Master Planning Services

Manheim Township School District
April 11, 2019



922 Fayette Street
Conshohocken, PENNSYLVANIA 19428

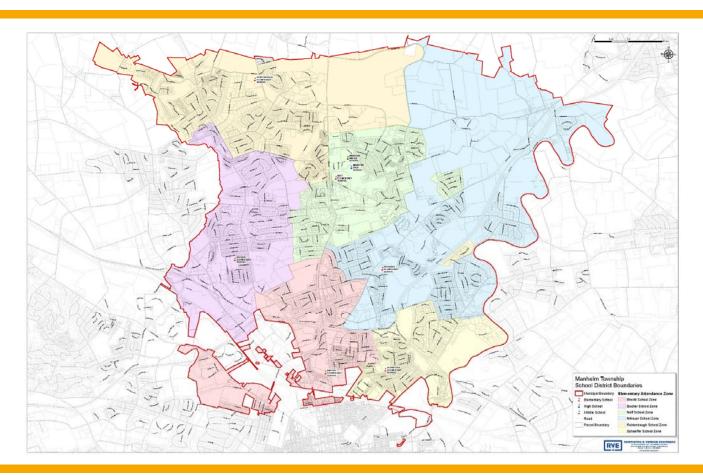


Agenda

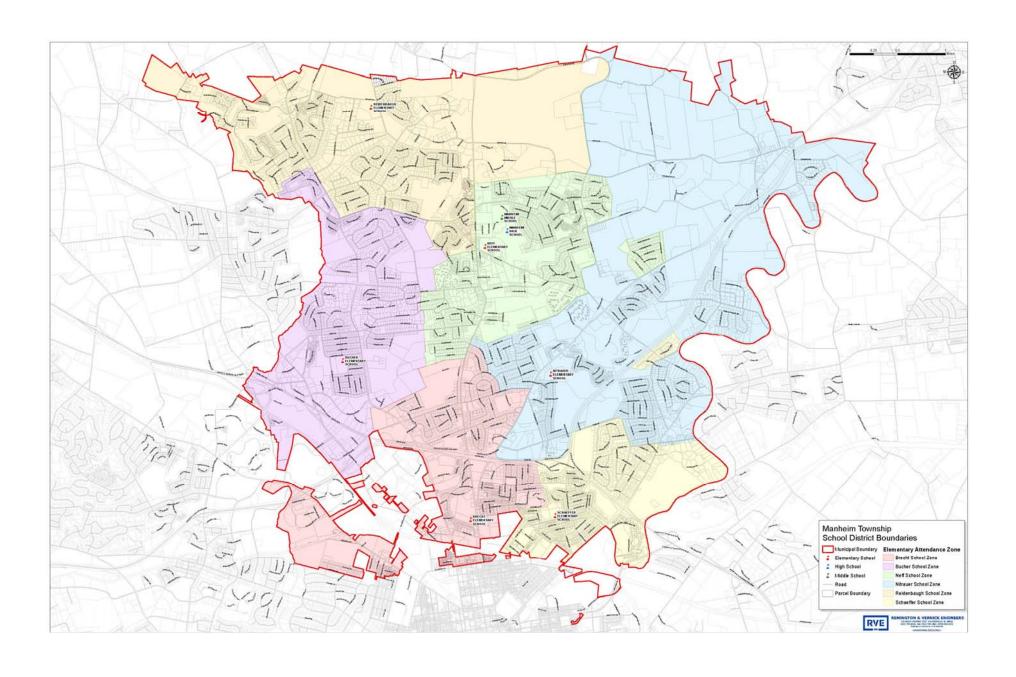
- Team Introduction
 - Annina Hogan, PE, RA, LEED AP (RVE)
 - Ashton Jones, AICP (RVE)
 - Christopher Gross, Cartographer/GIS Specialist (RVE)
 - George Sundell, Demographer (Sundance Associates)
- Master Planning Phase 1 Scope of Services
 - GIS Mapping of Schools & Students
 - GIS Mapping of Approved, Planned and Vacant Land
 - Enrollment Projection
 - Historical, Cohort-Survival, Approved Developments, Planned Development
 - Future Considerations for Vacant Land



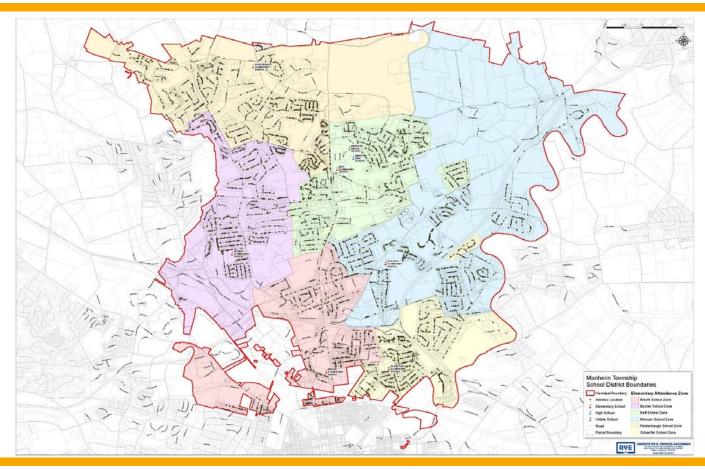
District Map



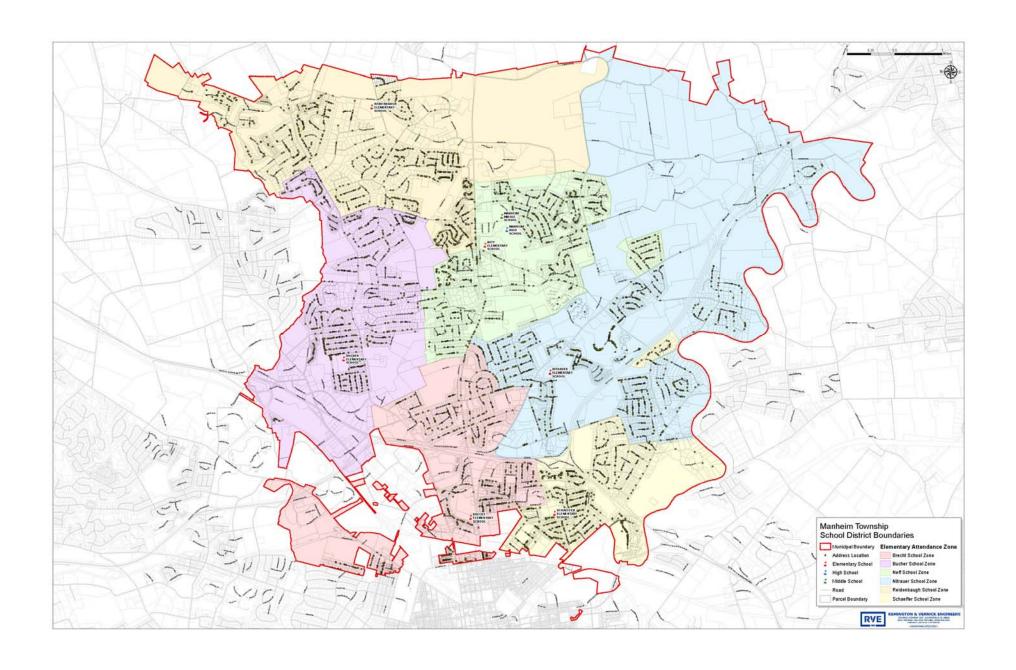




GIS Location of 2018-19 Enrolled Students





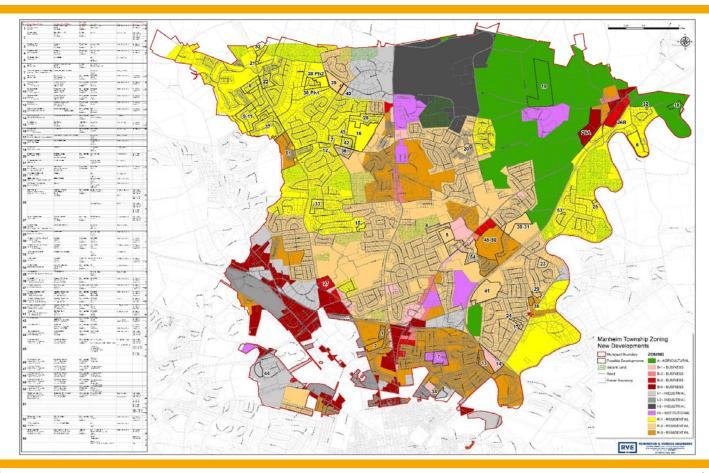


Developmental Review with Township

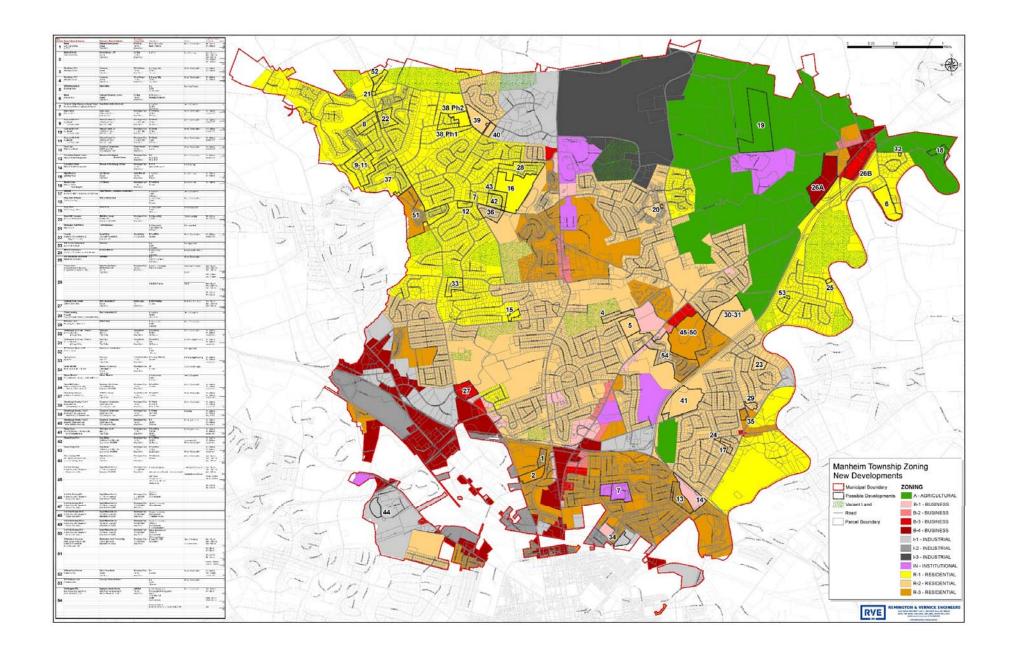
- Approved and Planned development list from Township Planner
- Map of all site locations for each location in GIS
- Separation of existing COs issued on approved housing
- Breakdown of Unit type from Township Planner
- Review of Vacant Land and Potential Redevelopment for long-term planning
- Review with each developer contact for Unit Type and anticipated forecast for permits/COs



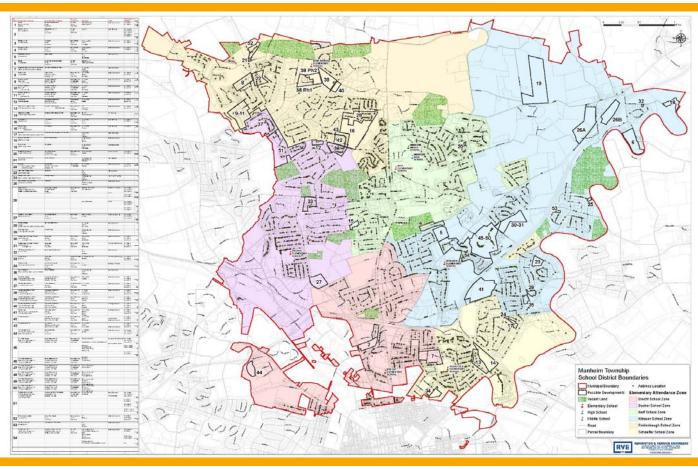
GIS Mapping - Development/Vacant Land



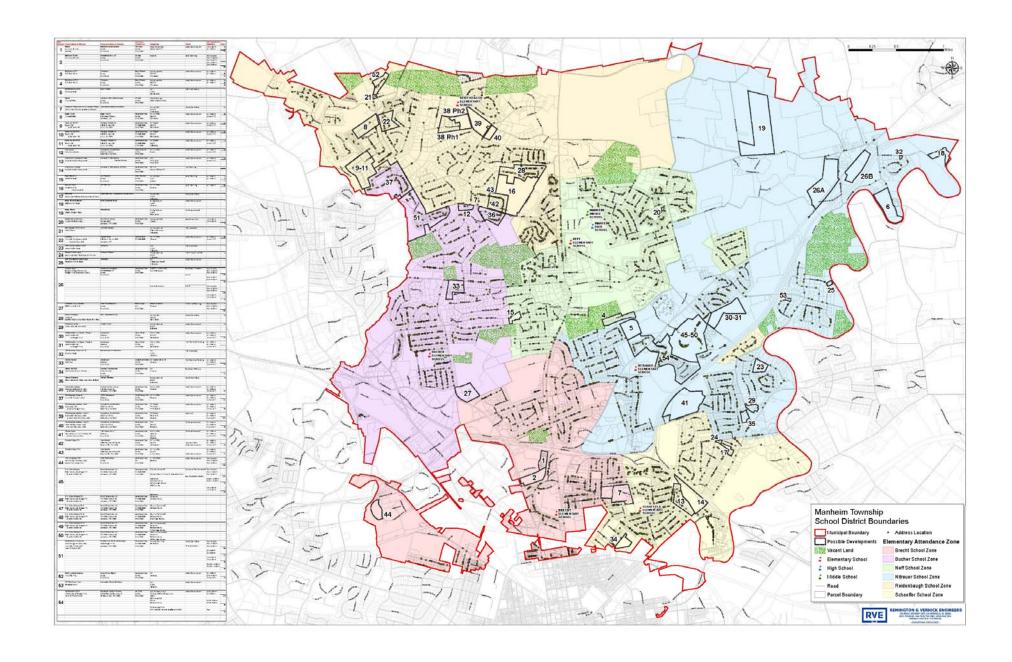




GIS Mapping of Students and Developments







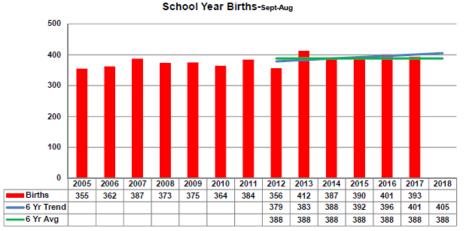
Enrollment Project Review

- Methodology
- Births review
- Historical Building Permit Review average
- Projected Building Permits
- Development Forecast Review units and timing
- Residential Multipliers
- Enrollment Projections



Historical Birth Data - Manheim Township

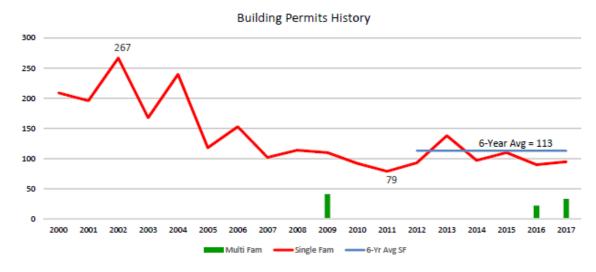




School Year Births correlate better with enrollments than does Calendar Year Births, and are used in this study. The trend is for 4-5 more births each year, but the methodology calls for the use of the 6-Year Average of 388 for those few years for which data is not yet available.



Building Permit History

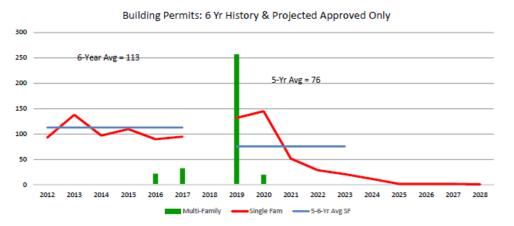


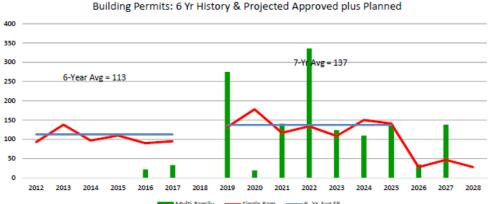
Building Permits have significantly decreased from the year 2002 high of 267 units per year. The recent 6-year average is for 113 units per year.

There were few Multi-Family Permits issued in the past. Most recently, permits for 22 units and 33 units were issued in 2016 and 2017 signalling a possible change in building type mix in Manheim Township.



Projected Building Permits





The impact of 113 Single Family units per year is built into the Cohort Survival Rates. The difference between the 113 past average and the 137 units per year future average, if approved and planned move ahead, is only 1 student per grade level.

However, not adding in Single Family also assumes that Single Family developments in the past will geographically be the same as in the future.

Only the impact of new and significantly higher levels of Multi-Family are "added" to the standard projection.



Projected Development New Unit Forecast

APPROVED Residential Cons	truction by Antic	ipated Y	ear of	Occup	ancy								PLANNED Residential Constru	ction by Anticipa	ited Year	of Occu	ipancy							
Project Name	Unit	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		Project Name	Unit	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1 Belmont - Residential	TH - 3 Bdrm	36	20	0	0	0	0	0	0	0	0		2 Belmont South	Apt - Studio				10						
	SF - 4 Bdrm	7												Apt - 1										
44 The Crossings PRD	Apt -	15												Apt - 2 Bdrm										
_	Apt - 1 Bedrm	83												SFc - 4 Bdrm				25						
	Apt - 2 Bdrm	105													0	0	Ω	100	0	0	0	0	0	0 1
	Apt - 3 Bdrm	18														- 0	-	100	-	- 0	- 0	- 0		
													27 Overlook Town Center	Apt - Studio				8						
		264	20	0	0	0	0	0	0	0	0	284 Brecht ES		Apt - 1 Bedm										
														Apt - 2 Bdrm				60						
12 Fern Lane	SF - 4 Bdrm	3	3												0	0	0	103	0	0	0	0		0 10
33 Spring Haven	SF - 4 Bdrm	6														U	U	103	U	U	U	<u> </u>		
36 Stone Mill Estates	SF - 4 Bdrm	3											6 286 Bushong Road	SFD - 4 Bdrm				20	20	20				
37 Stonehenge Reserve	SF - 4 Bdrm	15	16										19 King, Amos	SF - 4 Bdrm		30	30	30	30	30	25			
38 Stonehenge Estates	SF - 4 Bdrm	15	15	11									23 1981 Landis Valley Road			3								
													26 Oregon Dairy	Apt - Studio			16	16						
		42	34	11	0	0	0	0	0	0	0	87 Bucher ES		Apt - 1 Bedrm Apt - 2 Bdrm			45 16	45 16						
														Apt - Studio			10	10	20	20	24			
4 Brooklawn Ph 1 & 2	SF - 4 Bdrm	8	8	12	12	12	10							Apt - 1 Bedrm					70	70	70	19		
15 High Meadow	SF - 4 Bdrm	4	4	3										Apt - 2 Bdrm			0		20	20	24			
														TH - 2 Bdrm			0					10		
		12	12	15	12	12	10	0	0	0	0	73 Neff ES	20.6-111	TH - 3 Bdrm					0 8	0 15	0 4	6		
													30 Settlements of LV East - 41 Stoner Farm	SF - 3 Bdrm					8	15	1	1	1	1
30 Settlements of LV East -	PSF - 4 Bdrm	5	15	15	15	7							Tr otonor rann	SF - 4 Bdrm							25	25	26	26
53 191 Windover Turn	SF- 4 Bdrm	1												TH - 2 Bdrm							8			
54 Worthington PRD	SF- 4 Bdrm	16	45	1										TH - 3 Bdrm							10			
	TH 3 Bdrm	15	15										45 V of Olde Hickery-Ph II	Apt - Studio	6		6				6		6	
														Apt - 1 Bedrm Apt - 2 Bdrm	18 30		22 36				22 36		22 36	
		37	75	16	15	7	0	0	0	0	0	150 Nitrauer ES		Townhouses	0		0				44		74	
														Townhouses	-36				-66		-106			
8 Essex Court	SF - 4 Bdrm	10	7											SFc 3 Bdrm			5				11		18	
9 Farm on QR-Ph 1-III	SF - 4 Bdrm	2	2	2	2	2	2	2	2	2	1													
22 Landale	SF - 4 Bdrm	3													18	33	176	127	102	175	204	61	183	27 11
43 Sunset Ridge Ph II	SF - 4 Bdrm	8	7										16 Hoover Farm	SF - 4 Bdrm			30	30	30	30	30			
52 Willows Bend Estates	SFD - 4 Bdrm	3											39 Stonehenge Estates Ph 1				0	0	0	32	32			
														SF - 4 Bdrm						11	11			
		26	16	2	2	2	2	2	2	2	1	57 Reidenbaugh ES												
14 Grandview Charter Homes SF - 4 Bdrm		8	8	8											0	0	30		30	73	73	0	- 0	0 2
													34 Stehli Silk Mill	Apt - 1 Bedrm Apt - 2 Bdrm				31 50	30 50					
		8	8	8	0	0	0	0	0	0	0	24 Schaeffer ES		Apt - 2 Builli		-	0			0	-	U	0	
Approved Housing Total		389	165	52	29	21	12	2	2	2	1	675 675			0	0	0	81	80	0	0	0	0	0 10
- pp								_	_	_	_		Planned Housing Total	nl	18	33	206	441	212	248	277	61	183	27 17
	Single Family	117	130	52	29	21	12	2	2	2	1	368		Single Family	0	33	65	105	88	138	139	26	45	27 €
	Multi Family	272	35								0	307		Multi Family	18	0			124	110	138	35	138	0 10
					0.4	0.5	404				440	675												17
	SF above 113	4	17	-61	-84	-92	-101	-111 -	111	-111	-112			SF above 113						25	26			



Residential Multipliers

Type	# Bdrms	Multiplier Public SAC
- 71		
Apt	1 Bdrm	0.05
Apt	2 Bdrm	0.25
Apt	3 Bdrm	1.20
TH	2 Bdrm	0.30
TH	3 Bdrm	0.57
Single	4 Bdrm	1.00

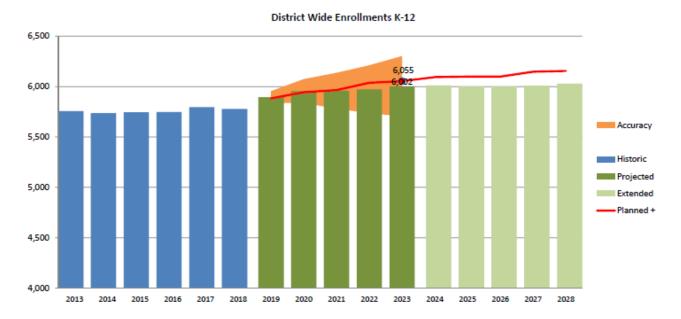


- To estimate the number of School Age Children (SAC) or the Public School Age Children (PSAC), "multipliers" for unit types and bedroom counts are applied to the number of units.
- After determination of the number of School Age Children, they are scheduled for entry into the school system based upon the construction and occupancy schedule.
- The source for the multipliers is *Who Lives in Pennsylvania Housing, a Quick Guide to Pennsylvania Residential Demographic Multipliers* by the Center for Urban Policy Research of the Edward J. Bloustein School of Planning and Public Policy at Rutgers, The State University of New Jersey, as developed from the 2000 U. S. Census.
- Six different multipliers are used in this study for Types of Housing (Rental Apartments & Condominiums, Townhouses and Single Family) and Number of Bedrooms.
- Application of the multipliers for unit types determines that 675 APPROVED units over five years (beginning in year 2019) will generate 121 additional Public School Age Children.
- In an alternate analysis, application of the multipliers for unit types determines that 2,381 APPROVED and PLANNED units over ten years will generate 291 additional Public School Age Children.
- In both projections, only Single Family housing above 113 units per year, generates additional students. All Multi-family housing generates additional students.



Enrollment Projections: 5 & 10 year looks

Manheim Township District Wide



Manheim Township

- 135 Student increase from STANDARD Projection in 5 years
- 224 Students from STANDARD plus APPROVED housing in 5 years
- 277 Students from STANDARD, APPROVED + PLANNED in 5 years
- 101 Add'l Students from STANDARD, APPROVED + PLANNED in 6-10 years

		TOTAL /	Average C	hange	%Chg	w/ Planned			
Historical	2013	5,756							
	2014	5,737							
	2015	5,745							
	2016	5,748	5,760						
	2017	5,795							
	2018	5,778		22	0.4%				
Projected	2019	5,894				5,882			
	2020	5,955				5,944			
	2021	5,957	5,956			5,965			
	2022	5,972				6,038			
	2023	6,002		224	3.8%	6,055	27		
Extended	2024	6,010				6,094			
	2025	6,003				6,099			
	2026	6,003	6,010			6,099			
	2027	6,007				6,148			
	2028	6,028		26	0.4%	6,156	10		

ACCURACY

The accuracy of Cohort Survival projections is ±1% per year lying within the golden cone on the chart above.

GRAPH COLORS

Historical Enrollments for 6-years are in blue.

Projections for 1 to 5 years are in green.

Extended Projections for 6 to 10 years are in light green.

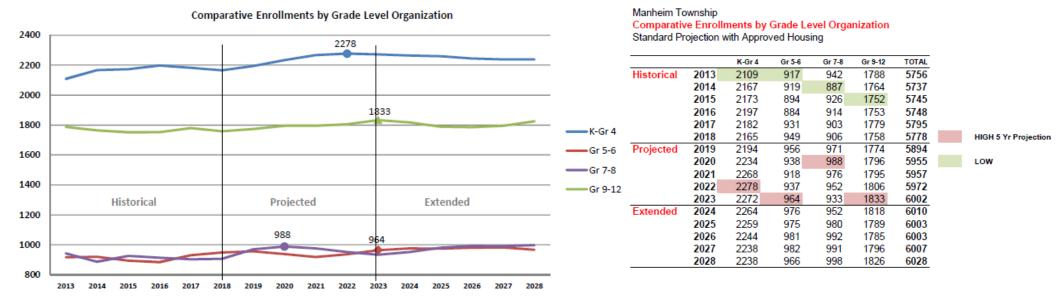
ENROLLMENT

District-wide enrollment, with new Approved housing will increase 224 students by year 2023.

District-wide enrollment, with new Approved and Planned housing will increase 277 students by year 2023.

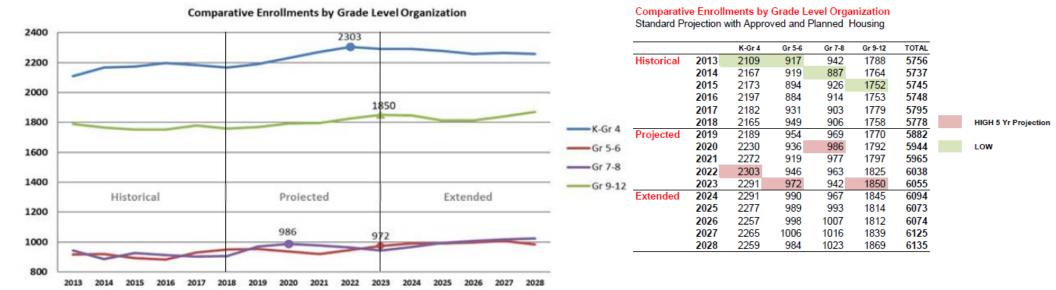


Grade Level Impacts (Approved Developments)



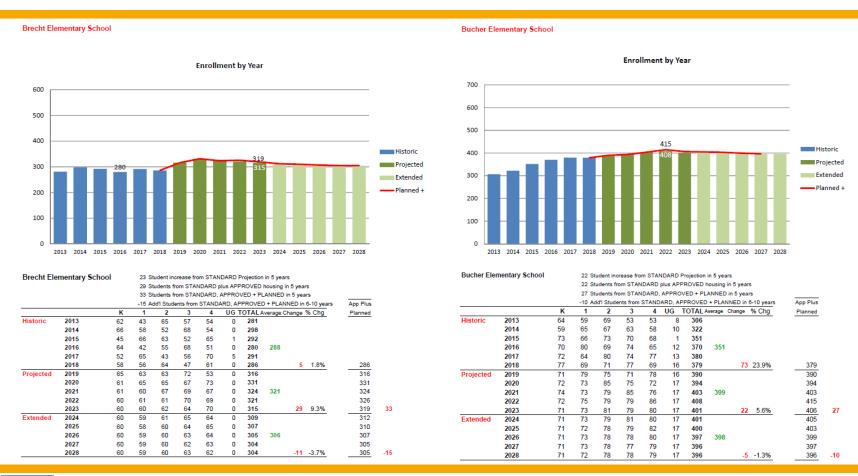


Grade Level Impacts (Approved & Planned)



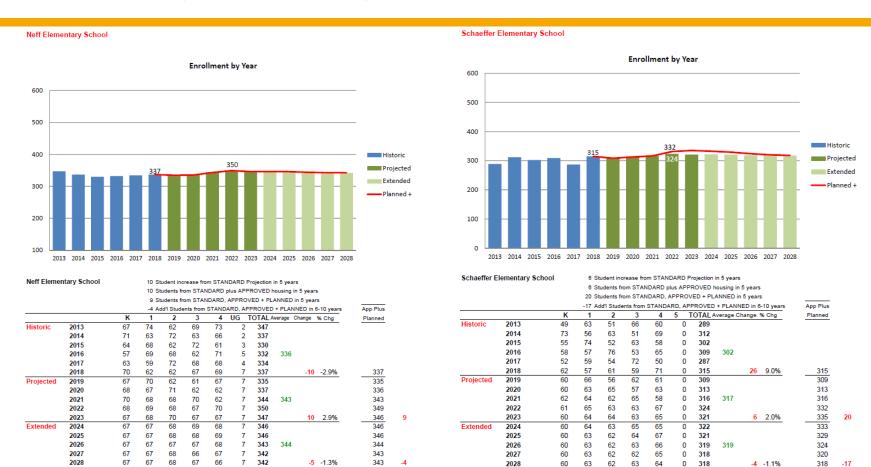


Elementary School Impacts (Brecht & Bucher)



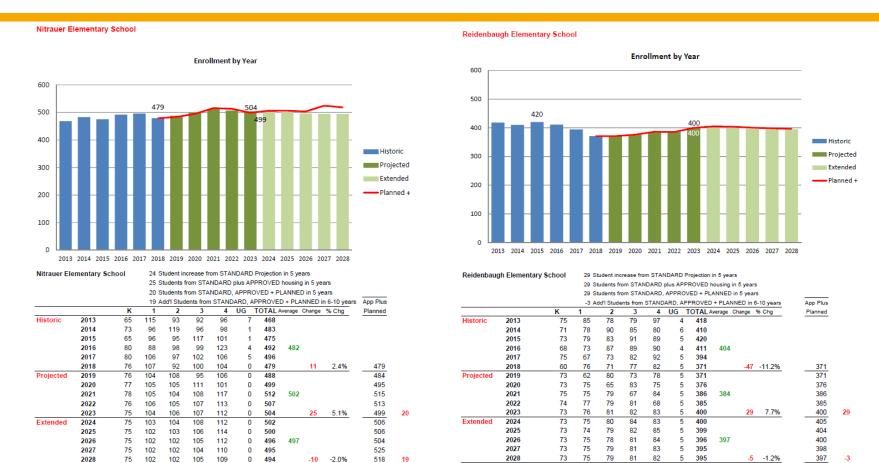


Elementary School Impacts (Neff & Schaeffer)





Elementary School Impacts (Nitrauer & Reidenbaugh)





Next Steps

- Adding Long-term Forecast for Vacant land into projections
- Mapping of projected 5-year, 10-year and long-term projections
- Review Capacity of Each School
- Preparing for delayed reaction
 - Enrollment has been impressively stable with significant increase in housing stock
 - Potential for delayed reaction with new home sales and enrollment
 - Potential for delayed reaction home resale and enrollment
 - Data use needs to remain fluid
- Review Scenarios for addressing increase in enrollment

