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Ohio Senate Transportation, Commerce and Workforce Committee

Testimony on House Bill 62, FY 20-21 Transportation Budget

Jack Marchbanks, Ph.D. Ohio Department of Transportation

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Chairman McColley, Vice Chair Uecker, Ranking Minority Member Antonio, and members of the Ohio Senate Transportation, Commerce and Workforce Committee:

I am Dr. Jack Marchbanks, Director of the Ohio Department of Transportation. Thank you for the opportunity to address you again today, as you now officially have language before you regarding the next two-year transportation budget.

The last time I stood before you, I detailed to you the status of ODOT's revenue streams and the consequences we could face - including serious safety concerns - if additional funding is not identified soon.

As you may recall, due to flat revenues, highway construction inflation, and mounting debt payments, ODOT is in jeopardy of being unable to fulfill its mission to maintain the state's most valuable physical asset: our state highway system. The credit cards are maxed out and the long-term health of Ohio's transportation system is now at stake.

I will not go into extensive detail, again, on the need for more revenue. I laid out that case in my last testimony. Instead, I would like to spend my time detailing the data behind the specifics of our \$0.18 executive proposal and reviewing how funding in the current version of House Bill 62 falls far short of Ohio's real need.

You are aware, by this point, that our revenue shortfall is not a new issue. Members of this chamber lamented, just two years ago when they passed the last transportation budget, that the bill did not include "a longer-term plan for maintaining the vast infrastructure we have in Ohio." Going further back, members of the Ohio General Assembly commissioned study committees, one in 2013 and one in 2015, to research how the state should fund transportation projects in the future.

¹ https://www.dispatch.com/news/20170322/long-term-funding-issues-remain-as-senate-moves-78b-transportation-budget

Even as far back as 2007, just four years after voting on the last motor vehicle fuel tax increase, a joint legislative study committee recommended seeking "additional funding for Ohio's transportation infrastructure needs."²

We do not need \$0.18 because ODOT is looking to pad its coffers or build platinum-laden streets. I will soon detail how our data-driven, empirical analysis led us to this number. First, I want to remind you that we need \$0.18 because the state has avoided making the difficult decision to find a long-term solution to our transportation revenue shortfall for more than a decade.

Had this user fee been raised in accordance with the state's needs a decade ago, todays ask would be much smaller. Had it been scheduled to increase in a manner that kept up with real conditions, our shortfall would be significantly less. Had we done more than study this issue, we might not have been asking for anything at all.

Instead, the revenues we receive from this fee have remained flat thanks to both the lack of a mechanism to increase it and virtually no increase in the number of gallons of fuel purchased in the state. Instead, a decade's worth of kicking the can down the road, of relying on one-time, short-term revenue infusions, have led to a massive budget hole and an agency that has now nearly reached its constitutional debt limit.

I have reminded us why the need is so large. Let me now spend some time talking about why, specifically, we are seeking that particular level of funding.

Needs Analysis

We are very encouraged by the bipartisan actions taken by the Ohio House to approve a long-overdue revenue increase for Ohio's roads and bridges. It is certainly a step in the right direction and any revenue increase is better than no revenue increase. However, it is clear from the House's actions that I have not done my due diligence in detailing how ODOT arrived at the figure of eighteen cents.

Our task was to determine what our agency would need to not just maintain the status quo, but to actually make meaningful improvements to our transportation system. We were asked to be conservative, to find the minimum amount we would need to make our roads safer and less congested. Asking citizens to pay more at the pump is a big deal, and we wanted to ensure your vote does something meaningful, something that makes a true impact for Ohio.

In preparation for this budget, ODOT performed a needs analysis. Our Planning and Finance experts gathered together and individually examined all of our different maintenance, operations, safety, pavement, bridge and local programs that ODOT funds. For each program, the team looked at what the current budget (one that does not include any revenue increase) would provide for each program through 2030, and then determined what the needs for each program would be over the same time span.

The gap for all programs was totaled for each year. In year one, the fiscal year beginning July 1, 2019, the need was about \$743 million dollars. That is roughly what ODOT would receive under the executive budget proposal. Every year thereafter, the need continues to rise, due primarily to inflation projections, by \$50-\$60 million per year, or, about a penny's worth of motor vehicle fuel tax revenue.

² Final Report of the Ohio Transportation Task Force of the 127th Ohio General Assembly

Maintenance & Operations

For some programs, like equipment and materials purchasing for example, the team was able to make projections about future needs by looking backwards at inflation trends in those categories.

For determining our road and bridge maintenance needs, however, they dove much deeper into the data. ODOT utilizes several advanced software systems to track the status of roads and bridges on our system.

In Ohio, we inspect our bridges every year. Engineers and inspectors rate the substructure, the pillars or other supports that hold up and support the bridge, and the deck, the part you drive on, to determine their condition.

That information is then entered into a database we call our Bridge Management System, along with other data points such as the materials the structure is made of, maintenance cost estimates, average daily traffic estimates, and historic condition information. Every year, our ODOT District engineers review those thousands of data points and decide, based on the conditions and the available maintenance budget they have for that year, what kinds of treatments or rehab projects or replacement projects we should do to get the biggest return on our investment.

For pavements, the process is even more sophisticated.

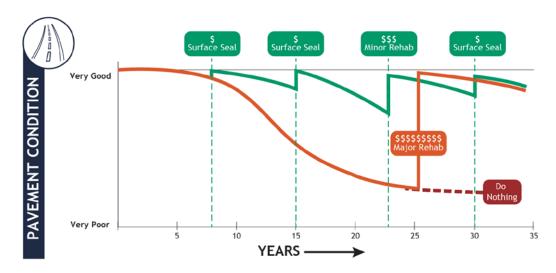
Our Pavement Management System uses advanced algorithms, to calculate for us what kinds of treatments will be needed over the next year, two year, ten years... whatever scenario we as it to run. We use it to analyze current conditions, track the effectiveness of what we're doing, and to project future conditions and needed treatments.

Pavement inspectors rate each segment of pavement each year. That is entered into the pavement management system, along with details about the type of pavement used, the average daily traffic counts, treatment cost estimates for that geographic area (work can cost more or less, depending on whether you are doing it in Cleveland or Marietta or Greenville), and data on how quickly that material should deteriorate under those traffic conditions.

The software analyzes these points of data on each segment of roadway we maintain. It then creates and reviews dozens of treatment scenarios for each segment, along with cost estimates, to determine the best, most cost-effective treatment for each segment over whatever time period we are reviewing.

The graph on the next page shows one scenario for one segment of roadway. It tells us, based on the inputted information, and out of the dozens of scenarios it evaluated, that this is the most cost-effective treatment strategy for this roadway segment.

We use this system to determine our work plan for the upcoming years. We tell it what our pavement budget is for the entire state and it looks, statewide, at all scenarios on all segments of roadway and tells us how we should spend whatever dollars we have to get the most bang for our buck.



Remember those pavement condition projection maps I shared with you last time? We created those by telling our Pavement Management System to tell us what would happened to conditions if our funding was restricted to the current level of the motor vehicle fuel tax through 2030. It took into account all of the work we could afford, assumed we would follow its recommendations for the most cost-effective work plan each year, and the deterioration you saw was the gap between what we could do and what we should do.

When I spoke last time about the \$300 million dollars in savings we have achieved through our Asset Management program, this is what I meant. We do not blindly allocate random sums of money based solely on factors like population, or political preferences. We use highly advanced data analytics to make empirical decisions about when it makes the most sense to sweep a bridge, when it makes the most sense to microsurface a roadway, or when it makes the most sense to completely reconstruct.

And, as I mentioned last time, our Asset Management program is highly-regarded as one of the best in the nation. This effort will continue to allow us to do tens of millions of dollars in additional work each year.

When it came to our needs analysis, we used these software programs to tell us, based on need, what our maintenance costs would be over the next decade in order to keep our system in an acceptable condition. Our engineers did not simply project outward based on average spends and expected inflation. They let our software tell us what would be needed every year and let the software assign a cost to that.

Based on the work in the needs analysis, the gap between current funding and needed funding for maintenance averaged about \$500 million a year through 2030.

In fiscal year 2020 alone, our needs analysis determined it needs about \$2.84 billion for maintenance and operations. This is what we would need to simply maintain the status quo. It does not leave any room for any additional improvements of any kind. \$2.84 billion.

Under the house-passed version of this budget, ODOT would receive about \$2.74 billion in total revenue in Fiscal Year 2020 for road and bridge maintenance after allocations such as the mandated increase in funding to transit programs is removed. That is a shortfall of about \$100 million for next year. The revenue increases in Fiscal Year 2021 due to the phase-in. It would cover our projected maintenance and operations needs, for that year, however the surplus would not even cover the deficit of the year prior.

The house-passed version of this budget is a status quo budget. This does not even cover our basic maintenance needs, and there is still essentially **no** additional revenue to make **any** improvements of **any** kind in **any** place.

Safety

As I said earlier, when we put together our needs analysis, Governor DeWine asked us to look at not just what would be needed to maintain the status quo, but also what was needed to make meaningful improvements to our state highway system.

ODOT has a safety program that funds improvements to dangerous intersections and stretches of road annually. It is mostly required spending because of our receipt of federal funds. At about \$109 million annually it has helped save lives by making improvements to lanes and guardrails and reflective striping and other, larger projects. But it is not enough. One thousand people die on our roads in Ohio every year and more than 100,000 are seriously injured.

ODOT has a Safety Management System through which we log and geolocate every crash that occurs on roadways in the state. This program analyzes roadway segments and intersections and tells us which areas are experiencing a higher number of crashes than similar roads and intersections in other parts of the state.

I should point out that, unlike the Pavement System, this program does not recommend treatments. It locates and prioritizes locations. Once the locations are identified, ODOT engineers would go out to the location and study the area to determine what factors might be leading to the higher-than-typical crash numbers. It may be a visibility issue or a signage issue or a grading issue or a lighting issue. It could be a simple fix, such as more visible signage or flashing lights, more complex like adding a stop light, or very complex requiring a redesign of the existing traffic configuration.

For this reason, we could not provide the Governor and all of you with an exact number for our safety needs every year. Instead, we know how much work we can get done with our current safety budget, and through the analysis performed by our Safety Management System, we can see how great the need for improvement is by cataloging how many roads and intersections experience a higher-than-typical number of crashes.

We have provided you with a list of the 50 highest-ranked unsafe intersections in urban, suburban and rural Ohio. This list of 150 touches every corner of the state. Most of you will probably see at least one that falls within your district. Unless we have another scheduled maintenance project in that area, we would currently have very limited, if any, resources available to do something about those locations.

Our experts determined that we would need about \$250 million each year to make steady progress towards improving these areas. The executive budget proposal fully funds this work, meaningful progress towards safer roads, for at least the next decade.

Under the house-passed budget proposal, there is no additional funding for safety improvements beyond the minimum we are required to spend by the federal government. We would not have any additional revenue beyond our basic maintenance needs, and therefore could do very little each year to make improvements in these areas.

Major New Improvements

The last pool of potential projects we talk about here at ODOT are what we refer to as Major New Improvements. These are projects that address safety and congestion (which itself is a significant safety hazard) by adding lanes or interchanges to the existing highway system. When we talk about maintenance, we are talking about maintaining all the lane miles that are currently on the system. It might include major projects like repaving dozens of lane miles of interstate or replacing large bridges, but maintenance projects do not add any additional capacity to the highway system.

Some would argue, and perhaps rightly so, that Ohio's highway system is nearly built out. Relative to the size of our system, there are few additional lane miles left to build. However, many of the projects left incomplete, at this time, represent major safety hazards and pinch-points in our system that have a negative impact on the people who live, work and travel there. The I-70/71 "splits" here in downtown Columbus, the innerbelt in Cleveland, US 35 in Dayton, the Central Interchange in Akron, I-75 in Cincinnati.

Additionally, major new improvement projects are also very important for economic development throughout the state. Ask any of your regional economic development officials and I am confident they will tell you: new interchanges and better traffic flow are essential to attracting and keeping business investment in Ohio.

Knowing what is currently in the queue of unfunded major new improvement projects, the executive budget proposal would have provided \$535 million over the biennium to jump-start several of these projects. The sooner we are able to break ground, the less we will ultimately spend for each project. Over the next nine years, we would have an average of about \$150 million per year to support these projects. This is a modest proposal for these projects. Over the last 16 years our major new improvement program averaged \$305 million per year and that figure does not even include the money that was spent using turnpike bond dollars.

Again, because the house-passed version of House Bill 62 contains only the funding necessary to meet our maintenance needs over the next few years, there will not be funding to complete any of these major new improvement projects moving forward.

Without a change, it is likely most of them, if any, will never get done.

Additional Areas of Concern

Before I wrap up, I would like to call out one item other in the house-passed version of the bill.

I want to say that ODOT is supportive of identifying more funding for public transit. It is often cited that we conducted a Transit Needs Study in 2015 to identify policy and funding recommendations that could help those agencies better fulfill their missions. The executive proposal illustrates a 100% increase on ODOT federal flex funding since the report was issued. The house-passed version requires ODOT to add another \$60 million on top of that commitment, bringing that total to \$100 million.

An often-overlooked detail of the Transit Needs Study is that, while it recommended an additional \$150 million annually in state funding for transit, it did not recommend that money come from motor vehicle fuel tax revenues. The study actually recommended establishing a committee to identify a separate,

statewide, dedicated public transportation funding source due to the constitutional restriction of only using state motor vehicle fuel tax dollars for highway maintenance purposes. We would support the creating of this committee to study, in depth, this issue.

If it is the will of the General Assembly to dictate how much of ODOT's discretionary funding should be dedicated to public transit, so be it. However, I do need to point out that, under the house-passed version of the bill, this is money we would otherwise be able to spend on road and bridge maintenance. We are not talking about trading major new improvements for public transit, we are talking about siphoning money away from basic road and bridge maintenance.

Again, the house-passed version of this bill does nearly fund ODOT's basic maintenance needs over the biennium, including the funding redistribution. However, like the additional transit allocation, over time, this formula shift will eat into ODOT's ability in the long term to maintain needed programs and maintenance work at current funding levels.

As I said earlier in this testimony, members of this chamber lamented, just two years ago when passing the last transportation budget, that the bill did not include "a longer-term plan for maintaining the vast infrastructure we have in Ohio."

I hope I have made it clear that while the house-passed version of this bill is certainly a step in the right direction, it is not a long-term plan by any means. It would allow ODOT to barely maintain the status quo for the next few years but after that our road and bridge conditions would once again begin to decline. It will not allow us to make any additional safety improvements or plan any major new improvement projects that are considered vital to our state's economic development.

In fact, if funding is kept at this level, I will certainly have to stand before this chamber again, in just two years, giving the same presentation about how our needs are outpacing our revenues. I will stand here, again, talking about how we cannot fund needed major new improvement projects or emergency repairs due to our limited ability to borrow funds. I will stand here, again, urging this chamber again to approve a long-term solution for funding Ohio's transportation needs.

The executive budget proposal provided just that: a long-term, responsible funding solution that would allow ODOT and local partners to reliably plan for needed maintenance and projects out for a decade, not just the next two years. It would provide our transportation planners with a reliable stream of revenue that increases with inflation over time. It would allow us to not just maintain the status quo, but to do projects that would save lives and spur economic development. It would allow us to improve the quality of life for the people who live in this state and pay this user fee.

I urge the members of this chamber to reconsider the executive proposal and to finally craft a solution that Ohio has needed for more than a decade: a reliable, longer-term funding solution that will not just keep our roads and bridges from falling apart, but will actually improve our transportation system. This is an investment that we desperately need, and I urge your support of restoring funding to the executive proposal levels.