

Worthington City School District

Project Update Middle School Projects

October 28, 2019



Worthington Middle School Projects	original master plan 2016			add capacity and renov		updated budget takeoff		Value Engr	
	Dec-18			Mar-19		Sep-19		Oct-19	
	Master Plan Proj Budget	Capacity	Original Renovation	Master Plan Proj Budget	SD Capacity	Master Plan Proj Budget	Capacity	Value Engineering	REVISED Estimate Oct2019
Worthingway Middle School	\$20,000,000	750	level3	\$20,497,750	750	\$22,876,189	750	-\$254,340	\$22,621,849
Perry / Phoenix Middle School	\$20,000,000	750	level3	\$22,849,190	865	\$26,658,588	865	-\$874,992	\$25,783,596
Kilbourne Middle School	\$2,500,000	600	0	\$2,742,740	600	\$4,331,137	600	-\$388,355	\$3,942,782
McCord Middle School	\$2,500,000	600	0	\$6,327,620	675	\$8,953,000	675	-\$676,842	\$8,276,158
	\$45,000,000	2700		\$52,417,300	2890	\$62,818,914	2890	-\$2,194,530	\$60,624,384
PHASE DELTA				-\$7,417,300	190	-\$10,401,614	0		\$2,194,530
PROJECT DELTA				-\$7,417,300		-\$17,818,914			-\$15,624,384

COST OVERAGE CATEGORIES (estimated)		
Capacity (enrollment)	up to	7.4MM
Construction inflation	up to	6.0MM
Design Options (renovation scope)	up to	2.2MM

15.6MM

Worthington Middle School Projects	original master plan 2016		
	Dec-18		
	Master Plan Proj Budget	Capacity	Original Renovation
Worthingway Middle School	\$20,000,000	750	level3
Perry / Phoenix Middle School	\$20,000,000	750	level3
Kilbourne Middle School	\$2,500,000	600	0
McCord Middle School	\$2,500,000	600	0
	\$45,000,000	2700	
PHASE DELTA			
PROJECT DELTA			

OFCC Ohio School Design Manual

Types & sizes of spaces
(program equity)

Building materials & systems
**(building performance
equity)**



2017

Ohio School Design Manual

Volume 1:
Educational Facility Planning Guide

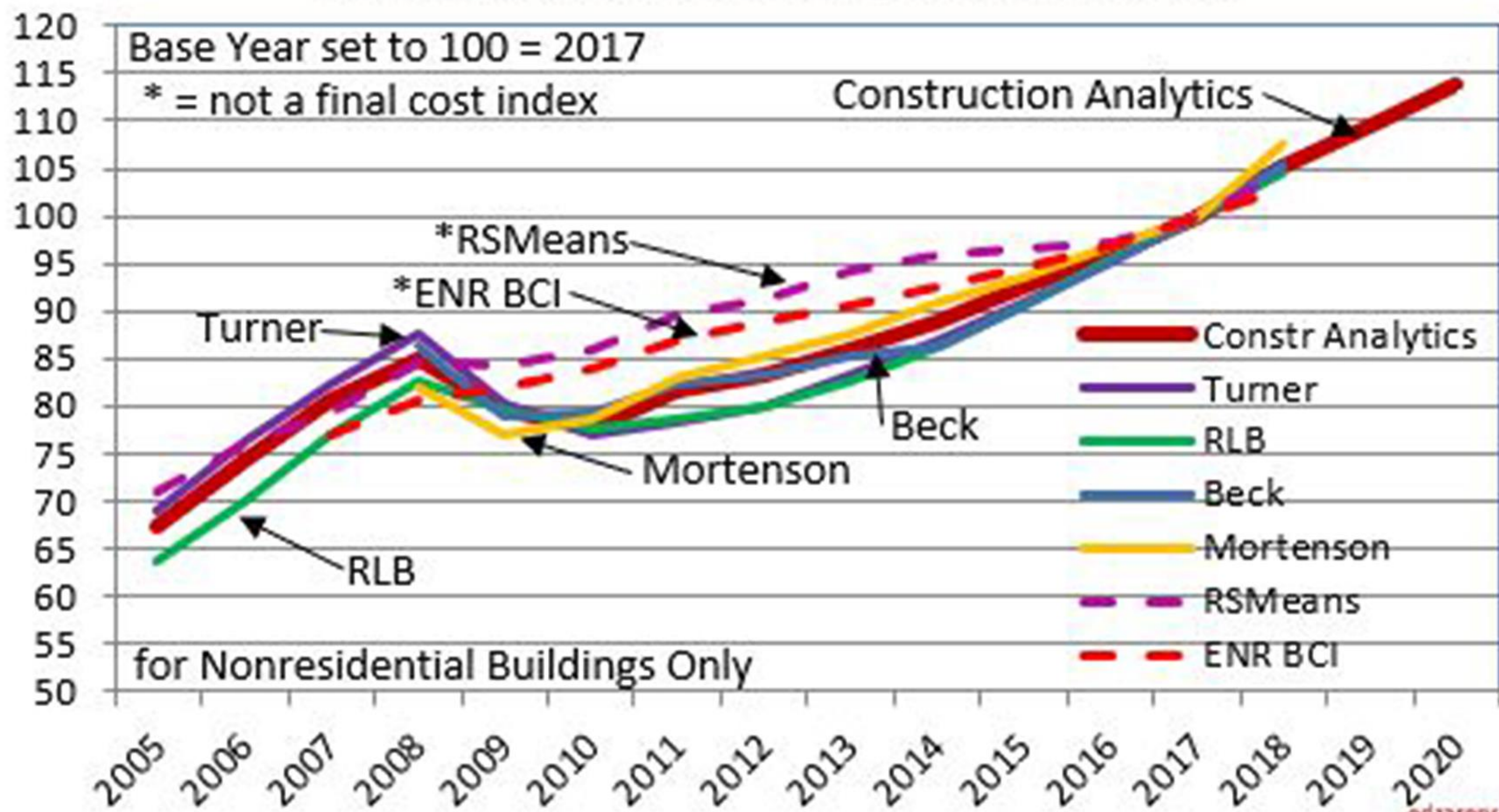
Design Goals: (aspirational)

- **Like new 750 student neighborhood middle school**
- **21st century teaching & learning**
- **Achieve high level of sustainability**
- **Retain exist. asset value to greatest degree possible**
- **Improve site traffic safety**
- **Improve building life safety**
- **Accommodate continuing operation (swing site)**

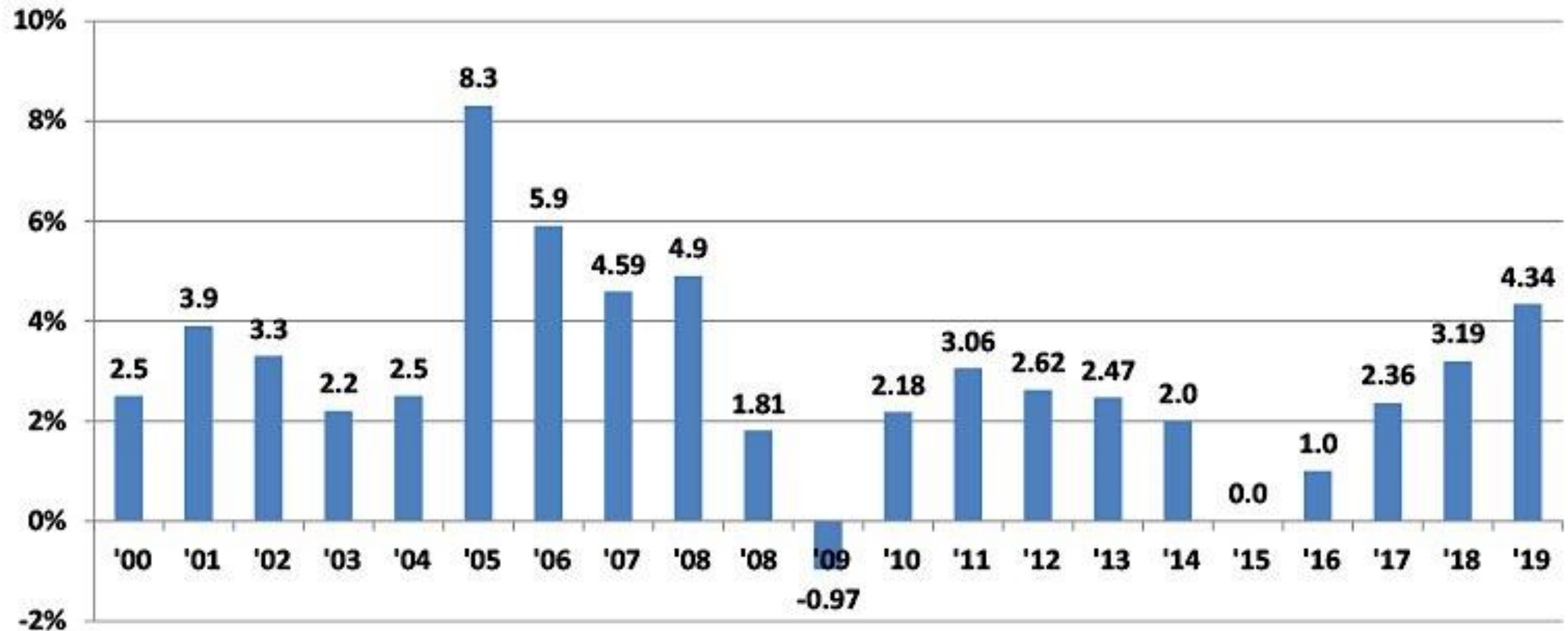
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PROJECT DELTA				-\$7,417,300	

Accommodate additional capacity and complete renovation s

Construction Building Cost Indices

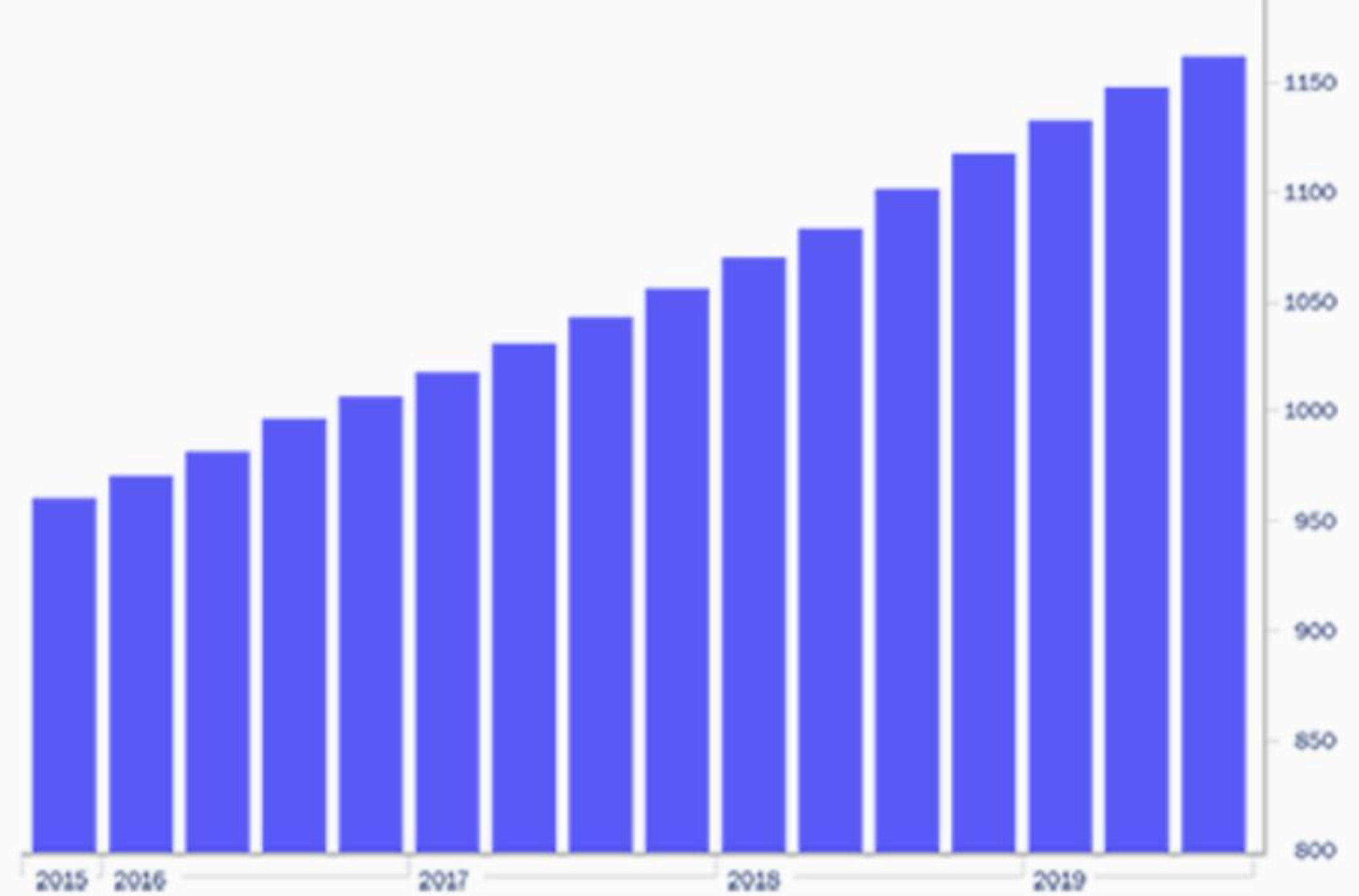


Historical Annual Inflation Rate



“Large project starts in a fairly busy construction market are continuing to impact availability of skilled labor.”

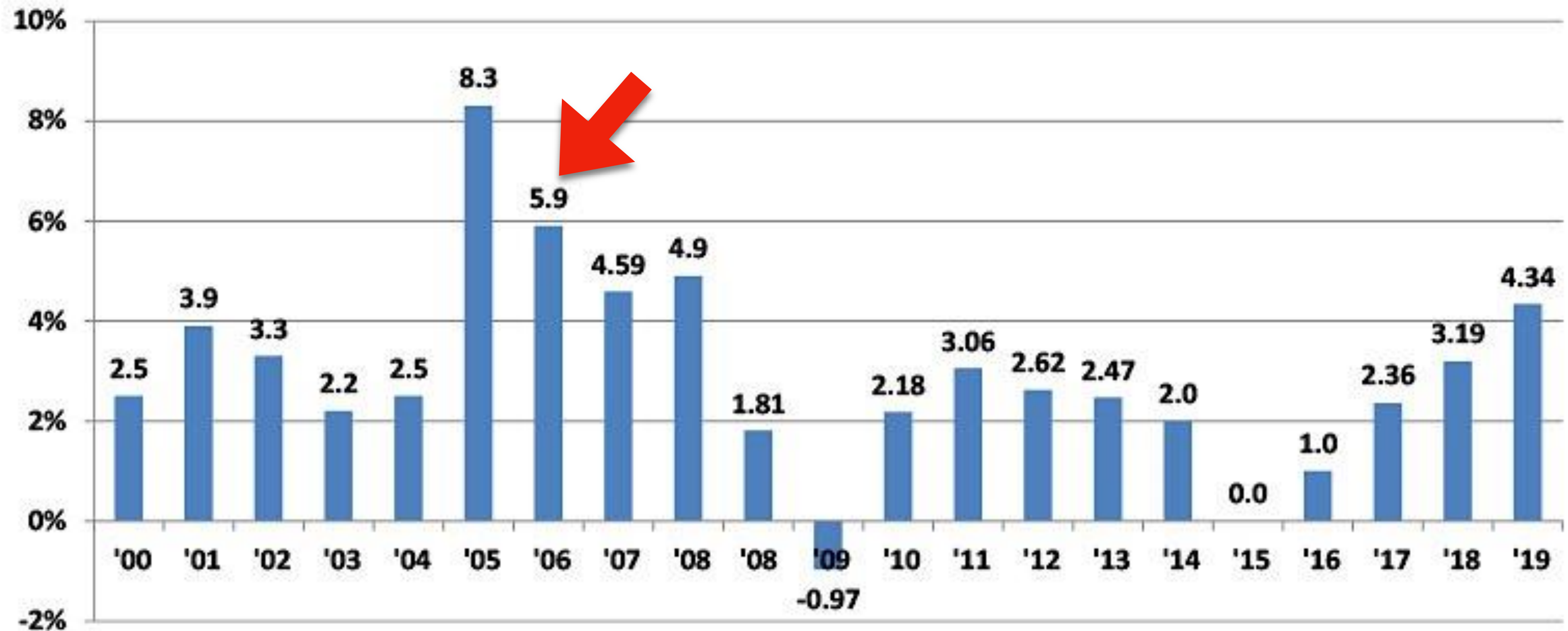
Attilio Rivetti
Vice President

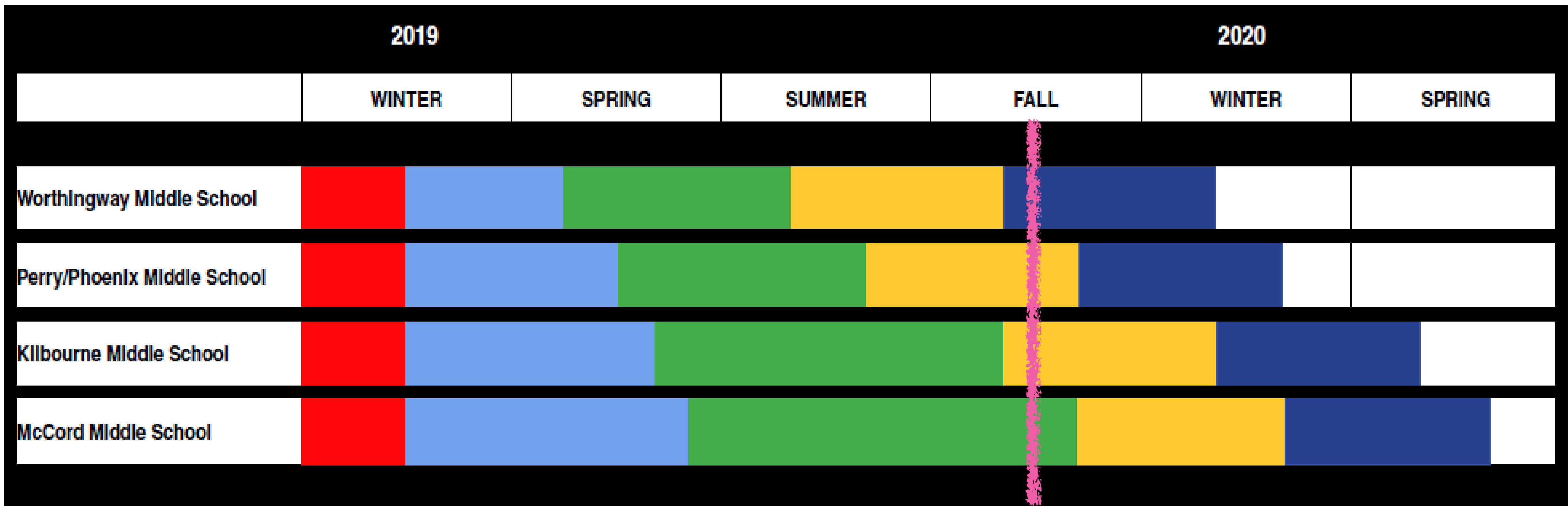


Quarter	Index	% Change
3rd Quarter 2019	1162	1.13
2nd Quarter 2019	1149	1.23
1st Quarter 2019	1135	1.34
4th Quarter 2018	1120	1.36

5.06%

Historical Annual Inflation Rate





- POR - Programming ■
- SD - Schematic Design ■
- DD - Design Development ■
- CD - Construction Documents ■
- PR - Procurement ■



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Technical delivery phase (WMS & PPMS) / material & labor

COST OVERAGE CATEGORIES (estimated)

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Construction inflation	up to	6.0MM
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Design Options (renovation scope)	up to	2.2MM
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LEED v4 for BD+C: Schools
Project Checklist

Project Name: Worthingway Middle School Additions and Renovations
Date: 10/15/2019

Y ? N

			Credit	Integrative Process	1
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4	0	25	Location and Transportation		15
0	0	15	Credit	LEED for Neighborhood Development Location	15
0	0	1	Credit	Sensitive Land Protection	1
0	0	2	Credit	High Priority Site	2
2	0	3	Credit	Surrounding Density and Diverse Uses <i>(review calculations)</i>	5
1	0	3	Credit	Access to Quality Transit <i>(review with COTA)</i>	4
0	0	1	Credit	Bicycle Facilities	1
1	0	0	Credit	Reduced Parking Footprint	1
0	0	0	Credit	Green Vehicles	1

4	1	7	Sustainable Sites		12
Y			Prereq	Construction Activity Pollution Prevention	Required
Y			Prereq	Environmental Site Assessment	Required
1	0	0	Credit	Site Assessment <i>(Sands Decker to develop documents)</i>	1
0	0	2	Credit	Site Development - Protect or Restore Habitat	2
0	1	0	Credit	Open Space <i>(Sands Decker to review)</i>	1
2	0	1	Credit	Rainwater Management <i>(Sands Decker to develop)</i>	3
0	0	2	Credit	Heat Island Reduction	2
0	0	1	Credit	Light Pollution Reduction	1
0	0	1	Credit	Site Master Plan	1
1	0	0	Credit	Joint Use of Facilities	1

6	4	2	Water Efficiency		12
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2	0	0	Credit	Outdoor Water Use Reduction	2
3	4	0	Credit	Indoor Water Use Reduction	7
0	0	2	Credit	Cooling Tower Water Use	2
1	0	0	Credit	Water Metering	1

22	0	9	Energy and Atmosphere		31
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
6	0	0	Credit	Enhanced Commissioning <i>(Heapy requested meeting at 95% CDs)</i>	6
13	0	3	Credit	Optimize Energy Performance	16
1	0	0	Credit	Advanced Energy Metering	1
2	0	0	Credit	Demand Response	2
0	0	3	Credit	Renewable Energy Production	3
0	0	1	Credit	Enhanced Refrigerant Management	1
0	0	2	Credit	Green Power and Carbon Offsets	2

6	4	3	Materials and Resources		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
2	0	3	Credit	Building Life-Cycle Impact Reduction	5
1	1	0	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
1	1	0	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1	1	0	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
1	1	0	Credit	Construction and Demolition Waste Management	2

10	4	2	Indoor Environmental Quality		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
Y			Prereq	Minimum Acoustic Performance	Required
1	1	0	Credit	Enhanced Indoor Air Quality Strategies	2
3	0	0	Credit	Low-Emitting Materials	3
1	0	0	Credit	Construction Indoor Air Quality Management Plan	1
2	0	0	Credit	Indoor Air Quality Assessment	2
1	0	0	Credit	Thermal Comfort	1
2	0	0	Credit	Interior Lighting	2
0	3	0	Credit	Daylight	3
0	0	1	Credit	Quality Views	1
0	0	1	Credit	Acoustic Performance	1

1	0	5	Innovation		6
0	0	5	Credit	Innovation	5
1	0	0	Credit	LEED Accredited Professional	1

4	0	0	Regional Priority		4
1	0	0	Credit	Regional Priority: Specific Credit <i>(Advanced Energy Metering)</i>	1
1	0	0	Credit	Regional Priority: Specific Credit <i>(Demand Response)</i>	1
1	0	0	Credit	Regional Priority: Specific Credit <i>(Building Life-Cycle Impact Reduction)</i>	1
1	0	0	Credit	Regional Priority: Specific Credit <i>(Rainwater Management)</i>	1

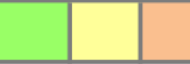
57	13	53	TOTALS		Possible Points:	110
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110						



LEED v4 for BD+C: Schools

Project Checklist

Y ? N



Credit Integrative Process

1

0	2	28	Location and Transportation	15
0	0	15	Credit LEED for Neighborhood Development Location	15
0	0	1	Credit Sensitive Land Protection	1
0	0	2	Credit High Priority Site	2
0	0	5	Credit Surrounding Density and Diverse Uses	5
0	0	4	Credit Access to Quality Transit	4
0	1	0	Credit Bicycle Facilities	1
0	0	1	Credit Reduced Parking Footprint	1
0	1	0	Credit Green Vehicles	1

3	1	8	Sustainable Sites	12
Y			Prereq Construction Activity Pollution Prevention	Required
Y			Prereq Environmental Site Assessment	Required
1	0	0	Credit Site Assessment	1
0	0	2	Credit Site Development - Protect or Restore Habitat	2
0	0	1	Credit Open Space	1
0	0	3	Credit Rainwater Management	3
0	1	1	Credit Heat Island Reduction	2
1	0	0	Credit Light Pollution Reduction	1
0	0	1	Credit Site Master Plan	1
1	0	0	Credit Joint Use of Facilities	1

6	0	6	Water Efficiency	12
Y			Prereq Outdoor Water Use Reduction	Required
Y			Prereq Indoor Water Use Reduction	Required
Y			Prereq Building-Level Water Metering	Required
2	0	0	Credit Outdoor Water Use Reduction	2
3	0	4	Credit Indoor Water Use Reduction	7
0	0	2	Credit Cooling Tower Water Use	2
1	0	0	Credit Water Metering	1

22	2	7	Energy and Atmosphere	31
Y			Prereq Fundamental Commissioning and Verification	Required
Y			Prereq Minimum Energy Performance	Required
Y			Prereq Building-Level Energy Metering	Required
Y			Prereq Fundamental Refrigerant Management	Required
6	0	0	Credit Enhanced Commissioning	6
13	0	3	Credit Optimize Energy Performance	16
1	0	0	Credit Advanced Energy Metering	1
2	0	0	Credit Demand Response	2
0	0	3	Credit Renewable Energy Production	3
0	0	1	Credit Enhanced Refrigerant Management	1
0	2	0	Credit Green Power and Carbon Offsets	2

Project Name: Perry/Phoenix Middle School Additions and Renovations

Date: 10/18/2019

6	5	3	Materials and Resources	13
Y			Prereq Storage and Collection of Recyclables	Required
Y			Prereq Construction and Demolition Waste Management Planning	Required
2	1	3	Credit Building Life-Cycle Impact Reduction	5
1	1	0	Credit Building Product Disclosure and Optimization - Environmental Product Declarations	2
1	1	0	Credit Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1	1	0	Credit Building Product Disclosure and Optimization - Material Ingredients	2
1	1	0	Credit Construction and Demolition Waste Management	2

10	1	5	Indoor Environmental Quality	16
Y			Prereq Minimum Indoor Air Quality Performance	Required
Y			Prereq Environmental Tobacco Smoke Control	Required
Y			Prereq Minimum Acoustic Performance	Required
1	1	0	Credit Enhanced Indoor Air Quality Strategies	2
3	0	0	Credit Low-Emitting Materials	3
1	0	0	Credit Construction Indoor Air Quality Management Plan	1
2	0	0	Credit Indoor Air Quality Assessment	2
1	0	0	Credit Thermal Comfort	1
2	0	0	Credit Interior Lighting	2
0	0	3	Credit Daylight	3
0	0	1	Credit Quality Views	1
0	0	1	Credit Acoustic Performance	1

1	0	5	Innovation	6
0	0	5	Credit Innovation	5
1	0	0	Credit LEED Accredited Professional	1

3	0	1	Regional Priority	4
1	0	0	Credit Regional Priority: Specific Credit (<i>Advanced Energy Metering</i>)	1
1	0	0	Credit Regional Priority: Specific Credit (<i>Demand Response</i>)	1
1	0	0	Credit Regional Priority: Specific Credit (<i>Building Life-Cycle Impact Reduction</i>)	1
0	0	1	Credit Regional Priority: Specific Credit	1

51	11	63	TOTALS	Possible Points:	110
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LEED v4 for BD+C: Schools

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Y ? N



Credit

Integrative Process

57	13	53	TOTALS	Possible Points:	110
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Project Name: Worthingway Middle School Additions and Renovations

Date: 10/15/2019

51	11	63	TOTALS	Possible Points:	110
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Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

Project Name: Perry/Phoenix Middle School Additions and Renovations

Date: 10/18/2019



DATE	WMS	PPMS	KMS	MMS
9/9/19	POR/SD	POR/SD	POR/SD	POR/SD
9/23/19	GMP #1 site			
10/28/19	GMP #2 concrete	GMP #3 site		
11/13/19	DD/GMP #4 masonry/steel			
11/25/19		DD/GMP #5 conc/masonry/stee I		
1/13/20	GMP #6 final package			
1/27/20	CD	CD/GMP #7 final package		
2/10/20			DD	DD
2/24/20			GMP #8 complete pkg	
3/9/20			CD	
4/13/19				GMP #9 complete pkg
5/11/20				CD

Documentation Dates

Worthington City School District

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