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MINUTES OF THE TENNESSEE ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS

September 5, 2019

Meeting Called to Order

The Tennessee Advisory Commission on Intergovernmental Relations met in House Hearing Room II of the Cordell Hull Building at 1:04 p.m., Chairman Mike Carter presiding.

Present 21	Absent 4
Mayor Rogers Anderson	Mayor Buddy Bradshaw
Assistant Commissioner Sammie Arnold	Representative Susan Lynn
Mayor Tom Bickers	Senator Katrina Robinson
Mayor Kevin D. Brooks	Senator Ken Yager
Representative Mike Carter	
Mr. Calvin Clifton	
Representative John Crawford	
Deputy Commissioner Paula Davis	
County Clerk Mary Gaither	
Mayor Brent Greer	
Mayor Jill Holland	
County Executive Jeff Huffman	
Representative Harold Love Jr.	
Senator Jon Lundberg	
Mayor A. Keith McDonald	
Representative Antonio Parkinson	
Mr. Jeff Peach	
Mayor Larry Waters	
Senator Bo Watson	
Comptroller Justin Wilson ¹	
Senator Jeff Yarbro	

¹ Lauren Spires represented Justin Wilson.

1. Call to Order and Approval of the Minutes

Chairman Mike CARTER called the meeting to order at 1:04 p.m. and dispensed with the calling of the roll. He then welcomed the Commission's three newest members, Assistant Commissioner Sammie ARNOLD of the Tennessee Department of Economic & Community Development, County Clerk Mary GAITHER of Tipton County and City Mayor Jill HOLLAND of McKenzie, and asked if they would please introduce themselves. Following their remarks, Chairman CARTER requested approval of the minutes of the May 2019 meeting. The minutes were moved, seconded, and passed unanimously.

2. Commission and Staff Update

Executive Director Cliff LIPPARD provided an update on a recommendation from the Commission's 2018 report, *Encouraging More Cooperation and Accountability in Payment in Lieu of Tax Agreements*, which suggested that TACIR's fiscal capacity calculation should be updated to include current industrial development board assessment amounts rather than the 1993-1995 payments in lieu of taxes data currently used. He reminded the members that the report said that making this replacement would require a change in state law or a recommendation by the Basic Education Program Review Committee (BEPRC) and approval by the General Assembly. Dr. LIPPARD explained that staff contacted the Department of Education and the State Board of Education about the recommendation, and then discussed it at a meeting of the BEPRC on May 29, 2018. At that time, the committee chose to postpone any action until after the November 2018 gubernatorial election.

Dr. LIPPARD added that on August 16, 2019, the Commission received letters from Commissioner Penny Schwinn of the Department of Education and Chairman Lillian Hartgrove of the State Board of Education saying that they do not believe the BEPRC has the authority to make changes to TACIR's fiscal capacity model. They asserted that they believe that TACIR has that authority, and if not, should request any needed changes to the formula through the General Assembly. Dr. LIPPARD said that staff does not agree with this position, and will continue to seek some resolution.

Mayor MCDONALD added that he was also present as a member at the most recent meeting of the BEPRC, and that he concurred that who has the authority to make the changes isn't clear. He wondered whether the legislative members of the Commission could seek an opinion from their legal staff. He added that he felt it important to make the change to make the fiscal capacity model more accurate. Chairman CARTER responded by asking whether it would be appropriate to request an Attorney General opinion on the question. Representative PARKINSON asked for clarification on whether the issue was whether the Commission could make changes to the BEP. Dr. LIPPARD responded that the issue was regarding changes to the fiscal capacity formula and not the entirety of the BEP, and went on to say that staff currently makes changes to incorporate changes made by the producers of source data, but does not add or subtract components from the formula. Representative PARKINSON commented that the Commission is a recommending body, while the legislator is the body makes the actual changes. Chairman CARTER acknowledged a motion and second to request an opinion from the Attorney General concerning the Commission's authority and its limits on the matter. Following discussion, the motion passed unanimously.

Moving on, Dr. LIPPARD informed the members that starting with the current meeting, staff will be taking a slightly different approach when presenting draft reports for review and comment. They will provide slightly shorter presentations on the drafts, focused on one-page summaries that highlight the reports' recommendations. He noted that the intent with this change is to allow for more time for members to ask questions and discuss the reports.

Dr. LIPPARD then asked the members to recognize the service of Morristown Vice-Mayor Kay SENTER, who decided not to seek reappointment after eight years of dedicated service to the Commission. Her term of service ended in July of this year, and the Commission has presented her with a certificate commemorating that service.

Moving on to staff updates, Dr. LIPPARD acknowledged Policy Coordinator Matthew OWEN, who achieved five years of state service in July 2019. Additionally, in June 2019, Dr. OWEN graduated from the Tennessee Government Management Institute, the state's comprehensive two-week training program designed to develop and promote leadership ability in its emerging leaders.

3. Public Chapter 952, Acts of 2018 (Credit to Shipper's 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.

4. House Bill 2265/Senate Bill 2146 (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.

5. Public Chapter 827, Acts of 2018 (Global Positioning 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.

Mayor Tom BICKERS asked about the role of victims and victim advocates in the process and said they need to have a clear role and a considerable say in whether someone is released with a GPS monitor. He also asked whether there is a study that shows how often people with a monitor violate conditions, requiring an immediate response. Ms. BARRIE responded that GPS monitoring is an optional tool, but because it doesn't guarantee victims' safety, stakeholders and literature agree that a coordinated community response and involvement of victim advocates are critical in a GPS program. [Information on defendants violating monitoring conditions will be included in the final report.]

Mayor BICKERS asked staff to focus the report on the victim and the need for appropriate victim representation. Mayor MCDONALD said he would like the report to consider training requirements for magistrates if they are going to order GPS as a condition of bail. Chairman CARTER mentioned the 12-hour "cooling off" period, which helps address Mayor BICKERS' concern about the short period of time magistrates have to make decisions. He said judges don't know who is telling the truth, and although GPS doesn't protect anyone, it provides data and proof. He asked that the report include more information about available technology, including technology that alerts the victim. He also suggested that GPS could be ordered in lieu of bond in appropriate cases, and the defendant be required to pay in advance as a condition of bond to help address the funding challenge.

County Clerk Mary GAITHER asked what the percentage of domestic violence cases is in the state. Ms. BARRIE said appendix A in the report includes the number of intimate partner violence offenses statewide and by county, and staff could calculate a percent of all domestic violence offenses using TBI data.

Dr. LIPPARD asked Ms. BARRIE to discuss the importance of victims participating in the program and the related funding issues. Ms. BARRIE said that because domestic violence is complex and the victim and offender are in an intimate relationship, it is important that the victim is cooperative with monitoring. But the greater their involvement, the more resource-intensive it is. For example, victims can choose to carry a device, which costs about \$5 per day and requires staff to manage and, if the defendant comes within a mobile exclusion zone (closer than a court ordered distance from the victim), send alerts. In response to a question from Chairman CARTER about victims being traumatized by carrying a device, Ms. BARRIE and

Research Manager David LEWIS explained more about the exclusion zones, alerts, and response.

Mayor Kevin BROOKS said he is concerned about the criminal justice and jail system and agrees that awareness and training about alternatives to jail is important—in Bradley County they have an overcrowded jail but a less restrictive and less expensive workhouse with beds going unused. 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.

Chairman CARTER adjourned the meeting at 2:17 p.m.





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MINUTES OF THE TENNESSEE ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS

September 6, 2019

Meeting Called to Order

The Tennessee Advisory Commission on Intergovernmental Relations met in House Hearing Room II of the Cordell Hull Building 8:37 a.m., Chairman Mike CARTER, presiding.

Present 18	Absent 7
Mayor Rogers Anderson	Mayor Buddy Bradshaw
Assistant Commissioner Sammie Arnold	Mr. Calvin Clifton
Mayor Tom Bickers	Mayor Jill Holland
Mayor Kevin D. Brooks	Representative Susan Lynn
Representative Mike Carter	Senator Katrina Robinson
Representative John Crawford	Senator Bo Watson
Deputy Commissioner Paula Davis	Senator Ken Yager
County Clerk Mary Gaither	
Mayor Brent Greer	
County Executive Jeff Huffman	
Representative Harold Love Jr.	
Senator Jon Lundberg	
Mayor A. Keith McDonald	
Representative Antonio Parkinson	
Mr. Jeff Peach	
Mayor Larry Waters	
Comptroller Justin Wilson ¹	
Senator Jeff Yarbro	

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¹ Lauren Spires represented Justin Wilson.

6. Public Chapter 819, Acts of 2018 (5G Technology)—Update and Guest Speakers

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.

Noting that the World Health Organization has said wireless facilities are not harmful, Senator LUNDBERG said constituents have raised concerns about the effect of small cells on health, and he asked whether there is any additional information about the safety of 5G. Dr. HONG responded that health is not his area of expertise, but in his personal opinion, we already live in an environment with electromagnetic waves everywhere, and small cells operate at relatively low power. He also said that 5G transmits data using electromagnetic waves with higher frequencies that can be easily blocked by objects like the skin.

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.

7. Senate Joint Resolution 344 (Illegal Tire Dumping)—Panel

The Commission welcomed a panel of experts with knowledge of scrap tire recycling, waste management, and the public health risks associated with discarded tires. The panel included Mr. Dewey GRANTHAM, Liberty Tire Recycling; Mr. Jeremy HOOPER, Tennessee Department of Environment and Conservation (TDEC), Division of Solid Waste Management; Dr. Abelardo MONCAYO, Tennessee Department of Health, and Mr. Mike STOOKSBERRY, 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 predisposal 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 acknowledge 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 predisposal 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.]

8. 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.

9. Senate Joint Resolution 593 (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.

Other Business

The next meeting is scheduled for December 11-12, 2019, and the winter meeting is scheduled for January 16-17, 2020. Chairman CARTER adjourned the meeting at 12:32 p.m.