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Are They Ready? Regional Growth and Transportation Investment: A ULI Survey of Major Regions – Conducted by Hartgen Associates, March 2008

A recent ULI Survey of the 23 largest and fastest growing metropolitan regions found that population growth is expected to increase 39 percent and traffic growth 51 percent over the next 25-30 years. Coping with growing transportation demands represents a significant challenge for urban regions struggling with development and traffic congestion, while providing enhanced transit services. Most of these changes will occur gradually over the long term and be a continuation of current trends. Some of the big trends among urban regions are:

Growth trends – The three fastest growing regions are Phoenix, Houston, and Orlando, with population growth expected to increase 53 percent to 87 percent, and congestion growth projected to more than double for Phoenix and Houston, and increase by 71 percent in Orlando. Slow-growth regions with population increases of less than 24 percent, and expected traffic increases of 36 percent or less, include: New York, Milwaukee, Philadelphia, Washington, D.C., St. Louis, Chicago, and Providence. The other large regions project congestion growth in a range of 39 percent to 59 percent. A number of regions have instituted alternative growth scenarios which direct growth into established areas with more transportation choices and less need to drive.

Spending – The growth in annual per capita transportation spending between today's levels, as reported in the near-term Transportation Improvement Programs (TIPs) and the long-range plans is relatively modest: 24 percent per capita. However, there is an enormous difference between highway plans - expected to grow at a modest 9 percent, and transit plans, which enjoy a 52 percent expansion.

- Six regions report significant levels of projected spending, typically for both highways and transit. **Seattle -** highways and transit; **Denver -** road spending shifts after completing their ambitious transit project; **Philadelphia -** both highway and transit spending; **Providence** both highways and transit; **Sacramento -** transit and highway funding; **Houston -** continues highway and transit funding levels.
- Combined transit spending over this period will actually exceed that spent on highways, a shift of historic proportions. Shifts in the actual use of transit have been more limited.
- Twelve large regions are concentrating their long-range plans on transit, often at the expense of much-needed road improvements. These include legacy transit markets of Washington, D.C. and San Francisco, and the newer large transit market of Los Angeles, but also smaller transit cities of Dallas/Ft. Worth, Atlanta, Phoenix, San Diego, Minneapolis-St. Paul, St. Louis, and Milwaukee.

• Florida's three regions – Miami/Broward/Palm Beach, Orlando, and Tampa all project significant cutbacks in both transit and highway funding, despite significant anticipated population and travel growth.

Transit

Many regions expect significant growth in the number of transit trips, a result of investment and development near transit corridors. Others expect transit to grow faster than population and actually increase its share of commuting or daily travel. Significant growth is expected in Los Angeles, Miami/Broward/Palm Beach, San Francisco, Seattle, San Diego, Houston, Minneapolis-St. Paul, Denver, Portland, and San Diego.

Congestion

Reducing traffic congestion is a popular goal for travelers, elected officials, and business leaders. However, simply meeting the demands of growth and preserving existing highway and transit facilities in an era of funding shortages is a greater concern. The regions surveyed, including all of those at the top of the most congested lists, generally forecast congestion increases, in many cases significant ones. The two exceptions are San Francisco and Seattle. San Francisco plans to spend 85 percent of its future transportation funding on maintaining and preserving existing facilities, and two-thirds of its expansion budget on transit. Seattle's plans, however, will change as a result of the defeat of a transportation funding bill in last fall's elections. Houston, Dallas-Ft. Worth, San Francisco, Chicago, Providence, and portions of the New York region report that future congestion will increase moderately. The others anticipate substantial expansion over today's congestion levels.

Regional Summaries - Legacy Transit systems

The seven regions with the most extensive transit systems, and highest transit use, plan to increase transit spending by \$6 billion annually, to \$16.5 billion, compared to a very modest increase in highway funding, from just under \$9 billion to slightly over \$9 billion. (This excludes Chicago, which does not publish the split between highways and transit). Los Angeles and San Francisco are the only two of these regions not spending most of their transportation funds on transit today, but plan to do so in the future.

New York Region

The region is represented by separate Metropolitan Planning Organizations (MPO's) in the three states of New York, New Jersey, and Connecticut, increasing the difficulty of regional collaboration. Despite modest population growth of 16 percent, a 38 percent growth in vehicle miles traveled (VMT) is quite a challenge for such a mature region. The primary focus on the New York side is to bring an aging transportation system into a state of good repair, while in New Jersey it is to help the region grow wisely. There does appear to be good cooperation on the Trans Hudson Tunnel, a \$6 billion project to improve rail connections. There are significant new transit projects in New York, and Mayor Bloomberg's congestion pricing program along with a new environmentally oriented city plan could change the pace of suburbanization and travel (this initiative was introduced after the current plan was adopted). Continuing funding is a challenge, with the most immediate crisis in New Jersey. About two-thirds of current transportation spending goes toward transit today, and it is expected to decline somewhat as a

result of expansion in highway spending. Transit ridership in New Jersey is expected to double, while the congestion outlook seems murky; better in some areas, worse in others.

Washington, D.C.

The Washington, D.C. region also expects a modest 23 percent population growth and 32 percent growth in VMT. The Washington METRO is probably the best success story of new transit systems developed over the last half century, both in ridership growth and transit-oriented-development, although half of regional growth is expected in outer counties not well served by transit. The region spends about half of transportation funds on transit today, a ratio that will increase to 60 percent over the long term. Current spending on transit is primarily on construction, with considerable highway spending on maintenance and operations. The long-range plan shows even greater spending on transit, overwhelmingly toward maintenance of a maturing system. Transit is expected to increase from a 13 percent share of commuting today to 17 percent in the future, the largest increase in market share among the areas surveyed. A modest increase in highway funding is planned, which will continue to go toward maintenance and operations. Funding shortages and an increasing need for preservation and maintenance is making Public-Private Partnerships a prospect for future road projects. Despite this, congestion is expected to increase 50 percent, creating a "stop and go" future.

San Francisco

The Bay Area projects an average population growth of 29 percent and 40 percent VMT growth. Recognizing the importance of preservation and maintenance, the region plans to spend 85 percent of its long-range spending on that category. Regional growth strategy calls for directing 25 percent of new households in central cities, and another 37 percent into established suburbs, with the rest in fringe locations. Transit-oriented-development locations will account for 36 percent of growth. The market share of commuting by transit is expected to grow by 3 percentage points, one of the largest shifts among regions, and increase the number of transit riders by 59 percent. There is discussion of a downtown auto-pricing zone, which would make it one of the few in the U.S. Most of the new highway funding is directed toward High Occupancy Toll lanes (HOT) to hold congestion in check. The Bay Area's legendary commuting times are expected to get worse, with the average commute times increasing from 29 minutes to 31 minutes.

Los Angeles

Growth in the Los Angeles region is at the upper end of the average range, 38 percent for population, and 50 percent for VMT growth. The plans reviewed for this study showed a sharp increase in the region's already ambitious transit plans, and scaling back on highways. Even so, only a very minor expansion of transit's currently low share of daily travel (less than 5 percent) was expected. Congestion was expected to double, average speeds were predicted to plummet from 30 mph to 20 mph. Expressing the frustration that "we cannot build our way out of our transportation problems," plans identified a \$23 Billion 'gap.' There is, however, a new plan being considered in draft form, which would dramatically increase highway funding. While congestion would also worsen under the new plan, it would be a much more moderate drop in freeway speeds from 30 mph to 28 mph.

Chicago

The Chicago region projects relatively slow growth of 24 percent in population, and even slower 21 percent in traffic VMT. While not reported by mode, 72 percent of the long-range plan is dedicated for preservation, important to a mature city. The region is one of the few to focus on the importance of goods movement, appropriate for such a major historic center of manufacturing. In addition, the privatization deal on the Chicago Skyway was one of the pioneers in the U.S. Chicago expects to see a loss from its high transit share (11 percent commuting) as a consequence of continued suburbanization. A modest increase in congestion from 10 percent of all travel today to 11 percent in the future is forecast.

Philadelphia

The Delaware Valley region predicts only a modest 12 percent gain in population, but a more rapid 32 percent growth in VMT. Plans call for an ambitious increase of almost three-fourths from today's transit funding levels, (which account for 54 percent of transportation spending, and an even greater increase in highway funding). As a result, only a modest increase in congestion is expected, despite disproportionate growth in driving, a consequence of rapid suburbanization.

Boston

The Boston region predicts a relatively modest 10 percent growth in population. Virtually all of its growth in transportation spending is expected to go to transit, a consequence of the need for significant revitalization of an aging system, a growing interest in using transit as a central focus of growth in Massachusetts, and the winding down of substantial highway spending on the Central Artery/ Tunnel project – AKA the "big dig."

Regions with Newer Extensive Transit

Regions that lack the density and extensiveness of the major transit systems also aspire to create transit options. These are typically higher growth regions actually expected to expand transit funding at a greater rate than for the mature systems, almost double today's levels. They also forecast a much greater increase in highway funding, almost 50 percent, than the mature transit regions.

Seattle

The Seattle region had planned significant expansion in both highway and transit funds. It has state growth management legislation to help shape new development. The region forecasts rapid population growth of 61 percent, and slower growth in VMT of 42 percent. The plan called for completion of the light rail system currently under construction, and major shifts to HOT lanes to cope with traffic growth, an 18 percent increase in freeway lanes, and 239 percent increase in HOV/T lanes. The long-range plan called for more of the transit funds to go for maintenance and operation of the completed system and highway funding to tilt significantly toward capital projects The projection was for commute shares by transit to increase a full percentage point from today's 7 percent. Seattle also forecasts an improvement in traffic congestion, one of only two regions to do so. The ambitious plans did recognize a \$40

billion funding gap. In November, voters defeated a transportation funding bill, requiring reconsideration of these plans.

Portland

The Portland region projects a relatively high 53 percent increase in population, but only a 39 percent growth in VMT, one of only three regions with lower travel growth than population. It has been recognized for the quality of regional planning and design, and transit development, and is the only region in the country with elected regional officials. The region has a growth boundary that helps avoid the excessive sprawl that creates disproportional travel growth elsewhere. The region's plans show a scaling back in transit spending from today's levels, and a modest increase in highway spending, while acknowledging a \$7 billion unfunded gap. Transit ridership is expected to double. On the other hand, forecasts show significant increases in congestion, with speeds dropping from 25 mph to 21 mph, and increased delays of 156 percent. On the other hand, this region is one where planners have demonstrated an ability to challenge conventions, such as reducing congestion as a goal.

San Diego

The San Diego region is at the upper range of the growth projections, looking at a population increase of 37 percent, and 55 percent VMT growth. While it is at the lower range among this group of the share of transportation spending on transit, San Diego was the first in the U.S. to develop a light rail system, the first to adopt Transit-Oriented Development, and has ambitious expansion plans for "transit competitive with the car" on light rail extensions and managed (toll) lanes. The region was one of the first in California to adopt a ½ cent sales tax for transportation, helping counteract diminished state and federal funding. Transit expenditures in the long term will more than double from today's levels, and highway spending will increase by about one-fourth. Current spending levels on transit are tilted toward capital, while highway spending is more for maintenance and operations. The long-range plan shows that both highway and transit accounts shift toward capital. The share of commutes on transit is projected to double from 5 percent today to 10 percent in the future, the greatest such shift observed, placing the region in the first ranks of transit regions. Best of all, congestion is actually expected to be reduced from today's levels.

Miami-Broward-Palm Beach

South Florida runs along the Atlantic coast from Palm Beach to Miami. It is recognized as an economic region, but not for transportation purposes, being split into different metropolitan planning organizations for each of the three counties. The combined region projects population increases of 40 percent, accompanied by VMT growth of 53 percent. The region expects to build on its system of toll roads, and expand managed lanes through pricing to serve road traffic. Ambitious transit plans are anticipated also, building on the Miami subway, the downtown people mover, and the regional Tri-Rail commuter rail system. However, the financially constrained plans of the three transportation organizations (the federal government will require a single integrated plan for the next round) show the same problem seen in other Florida regions: lack of funding. The plans indicate modest cutbacks in transit funding, but deeper reductions in highway finance. As a result, only a minor increase is expected in

commuting by transit, just under 5 percent of commuting, and traffic congestion is expected to grow substantially in each of the component regions.

Denver

Denver is expected to be a fast growing area, with population gains of 47 percent and traffic growth of 59 percent. The region has been moving toward a regional growth strategy that limits the spread of new development. As indicated above, the region expects transportation funding to more than double. With the completion of a 122-mile light rail and commuter trail system, the priority will shift to investing in highways, although the long-range plan shows transit and highway spending will be overwhelmingly on maintenance and operations. Many of the new roads will be Public-Private Partnerships and managed lanes. The price of the transit system has escalated from \$4.7 billion to \$6.2 billion, placing a growing burden on funding. The transit shift on commuting is projected to increase from 4 percent to 7 percent, one of the largest shifts in the country. Despite all these efforts, congestion in Denver is projected to grow substantially, from 24 percent of the roads and 17 percent of the vehicle miles traveled to 36 percent of the roads and 28 percent of the vehicle miles traveled.

Atlanta

Atlanta projects one of the fastest population increases, 61 percent, but a more manageable 41 percent growth in traffic. Claimed by some to be the "fastest growing urbanization on earth," there is widespread understanding and support for smart growth, at least philosophically. Virtually all of the 42 percent increase in transportation spending is projected to go to transit, increasing its share of transportation spending over the long range to 42 percent. Preservation and maintenance will be addressed in the plans, with future highway capital spending only slightly more than maintenance/operations and transit spending slightly higher on maintenance and operations. Congestion is expected to increase substantially, from 24 percent of the freeways today to 34 percent in the future.

Dallas-Fort Worth

The North Central Texas region was the sixth largest in 2003, and predicts fast-paced growth of 45 percent in population and 59 percent in VMT, making this one of the most challenging regions in dealing with growth. The North Texas Council of Governments has a Sustainable Development Funding Program which allocates transportation funds to land use projects promoting alternate modes or reduced auto use, and has a goal that 25 percent of new households be located near transit. Regional transportation issues are reinforced by a Texas Metropolitan Mobility plan, a statewide initiative to identify long-range transportation needs in the larger metro areas and short-range priority improvements. In addition, inter-regional corridors have been identified with the assistance of the State of Texas. The long-range plans call for substantial increases in funding for transit projects, and more modest gains for highways. In addition to a funded long-range plan estimate of \$71 billion, an additional \$59 billion unfunded gap is projected, largely for road expansion and rehabilitation costs. Congestion is expected to be kept in check, from an estimated 34 percent increase in travel time during the base year, to 37 percent in 2030.

Minneapolis-St. Paul

The Twin Cities region projects what is average growth elsewhere, but quite rapid for a snow-belt community with a population increase of 36 percent, and VMT growth of 51 percent. The region's strong planning tradition is developed from the Metropolitan Council, officials representing the region and appointed by the governor, although state political trends recently have sidelined traditional smart growth plans. Regardless, there has been significant progress in urban development and in crafting better approaches for conventional suburbs. Build out is planned for a new light rail system, and transit use is expected to double, buoyed by a 24 percent increase in transit funds. On the highway side, an actual cutback in funding is planned, as well as a slight redirection from building to maintenance. However, this plan was developed prior to the I-35 W bridge collapse, a significant unexpected expense. Substantial increases in traffic congestion are expected, with average delay increasing 50 percent.

Milwaukee

The Milwaukee region anticipates slow growth with an 18 percent increase in both population and VMT. After much debate over the prospects for transit, a \$6.6 billion regional transit and express transit system is planned. As a result, the increased transportation funding for the future is planned entirely for transit, increasing its share from 23 percent of current spending to 34 percent of future spending. Despite this redirection, planners expect to make progress on congestion, reducing the number of miles of congested roadways from 290 to 125.

Lower share transit regions

Phoenix

The Phoenix region continues to be one of the fastest growing, with an expected 77 percent population increase and VMT more than doubling. A light rail system is under construction and will be used in an effort to focus development around transit. The region enjoys a dedicated ½ cent sales tax for freeway expansion as well. The long-range plan calls for a substantial increase in transit spending, and a slight cutback in road funding. Travel speeds are expected to decrease substantially, with average speeds dropping from 32 mph to 28 mph.

Houston

Houston - the fastest growing region surveyed - is projected to experience extremely rapid population growth of 87 percent, and a 113 percent increase in VMT - second to Phoenix. The region expects to maintain today's high levels of spending, more than doubling transit spending to support the expansion of the light rail system in five corridors and 73 miles, along with 8 miles of commuter rail. Often maligned by planners as the largest city without planning – a badge of honor among Houstonians - the region's transportation plans are based on an Envision Houston Region scenario. The land use projections are based on a series of participant created land use scenarios that redirect a portion of new growth to planned transit corridors and emerging centers, and reduces new development in the flood plains. This scenario shows a 5.4 percent reduction in vehicle miles traveled compared to trends – a travel time savings of \$8 million annually – and an increase in transit boardings of 23 percent

compared to trends, and 49 percent above today's level. A modest increase in today's high level of highway spending is planned with toll roads an important part of the mix. The plan is expected to maintain congestion at just about today's levels, an average speed of about 38 mph compared to 39 mph today, an extraordinary accomplishment for such a fast-growth community.

Sacramento

The Sacramento region, as a green state capital, has been studying land use and transit alternatives, needed to accommodate a population growth of 48 percent and VMT gain of 53 percent. A Sacramento Blueprint has been adopted to offer options and reduce the costs. The prior plan showed extraordinary growth in transit funding, as well as significant growth in highway funds. Under the prior plan, transit ridership was expected to triple, although from a relatively low 3 percent share, with a substantial increase in congestion of 158 percent. In response to these shortfalls, a new plan was adopted in April 2008 that redresses many of these concerns, further increasing transit's share, and reducing driving and congestion.

Providence, R.I.

The Providence region is facing relatively slow growth, population increases of 8 percent and VMT of 19 percent. The plan has a focus on condition and repair, appropriate to a place with a high percentage of deficient roads and bridges. Transit spending is expected to double in the long-range plan, and highway spending triple. As a result, there will be a modest increase in the percentage of daily travel by pubic transportation.

Orlando

The Orlando region's fast paced population growth of 53 percent, and VMT growth of 71 percent, rank it third in travel growth. The region has struggled with transit plans, and a 22-mile light rail project is currently unfunded. The 2000 census estimated transit in the region carried a mere 2 percent of commuters, one of the lowest, and for the city of Orlando, it was only 4 percent. As with the other three Florida regions, long-range funding appears perilous, with plans calling for a reduction in both transit and highway projects. Faced with all these difficulties, the number of hours of traffic delay is expected to more than double.

St. Louis

The Bi-State region between Missouri and Illinois projects slow population growth of 10 percent, and disproportionately faster VMT growth of 27 percent, a likely reflection of extensive suburbanization. While St. Louis population is expected to stabilize, continued decline in the central county is anticipated, with virtually all growth at the fringe. A light rail system was developed in the 1990s, with gradual expansions. The plans reflect the importance of preservation and maintenance required for the core areas of a heartland city, with only a 6 percent increase in highway funding primarily directed to preservation rather than new capacity. Plans call for transit funding to triple to help support this system. Funding shortfalls

are acknowledged – a \$6 billion gap for highways, and \$1 billion for transit, "without which Metro cannot begin to consider any of the five MetroLink extensions in the plan".

Tampa

The Tampa region anticipates rapid growth, as in other Florida regions, 53 percent increase in population and 56 percent increase in VMT. The story is similar in terms of transit. The 1 percent transit share for commuters presently is even lower than in Orlando, and funding is a challenge. Transit and highway funding are expected to shrink in the future, with an emphasis on preservation and necessary maintenance. While transit ridership is expected to increase by 65 percent that is barely keeping pace with growth so only modest changes in the transit share are anticipated. Congestion is predicted to grow sharply, about a 2 ½ times increase in the number of hours of delay.