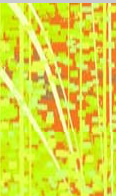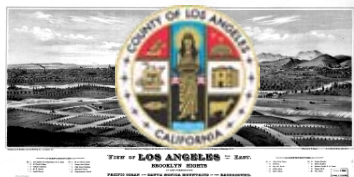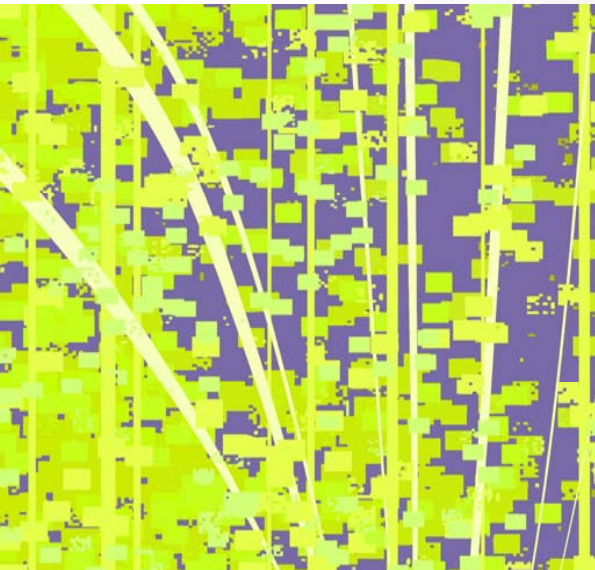# Vulnerable Communities in Los Angeles County
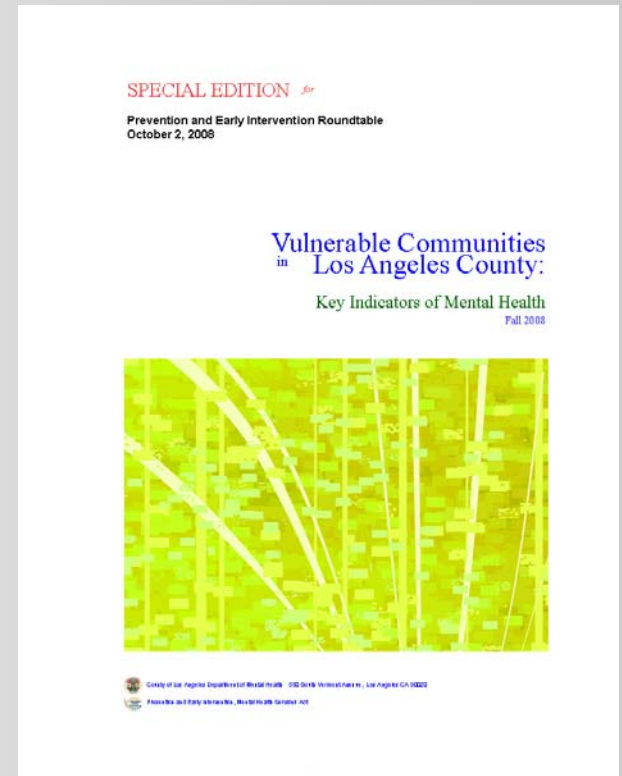## Understanding Service Area Data Profiles

Randy Ahn, PhD, MLIS
MHSA Consultant

Prevention and Early Intervention Roundtable
County of Los Angeles Department of Mental Health
October 2, 2008

Data Driven Decisions

- Data can identify populations or areas that are at risk for a variety of behavioral, mental, and social problems.

- Indicators were selected to provide measures related to the PEI priority populations and key community needs identified by the California State Department of Mental Health.

- Data provide a baseline of various indications of the social well-being of our communities.

- Roundtable release: demographic info, descriptions of key indicators, and summaries of data tables.

SPECIAL EDITION *for*

Prevention and Early Intervention Roundtable
October 2, 2008

Vulnerable Communities
in Los Angeles County:

Key Indicators of Mental Health
Fall 2008

County of Los Angeles Department of Mental Health · 550 South Vermont Avenue, Los Angeles CA 90020

Prevention and Early Intervention, Mental Health Services Act

Selection of indicators

- Indicators were initially derived through a rational-theoretical approach yielding a list of potential indicators, 60+.

- Literature review conducted.

- Indicators with the strongest research base were retained.

- Indicators which appeared to have strong face validity as measures were retained – (e.g. HS grad rates, probation numbers)

- Final set of 24 key indicators further shaped by quality of data and availability of data.

- One indicator may contain a number of variables: (e.g. gender, age, and ethnicity) and multiple data tables (e.g. between and within service area community comparisons).

Q. What is the average velocity of a coconut-laden sparrow?

Availability of statistics – demographic info or social variables of interest are typically tracked by organizations that have a specialized interest in them – data is tracked to serve a particular need. More often than not, especially if you have in depth knowledge of an area, you will find that the statistics you want are either not available or are not in the form that you really want.

(e.g. Suicide risk data)

?

4

Data Processing Procedures

- Data acquisition – took several months, to acquire information from State, Federal, and County sources.
- Data geo-coded and allocated to the service area communities and tabulated across demographic categories of interest, namely ethnicity, and PEI age groups
- Data was then aggregated to the service area and county levels.
- Lightweight analyses – calculation of base rates, percentages, and simple ratios.
- Generation of data tables.

Indicators by Priority Population

Underserved Cultural Populations

    Ethnicity

    Primary Language

    Linguistic Isolation

Individuals Experiencing Onset of Serious Psychiatric Illness

    Mental Health Treatment Penetration Rate

    Depressive Disorders

    Co-Occurring Disorders

Children/Youth in Stressed Families

    Poverty

    Unemployment Rate

    Disrupted Families

    Safe Place to Play

Indicators continued

Trauma-Exposed

        Child Abuse Statistics

        Elder and Dependent Adult Abuse Statistics

        Posttraumatic Stress Disorder

        Homelessness

Children/Youth at Risk for School Failure

        High School Dropout Rates

        High School Graduation Rates

        English Fluency

        3rd Grade Reading Level

Children/Youth at Risk of or Experiencing Juvenile Justice

        School Discipline

        Juvenile Felony Arrests

        Youths on Probation

Indicators for Community Needs

Stigma and Discrimination

   Language Capacity of Mental Health Providers

Suicide Risk

   Deaths by Suicide

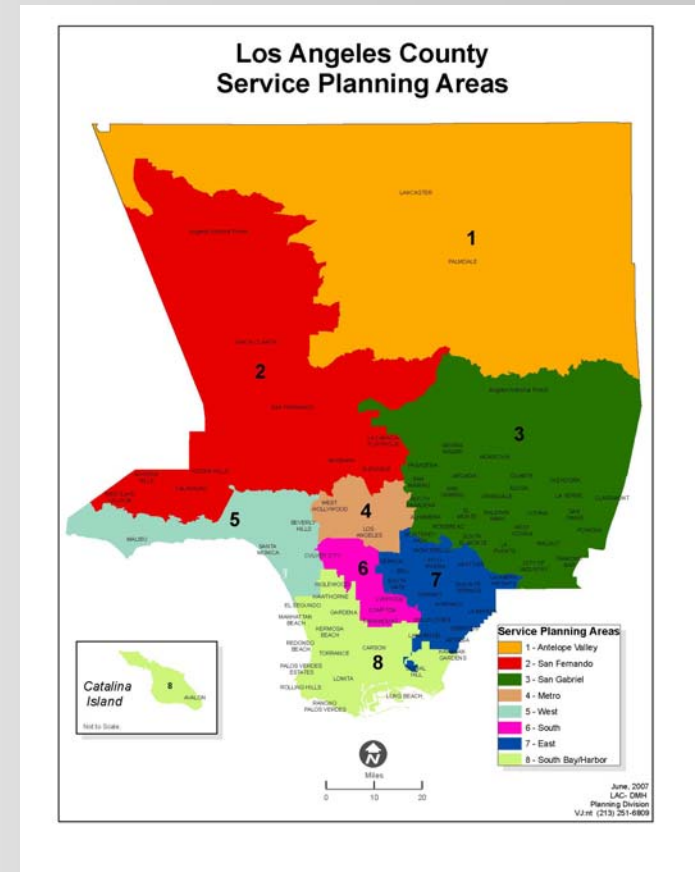   Mental Health Emergency Statistics

Data Sources

- Child abuse and neglect statistics were obtained via special tabulation by the County of Los Angeles, Department of Children and Family Services, 2006.

- Elder and dependent adult abuse statistics were obtained via special tabulation by the County of Los Angeles, Adult Protective Services, Department of Community and Senior Services, 2008.

- Crime Statistics. State of California, Office of the Attorney General, Department of Justice, Criminal Justice Statistics Center. Probation data was obtained via special tabulation by the County of Los Angeles, Department of Probation, 2008.

- Demographic Estimates. The demographic estimates incorporated data from the American Community Survey, 2005, 2006, 2007 (ACS).

- Economic Data. Poverty estimates (e.g. the number of Individuals living at or below 200% of Federal Poverty Level in Los Angeles County) and self reported unemployment rates such were obtained from the U.S., Bureau of the Census, 2005 American Community Survey. Other employment data was obtained from the State of California Employment Development Department.

Data Sources Continued

- Education Data. High school and college graduation rates, 3rd grade reading rates, and drop out data was provided by the State of California, Department of Education.

- Homeless Statistics. Homeless statistics were obtained from the Los Angeles Homeless Services Authority's Greater Los Angeles Homeless Count.

- Mental Health Statistics. Mental health diagnoses, mental health emergency data, and mental health therapist language data were provided by the County of Los Angeles Department of Mental Health, 2008. SMI estimates were provided by the California State Department of Mental Health, Statistics and Data Analysis, 2008.

- Vital and Health Statistics. Vital and Health statistics were provided by the County of Los Angeles, Department of Health Services and the Department of Public Health. Teen Pregnancy Statistics were obtained via special tabulation by the County of Los Angeles, Department of Health Services, 2005.
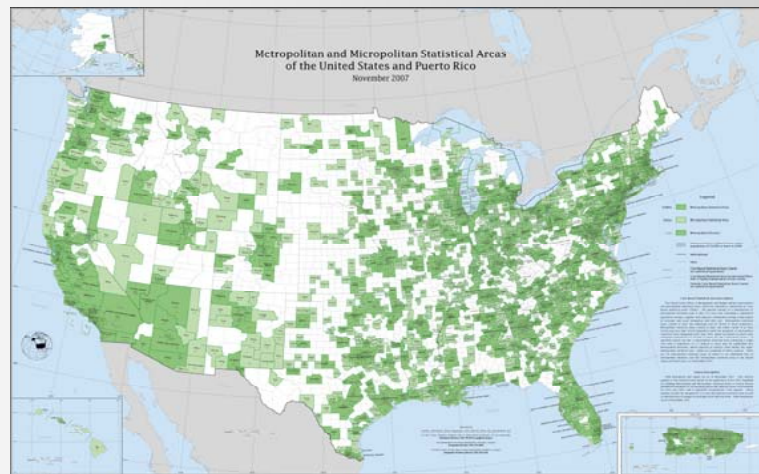
Reporting Geography

- Limitations of past planning efforts
  - County level data too general
  - The size of the county's service areas are very large
  - Service areas contain regional differences
  - Planners need more detail than SA or county summaries.
- Census tracts (4000-8000 individuals)
  - in LA County – over a thousand – too many to review them all.
  - Issues with identifiers
- ZIP codes (problematic)
  - close to 300
  - ZIP codes do not refer to a precise map coordinates. They are postal routes. Geo-coding problems.

Los Angeles County Service Planning Areas

Service Planning Areas
1 - Antelope Valley
2 - San Fernando
3 - San Gabriel
4 - Metro
5 - West
6 - South
7 - East
8 - South Bay/Harbor

Catalina Island

June, 2007
LAC- DMH
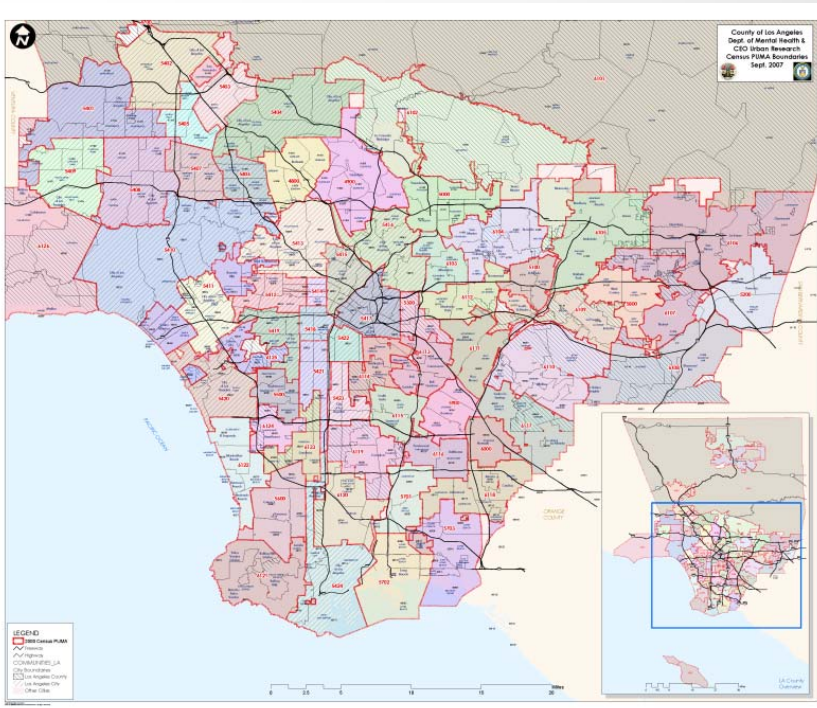Planning Division
VJ.nt (213) 251-6909

Public Use Microdata Areas (PUMAs)

- PUMAs are aggregated census tracts created by the US Census Bureau
- 100,000 – 140,000 people
- US Census Bureau recently published PUMA level demographic data for the American Community Survey 2005
- PUMAs as a unit of analysis.
- About 8-10 PUMAs per service area
- PUMAs define our communities in the current report

Metropolitan and Micropolitan Statistical Areas of the United States and Puerto Rico
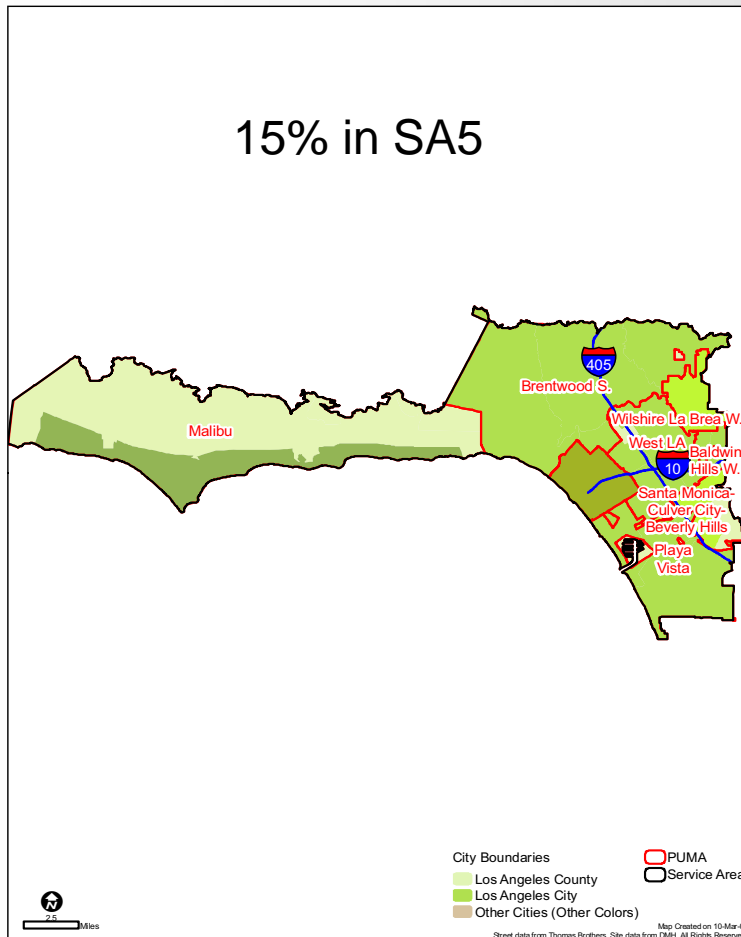November 2007

PUMA Identifiers

- PUMAs are assigned 5-digit codes that are unique within a state.

- PUMAs are not assigned formal names only numerical identifiers. Working with our demographer for the purposes of this report, community naming conventions were created.

- PUMAs are more user friendly than having to examine a thousand census tracts or hundreds of imprecise ZIPs

- 92 named communities

PUMA Issues

- It is important to recognize that community names correspond to PUMAs which are aggregated of census tracts. So a particular community name may encompass more geography than the name alone suggests.

- Consult the maps to get a sense for the geographic boundaries of each community – it is not always apparent.

- For example, in SA1, the two urban areas are contained within two PUMAs, the Lancaster area and the Palmdale area -- the surrounding North County area is another PUMA.

- Some PUMAs fall upon service area boundary intersections and are split

- In these cases, data are apportioned to each split PUMA based their respective population share. So, if a PUMA's population was split in half by a service area boundary, then any data reported for the PUMA would get allocated to each side equally. Fragmented PUMAs with at least 5% of the population share are named communities.

PUMA 5412

15% in SA5

85% in SA4

Nature of Data

- Frequency data are tabulated and in some cases, are reported in actual numbers. In other cases, population percentages have been calculated to facilitate interpretation (e.g. ethnicity reported as percentages, youth in probation camp reported in actual numbers).

- Population base rates were calculated when frequency data was low (e.g. suicide rates).

- Simple ratios were calculated to allow interpretation of two variables simultaneously (e.g. disrupted families).

- Weighted sums were calculated in order to allow interpretation of more than two variables simultaneously (e.g. triage acuity). Weighting either emphasizes or adjusts numbers to improve interpretability.

- The roundtable edition of the service area data profiles contain excerpted material from a larger report that contains all of the data tables.

- Data is cross-sectional.

- Please review the finalized data tables when they are released in the coming weeks.

Using the Numbers

- Modeling risk – How to identify communities at risk? What indicator or collection of indicators should one use?

- Each indicator points to areas and populations where problems are apparent; they can stand alone or work together.

- As a stakeholder, *you* must decide how to use the numbers.

Single Indicators

- Simplest approach based upon priority population or sector interest.

- For example, we know that ethnicity or primary language is related to mental health access issues for underserved cultural populations.

- Or, we may be interested in using high school graduation rates as an indicator of risk for school failure from the Education sector's perspective.

- As an exercise, a stakeholder may want to select a collection of single indicators to form a profile based upon their individual notions of what constitutes risk

Multiple Indicators

- Rational approach – based on a stakeholder theory of behavior.

  - For example, with regard to mental health access issues, linguistic isolation, unemployment, and depression, might constitute a set of indicators which a stakeholder may believe best identifies communities/populations at risk.

  - In the context of school failure from the Education sector's perspective, maybe it's best to look at 3rd grade reading levels AND HS graduation rates to identify areas where there may be a developmental or more pervasive systemic issue.

- Empirical approach – variables could be subjected to further statistical analyses to develop a mathematical model of risk. For example, a factor analysis, could identify a set of higher order independent risk factors.

Data Release

- Final and full report with all data tables is being finalized.

- Final report will be released on the PEI website in the next couple of weeks:
http://dmh.lacounty.info/mhsa/plans/peidata.html

- For more information, please contact the PEI Administrative Team.
mhsapei@dmh.lacounty.gov
(213) 738-2331

County of Los Angeles Department of Mental Health
Mental Health Services Act (MHSA)
Prevention and Early Intervention (PEI) Administration
550 S. Vermont Ave, Suite 605
Los Angeles CA, 90020

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