Pavement Trench Cut Fee Study

Public Works Department

Infrastructure & Mobility Committee
May 11, 2023

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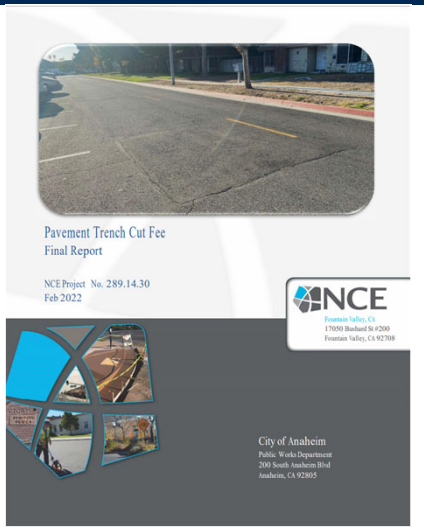
OPPORTUNITY

1. Consider a Pavement Trench Cut Fee Study to assess and quantify damage caused by trenching and utility cuts on City streets

2. May lead to adopting a Fee Schedule to recover costs associated with trenching impacts and reduce life of roads



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BACKGROUND

1. Paving Moratorium was extended from three to five years
2. GIS Paving Map
3. Pavement Management Program incorporated regular street surveys and Lucity software
4. Increased roadway investment from $13 million to over $24 million during the past 10 years

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BACKGROUND

5. Assess truck volumes, cut-through traffic concerns, & restrictions
6. Piloted Recycled Asphalt Material
7. Partnered with RPU to recommend on-call contractor to repair roads and sidewalks damaged by water line repairs
8. Continue to pursue best practices to help preserve streets
9. Not New – Anaheim, Los Angeles, Sacramento, Austin, Phoenix, San Francisco, Kansas City, and many more agencies have conducted these studies

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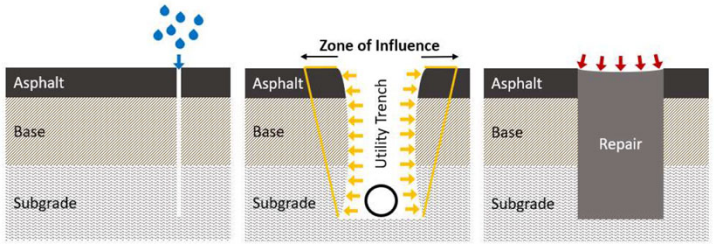
ROAD DAMAGE BY TRENCHING OPERATIONS

1. Water Intrusion places load pressure on pavement causing some of the gravel to become unstable – leads to cracking
2. Zone of Influence – lateral support becomes weak and unstable, can unravel toward the trench opening (caving in)
3. 90% compaction isn't always achieved which leads to failing patches and rough roads



BENEFITS OF A PAVEMENT TRENCH CUT FEE STUDY

1. Conduct structural damage at multiple locations in the City. Would select different pavement classes (i.e. Excellent, Very Good, Good, Fair, Poor, etc.)
2. Review the number of annual street opening permits
3. Structural evaluations would provide deflection measurements and required overlay thicknesses. The study would provide the reduction in pavement life for various Pavement Condition Index scores.
4. Recommend a Utility Cut Damage Fee Schedule specific for the City of Riverside

EXAMPLES OF TRENCH CUT FEE SCHEDULES

City of Anaheim

PCI	Fee	
	Trench ($/SF)	Pothole ($/EA)
>65	$8.40	$69.30
55 to 65	$11.60	$95.70
<55	$3.60	$29.70

City of Los Angeles

Road Classification	Fee
	Trench or Bore Pit ($/SF)
Local	$8.24
Select Street Designations	$19.44

County of Sacramento – For Trenches Less Than 4 Feet Deep

Major Streets[1] or all streets within 5 years of construction or structural overlay	PCI between[2]	100	and	70	$3.90 per S.F. longitudinal
Major	PCI between	69	and	26	$7.80 per S.F. transverse
					$2.20 per S.F. longitudinal
Major	PCI between	25	and	0	$4.40 per S.F. transverse
					NO FEE
Other	PCI between	100	and	70	
					$2.41 per S.F. longitudinal
Other	PCI between	69	and	26	$4.82 per S.F. transverse
					$1.18 per S.F. longitudinal
Other	PCI between	25	and	0	$2.36 per S.F. transverse
					NO FEE

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STRATEGIC PLAN ALIGNMENT

Strategic Priority 6 – Infrastructure, Mobility & Connectivity

Goal 6.2 – Maintain, protect and improve assets and infrastructure within the City's built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.

Cross-Cutting Threads

- Community Trust
- Fiscal Responsibility
- Sustainability & Resiliency
- Equity
- Innovation

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RECOMMENDATION

That the Mobility & Infrastructure Committee recommend that the City Council approve a Pavement Trench Cut Fee Study to assess damage caused by trenching in the roadways and sidewalk associated with development and utility work to consider adopting a fee schedule to recover costs from such damage.