

THE DEVELOPMENT OF ASPHALT EMULSION MIXES IN THE NORTHWESTERN UNITED STATES

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SUMMARY

About fifty years ago, asphalt emulsion mixes came into common usage in the northwestern United States.

Since that time the variety of types of emulsions and mixes have evolved, with improved techniques and equipment.

The applications for the emulsion mixes include --

- upgrading aggregates which degrade with a bitumen coating,
- using a dilute emulsion to process and tie up the base rock, so it can carry traffic without decompaction,
- forming a barrier with an emulsion treated base to prevent infiltration of a plastic subgrade,
- recycling of bituminous pavements with emulsions either in place or in a stationary plant,
- treating native aggregates with emulsions to produce bituminous bases and pavements,
- manufacturing open graded bases and pavements,
- producing cold mixed patching mixes,
- solving the transporting and handling problems of bitumen for hot mix in remote sites,
- developing slurry seals to its current usages.

Emulsion mixes continue to serve these specific areas of bituminous pavement construction in the northwestern United States.