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CONNECTICUT STATE DEPARTMENT OF EDUCATION

2015
Connecticut
NAEP Science Results

State Board of Education
December 7, 2016

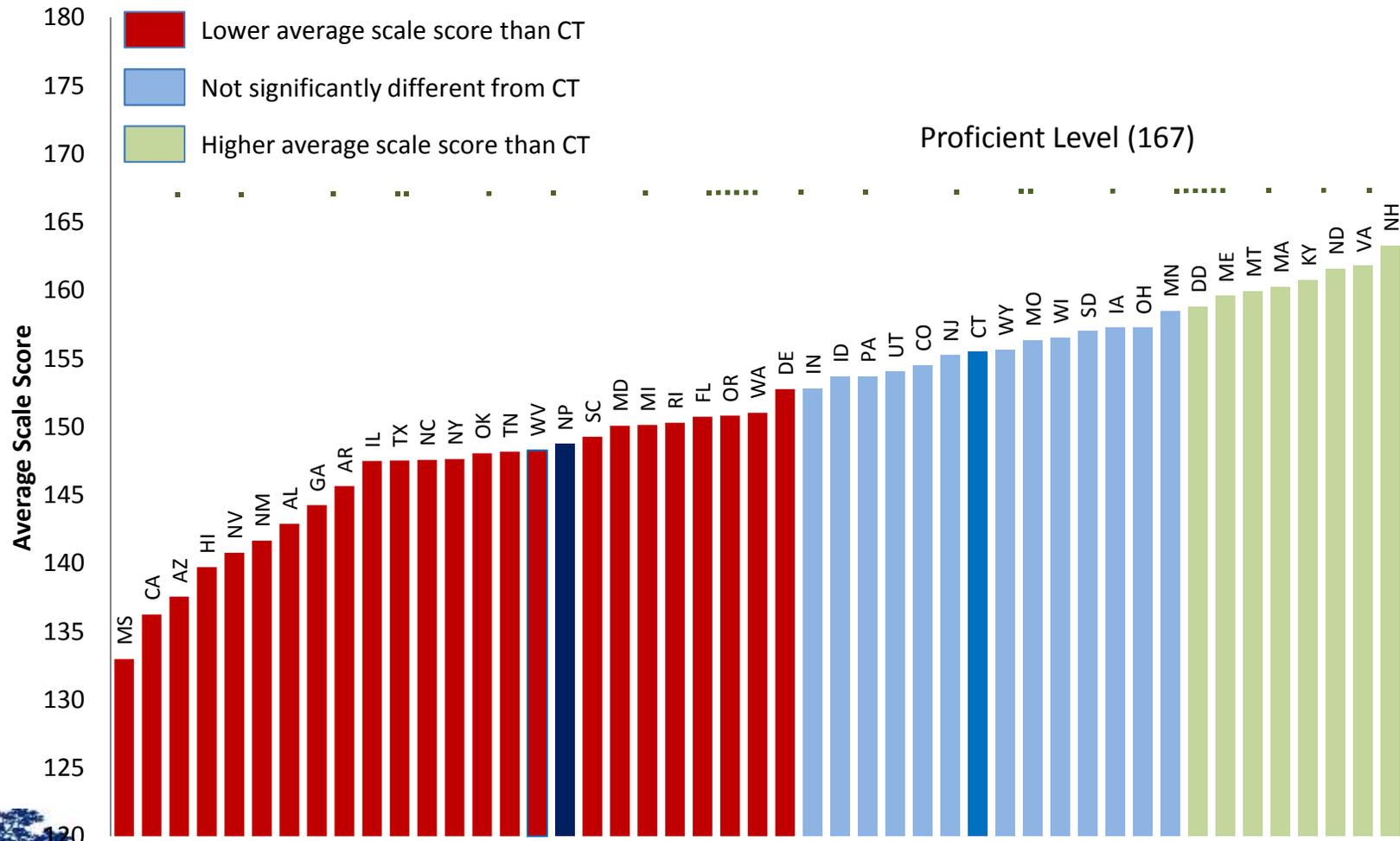
Connecticut NAEP 2015 Performance in Science

- While the national NAEP scores increased in Grades 4 and 8, Connecticut's overall NAEP performance remained the same.
- In Connecticut, 38 percent of Grade 4 students and 35 percent of Grade 8 students scored in the Proficient or Advanced levels. This is not different from the National Public results.
- The NAEP Science framework changed in 2009, so the 2009 administration is the baseline for measuring change over time. Grade 4 results can be compared to 2009, and Grade 8 results can be compared to 2011 and 2009.
- In science, similar to mathematics, Connecticut students in grades 4 and 8 are in the middle of the pack in terms of performance. Connecticut Grade 4 students perform no different than the national average, while Grade 8 students perform above the national average.
- Fifteen jurisdictions outperform Connecticut fourth graders, and seventeen outperform eighth grade students.



Connecticut NAEP 2009 Performance Relative to Other Jurisdictions

NAEP Science Grade 4 – Overall Average Scale Score: 2009

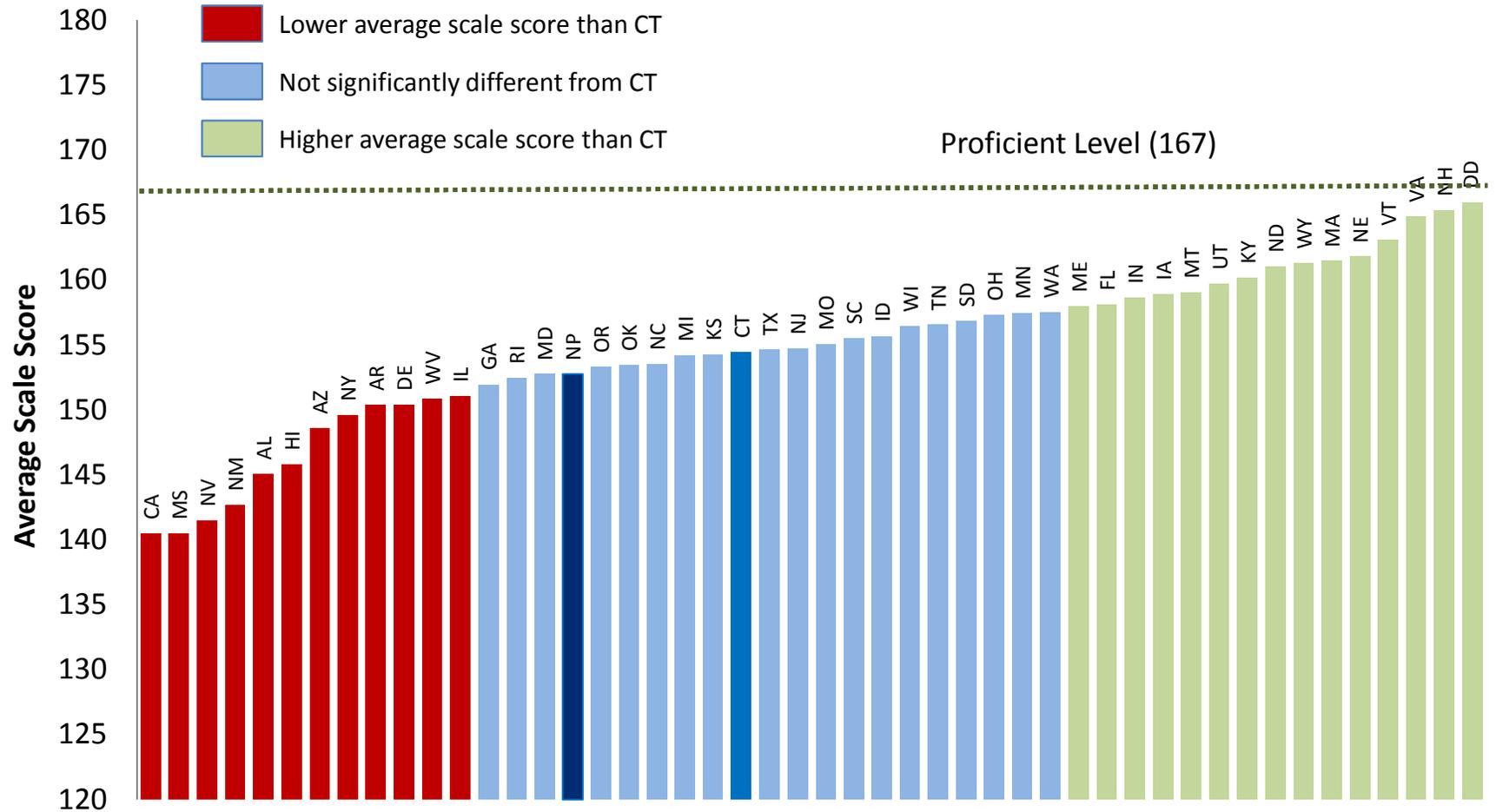


NOTE: The NAEP grade 4 science scale ranges from 0 to 300.



Connecticut NAEP 2015 Performance Relative to Other Jurisdictions

NAEP Science Grade 4 – Overall Average Scale Score: 2015



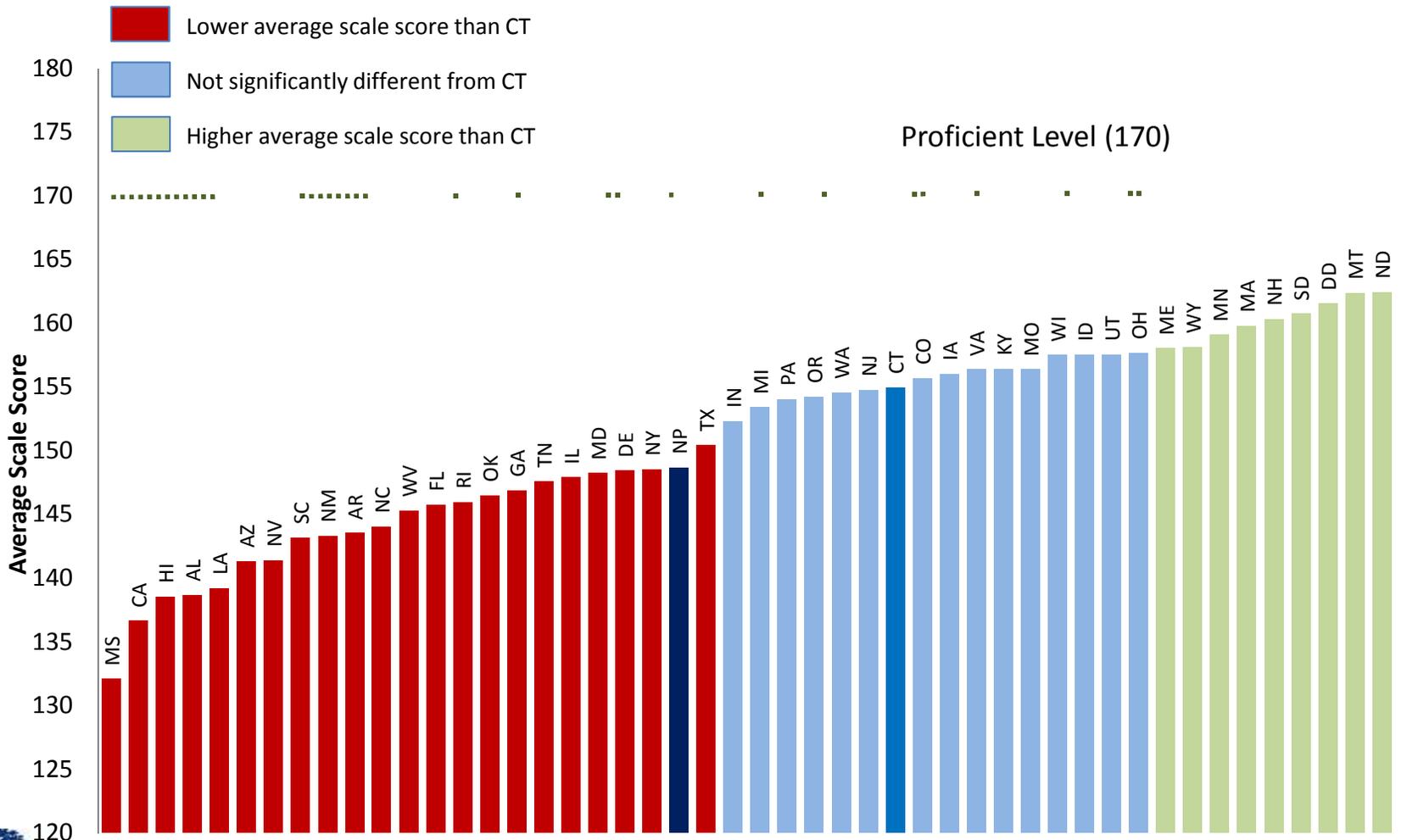
NOTE: The NAEP grade 4 science scale ranges from 0 to 300.



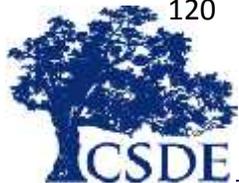
Connecticut NAEP 2009 Performance Relative to Other Jurisdictions

NAEP Science Grade 8 – Overall

Average Scale Score: 2009



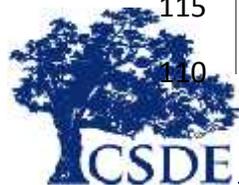
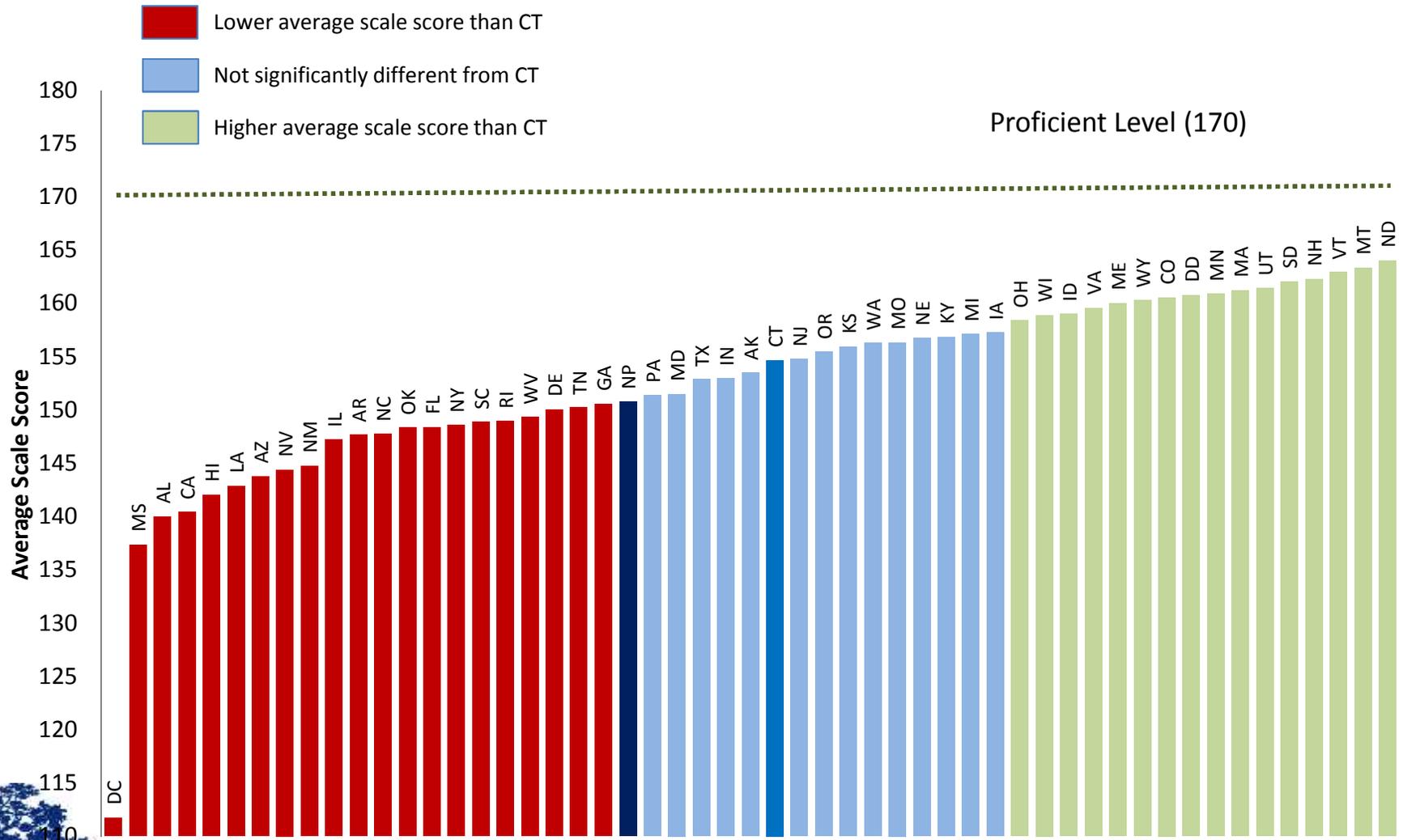
NOTE: The NAEP grade 8 science scale ranges from 0 to 300.



Connecticut NAEP 2011 Performance Relative to Other Jurisdictions

NAEP Science Grade 8 – Overall

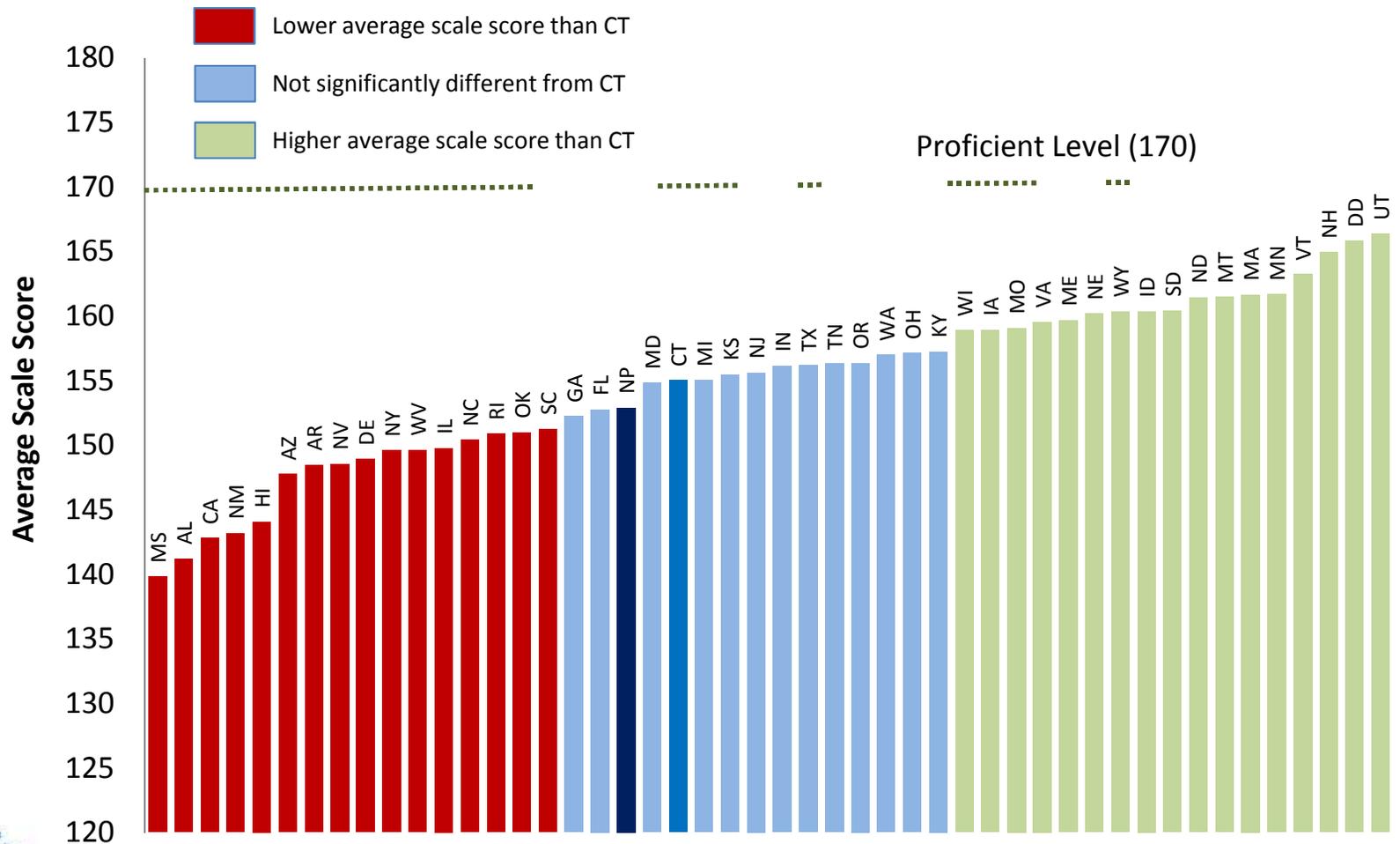
Average Scale Score: 2011



NOTE: The NAEP grade 8 science scale ranges from 0 to 300.

Connecticut NAEP 2015 Performance Relative to Other Jurisdictions

NAEP Science Grade 8 – Overall Average Scale Score: 2015



NOTE: The NAEP grade 8 science scale ranges from 0 to 300.



National Results

Summary of changes across test administrations for all participating jurisdictions.*

Science

- **National Public Schools:** The average scale score in Grades 4 and 8 increased. Grade 12 scores remained flat (no state-level Grade 12 results).
- **Connecticut:** The average scale score in both grades did not change.

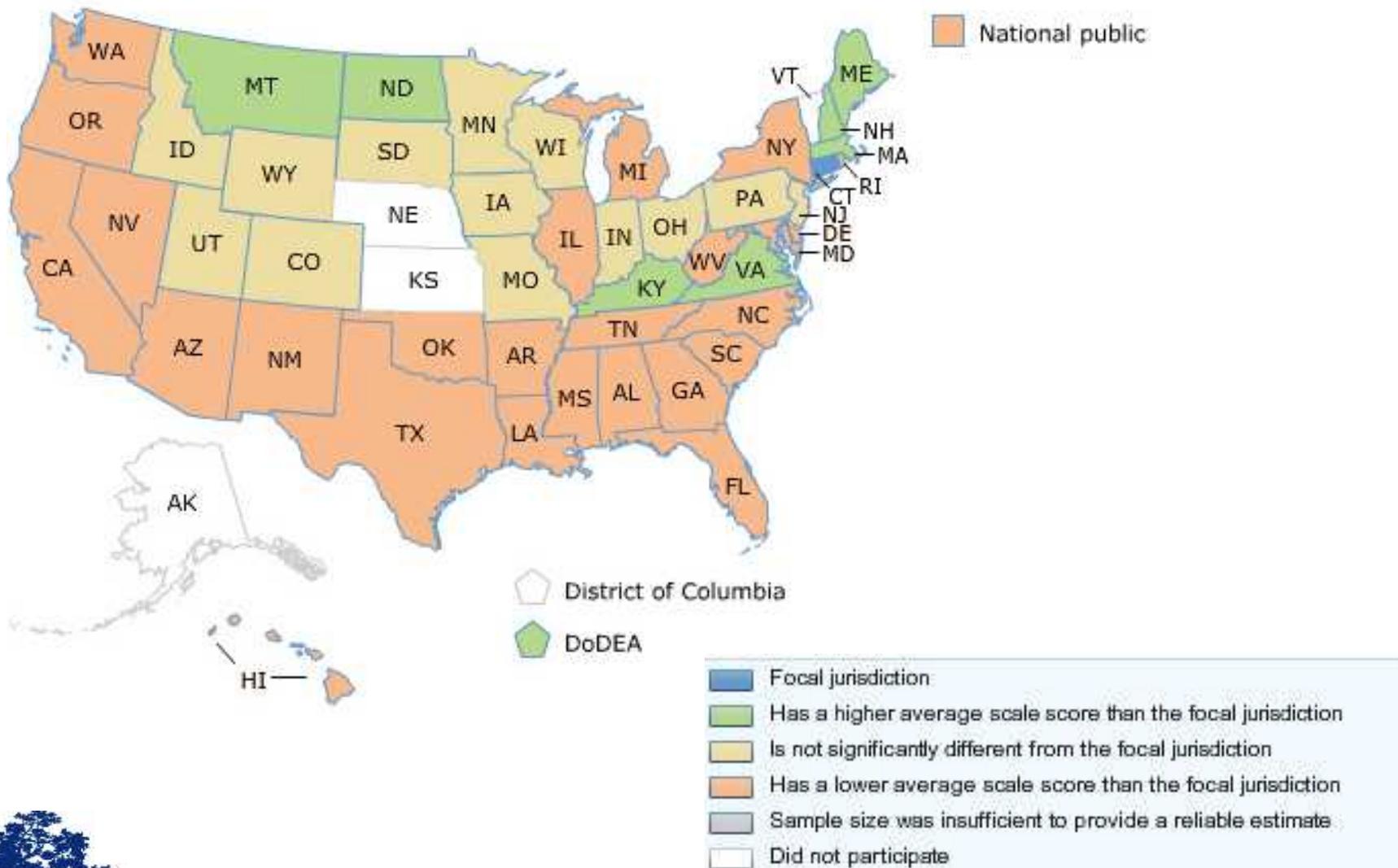
	Grade 4 (2009 to 2015)	Grade 8 (2009 to 2015)	Grade 8 (2011 to 2015)
	18	24	12
	1 (DE)	0	1 (ND)
=	25 (includes CT)	20 (includes CT)	34 (includes CT)
No comparison available	8	8	5

* There were five jurisdictions that did not participate in 2015 Science at either grade (LA, CO, PA, AK, DC). There were also jurisdictions that did not participate in the 2009 administration so it is not possible to measure 2009 to 2015 change for those jurisdictions (VT, NE, KS, AK, DC).

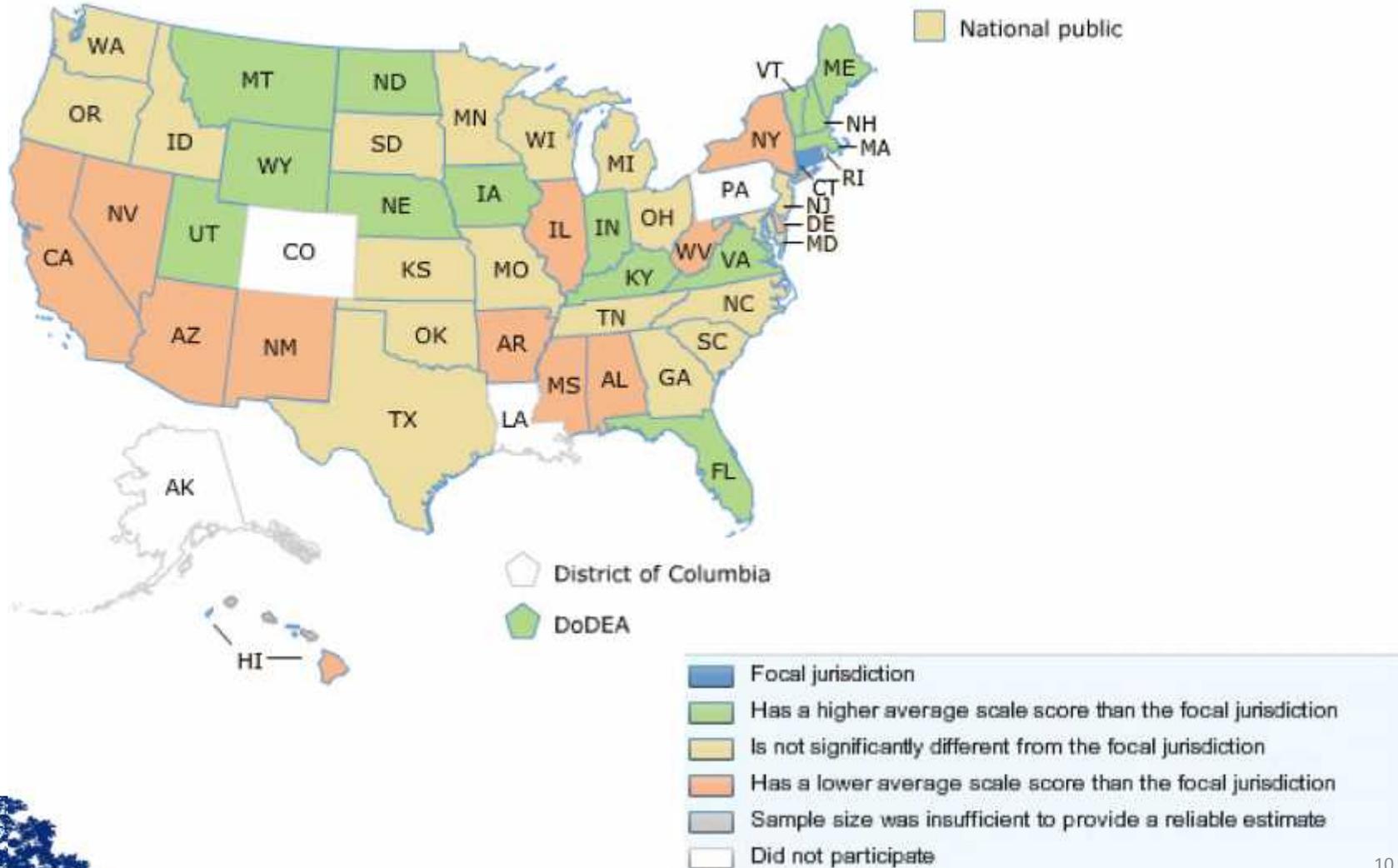
8



NAEP 2009: Grade 4 All Students



NAEP 2015: Grade 4 All Students



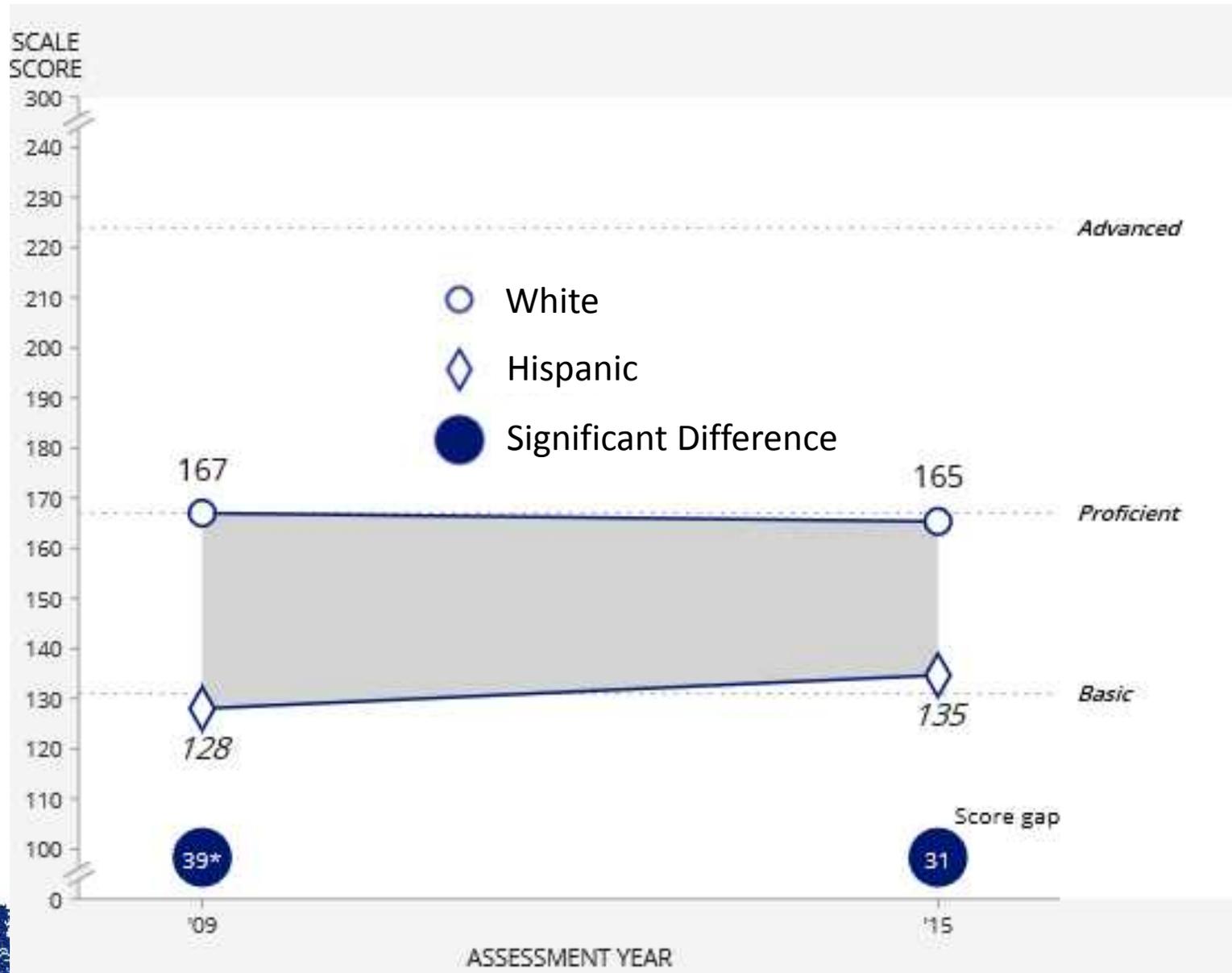
Connecticut Grade 4 Subgroup Trend and Comparison Data

	Avg. SS 2009	Avg. SS 2015	2009 to 2015 Δ	CT SS vs. NP SS 2015	# Jurisdictions with higher SS 2009	# Jurisdictions with higher SS 2015
All	156	154	=	=	8	15
White	167	165	=	=	1	4
Black	129	130	=	=	4	3
Hispanic	128	135	=	=	18	16
NSLP	130	134	=	<	27	33
SWD	132	120	↓	<	5	31
EL	109	120	=	=	15	13

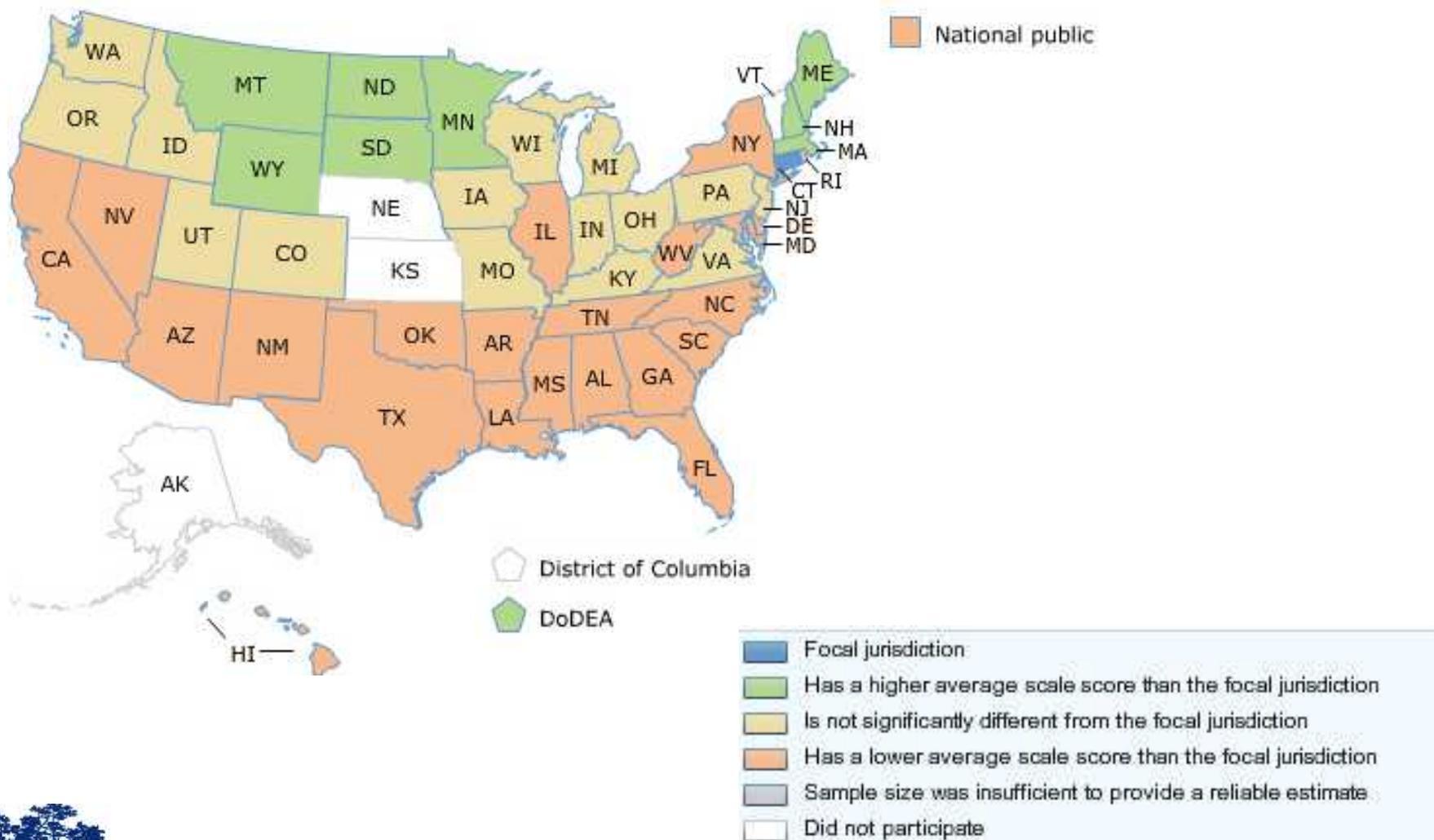
	2009 Gap	2015 Gap	2009 to 2015 Gap Δ
White- Black	38 (167,129)	35 (165, 130)	=
White- Hispanic	39 (167, 128)	31 (165, 135)	↓
NSLP	36 (166, 130)	33 (167, 134)	=



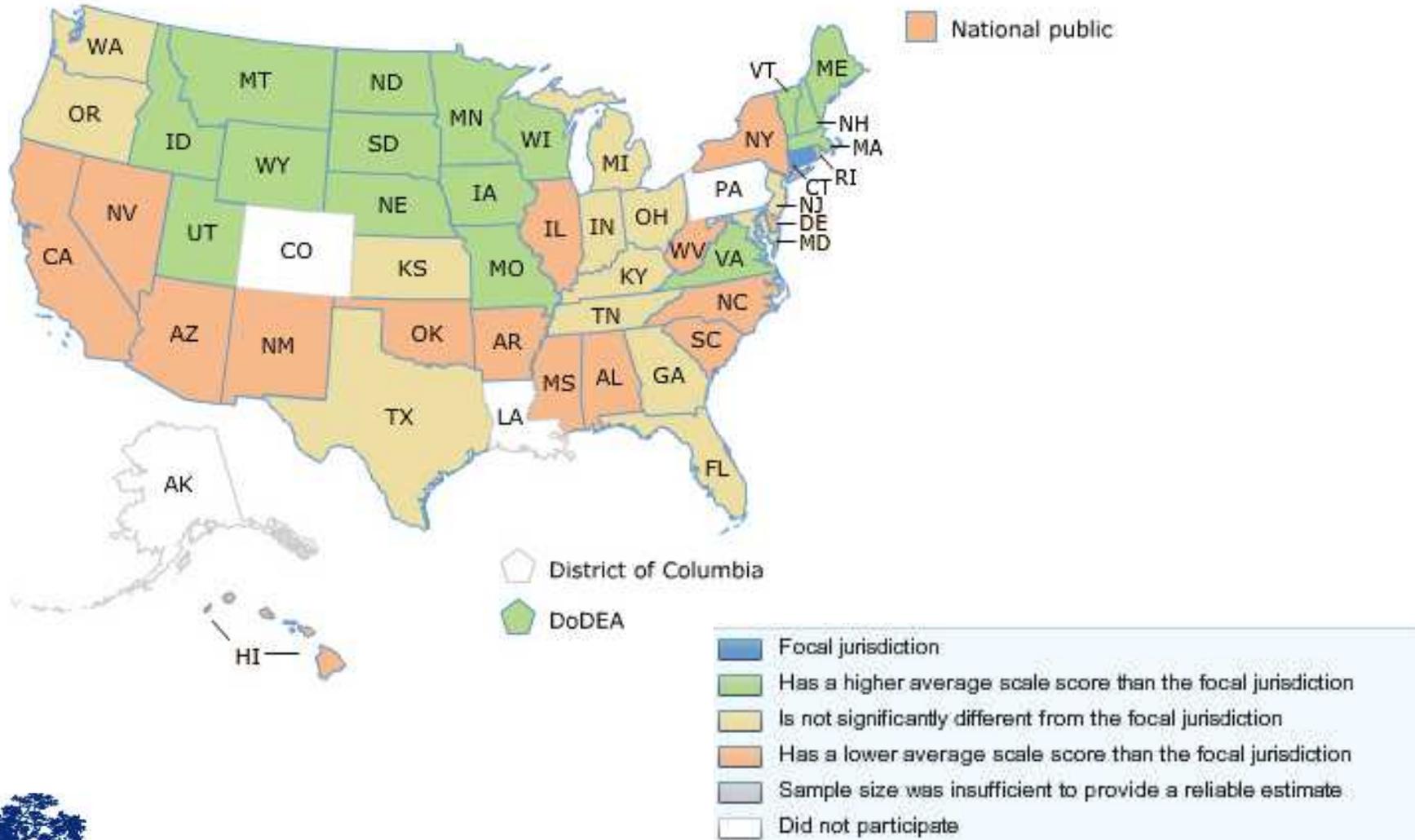
Progress in Reducing the Grade 4 White-Hispanic Performance Gap



NAEP 2009: Grade 8 All Students



NAEP 2015: Grade 8 All Students



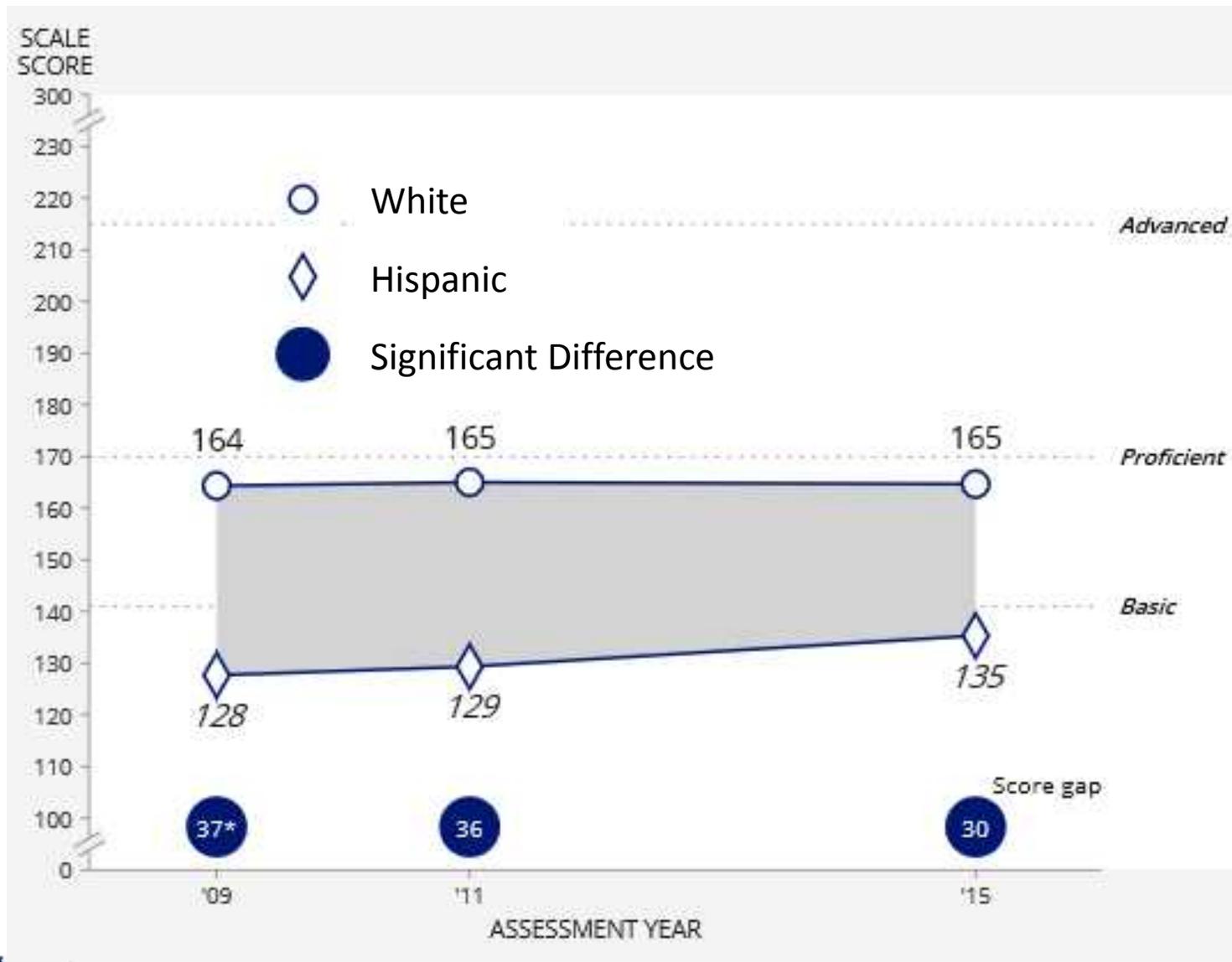
Connecticut Grade 8 Subgroup Trend and Comparison Data

	Avg. SS 2009	Avg. SS 2015	2009 to 2015 Δ	CT SS vs. NP SS 2015	# Jurisdictions with higher SS 2009	# Jurisdictions with higher SS 2015
All	155	155	=	>	9	17
White	164	165	=	=	1	6
Black	126	131	=	=	5	2
Hispanic	128	135	=	=	18	13
NSLP	130	137	↑	=	25	26
SWD	126	121	=	=	5	12
EL	100	100	=	<	5	10

	2009 gap	2015 gap	2009 to 2015 Gap Δ
White- Black	38 (164, 126)	34 (165, 131)	=
White- Hispanic	37 (164, 128)	30 (165, 135)	↓
NSLP	33 (164, 130)	28 (165, 137)	=



Progress in Reducing the Grade 8 White-Hispanic Performance Gap



Summary

- Connecticut's overall NAEP performance has remained the same from 2009 to 2015 while many other states have improved.
- Some progress has been made in closing the White-Hispanic gap in both Grades 4 and 8.
- CSBE adopted Next Generation Science Standards (NGSS) in November 2015.
- Implementation of the standards through diverse professional learning opportunities is underway.
- A new state assessment aligned to the NGSS is expected to be ready for initial implementation in 2018-19.

