

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

April 9, 2013

SUBJECT:

Sustainable Transportation - Land Use Integration Study (ST-LUIS)

SUMMARY:

The Sustainable Transportation and Land Use Integration Study (ST-LUIS) highlights the potential to move the region towards greater use of sustainable transportation modes – transit, walking and biking. The study provides a fresh look at ideas for transit investments and services that have been under previous consideration, and supports the creation of walkable and transit-oriented communities. The uniqueness of the ST-LUIS is the holistic approach taken to investigating transit's potential, by integrating real estate market analysis with transit corridor assessment and ridership modeling. The Study's focus on transit and supportive land use is joined up with recommendations for creating compact walkable places throughout the region.

ST-LUIS asks how the region can move toward sustainable transportation in ways that:

- Reflect market reality
- Recognize the high cost of high capacity transit, and
- Are consistent with the values and aspirations of member communities.

ST-LUIS was undertaken from 2010-2013 and completed in three phases: research and analysis, scenario planning and modeling, and the development of local and regional tools. The study was complemented by nine stakeholder activities. These activities included two business/public forums coordinated by the Arizona Chapter of the Urban Land Institute (ULI). The perspectives of participants from these forums were integral to understanding the market realities in local communities.

Based on the ST-LUIS investigation of market realities and research findings, and the study's testing of high capacity transit (HCT) scenarios in the MAG region, the overarching recommendations from the ST-LUIS are: 1) provide a high quality, productive transit system supported by compact walkable and transit-oriented places, and 2) create a small, focused rail network with an upgraded bus system that feeds the rail network and extends transit access to much of the region.

The Study's key findings are: 1) TOD demand will be driven by projected regional growth in population and jobs, and supported by demographic shifts, 2) transit-supportive and compact walkable development is achievable, with distinct opportunities in different parts of the region, 3) a small, compact, and selective HCT network is most productive, 4) a large rail network would oversupply land for transit-oriented development 5) targeted corridor modifications improve transit productivity, 6) regional transit mode share and regional access increase with a mix of LRT and upgraded bus services, and 7) existing conditions drive the pathway for future HCT service

The study was rooted on the projected demand for transit oriented development (TOD), which projects that in a future of 8.3 million people, 1 million (12%) will be the market for TOD; as well as a quarter, 1.1 million jobs from a future 4.4 million jobs would drive the TOD employment demand forward.

With this and other key findings, the study moved forward with a scenario planning and modeling exercise to offer three visions for future land uses, high capacity transit networks, transit ridership and transit productivity, using the project's market demand forecasts for TOD jobs and housing. The results of the scenario planning exercises provide high-level results rather than specific local recommendations. The scenario modeling exercise used the 44 recommended high capacity transit corridors from the MAG Regional Transit Framework Study, as the candidate corridors for analysis.

As part of the scenario planning exercise, the STLUIS created 3 place types: Compact Walkable, Transit Served, and High Capacity Transit (HCT) Oriented were created to reflect threshold densities and development patterns supportive of different transit modes. These land uses and were "applied" to station areas (½ mile) in the scenario planning process.

Transit service and capital investments included in each scenario were derived from an understanding of related studies, existing and future transit services, projected travel demand characteristics, land use and growth patterns, and regional connectivity. A brief summary of each scenario is provided below.

Enhanced Transit Scenario

The Enhanced Transit Scenario reflects a moderate expansion of the MAG Base Case scenario transit network (the RTP 2035 Network), as well as a reallocation of total regional growth to specify transit-oriented development (TOD) consistent with the ST-LUIS place types within one half mile of transit stations ("station areas"). The scenario includes 10 LRT, streetcar, and commuter rail corridors (including eight service corridors and two commuter rail corridors).

Transit Supply Scenario

This scenario reflects a very generous expansion of the Base Case scenario transit network, as well as a reallocation of total regional growth to direct transit-oriented and compact walkable development to station areas. This scenario includes all 44 corridors including LRT, BRT (mixed flow running, similar to the LINK), streetcar, and commuter rail corridors.

Refined Transit Supply Scenario

This scenario was generated after Scenario 1 and Scenario 2 were completed. This scenario tests a transit network that is more extensive than that of Scenario 1, but less extensive compared to Scenario 2. Transit network and land use assumptions were revised with the aim of increasing network productivity and reflecting constraints to HCT-supportive densities in some locations. This scenario includes 25 corridors including LRT, BRT (mixed flow running, similar to the LINK), streetcar, and commuter rail corridors.

Transit performance determined that the smaller Enhanced Transit Scenario was most productive.

As cities, towns, communities, neighborhoods, and transportation corridors are quite different throughout the region, the STLUIS recognizes that *One Size Doesn't Fit All* and created 3 tools for the region and it's member agencies to use: 1) Place Types, 2) Local Toolkit - Community Pathways to Sustainable Transportation and Development Prototypes Catalogue, and the 3) Regional High Capacity Transit (HCT) Evaluation and Scenario Planning Process.

The study recommendations, findings and tools have set the stage for the region to move toward more sustainable transportation options by evaluating regional projects that support sustainable transportation, jump start the regional transportation plan process, consider upgrading transit services, and support municipal actions. A copy of the Key Findings and Recommendation Paper is enclosed and the seven working papers and employment/market analysis is available at www.bqaz.org.

PUBLIC INPUT:

The study process included seven stakeholder meetings and two public/private business meetings to define sustainable transportation for the MAG region, and coordinate findings, create useful tools and products from the study.

PROS & CONS:

PROS: This study takes a holistic approach in investigating the region’s high capacity transit network potential, by integrating real estate market analysis with transit corridor assessment and ridership modeling.

CONS: A shift in regional transportation, transit priorities, and discussions with local agencies on compatible land uses would be required to implement the recommendations for sustainable transportation services identified in the Sustainable Transportation Land Use Integration Study.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: To provide a data driven, analytical approach for testing different high capacity transit systems and their productivity, the scenario planning process established a two tiered screening and selection process of HCT candidate corridors, while evaluating the positive relationship with the more compact walkable and transit oriented land uses. The performance standards and indicators indicated that the future market for transit oriented development will support a small, focused rail network with an upgraded, high quality and productive bus system that feeds the rail network and extends transit access to much of the region, which should be supported by compact walkable and transit-oriented places.

POLICY: The Sustainable Transportation Land Use Integration Study provides a data driven, technical foundation for future policy discussions related to creating a more sustainable transportation network, and shifting transit investments and prioritization.

ACTION NEEDED:

Information, discussion, and recommendation to accept the recommendations, key findings, and the three Sustainable Transportation and Land Use Integration Study tools: 1) Place Types, 2) Local Toolkit, and the 3) Regional high capacity transit corridor evaluation and scenario planning process.

PRIOR COMMITTEE ACTIONS:

None

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