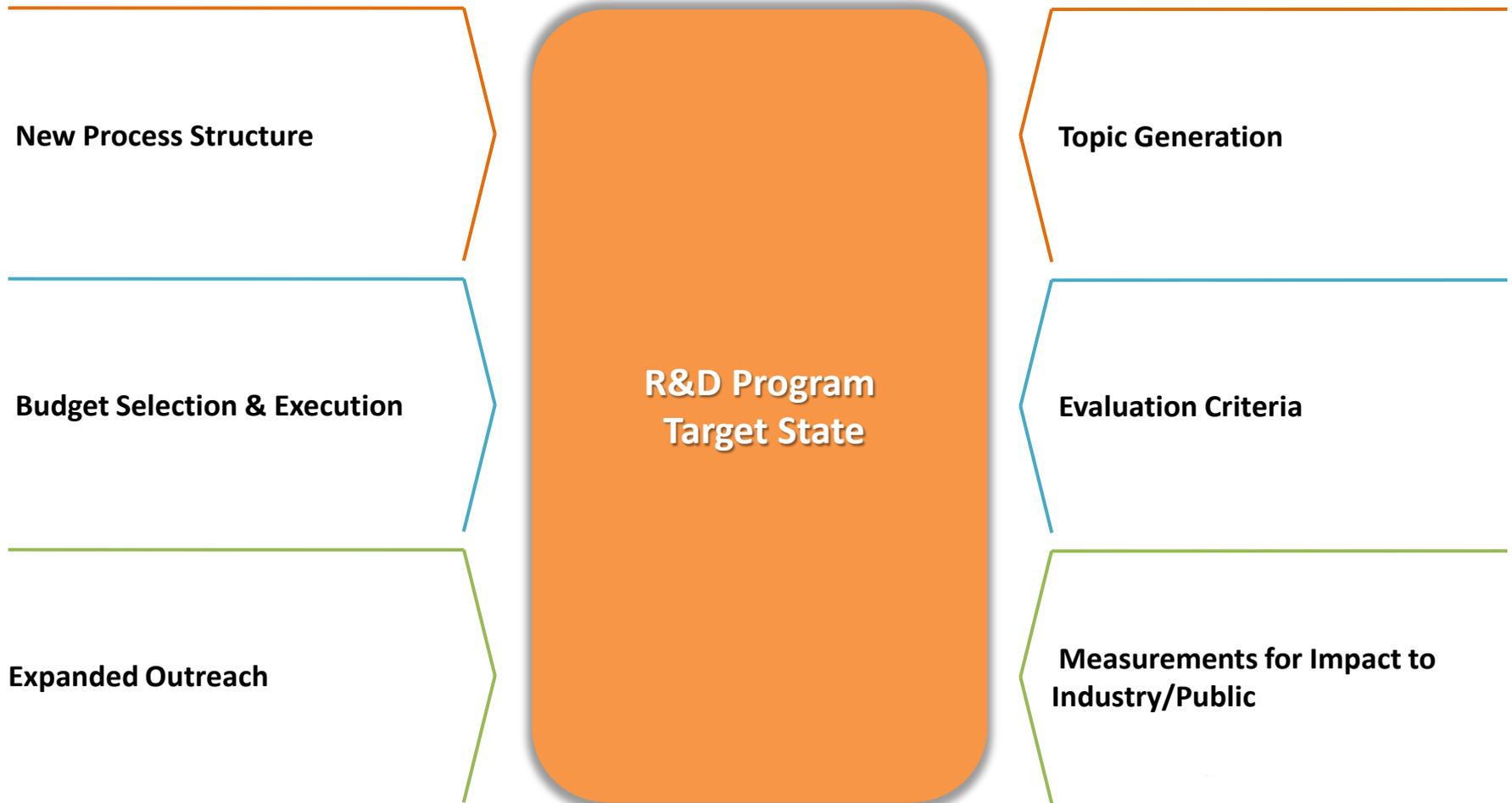


Hazardous Materials Research and Development Program

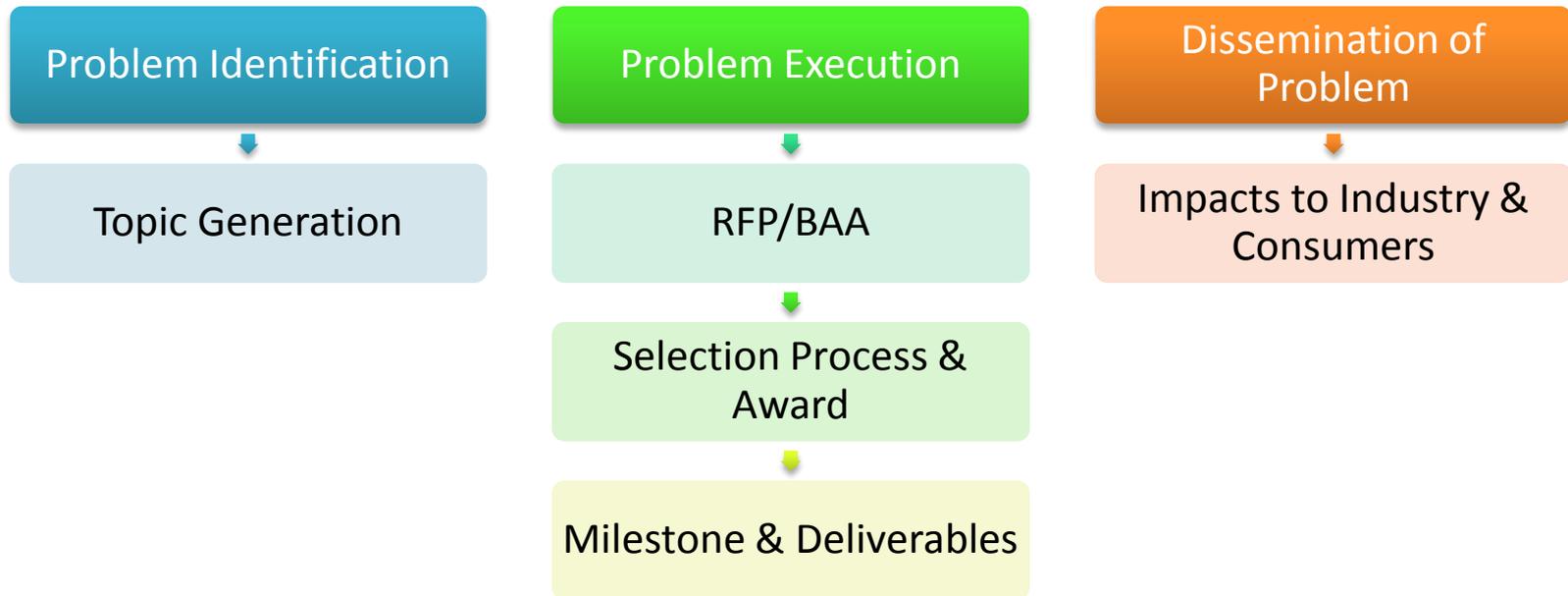
Richard Boyle
April 16, 2015
US/DOT, Washington DC



R&D Program – New Direction and Areas of Improvement



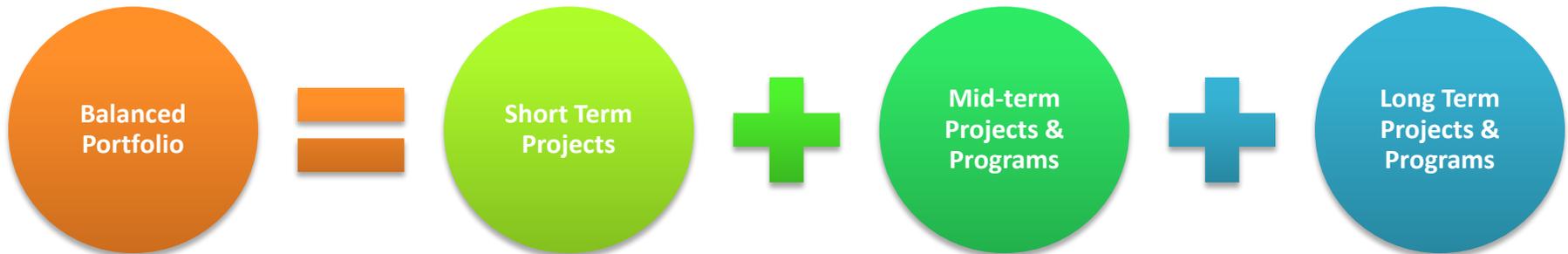
R&D Program Process Development



R&D Program – Balanced Portfolio

PHMSA is planning to distribute topics and projects that will diversify and spur the safety of hazardous materials transportation. In doing so, PHMSA is strategically pursuing a balanced portfolio:

- Short-term/Immediate Research and Development Projects (1-3 years)
- Mid-Range (2-6 years impacts)
- Long term (lower success rate projects, spurs further innovation, 4-10 years)



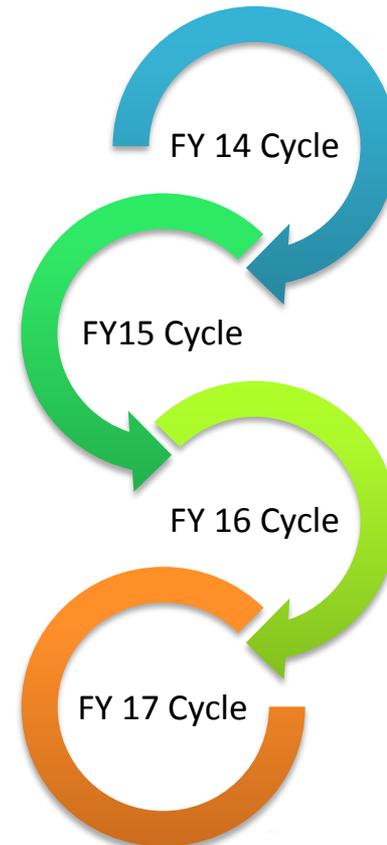
R&D Program – Alternative Spend Mechanisms

The PHMSA R&D program recognizes that significant opportunities exist for further research outside of traditional means. We are examining alternative spend mechanisms to assist in improving HazMat Safety, such as:

- Grand Prize formats
- Innovation centers/Technology Accelerators
- International/Joint R&D multi-year projects
- Risk and D&I studies



Fiscal Year R&D Program Process Milestones



R&D Program Phases 1-3 Overview

