

## The Health and Equity Impacts of Expanded Access to Preschool: Cincinnati's Fork in the Road















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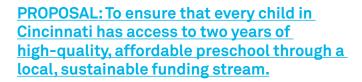
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### The Health and Equity Impacts of Expanded Access to Preschool: Cincinnati's Fork in the Road

### **Executive Summary**



The people of Cincinnati face a fork in the road. They could choose to invest in their shared future by increasing access to high-quality preschools for all children. Or they could continue on the current path, with nearly half of their children starting from a disadvantage on their first day of kindergarten. Our research shows that expanding access to preschool would improve the health of Cincinnati's children and families, making Cincinnati a healthier, wealthier and more equitable city.



### **RECOMMENDATIONS**

- Expand access to high-quality preschool programs to all children
- 2. Prioritize to reach those most in need, such as children living in poverty
- 3. Assure high-quality preschools and teachers through adherence to preschool program and training features that research has proven to be successful
- 4. Utilize a trauma-informed approach to discipline that incorporates an understanding of the source of the behavior problem, in preschool and beyond, rather than zero tolerance policies such as suspensions and expulsions
- 5. Assure that high-quality preschools are geographically distributed throughout the city

### We find that if expanded access to preschool were implemented for a decade...



Over 20,000 more children would have access to preschool,

including more than 9,000 vulnerable children living in poverty.

Parenting stress would be reduced.

Child abuse and neglect would be reduced by 27%.



More than 500 children would not be held back a year.

More than 500 children would not be in special education.

Nearly 3,500 more students would graduate high school.

Over 4,000 fewer crimes would take place.



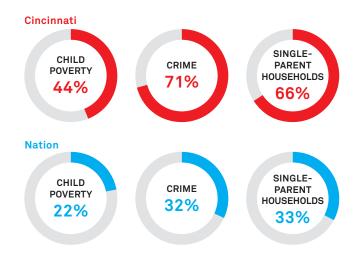
These 20,000 more children who go to preschool would grow up to acquire higher paying jobs that would increase their annual earnings by about \$9,000.

This adds up, over 10 years and 20,000 children, to nearly \$1.8 billion more in earnings.

RESULTING IN HEALTHIER CHILDREN, FAMILIES, AND CINCINNATI.

### CINCINNATI TODAY: THE LANDSCAPE FOR CHILDREN

Children in some neighborhoods of Cincinnati can expect to live nearly 20 years less than children in other neighborhoods.



Cincinnati ranks 31st in the nation and 5th in the state of Ohio for its child poverty rate. The rates for child poverty, single-parent households, and crime for Cincinnati are all nearly double the national rate. One potential reason for the high proportion of children living in single-parent households may be incarceration of parents. In Ohio, it is estimated that 10% of children (271,000) have a parent who is incarcerated.

Cincinnati is one of the least economically mobile cities in the nation. This means that children who are born into poverty in Cincinnati will have very little chance to break out of it, unless something changes.

### THE CURRENT PATH: LIMITED ACCESS TO PRESCHOOL

The majority of three- and four-year old children in Cincinnati do not attend preschool. Of Cincinnati's approximately 9,150 preschool-aged children, only 44% are enrolled in preschool.



For many families, preschool is unaffordable. In Ohio, a family with two children living below the 150% poverty level paid 51% of their income for the annual cost of two children in childcare/preschool.



"Parents are burdened down with the cost of preschool ... it impacts everything about their lives. They need to go to a place that's good for their children so they can go to work comfortably, but they can't afford it."

-Kathy (preschool administrator/provider)

Children who do not attend preschool are more likely to have lower readiness scores in kindergarten, require more special education, more likely to repeat a grade, and less likely to graduate high school. This explains why nearly half of Cincinnati's children are academically unprepared for school, as measured by the Cincinnati Public School 2014 Kindergarten Readiness Assessment.

When children enter school already behind, they are more likely to struggle and drop out. High school graduation rates in Cincinnati are unacceptably low, according to Ohio's Department of Education. Lower high school graduation rates lead to lower wages and more crime.



Male high school dropouts are
47 times more likely to be
incarcerated then similar-aged males
with a four-year college degree.



Enrolling a child in preschool can provide parents a respite from parenting stress. When parents do not have this opportunity, the ongoing stress can manifest in parental depression, decreased emotional attachment between the child and caregiver, as well as increased child neglect and abuse. In 2014, 2,149 children were victims of abuse or neglect in Hamilton County.

Traumatic childhood experiences, such as having a parent who is incarcerated or being subject to or witnessing violence, are associated with poor behavioral health and dropping out of high school. It is estimated that 10-15% of preschool children have chronic behavior problems. If these problems are not addressed early, they can persist through later school years. Sixty-five percent of children with emotional and behavioral disorders drop out of high school.

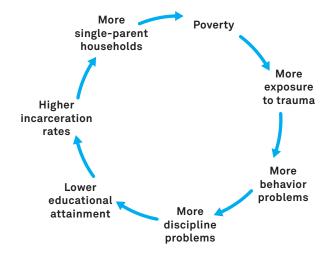
### WHY LACK OF PRESCHOOL MATTERS TO HEALTH

Traumatic experiences, lower levels of education and income, and incarceration all exact a toll on physical and mental health, which can contribute to increased healthcare costs. People with low education levels can expect to die 7 years earlier, on average, when compared to people with higher levels of education.

If Cincinnati does nothing to change preschool access for its children, it can expect future outcomes similar to or worse than those today.

Due to multiple structural forms of discrimination, growing up in poverty, in a single-parent household, or with a parent who is incarcerated are all more common experiences for children of color. These experiences increase the odds of negative physical and mental health outcomes and lead to a vicious cycle that continues through multiple generations, further contributing to ongoing inequities.

- 44% of white kindergartners are low-income, compared to 91% of African American kindergartners.
- In Ohio, the average K-12 suspension rate for white students is 5%, compared to 16% for black students.
- Compared to white children, African-American children are seven times more likely to have a parent incarcerated.
- Incarceration of men leads to an increase in single-parent households headed by women.
- 13% of children in married-couple families live in poverty, compared to 64% of children living in single-parent families.



### THE BETTER PATH: EXPANDED ACCESS TO PRESCHOOL

The good news is that there is compelling evidence that expanding access to high-quality preschool for Cincinnati's children would help address these challenges.

Children who participate in high-quality preschools score better on kindergarten readiness assessments and begin to learn the crucial behavior management skills that are essential for school and life success.



"I see a big difference between my older kids and the ones who had a head start with preschool." **–JW (parent)** 

"In preschool they learn a bunch of ... social-emotional skills they need to be successful in kindergarten ... They at least learn how to sit in a group with other people and have a constructive conversation, and how to attend a task, how to move through the routine of a school day."

- Rachel (preschool teacher)

Preschool has lasting effects throughout the child's school experience. Studies show children who attend high-quality preschool have less need for special education services, less grade retention, fewer behavior problems, and higher rates of high school graduation, which in turn lead to higher wages and less crime.



"Especially if they're living in poverty or in a very abusive home ... their lives are so stressful... Even a three hour break from each other, it's almost like stress vacation." —Rachel (preschool teacher)

Preschool can improve family relationships to the point that it reduces child neglect and abuse by over half. Forty-year old adults who attended preschool as children are still more likely to say their family relationships are better than those who did not.

In addition to preventing child neglect and abuse, preschools can be an early opportunity to identify and intervene when such problems are already occurring.

"At another center I had 88 kids, and it seemed like I had to deal every morning with a child being beat up, black eyes and everything. Kids will say 'Come here Ms. Flora, can you pray with me in the bathroom? He just did this to me last night.' I'm talking about broken ribs and everything."

— Flora (preschool teacher)

### WHY PRESCHOOL MATTERS TO HEALTH

Compared to those who did not participate in preschool, adults who participated in high-quality preschool as children have better overall health. They have lower rates of substance abuse, depressive symptoms, and disability. They are more likely to have health insurance. They also are less likely to become parents during their teenage years.

Preschools can also have a direct impact on health. They can improve nutrition and physical fitness through the programs and services they offer. Preschools also often help to identify mental and behavioral problems, language and speech issues, oral health problems, and abuse and neglect.

### **ABOUT THIS REPORT**

This is the executive summary from a Health Impact Assessment (HIA). This study was conducted by Human Impact Partners, in partnership with The AMOS Project. Further guidance, direction, content, and framing of this report was provided by advisory committee members from: Cincinnati Children's Hospital Medical Center, Interact for Health, Mercy Health, StrivePartnership, and United Way of Greater Cincinnati/Success By 6.

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# A FORK IN THE ROAD FOR CINCINNATI

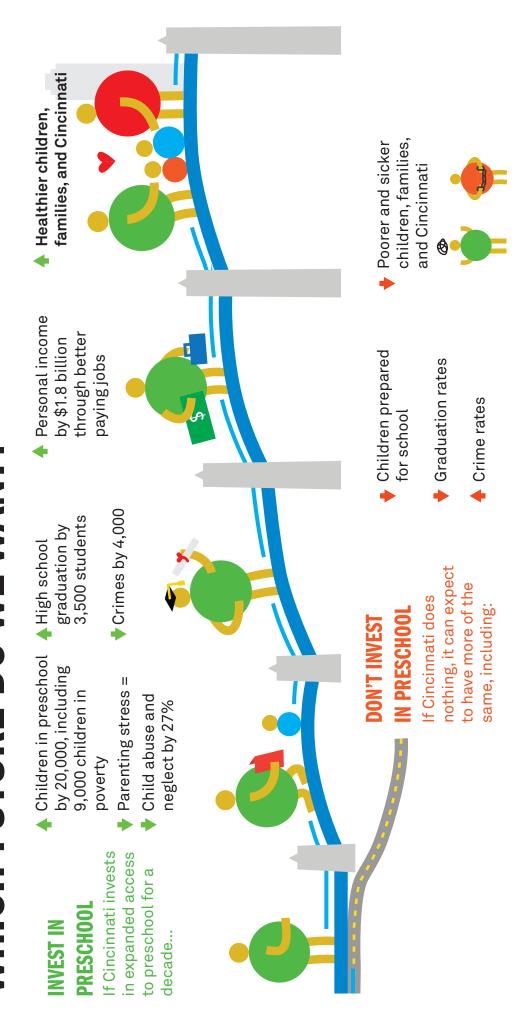
### **CINCINNATI TODAY**

Children in some parts of Cincinnati can expect to live about 20 years less than children in other neighborhoods.

Nearly half of the children in Cincinnati will grow up in poverty, and they will likely remain poor unless something changes.

What if children in Cincinnati get the same fair start: 2 years of high-quality preschool?

## WHICH FUTURE DO WE WANT?

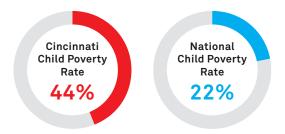


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### Cincinnati Today: The Landscape for Children

Children in some neighborhoods of Cincinnati can expect to live nearly 20 years less than children in other neighborhoods.<sup>1</sup>

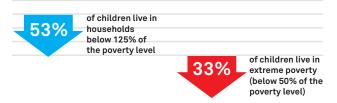
Cincinnati ranks 31st in the nation and 5th in the state of Ohio for its child poverty rate.<sup>2</sup> In 2014, Cincinnati's child poverty rate of 44% was double the national child poverty rate of 22%.<sup>2</sup>



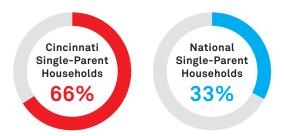
Cincinnati is one of the least economically mobile cities in the nation.<sup>3</sup> This means that children who are born into poverty in Cincinnati will have very little chance to break out of it, unless something changes.

Children living in poverty, children in single-parent households, and children with incarcerated parents may all be especially vulnerable to negative health and social outcomes, if they do not receive the protective benefits of high-quality preschool.

Over half (53%) of all children in Cincinnati live in households with an income below 125% of the federal poverty level, or \$30,375 a year for a family of four. 4,5 This amounts to approximately 5,500 preschool-aged children living in poverty. 4 Nearly a third of all children in Cincinnati live in extreme poverty – below 50% of the federal poverty level, or \$12,150 a year for a family of four. 4,5



The proportion of children living in single-parent households in Cincinnati (66%) is much higher than for children in Ohio (36%) and the US as a whole (33%), and living in single-parent households is linked to living in poverty. We estimate 6,900 preschool-aged children in Cincinnati live in single-parent families.



One potential reason for the high proportion of children living in single-parent households may be incarceration of parents. In Ohio, it is estimated that 10% of children (271,000) have a parent who is incarcerated. In 2012, Cincinnati had nearly twice the rate of crime as Ohio and the US as a whole.<sup>7,8</sup>

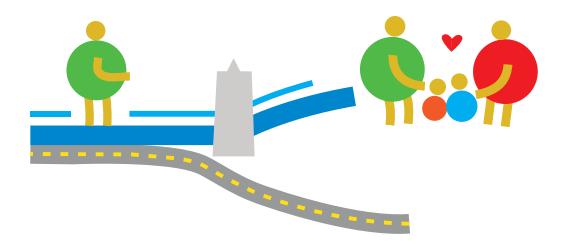


In 2012, Cincinnati had twice the rate of crime as Ohio or the U.S.

In 2013, the Cincinnati Children's Hospital Medical Center released a report on the health status of children in Greater Cincinnati/Northern Kentucky. Thirty percent of low-income families reported that they delayed or did without healthcare for their child due to money, and 8% of survey respondents reported that their child "had received some kind of mental or behavioral health services in the past 12 months". Another report states that 9% of Cincinnati Public School students were diagnosed with emotional or behavioral conditions that interfere with school. 10

A large proportion of juveniles in Ohio's juvenile justice system have special mental health or educational needs. In fact, in April 2016, 48% of juveniles in custody with Ohio's Department of Youth Services had mental health problems, and 49% were considered in need of special education.<sup>11</sup>

In summary, these data suggest that conditions in Cincinnati today are challenging for many of its children. Cincinnati has roughly twice the rate of child poverty, crime, and single-parent households compared to the state or the nation. There is a 20-year discrepancy in life expectancy for children who live in different neighborhoods of the city, and Cincinnati is one of the least likely cities in the nation to offer its children a way out of poverty.



Proposal: to ensure that every child in Cincinnati has access to two years of high-quality, affordable preschool through a local, sustainable funding stream.

The people of Cincinnati face a fork in the road. They could choose to invest in their shared future by increasing access to high-quality preschools for all children. Or they could continue on the current path, with nearly half of their children starting from a disadvantage on their first day of kindergarten. Our research shows that expanded access to preschool would improve the health of Cincinnati's children and families, making Cincinnati a healthier, wealthier and more equitable city.

### We find that if expanded access to preschool were implemented for a decade...



Over **20,000** more children would have access to preschool,

including more than 9,000 vulnerable children living in poverty.

Parenting stress would be reduced.

Child abuse and neglect would be reduced by 27%.



More than 500 children would not be held back a year.

More than 500 children would not be in special education.

Nearly 3,500 more students would graduate high school.

Over 4,000 fewer crimes would take place.



These 20,000 more children who go to preschool would grow up to acquire higher paying jobs that would increase their annual earnings by about \$9,000.

This adds up, over 10 years and 20,000 children, to nearly \$1.8 billion more in earnings.

RESULTING IN HEALTHIER CHILDREN, FAMILIES, AND CINCINNATI.

### Current Path: Limited Access to Preschool

What happens if there is no change in access to high-quality preschool for Cincinnati's children?

### If Cincinnati does nothing, it can expect to have more of the same, including:

More than half of children academically and behaviorally unprepared for school, which can lead to...

Lower graduation rates Lower wages Higher rates of child neglect and abuse Higher crime rates

Poorer and sicker children, families, and Cincinnati

### **ACADEMIC ACHIEVEMENT**

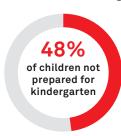
The majority (56%) of three- and four-year old children in Cincinnati do not attend preschool. Of Cincinnati's approximately 9,150 preschool-aged children, only 44% (4,037) are enrolled in preschool.<sup>12,13</sup>

56% of Cincinnati's children are not enrolled in preschool



Children who do not attend preschool are more likely to have lower readiness scores in kindergarten, require more special education, more likely to repeat a grade, and less likely to graduate high school.<sup>14</sup> In 2014, the 4-year high school graduation rate for the Cincinnati Public School District was 71.2%, which is considered a failing graduation rate by the Ohio State Department of Education.<sup>15</sup>

Overall early literacy preparedness for entering kindergarteners in 2014 was 52%, according to the state's new Kindergarten Readiness Assessment.<sup>16</sup>



61% of children who had preschool experience were on track in early literacy, compared to 47% of children who did not have preschool, demonstrating the difference that preschool can make for children entering kindergarten and their classroom peers.<sup>16</sup>

### **FAMILY FINANCIAL STRESS**

The cost of preschool is a substantial expense for families. A report by Child Care Aware of America shows that in 2014 in the Midwest, childcare/preschool costs exceeded the cost of all other types of household expenses, including housing, transportation, food, or healthcare, and even exceeded the expense of one year of college tuition.<sup>17</sup> For families living in poverty, the cost of preschool can be an even greater burden. In Ohio, a family with two children living below 150% of the federal poverty level would pay 51% of their income for the annual cost of two children in care.<sup>17</sup>

Middle-income families are also negatively affected by the high cost of childcare/preschool, especially because they don't qualify for subsidies. For example, federal Child and Dependent Care (CADC) targets low-income families to help reduce tax liability of up to \$3,000 for one child and \$6,000 for two or more, but the higher the income, the less likely these tax liabilities are available—leaving families who may still need assistance with no support.<sup>17</sup>

Family economic insecurity can be stressful to both parents and children in low-income households. The high cost of preschool further exacerbates these financial stresses for families.



"Parents are burdened down with the cost of preschool ... it impacts everything about their lives. They need to go to a place that's good for their children so they can go to work comfortably, but they can't afford it."

-Kathy (preschool administrator/provider)

Research shows that the cumulative financial strain and hardships that families face interrupts children's cognitive development, and leads to poorer behavior and academic performance in school.<sup>18</sup>

### **FAMILY RELATIONSHIPS**

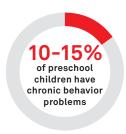
In addition to financial stress, the stress of parenting can have detrimental effects on the wellbeing of children and parent-child relationships.19

"Some of the things the families are going through, we couldn't deal with. We would be completely stressed out if we had to deal with some of these children in a regular everyday life."

-Kathy (preschool administrator/provider)

Enrolling a child in preschool can provide parents a respite from this parenting stress, and offer them guidance in additional parenting strategies through parent-child engagement activities. When parents do not have these opportunities, the ongoing stress can manifest in parental depression and decreased emotional attachment between the child and caregiver, as well as increased child neglect and abuse.<sup>20</sup> The Ohio Family Violence Prevention Project reports that in 2014 there were 2,149 children who were victims of abuse or neglect in Hamilton County, and more than 3,400 children living in homes where intimate partner violence is occurring.21

### BEHAVIOR PROBLEMS AND CRIME



It is estimated that 10-15% of preschool children have chronic behavior problems.<sup>22</sup> Such behavior problems can range from withdrawal, depression, or anxiety, to aggression, hyperactivity, lack of social skills, and defiance, or even violent behaviors such as biting or

throwing chairs.<sup>22</sup> If these problems are not addressed early, they can persist through later school years.<sup>22</sup> Sixty-five percent of children with emotional and behavioral disorders drop out of high school, leading to poor job outcomes, limited income, and other challenges that persist into adulthood.<sup>22</sup>

65% of children with emotional and behavioral disorders drop out of high school



Behavior problems in preschool children may be an indicator of the family or community environment in which they live. Children who have been exposed to traumatic experiences, such as low attachment to

caregivers, child maltreatment, witnessing violence, or the loss of a loved one, may have a difficult time developing social bonds with others, instead reacting with distrust or suspicion that leads them to withdraw from others or bully others.<sup>23</sup> They may experience poor behavioral health, impaired brain development, decreased educational and economic attainments, delinquency, and crime. 24,25,26,23 Incarceration of a family member, particularly a father, is also associated with increased aggressive behavior among boys, as well as increased suspensions and expulsions from school.27

"Coco saw two people get killed outside. She asked Social Services why they keep asking her her colors. She wanted to know why the people got killed outside and can't come back."

-Dazree (parent)

Discipline approaches to these behavior problems are critical to the lifelong success or challenges of the student. A nationwide study found that preschoolers were expelled for behavior problems at a rate three times higher than that found for K-12 students, 28 and two-thirds of states with preschool programs allow students to be expelled, including Ohio.29,30

"Some of the three and four year olds have been suspended from school already."

-Gwen (preschool teacher)

"Some of the things that are going on [in] preschool are scary... they are putting them out and sending them to [the] children's home for things that are ... just typical preschool behavior that you address and work on."

-Kathy (preschool administrator/provider)

Such harsh discipline experiences early in a student's academic career can lead to feelings of being disconnected from school, and result in those students being several times more likely to experience later disciplinary actions, drop out or fail out of high school, or be incarcerated in later life.18



Male high school dropouts are 47 times more likely to be incarcerated then similar-aged males with a four-year college degree. 34



### WHY LACK OF ACCESS TO PRESCHOOL MATTERS TO HEALTH

### Academic achievement

Children who do not attend preschool are more likely to have lower educational attainment. Education levels have a strong impact on overall health and life expectancy, and this impact has grown over time. The gap in life expectancy between those with 12 years of education or less, compared to those with 13 years or more, used to be about 3 years in the early 1980s. But now, people with low education levels can expect to die 7 years earlier, on average, when compared to people with higher levels of education. People with lower education levels have higher rates of heart disease, cancer, respiratory disease, stroke, and injuries compared to people with higher education levels. This trend has been confirmed with very recent research as well.

### Family financial stress

Lack of financial access to preschool can keep parents from fully participating in employment opportunities or overburden them with school expenses. This can reduce the amount of income available to take care of family needs, such as housing, food, transportation, medical care and other resources. Limited access to these necessities can lead to a host of health problems, including diabetes, asthma, heart conditions, hearing problems, digestive disorders, high glucose, and high blood pressure. 33

### Family relationships

Family relationships can experience more strain when parents do not have access to preschool as a respite from parenting stress.<sup>20</sup> Children who have experienced trauma and adverse experiences, such as abuse or neglect from family members, may be at elevated risk for mental and physical health problems and substance abuse in adolescence and adulthood.<sup>23</sup>

### Behavioral problems and crime

Children who drop out of high school are at increased risk for crime and incarceration. Juvenile incarceration is associated with stress-related illnesses, psychiatric problems, suicide attempts, and increased HIV, Hepatitis C, and tuberculosis.<sup>34</sup> Rates of mental health problems and addictions are also much higher for people who are in prisons or jail.<sup>35</sup>

### Reduced access to early screening for problems

Limited access to high-quality preschool education can also reduce access to screenings for health problems. For example, screening for speech and

language development problems can help educators and healthcare providers assess a child's overall development and cognitive abilities related to school success. <sup>36</sup> Chances for improvement are best when children are at a young age, and intervention services and family assistance can help to address any children who are identified to be at risk for developmental delay. <sup>36</sup> If children do not receive screening for speech and language delay in preschool, they may be at increased risk for learning disabilities that could result in reading and writing difficulties, leading to academic underachievement. <sup>36</sup> They are also at increased risk for behavior problems and impaired psychosocial adjustment. <sup>36</sup>

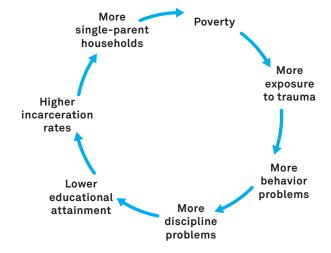
Similarly, screenings for oral healthcare can be implemented through school programs.<sup>37</sup> Nationally, oral healthcare is the most prevalent unmet healthcare need among children and adolescents.<sup>37</sup> One study of preschool children in Maryland found that 55% of the children had oral health problems and 10% had related pain from their conditions, which was consistent with studies of preschool children in other areas.<sup>38</sup> The Cincinnati Public School district provided dental care to 7% of its students in 2012-2013. Schools in the district with very high percentages of low-income students provided 15-27% of their students with dental care services.<sup>39</sup>

### **PREDICTIONS**

If Cincinnati chooses the current path and makes no investment to change access to high-quality preschool for its children, it is likely that many of the problems the community is currently experiencing will remain the same or worsen.

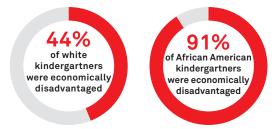
For example, academic achievement may remain the same, including similar rates of special education, grade retention, and high school dropouts. Because of the close connection between high school graduation and income, wages may stay relatively low. Families will continue to struggle to afford high-quality preschool for their children, including many families who could most benefit from high-quality preschool, as only very few parents can afford the true cost of quality care.17 Children with behavior problems, which may already be due to the challenges of their environment and family situations, will continue to display problem behaviors at higher levels of schooling, leading to increased risk for academic delays, and engagement in the criminal justice system. These outcomes can cumulatively lead to a variety of poor physical and mental health outcomes and increased healthcare costs.

Due to multiple structural forms of discrimination, growing up in poverty, in a single-parent household, or with a parent who is incarcerated are all more common experiences for children of color.<sup>40</sup> These experiences increase the odds of negative physical and mental health outcomes and lead to a vicious cycle that continues through multiple generations, further contributing to ongoing inequities.

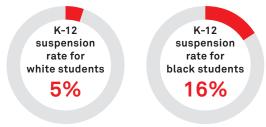


Poverty reduces parenting resources and capacities, leading to increased exposure to traumas.<sup>41</sup> Exposures to traumas could then contribute to poor behaviors and poor academic readiness in schools.<sup>41</sup> Harsh discipline of behavior problems can lead to suspensions, which can eventually lead to higher dropout rates.<sup>18</sup> Low educational attainment can contribute to higher rates of incarceration.<sup>42</sup> Incarceration can lead to single-parent households, which can then lead back to poverty.<sup>4,43</sup>

Some examples of how these experiences are disproportionately experienced include:



 Cincinnati school data show that 44% of white kindergartners were economically disadvantaged, compared to 91% of African American kindergartners.<sup>44</sup>  In one study, nearly 9 out of 10 kindergartners who were suspended were African American or Hispanic, and most were from low-income areas.<sup>45</sup>



- In Ohio, the average K-12 suspension rate for white students is 5%, compared to 16% for black students.<sup>28</sup>
- Very low income youth are twice as likely as upper income youth to have an incarcerated family member.<sup>46</sup>
- Compared to white children, African-American children are seven times more likely to have a parent incarcerated.<sup>47</sup>
- In Hamilton County, African-Americans make up 25% of the population, but make up 60% of those who are incarcerated in the Hamilton County Justice Center.<sup>48</sup>
- Only 13% of children in married-couple families live in poverty, compared to 64% for children living in single-parent families.<sup>4</sup>

### The Better Path: Expanded Access to Preschool

What happens if Cincinnati invests in high-quality preschool for its children?

If Cincinnati invests in high-quality preschool for its children, the following could happen:

Most children would be academically and behaviorally prepared for school, which can lead to...
Higher graduation rates

nigher graduation rate

Higher wages

Lower rates of child neglect and abuse

Lower crime rates

Healthier and happier children, families, and

Cincinnati

### **ACADEMIC ACHIEVEMENT**

There is ample evidence that high-quality preschool programs benefit children's academic achievement and school readiness. A meta-analysis of numerous studies shows that preschool programs consistently contribute to higher scores in language, reading and math that persist through third grade, providing children with the foundation they need to be ready to learn. <sup>49</sup> There is also compelling evidence that preschool could reduce racial/ethnic gaps in school readiness. <sup>50</sup> Researchers estimate that if high-quality preschool were universally available to all 3- and 4-year-olds, it could reduce the black/white school readiness gap by 20% and the Hispanic/white readiness gap by 36%. <sup>50</sup>

"They need the preschool environment in order to get ahead and be ready for kindergarten."
—London (parent)



"I see a big difference between my older kids and the ones who had a head start with preschool." —JW (parent)

Many of the benefits of preschool persist throughout the K-12 school experience. Studies show children who attend high-quality preschool have lower rates of absenteeism from school, less need for remedial and special education services, less grade retention, fewer behavior problems, less delinquency, and higher rates of high school graduation. <sup>24,49,51–56,57</sup> These benefits then contribute to other lifelong successes, including being more likely to hold a job at age 19, more likely to attend college or job-training programs, less likely to receive welfare assistance, and more likely to receive higher earnings. <sup>49</sup>

### **FAMILY FINANCIAL OPPORTUNITIES**

Most parents find the cost of preschool to be a burden. The opportunity to receive financial assistance to send their child to preschool not only provides a financial buffer, it often allows them additional career or educational advancement opportunities for themselves that they had not been able to pursue.

"The best part of him being in school is that I am going back to online school." — Jovan (parent)



"I was able to continue working because the preschool teachers tested my kids and figured out how to deal with them." — Dazree (parent)

### **FAMILY RELATIONSHIPS**

Access to preschool may provide an avenue for the parent to engage in the child's life and enrich the parent-child bond. Parental involvement in preschool has been linked to positive outcomes such as longer periods of mutual play, and increased mother-child reciprocal communication. <sup>58-61</sup> These improved family relationships can persist into adulthood. One study found that at age 40, adults who had participated in a high-quality preschool program when they were children were more likely to report that they were getting along very well with their families, compared with adults who did not participate in preschool as children. <sup>62</sup>

"Parents need to learn how to interact with their children and know what their roles are."

—Leroy (grandparent)

"I always ask my daughter what they did in preschool. I put her pictures she colored up on the refrigerator." — Danisha (parent)

"We're big on parent engagement. There's not a lesson plan that's written in our center that doesn't deal with parent engagement and deal with getting the parent involved with their child." - Kathy (preschool administrator/provider)

Preschool may also relieve some of the burden of parenting. Children learn skills to regulate their behavior and function adaptively over the preschool period. This behavioral independence may allow parents to become less responsible for monitoring and regulating their child's emotion during everyday tasks, which likely reduces parenting stress. <sup>63</sup> Perhaps because of this reduced burden and stress, as well as increased involvement in the child's school, high-quality preschool programs have been found to decrease rates of child maltreatment and neglect by as much as 52%. <sup>20</sup>

"It gives me time to get myself together without having to worry about temper tantrums and constantly having to refocus."—Daisha (parent)

"Especially if they're living in poverty or in a very abusive home ... their lives are so stressful... Even a three hour break from each other, it's almost like stress vacation." —Rachel (preschool teacher)

"Sometimes [the parents] just need to get their grocery shopping done...They don't have family close by, they're a single mom, they have four kids, to get to the grocery store they have to take the bus, to get their laundry done too... And if it means that child doesn't have to go through all that, while she's with me, it's good."—Rachel (preschool teacher)

In addition to preventing child neglect and abuse, preschools can be an early opportunity to identify and intervene when such problems are already occurring.

"At another center I had 88 kids, and it seemed like I had to deal every morning with a child being beat up, black eyes and everything. Kids will say 'Come here Ms. Flora, can you pray with me in the bathroom? He just did this to me last night.' I'm talking about broken ribs and everything."

—Flora (preschool teacher)



"A stable domestic situation is extremely important to children and maybe the centers can be early intervention in regard to home situations and provide services and counseling."

— Leroy (grandparent)

### BEHAVIOR PROBLEMS AND CRIME

High-quality preschool programs can reduce the risk of behavioral problems in later schooling. Participation in preschool programs has been shown to make children feel more motivated, behave better, and help them learn more in school. They learn how to think before they act, take personal responsibility for their actions, and gain skills for getting along with others. <sup>24,64</sup> At-risk children whose mothers have less education are more likely to have behavior problems by age eight when compared to children of college-educated moms, but if at-risk children participate in high-quality preschool programs, research has shown that that difference in behavior problems is eliminated. <sup>65</sup>



"In preschool they learn a bunch of ... social-emotional skills they need to be successful in kindergarten ... They at least learn how to sit in a group with other people and have a constructive conversation, and how to attend a task, how to move through the routine of a school day."

- Rachel (preschool teacher)

"He's learning other ways to keep himself in check. He is hyper and defiant but I was defiant at that age too. Preschool is helping with repetition." – Jovan (parent)

The likelihood of delinquency and crime later in life can be reduced when children's behavior problems are identified and addressed early in high-quality preschool programs, especially when those

preschools do not partake in harsh discipline policies such as suspensions and expulsions. Multiple studies of high-quality preschool programs consistently show positive impacts on student behavior, school climate, and teacher working conditions. Schools with higher proportions of preschool enrollees have fewer problems in maintaining order and discipline, less fighting, fewer weapons brought to school, fewer thefts, and fewer physical attacks in schools. 20,66,67,68,69 Participation in preschool can also reduce crime rates. Participation in preschool is associated with lower rates of overall arrests, arrests for violent crimes, and arrests for property and drug crimes; and lower likelihood of subsequent prison or jail sentences. 57,62

### WHY PRESCHOOL MATTERS TO HEALTH

Compared to those who did not participate in preschool, adults who participated in quality preschools as children have better overall health. <sup>57,70</sup> They have lower rates of substance abuse, depressive symptoms, and disability. <sup>57,70</sup> They are more likely to have health insurance. <sup>57,70</sup> Preschool participants also had lower rates of teenage parenthood. <sup>70</sup>

### Academic achievement

When participation in preschool improves a child's chances of succeeding in school, those educational benefits can have ripple effects that improve health outcomes as well. Education is a strong determinant of health; people with higher levels of education can expect to live longer and healthier lives than their less educated peers.71 This is because education can increase health knowledge, coping skills, and social networks of support, enabling a person to make better-informed choices about medical care and adopting healthier behaviors and lifestyles such as not smoking and exercising.<sup>72,73,74</sup> Higher education also leads to a greater likelihood of being employed, having better working conditions, and having better employment benefits such as health care, paid sick days and higher wages; having a higher income is one of the strongest and most consistent predictors of health.75

### Child maltreatment and crime

Participation in high-quality preschool programs can protect against the negative health impacts from child abuse and neglect, as well as the negative health impacts of incarceration, all mentioned in the previous chapter. See the Predictions section on the following page for further details on the extent of these impacts.

### General health education resource for parents

High-quality preschools can have a broad impact on the health knowledge of parents through parent engagement programs.

"We have a family services coordinator, health coordinator... We have a monthly newsletter where we send things out... what the dental clinic is offering and the hours, reminders of car seats and changes in regulations, healthy menus and suggestions, it's a catch all. There's also an article about ... cognitive tips ..." — Jenn (preschool teacher)

### Healthy nutrition and physical fitness

In Ohio, the Child and Adult Care Food Program (CACFP) offers nutritious meals and snacks to children through childcare centers, Head Start programs, and other early childhood education programs. The Participation in CACFP is associated with a lower Body Mass Index in children, especially low-income children. Compared to non-CACFP sites, CACFP sites served more fruits, vegetables, milk, and meat or meat alternatives and less sweetened beverages and other sweets. This program enables low-income children who may experience food insecurity to qualify for free or reduced meals and have better nutrition.

"We have a nutrition event once a year and we're fortunate enough to have our own cook and kitchen in the school, so they fix a couple sample healthy snacks, invite families to come see and get the recipes." — Jenn (preschool teacher)

"Our next training... parents will attend and we give food. Our mandate has always been about healthy food, so that goes along with our food program." – Kathy (preschool administrator/provider)

In addition to better nutrition, several studies show that children who participate in preschool are more physically active than children who do not participate in preschool.<sup>80,81,82</sup>

### **Screenings**

High-quality preschool programs can also conduct screenings to identify behavioral and mental health problems, speech and language problems, and dental problems, and refer for early intervention and care.



"I found that Children's Hospital is a great resource and they do a great job with speech. They can go there while they're waiting for other resources." — Gwen (preschool teacher)

"We've been ... paired with the school of psychology. The master's students are ... providing the mental health services. They're developing parent education nights... It's the same thing we did with speech, to catch the ones who are not ready for an IEP. We catch it with the future language pathologists, so they're providing these services." —Jenn (preschool teacher)

### **PREDICTIONS**

If Cincinnati chooses the alternate path to invest in high-quality preschool for its children, academic achievement would improve, including improved readiness scores for kindergartners, reduced need for special education, reduced grade retentions, and increased high school graduations. Because of the close connection between high school graduation and income, there would also be increases in monthly earnings.

Families would have fewer financial challenges to access high-quality preschool for their children, including many low-income families who could most benefit from high-quality preschool. Families could gain respite from parenting stress and there could be a reduction in the number of children who are abused and neglected.

Children would learn social and emotional skills and have fewer behavior problems at school. Those who already have behavior problems may be identified early and receive the proper referrals and supportive services to avoid continuing problems at higher levels of schooling. This could lead to more consistent and productive engagement in the school environment, leaving students more likely to succeed in school and less likely to engage in delinquent behavior that could lead them into the criminal justice system. Ultimately, this could lead to less crime and lower rates of incarceration.

These outcomes can cumulatively lead to a variety of improved physical and mental health outcomes that could decrease healthcare costs.

Using data specific to the Cincinnati population, in combination with research findings regarding the various impacts of high-quality preschool, we have calculated Cincinnati-specific predictions below. They predict the cumulative impact over the course of ten years, which is a proposed length of funding. For additional information on these calculations, please see the appendices.

Predicted 10-Year Cumulative Impacts					
	Current	Universal Preschool	Number Change	Percent Change	
Number of Preschoolers	20,185	40,637	20,452	101%	
High School Graduates	28,136	31,613	3,477	12%	
Students in Special Education	4,602	4,049	-552	-12%	
Students Held Back a Year	3,886	3,322	-563	-15%	
Victims of Abuse or Neglect	520	378	-142	-27%	
Arrests	19,296	15,205	-4,090	-21%	
Total earnings	\$8,737,763,400	\$10,571,080,680	\$1,833,317,280	21%	

### Assumptions:

- 80% uptake of enrollment in preschool for those not currently enrolled
- Preschools in which students enroll are high-quality preschools
- Population levels of 3- and 4-year-olds remain stable

### Conclusions and Recommendations

### **CONCLUSIONS**

Cincinnati is facing a fork in the road. If it continues down the current path and does nothing to change preschool access for its children, it can expect to have continuing challenges with high school graduation rates, lower wages, more crime, and higher healthcare costs. The children who are most likely to be vulnerable to these negative outcomes include children in poverty, children in single-parent households, and children with an incarcerated parent. These outcomes lead to a vicious cycle that could be perpetuated through multiple generations, further contributing to ongoing inequities, especially for children of color.

The good news is that if Cincinnati chooses the alternate path and increases access to high-quality preschool, there is compelling evidence that Cincinnati could help its children address these challenges. It may be intuitive to imagine that if more children participated in high-quality preschools, there would be more children ready for kindergarten, and they might be better behaved when they entered school. But research consistently shows those two impacts have lasting effects throughout the child's school experience, leading to higher graduation rates, which in turn lead to higher wages and less criminal activity.

Another finding that might not be intuitive is that preschool can improve family relationships to the point that it reduces child neglect and abuse by over half. Forty-year old adults who attended high-quality preschool as children are still more likely to say their family relationships are better than those who did not. Children who grow up to graduate high school, get a job, stay out of trouble, and have good family relationships are more likely to have better physical and mental health.

If access to high-quality preschool were implemented for a decade, the cumulative impact could be that over 20,000 more children could experience these benefits, including more than 9,000 vulnerable children living in poverty. Together, these children could grow up to acquire higher paying jobs that would increase their combined earnings over ten years by \$1.8 billion.

### **RECOMMENDATIONS**

Based on the findings above, and additional research presented below, the authors offer the following recommendations:

### 1. Expand access to high-quality preschool programs to all children

The research summarized in this report supports expanding access to high-quality preschool programs to all children.

### 2. Prioritize reaching those most in need

Prioritize children living in poverty, who are most vulnerable to the negative impacts of a lack of access to high-quality preschool.

### 3. Assure high-quality preschools and teachers In order to receive state funding from the Ohio Department of Education, participating early chil

Department of Education, participating early child-hood education and preschool special education programs must achieve a rating of 3, 4, or 5 on the state's Step Up to Quality five-star rating system. 83 In addition to these quality criteria, preschools could better achieve high-quality performance by incorporating the following elements:

- a. Research suggests that the positive outcomes linked to preschool are often only found for high-quality preschools. Levaluations of various preschool programs over time have shown a few key features that are associated with benefits that are sustained through the early elementary grades. Those include:
  - Quality teacher-child interactions that include a supportive emotional climate that is language-rich and promotes higher-order thinking skills.<sup>84</sup>
  - Professional development supports for teachers that offer quality improvement through coaching and mentoring from experienced professionals.<sup>85,86</sup>
  - Employing a proven curriculum and providing teachers with the training to implement it well.<sup>14</sup>

Additional features that have been shown to increase benefits<sup>14</sup> include:

• Two-year preschool programs show greater benefits than one-year programs.

- Full-day preschool programs show greater benefits than half-day programs.
- Preschool programs that align with the learning standards of early elementary grades, to maximize continuity and academic gains, show greater benefits than preschool programs that are independent of early elementary school programming.
- Universal preschool programs offered in cities like Cincinnati, with a high proportion of child poverty, have shown that their effects are essentially the same as programs targeted toward low-income groups, because of the high proportion of children who would be targeted for them anyway.
- **b.** Offer resources to ensure all preschool centers are able to achieve high-quality rating.

"Small centers are ... not going to be able to afford to do the kind of things we need to do to qualify as quality... Step Up [to Quality] does some great things, but there are some things that are ... expensive ... How is a center that doesn't have funding already going to get to that point to be able to access the funds?"

-Rachel (preschool teacher)

**c.** Hold all preschool programs to the same high-quality standards.

"A preschool child should get the same experience ... the same level of quality ... no matter where they go." –Kathy (preschool administrator/provider)

- **d.** Improve teacher preparation regarding cultural responsiveness and racial equity; support a diverse teacher workforce and pipeline.<sup>18</sup>
- **e.** Equalize teacher pay to assure highly qualified teachers can afford to teach in preschool.

"The job is almost a bit of charity work. Just last night I looked at the pay schedule for the school district I live in for my years of experience and degrees - the salary is more than double what I make if I was to go teach kindergarten or first grade." - Jenn (preschool teacher)

"People come to us and say, 'You know you're not in this for the money.' And we're not, but we need to live." - Kathy (preschool administrator/provider)

### 4. Utilize a trauma-informed approach to discipline, rather than zero tolerance policies, in preschool and beyond

Harsh discipline policies such as suspensions and expulsions can result in negative educational attainment outcomes, and lead to further likelihood of incarceration. Discipline approaches that incorporate an understanding of the source of the behavior problems have been shown to be an effective alternative.

- **a.** Prohibit suspensions and expulsions across early childhood settings.<sup>18</sup>
- b. Prevent re-injury or re-traumatization by acknowledging trauma and its triggers, and avoiding stigmatizing and punishing students.<sup>23</sup> Examples of this approach are summarized in a resource document titled: Unlocking the Door to Learning: Trauma-Informed Classrooms & Transformational Schools produced by the Education Law Center of Pennsylvania.<sup>23</sup>
- c. Expand access to in-school behavioral and emotional support services, including Early Childhood Mental Health Consultation (ECMHC).<sup>18</sup> ECMHC is a model for reducing problem behaviors in children. It aims to prevent, identify, treat, and reduce the impact of mental health problems among children from birth to 6 years old and their families.<sup>22</sup>
- **d.** Ensure that these trauma-informed approaches continue through the K-12 school years to ensure protection from damaging zero tolerance policies.

"...the idea that you remove children from preschool - we don't do that at our center. It's a cornerstone of our behavioral process, we understand that they are 3, 4, and 5 year olds and they need a place to make mistakes... Our staff is trained to know when things are typical or atypical ... and all the resources that we might need... We all need to be on the same team—we need to be on the side of the child. We're all invested in the child and that's what drives everything."

— Jenn (preschool teacher)

- Jenn (preschool teacher)

### 5. Assure that high-quality preschools are geographically distributed throughout the city

Maximize access and minimize barriers such as transportation, by ensuring that high-quality preschools are distributed in all neighborhoods throughout the city. Prioritize geographic areas that do not currently have high-quality preschools.

### About this Study

### **GOALS AND PURPOSE**

The purpose of this report is to provide empirical data on the potential health and equity impacts of expanding access to high-quality preschool in Cincinnati, and propose recommendations based on identified impacts to inform the residents of Cincinnati.

An additional goal is to engage and empower community members, including parents, teachers, and other stakeholders to participate in discussions regarding implementation decisions and to strengthen collaboration among organizations.

### **Health Impact Assessment**

This study is a Health Impact Assessment (HIA). HIA is a public engagement and decision-support tool that can be used to assess policy and planning proposals and make recommendations to improve health outcomes associated with those proposals. The fundamental goal of HIA is to ensure that health and health inequities are considered in decision-making processes using an objective and scientific approach, and engaging stakeholders in the process. HIA is a flexible process that typically involves six steps:

- 1. Screening involves determining whether or not an HIA is warranted and would be useful in the decision-making process.
- 2. Scoping determines which health impacts to evaluate and the methods for analysis.
- 3. Assessment includes gathering existing conditions data and predicting future health impacts using qualitative and quantitative methods.
- 4. Evidence-based *recommendations* are developed to mitigate negative and elevate positive health outcomes of the proposal.
- 5. Reporting communicates findings.
- 6. Monitoring evaluates the effects of an HIA on the decision and its implementation as well as on health determinants and health status.

### Methods

The following methods were employed in this project:

 Review of the scientific (peer-reviewed) and grey (non peer-reviewed) literature;

- Data collection from existing sources, such as the U.S. Census Bureau's American Community Survey, U.S. Department of Labor Statistics, City of Cincinnati Health Department, an economic analysis conducted by the University of Cincinnati Economic Center, the Greater Cincinnati Community Health Status Survey, and data from the Ohio Department of Youth Services
- Focus groups with Cincinnati parents and guardians of preschool-aged children currently participating in a preschool program, those with preschool-aged children not enrolled in preschool, and Cincinnati preschool teachers.

Visit www.humanimpact.org for appendices to this report that provide more information on the HIA, stakeholder engagement, and methods used.

### Our Perspective on Health

This study brings a public health and equity perspective to the topic of expanded access to preschool. Given this, it is important to understand what is meant by "health" in this report. We use the World Health Organization's definition: "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

While health is influenced by our genes and the personal choices we make, over 50% of our health and well-being is determined by social and environmental conditions, such as where we live, whether we have a job, and larger social and political forces like racism and sexism. 88 The public health community calls these the social determinants of health, or the circumstances in which people are born, grow up, live, learn, work, and age and the systems in place to deal with illness. These circumstances are shaped by a wider set of economic and social policies, and there are many opportunities for such policies to promote health and build healthy communities. 89

In this context, we recognize that there are social and economic factors that could influence preschoolaged children, their families, and the community in which they live. These social and economic factors could also influence the health and equity impacts of a ballot initiative designed to increase access to high-quality early education for children. Therefore, this report includes a discussion of the social and economic factors that determine our health.

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Human Impact Partners is a national non-profit working to transform the policies and places people need to live healthy lives by increasing the consideration of health and equity in decision-making. Through research, advocacy, and capacity-building, we bring the power of public health science to campaigns and movements for a just society.

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