



Legislation Text

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Flooding in Older Neighborhoods and Process for Road Repair (B)

This item is offered as an update on the status of Public Works' residential roadway pavement program.

The City of Gainesville's Public Works Department utilizes a three-year residential street paving plan using a combination of field data, predictive modeling, and inter-agency coordination. The documented workflow begins with regular field inspection of 1/3 of all city-maintained residential roads each year. Information is collected about the current pavement condition, the road's physical measurements, and roadway type. In addition, records of the last maintenance date are also maintained. This information is input into the software program, "MicroPAVER™," for predictive modeling.

MicroPAVER™ was created by the Army Corps of Engineers and is recommended by the American Public Works Association (APWA) to assist municipalities in creating models of current and future city-wide street conditions. MicroPAVER™ generates a Pavement Condition Index (PCI), a numerical value on a scale of 1-100 that indicates the pavement condition of each section of road. The PCI value determines the need for and type of treatment for a specific street section. Lower PCI values from 0-45 typically require a total rebuild, while PCI values from 46-70 typically require asphalt overlays. PCI values above 70 typically indicate that that section of road does not need maintenance. Proactive preventive maintenance can avoid the more expensive option of rebuilding a street. The software anticipates the average annual degradation of existing street conditions when determining future models. The final product of the software is a recommended plan to maintain city streets at an acceptable PCI level, funding not withstanding.

To maintain this average PCI value, MicroPAVER™ produces recommendations on which streets to address, either via rebuild or overlay, while considering available funding. Public Works staff examines the model's recommendations to determine where opportunities exist to improve pavement conditions at the neighborhood scale. This is done by comparing the PCI values of the streets selected by the model with the PCI values of adjacent streets. Opportunities to pave adjacent streets with comparable PCI values decreases mobilization costs, encourages efficient use of materials, and increases citizen satisfaction. The final step in selecting streets for upcoming paving projects is to compare the strategic plans and current projects of local and regional agencies (GRU, Alachua County Public Works, FDOT, etc). This ensures improved inter-agency communication and reduces duplication of effort.

The Public Works Department's annual budget for residential street paving is approximately \$300,000. Of that, approximately \$150,000 is allocated for rebuild and the remaining \$150,000 for overlay treatments.

The City Commission hear the presentation on the Pavement Management Program.