

# Lesson-4

## Chapter II (pp. 20-24)



**Emergency  
Repair Work**

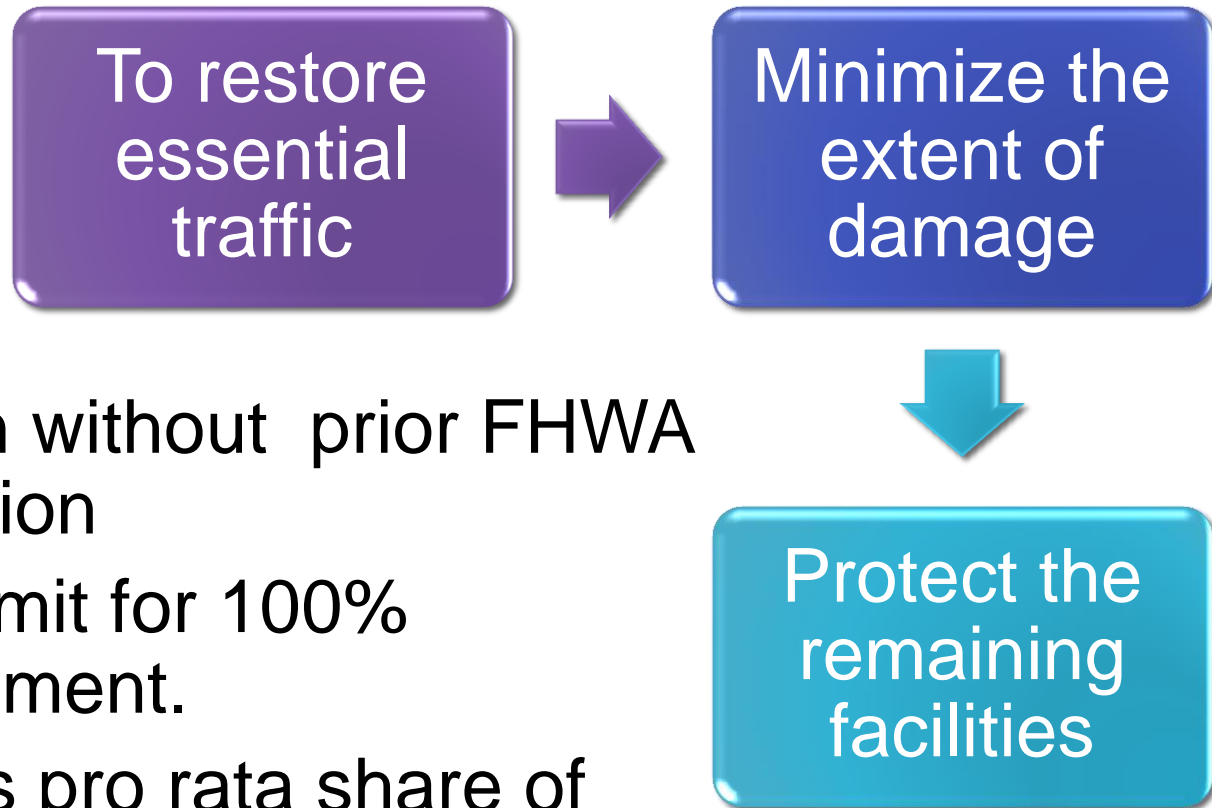
**Vs.**



**Permanent  
Repair Work**

# Emergency Repair

## General



- Can begin without prior FHWA authorization
- 180 day limit for 100% reimbursement.
- >180 days pro rata share of 80%.
- Requires proper documentation.

b). Examples of Emergency Repairs:

Debris  
Removal

Roadway  
Fills

Erection &  
Removal of  
barricades

Removal of  
Slides

Construction  
of Detours

Temporary  
detour  
bridges

Placement of  
Riprap to  
prevent scour

Ferryboats  
for temporary  
service



Minimize the extent  
of the damage

Protect the remaining  
facilities



# MAP-21 Debris Removal Policy

There is a Governor's declaration, but no Presidential declaration. Funded by FHWA

There is a President declaration under the Stafford Act. Funded by FEMA

There is a President declaration, but FEMA has determined to be not eligible. ER funds can participate, but will need FEMA's determination

There is a President declaration, but the Governor's declaration covers more counties. FHWA concurs in the Governor's declaration. In this case ER funds may participate in debris removal costs.

# Debris Collection Definitions

## First Push

- Initial effort to clear roadway includes cut & toss
- operations to push debris out of traveled way

## First Pass

- Initial effort to collect debris pushed aside during first push operations
- All debris (vegetative & non-vegetative) must be collected at same time as first pass operation
- Must be within debris clearing limits

# First Push Debris Pile



It is blocking one lane, while the other lane is free for critical traffic flow.

# Outside Eligible Cleaning Limits



The picture above shows two trucks being loaded with debris pulled from within a tree line which is far away from the side of the roadway and beyond the drainage ditch and clear zone. **NOT ELIGIBLE!!!**



# Adequate Documentation

## Debris Removal Documentation

### Debris Removal

#### Load Tickets

- first pass, date, quantity, and location

#### Invoices

- Monitoring, reduction, disposal, etc.

#### Summary sheet

- Of all load ticket data

#### Photos

- Before and After

#### If by Force Account

- Need labor, equipment, materials

# Adequate Documentation

## Infrastructure Repair Documentation

### Roads, Bridges, Signs, Signals

- Before and after pictures of locations repaired or replaced
- Sketches of intersections or road/bridge damage helpful
- Cost to repair / replace each roadway section, sign, signal, etc. and supporting documentation

# Permanent Repair Work

23 CFR 668.109(b)(1)

- Restoring Highway to pre-disaster condition
- Pro-rata share:
  - 90% for Interstate
  - 80% for non-interstate
- Requires prior FHWA approval & authorization
- Normal FHWA procedures are required
- Public Interest Finding Required for Force Account work performing Permanent Restoration



# Permanent Repair Work

## 1. Replacement-in-Kind

### Existing Location

- Must have suffered extensive damage
- The pre-disaster condition is not possible
- Required to meet current design standards
- Limited to the costs of a comparable facility

### New Location

- If necessary, the State must determine what part of the relocation can be justified for construction

# Permanent Repair Work

## 2. Deficient Bridges

- Includes structural conditions only
- Not under construction or scheduled for replacement

## 3. Replacement of Culverts

- Must be specifically related to eligible disaster damage repair.

## 4. Betterments

- added protective features
- changes which modify the function or character of a highway facility
- Requires justification and FHWA prior approval