

Smooother Roads

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Physics Of Road Destruction

- Water permeates roads
- Water expands as it freezes, things break
- Frequent freeze thaw cycles increase damage
- Roads crumble at joints
- Some materials are weaker, some tougher

Repairing Damage

- Usually with asphalt patch – faster
- Optional asphalt roller makes better patches
- Sometimes with concrete patch – lasts longer
- Sometimes by replacing the road – costly

Some Problems

- Crumbling roads are very bumpy
- Vehicle damage, bicycle damage
- Difficult for pedestrians, bikes, motorcycles, cars
- Collisions from avoiding holes
- Patched roads still not smooth
- Concrete repairs break apart
- Asphalt repairs deteriorate faster
- Sometimes repeated repairs are necessary

A Bumpy Repair



Repeated Repairs



Recommendations

- Identify better repair materials and methods
- Epoxy cement?
- Grind out hole before repair?
- Apply glue before repair material?
- Make smooth repairs, takes longer, better results
- Make repairs sooner to prevent further damage
- Repair more roads, replace fewer roads
- Use prison labor, increase prison labor pay
- Use current contractors for major reconstruction

Enjoy Nature (Great Bear Park)

