

Yolo County Roads Crew Hard at Work Year Round

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As summer comes to a close and we prepare for the winter months, I want to recognize the stellar and challenging work of the Yolo County Roads Crew as they transition from road repair to road maintenance, ensuring the public's safety on our county-maintained roadways.

In the months to come, you will see the roads crew out preparing for the rainy season by cleaning drains and ditches, trimming trees and alerting residents to areas of flooding. During stormy weather, the crew will be on-call, 24 hours a day, fixing problems and closing roads as needed.

But this past summer – and every summer – the crew focused on repairing our roads. Road repairs in the rural setting, as opposed to within cities, pose unique challenges. First, the time and logistics required to move heavy equipment to a road in need of repair within the county's vast 1,021 square mile network of roads is exponential compared to the compact geographic area of a city. More challenging is the difference in the construction of county roads versus city streets.

Most county roads are former wagon trails that over the years were modified to varying degrees to accommodate motor vehicle traffic. While those modifications initially served us well, today's increased traffic and heavier vehicles have conspired to weaken our rural roads. To illustrate the impact of heavier vehicles, a three to four axle, single trailer vehicle you might see transporting gravel or tomatoes on a rural road has a pavement impact 5,296 times that of the car you use to commute to work each day.

Because of the less-than-adequate conversion of wagon trails to county roads, increased traffic and heavier vehicles, our rural roads tend to have a faster rate of deterioration than city streets. Another contributing factor is the open ditch system along county roads, initially designed for storm water runoff conveyance, but now utilized year-round for irrigation to adjacent fields. Unlike closed storm sewer systems found in cities, open ditches allow infiltration of water into the road base, weakening the support below the pavement, causing the pavement to flex, crack and rut.

To address these issues and shore up our rural roadways, Yolo County's crew uses a relatively new multi-stepped, multi-layered paving procedure. Starting with excavation of the road surface, rollers are then used to compact the base. This is then followed by multiple layers of Hot Mix Asphalt, best utilized when the mix temperature ranges from 265°F to 320°F, and outside temperatures are also high. One key to the success of this effort is the repeated rolling effort to compact the mixture and eliminate air voids. For every 1% reduction in air voids, there is a 10% reduction in cracking. As one can imagine, this is a time-consuming, hot, dirty and strenuous job, but well worth the effort.

This summer, the road crew spent 9,780 hours repairing 123 miles of road. They will continue with this effort until the temperatures drop and then will shift into winter preparedness and response efforts. While the challenges of maintaining 757 miles of county roads is ever present, so is the resolve and excellent workmanship of the Yolo County Roads Crew.