

## **Healthy Economy Indicators**

*Note: Unlike other indicator sections, an analysis of Healthy Economy Indicators for each Plan Alternative was not possible as part of this Health Impact Assessment. Data on how each Plan Alternative would impact jobs and wages was not available. After discussing the Health-Based Rationale and Existing Conditions for each indicator, a broad analysis including the conclusions are given for how each Plan Alternative could impact jobs generally. Detailed jobs data is given in the Appendix.*

### **HE.1.a Proportion of jobs paying a livable wage**

#### **Health-Based Rationale**

The Humboldt County General Plan clearly recognizes the need for future policies to support economic development practices that “promote and sustain economic prosperity.” This economic prosperity can be achieved with a living wage, which is defined as a wage needed to meet a minimum standard of living.<sup>1</sup> Job security and employment rates, along with health insurance provided by employers all significantly contribute to a healthy workforce and result in a stable and efficient economy.

Income is one of the strongest and most consistent predictors of health and disease in public health research literature. The strong relationship between income and health is not limited to a single illness or disease. In one study, individuals with an income of less than \$20,000 for 4-5 years had a higher mortality risk than those who earned this income for fewer years, and a separate study in the New England Journal of Medicine<sup>2</sup> concluded that people who earned \$15,000 annually were three times likely to die prematurely than those earning \$70,000 annually.

Unemployment is associated with premature mortality<sup>3</sup>, cardiovascular disease, hypertension, depression, and suicide.<sup>4 5</sup> Those who self-reported job insecurity versus those with secured employment faced minor mental illness.<sup>6</sup> An estimated 6,000 excess deaths were reported as a result of 1% increase in unemployment in the United States.<sup>7</sup>

The adoption of a living wage is associated with a decrease in premature death from all causes for working adults. Among the offspring of low-wage workers, a living wage was associated with

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<sup>1</sup>Poverty in America: Living Wage Calculator. Pennsylvania State University Available at: <http://www.livingwage.geog.psu.edu/index.php>.

<sup>2</sup> Isaacs S, Schroeder S. Class—The Ignored Determinant of the Nation’s Health. New England Journal of Medicine. 2004, 351(11): 1137-1142.

<sup>3</sup> Cornwall A, Gaventa J. 2001. From Users and Choosers to Makers and Shapers: Repositioning Participation in Social Policy. Working Paper 127 Sussex: Institute of Development Studies.

<sup>4</sup> Jin RL, Shah CP, Svoboda TJ. 1995 The impact of unemployment on health: a review of the evidence. The Journal of the Canadian Medical Association 153:529-540.

<sup>5</sup> Voss M, Nylén L, Floderus M, Diderichsen F, Terry P. Unemployment and Early Cause-Specific Mortality: A Study Based on the Swedish Twin. American Journal of Public Health. 2004;94(12):2155-2161.

<sup>6</sup> Ferrie JE, Shipley MJ, Newman K, Stansfeld SA, Marmot M. Self-reported job insecurity and health in the Whitehall II study: potential explanations of the relationship. Social Science & Medicine. 2005;60(7)1593-1602.

<sup>7</sup> Jin RL, Shah CP, Svoboda TJ. The impact of unemployment on health: a review of the evidence. The Journal of the Canadian Medical Association. 1995;153:529–540.

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improved educational outcomes and a reduced risk of early childbirth.<sup>8</sup> Attainment of self-sufficiency income predicts better health, improved nutrition, and lower mortality.<sup>9</sup>

### Existing Conditions

*Data source.* The main source of employment information for this Health Impact Assessment was the *California LaborMarketInfo*<sup>10</sup>, an employment database provided by the State of California. Included in this analysis are occupations identified at the Humboldt County General Plan Update and Health focus groups and with the Humboldt County Public Health Department, but only those where there was sufficient information for Humboldt County, i.e., this analysis does not represent all occupations in each industry, but serves as a sample. Occupations were categorized based on the description as provided by *California LaborMarketInfo*.

*General Plan Update Goals and Policies.* Goals, policies, and implementation measures defined in the Humboldt County General Plan Update Chapter 11: Economic Development Element, which can be accessed on the Humboldt County website<sup>11</sup>, reinforce the goal of creating a “healthy economy”, here defined as maintaining a healthy, employed workforce with living wages and health insurance in relation to the analysis of the current economic conditions based on industry. Positive impacts of current goals, policies, investments and partnerships as stated in the Humboldt County General Plan Update in conjunction with current findings of this assessment are:

- Maintaining a diverse, stable, and growing local economy (ED-G1, ED-P19);
- Expanding internet access (ED-G2);
- Supporting education and training of the workforce (ED-G4, ED-P11, ED-P17, ED-P18, ED-IM4);
- Protecting timber lands (ED-G8);
- Revitalizing Brownfields (ED-G9, ED-P6, ED-P7);
- Encouraging partnerships between educational and training institution, employment centers and job searchers (ED-G10);
- Economic Development Assistance Programs for current and future workforce (ED-G11).

*Living wage.* Living wage calculations are based on a family scenario where one adult is the sole provider and working full-time (2080 hours per year or 40 hours per week). Poverty wage calculation is based on gross annual income and is converted to hourly wage for comparison. The table below compares living, minimum and poverty wages for different size families in Humboldt County. The living wage for a family of one adult and one child (\$15.27 per hour) will be used for future comparison to hourly wage earned for each occupation.

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<sup>8</sup> Yen I, and Bhatia R. 2002. How Increasing the Minimum Wage Might Affect the Health Status of San Francisco Residents: A Discussion of the Links Between Income and Health, Working Paper, February 27, 2002.

Bhatia R, Katz M. 2001. Estimation of the health benefits from a living wage ordinance. *Am J Public Health* 91:1398-1402.

<sup>9</sup> National Academy of Sciences. 2006. Genes, Behavior, and the Social Environment: Moving Beyond the Nature/Nurture Debate. LM Hernandez and DG Blazer, eds. The National Academies Press. Accessed at: [http://orsted.nap.edu/openbook.php?record\\_id=11693&page=25](http://orsted.nap.edu/openbook.php?record_id=11693&page=25).

<sup>10</sup> California LaborMarketInfo, Employment Development Department State of California Available at: <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/localAreaProfileQSRResults.asp?selectedarea=Humboldt+County&selectedindex=12&menuChoice=localAreaPro&state=true&geogArea=0604000023&countyName=>

<sup>11</sup> Humboldt County General Plan Update. Available at: <http://co.humboldt.ca.us/planning/gp/>.

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|                                | One Adult | One Adult,<br>One Child | Two Adults | Two<br>Adults, One<br>Child | Two Adults,<br>Two Children |
|--------------------------------|-----------|-------------------------|------------|-----------------------------|-----------------------------|
| <b>Living Wage (per hour)</b>  | 7.42      | <b>15.27</b>            | 10.81      | 17.22                       | 22.07                       |
| <b>Minimum Wage (per hour)</b> | 7.50      | 7.50                    | 7.50       | 7.50                        | 7.50                        |
| <b>Poverty Wage (per hour)</b> | 4.73      | 6.38                    | 6.03       | 7.43                        | 9.39                        |

*Employment by industry.* Based on the California Labor Market Info, the following table details how Humboldt residents, ages 16 years old and older, are currently employed based on industry.

|   | Total         | %          |
|---|---------------|------------|
| <b>Agriculture, forestry, fishing and hunting, and mining</b>                                   | 2,743         | 4.9        |
| Also includes logging and crop production   |               |            |
| <b>Construction</b>   | 3,239         | 5.8        |
| <b>Manufacturing</b>  | 4,802         | 8.7        |
| <b>Wholesale trade</b>  | 1,727         | 3.1        |
| <b>Retail trade</b>   | 6,930         | 12.5       |
| Includes automobile dealers, furniture, appliances, grocery stores, clothing, etc.              |               |            |
| <b>Transportation and warehousing, and utilities</b>  | 2,082         | 3.8        |
| <b>Information</b>  | 1,061         | 1.9        |
| Includes software publishing, data processing services  |               |            |
| <b>Finance, insurance, real estate, and rental and leasing</b>                                  | 2,812         | 5.1        |
| <b>Professional, scientific, management, administrative, waste management services</b>          | 3,822         | 6.9        |
| Includes legal services, computer systems design, travel services                               |               |            |
| <b>Educational, health and social services</b>  | 14,748        | 26.6       |
| Includes elementary thru university, and trade schools, hospitals, other health care offices    |               |            |
| <b>Arts, entertainment, recreation, accommodation and food services</b>                         | 5,408         | 9.8        |
| Includes artists, art institutions, gambling, traveler services, parks/camps, restaurants, bars |               |            |
| <b>Other services (except public administration)</b>  | 2,870         | 5.2        |
| Includes political organizations  |               |            |
| <b>Public administration</b>  | 3,182         | 5.7        |
| Includes legislative offices, general government, justice, armed forces                         |               |            |
| <b>Total</b>  | <b>55,426</b> | <b>100</b> |

*Living wage by occupation.* Occupations in Humboldt County that can provide a living wage (i.e., the hourly mean wage can support a family size of one adult and one child - \$15.27) include:

- Timber;
- Construction;
- Road construction and maintenance;
- Restoration of lands;

<sup>12</sup> Amy K. Glasmeier. Poverty of America Living Wage Calculator. Pennsylvania State University. Available at: <http://www.livingwage.geog.psu.edu>.

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- High technology industries.

Industries that did not always provide a living wage include:

- Agriculture, Ranching, Fishing;
- Tourism including restaurants, hotel, outdoor recreation;
- Retail;
- Government;
- Gaming.

Industries that sometimes provide a living wages include:

- Green industry;
- Healthcare.

Hourly mean wages for those employed in *education* could not be suitably estimated due to seasonal work period.

*Industry growth.* *California LaborMarketInfo* forecasts an increase in employment need in industries from 2004-2014. The growth industries often providing living wages include:

- High technology (20-40%);
- Registered nurses and some other health care professions (22.5%);
- Some construction occupations (19.1%).

These occupations educational/training perquisites range from an Associate's or Bachelor's Degree to on the job training.

Occupations with projected growth that do not often supply living wages:

- Gaming dealers and service workers (33% growth);
- Retail salespersons (21.9%);
- Recreation attendants in the outdoor tourism industry (18.8%);
- Preschool teachers (15.6%);
- Hotel clerks (13.6%).

Many of the occupations require a minimum of on the job training or vocational education.

*Significant Employment Providers.* The population employed in the industries mentioned above varies, but employment sectors providing the most jobs include:

- Educational institutions, health and social services (26.6%);
- Retail trade (12.5%).

*Unemployment rates.* Unemployment Rate and Labor Force not seasonally adjusted. Humboldt County's unemployment rate (6.5%) is slightly higher than the State of California (5.9%) and San Francisco County (4.5%).

**HE.2.c Number of jobs available with appropriate educational requirements**

**Health-Based Rationale**

One’s education level plays an important role in determining the types of jobs and therefore the income one can expect. Level of educational attainment is a variable linked with economic advancement with the opportunities and accessibility to higher paying jobs. As income increases, funds can be used to amenities that contribute to good health including medical care.<sup>13</sup> As detailed above, income is one of the strongest and most consistent predictors of health and disease in public health research literature.

**Existing Conditions**

*Education levels.* As the table below shows, of the population in the County 25 years and older, approximately 74% have finished junior high but do not have more than an Associate’s Degree.

| <b>HE.3 Education levels in Humboldt.<sup>14</sup></b> |                   |                |
|--|-------------------|----------------|
|  | <b>Population</b> | <b>Percent</b> |
| <b>Population 25 years and over</b>                    | <b>84,677</b>     | <b>100</b>     |
| Less than 9th grade                                    | 3,648             | 4.3            |
| 9 to 12th, no diploma                                  | 5,978             | 7.0            |
| High School Graduate (Equivalency)                     | 20,958            | 24.8           |
| Some college, no degree                                | 24,495            | 29.0           |
| Associate's degree                                     | 7,468             | 8.8            |
| Bachelor's degree                                      | 15,353            | 18.1           |
| Graduate or professional degree                        | 6,777             | 8.0            |
|  |                   |                |
| High School Graduate or higher                         | 75,024            | 88.60          |
| Bachelor's Degree or higher                            | 22,101            | 26.10          |

*Occupations by education level.* This level of education qualifies Humboldt residents for several industries with living wages:

- Timber;
- Construction (excluding managerial);
- Healthcare;
- Some education occupations.

Many of these industries do require additional on the job training ranging from 30 day to one year training.

Occupations not often compensating employees with a living wage based on this educational attainment are (all excluding managerial or supervisor positions):

- Agriculture, Ranching, Fishing;

<sup>13</sup> Isaacs, Stephen and Steven A. Schroader. The Ignored Determinant of the Nation’s Health. The New England Journal of Medicine. 2004: 351:11.

<sup>14</sup>Social Characteristics in the United States: 2006. U.S. Census Bureau American FactFinder. Available at: [http://factfinder.census.gov/servlet/ADPTable?\\_bm=y&-geo\\_id=05000US06023&-qr\\_name=ACS\\_2006\\_EST\\_G00\\_DP2&-ds\\_name=ACS\\_2006\\_EST\\_G00\\_-&-\\_lang=en&-\\_sse=on](http://factfinder.census.gov/servlet/ADPTable?_bm=y&-geo_id=05000US06023&-qr_name=ACS_2006_EST_G00_DP2&-ds_name=ACS_2006_EST_G00_-&-_lang=en&-_sse=on)

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- Restaurants;
- Hotel;
- Outdoor tourism;
- Retail;
- Government;
- Gaming.

**HE.2.a Proportion of jobs that provide health insurance benefits**

**Health-Based Rationale**

Jobs that do not include health insurance contribute to poor health outcomes. Annually nationwide, 18,000 premature deaths are attributable to lack of health coverage.<sup>15</sup> Families with at least one full-time, full-year worker are more than twice as likely to have health insurance coverage, compared to families whose wage earners work as part-time employees (less than 35 hours per week), as contingent labor (e.g., on a seasonal or temporary basis, as employees of contractors, self-employed), or in which there is no wage earner.<sup>16</sup> Individuals without health insurance frequently forego timely health care, suffer more severe illness, and are more likely to die a premature death than their insured counterparts.<sup>17 18</sup>

**Existing Conditions**

Information on health insurance benefits for industries is limited and not sufficiently categorized and unable to make conclusions based on this evidence.

Humboldt County’s uninsured percentages for all ages and person under age of 18 are below that of the entire State of California (18.8, 15.5), but above that of San Francisco County (13.3, 10.6).<sup>19</sup>

| <b>Table HE.4. Number of Uninsured in Humboldt County.<sup>20</sup></b> |                         |                          |                       |                         |                          |
|---|-------------------------|--------------------------|-----------------------|-------------------------|--------------------------|
| <b>All Ages</b>   |                         |                          | <b>Under Age 18</b>   |                         |                          |
| <b>Number insured</b>   | <b>Number uninsured</b> | <b>Percent uninsured</b> | <b>Number insured</b> | <b>Number uninsured</b> | <b>Percent uninsured</b> |
| 102,605   | 21,154                  | 17.1                     | 25,539                | 3,975                   | 13.5                     |

<sup>15</sup> Institute of Medicine, 2004. Project on the Consequences of Uninsurance: An Overview. <http://www.iom.edu/Object.File/Master/17/736/Fact%20sheet%20overview.pdf>.

<sup>16</sup> Institute of Medicine. Committee on the Consequences of Uninsurance. Coverage Matters: Insurance and Health Care (2001), Chapter 3, Who Goes Without Health Insurance? Who Is Most Likely to Be Uninsured? Available at: [http://www.nap.edu/html/coverage\\_matters/ch3.html](http://www.nap.edu/html/coverage_matters/ch3.html).

<sup>17</sup> Institute of Medicine, 2004. Project on the Consequences of Uninsurance: An Overview. <http://www.iom.edu/Object.File/Master/17/736/Fact%20sheet%20overview.pdf>.

<sup>18</sup> [http://www.nap.edu/html/coverage\\_matters/ch3.html](http://www.nap.edu/html/coverage_matters/ch3.html).

<sup>19</sup> U.S. Census Bureau, Small Area Health Insurance Estimates Program Available at: <http://www.census.gov/hhes/www/sahie/index.html>.

<sup>20</sup> U.S. Census Bureau, Small Area Health Insurance Estimates Program Available at: <http://www.census.gov/hhes/www/sahie/index.html>.

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### **Impacts of the Humboldt General Plan Update**

Below is a limited analysis of the Plan Alternatives based on descriptions in the Humboldt General Plan Update. There will be exceptions in these alternatives based on various industry and economic circumstances and trends.

#### Description of Plan Alternatives

The Humboldt General Plan Update describes the Plan Alternatives as follows:

Plan Alternative A: Industrial reuse and protection of prime employment lands are key policies. Includes less robust economic development such as the expansion of road, rail, and airport, does not accommodate “big box” in unincorporated areas, and is more environmentally superior alternative.

Plan Alternative B: Consists of fairly robust economic development initiatives including expansion of road, rail, and airport and includes discretionary review of “big box” commercial uses. Industrial reuse and protection of prime employment lands are key policies.

Plan Alternative C: Higher capacity, less regulatory plan, some government programs left out and accommodates “big box” in unincorporated area.

### **Conclusions**

#### Plan Alternative A

- With the protection of prime employment and industrial reuse, this land use alternative preserves and promotes some industries that provide employees with living wages and appropriate education requirements, such as timber.
- Construction jobs, which often can pay living wages, may also increase with infill housing development and with the development of walking trails and other green living construction.
- Some industries that often do not provide jobs with living wages would also remain relatively stable (e.g., tourism and agriculture) or grow slightly given the population growth (e.g., retail).
- Other industries that also infrequently provide living wages, such as big box retail, would be less likely given the limited development opportunities.
- There is also a possibility that the cost of living may decrease because general costs, such as those for housing, utilities and transportation may be reduced. See other indicator sections for more details.

#### Plan Alternative B

- This land use scenario would be slightly detrimental to some industries that can provide employees with living wages and appropriate education requirements, such as timber.
- Construction jobs, which also can pay living wages, may increase more in this Plan Alternative than in Plan Alternative A.
- Some industries that do not often provide jobs with living wages would also remain relatively stable (e.g., tourism) or grow given the higher population growth in this Plan Alternative (e.g., retail).
- Others industries that infrequently provide jobs with living wages would decrease (e.g., agriculture).
- Plan Alternative B is slightly more hospitable to other industries that also infrequently provide living wages, such as big box retail.

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### Plan Alternative C

- This land use alternative would be detrimental to some industries that can often provide employees with living wages and appropriate education requirements, such as timber.
- Construction jobs, which also can pay living wages, would increase most in this Plan Alternative.
- Some industries that do not often provide jobs with living wages would also remain relatively stable (e.g., tourism) or grow given the higher population growth in this Plan Alternative (e.g., retail).
- Other industries that infrequently provide for living wages would decrease (e.g., agriculture).
- This Plan Alternative is most likely to promote other industries that also infrequently provide living wages, such as big box retail.
- There is also a possibility that the cost of living may increase in this Alternative since, for example, people may be more dependent on owning a car, average electricity consumption could increase and housing prices may increase.

### **Recommended Health-Promoting Mitigations:**

- Develop policies to attract and retain industries who:
  - Can provide a living wage;
  - Provide health insurance benefits;
  - Meet existing levels of workforce education.
- Develop policies to solidify collaborations that can provide employees the opportunity for advancement, possibly resulting in earning a living wage:
  - Educational institutions;
  - Labor training centers;
  - Other labor organizations.
- Ensure that a trained and qualified workforce is available to meet the needs of projected growing industries that can often provide living wages.