



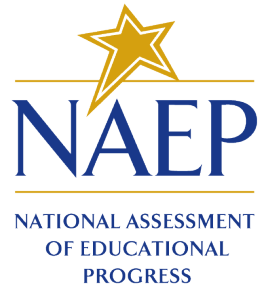
**NAEP**  
12<sup>th</sup> GRADE  
PREPAREDNESS  
COMMISSION

# The Nation's Report Card and 12<sup>th</sup> Grade Academic Preparedness

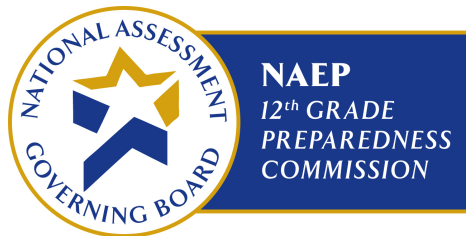
October 24, 2011    Boston, Massachusetts



- An independent, non-partisan board
- Sets policy for and oversees NAEP



- The only continuing, nationally representative, state-comparable measure of student achievement



- Created to increase awareness about academic preparedness, as measured by NAEP



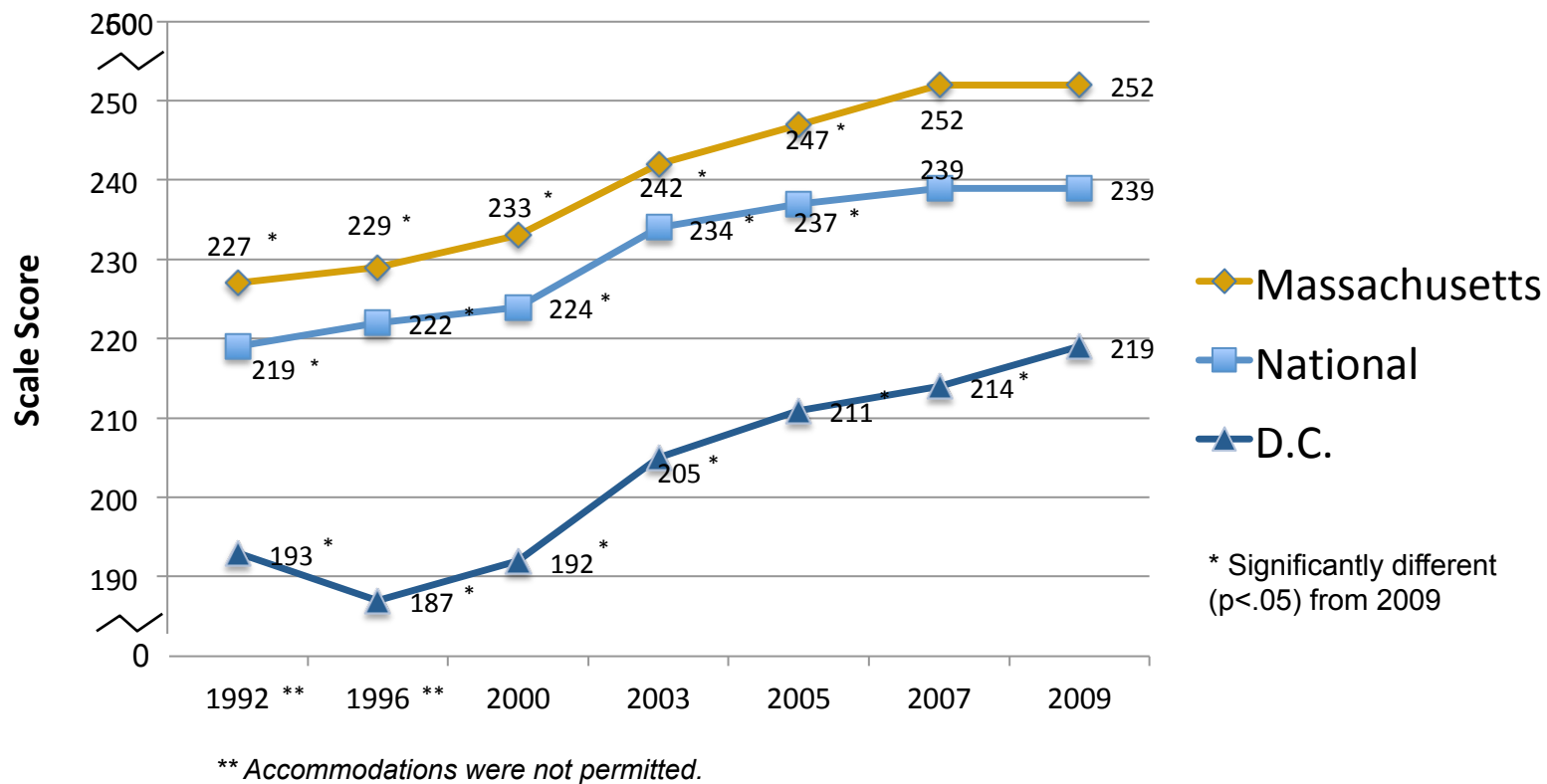
# What is NAEP?

# NAEP: Gold Standard in Assessing Achievement

Assesses what students know and can do:	
SUBJECTS	GRADES
Reading, Mathematics, Writing, Science, U.S. History, Civics, Geography, Economics, the Arts, Technology and Engineering Literacy, Foreign Language	4, 8, and 12
RESULTS	
Student Achievement Data for the - Nation - States - 21 Urban Districts (Boston)	

# NAEP Provides Massachusetts with Data in Comparison to the Nation and Other States

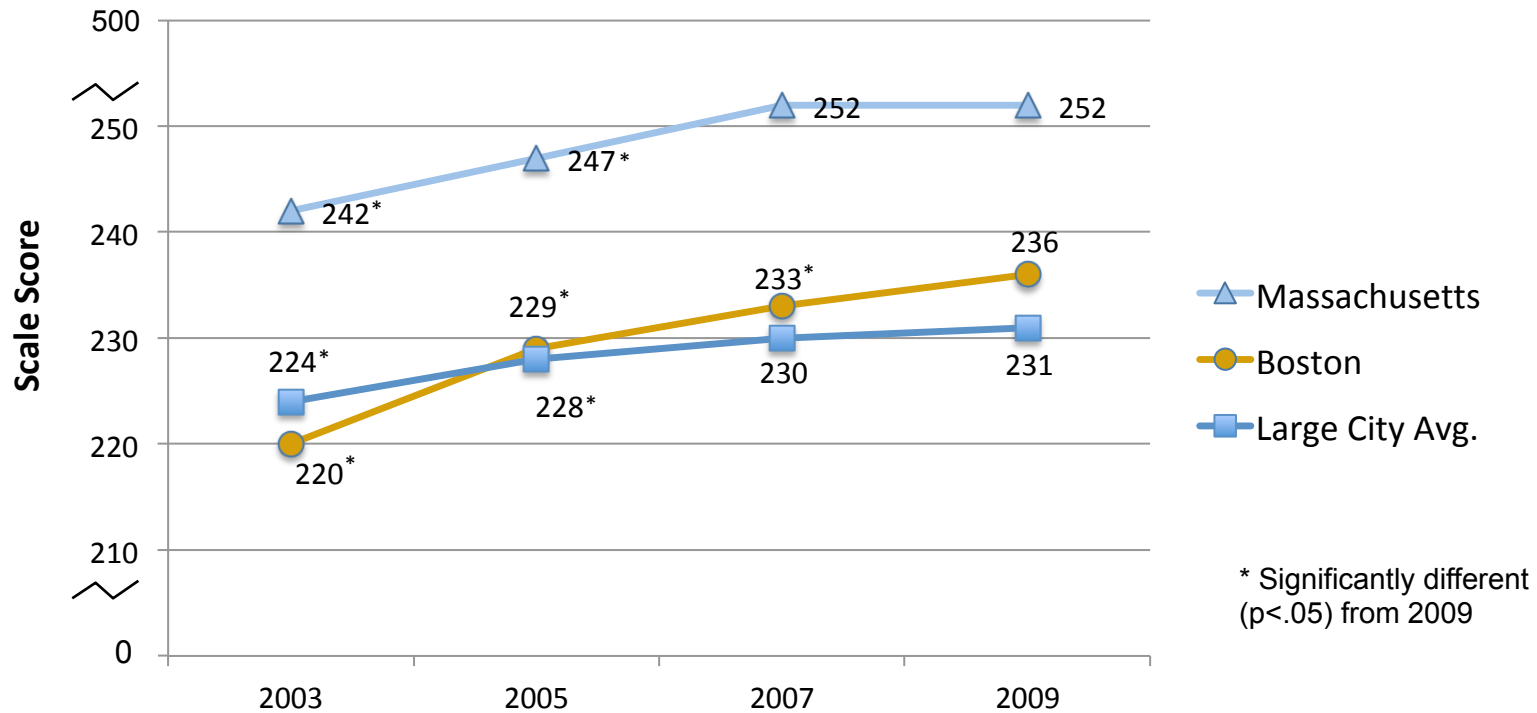
## Massachusetts: Grade 4 Mathematics Scores



Source: National Center for Education Statistics, 2009

# NAEP Allows Comparison Between Urban Districts Within Massachusetts and Across the Nation

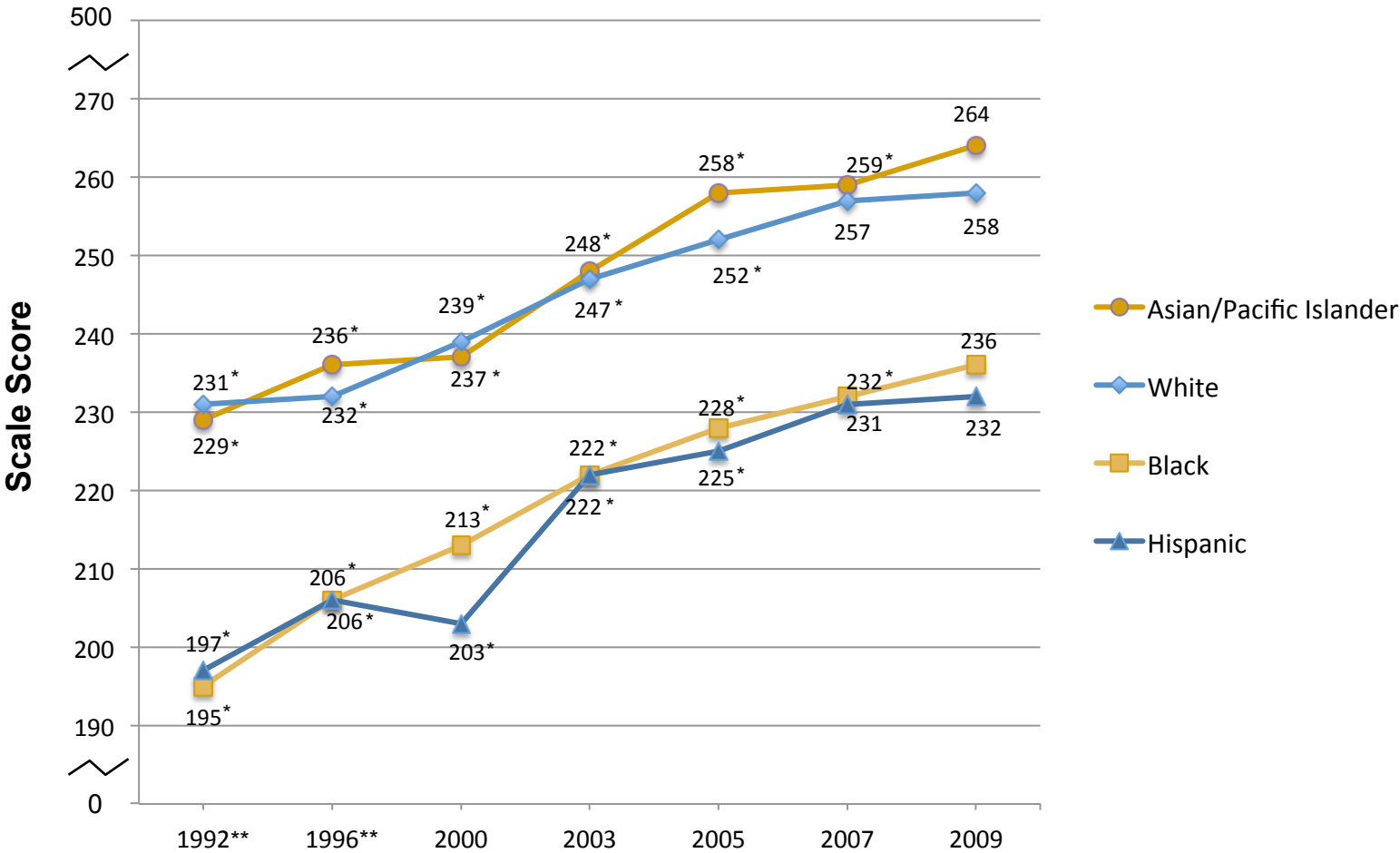
## Massachusetts: Grade 4 Mathematics TUDA Scores



Source: National Center for Education Statistics, 2009

# NAEP Reports on Student Achievement Gaps

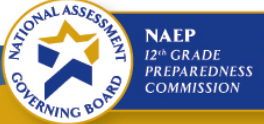
## Massachusetts: Grade 4 Mathematics Scores by Race/Ethnicity



\*\* Accommodations were not permitted.

\* Significantly different (p<.05) from 2009

Source: National Center for Education Statistics, 2009



# NAEP Provides Unique Benefits to States

- ★ Progress over time
- ★ Rich information, no cost to the state
- ★ Minimal burden on schools
- ★ No test preparation

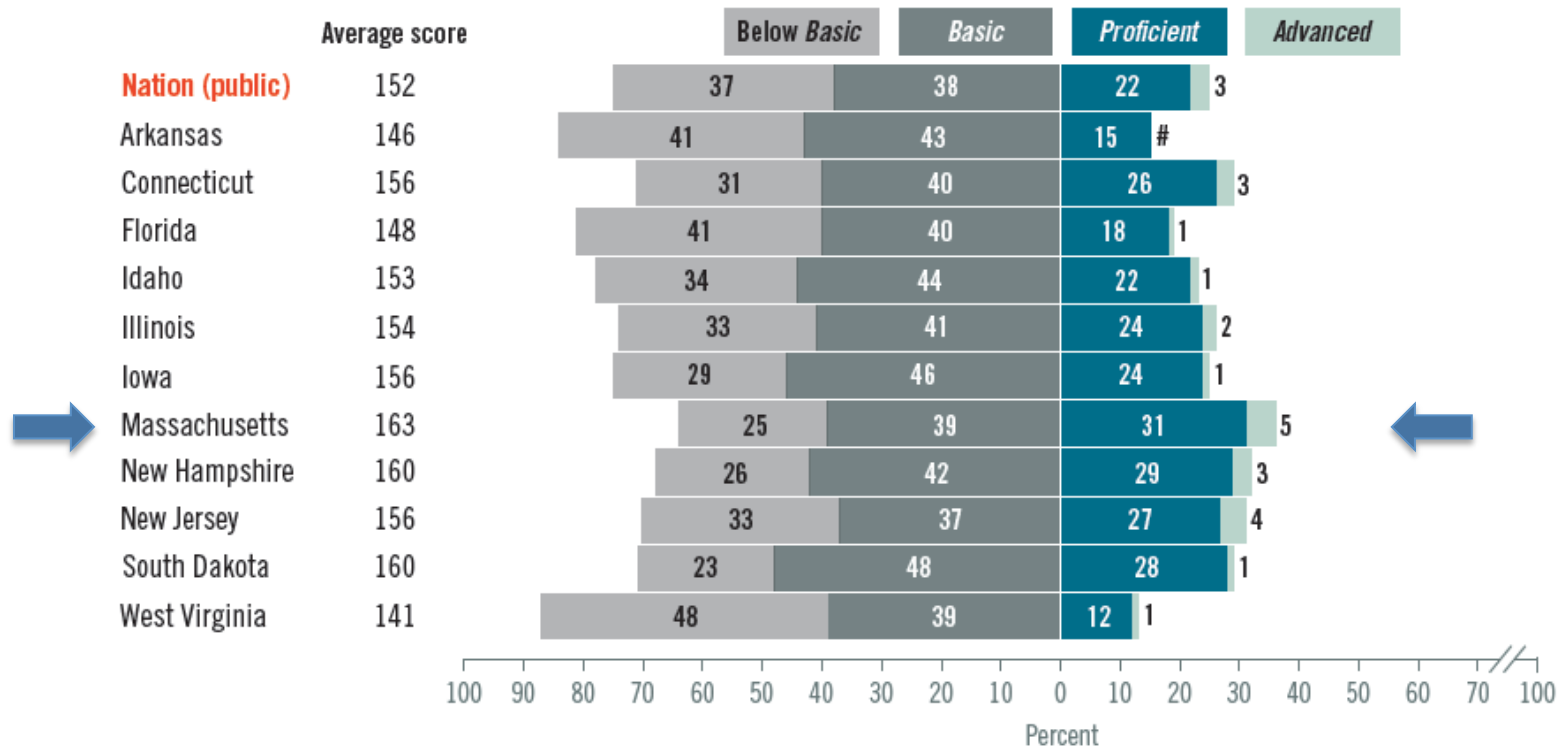


# NAEP Provides Unique Benefits to States

- ★ NAEP will put Massachusetts' state results in international context.
- ★ NAEP provides state-comparable achievement data for all states.
- ★ **NAEP is the only source of national and state-comparable student achievement data at the 12<sup>th</sup> grade.**
  - 11 state pilot at 12<sup>th</sup> grade in 2009 – reading and math
  - Administered every two years beginning in 2013

# NAEP: Only Source of 12<sup>th</sup> Grade Comparisons

## Grade 12 Mathematics Scale Scores and Achievement Levels



# Rounds to zero.

NOTE: Eleven states participated in the assessment and met the reporting criteria. Detail may not sum to totals because of rounding.

Source: National Center for Education Statistics, 2009

# NAEP and 12th Grade Academic Preparedness

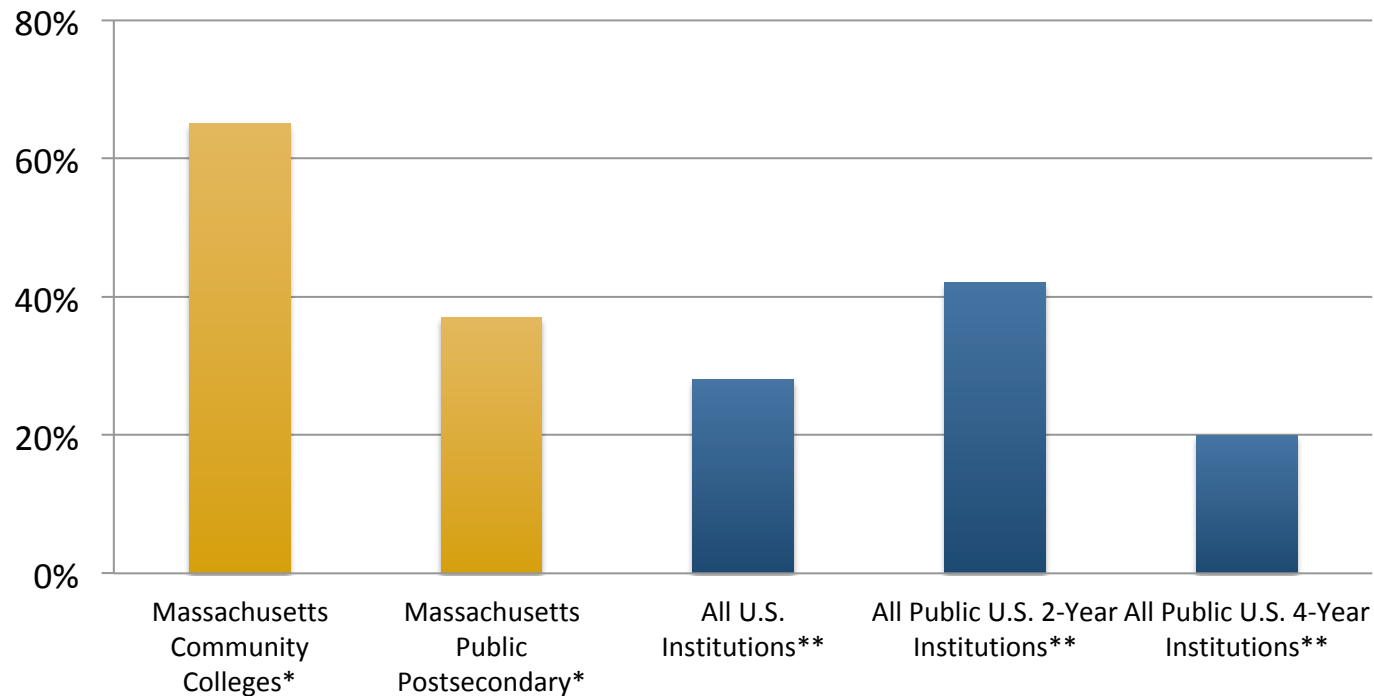
# National Blue-Ribbon Panel: Recommended NAEP Report on 12<sup>th</sup> Grade Preparedness

## The panel's rationale:

- ★ Grade 12: transition to postsecondary education and training.
- ★ The nation needs an indicator of 12<sup>th</sup> grade student preparedness.
- ★ NAEP—trusted for quality and integrity.
- ★ NAEP—uniquely positioned to serve as preparedness indicator.

# Many High School Graduates Are Not Prepared for Entry-Level College Courses

Percentage of Freshman College Students Taking Any Remedial Course (reading, writing, mathematics)



Source: \*Massachusetts DOE, 2008; \*\*NCES, 2004

- **The costs of remediation are high and far-reaching**
- **A high school diploma and academic preparedness are not necessarily the same**

**Changes in demography & labor market**



**Need for high levels of academic preparedness**

# What We Know, What We Don't Know



# What We Know



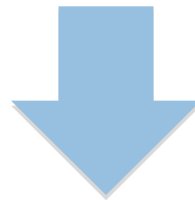
## On a daily basis we know:

- ★ The changes on the stock market
- ★ The number of bushels of wheat produced
- ★ The price of gold

## What We Don't Know:

**Are the nation's 12<sup>th</sup> graders well-prepared academically for college and job training?**

The U.S. has no common definition or measure of 12<sup>th</sup> grade preparedness

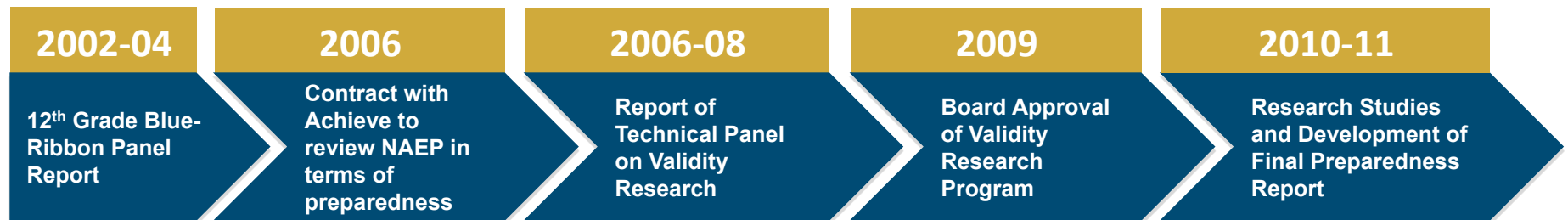


### **Governing Board program of research:**

Transform 12<sup>th</sup> grade NAEP into indicator of preparedness for postsecondary education and training

# The Governing Board's Preparedness Research

# The Governing Board's Work on Preparedness: Underway for Nearly a Decade



The Governing Board's approach: rigorous, comprehensive, and methodical in making NAEP a preparedness indicator.

# Working Definition of Preparedness

- ★ The knowledge and skills needed to **qualify for placement** into entry-level college-credit courses or job training, **without the need for remediation** in math or reading
- ★ Assumption: 12<sup>th</sup> graders need training beyond high school to qualify for a career
- ★ **“Preparedness”** versus **“Readiness”** – NAEP measures *academic* proficiency
- ★ Academic skills for college and for job training not necessarily the same

# A Comprehensive Plan: More than 30 Studies in Five Research Areas

- ★ **Content Comparison**
- ★ **Statistical Linking**
- ★ **Standard Setting**
- ★ **Benchmarking**
- ★ **Higher Education Survey**

# Early Research Results Are Promising

## ★ Content Comparison

Significant overlap between NAEP and ACT, SAT, and other tests

## ★ Statistical Linking

- ★ NAEP and SAT math = about .90 correlation
- ★ Proficient on NAEP = 500 on SAT Reading and Math = College Board Readiness Benchmark
- ★ Florida study: 12<sup>th</sup> grade state NAEP and
  - ACT, ACCUPLACER, COMPASS, SAT, and WorkKeys
  - Employment and salary data
  - Course grades in college and job training programs
- ★ Florida results are confirming of NAEP/SAT results

# Standard Setting: 12 studies in five job training programs and college placement

## ★ Job training

- ★ Automotive Master Mechanic
- ★ Computer Support Specialist
- ★ HVAC Technician
- ★ Licensed Practical Nurse
- ★ Pharmacy Technician

## ★ Criteria

- ★ Significant numbers, stable or growing positions
- ★ Range of occupations
- ★ Training beyond high school, not bachelor's degree
- ★ Range of reading/math skills
- ★ Compensation with growth potential
- ★ Familiar to public



# Other Research Study Types

- ★ **Job Training Course Content Analysis**

Review of course syllabi and textbooks for reading and math demands

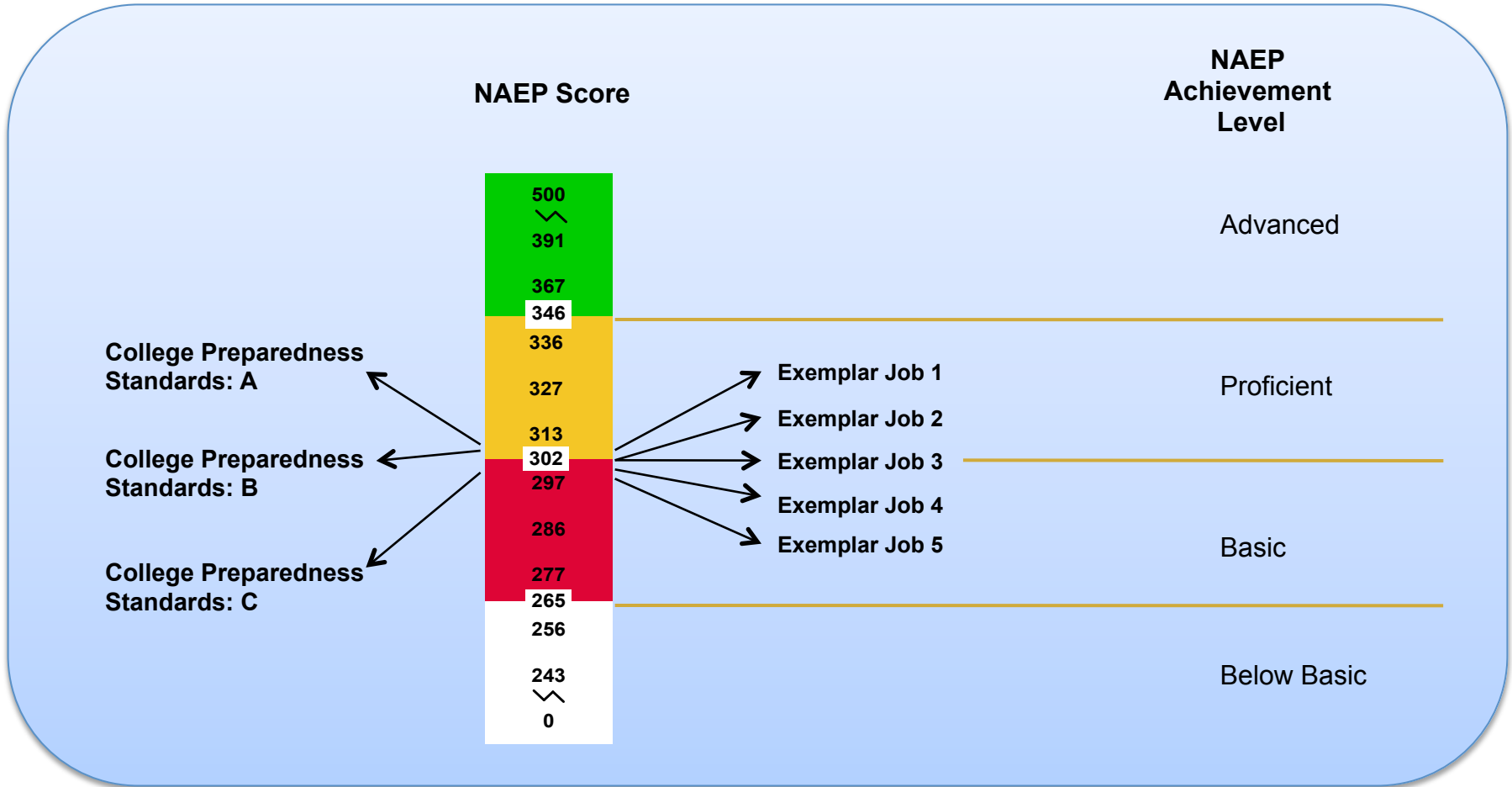
- ★ **Benchmarking**

Seeking partners for collaboration—job training, military, higher ed., etc.

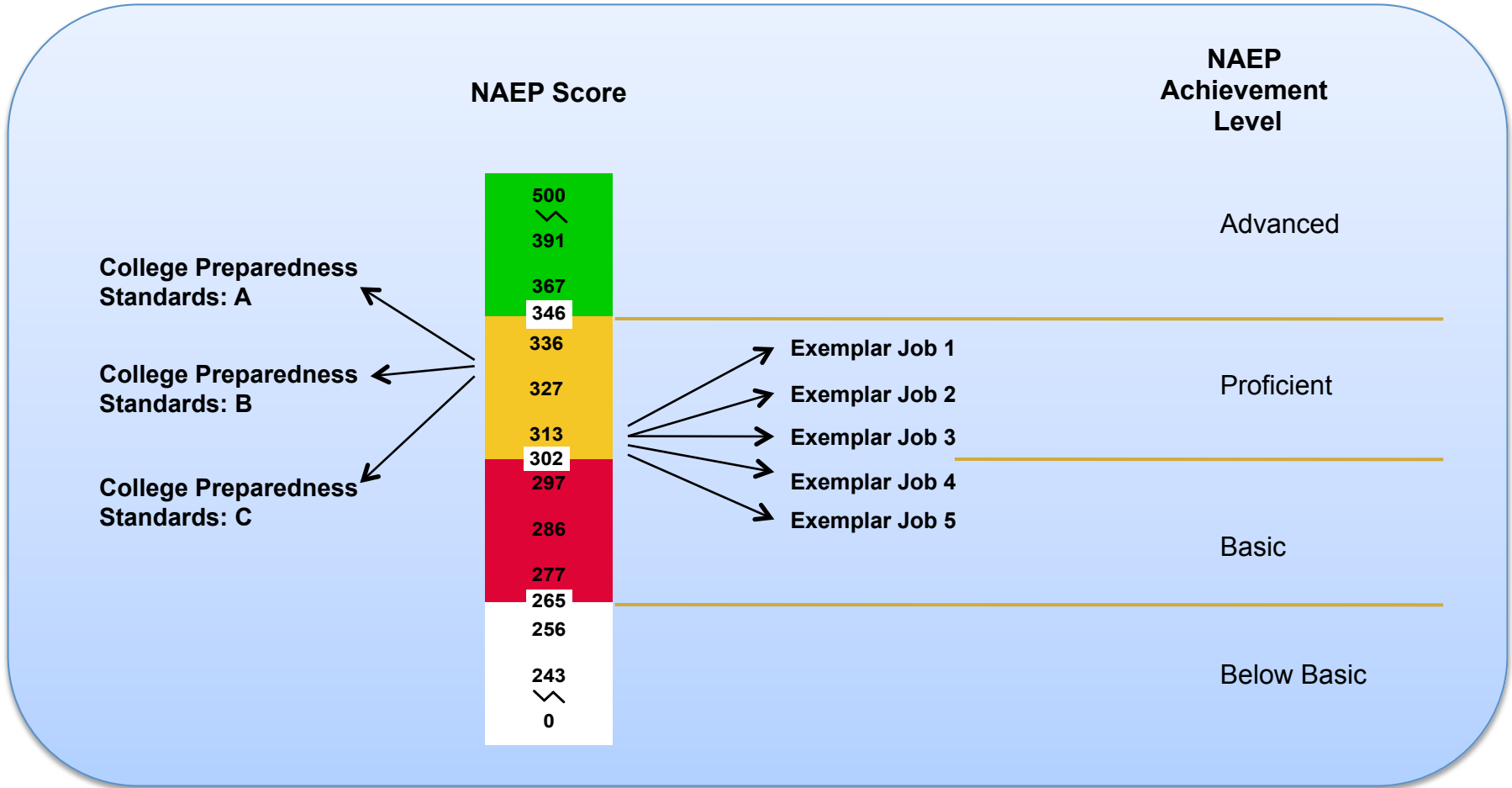
- ★ **Higher Education Survey**

Tests and cut-scores used to place freshmen

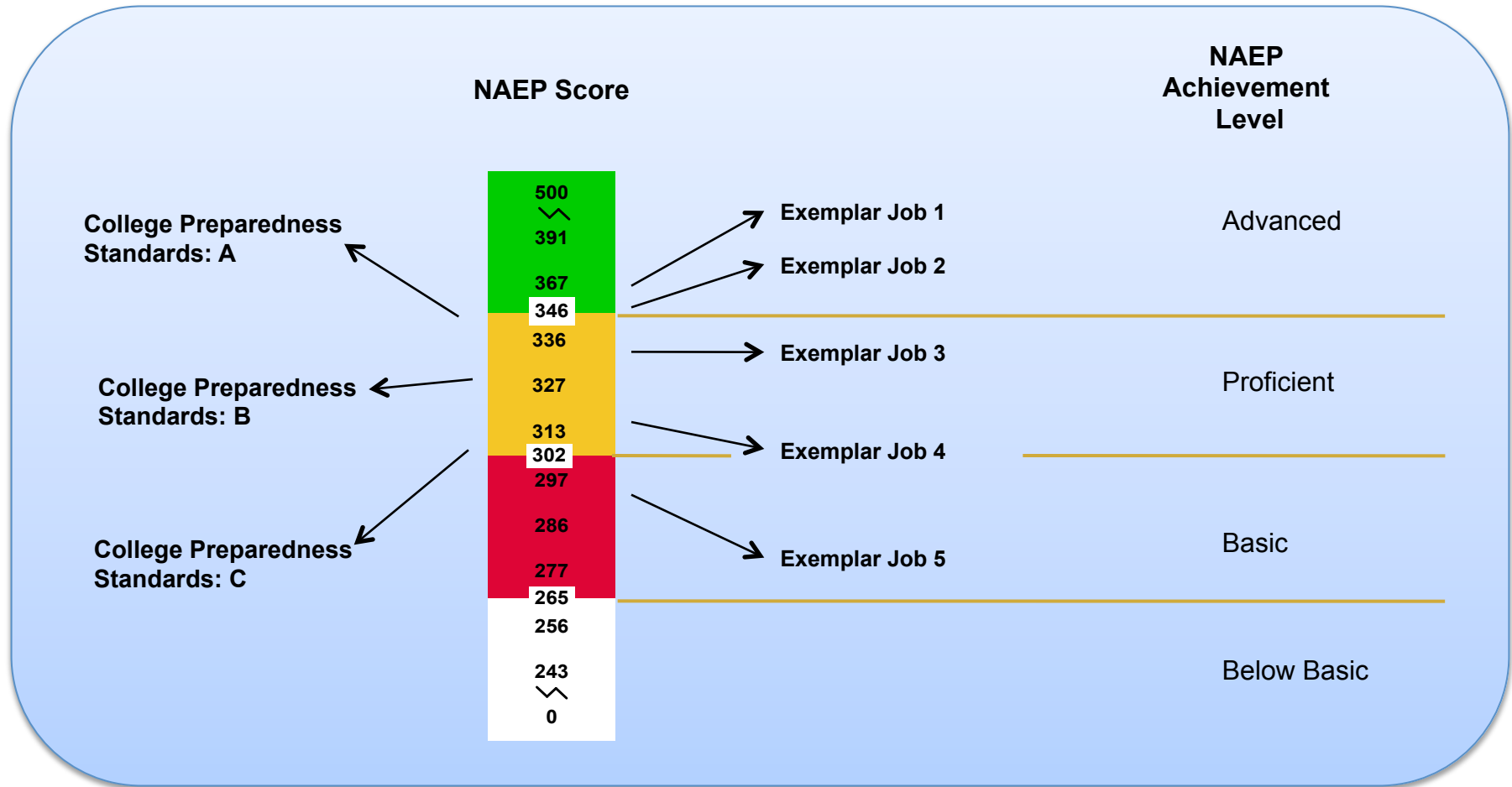
# Scenario 1: Results Converge



# Scenario 2: Results Converge but in Different Ranges on Scale



# Scenario 3: Results Are Dispersed Across Scale



# Implications

- ★ Potential relevance and use of this research in Massachusetts?
- ★ Additional research to consider?
- ★ Potential partners for additional research?
- ★ Research to consider were Massachusetts to volunteer for 12<sup>th</sup> grade NAEP at the state level in 2013?

## For More Information...

- ★ National Assessment Governing Board:  
[www.nagb.org](http://www.nagb.org)
- ★ NAEP 12<sup>th</sup> Grade Preparedness Commission:  
[www.nagb.org/commission](http://www.nagb.org/commission)
- ★ Preparedness Research and Resources:  
[www.nagb.org/commission/researchandresources](http://www.nagb.org/commission/researchandresources)



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