

ABSTRACT - SUSTAINABLE SOLUTIONS: SHARING OPPORTUNITIES TO MOVE FROM VISION TO REALITY

We are applying for this grant (category 2) to meet the needs of families for affordable housing, transportation, food and access to a vibrant local economy. We will develop and establish the practical strategies and necessary tools to implement long-term sustainable growth which creates an unparalleled quality of life. Utah visionaries, over a decade ago, developed a quality growth strategy for the Salt Lake Metropolitan region with cooperation from the local Metropolitan Planning Organizations (WFRC and MAG), Envision Utah, the Utah Department of Transportation (UDOT), Utah Transit Authority (UTA), and public and private sector partners. As a follow-up to the quality growth strategy, in 2005 the four urban counties on the Wasatch Front adopted Wasatch Choices 2040 as their regional land use and transportation vision after an extensive public process. The original Utah consortium has once again come together, joined by national experts from academia, key private partnerships, and experts from the front-lines of local implementation, including housing, economic development, etc., to make this vision a reality. Our region is seen as a national laboratory in the eyes of many; however, there are barriers and challenges to successful implementation. With your assistance, we can overcome these barriers and advance sustainability here and across the nation

Our Wasatch Choice for 2040 Regional Vision outlines strategies for meeting housing needs, reuse and infill, energy conservation, residential street design, walkable commercial development and more; however, moving beyond the planning stage and actually implementing the growth principles and the Vision remains a challenge.

Within the scope of this project the Utah Consortium, under the leadership of WFRC, Envision Utah, and Salt Lake County, will set a national precedent for moving from plan to implementation. Our overarching goal is to empower and affect change in policy and physical investment along the Wasatch Front and in communities throughout the nation. With this grant, we will remove obstacles and create incentives for sustainable development at six regionally catalytic demonstration sites and begin their emergence as model locations for the rest of the centers identified in the Wasatch Choice for 2040 Regional Vision. We will do this by promoting capacity building and knowledge sharing while filling in process and subject gaps in the existing vision through the following four Sustainable Communities Programs:

Program 1: Envision Tomorrow Plus

The University of Utah's Metropolitan Research Center and Fregonese Associates will build upon the premiere regional planning tool currently available to develop an open-access, open-source, wiki-based community sustainability model called *Envision Tomorrow Plus (ET+)* which will work as a plug-in to ESRI's popular ArcGIS software. Academics at the U of U will use their pioneering "7D" analysis in support of eighteen modules, or "apps," addressing key planning and development indicators. When complete, *ET+* will allow users to determine growth, building and land use types, transportation effects, transportation safety, energy consumption, air quality and climate impacts (including CO₂), public health outcomes, water consumption, employment growth and resilience, workforce housing, housing + transportation costs, development capital, fiscal impacts, return on investment, optimum redevelopment timing, LEED-ND (Leadership in Energy and Environmental Design-Neighborhood Design), and arts and public amenities at the selected location. With this model, communities all over the country will be able to compare alternative scenarios for proposed projects and see how changes to land use, density, etc. for a particular project affect the environmental and economic priorities specified by that community.

Program 2: Scenario Development for 6 Catalytic Projects and Dissemination of Results

Our region pioneered the use of scenarios analysis to create a regional vision. Scenarios allow us to engage the public and test alternative growth patterns more effectively. We will use scenarios to compare multiple TOD designs at six catalytic centers and corridors (demonstration sites), to identify those that create the most significant regional benefits and that work for the cities, neighbors, developers and lenders. Scenarios will reflect existing plans and ideas from public workshops. Using *ET+* we will explore in real time the impacts of different building and land use

choices. This process will be enhanced by the federally funded *UPlan* – a first of its kind, cutting-edge multi-jurisdictional, multi-discipline planning tool that makes every mapable layer produced by municipalities, MPOs, state agencies, or federal agencies, viewable over aerial photos or street maps in a single location. As *UPlan* and *ET+* are both driven by ArcGIS, their integration will allow 3-D bird's eye views and technical analysis of the scenarios to be made available to the general public. Further public process will lead to the selection of a preferred scenario for each test site. Having a preferred scenario is not enough in itself. The consortium will continue to work with stakeholders to identify barriers to implementing the preferred scenario. Lastly, this program will create a standardized method for integrating *ET+* and sustainable development strategies within the MPO transportation models to fully institutionalize implementation aspects of sustainable development.

Program 3: Regional Affordable Housing + Transportation Plan

This project will create a Regional Housing Plan, drawing upon existing community housing plans and evaluation of existing affordable housing, and correlating identified need to locations with multiple transportation options. Characteristics of existing housing inventory will be matched against existing and projected household types by income level as developed by the Department of City and Metropolitan Planning at the University of Utah. Current and projected affordable housing needs will be developed for moderate, low- and very low-income households as well as special needs populations. The final Regional Affordable Housing + Transportation Plan will integrate housing recommendations with regional transportation plans and identify locations to concentrate financial and educational efforts. Affordable housing recommendations will be applied to each of the six catalytic projects, and educational materials will be generated (using *ET+*) to help change the stereotypes of affordable housing, including maps of the region showing areas where policemen, teachers, fire fighters, and retail employees could not afford to live. We expect these educational materials will have national applicability in the fight to reduce opposition and to create a wider distribution of affordable housing. Local government adoption will be pursued to assure alliance of regional goals with local policies.

Program 4: Education, Policy Advocacy and Transferability

The Utah Consortium will create a toolbox to assist local communities in implementing the Wasatch Choice for 2040 Regional Vision which promotes the Sustainable Communities Initiative principles, in a format that communities across the nation can use to accomplish their sustainability goals. The toolbox will include, among other things: 1) a set of model form-based codes addressing a variety of center and corridor types; 2) strategies for overcoming financial barriers to TOD, including investigating sustainable/replenishable financing sources for smart growth infrastructure and other innovative financing products that could help fund Sustainable Communities; and 3) educational packages, public workshops, training sessions and collaboration with local governments and the financial community, and presentations to national audiences. Recognizing that policy change takes hold only if it has broad public support, the consortium will conduct an educational and public involvement campaign directed at the general public, using traditional and emerging social media. The campaign will take lessons learned from this process and identify which individual actions will most benefit our region. It will also motivate the public to support implementation efforts in their communities. Finally, once completed, *ET+* will be available for free, accessible through a wiki-based web site created and maintained by the University of Utah.

The Wasatch Front has involved nearly 40,000 residents in planning and visioning over the past 13 years. This project aims to refresh dialogue with previous participants, expand outreach into new audiences, and ultimately to ensure endorsement and implementation of the Wasatch Choice for 2040 Regional Vision at the regional and local level. Local implementation is the foundation for predictable, sustainable investment. Through collaboration and coordinated planning and research, consortium members will enhance our existing policies and processes, and build our region's capacity for sustainable development. This project will bring the research, investments, and projects of nearly a dozen multifaceted public and private entities together into a single package with sophisticated and robust capability, that will allow for local implementation with nationwide replication.