

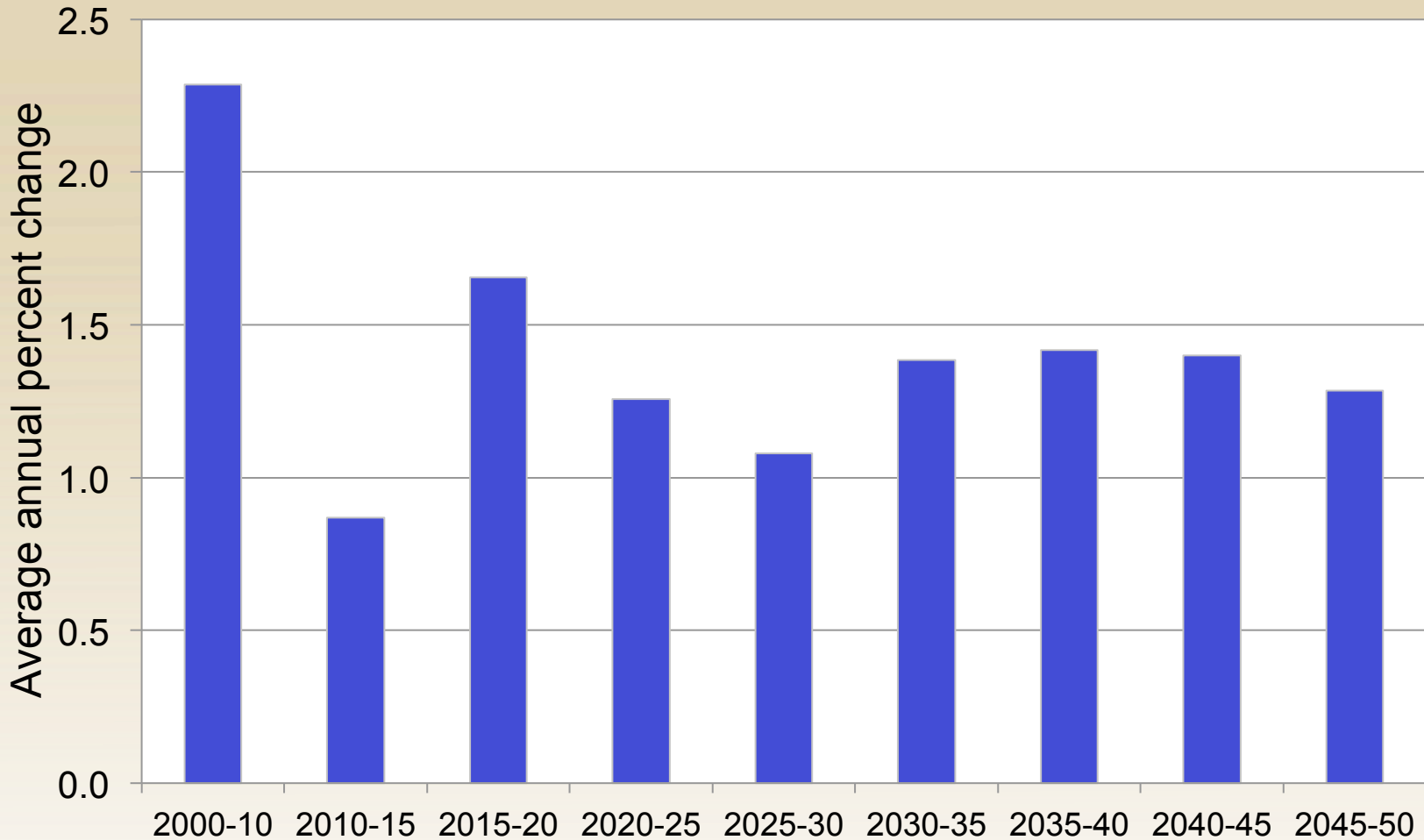
The Economic Case for Investments in Young Children

Arizona Town Hall
November 4, 2013



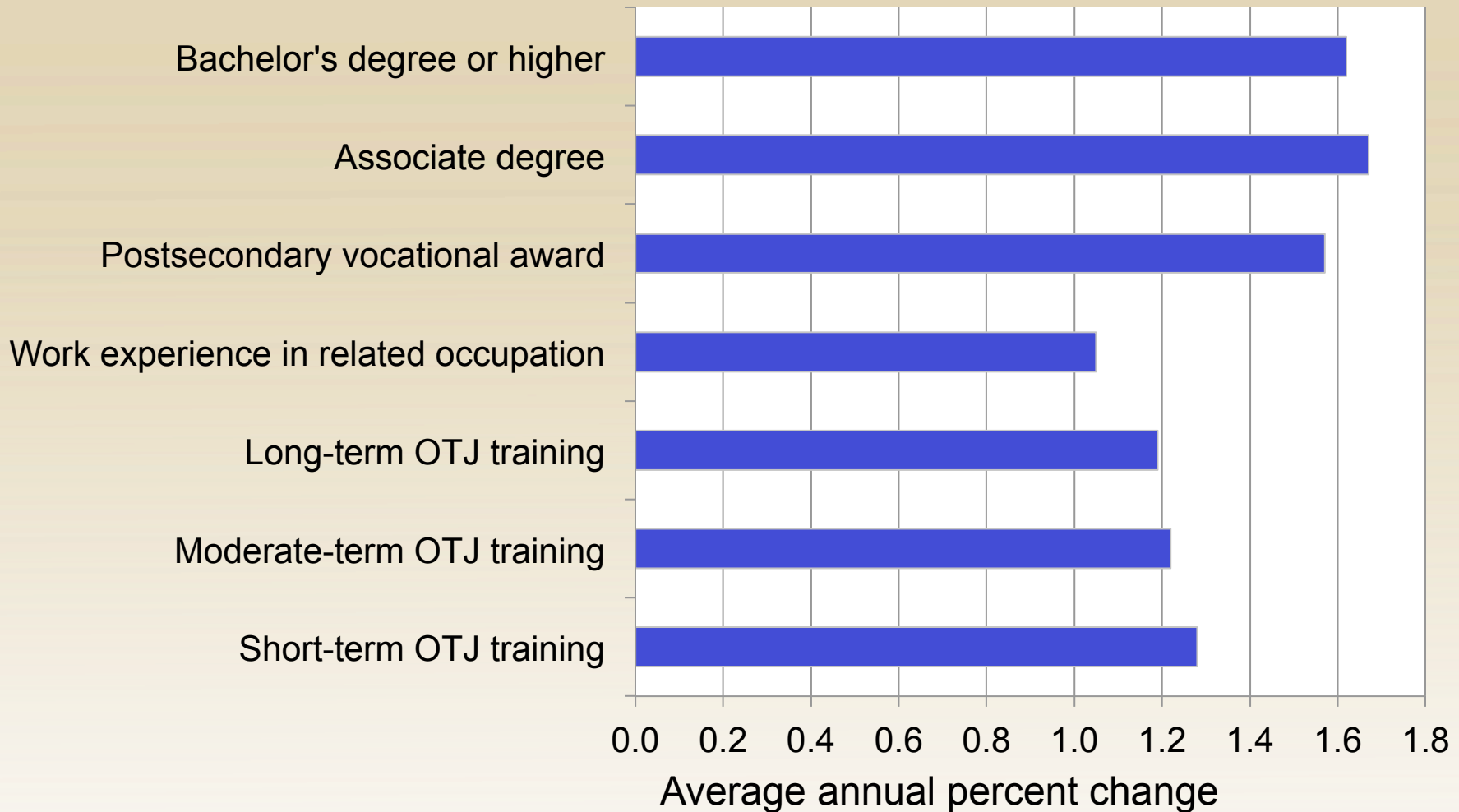
Rob Grunewald
Federal Reserve Bank of Minneapolis

Arizona Population Projections, Ages 15 to 64



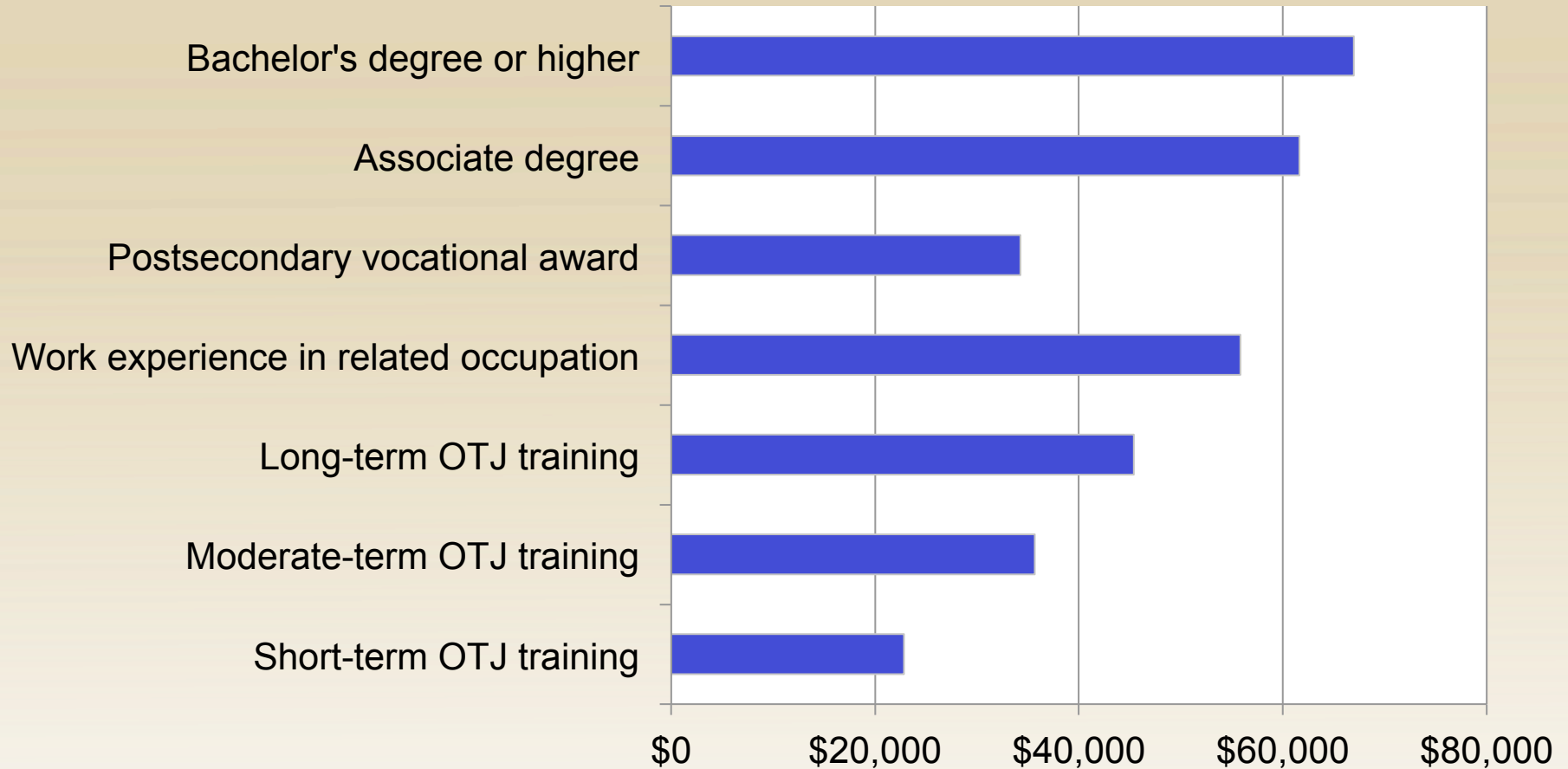
Source: Arizona Department of Administration

U.S. Job Growth by Primary Source of Education and Training, 2010 to 2020



Source: U.S. Bureau of Labor Statistics, Employment Projections Program

U.S. Median Annual Wages by Primary Source of Education and Training, 2010



Source: U.S. Bureau of Labor Statistics, Employment Projections Program

The Economic Case for Investments in Young Children



- Early investments yield a high public return
- Benefits sustain into adulthood
- Key investments: Home visiting, preschool, quality child care, parent education and health care
- Role of public-private partnerships

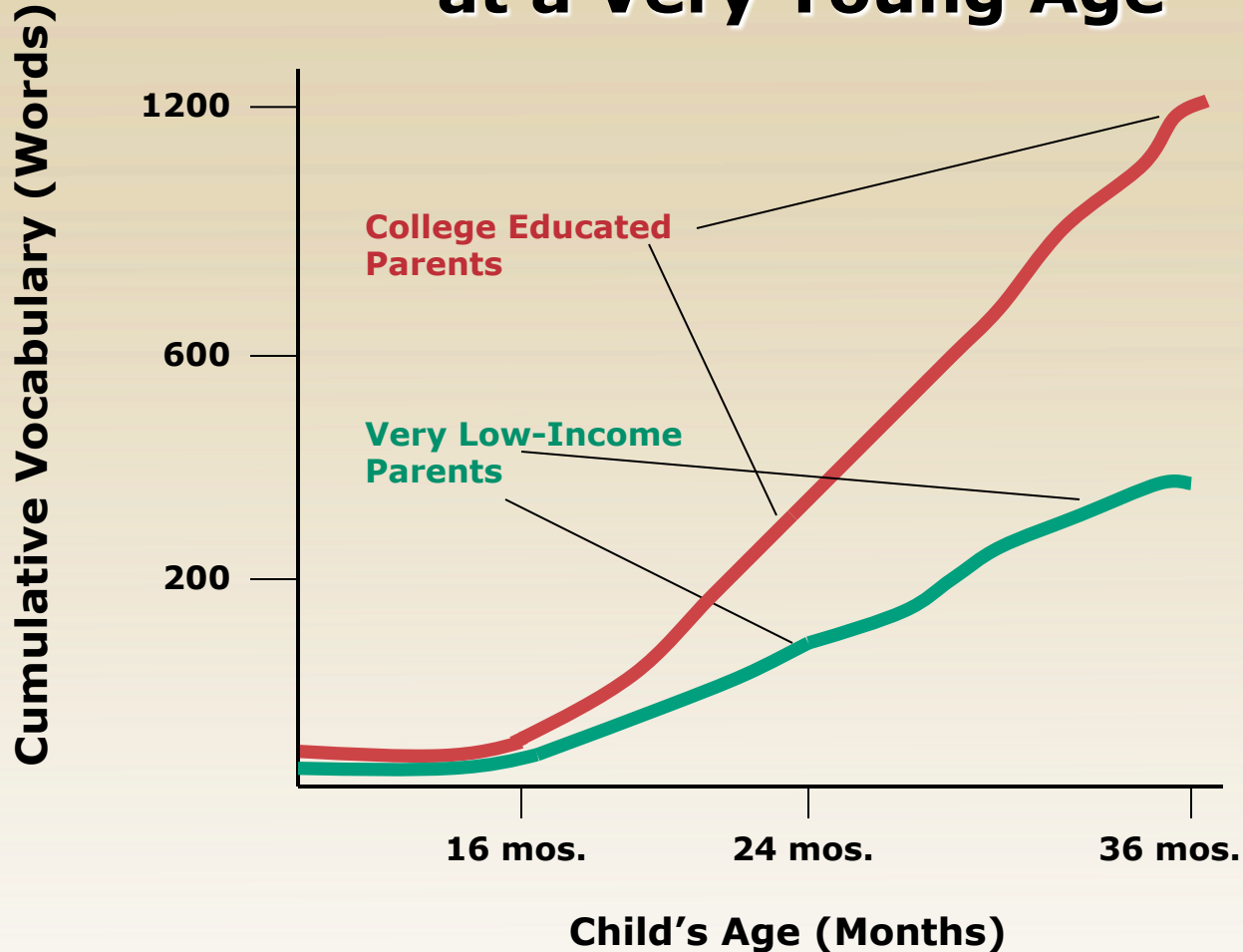
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Barriers to Social Mobility Emerge at a Very Young Age



Source: Hart & Risley (1995)

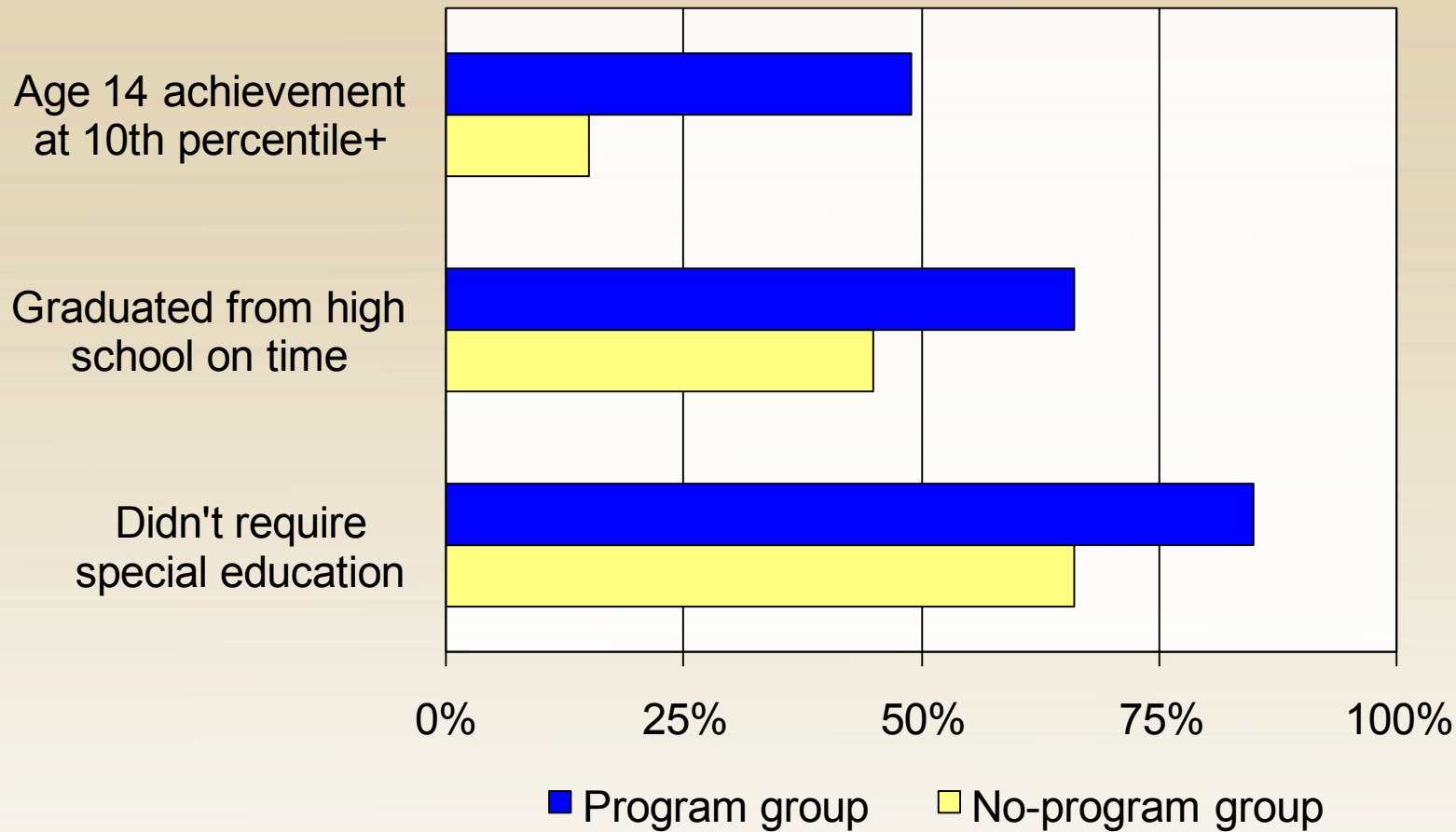


High/Scope Study of Perry Preschool

- In early 1960s, 123 children from low-income families in Ypsilanti, Mich.
- Children randomly selected to attend Perry or control group.
- High-quality program with well-trained teachers, daily classroom sessions and weekly home visits.
- Tracked participants and control group through age 40.



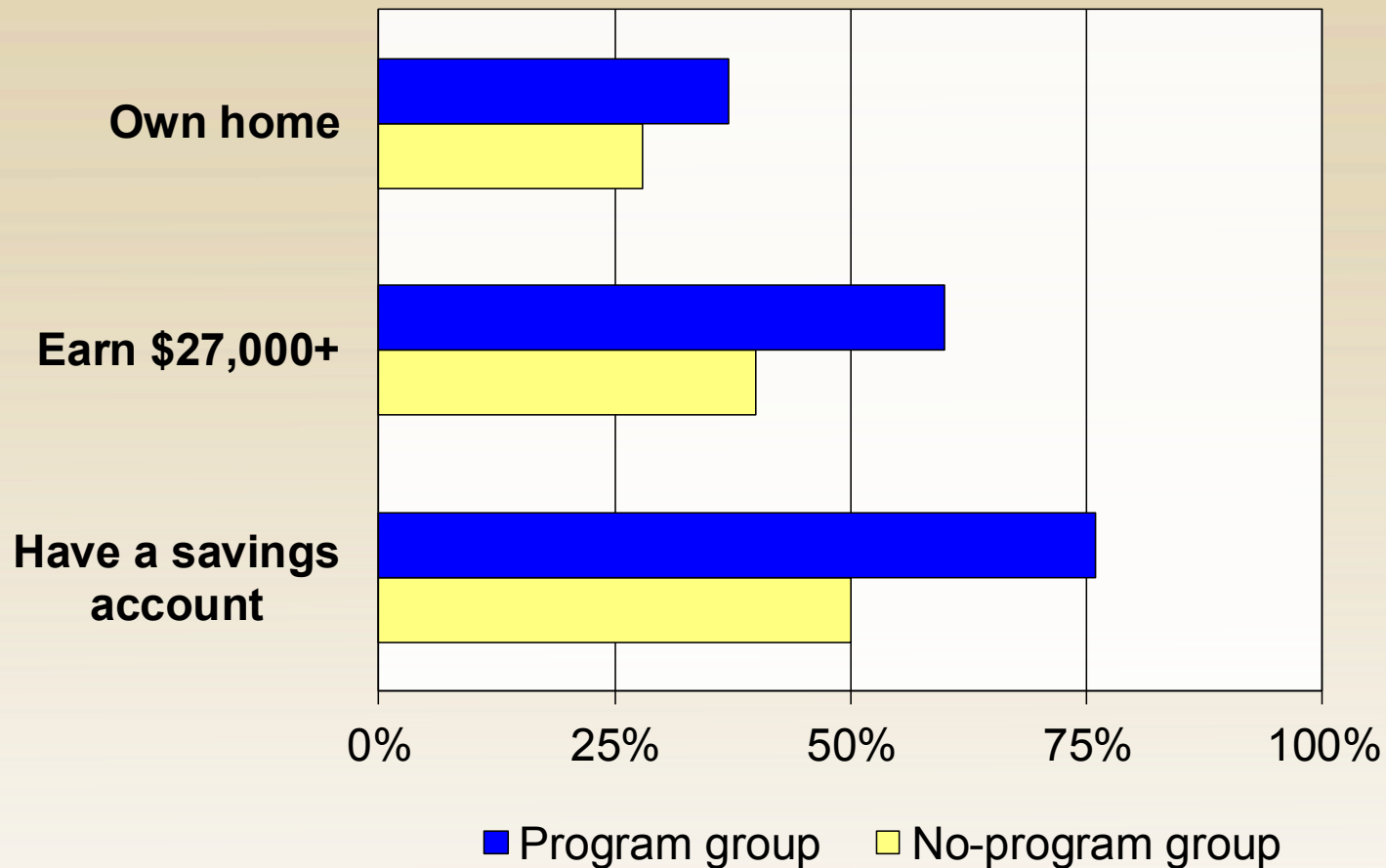
Perry: Educational Effects



Source: Schweinhart, et al. (2005)



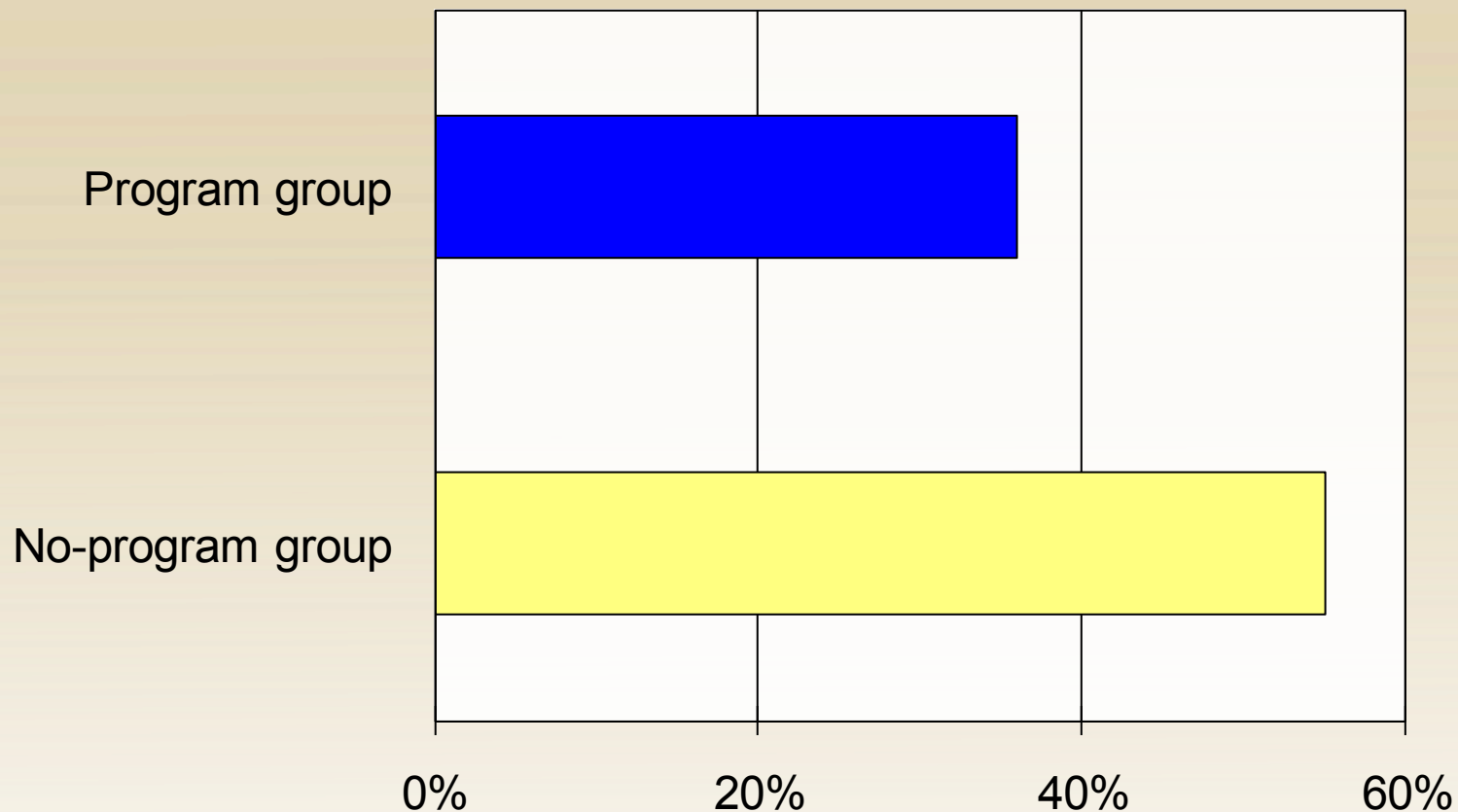
Perry: Economic Effects at Age 40



Source: Schweinhart, et al. (2005)



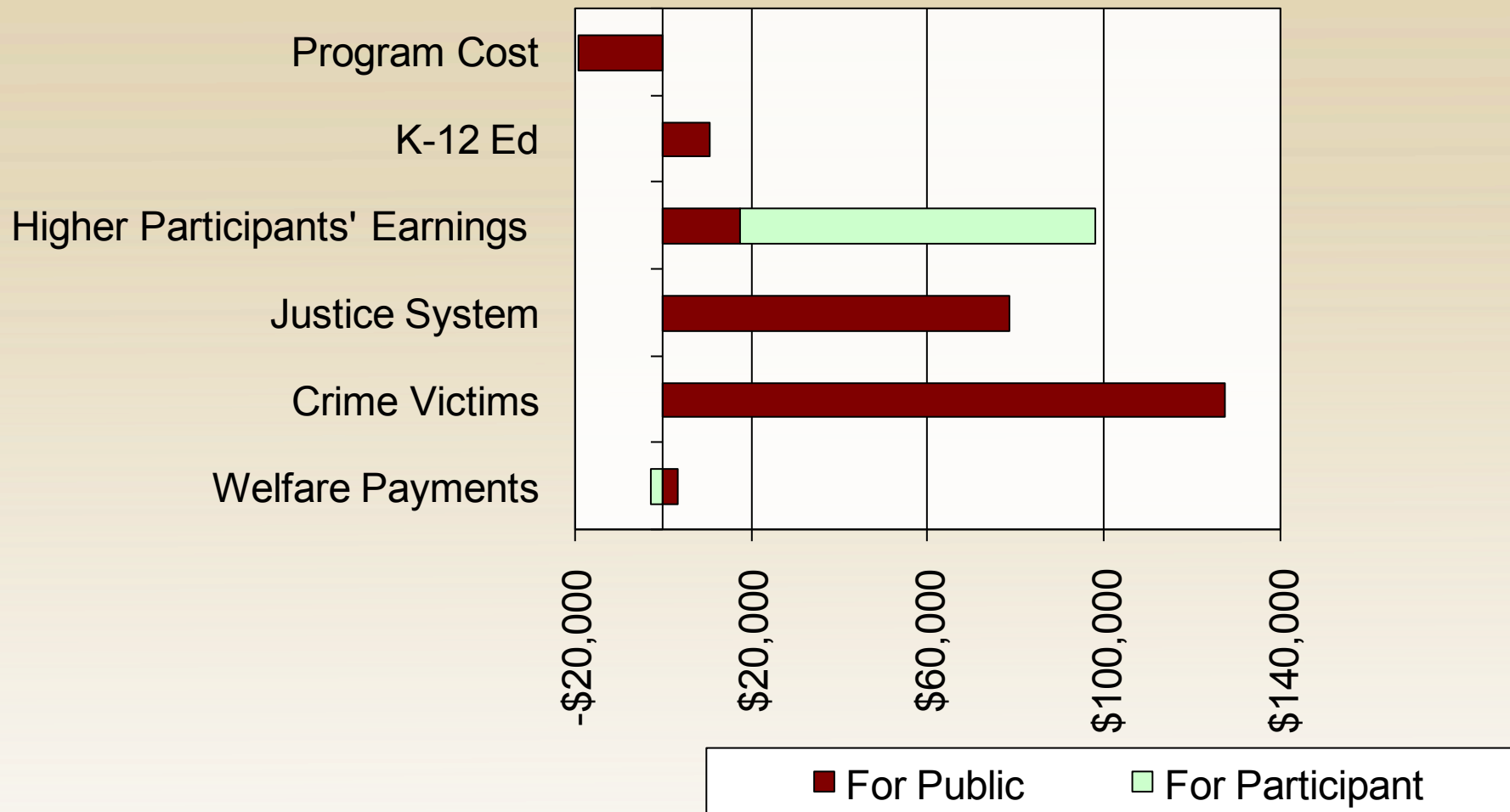
Perry: Arrested 5 or More Times Before Age 40



Source: Schweinhart, et al. (2005)



Perry Preschool Costs and Benefits Over 62 Years



Source: Schweinhart, et al. (2005)



Perry Preschool — Estimated Return on Investment

- Benefit-Cost Ratio = \$16 to \$1
- Annual Rate of Return = 18%
- Public Rate of Return = 16%
- Heckman Reanalysis = 10%

Sources: Schweinhart, et al. (2005); Author's calculations; Heckman, Moon, Pinto, Savelyez, & Yavitz (2010)



Benefit-Cost Ratios for Other Longitudinal Studies

- Abecedarian Educational Child Care
 - \$4 to \$1
- Chicago-Child Parent
 - \$10 to \$1
- Elmira Prenatal/Early Infancy Project
 - \$5 to \$1

Sources: Masse & Barnett (2002); Reynolds, Temple, White, Ou, & Robertson (2011); Karoly, et al (1998)



Short-Run Benefits

- Fewer low-weight and pre-term births
- Fewer emergency room visits
- Reduced child abuse and neglect
- Reduced grade retention and special education



Short-Run Benefits to Businesses

- Allow parents to enter workforce
- Reduce absenteeism and turnover
- Stronger local schools



Lessons Learned from Research

- Invest in quality
- Involve parents
- Start early
- Reach at-risk population
- Bring to scale

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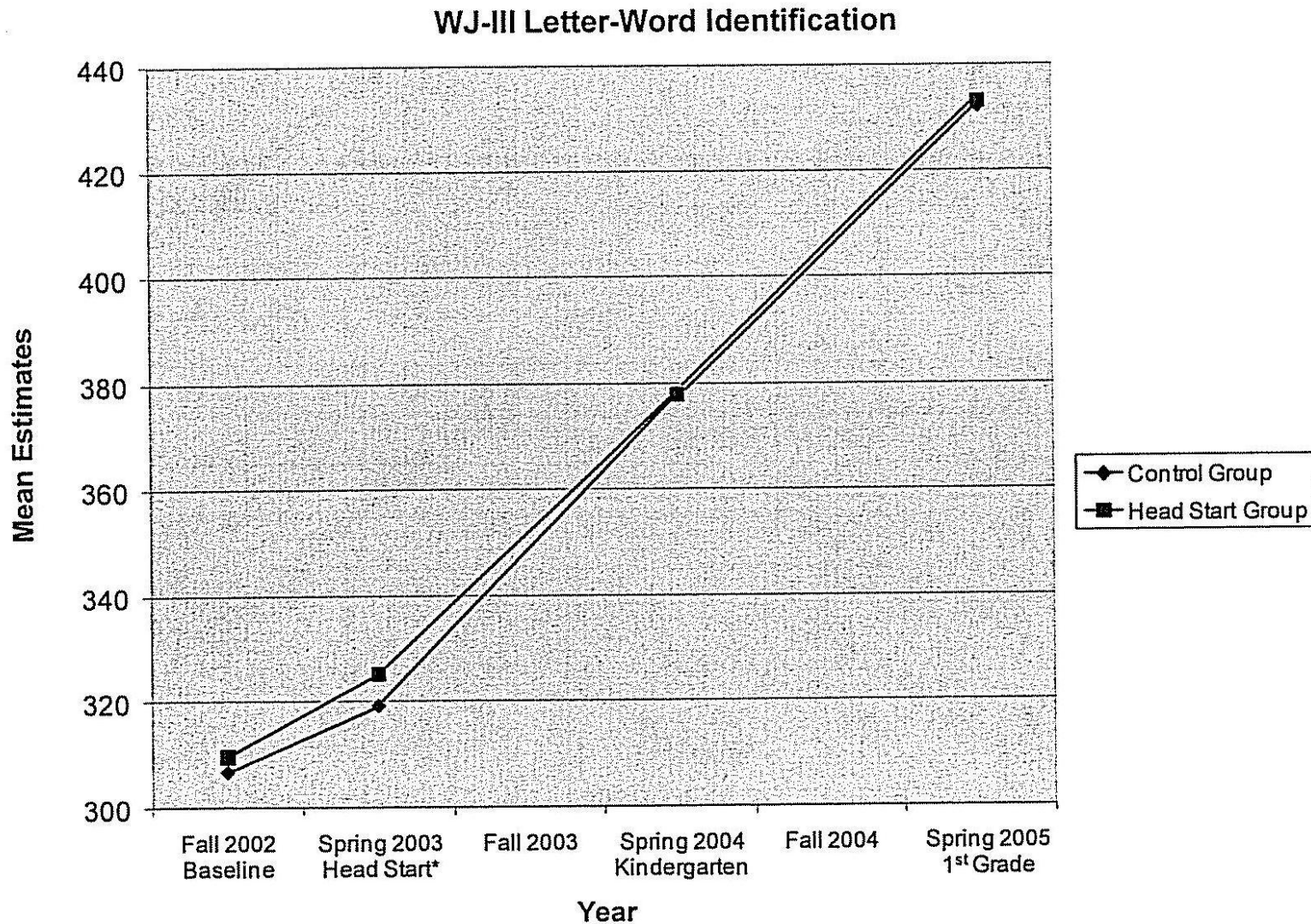


Head Start Randomized Control Trial

- “Head Start improved children’s preschool outcomes across developmental domains, but had few impacts on children in kindergarten through 3rd grade.”
- Measures Intent-to-Treat
 - Includes Head Start enrollees who don’t show up
 - 60 percent of the control group children participated in child care or early education programs

Source: Puma, Bell, Cook, Heid, Broene, Jenkins, Mashburn, and Downer (2012)

Head Start children continue to improve, but control children catch up



Source: Presentation by Steve Barnett, Rutgers University



Study of siblings in the National Longitudinal Survey of Youth show fade out of test scores, but other short-run and long-run effects

	Test scores				Nontest score	Long term
	5-6 (1)	7-10 (2)	11-14 (3)	5-14 (4)	7-14 (5)	19+ (6)

Panel A: Overall

Head Start	0.145* (0.085)	0.133** (0.060)	0.055 (0.062)	0.101 (0.057)	0.265*** (0.082)	0.228*** (0.072)
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Test scores: Standardized PPVT and PIAT math and reading scores

Nontest score: Grade retention and learning disability diagnosis

Long term: High school graduation, college attendance, idleness, crime, teen parenthood, and health status.

Source: Demming (2009)



Key Investments

- Home visiting
- Preschool
- Quality child care
- Parent education
- Health care

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The Saint Paul

Early Childhood Scholarship Program

Helping Families Get High-Quality Child
Care and Early Education

Now enrolling 3-year-old children in Saint Paul's Frogtown and
North End neighborhoods

Tam si no yag. Lib si jhawe rau cov nemyam tsuj tsab nypog 3 ayos uas nyob hauv
St. Paul ohi tsog tsuj zog Frogtown tsab North End cov npeh kom tsab!

¡Iniciando vaca la qonysa tsabha 3 sanno jints ah ee zashidaha Frogtown yoo North
End ee Saint Paul!

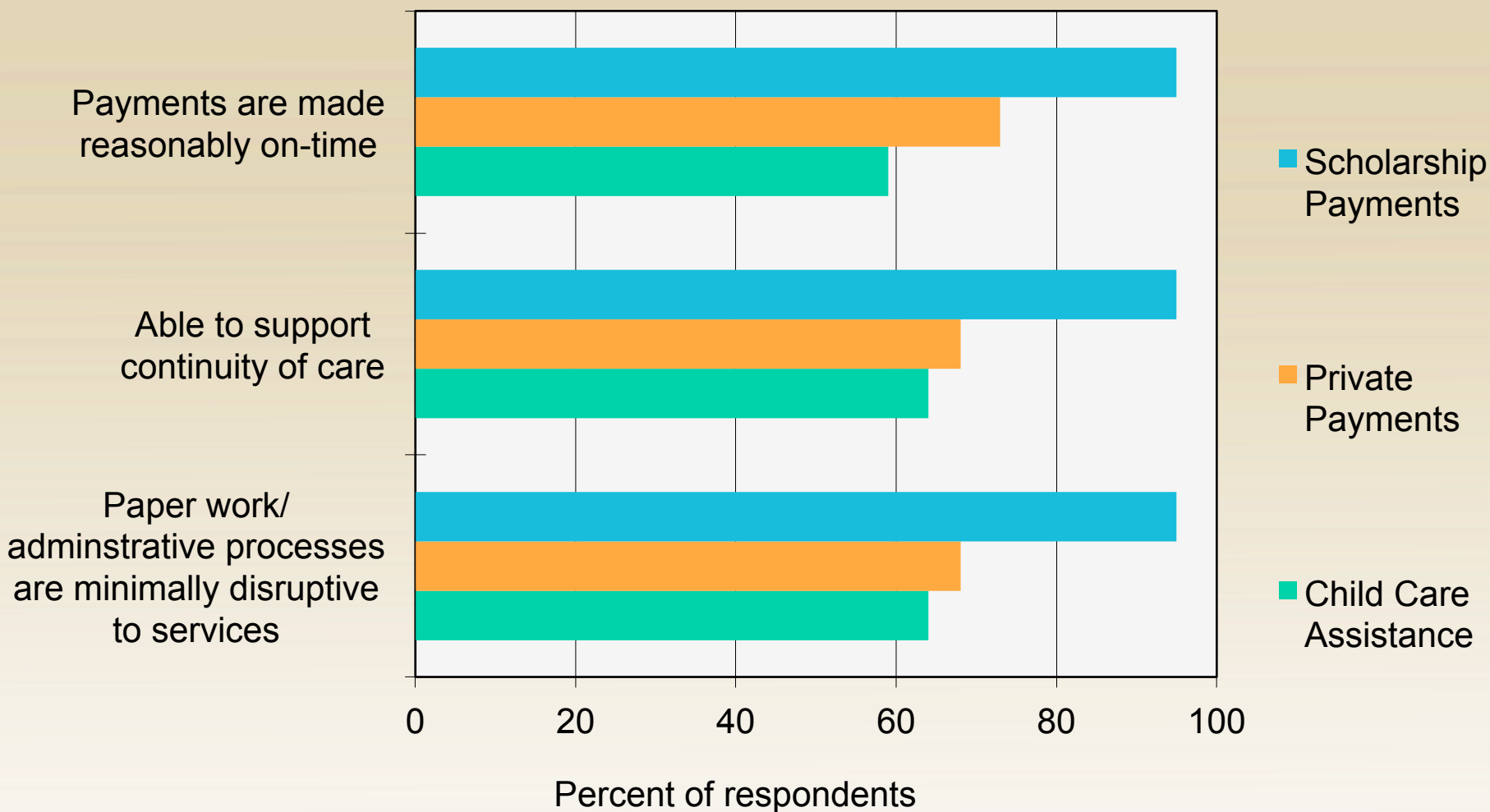
¡Ahora registrando a los niños de 3 años de edad de los vecindarios de Saint Paul,
Frogtown y North End!



Source: Minnesota Early
Learning Foundation



Programs reported benefits of scholarship funds



Source: Gaylor, Spiker, Williamson, & Ferguson (2011)

Sources



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