



# Strategic Budgeting Review Progress Report – Findings and Implications

Board Discussion • March 9, 2015

# Purpose

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- Since June of 2014, NHPS has undertaken a Strategic Resource Allocation project with the goal of making changes to NHPS' priorities in the name of long-term sustainability
- Funded through the Teacher Incentive Fund (TIF), the Strategic Resource Allocation work will guide NHPS through four resource realms:
  - **Funding:** How much do we spend, and on what?
  - **Equity:** How much do we spend across different schools and student types, and how does that align with need? What factors account for the variation?
  - **Human Capital:** What are we doing to attract, develop, and retain top performing teachers? How is effectiveness distributed across the district, and how are leveraging our top teachers?
  - **School Design:** How do schools organize their people, time, and money, and how does that align with student need, school context, and district strategy?
- Thus far, we have covered the Funding and Equity areas, and need to ensure that planning in the current and future years take these insights into account
- Today's discussion focuses on Funding and Equity and provides visibility into key decisions NHPS is in the process of making

# Executive Summary of Findings To-Date

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## Overall Funding

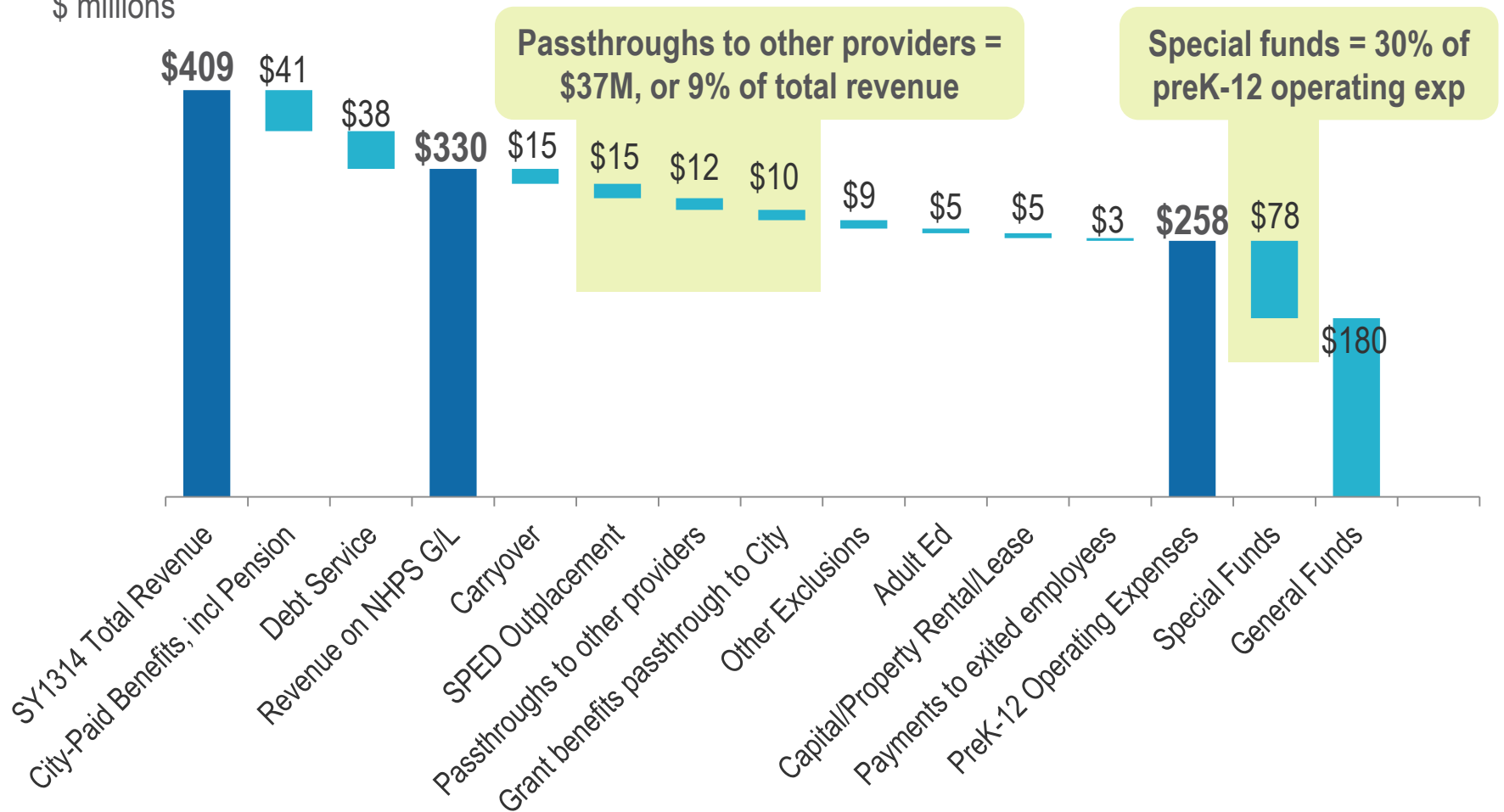
- NHPS is funded on par with peer districts
  - Higher-than-typical rates of passthroughs to other providers
  - Higher transportation and food service costs than national peer districts
- NHPS has invested in 400 more school-based instructional (including 241 more teachers) FTE, totaling \$20M, vs. what we would expect based on peer district staffing ratios
  - Three-fourths of this investment is in teachers, concentrated in High Schools
- With some exceptions, NHPS central office is relatively lean, at 6% of pre-K-12 operating expense

## Resource Equity

- NHPS has greater resource variation across schools than we see in peer districts
  - HSs are funded \$1,600 per pupil higher than K-8s, with an additional “small school premium” for HSC and Hyde
- Most variation in resource allocation among K-8s is “unexplained” by the data, but is associated with higher staffing levels
  - Magnet status accounts for only about 25% of variation
- NHPS has the potential to significantly increase equity among its K-8 schools

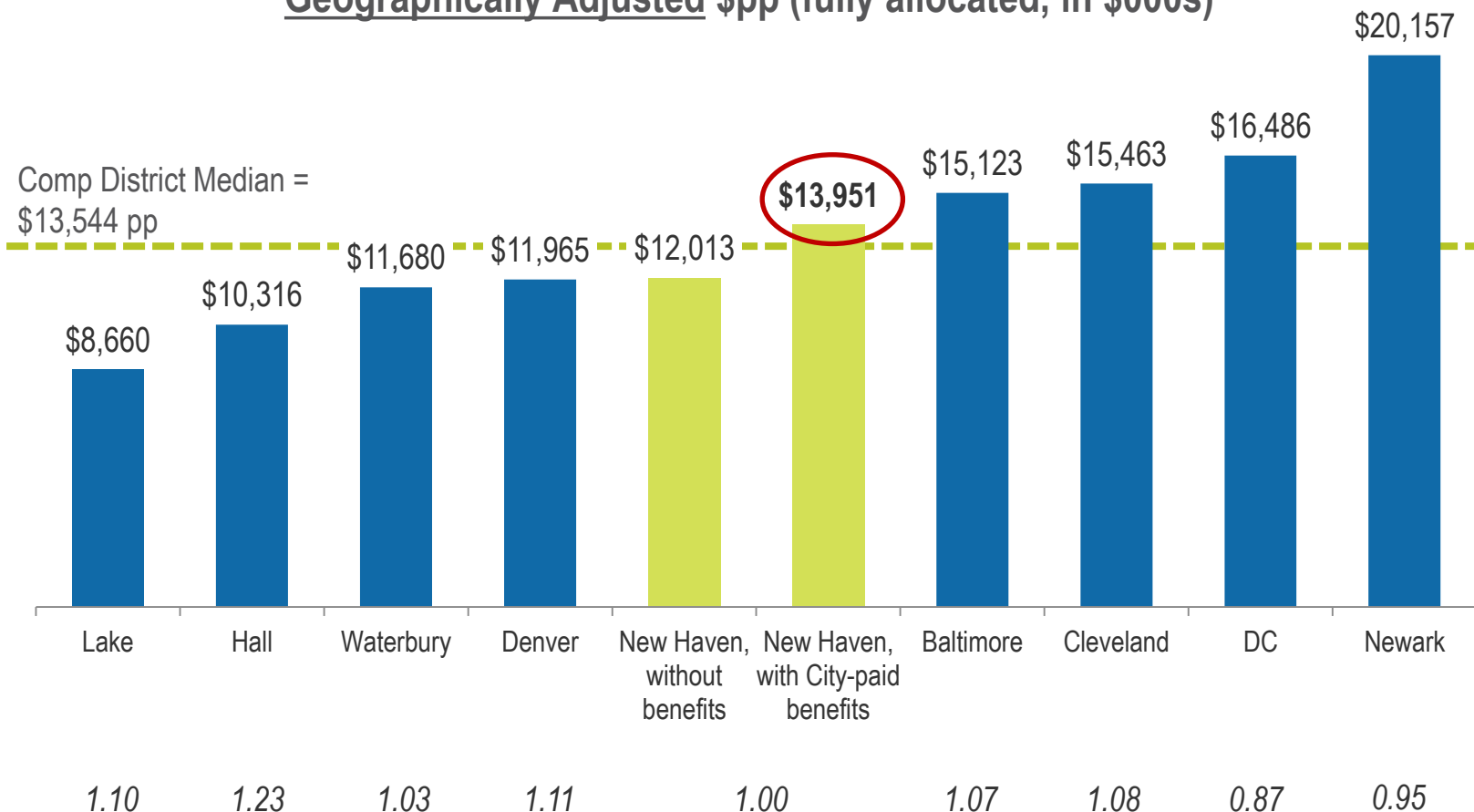
# NHPS spent \$260 million educating its students in the 2013-14 school year

\$ millions



# NHPS per-pupil operating funding is middle-of-the-pack vs. peer districts

Cross District Comparison of Average PreK-12 Operating Geographically Adjusted \$pp (fully allocated, in \$000s)\*



NCES-  
Comp  
Wage  
Index

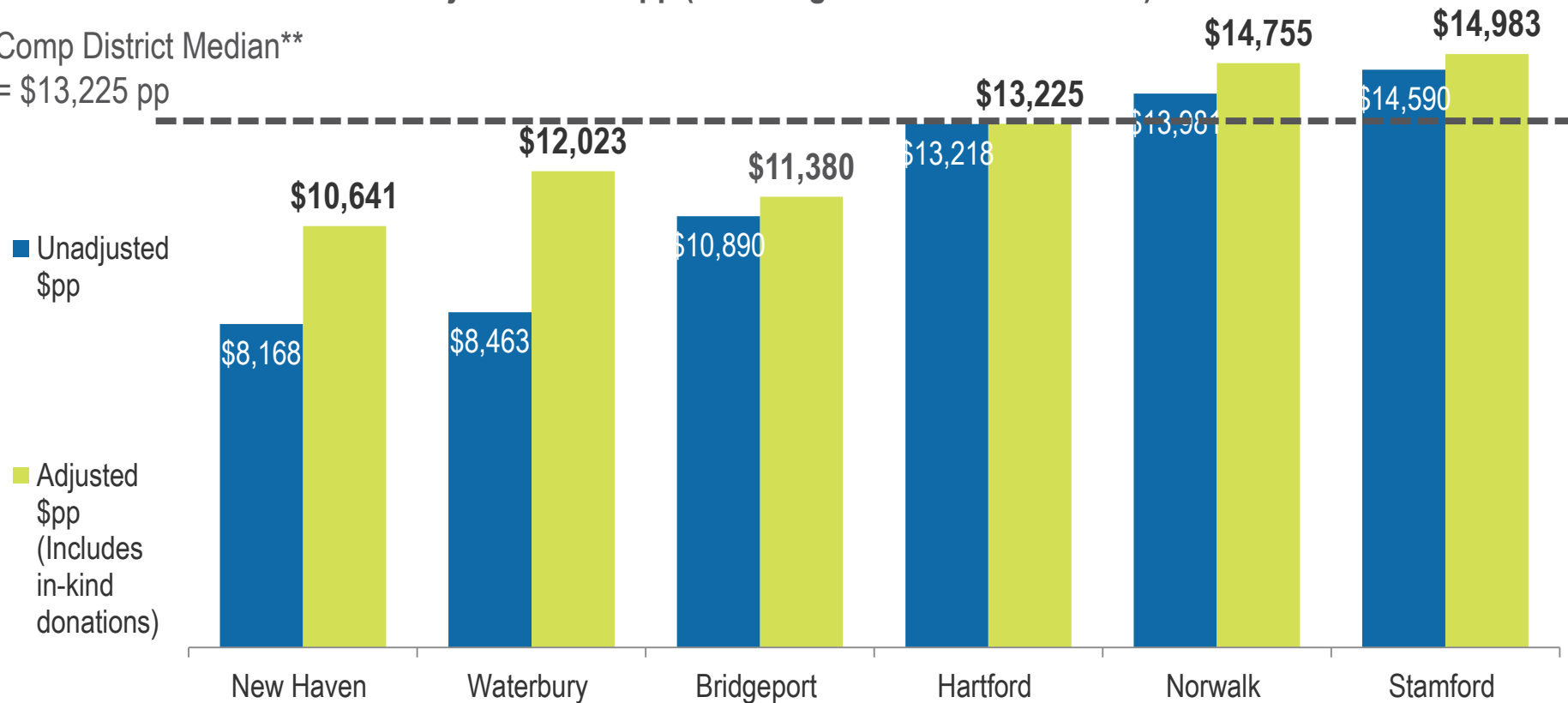
\* Dollars represent K-12 operating budget/expenditure for year studied. Dollars adjusted for geography using the National Center for Education Statistics 2005 School District Comparative Wage Index. Dollars adjusted to 2013-14 (inflation adjusted) using the Bureau of Labor Statistics CPI calculator

Source: NHPS SY1314 Expenditures, ERS analysis; ERS benchmark database

# NHPS receives less per-pupil from the City than other urban districts in Connecticut

Cross District Comparison of 2012-2013 Minimum Budget Requirement (MBR) \$pp and Adjusted MBR \$pp (Including In-Kind Contributions)\*

Comp District Median\*\*  
= \$13,225 pp



**12-13 Adjusted MBR\*\***

\$225,409,965

\$221,083,696

\$229,361,227

\$284,160,667

\$163,363,079

\$235,453,654

\*Calculated from reported enrollment on October 1, 2012

\*\*Includes in-kind contributions

Sources: <http://www.sde.ct.gov/sde/cwp/view.asp?a=2635&q=320574>; <http://sdeportal.ct.gov/Cedar/WEB/ResearchandReports/SSPReports.aspx>; 2012-2013 Form ED001 Schedule 1 (Part 1)

# ERS defines “school-based” resources to include many categories reported on the central budget

**NHPS**

## **Leadership & Management**

**District Governance, Management of the support services provide to Schools**

Example: Superintendent, Strategy, Dir. of Math, Dir. of Transportation

**6%**

## **Shared Services**

**All FTEs, services, and materials that provide support to schools but generally on as-needed or irregular basis**

Example: Transportation, Maintenance

**15%**

## **School on Central**

**All FTEs, services, and materials not reported in the financial system at schools, but play out in schools on a regular and predictable basis**

Example: Most school-based staff

**74%**

## **School Reported**

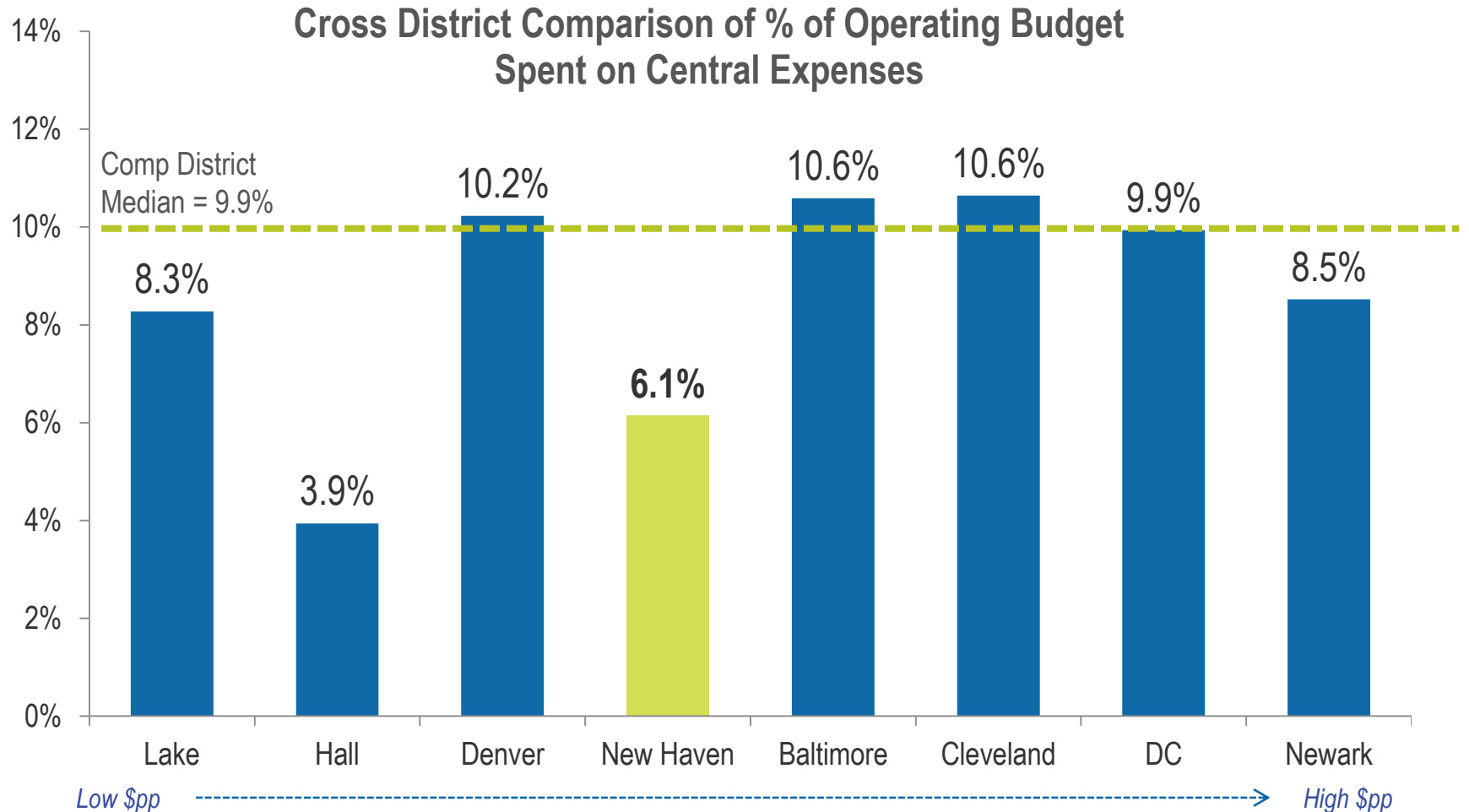
**All FTEs, services, and materials allocated directly to schools in the district expenditures**

Example: Some Interdistrict Magnet resources

**5%**

**Predictably school-based resources**

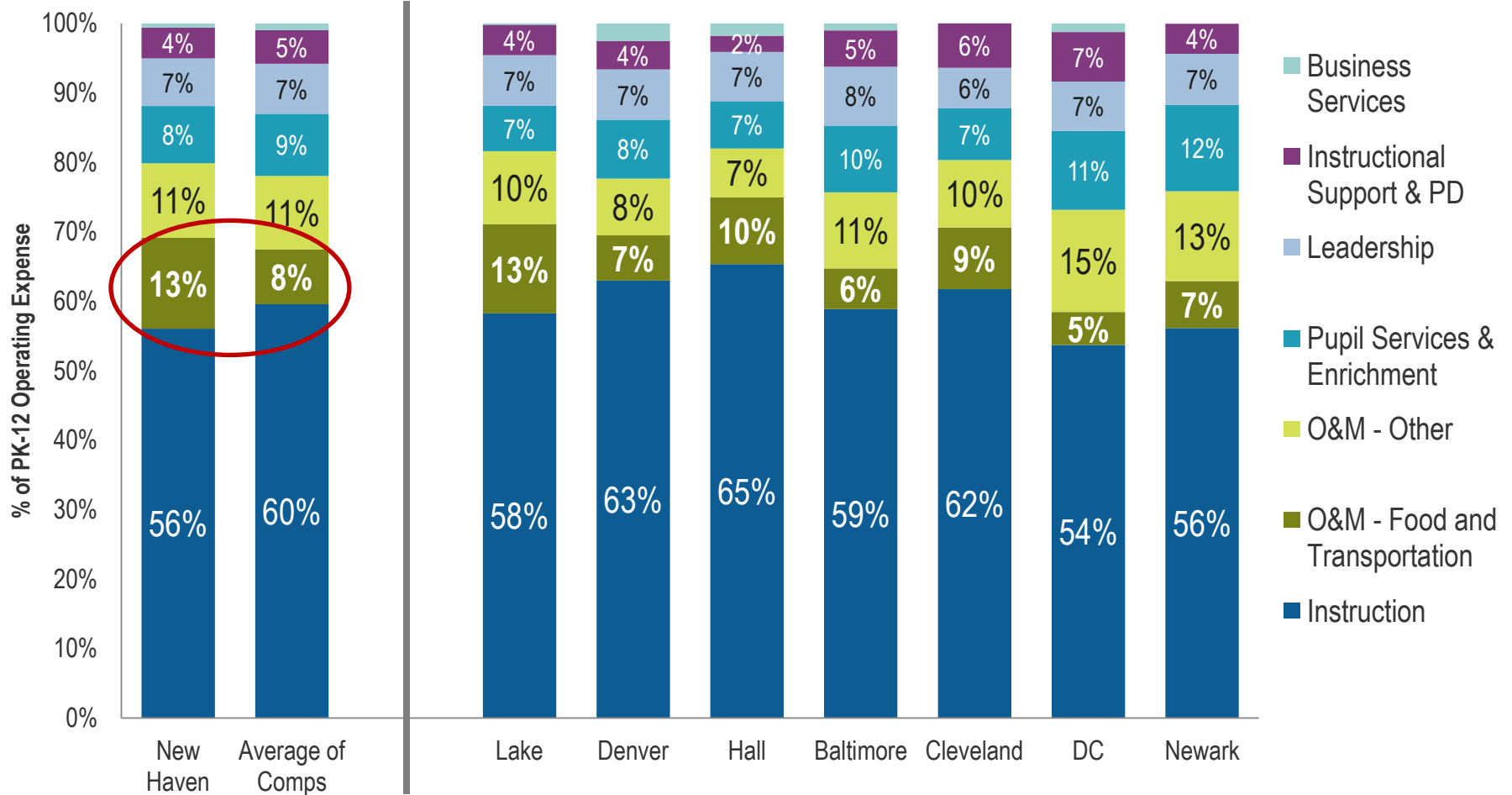
# NHPS' \$18M central expense line represents a lower proportion of its budget than peer districts





# Above-average Operations & Maintenance costs are driven by Food Service and Transportation

Breakdown of school-attributed spending, by use



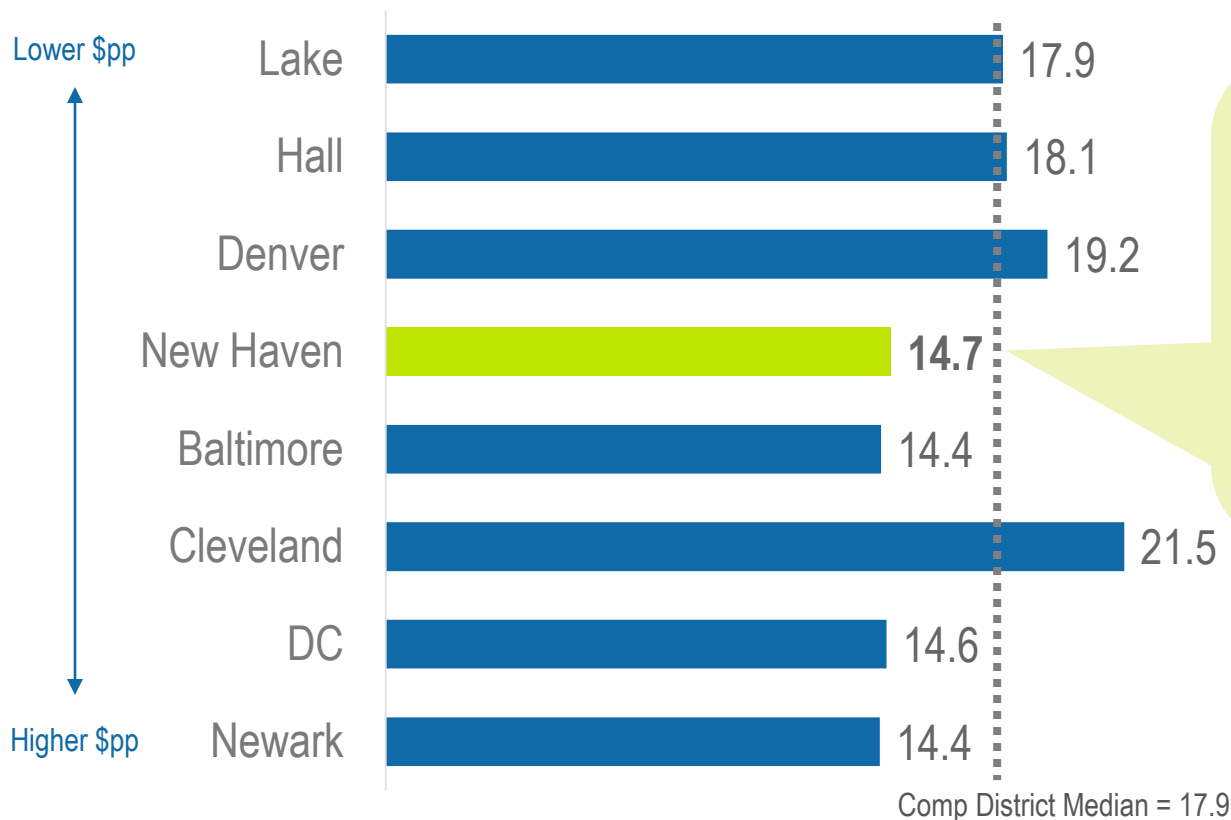
Source: NHPS SY1314 Expenditures, ERS analysis; ERS benchmark database

# Student Transportation costs are affected by local context in New Haven

Function	NHPS Total	NHPS \$pp	Comp Dist Median	% Gap	\$ Gap	Key Local Context
Student Transportation	\$21.5M	<b>\$1,016</b>	\$387	163%	\$13.3M <i>\$9.6M incl magnet revenue offset</i>	Living wage mandate Magnet busing High costs in other CT districts
Facilities & Maintenance	\$15.1M	<b>\$760</b>	\$717	6%	\$0.9M	Living wage mandate
Food Services	\$14.7M	<b>\$694</b>	\$537	29%	\$3.3M	Living wage mandate
Utilities	\$9.7M	<b>\$457</b>	\$313 \$515	46% -17%	\$3.0M <b>(-\$1.1M)</b>	<< Unadjusted for local rates << Adjusted for local rates
Security & Safety	\$3.9M	<b>\$186</b>	\$196	-5%	<b>(-\$0.2M)</b>	

# NHPS has more teachers for its size than most peer districts

District-Average  
Non-SPED Student:Teacher Ratio



Implied gap vs. peer median  
241 teachers, or \$14.7M

Breakdown of 241 positions  
by school level/type

Magnet HS:	100 FTE
Neighborhood HS:	58 FTE
Magnet K8:	36 FTE
Neighborhood K8:	47 FTE

## Equal Funding

Schools get comparable resources based on size and/or other fixed allocation drivers



## Equitable Funding

Schools get resources that are comparable based on student needs and what it will take to address them

# Having variation in per-weighted-pupil funding across schools is not necessarily a bad thing

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## Good Variation



- ✓ Deliberate/  
By Design
- ✓ Aligned with district's  
strategic goals
- ✓ Gives “needier”  
schools additional \$\$

## Bad Variation



- ✓ Unplanned/  
Unintentional
- ✓ Unstrategic
- ✓ Resources not going  
to the “needier”  
schools

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To assess the variation in per-weighted-pupil funding, we must look at what appears to be driving it

# New Haven spends different amounts on different student types

Fully Allocated \$pp by Student Type



<b>Ratio</b>	1.0	1.1	1.1	1.2	1.2	1.2	2.3	2.4
<b># of Pupils*</b>	19,344	13,767	598	1,580	2,739	224	1,528	244

\* Students that are Poverty, ELL, and SPED-Related Services, and SPED Resource/Inclusion are also served in a GenEd Setting; Pre-K students are only included in the Pre-K count and are excluded from all other categories.

Source: NHPS SY1314 Expenditures; ERS analysis

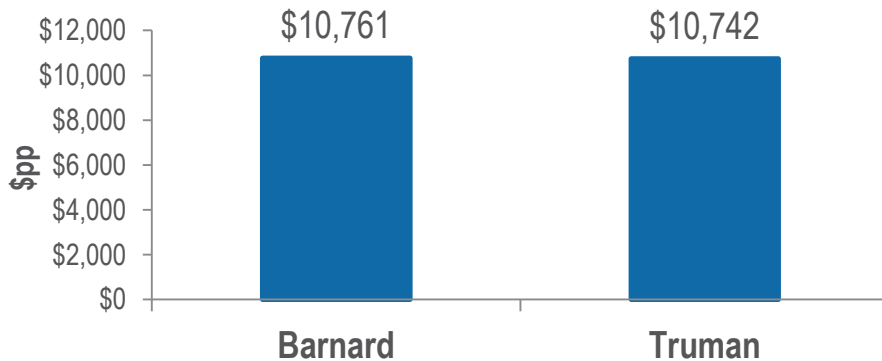
# New Haven's spending is similar to peer districts, except for lower investment in self-contained SWD

District	General Ed base (\$000 pp)	Poverty	ELL	SPED – Res/Inclusion	SPED – Self-Contained
New Haven	\$11.1	1.1	1.2	2.3	3.0 (K-8) 1.9 (HS)
Peer District Median	\$8.4	1.1	1.3	2.5	3.1
Lake	\$6.6	1.1	1.1	2.1	3.3
Denver	\$7.6	1.2	1.1	2.3	4.3
Hall	\$8.4	1.1	1.3	2.5	2.9
Baltimore	\$11.1	1.1	1.5	3.0	3.1
DC	\$11.2	1.1	1.5	2.4	3.2
Cleveland	\$10.9	1.1	1.1	2.5	3.5
Newark	\$15.6	1.0	1.3	2.3	2.5

# ERS adjusts per pupil spending at each school to account for these different student types

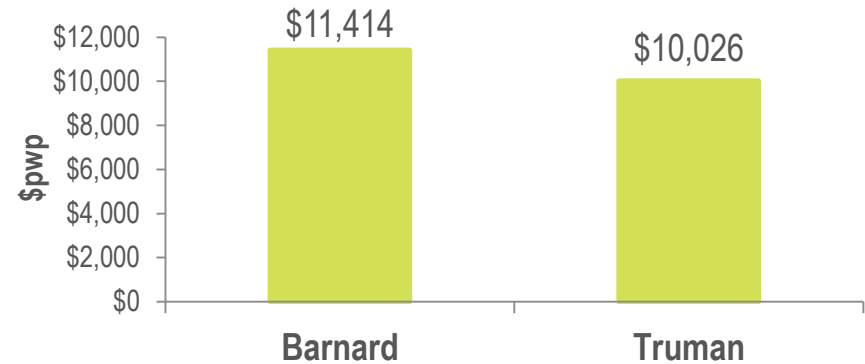
1

These two schools have similar per pupil amounts but Truman serves a needier student population ...



2

... so ERS takes the student type weights that we calculated to adjust each school's enrollment to create an "weighted" per-pupil amount



	Barnard	Truman
<b>Unweighted Enrollment</b>	584	462
<b>% SPED</b>	10%	13%
<b>% ELL</b>	7%	39%
<b>% Pov</b>	67%	85%

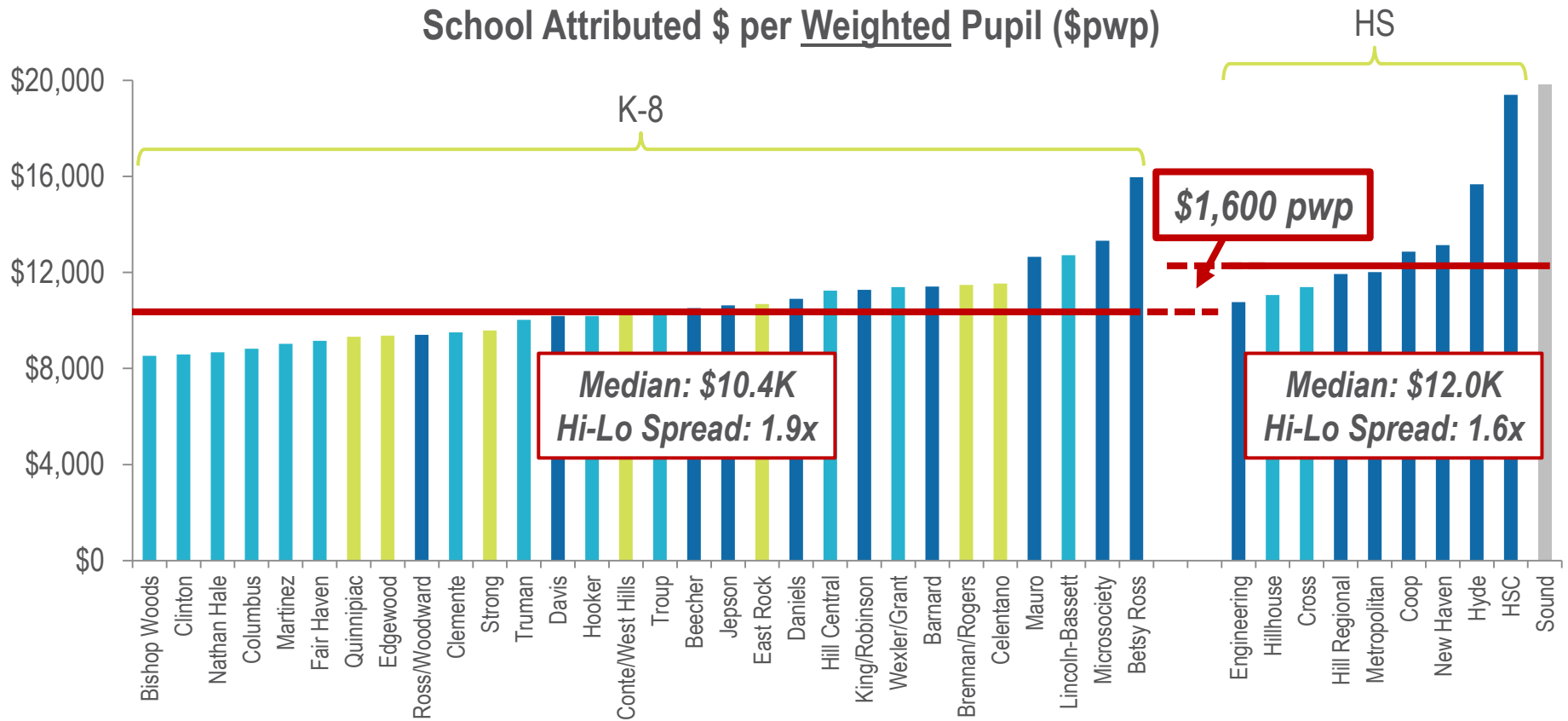


	Barnard	Truman
<b>Weighted Enrollment*</b>	551	495

\* For example: We know that the district overall spending on ELL students is 1.2 weight, so any ELL students at Barnard and Truman are weighted 1.2 in the school's weighted enrollment. Across the district, **the weighted enrollment is then grossed down proportionally to get to the district's actual enrollment.**



# NHPS has a large resource gap between K-8 and HS as well as between neighborhood and magnet schools

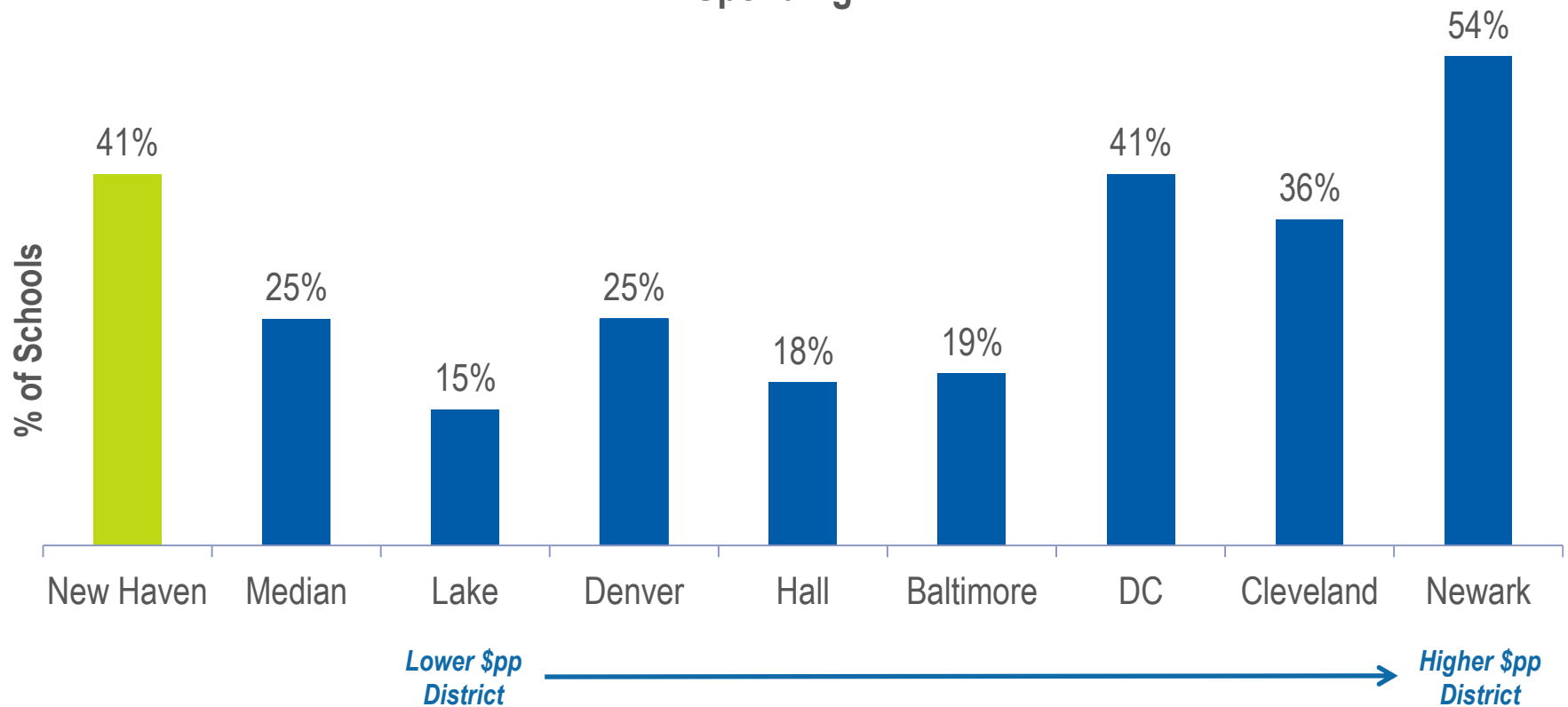


<b>Neighborhood</b>	<b>\$9,503</b>	<b>--</b>	<b>\$11,224</b>	<b>--</b>
<b>NHPS Magnet</b>	<b>\$10,326</b>	<b>+9%</b>	<b>N/A</b>	<b>N/A</b>
<b>Interdistrict Magnet</b>	<b>\$11,090</b>	<b>+17%</b>	<b>\$12,868</b>	<b>+15%</b>

Note: Comparisons exclude Sound School  
Source: NHPS SY1314 Expenditures; ERS analysis

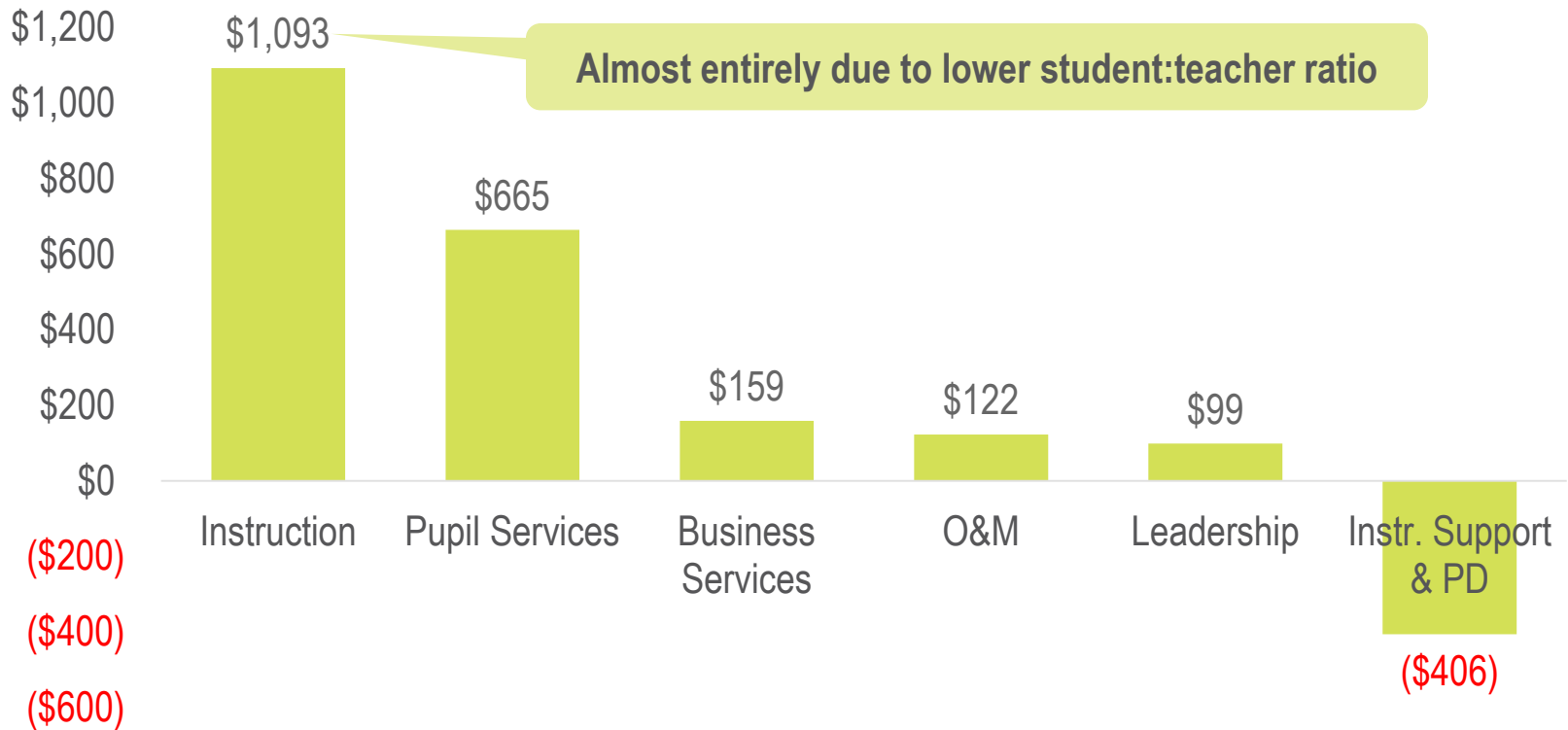
# NHPS has more variation across schools compared with most peer districts

Share of Schools Outside 10% of School Level Median Per Weighted Pupil Spending



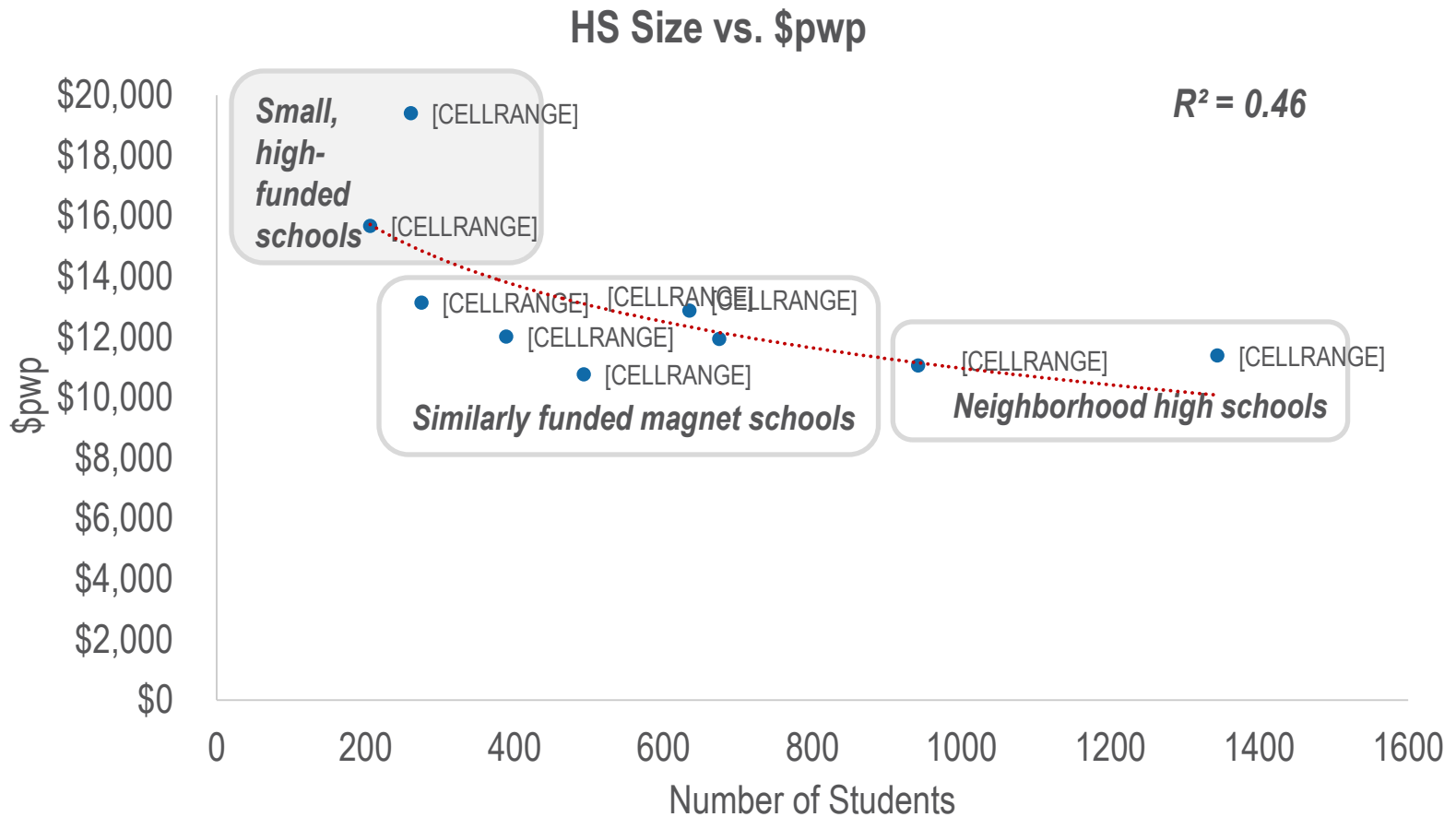
# Nearly 2/3 of the extra dollars in high schools are devoted to higher levels of teacher staffing

Additional \$pp spent in HS relative to K-8, by Use



<b>K-8 \$pp</b>	\$6,815	\$822	\$20	\$1,343	\$820	\$682
<b>HS \$pp</b>	\$7,908	\$1,487	\$179	\$1,465	\$919	\$277
<b>% of Total Gap</b>	63%	38%	9%	7%	6%	(23%)

# Much of the variation at the high school level is driven by size





Note: Comparisons exclude Sound School

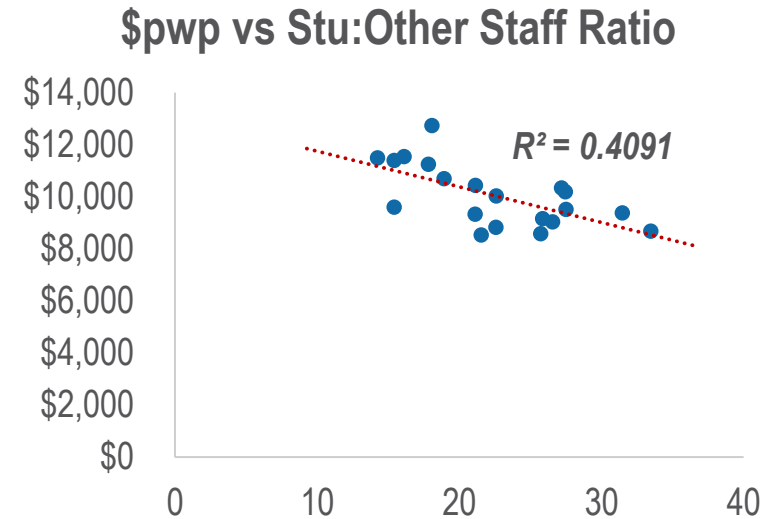
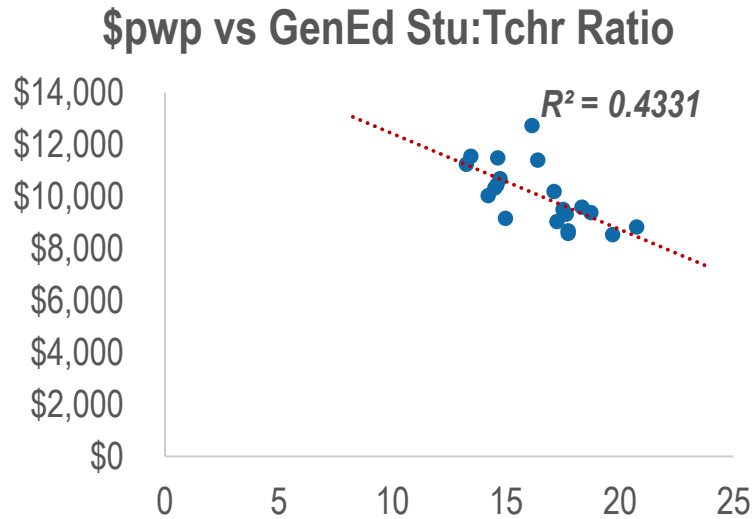
Source: NHPS SY1314 Expenditures; NHPS SY1314 Student Enrollment; ERS analysis

# Most funding variation across K-8 schools is not easily explained by the data...

How significant is this factor?

Common Drivers of Variation	Very (50%+)	Somewhat (20%)	A little (10%)	Not (<5%)
 Interdistrict Magnet status		✓		
School size			✓	
Prior year student performance				✓
Most recent school tiers			✓	
Teacher compensation				✓
Not adjusting to changes in student enrollment				✓
Special Grants Funding				✓
 Ad-hoc exceptions / unexplained variation	✓			

# ...but is associated with differences in staffing levels



**Higher levels of staffing relative to school size and student need accounts for two-thirds of variation in spending among NHPS K-8 schools**

# How could NHPS address the variation within school level and type?

Strategy	Considerations	Status on March 9, 2015
<b>Move staff from higher resourced to lower resourced schools</b>	<ul style="list-style-type: none"> <li>• Creates equity for SY1516 without requiring system-level changes</li> <li>• Requires shifting the mix of more and less effective staff, to avoid simply passing less effective staff to new schools</li> <li>• Does not address underlying factors driving variation</li> </ul>	<ul style="list-style-type: none"> <li>• Staffing Tool under development that would allow for real-time decision making</li> <li>• Retirements/resignations in the current year are seen as major opportunity for impact</li> </ul>
<b>Shift enrollment from lower resourced to higher resourced schools</b>	<ul style="list-style-type: none"> <li>• Creates equity for SY1516 without requiring system-level changes</li> <li>• Implies change that families may resist, especially if they are asked to move from top-choice schools</li> </ul>	<ul style="list-style-type: none"> <li>• Enrollment projections can and should account for possible enrollment changes in the next school year</li> <li>• September enrollment results must weigh on next steps</li> </ul>
<b>Create and adhere to consistent school-wide staffing guidelines</b>	<ul style="list-style-type: none"> <li>• Creates a systemic approach that maintains assignment flexibility for school teams</li> <li>• Implies re-thinking service delivery model as staffing allocations vary</li> <li>• Risks creating equality without equity</li> </ul>	<ul style="list-style-type: none"> <li>• Adopting a formal staffing model is on the Executive Team agenda for future year consideration</li> </ul>
<b>Design and implement a Weighted Student Staffing or Weighted Student Funding model</b>	<ul style="list-style-type: none"> <li>• Ensures a long-term strategic approach to resource allocation across the system</li> <li>• Requires time and consideration to develop and implement a new system strategically</li> <li>• Requires a different skill set vs. traditional funding system, especially among finance and school staff</li> </ul>	<ul style="list-style-type: none"> <li>• Adopting a student-based funding model is on the Executive Team agenda for future year consideration</li> </ul>

# Implications and Next Steps

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- Targeted program reviews of significant areas of spending are underway, with a clear intention of identifying cost savings
- Additional budget is sought through zero-basing all central costs other than staffing and “fixed cost” components.
- Incremental and intentional investments in certain key offices and schools are being considered, and will be evaluated using the current findings on funding and equity/student need.
- Additional budget has been allocated to all schools, with a focus on student-based resourcing. Schools will continue to be reminded of the upcoming budget adjustments in the Fall.
- Careful evaluation of current staffing levels in the context of equity will inform NHPS’ eventual hiring or non-rehiring of positions for the upcoming school year.
- Final proposed budget will articulate planned reductions and investments in the context of what we’ve learned about our funding and equity status.
- A five-year resource allocation plan will be our focus after the FY16 Budget is delivered

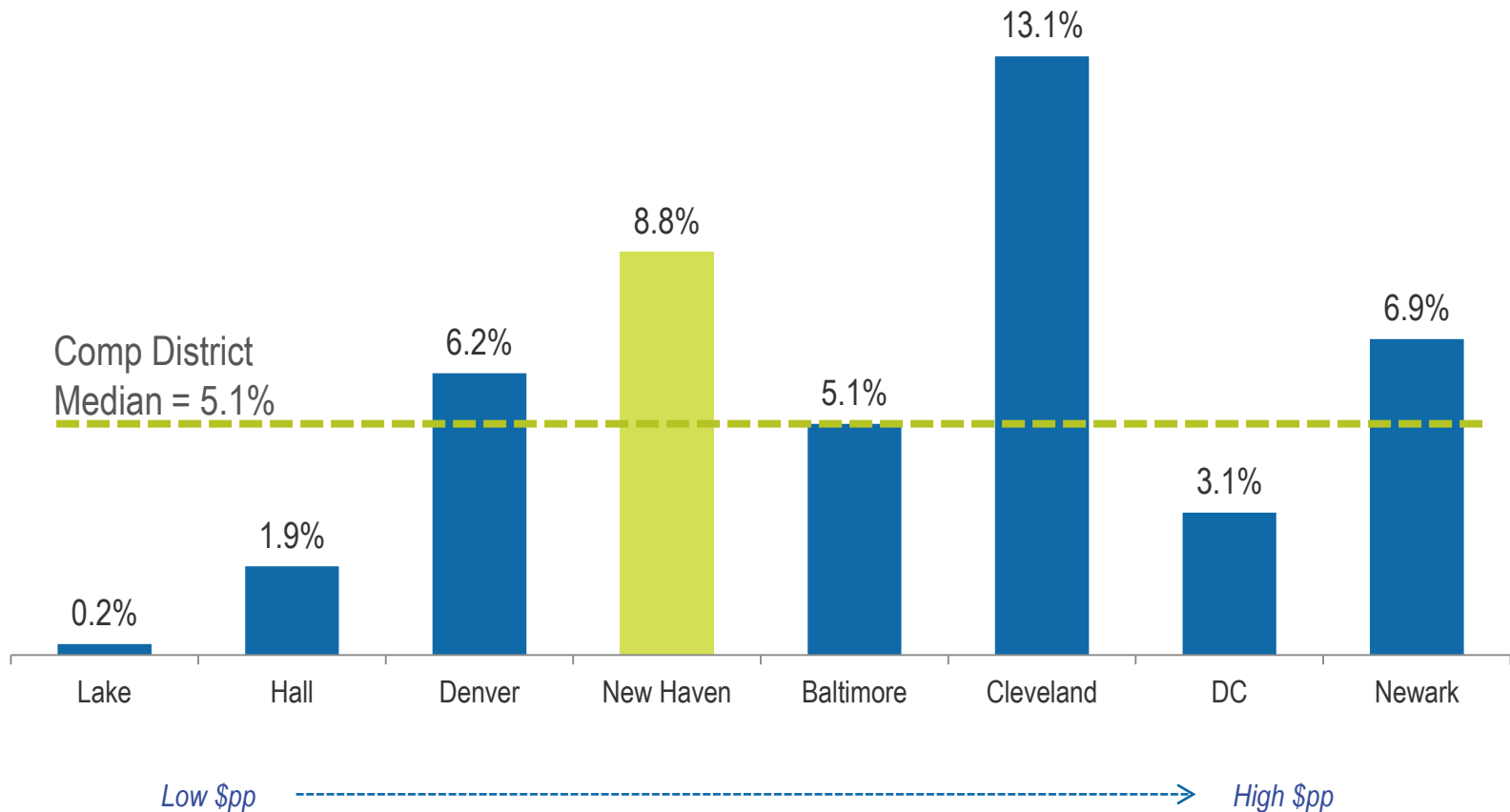


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# APPENDIX

# A higher proportion of passthroughs from the G/L means NHPS is leaner than perceived, and has less control over its revenue

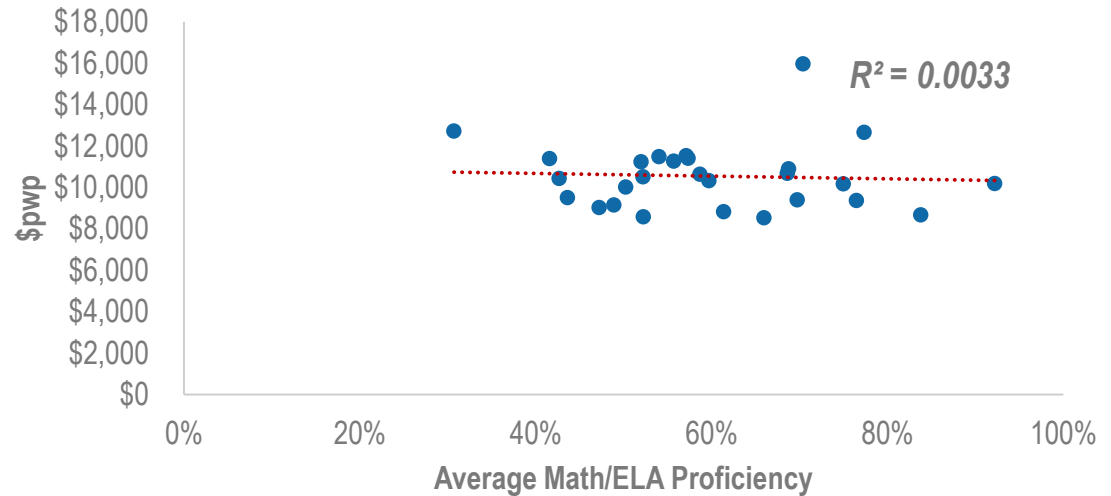
## Passthroughs from G/L as % of Total Expenses



Note: Excludes payments to Charters, which don't appear on NHPS books  
Source: NHPS SY1314 Expenditures, ERS analysis; ERS benchmark database

# Lack of Student Proficiency Correlation to Funding

Student Performance and \$pwp in K-8s



## SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.06
R Square	0.00
Adjusted R Square	(0.03)
Standard Error	1,646.24
Observations	30.00

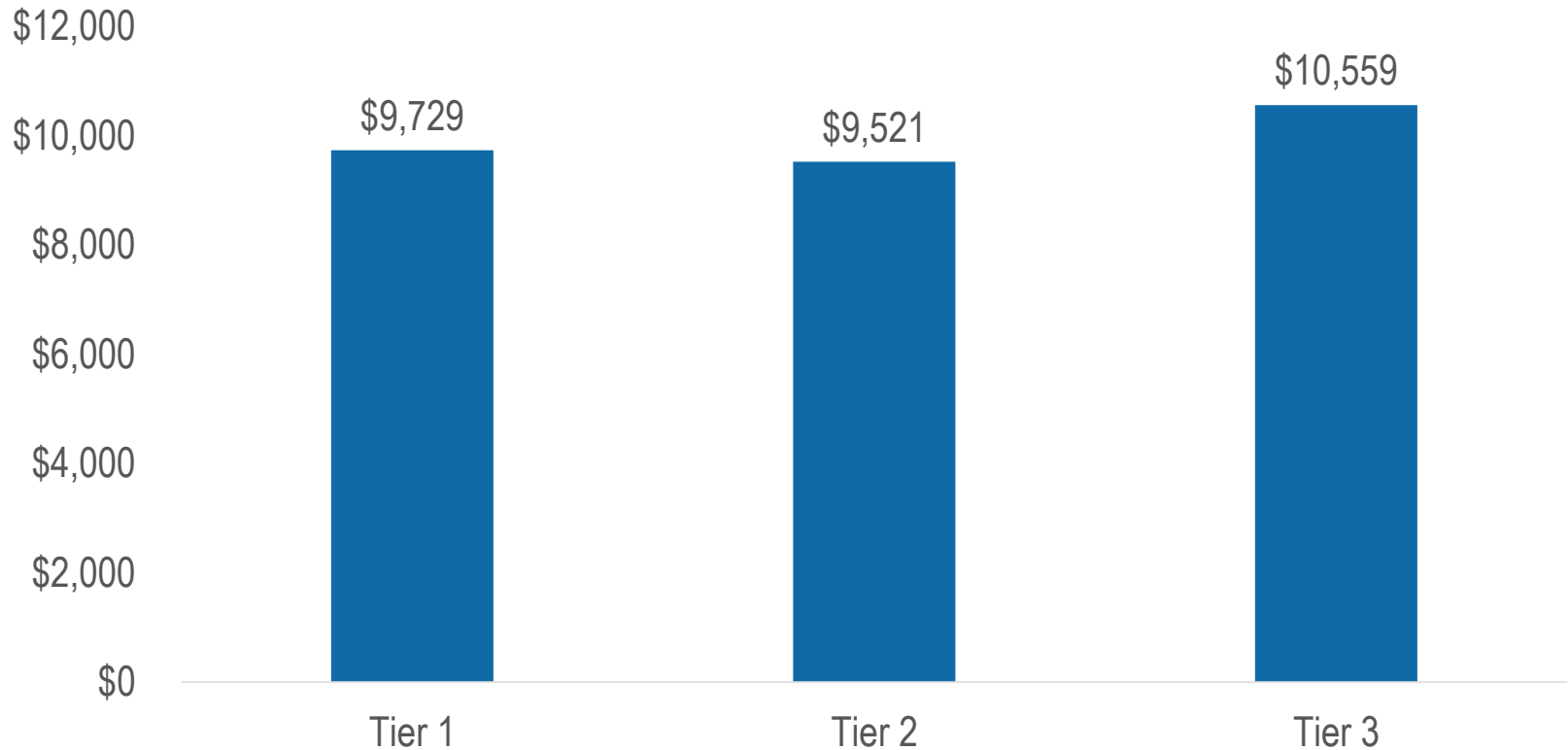
## ANOVA

	df	SS	MS	F	Significance F
Regression	1.00	290,461.35	290,461.35	0.11	0.75
Residual	28.00	75,883,146.96	2,710,112.39		
Total	29.00	76,173,608.30			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	10,800.05	786.56	13.73	0.00	9,188.87	12,411.24	9,188.87	12,411.24
Student Performance	(442.37)	1,351.25	(0.33)	0.75	(3,210.27)	2,325.53	(3,210.27)	2,325.53

# K-8 Neighborhood Tier III schools receive more money than Tier I and II schools

Average \$pwp by School Performance in K-8 Neighborhood Schools



**Average Proficiency**

80%

42%

46%