MEMORANDUM

TO: City Council

FROM: Howard S. Lazarus, City Administrator

DATE: August 29, 2018

SUBJECT: Update on City Council Budget Amendment 1 as passed May 21, 2018 - Resolution R-18-195

Background

This memorandum is intended to address the requested update per City Council Budget Amendment 1 as passed May 21, 2018 in Resolution R-18-195. That amendment included requirements that staff provide to Council by September 1, 2018:

- A plan to achieve the City goal of having 80% of city streets rated at 7 or higher by 2025 (hereafter "target range") with emphasis on funding issues, obstacles and challenges, and solutions to those obstacles;

- A recommendation with regard to changing the required (Act 51) fund balance policy for Major and Local Streets to match the current policy for the City's Street and Sidewalk Millage.

Funding Analysis and Strategy

2017 pavement ratings results showed the Major Street system as progressing towards the desired target range while the Local Street system had experienced a reduction in the mileage of streets in that range. This reflected, in part, prior commitments of funding heavily to projects in the Major Street system. Based on those results, a decision was made to break the overall Roadsoft Pavement Asset Management model into two separate models, one each for the Major and Local Street systems.

The funding analysis then identified which funding sources are restricted to use in the Major Street system, which are restricted to use in the Local Street system, and which can be spent on either system. Analysis showed that, in a typical year, approximately 40% of available funding is specifically restricted by funding guidelines to use in the Major Street system while Major Streets represent only about 34% of the total street network.

Annual projected revenues for each funding source were obtained through Finance. Allocations for needs not directly related to pavement treatment (such as non-motorized projects and bridge inspections and repairs) were deducted to establish the projected total pavement treatment fund availability for each year through 2025. Available annual funding ranged from $12.9M to $18.3M for the years FY2019 through FY2025.

Model scenarios were then run to determine the optimal distribution of those funds that are available to be utilized for either the Major or Local Street system. As expected based on the current rating patterns, the model suggested allocating those funds primarily to the Local Street system.

Projected rating results with additional available funding shifted to Local Street System were then examined. Because a PASER rating of 7 is not a natural breakpoint in the Roadsoft model, it is difficult to utilize the model to answer the specific question of what percentage of streets will be in the target range in 2025. However, based on current rating trends and model projections, it appears feasible that having 80% of streets in the target range is achievable for the Major Streets system.

For the Local Street system, the model shows significant progress towards the target goal by 2025, but suggests that miles of streets in the target range will fall short of the 80% goal. However, the number in poor condition will be considerably reduced. In other words, there are likely to be many streets rated 5 or 6, just below the target rating of 7. The model describes 5 as the bottom of "Fair" and 7 as the top, so all such ratings fall in the same general pavement rating category. Some of the challenges to achieving the goal are outlined below.

Challenges To Achieving Target Ratings

Increasing Treatment Costs

Escalating treatment costs present a challenge to success in meeting target goals. Costs per square yard for pavement treatments rose significantly during the economic upturn that occurred after the original model was generated in 2014. The result of this was that less miles of street were treated in 2014 - 2018 with available funds than originally anticipated in the model. Recent bidding seems to indicate a trend toward stabilization of costs. Looking forward to FY2019-FY2025 (the remaining years in the original target range), staff updated treatment costs in the model to reflect current trends and introduced an inflation factor.

For the Major Streets system, the strategy is to continue with current efforts, utilizing available budgets as outlined above, and to revise the strategy only if subsequent ratings show a change in the present upward ratings trend.

Contractor Capacity

For the Local Street system, additional funding would theoretically move the needle further upward by the target year of 2025. However, contractor capacity is already presenting a challenge at current funding levels. The costs associated with trucking materials to a site typically restrict successful paving bidders to a tight geographic area around the City. The City's present level of paving efforts appears to be tapping the full capacity of regularly successful bidders. Coupled with the short Michigan construction season, local paving contractors are already juggling multiple City projects and struggling to successfully deliver awarded projects in a given season.

In an effort to address this challenge, staff have been making direct efforts to solicit bids from a wider range of paving contractors, but it is not yet known whether additional contractors (from further outside Ann Arbor) can bid competitively. Another strategy being explored is the possibility of issuing multi-year contracts to "raise the stakes" and encourage more bidders from out of area. This could also have the added benefit of lowering prices from the City's currently successful bidders.

Pavement Evaluation Methods

Also, staff believe that the rating technique used in the 2014 and 2017 ratings appears to be over-reporting the percentage of streets in the bottom rating range. Those previous ratings utilized a very intense technical procedure that generated a rating called a Pavement Condition Index (PCI) score that was then mathematically converted to the PASER rating system. PASER ratings are based on a general visual exam. It appears that the conversion between systems rates streets more harshly at the lower end of the scale.

Based on this, a switch to utilizing direct PASER rating is planned. In addition, the next system-wide rating will be moved up from 2020 to 2019 and the rating cycle interval changed from three years to two years. This will allow for more frequent analysis of progress towards the 2025 goal as well as provide more frequent opportunity for any needed course corrections (such as the direction of additional funding to the Local Street system as set forth above). This will also bring the City into conformance with the MDOT-endorsed rating method and into consistency with other communities statewide.

Use of Road Funding

The asset management model was run on the assumption that available funding would be directed to improving and/or maintaining the existing pavement. However, studies such as the State Street and Nixon Corridor Transportation studies identified capital needs that could only be achieved through complete reconstruction projects, which is inconsistent with the shorter term recommendations of the pavement asset management model.

While additional outside funding sources such as Congestion Mitigation (CMAQ) and Surface Transportation Program (STP) would likely be available, matching funds from the City are always required. Therefore, construction of such new improvements would require a diversion of funds from the same sources currently planned to treat existing roads. Therefore, it is recommended that such projects be planned for further into the future, after the current goals of the Pavement Asset Management Plan have been achieved.

Recommendations

The intensive application of new capital preventive maintenance surface treatment techniques did not begin to be utilized until after pavement ratings were completed in June of 2017. These treatments, along with traditional resurfacing and reconstruction efforts, are serving to elevate significant miles of streets to the target range. In addition, the crack sealing treatment also being utilized serves to stabilizes roads with current PASER ratings of 7 to maintain them within the rating target for a number of years.

In 2019, when the next ratings are undertaken, the effect of such treatments on progress toward the target range coupled with a direct PASER rating of the system will enable a significant model update. Therefore, staff recommends “staying the course” through next construction season with current strategy other than making targeted funding shifts to the Local Street system as described above.

Recommendation Regarding Act 51 Fund Balance

Act 51 funds are utilized heavily for routine maintenance operations such as pothole repair, patching, street sweeping, pavement markings, and snow plowing. Modest allocations applicable to non-routine pavement treatments are primarily utilized for crack sealing, and light preventive maintenance treatments. Act 51 requirements allocate 25% of funding to the Local Street system and 75% to the Major

Streets system. Planned Act 51 allocations through 2025 for preventative maintenance treatments are in the range of about \$1.3 - \$1.6 million annually for the Major Street system and about \$300,000 - \$350,000 for the Local Street system.

Government Finance Officers Association Best Practices recommend higher fund balances for funds that exhibit the following:

- A volatility of expenditures
- Exposure to one-time outlays
- The potential drain on other resources
- Potential impact on bond ratings

Operations such as snow plowing are particularly vulnerable to volatility depending on the harshness of any particular winter.

In addition, the City's current policy;

- Allows the City to leverage unanticipated/unbudgeted events such as harsh winters
- Provides a safety net for revenue collection from the State of Michigan
- Provides matching dollars for state and federal aid projects.

Therefore, because the bulk of Act 51 funds are utilized for critical routine maintenance operations, staff does not recommend changing the required Act 51 fund balance policy for Major and Local Streets to match the current policy for the City's Street and Sidewalk Millage.

It is noted, however, that one-time allocations from Act 51 fund balance, such as that made possible through Budget Amendment No. 1 in May of 2018, can still provide a tool to supplement other available funds when other routine operations allow and when contractor capacity is available.