#### Appendix A: Data Tables

 Data included for:

 Asthma

 Mental Health & Substance Abuse

 Nutrition & Physical Activity

 Tobacco

 Domestic Violence

 Lead

 STDs, HIV, & Reproductive Health

 Diabetes

 Surrogates of Health Including Location of Care, Insurance Status, and Barriers to Care

|   | New       | Middlesex |                    |                                 |
|---|-----------|-----------|--------------------|---------------------------------|
|   | Brunswick | County    | Source             | Notes                           |
| Adults who have been told by a doctor that      |           |           |                    |                                 |
| they currently have asthma                      |           | 7.5%      | BRFSS 2010         |                                 |
| Adults who have ever been told by a doctor that |           |           |                    |                                 |
| they have asthma                                |           | 11.6%     | BRFSS 2010         |                                 |
| Estimated lifetime asthma among adults          |           | 12.9%     | NJ Asthma 2010     | 2005-2009 data                  |
| Estimated current asthma among adults           |           | 8.4%      | NJ Asthma 2010     | 2005-2009 data                  |
| Anyone in household has asthma                  | 18%       |           | Eagleton/NBT 2012  |                                 |
|   |           |           |                    | data also organized by          |
| Anyone in household has asthma                  | 29.2%     |           | Bloustein/NBT 2011 | race/ethnicity, income, and age |
| Has been told by a doctor, nurse, or other      |           |           |                    |                                 |
| health professional that they had asthma?       |           | 17.3%     | Hospitals 2012     |                                 |
| Asthma in Hospitals                             |           |           |                    |                                 |
| Age-adjusted rate per 10,000 residents for      |           |           |                    |                                 |
| hospitalizations due to asthma                  |           | 11.9      | NJ SHAD            | 2011 data                       |
| Rate per 100,000 population for avoidable       |           |           |                    |                                 |
| inpatient hospitalizations for asthma in young  |           |           |                    |                                 |
| adults  | 64        |           | CSHP Util 2013     |                                 |
| Rate per 100,000 population for avoidable       |           |           |                    |                                 |
| inpatient hospitalizations for COPD/asthma in   |           |           |                    |                                 |
| older adults                                    | 397       |           | CSHP Util 2013     |                                 |
| Number of Asthma ED visits, 2009                |           | 3,665     | NJ Asthma 2010     | 2005-2009 data                  |
| Percent of NJ asthma ED visits in 2009          |           | 6.9%      |                    |                                 |

|  | New       | Middlesex |               |                           |
|--|-----------|-----------|---------------|---------------------------|
|  | Brunswick | County    | Source        | Notes                     |
| HISTORIC DATA                                |           |           |               |                           |
| Asthma                                       |           |           |               |                           |
| Percent of children reported with asthma     |           |           |               |                           |
| (total)                                      | 10.2%     |           | CSHP/HNB 2004 |                           |
| Percent of near-poor* children reported with |           |           |               | *between 101% and 200% of |
| asthma                                       | 14.5%     |           | CSHP/HNB 2004 | federal poverty level     |
| Percent of African-American children         |           |           |               |                           |
| reported with asthma                         | 14.8%     |           | CSHP/HNB 2004 |                           |

|   | New       | Middlesex |                     |                                 |
|---|-----------|-----------|---------------------|---------------------------------|
|   | Brunswick | County    | Source              | Notes                           |
| Mental Health                               |           |           |                     |                                 |
| Anyone in household have depression,        |           |           |                     | data also organized by          |
| anxiety, or other mental health condition   | 26.4%     |           | Bloustein/NBT 2011  | race/ethnicity, income, and age |
| In past 12 months, saw a provider for an    |           |           |                     |                                 |
| emotional or mental health problem          |           | 8.1%      | Hospitals 2012      |                                 |
| Percent of inpatient high users with mental |           |           |                     |                                 |
| health comorbidities                        | 33.9%     |           | CSHP Util 2013      |                                 |
| Percent of ED high users with mental health |           |           |                     |                                 |
| comorbidities                               | 16.8%     |           | CSHP Util 2013      |                                 |
| Alcohol Consumption Including Excessive /   |           |           |                     |                                 |
| Heavy Drinking (multiple points)            |           |           |                     |                                 |
| Believe that alcohol / drug abuse are a     |           |           |                     |                                 |
| problem in their community                  |           | 62.8%     | Hospitals 2012      |                                 |
| Adults who reported binge drinking (<4 for  |           |           |                     |                                 |
| women & <5 for men) on a single occasion in |           |           |                     |                                 |
| past 30 days                                |           | 13.0%     | County HR           | 2005-2011 data                  |
| Number of alcohol admissions                | 160       | 1692      | NJ SubsAb Middlesex | 2012 data                       |
| Alcohol admissions (NB Residents) as a      |           |           |                     |                                 |
| percent of total New Brunswick SA           |           |           |                     |                                 |
| admissions                                  | 32.0%     |           | NJ SubsAb Middlesex | 2012 data                       |
| Alcohol admissions (Middlesex County        |           |           |                     |                                 |
| Residents) as a percent of total Middlesex  |           |           |                     |                                 |
| County SA admissions                        |           | 33.4%     | NJ SubsAb Middlesex | 2012 data                       |
| Alcohol admissions (NB Residents) as a      |           |           |                     |                                 |
| percent of total Middlesex County Alcohol   |           |           |                     |                                 |
| admissions                                  | 9.5%      |           | NJ SubsAb Middlesex | 2012 data                       |

|   | New       | Middlesex |                    |                                 |
|---|-----------|-----------|--------------------|---------------------------------|
|   | Brunswick | County    | Source             | Notes                           |
| Anyone in household has drinking or alcohol |           |           |                    |                                 |
| issues                                      | 4.0%      |           | Eagleton/NBT 2012  |                                 |
| Anyone in household have alcohol / drug     |           |           |                    | data also organized by          |
| problems                                    | 6.8%      |           | Bloustein/NBT 2011 | race/ethnicity, income, and age |
| Heavy drinkers (Adult men having more than  |           |           |                    |                                 |
| two drinks per day and adult women having   |           |           |                    |                                 |
| more than one drink per day)                |           | 3.1%      | BRFSS 2010         |                                 |
| Binge drinkers (males having five or more   |           |           |                    |                                 |
| drinks on one occasion, females having four |           |           |                    |                                 |
| or more drinks on one occasion)             |           | 10.6%     | BRFSS 2010         |                                 |
| Rate per 1000 of adult alcohol abuse        |           |           |                    |                                 |
| treatment admissions                        | 3.9       |           | PRAB 2013          |                                 |
| Rate per 1000 of youth alcohol abuse        |           |           |                    |                                 |
| treatment admissions                        | 0.2       |           | PRAB 2013          |                                 |
| Adults ages 18+ who reported binge drinking |           |           |                    |                                 |
| in past 30 days                             |           | 13.3%     | NJ SHAD            | 2008-2010 data                  |

|  | New       | Middlesex |                     |                                 |
|--|-----------|-----------|---------------------|---------------------------------|
|  | Brunswick | County    | Source              | Notes                           |
| Drug Abuse                                 |           |           |                     |                                 |
| Number of cocaine admissions               | 38        | 261       | NJ SubsAb Middlesex | 2012 data                       |
| Cocaine admissions (NB Residents) as a     |           |           |                     |                                 |
| percent of total NB substance abuse        |           |           |                     |                                 |
| admissions                                 | 7.6%      |           | NJ SubsAb Middlesex | 2012 data                       |
| Cocaine admissions (Middlesex County       |           |           |                     |                                 |
| Residents) as a percent of total Middlesex |           |           |                     |                                 |
| County substance abuse admissions          |           | 5.1%      | NJ SubsAb Middlesex | 2012 data                       |
| Number of heroin & opiates admissions      | 155       | 2206      | NJ SubsAb Middlesex | 2012 data                       |
| Heroin & opiates admissions (NB Residents) |           |           |                     |                                 |
| as a percent of total NB substance abuse   |           |           |                     |                                 |
| admissions                                 | 31.0%     |           | NJ SubsAb Middlesex | 2012 data                       |
| Heroin & opiates admissions (Middlesex     |           |           |                     |                                 |
| County Residents) as a percent of total    |           |           |                     |                                 |
| Middlesex County substance abuse           |           |           |                     |                                 |
| admissions                                 |           | 43.5%     | NJ SubsAb Middlesex | 2012 data                       |
| Number of marijuana admissions             | 129       | 774       | NJ SubsAb Middlesex | 2012 data                       |
| Marijuana admissions (NB Residents) as a   |           |           |                     |                                 |
| percent of total NB substance abuse        |           |           |                     |                                 |
| admissions                                 | 25.8%     |           | NJ SubsAb Middlesex | 2012 data                       |
| Marijuana admissions (Middlesex County     |           |           |                     |                                 |
| Residents) as a percent of total Middlesex |           |           |                     |                                 |
| County substance abuse admissions          |           | 15.3%     | NJ SubsAb Middlesex | 2012 data                       |
| Number of marijuana admissions             | 160       | 760       | NJ SubsAb Middlesex | 2012 data                       |
| Anyone in household have alcohol / drug    |           |           |                     | data also organized by          |
| problems                                   | 6.8%      |           | Bloustein/NBT 2011  | race/ethnicity, income, and age |

|  | New       | Middlesex |                     |           |
|--|-----------|-----------|---------------------|-----------|
|  | Brunswick | County    | Source              | Notes     |
| Rate per 1000 of adult drug abuse treatment  |           |           |                     |           |
| admissions                                   | 7.8       |           | PRAB 2013           |           |
| Rate per 1000 of youth drug abuse treatment  |           |           |                     |           |
| admissions                                   | 1.1       |           | PRAB 2013           |           |
| Believe that alcohol / drug abuse are a      |           |           |                     |           |
| problem in their community                   |           | 62.8%     | Hospitals 2012      |           |
| Undefined Substance Abuse                    |           |           |                     |           |
| Number of other admissions                   | 18        | 135       | NJ SubsAb Middlesex | 2012 data |
| Other admissions (NB Residents) as a percent |           |           |                     |           |
| of total New Brunswick substance abuse       |           |           |                     |           |
| admissions                                   | 3.6%      |           | NJ SubsAb Middlesex | 2012 data |
| Other admissions (Middlesex County           |           |           |                     |           |
| Residents) as a percent of total Middlesex   |           |           |                     |           |
| County substance abuse admissions            |           | 2.7%      | NJ SubsAb Middlesex | 2012 data |
| Percent of inpatient high users with         |           |           |                     |           |
| substance use disorder comorbidities         | 13.8%     |           | CSHP Util 2013      |           |
| Percent of ED high users with substance use  |           |           |                     |           |
| disorder comorbidities                       | 10.3%     |           | CSHP Util 2013      |           |

|   | New       | Middlesex |              | Notes                     |
|---|-----------|-----------|--------------|---------------------------|
|   | Brunswick | County    | Source       |                           |
| Childhood Obesity                             |           |           |              |                           |
|   |           |           |              | data also organized by    |
| Not overweight, ages 3-5                      | 52%       |           | Obesity 2010 | gender and race/ethnicity |
| Not overweight, ages 6-11                     | 52%       |           | Obesity 2010 |                           |
| Not overweight, ages 12-18                    | 56%       |           | Obesity 2010 |                           |
| Overweight, ages 3-5                          | 19%       |           | Obesity 2010 |                           |
| Overweight, ages 6-11                         | 20%       |           | Obesity 2010 |                           |
| Overweight, ages 12-18                        | 19%       |           | Obesity 2010 |                           |
| Obese, ages 3-5                               | 29%       |           | Obesity 2010 |                           |
| Obese, ages 6-11                              | 28%       |           | Obesity 2010 |                           |
| Obese, ages 12-18                             | 25%       |           | Obesity 2010 |                           |
|   |           |           |              | data also organized by    |
| Parent's Perceptions of Child's Weight Status |           |           |              | gender and race/ethnicity |
| Not overweight, ages 3-5                      | 92%       |           | Obesity 2010 |                           |
| Not overweight, ages 6-11                     | 88%       |           | Obesity 2010 |                           |
| Not overweight, ages 12-18                    | 75%       |           | Obesity 2010 |                           |
| Slightly overweight, ages 3-5                 | 8%        |           | Obesity 2010 |                           |
| Slightly overweight, ages 6-11                | 12%       |           | Obesity 2010 |                           |
| Slightly overweight, ages 12-18               | 22%       |           | Obesity 2010 |                           |
| Very overweight, ages 3-5                     | 0%        |           | Obesity 2010 |                           |
| Very overweight, ages 6-11                    | 1%        |           | Obesity 2010 |                           |
| Very overweight, ages 12-18                   | 3%        |           | Obesity 2010 |                           |

|   | New       | Middlesex |                    |                             |
|---|-----------|-----------|--------------------|-----------------------------|
|   | Brunswick | County    | Source             | Notes                       |
| Adult Obesity                                     |           |           |                    |                             |
| Neither overweight nor obese (BMI ≤ 24.9)         |           | 39.7%     | BRFSS 2010         |                             |
| Overweight (BMI 25.0 - 29.9)                      |           | 37.3%     | BRFSS 2010         |                             |
| Obese (BMI 30.0 - 99.8)                           |           | 23.0%     | BRFSS 2010         |                             |
| Overweight (BMI 25.0 - 29.9)                      |           | 38.0%     | Hospitals 2012     | Survey data                 |
| Obese (BMI 30.0 - 99.8)                           |           | 28.0%     | Hospitals 2012     | Survey data                 |
| Overweight (BMI 25.0 - 29.9)                      |           | 38.2%     | NJ SHAD 2006-2008  | 2006-2008 data              |
| Obese (BMI 30.0 - 99.8)                           |           | 22.4%     | NJ SHAD 2006-2008  | 2006-2008 data              |
| Obese (BMI 30.0 - 99.8)                           |           | 24.0%     | County HR          | 2009 data                   |
| Anyone in household has obesity or weight related |           |           |                    |                             |
| issues  | 21%       |           | Eagleton/NBT 2012  |                             |
|   |           |           |                    | data also organized by      |
|   |           |           |                    | race/ethnicity, income, and |
| Anyone in household have weight problem           | 38.7%     |           | Bloustein/NBT 2011 | age                         |
| In the past 12 months, a doctor, nurse or other   |           |           |                    |                             |
| health professional gave them advice about their  |           |           |                    |                             |
| weight?   |           | 24.8%     | Hospitals 2012     | Survey data                 |
| Self perceived somewhat overweight / very         |           |           |                    |                             |
| overweight  |           | 60.0%     | Hospitals 2012     | Survey data                 |

|  | New       | Middlesex |              | Notes                     |
|--|-----------|-----------|--------------|---------------------------|
|  | Brunswick | County    | Source       |                           |
| Childhood (ages 3-18) Physical Activity              |           |           |              |                           |
| Percentage not active at least 60 minutes a day 6-7  |           |           |              | data also organized by    |
| days a week  | 81%       |           | Obesity 2010 | gender and race/ethnicity |
| Percentage not active at least 30 minutes a day 6-7  |           |           |              | data also organized by    |
| days a week  | 57%       |           | Obesity 2010 | gender and race/ethnicity |
| Percentage who never walk, bike, or skateboard to    |           |           |              | data also organized by    |
| school   | 56%       |           | Obesity 2010 | gender and race/ethnicity |
| Percentage who get physical activity at school 2 or  |           |           |              | data also organized by    |
| fewer days per week                                  | 55%       |           | Obesity 2010 | gender and race/ethnicity |
| Percentage who spend more than 2 hours a day on      |           |           |              | data also organized by    |
| weekdays on TV, computer, or video games             | 18%       |           | Obesity 2010 | gender and race/ethnicity |
| Percentage who spend more than 2 hours a day on      |           |           |              | data also organized by    |
| weekend days on TV, computer, or video games         | 47%       |           | Obesity 2010 | gender and race/ethnicity |
| Parent believe that their child gets enough physical |           |           |              |                           |
| activity   |           |           |              |                           |
|  |           |           |              | data also organized by    |
| Strongly agree                                       | 54%       |           | Obesity 2010 | gender and race/ethnicity |
| Somewhat agree                                       | 36%       |           | Obesity 2010 |                           |
| Somewhat or strongly disagree                        | 10%       |           | Obesity 2010 |                           |

|  | New       | Middlesex |                    |                             |
|--|-----------|-----------|--------------------|-----------------------------|
|  | Brunswick | County    | Source             | Notes                       |
| Adult Physical Activity / Inactivty                    |           |           |                    |                             |
| During the past month, did you participate in any      |           |           |                    |                             |
| physical activities?                                   |           | 70.9%     | BRFSS 2010         |                             |
| Percent of adults ages 20+ reporting no leisure time   |           |           |                    |                             |
| physical activity                                      |           | 27.0%     | County HR 2013     | 2009                        |
|  |           |           |                    | race/ethnicity, income, and |
| Ever told by your doctor that you should exercise?     |           |           |                    | age                         |
| Yes  | 59.9%     |           | Bloustein/NBT 2011 |                             |
| No   | 40.1%     |           | Bloustein/NBT 2011 |                             |
|  |           |           |                    | data also organized by      |
|  |           |           |                    | race/ethnicity, income, and |
| Do you have an indoor place to exercise regularly?     |           |           |                    | age                         |
| Yes  | 43.2%     |           | Bloustein/NBT 2011 |                             |
| No   | 56.8%     |           | Bloustein/NBT 2011 |                             |
| Believe that places to exercise are a problem in their |           |           |                    |                             |
| community  |           | 32.1%     | Hospitals 2012     |                             |

|   | New       | Middlesex |                                       |                           |
|---|-----------|-----------|---------------------------------------|---------------------------|
|   | Brunswick | County    | Source                                | Notes                     |
|   |           |           |                                       | data also organized by    |
| Childhood (ages 3-18) Nutrition                   |           |           |                                       | gender and race/ethnicity |
| Childhood Fruit or 100% Juice Consumption         |           |           |                                       |                           |
| <1 time per day                                   | 14%       |           | Obesity 2010                          |                           |
| 1 to < 2 times per day                            | 31%       |           | Obesity 2010                          |                           |
| 2 or more times per day                           | 56%       |           | Obesity 2010                          |                           |
| Childhood Vegetable Consumption                   |           |           |                                       |                           |
| <1 time per day                                   | 24%       |           | Obesity 2010                          |                           |
| 1 to < 2 times per day                            | 46%       |           | Obesity 2010                          |                           |
| 2 to <3 times per day                             | 19%       |           | Obesity 2010                          |                           |
| 3 or more times per day                           | 12%       |           | Obesity 2010                          |                           |
| Percentage who do not eat fruits and vegetable as |           |           |                                       |                           |
| snacks daily                                      | 53%       |           | Obesity 2010                          |                           |
| Childhood Other Food Consumption                  |           |           |                                       |                           |
| 2 or more visits to a fast-food establishment per |           |           |                                       |                           |
| week  | 12%       |           | Obesity 2010                          |                           |
| Drink 2 or more sugar-sweetend beverages per      |           |           |                                       |                           |
| day   | 11%       |           | Obesity 2010                          |                           |
| Eat energy-dense sweet (e.g. cookies, cakes,      |           |           |                                       |                           |
| candy or pies) snacks daily                       | 20%       |           | Obesity 2010                          |                           |
| Eat energy-dense salty (e.g. chips, Doritos or    |           |           |                                       |                           |
| nachos) snacks daily                              | 15%       |           | Obesity 2010                          |                           |
| Percentage who do not eat breakfast daily         | 21%       |           | Obesity 2010                          |                           |
| Parent believe that their child eats healthy      | -         |           | · · · · · · · · · · · · · · · · · · · |                           |
| Strongly agree                                    | 51%       |           | Obesity 2010                          |                           |
| Somewhat agree                                    | 39%       |           | Obesity 2010                          |                           |

|                               | New       | Middlesex |              |       |
|-------------------------------|-----------|-----------|--------------|-------|
|                               | Brunswick | County    | Source       | Notes |
| Somewhat or strongly disagree | 10%       |           | Obesity 2010 |       |

|   | New       | Middlesex |                    |                             |
|---|-----------|-----------|--------------------|-----------------------------|
|   | Brunswick | County    | Source             | Notes                       |
| Family Nutrition                                    |           |           |                    |                             |
|   |           |           |                    | data also organized by      |
| Programs that you or your family currently          |           |           |                    | race/ethnicity, income, and |
| participate in?                                     |           |           |                    | age                         |
| Percent who receive NJ SNAP benefits                | 27.5%     |           | Bloustein/NBT 2011 |                             |
| Percent who participate in school breakfast and /   |           |           |                    |                             |
| or lunch program                                    | 22.8%     |           | Bloustein/NBT 2011 |                             |
| Percent who receive WIC benefits                    | 17.5%     |           | Bloustein/NBT 2011 |                             |
| Percent of eligible women and children actively     |           |           |                    |                             |
| enrolled in NJ WIC                                  | 90.6%     |           | NJ WIC 2014        |                             |
| Believe that finding fresh fruits/veggies are a     |           |           |                    |                             |
| problem in their community                          |           | 24.6%     | Hospitals 2012     | Survey data                 |
|   |           |           |                    | NJ SNAP data 2012,          |
| Percent of children who receive NJ SNAP benefits    |           | 13.1%     | Kids Count 2013    | population data 2011        |
| Percent of all children receiving free- or reduced- |           |           |                    | breakfast data 2011- 2012,  |
| price school breakfast                              |           | 6.5%      | Kids Count 2013    | population data 2011        |
| Percent of eligible children receiving free- or -   |           |           |                    |                             |
| reduced price school breakfast                      |           | 31.2%     | Kids Count 2013    |                             |
| Percent of all children receiving free- or reduced- |           |           |                    | lunch data 2011- 2012,      |
| price school lunch                                  |           | 16.5%     | Kids Count 2013    | population data 2011        |
| Percent of eligible children receiving free- or -   |           |           |                    |                             |
| reduced price school lunch                          |           | 79.9%     | Kids Count 2013    |                             |

|   | New       | Middlesex |                         |                          |
|---|-----------|-----------|-------------------------|--------------------------|
|   | Brunswick | County    | Source                  | Notes                    |
| HISTORIC DATA                                   |           |           |                         |                          |
| Childhood Obesity                               |           |           |                         |                          |
| At risk for overweight (children under age 19)  | 24.5%     |           | CSHP/HNB 2004           |                          |
| Overweight (children under age 19) (total)      | 24.0%     |           | CSHP/HNB 2004           |                          |
|   |           |           |                         | *between 101% and 200%   |
| Poor or near-poor*                              | 30.2%     |           | CSHP/HNB 2004           | of federal poverty level |
| Hispanic/Latino                                 | 35.5%     |           | CSHP/HNB 2004           |                          |
| Childhood (ages >5-18) Physical Activity        |           |           |                         |                          |
| Inadequate physicial activity or exercise (< 60 |           |           |                         |                          |
| minutes per day) - total                        | 42.6%     |           | CSHP/HNB 2004           |                          |
| Uninsured                                       | 58.4%     |           | CSHP/HNB 2004           |                          |
| Mexican   | 64.4%     |           | CSHP/HNB 2004           |                          |
| Adult Physical Activity / Inactivty             |           |           |                         |                          |
| Exercise every day                              | 10.0%     | 14.0%     | Middlesex Co. CHNA 2001 |                          |

|   | New<br>Brunswick | Middlesex<br>County | Source                   | Notes                       |
|---|------------------|---------------------|--------------------------|-----------------------------|
| Adult Smoking                                 |                  |                     |                          |                             |
|   |                  |                     |                          | smokes every day or most    |
| Adults Who Are Current Smokers                |                  | 13.0%               | County HR 2013           | days; 2005-2011 data        |
| Adults Who Are Current Smokers                |                  | 12.8%               | BRFSS 2010               |                             |
| Adults Who Are Current Smokers                |                  | 12.2%               | NJ SHAD                  | 2007-2009 data              |
|   |                  |                     |                          | data also organized by      |
| Anyone in Household that Smokes               | 20.9%            |                     | Bloustein/NBT 2011       | race/ethnicity, income, and |
| Individual Smoking Status                     |                  |                     |                          |                             |
| Smoke everyday                                |                  | 10.8%               | BRFSS 2010               |                             |
| Some some days                                |                  | 2.0%                | BRFSS 2010               |                             |
| Former smoker                                 |                  | 23.5%               | BRFSS 2010               | 2005-2009 data              |
| Never smoked                                  |                  | 63.6%               | BRFSS 2010               |                             |
| Smoking Allowed in Home                       |                  | 10.9%               | Hospitals 2012           |                             |
| Abstinence from Tobacco During Pregnancy      |                  | 96.3%               | NJ SHAD                  | 2007-2009 data              |
| Related Social Indicators                     |                  |                     |                          |                             |
| Number of licensed cigarette retailers        | 83               |                     | NJ SubsAb Chartbook 2013 | 2009 data                   |
| Rate of licensed cigarette retailers per 1000 |                  |                     |                          |                             |
| persons                                       | 1.5              |                     | NJ SubsAb Chartbook 2013 | 2009 data                   |
| HISTORIC DATA                                 |                  |                     |                          |                             |
| Adult Smoking                                 |                  |                     |                          |                             |
| Currently smoke cigarettes                    | 36.0%            | 25.0%               | Middlesex Co. CHNA 2001  |                             |
| Secondhand Smoke                              |                  |                     |                          |                             |
| Children living with a smoker                 | 37.6%            |                     | CSHP/HNB 2004            |                             |
| Uninsured                                     | 43.7%            |                     | CSHP/HNB 2004            |                             |

|                  | New       | Middlesex |               |       |  |
|------------------|-----------|-----------|---------------|-------|--|
|                  | Brunswick | County    | Source        | Notes |  |
| African-American | 54.3%     |           | CSHP/HNB 2004 |       |  |

|   | New       | Middlesex |                |             |
|---|-----------|-----------|----------------|-------------|
|   | Brunswick | County    | Source         | Notes       |
| Child Maltreatment / Abuse Reports              |           |           |                |             |
|   |           |           | NJ Child Abuse |             |
| Number of child maltreatment reports, 2011      | 989       |           | 2011           |             |
| Percent of child maltreatment reports that      |           |           | NJ Child Abuse |             |
| are substantiated                               | 11.1%     |           | 2011           |             |
| Domestic Violence Offenses                      | 550       | 5,143     | NJ DV 2011     |             |
| Number of children involved, child abuse /      |           |           | NJ Child Abuse |             |
| neglect investigations                          |           | 6,224     | 2011           |             |
| Substantiation rate, child abuse / neglect      |           |           | NJ Child Abuse |             |
| investigations                                  |           | 9.16%     | 2011           |             |
| Believe that domestic violence is a problem in  |           |           |                |             |
| their community                                 |           | 49.8%     | Hospitals 2012 | Survey data |
| Believe that elder abuse / neglect is a problem |           |           |                |             |
| in their community                              |           | 46.2%     | Hospitals 2012 | Survey data |
| Number of forcible rapes known to law           |           |           |                |             |
| enforcement                                     | 24        |           | FBI Crime 2012 |             |

|  | New       | Middlesex |                         |       |
|--|-----------|-----------|-------------------------|-------|
|  | Brunswick | County    | Source                  | Notes |
| Elevated Blood Lead Levels                       |           |           |                         |       |
| Percent of children ages 6 to 29 months with     |           |           |                         |       |
| confirmed blood lead ≥ 5 μg/dL                   | 4.5%      | 2.5%      | NJ Lead 2012            |       |
| Percent of tested children under 6 years of      |           |           |                         |       |
| age with confirmed blood lead $\geq 5\mu g/dL$ , | 4.6%      | 2.60%     | NJ Lead 2012            |       |
| Screening Levels                                 |           |           |                         |       |
| Percent of children ages 6 to 29 months          |           |           |                         |       |
| tested for lead poisoning                        | 69.0%     | 37.0%     | NJ Lead 2012            |       |
| Percent of children under 6 years of age         |           |           |                         |       |
| tested for lead poisoning                        | 40.0%     | 22.0%     | NJ Lead 2012            |       |
| Surrogate Markers                                |           |           |                         |       |
| Number of pre-1950 housing units in New          |           |           |                         |       |
| Brunswick, NJ                                    | 6,407     | 51,570    | ACS 2012                |       |
| Percent of housing units in New Brunswick        |           |           |                         |       |
| built before 1950                                | 42.1%     | 17.4%     | ACS 2012                |       |
| Number of pre-1950 housing units as of 2000      |           | 52,430    | NJ SHAD                 |       |
| HISTORIC   |           |           |                         |       |
| Elevated Blood Lead Levels                       |           |           |                         |       |
| Percent of children with elevated blood          |           |           |                         |       |
| lead levels (≥ 10µg/dL)                          | 32.0%     | 7.0%      | Middlesex Co. CHNA 2001 |       |
| Screening Levels                                 |           |           |                         |       |
| Percent of children tested for lead              |           |           |                         |       |
| poisoning under age 5                            | 40.0%     | 27.0%     | Middlesex Co. CHNA 2001 |       |
| Surrogate Markers                                |           |           |                         |       |
| Percent of housing units in New Brunswick        |           |           |                         |       |
| built before 1979                                | 91.6%     | 77.8%     | Middlesex Co. CHNA 2001 |       |

|  | New       | Middlesex |        |       |
|--|-----------|-----------|--------|-------|
|  | Brunswick | County    | Source | Notes |
|  |           |           |        |       |

|   | New       | Middlesex |                     |                         |
|---|-----------|-----------|---------------------|-------------------------|
|   | Brunswick | County    | Source              | Notes                   |
| STDs  |           |           |                     |                         |
| Number of Chlamydia cases                             | 358       | 1,901     | NJ STD Program 2012 |                         |
| Number of Gonorrhea cases                             | 56        | 275       | NJ STD Program 2012 |                         |
| Believe that STDs are a problem in their community    |           | 40.9%     | Hospitals 2012      |                         |
| Chlamydia rate per 100,000 population                 |           | 214.0     | County HR 2013      | 2010 data               |
| HIV/AIDS  |           |           |                     |                         |
| Cumulative AIDS cases (Middlesex County resident at   |           |           |                     |                         |
| time of diagnosis)                                    |           | 3,130     | NJ HIV/AIDS 2012    |                         |
| HIV cases, not AIDS                                   |           | 1,013     | NJ HIV/AIDS 2012    |                         |
| Cumulative HIV & AIDS cases (resident when            |           |           |                     |                         |
| diagnosed)  | 956       | 4,166     | NJ HIV/AIDS 2012    | As of December 31, 2012 |
| Current persons living with HIV/AIDS (resident when   |           |           |                     |                         |
| report compiled)                                      | 384       | 2,036     | NJ HIV/AIDS 2012    |                         |
| Residents age at diagnosis (resident when             |           |           |                     |                         |
| diagnosed), age < 13                                  | 26        | 81        | NJ HIV/AIDS 2012    | As of December 31, 2012 |
| Residents age at diagnosis (resident when             |           |           |                     |                         |
| diagnosed), ages 13-24                                | 64        | 296       | NJ HIV/AIDS 2012    | As of December 31, 2012 |
|   |           |           |                     |                         |
| Current resident, living cases of HIV/AIDS, age < 13  | 0         | 6         | NJ HIV/AIDS 2012    | As of December 31, 2012 |
| Current residents, living cases of HIV/AIDS, ages 13- |           |           |                     |                         |
| 24  | 16        | 70        | NJ HIV/AIDS 2012    | As of December 31, 2012 |
| Perinatal HIV exposures (child's HIV serostatus is    |           |           |                     |                         |
| negative or indeterminate)                            |           | 252       | NJ HIV/AIDS 2012    |                         |

|   | New       | Middlesex |                          |                |
|---|-----------|-----------|--------------------------|----------------|
|   | Brunswick | County    | Source                   | Notes          |
| REPRODUCTIVE HEALTH                                 |           |           |                          |                |
| Prenatal Care                                       |           |           |                          |                |
| Percent of women receiving early prenatal care in 2 | 75.4%     |           | PRAB 2013                |                |
| Percent of women receiving early prenatal care in 2 | 2009      | 83.8%     | Kids Count 2013          | 2009 data      |
| Births receiving adequate prenatal care             | 64.2%     |           | PRAB 2013                |                |
| Percent of live births with no prenatal care        |           | 0.7%      | NJ SHAD                  | 2005-2009 data |
| Birth Rate  |           |           |                          |                |
| Birth rate per 1000 residents                       | 21.1      |           | PRAB 2013                |                |
| Birth rate per 1000 residents                       |           | 13        | NJ SHAD                  | 2009 data      |
| Percent of live births to unmarried mothers         |           | 26.5%     | NJ SHAD                  | 2007-2009 data |
| Birth rate per 1000 females, aged 15-17             |           | 9.0       | NJ SHAD                  | 2009 data      |
| Birth rate per 1000 females, aged 18-19             |           | 26.4      | NJ SHAD                  | 2009 data      |
| Percentage of births to females 10-19               |           | 4.3%      | Kids Count 2013          | 2011 data      |
| Number of births per 1000 female population,        |           |           |                          |                |
| ages 15-19  |           | 17.0      | County HR 2013           | 2004-2010 data |
| Low Birthweight                                     |           |           |                          |                |
| Percentage low birth weight (weighing < than 2500   |           |           |                          |                |
| grams or 5.5 lbs at birth) infants                  | 7.5%      |           | PRAB 2013                |                |
| Percentage low birth weight (weighing < than 2500   |           |           |                          |                |
| grams or 5.5 lbs at birth) infants                  |           | 7.9%      | NJ SHAD, Kids Count 2013 | 2009 data      |
| Percentage low birth weight (weighing < than 2500   |           |           |                          |                |
| grams or 5.5 lbs at birth) infants                  |           | 8.3%      | County HR 2013           | 2004-2010 data |

|  | New       | Middlesex |                         |       |
|--|-----------|-----------|-------------------------|-------|
|  | Brunswick | County    | Source                  | Notes |
| HISTORIC DATA                                      |           |           |                         |       |
| HIV/AIDS   |           |           |                         |       |
| Persons living with HIV/AIDS (resident when report |           |           |                         |       |
| compiled)  | 354       |           | Middlesex Co. CHNA 2001 |       |
| Pediatric infections (ages <13)                    | 16        | 51        | Middlesex Co. CHNA 2001 |       |
| REPRODUCTIVE HEALTH                                |           |           |                         |       |
| Birth Rate   |           |           |                         |       |
| Birth rate per 1000 residents                      |           | 13.6%     | Middlesex Co. CHNA 2001 |       |
| Prenatal Care                                      |           |           |                         |       |
| Percent receiving prenatal care in first trimester |           | 84.4%     | Middlesex Co. CHNA 2001 |       |
| Low Birthweight                                    |           |           |                         |       |
| Percentage low birth weight (weighing < than 2000  |           |           |                         |       |
| grams or 5.5 lbs at birth) infants                 | 6.2%      | 6.9%      | Middlesex Co. CHNA 2001 |       |
| Percentage very low birth weight (weighing < than  |           |           |                         |       |
| 1500 grams or 5.5 lbs at birth) infants            | 2.4%      | 1.6%      | Middlesex Co. CHNA 2001 |       |

|  | New       | Middlesex |                    |                                 |
|--|-----------|-----------|--------------------|---------------------------------|
|  | Brunswick | County    | Source             | Notes                           |
| Diabetes                                       |           |           |                    |                                 |
| Have you ever been told by a doctor that you   |           |           |                    |                                 |
| have diabetes? Pregnancy related excluded      |           | 9.7%      | BRFSS 2010         |                                 |
| Anyone in household has diabetes               | 24.0%     |           | Eagleton/NBT 2012  |                                 |
|  |           |           |                    | data also organized by          |
| Anyone in household has diabetes               | 36.9%     |           | Bloustein/NBT 2011 | race/ethnicity, income, and age |
| Has been told by a doctor, nurse, or other     |           |           |                    |                                 |
| health professional that they had diabetes?    |           | 14.0%     | Hospitals 2012     |                                 |
| Percent of adults aged 18+ with diagnosed      |           |           |                    |                                 |
| diabetes who had a dilated eye exam within     |           |           |                    |                                 |
| the past 12 months                             |           | 72.9%     | NJ SHAD            | 2008-2010                       |
| Screening                                      |           |           |                    |                                 |
| Percent of diabetic Medicare patients whose    |           |           |                    |                                 |
| blood sugar control was screened in the past   |           |           |                    |                                 |
| 12 months using a test of their glycated       |           |           |                    |                                 |
| hemoglobin levels                              |           | 82.0%     | County HR 2013     | 2010                            |
| Diabetes in Hospitals                          |           |           |                    |                                 |
| Rate per 100,000 population for avoidable      |           |           |                    |                                 |
| inpatient hospitalizations for DM short-term   |           |           |                    |                                 |
| complication                                   | 57.0      |           | CSHP Util 2013     |                                 |
| Rate per 100,000 population for avoidable      |           |           |                    |                                 |
| inpatient hospitalizations for DM long-term    |           |           |                    |                                 |
| complication                                   | 113.0     |           | CSHP Util 2013     |                                 |
| Rate per 100,000 population for avoidable      |           |           |                    |                                 |
| inpatient hospitalizations for uncontrolled DM | 20.0      |           | CSHP Util 2013     |                                 |
| HISTORIC DATA                                  |           |           |                    |                                 |
| Diabetes                                       |           |           |                    |                                 |

|                                     | New       | Middlesex |                         |       |
|-------------------------------------|-----------|-----------|-------------------------|-------|
|                                     | Brunswick | County    | Source                  | Notes |
| Have a personal history of diabetes | 8.0%      | 8.0%      | Middlesex Co. CHNA 2001 |       |

|                               | New Middlesex |        |                    |
|-------------------------------|---------------|--------|--------------------|
|                               | Brunswick     | County | Source             |
| Location of Care              |               |        |                    |
| Location Receive Medical Care |               |        |                    |
| Family doctor                 | 56.0%         |        | Eagleton/NBT 2012  |
| Local clinic                  | 19.0%         |        | Eagleton/NBT 2012  |
| Hospital Emergency Room       | 24.0%         |        | Eagleton/NBT 2012  |
| Take care of self / at home   | 2.0%          |        | Eagleton/NBT 2012  |
| Normally receive medical care |               |        |                    |
| Family doctor, outside NB     | 36.6%         |        | Bloustein/NBT 2011 |
| Family doctor, in NB          | 27.7%         |        | Bloustein/NBT 2011 |
| NB Clinic                     | 17.8%         |        | Bloustein/NBT 2011 |
| Clinic outside NB             | 2.6%          |        | Bloustein/NBT 2011 |
| Hospital ER                   | 9.6%          |        | Bloustein/NBT 2011 |
| Other                         | 5.7%          |        | Bloustein/NBT 2011 |
| Ever used clinic              |               |        |                    |
| Chandler                      |               |        |                    |
| Self                          | 19.6%         |        | Bloustein/NBT 2011 |
| For child                     | 6.6%          |        | Bloustein/NBT 2011 |
| For self and child            | 11.7%         |        | Bloustein/NBT 2011 |
| St. Peters                    |               |        |                    |
| Self                          | 11.1%         |        | Bloustein/NBT 2011 |
| For child                     | 11.2%         |        | Bloustein/NBT 2011 |
| For self and child            | 7.7%          |        | Bloustein/NBT 2011 |

|  | New       | Middlesex |                    |
|--|-----------|-----------|--------------------|
|  | Brunswick | County    | Source             |
| St. Johns                                      |           |           |                    |
| Self   | 6.2%      |           | Bloustein/NBT 2011 |
| For child                                      | 2.3%      |           | Bloustein/NBT 2011 |
| For self and child                             | 2.7%      |           | Bloustein/NBT 2011 |
| Ease of Obtaining Health Care                  |           |           |                    |
| Very easy                                      | 46%       |           | Eagleton/NBT 2012  |
| Somewhat easy                                  | 29%       |           | Eagleton/NBT 2012  |
| Somewhat hard                                  | 14%       |           | Eagleton/NBT 2012  |
| Very hard                                      | 6%        |           | Eagleton/NBT 2012  |
| Don't know                                     | 5%        |           | Eagleton/NBT 2012  |
| Went to $ED \ge 1$ time in last 12 months      |           | 20.1%     | Hospitals 2012     |
| Main reason for ED visit was emergency         |           | 63.1%     | Hospitals 2012     |
| Healthcare provider visits in past 12 months   |           |           |                    |
| Check-ups / preventive                         |           | 80.5%     | Hospitals 2012     |
| Specialty visits                               |           | 52.8%     | Hospitals 2012     |
| Other doctor visits                            |           | 33.3%     | Hospitals 2012     |
| In past 12 months, made call(s) to a health    |           |           |                    |
| care provider about own health, including      |           |           |                    |
| medical advice, prescriptions, or test results |           |           |                    |
| but not scheduling                             |           | 48.3%     | Hospitals 2012     |
| Rate per 100,000 population for avoidable ED   |           |           |                    |
| visits that were primary care treatable        |           | 7829.0    | CSHP Util 2013     |
| Hospital discharge rate for ambulatory care-   |           |           |                    |
| sensitive conditions per 1000 Medicare         |           |           |                    |
| enrollees                                      |           | 65.0      | County HR 2013     |

|  | New       | Middlesex |                    |
|--|-----------|-----------|--------------------|
|  | Brunswick | County    | Source             |
| Insurance Status                             |           |           |                    |
|  |           |           |                    |
|  |           |           |                    |
| Do any of your jobs provide health benefits? |           |           |                    |
| Yes  | 52.5%     |           | Bloustein/NBT 2011 |
| No   | 47.5%     |           | Bloustein/NBT 2011 |
|  |           |           |                    |
| Do you have any other health insurance?      |           |           |                    |
| Yes  | 41.3%     |           | Bloustein/NBT 2011 |
| No   | 58.7%     |           | Bloustein/NBT 2011 |
|  |           |           |                    |
| Programs that you or your family currently   |           |           |                    |
| participate in?                              |           |           |                    |
| FamilyCare                                   | 18.9%     |           | Bloustein/NBT 2011 |
| SCHIP  | 4.1%      |           | Bloustein/NBT 2011 |
| Medicaid                                     | 41.5%     |           | Bloustein/NBT 2011 |
| Medicare                                     | 46.0%     |           | Bloustein/NBT 2011 |
| Charity Care                                 | 10.1%     |           | Bloustein/NBT 2011 |
|  |           |           |                    |
| Children receiving NJ Family Care / Medicaid |           | 20 10/    | Kids Count 2013    |
| Children under 18 without health insurance   |           |           | Kids Count 2013    |
|  |           | 0.4%      |                    |
| Percent of the population < 65 that has no   |           | 15.00/    | Country LID 2012   |
| health insurance                             |           | 15.0%     | County HR 2013     |
| Main health insurance coverage               |           |           |                    |
| Public                                       |           | 28.4%     | Hospitals 2012     |

|           | New       | Middlesex |                |
|-----------|-----------|-----------|----------------|
|           | Brunswick | County    | Source         |
| Private   |           | 64.9%     | Hospitals 2012 |
| Uninsured |           | 6.7%      | Hospitals 2012 |

|  | New       | Middlesex |                    |
|--|-----------|-----------|--------------------|
|  | Brunswick | County    | Source             |
| Barriers to Care                               |           |           |                    |
| Reasons for Not Obtaining Care Including       |           |           |                    |
| Navigation and Language Barriers               |           |           |                    |
| No insurance or cannot afford it               | 54%       |           | Eagleton/NBT 2012  |
| Excessive wait / no doctors                    | 35%       |           | Eagleton/NBT 2012  |
| Residency                                      | 4%        |           | Eagleton/NBT 2012  |
| Other  | 8%        |           | Eagleton/NBT 2012  |
| Could not get transportation                   |           | 7.6%      | Hospitals 2012     |
| Could not get day care                         |           | 10.7%     | Hospitals 2012     |
| No available parking at place of care          |           | 16.0%     | Hospitals 2012     |
| Unable to find provider who spoke same         |           |           |                    |
| language                                       |           | 8.0%      | Hospitals 2012     |
| Hours were inconvenient                        |           | 35.3%     | Hospitals 2012     |
| Had to wait too long for an appointment        |           | 34.8%     | Hospitals 2012     |
| In the past 12 months did not get or delayed   |           |           |                    |
| getting a prescription medicine because it     |           |           |                    |
| cost too much                                  |           | 15.4%     | Hospitals 2012     |
| In the past 12 months reduced or skipped       |           |           |                    |
| dose(s) of prescription medicine to save       |           |           |                    |
| money  |           | 11.3%     | Hospitals 2012     |
| Ever had difficulty communicating with a       |           |           |                    |
| healthcare provider because of a difference in |           |           |                    |
| language                                       |           |           |                    |
| Yes  | 22.8%     |           | Bloustein/NBT 2011 |
| No   | 77.2%     |           | Bloustein/NBT 2011 |
|  |           |           |                    |

|   | New       | Middlesex |                         |
|---|-----------|-----------|-------------------------|
|   | Brunswick | County    | Source                  |
| HISTORIC DATA                           |           |           |                         |
| Location of Care                        |           |           |                         |
| Regular place of care - all children    |           |           |                         |
| Private doctor                          | 48.4%     |           | CSHP/HNB 2004           |
| Hospital / clinic                       | 15.7%     |           | CSHP/HNB 2004           |
| Health center                           | 21.6%     |           | CSHP/HNB 2004           |
| Other                                   | 6.2%      |           | CSHP/HNB 2004           |
| No regular source of care               | 8.1%      |           | CSHP/HNB 2004           |
| Mexican                                 | 10.6%     |           | CSHP/HNB 2004           |
| Near-poor*                              | 16.4%     |           | CSHP/HNB 2004           |
| Uninsured                               | 25.4%     |           | CSHP/HNB 2004           |
| Insurance Status                        |           |           |                         |
| Do you have any other health insurance? |           |           |                         |
| Yes                                     | 88.0%     |           | Middlesex Co. CHNA 2001 |
| No                                      | 22.0%     |           |                         |
| Uninsured children                      | 17.3%     |           | CSHP/HNB 2004           |
| Near-poor*                              | 26.3%     |           | CSHP/HNB 2004           |
| Mexican                                 | 27.8%     |           | CSHP/HNB 2004           |

|                                    | New                 | Middlesex |               |
|------------------------------------|---------------------|-----------|---------------|
|                                    | Brunswick           | County    | Source        |
| HISTORIC DATA (continued)          |                     |           |               |
| Barriers to Care                   |                     |           |               |
| Difficulty getting                 |                     |           |               |
| Prescription drugs                 | 3.7%                |           | CSHP/HNB 2004 |
| Dental care                        | 4.7%                |           | CSHP/HNB 2004 |
| Medical or surgical care           | 1.6%                |           | CSHP/HNB 2004 |
| Mental health                      | 0.6%                |           | CSHP/HNB 2004 |
| Barrier is a "Major problem"       |                     |           |               |
| Wait for appointment               | 30.2%               |           | CSHP/HNB 2004 |
| Language                           | 18.4%               |           | CSHP/HNB 2004 |
| Finding parking                    | 16.9%               |           | CSHP/HNB 2004 |
| Hours available                    | 13.3%               |           | CSHP/HNB 2004 |
| Transportation                     | 10.5%               |           | CSHP/HNB 2004 |
| Daycare                            | 7.9%                |           | CSHP/HNB 2004 |
|                                    |                     |           |               |
| * Near-poor is 101% and 200% of fe | deral poverty level |           |               |

#### Appendix B: Sources and Methods for the Data Provided in the Report and Appendix A

**Note:** This Appendix is in alphabetical order organized by the shorthand used in the data tables (see Appendix A). For each study or assessment we provide a description as well as the formal citation used in the report.

#### Bloustein/NBT 2011

*New Brunswick Tomorrow 2011 Needs Assessment* is a mixed-mode survey research study performed for New Brunswick Tomorrow by the Bloustein Center for Survey Research, Edward J. Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey. This 34-question survey included multiple choice and yes/no questions as well as open-ended items. Data collection included mail surveys and in-person administrations. The randomly selected mail sample of 3,330 addresses was stratified into 4 zones (1: students and commuters, 2: border area – mix of all, 3: densely populated Latino/a and 4: Latino/a and African American) and included an oversample for senior citizens. Respondents completed 724 surveys by mail for a 24.98% response rate. An additional 119 surveys were completed during site collections at the Adult Learning Center, Sharon Baptist Church, and Puerto Rican Action Board (PRAB). Total response rate for the mail and site collection surveys was 28.27%.

Report citation: Weiner, M.D., MacKinnon, T.D., & Puniello, O.T. (March 2011). *New Brunswick Tomorrow 2011 Needs Assessment*. New Brunswick, N.J.: Rutgers Edward J. Bloustein School of Planning and Public Policy, The Bloustein Center for Survey Research.

#### **BRFSS 2010**

In 1984, the Centers for Disease Control and Prevention (CDC) established the Behavioral Risk Factor Surveillance System (BRFSS), which collects state data about U.S. residents regarding their health-related risk behaviors and events, chronic health conditions, and use of preventive services. Currently, BRFSS collects data in all 50 states as well as the District of Columbia and three U.S. territories. BRFSS completes more than 400,000 adult interviews each year using multi-modes (mail, landline phone, and cell phone). State health departments use in-house interviewers or contract with telephone call centers or universities to administer the BRFSS surveys continuously through the year. The states use a standardized core questionnaire, optional modules, and state-added questions. See <a href="http://apps.nccd.cdc.gov/BRFSS-SMART/">http://apps.nccd.cdc.gov/BRFSS-SMART/</a>

Report citation: CDC – Centers for Disease Control and Prevention. (2010a). Data for Middlesex County, N.J. *Behavioral Risk Factor Surveillance System (BRFSS)*. Retrieved June 7, 2013 from <u>http://www.cdc.gov/brfss/</u>

#### County HR 2013

The *Rankings* data set is based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play.

Building on the work of America's Health Rankings, the University of Wisconsin Population Health Institute uses this model to rank the health of counties. The *County Health Rankings* measures the health of nearly all counties in the nation and ranks them within states. The *Rankings* data set is compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights. See http://www.countyhealthrankings.org

Report citation: University of Wisconsin, Population Health Institute and Robert Wood Johnson Foundation (2013). County Health Rankings and Roadmaps. Data for Middlesex County, N.J. retrieved June 6, 2013 from <a href="http://www.countyhealthrankings.org/app/new-jersey/2013/middlesex/county/outcomes/overall/snapshot/by-rank">http://www.countyhealthrankings.org/app/new-jersey/2013/middlesex/county/outcomes/overall/snapshot/by-rank</a>

### **CSHP/HNB 2004**

The Rutgers Center for State Health Policy conducted a community health needs assessment (CHNA) of New Brunswick, N.J. for the Healthier New Brunswick 2010 initiative sponsored by New Brunswick Tomorrow and the then UMDNJ-Robert Wood Johnson Medical School. For this CHNA, the CSHP conducted focus groups, interviewed residents and community stakeholders, and administered a survey to New Brunswick residents. We used the data from this study to provide historic data for New Brunswick.

Report citations: Cantor, J.C., Guarnaccia, P., Brownlee, S., Schneider, C., & Nova, J. (April 2006). *Health and Health Care of New Brunswick's Children: A Chartbook*. New Brunswick, N.J.: Rutgers Center for State Health Policy and Healthier New Brunswick 2010. And. Guarnaccia, P., Martinez, I., Silberberg, M., Cantor, J.C., & Davis, D. (Fall 2004). Health and Health Care for the Residents of New Brunswick: Focus Group Perspectives A 'Report of the New Brunswick Community Health Assessment. New Brunswick, N.J.: Rutgers Center for State Health Policy and Health Policy and Healthier New Brunswick, N.J.: Rutgers Center for State Health Assessment. New Brunswick, N.J.: Rutgers Center for State Health Policy and Healthier New Brunswick 2010.

# CSHP Util 2013

Researchers used the New Jersey uniform billing (UB) data over the period 2008-2010 available from the N.J Department of Health (DOH). This hospital discharge-level database is the source of inpatient hospitalization and treat-and-release emergency department (ED) utilization by all adult (age 18 or older) hospital patients within each study area. The New Brunswick ACO area includes New Brunswick city and Franklin Township. With the assistance of the DOH Center for Health Statistics, the researchers enhanced the publicly releasable UB files to create a linked database that tracks patients over time. For calculating population-based estimates researchers use zip code level population data available from Nielsen Claritas. See http://www.cshp.rutgers.edu/Downloads/9810.pdf

Report citation: Chakravarty, S., Cantor, J.C., Tong, J., DeLia, D., Lontok, O., & Nova, J. (March 2013). *Hospital Utilization Patterns in 13 Low Income Communities in New Jersey: Opportunities for Better Care and Lower Costs*. New Brunswick, N.J.: Rutgers Center for State Health Policy.

### Eagleton/NBT 2012

*New Brunswick Tomorrow Final Report* is a telephone fielded survey (both landlines and cellphones) designed by the Eagleton Center for Public Interest Polling in collaboration with New Brunswick Tomorrow. This 58-question survey included multiple choice and yes/no questions and open-ended items, which the researchers categorized during analysis. A total of 600 respondents completed the survey via landline and 150 via cell phone. Respondents were screened to be permanent New Brunswick residents (full time Rutgers students were not included, unless they had long-term residence in New Brunswick). Results were weighted to known parameters of the New Brunswick adult population, using U.S. Census Bureau data, based on respondent gender, race, and ethnicity.

Report Citation: Redlawsk, D.P. (October 2012). *New Brunswick Tomorrow Final Report*. New Brunswick, N.J.: Rutgers Eagleton Center for Public Interest Polling.

### FBI Crime 2012

Uniform Crime Reporting (UCR) data is a collective effort of nationwide city, county, state, tribal, and federal law enforcement agencies. Participating agencies throughout the country voluntarily provide monthly reports on crimes known to the police and on persons arrested. After FBI staff members review the information for accuracy and reasonableness, they enter the data into the national database. See <a href="http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2012/crime-in-the-u.s-2012/tables/8tabledatadecpdf/table-8-state-cuts/table\_8\_offenses\_known\_to\_law\_enforcement\_by\_new\_jersey\_by\_city\_2012.xls">http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2012/crime-in-the-u.s-2012/tables/8tabledatadecpdf/table-8-state-cuts/table\_8\_offenses\_known\_to\_law\_enforcement\_by\_new\_jersey\_by\_city\_2012.xls</a>

Report Citation: FBI – Federal Bureau of Investigation (2012). Uniform Crime Reports. Table 8: New Jersey Offenses Known to Law Enforcement by City. *Crime in the United States 2012*. Retrieved December 5, 2013 from <u>http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2012/crime-in-the-u.s.-2012/tables/8tabledatadecpdf/table-8-state-</u> cuts/table 8 offenses known to law enforcement by new jersey by city 2012.xls

#### **Hospitals 2012**

A Community Health Needs Assessment for Saint Peter's University Hospital and Robert Wood Johnson University Hospital is a random-digit dial telephone survey of non-institutionalized New Jersey adults ages 18 and over residing in Middlesex County or two zip codes in Somerset County (08873, 08823) that directly border Middlesex County. This area was previously defined by hospital staff as their main patient service area. Telephone interviews for the 231 question survey were completed for 1000 respondents; 750 of the completed interviews were conducted via landline telephone, while 250 were conducted via cellular telephone. Proportionate samples were drawn from each of the zip codes in the sampling area in order to ensure representativeness. The overall cooperation rate for the survey was 55.9%. See http://www.cshp.rutgers.edu/Downloads/9620.pdf

Report Citation: Chakravarty, S., Brownlee, S., Tong, J., Pellerano, M.B., Howard, J., Shaw, E.K., Chase, S. & Crabtree, B.F. (December 2012). *A Community Health Needs Assessment for* 

Saint Peter's University Hospital & Robert Wood Johnson University Hospital: Findings from the Behavioral Risk Factor & Surveillance System (BRFSS), Hospital Discharge Data, A Community Survey, Key Informant Interviews, and Community Member Focus Groups. New Brunswick, N.J.: Rutgers Center for State Health Policy and UMDNJ-Robert Wood Johnson Medical School, Department of Family Medicine and Community Health.

### Kids Count 2013

New Jersey Kids Count is a project of Advocates for Children of New Jersey. Funded by the Annie E. Casey Foundation, this annual snapshot of child well-being is intended to inform policymakers and the public of the challenges and successes New Jersey faces in ensuring the health, welfare and safety of all children. The New Jersey Kids Count 2013 Pocket Guide documents key measures of child well-being on the county and state levels. See http://www.acnj.org/admin.asp?uri=2081&action=15&di=2514&ext=pdf&view=yes

Report Citation: Advocates for Children of New Jersey (2013). *The Pocket Guide 2013 New Jersey Kids Count: the State of Our Counties*. Newark, N.J.: Advocates for Children of New Jersey.

# Middlesex County CHNA 2001

The Middlesex County Public Health Department researched and reported on the community health needs of the New Brunswick community in 2001. This report assessed the health of New Brunswick and provided information on several factors that influence health. The data in this report described health status, health risks, health care access, and other health determinants, such as housing structures and water fluoridation. The authors compared national, state, county, and municipal data to the Healthy People 2010 objectives showing health improvements that were needed.

Report Citation: Middlesex PHD – Middlesex County Public Health Department (2001). Community Health Needs Assessment for New Brunswick: A Comprehensive Report on the Health of the Residents of New Brunswick, New Jersey. New Brunswick: Middlesex County Public Health Department.

# NJ Asthma 2010

The New Jersey Department of Health and Senior Services (NJDHSS) monitors the percentage of residents with lifetime asthma and current asthma using the New Jersey Behavioral Risk Factor Survey (NJBRFS). The NJBRFS is an ongoing telephone survey that is partially funded by the Centers for Disease Control and Prevention (CDC) and is administered by the NJDHSS Center for Health Statistics. Using this system, population-based estimates are generated from interviews of non-institutionalized adults aged 18 years and older. Asthma cases reflect only those that have been diagnosed by a health care professional, as reported by survey respondents. See <a href="http://www.nj.gov/health/fhs/asthma/asthma">http://www.nj.gov/health/fhs/asthma/asthma</a> resources.shtml#publications

Report Citation: New Jersey Asthma Awareness and Education Program. (November 2010).

*Asthma in New Jersey*. Trenton, N.J.: New Jersey Department of Health. Retrieved June 3, 2013 from <u>http://www.state.nj.us/health/fhs/asthma/asthma\_resources.shtml</u>

## NJ DCF 2011

The New Jersey State Child Abuse and Neglect Hotline, also known as the State Centralized Registry, fields an average of 15,000 phone calls per month. When a call comes into the hotline and the caller reports a child may have been abuse or neglected, one of our screening staff takes down all of that information and then reaches out to our staff in the field to conduct an investigation. As a result of that investigation, we make a finding about whether or not child abuse or neglect occurred. This report provides an overview of statistics on child abuse and neglect and family problem cases reported to the New Jersey Division of Youth and Family Services for calendar year 2011.

Report Citation: NJ DCF – State of New Jersey, Department of Children and Families. (2011). *Child Abuse and Neglect Substantiations, Calendar Year 2011.* Trenton, N.J.: State of New Jersey, Department of Children and Families.

## NJ DV 2011

Pursuant to N.J.S.A. 2C:25-24, *Domestic Violence In New Jersey: For the Year Ending December 31, 2011* is the twenty-ninth annual report on domestic violence in New Jersey. The annual report is based on the domestic violence offense reports submitted to the New Jersey Uniform Crime Reporting System by every New Jersey law enforcement agency for the year 2011. See <u>http://www.njsp.org/info/ucr2011/pdf/2011</u> domestic violence.pdf

Report Citation: State Police of New Jersey, Uniform Crime Unit. (2011). *Domestic Violence in New Jersey, For the Year Ending December 31, 2011*. Trenton, N.J.: State of New Jersey, Department of Law and Public Safety, State Police of New Jersey, Uniform Crime Unit.

## NJ HIV/AIDS 2012

Data in this report are based on cases that were reported to the Division of HIV, STD and TB Services (DHSTS) through June 30, 2012. A description of how these data are collected can be found in the June 2002 HIV and AIDS Surveillance Report – available on the NJDOH website at www.state.nj.us/health/aids/aidsqtr.shtml

Report Citations: NJDOH HIV – Division of HIV, STD, and TB Services-Sexually Transmitted Diseases Program. (2012a). New Brunswick Residents at Diagnosis: HIV/AIDS Cases Reported as of December 31, 2012. Retrieved June 6, 2013 from <u>http://www.state.nj.us/health/aids/repa/allcities/documents/new\_brunswick.pdf</u> And. NJDOH HIV – Division of HIV, STD, and TB Services-Sexually Transmitted Diseases Program. (2012b). Middlesex County Residents at Diagnosis: HIV/AIDS Cases Reported as of December 31, 2012. Retrieved from June 6, 2013 http://www.state.nj.us/health/aids/repa/county/documents/middlesex.pdf

## NJ SHAD

The New Jersey Department of Health's State Health Assessment Data (NJSHAD) System provides access to public health datasets and information on the health status of New Jerseyans. NJ SHAD reports various national and state data sets for each of the data points. See <a href="http://www4.state.nj.us/dhss-shad/home">http://www4.state.nj.us/dhss-shad/home</a>

Report Citations: NJ SHAD (2012a). Data for Percent of Children Tested for Lead Poisoning Before 3 Years of Age, by County, among Children Born in 2008. Retrieved June 3, 2013 from <u>http://www4.state.nj.us/dhss-shad/indicator/view\_numbers/Pb\_test\_cov.pcnt\_co\_b04.html</u> And. NJ SHAD (2012b). Data for Percent of Tested Children under 3 Years of Age with Confirmed Blood Lead of  $\geq$  10 µg/dL, Children Born in 2008 by County. Retrieved June 3, 2013 from <u>http://www4.state.nj.us/dhss-shad/indicator/view\_numbers/Pb\_blood\_lev.Pb\_GE10.html</u>

## NJ STD Program 2012

Cases of sexually transmitted diseases (STDs) reported to the New Jersey Department of Health (NJDOH). Healthcare providers, institutions (e.g., institutions of higher learning, correctional facilities, and day care centers), and laboratories are required to report STDs to NJDOH within 24 hours of diagnosis. See <a href="http://www.state.nj.us/health/std/stats.shtml">http://www.state.nj.us/health/std/stats.shtml</a>

Report Citation: NJDOH STD – Division of HIV, STD, and TB Services-Sexually Transmitted Diseases Program. (2012). Reported Sexually Transmitted Diseases Morbidity in Middlesex County by Municipality for Reporting Year 2012. Retrieved November 29, 2013 from <a href="http://www.state.nj.us/health/std/stdstats/stdstats2012/middlesex.pdf">http://www.state.nj.us/health/std/stdstats/stdstats2012/middlesex.pdf</a>

## NJ SubsAb Chartbook 2013

*The New Jersey Chartbook of Substance Abuse Related Social Indicators: Middlesex County* is intended to identify social and health problems directly or indirectly related to substance use and to aid in the assessment of needs for treatment and prevention services. Data for the social indicators core protocol and supplemental indicators were obtained from archival sources published by the U.S. Bureau of the Census and New Jersey governmental agencies, including the Departments of Human Services, Health, and Law and Public Safety. Data are also obtained from DMHAS' Substance Abuse Monitoring System and from DMHAS sponsored needs assessment surveys. A detailed list of sources is provided in an Appendix of the Chartbook. See <a href="http://www.state.nj.us/humanservices/das/news/reports/epidemiological/Middlesex\_County\_Chartbook\_2013.pdf">http://www.state.nj.us/humanservices/das/news/reports/epidemiological/Middlesex\_County\_Chartbook\_2013.pdf</a>

Report Citation: New Jersey Department of Human Services, Division of Mental Health and Addiction Services (May 2013). *The New Jersey Chartbook of Substance Abuse Related Social Indicators: Middlesex County.* Trenton, N.J.: New Jersey Department of Human Services.

## NJ SubsAb Middlesex 2013

The *Substance Abuse Overview* publications provide statistics on substance abuse treatment for each New Jersey County for calendar year 2012. In 2012 there were 75,837 treatment admissions and 73,036 discharges reported to the New Jersey Department of Human Services, Division of Mental Health and Addiction Services by substance abuse treatment providers. These reports were submitted through the web-based New Jersey Substance Abuse Monitoring System (NJSAMS). See

http://www.state.nj.us/humanservices/das/news/reports/statistical/Substance%20Abuse%20Overview%20Reports%202012/Sub\_Abuse\_Overview\_2012\_Midd.pdf

Report Citation: Zhu, L., (June 2013). *Substance Abuse Overview 2012: Middlesex County*. Trenton, N.J.: Department of Human Services, Division of Mental Health and Addiction Services. Retrieved November 20, 2013 from http://www.state.nj.us/humanservices/das/news/reports/statistical/Substance%20Abuse%20Over

view%20Reports%202012/Sub\_Abuse\_Overview\_2012\_Midd.pdf

## NJ WIC 2014

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk. Researchers developed formulas for each of the data points using information from official New Jersey vital statistics (for 2006-2008) and poverty statistics from the 2010 Census of Population. Estimates were made for 75 municipalities (with a population of 30,000 or more according to the 2010 Census of Population) and 21 counties or in the balance of a county where individual municipalities were included. See <a href="http://www.state.nj.us/health/fhs/wic/documents/2014\_state\_strategic\_plan.pdf">http://www.state.nj.us/health/fhs/wic/documents/2014\_state\_strategic\_plan.pdf</a>

Report Citation: NJDOH WIC – New Jersey Department Of Health, Public Health Services Branch, Family Health Services, WIC Services (2013). *Special Supplemental Nutrition Program For Women, Infants And Children (WIC), FFY 2014: State Strategic Plan.* Trenton, N.J.: New Jersey Department Of Health, Public Health Services Branch, Family Health Services, WIC Services.

### **Obesity 2010**

The NJ Childhood Obesity Study was conducted by the Rutgers Center for State Health Policy (CSHP) and funded by the Robert Wood Johnson Foundation School in five cities in New Jersey (Camden, New Brunswick, Newark, Trenton, and Vineland). Rutgers CSHP obtained deidentified data from the New Brunswick Public Schools (2008-2009) and computed a BMI score and BMI percentile for each child. A random-digit-dial landline telephone sample of 208 households from New Brunswick was surveyed (as were samples from the other 4 cities) for a total of 1700 families with 3 – 18 year old children. Average survey length was 36 minutes. Worksheets and tape measures were mailed to each home to weigh and measure 3–18 year old children and the respondent. Overall response rate was 49%. For School BMI Data see <a href="http://www.cshp.rutgers.edu/Downloads/8430.pdf">http://www.cshp.rutgers.edu/Downloads/8430.pdf</a> and for the Survey Chartbook see <a href="http://www.cshp.rutgers.edu/Downloads/8660.pdf">http://www.cshp.rutgers.edu/Downloads/8660.pdf</a>

Report Citations: Lloyd, K., Ohri-Vachaspati, P., Brownlee, S., Yedidia, M., Gaboda, D., and Chou, J. (2010). *New Jersey Childhood Obesity Survey Chartbook: New Brunswick*. New Brunswick, N.J.: Rutgers Center for State Health Policy. And: Ohri-Vachaspati, P., Lloyd, K., Chou, J., Petlick, N., Brownlee, S., & Yedidia, M. (2010). *The New Jersey Childhood Obesity Study: New Brunswick School BMI Data*. New Brunswick, N.J.: Rutgers Center for State Health Policy.

## PRAB 2012

The *Middlesex County Human Services Needs Assessment* was conducted by the Rutgers School of Social Work for PRAB, Inc. in 2012. It included three components: 1) Surveys were sent to 2,132 randomly selected households in Middlesex County regarding their human service needs. Completed surveys were received from 770 households for a 40% response rate; 2) Face-to-face interviews with 132 PRAB clients regarding their human service needs; and 3) Archival data was analyzed from a variety of national, state, and local sources. See <a href="http://www.prab.org/wp-content/uploads/2013/03/Middlesex-County-Needs-Assessment-Report-March-13-2013.pdf">http://www.prab.org/wp-content/uploads/2013/03/Middlesex-County-Needs-Assessment-Report-March-13-2013.pdf</a>

Report Citation: Rutgers School of Social Work and PRAB (2013). *Middlesex County Human Services Needs Assessment*. New Brunswick, N.J.: Rutgers School of Social Work and PRAB.

## US Census 2010

The U.S. Census counts every resident in the United States every 10 years. Approximately 74 percent of the households returned their census forms by mail and the remaining households were counted by census workers walking neighborhoods throughout the United States. The webbased American FactFinder provides access to data about the United States, Puerto Rico and the Island Areas. The data in American FactFinder come from several censuses and surveys. See http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Report Citation: U.S. Census Bureau, 2010. American FactFinder. Retrieved November 26 and 27, 2013 from <u>http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml</u>

### Appendix C: Indicator Tables with Baseline, Target, and New Brunswick Information Where Available

Table1: Healthy People 2020 Leading Health Indicators

Table 2: Healthy New Jersey 2020 Leading Health Indicators

Table 3: National Prevention Strategy (NPS) Indicators

 Table 4: Kaiser Permanente Indicators

 Table 5: County Health Rankings & Roadmap

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| Injury and Violence  |                              |  |               |                 |   |   |   | <br> |  |
|--|------------------------------|--|---------------|-----------------|---|---|---|------|--|
| Reduce fatal injuries (IVP-1.1)  | 59.2 deaths per<br>100,000   | 53.3 deaths per<br>100,000                 | 12.7          | NJSHAD, 2009    |   |   |   | <br> |  |
| Reduce homicides (IVP-29)  | 6.1 per 100,000              | 5.5 per 100,000                            | 14.5          | FBI Crime, 2012 |   |   | 1 |      |  |
| Maternal, Infant, and Child Health   |                              |  |               |                 |   |   |   |      |  |
| Reduce the rate of all infant deaths (within 1 year) (MICH-1.3)  |                              | 6.0 infant deaths<br>per 1,000 live births | Not available |                 |   |   |   |      |  |
| Reduce total preterm births (MICH-9.1)   | 12.7 percent of live births  | 11.4 percent of live births                | Not available |                 |   |   |   | 1    |  |
| Mental Health  |                              |  |               |                 |   |   |   |      |  |
| Reduce the suicide rate (MHMD-1)   | 11.3 suicides per<br>100,000 | 10.2 suicides per<br>100,000               | Not available |                 | 1 |   |   |      |  |
| Reduce the proportion of adolescents aged 12 to 17 years who experience major depressive episodes (MDEs) (MHMD-4.1)                | 8.3%                         | 7.4%                                       | Not available |                 | ~ |   |   |      |  |
| Nutrition, Physical Activity, and Obesity  |                              |  |               |                 |   |   |   |      |  |
| Increase the proportion of adults who meet the objectives for aerobic physical activity and muscle strengthening activity (PA-2.4) | 18.2%                        | 20.1%                                      | Not available |                 |   | √ |   |      |  |
| Reduce the proportion of adults who are obese (NWS-9)  | 33.9%                        | 30.5%                                      | Not available |                 |   | √ |   |      |  |
| Reduce the proportion of children and<br>adolescents aged 2 to 19 years who are<br>considered obese (NWS-10.4)                     | 16.1%                        | 14.5%                                      | 26.7%         | Obesity 2010    |   | 1 |   |      |  |

| Increase the contribution of total vegetables to<br>the diets of the population aged 2 years and<br>older (NWS-15.1)  | 0.8 cup equivalent<br>of total vegetables<br>per 1,000 calories | 1.1 cup equivalent<br>of total vegetables<br>per 1,000 calories | 31% of children<br>have ≥ 2 servings<br>per day | Obesity 2010 |   | V |   |   |      |
|---|---|---|---|--------------|---|---|---|---|------|
| Oral Health   |   |   |   |              |   |   |   |   |      |
| Increase the proportion of children, adolescents,<br>and adults who used the oral health care system<br>in past year (OH-7)                                   | 44.5%   | 49.0%   | Not available                                   |              |   |   |   |   | √    |
| Reproductive and Sexual Health  |   |   |   |              |   |   |   |   |      |
| Increase the proportion of sexually experienced<br>females aged 15 to 44 years who received<br>reproductive health services in the past 12<br>months (FP-7.1) | 78.6%   | 86.5%   | Not available                                   |              |   |   |   | √ |      |
| Increase the proportion of persons living with<br>HIV who know their serostatus (HIV-13)  | 80.6%   | 90.0%   | Not available                                   |              |   |   |   | 1 |      |
| Social Determinants   |   |   |   |              |   |   |   |   | <br> |
| Increase the proportion of students attending<br>public schools graduated with a regular diploma<br>4 years after starting 9th grade (AH-5.1)                 | 74.9%   | 82.4%   | 58.6%   | NJ DOE, 2012 |   |   |   |   |      |
| Substance Abuse   |   |   |   |              |   |   |   |   |      |
| Reduce the proportion of adolescents (12-17 years old) reporting use of alcohol or any illicit drugs during the past 30 days (SA-13.1)                        | 18.4%   | 16.6%   | Not available                                   |              | v | , |   |   |      |
| Reduce the proportion of persons engaging in<br>binge drinking during the past 30 days - adults<br>aged 18 years and older (SA-14.3)                          | 27.1%   | 24.4%   | Not available                                   |              | v | , |   |   |      |
| Торассо   |   |   |   |              |   |   |   |   |      |
| Reduce cigarette smoking by adults (TU-1.1)   | 20.6%   | 12.0%   | Not available                                   |              |   |   | r |   |      |

| Reduce use of cigarettes by adolescents (past |       |       |               |  |              |  |
|---|-------|-------|---------------|--|--------------|--|
| month) (TU-2.2)                               | 19.5% | 16.0% | Not available |  | $\checkmark$ |  |



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| Reduce unintentional injury deaths (IVP-1.1)  | 40.0 deaths per<br>100,000 | 36.0 deaths per<br>100,000 | 12.7          | NJSHAD, 2009 |   |   |  |   |
|---|----------------------------|----------------------------|---------------|--------------|---|---|--|---|
| Healthy and Safe Environments   |                            |                            |               |              |   |   |  |   |
| Number of days the Air Quality Index (AQI) exceeds 100 (EH-1)   | 11 days                    | 10 days                    | Not available |              | 1 |   |  |   |
| Amount of toxic pollutants released into the environment (EH-11)  | 1,950,000 tons             | 1,750,000 tons             | Not available |              | 1 |   |  |   |
| Proportion of state public health agencies that<br>can convene, within 60 minutes of notification, a<br>team of trained staff who can make decisions<br>about appropriate response and interaction with<br>partners | 84.0%                      | 98.0%                      | Not available |              |   |   |  |   |
| Proportion of children aged 5 to 17 years with<br>asthma who missed school days in the past 12<br>months (RD-5.1)   | 58.7%                      | 48.7%                      | Not available |              | 1 |   |  |   |
| Clinical and Community Preventive Services  |                            |                            |               |              |   |   |  |   |
| Proportion of medical practices that use electronic health records (HC/HIT-10)  | 25.0%                      | 27.5%                      | Not available |              |   |   |  | 1 |
| Proportion of adults aged 18 years and older<br>with hypertension whose blood pressure is<br>under control (HDS-12)   | 43.7%                      | 61.2%                      | Not available |              |   | 1 |  |   |
| Proportion of adults aged 20 years and older<br>with high low-density lipoprotein (LDL)<br>cholesterol whose LDL is at or below<br>recommended levels   | 33.2%                      | 36.5%                      | Not available |              |   | 1 |  |   |
| Proportion of adults aged 50 to 75 years who receive colorectal cancer screening based on the most recent guidelines (C-16)   | 54.2%                      | 70.5%                      | Not available |              |   |   |  |   |

| 23.0% | 80.0%   | Not available   |  |   |  |  |  |   |   |
|-------|---|---|--|---|--|--|--|---|---|
| 40.0% | 80.0%   | Not available   |  |   |  |  |  |   |   |
| 26.0% | 80.0%   | Not available   |  |   |  |  |  |   |   |
| 10.0% | 80.0%   | Not available   |  |   |  |  |  |   |   |
| 24.9% | 80.0%   | Not available   |  |   |  |  |  |   |   |
| 67.0% | 90.0%   | Not available   |  |   |  |  |  |   |   |
|       |   |   |  |   |  |  |  |   |   |
| 60.0% | 66.0%   | Not available   |  |   |  |  |  |   | V   |
| 80.0% | 88.0%   | Not available   |  |   |  |  |  |   |   |
|       |   |   |  |   |  |  |  |   |   |
|       |   |   |  |   |  |  |  |   |   |
| 14.2% | 8.8%  | Not available   |  |   |  |  |  |   |   |
| 13.0% | 8.8%  | Not available   |  |   |  |  |  |   |   |
| 17.1% | 8.8%  | Not available   |  |   |  |  |  |   |   |
| 10.1% | 9.0%  | Not available   |  |   |  |  |  |   |   |
|       | 40.0%<br>26.0%<br>10.0%<br>24.9%<br>67.0%<br>60.0%<br>80.0%<br>14.2%<br>13.0% | 23.0%       80.0%         40.0%       80.0%         26.0%       80.0%         10.0%       80.0%         24.9%       80.0%         67.0%       90.0%         60.0%       66.0%         80.0%       88.0%         114.2%       8.8%         13.0%       8.8%         17.1%       8.8% | 23.0%       80.0%       Not available         40.0%       80.0%       Not available         26.0%       80.0%       Not available         10.0%       80.0%       Not available         24.9%       80.0%       Not available         67.0%       90.0%       Not available         60.0%       66.0%       Not available         80.0%       88.0%       Not available         14.2%       8.8%       Not available         13.0%       8.8%       Not available         17.1%       8.8%       Not available | 23.0%       80.0%       Not available         40.0%       80.0%       Not available         26.0%       80.0%       Not available         10.0%       80.0%       Not available         24.9%       80.0%       Not available         67.0%       90.0%       Not available         67.0%       90.0%       Not available         60.0%       66.0%       Not available         80.0%       Not available       Image: state st | 23.0%       80.0%       Not available       Image: constraint of the straint of the | 23.0%       80.0%       Not available       Image: constraint of the second s | 23.0%       80.0%       Not available       Image: Constraint of the second s | 23.0%       80.0%       Not available       I | 23.0%       80.0%       Not available       I |

|   | 1     |       |               | 1 |   |              | ļ |      |   |
|---|-------|-------|---------------|---|---|--------------|---|------|---|
| Proportion of persons who report their health   |       |       |               |   |   |              |   |      |   |
| care provider always listens carefully (HC/HIT-<br>2.1)   | 59.0% | 65.0% | Not available |   |   |              |   |      | 1 |
| Tobacco Free Living   |       |       |               |   |   |              |   |      | + |
| Reduce cigarette smoking by adults (TU-1.1)   | 20.6% | 12.0% | Not available | 1 |   |              | 1 | <br> |   |
| Reduce use of cigarettes by adolescents (past month) (TU-2.2)   | 19.5% | 16.0% | Not available | 1 |   |              | 1 |      |   |
| Reduce the proportion of children aged 3 to 11 years exposed to secondhand smoke (TU-11.1)  | 52.2% | 47.0% | Not available | 1 |   |              | ~ |      |   |
| Preventing Drug Abuse and Excessive Alcohol<br>Use  |       |       |               |   |   |              |   |      |   |
| Proportion of adults aged 18 years and older<br>who reported that they engaged in binge<br>drinking during the past month (SA-14.3)         | 27.1% | 24.3% | Not available |   | V |              |   |      |   |
| Proportion of high school seniors who binge drinking during the past two weeks (SA-14.3)  | 25.2% | 22.7% | Not available |   | ~ |              |   |      |   |
| Proportion of persons aged 12 years or older<br>who reported nonmedical use of any<br>psychotherapeutic drug in the past year (SA-<br>19.5) | 6.1%  | 5.5%  | Not available |   | √ |              |   |      |   |
| Proportion of youth aged 12 to 17 years who have used illicit drugs in the past 30 days   | 10.0% | 9.3%  | Not available |   | ~ |              |   |      |   |
| Proportion of adults and children who are obese   |       |       |               |   |   |              |   |      |   |
| Adults 20+ years (NWS-9)  | 34.0% | 30.6% | Not available |   |   | $\checkmark$ |   | <br> |   |

| Children and adolescents 2-19 years (NWS-<br>10)   | 16.2%    | 14.6%   | 26.7%         | Obesity 2010 |   | √ |  |  |  |
|--|----------|---|---------------|--------------|---|---|--|--|--|
| Average daily sodium consumption in the population (NWS-19)  | 3,641 mg | 2,300 mg  | Not available |              |   | ~ |  |  |  |
| Average number of infections caused by salmonella species transmitted commonly through food (FS-1.4)   |          | 11.4 cases per<br>100,000 population                    | Not available |              |   | √ |  |  |  |
| Proportion of infants who are breastfed exclusively through 6 months (MICH-21.5)   | 14.1%    | 25.5%   | Not available |              |   | √ |  |  |  |
| Active Living  |          |   |               |              |   |   |  |  |  |
| Proportion of adults who meet physical activity guidelines for aerobic physical activity (PA-2.1)  | 43.5%    | 47.9%   | Not available |              |   | √ |  |  |  |
| Proportion of adolescents who meet physical activity guidelines for aerobic physical activity (PA-3.1)   | 18.4%    | 20.2%   | Not available |              |   | √ |  |  |  |
| Proportion of the nation's public and private<br>schools that provide access to their physical<br>activity spaces and facilities for all persons<br>outside of normal school hours (PA-10) | 28.8%    | 31.7%   | Not available |              |   | √ |  |  |  |
| Proportion of commuters who use active transportation (i.e. walk, bicycle, and public transit) to travel to work (N/A)   | 8.7%     | 20.0%   | Not available |              |   | √ |  |  |  |
| Injury and Violence Free Living  |          |   |               |              |   |   |  |  |  |
| Rate of fatalities due to alcohol impaired driving (SA-17)   |          | .38 deaths per 100<br>million vehicle miles<br>traveled | Not available |              | √ |   |  |  |  |

| Rate of fall related deaths among adults aged 65 years and older (IPV-23.2)  | 45.3 deaths per<br>100,000 population | 45.3 deaths per<br>100,000 population | Not available |                 |  |   |   |
|--|---------------------------------------|---------------------------------------|---------------|-----------------|--|---|---|
| Rate of homicides (IVP-29)   | 6.1 per 100,000                       | 5.5 per 100,000                       | 14.5          | FBI Crime, 2012 |  | 1 |   |
| Rate of motor vehicle crash-related deaths (IVP-<br>13.1)  |                                       | 12.4 deaths per<br>100,000 population | 1.8           | NJSHAD, 2009    |  |   |   |
| Reproductive and Sexual Health   |                                       |                                       |               |                 |  |   |   |
| Proportion of children born with low birth weight (LBW) and very low birth weight (VLBW)   |                                       |                                       |               |                 |  |   |   |
| Low Birth Weight (MICH-8.1)  | 8.2%                                  | 7.8%                                  | Not available |                 |  |   | ✓ |
| Very Low Birth Weight (MICH-8.2)   | 1.5%                                  | 1.4%                                  | Not available |                 |  |   | 1 |
| Proportion of pregnant females who received early and adequate prenatal care (MICH-10.2)   | 70.5%                                 | 77.6%                                 | Not available |                 |  |   | 1 |
| Pregnancy rates among adolescent females aged 15 to 19 years   |                                       |                                       |               |                 |  |   |   |
| 15-17 years  | 40.2 pregnancies per 1,000 females    | 36.2 pregnancies per 1,000 females    | Not available |                 |  |   | 1 |
| 18-19 years  | 117.7 pregnancies per 1,000 females   | 105.9 pregnancies per 1,000 females   | Not available |                 |  |   | 1 |
| Increase the proportion of sexually experienced<br>females aged 15 to 44 years who received<br>reproductive health services in the past 12<br>months |                                       |                                       | Not available |                 |  |   |   |
| Females (FP-7.1)   | 78.9%                                 | 86.7%                                 | Not available |                 |  |   | 1 |
| Males (FP-7.2)   | 14.9%                                 | 16.4%                                 | Not available |                 |  |   | 1 |

| Proportion of persons living with HIV who know their serostatus (HIV-13)   | 79.0%                            | 90.0%                           | Not available |  |   |      | √     |  |
|--|----------------------------------|---------------------------------|---------------|--|---|------|-------|--|
| Proportion of sexually active females aged 16<br>to 20 years and 21 to 24 years enrolled in<br>Medicaid and commercial health insurance<br>plans who were screened for genital Chlamydia<br>infections during the measurement year |                                  |                                 |               |  |   |      |       |  |
| 16-20 year old females enrolled in Medicaid plans (STD-3.1)  | 52.7%                            | 74.4%                           | Not available |  |   |      | √     |  |
| 21-24 year old females enrolled in Medicaid plans (STD-3.2)  | 59.4%                            | 80.0%                           | Not available |  |   | <br> | <br>√ |  |
| 16-20 year old females enrolled in commerical health insurance plans (STD-4.1)   | 40.1%                            | 65.9%                           | Not available |  |   |      | 1     |  |
| 21-24 year old females enrolled in commerical health insurance plans (STD-4.2)   | 43.5%                            | 78.3%                           | Not available |  |   |      | √     |  |
| Mental and Emotional Well Being  |                                  |                                 |               |  |   |      |       |  |
| Proportion of primary care physician office visits that screen adults and youth for depression   |                                  |                                 |               |  |   |      |       |  |
| Adults 19+ years (MHMD-11.1)   | 2.2%                             | 2.4%                            | Not available |  | 1 |      |       |  |
| Youth, 12-18 years (MHMD-11.2)   | 2.1%                             | 2.3%                            | Not available |  | 1 |      |       |  |
| Proportion of children exposed to violence within<br>the past year, either directly or indirectly (e.g., as<br>a witness to a violent act; a threat against their<br>home or school) (IVP-42)                                      |                                  | 54.5%                           | Not available |  |   | ~    |       |  |
| Rate of suicide attempts by adolescents (MHMD 2)   | -1.9 suicide<br>attempts per 100 | 1.7 suicide attempts<br>per 100 | Not available |  | ~ |      |       |  |

| Proportion of persons who experience major depressive episode (MDE) |      |      |               |              |  |  |
|---|------|------|---------------|--------------|--|--|
| Adolescents, 12 -17 years (MHMD-4.1)                                | 8.3% | 7.4% | Not available | $\checkmark$ |  |  |
| Aduts, 18+ years (MHMD-4.2)   | 6.8% | 6.1% | Not available | √            |  |  |



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| Unemployment Rate, Seasonally Adjusted                | Not available |   |              |   |   |   |
|---|---------------|---|--------------|---|---|---|
| School Reading Proficiency (4th Grade)                | Not available |   |              |   |   | 1 |
| Free and Reduced Price School Lunch Eligibility       | Not available |   | 1            |   |   |   |
| Enrolled in Supplemental Nutrition Assistance Program | Not available |   | 1            |   |   | 1 |
| Teen Births   | Not available |   |              |   | √ |   |
| Violent Crime   | Not available |   |              | 1 |   |   |
| Population Receiving Medicaid                         | Not available |   |              |   |   | 1 |
| Lack of Social or Emotional Support (Adult)           | Not available | 1 |              |   |   |   |
| Health Behaviors                                      | Not available |   | 1            |   |   |   |
| Fruit/Vegetable Consumption (Adult)                   | Not available |   | 1            |   |   |   |
| Fruit/Vegetable Consumption (Youth)                   | Not available |   | 1            |   |   |   |
| Soft Drink Consumption                                | Not available |   | ~            |   |   |   |
| Heavy Alcohol Consumption (Adult)                     | Not available | 1 |              |   |   |   |
| Tobacco Usage (Adult)                                 | Not available |   | $\checkmark$ |   |   |   |
| Physical Activity (Adult)                             | Not available |   | $\checkmark$ |   |   |   |
| Physical Activity (Youth)                             | Not available |   | 1            |   |   |   |
| Breastfeeding (an)                                    | Not available |   | ~            |   |   |   |
| Breastfeeding (exclusive)                             | Not available |   | 1            |   |   |   |
| Alcohol Expenditures                                  | Not available | 1 |              |   |   |   |
| Tobacco Expenditures                                  | Not available |   | 1            |   |   |   |
| Fruit/Vegetable Expenditures                          | Not available |   | 1            |   |   |   |

| Physical Environment                               |               |   |   |              |  | 1 |   |   |
|--|---------------|---|---|--------------|--|---|---|---|
| Fast Food Restaurant Access                        | Not available |   |   | ✓            |  |   |   |   |
| Grocery Store Access                               | Not available |   |   | ✓            |  |   |   |   |
| WIC Authorized Grocery Store Access                | Not available |   |   | ✓            |  |   |   |   |
| Population Living in Food Deserts                  | Not available |   |   | 1            |  |   |   |   |
| Liquor Store Access                                | Not available |   | 1 |              |  |   |   |   |
| Park Access  | Not available |   |   | $\checkmark$ |  |   |   |   |
| Walkability  | Not available |   |   | $\checkmark$ |  |   |   |   |
| Recreation and Fitness Facility Access             | Not available |   |   | $\checkmark$ |  |   |   |   |
| Poor Air Quality (Particulate Matter 2.5)          | Not available | √ |   |              |  |   |   |   |
| Clinical Care - Access                             |               |   |   |              |  |   |   |   |
| Federally Qualified Health Centers                 | 1             |   |   |              |  |   |   | 1 |
| Population living in a HPSA                        | Not available |   |   |              |  |   |   | √ |
| Facilities Designated as HPSAs                     | Not available |   |   |              |  |   |   | √ |
| Lack of Usual Source of Primary Care               | Not available |   |   |              |  |   |   | √ |
| Access to Primary Care                             | Not available |   |   |              |  |   |   | √ |
| Clinical Care - Delivery                           |               |   |   |              |  |   |   |   |
| Colon Cancer Screening (Signoidoscopy/Colonoscopy) | Not available |   |   |              |  |   |   |   |
| Pneumonia Vaccination (age 65 +)                   | Not available |   |   |              |  |   |   |   |
| Diabetes Management (Hemoglobin A1c Test)          | Not available |   |   |              |  |   | 1 |   |
| Cervical Cancer Screening (Pap Test)               | Not available |   |   |              |  |   |   |   |
| Breast Cancer Screening(Mammogram)                 | Not available |   |   |              |  |   |   |   |

| HIV Screening                        | Not available ✓        |   |
|--------------------------------------|------------------------|---|
| Dental Care Utilization (Adult)      | Not available          |   |
| Dental Care Utilization (Youth)      | Not available          |   |
| Absence of Dental Insurance Coverage | Not available          | √ |
| Dental Care Affordability (Youth)    | Not available          | √ |
| Lack of Prenatal Care                | Not available          |   |
| Preventable Hospital Events          | Not available          | √ |
| Health Outcomes - Morbidity          |                        |   |
| Asthma Incidence (Adult)             | Not available ✓        |   |
| Asthma Incidence (Youth)             | Not available ✓        |   |
| Obesity (Adult)                      | Not available          |   |
| Overweight (Adult)                   | Not available          |   |
| Obesity (Youth)                      | 26.7% Obesity 2010 🗸 🗸 |   |
| Overweight (Youth)                   | 19.7% Obesity 2010 ✓   |   |
| Diabetes Incidence                   | Not available          |   |
| Diabetes Hospitalizations (Adult)    | Not available          |   |
| Diabetes Hospitalizations (Youth)    | Not available          |   |
| Heart Disease Incidence              | Not available          |   |
| Breast Cancer Incidence              | Not available          |   |
| Cervical Cancer Incidence            | Not available          |   |
| Colorectal Cancer Incidence          | Not available          |   |
| Lung Cancer Incidence                | Not available          |   |

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| Prostate Cancer Incidence      | Not available      |              |              |              |   |          |   |  |
|--------------------------------|--------------------|--------------|--------------|--------------|---|----------|---|--|
| Chlamydia Incidence            | Not available      |              |              |              |   | 1        | , |  |
| HIV Prevalence                 | Not available      |              |              |              |   | V        |   |  |
| Population with Any Disability | Not available      |              |              |              |   |          |   |  |
| Low Birth Weight               | Not available      |              |              |              |   | <b>√</b> |   |  |
| Poor Dental Health (Adult)     | Not available      |              |              |              |   |          |   |  |
| Poor General Health (Adult)    | Not available      |              | $\checkmark$ |              |   |          |   |  |
| Poor Mental Health             | Not available      |              |              |              |   |          |   |  |
| Health Outcomes - Morbidity    |                    |              |              |              |   |          |   |  |
| Cancer Mortality               | 83.3 per 100,000 N | IJSHAD, 2009 |              |              |   |          |   |  |
| Premature Death                | Not available      |              |              |              |   |          |   |  |
| Heart Disease Mortality        | 65.2 per 100,000 N | IJSHAD, 2009 |              | $\checkmark$ |   |          |   |  |
| Stroke Mortality               | 10.9 per 100,000 N | IJSHAD, 2009 |              | $\checkmark$ |   |          |   |  |
| Motor Vehicle Crash Death      | 1.8 per 100,000 N  | IJSHAD, 2009 |              |              |   |          |   |  |
| Pedestrian Motor Vehicle Death | Not available      |              |              |              |   |          |   |  |
| Infant Mortality               | Not available      |              | $\checkmark$ |              |   | <b>√</b> |   |  |
| Suicide                        | Not available      |              | $\checkmark$ |              |   |          |   |  |
| Homicide                       | 14.5 per 100,000 N | JSHAD, 2009  |              |              | 1 |          |   |  |



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|   | 1                                  |               |   |  |   |   |   |
|---|------------------------------------|---------------|---|--|---|---|---|
| Alcohol & drug use  |                                    |               |   |  |   |   |   |
| Percent of adults that report either binge drinking<br>(women consuming 4 or more and men consuming 5 or<br>more alcoholic beverages on a single occasion in the<br>past 30 days) or heavy drinking (women consuming<br>more than 1 and men consuming more than 2 drinks<br>per day on average) | 7.0%                               | Not available | √ |  |   |   |   |
| Motor vehicle crash deaths  | 10 per 100,000<br>population       | Not available | √ |  |   |   |   |
| Sexual activity and reproductive health   |                                    |               |   |  |   |   |   |
| Chlamydia rate  | 92 per 100,000<br>population       | Not available |   |  | ~ |   |   |
| Teen birth rate, ages 15-19   | 21 per 1,000 female population     |               |   |  | ~ |   |   |
| Access to Care  |                                    |               |   |  |   |   |   |
| Percent of population under age 65 without health insurance   | 11.0%                              | Not available |   |  |   |   | √ |
| Ratio of population to primary care physicians  | 1,067:1                            | Not available |   |  |   |   | 1 |
| Ratio of population to dentists   | 1,561:1                            | Not available |   |  |   |   | √ |
| Quality of Care   |                                    |               |   |  |   |   |   |
| Hospitalization rate for ambulatory-care sensitive conditions   | 47 per 1,000<br>Medicare enrollees | Not available |   |  |   |   | √ |
| Percent of diabetic Medicare enrollees that receive<br>HbA1c screening  | 90.0%                              | Not available |   |  |   | √ |   |
| Percent of female Medicare enrollees that receive mammography screening   | 73.0%                              | Not available |   |  |   |   | √ |

| Education  |                              |               |                |   |   |   |  |
|--|------------------------------|---------------|----------------|---|---|---|--|
| Percent of 9th grade cohort that graduates in 4 years  | Not available                |               |                |   |   |   |  |
| Percent of adults aged 25-44 with some post-<br>secondary education                          | 70.0%                        |               |                |   |   |   |  |
| Employment   |                              |               |                |   |   |   |  |
| Percent of population age 16+ unemployed but seeking work                                    | 5.0%                         |               |                |   |   |   |  |
| Income   |                              |               |                |   |   |   |  |
| Percent of children under age 18 in poverty  | 14.0%                        | 27.5%         | US Census 2010 |   |   |   |  |
| Family & social support  |                              |               |                |   |   |   |  |
| Percent of adults without social/emotional support   | 14.0%                        |               |                |   | √ |   |  |
| Percent of children that live in household headed by single parent                           | 20.0%                        |               |                |   |   |   |  |
| Community safety   |                              |               |                |   |   |   |  |
| Violent crime rate per 100,000 population  | 66 per 100,000<br>population |               |                |   |   | 1 |  |
| Environmental quality  |                              |               |                |   |   |   |  |
| The average daily measure of fine particulate matter in micrograms per cubic meanter (PM2.5) | 8.8                          | Not available |                | ~ |   |   |  |
| Percent of population exposed to water exceeding a violation limit during the past year      | 0.0%                         |               |                |   |   |   |  |

| Built environment  |                              |               |  |   |  |  |
|--|------------------------------|---------------|--|---|--|--|
| Rate of recreational facilities  | 16 per 100,000<br>population | Not available |  | √ |  |  |
| Percent of population who are low-income and do not live close (< 1 mile) to a grocery store | 1.0%                         | Not available |  | √ |  |  |
| Percent of all restaurants that are fast-food establishments                                 | 27.0%                        | Not available |  | √ |  |  |

## Appendix E: Quantitative and Qualitative Research Methods At-A-Glance

|   | Q   | UANTITATIVE METHO   | DS  |   |
|---|---|---|---|---|
| Method  | Pros  | Cons  | Costs   | Time to complete -<br>data collection   |
| Archival research -<br>analysis of preexisting<br>data (e.g. U.S. Census<br>records)  | <ul> <li>* Provides detailed<br/>information</li> <li>* Use to establish<br/>trends</li> <li>* Sometimes is fast<br/>and inexpensive</li> <li>* Often there is a lot of<br/>data available</li> </ul>                               | * May be complicated<br>to organize<br>* May require<br>specialized software to<br>analyze (e.g. SAS)   | Inexpensive to<br>expensive depending<br>on data design and<br>format and analysis<br>needs | Quick to time<br>consuming: dependent<br>on data and structure<br>of output                                   |
| Record review -<br>review existing records<br>(paper or electronic)<br>that are not easily<br>developed into a report<br>(e.g. paper medical<br>records and deeds)                      | * Can be objective<br>* Mostly fast because<br>records are existing<br>* Does not require<br>participants   | * Sometimes data is<br>difficult to find because<br>different people have<br>created the records<br>* Records are often<br>incomplete<br>* Need to input data<br>into database if records<br>are not electronic   | * Varies depending on<br>the number of records<br>to review and the<br>records' complexity  | * Variable depending<br>on the number of<br>records needing review  |
| Self-administered<br>surveys - surveys<br>taken by the participant<br>without aid of a<br>researcher. Usually<br>administered by mail,<br>at point of contact, or<br>over the Internet. | * Good for obtaining a<br>lot of information in a<br>non-threatening way<br>* Can be anonymous<br>* Usually easy to<br>analyze especially if<br>administered<br>electronically<br>*Easy to make<br>comparisons between<br>responses | (may miss populations<br>without computer<br>and/or Internet access)<br>* May miss important<br>information<br>* Poor response rate<br>creates a problem for<br>analysis<br>* Skipping questions<br>can be incorrectly done<br>by respondent<br>(particularly on paper<br>surveys)<br>* May get a number of<br>incomplete surveys |   | * Varies depending on<br>survey administration<br>costs and difficulty<br>obtaining desired<br>response rate  |
| Face-to-face<br>structured surveys -<br>survey taken by<br>participant in person<br>with a researcher   | * Good for low literacy<br>populations<br>* Allows questions<br>and/or responses to be<br>clarified   | * Requires staffing and<br>time<br>* Scheduling people to<br>complete surveys may<br>be difficult<br>* Respondents may not<br>answer questions<br>honestly  | * Tends to be<br>expensive because<br>staff resources are<br>needed                         | * Varies depending on<br>method used for<br>survey completion and<br>how quickly people<br>respond to request |

# Appendix D: Developing and Displaying an Indicator Set

This section is intended for community stakeholders as they begin to develop a shared measurement indicator set. It describes why New Brunswick has to create its own indicators separate from Middlesex County; getting the questions and methods right; categories of indicators; information accessibility; primary concerns in New Brunswick; and a suggested process for creating a long-term indicator project.

### New Brunswick's Demographic Difference Makes County Data Unsatisfactory

Too often health data is only available at the geographical scale of the county, not the municipality. As we demonstrated in Section I, New Brunswick is demographically different from the county so information collected at the county level is not necessarily descriptive of New Brunswick. In order to understand our city, we need to collect data at the city level from city residents. This data needs to be collected at regular intervals (for example every two or three years) and needs to be collected in a manner that allows us to compare data from one data collection event to another.

### **Getting the Questions and Methods Right**

#### Questions

How one asks questions and the method of data collection determine the reliability of the data. Some of the questions previously asked in New Brunswick make it difficult to determine prevalence because the information gathered was not attributed to an individual within a household. When researchers do not gather information on individuals, the actual prevalence of a health problem cannot be determined. When they can, researchers prefer to use questions taken from large national surveys because such questions have been tested and validated over time on many respondents.

### Methods

Collecting data to create a whole picture of a community such as New Brunswick is not a simple endeavor. There are many different data collection methods (for example surveys, focus groups, and reviews or records) each with its own strengths and weaknesses, varying costs, and time

requirements. To assist readers as they consider data collection methods, we have provided a table that compares different quantitative and qualitative methods as well as the comparative advantages, disadvantages, completion time, and costs of each (see Appendix E). Methods break down into quantitative data (quantifiable statistics that provide a snapshot in time) and qualitative data (narrative data that provides an in-depth understanding of whatever is being evaluated). As noted previously, some of the New Brunswick data could have been improved by the use of qualitative data, which allows one to understand the statistics more fully.

#### **Categories of Indicators to Consider**

A healthy community is described by the U.S. Department of Health and Human Services *Healthy People 2010* report as "one that continuously creates and improves both its physical and social environments, helping people to support one another in aspects of daily life and to develop to their fullest potential. Healthy places are those designed and built to improve the quality of life for all people who live, work, worship, learn, and play within their borders – where every person is free to make choices amid a variety of healthy, available, accessible, and affordable options." (CDC, 2010b) Using this definition to guide the development of an indicator set means we want to include measures of demographics, health conditions and behaviors, social issues, and the local environment (natural and built). The County Health Rankings & Roadmaps indicator set (see Figure 4 best represents the Healthy People 2010 definition by capturing indicators across population health components (UWPHI, 2012).

#### Demographics

Demographic information allows us to see population changes over time. Demographic information is readily available because it is collected every ten years by the U.S. Census (2010) and includes social and economic data as well. For some cities, including New Brunswick, the U.S. Census estimates changes to the population more frequently than every ten years. Choices will need to be made about which demographic information we should regularly review. We can track demographics of people accessing health services in New Brunswick using data from electronic health records.

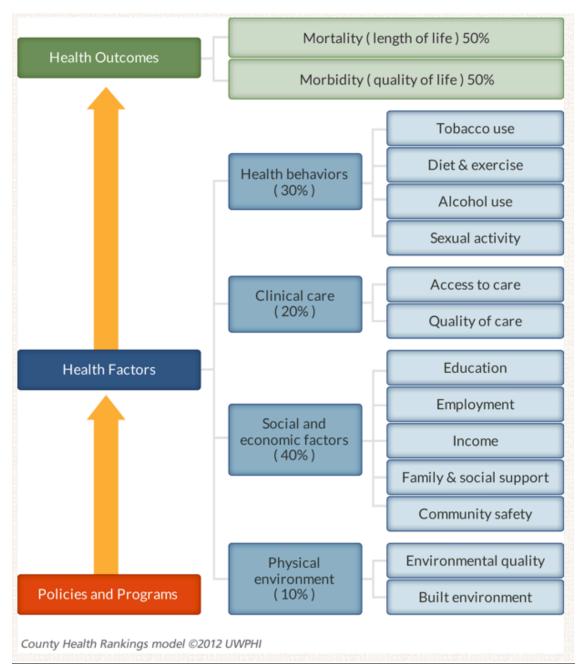


Figure 4: County Health Rankings Model

#### Health

Health is a very broad category that includes conditions, behaviors, and clinical care. Health conditions can include specific diseases (such as asthma, diabetes, and high blood pressure), perceptions of wellness (for example how a persons feels physically or mentally), or causes of death (for example, cancer). Health behaviors can include disease screenings (for example,

mammography or colonoscopies), personal behaviors (such as diet, exercise, or tobacco and alcohol use), and preventive care (for example immunizations and regular check ups). Clinical care includes where people obtain care, barriers to and facilitators of obtaining care (for example access to transportation and ability to pay for prescription drugs) as well as perceptions of the quality of care that they are receiving (such as how well their provider communicates). We can ascertain health information using surveys, record reviews (for example electronic health records or insurance claims data), and statistical data sets (for example death records). Some of this information is available for New Brunswick (for example birth and death data) while other information would need to be collected (for example, prevalence rate of diabetes or how many adults meet physical activity guidelines).

#### Social and Economic

Social and economic factors include such matters as educational status, economic status, or satisfaction with and livability of a community. Indicators about education might include educational achievement, specialized trainings, and satisfaction with education. Economic status usually includes poverty levels, individual and household income, and employment and unemployment levels but can also include percent of people who do not purchase medications because of cost or the prohibitive cost of using an emergency room for non-ambulatory conditions. Livability of the community includes satisfaction with neighborhoods, city services, local organizations and institutions, and elected officials, among other factors.

#### Natural and Built Environment

Indicators of the natural and built environments often are the foundation of many healthaffecting activities. For example, several times each year, the State of New Jersey declares a "bad air day" for the New Brunswick area and recommends that people stay indoors or limit their outdoor activity because degraded air can exacerbate respiratory conditions such as asthma. Examples of the built environment include having maintained sidewalks and parks, which can help residents meet physical activity goals. Having easy access to stores with fresh fruits and vegetables can help residents achieve their healthy diet goals.

### Information Accessibility

Successful shared measurement efforts for collective impact require that information be understandable and useful to community members and stakeholders. Shared measurement can be considered successful when people regularly use the information to assess progress or lack of it towards a particular goal. There are at least two ways to make information widely accessible and useful: dashboards and maps.

#### Dashboards

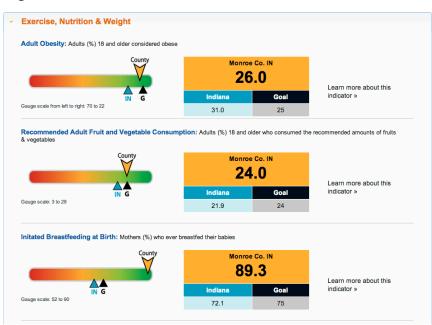
One excellent way to display progress towards a goal is to create a web-based dashboard. Similar to an automobile dashboard, a web-based dashboard organizes and presents data as a quick snapshot that is easy to understand. In the case of community health indicator dashboards, designers use a series of simple icons (for examples dials or thermometers) to display indicators important to the community. Often the dials or thermometers use green (best), yellow (needs work), and red (not meeting the target) to indicate progress towards a target. For example, in Figure 5 one can quickly see that Sonoma County, California is doing well with fruit and vegetable consumption but poorly on its teacher-to-student ratio. Many dashboards also provide

#### Figure 5: Healthy Sonoma's Community Dashboard



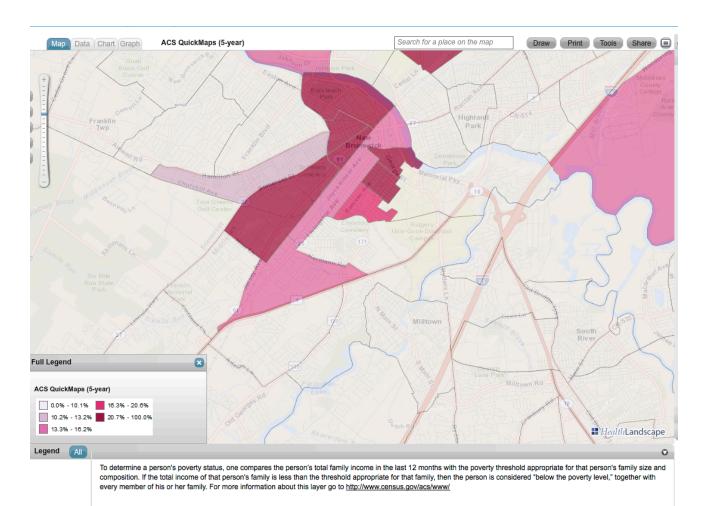
comparisons to national targets set in Healthy People 2020 or state targets. For example INdicators, Indiana's Health Dashboard, uses a visual thermometer as well as a set of numbers to display how a particular county is doing compared to state goals (see Figure 6).

### Figure 6: INdicators Dashboard



### Maps

Another excellent method for visualizing information is mapping the data. Maps are very helpful to community stakeholders and policy makers because they can reveal hot spots (of a disease, for example). Maps can also reveal hidden relationships by overlaying multiple types of information (obesity and income, for example). Maps require expertise with GIS (geographical information systems) software, and of course they require relevant data to be mapped. Figure 7 is a map showing percent of persons living below poverty in different neighborhoods in New Brunswick.



### Figure 7: New Brunswick: Percent of Persons Below Poverty Level

#### **Creating a Shared Measurement Data Set for Collective Impact in New Brunswick**

This paper is intended to lay the groundwork for community partners to work together to develop a set of indicators in support of New Brunswick's healthy communities project – Healthier New Brunswick. As Kate Besleme and Megan Mullin noted in 1997, healthy community projects cultivate a sense of shared responsibility for community health and well-being by bridging the gap between government and citizens, building coalitions within communities, and attempting to draw attention to problems and negative trends before they become damaging to the community.

This section reviews what we know about resident's concerns about the New Brunswick community, describes a process for developing community health indicators in New Brunswick, and offers a suggested list of indicators to help meet the goals of Healthier New Brunswick.

### Social and Economic Determinants of Health in New Brunswick

We have detailed many health conditions, health behaviors, and clinical care issues in New Brunswick in "Section II – What do we know about the health of New Brunswick residents?" There are a number of social and economic conditions in New Brunswick that impact the health outcomes of residents. For example, people's perceptions of safety affect whether or not they let their children play outside. We will not detail these concerns in this report but instead refer you to the 2011 and 2012 surveys conducted for New Brunswick Tomorrow (Weiner et al., 2011 and Redlawsk, 2012). Together, these two surveys provide insight into some of the most pressing social and economic issues in New Brunswick. We have included some of these indicators where appropriate in our suggested set of indicators. For example, we have included neighborhood safety in as a suggested indicator for Nutrition & Physical Activity.

#### **Community Indicators Process**

The American Planning Association (APA) outlines a ten-step process for developing community indicators (APA-PAS, 2003), which is included as Figure 8. The APA recognizes that an indicator process is long-term and its "scope and breadth requires a far-sighted and far-reaching timeline" (APA-PAS, 2003).

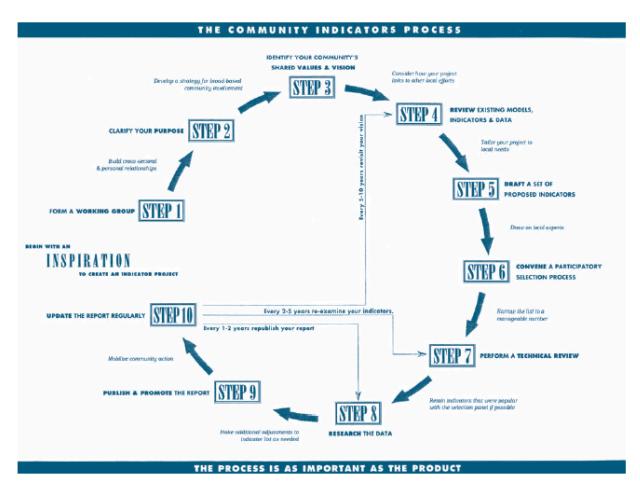


Figure 8: Community Indicators Process as Published by APA-PAS

With the completion of this report, the Healthier New Brunswick Initiative is half way through the community indicators process (see Table 6).

| Table 5: HNB Progress Towards Community Indicators Process |
|--|
|--|

| Step  | HNB Progress   |
|---|--|
| Step 1: Form a working group. ( <i>Build</i> cross-sectional & personal relationships.)           | Completed – HNB work is accomplished through the Alliance for a Healthier New Brunswick and the Health Task Force.                                 |
| Step 2: Clarify your purpose. ( <i>Develop</i> a strategy for broad-based community involvement.) | Mission of HNB – Improve the health and healthcare of New Brunswick residents through community-based partnerships.                                |
| Step 3: Identify your community's shared values & vision. (Consider how                           | HNB Vision – HNB envisions a city where all stakeholders work together to improve health and wellness for all New Brunswick residents. The work of |

| your project links to other local efforts.)  | HNB, through our community partners, is a model of excellence in public and<br>private partnerships, where a culture of health and wellness is produced.<br>The process is inclusive of all stakeholders and residents and dedicated to<br>maximizing community health efforts and the continuous improvements in<br>the quality and value of services. Ultimately, HNB assists city residents lead<br>active, healthier lifestyles and have greater positive health outcomes. |
|--|--|
| Step 4: Review existing models,<br>indicators & data. ( <i>Tailor your project to</i><br><i>local needs</i> .)                         | This report fulfills this step.  |
| Step 5: Draft a set of proposed indicators. ( <i>Draw on local experts</i> .)  | This report fulfills this step.  |
| Step 6 Convene a participatory<br>selection process. ( <i>Narrow the list to a</i><br><i>manageable number</i> .)                      | Future action.   |
| Step 7: Perform a technical review.<br>(Retain indicators that were popular<br>with the selection panel if possible.)                  | Future action.   |
| Step 8: Research the data. ( <i>Make</i><br>additional adjustments to indicator list<br>as needed.)                                    | Future action.   |
| Step 9: Publish & promote the report.<br>( <i>Mobilize community action</i> .)   | Future action.   |
| Step 10: Update the report regularly.<br>(Every 1-2 years republish your report<br>and Every 3-5 years re-examine your<br>indicators.) | Future action.   |

## Appendix E: Quantitative and Qualitative Research Methods At-A-Glance

|   | QUANTITATIVE METHODS  |   |   |   |  |  |  |  |  |
|---|---|---|---|---|--|--|--|--|--|
| Method  | Pros  | Cons  | Costs   | Time to complete -<br>data collection   |  |  |  |  |  |
| Archival research -<br>analysis of preexisting<br>data (e.g. U.S. Census<br>records)  | <ul> <li>* Provides detailed<br/>information</li> <li>* Use to establish<br/>trends</li> <li>* Sometimes is fast<br/>and inexpensive</li> <li>* Often there is a lot of<br/>data available</li> </ul>                               | * May be complicated<br>to organize<br>* May require<br>specialized software to<br>analyze (e.g. SAS)   | Inexpensive to<br>expensive depending<br>on data design and<br>format and analysis<br>needs | Quick to time<br>consuming: dependent<br>on data and structure<br>of output                                   |  |  |  |  |  |
| Record review -<br>review existing records<br>(paper or electronic)<br>that are not easily<br>developed into a report<br>(e.g. paper medical<br>records and deeds)                      | * Can be objective<br>* Mostly fast because<br>records are existing<br>* Does not require<br>participants   | * Sometimes data is<br>difficult to find because<br>different people have<br>created the records<br>* Records are often<br>incomplete<br>* Need to input data<br>into database if records<br>are not electronic   | * Varies depending on<br>the number of records<br>to review and the<br>records' complexity  | * Variable depending<br>on the number of<br>records needing review  |  |  |  |  |  |
| Self-administered<br>surveys - surveys<br>taken by the participant<br>without aid of a<br>researcher. Usually<br>administered by mail,<br>at point of contact, or<br>over the Internet. | * Good for obtaining a<br>lot of information in a<br>non-threatening way<br>* Can be anonymous<br>* Usually easy to<br>analyze especially if<br>administered<br>electronically<br>*Easy to make<br>comparisons between<br>responses | (may miss populations<br>without computer<br>and/or Internet access)<br>* May miss important<br>information<br>* Poor response rate<br>creates a problem for<br>analysis<br>* Skipping questions<br>can be incorrectly done<br>by respondent<br>(particularly on paper<br>surveys)<br>* May get a number of<br>incomplete surveys |   | * Varies depending on<br>survey administration<br>costs and difficulty<br>obtaining desired<br>response rate  |  |  |  |  |  |
| Face-to-face<br>structured surveys -<br>survey taken by<br>participant in person<br>with a researcher   | * Good for low literacy<br>populations<br>* Allows questions<br>and/or responses to be<br>clarified   | * Requires staffing and<br>time<br>* Scheduling people to<br>complete surveys may<br>be difficult<br>* Respondents may not<br>answer questions<br>honestly  | * Tends to be<br>expensive because<br>staff resources are<br>needed                         | * Varies depending on<br>method used for<br>survey completion and<br>how quickly people<br>respond to request |  |  |  |  |  |

| Method   | Pros   | Cons  | Costs  | Time to complete -<br>data collection   |
|--|--|---|--|---|
| Telephone surveys -<br>survey administered by<br>calling participants on<br>the telephone (using<br>landline or cell phone)<br>Researcher often uses<br>computer assistance to<br>administer the survey. | * Allows you to target a   | * Requires staffing and<br>time<br>* Misses people<br>without phones<br>* Sometimes hard to<br>reach the correct<br>residents if calling cell<br>phones (phone number<br>often does not indicate<br>geographic location of<br>residence)  | * Expensive particularly<br>if many people in<br>targeted population<br>only have cell phones  | * Varies depending on<br>collection method and<br>response rate   |
|  |  |   | S  |   |
| Focus groups -<br>explore a topic in depth<br>using a group<br>discussion  | * Can obtain<br>information quickly<br>* Efficient way to get<br>range and depth of<br>information in a short<br>time<br>*Can use to convey<br>information to<br>participants                  | difficult<br>* Needs to be well-  | Inexpensive if run,<br>transcribed, and<br>analyzed in-house;<br>more expensive if<br>using professional<br>facilitators and<br>transcribers | Quick: Each focus<br>group generally takes<br>1.5 hours   |
| <b>Observation</b> - gather<br>information in real time<br>by observing and<br>taking notes  | * Can view a process<br>as it is occurring<br>* Can adapt to events if<br>necessary  | <ul> <li>* Requires a well-<br/>trained observer</li> <li>* Sometimes<br/>observations are<br/>difficult to categorize</li> <li>* Can influence<br/>behaviors of people<br/>being observed</li> <li>* If notes not written<br/>within 24 hours of<br/>observation - key data<br/>may be lost</li> </ul> | Expensive if using<br>trained, non-interested<br>party observers   | Quick - Long Time:<br>dependent on how<br>many observations,<br>process length, and<br>availability of both the<br>observer and the group<br>being observed |
| Interviews - multiple<br>questions on one<br>subject designed to get<br>detailed impressions,<br>experiences, or<br>information. Can be<br>structured or<br>unstructured.                                | <ul> <li>* Get a full range of<br/>information</li> <li>* Researcher can<br/>develop relationships<br/>with subjects</li> <li>* Can be flexible</li> </ul>                                     | * Can take a lot of time<br>* Can be hard to<br>analyze or compare<br>* Interviewer can bias<br>responses by theway<br>they ask questions<br>* Analysis of multiple<br>interviews takes time  | * Cost depends on<br>number of interviews<br>and length of<br>interviews   | * Individual interviews<br>usually take an hour to<br>complete  |
| <b>Case study</b> - a<br>comprehensive<br>examination of a<br>particular person,<br>group, or situation over<br>a period of time.<br>Sometimes compared<br>to another person,<br>group, or situation.    | <ul> <li>* Gather in-depth<br/>information</li> <li>* Fully depicts</li> <li>experience of subject</li> <li>* Powerful way to<br/>portray strategy or</li> <li>process to outsiders</li> </ul> | * Usually very time-<br>consuming to collect,<br>organize, and describe<br>* Requires experienced<br>researchers<br>* Sometimes of limited<br>widespread use  | * Usually expensive but<br>is dependent on the<br>complexity of the case<br>study  | * Usually long  |