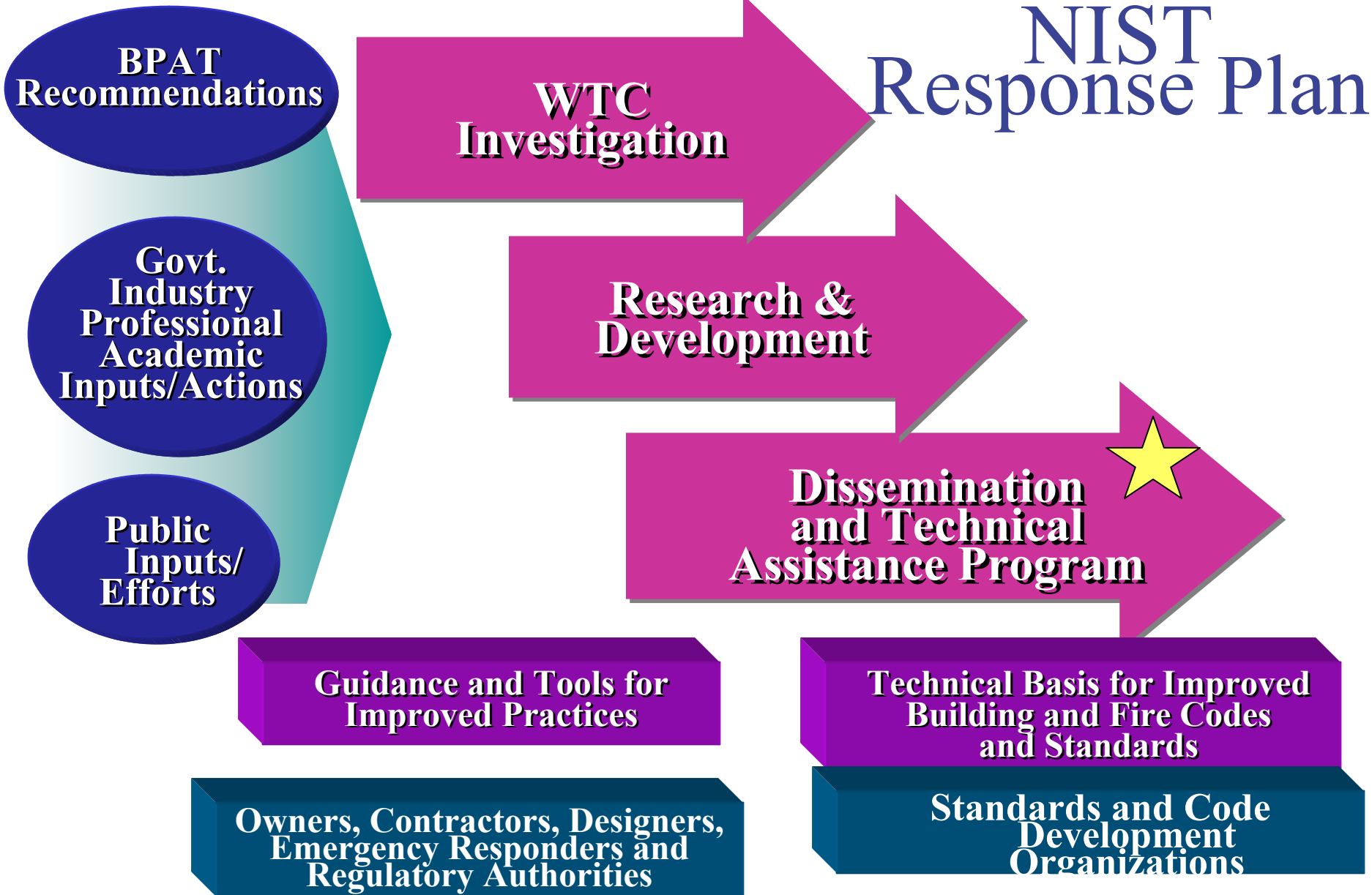


Dissemination and Technical
Assistance Program (DTAP)
Status Report August 26, 2003

Jack Snell

NIST Response Plan



Research and Development Program

Structural Fire Protection

1. Fire safety design & retrofit of structures
2. Method of fire resistance determination
3. Prevention of progressive structural collapse
4. Improved fire resistance protection of steel

Human Behavior, Occupant Response, and Mobility

1. Fire simulation re-creation tool
2. Occupant behavior & response
3. Technology for emergency mobility
4. Guidelines, equipment standards for fire & emergency responders

Building Vulnerability Reduction

1. Standard information models
2. Guidelines, advanced technology for Chem., Bio., Radiological attack*
3. Cost-effective risk management tools

* Beyond scope of the WTC and NCST

Dissemination and Technical Assistance Program

Concept:

- Forum through which facility owners and contractors deliver and disseminate results of research into ongoing projects and practice.
- Draw on top management, chief scientists/technology officers to motivate needed change.
- Complement and support parallel efforts of engineering societies to improve technology, codes, and standards.

Functions:

- Provide advice on best practices, guidance on vulnerability assessment, guidance on standards and codes needs.
- Disseminate and implement R&D outputs.
- Act as clearinghouse (Q&As, industry inputs, needs/priorities, etc,...)
- Benchmark results

Some Partners:

- The Infrastructure Security Partnership (TISP/ASCE)
- Construction Industry Institute (CII), and FIATECH
- Civil Engineering Research Foundation (CERF)
- National Institute of Building Sciences (NIBS)

Getting Research Results into Use

An Example from Our Past: Energy Conservation Standards for Buildings

NBS Develops Energy Document; *“Energy Conservation Design and Retrofit for Buildings”*

NBS Transmits it to **NCSBCS**

NCSBCS Requests **ASHRAE** to develop it into standard

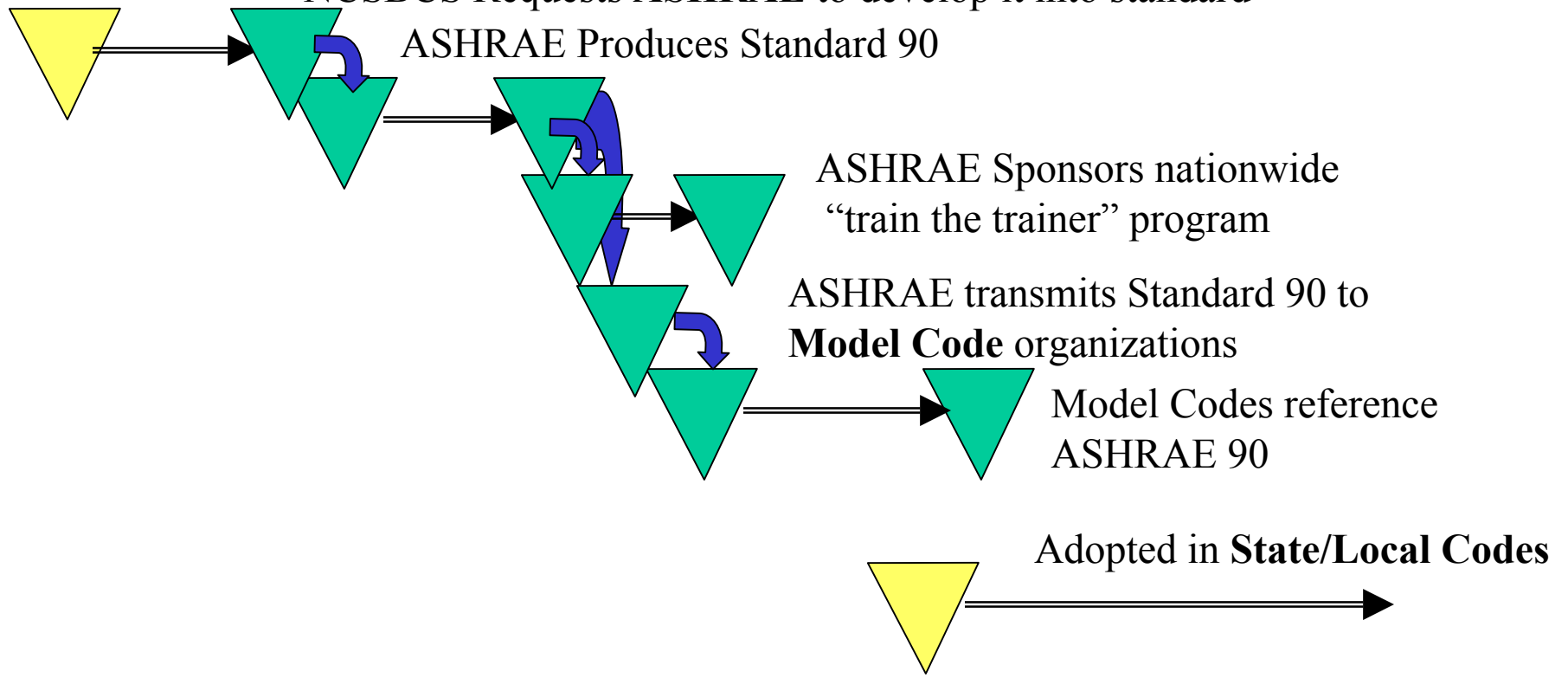
ASHRAE Produces Standard 90

ASHRAE Sponsors nationwide
“train the trainer” program

ASHRAE transmits Standard 90 to
Model Code organizations

Model Codes reference
ASHRAE 90

Adopted in **State/Local Codes**



Some Planned “Products” of R&D Program

- **Prevention of Progressive Structural Collapse - Guidelines, pre-standards (NIBS)**
- Fire safety design and retrofit of structures - Guidelines and pre-standards
(ASCE 29-99 w/SFPE, FRS/UK, CTICM/FR, ...)
- **Fire protective systems for structural steel - performance criteria and tests for innovative systems. (CERF)**
- Methodology for fire resistance determination - improved test/measurement methods
(FORUM, China/Taiwan, Aust., NZ, Japan...)
- Fire simulation tools - enhancements to FDS and Smokeview
- **Emergency use of elevators - revisions to ASME standard 17. (ASME, Industry group)**
- Occupant behavior and egress - ?
- Equipment standards for first responders - (being defined in cooperation with IAFC, industry)
- Standard building information models - ?
- **Cost-effectiveness tool for management of terrorist risks - (being coordinated with DHS and ASME efforts; Wharton)**

Implementation Assistance Contract (Pending)

Task 1. Develop candidate strategies for each potential “product.” (1-2 months)

Task 2. Establish initial liaison teams and action plans. (3-5 months)

Task 3. Sponsor workshops, round table discussions, etc., as required to aid implementation of action plans. (through FY’08)

Other DTAP Activities

- Construction Industry Institute, CII Contract -
Integrate Infrastructure Security Provisions into CII “Best Practices”
- National Conference of States on Building Codes and Standards, NCSBCS Contract -
NYC Summit meeting to produce Draft procurement specification for interoperability; and related IT integration, and critical building information activities.
- FIATECH Contract -
Address Infrastructure Security Issues in Capital Projects
Industry Roadmap