1. Population Health and Health Equity - The City of Perris's 'e3p3 Live Well Perris Project (e3p3-LWPP) is a Tier 1 project and reflects a combined top down and bottom up approach that addresses health and health equity in the City of Perris with a focuses on the three e's: e1: Environmental Sustainability (Built Environment), e2: Economic Opportunities (Social/Economic Factors) and e3: Equity (supporting Healthy Behaviors and Environmental Exposures). Each of the three e's are supported by Public, Private Partnerships (p3), that serve as the core sector team comprised of community, health and faith-based organizations, corporations, health and industry experts, elected officials, funders and philanthropists, and more.

Project Design/Concept of Success – The e3p3 LWPP program serves to expand health equity and other indicators of a healthy community as a 'continuum of care' using five (5) pillars of a healthy community: Health Education, Access to Social, Educational and Economic Resources, Public-Private Partnership Synergistic Engagement, Community Inclusion, and City Leadership. The goal of the LWPP is to engage the City of Perris' cross-sector team of p3's to create a 'continuum of health culture' within the city that addresses health indicators that are most prevalent in underserved neighborhoods throughout the city by creating 31 'e3p3 LWPP community garden/open education platforms'. Efforts will be led by a cross-sector team of p3's and their individualized capacity and expertise as a



Table 1: Design for Creating 31 e3p3 LWPP Community Garden/Open Education Platforms

catalyst in the overall project mission.

Measurable Impact for the Underserved -26.3% of the residents in the City of Perris are at, below, or farbelow the poverty level, and less than 9% of the area residents have a college Further, health degree or higher. indicators for ozone and drinking water measuring 98 and 78 respectively, as identified by the State of California's Enviro-Screen 2.0, place the city of Perris (zip codes 92570, 92571, 92572, and 92599) in the top 10% of underserved

communities in the State of California. These indicators, and others (See Section 3: Project Measures below) will be used to show measureable improvements in both community and population health and will serve as a baseline for measurements for the project. A concerted focus will be in the areas of: Nutrition, Physical Activity, Food Quality, Walkability and Transit Use, Air Quality and Water Quality, and Educational Attainment (as identified by the Healthy Cities Counties Challenge Domain(s).

Innovation - The designed plan is new and innovative as it: a) uses the National Resource Development Council for Local Governments (NRDC-LG)'s e3p3 focus (a community centered approach supportive of environmental sustainability, economic opportunities, and equity (in health, education and access to support resources) in coordination with the city's existing Live Well Perris Program to ensure the project moves upstream on the 'continuum of health culture' and is sustainable and replicate-able in other areas; b) adopts three overarching measures: Policy, Growth/Replicate-ability, and Engagement/Synergy and five pillars: that have proven effective in healthy cities across the U.S. These five (5) pillars: Health Education, Access to Healthy Living, Public-Private Partnership, Community Inclusion, and City Leadership c) allow the project to be introduced to the residents/expanded into communities in three graduating phases so as to utilize the traction garnered from each of the previous phases; d) engages the city's resolution to increase access to healthy foods/food gardens for area residents with a design plan to ensure residents are within a 1/8th of a mile radius in accessing healthy foods/food gardens; and e) promotes a 'continuum of care culture' within the city using a cross-sector team of p3's that will advance opportunities in nutrition, healthy eating, physical fitness and exercise, access to healthy/quality foods, walkability and transit use, air quality and water quality, economic vitality/cost savings, and educational attainment (as identified by the Healthy Cities Counties Challenge Domain(s); and f) engages 31 locations to serve as an 'e3p3 LWPP community garden/open education platform' using a cross-sector team of p3's throughout the City of Perris (that advances the project's mission).



Figure 2- Map of Perris and the 5 Satellite Garden Locations

Currently, the City of Perris has one community garden, located next to City Hall. The garden is used as a demonstration facility for the community to learn the basics of nutrition. The LWPP will expand the garden capacity and yield and create open space classrooms that will foster health and grey-water usage education, physical fitness and active living (that reduces green-house gas emission), linkages to advanced education with area community colleges and four-year institutions.

Figure 3: City of Perris Community Garden; Council Member Rabb



Expected Locations Throughout Perris- Although the exact locations of the 31 sites have not been established save the City Hall Hub, the following map depicts the areas that are well populated and will provide the very best climate for growing. The 31 sites will be represented by **one** (1) Core Hub Site - City Hall City of Perris; **five** (5) Satellite Hub Site(s) – Schools and Community and Faith-based Organization sites; and twenty-**five** (25) local neighborhood sites (residential housing and shared spaces/apartment complexes).

2. Cross Sector Collaborations Between Health and Other Sectors - In an effort to create not just a localized program but one that expand into the entirety of Riverside County, the City of Perris has agreed to partner with diverse organizations (p3's) so as to include best practices and proven methods to advance the mission of the e3p3 LWPP.

Figure 4 – Picture of an Open Classroom (conceptual)



Diverse organizations reflective of the diversity of Perris and Riverside County include numerous community based organization, numerous policy bodies, and funders willing who are to contribute to a successful project. For the following program designed phases (described below), each cross sector team member

will collaborate efforts in deploying task(s) and activities associated with each phase that supports the project's capacity to address population health and equity as it relates to nutrition, exercise, air quality, water quality, and educational attainment.

Phase I (First 6 months)-The design for the first 6 months creates an interconnected yield that will benefit all residents within the City of Perris. A. Growth/Replicate-ability: Garden/Healthy Foods: engage cross-sector partners in *a*) expanding the hydroponic and water conserving system that is a cornerstone of the community garden; **b**) doubling the capacity of the garden for which an acre of land has already been appropriated; c) increase capacity of garden to utilize diverse tools such as tires, large metal cylinders, and cinderblocks to house the plants; d) define plan for creating satellite gardens throughout the North, East, South, and West corners of the City; e) establish the City Hall location as the Core for the 31 "e3p3 LWPP community garden/open education platform' sites to replicate on a smaller scale. Open Classroom - engage cross-sector partners a) Defining the topics and curricula that will be taught in the open classroom that advances healthy and grey-water usage, promotes continued education, physical fitness and active living (that reduces green-house gas emission), linkages to advanced education with area community colleges and four-year institutions. b) further design plans for open classroom on-sit at City Hall (2,000+ sq. ft. of space). B. Engagement/Synergy: Garden/Healthy Foods: engage cross-sector partners in a) defining strategy for engagement of underserved populations throughout the city; b) define strategies for expansion of the community garden; c) introduce the concept of an outdoor classroom to the community; d) reinforce the purpose of the platform and its capacity to engage Community Based and Health Organizations in the area to teach on healthy living, benefits of using and accessing garden/organic foods. 2) Open Classroom: engage community partners in a) deploying activities in the garden b) recruiting community based organizations in the leading and participation of the classroom activities c) engagement of city officials in the participation of garden activities. C. Policy: Garden/Healthy Foods: engage cross sector partners in a) Passing a resolution to have policy discussions forwarded to the city council as a resolution. b) Have 'healthy location count' for all residents in Perris c) create a resolution for the community involvement in the yield of the garden. **Open Classroom** engage cross-sector partners in *a*) create plans for an outdoor classroom as a venue for policy discussion. b) hold a public forum discussion regarding changes the community would like to see with regards to healthy living c) allow for open discussion between residents and Phase II. (Months 7-15): The design for months 7-15 builds on the created the policy decision makers. interconnected yield and further expands community and p3 participation in all three areas. A. Growth/Replicate. -Garden/Healthy Foods: Engage cross sector partners in a) deploying construction so the community garden will double its capacity and yield. b) encourage attendance classes on healthy eating and understanding of health equity c) launch the farm sharing d) ensuring opportunities to create garden is made available individual, families, and community based organization, e) launching a sponsorship system that supports the project. d) engaging sponsors from the community to maintain the community garden. B. Engagement/Synergy: engage cross sector partners in a) introduction of exercise and healthy living classes taught by CBOs in the area. b) design open spaces so that they become locations where local students can learn the basics of agriculture, water treatment, and even business entrepreneurship that sparks interest in higher education platform c) ensure training and education is used to advance learning and higher education. C. Policy: Engage cross sector partners in a) creation of the food oasis policy. b) combining yield from all satellite locations for food oasis policy. Phase III (Months 15-24). Serves in culminating project and continued assessment of the continuum of health culture in Perris. A. Growth/Replicate-ability: engage cross-sector partners in a) engaging corporate sponsors and connectivity to other gardens in the area. Currently the University of California at Riverside has one of the largest community garden programs in the State of California. b) engaging corporate sponsors who will donate cash or kind contributions so that low income community members can farm crops within the garden without having to pay the out of pocket costs. B. Engagement/Synergy: Engage cross sector partners in a) deployment of a training course for community sustainability and greywater reuse platform; b) analysis of greywater reuse and capacity for improvement. C. Policy: engage cross sector partners in a) Policy passed to restructure EBT transactions within the City. b) advocacy campaigns for EBT restricting and acceptance across entire City of Perris.

List of Cross Sector (P3) Partners - Each of the partners listed below has previously partnered with the City of Perris and have/will agree to provide cash or in kind services amounting to \$250,000 therefore boasting a dollar for dollar planned match to the overall planned e3p3 LWPP. Each of the following partners, their role and their match is listed in the table below. It is important to note that the further establishing of all of partners and specific behavior and intervention strategies will take place in the first funding cycle. **Funding Commitments**- Currently, the City of Perris has completed stage 1 of their overall plan to renovate and improve the community garden. Completed in early 2013, the community garden currently utilizes hydroponic and the 'urban garden' concepts in order to maximize their yield in the arid climate of Perris. The City contributed more than \$15,000 to the development of the community garden, which included the entire infrastructure being built, and the maintenance of the garden (ongoing). Further, numerous partners within the region including the Boys and Girls Club of Perris and the Perris Rotary Club generously sponsored \$10,000. The initial success of the community garden, continue to expand in Perris. See Chart below.

Name of Partner	Type of Agency/ Diversity of Team	Role: Metric of Focus		
Kaiser Permanente	Health Officer	Metric of Focus Growth/Policy - Will provide sponsorship to low income residents, will provide nutrition experts bi-weekly to lead nutrition classes, and will provide support for the policy change portions of the three phases of the LWPP all of which will support the <i>healthy behaviors domain and the metrics of physical activity and consuming of fruits and vegetables</i> .		
Eastern Municipal Water Districts	Private Sector Entity	Metric of Focus Growth - Will provide the watering systems, the soil and the necessary cover for the plants and crops within the community garden. Will also act as a sponsor to low-income residents who would like to participate in the farm share program. All of this will support the built environment domain under the food environment index metric.		
Riverside University Health Systems	Health Officer	Metric of Focus Engagement- Will provide exercise and nutrition experts bi-weekly for classes taught in the outdoor classroom and will also lead the policy discussions held at the outdoor classrooms all of which will support the healthy behaviors domain and the metrics of physical activity/consuming of fruits and vegetables		
Boys & Girls Club	Faith/community organization	Metric of Focus Engagement - Will coordinate trips to the community garden, will nominate low income families for sponsorship from participating companies, and will lead the exercise classes at the community garden. <i>Efforts will address the healthy behavior, built environment, and environmental exposure domains.</i>		
City of Perris	Government Official	Metric of Focus Growth/Engagement/Policy : The City of Perris will act as the lead agency for this project and thus will be involved in every aspect of its deployment and assessment. Efforts will support the healthy behaviors, built environment, and environmental exposure domains as well as the metrics regarding tobacco use, tobacco exposure to children, healthy eating, exercise, air quality, water quality etc.		
San Manuel Tribe	Tribal Agency	Metric of Focus Growth : The San Manuel Tribe will act as the tribal agency partner for this effort and will promote the nutrition classes, make connections to other community gardens,		

	and provide marketing expertise for the effort. <i>These interventions will specifically address the healthy behaviors, built environment, and environmental exposure domains.</i>	
Council/County of Riverside Officials/County pro- Agency council biologicals	Metric of Focus Policy : The City Council/County of Riverside will represent elected officials/ as project Leader's for the LWPP- program and his efforts will be primarily concentrated on engaging the community based organizations, engaging the local businesses, managing the community garden, and expanding the reach of the community garden. The City Council <i>will address the healthy environment, built environment, and environmental exposure domains as well as the metrics regarding tobacco use, tobacco exposure to children, healthy eating, exercise, air quality, water quality etc.</i>	

3. Project Metrics Used to Evaluate Change - The cross sector team will utilize the following five (5) measures as validation that the PWLP program is meeting its mission objective. Measures will be collected prior to the program being deployed, again at the midpoint of the program, and finally at the end of the funding cycle provided by this challenge. The City of Perris will work with school districts, community organizations, and the county of Riverside in order to collect data that cannot be garnered from surveys. The overarching domains focused on are as follows

Domain	Metric	Data Source	Data Collection
Healthy	Nutrition – Increase in consumption of	Community Commons	1) Pre-Intervention; 2) Mid-
Behaviors	healthy/organic foods		Intervention; and 3) Post-Program
Healthy	Physical Activity - % of adults that report	CDC Community Health Status	1) Pre-Intervention; 2) Mid-
Behaviors	increase in physical activity	Indicators	Intervention; and 3) Post-Program
Built	Food Quality - Food Environment Index (CHR	County Health Rankings and	1) Pre-Intervention; 2) Mid-
Environment	from USDA food atlas)	Roadmaps	Intervention; and 3) Post-Program
Environmental	Air & Water Quality – Increase in use of	County Health Rankings and	1) Pre-Intervention; 2) Mid-
Exposure	greywater and reduction in Gas Emissions	Roadmaps	Intervention; and 3) Post-Program
	resulting from increased bike/walk routes used.	_	
Social/Economic	Educational Attainment – Increased access to	CDC Community Health Status	1) Pre-Intervention; 2) Mid-
Factors	opportunities for obtaining HS Diploma, AA BA,	Indicators; DOE Reports	Intervention; and 3) Post-Program

4. Metrics and Interventions - All of the interventions that are being proposed for this project are directly addressing the overarching domains of healthy behaviors, environmental exposure, social/economic factors and built environment. Specifically, the interventions being deployed will address the following metrics in the first funding cycle to drive change. 1) Nutrition - Adults over the age of 18 are consuming less than 5 servings of fruits and vegetables each day: Perhaps the largest tenant of the LLWP is the introduction of fruits and vegetables to the community but also providing the necessary training for cooking with fruits and vegetables. The first step in addressing this metric is the deployment of the community gardens throughout the city, second will be the classes that will be available on nutrition within the community garden, third will be the deployment of the food share program, fourth will be the food desert oasis program, and finally, connecting the Perris community gardens to other community gardens in the area will serve to provide the tools and access to fruits and vegetables that will improve the metric related to the consumption of fruits and vegetables. 2) Physical Activity - % of adults that report no leisure-time physical activity: While access to healthy food and educational classes about healthy cooking are critical, physical activity and exercise will supplement efforts to lead healthier lives. The intervention that will increase the amount of physical activity the most will be the availability of group exercise classes at the community garden campus. Lead by community based organizations, these classes will provide a community centered approach to physical activity and improve the overall health of Perris. 3) Food Quality - Food Environment Index (CHR from USDA food atlas): The food environment index provided by the USDA measures food proximity, food choices, diet quality etc. Currently, Riverside County maintains a high percentage of fast food restaurants (more than 1,300) compared to the amount of grocery stores. Improving these rates will be addressed through the community garden expansion, through partnerships with local super markets, the expansion of the food desert program, and the connection to other regional community gardens. 4) Air and Water Quality - CHR Community Health Status Indicator focusing on air and water quality: While the CHR metric analyzes a plethora of different topics, focusing on air quality and water quality will be critical to the health of Perris. Currently, Perris maintains 17 unhealthy air quality days and 101 'unhealthy for sensitive group' days according to the Air Quality Index. In order to address this metric, the expansion of the community gardens and the satellites will allow residents to access fresh fruits and vegetables without having to traverse via automobile. Moreover, trip to fast food

restaurants will be reduced because of the high availability of fruits and vegetables because of the interconnected community gardens. 5) *Educational Attainment - High School, Associate of Arts, Bachelor of Arts Degrees and Above:* Socioeconomic status (SES) is correlated with the number of vegetables eaten daily and weekly frequency of exercise. People with higher SES are more likely to think about things that improve their health and exercise more frequently. Higher education will propel the community of Perris into a healthier level for adults and children.

5. Project Replicate-ability and Sustainability Capacity - To sustain the positive impact of the project, program or policy once the challenge is over, the City of Perris has identified three elements within its designed approach that supports its capacity to be replicated and sustainable in other communities throughout Riverside County and across multiple urban and semi-rural areas across the State/Nation. These elements for the LWPP are Collaboration, Leadership, and Creative Financing. A. Collaboration- The core premise of the LWPP is to engage multiple organizations with diverse expertise in order to provide systemic and grassroots changes that creates a 'continuum of health culture' within a city. In order to sustain the model being proposed, a city must be willing to a adopt a strong public private model of cross-sector agencies willing to understand the sustainability and impact that an open space community garden can have. Further, the collaborative group must be willing to 'buy in' to the concept and the five pillars. The group will be diverse in their requirements and their experience yet all must have a clear vision for the success of the community garden. Secondly, by collaborating with diverse organizations, the value-based assets, community benefits and the overall impact of creating a 'continuum of health culture' within the city can be marketed and advertised by the P3's to show project success and to sustain project momentum. Finally, through a system of public-private partnerships, the partners will all partake in the risk associated with the project but also the rewards which will allow for a greater farm share program and greater sense of community. **B.** Leadership- The City of Perris (or any City seeking to replicate the model) and the City Council will be critical leaders in the overall effort. The growth and expansion of the LWPP is dependent on the leader's capacity to work with cross-sector partners (P3's) in connecting and engaging neighboring communities to participate. In this instance, strong leadership requires constant communication of the vision of the e3p3 LWPP, its favorable impact to area residents and the community. The model is designed to take into account communities with similar populations, probable obstacles, and opportunities, and, as such, it is easily replicated. Enabling area underserved residents in their capacity to capitalize on the benefits and opportunities of the e3p3 LWPP community garden/open education platform' is also supported by leadership established networks and resources – all of which will be critical to the development and success of the project. C. Creative Financing- In order to sustain the positive impact of the program once the challenge is over, the garden and all of the instruction will be supplemented through 3 funding streams: Farm sharing-All farm sharing members will pay \$100 each year which will support the operations of the community garden. With an expected 100 members by year 3, the resulting \$10,000 will support much of the operations; Sponsorships- from outside entities. Of the partners listed, all have agreed to combine to donate \$250,000 to the PLWP either through in kind or cash matches. Selling of fruits and vegetables - not utilized for the oasis program or from the farm sharing/farmers' markets hosted by the LWPP.

<u>Capacity of Program to Serve as a Model for Other Communities</u> - Strategies include: 1) Identifying Like Partners- As previously mentioned, collaboration and building partnerships is key to promoting health and health equity throughout a city. A primary focus for sustained and long-term engagement of partners should include identifying collaborative partners that have been engaged with the lead agency (city) prior to project, engaging new and existing partners with similar mission in advancing a 'continuum of health culture' within the city, establishing long-term commitments upfront, and promote the project's benefits to underserved populations frequently Uniqueness of services that an agency/individual is able to contribute to the partnerships should also be diverse in scope with a demonstrated capacity to fulfill a specific role in the overall project effort. 2) Identifying and Engage Leaders- Strong leadership will foster sustained involvement among partners. The Mayor of Perris, the City Manager, and the numerous public works employees have all concentrated their efforts towards the perfection and promotion of the LWPP and are willing to ensure the project serves as a state model. This level of commitment among leaders supports the propensity of adoption and replication by other lead agencies (cities) and as such warrants continued involvement of existing partners and sponsors. 3) Promoting Effective Financing and

Sustainability- The tremendous benefit of the LWPP is that it becomes self-sustaining because of the connections to other gardens (satellite and otherwise) and the high amount of yield that will result from the expanded network. The selling of the fruits and vegetables to either the community directly or to local supermarkets means that the operations of the community gardens and the LWPP can be maintained. Any community that wishes to replicate this model must also have a means of making an initial investment to support the financial sustainability of the project 'Core' and continue to seek support funding from federal, state and private funds.

6. Evidence-based Practices Leading to Positive Changes in Health and Health Equity - *The LWPP will utilize two separate nutrition based intervention best practices, two exercise based best practices, and two community education and sustainability best practice models. The nutrition best practices being utilized will all fall under the healthy behaviors metric and will be utilizing the metric of fruits and vegetables being consumed by adults.* The two best practice models being used will be 1) **The Stanford Nutrition Action Plan (SNAP)-** SNAP teaches methods of choosing and preparing low-fat foods in ways that will help women and their families reduce their risk of heart attack by lowering fat intake. SNAP consists of a 6-week classroom-based intervention which will take place at the outdoor classroom followed by a 12-week maintenance intervention. Central to the lessons is the link between low-fat eating and the prevention of heart disease 2) **Planet Health:** Aims to improve activity and dietary behaviors using an interdisciplinary curriculum approach. Intervention materials are infused into language, arts, math, science, and physical education classes, using grade-level and subject appropriate skills and competencies. *For exercise regiments, the LWPP will be addressing the healthy behaviors domain and the daily exercise metric as provided by the CDC community health indicators metric.* **3) SPARK:** (Sports, Play and Active Recreation for Kids) - is one of the leading physical activity programs with an evidence based shown to improve the health of children and adolescents by disseminating evidence-based physical activity and nutrition programs that provide curricula, staff development, follow-up support, and equipment to teachers.

The LWPP will also addressing environmental exposure utilizing air and water quality as the metrics. The two models to be utilized are **1**) **Best Practices in Water Conservation**- This innovative program created by 'Practice Green Health' teaches the basics of creating sustainable water use and automobile use practices. The emphasis of this project is a movement away from the need to use fresh water but instead a greater reliance on greywater or even black water if the project permits. The second best practice model to be used is the **2**) **City West Water Initiative popularized by the City of Victoria-** This model utilizes the practice of understanding how to cycle water through different systems (laundry, cleaning, kitchens) and how to maximize household water use.

7. Project Marketing/Sharing - In order to best market and attract community members to the expansion of the programs and the policy changes that are to take place, the following three strategies will be deployed to foster effective project marketing and data/impact sharing. 1) Engaging of P3's (Cross-Sector Partners) The 31 'e3p3 LWPP community garden/open education platforms' being proposed for this project are to be run by City, community leaders and community based organizations, and area residents; thus, the marketing and promotion of the neighborhood system of engagement and education will be effectively conveyed through a myriad of media outlets to ensure the message is being heard. Moreover, P'3 will be engaged in the program because of their now expanded capacity to teach healthy eating with vegetables, host open classroom sessions, and participate in dispersing resources that advance continued and higher education for all underserved residents. 2) City Council Meeting Announcements- The City of Perris holds city council meetings on the second and last Tuesday of each month. At each of the City Council meetings leading up to the deploying of phase one, and throughout the existence of the program, the city council will announce all policy changes, the schedule of each of the classes taking place at the outdoor market and the locations of the food desert oasis stands. In order for the farm share program to work at the level that is being proposed (31 sites) it is imperative that the community is aware of the program and its benefits. 3) Marketing Campaign with Local Grocery Stores- In order to receive the support needed to see policy or resolutions adopted by the city, Perris staff will engage local supermarket owners and partners to be instrumental in plans that addresses the 'healthy' food desert oasis that exists, as well as the EBT policy and needed changes (increased usage by grocers). The campaigns with the grocery stores will provide an even greater expanse of influence throughout the city.