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Examining the City of Jackson's 1% Sales Tax Infrastructure Program: Insights & Implications

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Abstract

This research brief examined the City of Jackson's (MS) 1% Sales Tax Infrastructure Program. Estimates of the cost to fix Jackson's infrastructure problems range between \$750 million to \$3 billion (Eason, 2014) (COJ, 2018). The goal of this research brief is two-fold: (1) provide an overview of issues related to infrastructure problems; and (2) provide insight on how a "designated sales tax" can address infrastructure problems at the local level. A mixed-method, non-experimental research methodology guided data collection and analysis activities. Secondary data from the City of Jackson's Public Works Department and the Mississippi Department of Revenue identified funding categories and trends. Federal, state, and local infrastructure reports provided qualitative data to identify common themes and relevant issues. Research findings revealed infrastructure issues and their solutions are multi-dimensional and usually exceed the capacity of any one single entity to resolve. Based upon research findings, several policy and programmatic implications emerged. Those implications included: (a) using a single funding source will not likely be sufficient to address all infrastructure needs; (b) avoiding multi-layer administrative structures can help increase the efficiency and timely completion of infrastructure projects; and (c) making infrastructure improvements is a long-term proposition that does not lend itself to quick and easy fixes. Local units of governments would be wise to use a multiprong approach to addressing their infrastructure needs. Implementing a "designated sales tax" to address infrastructure needs can be helpful, but will likely require linking with other programs and funding sources to meet most local infrastructure needs.

Introduction

As has been occurring in urban areas across the United States, local governments have been struggling to repair, replace, and/or install new infrastructure-related projects (NLC, 2018). The City of Jackson is no exception to this national problem. Estimates of the overall cost to fix Jackson's infrastructure problems range between \$750 million to nearly \$3 billion (Eason, 2014) (COJ, 2018). Given the pervasiveness of infrastructure problems both locally and internationally, this research brief examined how the City of Jackson is using a "designated sales tax" program to help address its infrastructure needs. The goal of this research brief is two-fold: (1) provide an overview of issues related to infrastructure problems; and (2) provide insight on how a "designated sales tax" can help resolve infrastructure problems at the local level. This brief specifically examines infrastructure problems occurring at the international, national, state, and local levels; chronicles the development and implementation of the City of Jackson's sales tax infrastructure program; and examines solutions used by other municipalities to address their infrastructure needs. In seeking to fulfill its mission of helping to improve the quality of life in urban areas, the Mississippi Urban Research Center (MURC) is sharing this research brief to help municipalities and other interested parties better understand and develop solutions to their infrastructure needs.

Defining Infrastructure

The term "infrastructure" broadly refers to those basic physical structures and facilities needed for the operation of a society or enterprise (EOLD, 2019). These include structures and facilities that provide a foundation supporting the production, distribution, and consumption of goods and services in a society (Edwards, 2017). Common examples of different types of infrastructure include *public utilities* like gas, electricity, water, telecommunications, sewage treatment, and waste collection; *public works structures* such as roads, bridges, and dams; *public facilities* such as schools and other government buildings; and other *transportation-related facilities* such as railways, ports, waterways, and airports (Woetzel, Garemo, Mischke, & Palter, 2017).

In a 2016 report by the American Society of Civil Engineers (ASCE), there were ten infrastructure sectors considered critical to the economic health of the United States. Those sectors were Aviation; Bridges; Drinking Water; Electricity; Inland Waterways; Ports; Commuter Rail; Roads; Transit; and Wastewater (ASCE, 2016). Approximately 94% of the U.S. non-defense infrastructure is controlled and funded by state government, local government, and the private sector (Edwards, 2017). Given that state and local governments control most of the ten infrastructure sectors considered critical by ASCE, developing a better understanding of infrastructure issues can help officials improve the quality of life for residents. As related to this research brief and its focus on the City of Jackson, the term "infrastructure" will specifically refer to streets, roads, bridges, and water and sewage treatment facilities.

Defining Sales Tax

As used in this research brief, the term "sales tax" refers to a governmental policy designed to generate revenue to support government activities, programs, and services (DuPuis & McFarland, 2016). A "sales tax" is an additional cost (which varies among local governmental units) added to the sale of goods and services as determined by state law. While the primary advantage of a "sales tax" is the ability to generate revenue, there are also several disadvantages with the use of a "sales tax" (DuPuis & McFarland, 2016). Those disadvantages include intensifying fiscal disparities between cities with different revenue-generating capacities, and the tax having an unfair "regressive" impact on lower-income residents who have to pay a higher share of their income to receive the same level of service as higher-income residents. Another disadvantage is the possibility of encouraging more cross-border shopping by residents seeking a lower cost for goods and services (DuPuis & McFarland, 2016). The type of sales tax used in situations like the City of Jackson is usually time-limited and restricted to funding certain types

of projects. The time-period for the City of Jackson's special sales tax was 20 years as established by State legislation. Also required by the legislation was that the tax be used exclusively for infrastructure-related projects (SB2839, 2011). Within the context of this research brief, the type of sales tax examined in the City of Jackson's program will be defined as a "special purpose local option sales tax" (DuPuis & McFarland, 2016).

Importance of Infrastructure

Considered the "backbone of the U.S. economy", infrastructure is critical to the nation's health, safety, and economic prosperity (ASCE, 2016). Representing roughly 11% of the U.S. workforce, there are approximately 14 million workers employed in infrastructure related sectors (McBride, 2018). Because of the inter-relatedness of many infrastructure sectors (e.g., roads, bridges, and rail), breakdowns or failures in one sector can lead to failures and breakdowns in other sectors (ASCE, 2016). Taken to the extreme, failing systems can literally lead to a massive loss of lives and human suffering (e.g., the New Orleans levees breaking during Hurricane Katrina; the Minnesota I-35 bridge collapsing in 2007; and the Flint (Michigan) water crisis in 2016) (Edwards, 2017). In the U.S., roughly 8% of the public water systems serve approximately 82% of the U.S. population living in the largest metropolitan areas (ASCE, 2016). Failures in any of those water/wastewater systems could endanger the lives of literally millions of people.

Contrary to many other industrialized nations, most U.S. infrastructure spending does not occur at the federal level but occurs at the state and local government levels (McBride, 2018). Overall, federal financial contributions to certain infrastructure areas have declined (e.g., national wastewater funding has declined from approximately 63% in the 1970s to approximately 9% as of 2014 (McBride, 2017). However, recent improvements in the U.S. economy has resulted in increased tax collections thereby providing local governments with more money for infrastructure projects (Slowey, 2018). There is also evidence of state and local governments borrowing more money for infrastructure projects with some estimates showing increases by as much as 19% (Slowey, 2018). There is evidence of federal, state, and local governments investing more funds addressing the gap between current infrastructure funding and needed infrastructure projects (ASCE, 2016).

Nationally and locally, improving infrastructure has many advantages such as helping to create employment opportunities and improve economic competitiveness; helping connect communities to various types of opportunities; and helping improve the health and safety of local residents by decreasing potential accidents, disease outbreaks, and other public safety concerns (DPW, 2016) (OMB, 2018). These and other issues emphasize the importance infrastructure plays in helping to improve the quality of life for local residents.

Methodology for Conducting Study

This research study used a mixed-method, non-experimental research methodology to conduct its analysis. Secondary data was collected and analyzed from the City of Jackson's Public Works Department (COJ, Public Works, 2018), and the Mississippi Department of Revenue (MDOR, 2018). That data was analyzed using descriptive statistics and then converted into charts for display. Text analysis of qualitative data identified common themes found in federal, state, and local infrastructure reports. The time-period for this study was 2014 (the

starting point for collecting the additional 1% tax) through November 2018 (the most recent 1% Jackson Sales Tax Commission meeting at the writing of this research brief).

International Infrastructure Problems

Although the City of Jackson's infrastructure problems have been well publicized and documented (Eason, 2014) (Wolfe, 2017), infrastructure problems are by no means limited to the City of Jackson. In a report prepared by McKinsey & Company Global Institute, researchers found a significant infrastructure gap internationally between current infrastructure spending and projected infrastructure needs. According to the McKinsey report, needed to close the international infrastructure gap is approximately \$3.7 trillion of yearly investment until the year 2035 (Woetzel, Garemo, Mischke, & Palter, 2017). The largest projected infrastructure needs were in the areas of roads, power, telecommunications, water, and rail. The international areas considered in the McKinsey report included China and other Asian nations, North America, Eastern and Western Europe, India, Africa, the Middle East, Australia, and Latin America (Woetzel, Garemo, Mischke, & Palter, 2017).

National Infrastructure Problems

Each year, the National League of Cities (NLC) issues a "State of the Cities" report identifying major issues and problems affecting its membership. For the fifth year in a row, "infrastructure" emerged as one of the five issues/problems affecting NLC's approximately 19,000 cities and towns (NLC, 2018). In the NLC 2018 report, mayors identified infrastructure as the 2nd most cited issue nationally, and the sub-topic of Roads/Streets cited as the 3rd most pressing issue in the Southern region (NLC, 2018). Also included in the 2018 report, the top five national infrastructure "subtopics" included Roads/Streets/Signs, Water/Sewer & Wastewater, Public Transit, Pedestrian Infrastructure, and Infrastructure funding (NLC, 2018).

Other national organizations have also examined U.S. infrastructure needs. For example, findings by the American Society of Civil Engineers rated U.S. roadways a "D" using an "A, B, C, D, F" rating scale with "F" being the worst rating (ASCE, 2017). It has been estimated by the U.S. Federal Highway Administration that \$170 billion in capital investment is needed annually to improve existing roads (DuPuis & McFarland, 2016), and that driving on U.S. roads cost motorists approximately \$112 billion in yearly repairs and operating costs (Ferguson, 2018). In the U.S., over 70,000 bridges have been found to be structurally deficient (McCarthy, 2017), and it has been estimated an approximate \$1.5 trillion gap exists between current infrastructure spending and projected infrastructure needs (ASCE, 2016) (ASCE, 2017) (McBride, 2018).

Most of the U.S. water infrastructure is estimated to be between 50 to 150 years old (DuPuis & McFarland, 2016), and approximately 900 billion gallons of untreated sewage is discharged through aging wastewater pipes and related infrastructure (ASCE, 2016). It has been estimated the U.S. will need to spend \$384.2 billion for drinking water infrastructure improvements (DuPuis & McFarland, 2016), and over \$632 billion on upgrading water-related pipes, treatment plants, and wastewater management facilities (McBride, 2017). Approximately 278 U.S. school systems found unsafe levels of lead and other metals in their water systems (McBride, 2017). It has been estimated the average U.S. water usage rate is approximately doubled the average global water usage rate (McBride, 2017), and that on average, there are approximately 240,000 water main breaks each year estimated to waste over 2 trillion gallons of

treated drinking water and cost public water utilities approximately \$2.8 billion (McBride, 2017) (Wolfe, 2017). In terms of other U.S. infrastructure problems, it has been estimated that approximately one-fifth of the U.S. rail lines are in poor condition (McBride, 2018), and that by the year 2025, the estimated cost to the U.S. economy from declining transportation infrastructure systems will increase by \$238 billion (ASCE, 2016).

Mississippi Infrastructure Problems

According to the American Society of Civil Engineers' 2017 Infrastructure Report Card, 12.3% of Mississippi's bridges were rated as structurally deficient (MS-ASCE, 2017). In that same report, the estimated cost for upgrading Mississippi's drinking water systems was \$8.5 billion, while the estimated cost of upgrading Mississippi's wastewater systems was \$2.035 billion (MS-ASCE, 2017). Estimates have Mississippi's public schools systems experiencing a capital expenditure gap of \$289 million between current infrastructure spending and needed infrastructure repairs (MS-ASCE, 2017). Other key infrastructure needs identified in the 2017 ASCE Mississippi report included over 300 "high hazard" potential dams; 8 hazardous waste sites; and \$90 million in unmet park system needs (MS-ASCE, 2017). Additional findings include 28% of Mississippi's 76,777 miles of public roads having a "poor condition" rating; and over \$700 in estimated car repair costs each year to motorists driving on roads in poor condition (MS-ASCE, 2017).

City of Jackson Infrastructure Problems

The City of Jackson has over 900 miles of streets and roadways; 200 bridges and hydraulic structures; 1100 miles of water main; 1000 miles of sewer main; and two Water Treatment facilities (Powell, 2015) (Wolfe, 2017). On average, the City of Jackson has experienced over 570 sanitary sewer overflows each year (Powell, 2015). Those sanitary sewer overflows and other prohibited sewer-related problems resulted in Jackson entering a federal consent decree mandating improvement in sewer/wastewater management (Powell, 2015). During the weekend of March 10th, 2017, a water line break caused a water outage affecting approximately 40,000 water customers including businesses and residential households (Wolfe, 2017). Estimates have the City of Jackson experiencing a 40% water loss due to deterioration within its water line distribution system (Wolfe, 2017). Additionally, those water line leaks are causing soil erosion that undermines the condition and stability of streets and other roadways (Powell, 2015).

A 2013 Stantec engineering report estimated more than 60% of Jackson's streets had a serviceable life of approximately four years before needing substantial repairs (Wolfe, 2017). Approximately 77.3% of Jackson's streets rated below a minimum accepted "Pavement Quality Index" (PQI) score of 55 ("Fair condition"), with the average street rating being 40.4 ("Poor condition") (MSSTC, 2016). There are over 250 lane miles of streets in the City of Jackson rated as "un-serviceable" (MSSTC, 2016), with some Jackson bridges receiving a low structural sufficiency rating of 9 on a 100 point scale (Powell, 2015). All told, estimates of fixing Jackson's infrastructure problems ranged between \$750 million to \$3 billion (Eason, 2014) (COJ, 2018).

Addressing Jackson's Infrastructure Problems

The City of Jackson, along with other U.S. cities, have been experiencing significant infrastructure challenges. To help address some of those challenges, the City of Jackson under then-Mayor Harvey Johnson sought state legislation in 2009 that would allow Jackson to increase the sales tax to fund infrastructure improvements (Johnson, 2011). That request to the Legislature marked the beginnings of Jackson's 1% Sales Tax Infrastructure program.

State Legislation

In 2011, the Mississippi Legislature passed Senate Bill 2839 titled Municipal Special Sales Tax law (SB2839, 2011). That legislation allows the City of Jackson to collect an additional 1-cent tax on goods and services. Certain items were exempted from the additional sales tax such as groceries, restaurant food and beverages, prescription drugs, hotel/motel rooms, large equipment purchases, and subscription television and internet services (SB2839, 2011) (Powell, 2015). Below is a summary of the law outlining its major provisions . . .

An Act to amend Section 27-65-241, Mississippi code of 1972, to revise the law that authorizes the Levy of A MUNICIPAL SPECIAL SALES TAX in Certain Municipalities to provide that revenue collected pursuant to the tax levy shall be used to pay the cost of road and street repair, reconstruction and resurfacing projects based on traffic patterns, need and usage, and to pay the costs of water, sewer and drainage projects; to provide that a municipality may not hold an election required by this section more than twice; to reduce the amount of the special tax revenue that the Department of Revenue may retain to defray the costs incurred by the Department in the collection of the special tax; to provide that the commission required to be established pursuant to this section shall, with input from the municipality, establish a Master Plan for road and street repair, reconstruction and resurfacing projects based on traffic patterns, need and usage, and for water, sewer and drainage projects; to provide that expenditures of the revenue from the tax authorized to be imposed pursuant to this section shall be made at the discretion of the governing authorities of the municipality if the expenditures comply with the Master Plan; to provide that the committee shall monitor the compliance of the municipality with the Master Plan; to extend the date or repeal on this section until July 1, 2032, unless the tax fails to be adopted at an election held for such purpose prior to July 1, 2014, in which case this section is repealed from and after July 1, 2014; and for related purposes (SB2839, 2011).

As required by Senate Bill 2839, the City of Jackson conducted an election that allowed Jackson voters to decide if they approve the proposed sales tax increase. On January 14, 2014, over 90% of Jackson citizens voted to approve the sales tax referendum (Eason, 2014), thus allowing for the creation of the current 1% Sales Tax Infrastructure Program.

Amendment to Original Legislation

In 2014, House Bill 787 amended the original legislation (SB2839) and allowed the City of Jackson to collect an additional 1% sales tax. The 2014 amendment made two significant changes to the original legislation: (1) exempted additional items from the sales tax; and (2) allowed the use of collected funds to pay off certain infrastructure-related debts incurred by the

municipality (MDOR, 2014) (HB787, 2014). The following section lists the specific amendment language contained in House Bill 787 . . .

To amend Section 27-65-241, Mississippi code of 1972, to provide that the SPECIAL SALES TAX authorized by the section shall apply to sales of tangible personal property or services sold in the municipality and shall not apply to <u>Wholesale Sales of Food and Drink for</u> <u>Human Consumption Sold to Full Service Vending Machine Operators and Wholesale Sales of</u> <u>Light Wine, Beer and Alcoholic Beverages</u> (emphasis added); <u>To authorize the governing</u> <u>authorities of any municipality that levies the special sales tax authorized under this section to</u> <u>incur debt for the purpose of paying the costs</u> (emphasis added) of road and street repair, reconstruction and resurfacing projects based on traffic patterns, need and usage, and to pay the costs of water, sewer and drainage projects authorized by this section (HB787, 2014).

1% Sales Tax Commission & Master Plan

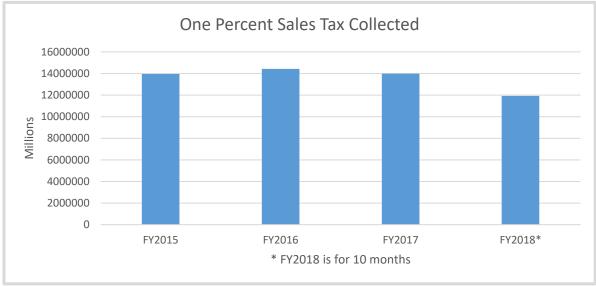
Mississippi Senate Bill 2839 required the creation of a ten member Commission charged with the responsibility of establishing a master plan for road and street repair; reconstruction and resurfacing projects; and water, sewer, and drainage projects (SB2839, 2011) (Powell, 2015). The Commission is also responsible for monitoring the compliance of expenditures in relations to the master plan (SB2839, 2011) (Powell, 2015). Some major provisions of the Commission-adopted master plan included:

- Fifty percent of the sales tax funds shall be spent on road improvements unless the commission decides otherwise;
- Sales tax funds can only be spent on infrastructure projects and cannot be used for experimental programs, mentoring programs, public relations, or other programs not approved by the commission;
- Funds can be used as matching dollars to obtain additional funding from other programs when those additional programs meet the master plan's priorities; however, any debt obligations that are repaid with sales tax funds must be approved by the commission; and
- The Commission retains the right to hire a construction manager (Hendrix, 2017).

Revenues Collected

As reported by the Mississippi Department of Revenue, the 1% special infrastructure sales tax has generated \$54,258,422 from the year 2015 through October, 2018 (MDOR, 2018) (MDOR, 2016-17). Graph 1 provides a yearly comparison of funds collected over that period:

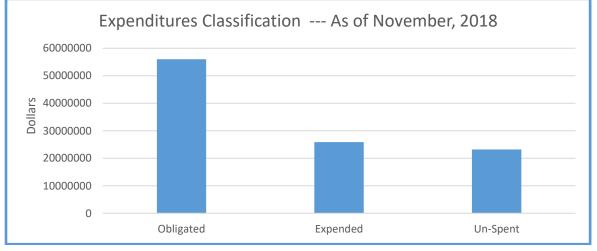
Graph 1 --- One Percent Sales Tax Collected



Expenditures

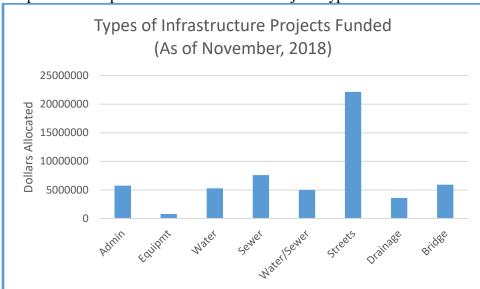
As reported in documents prepared for the November 14th, 2018, meeting of the Municipal Sales Tax Commission, the City of Jackson has obligated \$56,029,294 of funds collected. Of that amount, listed as expended was \$25,858,854, and listed as unspent was \$23,170,440 (Miller, 2018) Graph 2 provides a comparison of expenditure classifications of 1% sales tax funds:





Type Projects Selected

Graph 3 provides a comparison of the "types" of infrastructure projects selected for funding, and the amount of funding provided for each type project. As reported in documents prepared for the November 14th, 2018, meeting of the Municipal Sales Tax Commission, approximately 40% of the funds obligated were for "Street-related" projects.



Graph 3 --- Comparison of Infrastructure Project Types

In April 2016, the City of Jackson used 1% sales tax funds to purchase a \$240,000 pothole-patching machine. One result of purchasing that machine included 20 percent estimated increases in the productivity of pothole repair crews (DPW, 2016). For the year 2016 according to the Jackson Department of Public Works, pothole repair crews filled more than 65,000 potholes utilizing 1% funds (DPW, 2016).

One percent sales tax funds have also been used to finance two types of street resurfacing projects in the City of Jackson --- (1) a \$9.8 million neighborhood project; and (2) a \$4.5 million major street project termed "Operation Orange Cone" (Wolfe, 2017) (DPW, 2016).

Discussion

As presented in the previous graphs depicting revenues, expenditures, and selected infrastructure projects, the City of Jackson 1% Infrastructure Sales Tax Program comprehensively addresses the city's infrastructure needs. As is also evident from examining the previous graphs and related narratives discussing infrastructure issues, the current City of Jackson sales tax program will not be enough to close the gap between available funding and identified infrastructure needs. A major question facing the City of Jackson and other areas across the United States is how to close this gap in an expeditious manner. The following sections discuss issues, challenges, and possible solutions Jackson and other U.S. cities could consider in seeking answers to this question.

Issues Impacting Infrastructure Improvements

There are many issues affecting the ability of local governments like the City of Jackson to produce needed infrastructure improvements. One of those issues is a decline in traditional sources of federal infrastructure funding such as the Highway Trust Fund (McBride, 2018). Another issue involves many cities having difficulty meeting federal and state revenue matching requirements (DuPuis & McFarland, 2016). State laws restricting the ability of local governments to raise revenue using local sale taxes, local fuel taxes, and local income taxes also

pose challenges for cities seeking infrastructure improvements (NLC, 2019). Other issues affecting the ability of local governments to perform infrastructure improvements include restrictive "design and build specifications"; meeting federal and state environmental regulations; and hiring staff with the necessary expertise to implement complex infrastructure projects (DuPuis & McFarland, 2016).

Specific issues affecting Jackson's infrastructure projects include confusion regarding administrative roles and responsibilities between the 1% Sales Tax Commission and City of Jackson officials. Examples of past areas of confusion include responsibility for the development and implementation of the infrastructure master plan, and determining who has final authority to approve projects using 1% sales tax funds to leverage federal and state funding sources (Wolfe, 2017). Other issues affecting City of Jackson's infrastructure projects include meeting federal, state, and local regulations governing project selection, approval, and procurement. Examples of these requirements include projects needing approval by both the 1% Commission and the Jackson City Council, and projects adhering to the city's standard procurement processes which could take up to several months (Wolfe, 2017). Collectively, all the previous issues affecting the implementation of infrastructure projects present formidable challenges for local units of government. This brief will now turn its attention to discussing potential solutions used by some local governments to overcome those challenges.

Solutions to Local Infrastructure Challenges

As mentioned earlier, recent improvements in the U.S. economy is resulting in increased tax revenues being available for infrastructure projects. With increased tax revenues, local governments have begun borrowing more money for infrastructure projects. Examples of local infrastructure projects financed with borrowed money include \$16 billion in California (roads); \$500 million in New Jersey (schools and public infrastructure); \$548 million in North Carolina (school construction); and \$653 million in Oregon (housing) (Slowey, 2018).

As part of his 2018 budget plan, President Donald Trump proposed spending an additional \$200 billion over 10 years to improve national and local infrastructure (OMB, 2018). Other Trump administration initiatives include targeting investments toward high priority projects having an impact at the regional or national levels; reducing federal regulatory policies that delay implementing infrastructure projects at the local level; and forming more public-private partnerships (OMB, 2018) (Edwards, 2017).

Other solutions considered for helping local governments overcome infrastructure challenges include shifting funding for road and bridge projects from fuel taxes to mileage-based user fees (MBUFs); using "managed/designated lanes" to generate revenue; and using analytics to make more data driven selections of infrastructure projects. Another solution involves streamlining the regulatory review process to reduce the amount of time needed to get infrastructure projects approved. An additional proposed solution is forming public-private partnerships (Ferguson, 2018). Public-Private Partnerships (P3s) are generally long-term contracts between the private sector and government whereas the private sector assumes most of the financial costs and management responsibilities over a public asset or service (DuPuis & McFarland, 2016). Under many public-private partnership agreements, governmental units typically allow private entities the right to charge fees (e.g., tolls) in exchange for financing, building, and/or operating an infrastructure project (McBride, 2018). The privatization of certain

publicly owned assets (e.g., railroads, airports, energy utilities) has also been proposed as one solution to funding and managing infrastructure projects at the local level (Edwards, 2017).

Other suggested solutions include increasing federal and state gas taxes as a way to raise more revenue for infrastructure projects (ASCE, 2016) (McBride, 2018); and imposing "congestion pricing" (i.e., fees on cars entering certain parts of a city) as a way of raising revenue and reducing traffic congestion (McBride, 2018). Additional solutions include promoting more conservation and sustainable communities' solutions such as carpooling, public transportation, and water usage restrictions; and investing in "water line leak detection" technology to better identify water line leaks (ASCE, 2016). Also recommended as potential funding solutions are using "special taxing districts", "tax increment financing" (TIFs), and creating federal, state, and/or local "Infrastructure Banks" (DuPuis & McFarland, 2016). "Infrastructure Banks" are typically revolving investment funds established to provide a range of grants, loans, and credit enhancement products to public and private sponsors of infrastructure projects (DuPuis & McFarland, 2016).

As seen in the previous listing of potential solutions to infrastructure challenges, local governments like the City of Jackson are trying many different approaches to meet the infrastructure needs of their communities. Central to nearly all of the potential solutions discussed above is the need for local governments to generate enough revenue to meet current and future infrastructure needs. The City of Jackson's 1% Infrastructure Sales Tax Program is one such approach to meeting those infrastructure needs.

Conclusions

The purpose of this research brief is to help municipalities and other interested parties better understand infrastructure-related issues and their potential solutions. The City of Jackson's 1% Sales Tax Infrastructure Program provided a model upon which to examine one potential solution. Findings from this research revealed infrastructure issues are multi-dimensional and usually exceed the capacity of any one single entity to resolve. Establishing and implementing a "designated sales tax" can be helpful but is not likely to address sufficiently all local infrastructure needs. The City of Jackson's infrastructure program offers several implications that other municipalities can use in addressing their infrastructure needs. Those implications include the realization that one funding source is not likely to be enough to address all infrastructure needs; multi-layer administrative structures usually reduce the efficiency and timeliness of implementing infrastructure projects; and making infrastructure improvements is a long-term proposition that does not lend itself to quick and easy fixes. As of the writing of this research brief, the City of Jackson's infrastructure program is still in its early phases of implementation. Many of the administrative and funding challenges experienced by the program may be resolved with the passage of time. One thing that is certain whether in the City of Jackson or in other countries around the world, infrastructure problems are increasing in both frequency and cost. Based upon the City of Jackson's experiences, local municipalities and other interested parties would be wise to address those challenges sooner rather than later.

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