

National WINDSTORM Impact Reduction Program (NWIRP)

Strategic Plan Briefing for SDR

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Strategic Plan Approach

- Plan is modeled loosely on NEHRP Strategic Plan, per WWG guidance
- Gathered stakeholder input
 - NWIRP Strategic Planning Stakeholder's Workshop, June 17, 2016, at NSF
Over 80 participants from government, academia, and the private sector, including insurance and reinsurance companies, consultants, building product manufactures and trade associations, professional societies, and standards development organizations.
- Developed draft Plan considering
 - statutory requirements
 - key research needs and roadmap documents
 - previous NWIRP reports
 - stakeholder input
- WWG and ICC provided input, review, and approval

Vision and Mission

The NWIRP Vision is:

A nation that is windstorm-resilient in public safety and economic well-being.

The NWIRP Mission is:

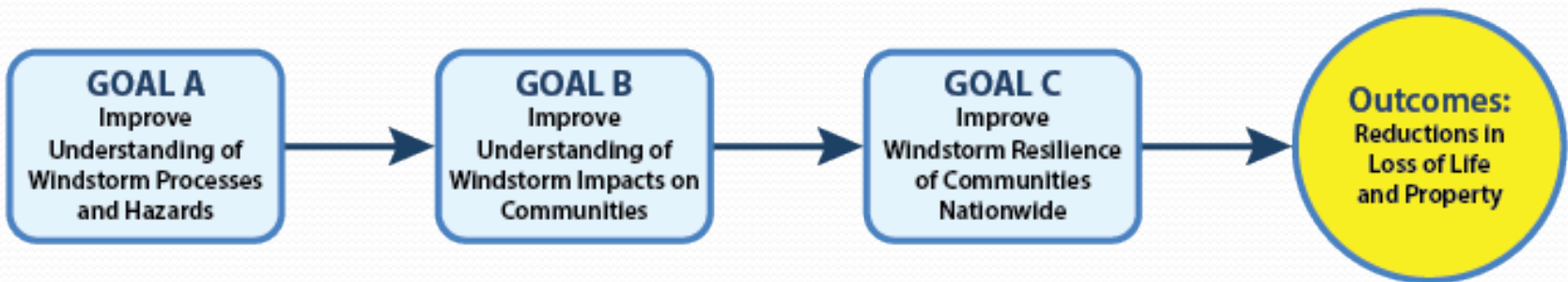
To achieve major measurable reductions in the losses of life and property from windstorms through a coordinated Federal effort, in cooperation with other levels of government, academia, and the private sector, aimed at improving the understanding of windstorms and their impacts and developing and encouraging the implementation of cost-effective mitigation measures to reduce those impacts.

Strategic Goals (Chapter 2)

Goal A: Improve the Understanding of Windstorm Processes and Hazards

Goal B: Improve the Understanding of Windstorm Impacts on Communities

Goal C: Improve the Windstorm Resilience of Communities Nationwide



Goal A. Improve the Understanding of Windstorm Processes and Hazards

- Objective 1: Advance understanding of windstorms and associated hazards
- Objective 2: Develop tools to improve windstorm data collection and analysis
- Objective 3: Understand long term trends in windstorm frequency, intensity, and location
- Objective 4: Develop tools to improve windstorm hazard assessment

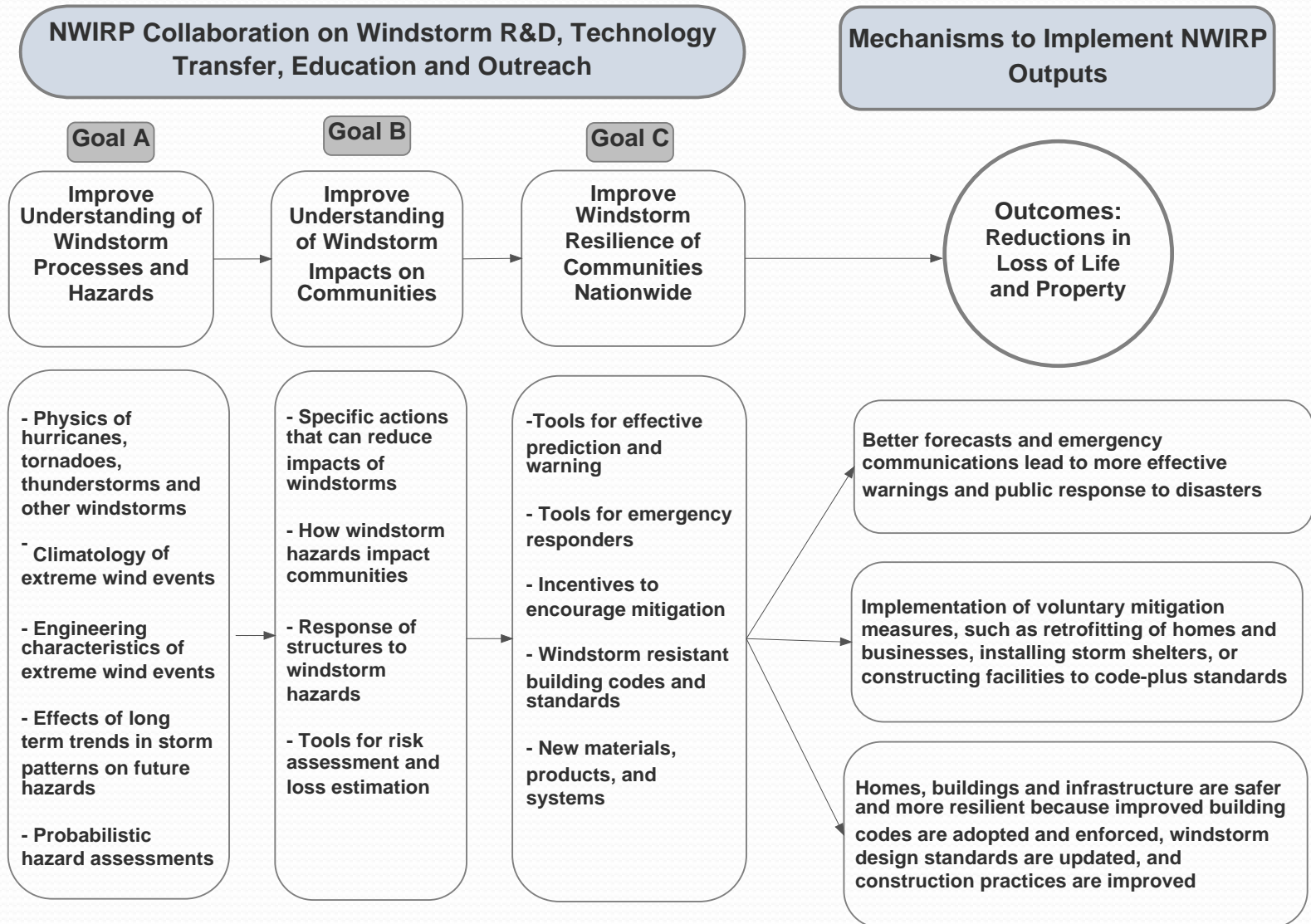
Goal B. Improve the Understanding of Windstorm Impacts on Communities

- Objective 5: Advance understanding of windstorm effects on the built environment
- Objective 6: Develop computational tools for use in wind and flood modeling on buildings and infrastructure
- Objective 7: Improve understanding of economic and social factors influencing windstorm risk reduction measures
- Objective 8: Develop tools to improve post-storm impact data collection, analysis, and archival
- Objective 9: Develop advanced risk assessment and loss estimation tools

Goal C. Improve the Windstorm Resilience of Communities Nationwide

- Objective 10: Develop tools to improve the performance of buildings and other structures in windstorms
- Objective 11: Support the development of windstorm-resilient standards and building codes
- Objective 12: Promote the implementation of windstorm-resilient measures
- Objective 13: Improve windstorm forecast accuracy and warning time
- Objective 14: Improve storm readiness, emergency communications and response

Linkage between Goals and Outcomes (Fig. 5)



Strategic Priorities (Chapter 3)

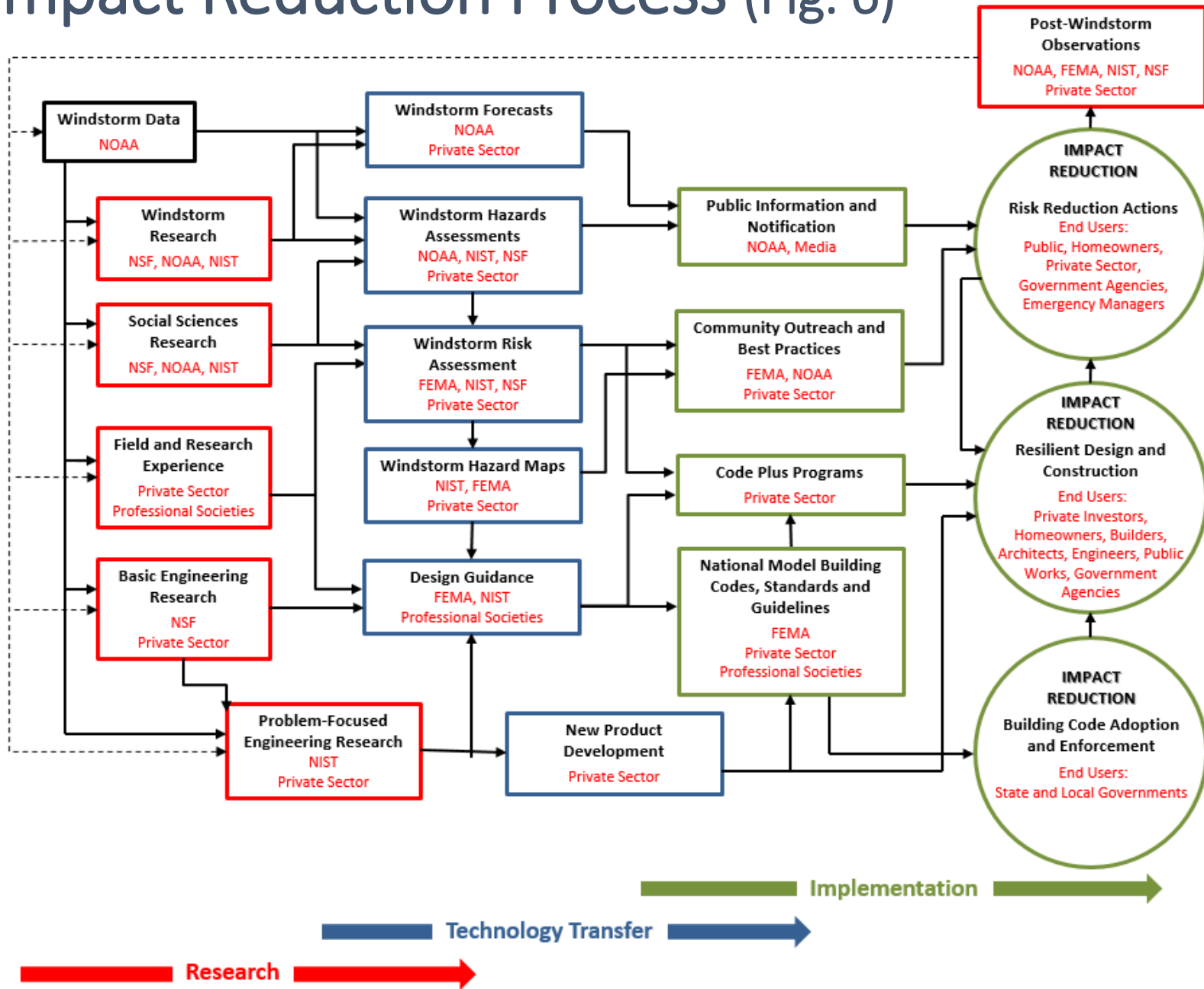
Special areas of focus for new and expanded efforts, including

- long-term research efforts to provide foundational windstorm hazard and loss data and models
- opportunities for more rapid windstorm impact reduction, building on existing programs
- crosscutting themes to enhance development of the Nation's human resource base in windstorm hazard mitigation fields

Strategic Priorities

SP-1	Develop Baseline Estimates of Loss of Life and Property due to Windstorms	Research
SP-2	Obtain Measurements of Surface Winds and Storm Surge Current and Waves in Severe Storms	
SP-3	Develop Publicly Available Databases of Windstorm Hazards and Impacts	
SP-4	Develop Performance-Based Design for Windstorm Hazards	Impact Reduction
SP-5	Expand Outreach and Partnerships to Improve Windstorm Preparedness and Hazard Mitigation	
SP-6	Enhance and Promote Effective Storm Sheltering Strategies	
SP-7	Develop the Nation's Human Resource Base in Windstorm Hazard Mitigation Fields	

Impact Reduction Process (Fig. 6)



Taking Plan to Completion

- Draft for Public Comment. **Published March 14,**
Comments due May 15
- **Accepting comments from other Agencies through mid-June**
 - email marc.levitan@nist.gov
- National Advisory Committee on Windstorm Impact Reduction (NACWIR) Comments, June 2017
- WWG considers Public, NACWIR, and Agency comments, finalize Plan, Summer 2017
- Interagency Coordinating Committee (ICC) Review and Approval, late Summer