



PLANNING COMMISSION ACTION

2011-07 West Hardy (Segment 2)

APPLICANT: Planning and Development Department, City of Houston

KEY MAP: 333 W, 373 A

LAMBERT: 5367

JURISDICTION: Houston ETJ, Harris County

DISTRICT/PRECINCT: Pcnt. 4

PROPOSAL:

To delete West Hardy Road as a major collector between East Richey Road and East Airtex Drive

APPLICANTS JUSTIFICATION & HISTORY:

West Hardy Road was first added to the Major Thoroughfare and Freeway Plan (MTFP) in 1972. In 2003 the Planning Commission approved downgrading West Hardy Road between FM 1960 and Rankin Road to a major collector. Staff's justification was that the thoroughfare spacing in the general area would provide sufficient mobility to service the projected traffic volumes. Also the use of the Hardy Toll Road coupled with East Hardy Street and West Hardy Street would provide sufficient north-south mobility.

An existing fabrication plant and a couple sandpit operations currently impede the proposed extension of West Hardy alignment between East Richey and East Airtex. Northview Park Section 2 subdivision, platted in 1985, included the dedication and alignment of existing West Hardy Road, north and south of East Richey Road. Kings Fabrication development was later constructed along the proposed West Hardy alignment.

West Hardy between East Airtex Road and Rankin Road is being developed as a 70' ROW collector street within Meadowview Farms and proposed Remington Creek Ranch subdivisions. A short segment of West Hardy Road north of Airtex is proposed with First Choice Business Park subdivision.

North-south circulation will be provided by major thoroughfares Imperial Valley Drive and East Hardy Road spaced approximately 0.7 mile at East Richey and one mile apart at East Airtex Drive. Existing local streets will allow for internal circulation in general area.

STAFF RECOMMENDATION:

Delete West Hardy Road as a major collector between East Richey Road and East Airtex Drive

STAFF JUSTIFICATION:

A number of impediments prohibit the proposed extension of major collector West Hardy Road as aligned on the Major Thoroughfare and Freeway Plan. These include:

1. Lectrus is a design and manufacturing facility located south of Bammel Road. This facility is more than 110,000 square feet and located on approximately 36 acre. It was constructed in 2001 and later expanded in 2007.
2. Kings Fabrication is a 170,000 square feet structural fabrication facility located on 18 acre south of Richey Road. The facility began its operations in 2001.
3. Sand mining facility operated by Sprint Sand and Clay is located on an approximately 70 acres site between Kings Fabrication and Airtex Drive.

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Additionally the proposed alignment of West Hardy would also have to extend across a 200 feet wide drainage channel owned in fee by Harris County Flood Control Authority. Since much the adjoining area along West Hardy is developed, realigning the major collector is not feasible.

The Travel Demand Model projections for the year 2035 indicate that West Hardy would carry a significant number of trips if it were extended between FM 1960 and Airtex. In its absence, this traffic will be displaced primarily along Imperial Valley Drive and a small portion along East Hardy Road. Additionally East Richey Road, Airtex, Rankin and Bammel will also carry more traffic in the future. The capacity of some of these facilities will have to be increased as the traffic along these streets increase. Imperial Valley, Richey, Airtex and Rankin are sufficient width major thoroughfares with 100' ROW. Bammel is currently a two-lane local street with approximately 80' ROW. Thus adding additional lanes will be feasible in the future if warranted.

Harris County Precinct 4 is in the process of constructing Imperial Valley Drive between Airtex and Rankin as a 4-lane boulevard cross-section. East Richey Road, between East Hardy and Aldine Westfield, is also being reconstructed as a combination of a 4-lane boulevard and 5-lane pavement cross-section. Staff has coordinated the outcome of the Travel Demand Model with Harris County.

PLANNING COMMISSION ACTION:

Delete West Hardy Road as a major collector between East Richey Road and East Airtex Drive

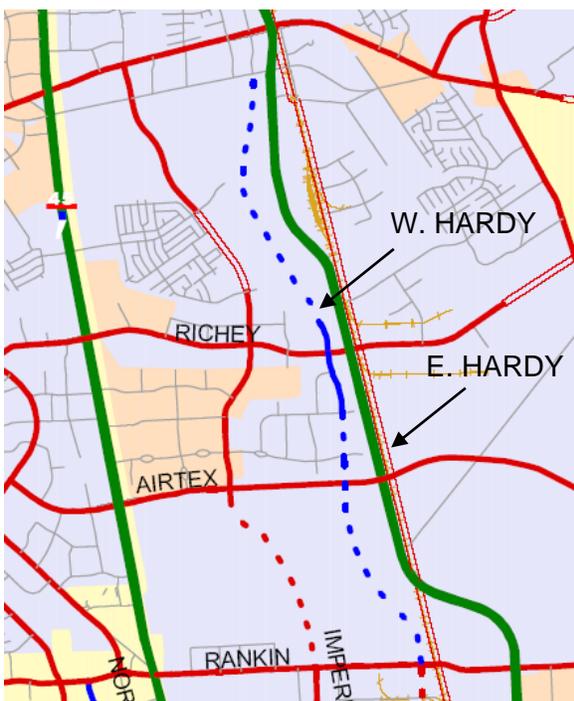


1972 MTFP

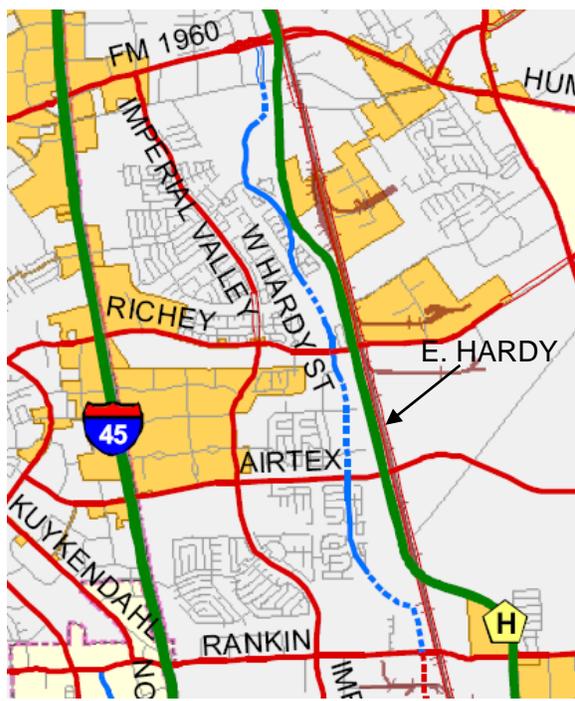


2001 MTFP

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2003 MTFP



2010 MTFP

1. Population & Employment Projections

According to 2010 Census, Texas grew by 20% in ten years, to over 25 million people, recording about a quarter of the nation's overall growth. The rate of growth in Texas was twice the national average. Harris County is the most populous county (4 million) in Texas. Today, 2.1 million people live within the City of Houston and another 2 million live in the City's extraterritorial jurisdiction (ETJ). Since 2000, the City of Houston added 146,000 people (8 percent) to its population. Houston's ETJ however grew 35 percent during the same time period.

Houston and its ETJ's rich employment sector are home to more than 1.8 million jobs, making it the state's most populous and robust economic center. More than one million jobs are located within the City limits and are saturated within the City's eight major activity centers.

One of the greatest challenges to Houston's mobility is that by 2035 significant numbers of residents are projected to live outside the City limits in the ETJ; while the major thrust of employment growth will be within the City limits. This increase in distance between the population and employment centers will result in more travel, greater travel time, and longer travel delays.

While the ETJ is growing, the City will also be taking in an additional 550,000 new residents. The most notable population growth occurs inside Loop 610. It reflects efforts to create a dense urban core through mixed-use development strategies.

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To compare the result between 2000 and 2010 Census, the subject area's population grew more than five times from 3,632 to 24,166. The 2010 census population is significantly higher than H-GAC's projections for the year 2010.

Based on adjusted projection over the next 20 years (2015 – 2035) using average annual growth rates*, the population within the study area** will increase from 25,271 to 30,721 (5,450 persons), or 21.6%. The number of persons per acre is projected to increase from 5.75 to 6.99. During the same period, the project estimates that the total jobs in the subject area will increase from 7,559 to 9,186 (1,627 jobs), or 21.3%. The number of jobs per acre is projected to increase from 1.72 to 2.09.

Year	Population (Persons/Acre)	% Chg	Households (Households/Acre)	% Chg	Jobs (Jobs/Acre)	% Chg
2010	5.48***		1.66***		1.64****	
2015	5.75	5.0%	1.76	6.0%	1.72	5.0%
2020	6.04	5.0%	1.87	6.0%	1.81	5.0%
2025	6.34	5.0%	1.98	6.0%	1.90	5.0%
2030	6.66	5.0%	2.10	6.0%	1.99	5.0%
2035	6.99	5.0%	2.22	6.0%	2.09	4.9%
Change (2015 to 2035)		21.6%		26.2%		21.3%
City of Houston Change (2015 to 2035)		14.4%		16.4%		23.8%
City of Houston ETJ Change (2015 to 2035)		53.3%		62.4%		50.9%

* Based on H-GAC's projections (2010-2035), average annual growth rates of Traffic Analysis Zones with 2010 population density (person/acre) between 5.4 and 5.5 are population (1.0%), households (1.2%) and jobs (1.0%).

** Data represents population, jobs, and households in 3 Traffic Analysis Zones (TAZ) encompassing approximately 4,395 acres around the proposed amendment. Population projections do not include projections for group housing.

*** 2010 Census Redistricting Data

**** 2010 ESRI Business Analyst

2. Land Use and Platting Activity

The study area extends between IH 45 and Hardy Toll Road to the west and east respectively, and FM 1960 to the north and Rankin Road to the south. 41% of the study area is still undeveloped. Single family residential development represents 22% of the total area and is primarily located north of East Richey and south of Airtex. Industrial and commercial uses represent 15% and 7% of the total acreage respectively. 4% of the property within the study area is open space and parks. Borden Golf Range along IH 45 is the largest parcel. Institutional uses represent 6% of the area. Lewis Middle School is located along W. Hardy Road just south of Bammel Road.

For the time period from 2004 to present, the majority of the platting activity in the general area where the West Hardy MTFP amendment is being requested was single family residential in nature. These residential developments are generally located between Imperial Valley Drive and the Hardy Toll Road and constituted 75% (344 acres) of area platted in the last seven years. Commercial platting activity represented 8% (39 acres) of this developed area.

**2011 Major Thoroughfare and Freeway Plan
Amendment Request**

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Subdivision Plat Name	Action Date	Key Map	Land Use	Property Size (acres)	Number of Lots
Sycamore Bend Detention Reserve	January 22, 2004	332Z	Other	7.12	
Sycamore Bend Sec 2	March 18, 2004	332Z	SF Residential (public street)	14.49	86
Northview Place Sec 5	April 15, 2004	332V	SF Residential (public street)	17.21	116
Imperial Trace Sec 1	May 13, 2004	332R	SF Residential (public street)	102.61	437
Harris County Utility District 16 Lift Station Restricted Reserve	October 14, 2004	372D	Transportation and Utility	0.11	
Starwood Sec 1	December 9, 2004	332Q	SF Residential (Type 2 PAE)	26.82	113
Starwood Sec 2	December 9, 2004	332Q	SF Residential (Type 2 PAE)	11.00	65
Starwood Sec 3	December 9, 2004	332Q	SF Residential (Type 2 PAE)	7.34	46
Holder Commercial Subdivision Sec 1	December 23, 2004	332M	Commercial	2.91	
Imperial Garden Sec 2	September 22, 2005	332L	SF Residential (public street)	12.64	82
Northview Place Sec 6	October 6, 2005	332V	SF Residential (public street)	20.20	73
Imperial Garden Sec 3	November 17, 2005	332L	SF Residential (public street)	25.43	46
Villas of Estrella	November 17, 2005	333W	SF Residential (public street)	12.09	112
Boothe Development no 1	February 2, 2006	332Z	Commercial	3.27	
Imperial Garden Sec 4	May 11, 2006	332L	SF Residential (public street)	0.52	4
Tricor Century Plaza Subdivision	November 9, 2006	372D	Commercial	7.30	
Imperial Trace Sec 2	November 30, 2006	332R	SF Residential (public street)	39.20	203
Airtex Plaza Subdivision	February 1, 2007	373A	Commercial	2.97	
Bammel Switch Site Subdivision	August 2, 2007	332M	Unrestricted	14.00	
West Hardy Road Middle School Subdivision	August 30, 2007	332R	Public and Institutional	37.60	
Memorial Hills South Sec 1	December 13, 2007	333J	SF Residential (public street)	20.36	105
Alfros Leasing Subdivision	19-Jun-08	333J	Commercial	4.00	
Greentree Airtex Unrestricted Reserve A Subdivision	March 19, 2009	373E	SF Residential (public street)	14.97	
Memorial Hills Water Plant no 1 Subdivision	June 25, 2009	333K	Transportation and Utility	0.57	
Alexander Center Subdivision Sec 1	March 18, 2010	373A	Commercial	1.50	
Alexander Center Subdivision Sec 2	March 18, 2010	373A	Unrestricted	1.47	
Bogata Subdivision	May 13, 2010	332M	Commercial	5.07	

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North Plaza Greentree Airtex Subdivision	June 10, 2010	373E	Unrestricted	13.75	
First Choice Business Park Subdivision	March 3, 2011	373A	Commercial	6.03	
Airtex Imperial Plaza Subdivision	March 17, 2011	372D	Commercial	6.55	
Pine Trace Sec 4	April 28, 2011	372D	SF Residential (public street)	19.64	98
Meadowview Farms partial replat no 1	July 21, 2011	373A	Commercial	2.97	

3. Right-Of-Way Status

West Hardy, from East Richey and Airtex, is identified as a major collector with four lanes and a 70' right-of-way. Portion of West Hardy Road to the north and south side of East Richey was platted and developed with Northview Park Section 2 subdivision. West Hardy south of Northview Park Sec. 2 to Airtex has not been dedicated.

Street	Segment	Classification	Status
W. Hardy	FM 1960 to Bammel	70' Major Collector	To be widened
W. Hardy	Bammel to Aldine ISD property	70' Major Collector	To be acquired
W. Hardy	Adline ISD property to Rhine River	70' Major Collector	Sufficient width
W. Hardy	Rhine River to Villas of Estrella Subdivision	70' Major Collector	To be acquired
W. Hardy	Villas of Estrella Subdivision to E. Richey	70' Major Collector	Sufficient width
W. Hardy	E. Richey to end of Northview Park Sec. 2	70' Major Collector	Sufficient width
W. Hardy	Northview Park Sec. 2 to E. Airtex	70' Major Collector	To be acquired
W. Hardy	Airtex to Benning Point	70' Major Collector	Sufficient width
W. Hardy	Benning Point to Rankin	70' Major Collector	To be acquired
Imperial Valley	FM 1960 to North Bend	100' Major Thoroughfare	Sufficient width
Imperial Valley	North Bend to E. Richey	100' Major Thoroughfare	To be widened
Imperial Valley	E. Richey to Airtex	100' Major Thoroughfare	Sufficient width
Imperial Valley	Airtex to Rankin	100' Major Thoroughfare	Sufficient width
E. Hardy	FM 1960 to E. Richey	100' Major Thoroughfare	To be widened
E. Hardy	E. Richey to Airtex	100' Major Thoroughfare	To be widened
E. Hardy	Airtex to Rankin	100' Major Thoroughfare	To be widened
FM 1960	Imperial Valley to W. Hardy	100' Principal Thoroughfare	Sufficient width
FM 1960	W. Hardy to Hardy Toll	100' Principal Thoroughfare	Sufficient width
FM 1960	Hardy Toll to E. Hardy	100' Principal Thoroughfare	Sufficient width
E. Richey	Imperial Valley to W. Hardy	100' Major Thoroughfare	Sufficient width
E. Richey	W. Hardy to Hardy Toll	100' Major Thoroughfare	Sufficient width
E. Richey	Hardy Toll to E. Hardy	100' Major Thoroughfare	Sufficient width
Airtex	Imperial Valley to W. Hardy	100' Major Thoroughfare	Sufficient width
Airtex	W. Hardy to Hardy Toll	100' Major Thoroughfare	Sufficient width
Airtex	Hardy Toll to E. Hardy	100' Major Thoroughfare	Sufficient width

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4. Major Thoroughfare Spacing

Two north-south major roadways, IH 45 and Hardy Toll Road are spaced approximately 1.5 miles along East Richey. The north-south thoroughfares, Imperial Valley, and West Hardy and East Hardy are spaced approximately 0.90 and 0.21 along East Richey. The east-west thoroughfares East Richey and Airtex are spaced 0.98 miles along West Hardy.

Street	From	To	Street Type	Direction	Spacing (mile)
W. Hardy	FM 1960	E. Richey	Major Collector	north-south	2.30
W. Hardy	E. Richey	Airtex	Major Collector	north-south	0.86
W. Hardy	Airtex	Rankin	Major Collector	north-south	1.38
Imperial Valley	FM 1960	E. Richey	Major Thoroughfare	north-south	2.03
Imperial Valley	E. Richey	Airtex	Major Thoroughfare	north-south	0.98
Imperial Valley	Airtex	Rankin	Major Thoroughfare	north-south	1.40
E. Hardy	FM 1960	E. Richey	Major Thoroughfare	north-south	2.15
E. Hardy	E. Richey	Airtex	Major Thoroughfare	north-south	0.87
E. Hardy	Airtex	Rankin	Major Thoroughfare	north-south	1.25
Aldine Westfield	FM 1960	E. Richey	Major Thoroughfare	north-south	1.21
Aldine Westfield	E. Richey	Airtex	Major Thoroughfare	north-south	1.64
Aldine Westfield	Airtex	Rankin	Major Thoroughfare	north-south	1.00
FM 1960	IH 45	Imperial Valley	Major Thoroughfare	west-east	0.51
FM 1960	Imperial Valley	W. Hardy	Major Thoroughfare	west-east	0.90
FM 1960	W. Hardy	E. Hardy	Major Thoroughfare	west-east	0.12
FM 1960	E. Hardy	Treaschwig	Major Thoroughfare	west-east	1.08
FM 1960	Treaschwig	Aldine Westfield	Major Thoroughfare	west-east	0.42
E. Richey	IH 45	Imperial Valley	Major Thoroughfare	west-east	1.11
E. Richey	Imperial Valley	W. Hardy	Major Thoroughfare	west-east	0.53
E. Richey	W. Hardy	E. Hardy	Major Thoroughfare	west-east	0.21
E. Richey	E. Hardy	Aldine Westfield	Major Thoroughfare	west-east	1.58
Airtex	IH 45	Imperial Valley	Major Thoroughfare	west-east	0.76
Airtex	Imperial Valley	W. Hardy	Major Thoroughfare	west-east	0.74
Airtex	W. Hardy	E. Hardy	Major Thoroughfare	west-east	0.32
Airtex	E. Hardy	Aldine Westfield	Major Thoroughfare	west-east	1.76
Rankin	IH 45	Imperial Valley	Major Thoroughfare	west-east	1.00
Rankin	Imperial Valley	W. Hardy	Major Thoroughfare	west-east	0.72
Rankin	W. Hardy	E. Hardy	Major Thoroughfare	west-east	0.11
Rankin	E. Hardy	Aldine Westfield	Major Thoroughfare	west-east	1.47

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5. Mobility

Imperial Valley, West Hardy and East Hardy are the three north-south thoroughfares in the study area other than the IH 45 and Hardy Toll Road. Imperial Valley measures approximately 5.29 miles between Aldine Bender and FM 1960 as a major thoroughfare. West Hardy/Hardy Road extends Harrington and FM 1960. Portions along this roadway north of Greens Road have not been improved. Also the segment between FM 1960 and Rankin Road is classified as a major collector, while the segment south of Rankin to Hardy Toll Road is classified as a major thoroughfare. The overall length of the proposed roadway between FM 1960 and IH 10 is 18.3 miles. East Hardy Road extends between Rayford Road and East Crosstimber Road approximately 21.1 miles. The segment between Rayford Road and Greens Road is classified as a major thoroughfare.

A number of east west thoroughfares traverse the study area. FM 1960 is a most significant east west principle arterial in the area. East Richey extends west from FM 1960 and is proposed to align with W. Greens Road west of Cutten Road. Airtex is the smallest segment extending between Aldine Westfield and Ella Drive. Rankin Road also extends west of Aldine Westfield to align with Spears Road and eventually north-south thoroughfare Gessner Road west of Veteran Memorial Drive.

The Spring Park & Ride is located along the north side of Bammel Road east of Imperial Valley Drive. It currently serves three park & ride service busses (202, 204 & 209) from Downtown Houston and a local bus route (86) along FM 1960 and Greenspoint area.

The two map exhibits below reflect the travel demand model projections with West Hardy improved as a four lane undivided street for the years 2018 and 2035, and projections with and without West Hardy Road between Airtex and FM 1960 for the year 2035. The table below identifies the average daily traffic (ADT) for the thoroughfares in the study area, in 2035. The travel demand model was calibrated using existing traffic counts for the area and the base population and employment projections were also updated based on the 2010 census.

The travel demand model projections for 2035 that compares the with and without West Hardy scenarios indicate that W. Hardy Road is a significant attractor of traffic in the area. Without West Hardy Road in the year 2035 the ADT along Imperial Valley increase to 27,245 (123%) and 31,451 (58%), north and south of Richey Road respectively. East Hardy Road north of Richey Road carries minimal volumes since north south traffic uses local street West Thorne Road that was recently improved as a four-lane divided roadway between East Hardy and FM 1960.

The 2018 results with West Hardy project more than 9,000 trips between Airtex and FM 1960. The results reflect that if West Hardy Road were extended would carry collector street volumes in the near future.

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ADT(Average Daily Traffic) Comparison with & without West Hardy in 2035

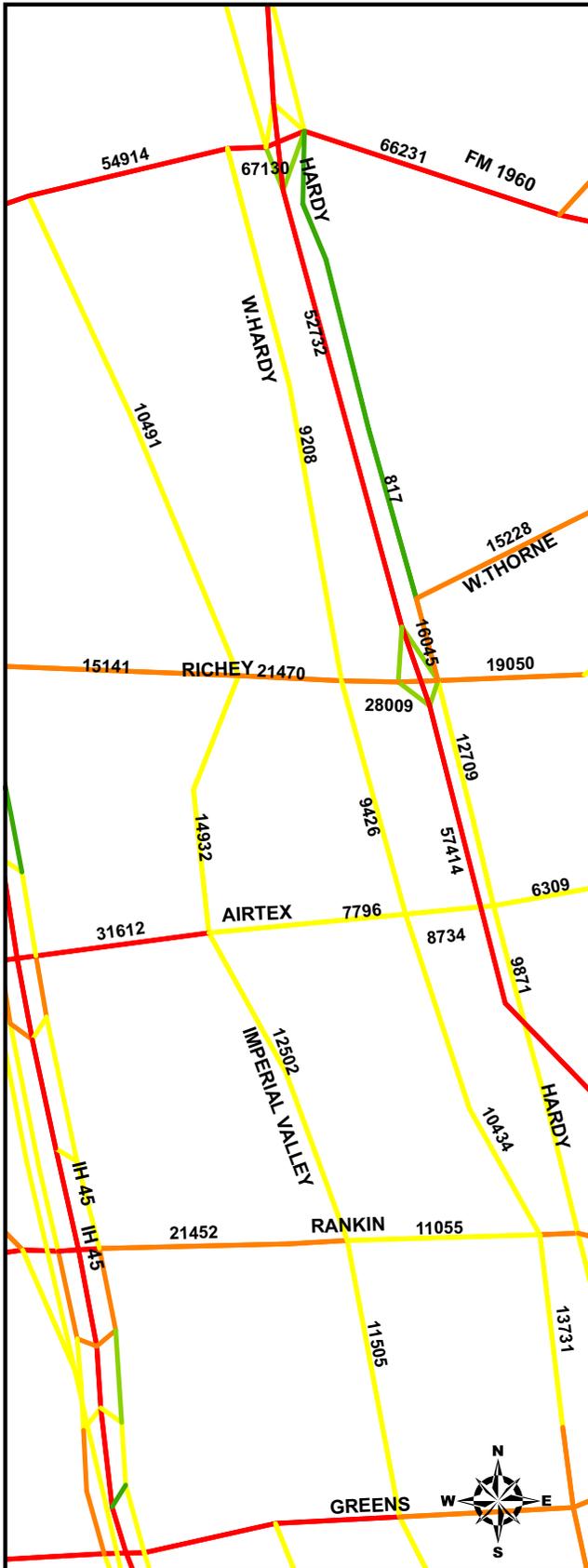
STREET	SEGMENT	With West Hardy	Without West Hardy	% Change with West Hardy
		2035	2035	
West Hardy	FM 1960 to East Richey	19,437	N/A	
West Hardy	East Richey to Airtex	14,649	N/A	
West Hardy	Airtex to Rankin	20,521	13,991	-32%
West Hardy	Rankin to Greens	22,684	20,530	-9%
Imperial Valley	FM 1960 to East Richey	12,198	27,245	123%
Imperial Valley	East Richey to Airtex	19,966	31,451	58%
Imperial Valley	Airtex to Rankin	17,902	21,310	19%
Imperial Valley	Rankin to Greens	17,903	15,877	-11%
East Hardy	FM 1960 to East Richey	1,226	2,642	115%
East Hardy	East Richey to Airtex	17,902	17,323	-3%
East Hardy	Airtex to Rankin	15,311	14,724	-4%
FM 1960	Imperial Valley to West Hardy	75,738	91,525	21%
FM 1960	West Hardy to East Hardy	105,900		-14%
East Richey	Imperial Valley to West Hardy	34,529	39,280	14%
East Richey	West Hardy to East Hardy	40,787		-4%
Airtex	Imperial Valley to West Hardy	14,975	24,128	61%
Airtex	West Hardy to East Hardy	23,079	26,513	15%
Rankin	IH 45 to Imperial Valley	27,910	28,221	1%
Rankin	Imperial Valley to West Hardy	21,205	25,476	20%
West Thorne	East Hardy to Aldine westfield	19,523	18,280	-6%
Hardy Toll Road	FM 1960 to East Richey	82,150	82,278	0%
Hardy Toll Road	East Richey to Airtex	92,038	92,937	1%

West Hardy Road Average Daily Traffic (ADT)

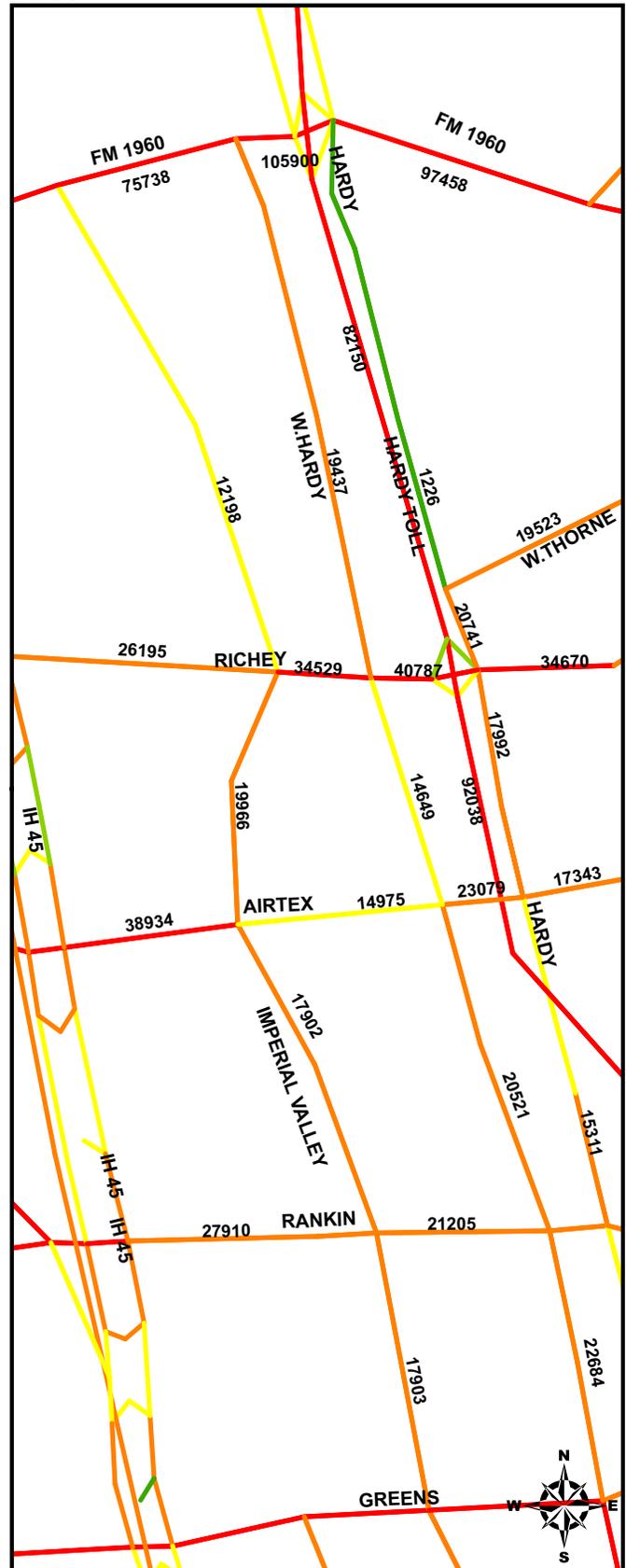
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2018



2035

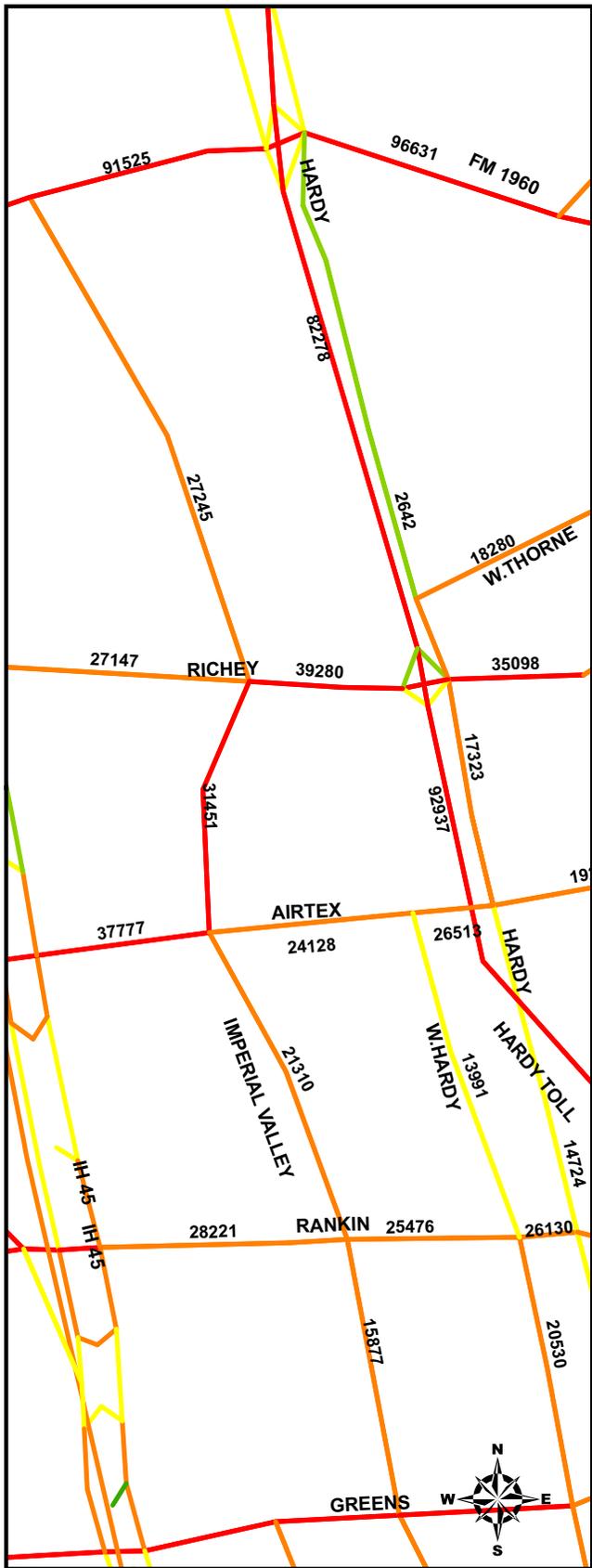


West Hardy Road 2035 Average Daily Traffic (ADT)

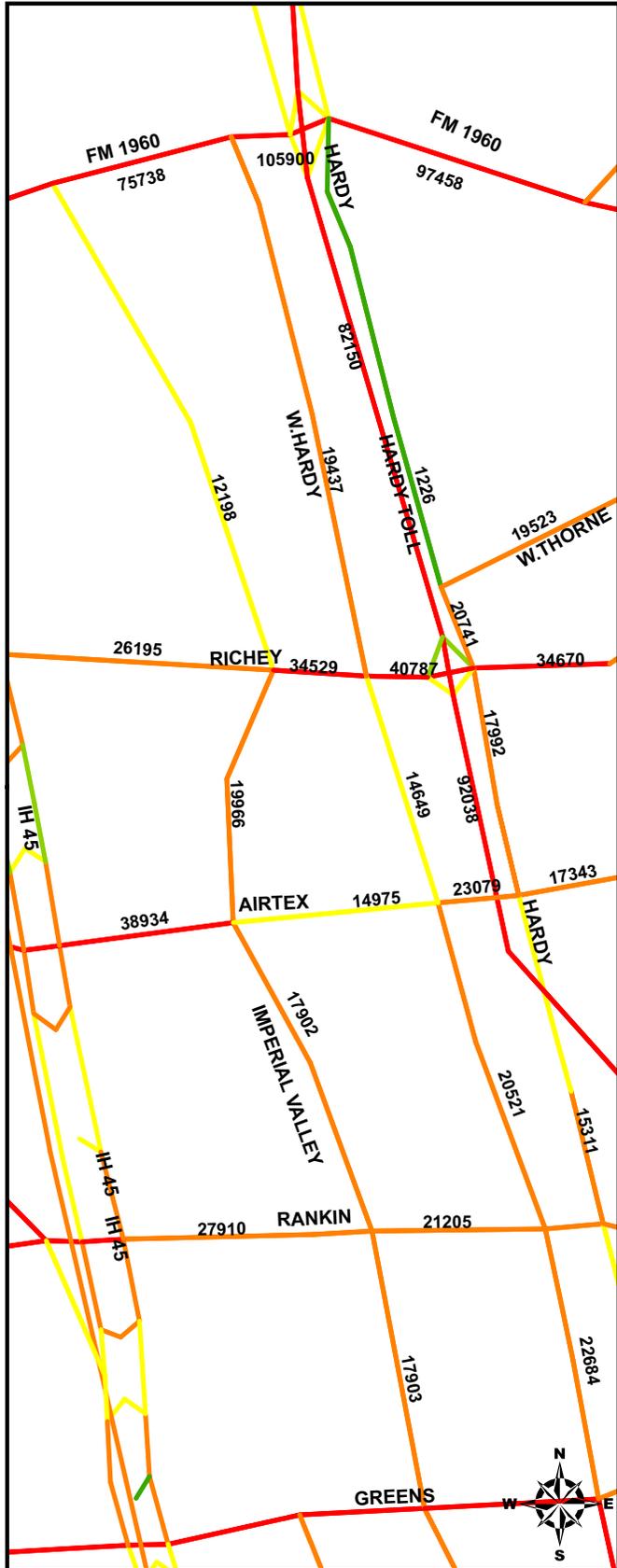
ADT

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WITHOUT



WITH

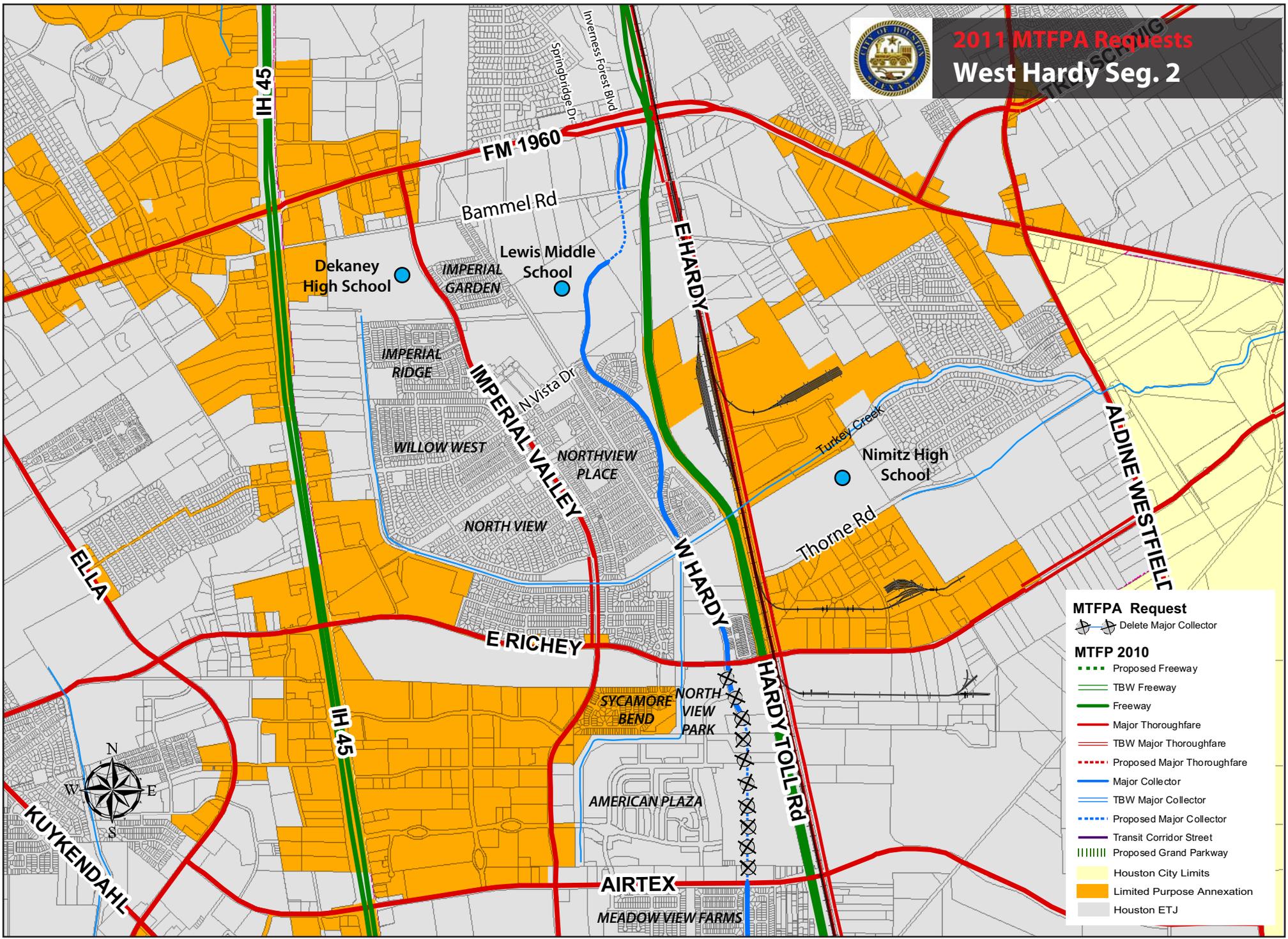


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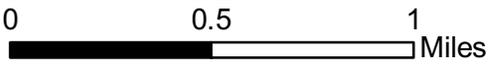
Planning & Development Department



2011 MTFPA Requests West Hardy Seg. 2



- MTFPA Request**
- Delete Major Collector
- MTFP 2010**
- Proposed Freeway
 - TBW Freeway
 - Freeway
 - Major Thoroughfare
 - TBW Major Thoroughfare
 - Proposed Major Thoroughfare
 - Major Collector
 - TBW Major Collector
 - Proposed Major Collector
 - Transit Corridor Street
 - Proposed Grand Parkway
 - Houston City Limits
 - Limited Purpose Annexation
 - Houston ETJ

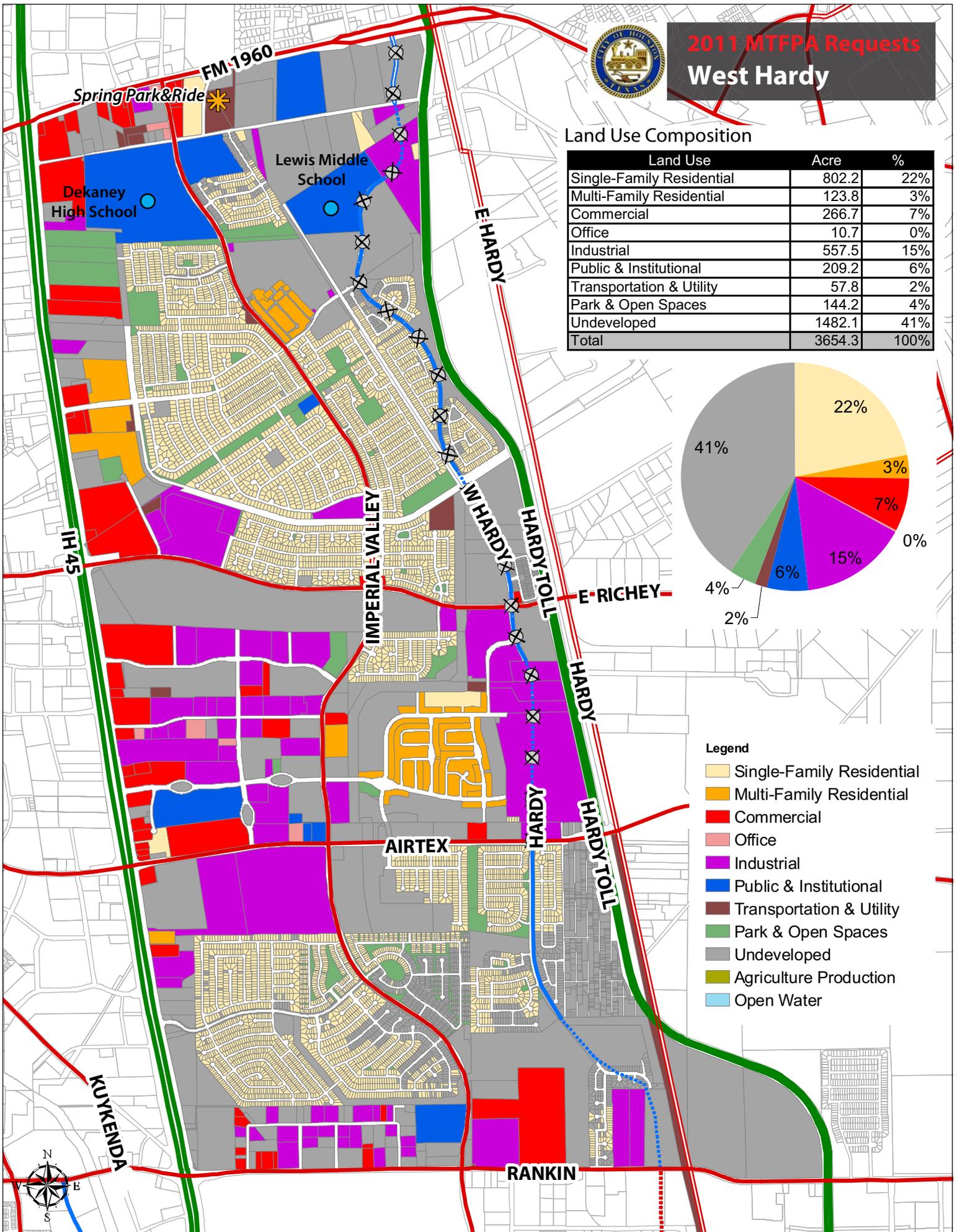
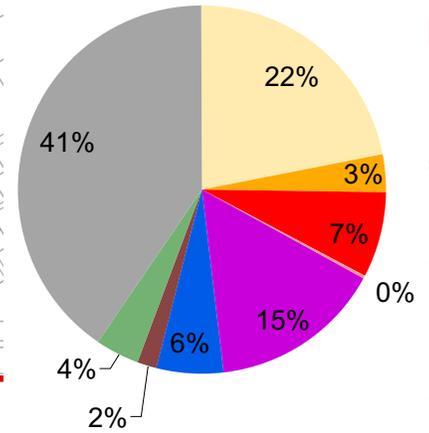




2011 MTFPA Requests West Hardy

Land Use Composition

Land Use	Acre	%
Single-Family Residential	802.2	22%
Multi-Family Residential	123.8	3%
Commercial	266.7	7%
Office	10.7	0%
Industrial	557.5	15%
Public & Institutional	209.2	6%
Transportation & Utility	57.8	2%
Park & Open Spaces	144.2	4%
Undeveloped	1482.1	41%
Total	3654.3	100%



Legend

- Single-Family Residential
- Multi-Family Residential
- Commercial
- Office
- Industrial
- Public & Institutional
- Transportation & Utility
- Park & Open Spaces
- Undeveloped
- Agriculture Production
- Open Water



2011 MTFPA Requests West Hardy

Public Transit / Bikeway

- Transit Center
- Bus Route
- Bike Lane (H-GAC)
- Proposed Shared Use Path/Trail (H-GAC)

