



Denton ISD

Build-out Analysis

Understanding Build-out

- Build-out refers to development of ALL developable land.
- Making use of the best available data
- Science and art collide
- Enrollment will always be fluid
- Functional Enrollment vs Maximum Enrollment
- A lot can happen in 20 years...

Build-Out Review Process

The Review

- **Summarize Planning Areas to Elementary Review Boundaries** – This allows TD analysis to complete the review process at a manageable and familiar level.
 - Calculate number of existing platted vacant lots
 - Review Vacant Acres
 - Current Student Yields
 - Housing density (homes per acre)
 - Percent of current developed land in zone as residential
- **Review Student Yields** – Summarize existing student yields by attendance levels
 - Students yields calculated by dividing the geo-coded students in each zone by the number of residential units. Single Family and Multi-family yields may be very different and therefore are calculated separately.
 - Adjust yields if necessary. These yields will be applied to all future housing and TD staff will review to see if the current yields are reasonable as build-out yields. Often very high initial yields will level off after several years or low yields will rebound with regeneration.
- **Build-out of Vacant Land** – TD staff use professional judgment to determine:
 - What percentage of the vacant land in each zone will be designated as residential at build-out.
 - Type of residential, single family or multi family based on existing or near by development
 - Density of single family development; units per acre
- **Calculate Build-Out Students by zone** – student build-out is calculated from the summation of all future housing multiplied by the appropriate student yield for the property type and attendance level.

Single Family Calculation

Existing SF + Existing Platted Lots + (vacant acres * percent single family * units per acre) = **Total Future SF Homes**

Total Future SF * SF Elementary Student Yield = **SF Build-out Elementary Students**

Total Future SF * SF Middle School Student Yield = **SF Build-out Middle School Students**

Total Future SF * SF High School Student Yield = **SF Build-out High School Students**












Note: This process is repeated for multi-family housing and yields.

General Build-Out/Land Use Terms

- **Total Developed Acres** – land that has been designated with some type of land-use.
- **Residential Parcel** – a tract of land designated by the appraisal district as residential and must include a year built or improved value field.
- **Improved Residential Acres** – The total area of all residential parcels.
- **Residential Acres Percentage** – Represents the percentage of all the developed acres that are currently designated with existing residential units. This percentage is used as a guide to developing the remaining vacant land
- **Units per acre** – The total number of residential parcels divided by the total acres they represent. (Example: 300 residential parcels on 100 acres = 3 units per acre.)
- **Student Yield** – The number of students per household within a given geography. This could be a planning area, subdivision or for the entire district. (Example: If a geography has 1,200 residential parcels and 750 students have been geo-coded to this same geography then the yield is $750/1,200$ or .625) Average yields are used to establish build-out students by grade level.
- **VDL** – Vacant developed lot, this is a lot or parcel that is ready for immediate development. These are parcels that do not contain a year built or improved value.
- **Future Inventory** – plats or developments that have been planned and sometime approved but no activity has begun. Generally still raw land.
- **Vacant Developable Land** – vacant land that has not been designated for a specific use and does not fall within a “floodway”

Parcel data for this study was acquired through
Denton County Appraisal District: File date, July
2010

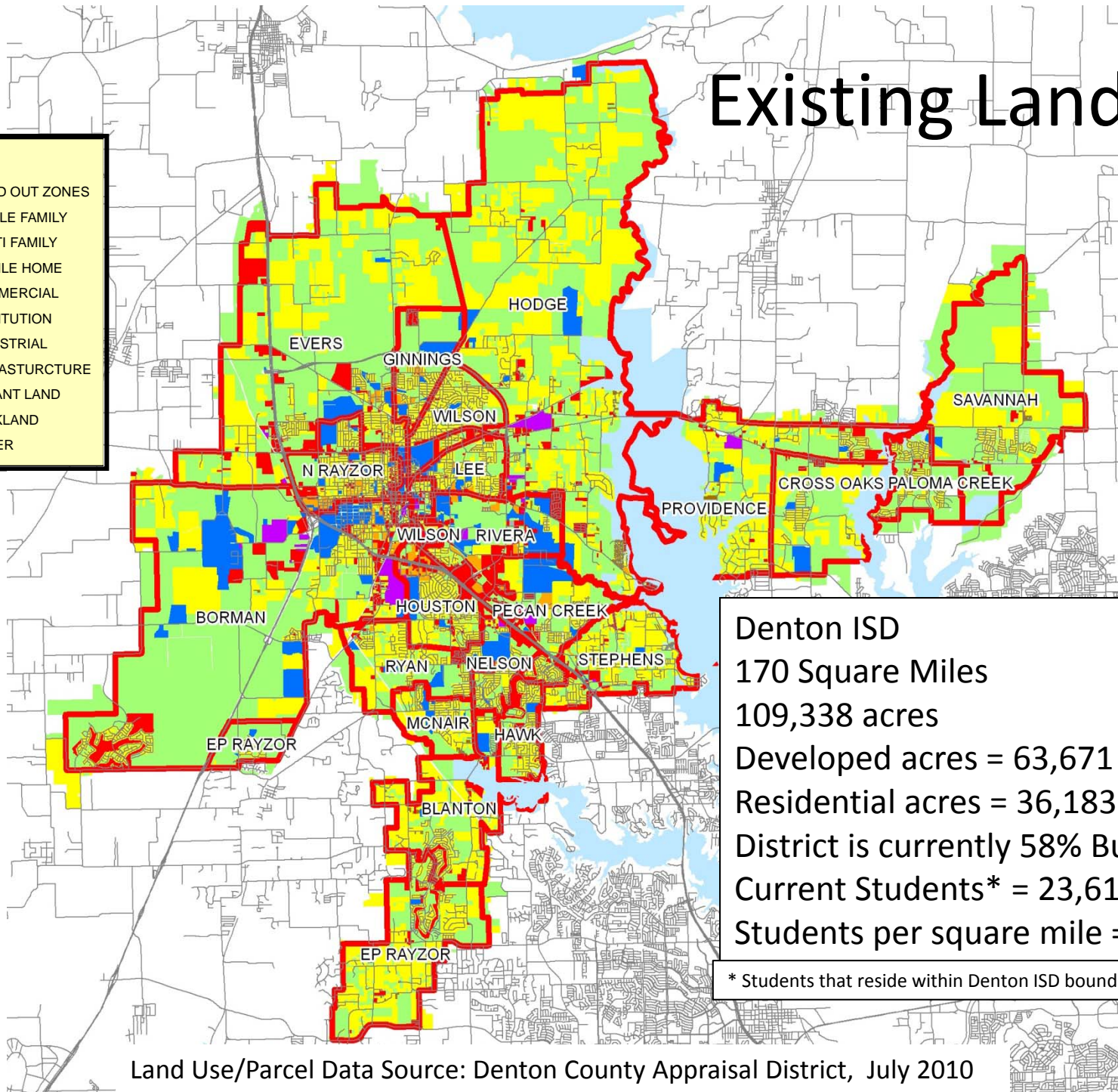
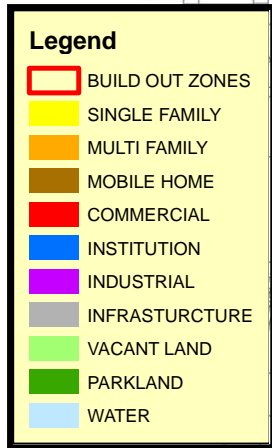
Land-Use Definitions

Legend	
	BUILD OUT ZONES
	SINGLE FAMILY
	MULTI FAMILY
	MOBILE HOME
	COMMERCIAL
	INSTITUTION
	INDUSTRIAL
	INFRASTRUCTURE
	VACANT LAND
	PARKLAND
	WATER

- **ELEM/BO ZONES** – Elementary attendance zones used as geography for build-out zones
- **SINGLE FAMILY**– Single family detached, duplex, townhomes
- **MULTI-FAMILY**– 3-4 unit attached residential, apartments
- **MOBILE HOME**– Mobile homes, trailers.
- **COMMERCIAL** – Commercial, retail, office, shopping centers, malls, entertainment centers
- **INSTITUTIONAL**– Public buildings or property. Churches, schools, Prisons, jails, County/State/Federal property
- **INDUSTRIAL**– Warehouse, manufacturing, rail road, heavy industry
- **INFRASTRUCTURE** – Vacant developed lot, this is a lot or parcel that is ready for immediate development. These are parcels that do not contain a year built or improved value.
- **VACANT**– Open developable land
- **PARKLAND** – Outdoor parks, public recreation
- **WATER**– lakes, rivers, streams, stock tanks, holding areas

Although an “official” color scheme does not exist, the American Planning Association and planning agencies generally use a defacto standard developed in the 1950s. Templeton Demographics has chose this color scheme for our land us analysis uses this color scheme.

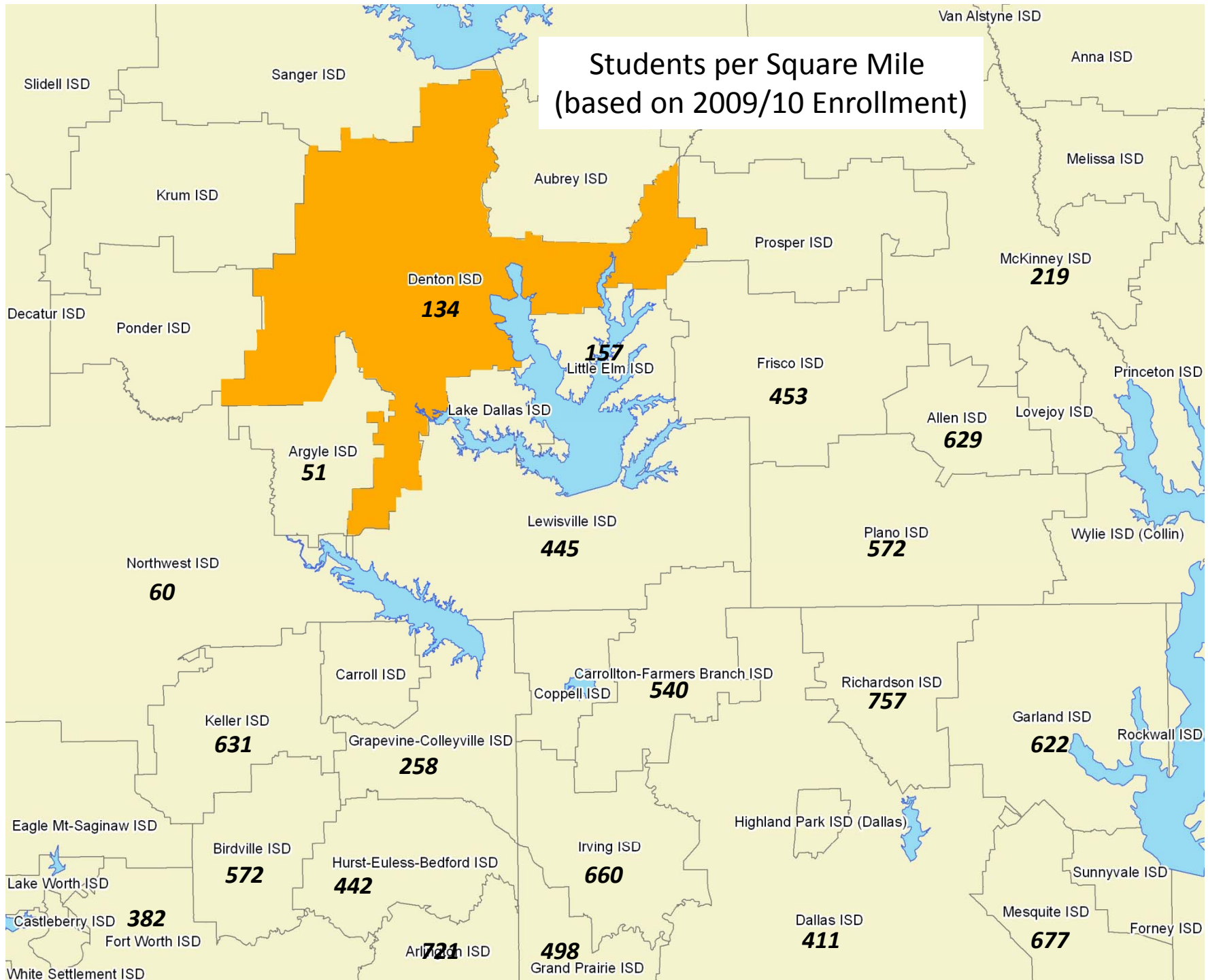
Existing Land-Use



Denton ISD
170 Square Miles
109,338 acres
Developed acres = 63,671
Residential acres = 36,183
District is currently 58% Built Out
Current Students* = 23,614
Students per square mile = 140

* Students that reside within Denton ISD boundary (May 2010)

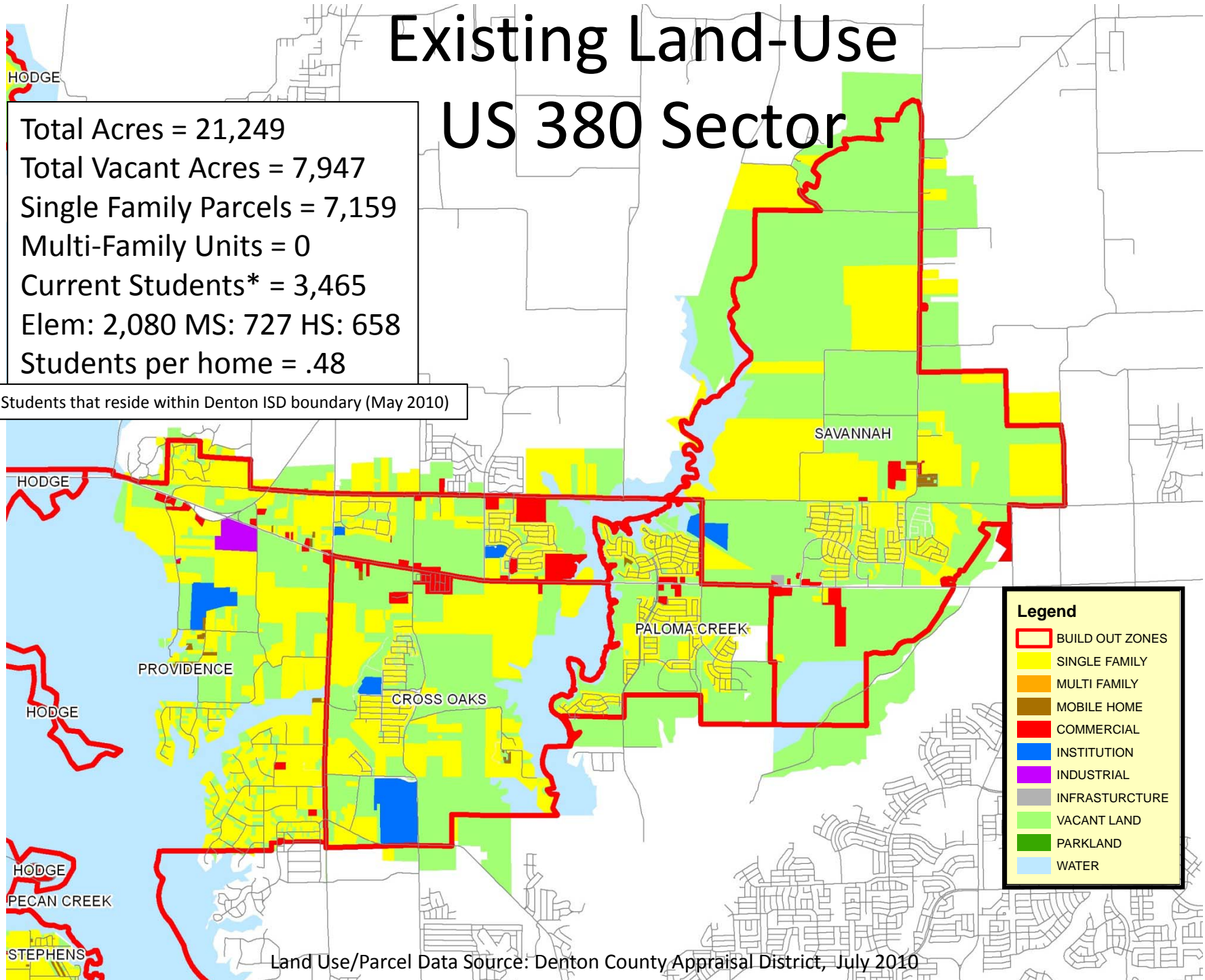
Students per Square Mile (based on 2009/10 Enrollment)



Existing Land-Use US 380 Sector

Total Acres = 21,249
 Total Vacant Acres = 7,947
 Single Family Parcels = 7,159
 Multi-Family Units = 0
 Current Students* = 3,465
 Elem: 2,080 MS: 727 HS: 658
 Students per home = .48

* Students that reside within Denton ISD boundary (May 2010)



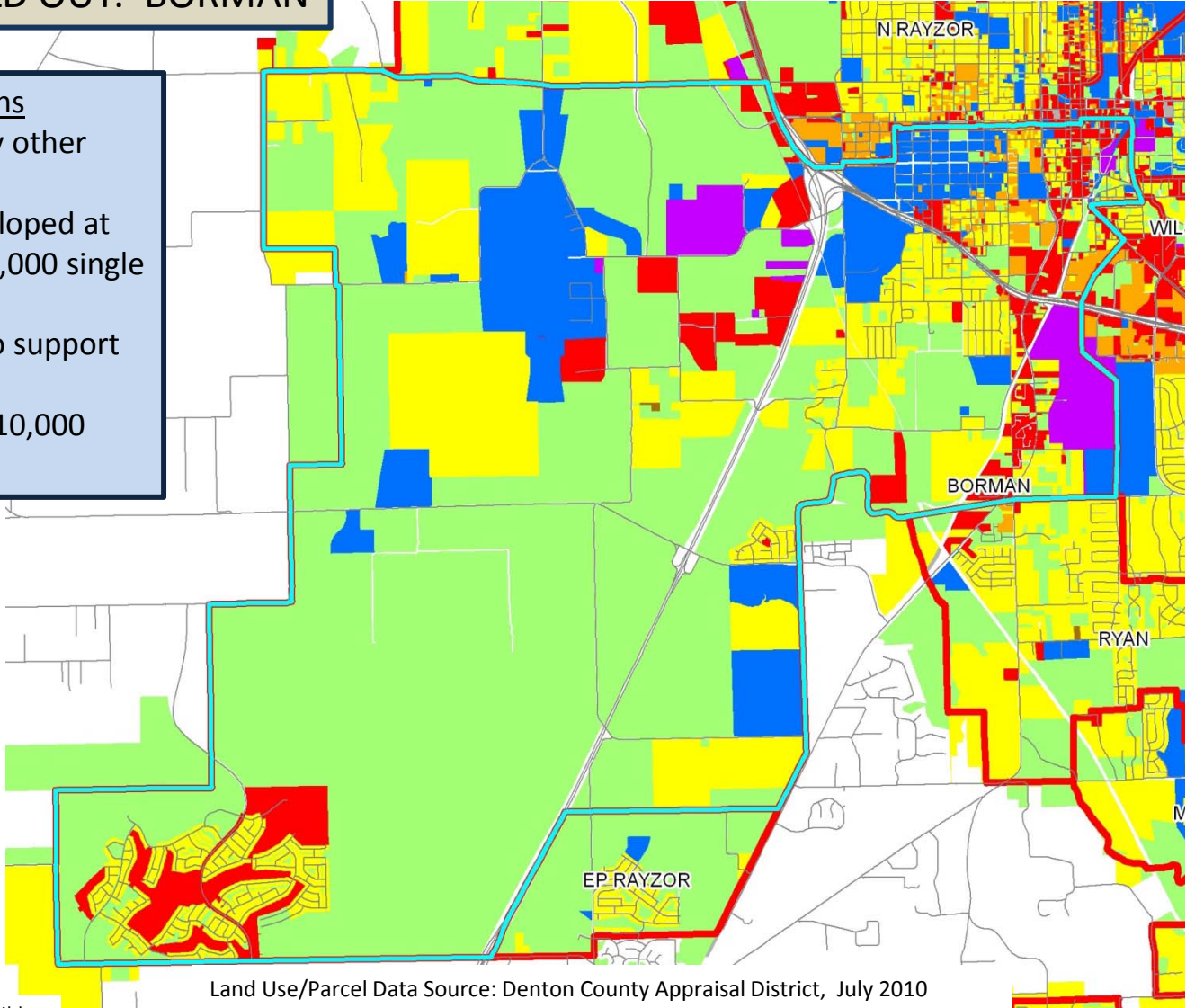
Land Use/Parcel Data Source: Denton County Appraisal District, July 2010

BUILD OUT: BORMAN

- Build-Out Conditions**
- More vacant land than any other build-out zone
 - 9,500 vacant acres if developed at 70% could generate over 20,000 single family homes.
 - The 35W corridor may also support multi-family (1,000 units)
 - Build-out would add over 10,000 students

Legend

- APARTMENTS
- ★ ELEMENTARY SCHOOL
- ★ MIDDLE SCHOOL
- ★ HIGH SCHOOL
- ★ OTHER
- BUILD OUT ZONES
- SINGLE FAMILY
- MULTI FAMILY
- MOBILE HOME
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Land Use/Parcel Data Source: Denton County Appraisal District, July 2010

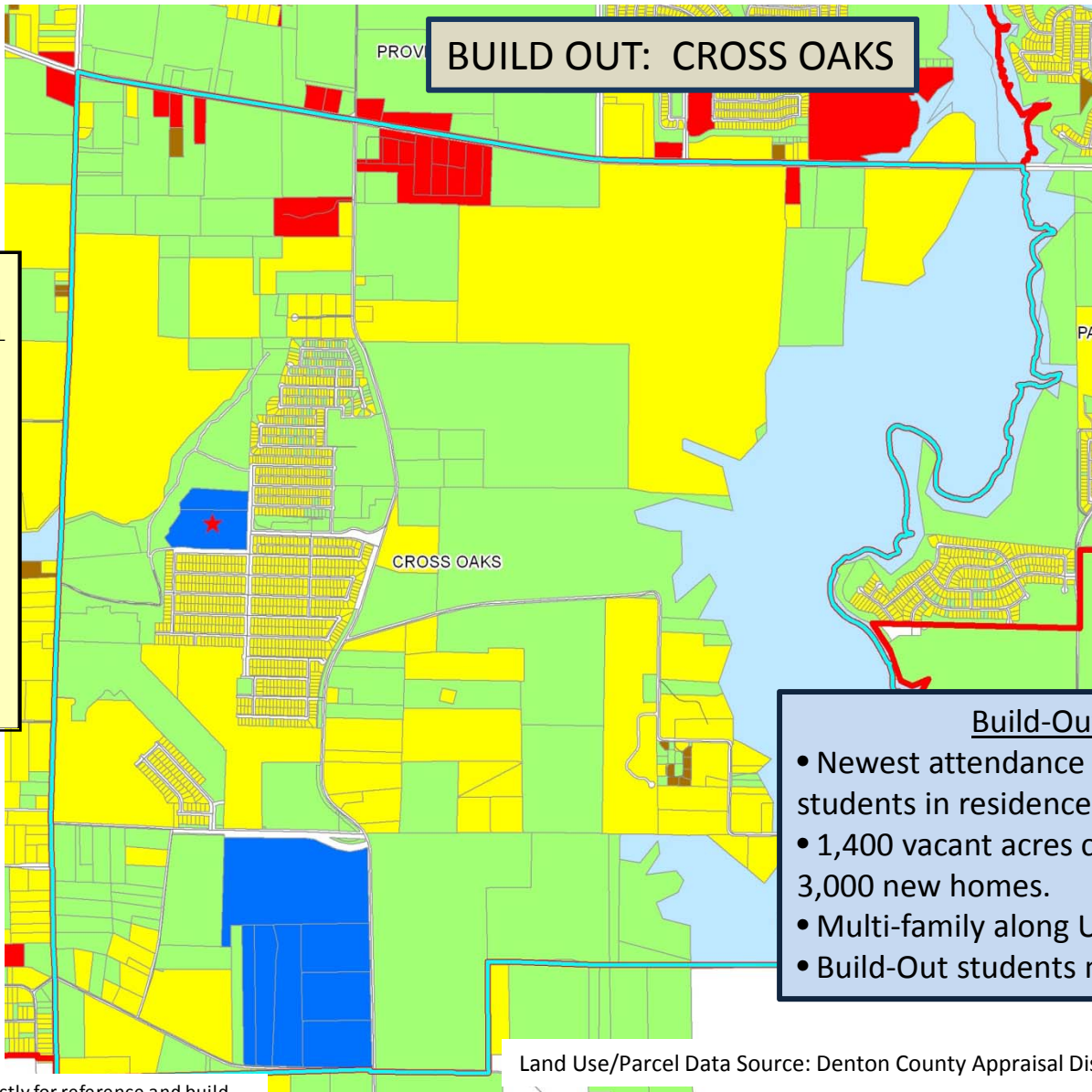
Note: Zone names are strictly for reference and build-out numbers represent the current land area within the attendance zones. Base year of build-out is 2010.

Zone	Under Construction or VDL	Developable Vacant Acres*	B.O. SF Developable Vacant Cohort	Projected SF Acres	Projected Units per Acre	Future SF Units	Future MF Units	B.O. SF Units, incl. Existing, UC, VDL and Future	B.O. MF Units, incl. Existing, UC, VDL and Future	Build-Out Elementary Students	Build-Out Middle Students	Build-Out HS Students	Total Build-Out Students
BORMAN	19	9,548	70%	6,683.9	3.0	20,071	7,000	23,791	9,103	7,008	2,505	2,375	11,888

BUILD OUT: CROSS OAKS

Legend

- APARTMENTS
- ★ ELEMENTARY SCHOOL
- ★ MIDDLE SCHOOL
- ★ HIGH SCHOOL
- ★ OTHER
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- WATER



Build-Out Conditions

- Newest attendance zone, currently 657 students in residence
- 1,400 vacant acres could eventually yield 3,000 new homes.
- Multi-family along US 380 possible
- Build-Out students may approach 2,000

Land Use/Parcel Data Source: Denton County Appraisal District, July 2010

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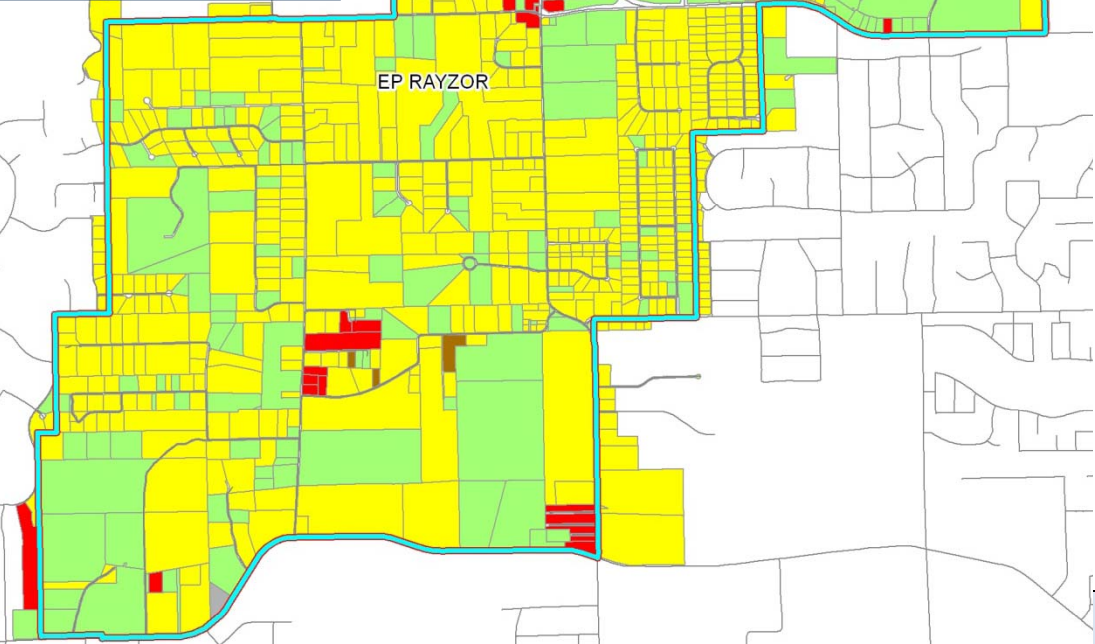
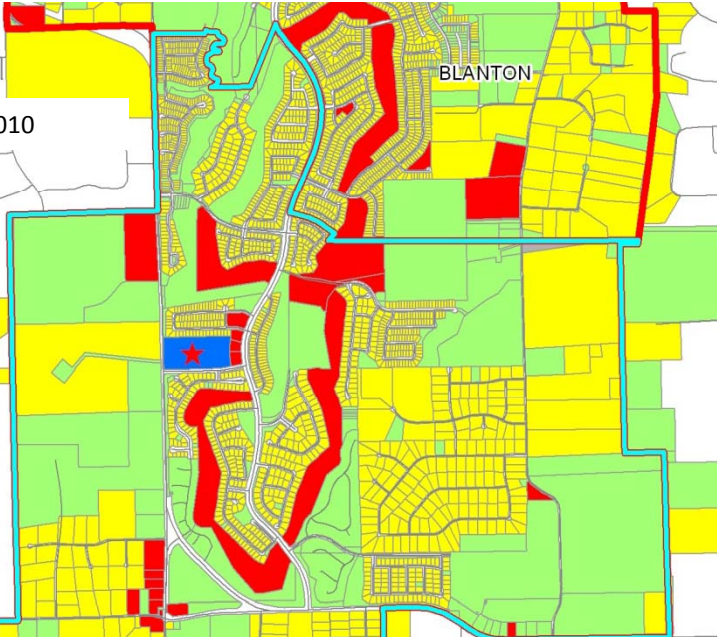
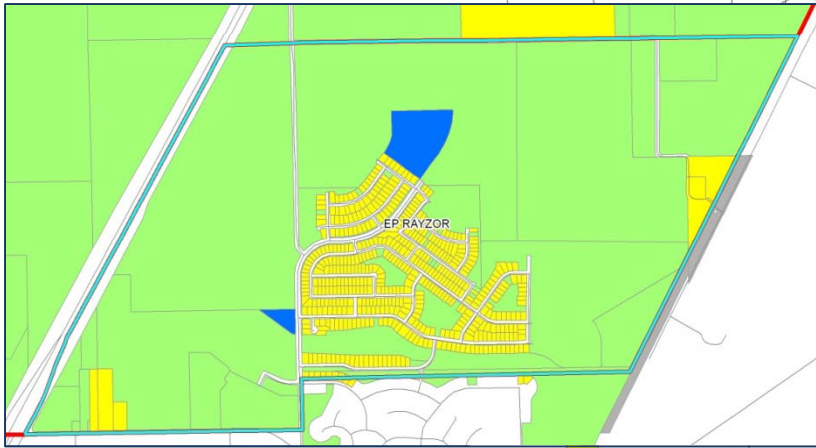
Zone	Under Construction or VDL	Developable Vacant Acres*	B.O. SF Developable Vacant Cohort	Projected SF Acres	Projected Units per Acre	Future SF Units	Future MF Units	B.O. SF Units, incl. Existing, UC, VDL and Future	B.O. MF Units, incl. Existing, UC, VDL and Future	Build-Out Elementary Students	Build-Out Middle Students	Build-Out HS Students	Total Build-Out Students
CROSS OAKS	61	1,410	60%	846.3	3.5	3,023	250	4,140	250	1,547	502	517	2,566

BUILD OUT: EP RAZOR

Land Use/Parcel Data Source: Denton County Appraisal District, July 2010

Legend

- APARTMENTS
- ★ ELEMENTARY SCHOOL
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- Build-Out Conditions**
- Split zone, 2,274 total vacant acres.
 - Currently mix of large ranchettes and high density housing averaging 1 acre per unit.
 - Density will increase during build-out primarily near Country Lakes, existing homes approx 5 units per acre.
 - Build-Out will more than double the housing totals and may include MF near 35W.

Note: Zone names are strictly for reference and build-out numbers represent the current land area within the attendance zones. Base year of build-out is 2010.

Zone	Under Construction or VDL	Developable Vacant Acres*	B.O. SF Developable Vacant Cohort	Projected SF Acres	Projected Units per Acre	Future SF Units	Future MF Units	Units, incl. Existing, UC, VDL and Future	Units, incl. Existing, UC, VDL and Future	Build-Out Elementary Students	Build-Out Middle Students	Build-Out HS Students	Total Build-Out Students
EP RAZOR	53	2,199	50%	1,099.5	2.5	2,802	440	5,357	440	1,588	554	511	2,653

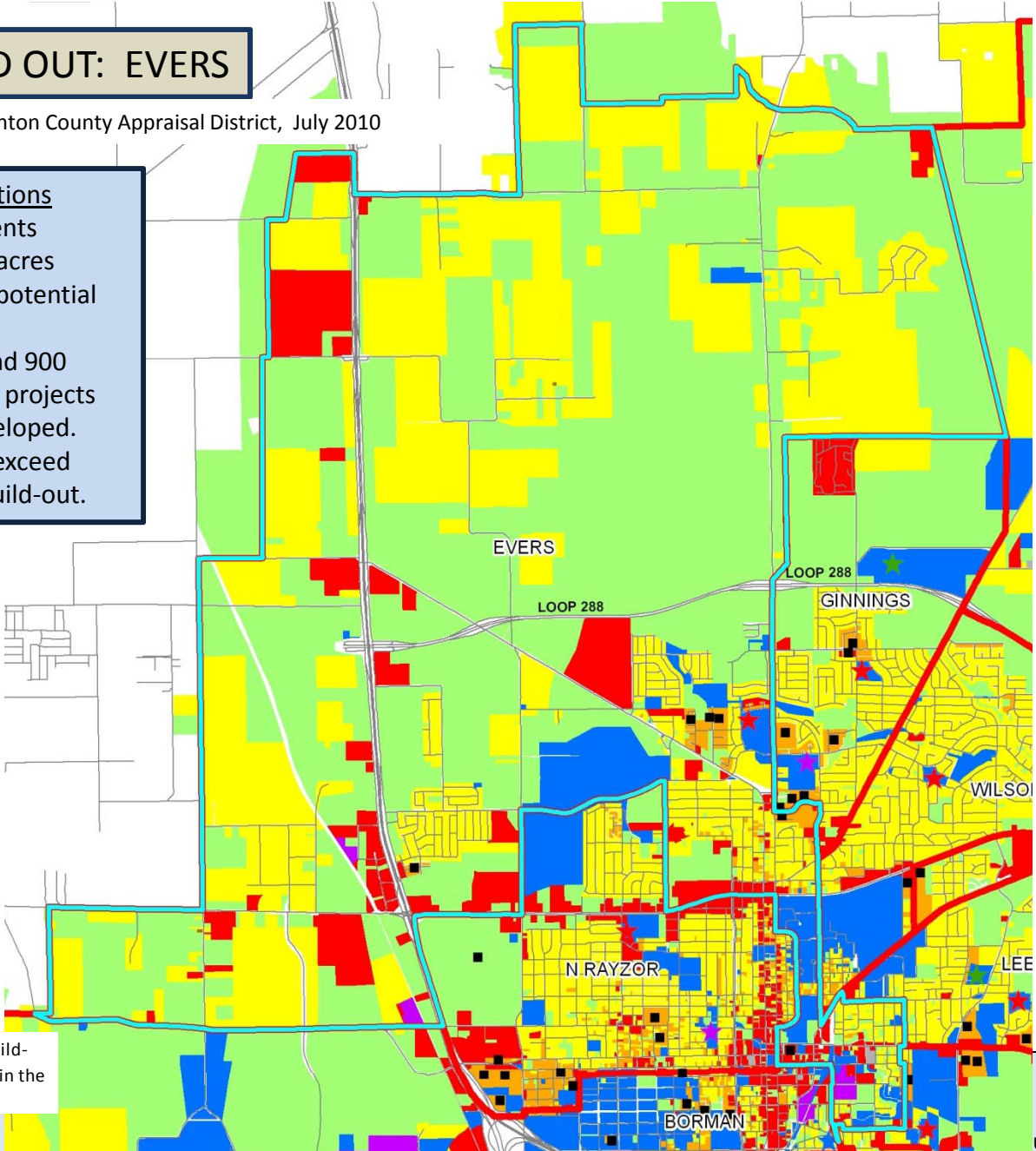
BUILD OUT: EVERS

Land Use/Parcel Data Source: Denton County Appraisal District, July 2010

- Build-Out Conditions**
- Currently 1,323 students
 - Almost 7,000 vacant acres
 - Strong development potential North of Loop 288
 - 7,000 single family and 900 additional multi-family projects forecasted at 50% developed.
 - Student totals could exceed 5,000 in this zone at build-out.

Legend

- APARTMENTS
- ★ ELEMENTARY SCHOOL
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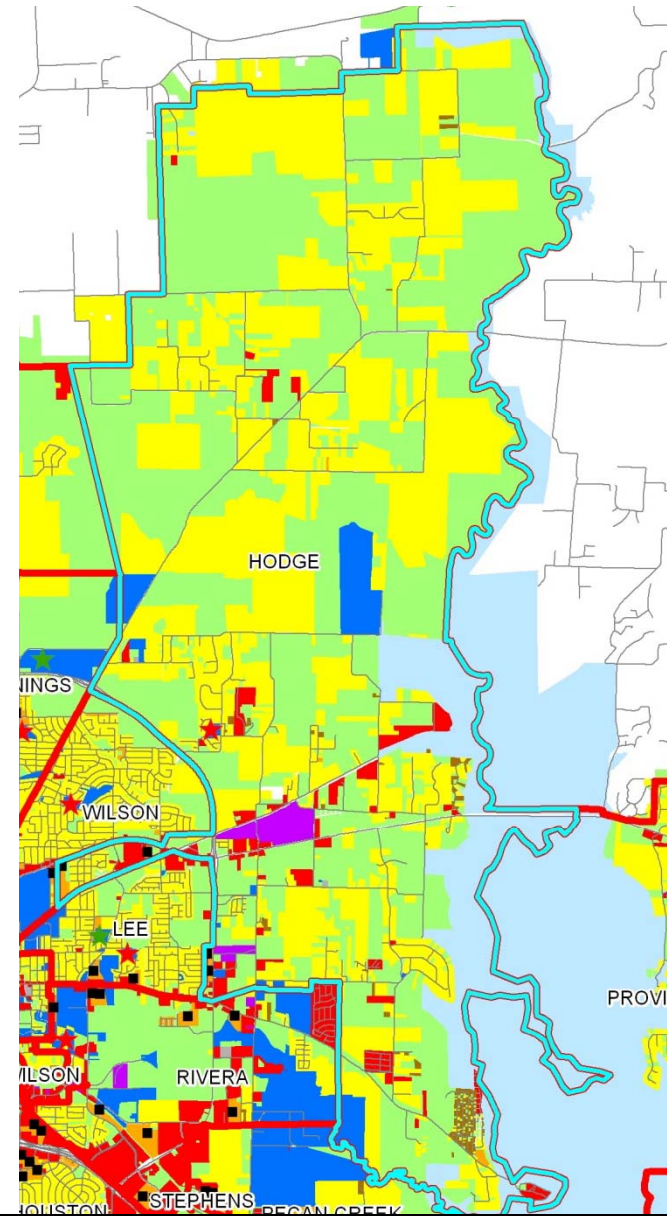
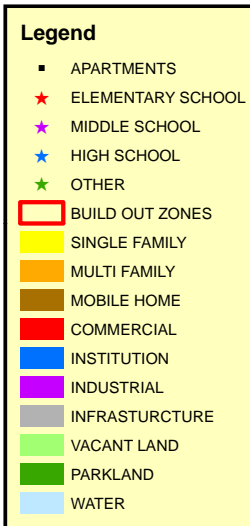
Zone	Under Construction or VDL	Developable Vacant Acres*	Developable Vacant Cohort	Projected SF Acres	Units per Acre	Future SF Units	Future MF Units	UC, VDL and Future	UC, VDL and Future	Elementary Students	Middle Students	Build-Out HS Students	Total Build-Out Students
EVERS	20	6,980	50%	3,489.9	2.0	7,000	900	9,613	1,544	3,100	1,067	1,001	5,168

BUILD OUT: HODGE

Land Use/Parcel Data Source: Denton County Appraisal District, July 2010

Build-Out Conditions

- 1,353 Students reside in this zone.
- The largest attendance zone in the district with over 22,000 total acres.
- Almost 10,000 acres of developable vacant land
- Large residential track will give way to more dense subdivisions (.2 homes per acre to 2 homes per acre)
- New development could add over 11,000 single family and multi-family homes.
- May eventually include 6,700 students



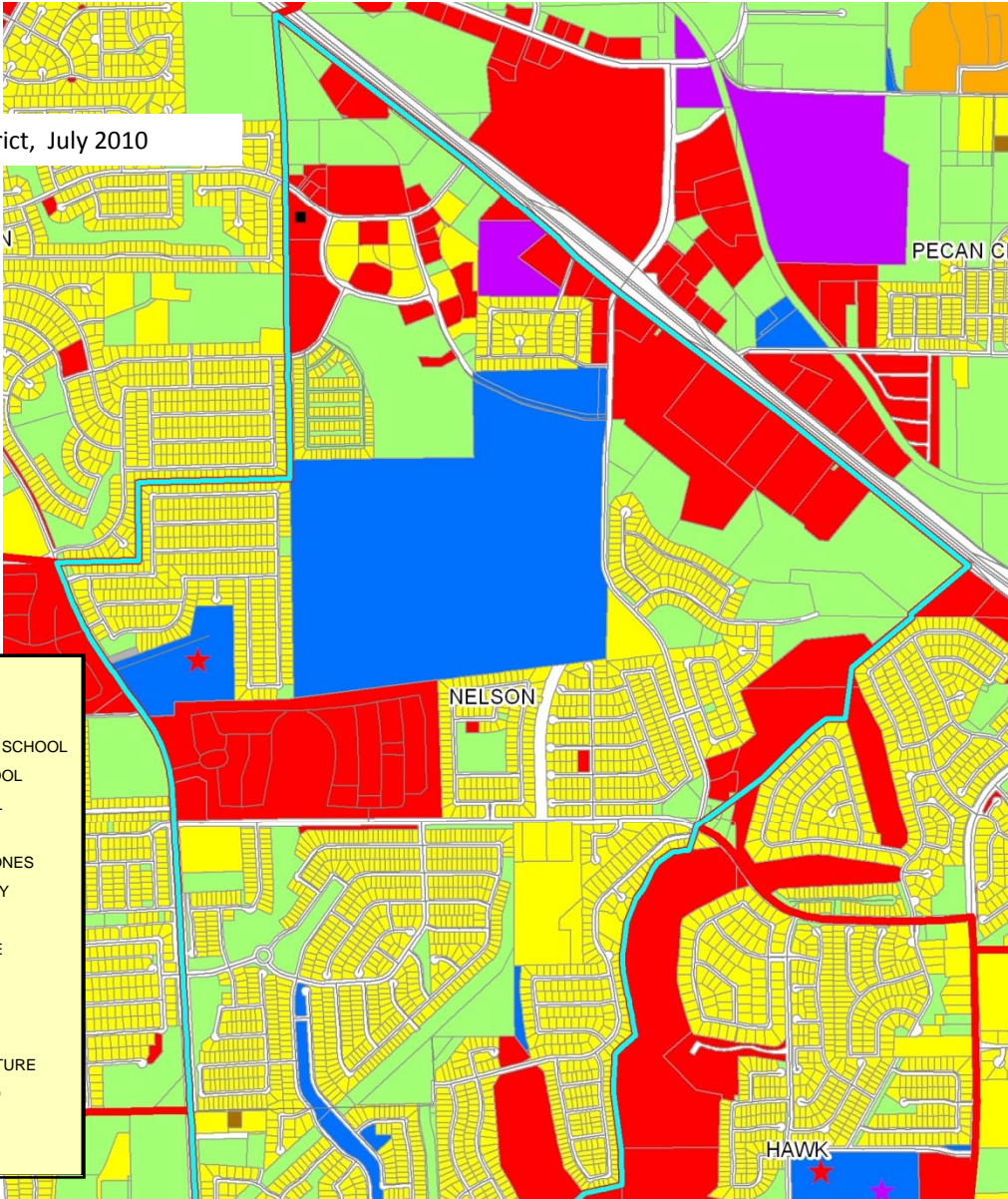
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HODGE	120	9,138	60%	5,482.9	2.0	11,086	500	12,795	1,168	3,441	1,378	1,914	6,733

BUILD OUT: NELSON

Land Use/Parcel Data Source: Denton County Appraisal District, July 2010

- Build-Out Conditions**
- This zone is the closest to build-out with less than 200 vacant acres.
 - New development will be primarily commercial or office.
 - Current enrollment in the zone is 1,431 students.
 - Enrollment may increase with new development and yields will fluctuate with regeneration.



Legend

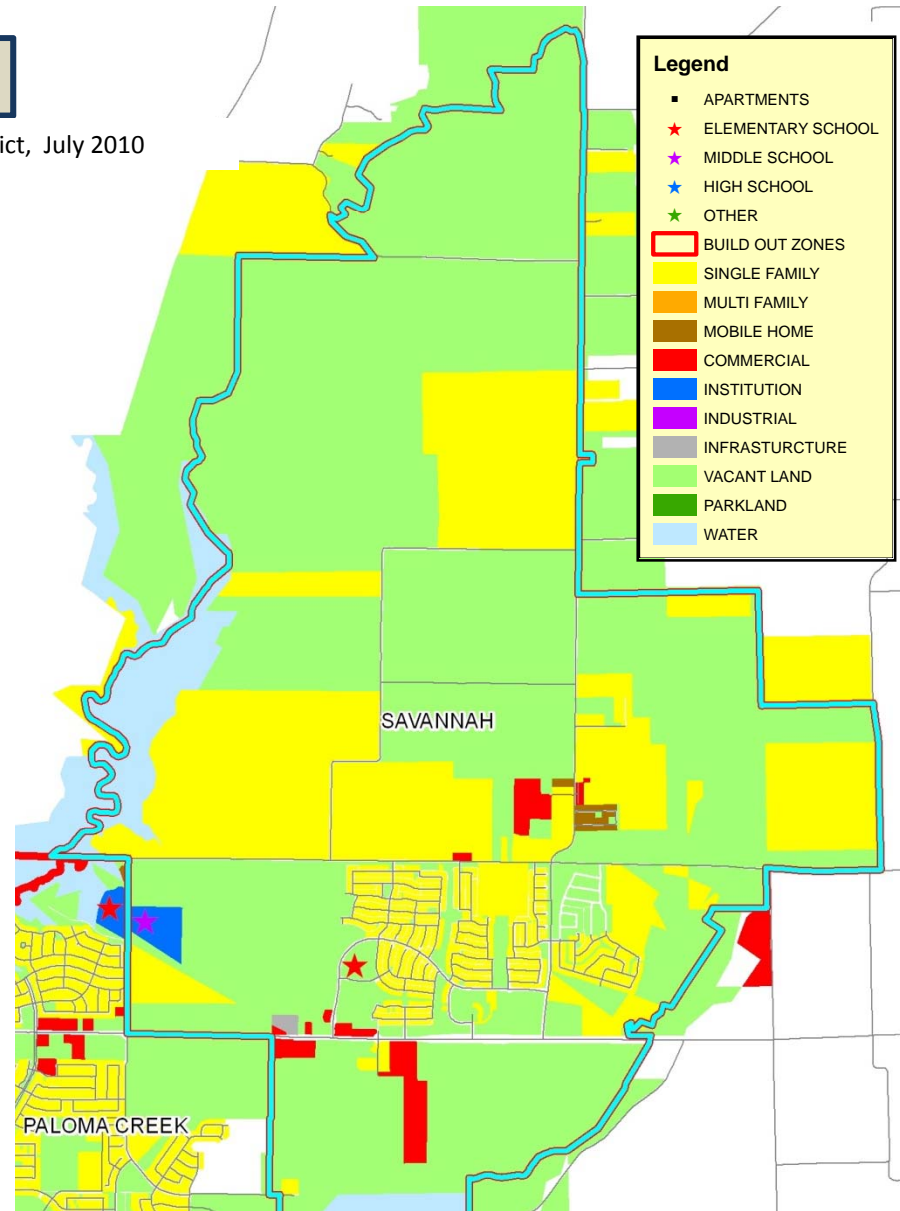
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Note: Zone names are strictly for reference and build-out numbers represent the current land area within the attendance zones. Base year of build-out is 2010.

Zone	Under Construction or VDL	Developable Vacant Acres*	B.O. SF Developable Vacant Cohort	Projected SF Acres	Projected Units per Acre	Future SF Units	Future MF Units	B.O. SF Units, incl. Existing, UC, VDL and Future	B.O. MF Units, incl. Existing, UC, VDL and Future	Build-Out Elementary Students	Build-Out Middle Students	Build-Out HS Students	Total Build-Out Students
NELSON	16	195	30%	58.5	4.0	250	0	2,519	116	761	334	475	1,570

BUILD OUT: SAVANNAH

Land Use/Parcel Data Source: Denton County Appraisal District, July 2010



Build-Out Conditions

- This zone currently has just over 800 students in residence.
- Located very near the DNT and with 3,700 vacant developable acres this zone should see some strong residential growth.
- Densities may vary as large lots develop north and more dense development occurs closer to existing subdivisions.
- May eventually add over 3,000 new students

Note: Zone names are strictly for reference and build-out numbers represent the current land area within the attendance zones. Base year of build-out is 2010.

Zone	Under Construction or VDL	Developable Vacant Acres*	B.O. SF Developable Vacant Cohort	Projected SF Acres	Projected Units per Acre	Future SF Units	Future MF Units	B.O. SF Units, incl. Existing, UC, VDL and Future	B.O. MF Units, incl. Existing, UC, VDL and Future	Build-Out Elementary Students	Build-Out Middle Students	Build-Out HS Students	Total Build-Out Students
SAVANNAH	9	3,746	70%	2,621.1	4.0	10,494	500	12,148	500	3,750	1,217	1,034	6,001

District Totals

Existing Conditions

Total Single Family Parcels*: 42,597

Total Multi-Family Units: 12,317

Vacant Developed Lots: 1,058

Developed SF Acres: 36,183 (57%)

Percent SF as share of Res.: 78%

Residential Units per Acre: 1.18

Current Student Yield: 0.43

Elem: 0.23 MS: 0.09 HS: 0.11

Existing Students: 23,614

Elem: 12,663 MS: 5,040 HS: 5,911

Build-Out Conditions

Single Family Units at build-out: 111,873

Multi-Family Units at build-out: 26,107

SF & MF Added through BO: 83,066

Developed SF Acres at BO: 60,652

Percent SF as share of Res. at BO: 84%

Build-out SF units per acre: 1.8

Build-out Student Yield: 0.45

Elem: 0.25 MS: 0.10 HS: 0.10

Build-Out Students: 62,462

Elem: 35,271 MS: 13,158 HS: 14,033

* Source for improved parcels, Denton County Appraisal District

Projected Build-Out Summary

Zone	Under Construction or VDL	Developable Vacant Acres*	B.O. SF Developable Vacant Cohort	Projected SF Acres	Projected Units per Acre	Future SF Units	Future MF Units	B.O. SF Units, incl. Existing, UC, VDL and Future	B.O. MF Units, incl. Existing, UC, VDL and Future	Build-Out Elementary Students	Build-Out Middle Students	Build-Out HS Students	Total Build-Out Students
BLANTON	311	908	59%	535.4	4.0	2,453	0	4,054	0	1,674	565	539	2,778
BORMAN	19	9,548	70%	6,683.9	3.0	20,071	7,000	23,791	9,103	7,008	2,505	2,375	11,888
CROSS OAKS	61	1,410	60%	846.3	3.5	3,023	250	4,140	250	1,547	502	517	2,566
EP RAYZOR	53	2,199	50%	1,099.5	2.5	2,802	440	5,357	440	1,588	554	511	2,653
EVERS	20	6,980	50%	3,489.9	2.0	7,000	900	9,613	1,544	3,100	1,067	1,001	5,168
GINNINGS	7	796	40%	318.4	2.5	803	250	2,593	1,110	949	406	449	1,804
HAWK	23	300	50%	150.2	3.5	546	0	2,451	0	910	380	409	1,699
HODGE	120	9,138	60%	5,482.9	2.0	11,086	500	12,795	1,168	3,441	1,378	1,914	6,733
HOUSTON	19	230	35%	80.4	3.0	260	350	2,631	2,801	788	345	401	1,534
LEE	24	295	50%	147.3	3.0	466	500	2,863	896	835	376	398	1,609
MCNAIR	1	362	50%	181.1	3.5	635	0	2,226	0	813	420	557	1,790
N RAYZOR	7	407	25%	101.7	4.0	414	500	2,871	1,481	1,040	338	296	1,674
NELSON	16	195	30%	58.5	4.0	250	0	2,519	116	761	334	475	1,570
PALOMA CREEK	0	797	60%	478.1	4.0	1,912	250	4,524	250	1,151	403	368	1,922
PECAN CREEK	30	686	45%	308.8	3.5	1,111	600	3,079	1,080	1,238	488	433	2,159
PROVIDENCE	137	1,373	50%	686.6	4.0	2,883	500	4,659	500	1,500	581	518	2,599
RIVERA	13	881	25%	220.2	2.0	453	500	1,089	2,906	711	291	430	1,432
RYAN	46	739	60%	443.3	3.0	1,376	0	3,029	0	691	377	431	1,499
SAVANNAH	9	3,746	70%	2,621.1	4.0	10,494	500	12,148	500	3,750	1,217	1,034	6,001
STEPHENS	115	784	65%	509.7	2.0	1,134	0	2,711	1,028	744	285	380	1,409
WILSON	27	257	10%	25.7	3.0	104	750	2,730	934	1,032	346	597	1,975
TOTAL	1,058	42,031	58.2%	24,468.9	2.83	69,276	13,790	111,873	26,107	35,271	13,158	14,033	62,462

Student Growth by Zone Through Build Out

Zone	ELEM	MS	HS	TOTAL
BLANTON	1,005	339	322	1,666
BORMAN	6,166	2,253	1,979	10,398
CROSS OAKS	728	235	243	1,206
EP RAYZOR	858	297	274	1,429
EVERS	2,403	809	633	3,845
GINNINGS	263	117	130	510
HAWK	176	73	79	328
HODGE	2,704	1,115	1,561	5,380
HOUSTON	83	36	41	160
LEE	160	67	75	302
MCNAIR	150	77	103	330
N RAYZOR	600	170	107	877
NELSON	66	30	43	139
PALOMA CREEK	509	178	166	853
PECAN CREEK	422	152	141	715
PROVIDENCE	643	247	226	1,116
RIVERA	154	72	111	337
RYAN	167	99	109	375
SAVANNAH	2,061	670	573	3,304
STEPHENS	244	96	129	469
WILSON	408	95	178	681
TOTAL	19,970	7,227	7,223	34,420

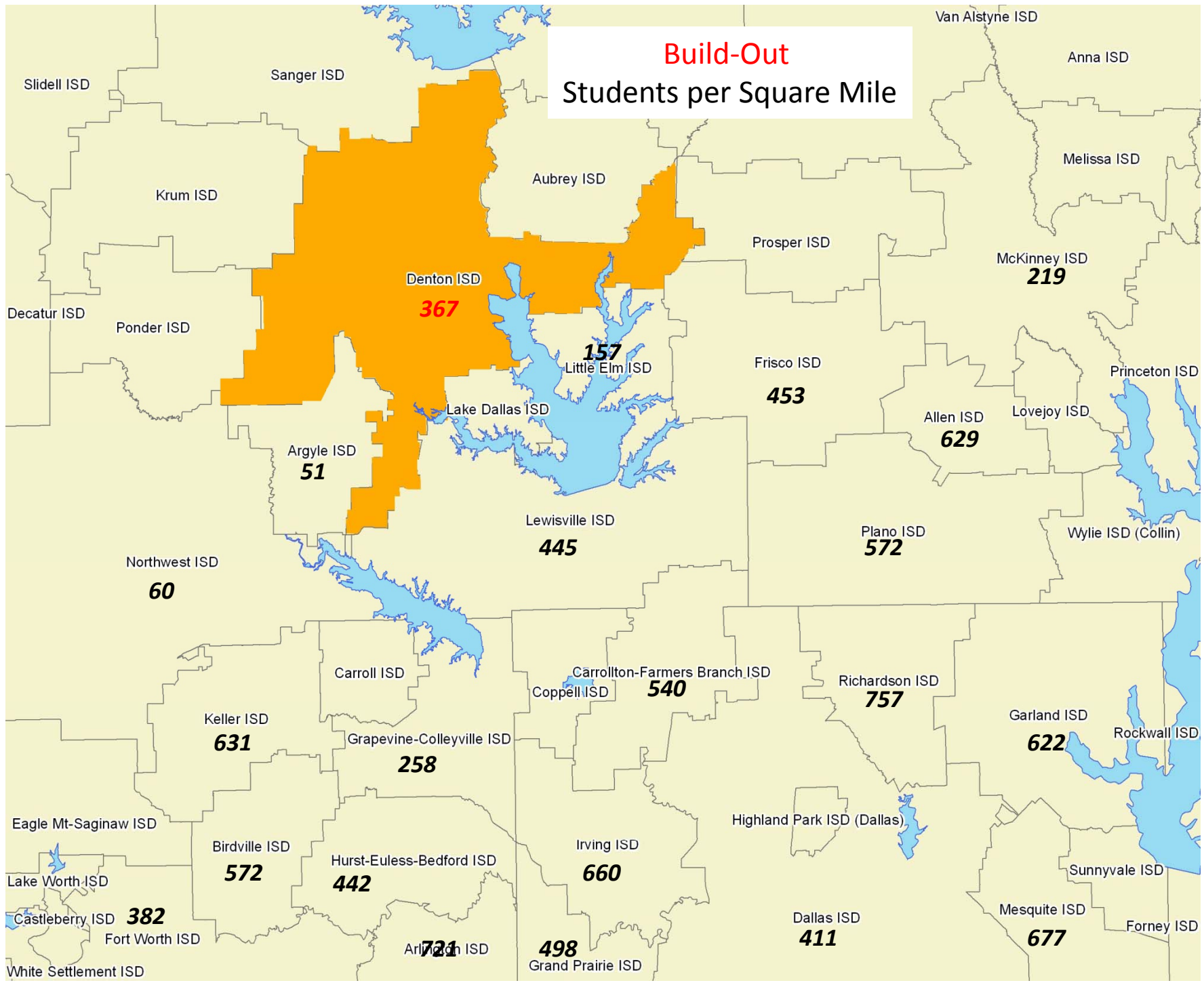
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Projected Campus Needs

Zone	Build-Out Elementary Students	Build-Out Middle Students	Build-Out HS Students	Total Build-Out Students	Build-Out Elementary Schools	Build-Out Middle Schools	Build-Out High Schools
BLANTON	1,674	565	539	2,778	2.23	0.57	0.25
BORMAN	7,008	2,505	2,375	11,888	9.34	2.51	1.08
CROSS OAKS	1,547	502	517	2,566	2.06	0.50	0.24
EP RAYZOR	1,588	554	511	2,653	2.12	0.55	0.23
EVERS	3,100	1,067	1,001	5,168	4.13	1.07	0.46
GINNINGS	949	406	449	1,804	1.27	0.41	0.20
HAWK	910	380	409	1,699	1.21	0.38	0.19
HODGE	3,441	1,378	1,914	6,733	4.59	1.38	0.87
HOUSTON	788	345	401	1,534	1.05	0.35	0.18
LEE	835	376	398	1,609	1.11	0.38	0.18
MCNAIR	813	420	557	1,790	1.08	0.42	0.25
N RAYZOR	1,040	338	296	1,674	1.39	0.34	0.13
NELSON	761	334	475	1,570	1.01	0.33	0.22
PALOMA CREEK	1,151	403	368	1,922	1.53	0.40	0.17
PECAN CREEK	1,238	488	433	2,159	1.65	0.49	0.20
PROVIDENCE	1,500	581	518	2,599	2.00	0.58	0.24
RIVERA	711	291	430	1,432	0.95	0.29	0.20
RYAN	691	377	431	1,499	0.92	0.38	0.20
SAVANNAH	3,750	1,217	1,034	6,001	5.00	1.22	0.47
STEPHENS	744	285	380	1,409	0.99	0.29	0.17
WILSON	1,032	346	597	1,975	1.38	0.35	0.27
TOTAL	35,271	13,158	14,033	62,462	47.03	13.16	6.38

Elementary School Capacity	Middle School Capacity	High School Capacity
750	1,000	2,200

Build-Out
Students per Square Mile



Summary

- District is currently 58% built out with over 63,000 developed acres.
- District has approximately 42,031 vacant developable acres.
- Remaining developable acres expected to build-out at approximately 60% residential.
- Build-out student population approximately 58,000 students.
- The US 380 Corridor will add almost 6,500 students.
- As the region expands north beyond Loop 288 and the Hodge zone could grow by over 5,000 students
- Development along IH 35W (Borman) could significantly change the district landscape