• 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:

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>GRADES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading, Mathematics, Writing, Science, U.S. History, Civics, Geography, Economics, the Arts, Technology and Engineering Literacy, Foreign Language</td>
<td>4, 8, and 12</td>
</tr>
</tbody>
</table>

RESULTS

Student Achievement Data for the
- Nation
- States
- 21 Urban Districts
NAEP Provides Tennessee with Data in Comparison to the Nation and Other States

Tennessee: Grade 4 Mathematics Scores

** Accommodations were not permitted.

Source: National Center for Education Statistics, 2011
NAEP Reports on Student Achievement Gaps

Tennessee: Grade 4 Mathematics Scores by Race/Ethnicity

**Accommodations were not permitted.**

Source: National Center for Education Statistics, 2011
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 Tennessee’s 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 12th grade.
  - 11 state pilot at 12th grade in 2009 – reading and math
  - Administered every two years beginning in 2013
### NAEP: Only Source of 12th Grade Comparisons

#### Grade 12 Mathematics Scale Scores and Achievement Levels

<table>
<thead>
<tr>
<th>Average score</th>
<th>Below Basic</th>
<th>Basic</th>
<th>Proficient</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nation (public)</strong></td>
<td>152</td>
<td>37</td>
<td>38</td>
<td>22</td>
</tr>
<tr>
<td>Arkansas</td>
<td>146</td>
<td>41</td>
<td>43</td>
<td>15</td>
</tr>
<tr>
<td>Connecticut</td>
<td>156</td>
<td>31</td>
<td>40</td>
<td>26</td>
</tr>
<tr>
<td>Florida</td>
<td>148</td>
<td>41</td>
<td>40</td>
<td>26</td>
</tr>
<tr>
<td>Idaho</td>
<td>153</td>
<td>34</td>
<td>44</td>
<td>18</td>
</tr>
<tr>
<td>Illinois</td>
<td>154</td>
<td>33</td>
<td>41</td>
<td>22</td>
</tr>
<tr>
<td>Iowa</td>
<td>156</td>
<td>29</td>
<td>46</td>
<td>24</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>163</td>
<td>25</td>
<td>39</td>
<td>31</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>160</td>
<td>26</td>
<td>42</td>
<td>29</td>
</tr>
<tr>
<td>New Jersey</td>
<td>156</td>
<td>33</td>
<td>37</td>
<td>27</td>
</tr>
<tr>
<td>South Dakota</td>
<td>160</td>
<td>23</td>
<td>48</td>
<td>28</td>
</tr>
<tr>
<td>West Virginia</td>
<td>141</td>
<td>48</td>
<td>39</td>
<td>12</td>
</tr>
</tbody>
</table>

# 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 12th Grade Preparedness

The panel’s rationale:

★ Grade 12: transition to postsecondary education and training.

★ The nation needs an indicator of 12th 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: *Tennessee Higher Education Commission, 2010; **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 12th graders well-prepared academically for college and job training?

The U.S. has no common definition or measure of 12th grade preparedness

Governing Board program of research:
Transform 12th 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

2002-04
12th Grade Blue-Ribbon Panel Report

2006
Contract with Achieve to review NAEP in terms of preparedness

2006-08
Report of Technical Panel on Validity Research

2009
Board Approval of Validity Research Program

2010-11
Research Studies and Development of Final Preparedness Report

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: 12th 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

★ ACT Study:

★ All content in ACT reading and math assessments is included in NAEP

★ NAEP’s content coverage is broader than ACT’s
Statistical Linking

★ NAEP and SAT math = about .90 correlation

★ Proficient on NAEP = 500 on SAT Reading and Math = College Board Readiness Benchmark

★ Florida study: 12th 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

NAEP Score

- College Preparedness Standards: A
  - College Preparedness Standards: B
    - College Preparedness Standards: C

NAEP Achievement Level

- Advanced
  - Proficient
    - Basic
      - Below Basic

Exemplar Jobs:
- Exemplar Job 1
- Exemplar Job 2
- Exemplar Job 3
- Exemplar Job 4
- Exemplar Job 5
Scenario 2: Results Converge but in Different Ranges on Scale

<table>
<thead>
<tr>
<th>NAEP Score</th>
<th>NAEP Achievement Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 - 391</td>
<td>Advanced</td>
</tr>
<tr>
<td>367 - 346</td>
<td>Exemplar Job 1</td>
</tr>
<tr>
<td>336</td>
<td>Exemplar Job 2</td>
</tr>
<tr>
<td>327</td>
<td>Exemplar Job 3</td>
</tr>
<tr>
<td>313 - 302</td>
<td>Exemplar Job 4</td>
</tr>
<tr>
<td>297 - 286</td>
<td>Exemplar Job 5</td>
</tr>
<tr>
<td>277</td>
<td></td>
</tr>
<tr>
<td>265 - 256</td>
<td>Basic</td>
</tr>
<tr>
<td>243</td>
<td>Below Basic</td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

College Preparedness Standards:
- A
- B
- C

Exemplar Jobs:
1. Exemplar Job 1
2. Exemplar Job 2
3. Exemplar Job 3
4. Exemplar Job 4
5. Exemplar Job 5
Scenario 3: Results Are Dispersed Across Scale

NAEP Score

College Preparedness Standards: A
- Exemplar Job 1
  - Advanced

College Preparedness Standards: B
- Exemplar Job 2
- Exemplar Job 3
  - Proficient
- Exemplar Job 4
  - Basic
- Exemplar Job 5
  - Below Basic

College Preparedness Standards: C
Implications

- Potential relevance and use of this research in Tennessee?
- Additional research to consider?
- Potential partners for additional research?
- Research to consider were Tennessee to volunteer for 12th grade NAEP at the state level in 2013?
What is the relevance and utility of the NAEP 12th Grade Academic Preparedness Initiative to Tennessee?

- NAEP as an indicator of academic preparedness

- The NAEP research

- The research results
What additional research should be considered in connection with NAEP 12th grade assessments in reading and mathematics to be conducted in 2013?

Who are potential research partners?
For More Information...

★ National Assessment Governing Board: www.nagb.org

★ NAEP 12th Grade Preparedness Commission: www.nagb.org/commission

★ Preparedness Research and Resources: www.nagb.org/commission/researchandresources