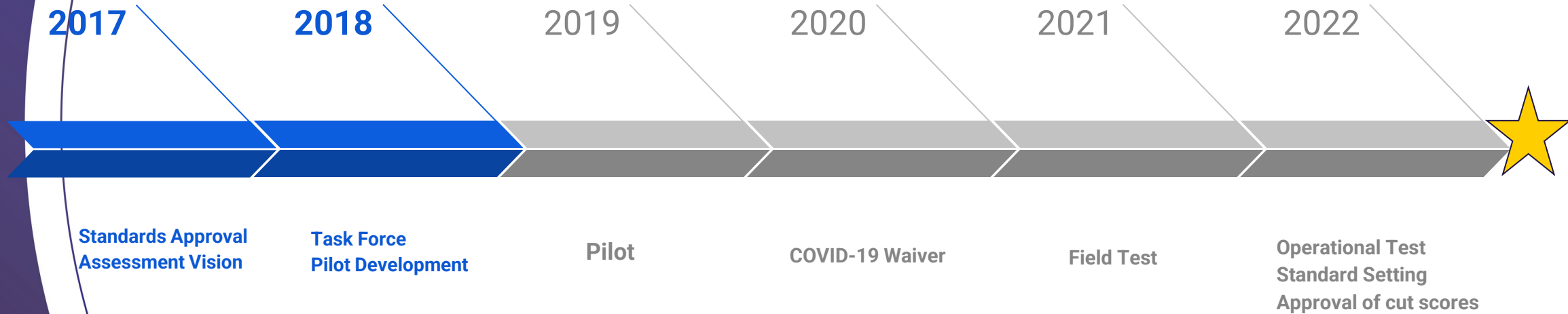




# NSCAS Science: Standard Setting

August 2022

# NSCAS Science Development Timeline

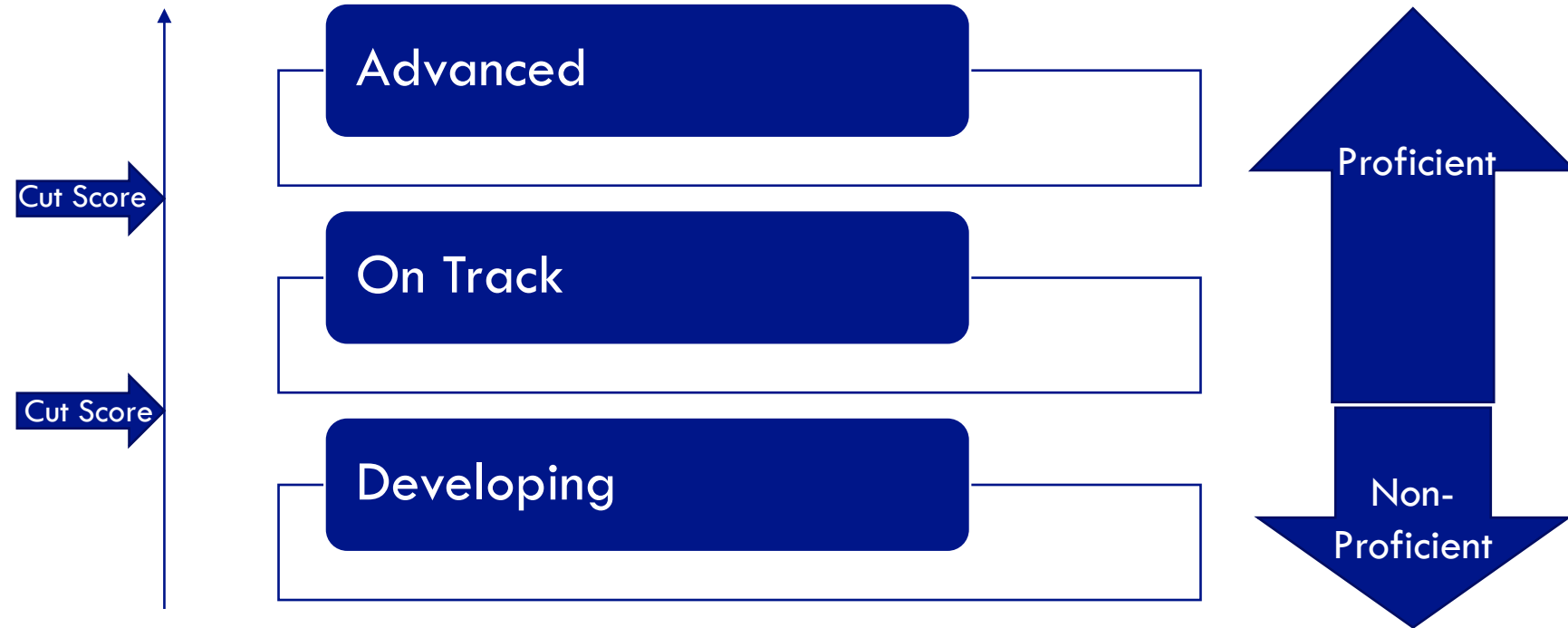


# Standard Setting for Assessments

- Process of determining the scores (or the point(s) of achievement) that determine the category of a student's proficiency.
  - Advanced: "...demonstrate high levels of proficiency..."
  - On Track: "...demonstrate proficiency..."
  - Developing: "...do not demonstrate proficiency..."
- Occurs as a result of new assessment items measuring revised content area standards and a revised Table of Specifications (e.g. what is tested).

# Standard Setting for Assessments

- For example...



# NSCAS Science and Alternate Science: *Standard Setting Process*

- NSCAS Science (Grades 5 & 8)
- NSCAS Alternate Science (Grades 5, 8, & 11)
  - 1% of students with the most significant cognitive disabilities.

# NSCAS Science and Alternate Science: *Standard Setting Process*

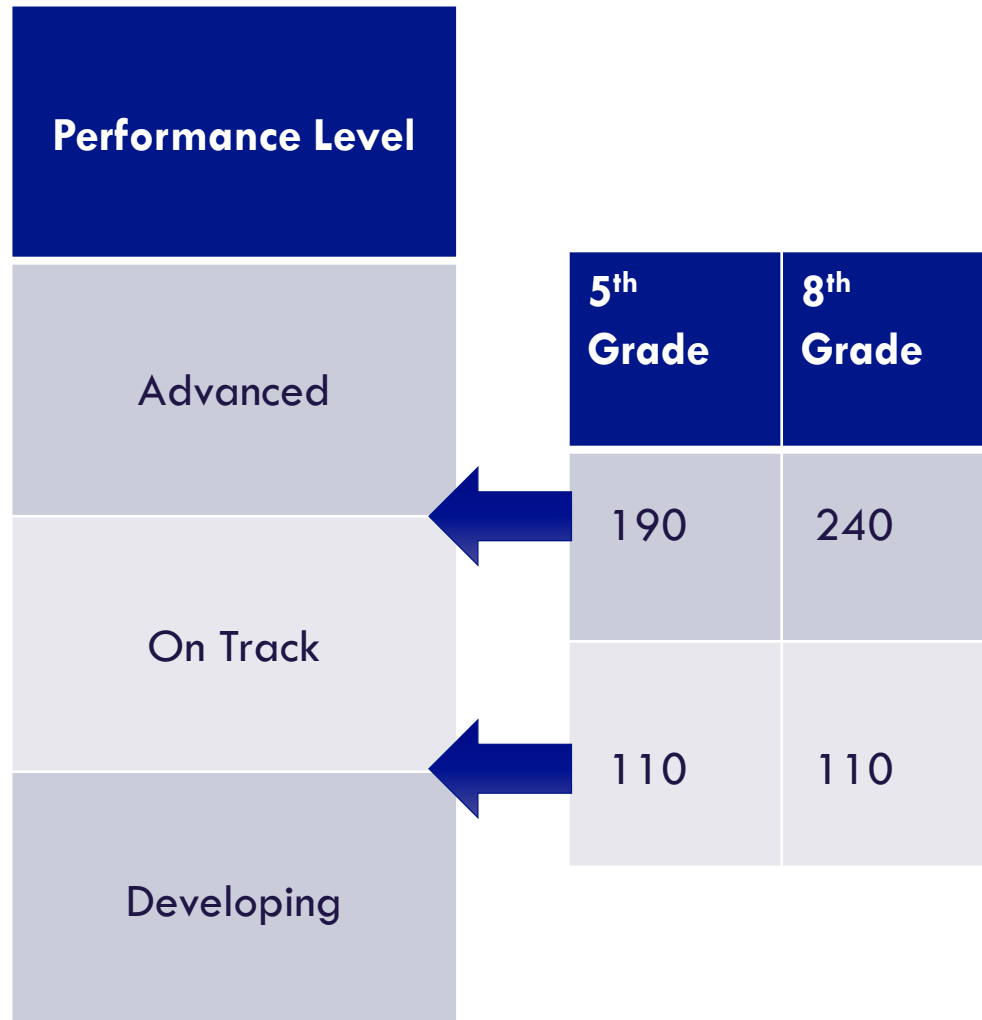
- Panelist Selection and Training:
  - Nebraska educators with science education expertise, including teachers, curriculum directors, postsecondary faculty, district assessment coordinators, etc.
- Method: Extended Angoff & Yes/No Angoff (Alternate)
- Multiple Rounds of Judgements:
  - Informed by content expertise, professional conversations, and impact data from Spring 2022 assessment.
  - Independent recommendations inform the group's recommendations.

# NSCAS Science and Alternate Science: *Standard Setting Process*

- Educators determined scores most likely for each proficiency level.
  - “Would a student that is barely advanced student get this question correct?”
- Panelists reviewed item data between rounds.
- Scores were aggregated and presented to the NDE as a recommended range around a median cut.
- Recommended cut scores reflect the recommendations of the panel.

# NSCAS Science: Cut Score Recommendations

Performance Level	5 <sup>th</sup> Grade	8 <sup>th</sup> Grade
Advanced	190	240
On Track	110	110
Developing		



NSCAS Science Scales:  
Grade 5: 100-220  
Grade 8: 100-330



# NSCAS Science: Recommended Cut Score with Impact Data

Performance Level	5 <sup>th</sup> Grade	5 <sup>th</sup> Grade % Proficient	8 <sup>th</sup> Grade	8 <sup>th</sup> Grade % Proficient
Advanced	4.0%	64.0%	3.1%	52.1%
On Track	60.0%		45.3%	
Developing	32.0%		47.9%	

# NSCAS Science Alternate: Cut Score Recommendations

Performance Level	5 <sup>th</sup> Grade	8 <sup>th</sup> Grade	High School
Advanced			
On Track	250	250	250
Developing	200	200	200

NSCAS Alternate Science Scale:  
100 to 300 points

# NSCAS Science Alternate: Recommended Cut Score with Impact Data

Performance Level	5 <sup>th</sup> Grade	5 <sup>th</sup> Grade % Proficient	8 <sup>th</sup> Grade	8 <sup>th</sup> Grade % Proficient	HS	HS % Proficient
Advanced	8.4%	46.3%	7.0%	57.0%	10.4%	45.5%
On Track	37.9%		50.0%		45.1%	
Developing	53.7%		43.0%		44.6%	

# State Board Policy Decision

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- August:
  - Action Item: Approve the cut scores for NSCAS Science and NSCAS Science Alternate.



Questions?