

CITY OF LANCASTER

Population: 160,000

- ▣ High Desert City of 94 Square miles
- ▣ Lane-miles or roadway = 750
- ▣ Flat as a pancake
- ▣ Average rainfall +/-7"
- ▣ Temperature range from 5 - 115 degrees

BUDGET

- 2008 Capital Construction budget = \$30,300,000.00
- 2012 Capital Construction budget = \$17,300,000.00
- 43% Reduction in available funds**
- 0% Reduction in lane-miles

ALTERNATIVE METHODS

TYPICAL PROCESSES

- ▣ Chip Seal
- ▣ Slurry Seal
- ▣ Cape Seal
- ▣ Mill and Fill
- ▣ Pavement Reconstruction
- ▣ Full Depth Reconstruction

ALTERNATIVE METHODS

- ▣ Bonded Wearing Course
- ▣ Cold in Place Recycle
- ▣ Central Plant Recycle
- ▣ Full Depth Reclamation
- ▣ Re-HEAT

CHOOSING METHODS

PAVEMENT CONDITION INDEX

Group	GIS ID	Street Name	Description	Length (ft)	Area (sq. yd.)	Classification	Rhabilitation Type	Estimated Cost	OCI
2	1182-1	30TH ST W	AVENUE K-4 to AVENUE K	1,338	5,852	Arterial	Surface Treatment	\$11,938	92
2	4525-1	30TH ST W	AVENUE K-12 to AVENUE K-8	1,328	5,807	Arterial	Surface Treatment	\$11,845	77
4	1784-1	LANCASTER BLVD	REDWOOD AVE to SPEARMAN AVE	384	2,098	Collector	Thin Overlay	\$37,299	64
1	7209-1	30TH ST E	LANCASTER BLVD to AVENUE I	2,638	15,381	Arterial	Thin Overlay	\$330,091	61
1	2176-1	30TH ST E	NEWGROVE ST to LANCASTER BLVD	648	2,950	Arterial	Moderate Overlay	\$71,293	53
3	3321-1	LANCASTER BLVD	33RD ST E to 40TH ST E	3,364	14,712	Collector	Moderate Overlay	\$312,420	49
7	3120-1	AVENUE I	5TH ST E to RODIN AVE	911	5,975	Arterial	Thick Overlay	\$169,674	43
1	7466-1	30TH ST E	AVENUE J to NEWGROVE ST	1,990	10,517	Arterial	Thick Overlay	\$298,641	40
8	1021-1	AVENUE K	21ST ST W to WESTFIELD DR	536	3,323	Arterial	Surface Reconstruction	\$142,708	36
12	775-1	17TH ST W	JENNER ST to JACKMAN ST	275	802	Residential	Surface Reconstruction	\$21,874	36
12	7987-1	16TH ST W	ALBRET ST to KILDARE ST	320	933	Residential	Pavement Reconstruction	\$36,924	29
12	7996-1	16TH ST W	KILDARE ST to JENNER ST	806	2,349	Residential	Pavement Reconstruction	\$92,981	26

WHEN TO USE FDR?

- ❑ Overall Condition Index of <30
- ❑ Severe pavement distress
- ❑ Subgrade failure
- ❑ Increased Traffic Index



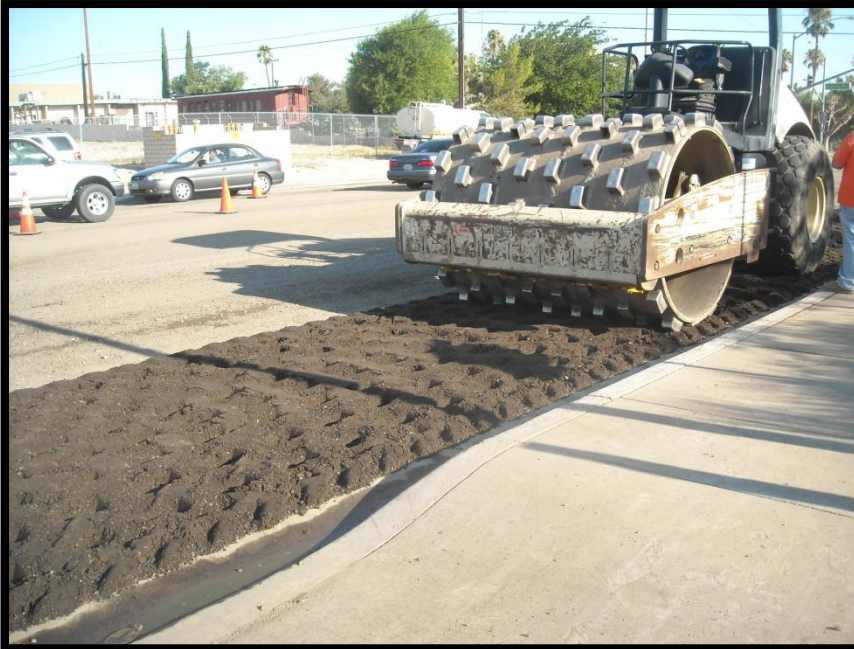
WHY FDR?

- ▣ Eliminates ALL asphalt failures
- ▣ Produces stronger base section
- ▣ Can reduce HMA or PCC pavement section
- ▣ Highly resistant to infiltration
- ▣ Fewer traffic related challenges
- ▣ Sustainable (Generally no import or export)
- ▣ Substantial cost savings over reconstruction

PHYSICAL CONSTRAINTS

CURB AND GUTTER

INCREASED PROFILE



UNCONFINED AREAS

Use excess material to improve shoulder



WEATHER

Emulsion needs warm dry weather to cure

FREEZING
TEMPERATURES



WET WEATHER



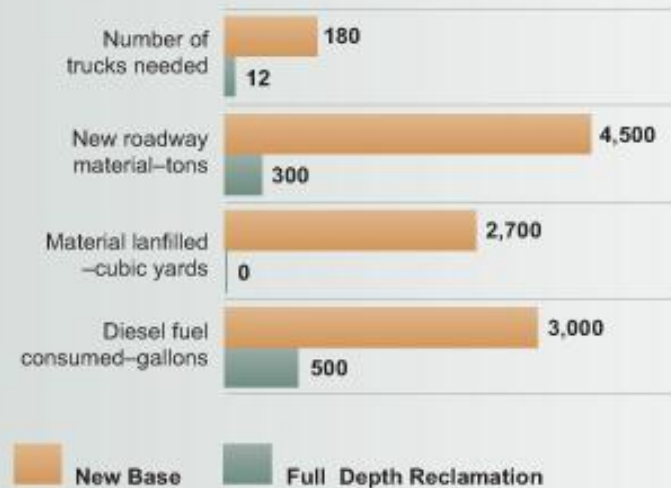
COST/BENEFIT

COST

Equal to or less than
conventional methods

BENEFIT

New construction (new base) vs Full Depth Reclamation Energy use and materials



Based on 1 mile of 24-foot wide 2-lane road, 6-inch base

FULL DEPTH RECLAMATION

It's the right
thing to do!