

November 5th, 2009

To: Merced County Board of Supervisors & Planning Commission

Re: November 10th MCGPU Preferred Growth Alternative Decision

The following comment letter highlights some of Merced County residents' priority health issues. We give examples of the links between health outcomes and land use decisions, and describe how health outcomes could be impacted by the various growth scenario alternatives being considered as potential "preferred alternatives" for the GPU's EIR.

Community Input on the Growth Scenario Alternatives

Over the past two years, Merced County staff and consultants facilitated focus groups and 45 community workshops on the GPU for diverse groups of stakeholders across the county, including asking participants to provide feedback on the growth alternatives being considered for the GPU. The broad consensus from community residents and other stakeholders was support of a growth scenario that emphasizes growth in cities and communities that have both the infrastructure capacity to support growth and fewer important resources that could be impacted negatively by growth (e.g., prime farmland, important habitat).ⁱ

Current Conditions in Merced County

- In July of 2008, Merced County accounted for the biggest portion of California foreclosures compared to other counties and cities in the state. Additional impacts of the economic downturn have been significantly lower home and real estate prices, dozens of businesses closed or in decline, and very high unemployment rates.^{ii iii}
- There are currently 24 separate urban centers (SUDPs) designated by Merced county.^{iv}
- There are currently an estimated 4.8 dwelling units people per acre in Merced County; the San Joaquin Valley Blueprint recommends increasing average residential densities in new development throughout the county to 8.6 dwelling units per acre.^{v vi}
- In 2000, there were 50,839 acres of undeveloped land within city spheres of influence in Merced County.^{vii}
- Between 1990 and 2000 urban and built-up land in Merced County increased by 12% (3,491 acres).^{viii}
- 19% of urban and built-up land is currently located outside of the city spheres of influence.^{ix}

Existing Health Conditions in Merced County

Since many factors, including income, impact health, below we consider the existing economic status of Merced County residents along with information about current health outcomes in the county.

Merced County Economic Characteristics

	<u>2005-2007^x</u>	<u>1990^{xi}</u>
Median Household Income	\$44,141	\$42,719

<i>CA Median Household Income</i> ^{xii}	\$61,154	\$45,184
Per Capita Income	\$18,132	\$17,734
Families Below Poverty Level	16.1%	15.4%
<i>CA Families Below Poverty Level</i> ^{xiii}		9.3%
Individuals Below Poverty Level	19.7%	24.5%
High School Graduate or Higher	67.2%	63.1%
Bachelor's Degree or Higher	12.7%	12.0%
Unemployment ^{xiv}	16.7%	
<i>CA Unemployment</i> ^{xv}	12%	

Disease Rates in Merced County

- Chronic disease and obesity are rapidly increasing in Merced County.^{xvi}
- **67% of adults living in Merced County are overweight.**^{xvii}
- **In 2007, Merced County had the 4th highest asthma prevalence in the state.** The estimated asthma prevalence was one in five people (20.6%), compared to an average of one in seven people (13.6%) statewide.^{xviii}
- While statewide asthma hospitalization rates decreased nearly 38% from 1990-2006, these rates have remained the same over this time period in Merced County.^{xix}
- There were 740 children's visits to emergency rooms in Merced County Hospitals due to asthma-related illnesses in 2006.^{xx}

San Joaquin Valley Air Basin Quality Data (2008)^{xxi}

- The San Joaquin Valley is designated Extreme Non-attainment for Ozone.
- On 150 days, levels of Ozone (8-hour) were higher than the allowable state standard.
- On 182 days, levels of PM10 (particulate matter, 10 micrograms) exceeded the state standard.

Health Impacts of Growth Alternatives

Access to retail and services, preservation of agricultural land and agricultural jobs, community safety issues, water quality and availability, and climate change and air quality were identified by Merced County community members as priority health issues of concern related to the General Plan Update process. The information below demonstrates:

- Links between these issues and health
- Data about existing conditions in Merced County
- How the General Plan Update growth alternatives may impact these health determinants

1. Access to Retail and Services

Merced County Guiding Principle #4: New growth and development in Merced County must be responsible for, have access to, and fully fund **all essential public facilities and services**, including water, sewer, storm water drainage, roadways, **schools, government centers, and recreation** [*Merced County General Plan Update, Revised Alternatives Report. October 2009*].

There are many links between land use, access to retail and services, and health:

- Denser neighborhoods often provide greater access to resources including public transportation, jobs, libraries, social services, grocery stores, and other retail shops and businesses. Residents of areas of lower residential density typically live farther away from these amenities.
- Road congestion in urban areas increases when residents from outside urban areas have to drive into urban areas for jobs, goods and services.
- Residents who have to travel longer distances between homes and schools, retail, services or jobs, spend more time each day in their cars.
- Commute time correlates with both obesity and physical inactivity. In a California study, counties with the highest average amount of vehicle miles traveled were significantly associated with the highest average rank of obesity.^{xxii}
- The more hours that people spend driving or riding in cars increases the likelihood that they will be injured or killed in a car accident.^{xxiii}
- An increasing amount of time commuting decreases the time an individual has to spend with family and effects engagement in civic or volunteer activities.^{xxiv}
- How much one drives has an impact on the amount of money a family has available for other health needs, such as nutritious food and health care costs.
- Neighborhoods with a mix of shops and businesses within easy walking distance are more “walkable” and can lead to more exercise and less obesity by significantly reducing the need to drive.^{xxv xxvi}
 - 25% of the population in Southwest Merced, and 60% of the population in Southeast Merced live within 1 mile of a grocery store.
- According to the Centers for Disease Control and Prevention, long distances to school are a primary barrier to walking to school. Walking to and from school can be an important source of exercise for children, many of whom are not getting enough exercise currently. Walking to school is safer when schools are close.
- Urban sprawl is significantly associated with increased EMS response time and a higher probability of delayed ambulance arrival following motor-vehicle crashes in the U.S.^{xxvii}
- Given that many patients miss appointments at health clinics due to transportation problems, better proximity to health care could improve access.
 - There are two hospitals in Merced County, one that is located in Los Banos, and one that is located in South Merced – however, the South Merced hospital is moving to North Merced, leaving South Merced residents with reduced access to emergency care and other health services.

Conclusions:

Growth in existing urban areas will place more housing in neighborhoods where health promoting goods and services (such as public transportation, schools, grocery and retail stores, jobs, medical services, senior services, and childcare) are already established and in close proximity. Therefore development in existing urban areas will allow residents on average to drive less, offering them more opportunities to connect with family and friends and to be physically active, which puts residents at lower risk for chronic disease related to obesity and for motor vehicle accidents.

Developing new towns decreases the funding that is available per area to develop, support or improve goods and services, and is therefore associated with health risks such as less physical activity, less social cohesion, and higher rates of overweight and obese residents. **Development in new towns has the potential to increase the proportion of new housing built over the next 10 to 30 years in neighborhoods with limited access to good and services.**

2. Preservation of Agricultural Land & Agricultural Jobs

Merced County's Guiding Principle #1: Agriculture is the backbone and essential part of Merced County's economy. It is a way of life that must be supported, and protected to assure the industry's continued vitality [*Merced County General plan Update, Revised Alternatives Report. October 2009*].

There are many links between land use, agricultural land and jobs, and health:

- Consumption of locally produced foods can reduce consumption of fossil fuels and reduce potential for pollution and for global warming, and may also increase consumption of fruits and vegetables.^{xxviii}
- Consumption of locally grown produce can have economic benefits: farmers who direct market their food receive a higher percentage of the sales price; and money paid to local farmers is more likely to stay in the local economy.^{xxix xxx}
- Jobs can impact physical, mental, and social health.
- Income level and unemployment are associated with a variety of health outcomes, including premature mortality, stress, depression and chronic disease.
- Unemployment can lead to shortened life expectancy, as well as higher rates of heart disease, hypertension, depression, and suicide.

Merced County Existing Conditions

- In 2007, the estimated market value of agricultural products sold in Merced County was more than 2.3 billion dollars.^{xxxi}
- Dollar-wise, Merced is the 5th largest agricultural county in the state, and 6th in the nation.^{xxxii}
- Between 1990 and 2000 Merced County lost 9,587 acres of agricultural farmland, 4,357 acres of which was high quality farmland.^{xxxiii}
- 59% of all land developed between 1990-2000 was high quality farmland.^{xxxiv}
- A predicted 55,873 acres of farmland in Merced County will be lost by 2040.^{xxxv}
- Despite the urbanization of nearly 100,000 acres of farmland in the Central Valley during the 1990s, the market value of Central Valley farm products sold at the farm gate increased

about 20% - from \$11 billion in 1992 to \$13.3 billion in 2002.^{xxxvi}

- Agriculture is Merced County's number one industry and is the county's largest employer. An estimated 15,585 workers were hired as farm labor in 2007 – down from 19,727 in 2002.^{xxxvii} When you include food processing, the agriculture industry employs 33% of Merced County's workforce.

Conclusions

Focusing growth in existing urban areas will preserve the greatest amount of agricultural land by limiting the amount of development in previously undeveloped areas. This would also help to preserve agricultural jobs and maintain the availability of locally produced foods.

Developing new towns would result in a reduction of the acreage of land area retained for active farming uses. This would lead to a decrease in agricultural jobs and a potential increase in the amount of food shipped into Merced County.

3. Community Safety

There are many links between land use, community safety, and health:

- A vibrant neighborhood retail environment is one type of setting for social interaction, which can lead to a heightened sense of community and less crime.
- Social relationships and interaction among community members, promotion of healthy behaviors, and political engagement that promote good health are expected to be greater for residents of denser, walkable, mixed use neighborhoods. By design, these neighborhoods encourage spontaneous and intentional social engagement since residents spend less time in cars and more in local schools, small stores, and other places where people interact.^{xxxviii}
- Opinions about crime are strongly related to feelings about community. A sense of being part of the community results in less fear.^{xxxix}
- With limited law-enforcement budgets, the ability to respond quickly to crimes may decrease for newly developed communities that do not have established law enforcement capacity.
- When law enforcement is spread too thin over a wide geographic area it becomes difficult to do good community-oriented policing that tends to help strengthen the relationship between residents and law enforcement, as well as deter gang involvement.

Conclusions

Development in existing urban areas concentrates residential density, which **may result in a decreased sense of isolation.** Additionally, focusing growth in existing urban areas will place a larger percentage of the population in close proximity to existing law enforcement and emergency services, **increasing the probability of faster emergency response times for residents in these areas.**

Development of new towns is likely to bring about an increase in social isolation as a result of locating more people in areas of the county where there are fewer resources and opportunities for casual contact. By spreading out population development where law-enforcement and community policing networks do not currently exist, **police protection and emergency services may experience barriers to serving the needs of new towns.**

4. Water Quality and Availability

Merced County Guiding Principles #3 & #4: The natural resources of Merced County, including air, **water**, energy, wildlife, and scenery, must be protected to assure a high quality of life for Merced County residents today and in the future; New growth and development in Merced County must be responsible for, have access to, and fully fund all essential public facilities and services, including **water, sewer, storm water drainage**, roadways, schools, government centers, and recreation [Merced County General plan Update, Revised Alternatives Report. October 2009].

There are many links between land use, water quality and availability, and health:

- Urban and suburban development cause profound changes to natural watershed conditions by altering the terrain, modifying the vegetation and soil characteristics, and introducing pavement, building, drainage and flood control infrastructure.
- Access to clean drinking water is vital for health.
- As far as water quality is concerned, it is significantly safer to live in more densely populated areas served by larger public water systems.
- Increased development leads to increases in impervious areas (most notably, roads and parking lots), which contributes to a reduction of natural groundwater storage (which can reduce both residential and municipal water supplies), and lead to increased flooding.
 - Lack of coordination of flood management systems and planning, has left areas in Southwest Merced such as Franklin/Beachwood prone to incidence of flooding over the past decade.
- Urban infill development leads to a smaller increase in impervious areas than non-urban development overall.^{xi}
- Water runoff may contain high concentrations of heavy metals, organic pollutants, fecal coliform bacteria, nutrients and total suspended solids. Exposure to contaminated water can lead to disease and at times, death. Coliform bacterial contamination of water supplies can cause diarrheal illness, which is of particular concern for vulnerable populations such as infants, young children and the elderly.

Merced County Existing Conditions

- Urban water demand constitutes 5 to 15% of the total water use in Merced County, and urban water use is expected to increase 50 to 70% and agricultural groundwater pumping is expected to increase 80 to 90% over the next 20 years.^{xli}
- Between 1994 and 1996, nearly 18,000 acres of irrigated farmland in the Central Valley was converted to urban use, a transformation that requires local governments to construct more water, sewage, highway, and flood-control infrastructure.^{xlii}

Conclusions

Growth in existing urban areas is more likely to increase the proportion of households using existing municipal water systems, and lead to a *smaller* increase in impervious areas. Therefore, **growth in existing urban areas would have a smaller impact on limited water resources, and require fewer resources to be allocated towards building infrastructure systems for water and sewage.**

Development of new towns would lead to a decrease in the proportion of households using existing municipal water systems since more new housing would be built in non-urban areas that do not have access to such systems. Building new water and sewage infrastructure in these areas would **require a significant investment of resources**, and allow fewer resources to maintain and improve existing infrastructure. Development of new towns will also **lead to a larger increase in impervious area, by requiring new roads, parking lots and housing.**

5. Climate Change & Air Quality

There are many links between land use, climate change and air quality, and health:

- People who need to travel longer distances between their homes and various destinations (jobs, retail, services, etc.) may be too spread out to make public transportation, walking, or biking convenient or effective – so therefore end up driving more.
- Denser areas lead to less dependence on cars and fewer vehicle miles traveled which results in improved regional air quality, reduced greenhouse gasses, and thus fewer respiratory and cardiovascular conditions as well as lessened negative impacts from climate change.^{xlvi}
- Greenhouse gases contribute to climate change, which may increase heat-related illness and death, negative health impacts related to extreme weather events, air pollution, and water-borne, food-borne, vector-borne and rodent-borne diseases.^{xlvi}
- Increasing residential density in new towns that are closer to agricultural operations increases the potential exposure of vulnerable populations to pesticides and other chemicals used for agricultural purposes.
- By developing New Towns, the impetus for Bay area commuters to live in Merced County, and create “bedroom communities” increases.

Existing Conditions

- In 2000, there were approximately 29,458 Vehicle Miles Traveled Per Household in Merced County.
- AB 32, signed into law in 2008, mandates, among other things, local governments to take certain actions to reduce greenhouse gas (GHG) emissions related primarily to reduced vehicle trips and energy consumption.^{xlvi}
- The San Joaquin Valley Blueprint in conjunction with AB 32 and SB 375 encourages a significant reduction in VMTs throughout California cities and towns.

Conclusions

Development in existing urban areas will lead to a decrease in per capita vehicle miles traveled because a higher proportion of residents will live in areas with better access to retail, services, jobs, schools and transportation – therefore reducing the need to drive. Therefore, **growth in existing urban areas offers the least amount of risk for contributing to climate change and ill health effects due to air pollution and global warming.**

Development of new towns would likely lead to a larger increase in the need for residents to drive to other areas for jobs, retail, services and schools, therefore increasing vehicle miles traveled and

offering a **greater potential to increase air pollution and Merced County's contribution to global warming.**

Summary of Conclusions

Merced County's General Plan Update will determine where to focus future growth in order to meet the county's housing and economic needs, and at the same time must find ways to protect productive agriculture land and sensitive environmental resources. If Merced County is to use the GPU process as a way to help draft policies and programs that move towards an environmentally, economically, and socially sustainable future, the potential impacts of the growth scenarios being considered as potential "preferred alternatives" must be analyzed.

The data presented in this letter demonstrates links between development decisions and health, existing conditions related to health in Merced County, and ways that the GPU growth scenario alternatives would potentially impact health outcomes for current and future county residents. Additional data and analysis would be required in order to conduct a full Health Impact Assessment (HIA) - a mechanism for predicting potential health impacts of proposed land use and policy decisions. A number of Merced County health experts have been trained in HIA, and, if conducted, a full Health Impact Assessment of the growth scenario selected for the GPU could serve to highlight how potential negative impacts to health could be mitigated, and could provide other recommendations to promote the health of county residents.

Focusing population growth and development in areas where there is existing urban development, infrastructure and municipal services would promote better health outcomes from enhanced access to retail and services, more preservation of agricultural land and jobs, better social connection and community safety, less impact on water quality and availability, and a more minimal impact to air pollution and climate change. In addition, developing in areas with existing urban development will help Merced County to achieve higher average residential densities, closer to those proposed in the San Joaquin Valley Blueprint Project Preferred Scenario.¹ The development of new towns would not result in the same type of beneficial health impacts, and may exacerbate negative health impacts related to these issues of concern. In order to address the infrastructure needs in unincorporated areas throughout Merced County such as Le Grand, Planada, and Delhi (to name a few), we support a Tax Revenue Sharing Agreement between Merced County and the six cities.

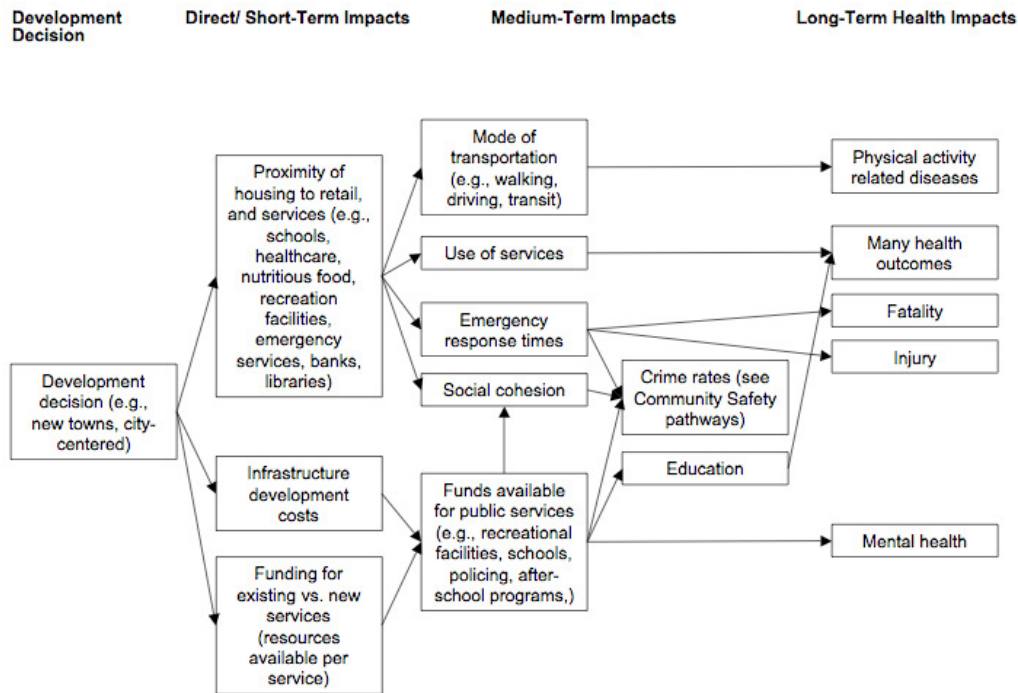
It is our hope that the Merced County Board of Supervisors and Planning Commission will take into consideration the information presented in this letter, and use it to inform their decision about the "preferred alternative" for the MCGPU EIR on November 10th. We, the undersigned, believe that the information presented in this letter supports the proposed Alternative E in the October 2009, Merced County General Plan Update Revised Alternatives Report. We appreciate you taking into consideration the concerns of Merced County residents.

Sincerely,

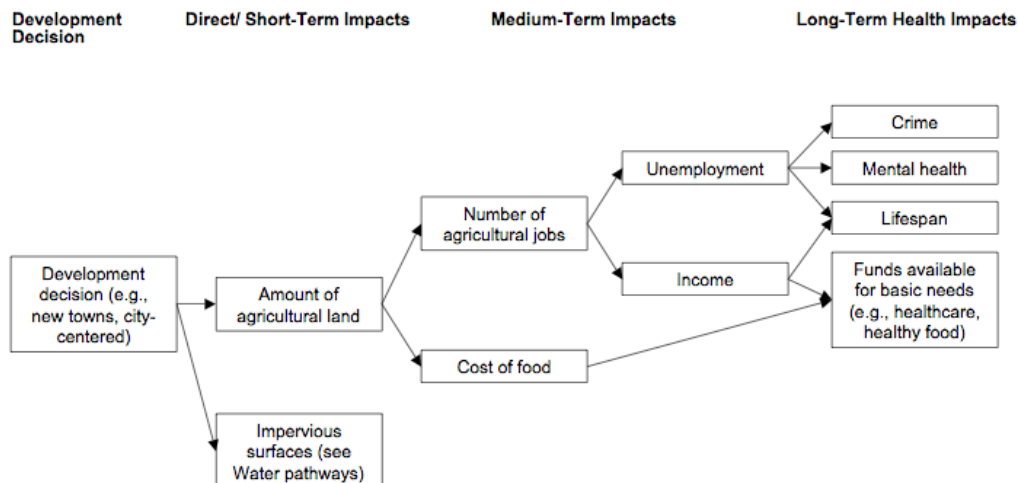
**Mike Sullivan, CEO
Golden Valley Health Centers
Merced, CA**

Appendix A. Health Pathway Diagrams

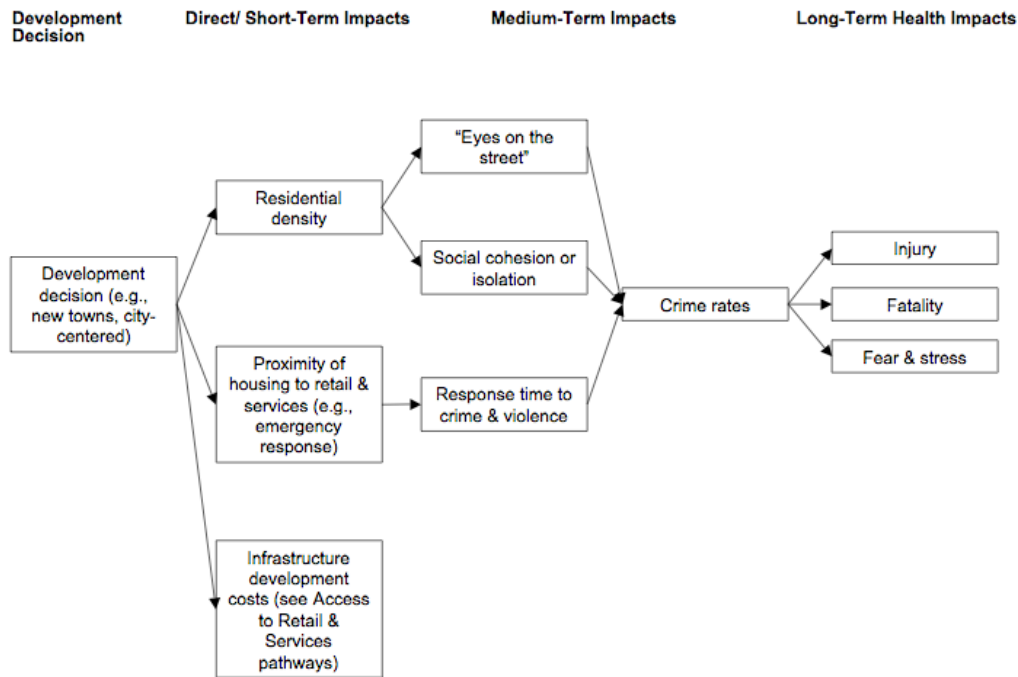
Impacts of General Plan Land-Use Decisions on Health through Access to Retail and Services



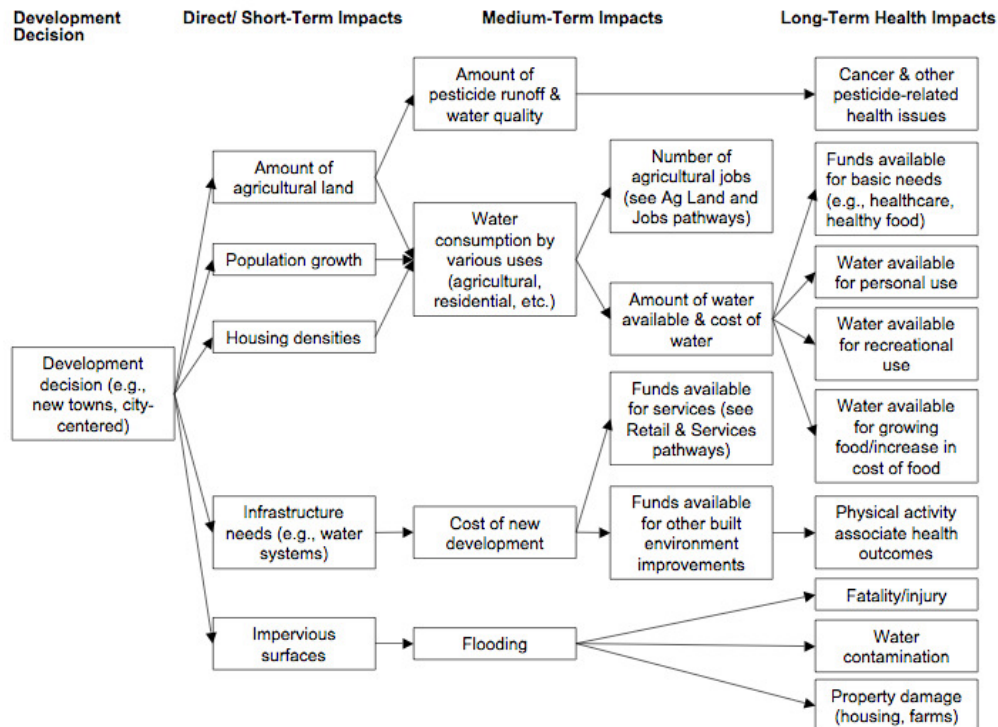
Impacts of General Plan Land-Use Decisions on Health through Agricultural Lands and Jobs



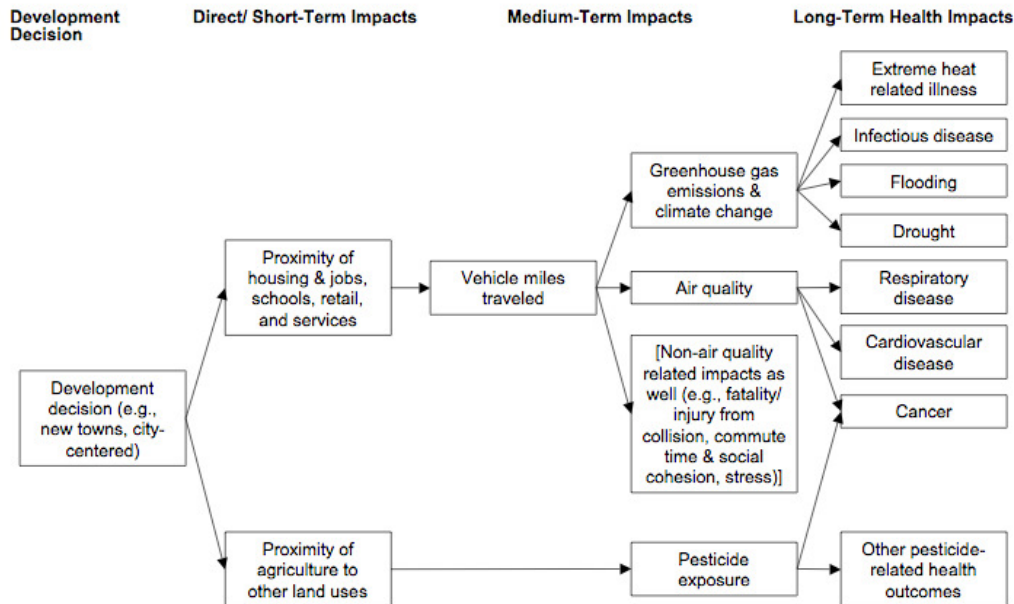
Impacts of General Plan Land-Use Decisions on Health through Community Cohesion



Impacts of General Plan Land-Use Decisions on Health through Water



Impacts of General Plan Land-Use Decisions on Health through Air Quality



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