From Preschool to Prosperity:
The Economic Payoff to Early Childhood Education

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Based in large part on Bartik’s 2014 book, From Preschool to Prosperity
Main Focus

• Why pre-K is an attractive investment for boosting national and state economies

• Also: how Michigan and Kalamazoo are doing on preschool
Logic of Pre-K Economic Effects

- Pre-K develops skills at K entrance.
- “Skills beget skills”: higher skills at K entrance lead to more K learning, and so on.
- As adult, higher skills increase employability & wages.
- 2/3rds of Americans spend most of career in same state they lived in at age 4.
- Spillover benefits: Higher state skills increase everyone’s wages by attracting more and better jobs.
- Pre-K is in sweet spot for high B/C ratio, because child’s brain is malleable at age 4, yet can have larger class sizes than even earlier interventions.
Ratio of Present Value of Future Earnings Benefits to Costs, Nation & State

Source: From Preschool to Prosperity
Note: Chart shows ratio of present value of future earnings increases to pre-K costs.
Do test score effects fade? Re-emergence due to soft skills

**Predicted Earnings Effects Based on Outcomes at Various Ages**

- Abecedarian/Educare
- Perry Preschool
- Head Start
- Chicago CPC

**SOURCE:** Figure 4.1, *From Preschool to Prosperity.*
Pre-K Supported by Multiple Studies of Diverse Programs in Diverse Places

% effects on adult earnings of pre-K programs

SOURCE: From Preschool to Prosperity
Pre-K’s Benefits are Broad

<table>
<thead>
<tr>
<th>Earnings gains versus baseline</th>
<th>Low-income family</th>
<th>Middle-income family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gains from full-day pre-K</td>
<td>$53,000</td>
<td>$48,000</td>
</tr>
<tr>
<td>(cost=$10,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline earnings</td>
<td>$547,000</td>
<td>$997,000</td>
</tr>
<tr>
<td>Percentage gain</td>
<td>10%</td>
<td>5%</td>
</tr>
</tbody>
</table>

NOTE: Gains and baseline earnings are rounded to the nearest thousand, in present-value 2012 dollars. Baseline earnings are the present value of total career earnings without pre-K. Earnings and gains are averages per child for program participants based on Tulsa results. SOURCE: *From Preschool to Prosperity* (Bartik, 2014).
Michigan Has Increased Pre-K Access, But Still Behind Leading States

Selected states (and Kalamazoo County) ranked by percentage of 4-year-olds in state pre-K programs (Kalamazoo includes KC Ready4s)

Source: National Institute for Early Education Research, and Author’s calculations.
Note: All except Michigan are 2012-2013 figures. Governor’s recent budget keeps Michigan’s slots same.
Declining Michigan Real Funding (2015 $) Per Half-Day GSRP Slot

Source: Author's calculations using CPI.
Kalamazoo County Ready 4s: Making Up For Gaps

- Provides pre-K tuition assistance, on sliding scale, to those who Head Start or GSRP do not serve, due to funding and eligibility restrictions.
- Supports income-integrated classrooms.
- Supplements GSRP per-slot payment to support adequate quality.
- Supports quality through training such as teacher coaching.
Summary

• Pre-K has extensive evidence for broad benefits.
• Cost of universal full-day pre-K for all 4-year-olds is $25 billion nationally, about 4% of what is spent on K-12.
• But benefits are over 12 times as great.
• Do we have political will to make investments whose biggest pay-off is long-term?