



Renewal Research Update

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**International Symposium on Non-Destructive Testing for Design
Evaluation and Construction Inspection**

**Marriott Wardman Park Hotel, Washington, DC
Friday, January 18, 2008**

SHRP 2 Focus Areas

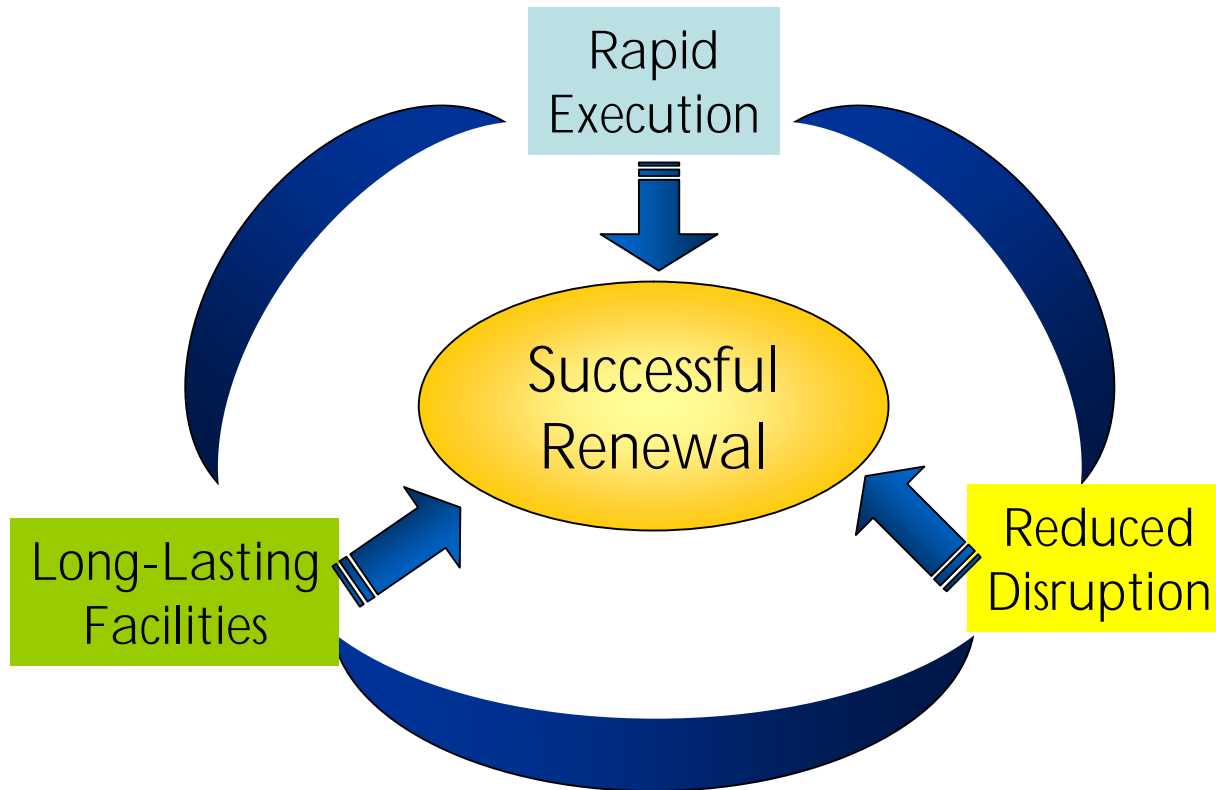
Safety

Renewal

Reliability

Capacity

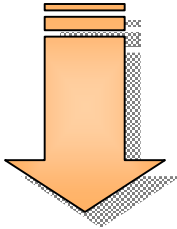
Renewal Program Goals



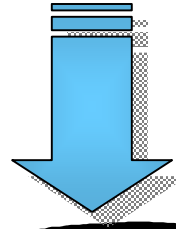
To develop tools and techniques for, and remove technical and institutional barriers to highway renewal that

- are executed rapidly
- cause minimized disruption
- produce long-lasting facilities

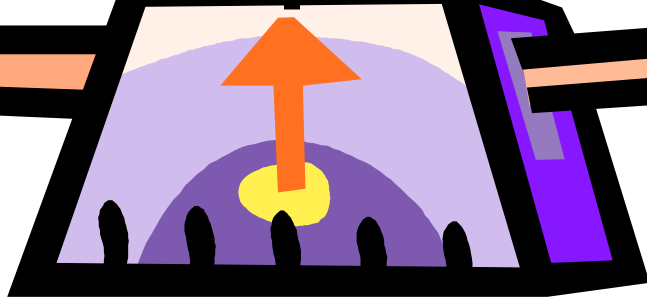
Development



Implementation



Successful
Renewal



Renewal Research Program

R01. Encouraging Innovation in Locating and Characterizing Underground Utilities (Track)	\$5 M
R02. Geotechnical Solutions for Soil Improvement, Rapid Embankment Construction and Stabilization of the Pavement Working Platform	\$3 M
R04. Innovative Bridge Designs for Rapid Renewal	\$2 M
R05. Modular Pavement Technology	\$1 M
R06. High-Speed, NDT Procedures for Design Evaluation and Construction Inspection (Track)	\$5 M
R07. Performance Specifications for Rapid Highway Renewal	\$3 M
R09. Risk Manual for Rapid Renewal Contracts	\$0.25 M
R15. Strategies for Integrating Utility and Transportation Agency Priorities In Renewal Projects (Track)	\$1 M
R16. Railroad-DOT Institutional Mitigation Strategies	\$0.4 M
R19-A. Bridges for Service Life beyond 100 Years: Innovative Systems, Subsystems, and Components	\$2 M
R19-B. Bridges for Service Life beyond 100 Years: Service Limit State Design	\$1 M
R21. Composite Pavement Systems	\$4 M
R23. Using Existing Pavement in Place and Achieving Long Life	\$1 M
R26. Preservation Approaches for High Traffic Volume Roadways	\$0.25 M
TOTAL BUDGET	\$28.9 M

Contingent and Additional Projects

R03	Identifying and Reducing Worker, Inspector, and Manager Fatigue in Rapid Renewal Environments	\$1M
R10	Innovative Project Management Strategies for Large, Complex Projects	\$0.75M
R11	Strategic Approaches at the Corridor and Network Level to Minimize Disruption from the Renewal Process	\$0.5M
R27	Steel Bridge Repair/Strengthening Systems	\$1.5M
R28	Techniques for Retrofitting Steel Bridges with Non-Redundant Structural Members	\$1.5M

Renewal Research Program

Summing up, we are developing tools and techniques to facilitate a

“GET IN, GET OUT, STAY OUT”

strategic approach to highway renewal.