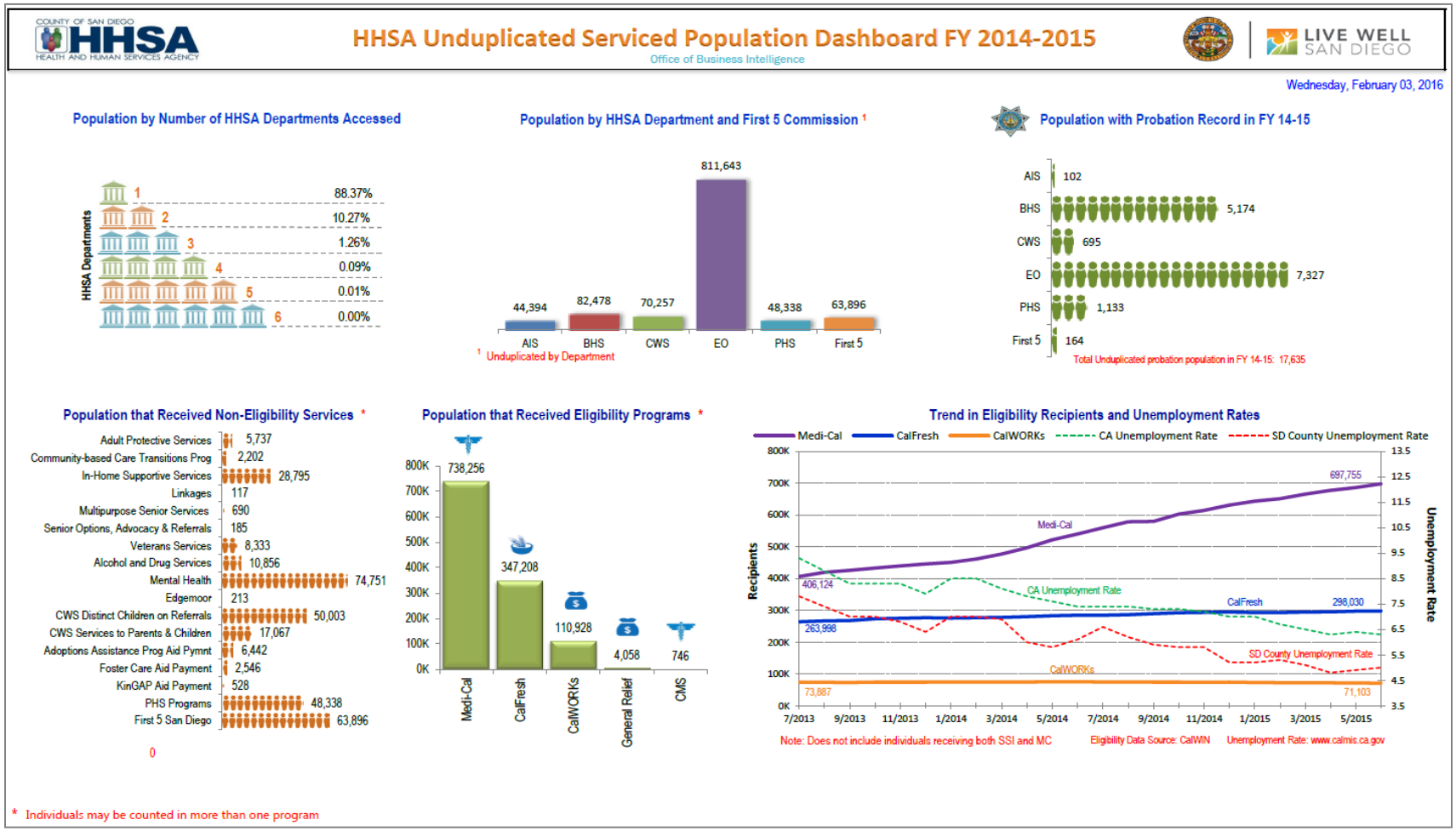
Non-Eligibility Program

Zip

DEMOGRAPHICS DASHBOARD



DEMOGRAPHICS DASHBOARD CONT.



DEMOGRAPHICS DASHBOARD CONT.

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY

HHSA Unduplicated Serviced Population Dashboard FY 2014-2015

Office of Business Intelligence

LIVE WELL SAN DIEGO

Population by Marital Status

Status	Count	%
Single	470,650	47.78%
Married	140,229	14.23%
Divorced	48,911	4.97%
Separated	23,360	2.37%
Common Law	15,863	1.61%
Widowed	15,680	1.59%
Other	9,491	0.96%
Unknown	260,923	26.49%
Total	985,107	100%

Population by Country of Origin

Country	Count	%
United States	577,445	68.19%
Mexico	122,695	14.42%
Iraq	19,877	2.62%
Philippines	16,522	2.06%
Vietnam	12,553	1.58%
Iran	3,582	0.46%
China	3,310	0.46%
Guatemala	2,683	0.32%
Other	37,882	4.53%
Unknown	188,558	5.37%
Total	985,107	100%

Population by Citizenship

Citizenship	Count	%
US Born Citizen	599,221	60.83%
Naturalized Citizen	72,209	7.33%
Derived Citizenship	3,204	0.33%
US National	1,271	0.13%
Dual Citizenship	347	0.04%
Undocumented Alien	283	0.03%
Legal Resident Alien	129	0.01%
Other Temporary Visa	12	0.00%
Other	21	0.00%
Unknown	308,410	31.31%
Total	985,107	100%

Population by Language

Language	Count	%
English	640,698	65.04%
Spanish	260,461	26.44%
Arabic	17,714	1.80%
Vietnamese	11,972	1.22%
Filipino	6,657	0.68%
Chinese	3,045	0.31%
Farsi	2,678	0.27%
Somali	2,181	0.22%
Other	8,771	0.89%
Unknown	30,930	3.14%
Total	985,107	100%

Population by Language and HHSA Region

Language	CoSD	Central	East	Nth Central	North	South
English	640,698	128,035	112,252	70,953	167,793	101,694
Spanish	260,461	62,761	21,099	9,162	81,523	73,848
Arabic	17,714	557	15,129	520	571	218
Vietnamese	11,972	5,736	422	4,086	1,321	132
Filipino	6,657	1,580	367	939	807	2,812
Chinese	3,045	584	136	1,078	966	213
Farsi	2,678	219	468	728	1,071	52
Somali	2,181	1,577	197	268	17	62
Other	8,771	2,778	2,063	1,612	1,410	531
Unknown	30,930	6,848	4,648	2,500	5,244	5,107
Total	985,107	210,675	156,781	91,846	260,723	184,669

Note: 80,413 clients have incomplete or no address, therefore could not determine region

Population by HHSA Department

Department	Count	%
AIS	44,394	4.51%
BHS	82,478	8.37%
CWS	70,257	7.13%
EO	811,643	82.39%
PHS	48,338	4.91%
First 5	63,896	6.49%

Unduplicated by department

Population by Elig. Programs*

Program	Count	%
Medi-Cal	738,256	74.94%
CalFresh	347,208	35.25%
CalWORKs	110,928	11.26%
General Relief	4,058	0.41%
CMS	746	0.08%

Population by Non-Eligibility Programs *

Program	Count	%
Adult Protective Services	5,737	0.58%
Community-based Care Transitions Prog	2,202	0.22%
In-Home Supportive Services	28,795	2.92%
Linkages	117	0.01%
Multipurpose Senior Services	690	0.07%
Senior Options, Advocacy & Referrals	185	0.02%
Veterans Services	8,333	0.85%
Alcohol and Drug Services	10,856	1.10%
Mental Health	74,751	7.59%
Edgemoor	213	0.02%
CWS Distinct Children on Referrals	50,003	5.08%
CWS Services to Parents & Children	17,067	1.73%
Adoptions Assistance Prog Aid Pymnt	6,442	0.65%
Foster Care Aid Payment	2,546	0.26%
KinGAP Aid Payment	528	0.05%
PHS Programs	48,338	4.91%
First 5 San Diego	63,896	6.49%

Population by Ethnicity

Ethnicity	Count	%
Hispanic	434,712	44.13%
White	217,286	22.06%
Black	66,084	6.71%
Filipino	26,313	2.67%
Vietnamese	18,504	1.88%
Iraqi	16,843	1.71%
Asian/Pacific Islander	11,264	1.14%
Chinese	5,777	0.59%
Other	59,204	6.01%
Unknown	129,120	13.11%
Total	985,107	100%

Population by Ethnicity and HHSA Region

Ethnicity	CoSD	Central	East	Nth Central	North	South
Hispanic	434,712	101,856	43,903	17,678	125,082	121,901
White	217,286	27,103	48,796	30,775	72,410	20,585
Black	66,084	26,653	11,537	5,097	8,054	6,228
Filipino	26,313	5,952	2,161	3,956	4,540	8,984
Vietnamese	18,504	7,919	848	6,281	2,842	296
Iraqi	16,843	339	15,423	280	411	193
Asian/Pacific Islander	11,264	2,602	1,511	2,625	2,748	1,284
Chinese	5,777	954	283	2,018	1,961	435
Other	59,204	15,347	10,684	8,713	14,222	6,862
Unknown	129,120	21,950	21,635	14,423	28,453	17,901
Total	985,107	210,675	156,781	91,846	260,723	184,669

Note: 80,413 clients have incomplete or no address, therefore could not determine region

Population by Number of HHSA Departments Accessed

Number of Deps.	Count	%
1	870,553	88.37%
2	101,213	10.27%
3	12,394	1.26%
4	897	0.09%
5	50	0.01%
6	0	0.00%
Total	985,107	100%

Population by Number of Programs/Services Received

Number of Programs	Count	%
1	618,313	62.77%
2	229,134	23.26%
3	110,007	11.17%
4	21,424	2.17%
5	4,874	0.49%
6	1,105	0.11%
7	224	0.02%
8	25	0.00%
9	1	0.00%
Total	985,107	100%

Population with Probation Record in FY 14-15

HHSA Departments	Count	% ~
AIS	102	0.58%
BHS	5,174	29.34%
CWS	695	3.94%
EO	7,327	41.55%
PHS	1,133	6.42%
First 5	164	0.93%
Total (Unduplicated)	9,615	54.52%

Total Unduplicated probation population in FY 14-15: 17,635

~ Department's count compared to total probation population

Population by Gender

Gender	Count	%
Female	529,468	54.27%
Male	452,878	45.73%
Unknown	2,761	0.00%
Total	985,107	100%

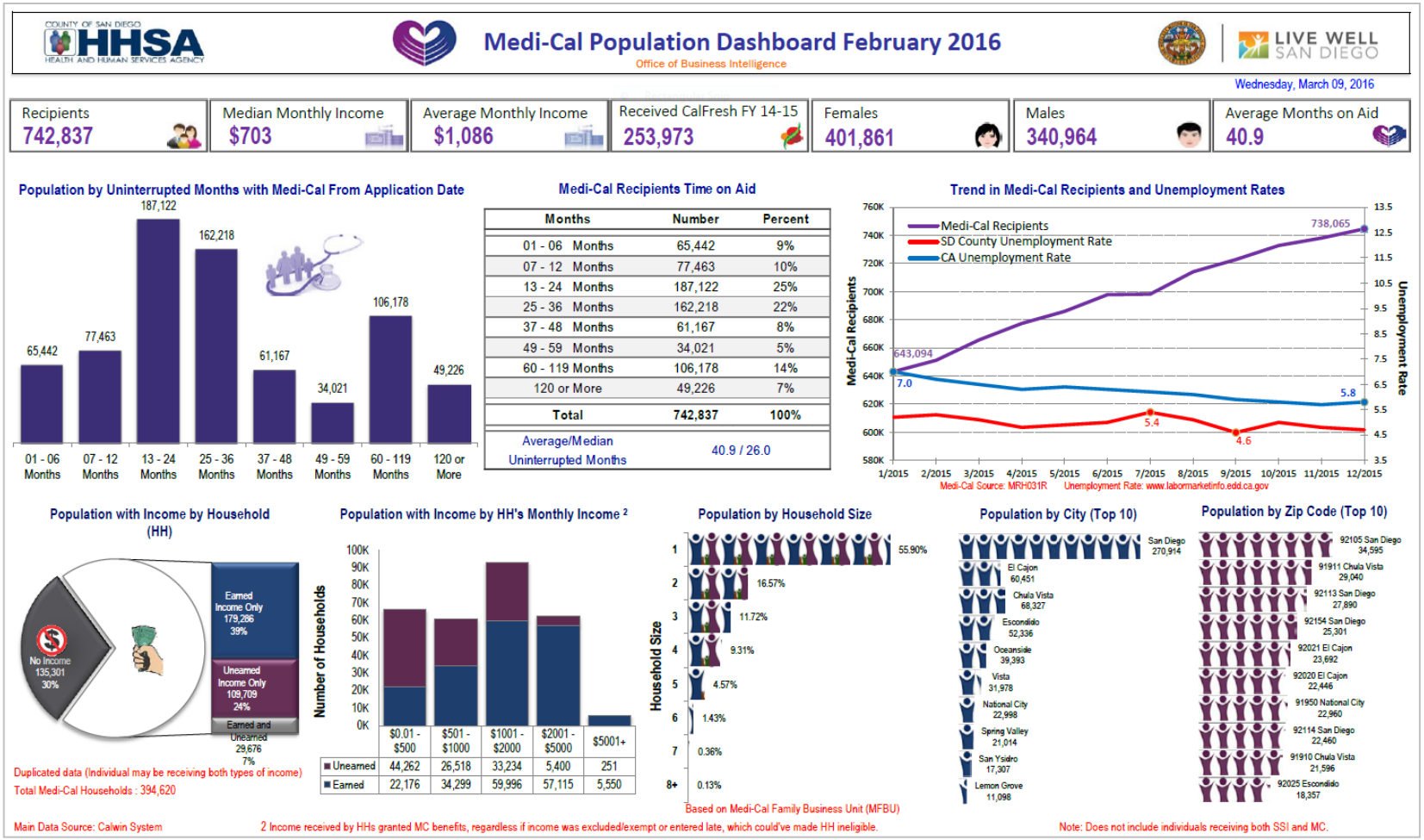
Population by Age and Gender

Age	Count	%	Female	%	Male	%
0 - 17	369,588	37.52%	179,866	33.97%	189,405	41.82%
18-24	101,872	10.34%	55,254	10.44%	46,371	10.24%
25-34	141,224	14.34%	83,060	15.69%	57,571	12.71%
35-44	111,003	11.27%	66,317	12.53%	44,020	9.72%
45-54	102,382	10.39%	54,721	10.34%	47,110	10.40%
55-64	81,392	8.26%	42,701	8.06%	38,481	8.50%
65+	75,344	7.65%	45,829	8.66%	29,359	6.48%
Unknown	2,302	0.23%	1,720	0.32%	561	0.12%
Total	985,107	100%	529,468	100%	452,878	100%

Note: Gender is unknown for 2,761 individuals

* Individuals may be counted in more than one program

PERFORMANCE DASHBOARD



GEOSPATIAL ANALYSIS

Identify Population

Protect community, employees, facilities, and vulnerable populations by identifying where they live.

Optimize Planning

Identify location for facilities using GIS, customer data, Census data, public transit, and commute times.

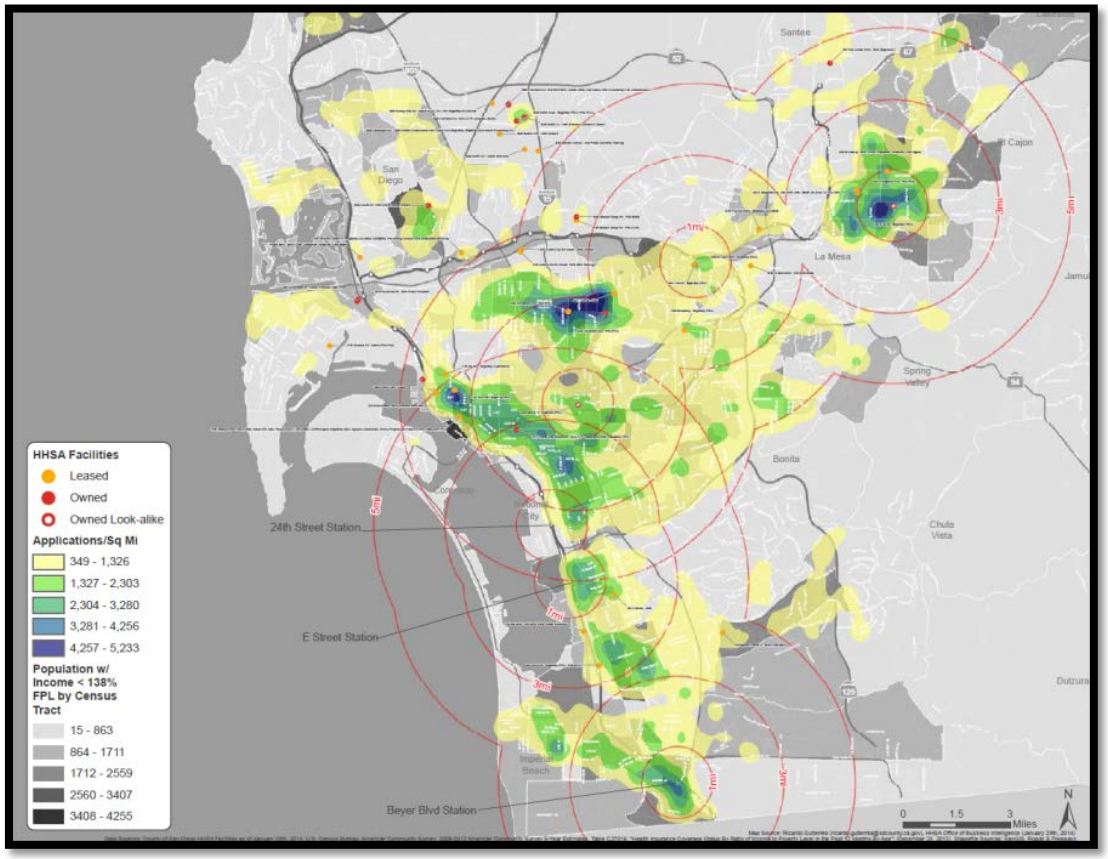
Risk Management

Protect community by identifying impacts of potential hazardous events and developing strategies to manage risks.

Emergency Preparedness

Coordinate efforts by simultaneously mapping at-risk populations, community resources, and potential hazards.

Applying data analysis to information with a geographical representation. Linking data to location.



PROJECT MANAGEMENT

EO Tiger Team

Model Office

BHS Action Team

CERMS

Emergency Preparedness

Human Resources CAR

Annual Operation Plan

Annual Facilities Report

Lean Six Sigma

The application of knowledge, skills, and techniques to execute projects effectively and efficiently.

- Design decisions based on identified workflows & best practices
- Implement project management techniques to measure and monitor performance
- Enhance participant communication by facilitating work groups, focus groups & team meetings

PROJECT MANAGEMENT WORKFLOW

LIVE WELL SAN DIEGO

Tools

Benchmarking
Brain Storming
Cycle Time Analysis
Focus Groups
Information Mapping
Ishikawa Diagraming
Pareto Analysis
Process Mapping
Prototyping
Quality Function Deployment
Questionnaires and Surveys
Risk Analysis
Value/Non Value Added Mapping
Workgroup Facilitation