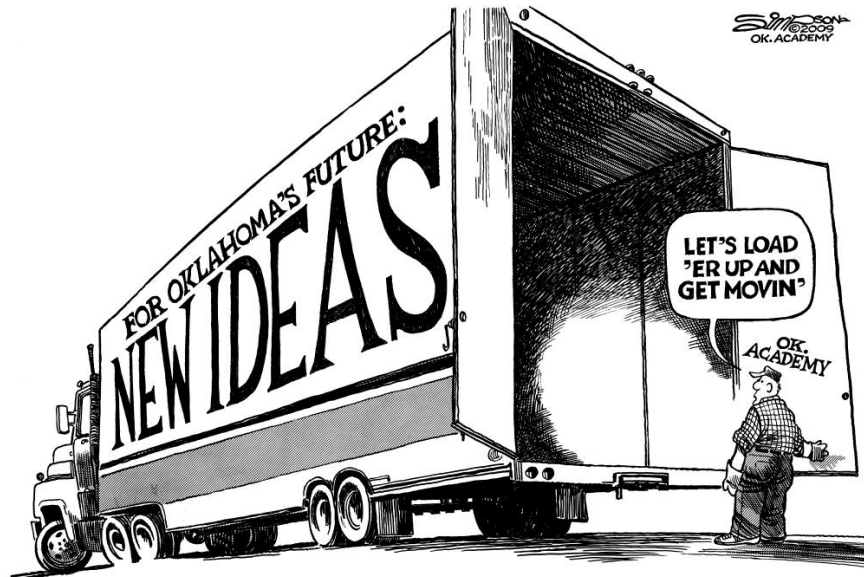




MOVING OKLAHOMA

IMPROVING OUR TRANSPORTATION INFRASTRUCTURE

FINAL REPORT



The 2013 Oklahoma Academy Town Hall

October 27-30

National Center for Employee Development, Norman

In 2013, The Oklahoma Academy for State Goals Town Hall attacked the massive, both in scope and importance, topic of transportation infrastructure. For purposes of the Town Hall, “transportation infrastructure” was defined in broad but impactful terms to include the movement of people, products, data, and molecules. Participants were asked to be creative in providing ideas for how Oklahomans should plan for, prioritize, maintain, build and finance roads and highways, rail, aviation, telecommunications, pipelines, transmission lines, and waterways.

Infrastructure is a compelling topic, because it directly affects everyone in Oklahoma. Unfortunately, municipal, county, state and federal governments have been forced to delay maintenance on existing infrastructure and refrain from expanding infrastructure due to a lack of funding. In the recent climate of escalating federal debt and a general reluctance to increase taxes, all levels of government have struggled to find viable ways to fund necessary infrastructure.

The Role of Transportation and Infrastructure

Town Hall participants universally agreed that transportation infrastructure plays a basic yet vital role in the lives of Oklahoma residents and visitors to the state. Transportation infrastructure is broad, impacting more than just the movement of people but also the movement of products, information and ideas across that state and beyond its borders. It is a creator of jobs, both directly and indirectly. Transportation infrastructure delivers necessary resources and adds value to the land. Simply put, it is the muscle of our economy. It is the livelihood of Oklahoma.

Participants of the Town Hall agreed that transportation infrastructure should be used to promote economic growth and improve the quality of life in Oklahoma. Oklahoma’s location at the crossroads of the Midwest creates a unique opportunity for further development of both interstate and intrastate transportation infrastructure. The key to success of Oklahoma’s transportation infrastructure is the integration of all elements of the infrastructure, including data infrastructure (i.e., broadband). Future development and implementation of transportation infrastructure is essential to everyone and should be considered through the lens of historical perspective to determine how best to serve the needs of the state. For example, transportation infrastructure in many areas in Oklahoma historically has not been well maintained. Because transportation infrastructure has no voice or face, it has generally eluded much legislative attention leading to an overall lack of funding. Further development and improvement of all transportation infrastructure within Oklahoma will require more advocacy to create awareness of the state’s evolving infrastructure needs as our growing expectations for our infrastructure are not on par with our financial reality or economic growth expectations.

Town Hall participants also agreed that infrastructure and transportation have a direct impact on the economy, environment and quality of life. The lack of adequate infrastructure reflects negatively on the state and its residents. Inadequate infrastructure reduces the attractiveness of Oklahoma for new businesses and as a potential tourist destination. Conversely, a well developed and maintained infrastructure is vital to keeping the business of the state running smoothly and can attract new businesses and visitors. The accessibility that a well developed and maintained transportation infrastructure provides should improve the quality of life for residents through access to jobs, education, medical care, entertainment and a variety of government services.

Development of Oklahoma's infrastructure for the transportation of its natural resources, such as oil, gas and water, will provide economic advantage, both now and in the future. However, consideration should be given to the environmental impact that the development will have on Oklahoma.

Town Hall participants agreed that Oklahoma's infrastructure and transportation needs vary among rural, urban and tribal communities. Rural areas have traditionally been underserved in all areas of transportation infrastructure, but especially with respect to roads, water, telecommunications and data systems. This imbalance has created a tension between the perception of equity between urban and rural transportation infrastructure upgrades. However, if rural Oklahoma does not have access to adequate transportation infrastructure, especially telecommunications and data transmission infrastructure, both rural and urban areas will suffer. Cooperation between tribal communities and urban and rural Oklahoma is key to achieving transportation infrastructure success. Additionally, tribal participation in planning and funding transportation infrastructure has become critical to provide matching funds for grants and input of information.

Contributing Factors to Oklahoma's Current System of Transportation and Infrastructure

The specific factors that have most significantly contributed to the development of Oklahoma's current system of infrastructure and transportation are many and varied. Geographic, economic, and political factors have contributed to the development of our current infrastructure. Geographic factors that have contributed include the availability of water sources, natural waterways and other natural resources. Political factors that have contributed to the development of our system of infrastructure and transportation are the political will of powerful politicians at any given time, the original section-line planning, the lack of coherent, broad-based land use planning and the diverting of available revenue streams legislatively dedicated to infrastructure and transportation. Additionally, access to infrastructure and transportation resources have strongly influenced development of new transportation infrastructure. Economic factors that have contributed to the development of our infrastructure and transportation are inexpensive fuel, the need to get farm and energy commodities to markets, and the relatively low population density.

The current abundant availability of resources and explosive commodity production, along with the low cost of living create an impediment to meaningful discussion of future planning. However, the inevitable decline in these natural resources and commodity production could significantly impact Oklahoma's transportation needs. Generally, greater focus on infrastructure planning at the local, regional, state and federal levels would positively impact the development of Oklahoma's transportation systems.

Changes in population demographics will also significantly impact future transportation needs and how those needs are met. Specifically, the age of the population and the movement of populations from rural to suburban to urban areas impact transportation needs. Recognizing where future transportation needs will exist is crucial.

The revenue streams that are adopted to support transportation infrastructure in Oklahoma will dramatically affect our transportation infrastructure development.

In order to meet Oklahoma's future transportation needs, we must understand changes in our population demographics, shifts in our culture and developments in technology. Oklahoma must acknowledge and plan for the younger population's willingness and interest in adopting multiple modes of transportation including mass transit systems and the older population's need for expanded mass transit services. We must balance our need to move commodities from rural areas to markets with the declining population in these rural areas. We must embrace the newest and best technology available in planning and developing our infrastructure. We must also recognize the potential environmental problems and cyber security risks and plan accordingly.

Oklahoma's challenges include the anticipated depletion of the Highway Trust Fund by 2015, the fact that the locks on our navigable waterways have already outlived their anticipated life-spans and need to be replaced, and the public concern that funding intended for infrastructure is being diverted for other purposes.

Oklahoma has some advantages that should be exploited. Oklahoma is a crossroads of waterways, pipelines, railroads, airports and interstates that currently have available capacity. We need to increase awareness and utilization of the available capacity. Communication is the key for planning and implementing all of this infrastructure development and maintenance.

Water is important as a source of transporting products and for consumption. Expanded inland waterways present an opportunity to collaborate with others. We need to increase awareness of Oklahoma's navigable waterways. We need to maintain and protect our non-renewable resources in order to ensure that Oklahoma will continue to benefit from their use long into the future.

It is important to foster public-private partnerships in planning, financing, and regulating in a collaborative approach. These collaborative efforts should include local, state and federal governments, as well as tribal nations. Regulation should also be a collaborative effort among all relevant governments (i.e. local, state, federal and tribal governments).

Strategies to Address the Transportation and Infrastructure Funding Crisis

Long term, comprehensive planning for broad transportation infrastructure and its smaller component segments is the first strategic step to sound transportation infrastructure funding in Oklahoma. Prior to a long term plan, a comprehensive needs assessment presented to the legislature would be helpful, because it would drive improvements and justify expansion of transportation infrastructure revenue sources. A commission to evaluate a "menu" of potential funding options would aid in the development of a long term plan.

Participants in the 2013 Town Hall identified various strategies to address the transportation infrastructure funding crisis in Oklahoma. They noted that because any single revenue stream is subject to erosion, diversification of revenue streams will help ensure reliable funding. A hybrid approach could include general revenue funding of ODOT, tolls and the motor fuel tax (with modifications). Any strategy must be fair and primarily derived from the actual usage and not solely from general taxation. However, since transportation infrastructure benefits everyone, general taxation should remain a consideration.

Flat taxation is not responsive to inflation and rising costs, therefore taxation must be adjusted to account for increasing costs. All panels agreed that the motor fuel tax should be adjusted, yet there was some disagreement among the panels as to how the tax should be

adjusted. Two panels suggested that the fuel tax should be tied to inflation instead of remaining static or making it a percentage of purchase price.

Another panel suggested establishing a fuel tax rate that would be focused on percentage of price versus volume of sales. The tax would include all alternative sources of fuel and would be based on a petroleum gallon equivalent. The Oklahoma Tax Commission would be responsible for implementing the new tax system.

The Oklahoma Academy Town Hall recommended conducting a study on increasing the following taxes or a combination of the following taxes - raising the motor fuel tax, raising the diesel tax to bring parity with the gas tax and creating an annual tax on alternative fuel vehicles to be paid when renewing tags. The study could potentially be funded by a private-public partnership between the universities and industry related businesses.

Additionally, an effective means of taxing alternative fuels should be developed. Any changes made to the fuel tax should include all alternative fuels and should be based on petroleum gallon equivalents.

Municipal financing is done almost exclusively with local sales tax. Yet, a narrowing base, the shift from a goods to a service based economy and an increase in Internet sales is hurting municipalities and the state. If sales tax were collected on goods purchased on the Internet (as is done on purchases made at brick and mortar stores) those funds would flow to the state, county and local governments.

Mileage based user fees may be a good solution for Oklahoma. The fee should be based on the weight and the efficiency of the vehicle. Privacy concerns about the use of devices to track mileage might be alleviated by citizen experience with GPS and other common tracking technologies. Another concern with this concept is that it fails to tax out of state drivers using Oklahoma roads.

Other suggestions for increasing transportation and infrastructure funding included reforming existing tax credits, reviewing or repealing state sales tax exemptions that are not self-sustaining and expanding public-private partnerships. Public private partnerships have been used effectively to create revenue; however, the program must ensure the funds used will benefit the private partners to incentivize the investment.

Finally, the reworking and revival of the State Infrastructure Bank to assist in project funding is recommended. Similar to the SIBs in Florida and South Carolina, the Oklahoma SIB would consist of two pools of money for traditional (roads and bridges) and non-traditional (all other) projects to avoid restrictions on spending of federal money. The Oklahoma Legislature would be responsible for implementing the SIB. Funding would be a combination of bonds, private sector funding and federal transportation funds. A similar system was attempted in 1995, but failed due to a lack of repayment. However, an interim study (H13-057) is set to begin in November 2013 regarding this issue.

There are different factors regarding transportation infrastructure that must be considered at the various government levels. The federal level is affected by regulation from the Environmental Protection Agency. The state level is affected by the voting public (such as OK's state question 640). Counties and municipalities often struggle for funding.

Several recommendations were made to address the funding crisis at the local level. Local solutions for resources will permit private control, risk assumption and smart choices. Funding recommendations included giving counties and municipalities access to a local ad valorem tax and allowing municipalities and/or counties to enact fuel taxes for maintenance and

development of transportation infrastructure (perhaps through the creation of regional transportation authorities).

To enable municipalities and regional entities to address the up-front cost of initial construction, the Town Hall recommended creating a transportation funding model similar to the Economic Bond Fund Act to provide low interest loans for infrastructure development. These funds could be used exclusively for transportation purposes. The Department of Commerce would be responsible for implementing the funding model by fiscal year 2015. Funds would be appropriated by the legislature, and the estimated cost of implementation would be based on bond source availability and revolving repayment.

Town Hall participants identified barriers to the optimal development of funding to meet Oklahoma's transportation and infrastructure needs. They predicted that any proposed new tax, including raising the fuel tax, will be unpopular with the voting public. However, such opposition is not insurmountable. A major awareness campaign could convince the public and legislature of the necessity of allocating funds for infrastructure. An awareness campaign should educate the public not only about the need for change but additionally inform them about the consequences of doing nothing.

Accountability and efficiency are of utmost importance and every effort must be made to instill confidence in the public that the State, county or municipality will carry out the approved plan as designed. Any new tax must be accompanied by a plan that outlines tangible benefits, return on investment for the tax payer and, most importantly, ensures the public that 100 percent of revenue raised will go toward infrastructure maintenance and development.

Other potential barriers include the rural-urban divide and a perceived usurping of freedom.

The Oklahoma Academy Town Hall recommended the Oklahoma legislature review funding for the county highway system and establish a mechanism to allow counties to issue bonds for transportation infrastructure. The Oklahoma legislature should also review exemptions on horizontal drilling as a possible source of funding for the county highway system. Further, Oklahoma should consider additional sources of funding for county highway systems including but not limited to a tax on rock, sand and gravel at the point of origin.

Public Transit: Needs, Challenges, Benefits and Funding

Town Hall participants considered and discussed various transportation needs within the State of Oklahoma that could and should be met through public transit. Generally speaking, participants agreed that almost all segments of our economy would benefit from a well developed public transit system that moves people quickly and cheaply from one place to another. More specifically, Town Hall participants recommended use of a public transit system to move students to school, workers to their place of employment or job site, tourists from the airport to hotels and tourist attractions, sports fans to sporting events and arenas and the sick and elderly to hospitals and clinics. Two panels even suggested that a Park and Ride system be explored and developed so that people in suburban and rural areas could travel quickly and easily to a variety of places within the metro area. Another panel recognized that the needs of urban and rural areas will differ as will needs in the future. The same panel identified congestion in the metro areas as a current issue that public transit could potentially alleviate.

Both opportunities and challenges to maximizing the benefits of public transit exist. Predictability and frequency present the most significant opportunities for maximizing benefits of public transportation to those who use it. Other opportunities identified by participants are the

use of smaller elements of public transit partnered with private entities to target the needs of individual groups such as vans, taxi cabs and car pooling incentives and the opportunity to create a centralized transit system with coordinated effort. One panel suggested that tribes use private transportation to connect tribal services to the community presenting an opportunity for cooperation between tribes and local governments. Challenges to maximizing the benefits of public transit include political and cultural resistance to public transportation, poor accessibility to transit systems which do exist (i.e., no sidewalks or shelters for waiting passengers), and a lack of coordination between nonprofit and governmental agencies.

In terms of prioritization, Town Hall participants recommended that only transportation systems that serve both private and public interests should be prioritized in all areas. Metropolitan areas should consider alternatives to transport workers living on the fringe of the metro area to ease interstate and highway congestion and a system to connect Tulsa and Oklahoma City. Town Hall participants also recommended that a bus system to transit Oklahomans to work, entertainment spots and to and from the airport should be a priority. In rural areas, utilization of the infrastructure already in place to transport rural students to and from school beyond normal school hours should be explored.

Town Hall participants recognized that public transportation is generally subsidized. Therefore, while user fees for using public transportation should continue, participants recommended that funding for a public transportation system should come, at least partially, from private enterprise with the remaining costs covered by local, county, state and/or federal funds. Consortiums of private interests may be able to establish transportation systems in suburban areas that can be made available to the public. Other potential funding sources identified include the creation of transit districts or dedicated local sales tax for bus and rail transit, ad valorem taxes, advertising and community services. Another method of funding would be to increase allocation to the Oklahoma State Public Transit Revolving Fund, retaining a 40 percent to 60 percent urban/rural split.

One panel recommended supporting nonprofit organizations like ITN America (Independent Transportation Network) or developing a similar organization to support sustainable scalable transportation for America's aging or disabled population (use of private transportation and banking hours). The recommendation applies to the private sector, community or individual action. The nonprofit sector and/or funders should be responsible for implementation of the recommendation. The recommended source of funding is corporate and/or private donors and volunteers. Barriers to implementation include liability and the price of fuel. The liability issue could be solved through the adoption of good Samaritan laws. This could be expanded to support transportation for those needing to get services even if not disabled or aged.

Meeting Transportation and Infrastructure Needs Without Additional or New Funding

Many options exist to help meet Oklahoma's transportation needs without requiring additional or new funding. Employers could provide virtual work places, institute flexible work hours, allow employees to telecommute, and/or conduct meetings via teleconferences or video conferences rather than face-to-face meetings. Oklahoma should review regulations and laws

regarding the ability of state, local and county bodies to use telecommunications for meetings (ie Open Meetings Act).

The virtual workplace is extremely viable for some businesses, but certainly, not all. Technology is rapidly changing and improving allowing people to more effectively telecommute. The more difficult problem to overcome is the culture of going to a physical location to work or shop. Flexible scheduling would be easy to engineer and implement, but may not be cost effective or practical. The viability of flex scheduling depends heavily on the type of industry. Virtual work-places, flex schedules and telecommuting would help alleviate traffic congestion.

Flex scheduling could be implemented immediately. Virtual workplaces would not be viable until adequate communication transmission infrastructure is in place to supply the necessary bandwidth. Oklahoma could offer use of its utility easements to private entities for the extension/development of data infrastructure to speed its development.

Changing energy and water use habits would help Oklahomans conserve some resources. These use habits could be changed through financial incentives, quality of life incentives and education. Carpooling, avoiding high density travel times, water conservation, electricity conservation are all areas that could be affected. The efforts to change these habits could be implemented immediately.

Oklahoma could expand its use of waterways and railways to transport products and materials. Waterways currently have unused capacity of 70%. Transporting bulk, non-perishable goods that do not require rapid delivery is much more cost effective via barge and railways. Because the capacity already exists, the cost would be negligible and certainly less costly than shipping via truck. This would provide an immediate decrease in truck traffic and congestion.

Communities with existing public transportation systems could better advertise and encourage greater use of these systems. The existing public transportation systems are currently underutilized and have excess capacity. Filling this excess capacity would reduce the number of automobiles on our roads. These efforts could commence immediately.

Oklahoma should seek private subsidization of public transportation. For example, casinos have public transportation from different areas to the casino and some hotels provide shuttles to patrons. The viability of this proposal would depend on whether corporate leadership could be convinced to embrace the concept.

Oklahoma should re-evaluate, prioritize and maximize the infrastructure currently in place. This process would include the re-assessment of the current allocation of funds dedicated to infrastructure. Zoning ordinances should be used to encourage development around existing infrastructure.

Oklahoma could implement a policy to encourage bicycle transportation. A significant exchange of bike riders for car drivers would drastically reduce traffic and the wear and tear on the roads.

Connecting Rural and Urban Oklahoma Communities

The panels agreed that Oklahoma has plenty of interstate highways, making travel from one side of the state to the other possible. Though recent projects have repaired many deficient bridges, several panels noted that transportation infrastructure overall is still deficient. They determined the state as a whole is playing catch up and needs to improve the maintenance of existing highways and county roads for accessibility, safety and moving goods.

Funding is the most significant challenge to connecting urban and rural areas. Market forces make airline and rail connections from urban to rural areas unfeasible, and there is currently no connectivity for intrastate bus lines.

Current municipality funding is insufficient to support development on an individual town-to-town or city-to-city basis. Rural and urban communities compete for the same funding. Cooperation or working toward a common goal, perhaps a statewide plan, is necessary to connect urban and rural communities.

To improve municipal transportation infrastructure funding, revenues from the Motor Vehicle Collection Fund currently used for municipalities should be increased from 3.1% to 13.1% over a five year period for the purpose of maintaining, constructing or improving roads and bridges within the municipalities. The Oklahoma Legislature should re-allocate the funds by July 2014.

To raise funds for maintaining state transportation infrastructure public-private partnerships should be promoted where the users of the infrastructure pay for the use. For example, the oil and gas industry should be asked to invest in the roads and bridges they use heavily. Improving enforcement of trucking regulations can be another method of increasing revenue and protecting our roads.

The Department of Commerce should identify national and international industries and businesses interested in locating to Oklahoma that would provide their direct investment to local, regional or state infrastructure prior to the final location agreement.

Creating an incentive for industries that most heavily utilize roads and bridges to use rail and waterways will reduce the deterioration of the roads. The funds saved on repairs can be used to expand roads for the futures.

Rural water districts should coordinate with the same design, engineering, construction and policy standards that municipalities follow, especially for those rural systems that abut or reside within corporate municipal limits.

Oklahoma's Transportation Infrastructure and Economic Competitiveness

Town Hall participants noted that interaction of Oklahoma's transportation infrastructure is both direct and indirect. Direct interaction is the availability of infrastructure meeting the needs of suppliers. Oklahoma has a good multi-modal framework. Connections between various production and delivery firms in the supply chain should be improved. This system needs to be maintained to be economically competitive. Another direct interaction is the availability of infrastructure supporting Oklahoma's tourism and travel. Without the viable modes to enter, exit and travel within the state, Oklahoma will lose revenue and opportunities to grow its economy. Physically visiting Oklahoma is not the only method of interacting with the state. Telecommunications and internet connectivity also strongly affect Oklahoma's ability to be competitive in a global economy.

Indirect interaction is Oklahoma's physical appearance and how residents and visitors perceive Oklahoma and its infrastructure. The state may be perceived as remote and/or inferior

due to the condition of Oklahoma's road infrastructure. This perception possibly makes Oklahoma less attractive to new business and tourism.

Both the direct and indirect interaction of Oklahoma's transportation infrastructure have impacted our ability to be more economically competitive. As a landlocked state, Oklahoma is uniquely positioned to be a major hub for interstate shipment of goods on our roads, railways waterways and airspace, and we should further capitalize on the unique location of our state for the transportation of goods being shipped from coast to coast. To further strengthen our position as a cross roads of various transportation systems within the United States, Oklahoma should continue to invest in multi-modal systems with distribution parts connecting the various transportation systems.

Town Hall participants recommended development of a long-term state-wide infrastructure plan designed to integrate the transportation systems within Oklahoma to ensure our competitive advantage nationally. Participants recognized, however, that there are challenges to the successful integration of Oklahoma's transportation infrastructure. For example, the process of obtaining permits that would allow Oklahoma to expand and connect its current infrastructure is extensive and involves regulatory hurdles that are not easy to overcome. Additionally, the uncertainty and lack of surety inherent in the planning and implementation of infrastructure discourages investment in the process. Therefore, processes should be created to facilitate and coordinate the integration of the various transportation systems within the state to encourage the utilization of all transportation systems available by current Oklahoma businesses and the relocation of new businesses to Oklahoma.

Another option would be the creation of an incentive package or portfolio to recruit global enterprise to Oklahoma. Such a package should include transportation infrastructure and natural resources, such as land, for the placement and operation of the business.

One adverse impact noted by Town Hall participants is the lack of direct flights in and out of Oklahoma City and Tulsa. It is difficult to attract aviation dependent industry and tourism into the state due to the inconvenience, time loss and expense of air travel in and out of the state. Therefore, Oklahoma should work towards strengthening direct flight offerings to large metropolitan centers outside the state, expanding runways and other facilities and services to attract and accommodate corporate jet traffic and live animal hauls.

The Oklahoma Academy Town Hall recommended that Oklahoma should develop through the Governor's office a long range transportation infrastructure development policy and roadmap akin to the recently developed "Oklahoma Energy Plan" to be a policy blue print to guide the integration and sustainable improvement of Oklahoma's multi-model transportation assets and capability for competitive advantage in the region. This recommendation requires both public policy action and private sector, community or individual action. A Blue Ribbon team appointed by the Governor should be responsible for the development of a comprehensive multi-modal infrastructure plan to be recommended for implementation in the 2015 legislative session. Funding for this recommendation could be obtained from private investment, new bonds or from an increase to the diesel fuel tax.

The Oklahoma Academy Town Hall recommended the repurpose of the Clinton-Sherman airfield at Burns Flat, Oklahoma to serve as a "Middle America" agricultural aviation hub. The

primary focus would be the time-sensitive movement of live animal stock and agricultural products internationally. This recommendation requires both public policy action and private sector, community or individual action. The Oklahoma Aeronautics Commission, Oklahoma Department of Commerce, the City of Burns Flat, Oklahoma, Southwest Oklahoma Development Authority (SWODA), the United States Air Force at Altus Air Force Base and the United States Department of Agriculture should work together to implement this recommendation. Funding for this recommendation could be obtained from new funding sources and/or a re-allocation of existing sources. Implementation of this recommendation requires Foreign Trade Zone designation.

The Oklahoma Academy Town Hall recommended interstate connectivity of non-interstate routes, such as turnpikes, to improve freight movement, tourism, and return on investment of existing infrastructure. For example, the Indian Nation Turnpike could be connected to I-30 in northwest Texas. The recommendation requires both public policy action and private sector, community or individual action. The Oklahoma Turnpike Authority and private companies building Texas turnpikes and/or the Texas Turnpike Authority should be responsible for implementation of this recommendation. Funding of this recommendation should be obtained from new sources such as out of state turnpike entities and a re-allocation of turnpike tolls on the existing system. The estimated cost of implementing this recommendation is \$900 million (\$20m/ mile x 45 miles). Barriers to implementation include the modest income raised by current Oklahoma toll fees and the ability to find a Texas partner to help shoulder the risk.

McClellan-Kerr Arkansas River Navigation System

The panels universally agreed that MKARNS is a significant element of Oklahoma's transportation infrastructure required for Oklahoma to maximize its economic future. Unfortunately, although the MKARNS is the most inland river port in the United States and the port represents the most efficient method available to transport non-perishable, bulk items, most people in Oklahoma are not even aware of its existence (at least not what the MKARNS provides). Several panels suggested raising awareness of the MKARNS to match the system's level of importance. This awareness could be created through education about its economic impact on Oklahoma and the jobs it creates. An education campaign focused on making Oklahomans aware of the needed repairs and upgrades to the MKARNS and the potential benefits it creates would generate the support necessary to obtain funding. Possibly a marketing campaign conducted jointly through the Department of Commerce, Department of Transportation and the relevant ports to provide accurate information about how MKARN could benefit Oklahoma businesses should be developed.

Promoting use of the existing capacity on our waterways would be beneficial, because it would reduce the road traffic without sacrificing any economic benefit. MKARNS provides significant benefits over trucking on shipments that can be moved by barge. These transportation costs are more stable and less affected by recession, fuel costs and availability of qualified employees (i.e. truck drivers).

Currently, 100 percent of the backlogged maintenance for MKARNS is supposed to be funded by the Federal Government. Oklahoma needs to focus efforts on getting the necessary Congressional action. It was suggested that the local governments who have jurisdiction over areas using the waterways form a coalition to lobby the Federal Government to obtain the

required funding and repairs. The Oklahoma Academy for State Goals should provide support through testimonials or a letter of support to the Congressional delegation requesting their assistance in funding maintenance on MKARNS. Oklahoma should also form a coalition with Arkansas to maintain and improve the MKARNS, including but not limited to dredging and sand maintenance. Additionally, Oklahoma must look at different additional funding methods. One possible funding method would include collaborative efforts with surrounding states that benefit from the MKARNS. Other suggestions include seeking grants, matching funds and/or TIGER funding.

A collaborative effort including water, rail, trucking and air in connected facilities, would make the Port of Catoosa more attractive. Oklahoma's infrastructure policy needs to abandon the current silo approach and develop a holistic approach including all forms of transportation. The synergy of all these modes of transportation is essential to expanding Oklahoma's import/export businesses. Oklahoma must show it is committed to ensuring good highway access to ports along the MKARNS that provide access to and from the waterway. In addition to the highway access, Oklahoma should encourage rail lines to develop longer train handling capacity for their access at ports. An intermodal transportation hub should be developed in Tulsa at the airport.

The ability to move goods via our waterway system is dependent on having available CDL drivers to transport goods from the port. A barrier identified by the Town Hall is the failure of the training/licensing system to keep up with demand. In order to resolve the training/licensing problem, Oklahoma should increase the educational capacity of CareerTech for CDL classes and increase the Department of Public Safety's capacity to do CDL testing.

In order to make the MKARNS more efficient and competitive, it must be dredged to a depth of 12 feet and the locks must be upgraded to accommodate more traffic and longer tows. It would be irresponsible and detrimental to allow the locks to further deteriorate.

Other suggestions regarding the MKARNS include:

- Allow all ports to assess their own fuel tax and/or user fees to allow MKARNS to raise its own funding to perform the dredging and maintenance
- Oklahoma should lobby the Federal Government to develop uniform forms for permits and other regulatory licenses, making the waterway a more attractive alternative.
- Additional and expanded trans load facilities need to be built at the port of Catoosa. The more flexible the trans load facilities, the more marketable the port.

Water: Developing Infrastructure, Meeting Need

The Oklahoma Water Resources Boards should continue to be the lead regulatory agency in developing water infrastructure and assessing and meeting water need in Oklahoma. The Town Hall recommended the OWRB focus on conservation, funding, distribution and transport, and facilitating intrastate and interstate collaboration. Additionally, the OWRB should educate the public on best uses and be the arbiter of due diligence.

Putting together a multi-year plan, setting forth funding requirements and measurable indicators of progress are the first steps in tackling the huge price tags on water upgrades. A 2060 water study is already in place. The state should ensure that a broad range of state interests

are reflected in the report and that it receives broad support from the public and policy makers. Rural, urban and tribal areas and their needs (water use, capital and waste water for instance) should to be considered in any state plan.

Infrastructure

The OWRB should play a central role in developing our water infrastructure to protect our water resources for the future while taking into consideration environmental flows and using regional coordination to plan water use. Considerations of water infrastructure should include waste water as well.

In some parts of the state, meeting water need/demand is an issue. The OWRB should continue to play a leadership role and provide technical assistance, especially to smaller cities, to allow municipal systems to achieve compliance. Incentivizing distribution and other water networks to work together would reap significant benefits and eventually lead to a regional system that assists small communities who struggle to meet the requirements. In turn, the total number of systems that must be funded would decrease.

Conservation

It is essential that the OWRB educate the public about and promote water conservation practices. Water conservation needs to be a state-wide effort but could happen on a regional level. For example, towns in the panhandle have come together and created a regional plan that includes conservation.

Conservation efforts should include supporting and collaborating with local conservation districts, encouraging the use of conservation easements along rivers and streams to reduce treatment costs, working with property owners on elective conservation efforts such as controlling the Eastern Red Cedar and incentivizing conservation efforts by county and city.

The Town Hall recommended that DEQ, OWRB, Oklahoma Conservation Commission and the Oklahoma Association of Conservation Districts partner together to conserve Oklahoma water by combining local, state and federal funding sources. Efforts should include rural and urban areas. Groups should address education (perhaps through a use app), lost water in transportation and irrigation as well as water use efficiency in households. Irrigation and recreation uses should also be discussed.

Funding

The OWRB's current funding mechanism is working well, but changes could be made to the funding structure to disperse a higher level of funds.

The OWRB should be a clearinghouse for the various intrastate regions for water funding and/or grant seeking activities. In order to provide municipalities with the ability to better address their own water infrastructure needs, OWRB should work with the legislature to preserve, expand and diversify municipal funding sources. The OWRB should continue their role in granting low-interest loans to develop water distribution lines and other projects. However, municipalities could pay more for their projects by charging higher fees, so they are able to recoup the cost and repay loans.

A proposed one-cent sales tax or an ad valorem tax could be a dedicated source to expand funding for water infrastructure. Most municipalities have the ability to raise these rates independent of acquiring votes. Recent votes for the bond projects highlights the public's current willingness to address the issue. Such a funding mechanism might lead to disagreement over how the money should be distributed.

Collaboration

The OWRB should interact and cooperate with surrounding states, tribal nations and state agencies when making water allocation decisions. Collaboration efforts should also include conservation districts, the conservation commission and rural water districts. Efforts should be made to streamline the planning and development process.

Economies of scale will be required of the water distribution system; thus, a regionally based system would be a benefit to the state. Utilizing a regionally based system would require addressing incompatibility between compliant and non-compliant systems. This problem could be overcome by incentivizing compliance from rural water lines to city codes and emphasizing the new customers resulting from such a connection.

The OWRB should facilitate water distribution between Eastern and Western Oklahoma. Tribal nations must be included in the negotiations. They may be open to collaboration, but we must respect their sovereignty.

Regulation

The re-use of water is a necessary future step for the State of Oklahoma, and will prevent the demand for new infrastructure and the expenditure of funds. This is a regulation issue because of current barriers in place do not provide for this efficient use of our resource. The OWRB should work with environmental regulators (DEQ, EPA) to facilitate use of treated water to boost net water availability and should work to develop regulations for reuse.

The Town Hall recommended that the (Oklahoma) Department of Environmental Quality develop regulations to permit indirect potable re-use of highly treated gray water to augment water supplies. The DEQ and legislature should work together to implement this change as soon as possible. Local municipalities would be responsible for funding the re-use of treated waste water.

Because compliance can be expensive for cities and towns with limited funds, the OWRB should petition the Federal Government to adjust water regulations. The board should provide a report detailing the costs associated with complying with the regulations.

Balancing Energy Demand and Environmental, Economic and Cultural Concerns

Town Hall participants identified the following process steps which could be utilized to encourage more timely deployment and modernization of high voltage transmission lines which would also respect the sensitivity of environmental, economic and cultural concerns:

- Educate the public to dispel myths and clarify effects regarding high voltage transmission lines.
- Explain choice of location for lines and technologies used, as well as the cost of alternatives.
- Investigate the possibility and feasibility of private utility corridors and/or interstate power grids (which are analogous to interstate highway systems) to overcome the single land owner issue.
- Enhance the energy policy at state and federal levels for the creation of collaborative regulations
- Plan and hold a forum on energy transmission to address all of the pros and cons associated with high voltage transmission lines.
- Review and monitor the current environmental laws to determine whether species listed on the endangered species list are actually still endangered.

- Incentivize the collaboration between and partnerships of transmission only companies with other transportation systems and transportation service providers to share right-of-ways in an inter-modal manner.
- Encourage the creation of partnerships between local and state entities to manage compliance with regulations.

The Oklahoma Academy Town Hall recommended the state consider adjusting re-use regulations on water. Re-use will decrease the demand for new infrastructure being constructed. The recommendation requires public policy action and should be implemented by the Oklahoma Legislature and city governments. The recommendation should be implemented by the end of the next legislative session and should be funded through a re-allocation of funds from the Oklahoma Department of Environmental Quality and the Oklahoma Water Resources Board. Barriers to implementation include the ability of state agencies, such as Oklahoma Department of Environmental Quality and the Oklahoma Water Resources Board, to work together and the lack of education regarding the re-use of water.

The Oklahoma Academy Town Hall recommended a process of mutually agreed memorandums of understanding between state and federal regulators that promote grid improvements and balance access, security and reliability with costs. The recommendation requires public policy action and should be implemented by the Oklahoma Corporation Commission, the Southwest Power Pool and the EPA.

The Oklahoma Academy Town Hall recommended that an informational forum be hosted by the Oklahoma Academy in the spring of 2014 to discuss the strengths, weaknesses, benefits, and concerns regarding the placement and construction of high voltage transmission lines in the Southwest Power Pool region. This recommendation requires private sector, community and individual action by the Oklahoma Academy to work with industry and citizens. It should be implemented in April of 2014.

Oklahoma should coordinate public and private resources to the research and development of enhancing renewable energy storage. Oklahoma should commit the necessary resources to be the industry leader in the development, manufacture and distribution of renewable energy storage systems. The funding for this R&D should be derived from a dedicated income tied to the exporting of renewable energy from Oklahoma to other jurisdictions. The Secretary of Energy and Environment should be responsible for implementing this program immediately.

Oklahoma should study the potential of multimodal collaboration (roads, rail, and electric transmission) in building transportation capacity and the multiple use of existing or shared rights of way.

Extending High Speed Broadband Services to all Parts of the State

A great disparity exists between rural and urban areas in access to HSBS. It is generally accepted that Oklahoma has an adequate HSBS infrastructure for the middle-mile. The key to providing access to HSBS to everyone in Oklahoma lies in the last-mile.

As a means of funding the expansion of last mile development, Oklahoma should encourage rural communities to pass bond issues to develop broadband infrastructure and allow the local public to repay the bond issue through user fees.

The stated public policy must be to adopt the leading edge technologies for telecommunications.

One suggestion was to conduct a statewide study of best practices to develop standards for wireless providers that would level the playing field between wireless and traditional land line providers.

Oklahoma should conduct a needs assessment to determine the existing and future demand for HSBS and determine how best to expand the infrastructure. We should get private companies and tribal nations involved to collaborate and contribute. The assessment should also determine whether the private sector will expand into the specified area without any government intervention or incentives. The State's limited resources should be restricted to expanding HSBS into areas that the private sector would not otherwise cover.

When delivering HSBS to remote regions of the state, multiple providers could form partnerships to distribute costs and share spectrum allowances. The FCC should open up spectrum allowances to satisfy the needs for coverage in remote areas. These spectrum allowances should be monitored to ensure it is allocated to areas that need it.

The FCC should require tower owners to allow co-locating on the towers to reduce the number of towers.

Oklahoma should allow last mile providers to run fiber along shared utility corridors and investigate possible partnerships between public and private entities to combine utilities.

Low interest loans for HSBS infrastructure development could be offered. Cities should work with providers to exchange access to rights of way in exchange for free HSBS services.

Oklahoma could offer reasonable tax incentives to service providers that expire in five years to bring closure to broadband connectivity in rural Oklahoma for "last mile" distribution. The service providers would have the responsibility to install the last mile, and the Corporation Commission would have oversight responsibility.

Improving Education With Telecommunication Technology Infrastructure

Telecommunications technology infrastructure allows many opportunities to improve quality, accessibility and outcomes throughout an individual's education.

Benefits and advantages

Benefits of online learning include student engagement, individual instruction plans for students who cannot attend school, better remediation, absence of peer pressure, instructor consistency for students who need such stability, educational opportunities (AP classes, concurrent enrollment and increased learning modalities) for advanced students that are not otherwise available, and education access for nontraditional students and those lacking transportation.

Telecommunications technology infrastructure could help retention rates in areas where the drop out rate is high by utilizing virtual classrooms that give students access to the required curriculum and classes across the state.

For higher education, access to technology is vital. Online learning may be cost-effective. As the cost of textbooks rises, online versions serve to save students hundreds of dollars every semester. Students who may not be able to attend a university can access online learning options

and may be more likely to graduate. Distance learning can enable a student to acquire essential technical or business skills from anywhere in the world.

Performance and Outcomes

The quality of online learning must be scrutinized. There must be a system of accountability and enforceable guidelines to ensure that education is taking place at a high level, comparable to the service available through the traditional model.

Finally, it must be kept in mind that technology itself does not equal quality. Instructors are not always trained to teach effectively online. The classroom environment and interaction between students and instructors are critical. Instruction paired with technology serves to allow for a blended approach to education.

Diminishing the Digital Divide

The digital divide exists on multiple levels. It affects both rural and urban areas. Telecommunication technology infrastructure can help bridge the digital divide. Urban and rural schools can collaborate to provide courses. For example, if a rural school is lacking a qualified foreign language instructor that school could work with another district or school to offer the course.

Infrastructure is imperative and must be reliable. Many rural communities do not have the infrastructure to effectively provide online education. Without the necessary infrastructure, those schools are at a disadvantage.

Telecommunication companies building infrastructure should be encouraged to or compelled to complete connectivity to educational institutions by a set deadline. In the development of technology infrastructure, the target should be what is possible in the future and not limited to the technology available now.

State owned fiber capacity along highway rights-of-way exists for universities, hospitals and government agencies. The Town Hall recommended the state enter into agreements with private companies and municipalities for excess capacity at low or no cost targeting underserved rural areas.

Another option for improving telecommunication infrastructure is putting private towers on public property to give rural schools access. By agreement, schools would be given free access to wireless broadband width.

Prioritized Actions to Improve Oklahoma's Transportation Infrastructure

Town Hall participants identified several critical or essential actions that should be taken. Funding is critical when considering sustainable infrastructure. Funding must keep up with needs and be dedicated. To that end, the Oklahoma Academy Town Hall put forth the following specific recommendations:

The Oklahoma Academy Town Hall recommends that the fuel tax be based on a percentage of the wholesale price of fuel rather than a static per-gallon amount. This will enable the fuel tax to index the rate of inflation. This recommendation requires public policy action by the Oklahoma Legislature and should be implemented by 2015. A barrier to implementation includes resistance to changes in tax structure and will require education of the general public.

The Oklahoma Academy Town Hall recommended that the share of state motor vehicle collections for municipal roads and bridges be gradually increased over a five year period from its current level of 3.1% to 13.1% with a commensurate reduction in the apportionment to the general revenue fund, helping ensure state transportation revenues are used strictly for transportation purposes. This recommendation requires public policy action by the Oklahoma Legislature and should be implemented by late 2014 or early 2015 (with the end of the five year period being late 2019 or early 2020). Much of the estimated cost of implementation will come from future growth in overall motor fuel tax collections. Ultimately, this recommendation will increase municipal road and bridge funding by \$84 million.

The Oklahoma Academy Town Hall recommended Oklahomans support passage of the federal Marketplace Fairness Act to enable the state, counties and cities to sustain the transportation infrastructure. This recommendation requires public policy change and can only be implemented by Congress. This recommendation should be implemented by 2015 with funding coming from an improved method of collecting an existing tax. The estimated financial impact of this recommendation is \$250 million plus per year in tax dollars generated for the support of state, county and local government infrastructure. Implementation of this recommendation will prevent further erosion of the state, county and local sales tax base and will create equity between main street businesses and their out of state internet based competitors.

The Oklahoma Academy Town Hall recommended the following for the purpose of generating necessary revenue to address critical infrastructure development: (1) enhanced bonding capacity of the state; (2) building of an endowed fund specifically committed to infrastructure improvement; (3) selling of excess state assets. A citizen task force should be created to consider and implement this recommendation.

Oklahoma should adopt a statewide approach to long-term infrastructure planning. Planning should include collaboration with neighboring states. A task force should be created by the Governor composed of key stake-holders including representatives from the four quadrants of the state. This task force shall:

1. Identify infrastructure issues/deficiencies that Oklahoma faces;
2. Establish the estimated cost of solving the identified infrastructure issues/deficiencies;
3. Identify barriers to solving issues/deficiencies;
4. Establish specific solutions to issues/deficiencies;
5. Establish a timeline for implementation

Other funding sources and methods identified include the re-evaluation of tax credits to make more funds available for allocation to support transportation infrastructure in Oklahoma, encouragement of continued federal funding for the MKARNS through advocacy to the legislature, increase of the fuel tax through a state question. All recommended funding actions should be given immediate priority.

The Oklahoma Academy participants also identified a variety of other critical issues and actions dealing with transportation infrastructure. One such issue, which was raised a number of times, is the need for long-range planning. To that end, the Oklahoma Academy Town Hall recommended that each agency responsible for the oversight of a state infrastructure system be responsible for the development of a long-range plan for infrastructure needs, the current revenue

streams, allocations of such revenues and the anticipated return of investment for implementation of the infrastructure plan. This recommendation requires public policy action and should be implemented by the appropriate state agencies by the end of 2014.

The Oklahoma Academy Town Hall recommended that the OTA be modernized to (1) streamline toll collection to make it more user friendly and seamless for coordination with other states, (2) streamline the Pike Pass purchasing process, (3) coordinate planning with the Oklahoma Department of Transportation so the system compliments, rather than competes with, other state highways. This recommendation requires public policy action and should be implemented by the Secretary of Transportation, the Oklahoma Department of Transportation and the Oklahoma Turnpike Authority by 2015. Funding for this recommendation should be obtained by re-allocation of an existing source and should eventually reduce administrative costs and increase toll collection.

The Oklahoma Department of Transportation, the Governor's office, and the Oklahoma County Commissioners Association should be made aware of and promote the tribal transportation program.

Town Hall participants identified the following items for implementation but disagree as to when such implementation should occur.

- Request the DEQ to modify regulatory policies and create procedures for the re-use of treated wastewater. This could be accomplished through agency or legislative action.
- Promotion of multi-modal transportation coordinated through collaboration with ODOT, DOC and the ports.
- Encourage businesses to locate and invest in Oklahoma through tax breaks and a portfolio of incentives.
- Public education regarding deficiencies to the current transportation infrastructure.
- Streamlining of regulation of transportation infrastructure.

Town Hall participants also identified a variety of issues that did not receive adequate time or attention during the 2013 Town Hall. Those include: aviation, pipelines, damage to roads and bridges created by overweight trucks with emphasis on ports of entry, under ground facilities, and conversion of vehicles to utilize compressed natural gas.