



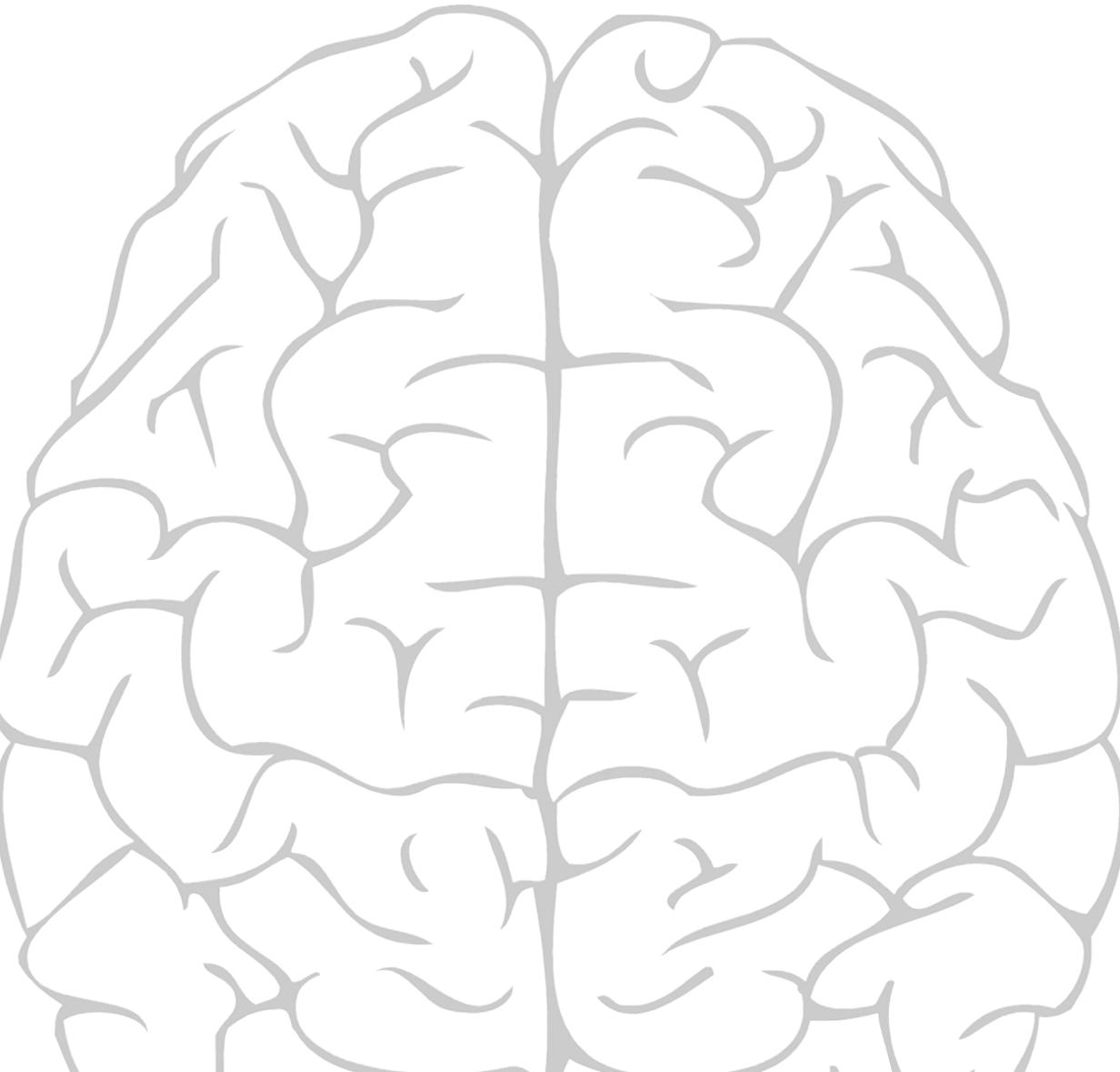
The class of 2025: What does the future hold for the children born in Shelby County in 2006?



|A|

It is critical to make the connection between children's early experiences, their lifetime achievements, and the community we will become.

Making critical connections



The brain's early architectural foundations affect lifelong learning.

Child



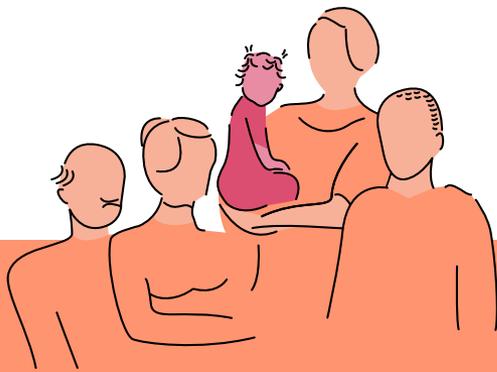
**80% of the brain develops
between conception and age three.**

A baby's brain will grow at an astonishing rate during the early years.

Neurons develop connecting synapses. Experience and repetition strengthen critical connections.



Family



Developmentally appropriate learning experiences can affect feelings and advance vision, language and movement.

Lack of family resources (nutrition, health care, developmentally appropriate stimulation) can negatively impact early childhood brain development.



Stimulation helps a child's brain grow in power and intelligence.

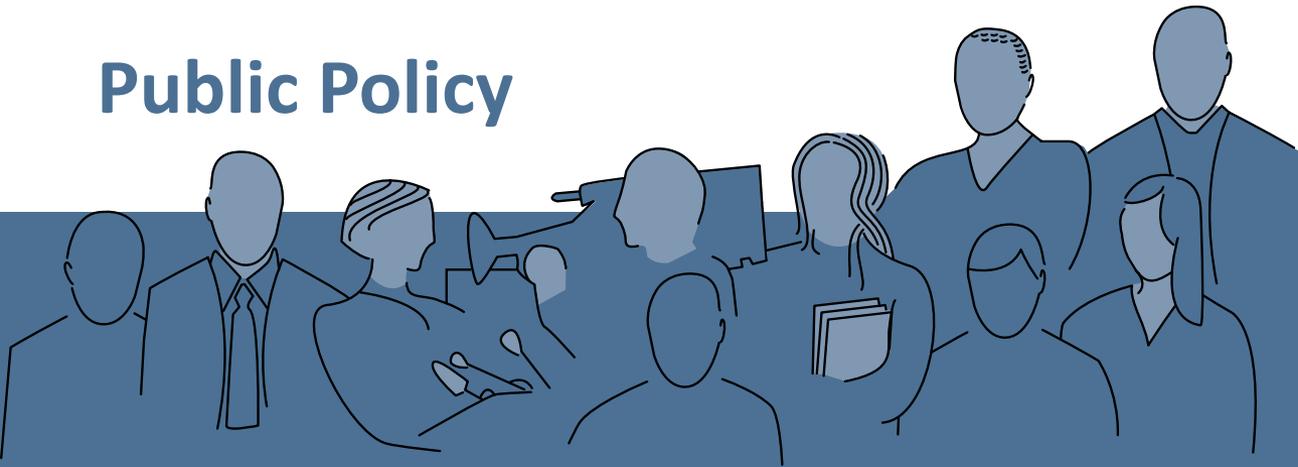
Community



Social environments lacking basic resources are the highest public health risk for serious illness and premature death.

- healthy food,
- safe housing,
- living-wage jobs,
- decent schools,
- supportive social networks,
- access to health care,
- other public and private goods and services.

Public Policy



Early childhood experiences influence lifetime achievements.

Problems in early childhood development cause high long-term costs to society.

Insecure emotional attachment and poor stimulation can lead to

- ↓ readiness for school,
- ↓ educational attainment,
- ↑ problem behavior,
- ↑ risk of social marginalization in adulthood.

Slow or retarded physical growth

- in infancy is associated with
- ↓ cardiovascular, respiratory, pancreatic and kidney development and function,
 - ↑ risk of illness in adulthood.



“Social Determinants of Health: The Solid Facts”
(World Health Organization 2003).



The city we will be in 2025 depends on the children
born in 2006...

→ See Chapter B.



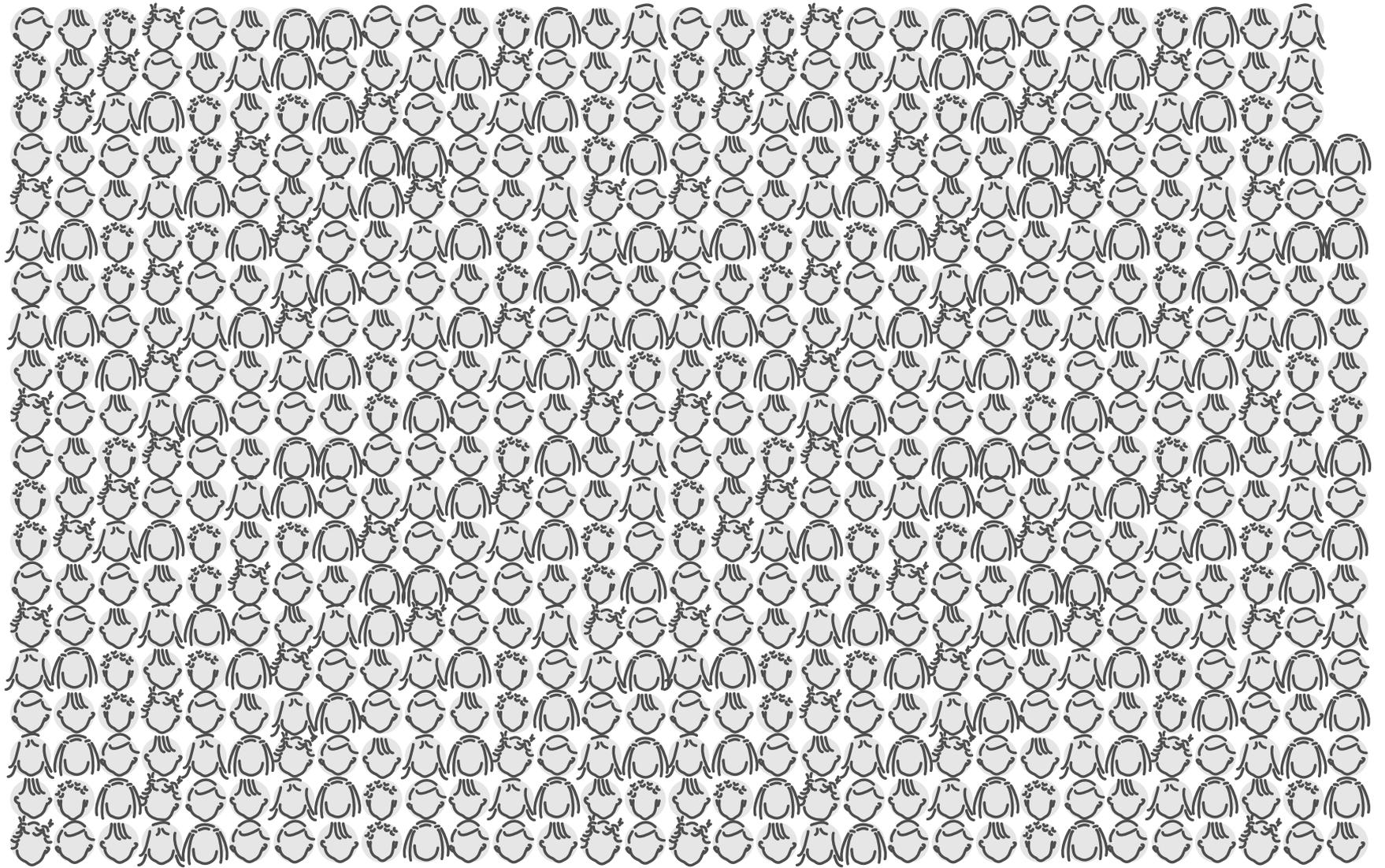
| B |

What do we know about the demographics and earliest experiences of the youngest Memphians?

The children born in 2006...

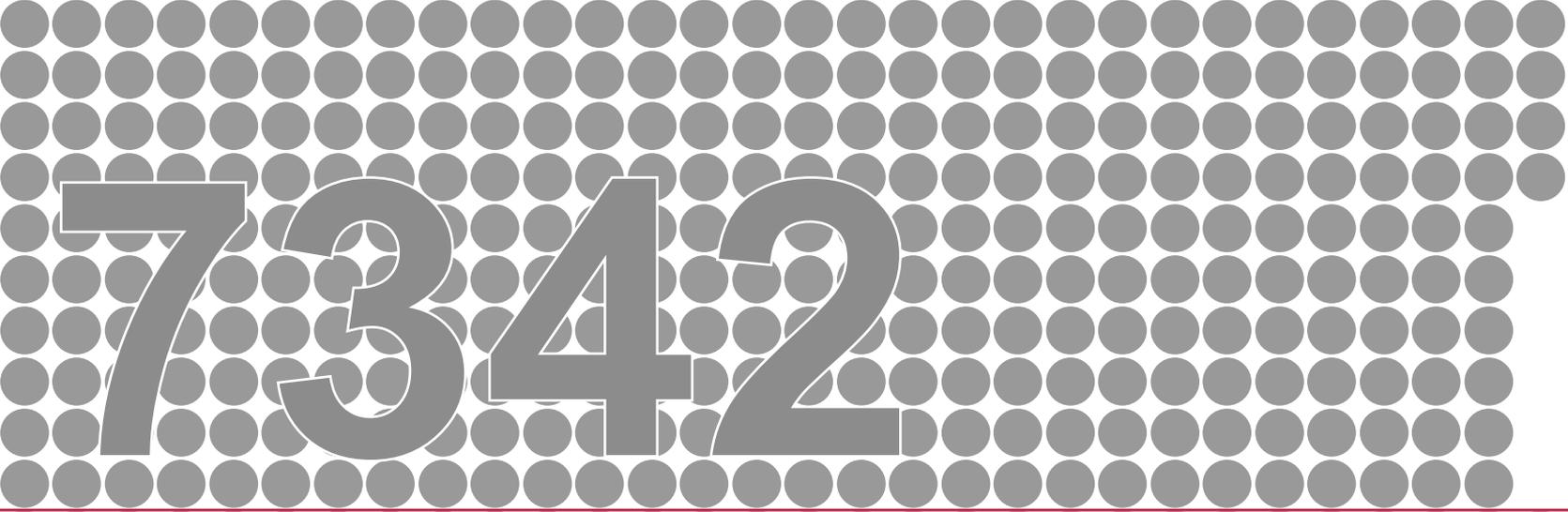


→ will enter kindergarten in 2012,
→ should graduate from high school in 2025.

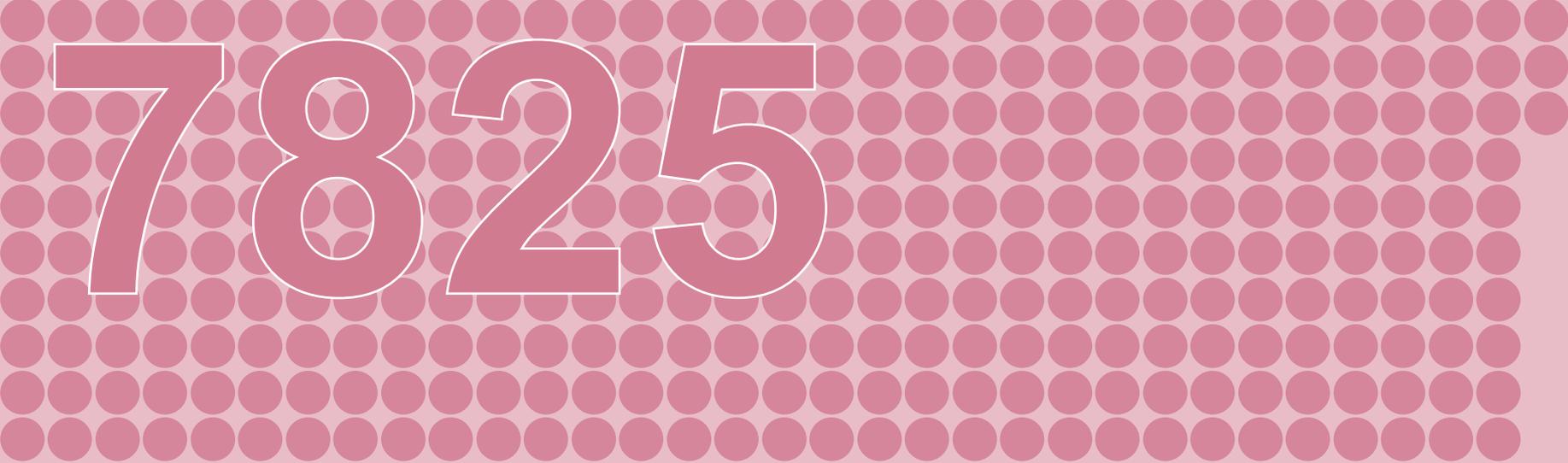


 = 25 children

15,167 children were born in Shelby County in 2006.



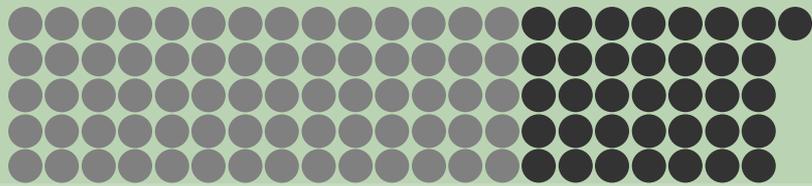
7342



7825

 = 25 children

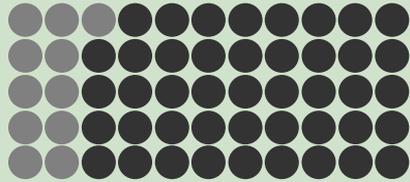
More than half of these children were born into families with income below the national poverty line.



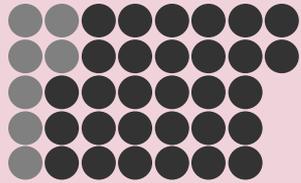
1742 white | 390 black
2378 children were born into
wealthy families. (\$75K and more)



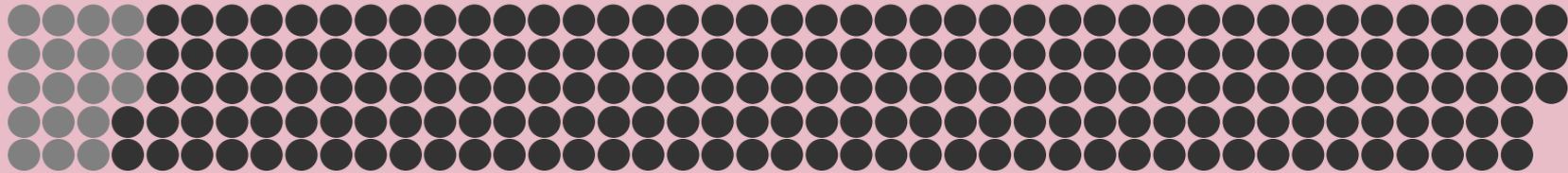
1704 white | 1467 black
3596 children were born into
middle class families. (\$25K-75K)



286 white | 847 black
1368 children were born into
low income families. (\$15K - 25K)



167 white | 739 black
1171 children were born into
poverty. (\$10K-15K)



438 white | 5130 black
6654 children were born into
dire poverty. (\$10K or less)

● = 25 white children
● = 25 black children

Children in families below the national poverty line lack access to basic resources.

Where do young children live in Shelby County?



Children Five Years of Age and Under in Shelby County by Zip Code

Where are young children most likely to live in poverty?



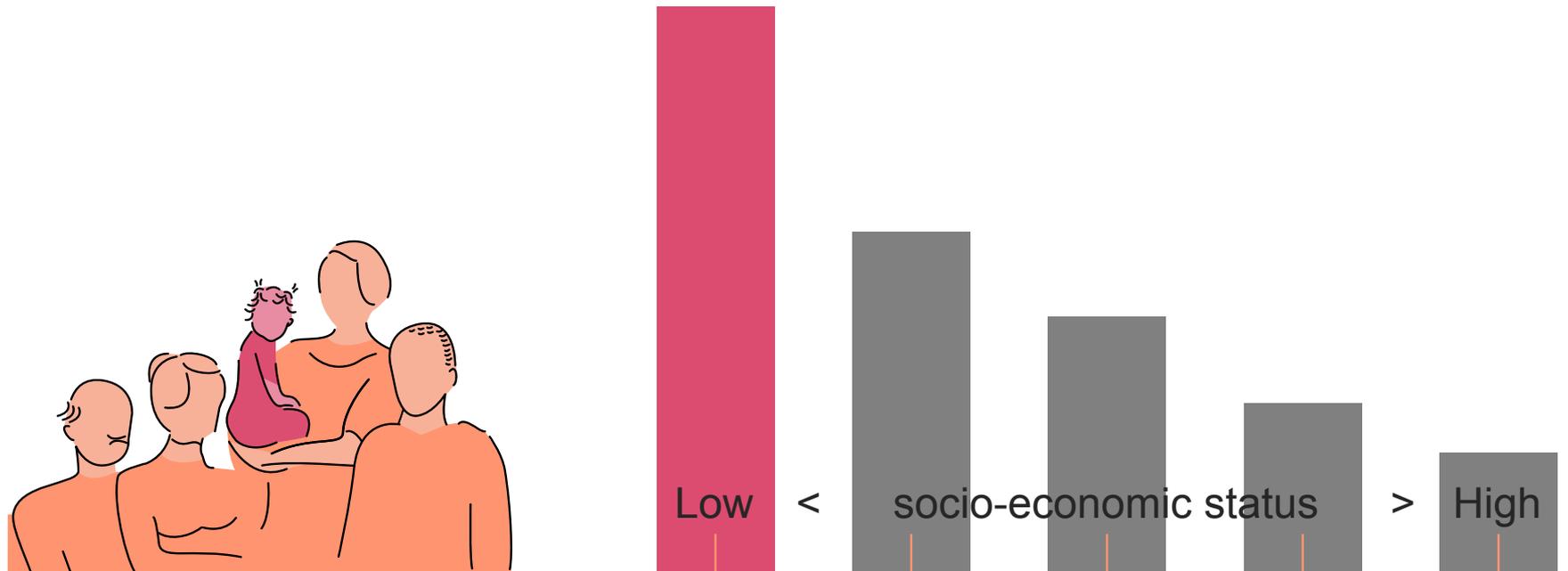
Children Five Years of age and Under Below Poverty in Shelby County by Zip Code

Differences in the experiences of young children by socioeconomic status

Differences in the experiences of young children by socioeconomic status

Lee and Burkam 2002

48.2% 29.3% 22.4% 14.7% 10.2%



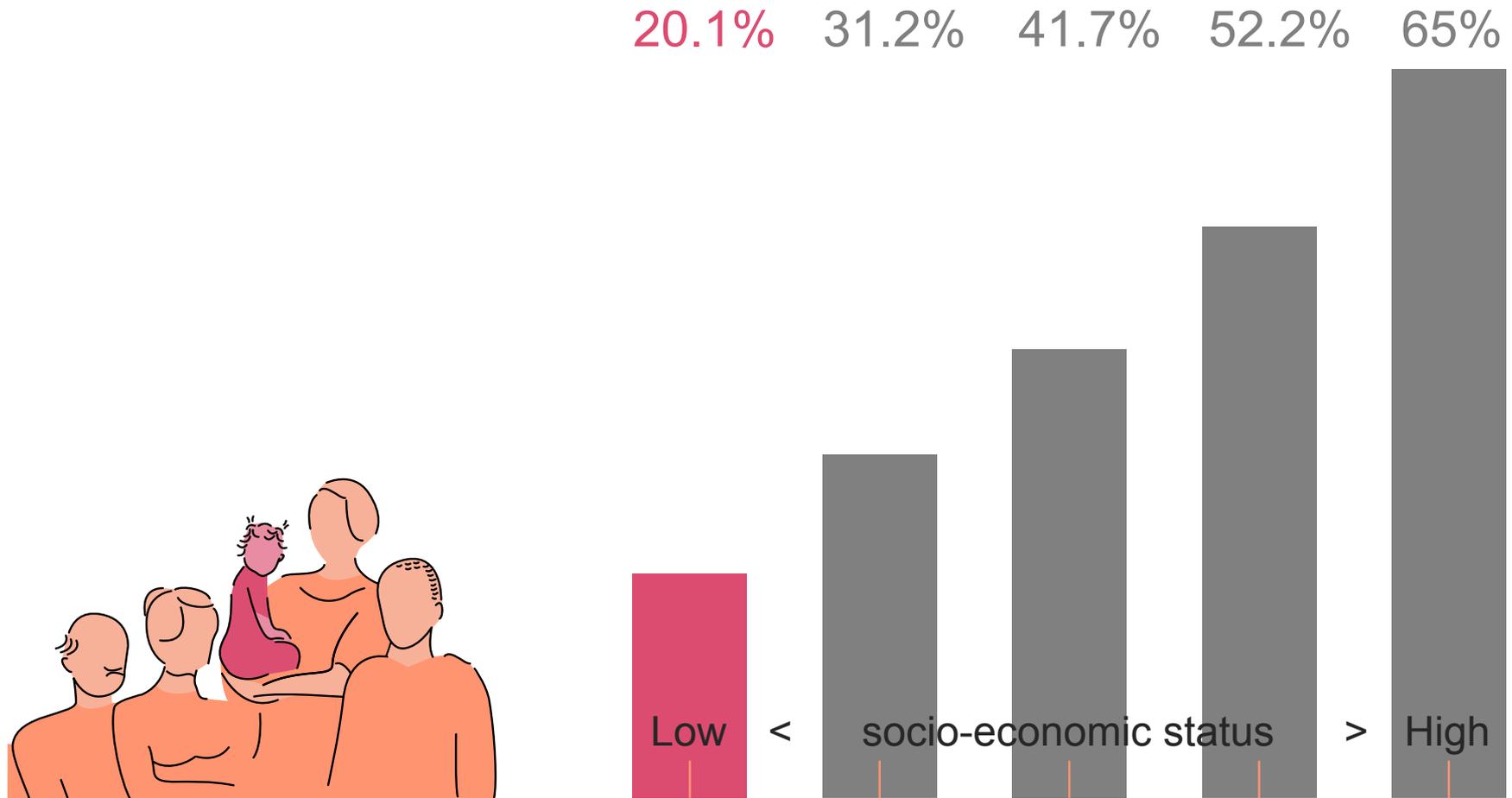
Children in families with low SES are
→ more likely to be raised in single-parent homes

| B | What do we know about the demographics and earliest experiences of the youngest Memphians?

The Class of 2025 | Center for Urban Child Policy | www.theurbanchildinstitute.org/cucp | Doug Imig, Ph.D. | dimig@memphis.edu | 901.678.1360

Differences in the experiences of young children by socioeconomic status

Lee and Burkam 2002



Children in families with low SES are

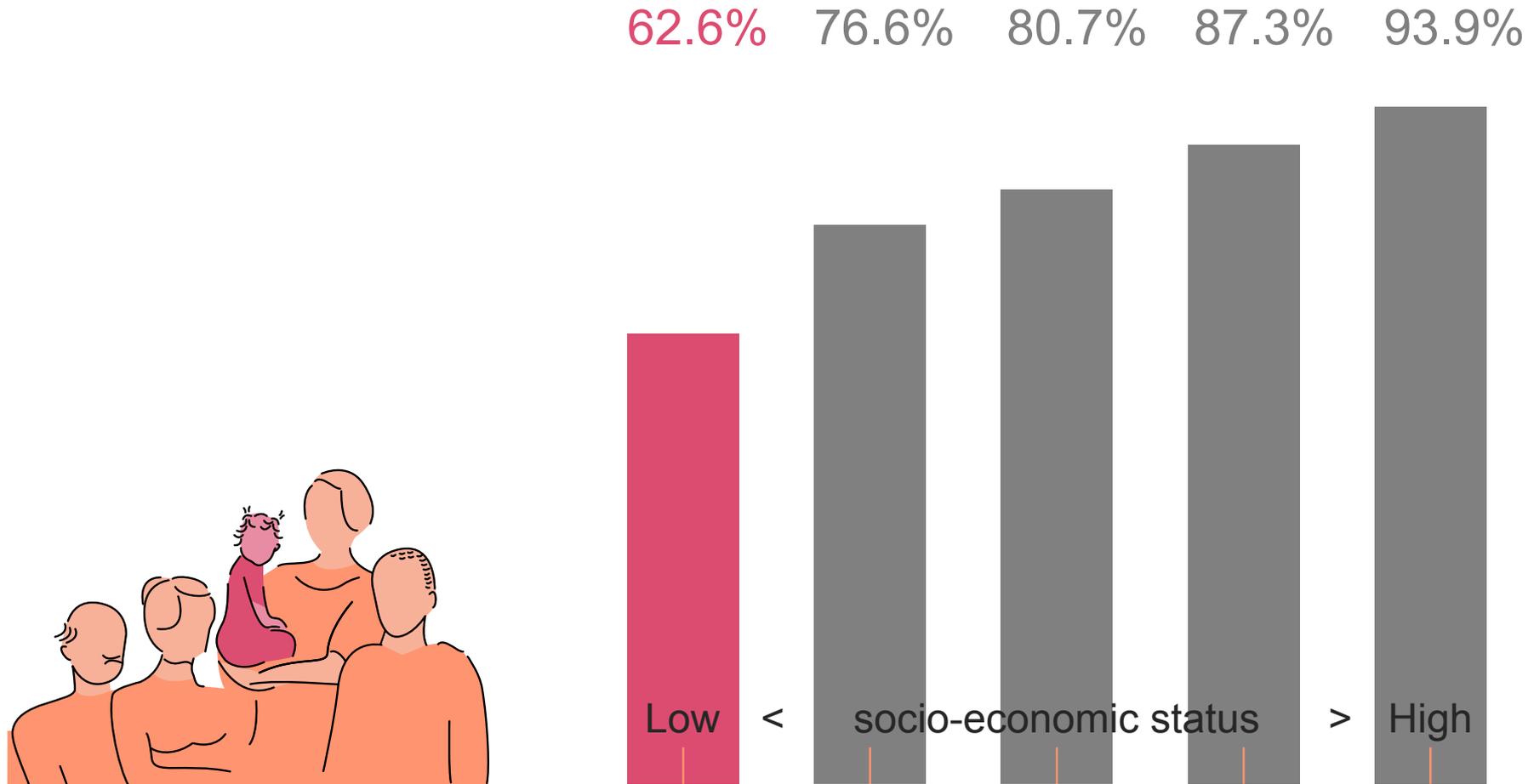
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Differences in the experiences of young children by socioeconomic status

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Children in families with low SES are

→ less likely to be read to frequently (3+ times a week).

| B | What do we know about the demographics and earliest experiences of the youngest Memphians?

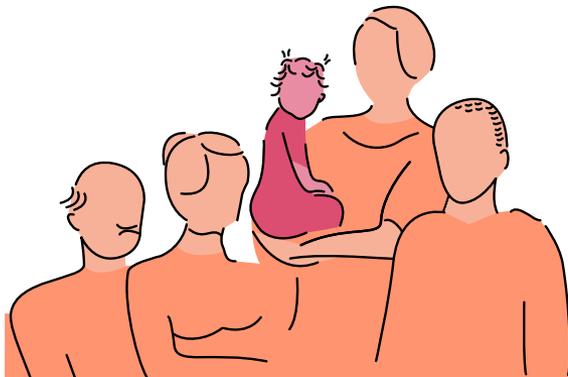
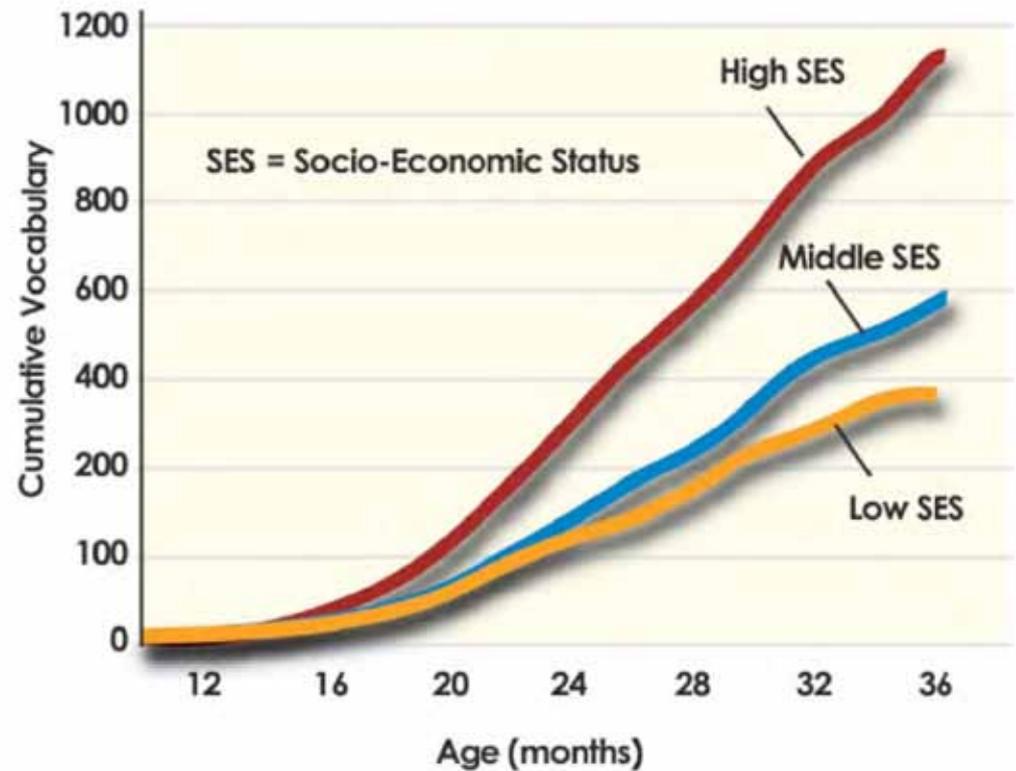
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Differences in the experiences of young children by socioeconomic status

Hart & Risley, 1995



Disparities in Early Vocabulary Growth



Children in families with low SES are
→ more likely to lack in early vocabulary development

| B | What do we know about the demographics and earliest experiences of the youngest Memphians?

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The effects of an unequal start in life follow children through school.

In MCS 83% of all students are from low-income families (< 185% FPL).

In 80% of schools more than 1/3 of all the students change schools each year.

↑ drop out

↑ behavior problems

↑ poverty rates

↓ lifetime earnings

↓ job stability

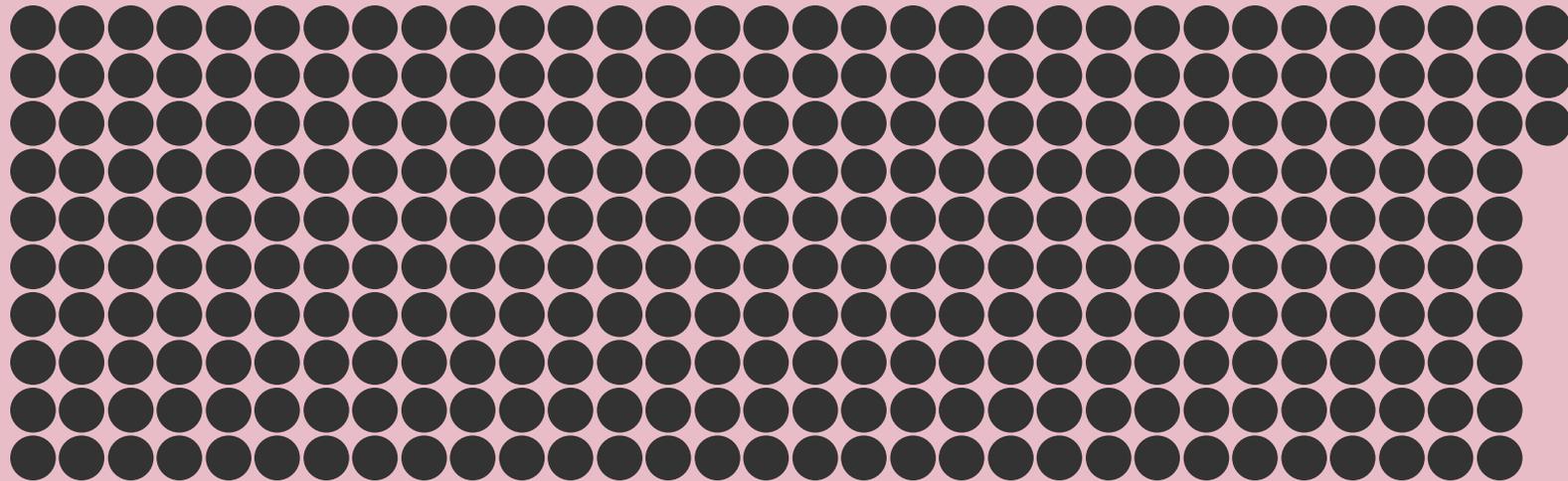
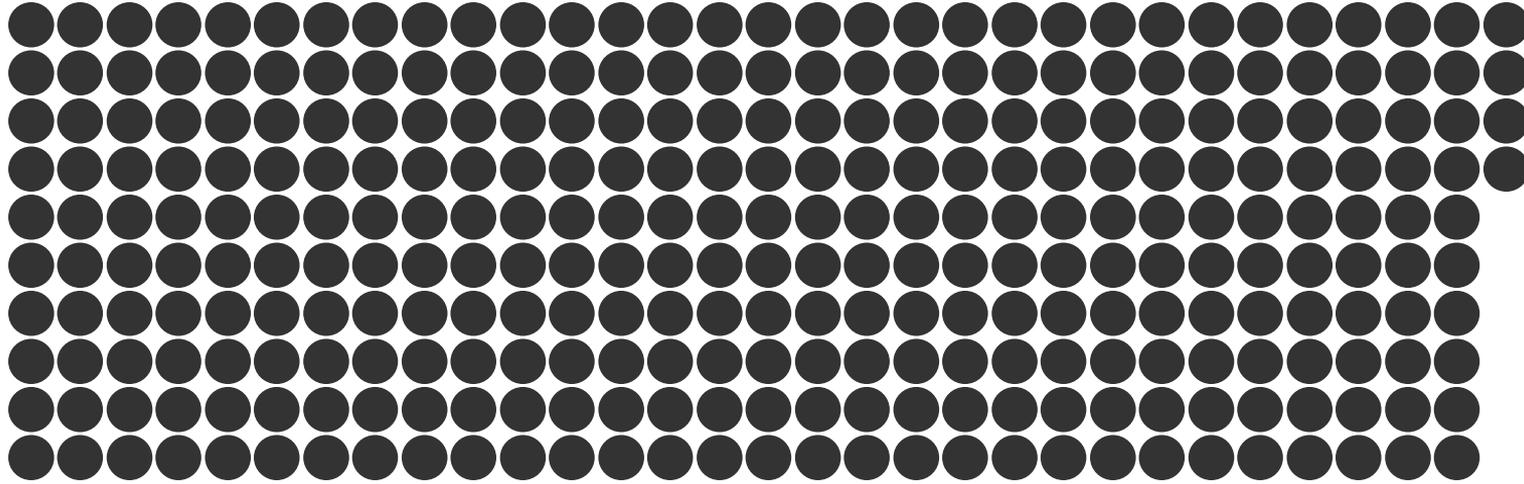
(Rumberger & Larson, 1998)

In every school district in the U.S., low-income students trail behind their more affluent peers.

| B | What do we know about the demographics and earliest experiences of the youngest Memphians?

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7342 HAVE ACCESS TO RESOURCES

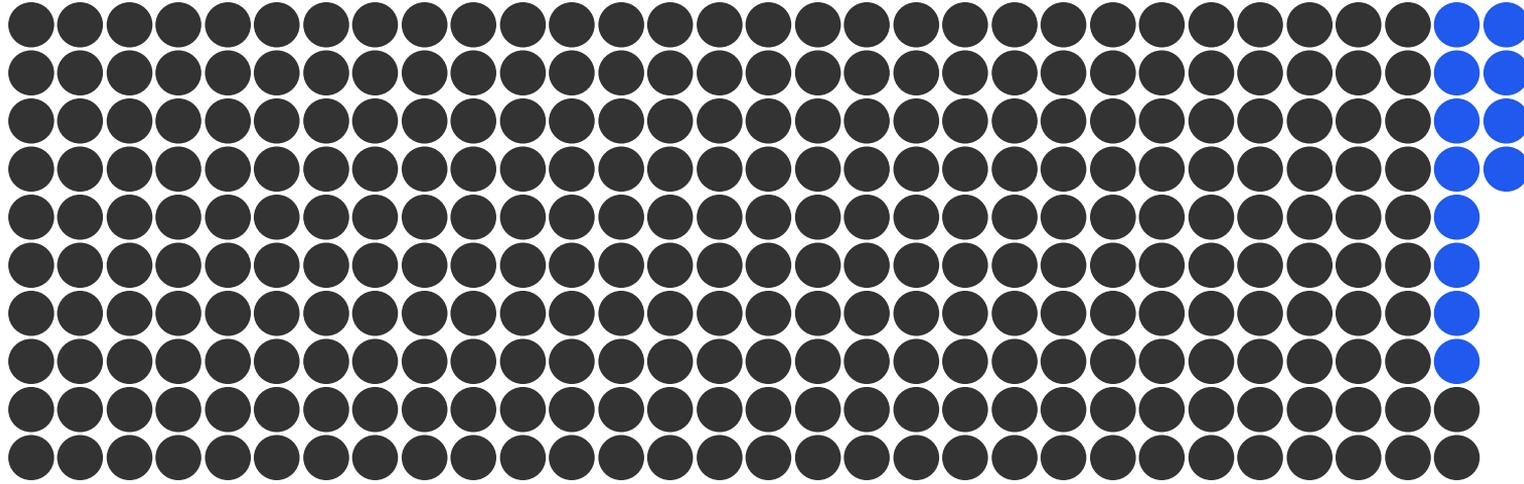


7825 LACK ACCESS TO RESOURCES

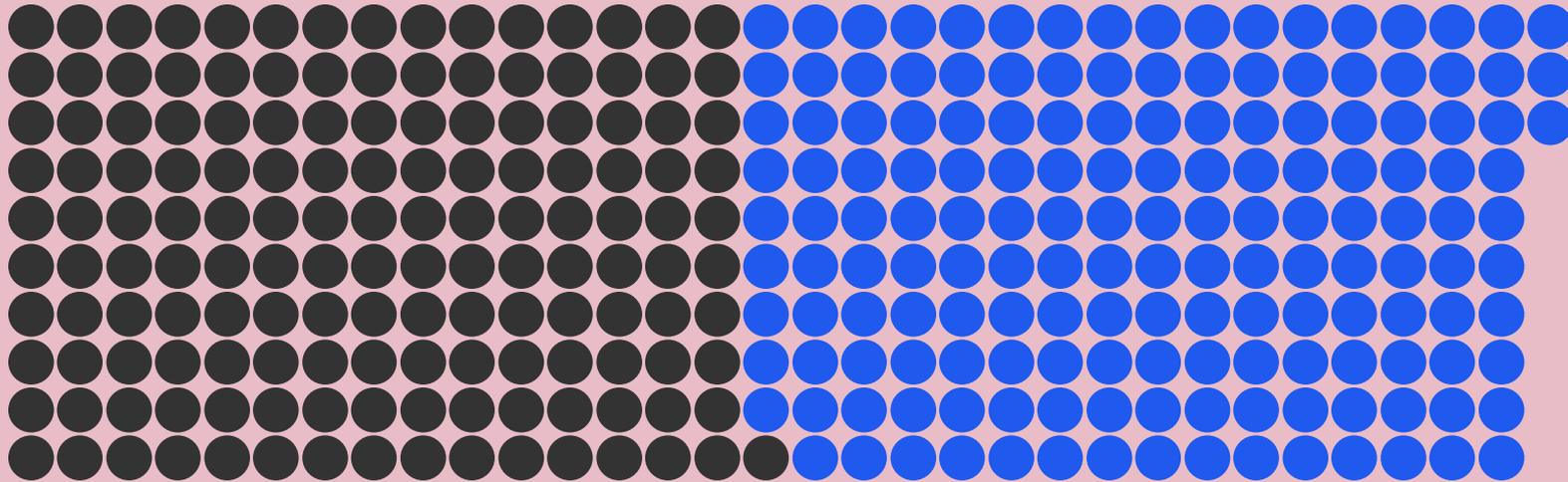
● = 25 children

Lacking access to basic resources will impact the chances in life for those 7825 children...

7342 HAVE ACCESS TO RESOURCES



294
will drop
out of high
school



4045
will drop
out of high
school

7825 LACK ACCESS TO RESOURCES

● = 25 children

High school drop outs

Total cost to Memphis/Shelby County: \$55,201,184

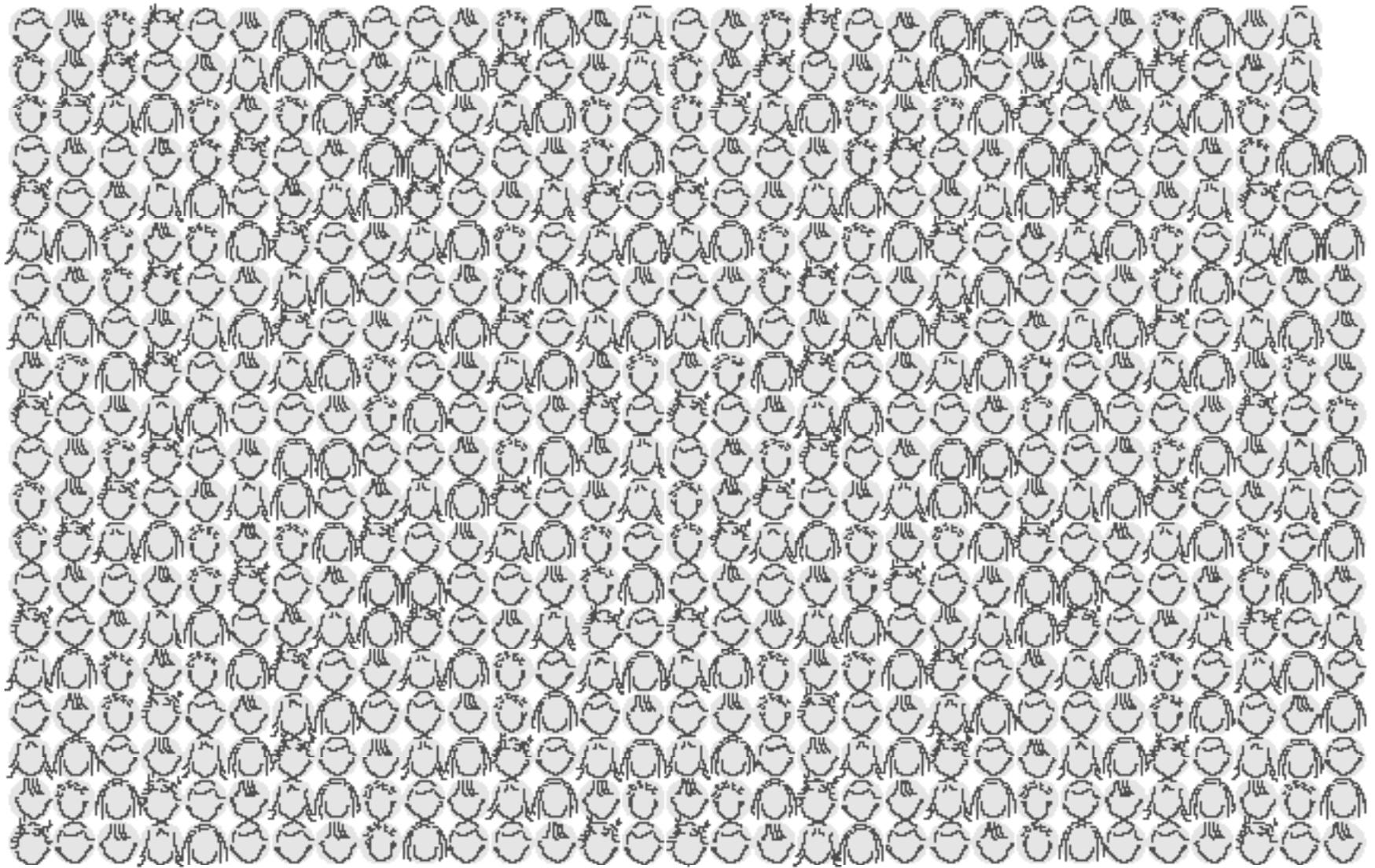


How would we change the life-trajectory for these
children in Memphis?

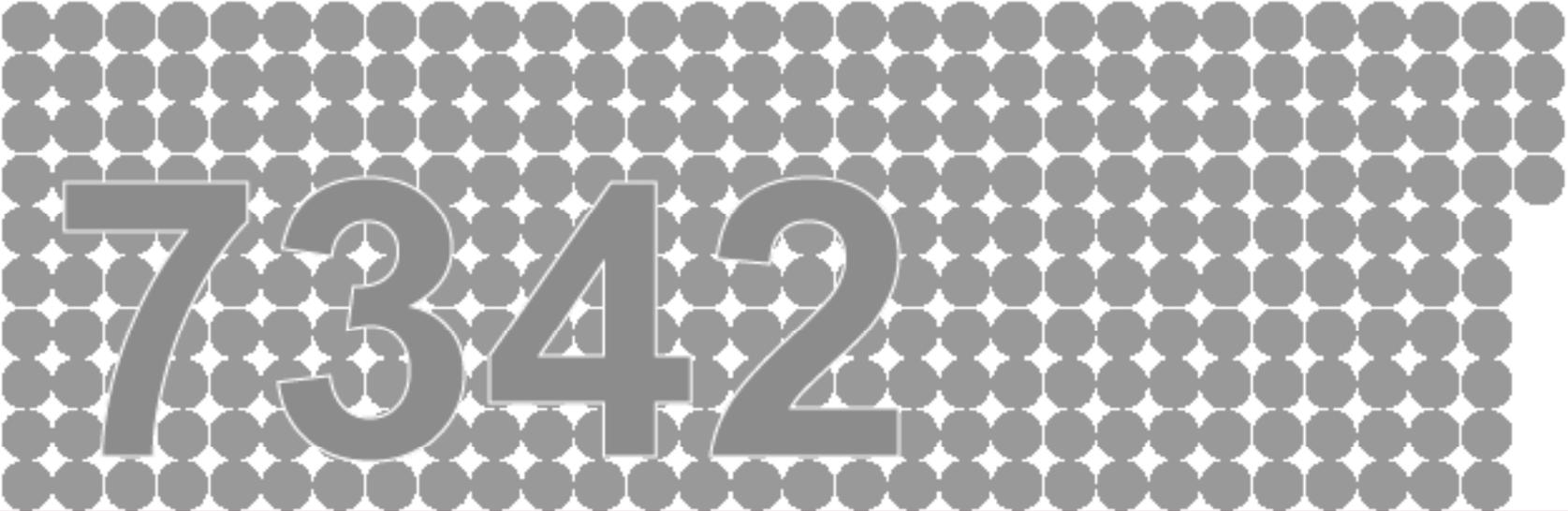
→ See Chapter C.

A dark silhouette of a city skyline is positioned at the top of the page. It features a variety of building shapes, including a large pyramid on the left, several rectangular skyscrapers of varying heights, and a building with a pointed roof on the right. The background is a solid dark teal color.

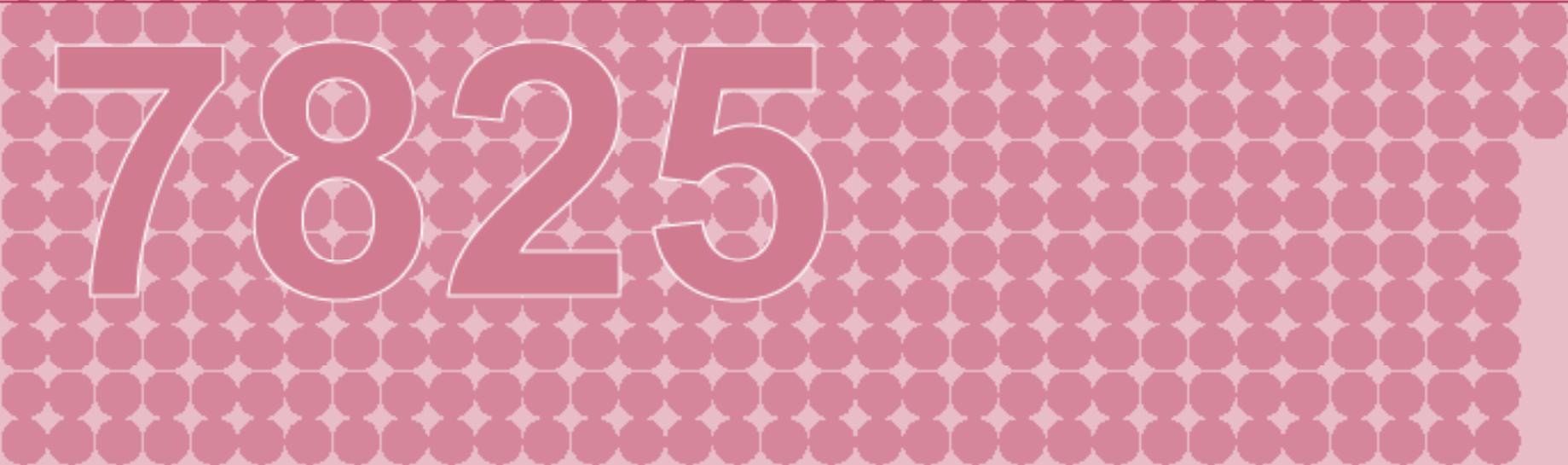
Children in poor families
lack access to basic resources.



15,167 children were born in Shelby County in 2006.



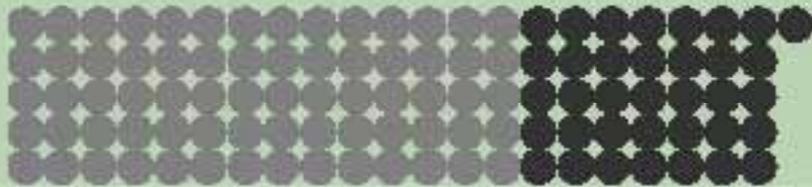
7342



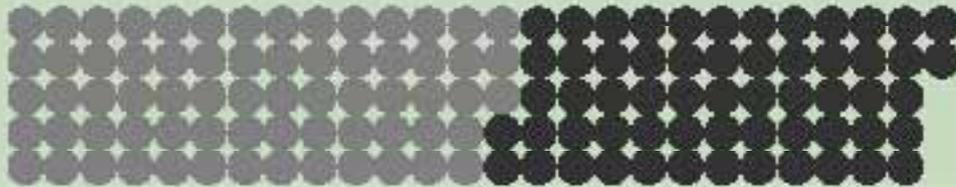
7825

 - 25 children

More than half of these children were born into families with income below the national poverty line.



1742 white | 390 black
 2378 children were born into
 wealthy families. (\$75K and more)



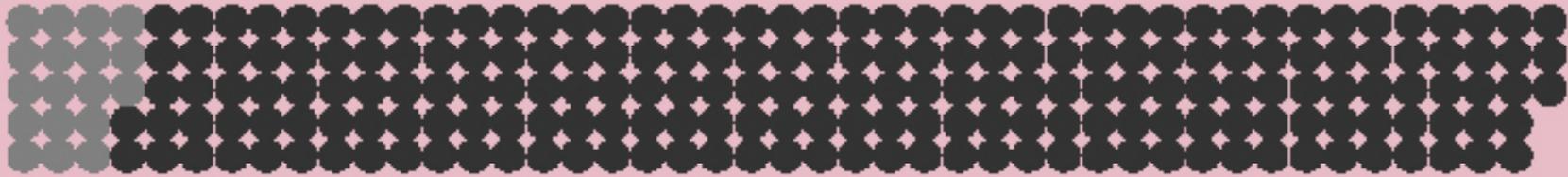
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 1171 children were born into
 poverty. (\$10K-15K)



438 white | 5130 black
 6654 children were born into
 dire poverty. (\$10K or less)

● - 25 white children
 ● - 25 black children

Children in families below the national poverty line
 lack access to basic resources.



Does family income during Early Childhood matter?

Poverty in early childhood is strongly associated with negative adult outcomes.

(Dahl & Lochner 2008; Duncan 2009; Duncan et al. forthcoming; Milligan & Stabile 2008).

Low family income

→ creates disadvantaged conditions in a poor household

→ impacts adult outcomes

Earlier childhood is most critical (prenatal to age 5).



Compared to children in families above twice the poverty line, children who grow up in poverty will have more negative adult outcomes.

As adults, poor children:

- ↓ Completed **two fewer years** of school
- ↓ Worked 451 **fewer** hours / yr.
- ↓ Received \$826 more in food stamps / yr.
- ↓ Are nearly **3-times more likely** to report poor health
- ↓ Poor males are **more than twice as likely** to be arrested
- ↓ Poor females are **more than five-times as likely** to bear children out of wedlock before age 21.

For children in poverty, a ***\$3,000 increase*** in family income during early childhood corresponds with:

↑ 1/5 standard deviation increase in children's achievement:

↑ Evident in both reading and math scores
(Milligan & Stabile 2008).

↑ Approx. 3 IQ point gain.

↑ 4 pts. Gain on Bracken Test of School Readiness (61 pt.)

↑ 19% higher annual earnings as adults

↑ 135 additional hours worked x yr.

Income effects are non-linear and stronger at lower income levels.

Duncan et al. forthcoming...

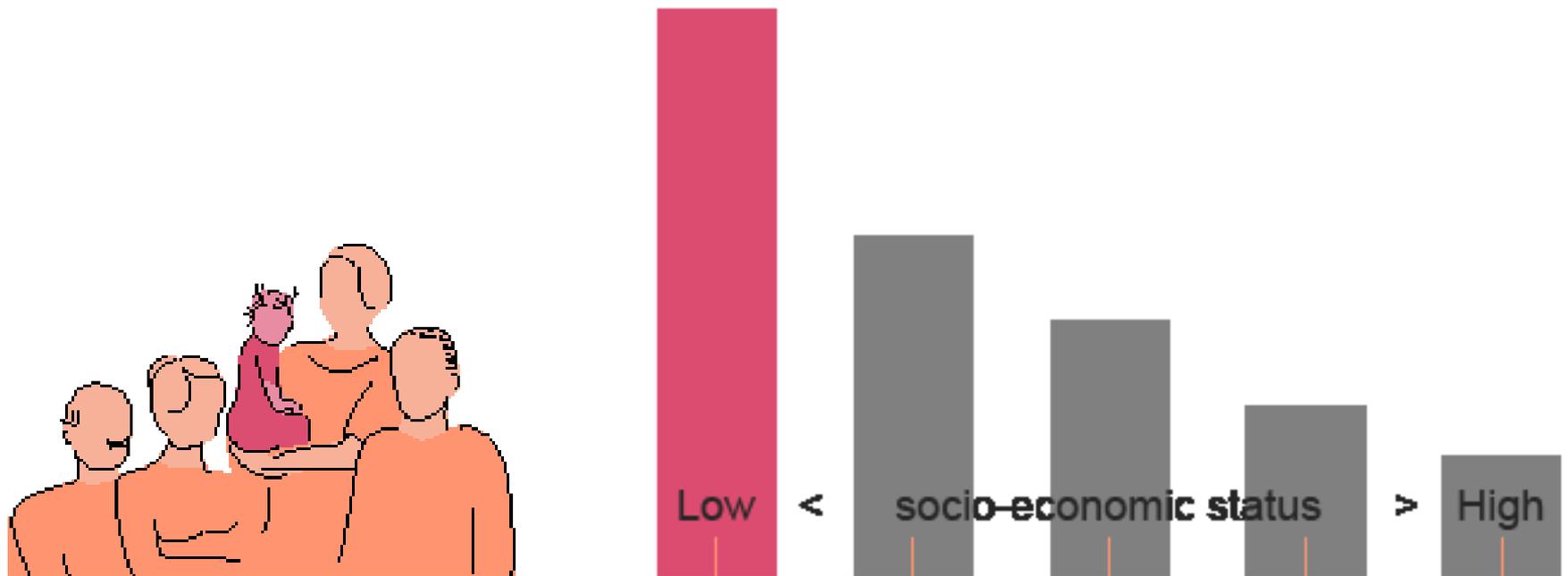
- 1968-2005 Panel Study of Income Dynamics
- Nationally representative sample of U.S. families and their children.
- Follows children from prenatal year until mid-30s.
- Measures income in every year of a child's life
- Distinguishing early & middle childhood and adolescence
- Specific childhood-stage increases in family income relate to adult achievement, social assistance, health & behavior...

Differences in the experiences of young children by socioeconomic status

Differences in the experiences of young children by socioeconomic status

Lee and Burkam 2002

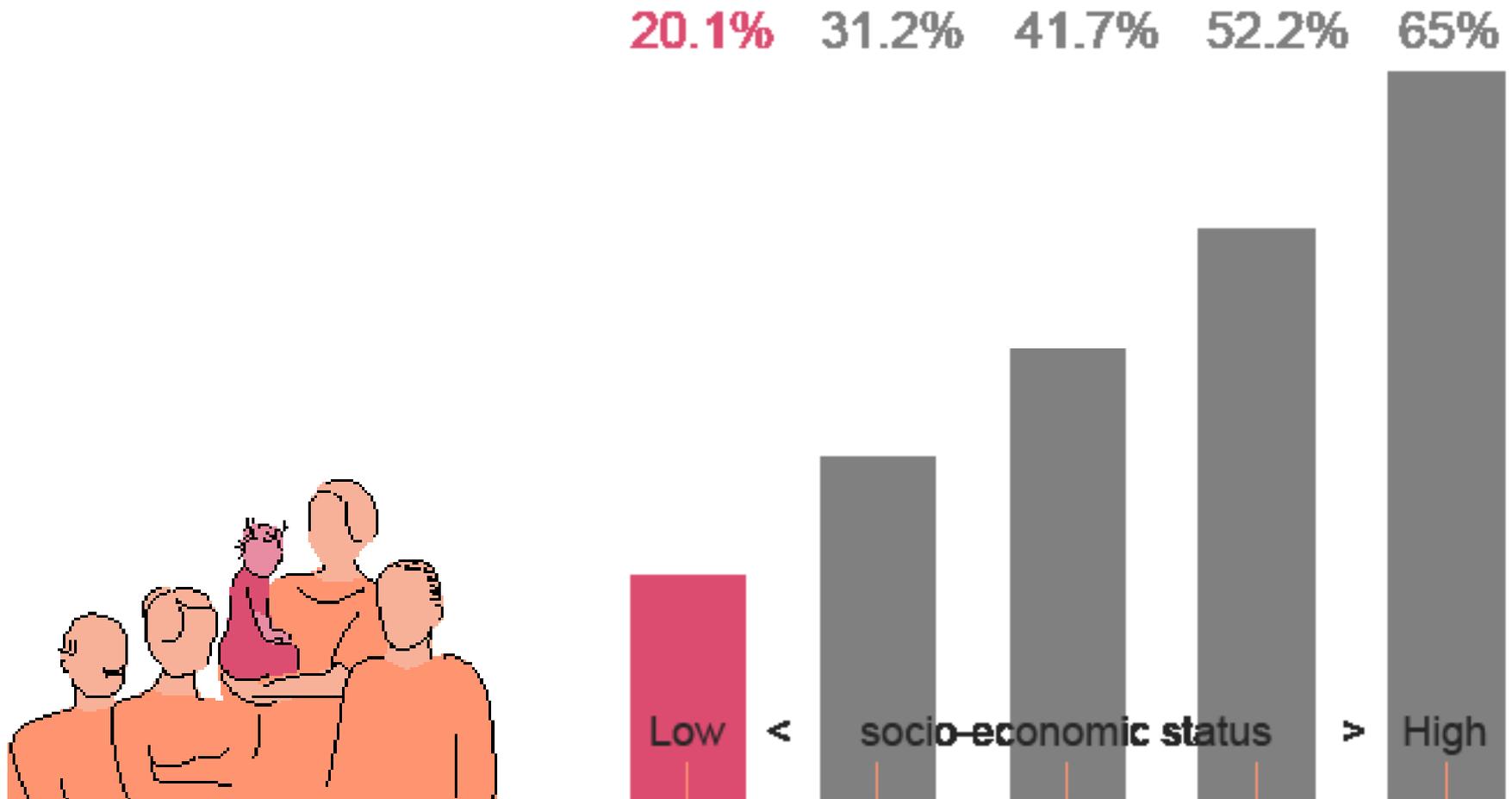
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Differences in the experiences of young children by socioeconomic status

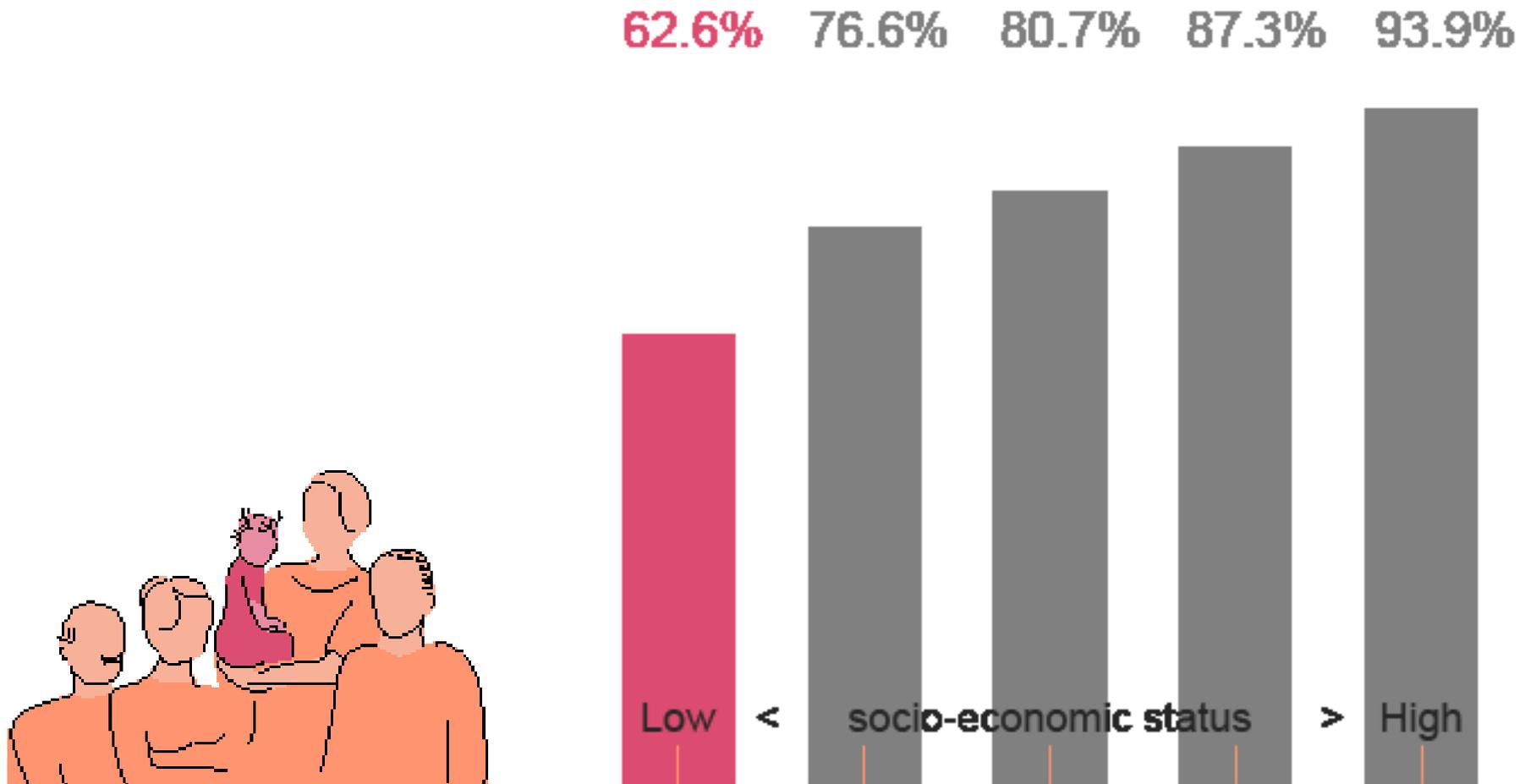
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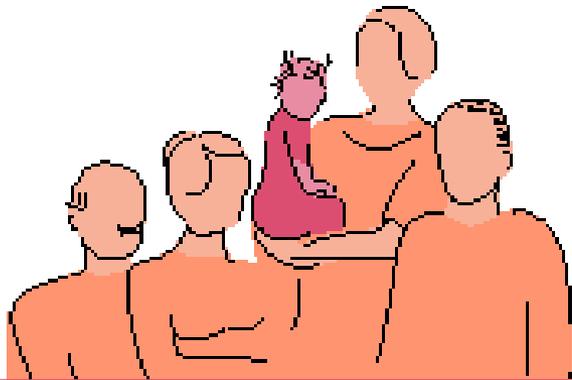
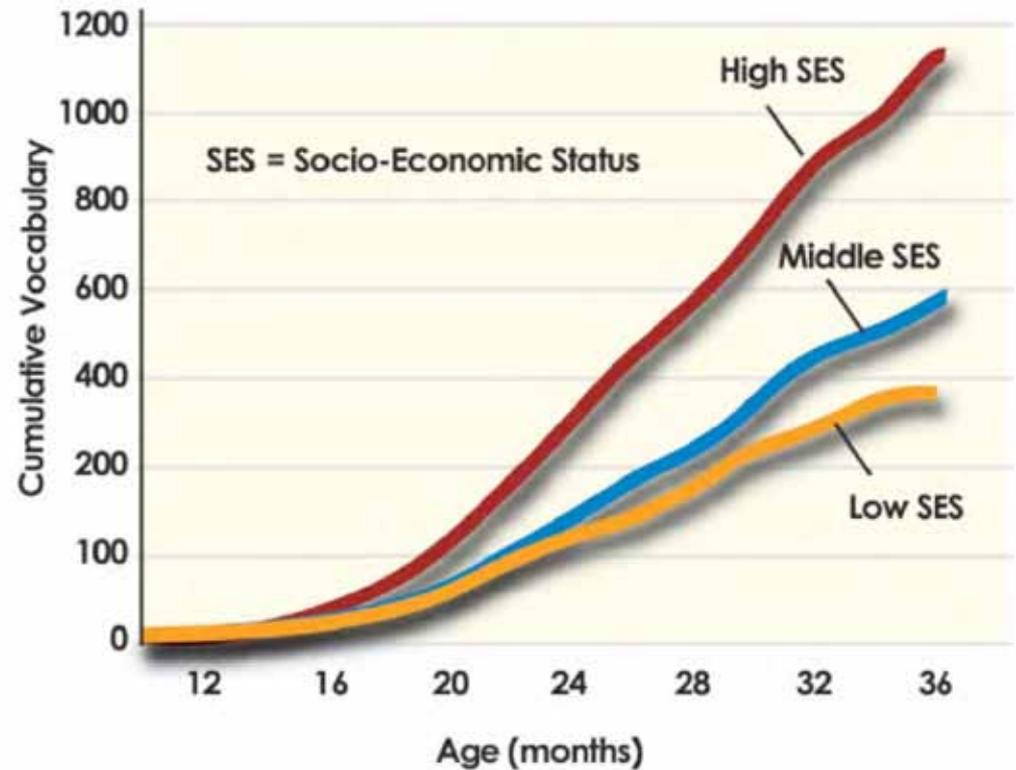
Differences in the experiences of young children by socioeconomic status

Hart & Risley, 1995



Center on the Developing Child
HARVARD UNIVERSITY

Disparities in Early Vocabulary Growth



Children in families with low SES are
→ more likely to lack in early vocabulary development



How would we change the life-trajectory
for these children in Memphis?



|C|

Changing the Life Trajectories through Interventions

What do we wish for all young children in Memphis?



All children have a rich, nurturing and stimulating environment where they feel safe, loved and wanted.

All children live in stable families, are born to parents who are not children themselves, who have finished school, who avoid crime and drugs and who delay parenting until they are emotionally and financially ready to choose parenthood.



**All children
reach school
ready to learn,
prepared for
academic –
and lifelong –
success.**



Goal-oriented results: What are the human and financial gains we're likely to see in our community as a result of interventions?

- ↑ Better readers (affecting Kindergarten readiness, test scores, & school success)
- ↑ More high school & college graduates.
- ↑ More stable families
- ↑ More employable/employed people
- ↓ Fewer days of work and school lost to illness.
- ↓ Lower crime rates (and lower costs associated with crime)...

How do we achieve these goals?

Abecedarian	High risk newborns randomly assigned to center based preschool (full-day, year-round, constructivist curriculum, on-site pediatric care, home visiting, parental support, school-age intervention)
Chicago Child Parent Centers	ages 3-9, low-income children, struggling in school, provided pre-K and after school care, parent training and coordination of services
High/Scope Perry	High-quality early childhood education for 3 and 4-year old disadvantaged children (all scored low on intelligence tests), 2.5 hrs a day, for 30 weeks, monthly small group meetings for parents; teacher home visits to model adult-child activities
Nurse Family Partnerships	single women pregnant with their first child, in poverty, lacking a high school diploma, provided home visitation, training in healthy behaviors and parenting skills
Seattle Social Development	low-income children ages 6-11, school-based program, coached in problem solving/conflict resolution training, teacher and parent training

Source: Feder and Clay 2002,
McCord 1986, Shonkoff 2007

Successful intervention program models

	Multigenerational; Parent Education/ Mentoring	Early Childhood Care and Education	Home Visitation	Case Management/ Advocacy
Abecedarian				
Chicago Child Parent Centers				
High/Scope Perry				
Nurse Family Partnerships				
Seattle Social Development				
Source: Feder and Clay 2002, McCord 1986, Shonkoff 2007				

Successful intervention program models encompass more than one aspect of child development strategy.

“Targeted interventions for young children, particularly between the ages of 0 and 3, can make a real difference in the lifetime outcomes of poor and low-income children”.

↓ Tangible costs such as special education, foster care, welfare, medical care, law enforcement, social security and social services.

↓ Intangible costs such as physical and emotional pain experienced by children with developmental delays and their families.





What do we know about the potential ROI for Memphis and Shelby County?

→ See Chapter D.

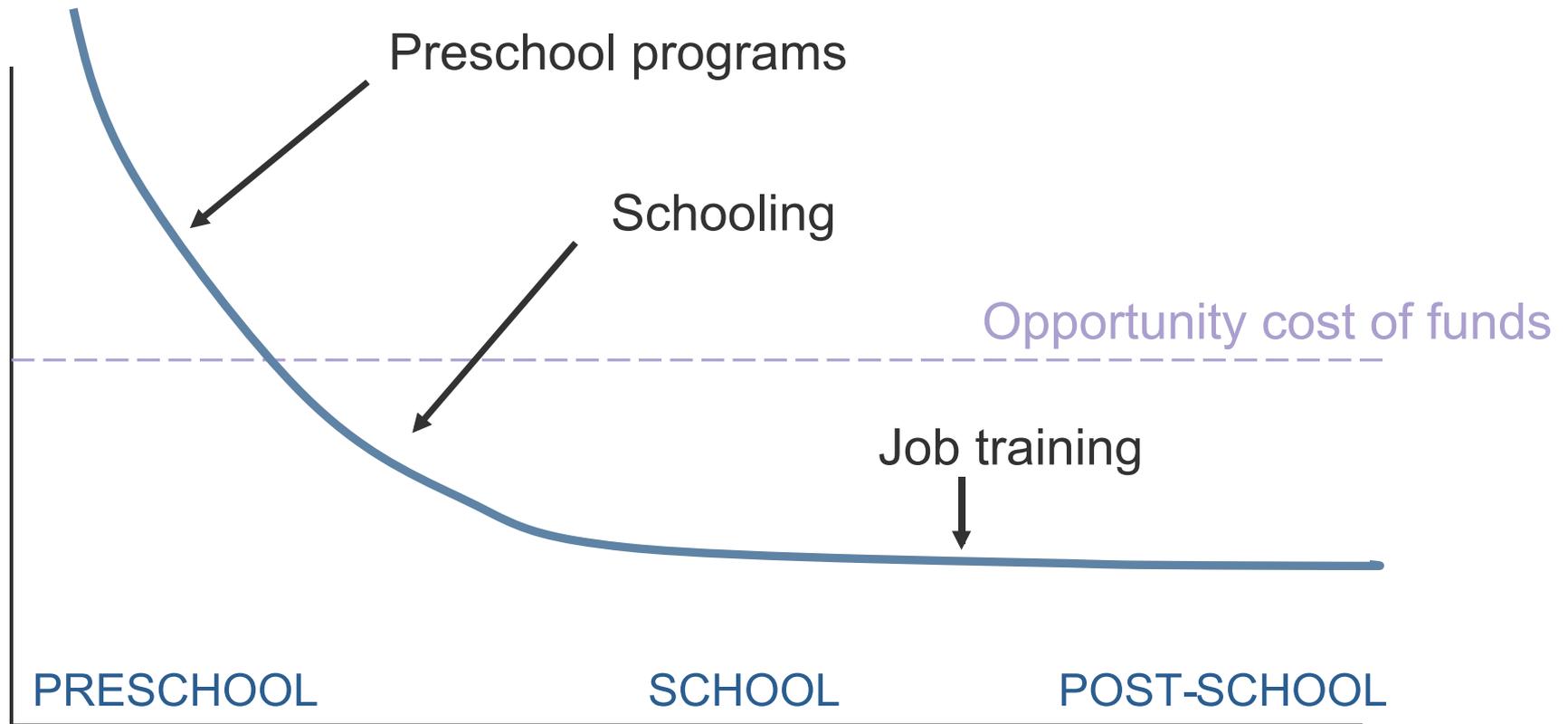


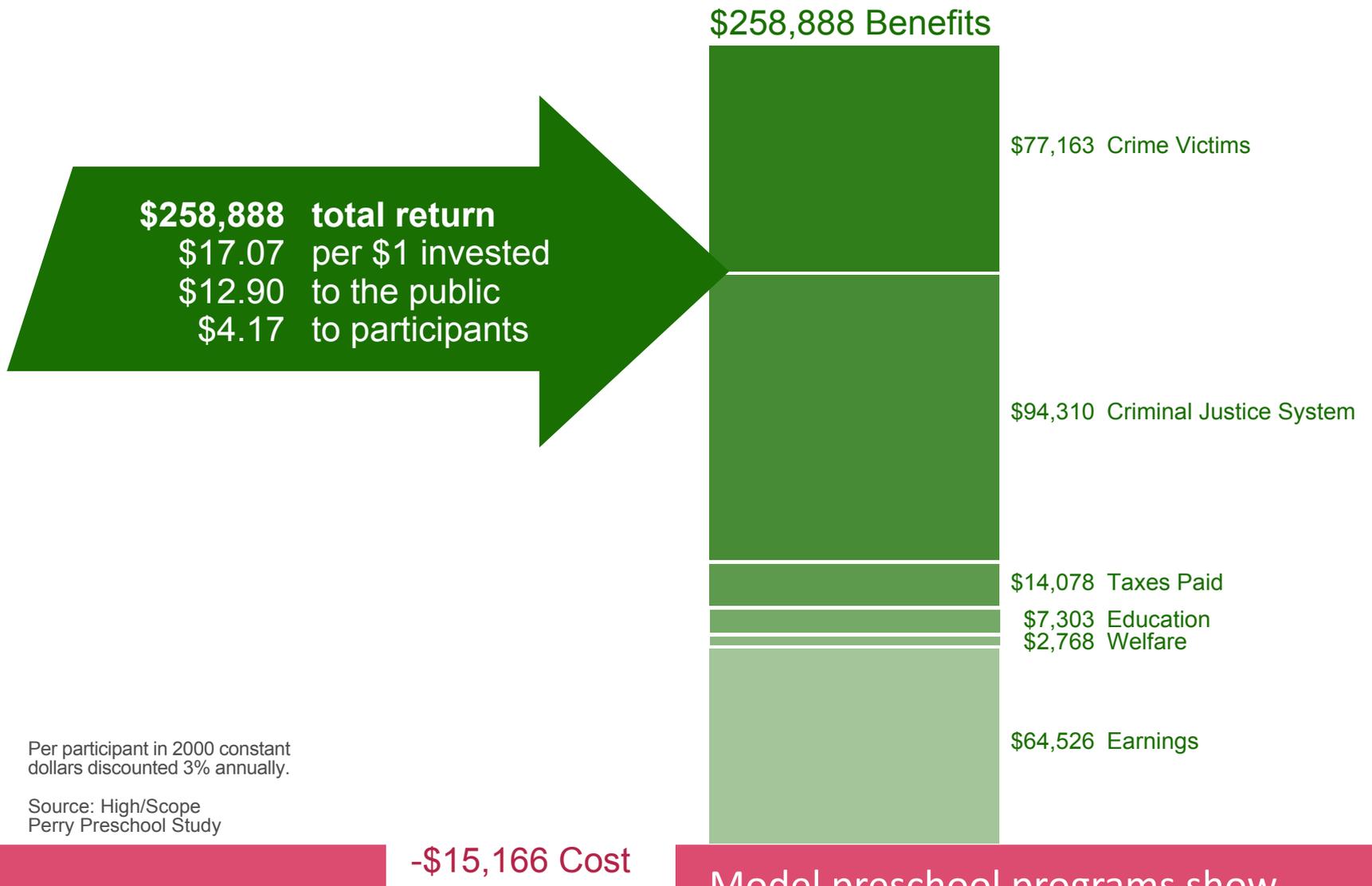
|D|

Return of Investment for Best Practice Interventions

Rates of return to investments in human capital

Investing in human capital –especially early on – shows great returns.





Model preschool programs show large returns on investment.

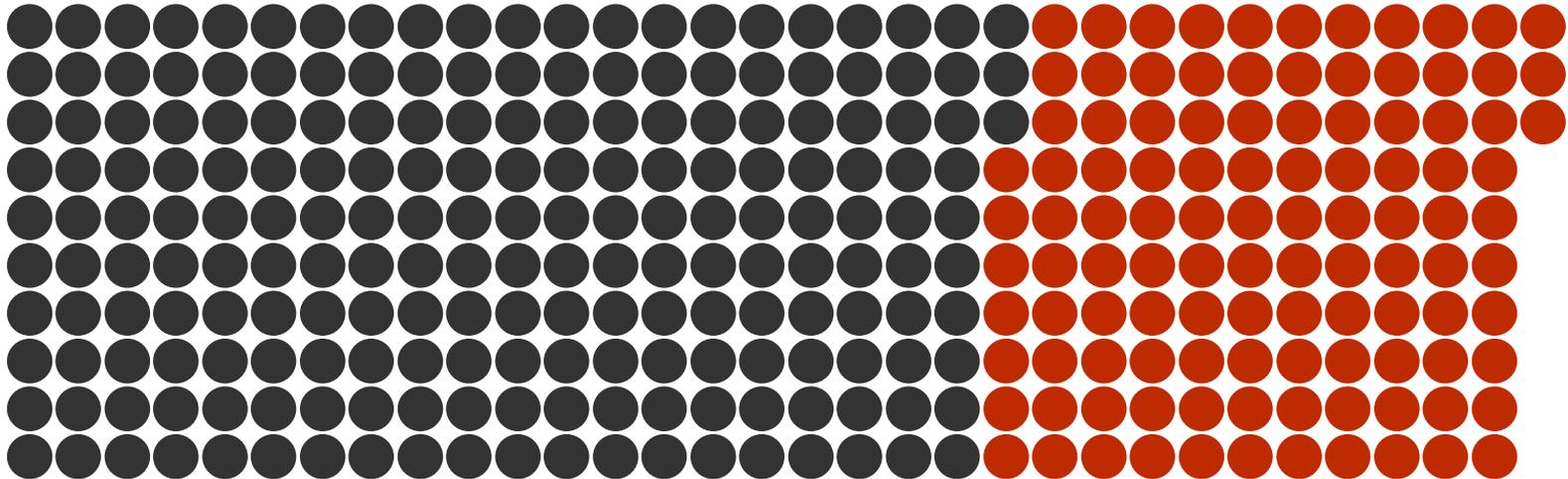
Cost to Memphis/Shelby County without intervention:

\$28,958,351

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will receive TANF: 2739



Children receiving TANF

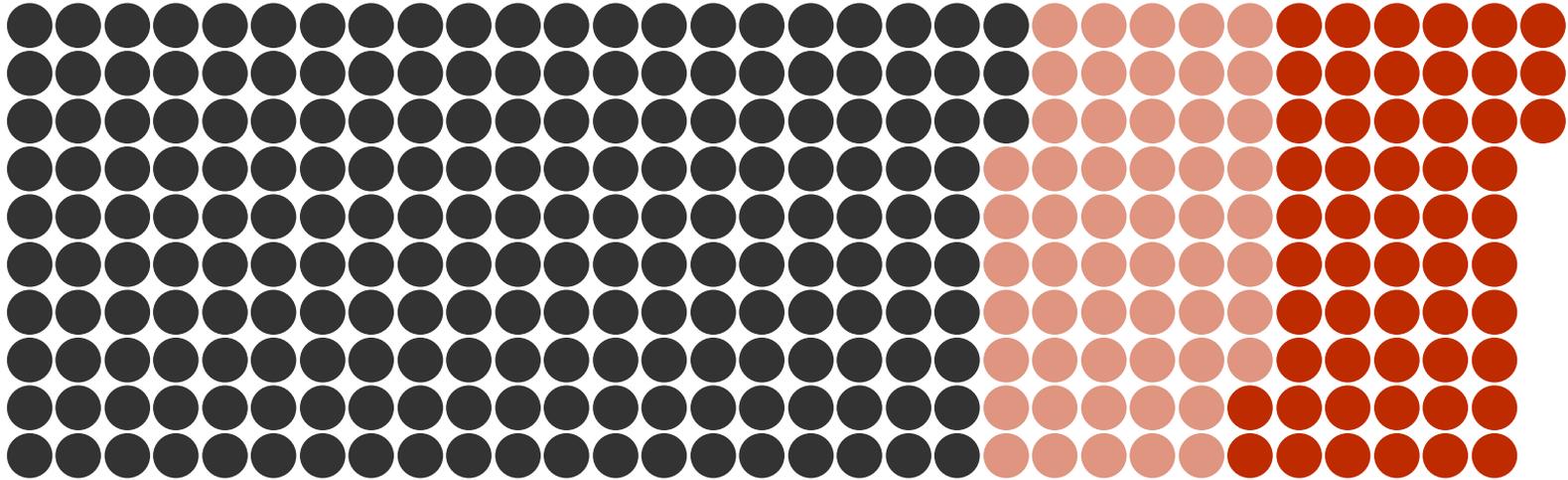
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\$28,958,351

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will receive TANF: 2739



With intervention: 1369

Reducing the number of children receiving TANF

Net savings to Memphis/Shelby County after intervention:

\$14,477,854

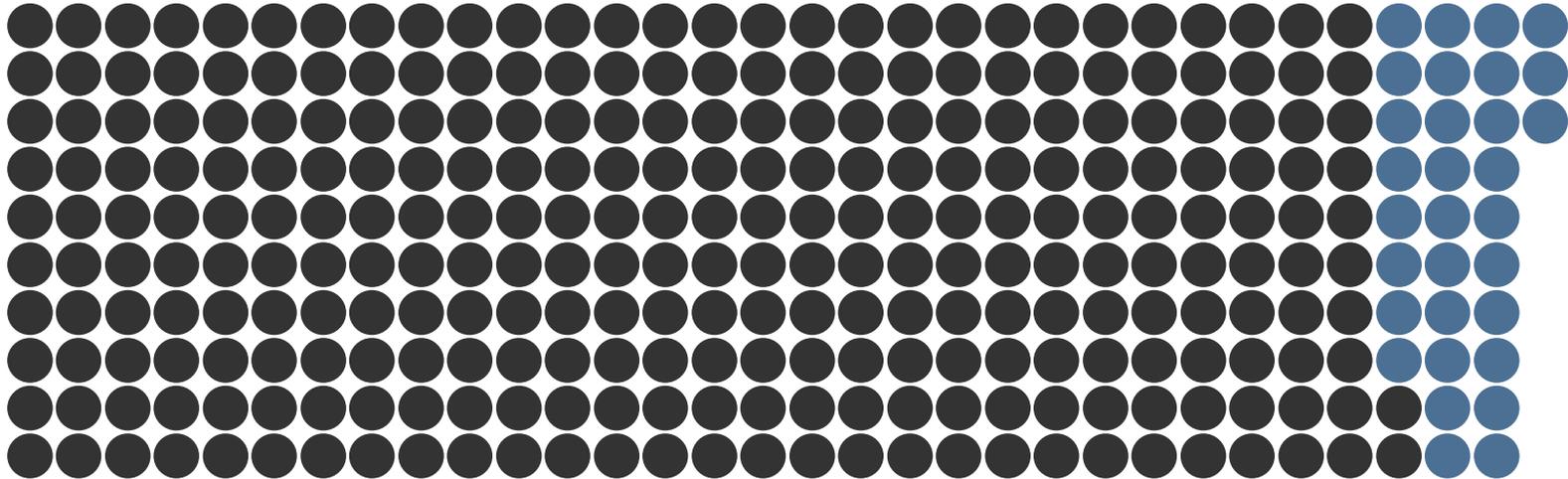
Cost to Memphis/Shelby County without intervention:

\$25,979,000

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will be a victim of child abuse: 783



Children who will be victim of child abuse

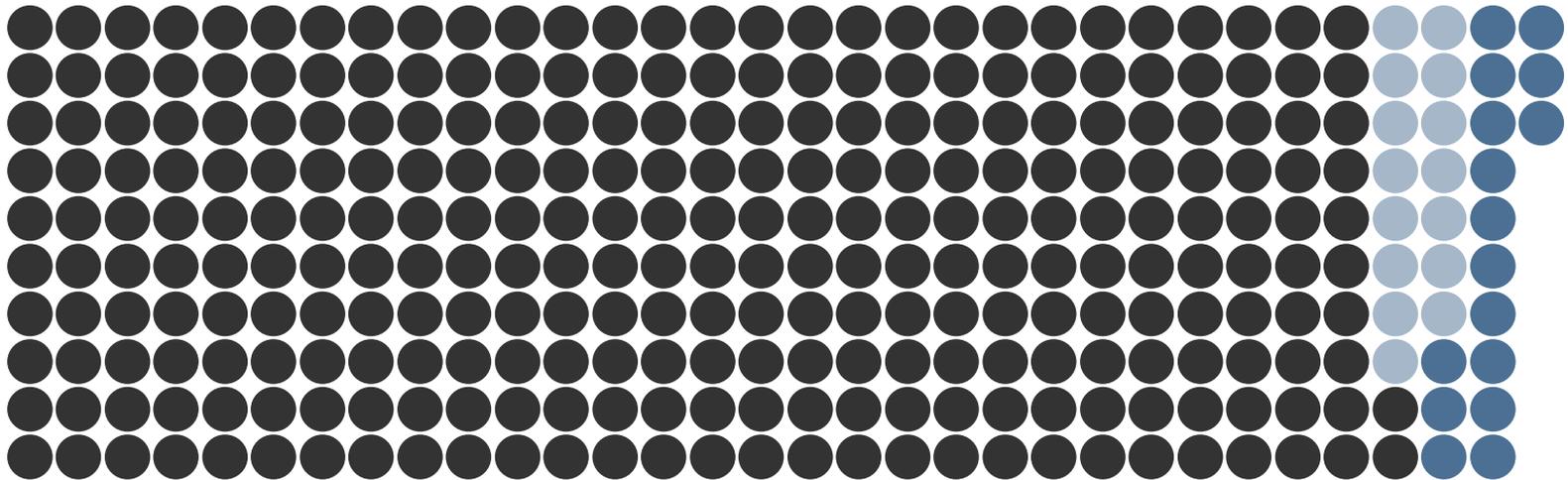
Cost to Memphis/Shelby County without intervention:

\$28,958,351

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will be a victim of child abuse: 783



With intervention: 391

Reducing the number of children who will be victim of child abuse

Net savings to Memphis/Shelby County after intervention:

\$22,861,520

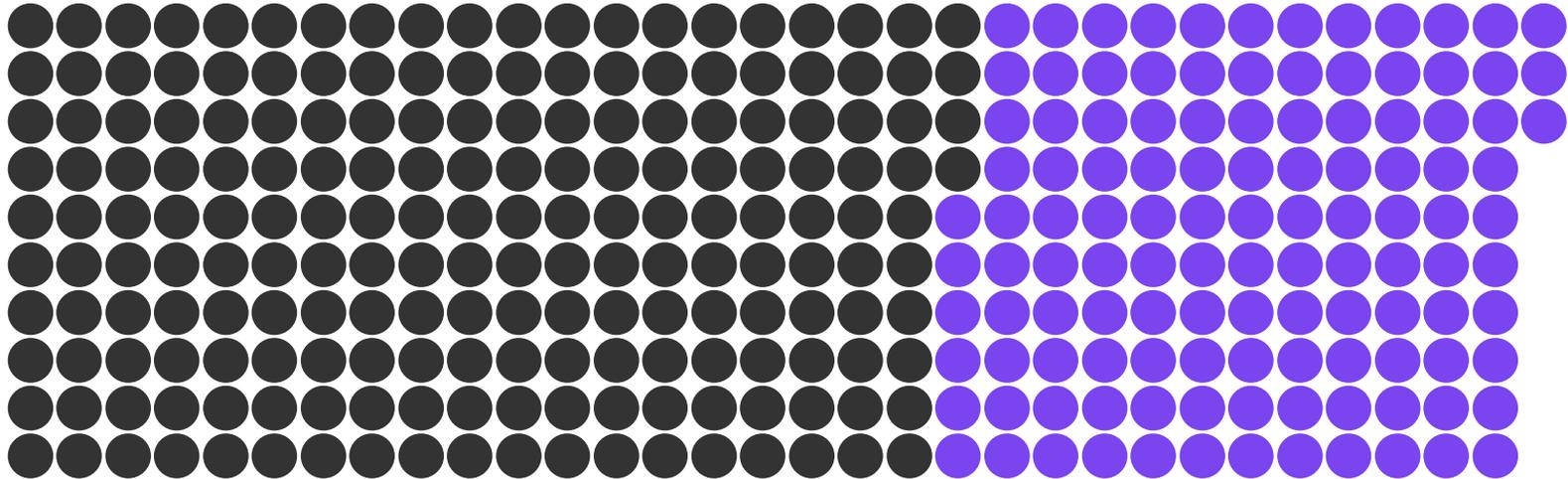
Cost to Memphis/Shelby County without intervention:

\$27,280,502

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will fail a grade: 2974



With intervention: 1279

Children who will fail a grade

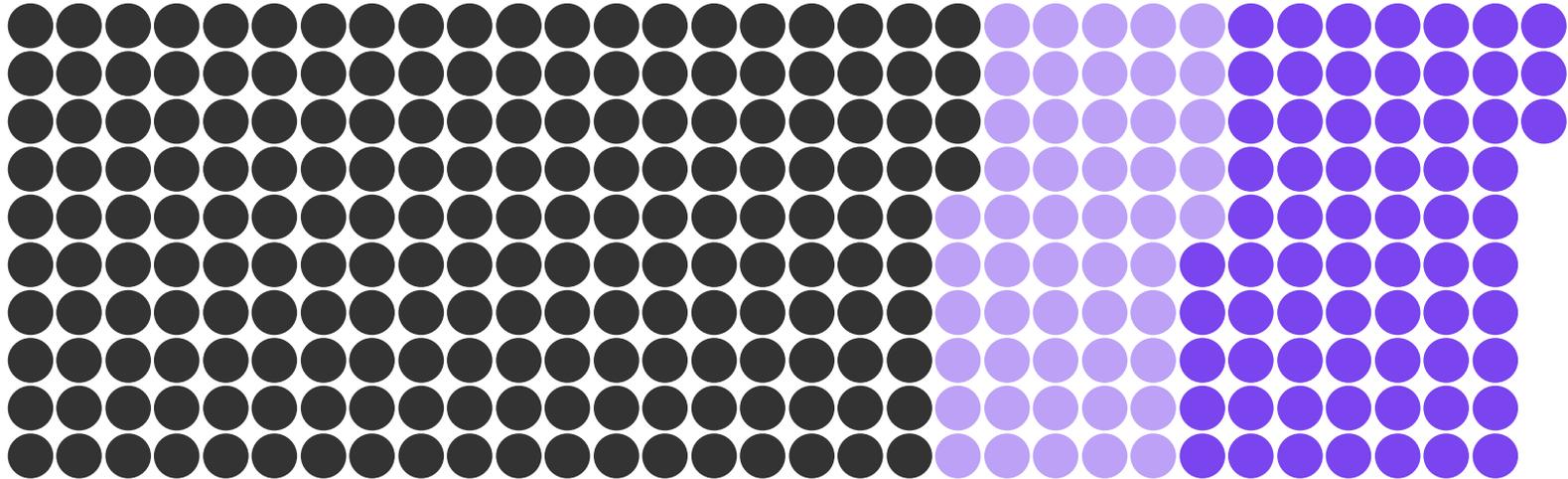
Cost to Memphis/Shelby County without intervention:

\$27,280,502

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will fail a grade: 2974



With intervention: 1279

Reducing the number of children who will fail a grade

Net savings to Memphis/Shelby County after intervention:

\$15,551,858

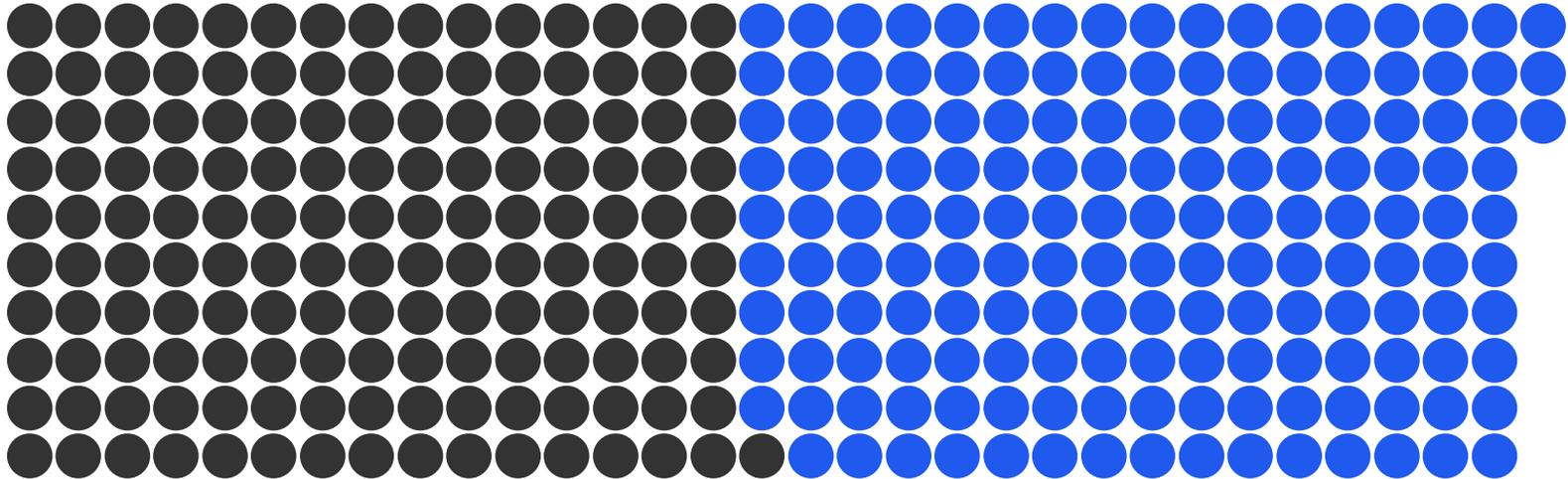
Cost to Memphis/Shelby County without intervention:

\$55,201,185

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will Drop Out of High School: 4045



High school drop outs

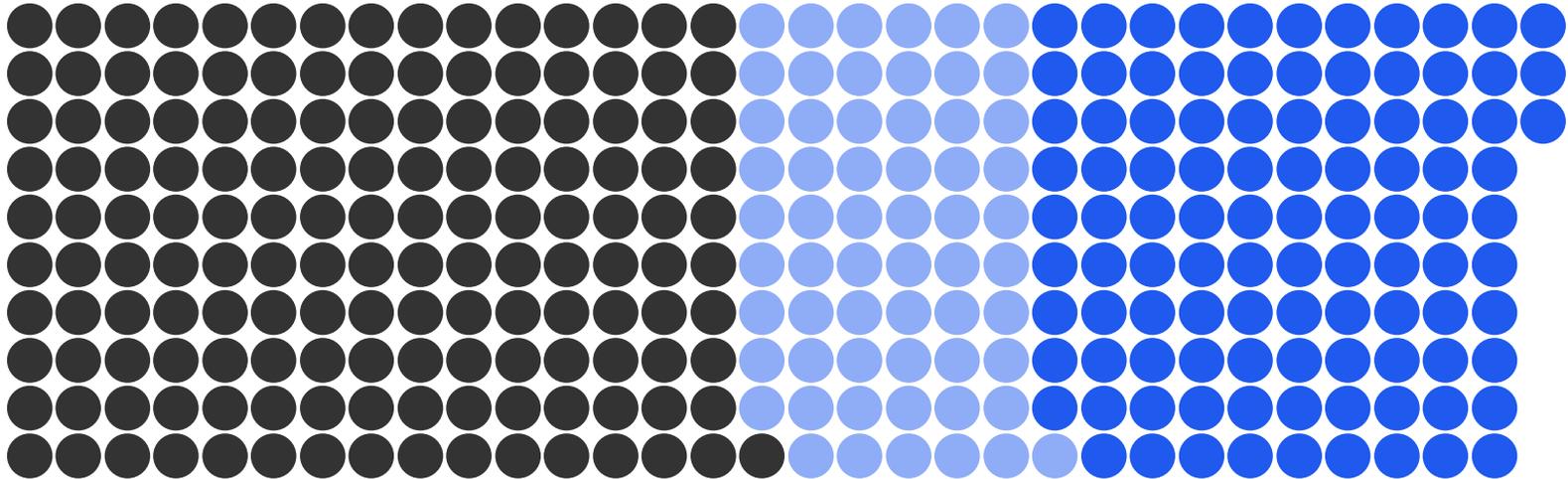
Cost to Memphis/Shelby County without intervention:

\$55,201,185

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will Drop Out of High School: 4045



With intervention: 2218

Reducing the number of high school drop outs

Net savings to Memphis/Shelby County after intervention:

\$24,926,810

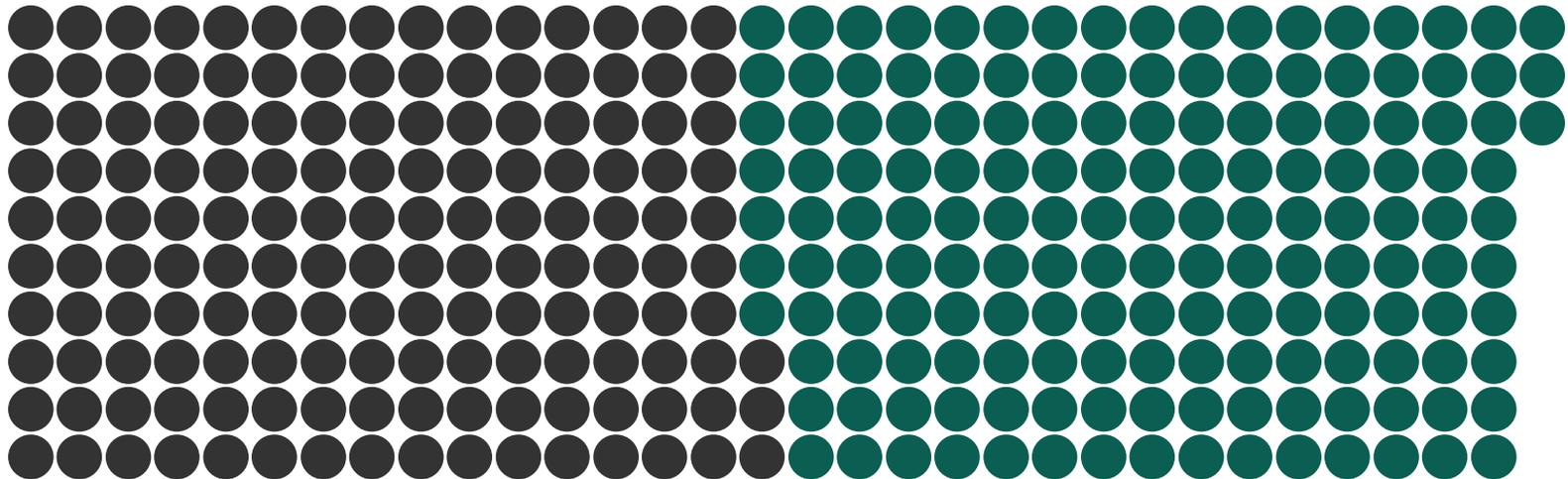
Cost to Memphis/Shelby County without intervention:

\$81,575,625

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will be arrested: 3991



Children who will be arrested

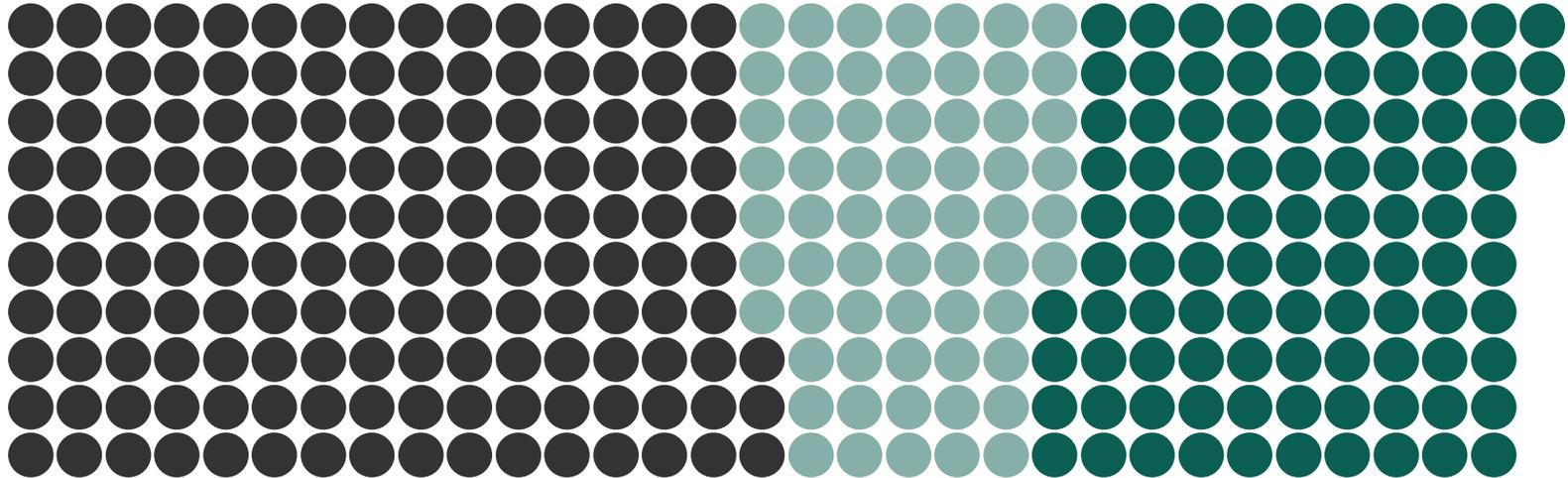
Cost to Memphis/Shelby County without intervention:

\$81,575,625

● = 25 children

7825 LACK ACCESS TO RESOURCES

Will be arrested: 3991



With intervention: 2426

Reducing the number children arrested

Net savings to Memphis/Shelby County after intervention:

\$81,575,625

Total program costs for gold standard interventions for the 7,825 most at-risk children in the class of '25:

• Home Visiting Program	\$84,136,573
• Early Childhood Care and Education	\$107,585,824
• Pre-Kindergarten	\$149,612,827
Total investment	\$341,335,224

Projected Savings and Benefits **\$2,048,011,344**

ROI: 6:1

There are significant gains to be realized on other dimensions as well ...

Particularly gains for the parents of children involved, and much longer-term returns...

- ↓ Reductions in arrest rates
- ↓ Reductions in numbers of future pregnancies
- ↑ More stable employment
- ↑ Higher levels of education



Investing in children and families now will help to
build the future we want for Memphis and Shelby
County.



- How much are we willing to invest?
- What return do we need to realize on our investment?
- How long are we willing to wait to see a return on our investment?
- In what areas do we want to make a difference – and where is the public likely to demand action – when it comes to children and families?