

getting reAdy

March 2011



Children Entering School Ready to Learn:
2010-2011 Maryland school readiness data

The Early Years A Window for Learning



Birth to Age 5: A Critical Period

- This is the “window” in which a child’s greatest brain development takes place.
- 90% of a child’s brain growth – in response to the stimulation the child receives – happens by age 5.
- Early experiences lay the groundwork for a child’s lifelong learning and behavior.
- School readiness – a child’s ability to successfully carry out kindergarten work – depends heavily on a child’s birth-to-five learning experiences.



School Readiness More than Worth the Investment



Powerful Impact on the Future

- Nobel Prize-winning economist James J. Heckman's research shows that effective early care and education decreases the need for Special Education and remediation, and also reduces juvenile delinquency, teen pregnancy, and dropout rates.
- A Pew Center study by economist Mark Cohen and criminologists Alex Piquero and Wesley Jennings finds that the societal "pay now" price of supporting healthy prenatal care, sound parental skills, and quality PreK programs is a fraction of the "pay later" price associated with the problems of low birth weight babies, child abuse and neglect, and high school dropouts.

Sources: James Warren, "Economist's Plan to Improve Schools Begins Before Kindergarten," *New York Times*, December 23, 2010.

Pew Center On the States, Issue Brief, "Paying Later: The High Costs of Failing to Invest in Young Children," January 2011.



About the MMSR How Maryland Assesses School Readiness



The Maryland Model for School Readiness (MMSR)

- Assesses what each kindergartener knows and is able to do in the Domains of Learning:
 - Language & Literacy
 - Mathematical Thinking
 - Physical Development
 - Scientific Thinking
 - Social & Personal Development
 - Social Studies
 - The Arts
- Children are identified as:
 - **Fully Ready:** Consistently demonstrates the skills, behaviors, and abilities, which are needed to meet kindergarten expectations successfully.
 - **Approaching Readiness:** Inconsistently demonstrates the skills, behaviors, and abilities, which are needed to meet kindergarten expectations successfully and requires targeted instructional support in specific areas.
 - **Developing Readiness:** Does not demonstrate the skills, behaviors, and abilities, which are needed to meet kindergarten expectations successfully and requires considerable instructional support in several areas.



About the MMSR Using the Data

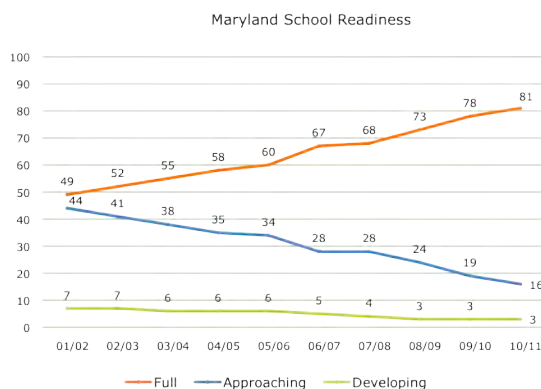


Statewide and Jurisdictional MMSR Data

- The Maryland State Department of Education (MSDE) annually releases both statewide and jurisdictional MMSR data.
- MMSR data:
 - Influence classroom instruction
 - Guide professional development
 - Promote better communication between school staff and families
 - Increase collaboration and coordination among early care and education programs
 - Support the alignment of early care and education and public school systems



More Children Fully School-Ready Maryland Model for School Readiness, 2010-2011



32-Point Jump in Readiness

- 81% of kindergarteners are fully school-ready, up from 49% in 2001-2002 and 78% last year.
- Maryland met statistical projections.



Source: Maryland State Department of Education

Maryland Demographics



Population Data

MD Department of Planning, 2009

Estimated Children Age 4	75,288
Children <5 (age 0-4)	376,440

School Enrollment

MSDE, School Year 2010-2011

Elementary Attendance Rate	95.3%	Kindergartener Ethnicity	
Chronically Absent	6.2%	American Indian	0.4%
		Asian	6.1%
PreK Students	29,377	African American	33.0%
Full-Day Program	42.9%	Native Hawaiian/Pacific Islander	0.3%
Half-Day Program	57.1%	White	41.8%
Kindergarten Students	62,701	Hispanic	14.4%
		Two or More Races	4.0%
Kindergartener Gender		Kindergartener with Services	
Male	51.2%	Children with Disabilities	8.2%
Female	48.8%	English Language Learners	14.0%
		Free/Reduced Priced Meals	42.3%

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Statewide Quick Take Maryland Model for School Readiness, 2010-2011



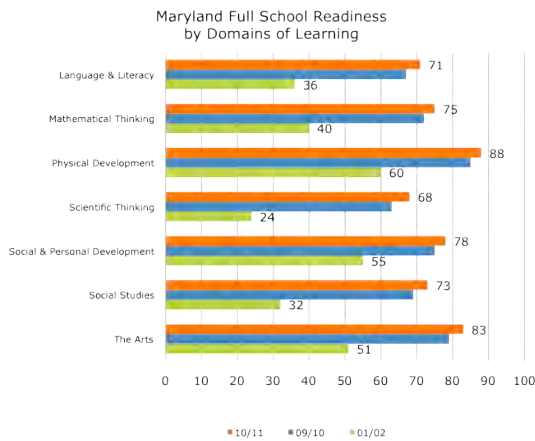
Key Trends in Maryland

- 81% of kindergarteners are fully ready in 2010-2011, up 32 points from 2001-2002 and 3 points more than last year.
- Maryland experienced pronounced gains in school readiness across all Domains of Learning.
- Children entering kindergarten with risk factors saw substantial achievement gains.
- Maryland's young children showed school readiness gains across all prior care settings.
- Formal prior care settings and the time spent at these settings strengthen school readiness.

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Source: Maryland State Department of Education

Sizable Increases Across All Domains Maryland Model for School Readiness, 2010-2011



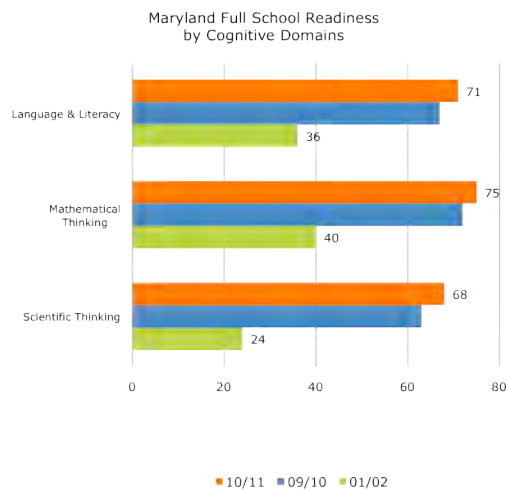
Major Improvements for Each Domain of Learning

- Kindergarteners show the greatest one-year readiness gain in the area of:
 - Scientific Thinking (68% fully ready, up 5 points from 2009-2010).
- Kindergarteners demonstrate strongest readiness in:
 - Physical Development (88% fully ready in 2010-2011) and
 - The Arts (83% fully ready).



Source: Maryland State Department of Education

Pre-Reading & STEM Focus Pays Off Maryland Model for School Readiness, 2010-2011



Investments in Key Domains Result in Tremendous Progress

Maryland saw a:

- 35-point increase from 2001-2002 in Language and Literacy (71% fully ready in 2010-2011);
- 35-point improvement in Mathematical Thinking (75% fully ready); and
- 44-point jump in Scientific Thinking (68% fully ready).



Source: Maryland State Department of Education

Impact of Readiness Gains Maryland Model for School Readiness, 2010-2011



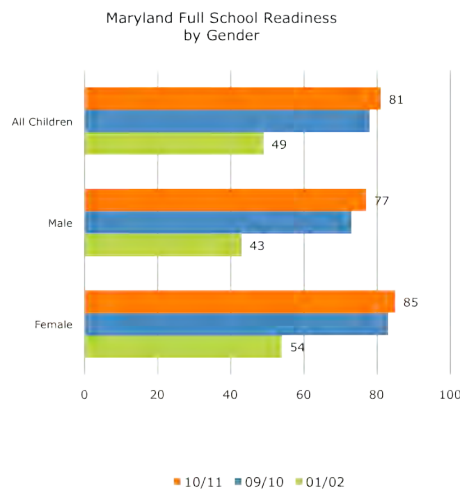
School Readiness Linked to Academic Achievement

- Language and Literacy readiness has the highest correlation to increases in overall full readiness levels.
- The MMSR data show a strong link between kindergarten readiness and Grade 3 reading and math scores on the Maryland School Assessment (MSA).
- The data show that children who enter kindergarten with full readiness skills in Language & Literacy have a 91% chance of being proficient or advanced on the Grade 3 MSA in Reading.



Source: Maryland State Department of Education

Achievement Gains for All Children Maryland Model for School Readiness, 2010-2011



Good Progress

- In the past 9 years, males (34-point improvement) and females (31-point improvement) made significant gains.
- While fewer males (77%) are fully ready for school in 2010-2011, they are within 4 points of the state average.

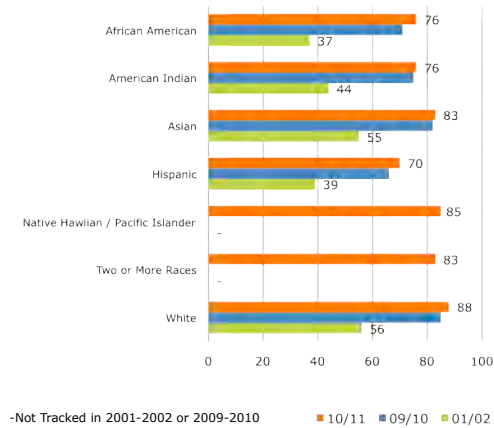


Source: Maryland State Department of Education

Achievement Gains for All Children Maryland Model for School Readiness, 2010-2011



Maryland Full School Readiness
By Ethnicity



Major Increases Among African-American & Hispanic Children

- 76% of African-American kindergarteners are fully school-ready in 2010-2011, rising from 37% in 2001-2002 and 71% last year.
- 70% of Hispanic children are now fully school-ready—a 31-point readiness gain from 2001-2002 and 4 points more than last year.

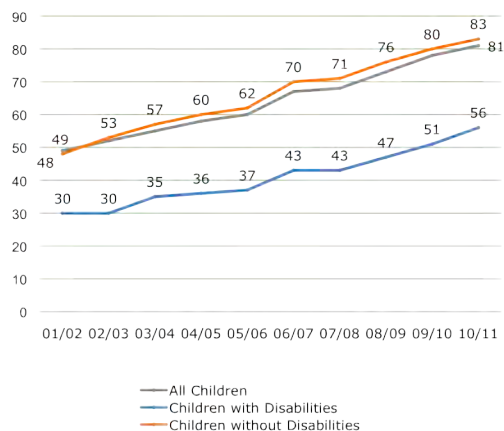


Source: Maryland State Department of Education

Achievement Gains for All Children Maryland Model for School Readiness, 2010-2011



Maryland Full School Readiness
By Children with Disabilities



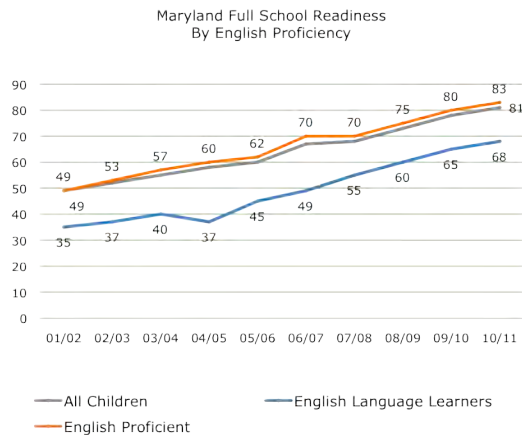
26-point Jump Among Children with Disabilities

- 56% of children with disabilities are fully ready in 2010-2011, making a substantial 26-point gain from 2001-2002.
- The 5-point gain from last year is 2 points greater than the statewide gains.



Source: Maryland State Department of Education

Achievement Gains for All Children Maryland Model for School Readiness, 2010-2011



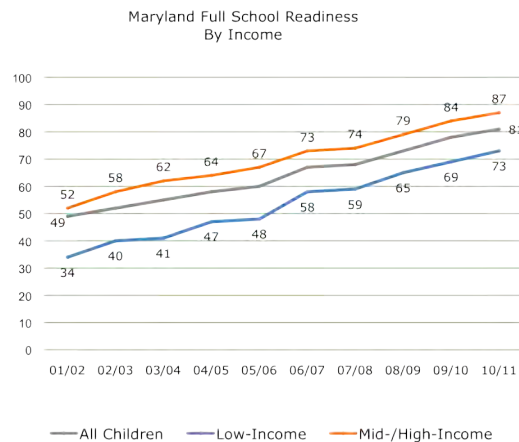
33-point Improvement Among English Language Learners

- 68% of English Language Learners (children whose first language is not English) are fully ready in 2010-2011, up from 35% in 2001-2002 and 65% last year.
- 14% of kindergarteners are English Language Learners—a 13% change in total number of ELL since last year.
- Over 200 languages are spoken in Maryland public schools.



Source: Maryland State Department of Education

Achievement Gains for All Children Maryland Model for School Readiness, 2010-2011



39-point Increase Among Low-Income Children

- 73% of kindergarteners from low-income households (as indicated by Free and Reduced Price Meal status) rose to full readiness in 2010-2011, up from 34% in 2001-2002 and 69% last year.
- 42.3% of kindergarteners are from low-income households, up from 41.7% in 2001-2002.



Source: Maryland State Department of Education

Readiness Disparities for At-Risk Children Maryland Model for School Readiness, 2010-2011



Children with Disabilities

- 56% of children with disabilities are fully school-ready in 2010-2011, compared with 83% of children without disabilities.
- While growth has occurred, the gap between children with disabilities and their peers doubled (an 18-point difference in 2001-2002 rose to a 27-point difference in 2010-2011).

English Language Learners

- 68% of English Language Learners are fully ready in 2010-2011, compared with 83% of their English-proficient peers.
- Despite the 33-point gains from 2001-2002, the disparity between English Language Learners and their English-proficient peers remained (14 points in 2001-2002 and 15 points in 2010-2011).

Children from Low-Income Households

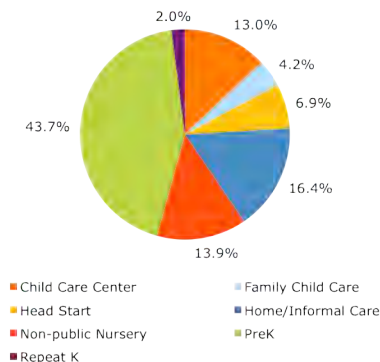
- 73% of kindergartners from low-income households are fully school-ready in 2010-2011, compared with 87% of children from mid- to high-income households.
- The 39-point increase from 2001-2002 reduced the readiness disparity between children from low-income households and their peers from 18 points to 14 points in 2010-2011.

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Prior Care Enrollment Maryland Model for School Readiness, 2010-2011



Prior Care Enrollment
of Maryland Kindergarteners



Early Learning Strengthens School Readiness

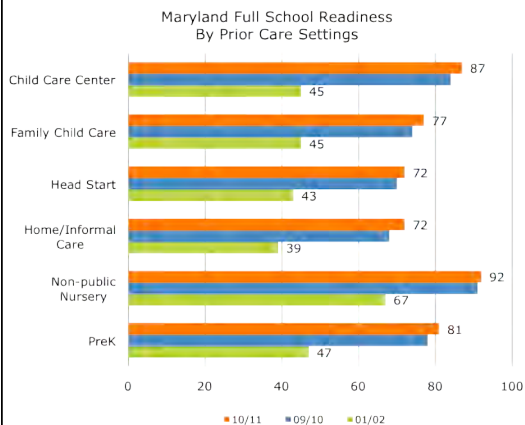
- Maryland served 29,377 children in school year 2010-2011 in its state-funded PreK program.
- 43.7% of the State's kindergarten parents' reported the predominant prior care setting (environment the year prior to kindergarten) was public PreK.

NOTE: Some prior care settings have enrollment criteria. For example, Head Start Centers and public PreK almost exclusively serve children from low-income households and children with disabilities—two subgroups that have consistently had significantly lower school readiness than Maryland kindergarteners as a whole, and are considered at risk.

Source: Maryland State Department of Education

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Big Improvements Across All Settings Maryland Model for School Readiness, 2010-2011



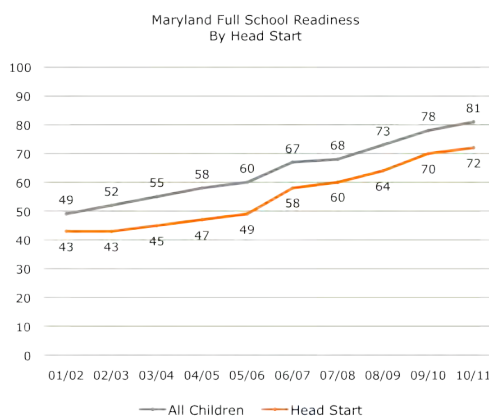
Gains for Children Enrolled in Early Learning Environments the Year Prior to Kindergarten.

- Child care centers saw a 42-point jump from 2001-2002 to 87% fully ready for 2010-2011.
- Public PreK programs experienced a 34-point rise to 81% fully ready.
- Family child care experienced a 32-point gain to 77% fully-ready.
- Non-public nursery programs saw a 25-point increase to 92% fully ready.



Source: Maryland State Department of Education

Extraordinary Progress for Head Start Maryland Model for School Readiness, 2010-2011



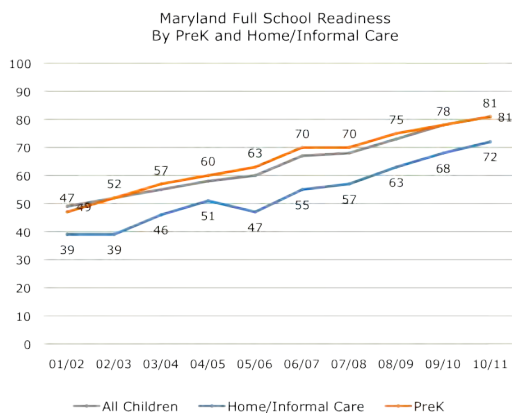
29-point Gain for Children Attending Head Start

- 72% of children attending Head Start the year prior to kindergarten are fully ready, up from 43% fully ready in 2001-2002 and within 9 points of the statewide average.
- Head Start serves a high percentage of children from low-income households; this data is significant in the context of addressing the achievement gap along income lines.



Source: Maryland State Department of Education

PreK Promotes School Readiness Maryland Model for School Readiness, 2010-2011



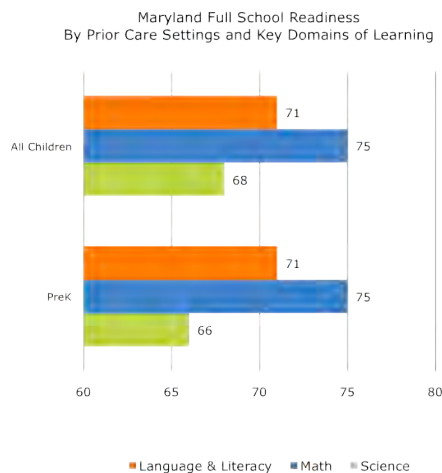
Higher Readiness Among PreK Children

- Kindergarteners who were enrolled in public PreK programs the year prior to starting school are on par with the Statewide average.
- Kindergarteners enrolled in public PreK programs (81% fully ready in 2010-2011) are better-prepared for school than their peers who were at home or in informal care (72% fully ready).



Source: Maryland State Department of Education

Prior Care Affects Cognitive Readiness Maryland Model for School Readiness, 2010-2011



Children Attending PreK Programs have High Readiness in Cognitive Domains.

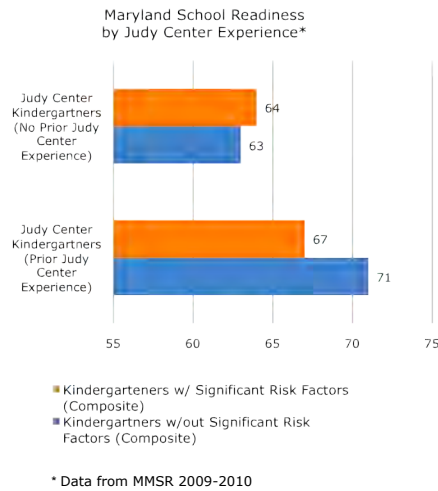
In 2010-2011, PreK children saw:

- 71% full readiness in Language & Literacy and 75% full readiness in Math, on par with the State's full readiness level in each Domain of Learning; and
- 66% full readiness in Science, within 2 points of the State's full readiness level.



Source: Maryland State Department of Education

Collaborative Systems Raise Readiness Maryland Model for School Readiness, 2010-2011



Judy Center Model Impacts School Readiness

- Children who had Judy Center experiences in the year prior to kindergarten have higher readiness levels (71% fully ready) than those who did not have such experiences (63%), performing better in all seven Domains of Learning.
- Of the children with significant risk factors (Free and Reduced Priced Meals, English Language Learners, and/or children with disabilities), those with prior Judy Center experience had higher school readiness scores (67% school ready, compared with 64% statewide).



Source: Maryland State Department of Education

Attendance Correlates with Readiness Maryland Model for School Readiness, 2010-2011



The amount of time a child spends per day in an early learning program, as well as the consistency of attendance, are highly correlated with school readiness.

- A recent study by the Annie E. Casey Foundation links chronic absenteeism with an increased likelihood of poor academic performance, disengagement from school, and behavioral problems.
- The National Center for Children in Poverty reports that chronic absenteeism among kindergartners is associated with substantially lower academic performance, especially among Hispanic/Latino children.
- A Montgomery County Public Schools report connects full-day PreK with increased kindergarten literacy skills.

Sources: Sarah D. Sparks, "Districts Begin Looking Harder at Absenteeism," *Education Week*, October 6, 2010.
 Marijosé Romero and Young-Sun Lee, "A National Portrait of Chronic Absenteeism in the Early Grades," National Center for Children in Poverty, October 2007.
 Laura Bornfreund, "Better Literacy Skills Linked to a Full Day of Pre-K," Early Education Initiative, New America Foundation, May 23, 2010.



Attendance Correlates with Readiness Maryland Model for School Readiness, 2010-2011



In Maryland:

- Jurisdictions that offer full-day programs to 100% of PreK students rank in the top quartile for overall school readiness, including children from low-income households.
- Jurisdictions that serve the greatest percentage of 4-year-olds (more than 75%) through the public PreK program exhibited higher school readiness than the statewide average.
- There is a 95.3% attendance rate statewide for elementary school children, with 6.2% of students chronically absent (more than 20 days of the 180-day school year).
- Jurisdictions with the fewest chronically absent children have the highest percentage of kindergarteners who are fully school-ready.



Most Jurisdictions Gain Ground Maryland Model for School Readiness, 2010-2011



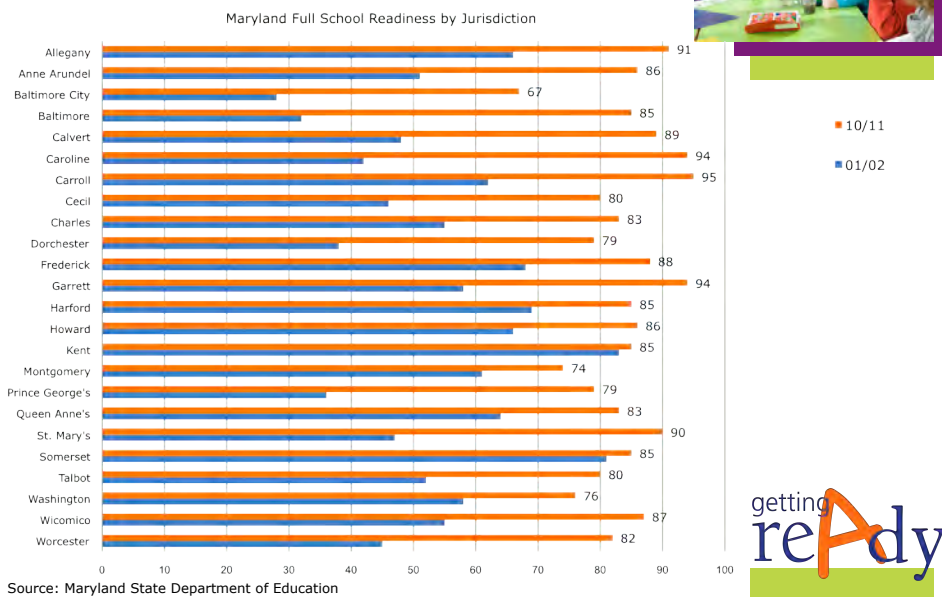
Jurisdiction	01/02	09/10	10-Year		1-Year	Total K
			10/11	Result		
Maryland	49	78	81	32	3	62,701
Allegany	66	89	91	25	2	588
Anne Arundel	51	84	86	35	2	5,737
Baltimore	32	83	85	53	2	7,767
Baltimore City	28	64	67	39	-3	6,722
Calvert	48	81	89	41	8	1,049
Caroline	42	89	94	52	5	409
Carroll	62	96	95	33	-1	1,852
Cecil	46	80	80	34	0	1,131
Charles	55	77	83	28	6	1,662
Dorchester	38	66	79	41	13	331
Frederick	58	87	88	20	1	2,986
Garrett	58	94	94	36	0	302
Harford	69	82	85	16	3	2,684
Howard	66	82	86	20	4	3,393
Kent	53	81	85	2	4	156
Montgomery	61	76	74	13	-2	10,954
Prince George's	36	65	79	43	11	9,276
Queen Anne's	54	90	83	19	-7	556
Somerset	81	81	85	4	4	226
St. Mary's	47	92	90	43	-2	1,290
Talbot	52	78	80	28	2	321
Washington	58	73	76	18	3	1,631
Wicomico	55	85	87	32	2	1,174
Worcester	45	81	82	37	1	464

Impressive Progress

- All 24 jurisdictions made nine-year gains.
- 18 jurisdictions reported higher school readiness from 2009-2010.
- 17 jurisdictions have full school readiness levels above the statewide average (81% fully ready in 2010-2011).



Most Jurisdictions Gained Ground Maryland Model for School Readiness, 2010-2011



Let's Use What We've Learned Maryland Model for School Readiness, 2010-2011



Call to Action

- This year's MMSR data reveal more ways in which we can use what we know for the benefit of every young child in Maryland.
- Let's join efforts, in all of our varying roles, to make certain that the crucial window of our children's earliest years opens them up to a lifetime of possibilities.
- For all of us in Maryland, children's school readiness doesn't cost. It pays.

