





MPAGES AND BENEFICE MOORE STREET AND BENEFICE MOORE STREET.













A little history:

- ▶ 2019: PRDOT begins to work on the microsurfacing specification for the first pavement preservation project.
- ▶ 2020: Puerto Rico launches project #1 with Microsurfacing for bidding. AC-0011630 on PR-116, Lajas PR.
- ▶ 2021: Puerto Rico successfully completes its first purely pavement preservation project on PR-116, Lajas PR.

PR-116: characteristics of the section

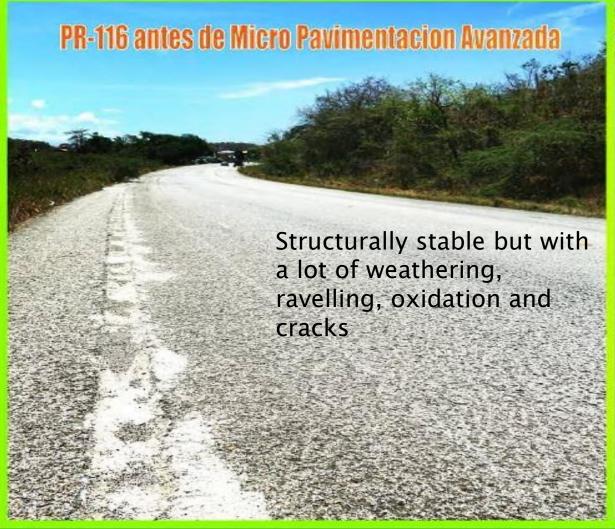
- Location: Southwest of the Island, very dry, from km.13.2 to km.14.0
- AADT (2019): 7,301 with 4.53% Trucks





PR-116 BEFORE MICROSURFACING TYPE II

AFTER 2 LAYERS OF MICROSURFACING TYPE II







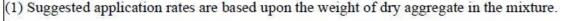




SPECIAL PROVISION SPECIFICATION 404

MICROSURFACING

	Table 404-6	6 Rate of Application	
AGGREGATE TYPE	LOCATION	SUGGESTED APPLICATION RATE ⁽¹⁾	
Type II	Collectors and Local Roads	Single Application: 15-21 lbs/yd ²	Double Application (two lifts) Bottom: 14-18 lbs/yd² Top: 16-20 lbs/yd² Total: 30-34 lbs/yd²
	Scratch or Leveling Course	As Required 14 lb/yd² (minimum)	
Type III	Interstate, Arterial Routes, and Wheel Ruts	Single Application: 18-30 lbs/yd ²	Double Application (two lifts) Bottom: 16-22 lbs/yd ² Top: 18-22 lbs/yd ² Total: 34-44 lbs/yd ²
	Scratch or Leveling Course	As Required 16 lb/yd ² (minimum)	







We made sure that the cracks were well attended to before depositing the mixture. It's mandatory in the specification.

Proyecto de Micro Surfacing en Carretera Estatal PR-116, Lajas, Puerto Rico





Proyecto de Micro Surfacing en Carretera Estatal PR-116, Lajas, Puerto Rico





Mixture deposit process:



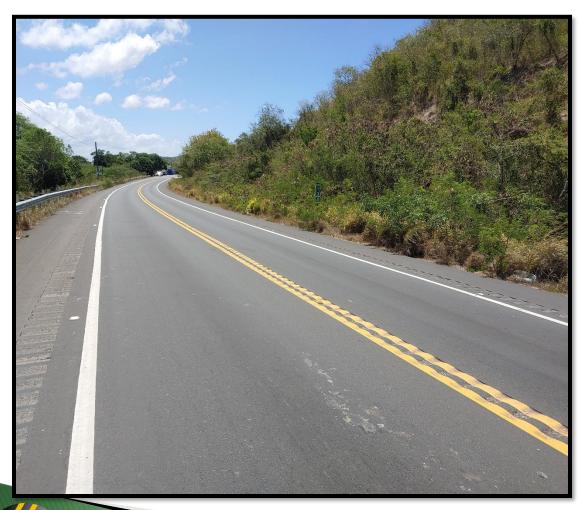
Final result of the performed work:







Microsurfacing project 1 yr. later (2022)









Microsurfacing project 1 yr. later (2022)









Microsurfacing project: 2 yr. later (2023)







What's Next?

- Next year we hope to have a second pilot project using microsurfacing.
- ▶ We want to use not only microsurfacing but slurry seals on roads with low vehicle volume as well.
- Continue monitoring our pilot projects to use the data collected to convince the Agency Top Management that we have the technology available and the advantages of the pavement preservation methods for our road network.
- Use pavement preservation methods not only on low severity distress roads but on low to medium severity distress as well.
 - Using good crack sealing in combination with microsurfacing or slurry seal we can obtain a better benefit-cost result in the long term and we also increase the number of candidate sections for these type of treatments.





Thank you for your attention..!!

Any questions??



