



MEMORANDUM

Date: April 10, 2015

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator 

Re: **Pavement Maintenance Response**

I recently advised the Board of Supervisors of actions being taken by the Department of Transportation to increase their capacity to respond to pavement repair and maintenance requests, specifically potholes. The attached April 3, 2015 and March 31, 2015 memoranda from Deputy County Administrator John Bernal and Transportation Director Priscilla Cornelio identify the steps being taken to improve identification and reporting of pavement repair issues. The primary changes are to add additional staffing response to pavement repair activities. This is a reallocation of staff within the Department of Transportation, which means other areas of road maintenance will be delayed.

In addition, we are increasing our efforts to increase documentation of repairs to provide positive feedback to those who report potholes and pavement surface deficiencies. More importantly, as we begin to consider a regional approach to pavement rehabilitation and restoration, we need to ensure we have accurate views of pavement surface conditions, the need for repair, and the types of repairs necessary. It is likely the system will integrate an already existing pavement management system with readily available Geographic Information System (GIS) tools the County presently uses, as well as Google Earth applications over a period of years, to graphically and accurately report roadway surface conditions.

CHH/anc

Attachments

c: John Bernal, Deputy County Administrator for Public Works
Priscilla Cornelio, Director, Department of Transportation

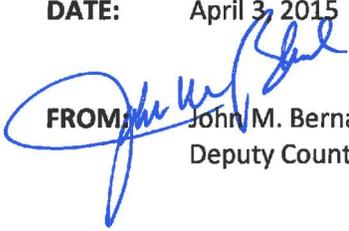


MEMORANDUM

Public Works Administration

DATE: April 3, 2015

TO: C.H. Huckelberry
County Administrator

FROM:  John M. Bernal
Deputy County Administrator

RE: Pavement Maintenance Response

As you have requested, the Department of Transportation (PCDOT) has provided additional information concerning their efforts to improve our pavement maintenance activities in light of the increased number of complaints about the surface condition of our roadways. The enclosed March 31, 2015 memorandum provides a brief review of the current resources available to PCDOT for addressing incoming requests for service, together with the resources being applied to complete necessary pothole repairs. I have reviewed this information and offer these observations:

1. The incoming volume of request for service by phone and email has significantly increased and is resulting in approximately 5,000 service requests being tracked in the course of a year. However, PCDOT informs that the *See it-Click it-Fix it* program employed by the City of Tucson has been reviewed and is not deemed to add any benefit to our current process. Unfortunately, the information supplied by PCDOT does not advise as to the reasons why such a program would not provide additional information to Pima County for responding to such service needs. I believe the City of Tucson's program, or some similar opportunity for the driving public to advise us of trouble spots being encountered will address the potential "pent up demand" for informing us of the need for repairs to our roadway system.
2. The resources invested in addressing pothole repairs have been significantly increased by doubling of the in-house crews. Furthermore, contract crews have been added to supplement those services currently available from in-house resources. As noted in this memorandum, the tonnage of asphalt used for pothole repairs has doubled from March 2015 in comparison to March 2014. However, as noted, response times relative to the receipt of request for service and the days or weeks required to complete such repairs are not readily available, given our current capabilities.
3. The apparent difficulty in obtaining more accurate response time information is attributed to the system used for establishing service requests and closing them out. The need for added administrative support is identified as a potential improvement in developing reliable response time statistics.
4. Additional information technology capabilities are also noted as a necessity for improving upon the tracking of labor, equipment and materials expenses. *CarteGraph* software has been identified as a system that can be used in lieu of our current cost accounting software to assist with the monitoring of our expenses related to pavement maintenance costs. I have recently communicated my own desires to the Information Technology Department (ITD) about increasing the attention to constituent services by exploring the *CarteGraph* software capabilities.

Memo to C.H. Huckelberry, County Administrator

Re: Pavement Maintenance Response

April 3, 2015

In summary, I believe the Department of Transportation must continue to explore improvements in their processes for addressing the volume of service requests that will only increase as we further prolong the investment in pavement preservation of our entire roadway system. As such, I support the department's request to add an administrative person to assist with their service request management and I also support the use of added information technology capabilities such as the *CarteGraph* software identified.

In addition to taking immediate steps to supplement the available resources for responding to pavement maintenance requests, DOT must develop performance standards for their operation maintenance staff such that they can effectively monitor the system they are employing to receive and track service requests from scheduling work to be accomplished, performing the work, and responding to the requesting parties as to the status of requested work. I will provide additional support to DOT to undertake an evaluation of their current work processes to assure that the most efficient and cost effective means are being employed to accomplish the desired end result of the fastest turnaround possible resulting in completed work of the highest quality at the lowest possible cost with the maximum customer satisfaction possible.

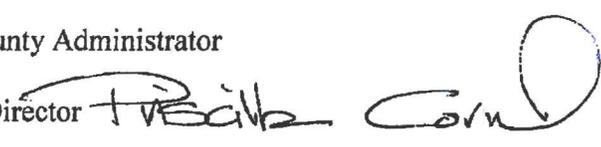
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Attachment

Cc: Priscilla Cornelio, Director, DOT
Ana Olivares, Deputy Director, DOT



MEMORANDUM

DATE: March 31, 2015
TO: John M. Bernal, Deputy County Administrator
FROM: Priscilla S. Cornelio, P.E., Director 
SUBJECT: **Pavement Management Response**

As a follow-up to our March 13, 2015 memorandum, we offer the following information:

Resources

In the March 13, 2015 memorandum we incorrectly stated calls to our Maintenance Operations Section (MO) had increased from 2,000/year to approximately 5,000/year. Those numbers actually apply to Service Requests (SR) and not calls. Since the addition of the Administrative Services Manager to MO and the reorganization of administrative staff, we have been tracking the number of calls received and the number of SRs entered in Maximo. Please note that not every phone call becomes a SR. We currently have three administrative staff taking calls and entering SRs in Maximo. Two are long term MO employees, Lori Witz and Adriana Vizuet, and the third is a new addition recently relocated from RWRD, Patsy Ronquillo. Their assignments are as follows:

- Lori and Patsy answer the phones and create all SRs that are generated through phone calls only.
- Adriana processes all e-mails received through the website, Director's office, Board of Supervisor's office and other internal/external e-mail. She creates all SRs generated by e-mail requests.

Entering SRs in Maximo takes approximately 10 to 15 minutes. Staff must first identify if the roadway service requested is within Pima County jurisdiction, identify which maintenance district the roadway is in so they can assign it to the correct supervisor and they must also identify the township, range and section. Once all the information is gathered, they create the SR.

MO has kept track of the phone calls and SRs created for the months of February and March this year. Table 1 shows the results to date.

Table 1

02/02/15 to 02/27/15	Total	Daily Avg
Maximo SR Entered	329	17
Email Requests Received	210	11
02/13/15 to 02/27/15	Total	Daily Avg
Telephone Calls Received	576	52
03/02/15 to 03/26/15	Total	Daily Avg
Maximo SR Entered	395	21
Email Requests Received	191	10
Telephone Calls Received	993	52

With an average of 52 calls per day, MO can expect to receive approximately 13,000 calls this year. Based on the number of SRs entered in the last two months, 724, MO can expect to enter approximately 5,000 SRs, based on 250 working days in a year. We ran a report from Maximo and determined that last year in the months of February and March, 477 SRs were entered; that is an increase of 52%. The three staff members assigned to take calls and enter SRs is sufficient at this time.

Update on Pothole Repair

As mentioned in the March 13, 2015 memorandum, MO increased the in-house pothole repair crews to eight (8) crew days per week and previously we had four (4). Contract crews were also added. Since the start of this aggressive approach in mid-March, there have been two weeks of two (2) contract crews, one week of three (3) contract crews and the fourth crew will be added as it is available. We compared the amount of asphalt tons used for potholes for two weeks in March 2014 and March 2015 and determined the amount thus far has approximately doubled:

	March 2014	March 2015
In-house Crews	313 Tons	323 Tons
Contract Crews		280 Tons
Total	313 Tons	603 Tons

Currently, we do not have good data to definitively state what our response times are or if they have improved from last year. We are working on developing a process to accurately track response times as explained below in Scheduling.

Scheduling

The maintenance district supervisor reviews the SRs received for his district and schedules the work accordingly. Once the work is complete, the supervisor goes into the Maximo system and closes out the SR. However, depending on the supervisor's workload it may take him several days or weeks to make the time to close out a SR; therefore, it is difficult to determine if the work has been completed just by running a report from Maximo.

John M. Bernal, Deputy County Administrator
Pavement Management Response
March 31, 2015
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This process still needs to be thoroughly reviewed before we can gather and provide accurate data. We plan to do this review within the next couple of months. We do know that to successfully manage the number of SRs created we will need to devote an additional administrative person to keep up with the SR scheduled work. This person would monitor the SRs that have been created and follow up with the supervisors to determine when they are completed, then go into the system and close out the SR. They would also tie the SR to a work order so that we can easily find out how much the SR cost. If there is contact information in the SR, this person would inform the requestor the service has been completed. With the number of SRs being created, this will be a full time job.

There is a vacant Administrative Specialist position available in MO and if permitted to fill this position, the successful candidate would take on this role.

CarteGraph Software

The CarteGraph licenses assigned to MO are used for Pave View and Pave View Plus only. CarteGraph has modules to log calls, create SRs and work orders. We also hope to explore the possibility of using CarteGraph in lieu of Crew Day Cards. It has a module that tracks labor, equipment and materials and ties it back to a work order. Department of Transportation (DOT) has not been allowed to explore any of the other CarteGraph modules because we were instructed to use the existing Pima County systems: Synergen, AMS, Maximo and Hansen (which is no longer an option).

DOT would like the opportunity to explore the other modules offered by CarteGraph and determine if it can meet our needs.

See it-Click it-Fix it

After discussing this application with the City of Tucson, we have determined this tool does not add benefit to what we currently do. We do not plan to advertise the use of See it-Click it-Fix it for DOT.

To summarize, the current administrative staff is sufficient to handle all calls and e-mails coming in and to create SRs. We do need additional resources to manage the SR scheduled work and assist the maintenance supervisors with closing out requests and connecting the SR to work orders to accurately capture the costs for each SR. **We request approval to add an additional administrative staff to MO to assist in the processing and scheduling of SRs.**

We also need the opportunity to thoroughly investigate the modules offered by CarteGraph to determine if it is the tool we can use to log calls, create SRs and work orders, as well as track labor, equipment and materials for each work order.

John M. Bernal, Deputy County Administrator
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March 31, 2015
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Please contact me if you need additional information.

PSC:AO:dg

c: Ana Olivares, Deputy Director
David Cummings, Transportation and Maintenance Division Manager
Annabelle Valenzuela, Program Manager
Oleta Garcia, Administrative Services Manager