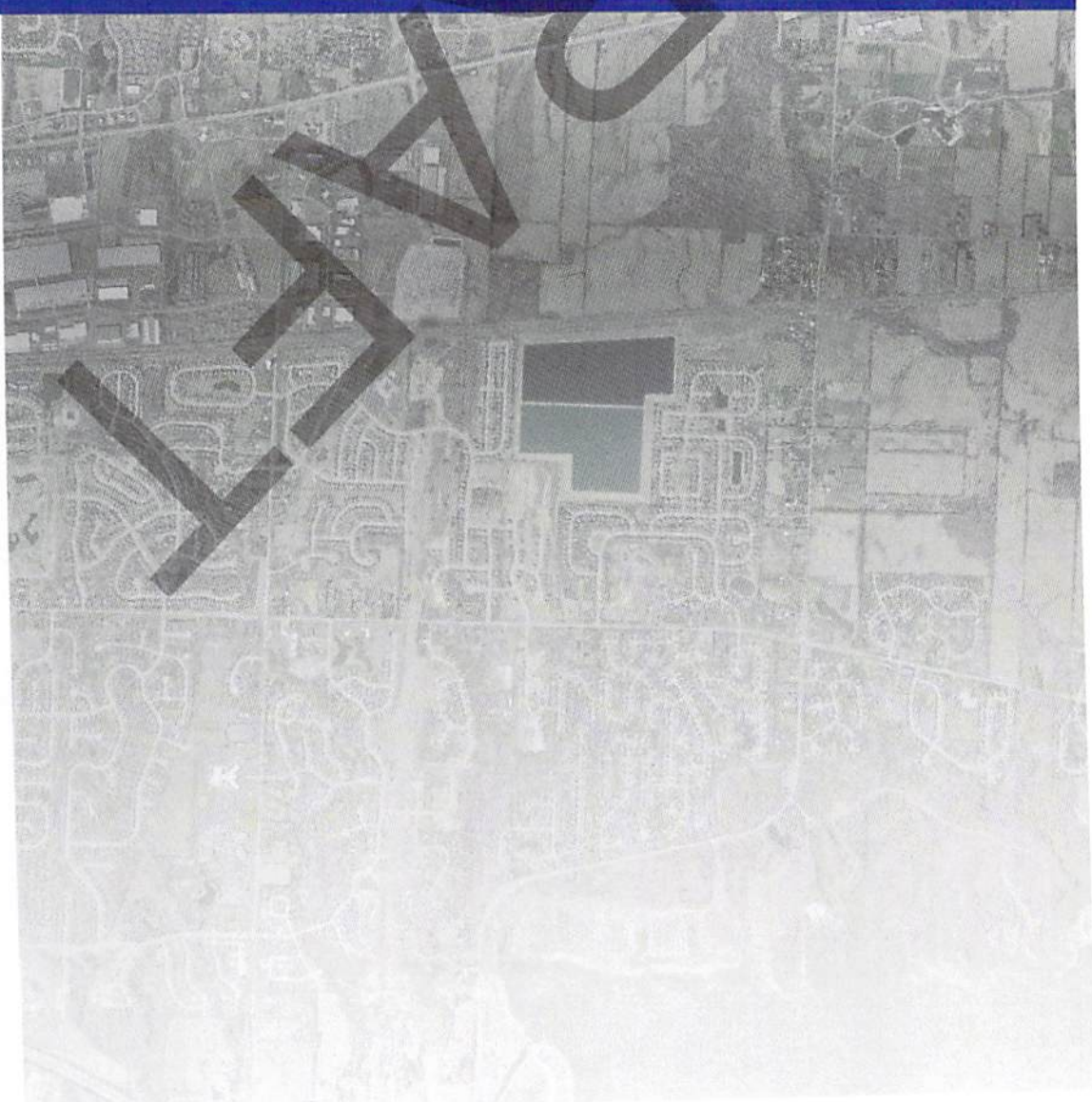


# Student Potential Analysis 2014



**OLENTANGY | LOCAL SCHOOL DISTRICT**  
*Our mission is to facilitate maximum learning for every student*

**DEJONG**  
RICHTER



## Executive Summary

### Introduction

In March 2014, DeJONG-RICHTER was contracted to study student demographics and develop a student potential analysis of the Orlentangy Local School District (OLSD). This summary is the result of collection, review, and analysis of student demographics, and housing information for OLSD.

The need for analyzing student demographics stems from the significant increase in student enrollment historically. Over the past ten years, beginning in the 2004-05 school year, an increase in enrollment of over 8,700 students has occurred which equates to an increase of nearly 191%.

Typically, increases in enrollment are caused by housing development and families moving into these new areas of growth. With the commercial influence of Polaris mall and the adjacent large businesses and industries as a major economic driver, the local economy can be expected to remain relatively stable. Birth counts peaked in 2006 at 1,140 and have stabilized at around 1,000 per year. Together with the good reputation of the Orlentangy Local Schools, families are continuing to move into Orlentangy generating higher enrollment's year over year.

However, even though total enrollment is continuing to grow, some areas of the district are beginning to show declines in enrollment. This is due to fluctuations in the student yield from existing housing units as the units age.

The purpose of this analysis is to determine the potential growth and decline for existing subdivisions and undeveloped land, and that impact on OLSD student population. By providing this student potential analysis to the District, it will be better equipped to make decisions regarding future potential increase in enrollment.

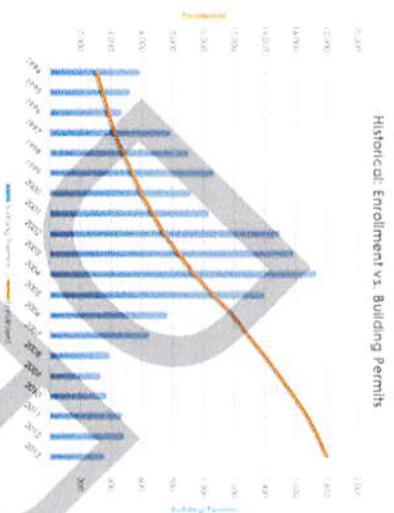
### Findings

To better identify why some areas of the district are declining, a student yield (percentage: # of students / # of housing units) analysis was completed based on subdivision age and price point. The table below illustrates the data. It is clear that the student yields do fluctuate in a predictable pattern. This trend has been observed as a 25 year cycle of first increasing, and then decreasing student output by housing unit. Because Orlentangy is a relatively young community, the sample size decreases in the older stock. DeJONG-RICHTER researched student yields of similar housing characteristics in a comparable, older school district to confirm the finding.

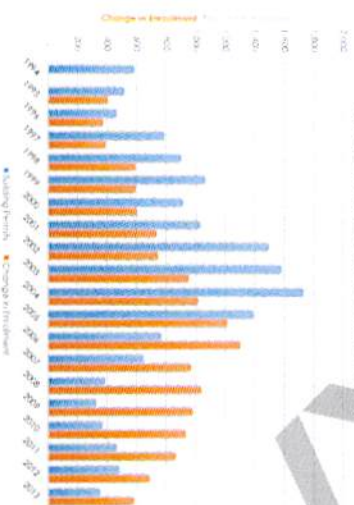
K-12 Subdivision Yield Correlated by Median Age and Current Assessed Value														Continued
	Assessed Value													Yield by Age
	< \$100K	\$100K-200K	200K-250K	\$250K-300K	\$300K-350K	\$350K-400K	\$400K-450K	\$450K-500K	\$500K-550K	\$550K-600K	\$600K-650K	\$650K-700K	> 700K	
< 5	0.52	0.78	0.18	0.41	0.79									0.26
5-10		0.52		0.55	0.60		0.56	0.42	0.41					0.36
10-15			0.47	0.63	0.68	0.67	0.50	0.49						0.49
15-20				0.47	0.63	0.68	0.79	1.04	0.94	0.79	0.67	0.70		0.55
20-25					0.68	0.65	1.02	0.88	0.66	1.01	0.78	0.78	0.26	0.67
25-30						0.68	0.96	0.67	1.03	1.15	1.08	0.81	0.91	0.89
30-35							0.94	0.59	0.79	0.83	0.42	0.63	0.63	0.91
35-40								0.45	0.59	0.79	0.83	0.63	0.63	0.91
40-45									0.45	0.59	0.79	0.83	0.63	0.91
45-50										0.45	0.59	0.79	0.83	0.91
50-55											0.45	0.59	0.79	0.91
55-60												0.45	0.59	0.91
60-65													0.45	0.91
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765-770														

## Housing Units

The chart below illustrates the last 20 years of historical enrollment and corresponding single-family building permits issued per year. Building activity peaked in 2004 and enrollment continued to increase as the number of building permits issued decreased. It is likely that building permits that issued during the peak building years (2002-2005) were not occupied until 2006 and beyond, contributing to the continued increase in enrollment after 2005. Please note that there is a correlation between the number of permits issued and the rate of growth by year.

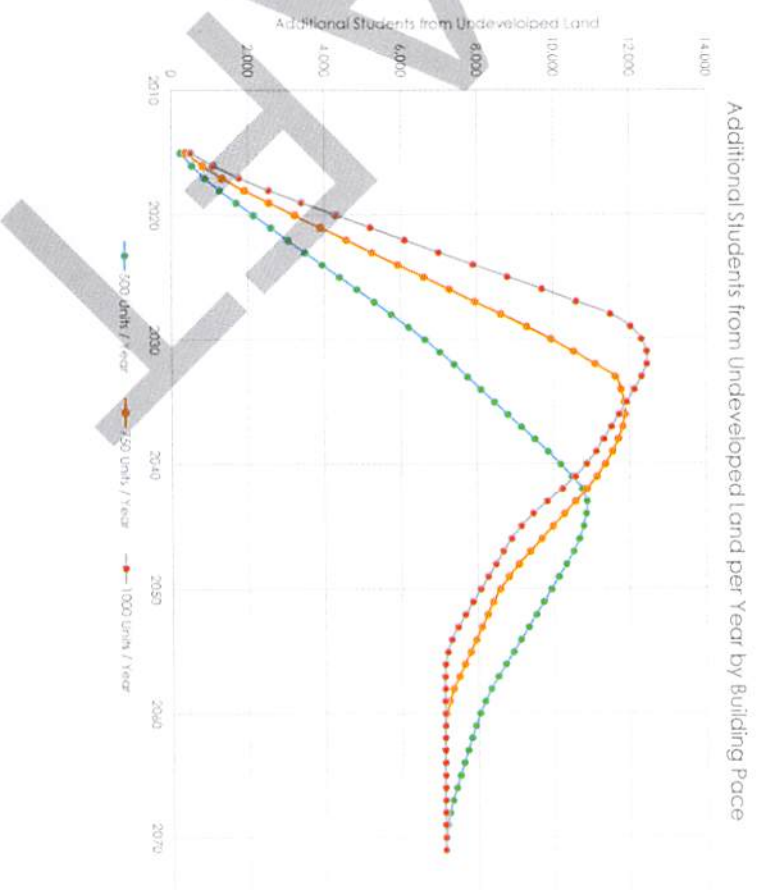


Historical Enrollment vs. Building Permits



## Building Pace for Undeveloped Land

When the sliding scale is applied to the three different building paces, the enrollment peaks in different years and at different levels as illustrated in the chart below. This is due to more total units in the high yield (0.90) portion of their life cycle at the same time in the faster building paces. Based on the 14,250 potential housing units, the maximum number of additional students is between 10,875 @ 500 units / year and 12,453 @ 1,000 units / year. Regardless of the pace, all three growth models reach the mature total of 7,125 additional students.

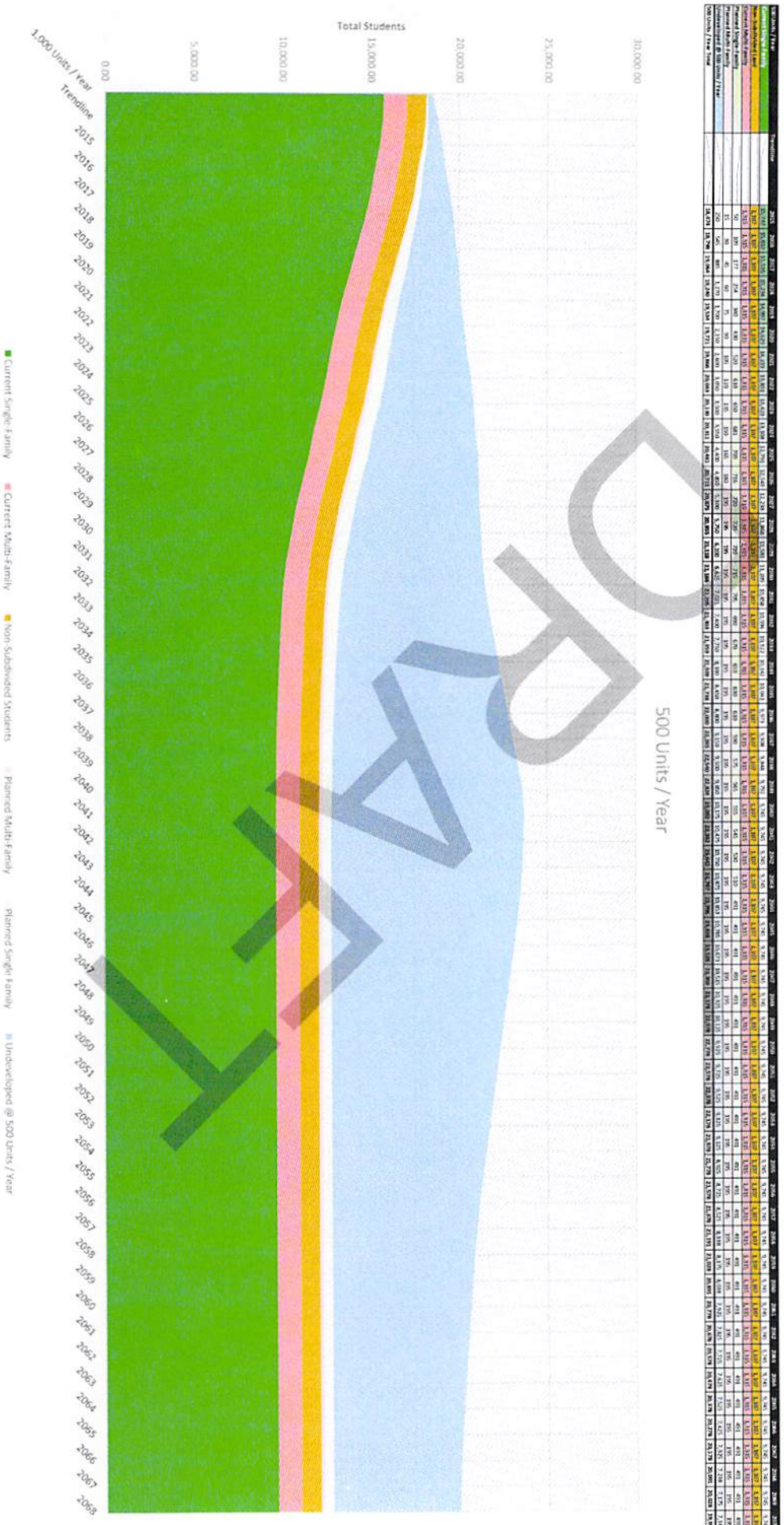


As illustrated on the chart to the right, the increase in enrollment correlates to the number of building permits issued. Based on the observed fluctuation in the number of single-family building permits issued historically, three different paces were used to project student potential from undeveloped land. The paces used were 500, 750, and 1,000 single-family units per year.



### Complete Student Potential: 500 Unit / Year Pace (Most Likely)

The chart and table below illustrate the complete student potential for the 500 unit / Year building pace. The maximum enrollment year is 2043 with an enrollment of 23,747. The mature enrollment year is 2070 with an enrollment of 19,994.



# Potential Enrollment by Current Attendance Boundary

The following table illustrates the current and potential number of students, and the mature number of students by current attendance boundary. Please note that there are no totals show for maximum enrollment. This is due to the fact that there is no timeframe associated with this calculation. Unlike the models shown on the previous pages, this assumes that all potential housing units would be at their maximum yield at the same time which is highly unlikely.

School	Occupied Non-Single-Family Land		Units from Existing Single-Family	Units from Planned Single-Family	Units from Existing Multi-Family	Units from Planned Multi-Family	Units from Vacant / Farm w/ 3+ Acres	Units from Vacant / Farm No. 3+ Acres	Total Housing Units	Percent Complete (Buildout %)	Students Occupied Non-Single-Family Land	Students from Existing Single-Family	Students from Planned Single-Family	Students from Existing Multi-Family	Students from Planned Multi-Family	Students from Vacant / Farm w/ 3+ Acres	Students from Vacant / Farm No. 3+ Acres	Total Maximum Students	Students Occupied Non-Single-Family Land	Students from Existing Single-Family	Students from Planned Single-Family	Students from Existing Multi-Family	Students from Planned Multi-Family	Students from Vacant / Farm w/ 3+ Acres	Students from Vacant / Farm No. 3+ Acres	Total Mature Students					
	Acres	Units	Units	Units	Units	Units	Units	Units	Units	%	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units					
Elementary Schools																															
Alum Creek ES	1,801	15	1,324	0	0	0	0	3,149	100%	8	583	0	0	0	0	0	583	8	314	0	0	0	0	0	0	342					
Arroyo Vista ES	762	218	861	67	225	0	0	1,867	28%	29	379	28	65	0	787	482	1,735	29	221	16	65	0	0	0	0	342					
Cabrera ES	10,099	345	1,316	0	211	0	0	12,726	31%	63	483	0	16	0	966	781	2,266	63	267	0	16	0	0	0	0	1,037					
Freedom Trail ES	2,644	35	1,313	0	146	0	0	4,066	79%	3	567	0	4	0	164	0	739	3	326	0	4	0	0	0	0	427					
Gran Oaks ES	2,484	32	942	0	476	0	0	1,458	79%	3	389	0	97	0	48	110	644	3	215	0	97	0	27	0	0	401					
Harvey ES	15,465	595	1,732	156	424	0	0	12,077	51%	115	474	65	20	0	521	503	1,583	115	312	36	20	0	291	281	1,694						
Indian Springs ES	5,555	198	1,221	212	40	0	0	552	47%	64	584	84	18	0	260	579	1,312	64	312	47	18	0	128	71	1,141						
Liberty Creek ES	10,244	400	1,168	202	0	0	0	1,874	68%	44	508	58	26	0	43	223	852	44	279	32	26	0	23	122	828						
Liberty Tree ES	5,155	152	1,091	189	385	0	0	2,813	100%	9	490	16	71	0	0	0	563	9	307	32	26	0	23	122	849						
Oak Creek ES	1,36	18	1,588	88	2,614	0	0	5,655	88%	18	314	16	158	0	0	0	613	18	314	16	158	0	0	0	613						
Ortega Meadows ES	4,207	89	1,592	0	1,405	0	0	3,066	100%	13	461	0	19	0	0	0	634	13	461	0	19	0	0	0	634						
Ortega Ridge ES	5,21	113	1,803	0	1,10	0	0	2,093	95%	9	612	0	0	0	46	0	658	9	314	0	0	0	0	0	428						
Ortega Vista ES	5,01	259	1,515	164	615	504	165	3,202	75%	28	584	68	39	35	60	0	776	28	313	38	19	35	35	0	996						
Ortega Vista ES	1,399	80	1,638	0	16	0	0	1,734	100%	13	573	0	7	0	0	0	580	13	378	7	0	0	0	0	0	888					
Ortega Vista ES	83	2,676	20,530	978	7,005	1,300	7,512	6,749	67,550	65%	Data Available													435	4,501	227	606	90	1,715	1,560	5,174
Middle Schools																															
Arroyo Vista MS	2,697	1,000	3,902	166	2,911	1,071	2,679	3,458	15,157	52%	84	744	76	81	35	536	680	2,372	84	376	42	81	35	309	178	1,535					
Harvey MS	11,146	419	1,312	151	1,104	0	660	868	6,794	27%	68	666	73	0	40	137	177	1,093	68	388	46	40	0	76	98	711					
Ortega MS	8,69	253	4,028	0	753	0	110	5,155	88%	18	316	0	32	10	23	0	732	18	452	0	33	0	13	0	0	514					
Ortega MS	5,94	87	4,217	18	2,107	0	0	6,958	95%	14	678	8	107	10	0	0	803	14	419	4	107	10	0	0	0	514					
Valhalla MS	22,05	917	5,066	721	614	0	4,053	13,916	49%	86	979	46	43	0	844	547	2,459	86	563	26	304	45	868	781	4,639						
Middle Schools Subtotal	83	2,676	20,530	978	7,005	1,300	7,512	6,749	67,550	65%	Data Available													270	2,448	113	304	45	868	781	4,639
High Schools																															
Liberty HS	27,705	672	2,345	151	1,903	0	7,70	848	11,919	84%	102	1,709	87	98	0	213	216	2,433	102	1,170	0	98	0	118	110	1,622					
Ortega HS	44,610	411	6,714	475	5,218	0	6,170	8,001	15,495	87%	41	1,671	51	37	0	1,715	1,637	5,186	41	913	66	57	0	954	910	2,882					
Ortega HS	11,842	1,583	6,821	202	5,218	0	1,800	7,512	15,495	87%	218	1,572	56	200	60	112	0	2,050	218	42	913	31	276	85	0	1,847					
High Schools Subtotal	83	2,676	20,530	978	7,005	1,300	7,512	6,749	67,550	85%	Data Available													302	2,946	131	403	60	1,570	1,840	6,351
Grand Total																															
											1,007	1,170	113	156	118	1,637	2,433	102	1,170	0	98	0	118	110	1,622						
											2,946	2,946	491	1,213	355	3,740	8,391	3,027	3,027	1,007	1,170	0	98	0	118						
											1,007	1,170	113	156	118	1,637	2,433	102	1,170	0	98	0	118	110	1,622						
											2,946	2,946	491	1,213	355	3,740	8,391	3,027	3,027	1,007	1,170	0	98	0	118						
											1,007	1,170	113	156	118	1,637	2,433	102	1,170	0	98	0	118	110	1,622						
											2,946	2,946	491	1,213	355	3,740	8,391	3,027	3,027	1,007	1,170	0	98	0	118						
											1,007	1,170	113	156	118	1,637	2,433	102	1,170	0	98	0	118	110	1,622						
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											2,946	2,946	491	1,213	355	3,740	8,391	3,027	3,027	1,007	1,170	0	98	0	118						



## Appendix

### Current Subdivision Listing

Global Market Overview										Regional Performance										Sector Analysis										Company Metrics										Financial Indicators																			
North America					Europe					Asia-Pacific					Latin America					Middle East					Africa					Oceania					Energy					Tech					Healthcare					Retail					Finance				
Region	Country	Market Cap	Revenue	Profit	Region	Country	Market Cap	Revenue	Profit	Region	Country	Market Cap	Revenue	Profit	Region	Country	Market Cap	Revenue	Profit	Region	Country	Market Cap	Revenue	Profit	Region	Country	Market Cap	Revenue	Profit	Region	Country	Market Cap	Revenue	Profit	Region	Country	Market Cap	Revenue	Profit	Region	Country	Market Cap	Revenue	Profit	Region	Country	Market Cap	Revenue	Profit										
NA	USA	1.2T	500B	100B	EU	Germany	400B	150B	30B	AP	China	2.5T	1.0T	200B	LA	Brazil	200B	80B	15B	ME	Saudi Arabia	150B	60B	10B	AF	South Africa	100B	40B	8B	OC	Australia	120B	50B	12B	E	Oil	1.5T	600B	120B	T	Software	800B	300B	60B	H	Pharma	600B	250B	50B	R	Walmart	400B	150B	30B	F	Banking	300B	120B	25B
NA	Canada	150B	60B	12B	EU	France	300B	120B	25B	AP	India	1.8T	700B	150B	LA	Mexico	180B	70B	14B	ME	UAE	120B	50B	10B	AF	Egypt	80B	30B	6B	OC	New Zealand	80B	30B	7B	E	Natural Gas	1.0T	400B	80B	T	Cloud	500B	180B	35B	H	Medical Devices	400B	160B	32B	R	Amazon	350B	140B	28B	F	Insurance	250B	100B	20B
NA	Mexico	100B	40B	8B	EU	UK	250B	100B	20B	AP	Japan	1.0T	400B	80B	LA	Argentina	120B	50B	10B	ME	Qatar	100B	40B	8B	AF	Nigeria	70B	30B	6B	OC	Philippines	100B	40B	8B	E	Coal	800B	300B	60B	T	AI	300B	100B	20B	H	Biotech	300B	120B	25B	R	Target	300B	120B	25B	F	Investment	200B	80B	15B
NA	USA	1.2T	500B	100B	EU	Germany	400B	150B	30B	AP	China	2.5T	1.0T	200B	LA	Brazil	200B	80B	15B	ME	Saudi Arabia	150B	60B	10B	AF	South Africa	100B	40B	8B	OC	Australia	120B	50B	12B	E	Oil	1.5T	600B	120B	T	Software	800B	300B	60B	H	Pharma	600B	250B	50B	R	Walmart	400B	150B	30B	F	Banking	300B	120B	25B
NA	Canada	150B	60B	12B	EU	France	300B	120B	25B	AP	India	1.8T	700B	150B	LA	Mexico	180B	70B	14B	ME	UAE	120B	50B	10B	AF	Egypt	80B	30B	6B	OC	New Zealand	80B	30B	7B	E	Natural Gas	1.0T	400B	80B	T	Cloud	500B	180B	35B	H	Medical Devices	400B	160B	32B	R	Amazon	350B	140B	28B	F	Insurance	2		



## Appendix

### Current Subdivision Listing

Project Information		Financial Overview		Operational Metrics		Compliance & Risk		Reporting & Audit	
Project ID	Project Name	Budget (USD)	Actual Cost (USD)	Progress (%)	Quality Score	Compliance Status	Risk Level	Report Date	Audit Status
P001	Alpha Initiative	1,200,000	1,150,000	85%	4.2	Compliant	Low	2023-10-26	Passed
P002	Beta Project	850,000	820,000	72%	3.8	Minor Issues	Medium	2023-10-25	Pending
P003	Gamma Development	2,100,000	2,050,000	91%	4.5	Compliant	Low	2023-10-27	Passed
P004	Delta System Upgrade	950,000	980,000	68%	3.5	Minor Issues	Medium	2023-10-24	Pending
P005	Epsilon Integration	1,500,000	1,480,000	78%	4.1	Compliant	Low	2023-10-26	Passed
P006	Zeta Platform Rollout	700,000	690,000	95%	4.3	Compliant	Low	2023-10-27	Passed
P007	Eta Data Migration	1,800,000	1,750,000	88%	4.0	Compliant	Low	2023-10-25	Passed
P008	Theta User Interface	1,100,000	1,080,000	75%	3.9	Minor Issues	Medium	2023-10-26	Pending
P009	Iota Backend Optimization	900,000	890,000	82%	4.1	Compliant	Low	2023-10-27	Passed
P010	Kappa Frontend Development	1,300,000	1,280,000	70%	3.7	Minor Issues	Medium	2023-10-24	Pending
P011	Lambda System Integration	1,600,000	1,580,000	80%	4.0	Compliant	Low	2023-10-26	Passed
P012	Mu Database Migration	1,000,000	990,000	73%	3.8	Minor Issues	Medium	2023-10-25	Pending
P013	Nu API Development	1,400,000	1,380,000	85%	4.2	Compliant	Low	2023-10-27	Passed
P014	Xi User Acceptance Testing	800,000	790,000	90%	4.4	Compliant	Low	2023-10-26	Passed
P015	Omicron Deployment	1,200,000	1,180,000	77%	3.9	Minor Issues	Medium	2023-10-24	Pending
P016	Pi Performance Tuning	900,000	880,000	83%	4.1	Compliant	Low	2023-10-27	Passed
P017	Rho Security Audit	1,100,000	1,090,000	76%	3.8	Minor Issues	Medium	2023-10-25	Pending
P018	Sigma Integration Testing	1,300,000	1,270,000	81%	4.0	Compliant	Low	2023-10-26	Passed
P019	Tau Final Review	1,500,000	1,480,000	79%	3.9	Minor Issues	Medium	2023-10-24	Pending
P020	Upsilon Go-Live	1,700,000	1,680,000	86%	4.2	Compliant	Low	2023-10-27	Passed
P021	Phi Post-Launch	1,000,000	990,000	74%	3.7	Minor Issues	Medium	2023-10-25	Pending
P022	Chi Feedback Loop	1,200,000	1,180,000	80%	4.0	Compliant	Low	2023-10-26	Passed
P023	Psi Optimization	1,400,000	1,380,000	78%	3.9	Minor Issues	Medium	2023-10-24	Pending
P024	Omega Final Report	1,600,000	1,580,000	82%	4.1	Compliant	Low	2023-10-27	Passed
P025	Overall Project Summary	1,800,000	1,750,000	88%	4.0	Compliant	Low	2023-10-25	Passed