

Infrastructure Assessment PRT

USACE Infrastructure Assessment Mission Overview:

- USACE Infrastructure Assessment (IA) Planning and Response Teams (PRTs) serve two primary functions:
 - (1) Augment local public works' structural safety assessment efforts following a major disaster.
 - (2) Provide a *management cell* for the full range of ad hoc Technical Assistance missions that are not covered by other PRTs (e.g. mechanical, electrical, geotechnical engineering inspections; water/wastewater infrastructure applications).
- Structural evaluations determine whether damaged (or potentially damaged) buildings are safe for use or if entry should be restricted or prohibited – mission involves Applied Technology Council-20 (ATC-20) post-earthquake (or ATC-45 post-windstorm/flood) placarding system.
- IA PRTs also include ATC-20 Training Officers who can provide “just-in-time” training to inspectors slated for supporting structural safety assessments.



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Full-Scale Deployed IA PRT Configuration:

IA Core PRT

ESF #3 Action Officer (IOF/JFO)
Mission Manager (RFO)
Mission Specialist (RFO)
Mission Data Manager (RFO)
Training Officer (RFO/EFO)
Supervisory Inspection Team Leader (EFO)

Support Elements

Inspection Team Leaders (ITLs); ATC-20/45
Inspectors; US&R Structures Specialist
(StS) Cadre; Structural, Electrical,
Mechanical , Geotechnical Engineers;
Dam Safety Inspectors;
other Specialists; SMEs



Inspector Sources

- Contractors
- USACE - various CoPs (CE, ME, EE, architects, technicians, etc), FEST members
- Other agencies (e.g. Bureau of Reclamation)
- Reemployed Annuitant Program (RAO) staff



ATC-20/45 Placarding Designations

GREEN: Habitable, safe to enter, minor or no damage.

YELLOW: Limited Entry (or Restricted Use)
– Damage that represents some degree of threat to occupants; entry/occupancy restricted.

RED: UNSAFE, not habitable, unsafe to enter/occupy, significant threat to life & safety.



INSPECTED

LAWFUL OCCUPANCY PERMITTED

This structure has been inspected (as indicated below) and no apparent structural hazards has been found.



Inspected Exterior Only



Inspected Exterior and Interior

Report any unsafe condition to the local authorities; reinspection may be required.

Inspector comments:

Facility Name and Address:



Date: _____

Time: _____

(Caution: Aftershocks since inspection may increase damage and risk.)

This facility was inspected under emergency conditions for:

(Jurisdiction)

Inspector ID / Agency



**Do Not Remove, Alter or Cover this Placard
until Authorized by Governing Authority**

BUILDING STRONG®

ATC-20/45 Placard Designations



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LIMITED ENTRY

OFF LIMITS TO UNAUTHORIZED PERSONNEL

Warning:

This structure has been damaged and its safety is questionable. Enter only at own risk. Aftershocks or other events may result in death or injury.

Date: _____

Time: _____

This facility was inspected under emergency conditions for:

Restrictions on use:

Entry for emergency purposes only

Other

(Jurisdiction)
on the date and time noted.

Facility Name and Address:

Inspector ID/Agency



**Do not Remove this Placard until
Authorized by Governing Authority.**



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UNSAFE

DO NOT ENTER OR OCCUPY

(THIS PLACARD IS NOT A DEMOLITION ORDER)

This structure has been inspected, found to be seriously damaged and is unsafe to occupy, as described below:



Date: _____

Time: _____

This facility was inspected under emergency conditions for:

(Jurisdiction)

Do not enter, except as specifically authorized in writing by jurisdiction. Entry may result in death or injury.

Facility Name and Address:

Inspector ID / Agency:



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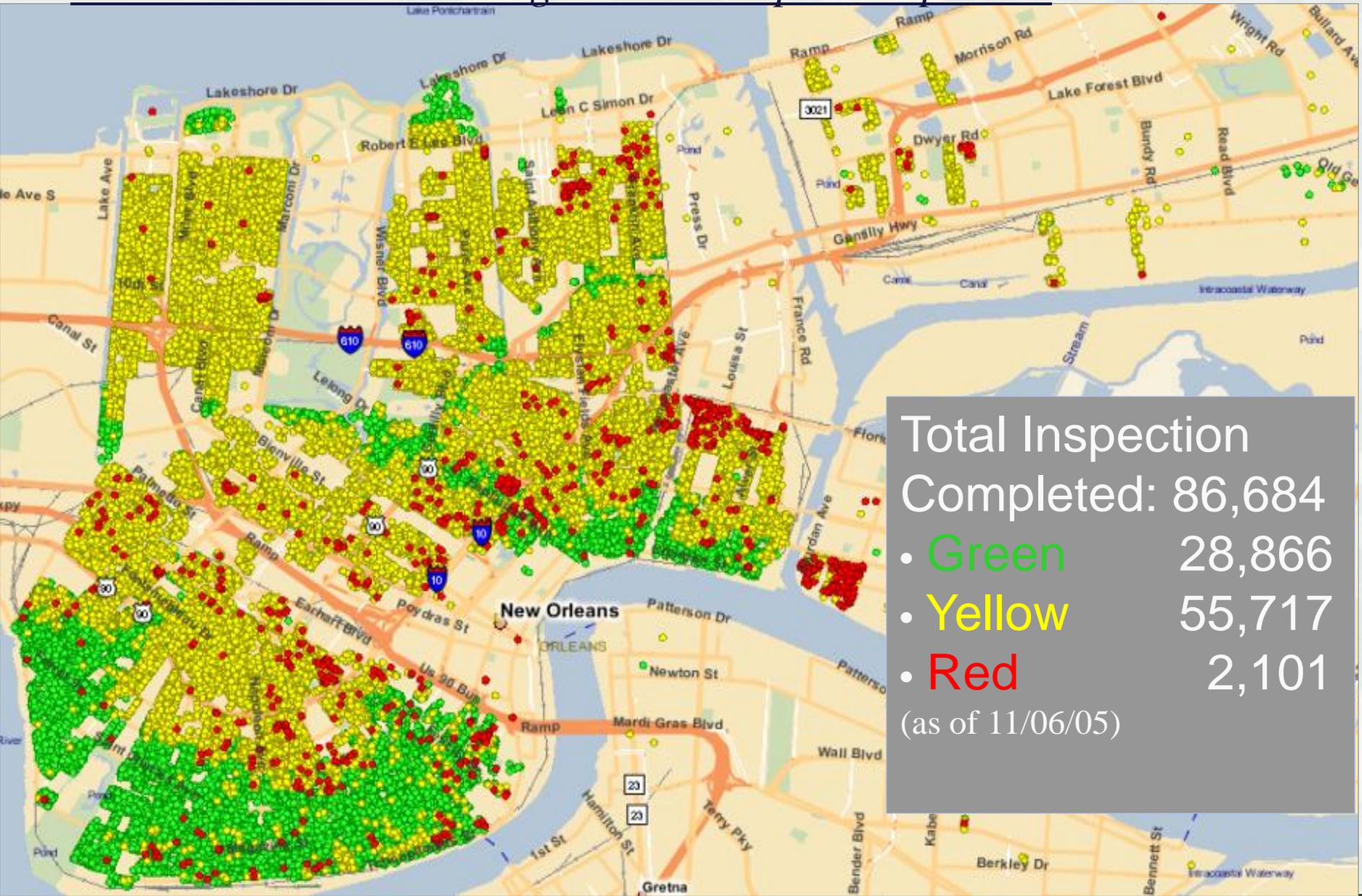
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ATC-20/45 Placard Designations Graphic Depiction



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Example IA PRT Missions

- (1) Management Cell Only (scalable) - Typically AO, MM, MS; can include SME, MDM, or be limited to one AO or SME.
- (2) Mgt Cell w/Training Officer - Scalable mgt cell duties + ATC-20 TO.
- (3) Full PRT w/Mission Support Staff - Full MA inspection capability for rapid inspections + broad range special/technical inspection data mgt. TO becomes SITL for special inspections once ATC-20 training is complete.
- (4) Training Officer Only - FEMA MA may be limited to request for ATC-20 TO(s).
- (5) Mgt Cell – Special Inspections Only - Covers relatively large technical assistance/special inspection/engineering services mission that would otherwise have no PRT e.g. Typhoon Pongsona, Hurricane Irene.
- (6) ATC-20 or ATC-45 Inspectors Only - Requirement limited to augmenting local government inspection capability e.g. CalEMA SAP EQ response.
- (7) NIMAT/IMAT Support - e.g. support in conjunction with new EIA SOP +



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TECHNICAL ASSISTANCE MISSIONS

- Inspect dams, bridges, specialty inspections (e.g. mechanical, electrical, geotechnical etc)
- Heavy structural engineer inspections (e.g. Oct 06 Kona EQ)
- Emergency construction (e.g. pier to facilitate transport of supplies)
- Emergency dam breach (e.g. Mar-Apr 05 Schroeder Dam, NV)
- Subterranean wall inspections (WTC Sep-Oct 01)
- US&R StS cadre support to Hotel Montana repatriation effort (Jan-Feb 2010)



QUESTIONS ?

