

Contents

Message from the Chair and Executive Director	iii
Focus Issues.....	5
Criminal Statutes of Limitations	5
Food Deserts.....	6
Excess Property.....	7
Local Revenue and Services	9
Internet Sales Tax.....	9
K-12 Education Funding and Services.....	10
Local Government Procurement and the Acceptance of Online Bids.....	11
Global Positioning Systems Monitoring	12
Illegal Tire Dumps	14
Tennessee’s Public Infrastructure Needs	15
February 2019.....	16
January 2020	17
Appendix A: Commission Members	19
Appendix B: TACIR Accomplishments by Research Area	21
Fiscal Year 2018-19	21
Fiscal and Tax Policy Research.....	21
Education Finance.....	21
Land Use, Transportation, and Growth Policy	21
Infrastructure.....	21
Other Research	21
Using Technology for Public Information	22
Fiscal Year 2019-20	22
Fiscal and Tax Policy Research.....	22
Education Finance.....	22
Land Use, Transportation, and Growth Policy	23
Infrastructure.....	23
Other Research	23
Using Technology for Public Information	23



Appendix C: TACIR Publications 25

Appendix D: Staff Presentations 27

Appendix E: Conference and Meeting Attendance 29

Appendix F: TACIR Organization, Mission, and Goals..... 31

Appendix G: What Does TACIR Do?..... 33

Appendix H: Legislation Affecting TACIR..... 35

 Fiscal Year 2018-19 35

 Fiscal Year 2019-20 36

Appendix I: Summary of Commission Meeting Minutes 37

 Fiscal Year 2018-19 Scheduled Commission Meetings..... 37

 September 6-7, 2018 37

 December 12-13, 2018..... 41

 January 31-February 1, 2019 45

 May 29-30, 2019 51

 Fiscal Year 2019-20 Scheduled Commission Meetings..... 55

 September 5-6, 2019 55

 December 11-12, 2019..... 66

 May 13-14, 2020 86

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Message from the Chair and Executive Director

This Biennial Report of the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) describes the accomplishments and primary activities of the Commission during fiscal years 2018-19 and 2019-20. The Commission's members take the mandate to provide a future-oriented perspective to public policy and intergovernmental relations seriously, focusing the efforts of the research and support staff on exhaustive, deliberative efforts to ensure that its recommendations and observations to the state's elected leaders and officials are both well informed and solidly grounded. The expertise and hard work of the talented individuals who serve on the Commission and shape the reports developed by its staff are essential to TACIR's success. Commission members for fiscal years 2018-19 and 2019-20 are listed in appendix A.

The report describes the work of the Commission in aiding local governments, the General Assembly, and the State of Tennessee and offers a focused overview of key issues the Commission addressed during the period covered, including criminal statutes of limitations, local revenue and services, and public infrastructure needs, among others. The broader scope of the Commission's work can be seen in the lists of publications, presentations, relevant legislation, and meeting participation included in the appendixes.

In closing, we wish to memorialize the passing of two members who served during the period covered by this report, Representative Charles Sargent and Metropolitan Nashville-Davidson County Trustee Charlie Cardwell. Both of these gentlemen were consummate public servants and valued members of the Commission. They will be missed.



Representative Mike Carter
Chairman, TACIR



Cliff Lippard
Executive Director, TACIR

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Focus Issues

The Commission and its staff addressed a variety of issues during fiscal years 2018-19 and 2019-20. Some of the highlights include criminal statutes of limitations, food deserts, excess government property management, internet sales tax, K-12 education funding and services, local government procurement, and the acceptance of online bids, global positioning system monitoring of defendants on bail, illegal tire dumps, and public infrastructure needs. The diversity of these issues demonstrate the range of topics that fall within the purview of the Commission’s mission to

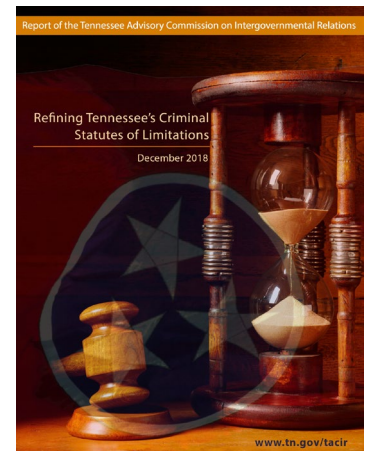
serve as a forum for the discussion and resolution of intergovernmental problems; provide high-quality research support to state and local government officials to improve the overall quality of government in Tennessee; and to improve the effectiveness of the intergovernmental system to better serve the citizens of Tennessee.

Criminal Statutes of Limitations

Criminal statutes of limitations (“SOLs”) are laws that set time limits for the prosecution of a crime after it occurs. After the relevant SOL period expires, the state can no longer bring charges, even if more than enough evidence of the perpetrator’s guilt is later obtained. According to legal experts, SOLs are a matter of legislative choice and represent efforts to balance the competing interests of protecting defendants from inaccurate charges from the past while maintaining public safety and finding justice for victims.

Prompted by testimony of a child sexual abuse survivor whose abuser escaped prosecution because of the state’s SOL, the Tennessee General Assembly passed Public Chapter 849, Acts of 2018, which directed TACIR to perform a study on Tennessee’s criminal SOLs and specified that the study include information on the SOLs on the prosecution of sexual offenses. The Commission’s report, *Refining Tennessee’s Criminal Statutes of Limitations*, explained that for the most serious crimes—such as murder and child rape offenses—most states have no time limits on prosecution. Tennessee, unlike the large majority of other states, still has time limits on the prosecution of second degree murder and for child rape offenses. In the last two decades, at the urging of child sexual abuse survivors, many states have eliminated or extended the SOL for various child sexual abuse crimes. Research shows that victims of child sexual abuse often do not disclose the sexual abuse until much later in life if they disclose at all.

In 2019, the 111th General Assembly enacted Public Chapter 499, which codified changes similar to one of the recommendations from the Commission’s report and incorporated two others. Specifically, the act



eliminated the criminal statutes of limitations for all felony child sex crimes committed against victims less than 13 years of age. The Commission had recommended eliminating the statute of limitation for all Class A and B felony child sexual abuse crimes and considering extending or eliminating the statute of limitation for other child sexual abuse crimes. For felony child sex crimes committed against victims between the ages of 13 to 17 years of age, the new law eliminated the statute of limitation if the victim reports the crime to another person prior to the victim attaining 23 years old. For those victims between the ages of 13 to 17 years old, if the aforementioned reporting requirement is not met, for prosecution to be brought more than 25 years after the victim reaches 18 years of age, the prosecution must offer admissible and credible evidence corroborating the allegations or similar acts by the defendant. As recommended in the Commission's report, the new law also corrected the drafting error in state statute that had the unintentional effect of shortening the statute of limitation for child rape and aggravated child rape offenses if the victim did not report the crime within three years of the offense. Following another one of the recommendations from the Commission's report, the General Assembly also enacted Public Chapter 410, Acts of 2019, which extended the statute of limitation for prosecution of second degree murder from 15 years from the offense to at any time after the offense committed.

Food Deserts

Many studies have linked disparities in public health to food access and consumption. In particular, researchers have found that people living in food deserts, which are low-income areas lacking large grocery stores, supermarkets, or supercenters, tend to have a less nutritious diet and poorer health outcomes than those living in other communities. In Tennessee, 21% of the state's population lives in areas considered food deserts—15% in urban food deserts and 6% in rural food deserts.

But because food deserts by definition lack large grocery stores, supermarkets, or supercenters, researchers and policymakers, including recent legislative efforts in Tennessee, have tended to focus on improving access to healthy food by opening or expanding retail establishments in these communities. Public Chapter 795, Acts of 2018, directed the Commission to study the benefits and costs of creating a special reserve fund in the state treasury for the sole use of funding grants and loans to encourage the financing and development of affordable healthy food retailers—referred to in the Act as food desert relief enterprises. Although the use of government incentives can help encourage the development of food retailers in food deserts, it is unclear whether simply opening or expanding stores in these communities leads to measurable changes in diet or health.



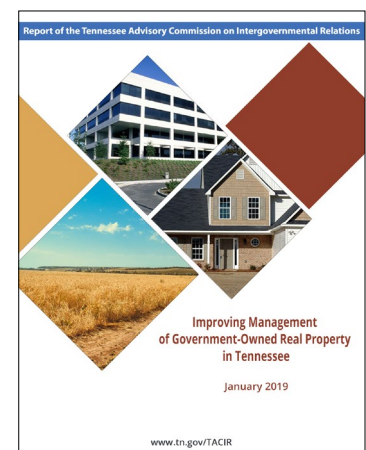
The Commission's report, *Access to Affordable Healthy Food*, explains that the primary barrier to opening grocery stores in many food deserts is that expected revenues are not great enough relative to costs. To offset startup or renovation costs for grocery stores or similar food grocery retailers located in food deserts, governments and private entities have offered grants, loans, or other incentives. The grants and loans proposed in Public Chapter 795, Acts of 2018, would have been funded by a percentage of the revenue generated by the existing sales tax on food collected from the sale of sugar-sweetened beverages, which was estimated to generate approximately \$26,000 per year.

Furthermore, the report found that research has not consistently demonstrated that simply opening new or expanding existing stores results in measurable improvements in diet and health or reduces the actual costs of obtaining healthy foods for residents of food deserts. Without an emphasis on education and community outreach, just being closer to nutritious food may be less likely to lead to citizens purchasing, properly preparing, and consuming it. While not always limited to food deserts, a variety of policy alternatives have been implemented in states and communities around the US to both improve access to and encourage the consumption of healthy food, including improving transportation to and from healthy food retailers, bringing the food to the customer through mobile markets or food delivery, providing vouchers for fruits and vegetables, emphasizing education to encourage healthy eating, and offering grants to give residents healthier options for food and exercise.

Given the costs of opening and renovating grocery stores and other similar food retailers and the complex relationship between improved access to healthy food sources and measurable improvements in diet and health, the report recommended that the state focus its efforts on leveraging the variety of public and private resources that are already available to assist communities in crafting solutions tailored to local needs. If Tennessee were to adopt a program for encouraging the development of grocery stores and other food retailers in food deserts, the state should structure the program as a public-private partnership with one or more community development financial institutions, or similar entities, to take advantage of existing federal programs and to maximize private investment and should incorporate consumer education and outreach into the program.

Excess Property

In 2018, the General Assembly passed Public Chapter 693, directing TACIR to determine the amount of non-tax-producing properties held by state and local governments in Tennessee and include recommendations in its report as to the highest and best use of the properties, as well as ways for making them productive. This study was prompted by the opening of a major retail development in East Ridge, Tennessee in 2016 on excess, state-



owned right-of-way property. “But the development also raises questions: How much unused government owned land exists in Tennessee and to what uses could it be put?”

The Commission’s report, *Improving Management of Government-Owned Real Property in Tennessee*, found that insufficient information hinders the efforts of the Department of General Services (DGS) to plan for the state’s real property needs and cites examples from the federal government and other states for ways to improve upon government real property management. TACIR surveyed local governments about their property issues and found that unwanted property acquired after tax sales is a leading concern.

To address these concerns, the report recommended all state agencies submit property-use information along with annual real property plans to the DGS, and that the state consider making the reporting of property use and real estate plans a part of each agency’s budget process. The state could require the Tennessee Department of Transportation (TDOT) to report its right-of-way (ROW) property to DGS; this would require TDOT to first complete an inventory of all its ROW property and determine which properties are needed and which are not. To facilitate identification and disposal of unneeded ROW property in Tennessee, TDOT could both actively market its surplus ROW property for sale and work with DGS to integrate surplus TDOT properties with the overall surplus property strategy for the state. The state could require the integration of geographic information systems with the state-owned property inventory to provide for more robust analysis and help promote the highest and best use of the state’s real estate assets.

The Commission’s report also suggested methods by which the state could assist local governments with the management and disposal of surplus property. As previously suggested in the Commission’s 2012 report, *Dealing with Blight: Strategies for Tennessee’s Communities*, the state could provide legal authority allowing any city or county to establish a land bank. The state could also help local governments reach a wider audience of potential buyers by allowing local governments to post links to their surplus real properties—including tax-delinquent properties—on the state’s website where the state advertises its surplus real property. The state could ensure that local government officials are always aware of state surplus available in their jurisdiction by requiring DGS staff to notify local officials of surplus state-owned properties that are available in their jurisdictions before offering the properties to the public for sale—as is already done voluntarily by DGS staff. Finally, the state could offer additional training on best practices for real property management for county and city officials to promote the highest and best use of real property owned by local governments.

Local Revenue and Services

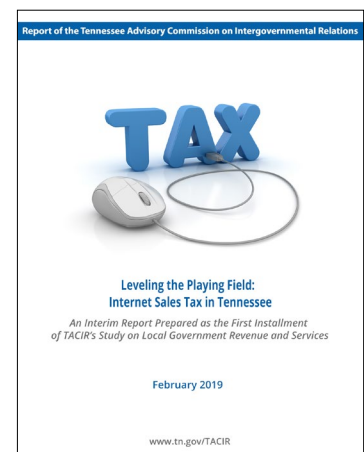
During its discussion of House Bill 971 by Representative Charles Sargent (Senate Bill 1075 by Senator Bo Watson) in the 110th General Assembly, a bill that as introduced would have revised the distribution of local government revenue generated by the 2.25% local sales tax imposed on sales made in this state by dealers with no location in Tennessee, the House Finance, Ways and Means Committee asked the Tennessee Advisory Commission on Intergovernmental Relations to study the duties of counties and cities mandated by law and the funds that go from the state to counties and cities to comply with the law.

The Commission, as suggested by its local members, directed staff to produce two interim reports as part of the research for the overall study. The first interim report was published in February 2019 and addressed online sales tax collection and distribution. The second interim report was published in January 2020 and focused on K-12 education services and funding. As the fiscal year closed, staff continued to prepare a draft of the final report in the local revenue and services series, which will provide a broad overview of the services local governments in Tennessee provide—including both required services and those that are authorized but not required—and the revenue available to fund them.

Internet Sales Tax

Prompted by the US Supreme Court's 2018 decision in *South Dakota v. Wayfair*, which opened the door for states to require out-of-state sellers with no physical presence in the state to collect and remit sales tax, and because provisions of Tennessee law relating to the Streamlined Sales and Use Tax Agreement (SSUTA)—a multistate effort that has the effect of reducing the burden of sales and use tax collection on retailers—were set to become effective July 1, 2019, unless the General Assembly took action, the Commission decided the local revenue and services study should initially focus on internet sales tax collection and distribution and on the streamlined provisions in Tennessee law.

In its 2019 report, *Leveling the Playing Field: Internet Sales Tax in Tennessee*, the Commission recommended that the General Assembly enable the Department of Revenue to enforce Rule 129, requiring out-of-state sellers with sales of more than \$500,000 in Tennessee to collect and remit sales tax (known as “economic nexus”). The General Assembly had prohibited enforcement while awaiting the outcome of *Wayfair*, but following the ruling, enforcement was enabled. The Department of Revenue subsequently required out-of-state sellers subject to Rule 129 to register and begin collecting sales and use taxes by October 1, 2019, increasing sales tax collections for the state and local governments in Tennessee. The report also recommended that the state consider lowering the threshold



that triggers the requirement for out-of-state sellers to begin collecting sales tax to further increase state and local revenue, which the 111th General Assembly did through the passage of Public Chapter 759, Acts of 2020. The new law lowers the threshold to \$100,000 in sales beginning October 1, 2020.

The Commission's report also addressed Tennessee's associate member status in the SSUTA. According to the Streamlined Sales Tax Governing Board, an associate member state is a state that has achieved substantial compliance with the terms of the SSUTA, but not necessarily with each provision, as required by the SSUTA. In its *Wayfair* decision, the Supreme Court spoke favorably of South Dakota's full membership in the SSUTA, but it did not require full membership in the SSUTA as a prerequisite for taxing out-of-state sellers without a physical presence in a state. Subsequently, 20 states, including Tennessee, that are not full members of the SSUTA have enacted economic nexus.

Previously, Tennessee adopted some SSUTA simplification provisions to become an associate member, along with some other provisions with delayed implementation that were necessary for full membership. Because some of these delayed provisions involve significant changes to Tennessee's sales and use tax laws that may not be in the state's interest, the Commission recommended in its report that the General Assembly not allow two provisions of state law that were intended to move Tennessee toward full membership to go into effect: changing Tennessee from origin-based to destination-based sourcing for intrastate sales and limiting the single-article cap to motor vehicles, aircraft, watercraft, modular homes, manufactured homes, and mobile homes. Neither change has been enacted by the General Assembly. But these and other streamlined provisions are set to become effective July 1, 2021, without further action by the General Assembly. The General Assembly has postponed the effective date of these provisions every two years since they were originally set to become effective in 2009.

K-12 Education Funding and Services

To better understand why and how funds for K-12 public education in Tennessee are spent and how the formula for funding school systems might be improved, the Commission directed staff to complete a second interim report, *K-12 Public Education Funding and Services*, as part of the Commission's comprehensive study on the duties of counties and cities under state law and the funds the state provides to support them.

The report explains that a combination of federal and state laws and regulations provide the minimum standards for the operation of public school systems, and within this framework, the services each school system provides are driven locally by student needs and community expectations.



There is no single blueprint for services that fits every school system and every child, and the state has delegated considerable authority to operate schools to locally elected school boards to account for these differences.

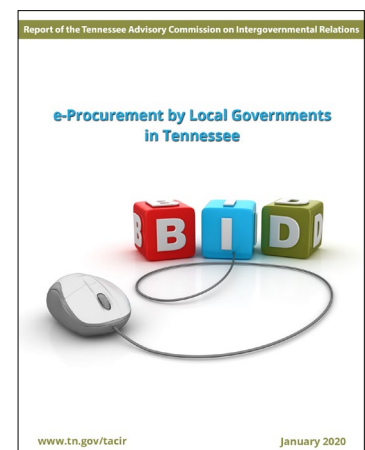
The state also grants school boards considerable flexibility over education spending. Approximately 95% of all state revenue school systems in Tennessee receive is provided through the Basic Education Program (BEP) formula, which was created by the Education Improvement Act of 1992 and funds a number of components to provide a basic level of state and required local matching funds for each of Tennessee’s public school systems. The report details how these components are calculated for school systems and restrictions on how funding for some components may be used.

The report explains that the meaning of the word “basic” for purposes of the BEP is not defined in law but rather through a review committee of state and local officials and other stakeholders to review and make recommendations to the General Assembly for needed revisions to the BEP formula. A review of the BEP Review Committee’s annual reports revealed that many of its recommendations have been implemented through the addition or enhancement of certain components of the BEP funding formula. However, not all of the BEP Review Committee’s recommendations have been implemented. And while the changes made in 1992 and subsequent changes resulted in substantial increases in state funding to support the BEP, the report found that meeting local needs and the requirements imposed by the state and federal governments often requires more resources than the BEP formula alone provides. Consequently, state and local funding in fiscal year 2017-18 totaled \$2.1 billion over and above what was required by the BEP formula, including a total of \$1.7 billion in local revenue.

Given the ever evolving needs of communities in Tennessee and the likelihood that the BEP funding formula could better account for these needs, the Commission recommended a comprehensive review of the components be made by the BEP Review Committee or other designated state and local officials and other stakeholders to ensure that the BEP funding formula supports a commonly accepted basic level of education for Tennessee students.

Local Government Procurement and the Acceptance of Online Bids

As government purchases are made using taxpayer dollars, public procurement is subject to tighter regulations, more intensive scrutiny, and a greater degree of accountability than private sector procurement. As technology has advanced, local governments are increasingly using new tools and services to improve their effectiveness and efficiency. To



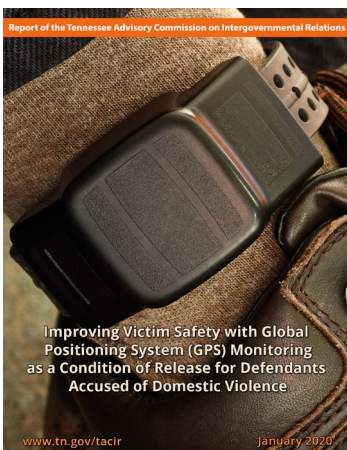
that end, Tennessee Code Annotated, Section 12-4-116, provides that Tennessee’s local governments may receive bids, proposals, and other offers electronically, i.e. online. In 2019, a Louisiana company that provides e-procurement services to local governments lobbied to amend Tennessee state law to make the receipt of online bids mandatory instead of permissive—House Bill 635 by Representative Ron Travis—requiring Tennessee’s local governments to provide a “secure electronic interactive system” and to accept bids, proposals, and other offers electronically through that online system. The House Local Government Committee requested that TACIR study the proposed law.

In its report, *e-Procurement by Local Governments in Tennessee*, the Commission recommended that e-procurement remain discretionary for local governments. While interviews with relevant stakeholders determined that some aspects of e-procurement are beneficial to local governments, few local governments in Tennessee have online systems in place to receive electronic bids and other offers. To meet the requirements of the bill, those governments without such a system would be forced to develop their e-procurement systems or contract with an e-procurement service provider. Several of Tennessee’s local government stakeholders—including the Tennessee County Services Association, the Tennessee Municipal League, and the Tennessee Association of Public Purchasing—opposed the bill on the grounds that it would create an unfunded mandate, among other concerns. Under the terms of the bill, even those local governments that already accept online bids for certain purchases would be required to accept online bids for all their bids and offers, losing their ability to choose when online bidding is the most effective route for them. A review of other states’ laws revealed that only Louisiana and Mississippi make e-procurement mandatory for local governments.

The report discusses another approach taken by states such as Virginia and Maryland that have state-level e-procurement systems. These states allow their local governments to use their statewide systems free of charge to receive online bids and offers. The report further explains that Tennessee’s state-level e-procurement software system, operated through the state’s Edison system, is not currently configured for use by local governments and would need to be upgraded if lawmakers wanted to provide local governments the ability to use the state’s system to receive electronic bids and other offers.

Global Positioning Systems Monitoring

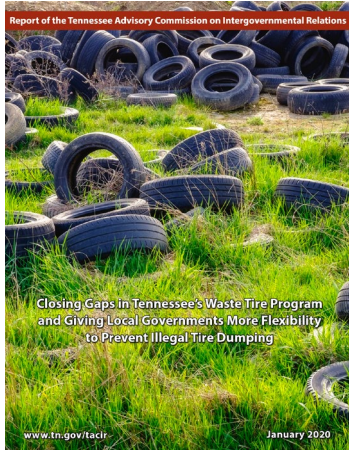
Pretrial Global Positioning System (GPS) monitoring is one condition of release that magistrates in Tennessee may impose for domestic violence defendants. Although it is a tool that can help improve victim safety, some experts and researchers in the field of domestic violence question GPS monitoring’s effectiveness in keeping victims safe and reducing recidivism



during the pretrial period, and funding it is a challenge. But in light of its potential as a tool to improve victim safety in domestic violence cases, the General Assembly passed Public Chapter 827, Acts of 2018, directing the Commission to conduct a study of the effects and implementation of GPS monitoring as a condition of release for defendants accused of stalking, sexual assault, domestic abuse, and violations of orders of protection.

The Commission's report, *Improving Victim Safety with GPS Monitoring as a Condition of Release for Defendants Accused of Domestic Violence*, details findings from the implementation of GPS monitoring programs in Memphis and Shelby County and in other states. The Commission's report explains that because of the unique and complex nature of domestic violence, pretrial GPS monitoring is most effective when implemented within a well-coordinated system involving courts, local law enforcement, local government, private vendors, and victim support services. To help maximize GPS monitoring's effectiveness for increasing the safety of domestic violence victims during the pretrial period, the report recommended local jurisdictions consider adopting it as one component of a larger coordinated community response that involves strong interagency partnerships, cooperation and commitment from stakeholders, education, and training, and victim support services such as family safety centers, domestic violence high-risk teams, and lethality assessments—a tool for identifying victims most at risk of serious harm or death. The report further encourages law enforcement and victim advocate agencies to adopt such assessments regardless of whether local governments choose to implement GPS monitoring programs because they help prioritize victims' access to safety planning and other services.

The report explains that the cost of GPS monitoring programs varies based on how they are structured and that finding sufficient and recurring funding for GPS monitoring for domestic violence cases is an obstacle to implementation. Funding sources in Tennessee include defendants, grants, local revenue, and the state's Electronic Monitoring Indigency Fund (EMIF), which is available to pay 50% of the cost of pretrial GPS monitoring for indigent domestic violence defendants with the other 50% covered by local governments. But depending on how many local governments choose to participate in the EMIF, current funding most likely will not be enough to cover the state's share in all cases. Given the importance of operating a pretrial GPS program within a larger coordinated community response and that funds for such programs are limited, the Commission recommended the General Assembly, if it appropriates additional funds specifically for real-time GPS monitoring of domestic violence defendants, require local governments drawing money from the EMIF, at a minimum, adopt a validated lethality assessment tool to both help identify which domestic violence victims are in the greatest danger and immediately connect those victims with safety planning and other services to improve their safety.



The report also explains how deciding which defendants should be monitored requires balancing victim safety with defendants' rights, and therefore local governments adopting pretrial GPS monitoring programs may choose to prioritize high-risk cases and certain types of offenses as Memphis and Shelby County did in their program.

Illegal Tire Dumps

At the request of Senator Steve Dickerson and Senate Energy, Agriculture, and Natural Resources Committee Chairman Steve Southerland, the Commission studied the issue of waste tires and suggested possible measures to prevent and reduce illegal dumping. In its report, *Closing Gaps in Tennessee's Waste Tire Program and Giving Local Governments More Flexibility to Prevent Illegal Tire Dumping*, the Commission made numerous recommendations to address the public health risks and cleanup costs associated with abandoned and waste tires to improve the state's current efforts concerning illegal tire dumps.

The report describes Tennessee's existing program to manage waste tires and repurpose them for beneficial end uses. To provide funding for counties and the state to manage waste tires, Tennessee, like many other states, collects a fee—currently \$1.35—on the sale of new tires, and retailers of new tires must register with the Tennessee Department of Revenue to remit the pre-disposal fees. However, Tennessee's waste tire program does not include the same requirements for retailers of used tires. Given the potential dangers of illegal tire dumps and the costs to clean them up, local governments in Tennessee would benefit from being able to identify all retailers that are sources of waste tires in their communities. For this reason, and because additional efforts to prevent dumping will require funding, the report recommends expanding the applicability of the tire pre-disposal fee to retail sales of used tires.

While most states require tire haulers to obtain permits, Tennessee does not. In these states, businesses selling tires are held responsible for proper disposal of their scrap tires, either on their own or by contracting with permitted tire haulers. Several states additionally require tire haulers to provide financial assurance before obtaining a permit. Because it could help local authorities identify and inspect vehicles carrying tires, facilitate better tracking of waste tires, and provide restitution when haulers are found responsible for illegal dumping, the report recommends that the state require commercial waste tire haulers to obtain a permit and provide proof of financial assurance, while requiring registered tire retailers to use only permitted haulers or document and transport their own waste tires for proper collection.

Local officials interviewed for the study said that the state's current tire program places too many restrictions on both the use of pre-disposal

fees and the disposal of waste tires. These officials said they would like to use revenue from pre-disposal fees to fund outreach, education, and other actions designed to prevent illegal dumping, as residents and business owners may not know about their county's collection site, whether they can dispose of some tires for free, what the penalties are for illegal dumping, or how waste tires facilitate the spread of diseases and pose other public health risks. Local officials also expressed a need for more flexible cost-effective disposal options since current law prohibits counties from shredding tires and disposing of them in landfills unless they show it would be cheaper than processing them for beneficial end uses and, under all circumstances, prohibits pre-disposal fees from being used to dispose of tires in landfills. Because allowing local governments greater flexibility for disposing of waste tires could lead to a more efficient use of the limited revenue generated by pre-disposal fees and because establishing a relationship between local governments and tire businesses could be an effective way to hold businesses accountable and monitor activity, the Commission's report additionally recommended expanding the purposes for which local governments may use pre-disposal fee revenue to include public education, inspections, enforcement, and, under certain circumstances, disposal of shredded waste tires in landfills where the beneficial end-use is documented to be cost-prohibitive.

Tennessee's Public Infrastructure Needs

During fiscal years 2018-19 and 2019-20, the Commission released the seventeenth and eighteenth reports in the series on Tennessee's infrastructure needs, *Building Tennessee's Tomorrow: Anticipating the State's Infrastructure Needs*. Public Chapter 817, Acts of 1996 requires the Commission to compile and maintain an inventory of public infrastructure needed in Tennessee and present these needs and associated costs to the General Assembly during its regular legislative session. The inventory, by law, is designed to support development by state and local officials of goals, strategies, and programs to

- improve the quality of life of all Tennesseans,
- support livable communities, and
- enhance and encourage the overall economic development of the state through the provision of adequate and essential public infrastructure.

The reports consistently show that, in general, the more people a county has and the more its population grows, the more infrastructure it will need, and fortunately, the more wealth it will likely have to pay for those needs. As has been the case throughout the history of the inventory, relationships among these factors are strong and well demonstrated by the variation reported for each Tennessee county. However, they are not perfectly aligned in any county. Some counties are able to meet their infrastructure

needs more easily than others, some continue to report the same needs year after year, and even fast-growing counties can find it challenging to meet their needs. And, relative to county population, counties with small populations need and complete just as much or more infrastructure than counties with large populations.

The reports show that governments often rely on more than one funding source to fund public infrastructure projects and that the government that owns the infrastructure will be responsible for providing the majority of the funding. For example, the state collects taxes and appropriates those funds to their projects and provides grants to the local level through programs at various agencies. Cities and counties fund most of their infrastructure improvements with revenue from property and sales taxes, while utility districts have a dedicated revenue source in the form of user fees. The federal government owns very little of the infrastructure in the inventory but provides substantial funding for transportation infrastructure.

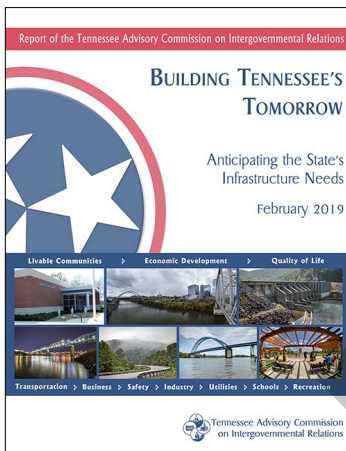
February 2019

According to the seventeenth report in the series, Tennessee needed at least \$49.8 billion of public infrastructure improvements during the five-year period of July 2017 to June 2022. The need for public infrastructure improvements, as reported by state and local officials, is up \$5 billion (11.1%) compared with the year before. Improvements needed for Transportation and Utilities, Education, and Health, Safety, and Welfare types of infrastructure continue to account for most of the inventory, with Education and Transportation and Utilities infrastructure needs responsible for most of the reported increase this year. As in last year's inventory, more than two-thirds of the estimated cost of needed infrastructure improvements reported in this year's inventory is not funded.

Costs for current infrastructure needs fall into six general categories:

- Transportation and Utilities: \$25.9 billion
- Education: \$13.6 billion
- Health, Safety, and Welfare: \$7.4 billion
- Recreation and Culture: \$1.9 billion
- General Government: \$698 million
- Economic Development: \$366 million

Starting with the July 2017 through June 2022 inventory as presented in this report, geographic coordinates are required for every project in the inventory so staff and public officials can better analyze infrastructure needs using Geographic Information System (GIS) analysis. This information may be used by TACIR staff members in the future to provide more detailed information to officials and the public.



January 2020

The Commission's eighteenth infrastructure report in the series estimated that Tennessee needs at least \$54.8 billion of public infrastructure improvements during the five-year period of July 2018 to June 2023—a \$4.8 billion (9.7%) increase from the year before. Improvements needed for Transportation and Utilities, Education, and Health, Safety, and Welfare infrastructure continue to account for most of the inventory, with Transportation and Utilities and Education infrastructure needs responsible for most of the reported increase this year. More than two-thirds of the estimated cost of needed infrastructure improvements included in this year's report is not funded, unchanged from last year.

Costs for current infrastructure needs fall into six general categories:

- Transportation and Utilities: \$29.6 billion
- Education: \$14.2 billion
- Health, Safety, and Welfare: \$7.6 billion
- Recreation and Culture: \$2.1 billion
- General Government: \$894 million
- Economic Development: \$300 million



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Appendix A: Commission Members

Fiscal Year 2018-19 through Fiscal Year 2019-20

Legislative

- Senator Thelma Harper*
- Senator Jon Lundberg
- Senator Mark Norris*
- Senator Katrina Robinson
- Senator Ken Yager
- Senator Jeff Yarbrow
- Representative Mike Carter
- Representative John Crawford
- Representative Harold Love, Jr.
- Representative Antonio Parkinson
- Representative Tim Wirgau*

Statutory

- Representative Charles Sargent, House Finance, Ways and Means**
- Senator Bo Watson, Chair, Senate Finance, Ways and Means
- Representative Susan Lynn, Chair, House Finance, Ways and Means
- Justin Wilson, Comptroller of the Treasury

Executive Branch

- Paula Davis, Deputy Commissioner, Operations and Administration Department of Economic and Community Development
- Iliff McMahan, Regional Director, Northeast Tennessee Region Department of Economic and Community Development*
- Sammie Arnold, Assistant Commissioner, Community and Rural Development Department of Economic and Community Development

County

- Rogers Anderson, Mayor, Williamson County
- Buddy Bradshaw, Mayor, Loudon County
- Ernest Burgess, Mayor, Rutherford County*
- Jeff Huffman, County Executive, Tipton County
- Kenny McBride, Mayor, Carroll County*
- Larry Waters, Mayor, Sevier County

Intergovernmental Challenges and Achievements

- Tom Bickers, Mayor, City of Louisville
- Kevin Brooks, Mayor, City of Cleveland
- Betsy Crossley, City Commissioner, City of Brentwood*
- Jill Holland, Mayor, City of McKenzie
- Keith McDonald, Mayor of Bartlett
- Kay Senter, Vice Mayor, City of Morristown*

Other Local Government

- Charlie Cardwell, Metropolitan Trustee, County Officials Association of Tennessee**
- Mary Gaither, Tipton County Clerk, County Officials Association of Tennessee
- Brent Greer, Mayor, Henry County, Tennessee Development District Association

Private Citizens

- Calvin Clifton, Kingsport
- Christi Gibbs, Nashville*
- Jeff Peach, Smyrna
- Kenneth Young, Franklin*

**No longer a member of the Commission*

***Deceased*

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Appendix B: TACIR Accomplishments by Research Area

Fiscal Year 2018-19 and 2019-20

Fiscal Year 2018-19

Fiscal and Tax Policy Research

- Completed a Commission report on the collection and distribution of internet sales tax in Tennessee.
- Continued to monitor and published a report on the Tennessee Valley Authority's payments in lieu of taxes and the effect of the Electric Generation and Transmission Cooperative Act of 2009 as amended in 2010 (Public Chapter 1035, Acts of 2010).

Education Finance

- Completed the fiscal year 2019-20 fiscal capacity model.
- Executive Director served on the Basic Education Program Review Committee.

Land Use, Transportation, and Growth Policy

- Continued to monitor implementation of Public Chapter 1101, Acts of 1998, Tennessee's growth policy law.

Infrastructure

- Continued the annual public infrastructure needs inventory. Collected information from 141 school systems, 95 counties, 345 municipalities, and 461 other entities.
- Completed an annual report to the legislature on Tennessee's public infrastructure needs pursuant to Public Chapter 817, Acts of 1996.

Other Research

- Completed the Commission's report to the legislature on Public Chapter 849, Acts of 2018, which directed the Commission to perform a study on the effectiveness of statutes of limitation on the prosecution of criminal offenses.
- Completed the Commission's report to the legislature on Public Chapter 795, Acts of 2018, which directed the Commission to study the benefits and costs of creating a special reserve fund in the state treasury for the sole use of funding grants and loans to encourage the financing and development of supermarkets, grocery stores, and farmers markets in food deserts, whose residents tend to have a less nutritious diet and poorer health outcomes than those living in other communities.
- Completed the Commission's report to the legislature on Public Chapter 693, Acts of 2018, which directed that the study determine the amounts of non-tax producing properties held by state and local governments, as well as recommendations about the highest and best uses of the properties and ways for making the properties productive.
- Monitored intergovernmental tax, fiscal, and education legislation.

Using Technology for Public Information

- Disseminated all reports electronically and maintained detailed focus sections about continuing research on TACIR's web page (<http://www.tn.gov/tacir/tacir-publications.html>).
- Further disseminated information from the public infrastructure needs inventory through a partnership with the University of Tennessee to include the data on their state data explorer website.
- Continued to update and enhance the profiles of Tennessee's counties, providing easy public access to detailed demographic, financial, and other information for each (<http://www.tn.gov/tacir/tennessee-county-profiles-redirect.html>).
- Published timely information Tracking Tennessee's Economy in partnership with Middle Tennessee State University (<https://mtsu.edu/tacir/>).
- Published county growth plans required by Public Chapter 1101, Acts of 1998, on TACIR's website (<https://www.tn.gov/tacir/tennessee-county-growth-plans.html>).
- Posted timely information to the agency's Facebook page notifying the public of new reports, elaborating on topics of interest, and pointing out relevant research by other organizations (<https://www.facebook.com/TN.ACIR>).
- Increased functionality of the agency's website (<http://www.tn.gov/tacir>).

Fiscal Year 2019-20

Fiscal and Tax Policy Research

- Completed the Commission's report to the legislature on Public Chapter 952, Acts of 2018 regarding a proposed shippers' franchise and excise tax liability credit.
- Completed the report requested by the Commission on local government revenue in Tennessee and the evolving market for cable television, satellite television, and streaming video services.
- Completed the Commission's report to the legislature on K-12 public education funding and services. On February 1, 2019, the Commission, responding to a request from its local members, approved an amended research plan for its study on local government revenue and services. The new plan includes a second interim report focusing on K-12 education services and funding as part of the Commission's comprehensive study of the duties of cities and counties under state law and the funds the state provides to comply, which was requested by the House Finance, Ways and Means Committee during its discussion of House Bill 971 by Representative Sargent in the 110th General Assembly. The first interim report dealt with online sales tax collection and distribution and was published in February 2019.
- Continued to monitor and published a report on the Tennessee Valley Authority's payments in lieu of taxes and the effect of the Electric Generation and Transmission Cooperative Act of 2009 as amended in 2010 (Public Chapter 1035, Acts of 2010).

Education Finance

- Completed the fiscal year 2020-21 fiscal capacity model.
- Executive Director served on the Basic Education Program Review Committee.

Land Use, Transportation, and Growth Policy

- Continued to monitor implementation of Public Chapter 1101, Acts of 1998, Tennessee’s growth policy law.

Infrastructure

- Continued the annual public infrastructure needs inventory. Collected information from 141 school systems, 95 counties, 345 municipalities, and 457 other entities.
- Completed Commission’s annual report to the legislature on Tennessee’s public infrastructure needs.

Other Research

- Completed the Commission’s report to the legislature on the timing of municipal elections in Tennessee. The report was prepared in response to House Bill 2265 by Representative C. Sexton and its companion, Senate Bill 2146 by Senator Gardenhire, which were introduced in 2018 because of concerns about low voter participation and the cost of municipal elections. As amended, the legislation would have required some cities to change their election dates to coincide with either the regular August or November election by 2022. The House Local Government Subcommittee voted to send the study to the Tennessee Advisory Commission on Intergovernmental Relations, while the Senate State and Local Government Committee deferred it to summer study, with the committee chair later saying the committee’s intent was for the Commission to conduct the study.
- Completed the Commission’s report to the legislature on e-procurement by Local Governments in Tennessee, which was prepared in response to a March 20, 2019 motion passed by the House Local Government Committee requesting a study of House Bill 635 by Representative Travis.
- Completed the Commission’s report to the legislature on improving victim safety with global positioning system monitoring as a condition of release for defendants accused of domestic violence, which was prepared in response to Public Chapter 827, Acts of 2018, which directs the Commission to conduct a study of the effects and implementation of Global Positioning System (GPS) monitoring as a condition of release for defendants accused of stalking, sexual assault, domestic abuse, and violations of orders of protection.
- Completed the Commission’s report to the legislature on how to close gaps in Tennessee’s waste tire program and giving local governments more flexibility to prevent illegal tire dumping. The report was prepared in response to Senate Joint Resolution 344, introduced by Senator Dickerson in March 2019, which directed the Commission to study the overall effects of illegal waste tire dumps in Tennessee. After the General Assembly adjourned without voting on the resolution, Senator Dickerson, with support from Senate Energy, Agriculture, and natural Resources Committee Chairman Southerland, sent a letter formally requesting that TACIR take up the study, which the Commission voted to do at its May 2019 meeting.
- Monitored intergovernmental tax, fiscal, and education legislation.

Using Technology for Public Information

- Disseminated all reports electronically and maintained detailed focus sections about continuing research on TACIR’s web page (<http://www.tn.gov/tacir/tacir-publications.html>).

- Further disseminated information from the annual public infrastructure needs inventory through a partnership with the University of Tennessee to include the data on their state data explorer website.
- Developed data visualization and interactive analysis tools for infrastructure reporting (<https://www.tn.gov/tacir/infrastructure/infrastructure-reports-/infrastructure-needs-2018-2023/infrastructure-needs-by-county.html>).
- Continued to update and enhance the profiles of Tennessee's counties, providing easy public access to detailed demographic, financial, and other information for each (<http://www.tn.gov/tacir/tennessee-county-profiles-redirect.html>).
- Published timely information Tracking Tennessee's Economy in partnership with Middle Tennessee State University (<https://mtsu.edu/tacir/>).
- Posted timely information to the agency's Facebook page notifying the public of new reports, elaborating on topics of interest, and pointing out relevant research by other organizations (<https://www.facebook.com/TN.ACIR>).

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Appendix C: TACIR Publications

Fiscal Year 2018-19 and Fiscal Year 2019-20

Intergovernmental Challenges and Achievements: Biennial Report Fiscal Years 2016-17 and 2017-18—Commission Report, September 2018

Tennessee's Election Security: A Staff Update—Staff Report, December 2018

Refining Tennessee's Criminal Statutes of Limitations—Commission Report, December 2018

Access to Affordable Healthy Food—Commission Report, January 2019

Improving Management of Government-Owned Real Property in Tennessee—Commission Report, January 2019

Tennessee Valley Authority's Payments in Lieu of Taxes: Annual Report to the General Assembly—Commission Report, February 2019

Leveling the Playing Field: Internet Sales Tax in Tennessee—Commission Report, February 2019

Building Tennessee's Tomorrow: Anticipating the State's Infrastructure Needs—Commission Report, February 2019

Public Chapter 952, Acts of 2018: Proposed Shippers' Franchise and Excise Tax Liability Credit Does Not Appear to be Necessary—Commission Report, September 2019

Timing of Municipal Elections in Tennessee: Continue to Authorize, Not Require, Election Consolidations—Commission Report, September 2019

Local Government Revenue in Tennessee and the Evolving Market for Cable Television, Satellite Television, and Streaming Video Services—Commission Report, September 2019

Tennessee Valley Authority's Payments in Lieu of Taxes: Annual Report to the General Assembly—Commission Report, January 2020

e-Procurement by Local Governments in Tennessee—Commission Report, January 2020

Improving Victim Safety with Global Positioning System (GPS) Monitoring as a Condition of Release for Defendants Accused of Domestic Violence—Commission Report, January 2020

Building Tennessee's Tomorrow: Anticipating the State's Infrastructure Needs—Commission Report, January 2020

Closing Gaps in Tennessee's Waste Tire Program and Giving Local Governments More Flexibility to Prevent Illegal Tire Dumping—Commission Report, January 2020

K-12 Public Education Funding and Services—Commission Report, January 2020

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Appendix D: Staff Presentations

Fiscal Year 2018-19 and Fiscal Year 2019-20

“Regional Collaboration: What Works? An Exploration of Mandated and Voluntary Collaboration Among Tennessee Local Governments” at the Southeastern Conference of Public Administration (September 2018)

“Institutional Integrity” at the State of Tennessee Boards and Commissions Academy (March 2019)

“Tennessee’s Court Fees and Taxes: Funding the Courts Fairly” to the panel on Legal Financial Obligations hosted by the Tennessee Advisory Committee to the United States Commission on Civil Rights, panelist (March 2019)

“Building Tennessee’s Tomorrow: Anticipating the State’s Infrastructure Needs—July 2018 through June 2023” to the Senate Finance, Ways and Means Committee (March 10, 2020)

“An Overview of TACIR and its Research on Public Purchasing” to the Tennessee Association of Public Purchasing (April 15, 2020)

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Appendix E: Conference and Meeting Attendance

Fiscal Year 2018-19 through Fiscal Year 2019-20

American Society for Public Administration, Southeast Regional Conference

American Society for Public Administration, National Conference

Association of Tennessee Valley Governments January Meeting

Broadband Adoption Working Group, as part of the Tennessee Economic and Community Development's Rural Task Force

ESRI ArcGIS User Seminar

Governing Magazine's Summit on Financial Leadership

Governmental Research Association Conference

Middle Tennessee State University Economic Outlook Conference

National Conference of State Legislatures Legislative Summit

State Resilience Planning Group hosted by PEW Charitable Trusts

Tennessee American Planning Association Annual Conference

Tennessee American Planning Association Winter Retreat

Tennessee Association of Public Purchasing Annual Conference

Tennessee County Services Association Annual Fall Conference

Tennessee Digital Government Summit

Tennessee Government Leadership Annual Conference

US Department of Housing and Urban Development's Annual Tennessee Director's Meeting

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Appendix F: TACIR Organization, Mission, and Goals

Organization

Consisting of public officials from state and local government and private citizen members, the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) “serves as a forum for the discussion and resolution of intergovernmental problems.”

The 25 members of the Commission capture the richness and diversity of perspectives of private citizens and officials representing different branches and levels of government. Of the 25-member Commission, 22 members are appointed to four-year terms, while three are statutory members who hold membership by virtue of their positions. Statutory members include the chairs of the House and Senate Finance, Ways and Means Committees and the Comptroller of the Treasury.

Responsibility for the appointment of four state senators and four state representatives rests with the speaker of each respective chamber of the Tennessee General Assembly. Other appointments to the Commission include four elected county officials, one official nominated by the County Officials Association of Tennessee, four elected city officials, one elected development district nominee, two private citizens, and two executive branch officials. In total, ten members have local government as their primary affiliation, eleven represent the legislature, two are drawn from the executive branch, and two are private citizens.

Mission

In the late 1970’s, legislative findings indicated the need for a permanent intergovernmental body to study and take action on questions of organizational patterns, powers, functions, and relationships among federal, state, and local governments. In pursuit of this goal, TACIR was created in 1978 (Tennessee Code Annotated § 4-10-101). TACIR’s enabling act established what has remained the Commission’s enduring mission (Tennessee Code Annotated § 4-10-104), to

serve as a forum for the discussion and resolution of intergovernmental problems; provide high-quality research support to state and local government officials to improve the overall quality of government in Tennessee; and to improve the effectiveness of the intergovernmental system to better serve the citizens of Tennessee.

Goals

Many specific duties and functions are required of the Commission by its enabling act, and additional duties are often assigned by the General Assembly. From its broad set of statutory obligations and special charges, the purpose for TACIR's existence can be summarized in four concise yet encompassing goals. The Commission strives to

1. advance discussion and deliberation of critical and sensitive intergovernmental policy matters;
2. promote action to resolve intergovernmental problems and improve the quality of government;
3. forge common ground between competing but equally legitimate values, goals, and interests; and
4. provide members of the General Assembly and other policymakers with accurate and timely information and analysis to facilitate reasoned decision-making.

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Appendix G: What Does TACIR Do?

Objectives

TACIR provides a future-oriented perspective to public policy and intergovernmental relations, identifying and diagnosing policy problems that loom on the horizon. To facilitate the achievement of its mission and goals, TACIR is directed by statute to

- engage in activities, studies, and investigations necessary for the accomplishment of the Commission's mission and goals;
- consider, on its own initiative, ways of fostering better relations among local governments and state government;
- draft and disseminate legislative bills, constitutional amendments, and model ordinances necessary to implement the Commission's recommendations;
- encourage and, where appropriate, coordinate studies relating to intergovernmental relations conducted by universities, state, local, and federal agencies, and research and consulting organizations;
- review the recommendations of national commissions studying federal, state, and local governmental relations and problems and assess their possible application to Tennessee;
- study the fiscal relationships between the federal government and Tennessee's state and local governments;
- study tax equivalent payments by municipally-owned electric operations to the various taxing jurisdictions within the state;
- study the laws relating to the assessment and taxation of property;
- conduct an annual study of the fiscal capacity of local governments to fund education; and
- conduct an annual infrastructure study (summarized from Tennessee Code Annotated § 4-10-104).

Additionally, the Commission is directed by statute to meet quarterly and report its research and findings. Commission meetings, with invited guests and experts, and lively and thoughtful debate, form the core around which virtually all commission activities are centered.

Given such broad tasks, the Commission adopts an annual work plan to guide its meetings and research. The work plan is designed to ensure the completion of objectives set forth in the Commission's enabling act, as well as the achievement of its mission and goals. From time to time throughout the year, the commissioners address problems that were not anticipated in the work plan. Generally, such matters are addressed at the direction of the General Assembly.

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Appendix H: Legislation Affecting TACIR

Fiscal Year 2018-19 and Fiscal Year 2019-20

Fiscal Year 2018-19

- Public Chapter 407, Acts of 2019, directed the Commission to perform a study of any cost savings realized by enrollees with health plans, including private health plans and state funded health plans, in states that have adopted legislation or programs that require carriers offering health plans in those states to offer incentive programs to enrollees for shopping for healthcare services at lower costs, commonly referred to as “Right to Shop” legislation or programs.
- Senate Bill 1114 by Senator Yarbrow and House Bill 1120 by Representative Freeman would have created a state government task force on extreme weather, natural catastrophes, and community resilience. During discussion on the bill in the House State Committee, Representative Hicks suggested that in lieu of creating a 24 member task force to produce a report and recommendations, it would be more efficient to have TACIR study the issue, meet with the relevant government agencies and stakeholders, and produce a report with recommendations. Representative Hawk and Senator Yarbrow made motions, which passed, in the House State Committee and the Senate State and Local Government Committee, respectively, directing the Commission to study the issues in the legislation.
- Senate Bill 600 by Jackson and House Bill 635 by Travis would have required local governments to provide a secure electronic interactive system as an additional option to satisfy any requirement for mailing invitations to bid, requests for proposals, and other offers electronically. The bill would have also required local governments to provide the option for vendors to submit bids, proposals, and other offers electronically. In the House Local Government Committee, Representative Travis made a motion, which passed, to send the bill to the Commission for a study.
- Senator Dickerson introduced Senate Joint Resolution 344, directing the Commission to study problems stemming from illegal waste tire dumps in Tennessee. The legislation was referred to the Senate Energy, Agriculture, and Natural Resources Committee, but the 111th General Assembly adjourned without taking up the bill. Senator Dickerson, with support from Senate Energy, Agriculture, and Natural Resources Committee Chairman Steve Southerland, sent a letter on May 5, 2019, to formally request that the Commission perform the study.
- The Commission completed a final report on Tennessee’s criminal statutes of limitations, pursuant to Public Chapter 849, Acts of 2018.
- The Commission completed a final report on the overall effects of creating a grant and loan program to encourage the financing and development of food desert relief enterprises, pursuant to Public Chapter 795, Acts of 2018.
- The Commission completed a final report on the amount of nontax-producing property held by state and local governments in Tennessee and recommendations on the highest and best uses of the properties, pursuant to Public Chapter 693, Acts of 2018.
- The Commission completed an interim report focusing on internet sales tax collection and distribution as part of its overall study on local revenue and services in Tennessee as requested by the House Finance, Ways and Means Committee during its discussions of House Bill 971 by Sargent and Senate Bill 1075 by Watson.

- Pursuant to Public Chapter 1101, Acts of 1998; Public Chapter 672, Acts of 2000; and Public Chapter 594, Acts of 2002, the Commission continued to monitor and report on implementation of the state's growth policy act.
- As directed by Public Chapter 817, Acts of 1996, the Commission completed the annual Public Infrastructure Needs Inventory and Report.

Fiscal Year 2019-20

- The Commission completed a final report on the potential, overall effects of creating a franchise and excise tax credit for shippers with pickups or deliveries originating in, or destined to Shelby County, pursuant to Public Chapter 952, Acts of 2018.
- The Commission completed a final report on the timing of municipal elections in Tennessee as requested by the House Local Government Subcommittee during its discussions of House Bill 2265 by Sexton and Senate Bill 2146 by Gardenhire.
- The Commission completed a final report on the implementation and effects of Global Positioning System (GPS) monitoring as a condition of bail for certain defendants, pursuant to Public Chapter 827.
- The Commission completed an interim report focusing on K-12 public education funding and services as part of its overall study on local revenue and services in Tennessee as requested by the House Finance, Ways and Means Committee during its discussions of House Bill 971 by Sargent and Senate Bill 1075 by Watson.
- The Commission completed a final report on illegal tire dumping and Tennessee's waste tire program, prepared in response to Senate Joint Resolution 344 at the request of Chairman Dickerson and Chairman Southerland.
- The Commission completed a final report on electronic procurements by local governments in Tennessee, prepared in response to House Bill 635 by Representative Travis at the request of the House Local Government Committee.
- Pursuant to Public Chapter 1101, Acts of 1998; Public Chapter 672, Acts of 2000; and Public Chapter 594, Acts of 2002, the Commission continued to monitor and report on implementation of the state's growth policy act.
- As directed by Public Chapter 817, Acts of 1996, the Commission completed the annual Public Infrastructure Needs Inventory and Report.

Appendix I: Summary of Commission Meeting Minutes

The following are summaries of the Commission's quarterly meetings. Full minutes and video for meetings are located on TACIR's website (<https://www.tn.gov/tacir/commission-meetings.html>).

Fiscal Year 2018-19 Scheduled Commission Meetings

September 6-7, 2018

Local Revenue and Services—Update

Executive Director LIPPARD provided an update of the Local Revenue and Services study. At its May meeting, the Commission directed staff to conduct a comprehensive study of local government revenue and services, including, but not limited to, out-of-state sales tax collections and state-shared taxes, with a goal of completing an interim or final report by January 2019. Local members of the Commission had two meetings over the summer with the first focused on a review of trends in revenue and current revenue and service obligations of local governments, and the second devoted to a discussion with Commissioner of Revenue, David GERREGANO, about the US Supreme Court's decision in Wayfair, which overturned Quill's physical presence requirement. Dr. LIPPARD said that following the two meetings, local members of the Commission agreed on three principles that should guide the Commission study:

The report should provide a comprehensive review of trends in local government revenue and services.

Because of the complexity of the overall revenue system and the potential for unintended consequences, the report should not propose shifting existing sources of revenue among cities and counties.

The report should explore whether the state should or could do more to financially support local governments.

Local members also agreed that one of the most effective ways to address local government budget issues would be for the state to use some of the likely increase in out-of-state collections of the 7% sales and use tax to increase its Basic Education Program (BEP) funding. They suggested possibly increasing teacher salary and benefits or to changing teacher-student ratios because teacher funding makes up one of the largest portions of the formula. Mayor Keith MCDONALD said the state should fully fund the BEP and determine what full funding should be.

Senior Research Associate Michael MOUNT summarized figures provided in the docket book noting that they show the downward trends in state-shared tax revenue as a percentage of the state's general revenue and the state's total tax revenue. He also summarized the issues covered by Commissioner GERREGANO: the internet (out-of-state) sales tax and the implications of the Wayfair decision. A Department of Revenue rule would have required out-of-state sellers with more than \$500,000 in sales in Tennessee to collect sales tax, but the Davidson County Chancery Court put enforcement of that rule on hold, and the General Assembly prohibited the Department of Revenue from enforcing it until further review.

Mr. MOUNT also discussed Tennessee's membership status in the Streamlined Sales and Use Tax Agreement and the major changes required for Tennessee to become a full member. For sales that are both delivered and received within the state (intrastate sales) Tennessee would move from origin-based sourcing to destination-based sourcing, meaning the jurisdiction where the delivery is made would be where the tax is remitted. Mayor MCDONALD said that the report should be specific so that cities understand that, as long as people

are coming to their store and buying it there, nothing changes, but when it is shipped, the sales tax revenue goes to the destination. He said, under destination-based sourcing, counties would receive some internet sales tax revenue that they have not previously received, and in all fairness, should.

Senator Jeff YARBRO asked whether the Commission is on the same page regarding origin versus destination-based sourcing, and Chairman NORRIS said he had a number of constituent locations, cities and otherwise, that were very concerned and did not support destination-based sourcing. He thought it would need to be resolved quickly in the next session of the General Assembly.

Dr. LIPPARD and Mr. MOUNT explained two additional changes resulting from the streamlined sales tax provisions in Tennessee law that go into effect July 1, 2019, unless some action is taken: elimination of the option for out-of-state sellers to collect local option sales tax at a uniform 2.25% rate and removal of the single article cap on local option sales tax for most sales. A refund process would be set up for businesses, but the Department of Revenue and some local governments are concerned about how the refund would be implemented.

Dr. LIPPARD said the local members suggested during their working group meetings that the next step should be to focus on the internet and streamlined sales tax issues, and suggested staff invite a representative from the Department of Revenue to participate in a panel discussion at the December Commission meeting.

Biennial Report for Fiscal Years 2016-17 and 2017-18—Final Report for Approval

The Commission adopted its biennial report for fiscal years 2016-17 and 2017-18.

Food Deserts (Public Chapter 795, Acts of 2018)—Update

Senior Research Associate Tyler CARPENTER provided an update of the Commission's study on food deserts. He presented preliminary information, including past legislation in Tennessee that would have implemented programs for financing the development of food retailers in food deserts, programs already implemented in other states for financing the development of food retailers in food deserts, private sector initiatives for financing the development of food retailers in food deserts, and other food desert relief programs.

Dr. LIPPARD explained that there are a number of approaches to address food deserts but no single solution. He said that staff would likely arrive at a menu list of things that could be done, including better coordination among public and private entities.

Elections Study—Update

Senior Research Associate Jennifer BARRIE presented an update responding to an April 2018 letter from Senator Frank NICELEY to the Commission in which he expressed concern about new threats to Tennessee's voting system. He requested that the Commission revisit and update its 2007 staff report, *Trust but Verify: Increasing Voter Confidence in Election Results*, which examined election security in Tennessee and included several findings and recommendations. He asked the Commission to address two specific topics:

The most cost-effective and efficient voter-verified paper audit trail (VVPAT) options for Tennessee counties

Opportunities to offset VVPAT costs with the use of Secure Electronic Transfer (SET), a system used by 35 states to ensure that data from all agencies is available to verify the accuracy of voter rolls

Ms. BARRIE provided preliminary information addressing Senator NICELEY's request and said she would give a full update at the December 2018 meeting.

Statutes of Limitations (Public Chapter 849, Acts of 2018)—Draft Report for Review and Comment

The Commission heard a presentation from a child sex abuse survivor, Ms. Donna COLTER, who began her presentation by describing her abuse experience. She said that victims often wait many years to open up about their abuse because of the fear and shame that consumes them. She explained that the detrimental effects of child sex abuse last for years, and victims can have physical and emotional health problems as adults. Ms. COLTER testified that aggressive prosecution of offenders can go a long way toward helping victims heal and recommended that the statute of limitations on child sex abuse crimes be eliminated in Tennessee.

Following Ms. COLTER's remarks, Senior Research Associate Nathan SHAVER presented the draft report on the criminal statute of limitations for review and comment. The report was required by Public Chapter 849, Acts of 2018. Summarizing the draft report's recommendations, Mr. SHAVER said that recognizing the special circumstances of child sexual abuse and the legitimate reasons why a complaint often is not made until many years after the abuse the draft report recommends that Tennessee should fully eliminate the statute of limitation for most felony child sex abuse crimes. Alternatively, Tennessee should consider eliminating the statute of limitations for felony child sexual abuse crimes in circumstances where corroborating evidence is obtained by the prosecutor. If corroborating evidence is not obtained, then the statute of limitations otherwise in place would apply. He added that Tennessee's law should also be amended to clarify a drafting error found in Tennessee Code Annotated, Section 40-2-101(h)(2) and (i)(2), which has the unintentional effect of shortening the statute of limitation for rape offenses committed against minors when the victim does not report the crime within three years of the offense. The draft report also recommends that the state consider either extending or eliminating the statute of limitations for second-degree murder.

Mayor MCDONALD urged the legislative members of the Commission to find ways to hold abusers accountable. Vice Mayor Kay SENTER agreed, saying the state needs to address this issue.

Small Cell (Public Chapter 819, Acts of 2018)—Update

Policy Coordinator Matthew OWEN provided an update on the results of the federal Connect America Fund Auction (CAF Auction) as part of the Commission's study of small cell wireless facilities as directed by Public Chapter 819, Acts of 2018. In Tennessee, the five bidders with winning bids for the CAF Auction will receive funding that will collectively total \$8.5 million over 10 years in exchange for expanding coverage in parts of 17 counties. Dr. OWEN said that the areas in Tennessee's winning bids contain a total of 3,290 homes and businesses that providers will be required to expand coverage to in exchange for receiving their CAF Auction funding. Representative WIRGAU noted that the state has its own Broadband Accessibility Grant program for expanding broadband coverage separate from the federal CAF programs and that some areas where providers will receive CAF Auction funding are located in counties where providers have also been awarded funding through the state's program.

Next, Dr. OWEN provided an update on preliminary research on other states that staff have completed for the Commission's study of small cell wireless facilities. Twenty states, including Tennessee, have passed laws creating specific frameworks governing the deployment of small cell wireless facilities, which compared with traditional cell towers, are short-range facilities that are small enough to be located on a variety of structures, including streetlights, electric poles, and buildings. Providers are deploying these small wireless facilities

as part of their effort to build the next generation of wireless networks to support a broad range of internet functions by offering faster speeds and better reliability, while reducing network congestion.

Dr. OWEN said that the states that have passed small wireless facility laws have generally followed a similar framework and addressed similar issues, including applications, fees, grounds for denial, issues related to height, size, aesthetics, and location, and pole attachments. The differences identified usually exist along a continuum with states clustering together in the middle. He said that to identify best practices as directed in the Act, staff will continue to study whether these state laws have an effect either on the deployment of broadband or on state agencies and local governments and will also monitor federal actions governing the deployment of small wireless facilities, including new rules that the FCC is scheduled to consider adopting in September 2018.

Mayor MCDONALD requested that the study include information about the authority of local governments under the Act to address situations where small cell infrastructure deployed in public rights of way is found to interfere with future infrastructure projects, such as when a sewer needs to be expanded. He also requested that the study include information about the maximum annual rates authorized under the Act for attaching to structures in public rights of way and the extent to which the maximum annual attachment rates vary based on whether those structures are owned by local governments or utilities. Representative WIRGAU said that to ensure users' needs for greater access and connectivity are met, fees should remain reasonable so that they do not become a barrier to providers when expanding wireless networks.

Excess Property—Panel Discussion

Public Chapter 693, Acts of 2018, instructed the Commission to determine the amount of nontax-producing properties held by the state and local governments in Tennessee and to make recommendations regarding best uses and ways to make the properties more productive. As part of the research for the study required by the Act, staff invited four panelists to speak with the Commission who each described their role in the management of excess property and processes for disposing of excess property. Panelists included

- Bruce NELSON, director of special projects, Tennessee Department of General Services;
- Jeff HOGE, director, Right-of-Way Division, Tennessee Department of Transportation;
- Ken MORRELL, manager of special projects, Tennessee Comptroller of the Treasury; and
- Lisa NOLEN, finance director, Rutherford County.

Commission members discussed various issues in managing excess property. Mayor MCDONALD said there is a problem with sovereign citizens putting public property deeds in their names and challenging ownership and requested that staff include this issue in the report. Mayor GREER addressed the issue of obtaining title insurance for tax delinquent properties and asked that the study examine this issue as well. Representative CARTER explained that when East Ridge, Tennessee successfully developed a BassPro retail facility on a Tennessee Department of Transportation right-of-way, he thought there might be more opportunities across the state to make use of underutilized government-owned properties. He said once the amount of nontax-producing property held by the state and local governments is known then it will be possible to decide what options are best for making this real property more productive. Commission members discussed having a single website or repository of information on government-owned property for sale as a possible solution.

Representative CARTER said the unneeded state property should be managed in a way that allows local governments to maximize the property tax from the property with the goal of increasing income for cities

and counties. He said the property needs to be inventoried and reported to the Comptroller, but that local government should decide how to manage the property that they own in a way the benefits them the most.

December 12-13, 2018

Local Revenue and Services—Update

Senior Research Associate Michael MOUNT introduced a panel of speakers knowledgeable about internet and streamlines sales tax issues—the initial focus of the Commission’s study of revenue and services of local governments in Tennessee. Panelists included

- David GERREGANO, commissioner, Department of Revenue;
- Donald BRUCE, professor, University of Tennessee, Department of Economics and Boyd Center for Business and Economic Research; and
- Scott PETERSON, director of governmental affairs and vice president of tax policy, Avalara, and former executive director, Streamlined Sales Tax Governing Board.

Commissioner GERREGANO summarized the Wayfair decision and the Department of Revenue’s rule (Rule 129) that would tax sales of out-of-state sellers with more than \$500,000 in sales in Tennessee per year. He added that about 30 other states have issued guidance to taxpayers that would file sales tax returns in their state regarding internet sales tax, with a lot of the discussion being around the threshold. Mayor BICKERS said that, considering available technology, there should not be much difference in the burden between a \$100,000 threshold and a \$500,000 threshold. Scott PETERSON agreed and predicted that states’ thresholds will decrease because sellers will be more able to comply. In response to a question from Mayor Jeff HUFFMAN, Commissioner GERREGANO said that the General Assembly has the ability to change the \$500,000 threshold.

Dr. BRUCE emphasized the importance of getting the policy challenges right that were presented by the Wayfair decision. He said that, although he expects revenue gains, the focus should be on tax fairness, and similar transactions should be treated similarly for tax purposes. Mayor Keith MCDONALD said that businesses and citizens in Tennessee are concerned with having a fair tax rate, but revenue is also a concern because it’s needed to pay for services.

Commissioner GERREGANO summarized the current distribution of sales tax revenue in Tennessee, explaining that the formula for distributing revenue from the uniform 2.25% rate option is based on the relative in-state collections of the various jurisdictions. He said 60% of out-of-state sales tax revenue is through the 2.25% uniform rate formula, although more out-of-state sellers are foregoing the uniform rate, and the other 40% of out-of-state revenue goes to the jurisdiction of the customer. Dr. BRUCE said it would make more sense for that revenue to go to the jurisdiction where the customer lives or through a formula based on personal income or population and Mr. PETERSON noted that the majority of states use destination sourcing. Commissioner GERREGANO highlighted several changes in state law set to take effect July 1, 2019, unless the General Assembly Acts, including the move from origin sourcing to destination sourcing and the applicability of the single-article cap, but noted that destination sourcing for in-state sales is no longer a requirement of the Streamlined Sales and Use Tax Agreement.

Commission members asked a serious of questions regarding sales tax collection technology, including questions about implementation costs and the distribution of sales tax revenue to cities and counties within the

same ZIP code. Commissioner GERREGANO said the Department of Revenue works with the Comptroller and uses a GIS database that's based on residential addresses, not ZIP codes.

Representative CARTER asked whether cities and states around the country could overwhelm retailers in Tennessee with audits. Commissioner GERREGANO said in theory they could, but in practice, they are limited by the number of auditors and their states' resources to conduct audits. Mr. PETERSON added that most audits are not sales tax audits but use tax audits, and with fewer businesses owing use tax—because more will be collected in the form of sales tax—he's hopeful that in five years there will be fewer audits, not more. He also said that states can audit Certified Service Providers (who assist sellers with collecting sales tax), and ask them to prove that they charged the right rate, or if no rate was charged, that the purchaser was truly exempt.

Election Study—Information Update

Senior Research Associate Jennifer BARRIE presented updated information pertaining to the 2007 staff report, *Trust but Verify: Increasing Voter Confidence in Election Results*. Ms. BARRIE said TACIR staff continues to support the 2007 staff recommendations that addressed the use of VVPAT. Staff would also encourage county election officials not wanting to replace their current non-VVPAT machines to consider adding printers, when they are available, to those machines to make them VVPAT capable. And rather than relying on paper voter registration applications, although the cost savings are not clear, staff encourages the state to continue implementing electronic voter registration processes, making it easier to register, improving accuracy of voter rolls, and potentially saving money.

Ms. BARRIE explained that the costs to each county differ depending on several variables such as the type of equipment a county uses and the amount of Help America Vote Act (HAVA) funds remaining, and that staff would add this information to the final update. The final staff update additionally includes information on driver service kiosks with electronic voter registration in response to questions from Vice Mayor Kay SENTER regarding electronic registration.

Boat Titling—Update

Senior Research Associate Nathan SHAVER provided an update on the boat titling report that the Commission previously approved in January of 2018. The Commission requested that the Tennessee Wildlife Resources Agency, the county clerks, and the Department of Revenue try to come up with a consensus on who would administer a potential boat titling system and report back at the December 2018 meeting. Mr. SHAVER explained that since then, TACIR staff has continued to discuss options with the three parties regarding how a boat titling system could be administered, but the parties' positions remain unchanged and there has not been a consensus reached by all on the best way to administer a potential boat titling system.

Statutes of Limitations—Final Report for Approval

The Commission approved the final report on Tennessee's criminal statutes of limitations, including statutes of limitations for the prosecution of sexual offenses. The report recommended that the state consider either extending or eliminating the statute of limitation for second degree murder. It also recommended that Tennessee law be amended to clarify the drafting error in statute that has the unintentional effect of shortening the statute of limitation for rape offenses committed against minors. The final recommendation is setup as a choice between two options. The first option is that Tennessee consider fully eliminating the

statute of limitation for most felony child sex abuse crimes. The second option is that, alternatively, Tennessee consider eliminating the statute of limitation for felony child sexual abuse crimes in circumstances where corroborating evidence is obtained by the prosecutor, and corroborating evidence is not obtained, then the statute of limitations otherwise in place would apply.

Following discussion of the final recommendation, the Commission voted to eliminate the second option and amend the language of the first option so that it reads “Tennessee should fully eliminate the statute of limitations for class A and B felony child sexual abuse crimes and consider extending or eliminating the statute of limitations for other child sexual abuse crimes.” In response to a question about a funding mechanism for the recommendations, Mr. SHAVER noted that the information included in the final report shows that the fiscal notes for past legislation on the elimination of a criminal statute of limitation determined the costs to be not significant, even though some stakeholders, such as district attorneys and public defenders, estimate an increase in future costs.

Excess Property—Draft Report for Review and Comment

A draft report on government-owned excess property was presented to the Commission for review and comment as required by Public Chapter 693, Acts of 2018. The Act directed the Commission to study and determine the amounts of non-tax-producing property held by the state and local governments and to make recommendations regarding ways to put surplus properties to productive use. The draft report explains that the State of Tennessee Real Estate Management Division (STREAM) within the Department of General Services is responsible for managing an inventory of the state’s real estate assets and disposing of unneeded surplus, but that STREAM needs additional information from other state agencies on their future real estate needs, and current property uses in order to be more effective. The draft report additionally included information on excess right-of-way property owned by the Tennessee Department of Transportation, tax-delinquent property acquired by local governments in Tennessee, and the use of Geographic Information Systems (GIS), land banks, and online advertising of surplus property to aid in property management.

Food Deserts—Draft Report for Review and Comment

A draft report on food deserts was presented to the Commission for review and comment as directed by Public Chapter 795, Acts of 2018, which required staff to evaluate the prospect of the Tennessee Department of Economic and Community Development (ECD) administering a grant and loan program for retailers in food deserts. The draft report includes information about states that have passed legislation creating healthy food financing programs, those that have funded these programs, and those that have not created a state program but have provided funding for the development of healthy food retail projects. The draft report describes the costs of opening and renovating grocery stores and other similar food retailers, the complex relationship between improved access to healthy food sources and measurable improvements in diet and health, and public and private resources that are already available to assist communities in crafting solutions tailored to local needs.

Mayor MCDONALD asked staff to include additional data supporting the costs cited in the draft report for opening a new grocery store and suggested that a state program may be better administered by the Tennessee Department of Agriculture rather than ECD, or jointly administered by the two. Vice Mayor Kay SENTER requested that staff explore programs like those implemented at Morristown’s farmer’s market, which includes nutrition education for individuals visiting the market. Representative Love asked staff to research

the prospect of the two land grant universities—Tennessee State University and the University of Tennessee, Knoxville—as resources to educate the population of the benefits of eating healthy and budgeting their money.

Cord Cutting and Local Revenue—Update and Panel Discussion

The Commission heard from a panel of speakers who provided information on the taxation of cable and satellite television and their internet-based alternatives and the laws governing cable television franchises in Tennessee. This panel included

- Sherry Hathaway, director, Tax Policy and Development Office, Tennessee Department of Revenue;
- Jerry Kettles, director, Economic Analysis, Tennessee Public Utility Commission; and
- John Hutton, telecom/utilities consultant, Tennessee Public Utility Commission.

Ms. Sherry HATHAWAY said that currently cable television service is subject to state and local sales tax. The first \$15 of the bill is exempt from state sales tax, while the first \$27.50 of the bill is exempt from local sales tax. The amount of the bill between \$15 to \$27.50 is subject to an 8.25% state sales tax, and the amount of the bill above \$27.50 is subject to a 7% sales tax and any applicable local sales tax. Satellite television is subject to an 8.25% state sales tax, but the federal Telecommunications Act of 1996 prohibits local taxation of satellite television. Over the top (OTT) services are subject to a 7% state sales tax and a 2.5% standard local tax rate. Ms. HATHAWAY explained the formula used to distribute the local sales tax portion of the revenue to local governments and Mayor GREER asked that this formula be made a part of the report.

Mr. Jerry KETTLES said that historically the oversight of cable television has been at the local level using franchise agreements, which establish franchise fees, access to rights of ways, and the provision of educational and governmental programming. In 2008, the Competitive Cable and Video Services Act was passed by the state legislature providing an alternative to the local franchising process by allowing the Tennessee Public Utility Commission (TPUC) to grant franchises anywhere in the state. Providers can now choose to negotiate a local franchise agreement, or they can apply for a state franchise. Mr. KETTLES also presented on the distinction between franchise fees and right of way fees.

In response to Mayor MCDONALD's question about how local governments get franchise fee revenue from state-issued franchises, Mr. John HUTTON responded that the law doesn't prescribe a method, but in most cases, the provider contacts a local government and works out a payment schedule with them. Mayor MCDONALD requested that Commission staff obtain a list of the state-issued franchises to help make affected local governments aware about the franchises and how to get their share of franchise fee revenues. Mayor MCDONALD also asked whether auditors review the franchise fees from state-issued franchises, and Ms. HATHAWAY said that the Department of Revenue does not audit state franchise fees, but they do audit sales taxes. Mr. KETTLES explained that there is a process for audit review of franchise fees that involves a bilateral attempt between the provider and the municipality to resolve the fee dispute, the option to involve the state Comptroller, and finally a case before a court or the TPUC.

Mayor BICKERS said that because providers have the option of obtaining a state-issued franchise, local governments lack leverage to insist that providers offer service to everyone. So they don't have disparate access among residents. He noted that access to internet service needed to access streaming services was sparse outside cable television franchise areas because providers of cable television are often a community's only providers of internet service. He also asked what would prevent the state from requiring a provider with a state-issued franchise to provide service to all residents in a municipality, and Mr. KETTLES said that

current law requires only that provides buildout to a set percentage of the locations in their service areas within a specified period of time. Mr. HUTTON further noted it would require a change in law to require providers with state-issued franchises to provide service to all residents in a municipality. Ms. HATHAWAY also responded that one way to counter cherry picking is to use utilities such as telephone and electric co-ops to provide cable and broadband internet service.

Representative LOVE asked whether the state tracks or has a way of tracking who is providing OTT services in Tennessee and whether there is a way of knowing who is being denied service. Mr. KETTLES said that none of these companies have sought a state-issued franchise and that he could not provide him with a complete list of OTT service providers operating in the state or where they provide service. Ms. HATHAWAY added that someone selling audio-visual products online is required to register and collect sales tax if they have nexus. But there may be some that don't have nexus because they don't have infrastructure, equipment, or offices in the state. OTT service providers are not required to pay a franchise fee because they are not required to obtain a franchise to provide service.

Dr. LIPPARD said that staff is working on three related studies: cord cutting, the effects of the small cell law that passed last year (Public Chapter 819, Acts of 2018), and an update on broadband access and adoption. He recommended working issues raised by Mayor BICKERS' questions into the broadband update. It is not due until 2021, but staff could provide interim updates. Dr. LIPPARD also said the staff will review the broadband access and adoption research plan to see what portions need to be included in the 2019 cord cutting study.

January 31-February 1, 2019

Excess Property—Final Report for Approval

The Commission approved the final report on excess property that was completed pursuant to Public Chapter 693, Acts of 2018. The Act directed the Commission to study and determine the amounts of non-tax-producing property held by the state and local governments and to make recommendations regarding ways to put surplus properties to productive use. The final report improved upon the draft presented in December by better describing the various sources of property information staff obtained and reviewed for the study and by adding more information about how other states require their agencies to report property information to their real estate management offices for maintaining their inventories, planning future needs and identifying surplus real property.

A recommendation was added to the report that goes a step further than the draft's recommendation that state agencies be required to report their property use and future plans to STREAM (the "State of Tennessee Real Estate Asset Management" division of the Department of General Services). The final report suggests that unused state-owned properties with no planned, future use reported to STREAM for 10 years should be automatically offered back for purchase to the prior owners or evaluated for potential sale as surplus. Another recommendation added builds on the draft's recommendation for the state to expand its use of Geographic Information Systems (GIS) for real property management. The final report adds that, at a minimum, the state should list a complete inventory of all its state-owned real property online, but goes on to say that an online, searchable, GIS database of state-owned real property could allow for more valuable and insightful analysis, as well as increased transparency.

Food Deserts—Final Report for Approval

The Commission approved the final report on food deserts. The report was in response to Public Chapter 795, Acts of 2018, which directed the Commission to study the benefits and costs of creating a special reserve fund in the state treasury for the sole use of funding grants and loans to encourage the financing and development of supermarkets, grocery stores, and farmers markets in food deserts, whose residents tend to have a less nutritious diet and poorer health outcomes than those living in other communities. Minor changes were made to the report since the December meeting, including clarifying that cost figures provided in the report for opening a grocery store are estimates provided by grocery store owners to the president of the Tennessee Grocers and Convenience Store Association.

Cord Cutting and Local Government Revenue—Panel Discussion

The Commission heard from a panel of speakers who provided information on the taxation of cable and satellite television and their internet-based alternatives and the laws governing cable television franchises in Tennessee. This panel included

- Andy Macke, vice president of external affairs, Comcast, speaking on behalf of the Tennessee Cable Telecommunications Association (TCTA);
- Bruce Mottern, manager, state government affairs, TDS, speaking on behalf of the Tennessee Telecommunications Association (TTA);
- Damon Stewart, of counsel, Orrick, Herrington and Sutcliffe, speaking on behalf of DISH;
- Jeremy Elrod, director of government relations, Tennessee Municipal Electric Power Association (TMEPA), speaking on behalf of both the TMEPA and the Tennessee Electric Cooperative Association (TECA); and
- Joelle Phillips, president, AT&T, Tennessee.

Mr. Andy MACKE explained that the way people are consuming video content is changing, but that the tax code has not been adjusted to reflect these changes in the industry or in consumer behavior. Consumers viewing the same content pay different tax rates based on the type of service to which they subscribe, and these taxes vary significantly. He also explained how the current regulatory regime for gaining access to rights-of-way (ROW) to expand communications networks can be burdensome and this is related to the lack of change in the regulatory structure. He said communications tax and fee policy should ensure similar services are treated alike, while encouraging investment and taxing services in a non-discriminatory manner.

In response to Senator YAGER's question about whether the state needs to modernize its tax laws as applied to these services, including its cable franchise laws, Mr. MACKE said that TCTA would be in favor of a fee for companies based on their use of the ROW and the costs incurred by local governments for that use and a separate communications services tax applicable to all providers. Senator YAGER asked whether this would mean moving toward an impact-based fee system, and Mr. MACKE responded that it would. Mayor MCDONALD said that for local governments ROW issues are not only about costs and fees but also about maintaining the ability to regulate what infrastructure is placed in the ROW and where it is placed so that space remains available for other uses. He noted that state legislation has often preempted local governments' ability to manage ROW and asked the Commission to look at both the cost and availability of ROW.

Ms. Joelle PHILLIPS said that the tax and fee structure and franchising processes are governed by state and federal law, and she described differences between franchise fees and ROW access fees currently authorized under state law. She also explained that, as the cable and telephone industries have evolved with the rise of the internet, the same networks that once provided either telephone service or cable television service now provide telephone, television, and broadband access. She said that in the communications sector there are lots of unequal fees and taxes and suggested that rather than trying to correct these disparities, the state should figure out how much revenue it hopes to generate from the sector, how they want to spend it, and then design a taxing mechanism using good tax policy like lowering the rate and broadening the tax base. She encouraged the state to move to a more uniform, predictable, and all-inclusive tax for communications services.

Mayor MCDONALD expressed concern that local governments have lost the authority needed to ensure local interests, including access to service, are being met by providers. Ms. PHILLIPS said that tax and fee issues should be dealt with separately from other local issues like ROW management and aesthetic concerns and that when they aren't separated these issues can slow access to ROW and slow the deployment of infrastructure. Mayor MCDONALD responded that these issues cannot always be separated because taxes and fees are often the only way to get providers' attention to work with local governments to address local concerns related to ROW management and aesthetics.

Mayor BICKERS asked where the panel sees technology evolving over the next five or 10 years and said that he is concerned that any changes made in the tax and fee structure would once again become obsolete as the industry and consumer preferences continue to change. Ms. PHILLIPS agreed that both the industry and consumer preferences would continue to evolve and said that the two big trends she sees are the movement away from using wires to deliver service and changing patterns of use based on consumer needs such that equipment is used in different ways depending on the time of day. She recommended moving away from a tax structure that is based on infrastructure toward one based on revenue. In response to questions from County Executive HUFFMAN regarding federal and other states' laws, Ms. PHILLIPS confirmed that federal laws and policies would limit what the state could do to address issues related to its tax and fee structure and there is no state she could recommend to serve as a model for Tennessee that has addressed the issues in a holistic way.

Mr. Damon STEWART said that franchise fees are not taxes but are fees for the use of local government property, and he explained that satellite companies don't pay franchise fees because they don't use or impinge on local government property when providing their television service. He said that franchise fees should be considered as operating costs no different than the costs incurred by satellite providers to design and launch satellites into space.

Mr. Bruce MOTTERN said that the sales tax that applies to video services in Tennessee should be simplified. He also noted that TTA members have had difficulty in negotiating pole attachment agreements with municipal electric systems and electric cooperatives, neither of which is subject to Federal Communication Commission's (FCC) pole attachment regulations. This results in increased costs and delays when deploying networks and negatively affects private sector investment and the pricing of services. He recommended that the state encourage the Tennessee Valley Authority (TVA) to negotiate with providers on pole attachment rates. He also said that it can be costly and time-consuming for providers to obtain permits for crossing railroad ROW as well as permits related to highway crossings and wildlife, and he noted that the cost of obtaining rights to transmit programming from content providers is a major cost driver.

Mr. Jeremy ELROD said that the electric utilities and cooperatives that provide video services in Tennessee pay taxes to the same extent as private providers do. Municipal electric utilities that provide video service make payments in lieu of taxes (PILOTs) as well as payments similar to the taxes a private provider would pay and electric cooperatives that provide video service pay ad valorem taxes and franchise fees. Mayor BICKERS asked whether the municipal utilities and electric cooperatives that provide internet service in Tennessee make their internet service available to all of their electric customers throughout their electric service areas. Mr. ELROD answered that most of the municipal electric utilities that provide internet service currently offer it to all of their electric customers, and those that offer internet to only a portion of their electric customers have a goal of expanding service to their entire electric footprint. Speaking on behalf of electric cooperatives, Mr. Mike KNOTTS, vice president of government affairs for TECA, responded that an electric cooperative that provides internet service through a subsidiary is required to provide service throughout its entire electric service area, under state law; but if it provides service through a third-party partner, it is not required by law to provide service throughout their territory. Mayor BICKERS emphasized the importance of addressing issues related to internet availability when addressing issues related to taxes and fees.

Mayor ANDERSON noted that some counties have found that infrastructure has been deployed in public ROW without going through the permitting process and said that this was the biggest cost to county governments related to the broader tax and fee issue.

Tennessee Valley Authority Payments In Lieu Of Taxes—Annual Report for Approval

The Commission approved the annual report on TVA PILOTs, which found that the amount Tennessee receives from TVA is estimated to increase for the second straight year.

Annual Report on Tennessee’s Public Infrastructure Needs—Final Report for Approval

The Commission approved the annual report on the public infrastructure needs inventory, *Building Tennessee’s Tomorrow: Anticipating the State’s Infrastructure Needs*. In response to a question from Mayor Keith MCDONALD, Senior Research Associate David KEISER explained why the cost per student for new schools needed in Wilson County is greater than the other school systems’ figures.

Dr. LIPPARD shared a press release about the recent Volcker Alliance’s report on Truth and Integrity in State Budgeting, noting that Tennessee’s grade improved from a B to an A because the Public Infrastructure Needs Inventory gives a full reporting of highway and bridge deferred maintenance costs.

Local Revenue and Services—Interim Report for Review, Comment, and Approval

The Commission approved the interim report on internet sales tax prepared in response to a request by the House Finance, Ways, and Means Committee in April of 2018 to study local revenue and services in Tennessee. The focus of the interim report on internet sales tax was based on a suggestion by the Commission’s local members that the study initially focus on internet sales tax collection and distribution in light of the Wayfair versus South Dakota US Supreme Court case and on provisions of Tennessee law, set to become effective July 1, 2019, relating to the Streamlined Sales and Use Tax Agreement (SSUTA).

Discussion of the interim report involved thresholds for requiring remote sellers to collect and remit sales tax in Tennessee and in other states. According to Commissioner of Revenue David GERREGANO, the \$500,000 threshold in Tennessee was chosen in 2016 when Rule 129 was promulgated because it was consistent with

previous legislation for the franchise and excise and business taxes. He said other states have adopted a \$100,000 threshold following the Wayfair case. The Commission voted to amend the report's recommendation that out-of-state sellers with more than \$500,000 in sales in Tennessee be required to collect and remit sales tax. The amendment includes a sentence that says, "Further, the state should consider lowering this threshold at some time in the future."

Senator YAGER asked to hear from representatives of city and county governments, and David CONNER, Executive Director of Tennessee County Services Association, and Margaret MAHERY, Executive Director of the Tennessee Municipal League, came forward to speak. Mr. CONNER said that in the late 1980s, only six counties had a rate higher than 2.25%, and now 2.75%—the maximum—is the most common rate. Ms. MAHERY suggested there should be two motions, one to delete language in the report recommending a population-based distribution and one addressing the uniform rate. Mayor BICKERS said that having a uniform rate of 2.25% and a local rate of 2.75% gives an advantage over brick-and-mortar stores and asked whether SSUTA requires Tennessee to have the uniform rate. Senior Research Associate Michael MOUNT said it requires Tennessee to eliminate the uniform rate; however, if Tennessee does not intend to become a full member in SSUTA, the state would have the flexibility of retaining the uniform rate. At the request of Representative LOVE, Mr. Mount explained other changes that would be necessary for Tennessee to become a full member of SSUTA. Executive Director LIPPARD clarified that full membership in SSUTA is not required to meet the Wayfair criteria.

Following further discussion on increasing or changing the applicability of the uniform rate option, the Commission voted to amend the report by adding a sentence that says, "The state may increase the uniform rate to the maximum." The Commission also voted to delete the sentence that reads, "Alternately, another distribution formula basis, such as population, could be used." Dr. LIPPARD said that at the Local Members Working Group meeting on January 31, the local members suggested that part two of the study should take a deeper look at BEP funding, and the Commission voted to amend the work plan as suggested.

Credit to Shippers' Franchise and Excise Tax Liability—Panel Discussion

The Commission heard from a panel of speakers knowledgeable about issues related to shipping and motor carrier services. Panelists included

- Brandon Musso, director of business development, project44;
- Michael A. Symonanis, director, North America Logistics / Global Container Logistics Group, Louis Dreyfus Company LLC;
- Elaine Singleton, vice president of supply chain, Technicolor;
- Dave Huneryager, president and chief executive officer, Tennessee Trucking Association; and
- Scott Schumpert, treasurer, Tennessee Trucking Association.

Brandon MUSSO explained the problem of driver shortages and equipment capacity in Tennessee and nationally and said that when he approached Representative Camper about this issue, the idea was to apply an incentive statewide, but instead a PILOT was proposed to test the idea out.

Michael SYMONANIS said that trucks are an essential part of daily cotton flow and emphasized that warehouse efficiency is critical to the industry. He explained three areas where the driver shortage has hurt the industry—1) compliance, safety, and accountability scores that reduce the number of available drivers that

shippers are willing to work with; (2) the implementation of electronic logging devices (ELDs) to support the hours of service (HOS) rules, which further reduced the capacity of the overall trucking industry; and (3) the demographic decline of available drivers in the country.

Elaine SINGLETON presented an overview of what Technicolor does and how that relates to the supply chain. She said it is critical that products make it from their manufacturing plants to the distribution centers that it is packaged, labeled, and distributed properly to every retail outlet. She said the shelf life of a movie is two weeks, so if a delivery is missed the product will sell for less than half the price. She also emphasized the issue of congestion in Memphis, noting it can take 45 minutes to get just a couple of miles.

Dave HUNERYAGER explained that the driver shortage is a serious issue for the industry and that there are times when freight cannot move because there are no available drivers. He said the industry is around 50,000 drivers short, and that number is expected to grow as the average age of a truck driver climbs, and drivers reach retirement. He also detailed the ELD mandate that went into effect in December of 2018, which he said makes it easier to track HOS and explained the required rest time rules for drivers. He stressed that anything to reduce delay at pick-up or the delivery site is worth doing because it adds to the bottom line. He added that Tennessee has nine of the top 80 freight bottlenecks in the country, according to a study by the American Trucking Associations.

Scott SCHUMPERT said that he is the treasurer of the Tennessee Trucking Association and is the partner-in-charge at the Carr, Ingram, and Riggs CPA firm. His firm prepares several thousand franchise and excise tax returns on an annual basis, and he is very aware of how the tax works and could work in the proposed legislation. He hears from his clients daily that the driver shortage is and has been the critical issue that the trucking industry is dealing with.

Representative PARKINSON asked how many drivers Tennessee needs and why. Mr. HUNERYAGER explained that they don't break it down to a state-level, but member carriers report anywhere from 5% to 9% of trailers are lacking a driver to haul the product. Mr. HUNERYAGER noted the high turnover rate of drivers and said aging is the reason. He explained the federal regulations with regard to age requirements for obtaining a commercial driver's license (CDL) and Representative PARKINSON expressed interest in supporting the training and recruitment of people out of high school to drive intrastate under a graduated CDL for 18 to 21-year olds. Vice Mayor Kay SENTER inquired about other possible reasons for the driver shortage.

Senator YARBRO asked whether any other states have done something similar that we should be mindful of, and Mr. MUSSO said to his knowledge, no other state has tried something like this before. Mr. HUNERYAGER added that Memphis is a transportation hub with all four transportation modes existing in the city. He said that if you could make this work, it could be replicated elsewhere. Ms. SINGLETON agreed, adding that the reach you get through Memphis makes it appealing—you can access 80% of the country in two days. Senator YARBRO asked which was preferred, speed and efficiency or predictability. Mr. SYMONANIS said that if a driver knows it's going to take an hour to unload at a location, they may be willing to come there. There would be a willingness to commit more capacity or more drivers because they are assured that the loading and unloading will occur in the agreed upon time frame.

Vice Mayor SENTER asked about the use of team drivers in the trucking industry and whether a second driver takes over after the first driver's time is up. Mr. HUNERYAGER responded that a lot of their carriers do team driving, usually a husband and wife, and that the first driver could get into the sleeper berth when the other driver takes over.

Mayor Kevin BROOKS asked whether the Inland Port on the Georgia-Tennessee border is going to even further increase the need for drivers. Mr. HUNERYAGER said that it will eventually mean more truck traffic. Mr. SYMONANIS added that he believes the Georgia Port is targeting volume coming into Tennessee. Unlike Memphis, which has NS, UP, CN, CSX, and BNSF, Nashville has one rail service coming in. If a delivery is coming in internationally, it is coming in a truck because of the connectivity of rail from the US East Coast to the US West Coast. It is going to increase the traffic flow.

May 29-30, 2019

Fiscal Year 2018-19 Accomplishments

The Commission received an update on TACIR's major accomplishments for fiscal year 2018-19.

Legislative Update

The Commission received a legislative update on the first session of the 111th General Assembly, which passed or considered legislation on several issues related to the Commission's work, some dealing directly with findings and recommendations from commission reports. Several laws were passed based on the Commission's recommendations from its reports regarding criminal statutes of limitations and internet sales tax. The General Assembly passed one bill requiring work by the Commission pertaining to the study of online insurance shopping incentives. Legislative committees requested two additional Commission studies: one relating to community resilience and extreme weather and one concerning the local government procurement process and online bidding. A fourth study request came via a letter from Senator Dickerson regarding illegal tire dumps in Tennessee.

Work Program Amendment and New Research Plan

The Commission considered and unanimously passed four amendments to the calendar year work program to add four studies. The first study, required by Public Chapter 407, Acts of 2019, directs the Commission to study any cost savings realized by enrollees with health plans, including private health plans and state-funded health plans, in states that have adopted legislation or programs that require carriers offering health plans in those states to offer incentive programs to enrollees for shopping for health care services at lower costs. The second study was requested by the Senate State and Local Government Committee and the House State Committee, which referred Senate Bill 1114 by Yarbrow and House Bill 1120 by Freeman to the Commission for study. The bill would have created the state government advisory task force on extreme weather and community resilience charged with studying and developing policy recommendations regarding Tennessee's community resilience to natural catastrophes and extreme weather. The third study was referred by the House Local Government Committee requesting a study of Senate Bill 600 by Jackson and House Bill 635 by Travis. The bill would have required local governments to provide a secure electronic interactive system for invitations to bid, requests for proposals and other offers, and would exempt certain local governments. The last study was requested via letter to the Commission asking for a study of Senate Joint Resolution 344, which directs the Commission to study the overall effects of illegal waste tire dumps within the boundaries of the State of Tennessee in an effort to better understand the adverse impacts of tire dump on the environment, review current waste tire recycling methods, and assess potential preventative measures to curb the practice of illegal tire dumping.

Fiscal Capacity for Fiscal Year 2019-20

The Commission heard a presentation on the annual update on TACIR's fiscal capacity index and provided background information about the index and education funding in Tennessee. The presentation included an explanation of the US Bureau of Economic Analysis's revision of its per capita income data, an update of counties' 15-year fiscal capacity trends, and a discussion of the potential effect of internet sales tax on local sales tax bases, one of the factors in TACIR's fiscal capacity calculation. The Commission discussed how the BEP is calculated and funding for education outside of the BEP.

Credit to Shippers' Franchise and Excise Tax Liability—Draft Report for Review and Comment

A draft report on a proposed credit for shippers' franchise and excise tax liability was presented to the Commission for review and comment. Public Chapter 952, Acts of 2018, required staff to study a proposal that would provide a franchise and excise tax credit of 2% to any shipper with deliveries to or from Shelby County that implements a turnaround policy to ensure that pickups and deliveries are performed on time. The report explained the unclear potential effect of the proposed credit on driver detention and turnaround time and included a recommendation that the proposed credit not be adopted at this time. Representative Harold LOVE asked whether the recommendation considered the number of companies already taking advantage of existing tax credits—some even reducing their franchise and excise tax liability to zero, and Senior Research Associate Tyler CARPENTER said that the number provided by the Tennessee Department of Revenue on franchise and excise tax liability and credits is just one part of a larger argument. Mayor Keith MCDONALD said the problem appears to be a federal issue with addressing detention time and that the franchise and excise tax credit is not the answer.

Local Revenue and Services—Panel Discussion on K-12 Funding and Requirements

The Commission heard from a panel of speakers knowledgeable about issues related to K-12 education funding in Tennessee. Panelists included

- Chris Henson, chief operating officer, Metropolitan Nashville Public Schools;
- Randy Frazier, director of Weakley County Schools and treasurer of Tennessee Organization of School Superintendents (TOSS); and
- Ben Torres, deputy general counsel and director of government relations, Tennessee School Boards Association (TSBA).

Randy FRAZIER said superintendents have concerns about the Basic Education Program (BEP) and outlined the reasons why he believes it underfunds public schools, including concerns with funding ratios, salaries, and at-risk student funding. He added that school systems have to make up funding for programs that communities expects them to provide.

Ben TORRES described how TSBA works with school districts, which are usually the largest employer in a county. He said the BEP is complicated, and superintendents and school boards have the challenge of providing the best education they can while looking to local officials for funding. He said the General Assembly made huge increases to teachers' salaries, but school board members share Mr. FRAZIER's concerns.

Chris HENSON said concerns about BEP funding being communicated through the BEP Review Committee's annual report. He said positions—such as school psychologists, counselors, nurses, and social workers—

are underfunded, particularly compared to national best practices. He said the average teacher salary in Tennessee is \$5,000 above what the formula generates per position. He also said school districts require more positions than the formula generates because class-size requirements must be met by each individual school, but the BEP is based on district-wide enrollment. He said the \$40 million for the technology component is a drop in the bucket versus what's needed for one million students statewide.

The discussion largely focused on previous and potential changes to the BEP formula. Senator YAGER asked how recalibrating the formula without increasing funding would help school districts, adding that in the past few years, the state made record appropriations to K-12 education. Mr. FRAZIER said additional increases in BEP funds are needed, and there is not enough recognition in the formula for the number of teachers you are required to have to run a school system. Mayor MCDONALD said the idea of keeping funding the same and changing the BEP is why it has never changed, because there will be winners and losers, and nobody wants to be the loser. Mayor WATERS asked whether we foresee any changes to the BEP funding formula, and Mr. TORRES said you may come up with something new or use the existing formula and improve it or add components. County Executive HUFFMAN noted that the BEP does not provide enough positions to operate a school system, but it was never meant to, and there are no systems only with positions generated through the BEP.

County Executive HUFFMAN asked about the effect of the state's share of the instructional component going from 75% to 70%, and Mr. TORRES said the locals make up that 5% difference while Mr. FRAZIER noted his system has seen a loss in funding. County Executive HUFFMAN asked, with the increases in state appropriations for education and the 5% decrease in the state's share of the instructional component, has there been a real increase in state funding? Mr. HENSON said yes, overall state funding increased. He added that the intent of BEP 2.0 was for the state's share of instructional funding to go back to 75%, where it was originally, but that never occurred.

Discussions next involved differences in funding schools in urban and rural areas, and County Executive HUFFMAN noted that these schools do not have the same challenges. Representative CRAWFORD asked whether it costs more to educate a student in an urban area than in a rural area, and Mr. HENSON said yes, based upon their needs. Mayor BROOKS said that in urban areas, the cost of living is high, and locals provide extra funding for salaries to be competitive. Senator YAGER asked whether the BEP is neutral in its application to urban and rural counties. Mr. HENSON said there are two fiscal capacity models, but it is debatable how fair they are. Mayor WATERS said, a point of contention for BEP 2.0 is that the TACIR model takes into account personal income, but CBER's model does not. He added that Sevier County is an outlier. Commission members and panelists also discussed funding for growing school systems.

Representative LOVE expressed concern with the status of school facilities across the state because funding generated through the BEP for capital needs can be used in areas other than maintenance. He suggested that we lock in funding for maintenance as is done for instructional funds. Ben TORRES and Mr. HENSON explained how funding generated for certain categories can be spent. County Executive HUFFMAN asked, of districts that use capital money on salaries, how do these districts fund capital needs? Mr. HENSON said the BEP is a funding formula, not a spending plan, and explained that his district requests capital funding from its mayor and funding body, and that is not something that typically comes out of the district's general purpose operating budget. Mr. HENSON said the district shows that it is spending funds generated for capital outlay on inadequacies in the current funding formula, which are in teacher salaries, teaching positions, and a variety of other areas.

Representative LOVE asked how much adverse childhood experiences and trauma increase education spending. Mr. HENSON said we must do something for the mental, social, and emotional needs of our students, but funding ratios for school psychologists, counselors, nurses, and social workers are inadequate in the BEP funding formula. Mr. TORRES said some of the issues can be traced to the opioid crisis in Tennessee, and Mr. FRAZIER said Weakley County used local funds to provide a month of special summer school work for children from at-risk homes. Vice-Mayor SENTER said, school systems take on programs that they can fully fund, but when services are not provided, the classroom teacher assumes them, becoming the nurse, the counselor, the guidance counselor, the liaison, or whatever needs to be done. She said funding is needed for grades K-3 to lay a foundation, and an educated citizenry lays the foundation for economic development.

In response to Mayor MCDONALD's question about what fully funding the BEP means, Mr. HENSON said that the BEP is fully funded as it stands today, not taking into consideration inadequacies and components that are inadequately funded or missing. County Executive HUFFMAN and Mayor MCDONALD emphasized that funding education is a partnership between state and local governments, with the BEP funding the minimum level of education for every child in the state. Mayor MCDONALD and Mayor ANDERSON discussed how investment in public education develops a prepared workforce and encourages growth. Mayor ANDERSON described the sales tax referendum in Williamson County, the agreement of local officials to use sales tax revenue for K-12 education, and the need to construct and add on to schools, which is costly and left to the county to fund.

In discussing the role of the BEP Review Committee and its annual report, Mr. HENSON explained that the report is submitted, with recommendations, to the Governor's Office, the House of Representatives, and the Senate. Many of the recommendations are repeats from previous years and typically require additional state dollars. There is still a need for additional funding, and the BEP Review Committee tries to outline where different components are inadequate. Mayor MCDONALD said the BEP Review Committee has looked at teacher salaries, and there is not enough revenue in the BEP to fund the average. Mayor BROOKS asked that the report include what the BEP Review Committee has been recommending because what's in those reports is not working or connecting.

Cord Cutting and Local Revenue—Draft Report for Review and Comment

A draft report on cord-cutting and local government revenue in Tennessee was presented to the Commission for review and comment. The report describes the variations in the taxes and fees that apply to cable, satellite, and streaming services, though each offered video entertainment for personal consumption. The report also includes information on federal and state laws relating to cable franchise agreements, explaining that in Tennessee these agreements can be issued by local governments or the state and information on local government compensation from cable providers through franchise agreements. The draft report describes several alternatives to Tennessee's tax and fee structure for video services based on a review of laws in other states and the effects of those alternatives. The draft report explains that the Commission doesn't recommend any immediate changes in the state's tax and fee structure. However, because it is likely that revenue from cable franchise fees will decrease in the future if industry trends continue, the draft report does recommend that local governments should consider no longer using this revenue to fund government services that have maintenance of effort requirements.

Policy Coordinator Dr. Matthew OWEN said that numerous other telecommunications-related concerns raised by commission members, providers, local officials, and others interviewed warrant further study, and he said that the draft report proposes that the Commission evaluate these issues in the update to its 2017

broadband report, which is required by the Tennessee Broadband Accessibility Act. Mayor MCDONALD said that ensuring access to broadband is a major concern for local governments, and he said that another concern is for local governments to know what infrastructure is being placed in their rights-of-way and where that infrastructure is located, noting that local governments sometimes lose the ability to enforce accountability when the state takes over previously local responsibilities.

Consolidation of Municipal Elections—Draft Report for Review and Comment

A draft report on the consolidation of municipal elections was presented to the Commission for review and comment. The report was prepared in response to House Bill 2265 by Representative C. Sexton and its companion bill, Senate Bill 2146 by Senator Gardenhire, which were introduced in 2018 because of concerns about low voter participation and the cost of municipal elections, which cities pay for when they don't coincide with countywide elections. As amended, the legislation would have required some cities to change their election dates to coincide with either the regular August or November election by 2022. The draft report explains that, although aligning municipal elections with countywide elections usually saves cities money and improves voter turnout, local government representatives are concerned about mandating that city elections coincide with county, state, and federal elections. Because local officials understand the unique needs and issues of their communities and when elections work best for them, the draft report recommended that the Tennessee legislature should continue to authorize, rather than require, municipalities with private act or general law charters to change their election date by ordinance to either the August or November general elections in even-numbered years. The legislature could consider adding one additional even-year election date—the presidential primary election in March—as another option for municipalities.

Mayor Keith MCDONALD echoed the concern of locals about election fatigue and mentioned that elections for all judges—local, county, and state—are required to be held in August, not on the date that municipalities have chosen for their elections, which incurs more expense for cities. He understands the concerns of other cities about long ballots and ballot fatigue and asked that in the final report staff look at whether the perception of ballot drop-off and lower turnout is reality. Vice-Mayor Kay SENTER agreed and commented that she appreciates the recommendation that the legislature continue to authorize cities to make the decision about whether to consolidate their elections, noting that it appears most locals are making the decision to save money.

Fiscal Year 2019-20 Scheduled Commission Meetings

September 5-6, 2019

Credit to Shippers' Franchise and Excise Tax Liability—Final Report for Approval

Senior Research Associate Tyler CARPENTER presented the final report for the Commission's approval. Public Chapter 952, Acts of 2018 directed the Commission to study a proposal that would provide a franchise and excise tax credit of 2% to any shipper that implements a turnaround policy to ensure that pickups and deliveries are performed on time and seeks to incentivize shippers to turn freight quicker. Mr. CARPENTER summarized two changes made since the draft report was presented. The first was clarifying that the proposed incentive is not limited to companies with a location in Shelby County and that companies from across Tennessee and from outside Tennessee would be eligible for the credit. The second was adding that proponents of the credit say that improved efficiency would reduce the effects of the driver shortage by making truck driving more desirable, but the proposed legislation does not include a method to track any

effect. Mr. CARPENTER said the report's recommendation that the proposed credit not be adopted at this time is unchanged from the draft report.

Senator Bo WATSON moved that the report be approved. Mayor Keith MCDONALD seconded the motion. The Commission unanimously approved the amended report.

Consolidation of Municipal Elections—Final Report for Approval

Senior Research Associate Jennifer BARRIE presented the final report for the Commission's approval. The report was prepared in response to House Bill 2265 by Representative Cameron Sexton and its companion bill, Senate Bill 2146 by Senator Gardenhire, which were introduced in 2018 because of concerns about low voter participation and the cost of municipal elections, which cities pay for when they don't coincide with countywide elections. As amended, the legislation would have required cities with private act charters to change their election dates to coincide with either the regular August or November election by 2022.

Ms. BARRIE said that in response to a question at the last meeting, one clarification was made to the report explaining voter, ballot, and election fatigue—sometimes voters cast their vote for races at the top of the ballot, for example for president, but don't complete the bottom of the ballot where local city or county races and initiatives are listed. This is often called ballot fatigue or drop-off. When elections are consolidated, ballots include more races and initiatives, resulting in longer ballots and potentially more drop-off. While it is easy to see drop-off in elections results, it is difficult to fairly and accurately compare ballot dropoff in different elections because turnout in elections is affected by many variables.

She said the report's recommendation remains unchanged from the draft report—the Tennessee legislature should continue to authorize, rather than require, municipalities with private act or general law charters to change their election date by ordinance to either the August or November general elections in even-numbered years. The legislature could consider adding one additional even-year election date—the presidential primary election in March—as an option for municipalities to move their election date.

Mayor MCDONALD moved to approve the report, and Representative Antonio PARKINSON seconded the motion. The Commission voted to approve the report with only Senator WATSON voting against approval.

Global Position System Monitoring—Draft Report for Review and Comment

Ms. BARRIE presented the draft report for review and comment. Public Chapter 827, Acts of 2018, directed the Commission to conduct a study of the effects and implementation of GPS monitoring as a condition of bail for defendants accused of stalking, sexual assault, domestic abuse, and violations of protection orders.

Ms. BARRIE summarized the report's findings and recommendations, explaining that the pretrial period is one of the most dangerous times for victims of domestic violence. If the magistrate finds the defendant is a threat or unlikely to return to court, the magistrate is required to set at least one condition of release, which can include a bond, no-contact order, and GPS monitoring. Although there are a wide range of views and findings about pretrial GPS monitoring and its effectiveness, the majority of stakeholders and literature agree that it is a tool that can help improve victim safety, and it is most effective when implemented within a larger coordinated system.

Ms. BARRIE said based on these findings the report recommends that to help maximize GPS monitoring's effectiveness for increasing the safety of domestic violence victims during the pretrial period, local jurisdictions

should consider adopting it as but one component of a larger coordinated community response—including strong interagency partnerships, cooperation and commitment from stakeholders, and services including lethality assessments, domestic violence high-risk teams, and family safety centers. Regardless of whether local governments choose to implement GPS monitoring programs, law enforcement agencies should be encouraged to adopt validated lethality assessments because of their effectiveness as a tool to identify victims most at risk of serious harm or death and to help prioritize their access to services. Based on victims' responses to a series of standardized questions, law enforcement officers at the scene of the incident and victim advocates determine the level of risk to the victim and immediately connect high-risk victims to services and safety planning in an attempt to keep them safe.

Additionally, because funding GPS monitoring is a challenge and given the importance of operating a pretrial GPS program within a larger coordinated community response, the report recommends that if the General Assembly appropriates additional funds to the Electronic Monitoring Indigency Fund (EMIF) specifically for real-time GPS monitoring of domestic violence defendants, it should require that local governments drawing money from the fund, at a minimum, adopt a validated lethality assessment tool. Other local governments adopting pretrial GPS monitoring programs may also choose to prioritize high-risk cases and certain types of offenses, including intimate partner violence, strangulation, stalking, threats involving firearms, or violations of protection orders.

In response to Chairman CARTER's question to the members about whether they would like more information about technology and cost, the members agreed a panel at the next meeting would be helpful. Mayor MCDONALD would like a representative from Memphis Shelby County and a vendor to speak.

5G Technology—Update and Panel Discussion

The Commission heard presentations from

- Dr. Liang HONG, a professor in the Department of Electrical and Computer Engineering at Tennessee State University, who provided information about small wireless facilities and the evolution of mobile wireless networks, and
- Dr. Daniel WORK, an associate professor in the Department of Civil and Environmental Engineering at Vanderbilt University, who provided information about ways in which advances in mobile wireless networks can support advances in the transportation sector.

Dr. HONG said that as wireless providers transition from fourth generation (4G) wireless service to fifth generation (5G) service the faster speeds of 5G will enable more mobile broadband applications including 3D video, ultra-high definition video, and the connection of many different devices and sensors often referred to as the internet of things (IOT). He stated the improved reliability that will come with 5G will also make possible self-driving cars and eHealth applications, including remote surgery.

Dr. HONG said that for 5G to reach its full potential, it will require new technologies, including small cell technology. He said that in contrast to traditional wireless sites with tower-mounted antennae and coverage areas spanning several miles, small cell devices can be placed on street lights, utility poles, other public infrastructure, or standalone poles; they typically supply coverage to areas spanning only a few hundred feet; and they provide increased capacity for users (often referred to as speed). For these reasons, he said small cells are best suited for densely populated areas with large data demands and are typically a supplement for traditional towers.

In response to Senator YARBRO's question about how densely populated those areas best suited to small cells are and whether a build-out strategy for small cells can be made in small towns or rural areas, Dr. HONG explained that dense areas are those with more than hundreds of users needing service at the same time. He said downtown business districts, urban residential neighborhoods, shopping malls, and stadiums would be examples of locations that would support small cells. A survey by RVA, LLC showed that 90% of cities with populations of more than 500,000 had small cells deployed but only 45% of cities with populations between 50,000 to 500,000 did.

Several other Commission members raised questions about small cell deployments and broadband coverage in rural areas. In response to Mayor ANDERSON's question about whether new technology is being developed that would help get better internet service to rural areas, Dr. HONG explained that small cells would be best suited to more densely populated areas; he said developing solutions that would get service to rural areas would depend in part on negotiations between the providers and local governments. Mayor ANDERSON stated that many farmers rely on wireless connectivity both when operating equipment and to maximize efficiency of their operations to compete in agricultural markets. He said that internet access was necessary for these communities. Mayor BROOKS said that some private providers have been experimenting with different methods for providing wireless service in rural areas though they don't provide 5G service, and he asked whether 5G would be suitable for rural areas. Dr. HONG answered that the deployment of any new generation of wireless technology is gradual and typically starts in areas with lots of users. He said that in five or six years 5G may expand to rural areas. Chairman CARTER mentioned that he gets complaints from people in his district about the lack of adequate internet service, and he said unserved areas are continually being told it will take another three or four years for them to receive service. He added that it will be difficult for him to support policies focused on improving existing internet service in urban areas if there are people in rural areas who can't get any broadband. In response to Chairman CARTER's question about whether small cells and 5G would reach rural areas, Dr. HONG replied that the cost in rural areas of running fiber optic cable necessary to connect small cells to providers' networks is very expensive. He said that his research team is studying ways to use wireless connections to replace this fiber backhaul, which could lower costs of deploying in some areas.

Describing the equipment associated with small cell devices, Dr. HONG stated that in addition to antennae, they often include other equipment attached to the support structure. He said the main complaints received by cities about small cells are the aesthetics of the equipment, time required for permitting, safety of the small cells and the cost of using the right-of-way (ROW) or poles. He said local governments should consider updating their local laws and policies to deal with issues related to small cell devices. Noting an example of a small cell that was powered by a generator placed in the ROW, Mayor MCDONALD asked for more information about what equipment gets placed underground and about how small cells are powered. Dr. HONG answered that power depends in part on the structure a small cell is attached to. If they are attached to street lights or utility poles, there is electric power close by on the pole they can use. He added that both power supplies and fiber optic connections used to transmit data from the small cell to a provider's broader network or communications hub may be located underground in the ROW.

Next, the Commission heard a presentation from Dr. WORK, who said future transportation systems will be dependent on communications networks. He explained that there are three digital transformations taking place in transportation that are dependent on connectivity. The first is phone based and includes the real-time traffic maps that are available online now. The second is vehicle based and includes autonomous driving, electrification, and sharing. The third is infrastructure based. An example of this would be traffic signals that can communicate with cars and help them to know when to stop for a red light. He said with 5G, the

transportation industry will be able to adopt strategies that have been researched for years but haven't been implemented because they require access to widely deployed incredibly fast and reliable communications networks. For example, 5G connectivity could facilitate truck platooning, enabling freight trucks to travel closer together and at faster speeds than they ever could with human drivers. 5G networks can help the trucks communicate with one another during a trip better than existing networks.

In response to Mayor MCDONALD's question about whether the Federal Highway Administration (FHWA) plans to deploy 5G on the federal interstate system, Dr. WORK said that while he couldn't speak for the FHWA, in the research community, which is funded by a number of agencies including FHWA, there is a lot of interest in taking advantage of the fact that cars are becoming more autonomous, and they might be able to network them together to improve fuel efficiency and highway safety.

Executive Director LIPPARD asked how long it would take for a new technology like 5G to become widely used in the transportation sector given the mix of old and new cars on the road. Dr. WORK responded that this is tricky to estimate. You might be able to upgrade the old cars, but they wouldn't be like new cars. He said some think the transition could be rapid, saying that if you have fully automated and connected cars constantly giving rides to people, they could easily rack up 100,000 miles a year and would have to be taken in often to have parts replaced. In response to Senator YARBRO's question about planning for the transition to a transportation system that relies more on connectivity and what the state should consider when adapting its regulatory framework, Dr. WORK said that the research community is looking at ways to produce benefits for efficiency and safety even when there is still a mix of old, unconnected cars and new cars.

Senator LUNDBERG asked whether Tennessee needs to make any changes in its regulatory and policy framework to encourage the deployment of new transportation systems, especially in relation to other states. Dr. WORK said he was not sure about the regulatory framework and where Tennessee sits in relation to other states. He said that a consortium of universities, the Oak Ridge National Laboratory, the Tennessee Department of Transportation, and local governments in the state have formed an organization, TN Smart, where they could talk about how to work together to put Tennessee at the forefront of the new transportation revolution. Senator LUNDBERG asked staff to determine where Tennessee's policy and regulatory framework is in relation to other states so that the state can be a leader in this area. [The staff will provide information on this topic in the small cell report.]

In response to Mayor ANDERSON's question about what communities can expect from this new technology for transportation in health care, Dr. WORK said that you could network an ambulance with traffic signals and other vehicles to make sure they have a clear road to the hospital. Paramedics could also send patient data from the ambulance to the hospital so the staff can better and more quickly treat the patient. In rural areas, telemedicine might be more efficient because a doctor could see more patients remotely instead of wasting valuable time driving to see them.

Chairman CARTER asked whether there is a way to reconcile Dr. Hong's opinion that 5G would be virtually inapplicable in rural areas with Dr. Work's opinion that it would be on every federal highway. Dr. WORK said that developing technologies will have a huge benefit to society, but they have to be deployed for all members of society. He said the state would be underserved if the technology were available only in some regions or communities.

Commission members suggested several issues for further study. Mr. PEACH suggested that providers could be required to deploy a certain number of devices in rural areas if they deploy a certain number in urban areas. Senator LUNDBERG asked whether we are creating digital divide around transportation corridors

where 5G may be available on highways first and then coverage slowly expands into surrounding rural areas. Mayor BICKERS asked how much 5G rollout has occurred in the state and where deployment can be expected to be two to five years. Chairman CARTER said that perhaps this is information the staff could collect for the next meeting. [This staff will provide information on this topic at the next meeting.]

Mayor BROOKS asked that the report include information about broadband's importance for education. [This information will be provided in the report on rural broadband.] He stated that Cleveland's Wi-Fi Task Force found that 47% of their city's schoolchildren don't have access to internet at home. Representative LOVE said that there are pockets in urban areas where children don't have access to the internet at home and that this contributes to achievement gaps in education. He added that this could be an affordability issue as much as a connectivity issue. Mayor Larry WATERS said that the providers are critical partners for the state in addressing these issues and that it is not economically viable to provide service in some rural areas. He asked that we look at how to help providers expand to rural areas as a part of this study. Dr. LIPPARD said that in addition to its report on small cells, the Commission has been directed to update its broadband report by Public Chapter 228, Acts of 2017, and that these topics would be addressed in one or both of these reports given the overlap between them. County Clerk GAITHER stated that access was an issue in her community as well and that this is a problem for the state's unserved areas. Chairman CARTER said that expanding coverage to unserved areas as quickly as feasible is important.

Illegal Tire Dumps—Panel Discussion

The Commission welcomed a panel of experts with knowledge of scrap tire recycling, waste management, and the public health risks associated with discarded tires. Panelists included

- Mr. Dewey GRANTHAM, regional vice president, Liberty Tire Recycling;
- Mr. Jeremy HOOPER, environmental scientist, Tennessee Department of Environment and Conservation (TDEC), Division of Solid Waste Management;
- Dr. Abelardo MONCAYO, epidemiologist, Tennessee Department of Health; and
- Mr. Mike STOOKSBERRY, consultant, University of Tennessee County Technical Assistance Service.

Mr. GRANTHAM said that the tire recycling business is complex because it requires the management of transportation logistics, manufacturing, packaging, and marketing. He said that Tennessee's tire program is good compared to other states because it uses tire fees for tire-related purposes. Mr. GRANTHAM said having collection sites in all counties keeps costs down; on average Tennessee counties pay \$90 a ton for tire collection, compared to \$136 a ton in Georgia.

Mr. GRANTHAM said that the fact that used tire retailers that aren't included in Tennessee's tire program probably does contribute to the illegal dumping problem. He said that tire haulers aren't registered and there is no paperwork tracking scrap tires. Mr. GRANTHAM stated that regulating used tire retailers and scrap tire haulers would likely reduce illegal dumping and it would support legitimate tire businesses.

Mayor Tom BICKERS asked Mr. GRANTHAM to explain what he meant by retailers not paying into the tire program. Mr. GRANTHAM said the pre-disposal fees [a \$1.35 per tire fee charged by retailers selling new tires only] are not paid on used tires, and that some used tires come from outside the state. Mayor BICKERS asked whether changing that would require legislation or an administrative rule. Mr. GRANTHAM said it would require changing the law and that he thinks it would be good to do so.

Representative Harold LOVE asked how used tire dealers acquire the tires they sell, and how a fee could be applied only once when a tire can be resold more than once. Mr. GRANTHAM estimated that approximately 20% of tires taken from vehicles get sold as used tires and he speculated that these tires are probably only sold once as used tires before they become scrap tires. Representative LOVE asked what happens when a person buys used tires at a shop and their old tires cannot be resold. Mr. GRANTHAM said they can take their tires to their county collection site, or directly to Liberty, and pay a fee to dispose of the tires. He said sometimes retailers that collect fees on new tires for the state's tire program get credits from the county for the pre-disposal fee. Mr. GRANTHAM said that waste haulers often offer to take waste tires from retailers for a fee and say they will dispose of them, but that there is no trail to see where those tires actually end up, which creates an opportunity and financial incentive for illegal dumping.

Mr. HOOPER described the division's process for handling reports of illegal dumping, enforcement, and cleanup. He said that, unless the division can determine who is responsible for an illegal dump, the cost of cleanup falls on that county, using money from new tire pre-disposal fees.

Senator Jon LUNDBERG asked Mr. HOOPER whether he was familiar with a former manufacturing facility in Bristol, Tennessee, where a business had filled a large warehouse with tires that it was attempting to sell and recycle for profit. Senator LUNDBERG asked who is responsible for the cost to remove those tires since the owner has abandoned the property. Mr. HOOPER said the first step would be to attempt to locate the current property owner. Senator LUNDBERG expressed concern about the risk of fire at any location where a large number of tires are stored. Mr. HOOPER agreed that fire and other health risks associated with waste tires are a valid concern.

Mayor Brent GREER said TDEC has been helping him with an illegal dumpsite next to the landfill in Henry County, and he said that TDEC needs more staff for enforcement and more power.

Mayor BICKERS described legislation in place that allows municipal governments to intervene and clean up the private property where a public health hazard exists. He said we should see whether that applies to tire cleanup. Chairman Mike CARTER said that, when a property owner allows illegal dumping on their land, then that owner should have liability for the cleanup costs of this illegal activity. Mr. HOOPER agreed, but said that TDEC has trouble proving that stockpiled tires are solid waste, rather than materials with value being stored for a business purpose.

Representative John CRAWFORD asked whether the state has a hotline to call and report illegal tire dumping and what department would receive those calls. Mr. STOOKSBERRY said that TDEC has a system for reporting illegal dumping. Representative CRAWFORD said he was unaware of that system, and that advertising it could help. Mr. HOOPER added that the system, called Wastebin, is their online database management system for recording and tracking the investigation and inspection of any problems reported. Mr. STOOKSBERRY and Mr. HOOPER explained that complaints can be tracked through the process. Although TDEC has eight field offices that serve all areas of the state, Mr. HOOPER acknowledged that some citizens may not know how they can file complaints of illegal dumping.

Senator LUNDBERG asked Mr. HOOPER and Mr. STOOKSBERRY about the problems mentioned with determining when tires are waste. Mr. STOOKSBERRY said it is about the length of time tires are allowed to be stockpiled, and that they have to be marked somehow to track that time. Mr. HOOPER said that TDEC does have difficulty proving that stored tires are waste material. Mr. GRANTHAM discussed the benefits of requiring all tire dealers to track their tires to show the inventory turnover rate and how scrap tires are

managed. He said that when the State of Georgia implemented inventory management requirements that this allowed the state regulators to identify retailers who were not managing tires properly.

Mayor Rogers ANDERSON asked how much is being raised by the state's \$5 fee associated with new car sales and how the money was spent, and also whether the money from tire pre-disposal fees are split between cities and counties. Senior Research Associate Bob MOREO said that the statute specifies what the funds can be used for and that he will get more information from TDEC about expenditures. Mayor BROOKS later said that his city does not get any money from tire fees, but that all the car sales are probably within the city [Staff researched these issues after the meeting and found that the \$5 fee for a new vehicle is intended to be used for grants, subsidies, or loans to cities or counties related to scrap tire management or cleanup. More details will be included in the report.]

Mayor GREER said that TDEC only provides financial assistance when tires are going to beneficial end-use. Mr. STOOKSBERRY said that was one reason the law changed in 2014 to give \$1.00 directly to counties, rather than the whole fee be administered by TDEC and distributed through grants, but the law kept the stipulation that the money can only be put towards beneficial end use of tires. He said recycling tires isn't always economically feasible, and counties shouldn't be forced to provide that service. Mayor GREER said there is confusion among local governments about what they can do, and that his county allocates tax revenue for recycling because they choose to.

Mr. STOOKSBERRY gave a history of how Tennessee's waste tire program has changed over the years. He said the intent of the waste tire program is to promote safe, economical disposal of tires, but doesn't think the intent was for counties to operate as commercial tire disposal centers. The money counties receive from pre-disposal fees should be enough to collect tires from residents and clean up most dumpsites, but he said there should be a point where TDEC will come clean up a larger site automatically. Mr. STOOKSBERRY said TDEC needs more people to assist and respond to dumping problems.

Mr. STOOKSBERRY said the law allows counties to shred tires and send them to a landfill if they prove it costs less than recycling for beneficial end-use, and he thinks that should be considered when large piles of tires are discovered. He also suggested the state use tires for more civil engineering projects.

Dr. MONCAYO said he studies diseases like West Nile virus and the Zika virus that are spread by insects like mosquitoes and ticks. He explained that tires are excellent breeding habitats for mosquitoes, which lay eggs in water that pools inside tires. Dr. MONCAYO said there are about 80 species of mosquito in Tennessee, and a different species carry La Crosse encephalitis but only spreads it among squirrels and chipmunks because it doesn't usually bite humans. Asian tiger mosquitoes bite animals and humans, spreading the disease.

Senator LUNDBERG asked whether mosquitoes are the biggest health risk associated with tires, and what effect would eliminating illegal tire dumping have on reducing disease. Dr. MONCAYO said that what makes tires a risk is that they can be moved, spreading infected eggs over long distances. Mr. GRANTHAM added that tires function as a warm incubator, hatching mosquito eggs much faster than other habitats.

Mayor Kevin BROOKS asked whether there is technology, like chip tracking, that manufacturers could implement. Mr. HOOPER did not know of anything. Mr. GRANTHAM suggested that it could be done by manufacturers, but it might be cost prohibitive.

Representative LOVE asked about financial incentives for scrap tire buy-back programs. Mr. GRANTHAM said that Memphis has an annual buyback event that many citizens participate, but he expressed concern

that it could attract tires brought from other states. Representative LOVE said that because these tire buy-back programs are popular they may be a tool that we could use to reduce illegal dumping. [Staff conducted additional research and found that the City of Memphis has hosted several tire buy-back events. In 2019, the City of Memphis and Shelby County Government each donated \$50,000 and they paid \$1 per tire, up to \$250 max per person. The event collected 20,687 waste tires in one day. Officials with the City of Memphis described some of the draw backs of the event, saying that citizens began storing old tires on their property before the event as soon as they learned of the program, which is health concern because of mosquitoes. Additionally, participants lined up days before the event and blocked streets in Memphis. When the buy-back program ran out of money on the first day, many people who were waiting in line became angry and dumped their scrap tires in the street. Kentucky currently has a waste tire collection program where citizens can drop off their unwanted tires at a location within their county free of charge during the collection period. Tire buy-back programs are an alternative that will be considered in the report.]

Representative CRAWFORD asked whether tires are treated in some way for use on playgrounds. Mr. GRANTHAM said the process removes all metal and the mulch is painted. Mr. STOOKSBERRY said that breathing untreated dust can cause problems. Mayor BROOKS said the city of Cleveland had just installed a rubber playground, and he asked Mr. GRANTHAM whether it would be viable for the city or county to buy its own chipping machine. Mr. GRANTHAM said the process is complicated, and that only 30% of a tire—mainly the sidewalls—can be used for rubber mulch, with the rest being less valuable. Creating more valuable products takes more than one machine. Mr. STOOKSBERRY added that, for tire-derived fuel, different buyers require different specifications, so the need drives the market.

Chairman CARTER asked whether tires can be used for fuel to heat buildings. Mr. GRANTHAM said cement companies burn whole tires for heat, and Mr. STOOKSBERRY described the process in more detail. Mr. MOREO said that tire-derived fuel is an important end-use for tires, but he is unaware of any small-scale applications.

Chairman CARTER asked Mr. GRANTHAM whether it would be profitable for Liberty Tire to go into a location with thousands of tires, like the one Senator LUNDBERG described in Bristol, and remove the tires at no charge. Mr. GRANTHAM said no because the costs of transportation and the recycling process are higher than what they can sell the end product for. The company charges counties, on average, \$90 a ton in Tennessee. He said that markets like rubberized asphalt are a higher value product, and if there were enough demand for that then they would pay for tires, but that level of consumer demand does not currently exist.

Mayor GREER said he would like the Commission to hear from county solid waste directors. Mr. MOREO said he has contacted some of them, and that Mr. STOOKSBERRY was on the panel because he has worked with counties across the state. Mr. MOREO said he would contact Henry County for Mayor GREER. Senator LUNDBERG asked Mr. MOREO to contact Sullivan County about the building in Bristol, and there was a request to contact Bradley County. [Staff contacted the solid waste directors in Henry, Sullivan, Bradley, and Chester counties. The information they provided will be included in the report.]

Cord Cutting and Local Revenue—Final Report for Approval

Policy Coordinator Dr. Matthew OWEN presented the final report on cord cutting and local revenue for Commission approval. He said the report was prepared in response to a request at the January 26, 2018, commission meeting from then-Chairman Mark Norris, who asked the Commission to study the effects of

cord cutting on cable television, satellite television, streaming video services, and local government revenue in Tennessee.

Dr. OWEN summarized the report's recommendations, which were unchanged from the draft report. Although the report doesn't recommend any immediate changes to Tennessee's cable franchising laws or its tax and fee structure, it does recommend that local governments consider no longer using cable franchise fee revenue to fund government services that have maintenance of effort requirements because it is likely that this revenue will decrease if the trend toward cord cutting continues. In response to Mayor GREER's question about how many local governments currently allocate cable franchise fee revenue to public K-12 education, Dr. OWEN said staff had been unable to obtain data to produce a complete count, but there appear to be a handful of counties that are allocating these funds to education, according to audit data collected by the Tennessee Comptroller of the Treasury. Noting that counties allocating their franchise fee revenue to education might have to raise revenue from other sources, including property taxes, to offset future franchise fee decreases, Mayor GREER asked whether this would have any additional effects in counties with multiple school systems given the sharing requirements applied to local revenue under state law. Dr. OWEN said the report does not address this issue and deferred to staff working on the Commission's report on multisystem counties. [Note: For counties with multiple school systems, maintenance of effort requirements are calculated for each system. Counties' cable franchise fee revenue budgeted for K-12 education operations and maintenance is subject to sharing requirements, under state law, like other local revenue.]

Dr. OWEN noted several issues raised during research on the report warrant further study; the report proposes these issues be included in the Commission's update to its 2017 report on broadband deployment, access, and adoption.

Mr. PEACH said the Federal Communications Commission's (FCC) newly adopted rule clarifying the compensation that counts toward the federal cap on cable franchise fees may affect access to public, educational, and governmental (PEG) programming at the local level. He said encouraging providers with state-issued cable franchises to offer PEG channels on a regional basis could be one way to address this issue, though he also noted that the FCC's rule would likely be challenged in court.

Mayor GREER moved approval of the report, Senator LUNDBERG seconded the motion, and it was approved unanimously.

Multi-School System Counties—Draft Report for Review and Comment

Senior Research Associate Michael MOUNT presented the draft report for review and comment. Senate Joint Resolution 593 directed TACIR to study the effects of sharing resources among school systems in counties with more than one school system in response to concerns that state laws requiring counties to share local revenue with all school systems in the same county favor city school systems and special school districts at the expense of county school systems. Mr. MOUNT said that state sharing requirements contribute to funding disparities among school systems in most multisystem counties, the requirements appear to favor city school systems and special school districts, and there are alternatives that would minimize intra-county disparities while ensuring that taxpayers derive similar benefits from taxes they pay regardless of where they live.

Summarizing the draft report's recommendations for improving the state's sharing requirements for local revenue, Mr. MOUNT said the General Assembly should consider adopting alternatives that would improve spending equity in counties with multiple school systems while adhering to principles of taxpayer equity. One

alternative that would do so is to transition from calculating fiscal capacity at the county level to calculating it at the system level as was recommended by Governor Bredesen's task force on teacher pay and the Basic Education Program (BEP) review committee.

Mayor BICKERS asked that the final report include information about tuition students, specifically the percentage of the students in independent and city schools that are tuition students. He said that when city school systems and special school districts accept tuition, it gives wealthier parents a choice, and BEP funding follows those students. He said allocating BEP dollars based on student residence might be a solution. He added that moving to a system-level fiscal capacity model is a step that could be taken, but it may not solve the problem. Mayor Keith MCDONALD noted that Bartlett City Schools does not charge tuition to students residing in Shelby County, and students residing outside the boundaries of the Bartlett City Schools district can remain in the school system as long as they maintain their grades.

Mayor BICKERS asked whether a legislative change is necessary to move to a system-level fiscal capacity model. Mr. MOUNT replied that TACIR may need more authorization to make the change, and Executive Director Cliff LIPPARD noted that part of the issue is that state law currently provides for two county-level fiscal capacity models—the TACIR model and the model developed by the Center for Business and Economic Research (CBER) at the University of Tennessee. He said that a system-level fiscal capacity model could be different from the prototype developed by TACIR, and that changing to a system-level model would take a considerable amount of research and negotiation among various stakeholders.

Some Commission members raised concerns about the BEP funding formula, noting its complexity, and said it should be more transparent and written in a way that people can more easily understand. Dr. LIPPARD explained that the BEP is a component-based formula that determines each school system's required level of funding, and fiscal capacity is what determines the local share of funding based on a county's relative ability to raise revenue. He said state revenue estimates from using TACIR's prototype system-level fiscal capacity model (Appendix D) could change depending on how the system-level model was developed. He added that some education funding issues that apply to all school systems across the state, including those involving the BEP and state shared taxes, will be addressed in TACIR's next interim report in the local revenue and services series.

Mr. MOUNT said that Senate Joint Resolution 593 further noted that the creation of new school systems has in the past created conflict regarding the ownership of existing school buildings, and in response, the draft report also considers options for the transfer of school property to new city school systems. Chairman Mike CARTER invited Senator Todd GARDENHIRE to discuss the property transfer process, and Senator GARDENHIRE detailed the method he proposed in his amendment to Senate Bill 1755 in the 110th General Assembly for determining the asset value of property a city seeks to obtain when creating its own school system. He said determining that value should be first step in the process of forming a new school system. Noting the importance of having a process to solve problems, Senator GARDENHIRE explained that the current process leads to unnecessary lawsuits. Chairman CARTER asked Mayor MCDONALD whether he ran into this problem when the City of Bartlett created its city school system, and Mayor MCDONALD said that there was a federal lawsuit they resolved through an agreement over post-employment benefits for teachers. Mayor MCDONALD spoke about *Prescott v. Town of Lennox* (1898) in which the Tennessee Supreme Court held that school buildings are held in trust for the public and said he hoped the legislature would also consider school buildings as a public trust and that the buildings would transfer with the students unless they cease to be used for education purposes. In distinguishing between a private sale and forced sale of property, Mayor Rogers ANDERSON said a formula or process should be used to determine the value

of property that properly compensates the party not wanting to lose the capital asset. He also spoke about allowing a county commission to determine the best use of property.

December 11-12, 2019

Broadband Internet Deployment, Availability, and Adoption—Panel Discussion

The Commission heard presentations from

- James STEGEMAN, president of CostQuest Associates, who provided information on the economic barriers to expanding broadband access, and
- Crystal IVEY, broadband director for the Tennessee Department of Economic and Community Development, who provided an update on the state's broadband accessibility grant program.

Mr. STEGEMAN said that it would cost around \$500 million—\$2,500 per location—to provide broadband to all the communities in Tennessee that are unserved, based on the cost of deploying a fiber-to-the-home network. In response to Senator Jon LUNDBERG's question about whether this is the cost of deploying fiber to every home in Tennessee that currently lacks a fiber connection, Mr. STEGEMAN clarified that it is the cost of providing fiber only to those homes and businesses in census blocks designated as unserved in the Federal Communications Commission's (FCC) coverage data. He acknowledged that this does not include every home or business that lacks access to broadband because the FCC designates an entire census block as served even if only one home or business in that block has service. He said this limitation is a source of constituent complaints and has been a key driver of recent FCC proceedings to collect more precise coverage data, though he said that improved federal data likely won't be available for another two years. Chairman Mike CARTER said that broadband access is the number one issue in his district and that the problem is greater and will cost more than the FCC data portray. Mr. STEGEMAN added that some states are undertaking their own mapping efforts in part to guide their efforts to fund broadband expansion. [Note: Ms. Ivey later clarified in her presentation that Tennessee is not among the states undertaking its own mapping effort.]

Mr. STEGEMAN said he uses 2% of a provider's per-location capital cost as a rule of thumb for determining the monthly revenue needed per subscriber to make a business case for serving a community, allowing a provider to make a return on its investment and cover operating costs. At a statewide average deployment cost of \$2,500 per unserved location for a fiber-to-the-home network, the required monthly revenue per subscriber needed to make a business case for Tennessee's unserved areas would be \$50. However, this assumes that 100% of potential subscribers in those areas actually subscribe to broadband service. Many providers only achieve subscription rates of 30% to 40%, and when these lower subscription rates are accounted for, the revenue needed per subscriber increases to more than \$100 per month, which Mr. STEGEMAN said would typically be unachievable and, therefore, make it unviable to serve those areas.

Mr. STEGEMAN said that especially in rural areas, the key barrier to making broadband economically viable is the number of potential subscribers per mile of road—which he referred to as linear density. Below 15 subscribers per road mile, it becomes challenging for providers to make a business case for deploying a broadband network. He said that most unserved areas of Tennessee are uneconomical to serve based on their linear densities—including some areas where the revenue needed per subscriber per month to support a fiber-to-the-home network would be more than \$500.

Mr. STEGEMAN said that one way to overcome the cost barrier for providers in unserved areas is for governments to provide funding to subsidize the cost of providing service. He described funding received

by providers in Tennessee through a variety of FCC programs—including the Connect America Fund, Phase II (CAF II); high-cost loop support; broadband loop support; and the alternative cost model. In response to Mayor Kevin BROOKS' question about whether the Electric Power Board of Chattanooga (EPB) receives any ongoing funding through these FCC programs, Mr. STEGEMAN said he would have to follow-up after the meeting. [Note: Eligibility for funding through the FCC programs described in Mr. Stegeman's presentation has been limited to legacy telephone companies. As a result, municipal electric utilities like EPB—as well as legacy cable companies—have not received any funding through them. EPB did receive a \$111 million grant from the US Department of Energy in 2010, which funded a portion of the construction of the network it uses to provide broadband in its service area.]

Mr. STEGEMAN said that the FCC is planning to award another round of funding for unserved areas through its new Remote Digital Opportunity Fund (RDOF) based on those areas that were eligible for CAF II. Although final eligibility and funding details have not been determined, the FCC plans to award RDOF funding by the end of 2020 through a reverse auction process. He said it is important for the state to be aware of the RDOF proceedings to ensure that it is treated fairly and maximize the amount of funding for unserved areas in Tennessee. He said that in terms of FCC funding received, Tennessee is middle of the pack compared to other states.

Mr. STEGEMAN described other barriers to expanding broadband coverage. Some of these barriers include the need to improve rates of broadband adoption among those with access to service—for example through digital literacy training—while others are related to regulatory processes. In particular, he said that charging for access to public rights-of-way can create hurdles for providers because it adds to the cost of construction. He also said that obtaining access to utility poles can be a barrier as the time it takes to determine which entities own which poles and then have the necessary work performed to ready those poles for new wireline attachments can account for 80% of the time and cost of the pole attachment process.

Mayor Tom BICKERS said one of the frustrations of local officials in Tennessee is that coverage gaps persist despite the grants that providers have received to expand coverage and the efforts of the state to reduce local regulation, for example by authorizing state-issued cable franchises. He acknowledged that regulations can add to the cost of broadband deployment, but he said that some regulations—such as those requiring providers to repave road cuts made when placing fiber underground—are necessary to repair and preserve infrastructure disturbed by the deployment process. He said it is important that any government incentives for providers be tied to coverage expansion.

Mr. STEGEMAN also described the limitations of some of the infrastructure used to provide service. He said that the copper telephone wires used to provide service by many telephone companies can provide speeds of 25 megabits per second or more but only over short distances. Fixed wireless and traditional satellite service also have speed constraints, and satellite can suffer from latency issues that create difficulties for voice communication and other real-time applications. He said that the faster speeds provided by 5G mobile service will be primarily for urban and suburban areas only. In response to Mayor Keith MCDONALD's question about the infrastructure used by incumbent cable or telephone companies, Mr. STEGEMAN said that cable companies typically provide service over networks that include both fiber-optic and coaxial cable whereas telephone companies use either fiber networks or, particularly in rural areas, their existing copper telephone wires. He said that cable companies tend to provide service mostly in urban and suburban areas and that in rural areas telephone companies may be the only wireline option.

Ms. IVEY provided an overview of the state's grant program for expanding broadband access in unserved areas. Several members expressed concerns about whether the definitions of served and unserved used in the FCC coverage data could affect eligibility for grants through the state program. Chairman CARTER said that one issue affecting his district is the possibility that a census block may be ineligible for funding through the state grant program if even one home in the census block has access to service. He asked whether the state might use different eligibility standards that account for the percentage of homes in a census block that are served or unserved. Mayor MCDONALD said that the logic behind the FCC's one-home-served-all-homes-served definition doesn't make sense, and he asked whether the state was required to use the FCC's coverage data for its grant program. Ms. IVEY responded that some states are developing their own coverage maps, but Tennessee is not. Instead, she said that although the state's initial eligibility determination is based on the FCC's data, there is a challenge process that allows grant applicants to demonstrate that areas designated as served in the FCC data are in fact unserved and eligible for state funding, including the unserved portions of partially served census blocks. She said the state does not want to penalize areas where the FCC data overstate the extent of coverage.

Ms. IVEY said that through the first two rounds of grant applications, the state has funded approximately 20% of the projects applied for, awarding \$25 million total over those rounds compared with funding requests totaling \$135 million. Chairman CARTER said it would be helpful to know how much money has been awarded and where it is going; he asked for a list of communities where grants have been awarded and the number of previously unserved Tennesseans getting broadband as a result. Ms. IVEY said she would provide this information after the meeting. [Note: This information was distributed to members on December 20, 2019.] She said that for the third round, the state had received \$62 million in requests—including a 50% increase in projects located in distressed counties—for \$20 million in funding. She said awards are expected to be announced in March 2020. The Department of Economic and Community Development (ECD) has requested \$25 million for the program in its budget request for fiscal year 2020-21. Ms. IVEY said that ECD has also partnered with the Tennessee State Library and Archives to award a total of \$250,000 to libraries in 48 counties to help fund digital literacy training for residents.

Chairman CARTER said that the state continues to spend large sums of money on expanding coverage but that the results aren't always easy to see. Ms. IVEY said that the state's grant program includes a 50-50 funding match requirement for providers. She said that other sources of funding for broadband expansion in Tennessee include the Appalachian Regional Commission, which has provided more broadband grants to Tennessee than any state except Kentucky, as well as grants and loans from the US Department of Agriculture.

Ms. IVEY said that the Tennessee Broadband Accessibility Act of 2017, which created the grant program, also authorized electric cooperatives to provide broadband and that 13 of the state's 23 electric co-ops have active broadband projects. Mayor Brent GREER said that one concern with electric utilities and cooperatives providing service in areas already served by existing providers is that it may inhibit the ability of those existing providers to expand coverage.

In response to Mayor WATERS' question about what the state is doing and what local governments can do to reach out to providers, Ms. IVEY said that the state continues to talk with providers. She said that local governments are encouraged to open communications with providers as well. Other things local governments can do include supporting digital literacy training opportunities and other measures to increase broadband adoption rates in their communities. She said that 54 communities have also applied to ECD to be designated as Broadband Ready Communities, meaning they have adopted a checklist of permitting and zoning procedures designed to signal providers that they have removed regulatory barriers to broadband

investment. Senator LUNDBERG asked whether any of the elements necessary for the Broadband Ready Community designation address pole attachment concerns raised in Mr. Stegeman's presentation. Ms. IVEY responded that the designation requires local governments to establish a single point of contact for providers, which should help address this issue.

Multi-School System Counties—Final Report for Approval

Presentation and action deferred until the Commission's January 2020 meeting.

Local Revenue and Services—Second Interim Report Executive Summary for Discussion

Senior Research Associate Michael MOUNT and Research Associate Emma JOHNSON presented the executive summary and supporting attachments for review and comment. The second interim report is being prepared in response to the Commission's local government members recommendation on January 31, 2019, that the Commission research public K-12 education services and funding in Tennessee to identify what services local governments provide, and how those services are funded. On February 1, 2019, the Commission approved an amended research plan to produce a second interim report focusing on K-12 education services and funding as part of the Commission's comprehensive study of the duties of cities and counties under state law and the funds the state provides to comply, which was requested by the House Finance, Ways and Means Committee during its discussion of House Bill 971 by Representative Sargent in the 110th General Assembly. The full report will be presented at the January Commission meeting.

Mr. MOUNT and Ms. JOHNSON summarized the report's findings and its recommendation, explaining that meeting local needs and the requirements imposed by the state and federal governments often requires more resources than the Basic Education Program (BEP) funding formula alone provides, and that the Basic Education Program Review Committee (BEPRC) was created in 1992 to make recommendations on needed revisions, additions, and deletions to the BEP formula. The report includes a recommendation that a comprehensive review of the components be made by the BEPRC or other designated state and local officials and other stakeholders to ensure that the BEP funding formula supports a commonly accepted basic level of education. Mayor WATERS said he fully supports a comprehensive review of the BEP.

Mayor Keith MCDONALD said the BEP is fully funded but overall, public education is not, noting that the BEP only funds 81% of the teacher positions needed to meet class size requirements and just under 85% of the actual costs of employing teachers based on the average teacher salary. He said we should fund the required positions and the required salary levels. In response to Senator Jon LUNDBERG's question as to whether the number of positions for which the BEP generates funding is the baseline, Ms. JOHNSON said that is correct.

Regarding the survey TACIR staff conducted on out-of-district students, Mayor Tom BICKERS said there is a perception that out-of-district policies of some school systems is having an economic impact on county schools. He asked about BEP money being redirected for out-of-district students, and Executive Deputy Director Melissa BROWN said that students are counted where they go to school and BEP money follows students wherever they are served. Mayor BICKERS asked whether the survey responses captured most of the multi-system counties. Mr. MOUNT said that the survey did not identify respondents, but that information may be determined by identifying the systems with tuition revenue as indicated in the Department of Education's Annual Statistical Report.

In response to Mayor Rogers ANDERSON's question as to whether there is any research that shows the number of students with an individual education program (IEP) who have to go to another school system or state for services that the student's school system does not provide, Ms. JOHNSON said she was not aware of that research but staff would look into it. Mayor ANDERSON asked where the funding comes from for these students, and Deputy Director BROWN said in the past there was federal excess services money, but that we would follow up with the Department of Education.

Illegal Tire Dumps—Draft Report for Review and Comment

Senior Research Associate Bob MOREO presented the draft report for review and comment, and noted the report is in response to a request from Senators Dickerson and Southerland to study Senate Joint Resolution 344 regarding the effects of illegal waste tire dumps in Tennessee. After the General Assembly adjourned without voting on the resolution, Senator Dickerson, with support from Senate Energy, Agriculture, and Natural Resources Committee Chairman Southerland, sent a letter formally requesting that TACIR study the joint resolution, which the Commission voted to do at its May 2019 meeting.

Mr. MOREO said that illegally dumped tires are problematic because exposed tires provide an ideal breeding ground for insects that spread dangerous diseases, the tires present a significant fire hazard, and the tires are difficult and expensive to clean up. The draft report found that Tennessee's existing waste tire program has been successful at diverting tires from landfills and recycling them, and that many of the worst illegal tire piles have been cleaned up, but the existing waste tire program doesn't specifically address illegal dumping issues.

Mr. MOREO said that most other states require tire haulers to obtain permits and require tire businesses to use only permitted waste tire haulers. The draft report recommends that Tennessee should require waste tire haulers to obtain a permit and provide proof of financial assurance as a condition of permit approval. In response to a comment by Mayor Buddy BRADSHAW, Mr. MOREO clarified that permitting waste tire haulers would allow law enforcement officers to stop someone with a large number of tires to check their permit. Mr. MOREO said that, because county governments in Tennessee are each responsible for their waste tire management, the draft report recommends clarifying and possibly amending the law that currently governs how counties can use the money they get from tire disposal fees. He said this could help counties fund more efforts to target illegal dumping proactively.

Mayor Brent GREER asked whether the report recommends changing how the law defines beneficial end-use. Mr. MOREO said the draft does not; however, the current law does permit waste tires to be landfilled if the county documents that sending the tires for a beneficial end-use is cost-prohibitive. Mr. MOREO acknowledged that staff heard from several counties that they feel the current law is too restrictive. Therefore, the report recommends amending the law to give counties more flexibility with how they can spend tire-fee revenue. Mayor GREER said that his county couldn't use tire-fee revenue to dispose of tires from an illegal dumpsite in any way other than for beneficial end-use. He requested that Mr. MOREO include information from several solid waste directors about possible changes to the law in the final report.

Global Positioning System Monitoring—Panel Discussion

Senior Research Associate Jennifer BARRIE said staff made several changes to the draft report, highlighted in the docket book, in response to questions and concerns expressed by Commission members at the last meeting, including providing updated information about the Memphis evaluation study, the electronic

monitoring indigency fund, and available technology and cost. Ms. BARRIE introduced a panel of experts with knowledge of domestic violence and pretrial GPS monitoring, including

- Deputy Chief Don CROWE with the Memphis Police Department, who spoke about the Memphis and Shelby County GPS monitoring pilot program, its implementation, results, and recommendations proposed by the program evaluation;
- Mr. Leo CARSON, vice president strategic sales with Sentinel Offender Services, who discussed types of current and future technology, its capabilities, and cost;
- Ms. Kathy WALSH, executive director of the Tennessee Coalition to End Domestic and Sexual Violence, who presented the victim's perspective and the importance of a victim advocate, coordinated community response, 24/7 monitoring, and lethality assessments; and
- Mr. Patrick FROGGE, executive director of the Tennessee District Public Defenders Conference, who spoke about the issue of indigency and his concerns about determining which defendants are assigned GPS devices.

Several Commission members had questions about costs and funding. In response to Representative John CRAWFORD's question about the cost of smartphone apps for victims, Mr. CARSON said the cost of victims' apps is integrated into the \$4-\$10 daily cost for monitoring. In response to Mayor Tom BICKERS question about state funding other than grant funding, Ms. BARRIE said that the electronic monitoring indigency fund can now be used to pay for GPS monitoring, and the state will match local governments' financial commitment for alcohol and GPS monitoring of indigents. However, ignition interlock devices are 100% state-funded, and only any excess funds from the ignition interlock account are used for other types of alcohol and GPS monitoring. In response to Senator YARBRO's question about indigency, Mr. FROGGE said that the court makes the indigency determination, and judges complete an affidavit of indigency. Mr. CARSON added that sometimes a sliding fee scale is used in defendant-pay programs. In response to Mr. Jeff PEACH's question about government versus contractor monitoring, Chief CROWE said that for their pilot program they chose the lowest cost option with Sentinel, but it has been very labor-intensive and stressful for the Memphis Police Department and Shelby County pretrial services staff.

Members asked a few questions about buffer and exclusion zones. In response to Representative CRAWFORD's question about dead spots and gaps in coverage, Mr. CARSON said that current technology uses GPS satellite, cellular, or wi-fi signals to track and report location information, and new advanced technology will be released next year that will have the ability in the absence of those signals to use the zones stored in the device to calculate locations. He said monitoring is 24/7, and when the buffer zone is breached the person monitoring gets an alert and starts communicating with both the victim and defendant and monitoring the defendant's movement. In response to Mayor BICKERS' question about protecting victims and information about their location when setting exclusion zones, Chief CROWE explained the process the Memphis and Shelby County program uses to communicate with victims to create the zones and said that even without the victim's address, it is still useful to monitor a defendant. Senator Jeff YARBRO asked how they handled complications with the buffer and exclusion zones, such as when a defendant lives in the same neighborhood as the victim or is passing through on the interstate. Chief CROWE explained the process developed over time their investigators use when monitoring to determine whether the defendant is intentionally going near the victim and whether to trigger an investigation.

Mayor BICKERS said he is concerned about releasing domestic violence defendants, as opposed to other types of defendants, to alleviate jail conditions and other problems. He said how we identify who participates in a GPS program is important and had several questions about the Memphis and Shelby County program.

He asked Chief CROWE how the program decides which defendants are appropriate to monitor. Chief CROWE said they developed an assessment and scoring sheet, and the program evaluation recommended the use of an assessment going forward. He said law enforcement officers conduct and score the Maryland lethality assessment (LAP) in the field. [Clarification: The program developed a three-part scoring tool that incorporated the Maryland LAP, a victim statement, and a pretrial assessment tool, and pretrial services staff made the recommendation for GPS based on the resulting weighted score.] In response to Mayor BICKERS' question about the number of times victims were re-assaulted by defendants released with GPS, Chief CROWE said the number was relatively low. In response to a question about when victim advocates are involved, Chief CROWE said an advocate is engaged the next day, or if the LAP score is high, the law enforcement officer immediately calls an advocate from the field to talk with high-risk victims and arrange transportation, shelter, and other services. Shelby County has victim advocates available to be engaged early in the process, and Chief CROWE agrees that advocate involvement would be an important part of any program the state adopts. Mayor BICKERS also asked whether Memphis and Shelby County use GPS when orders of protection are entered in the court in either civil or criminal cases. Chief CROWE responded that during the pilot program they assigned GPS to people who were criminally charged, and it did not correspond with orders of protection. However, the program evaluation does recommend including orders of protection.

Some members expressed concerns about how GPS data is managed. Senator YARBRO asked who owns the data, how it is stored and used, and how long it is stored and used. Chief CROWE explained that Sentinel stores the data, and the Memphis Police Department has used the data to solve other crimes, such as robberies. Mr. CARSON added that Sentinel archives the data indefinitely and considers it to belong to the end-user customer, in this case the Memphis Police Department, who can access it online or receive a data file. The company notifies the government entity if it receives a subpoena for the data, although this rarely happens. Defendants wearing devices do not have access to the data, and victims who use smart phone apps only see the defendant's location when the buffer zone has been breached. Mr. PEACH mentioned that the data could be subject to open records, and the State of Tennessee might want to consider making it confidential.

Chairman Mike CARTER said that he and Representative G.A. Hardaway are working on legislation.

Local Government Procurement and the Acceptance of Online Bids and Offers—Draft Report for Review and Comment

Senior Research Associate Nathan SHAVER presented the draft report for review and comment, and noted that the report was prepared in response to a March 2019 motion passed by the House Local Government Committee requesting a study of House Bill 635 by Representative Travis, which would have amended a state law addressing the local government procurement process. Mr. SHAVER said that current state law provides that Tennessee's local governments may receive bids and other offers electronically. House Bill 635 would have amended the current law to make it mandatory for local governments to accept electronic bids and other offers and required that local governments provide a "secure electronic interactive system" to accept those electronic bids and offers.

Mr. SHAVER said that while many of Tennessee's local governments use an online service to notify vendors of their purchasing opportunities to bid on, only a handful of Tennessee's larger local governments currently accept online bids through a secure online system, as the bill would have required. The draft report explains that all Tennessee procurement stakeholders interviewed for the study were opposed to making it mandatory, instead of optional, for local governments to receive online bids and other offers and to provide a "secure electronic interactive system." He said the Tennessee Association of Public Purchasing (TAPP) provided a

letter, shown in appendix B, which lists several reasons for opposing the bill, such as the potential cost to either the local governments or the vendors doing business with the local governments, and that they see the bill is an “unfunded mandate.”

Mr. SHAVER explained that the draft report included two recommendations. He said that the first recommendation is that while recognizing the potential benefits of receiving online bids and other offers, the Commission does not recommend making electronic procurement mandatory for Tennessee’s local governments. He said the draft report explains that some states, such as Maryland and Virginia, have state-level e-procurement systems that they allow their local governments the option to use to receive online bids and other offers. Mr. SHAVER explained that Tennessee’s state-level e-procurement software system is operated through the state’s Edison system, which would need to be upgraded to provide local governments the ability to use it to receive electronic bids. The state officials responsible for Edison estimate that it would cost approximately \$100,000 to update the Edison system so that local governments could have the option to use it to receive online bids. He said that the second recommendation is that if lawmakers want the state to have an e-procurement system that local governments could have the option to use to receive online bids and other offers, like Maryland and Virginia, they should consider upgrading the state’s current Edison system. He noted that TAPP’s president supports the recommendations.

Mayor Keith MCDONALD commended the staff on the draft report and noted that while House Bill 635 exempted some smaller local governments from the requirements of the bill, he cautioned that the law could later be amended to apply to all local governments. He also cautioned that while some companies offering online bidding services to local governments currently do not charge fees to local governments, those companies may later change their fee structure. He noted that he likes the permissive language, as current law provides, and is against mandating online bidding.

Senator Jeff YARBRO said he thinks the report was well done and asked whether there was any discussion about data security with the bill. Mr. SHAVER responded that although the bill would have required local governments to provide a “secure electronic interactive system” it did not define what it means to be secure, and that it was an issue worthy of consideration.

Chairman Mike CARTER said he appreciates the draft report and that he does not think the state should tell local governments how to do business. He noted that final report will be presented at the next Commission meeting in January 2020.

Community Resilience to Natural Catastrophic Disasters and Extreme Weather—Update

Senior Research Associate Tyler CARPENTER explained that as amended, House Bill 1120 by Representative Freeman and Senate Bill 1114 by Senator Yarbrow would have created a state government task force on community resilience—the ability to prepare and plan for, absorb, recover from, and more successfully adapt to disasters, chronic stresses, and acute shocks, including any hurricane, tornado, storm, high water, recurrent flooding, wind-driven water, earthquake, fire, landslide, mudslide, snowstorm, or drought. However, the legislation was not passed, and the issue of community resilience was referred to TACIR for study. The sponsors request that staff a) identify different natural catastrophes and extreme weather risks across the state, b) document the current status of community resilience planning in Tennessee at the state and local level, c) identify best practices for community resiliency planning, and d) determine the cost of action and inaction related to community resiliency.

Mr. CARPENTER explained that TACIR contracted with 3 Sigma Consultants, LLC to identify natural catastrophe and extreme weather risks, as well as the cost of action and inaction related to community resilience. The Commission then heard from a representative of 3 Sigma, Janey CAMP, PhD, who provided an update to the Commission regarding risks and costs related to natural catastrophes and extreme weather events in Tennessee. Dr. CAMP explained that 3 Sigma staff analyzed extreme weather and earthquake risks across Tennessee and used natural hazards, historical events, future event scenarios, and data on critical infrastructure assets to develop an impact assessment with the cost of action to promote community resilience versus the cost of inaction.

Dr. CAMP explained that resilience is about how a community responds to, recovers and bounces back from a disruptive event like extreme weather and earthquakes, which is the focus of the 3 Sigma work. Dr. CAMP acknowledged that most Tennesseans are likely aware of the seismic zone along the New Madrid fault in West Tennessee; however, she pointed out that there is also a significant seismic zone in East Tennessee. She explained that although the seismic zone in West Tennessee has the potential to generate more peak ground acceleration (i.e., release more energy), the seismic zone in East Tennessee has more frequent, small earthquakes. Senator Jeff YARBRO asked, for clarification on the map titled, Projected Seismic Hazard Map for Tennessee Based on Estimated Peak Ground Acceleration and the meaning of the various colored zones—whether red indicated a higher probability of an earthquake or a higher amount of potential damage. Dr. CAMP clarified that the colors on the map indicated potential energy with brown and red zones in West Tennessee showing the zones where peak ground acceleration would be highest. Mayor Keith MCDONALD stated that predicting earthquakes based on probability estimations is uncertain at best. Mayor MCDONALD suggested that Dr. Camp use the resources of the Center for Earthquake Research and Information (CERI) at the University of Memphis. Dr. Camp said her team is using data from the US Geological Survey, but is working with CERI on another project and has worked with them in the past.

Dr. CAMP discussed that to move from projecting natural catastrophes and extreme weather risks to estimating the cost of not implementing resilience strategies, requires an inventory of critical infrastructure that may be exposed to these events. She said as the population grows there will be additional exposure, which was considered when projecting future costs of inaction. Dr. CAMP then referred to a study by the National Institute of Building Sciences (NIBS) that demonstrated the cost savings related to implementing hazard mitigation strategies. This study revealed that implementing hazard mitigation strategies has the potential to provide a return on investment as high as \$12 for each dollar invested.

Dr. CAMP concluded with a summary of the key points derived from the work to date on natural catastrophe and extreme weather risks, as well as the cost of action versus inaction. She stated that Tennessee is exposed to a variety of natural hazard events on an annual basis. All locations in the state are exposed to multiple natural hazards. The frequency and severity of these events are expected to increase in the future. The cost of inaction is at least several hundred million dollars a year, an amount that is could nearly double by mid-century. Available risk mitigation actions that the state could undertake show a return-on-investment of anywhere from 3:1 to 12:1. And that prudent investment of risk mitigation resources could save hundreds of millions of dollars a year in expected disaster costs.

Mayor MCDONALD said that mitigation, particularly for earthquakes, deals primarily with building codes and that many builders feel their responsibility is to build to a standard that protects from loss of life, but not loss of property. Dr. CAMP replied that protecting human health and safety is the top priority; however, that there is no guarantee that a minimum standard would be protective for children, the elderly, or the disabled. Additionally, she said that making a small investment when structures are built saves in damage and disruption

if an event occurs, as well as costs of inspection, debris removal, landfill costs, and other incidentals that are often incurred by local governments. Mr. Calvin CLIFTON asked whether water distribution systems or wastewater collection systems are included in critical infrastructure. Dr. CAMP said many utilities do not have complete maps of their distribution and collection systems; therefore this type of infrastructure was not included because the information is not available. Mayor Tom BICKERS asked whether communication and technology strategies should be considered so that citizens have the information they need to enhance their safety. Dr. CAMP agreed that the communication network is critical infrastructure. She elaborated that education is an important component of mitigation and that educating the public is low-hanging fruit that would be less expensive than retrofitting infrastructure and would provide a good return on investment.

Senator YARBRO asked how we can prioritize investment so that we get the best results depending on the risks that an area faces? Dr. CAMP acknowledged that it is not possible to build our way out of risk exposure and infrastructure is not always the answer. For example, building houses in a bend of a river is not appropriate no matter what level of engineering is applied. She said that the research provides insights into the risks that each county is facing and that communities can use this information to make decisions on where to invest based on their priorities.

Mayor Rogers ANDERSON asked how people should prepare for water and food distribution. Dr. CAMP said that she agreed that water is critical and that planning for water and food should be part of the local hazard mitigation and resilience planning process, but identifying backup water and food options was beyond the scope of this project. She said most water supply facilities do keep a surplus of potable water in tanks, so water supply plants are one way to identify the water resources that are available. Mayor ANDERSON said many citizens are on well water and may not have a backup system. Dr. CAMP agreed that this is a vulnerability that the government and citizens should consider. Chairman Mike CARTER said he wants the report include recommendations on how we help citizens prepare for an interruption of water and food supplies because of a disaster. Executive Director Cliff LIPPARD said that TACIR staff will use the natural catastrophes and extreme weather risk data and information on costs that were prepared by 3 Sigma, but that the study will go beyond this and provide best practices and strategies that local governments and citizens can use to promote resilience.

January 16-17, 2020

Right to Shop—Panel Discussion

Chairman Robin SMITH, Public Chapter 407's sponsor, discussed the Right to Shop law that was passed by the General Assembly in 2019. It requires insurers to provide information that enables the insured to shop around for the best price on medical services and authorizes insurers to offer incentive programs to reward the insured for choosing lower cost services. Senior Research Associate Jennifer BARRIE followed with an overview of the study and said the Act directs the Commission to study any cost savings realized by enrollees with health insurance plans in states that have adopted legislation or programs that require insurance carriers offering health plans in those states to offer incentive programs to enrollees for shopping for healthcare services at lower costs. The study must include, at a minimum, an examination of savings realized by these types of programs in Maine, New Hampshire, Florida, Arizona, and Kentucky. The legislation requires the Commission to report its findings to the General Assembly by December 2020.

Ms. BARRIE introduced a panel of experts representing different perspectives on the issue, including

- Mr. Josh ARCHAMBAULT, senior fellow with the Foundation for Government Accountability, who explained the issue, how right to shop programs work, and Tennessee’s law;
- Ms. Jenny GOINS, commissioner of the Department of Employee Insurance in the Kentucky Personnel Cabinet, who explained Kentucky’s public employee health plan; how it has incorporated price transparency and shopping incentives, and the program results; and
- Mr. Nathan RIDLEY, attorney with Bradley Arant Boult Cummings LLP and representative of American Health Insurance Plans, who spoke about the healthcare insurance industry in Tennessee, transparency and incentive programs in other states, and industry concerns about Tennessee’s law.

Representative Antonio PARKINSON clarified that Tennessee’s legislation benefits people with insurance and asked Ms. GOINS whether the Kentucky plan benefits people with Medicaid. She said the program she oversees is just for public employees. Mr. ARCHAMBAULT said the Kentucky program does not include Medicaid recipients, and it was enacted as an administrative policy decision, not through legislation. He added that there are issues with the federal social security law that restricts giving incentives to Medicaid enrollees that would need to be addressed at the federal level before such an approach could be attempted.

In response to Representative PARKINSON’s question about the differences between Tennessee’s law, other states’ laws, and the new federal rules, Mr. ARCHAMBAULT said that first, other states and the new federal rules have real price disclosures for more health care services than Tennessee’s law, which is more limited and revolves around average prices. Second, other states’ laws require plans or whole segments of the individual and small business market to offer incentives, but Tennessee does not. Third, most other states have no cap on incentives while Tennessee has a \$599 annual cap on incentives. Fourth, states like Arizona and Maine grant patients credit toward their in-network out-of-pocket responsibility when they see out-of-network providers that saved them money; Tennessee does not. Fifth, the new federal rules require price disclosure by both insurers and hospitals while Tennessee’s requires price disclosure by insurers only.

Mayor Keith MCDONALD asked for copies of Mr. Archambault’s comments. He also asked Ms. Goins about overcoming the “you get what you pay for” mindset and how they track the quality of care. She said although, in Kentucky, they found for common procedures like colonoscopies, mammograms, and MRIs there is no difference in quality, they do recognize that there could be a difference. There are companies that provide tools that help compare quality and cost. Chairman SMITH clarified that Tennessee’s law is limited to in-network providers and does not encourage out-of-network shopping because insurance companies leverage quality with the in-network providers. Therefore, the law has a built-in quality metric. Representative John CRAWFORD said all providers, regardless of their cost, must meet minimum standards to practice in Tennessee.

In response to Ms. Mary GAITHER’s question about whether Kentucky has a database for shoppers to access reviews of facilities or providers, Ms. GOINS said several companies are providing quality measures for various services—in particular, the data for higher cost procedures is available. Mr. ARCHAMBAULT added that vendors have websites, apps, and call-in numbers, and their goal is to be consumer-friendly. They design their products to give consumers information about the low cost, high quality provider options in the consumer’s area within a minute.

Mayor ANDERSON asked Ms. GOINS whether Kentucky is having the same issues as Tennessee with the closure of small, rural hospitals, and whether Kentucky has certificates of needs. She stated that they do have certificates of needs, and other than a few extremes, they do not have the same issue with hospital closures but try to use telehealth to help the rural areas.

Local Government Procurement and the Acceptance of Online Bids and Offers—Final Report for Approval

Executive Director Cliff LIPPARD presented the final report on local government procurement and the acceptance of online bids and offers for approval. The report was prepared in response to a March 2019 motion passed by the House Local Government Committee requesting a study of House Bill 635 by Representative Travis, which would have amended the current law to make it mandatory for governments to accept electronic bids and other offers and required that local governments provide a “secure electronic interactive system” to accept those electronic bids and offers. Dr. LIPPARD said there were no significant changes since the draft report was presented at the last meeting.

Mayor Keith MCDONALD moved approval of the report, Senator Ken YAGER seconded the motion, and it was approved unanimously.

Illegal Tire Dumps—Final Report for Approval

Senior Research Associate Bob MOREO presented the final report on illegal tire dumping for the Commission’s approval. The report was prepared in response to a request by Senator Steve DICKERSON and Senator Steve SOUTHERLAND that the Commission study problems stemming from illegal waste tire dumps in Tennessee. Mr. MOREO reviewed changes made to the report since the report was presented at the December 2019 meeting.

He explained the report’s second recommendation, which says Tennessee should establish permit requirements for waste-tire haulers, was revised to include an exception for registered tire retailers that choose to transport their own waste tires and document their proper disposal, and that permit requirements can reduce illegal dumping by giving law enforcement officers a reason to stop vehicles hauling tires. Mr. MOREO said more details were added regarding the third recommendation—to give counties more flexibility to spend money they receive from tire pre-disposal fees—by addressing the use of pre-tire disposal funds as two separate concerns. The report recommends giving counties clear authority to use that revenue for specific efforts to combat tire dumping, as well as allowing counties to use it to dispose of shredded tires in landfills when the costs to find a beneficial end-use are significantly higher.

Mr. David CONNOR, Executive Director of the Tennessee County Services Association, was asked by Senator Ken YAGER to comment on the report and the issue of waste tires. Mr. CONNOR said tires are a serious problem all across the state, and that recycling tires is a challenge in part because there are few recycling companies, which drives costs up for county governments. He said that money from tire fees is rarely enough to cover counties’ costs. Senator YAGER asked whether collecting fees on the sale of used tires will help, and Mr. CONNOR said he believes that it will.

Mayor Brent GREER emphasized the need to regulate tire haulers and give law enforcement officers the ability to stop suspicious vehicles carrying tires. He said that TDEC should use more of the money it gets from tire fees to hire enforcement personnel. Executive Director Cliff LIPPARD asked Mayor GREER whether the report’s recommendation for tire hauler permits is a step in the right direction. Mayor GREER said it is, and that local governments are looking forward to having a clear process they can follow.

Mayor Buddy BRADSHAW cautioned that although stiff penalties can be a deterrent to illegal dumping, any new permitting process should not be too burdensome for small tire shops to follow. Chairman Mike CARTER agreed that provisions should allow individuals to carry a small number of tires without a permit.

The report was unanimously approved after being moved by Mayor Kevin BROOKS and Senator YAGER.

Global Positioning System Monitoring—Final Report for Approval

Senior Research Associate Jennifer BARRIE presented the final report for the Commission's approval. As directed by Public Chapter 827, Acts of 2018, the Commission conducted a study of the effects and implementation of GPS monitoring as a condition of bail for defendants accused of stalking, sexual assault, domestic abuse, and violations of protection orders. Ms. BARRIE said that to address concerns that members expressed during the panel discussion at the December 2019 meeting, information was added about data ownership and use and open records considerations. Updated results, recommendations, and conclusions from the Memphis and Shelby County GPS monitoring pilot program evaluation were also added.

The Commission report's recommendations remain unchanged from the draft report and include the following: Local jurisdictions should consider adopting GPS monitoring as but one component of a larger coordinated community response—including strong interagency partnerships, cooperation and commitment from stakeholders, and services such as family safety centers, domestic violence high-risk teams, and lethality assessments. Local governments and partner agencies need to clarify roles and expectations and develop and commit to procedures and policies. Regardless of whether local governments choose to implement GPS monitoring programs, law enforcement agencies should be encouraged to adopt validated lethality assessments because of their effectiveness as a tool to identify victims most at risk of serious harm or death and to help prioritize their access to services and develop safety plans. If the General Assembly appropriates additional funds specifically for real-time GPS monitoring of domestic violence defendants, it should require that local governments drawing money from the fund, at a minimum, adopt a validated lethality assessment tool to both help identify which domestic violence victims are in the greatest danger and immediately connect those victims with safety planning and other services to improve their safety. Local governments adopting pretrial GPS monitoring programs may also choose to prioritize high-risk cases and certain types of offenses, including intimate partner violence, strangulation, stalking, threats involving firearms, or violations of protection orders.

Mayor Rogers ANDERSON asked about the counties that are not listed as having committed to participating in the EMIF program. Ms. BARRIE said there was a timeline for counties to commit to participation for this fiscal year, and she believes there will be a timeline for counties to commit to participation in the next fiscal year. Mayor ANDERSON said that educating counties on the program will be important for participation. Chairman CARTER commented that he is working on legislation that will make GPS monitoring in lieu of bond so indigency won't be a factor, and counties won't have to pay for it.

Senator Katrina ROBINSON asked why Shelby County is not listed as committed to the EMIF program and whether the grant funds for the pilot program have been expended. Ms. BARRIE said she does not know why they have not committed and clarified that their grant program has ended, and they are continuing a locally funded program. Mayor MCDONALD said Shelby County did not commit to the EMIF because it had started the pilot program with grant funding before the EMIF program was an option.

Mayor Keith MCDONALD moved to approve the report, Mayor Kevin BROOKS seconded the motion, and the Commission voted to approve the report.

Multi-School System Counties—Final Report for Approval

Action on the report was deferred until the Commission's May 2020 meeting, and a work group of the Commission's local government members and other representatives of county and city governments will meet with TACIR staff to resolve outstanding concerns with the report.

Small Cell—Panel Discussion

The Commission heard from a panel of experts who discussed the effect of Public Chapter 819, Acts of 2018, on wireless providers and on the state and local government entities responsible for permitting small wireless facilities. Panelists included

- Vernon GERTH, assistant city administrator, City of Franklin;
- Jeff HOGE, director, Right-of-Way Division, Tennessee Department of Transportation; and
- Joelle PHILLIPS, president, AT&T, Tennessee.

Mr. GERTH said that as technology has evolved, small wireless facilities and their support structures have tended to fit better with the aesthetic character of the neighborhoods in which they are located. However, better coordination among local governments, electric utilities and cooperatives, and wireless providers and their subcontractors could reduce burdens on local governments in terms of both cost and time and create a more efficient process for deploying small wireless facilities in Tennessee. Mr. GERTH said wireless providers have been reasonable to work with, but problems have typically started after providers receive local permits for their facilities and turn over management of their projects to subcontractors. In Franklin, subcontractors have deviated from approved plans and shown disregard for coordinating site inspections with local government. Mr. GERTH said that local governments should be allowed to recoup their added costs by charging additional fees for added inspections or added permit reviews in these cases. In response to Mr. CLIFTON's question about whether Franklin has considered requiring performance bonds for small wireless facility projects, Mr. GERTH said that the city typically requires letters of credit instead, which he characterized as sufficient if installations of support structures, fiber-optic cable, and electricity can be aligned.

Mr. GERTH said that subcontractors' coordination with electric providers is woefully inadequate. Some new support structures installed for small wireless facilities have been installed for months before electric power and fiber have been extended or connected, and in some cases, power generators have been placed in the right-of-way to power facilities while they wait for electricity to be connected. In other cases, subcontractors have confused procedures for working in public rights-of-way with those for private easements.

County Executive HUFFMAN said that he receives complaints about installations occurring on private property without notice and asked whether Franklin requires property owners to be notified prior to work being performed in private easements. Mr. GERTH responded that utilities have a right to maintain their private easements but are obligated to notify property owners prior to performing work in them. He said that Franklin notifies property owners out of courtesy, follows up on complaints, and tries to apply penalties to subcontractors that disregard permitting and notice processes. Ms. PHILLIPS said one complicating factor is that different local governments have different rules regarding private easements—which are usually governed by private contracts—and general utility easements—which usually have a set of rules and requirements that vary depending on the type of work performed. She said that the differing local rules for general utility easements across the state create a patchwork and that uniformity would be welcome. In response to County Executive HUFFMAN's question about whether customers' service contracts allow providers onto their

property without permission, Ms. PHILLIPS said that although practices across the industry vary, AT&T's terms and conditions say they will follow the rules of the relevant local government; in cases where major construction is required, AT&T will negotiate an easement.

Regarding the need for better coordination, Mr. GERTH said that local governments should be allowed to require small wireless facilities permits to include a single point of contact who would be responsible for requesting inspections and resolving problems for all components of the permitted plan. Ms. PHILLIPS said the construction boom in Middle Tennessee has increased competition for the best subcontractors, and AT&T has had to remove a master contractor that did not provide necessary coordination on projects. She said that AT&T would be receptive to a uniform policy for coordinating work on small wireless facility projects, and she said that many cities already have a platform for utilities to communicate with each other, but wireless providers don't have access to it. She said that the 811 "call before you dig" program, which allows companies and individuals to determine the location of existing utilities before they begin digging, could be a starting point for finding a model that would improve coordination for small wireless facilities projects.

Among several other recommendations, Mr. GERTH said that plans should be approved by relevant electric utilities or cooperatives before being submitted to local governments and that small wireless facilities projects should be required to be completed in a timely manner, much as local governments are required to review permit applications for these projects in a timely manner. Ms. PHILLIPS agreed that it is important for facilities to be completed in a timely manner.

Mr. HOGE said that before Public Chapter 819, Acts of 2018, was passed, the Tennessee Department of Transportation (TDOT) had developed its own guidelines for small wireless facilities placed in rights-of-way managed by the department and classifies these facilities as utility infrastructure. TDOT does have concerns that new structures installed solely for small wireless could be abandoned in the future, and it prefers that small wireless facilities be collocated on existing support structures in the right-of-way, though it generally does not want them located on TDOT structures. Large cell towers are not permitted in the right-of-way. Mr. HOGE said that if a new support structure is approved, the department would want other providers to collocate on it in the future. Ms. PHILLIPS said that collocation will likely become more attractive to providers in future years, as more and more facilities get deployed.

Mr. HOGE said that TDOT's regional offices are processing applications within the time limits established by the 2018 law and that contrary to expectations the department has not been bombarded with applications. In response to Mayor MCDONALD's request for clarification about the number small wireless facilities TDOT allows in a single permit application, Mr. HOGE said that it is 10 facilities per application. Mayor BROOKS expressed concern that TDOT Region 2 where his community is located has the fewest number of small wireless facilities applied for despite being the fastest growing region for manufacturing in the state. Ms. PHILLIPS clarified that TDOT's numbers include only those small wireless facilities applied for in TDOT-managed rights-of-way and that there may be other small wireless facilities in these communities.

Mr. HOGE said the only substantive change for TDOT as a result of the 2018 law has been the fee charged for these facilities. In response to Mayor MCDONALD's question about the fees TDOT currently charges, Mr. HOGE said that consistent with the 2018 law, the department charges a permit fee of \$100 per small wireless facility for the first five facilities in a single application and \$50 per facility for each facility beyond the first five in the same application.

Ms. PHILLIPS said that Tennessee's small wireless facility law compares favorably to the laws in other states. As a result, AT&T's Tennessee office has been able to take resources from offices in other states that are having

issues with local permitting. In response to County Executive HUFFMAN's question about how Tennessee is likely to compare to other states five years from now, Ms. PHILLIPS said that although we got ahead of states with large population centers like Georgia and Florida early on, they are trying to catch up. She said one advantage for other states is that they can regulate the electric power and telecommunications industries together, including pole attachments. She said electric providers in Tennessee have been engaged on these issues, and AT&T has a good relationship with the Tennessee Valley Authority. She said one consideration would be to charge small wireless facilities for electricity based on average consumption rather than requiring separate electric meters for each facility.

In response to Mayor MCDONALD's question about the number of small wireless facilities currently deployed in Tennessee, Ms. PHILLIPS said AT&T has approximately 150 facilities up and running, with another 150 permitted facilities that are under construction. She expects another 200 small wireless facilities to be deployed by the end of 2020, and she said the pace of deployment has improved as a result of the 2018 law. In response to County Clerk GAITHER's request for a list of small wireless facilities and what areas have broadband service, Ms. PHILLIPS said that a new federal reporting and mapping process currently under development would likely improve the quality of broadband mapping in future years. She said that AT&T and other providers could work with CTIA—the trade group for wireless providers—to put together information on small wireless facilities in Tennessee.

In response to Mayor MCDONALD's question about the size of small wireless facilities and the equipment necessary to operate them, Ms. PHILLIPS said that the antenna is typically the size of a Quaker Oats box and that each antenna will need a power shutoff switch, in some cases an electric meter, as well as other equipment. Mayor MCDONALD asked whether the additional equipment includes large cabinets placed on the ground, and Ms. PHILLIPS responded that they do use ground-mounted equipment as part of their fiber network, which supports small wireless facilities.

Several members asked questions about the deployment of small wireless facilities and high-speed internet service in rural areas. In response to Senator YAGER's question about whether small wireless facilities would be used to provide broadband to rural areas, Ms. PHILLIPS said that initially small wireless facilities will serve more populated areas with greater capacity needs and those areas like interstate interchanges where many people are passing through. She said that as new uses of wireless service are adopted by residents, businesses, and industries it will be more likely that providers can make a business case to serve currently unserved areas. County Executive HUFFMAN asked how long industries, including agriculture, and rural communities will have to wait for access to the advanced capabilities provided by small wireless facilities. Ms. PHILLIPS responded that providers are generally already able to make a business case for serving manufacturing facilities of large enough size. She said as agricultural equipment manufacturers build greater connectivity into farming equipment, such as tractors and irrigation systems, it will drive the deployment of wireless infrastructure by making the business case for serving these areas. In response to Mr. PEACH's question about wireless service in rural areas, Ms. PHILLIPS said that fixed wireless service is already provided in some areas, using facilities that are larger than small wireless facilities but smaller than traditional cell towers. She said that consumers are already shifting from wireline to wireless broadband as their primary mode of internet access. In response to Senator YARBRO's question about resources communities could leverage to get residents access to high-speed internet beyond deploying service to every home, Ms. PHILLIPS said that communities can encourage residents to take advantage of resources including digital literacy training provided at libraries, community colleges and colleges of applied technology.

In response to County Executive HUFFMAN's question about whether small wireless facilities will improve redundancy in wireless networks to make them more resilient. Ms. PHILLIPS said that small wireless facilities were not directly related to improvements in redundancy, which she characterized as something that would be important if fiber-optic cables are cut. She said that the improvements in wireless connectivity that small wireless facilities will make wireless a stronger competitor for wired service. Mayor ANDERSON asked whether there are any concerns related to cybersecurity, small wireless facilities, and 5G service. Ms. PHILLIPS responded that almost all cybersecurity works better with more bandwidth, though she said that some things require unique solutions, providing FirstNet as an example where AT&T has constructed a wireless network with dedicated bandwidth for first responders and other officials to use during public emergencies.

Chairman CARTER said that rural broadband is one of the biggest issues for his constituents and that he hopes advances in wireless networks can help unserved areas. In response to Chairman CARTER's questions about whether existing conduit that was placed for AT&T's telecommunications networks decades ago could be used to deploy new fiber, Ms. PHILLIPS said that those conduits can be used for fiber today even if they were built for AT&T's copper network initially, though she said the electronics for those networks would need to be upgraded. She said small wireless facilities rely on fiber backhaul. Ms. PHILLIPS said that AT&T is considering working with electric cooperatives to provide them with video service for the cooperatives' internet customers.

Local Revenue and Services—Second Interim Report for Review, Comment, and Approval

Senior Research Associate Michael MOUNT presented the interim report on K-12 local revenue and service for review, comment, and approval. The second interim report was prepared in response to the Commission's local government members recommendation on January 31, 2019, that the Commission research public K-12 education services and funding in Tennessee to identify what services local governments provide, and how those service are funded. On February 1, 2019, the Commission approved an amended research plan to produce a second interim report focusing on K-12 education services and funding as part of the Commission's comprehensive study of the duties of cities and counties under state law and the funds the state provides to comply, which was requested by the House Finance, Ways and Means Committee during its discussion of House Bill 971 by Representative Sargent in the 110th General Assembly. The final report will be presented at the May Commission meeting.

Mr. MOUNT summarized the changes and additions that were made to the executive summary that was presented at the December 2019 Commission meeting. He said an analysis section, information about system level fiscal capacity models, a reference to the report on the Effects of Sharing of Revenue Among School Systems in Counties with More than One School System, a figure showing the state share and required local match of school systems, and appendixes on education expenditures as a percent of total expenditures by county and city were added. He said the number of licensed positions generated by the BEP funding formula and the number employed by school systems was updated.

In response to Mayor Rogers ANDERSON question about whether expenditures in appendix A includes bonded indebtedness, capital outlay, and operations, Mr. MOUNT said they are included. Mayor ANDERSON asked whether Appendix A, which shows Williamson County's education expenditures as a percent of total expenditures for 2017-18 (78.2%) is correct and meant that the county only had 22% of its budget to fund the rest of its government activities. Mr. MOUNT said the calculation is for expenditures and was based on Williamson's 2017-18 Annual Financial Report Statement of Activities. [NOTE: \$398,075,694 was for the Williamson County School Department, \$173,853,499 was for the primary government education expense

(\$111 million in education capital expenditures and \$63 million for education self-insurance), and \$333,501,984 was for the total primary government expense.]

County Executive Jeff HUFFMAN asked whether the \$4.1 billion in local revenue includes bond proceeds. Mr. MOUNT said it does not. County Executive HUFFMAN asked how much that represents. Mr. MOUNT said the Department of Education's 2018 Annual Statistical Report included \$790.0 million in non-revenue receipts, including \$428.6 million in bond, note, and lease proceeds and insurance recovery.

Representative Antonio PARKINSON moved that the report be approved. Mayor Keith MCDONALD seconded the motion. The Commission unanimously approved the report.

Annual Report on Tennessee's Public Infrastructure Needs—Final Report for Approval

Research Associate Rabia CHAUDHRY presented the Public Infrastructure needs report for approval. Senior Research Associate Dave KEISER assisted Ms. CHAUDHRY with questions and answers. Ms. CHAUDHRY said the report documents \$54.8 billion of needed infrastructure improvement projects, which were in some stage of development during the five-year period of July 2018 through June 2023.

Mayor Larry WATERS asked whether the information in the report was collected from consistent sources, using the same criteria across the state. Ms. CHAUDHRY said that TACIR contracts with the nine development districts to gather information from local officials using a standardized protocol. Mr. KEISER added that the information about state government infrastructure needs is also standardized for consistency.

Mayor Keith MCDONALD asked why the report did not show any infrastructure needs in Shelby County within the industrial sites and parks category, shown in appendix D-22a on page 214. Mr. KEISER said that Shelby County officials were surveyed by the Memphis Area Association of Governments staff, but that Shelby County officials did not identify any infrastructure needs in this category.

Mayor MCDONALD asked why there was no record for Memphis school infrastructure needs in appendix E-9 on page 256. Mr. KEISER explained that the needs were listed by school system and that because Memphis no longer had a city school system, the school infrastructure needs within Memphis were included in the Shelby County school system.

Mayor MCDONALD asked whether the report included a list of all mandates from the Americans with Disabilities Act (ADA). Mr. KEISER said that the report did not include a comprehensive list of all ADA mandates.

Vice-Chairman Kevin BROOKS asked for a motion to approve the report. County Executive Jeff HUFFMAN made the motion to approve the report. Mr. Jeff PEACH seconded the motion. The report was unanimously approved.

Tennessee Valley Authority Payments in Lieu of Taxes—Annual Report for Approval

Policy Coordinator Dr. Matthew OWEN presented the annual update on Tennessee Valley Authority (TVA) payments in lieu of taxes (PILOT) for approval. He said that the amount Tennessee receives from TVA is estimated to increase for the third straight year. Dr. OWEN reviewed incentives included in TVA's new wholesale power contracts and the potential for changes in TVA's customer base, saying that they could affect the PILOT in future years. He said that one of TVA's Tennessee distributors, Memphis Light, Gas and Water

(MLGW), is currently studying whether to leave the TVA system. Staff will provide an update on MLGW's study at the May commission meeting.

In response to Representative PARKINSON's question about the effect on the PILOT of MLGW leaving the TVA system, Dr. OWEN said that because it would reduce both TVA's overall revenue and the share of that revenue generated from sales in Tennessee, it would reduce both the overall PILOT for all states and TVA's payments to Tennessee. But any new entities that MLGW purchases wholesale electricity from would be required under Public Chapter 1035, Acts of 2010, to make payments in lieu of taxes equivalent to those that would have been made by TVA based on the cost of those new entities' wholesale power sales to MLGW. These payments would be added to what the state receives from TVA for allocation through the state's TVA PILOT distribution formula and would at least partially offset the decrease in TVA's payments to Tennessee. In response to Mayor MCDONALD's question about how payments through the state's distribution formula to cities in MLGW's service area would be affected if MLGW were to leave, Dr. OWEN said that cities and counties in MLGW's service area would see their allocations decrease because they would be excluded from the portion of the formula that allocates revenue based on population, county acreage, and TVA acreage. Mayor MCDONALD asked whether some cities like Bartlett could lose all of their current allocation. Dr. OWEN responded that in some cases, including Bartlett's, cities and counties could lose all of their current allocation. In response to County Executive HUFFMAN's question about whether entities selling wholesale electricity to a distributor like MLGW would be required to make payments in lieu of taxes directly to local governments to offset decreases through the state formula, Dr. OWEN said that he was not aware of anything in state law that would require wholesalers to make payments directly to local governments. The payments required by Public Chapter 1035, Acts of 2010, are made to the state for distribution through the state's formula.

County Executive HUFFMAN said that TVA has recently converted its Allen power generating facility in Memphis from coal to natural gas and asked whether MLGW's decision to leave would affect ownership of that facility. Dr. OWEN responded that MLGW's decision would not necessarily affect ownership of the facility, and if it remains owned by TVA, Shelby County would continue to receive direct payments from TVA related to it.

In response to County Executive HUFFMAN's question about whether TVA PILOT revenue will be a reliable revenue source for paying off bonded debt including school bonds, Dr. OWEN said that the PILOT will likely fluctuate, and there is no guarantee that the PILOT will increase or even remain the same from year to year. This is something for governments to consider when incorporating TVA PILOT revenue into budgeting and planning processes.

In response to Mayor WATERS' question about whether distributors studying whether to leave TVA's system is a recent phenomenon, Dr. OWEN said that MLGW initiated its study in the spring of 2019. A few distributors from other states have left the system in the last 20 years, though at least one has since returned. Mayor WATERS asked whether it would be fair to say that the PILOT would decrease if distributors like MLGW end up leaving the TVA system. Dr. OWEN responded that it would.

Mayor GREER said TVA's PILOT will be discussed at the upcoming meeting of the Association of Tennessee Valley Governments, and he invited staff to attend the meeting.

Mayor GREER moved approval of the report, Mayor MCDONALD seconded the motion, and it was approved unanimously.

Community Resilience to Natural Catastrophes and Extreme Weather—Panel Discussion

The Commission heard from a panel of experts who discussed their agency is currently doing to improve resilience to natural catastrophes and extreme weather, what is working regarding collaboration, and efforts that would improve resilience in Tennessee. Senior Research Associate Tyler CARPENTER introduced the panel. Panelists included

- Kent ARCHER, CDBG director, Tennessee Department of Economic and Community Development (ECD);
- Kendra ABKOWITZ, Ph.D., director, Office of Policy and Sustainable Practices, Tennessee Department of Environment and Conservation (TDEC); and
- Patrick SHEEHAN, director, Tennessee Emergency Management Agency (TEMA).

Mr. ARCHER explained that ECD's first experience with community resilience began approximately five years ago when the state was awarded the Community Development Block Grant (CDBG) National Disaster Resilience Competition (NDRC) grant for flood mitigation projects in Dyer County, Lake County, Lauderdale County, and Madison County. Since being awarded the NDRC grant, ECD has tried to incorporate resilience into their grant making and program management, particularly around water and sewer infrastructure development. Mr. ARCHER said every department does things differently, and it would be helpful for the state to determine define "community resilience" to provide direction for programming and funding decisions.

Dr. ABKOWITZ said it is likely that every agency has some statutory responsibility related to resilience, and that improving communication and collaboration between agencies helps each agency better accomplish its mission to assist communities across Tennessee. She agreed with Mr. ARCHER that determining a definition for resilience would be helpful so TDEC can better identify the scope of work that everyone believes contributes to resilience, and then identify more opportunities for agencies to collaborate.

Mr. SHEEHAN said he has worked with Tennessee mayors before, during, and after natural disaster events, and he always emphasizes the importance of state and local collaboration to mitigate hazards. Mr. SHEEHAN said that the aging water and wastewater infrastructure is a significant concern in Tennessee. He said that many communities in Tennessee lose 25% or more of the water in the distribution system due to leaking pipes and this is one area where ECD, TDEC, and TEMA are collaborating to assist local governments.

Senator Jeff YARBRO asked how the state works to provide grants and other assistance to different stakeholders affected by disasters so everyone's needs are met. Mr. ARCHER said ECD established an interagency resilience council to help coordinate projects and resources for the NDRC grant. He explained the council has been disbanded for several reasons, but he thinks a similar council should be reestablished to promote better coordination between state agencies and local governments. Dr. ABKOWITZ responded to Senator YARBRO's question, saying that state agencies need to continue working together to maximize resources and assist local governments. Mr. SHEEHAN said collaboration is always hard, but that TEMA makes it a priority.

County Executive Jeff HUFFMAN asked how much of the \$44.5 million for the NDRC grant has been spent in the past three years. Mr. ARCHER said that approximately 35-40% had been spent and two years are remaining on the grant. County Executive HUFFMAN asked why it is taking so long to complete projects under the grant. Mr. ARCHER said that the US Department of Housing and Urban Development (HUD) has changed the way they do grants and that five years is normal now.

County Executive HUFFMAN said he didn't understand why there would be a low-to-moderate income component in a mitigation grant because all who reside within an area subject to flooding will be affected, not just low-income people. Mr. ARCHER said that the low-to-moderate income component is a small part of the funds, and the reason the requirement exists is that often those who are the most affected by a disaster are also the most impoverished.

Mayor Larry WATERS asked who should be in charge of coordinating the state's efforts on community resilience and hazard mitigation. Mr. SHEEHAN said the director of TEMA is by law the Governor's authorized representative and the state coordinating officer during an emergency. Mr. SHEEHAN said he expects to be the state's representative and the coordinating officer for all future disaster events.

Chairman Mike CARTER asked Executive Director LIPPARD to address the information concerning how individuals can be prepared for a disaster. Dr. LIPPARD referred to the attachment behind tab 12, which included information from TEMA's website regarding actions that individual citizens may take to prepare for disasters.

May 13-14, 2020

The May 2020 meeting was rescheduled for June 18-19, 2020, and then postponed indefinitely due to the COVID-19 pandemic.

DRAFT