

Work Session of the Sandy Springs City Council was held on May 21, 2024, at 6:00 PM, Mayor Rusty Paul presiding.

I. Public Works

Mayor Rusty Paul called the meeting to order at 6:00 p.m.

A. 2024-116 Overview of the Roberts Drive Sidepath Scoping Study (S2123-1)

William H. Martin, Jr., AIA, Public Works Director, and Ko Seo, Public Works CIP Project Manager presented an overview of the Roberts Drive Sidepath Scoping Study (S2123-1).

The Roberts Drive Sidepath has been included in a number of the City's adopted plans, including: the Bicycle, Pedestrian, Trail Plan (2014), the Trails Master Plan (2019), the Transportation Master Plan (2021), and the Sidewalk Master Plan (2024).

The goal of the Roberts Drive Sidepath Scoping Study was to determine the sidepath alignment that would do the best job of increasing safety and providing more comfortable access between residences, the Sandy Springs Middle School, the MARTA bus stops, and the trails adjacent to the Chattahoochee River National Recreation Area (CRNRA), while also minimizing impact to the existing businesses, residences, and the National Park. The typical section included in the study is a 12-foot-wide sidepath with a 5-foot landscape buffer including street trees and pedestrian lights along Roberts Drive from Dunwoody Place to Roswell Road.

Based on the design goals, neighboring projects, and existing infrastructure, ecological, cultural, and physical constraints, the study recommends breaking the project into two phases:

- **Phase I (3,840 LF):** The alignment provides connection to the existing sidewalk, utilizes the City owned properties, and minimizes impact to the CRNRA property. It begins at Dunwoody Place and travels north connecting to the sidepath and the bridge constructed by SR400 Express Lane Phase I project. It ends with the mid-block crossing near Summer Crossing to provide a connection to the existing sidewalk and the sidepath from the first phase. This alignment also includes two additional mid-block crossings, one just east of Pride Place and the second at the Island Ford Park entrance, providing connection to the existing sidewalk on the opposite side of the road.
- **Phase II (5,950 LF):** The alignment avoids the Civil War Entrenchment on CRNRA property and minimizes impact to the existing streams (2) and the Issac Roberts House (National Register of Historic Places). The alignment begins at the mid-block crossing by Phase I and travels north providing connection to the sidepath constructed with the SR400 underpass bridge replacement by SR400 Express Lane Phase II project and continues to Roswell Road. This alignment includes one mid-block crossing west of SR400 underpass bridge to minimize utility conflicts and impact to the existing streams. It also connects to the future pedestrian bridge over Chattahoochee River giving access to trails and parks in Roswell.

Cost estimates for each phase from the scoping study are provided below:

	Phase I	Phase II	
Scoping Study			\$202,386
Design	\$269,113	\$718,689	
Construction	\$3,700,263	\$8,413,341	
ROW	\$51,395	\$886,901	
Utility	\$379,000	\$444,500	
Contingency	\$448,522	\$1,197,815	
Total	\$4,848,293	\$11,661,246	\$16,711,925

Adoption of the Roberts Drive Sidepath Scoping Study does not have any direct financial impacts. The study is intended to provide guidance for the alignment, phasing and funding of the project.

The scoping study was conducted utilizing TSPLOST 2021 Tier One, Tier 2 Design S-2123 funds to: determine the project feasibility, identify the preferred alignment of the 2 mile sidepath along Roberts Drive, and provide a cost estimate for the project.

Full design of the Roberts Drive Sidepath is planned to be funded by TSPLOST 2021 Tier One, Tier 2 Design S-2123 with a total available of \$1,025,000 for design of all Tier 2 Projects. A request has also been made to ARC requesting funding support for design.

The construction of the Roberts Drive Sidepath (up to \$10,950,000) could potentially be funded by TSPLOST 2021 Tier 2 if those funds become available. If ARC provides support of design funds for the project, the City may also request construction funding support in the future.

B. 2024-117 2024 Pavement Condition Index (PCI) Analysis Presentation

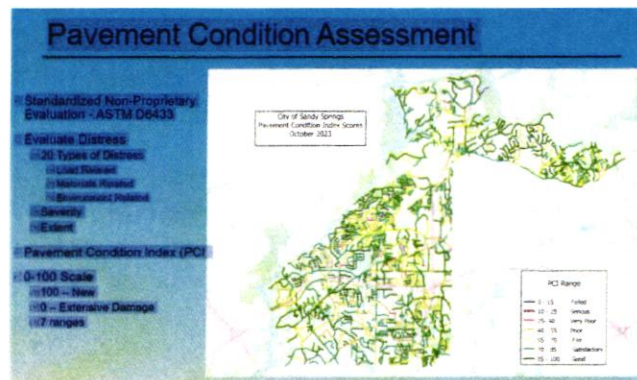
William H. Martin, Jr., AIA, Public Works Director, and Trevor Triffo, Founder and Owner, MDS Technologies, Inc. presented the 2024 Pavement Condition Index (PCI) Analysis.

The City has employed an independent third party to survey and rate all City-owned roads using the ASTM 6433 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys. This survey was completed using a combination of technology and human observation and rates the roads on a scale between zero, being the worst, and one hundred, being the best. Staff then uses this score along with budgetary guidance from City Council and management to program appropriate treatments for pavement management. The target average PCI score for the City's road network is currently eighty.

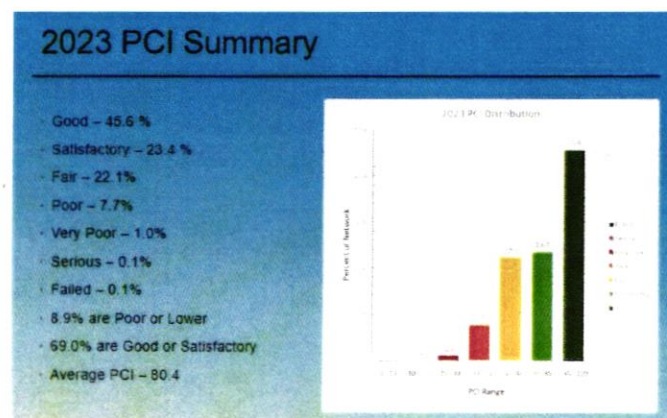
Public Works Director Martin said **MDS Technologies, Inc. Owner Triffo** will provide an assessment and paving plan recommendation for the City of Sandy Springs for the next three years and beyond.

MDS Technologies, Inc. Owner Triffo said the City maintains about three hundred and two centerline miles of paved roads. This is a valuable asset with a replacement cost of at least \$500,000,000, and this investment needs to be properly managed and maintained to preserve it and provide a desirable level of service to taxpayers. Proper management requires ongoing maintenance and rehabilitation of the road network. It also requires periodic assessment of the condition of the road network and a report card was done on the conditions of the road. MDS Technologies was hired to update the pavement management

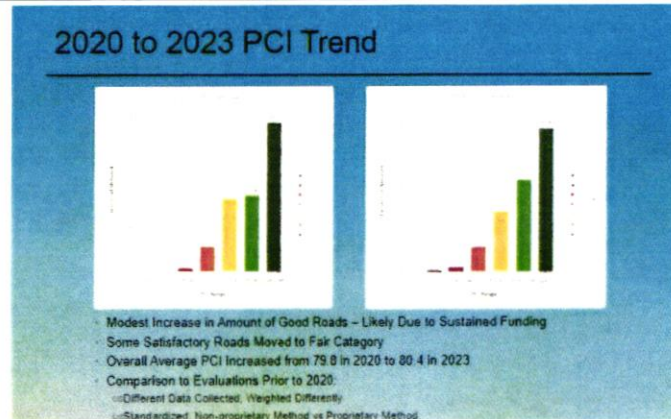
system, which is a database that defines all the roads in the City's road network, and each block is a separate entity in that database. There is a software package that attaches to the database allowing for inspection information tracking and has budgeting tools to estimate the effect any budget may have on the overall condition of the road network going forward. Part of the project is to confirm and update the road network if there are any new segments since the last time the work was done, and to assess the condition of the road network in a systematic and scientific way. A three-year rehabilitation program based on pavement condition was created and some analysis to estimate the budget required to maintain the desirable level.



We used a standardized nonproprietary method to evaluate the pavement condition created by American Society for Testing and Materials (ASTM). It evaluates twenty different kinds of distresses that happen on roads which includes the type of problem, the severity, and the extent on each road segment in the City. This information is combined and called the Pavement Condition Index (PCI). The PCI varies from a zero to one hundred scale, with one hundred being a new and perfect road.

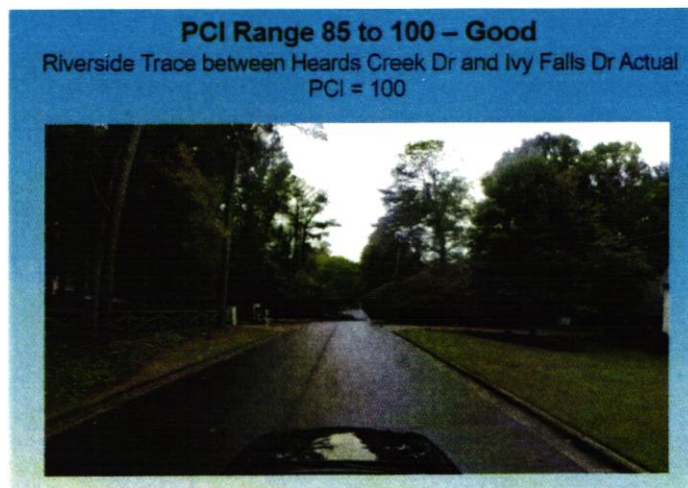


The PCI for each road segment in the City is represented in this summary chart following an evaluation in October 2023. Overall only 8.9% of the City's roads are considered to be in poor condition and 69% are satisfactory. The average for the whole road network is 80.4% and is on the high-end of the satisfactory condition.



The evaluation was also done in 2020 to compare the road network then versus now. The condition increased slightly from 79.8% in 2020 to 80.4% in 2023 which may be the result of sustained level of funding toward rehabilitating the road network over that period of time. Overall there has been an increase in the condition of the road network over the last three years.

The following are images of various categories in the PCI range.



PCI Range 70 to 85 – Satisfactory

Mount Vernon Hwy NW between Long Island Dr NW and Hammond Dr
Actual PCI = 76.4



PCI Range 55 to 70 – Fair

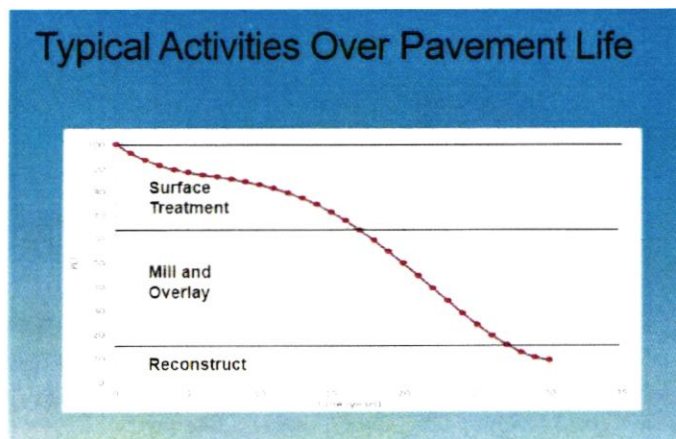
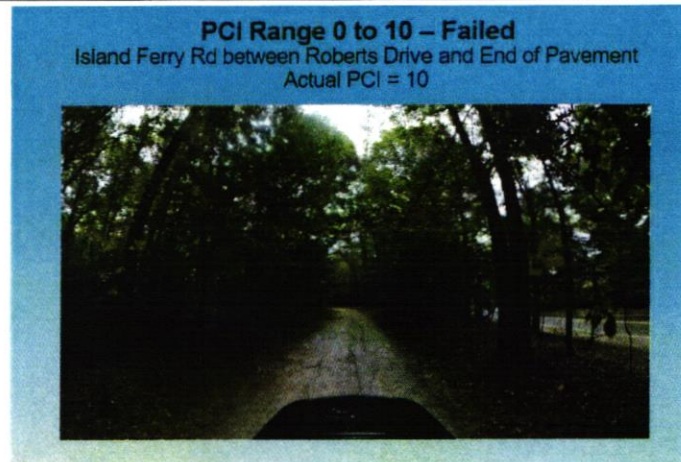
New Northside Dr between I-285 and Northside Dr
Actual PCI = 61.7



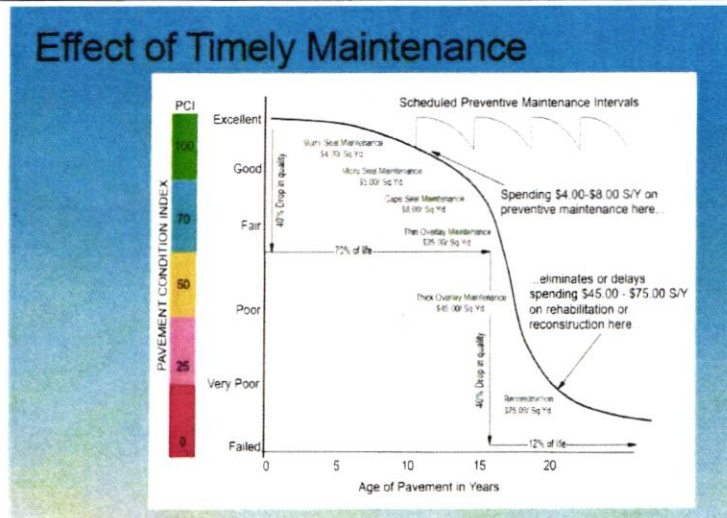
PCI Range 10 to 25 – Serious

Hammond Dr between Glenridge Dr and Glenridge/Hammond Ramp
Actual = PCI 23.4

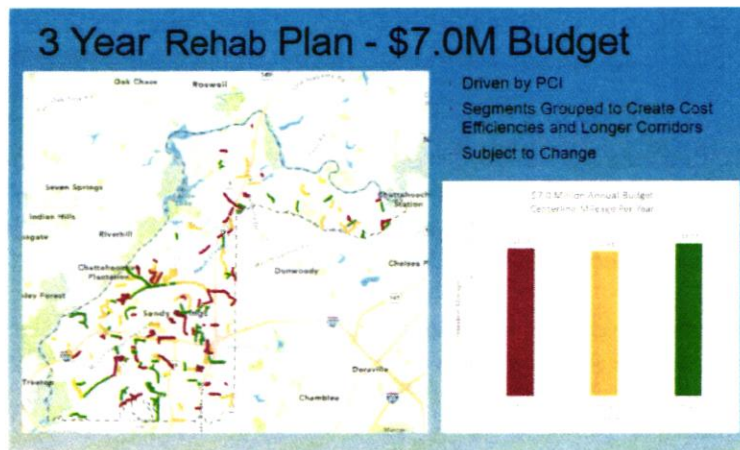




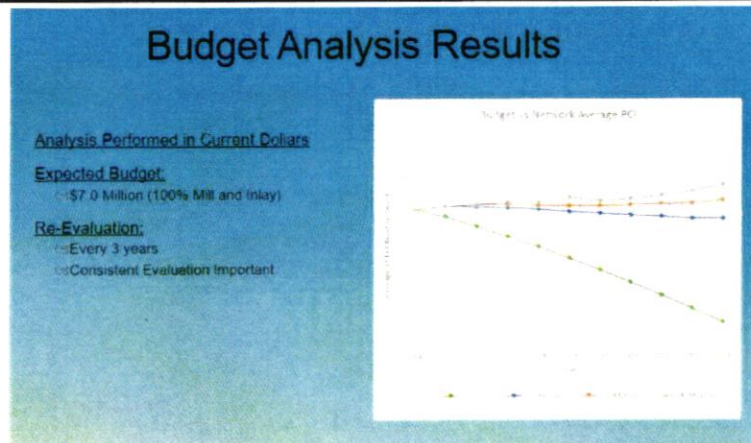
The dotted curved red line in the graphic represents a deterioration curve for a road. The PCI is one hundred when first built and deteriorates over time and the rate accelerates and moves from the area marked as Surface Treatment to the Mill and Overlay category, and eventually it may need to be reconstructed. Different types of treatments can be performed on roads at different points in its life cycle. Surface treatments such as crack sealing or different types of coatings could potentially extend the life of a road. Historically the City has operated in the Mill and Overlay area where roads deteriorate below the PCI sixty-five level and then activity is performed to bring the road back up to one hundred. Very few roads in Sandy Springs are allowed to deteriorate to the point where they need to be reconstructed.



The deterioration rate picks up faster as time goes on but surface treatments could extend the life of the road at a lower cost than waiting for it to further delay. There are many options and some are appropriate for some cases and the City should proceed cautiously.



Public Works Director Martin said this is the three-year rehabilitation plan based on the \$7,000,000 per year investment level discussed in the budget development, and it also defines an approximate centerline mileage for each of those fiscal years as a part of that average \$7,000,000 investment per year in the pay program.



Some budget analysis was done to determine the effect of different budgets on the overall condition of the network over the next ten years. The graph shows the average PCI of the whole road network and how that varies over time for different budget levels.

This program is driven by the PCI score and the worst roads tend to be fixed first. This was not done on a block-by-block basis, and we tried to create a lengthy smooth corridor for people using the road. It is very important to monitor the health of the road network and every three years the City should continue to have it re-evaluated to have the needed data to understand how the road network behaves.

Councilmember John Paulson said there are a number of projects to have final paving as part of the finished project, for example Mount Vernon down to Johnson Ferry. Those streets weigh down the City's average but are going to be fixed as part of the construction project, and it is unfair to penalize the system. How were those accounted for in this analysis?

Public Works Director Martin said when we knew the fix was coming, we ruled it out of the three-year rehabilitation plan. While the pavement may have been scored, it did not necessarily end up in the paving plan if it is already being addressed by some other means.

Councilmember Jody Reichel said we discussed maintaining an 80.0 index and it was mentioned 76.4 is for a road in good condition. Is the City still paving roads in good condition or is that an average? When does the City start to pave the road?

MDS Technologies, Inc. Owner Triffo said it is an average score and 80 is the overall target, but there are plenty of roads with a lower score. The idea is for the City to fix roads with a lower score and change the PCI score to 100 which brings the overall average up.

Public Works Director Martin said while we are making decisions to pave a degraded roadway, per the aging model, other pavements in the City are degrading over time as well and those scores are lessening. Since the score was done some pavement conditions across the City have decreased by virtue of age and deterioration of the pavement. The target average of 80 is still the number we strive for with the paving plan.

MDS Technologies, Inc. Owner Triffo said the 2023 PCI Summary is a distribution of all the PCI's for the City. There are roads in the 40 to 55 category which are considered to be in poor condition and are

being milled and overlayed, and their scores are far less than the 80 target overall. The average PCI of all the roads in the chart is 80, but the road rehabilitation program focuses on roads in the 25 to 40 or 40 to 55 range.

Councilmember Reichel asked does the City pave roads between and I-75 and I-285?

MDS Technologies, Inc. Owner Triffo said typically no.

Councilmember Tibby DeJulio said the City has been doing this for the last eighteen to nineteen years with a benchmark of seventy. Is eighty the new seventy, or are we just improving the quality of the roads?

Public Works Director Martin said before two cycles ago the PCI was not prepared in strict accordance with the the ASTM standard as a method of testing. There was a proprietary method that was based upon it and the scores from those surveys differed from the scores being produced now.

MDS Technologies, Inc. Owner Triffo said the ASTM is a standardized way of evaluating road condition and we used that method in 2020 and 2023. Prior to that a different company did the evaluation with a proprietary method that is not standardized, and the details of it are not public. In some ways their road surface evaluation is similar and different. They use different equipment and techniques, and you cannot draw conclusions because they are not directly comparable.

Councilmember Melissa Mular said this program is great because if you drive into another city out of Sandy Springs you immediately know you are in the other city because of the pavement. There are lots of miles to cover. How is the data gathered?

MDS Technologies, Inc. Owner Triffo said we use a 360-degree camera that is mounted on the roof of a data collection vehicle. As it goes down the road it captures frames at thirty-foot intervals and each frame is geotagged. We then take all the images and location and do an analysis for each road segment.

Mayor Paul said the photographs will tell a lot but they do not tell you everything. For instance, it does not tell you what is going on underneath in some cases. There may be a pavement preparing to fail because the subbase is weakened or deteriorating but the surface looks good. How do you assess the layers of a paved road?

MDS Technologies, Inc. Owner Triffo said our assessment is surface evaluation and there is no coring. Strength testing can be done where a weight is dropped on a road and the response can be measured to draw conclusions. We adhere to the ASTM standard but there are distresses that are indicative of a structural problem, for example certain types of cracks and cracks patterns. It is expensive to do deflection testing on the whole road network to try to find those spots. Typically, about one test per block is done but there is no guarantee that test location will be representative of the strength of that whole road as it is difficult to tell. Deflection testing is good for when a road has been identified as requiring some form of rehabilitation. Strength testing may be then done at a much tighter interval and in every lane to figure out where all the weak spots are and is when this testing is most useful.

Mayor Paul asked would that be Ground Penetrating Radar (GPR)?

MDS Technologies, Inc. Owner Triffo said GPR information may be useful in a project-level case where you decided that a road needs some form of rehabilitation but you will fine-tune how that is to be done. GPR gives how the asphalt thickness varies if it does over the length of a road, and it needs to be calibrated by coring and some other things. I am not sure how useful GPR information is at the network

level which is this type of study that we have done.

Mayor Paul asked can the City make a determination of the total condition of the road by just the surface cracking and the photographs?

MDS Technologies, Inc. Owner Triffo said yes. There may be instances where some of this testing is appropriate, such as it has been determined that something needs to be done but not sure what. The network evaluation we are doing is sufficient to provide a relative indicator of condition so that a road rehabilitation program can be pieced together.

Councilmember Andy Bauman said this set-up seems to be reactive. With potholes, weather, other factors and data, is the City going to get into a predictive model where the inputs over the course of several years could help further guide our decisions on where to invest?

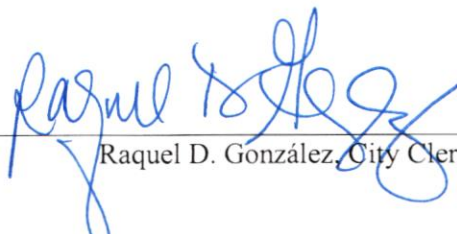
MDS Technologies, Inc. Owner Triffo said we have assessed the condition of the road network and have two data points for each piece of road. We are getting to the point where we can develop some predictive curves and predict future PCI's based on actual data collected, and that could be done on a road by-road basis. We can identify trends where if certain roads are deteriorating more quickly than they should, the next time we did it with three data points, we would be able to start drawing some conclusions. It is impossible to predict when and where a pothole is going to occur, and it is very dependent on weather events and a weakened area in the asphalt surface itself. That is reactive and probably will be for a while.

II. City Council Discussion Items

There being no further business, the meeting adjourned at 6:46 p.m.

Approved: June 4, 2024



John N. Paulson, Mayor Pro Tem

Raquel D. González, City Clerk