

## City of Dallas Transit Metrics Analysis

The City of Dallas analyzed transit mode share for the Downtown districts and Downtown as a whole. Ridership data was collected from area transit agencies, and proportions were calculated using cellphone and GPS data of automobile trips from Streetlight.

# METHODOLOGY FOR THE WEEKDAY PEAK HOUR TRANSIT MODE SHARE STUDY

## Purpose:

The purpose of this analysis was to determine a “transit mode share” for each 360 Plan district, the areas inside and outside the CBD (freeway loop), and the overall study area for weekday peak AM and PM travel periods, or rush hour periods (6:30am-8:59am, and 3:00pm-6:29pm). The study aims to provide a baseline understanding of transit activity (raw numbers of boardings and alightings as well as the percentage of all downtown trips that these numbers represent) during peak times. This exercise can be replicated in the future as a benchmark of how travel mode preferences shift over time, and can be used to inform planning and investment in transit and roadway infrastructure.

Overall procedure: Transit ridership data from Dallas Area Rapid Transit were gathered and aggregated for an average weekday peak time total. This was added to StreetLight Data, Inc. automobile counts gathered over the same peak time frames to arrive at a total number of peak hour trips (this analysis excludes pedestrian and bicycle trips). The transit trip totals for each geographic unit of analysis (the 18 Downtown districts, areas inside and outside the CBD, and the entire study area) were then divided by the number of total trips for that unit of analysis, to arrive at transit mode shares.

## Other Notes:

1. The numbers in the tables account for both boardings and alightings, and represent an average weekday. “Target time frame” refers to the peak AM time 6:30am-8:59am and the peak PM time 3:00pm-6:29pm, which correspond to the time frame over which data were collected for automobile counts.
2. Data were provided by Dallas Area Rapid Transit and McKinney Avenue Transit Authority (MATA data was not utilized – see number 10 below).

3. It was assumed that ridership was evenly distributed across each time frame as originally reported.
4. For LRT and bus, data were received for time frames that differed from the target peak time frames. Figures were calculated by extrapolating subsections of given time frames; for example, DART bus ridership data were provided from 6-9am, 9am-12pm, etc. The 6-9am time frame bus data were multiplied by five sixths to arrive at an approximation for the 6:30am-8:59am target time frame. Data were similarly extrapolated for both AM and PM across the datasets. Oak Cliff Streetcar data were provided in half-hour increments, so these data were aggregated to arrive at the target peak time frames. TRE and D-link data were provided comprehensively by stop over specified time frames (over five days in May and the month of May, respectively), so data were simply summed and then averaged to arrive at a typical weekday peak time total.
5. DART LRT data were provided for weekdays from April 3-May 26, 2017. Relevant data were originally divided into time frames 6am-9am and 3pm-7pm. Ridership counts for target peak time frames were extrapolated using the method described in number 4 above.
6. DART bus data were provided for “several months in 2014”. Relevant data were originally divided into time frames 6am-9am, 3pm-6pm, and 6pm-9pm. Data were provided in GIS shapefile and Excel formats; GIS work was undertaken to identify totals by district. Ridership counts for target peak time frames were extrapolated using the method described in number 4 above.
7. DART Oak Cliff Streetcar data were provided for May 2017. Relevant data were provided in half-hour increments; therefore, data were simply added to reflect peak times.
8. DART D-Link data were provided for May 2017. Data were provided in GIS shapefile and Excel formats; GIS work was undertaken to join peak hour data to the shapefile to identify totals by district.
9. TRE data were provided for the week of May 8-12, 2017. Data for all stops were provided for each train trip. Ridership counts for each

of the five days were added to reflect target peak time frames, then divided by five to arrive at an average daily count.

10. McKinney Avenue Transit Authority provided data for a sample of trolley trips from February-June 2017. Only three of these samples (February 7, 2017; April 5, 2017; May 5, 2017) were taken during target peak times with one two outbound and one inbound trip. These data were not included in the table because they represent too few data points to ensure they are representative. Two of the samples showed zero outbound passengers (towards Cityplace) alightings during weekday afternoons, which anecdotally is not representative as the trolleys are not typically empty. This implies that the transit mode shares for the districts served by MATA (Uptown, Dallas Arts District, and Thanksgiving Commercial Center) appear lower than they are, and correspondingly lessen the totals for inside and outside the CBD and the overall study area.

Downtown Dallas 360 Area Weekday Peak Hour Transit Mode Share										
Peak Hours Combined (6:30am to 9:00am and 3:00pm to 6:30pm)										
District	LRT Station(s)	LRT	Bus	Oak Cliff Streetcar	D-link	TRE	Total transit trips	Auto Trips	Total Trips	Transit Mode Share
Reunion District	Union Station	1,656	489	176		1,651	3,972	4,767	8,739	45.4%
West End Historic District	West End	9,407	2,063		34		11,504	22,646	34,150	33.7%
Thanksgiving Commercial Center	St. Paul, Pearl/Arts	11,048	5,189		39		16,276	36,143	52,419	31.0%
Main Street District	Akard	6,902	6,830		28		13,760	34,947	48,707	28.2%
Civic Center	Convention Center	455	850		106		1,411	20,924	22,334	6.3%
Dallas Farmers Market District			131		25		156	8,726	8,882	1.8%
Dallas Arts District			350		19		369	51,359	51,729	0.7%
<b>Total - CBD</b>		<b>29,467</b>	<b>15,902</b>	<b>176</b>	<b>251</b>	<b>1,651</b>	<b>47,447</b>	<b>179,513</b>	<b>226,960</b>	<b>20.9%</b>
South Dallas/Fair Park	MLK	816	1,267				2,083	4,732	6,815	30.6%
South Side	Cedars	672	66				737	3,631	4,369	16.9%
The Cedars			470				470	4,300	4,770	9.9%
Deep Ellum	Deep Ellum, Fair Park	844	385		10		1,239	11,615	12,854	9.6%
North Oak Cliff			1,321	243			1,564	20,920	22,484	7.0%
Victory Park	Victory	2,017	278			1,479	3,775	77,142	80,916	4.7%
Baylor District	Baylor	865	1,168				2,033	55,780	57,813	3.5%
Riverfront District			491				491	13,657	14,148	3.5%
West Dallas			226				226	7,516	7,742	2.9%
Uptown	Cityplace/Uptown	1,936	484		31		2,451	152,598	155,050	1.6%
Design District			227				227	34,722	34,949	0.6%
<b>Total - Outside the CBD</b>		<b>7,150</b>	<b>6,383</b>	<b>243</b>	<b>41</b>	<b>1,479</b>	<b>15,297</b>	<b>386,614</b>	<b>401,910</b>	<b>3.8%</b>
<b>Total - 360 Study Area</b>		<b>36,618</b>	<b>22,286</b>	<b>419</b>	<b>292</b>	<b>3,130</b>	<b>62,744</b>	<b>566,126</b>	<b>628,871</b>	<b>10.0%</b>

Downtown Dallas 360 Area Weekday Peak Hour Transit Mode Share*				
Peak Hours Combined (6:30am to 9:00am and 3:00pm to 6:30pm)				
District	Transit Mode Share	Total Transit Trips	Auto Trips	Total Trips
Reunion District	45.4%	3,972	4,767	8,739
West End Historic District	33.7%	11,504	22,646	34,150
Thanksgiving Commercial Center	31.0%	16,276	36,143	52,419
Main Street District	28.2%	13,760	34,947	48,707
Civic Center	6.3%	1,411	20,924	22,334
Dallas Farmers Market District	1.8%	156	8,726	8,882
Dallas Arts District	0.7%	369	51,359	51,729
<b>Total - CBD</b>	<b>20.9%</b>	<b>47,447</b>	<b>179,513</b>	<b>226,960</b>
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*Sorted by Transit Mode Share				

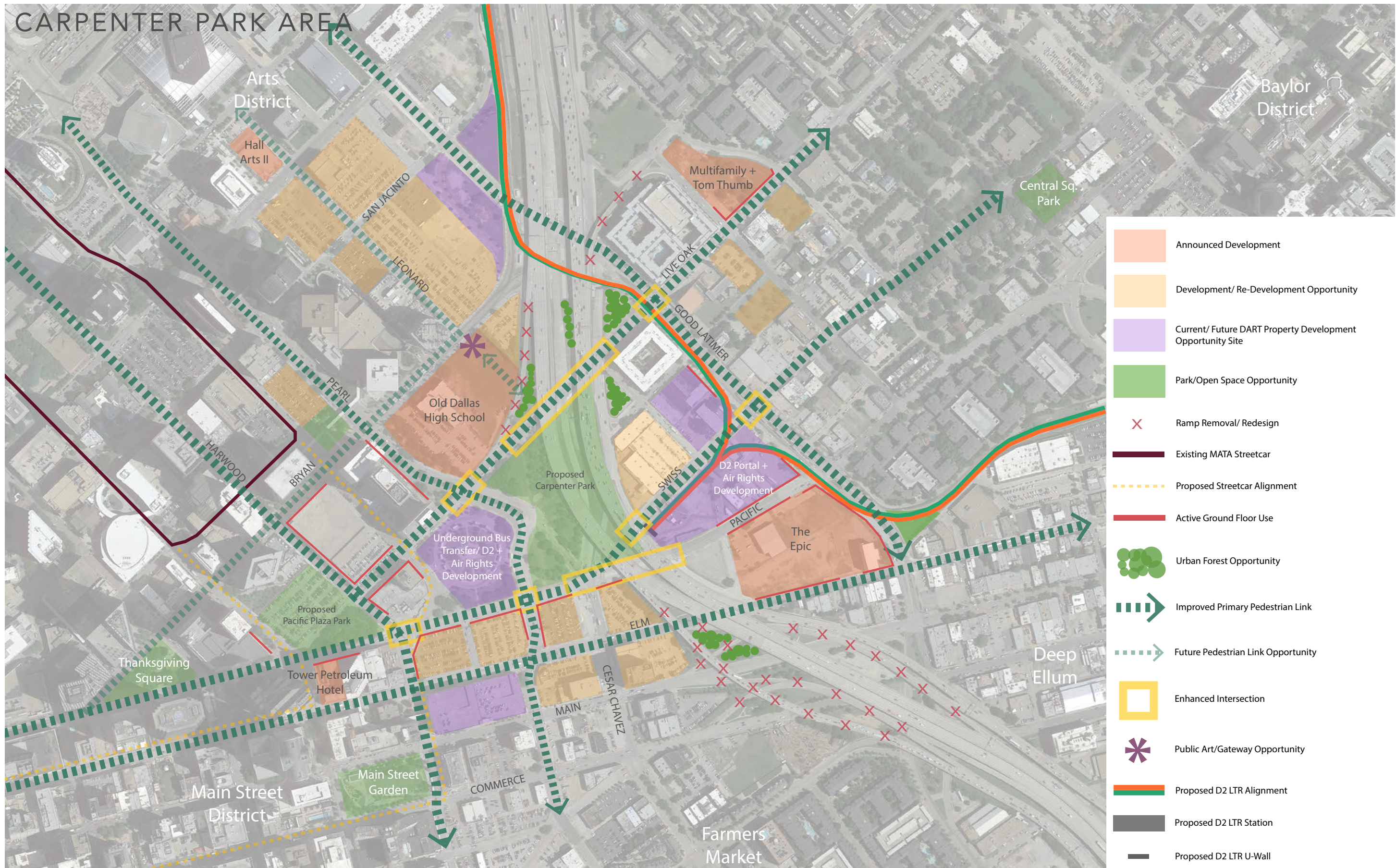
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# Catalytic Development Area Opportunity Maps

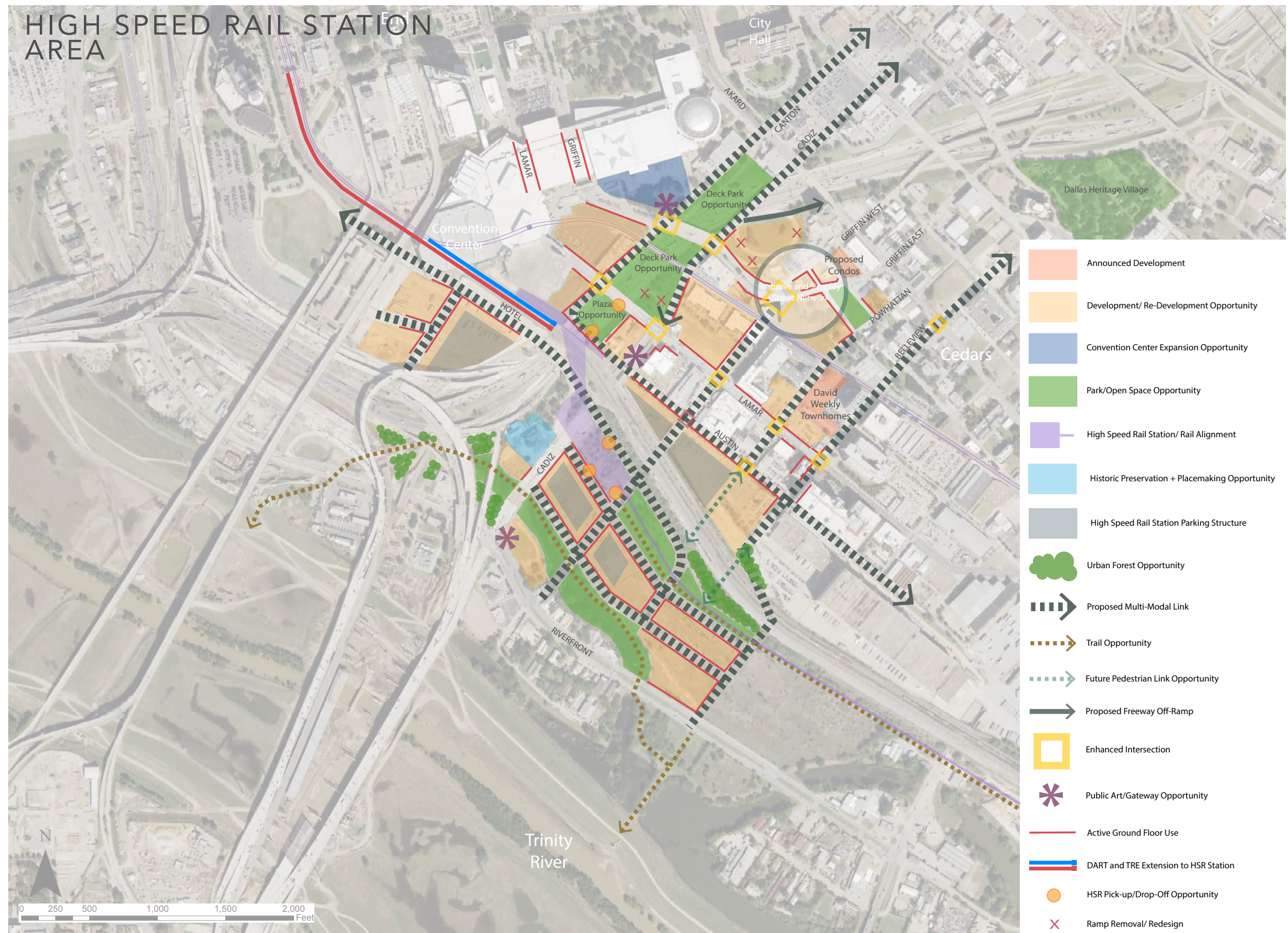
After four of the catalytic development areas had been identified, City of Dallas and DDI staff utilized MIG's Granular Assessment study and worked with appropriate stakeholders to identify opportunitites for each area. Each area was given a separate charette where potential development locations, street designs, and other relevant topics were considered. This input helped to create the Catalytic Development Opportunity Maps, which later informed each area's development plan shown in Chapter V.



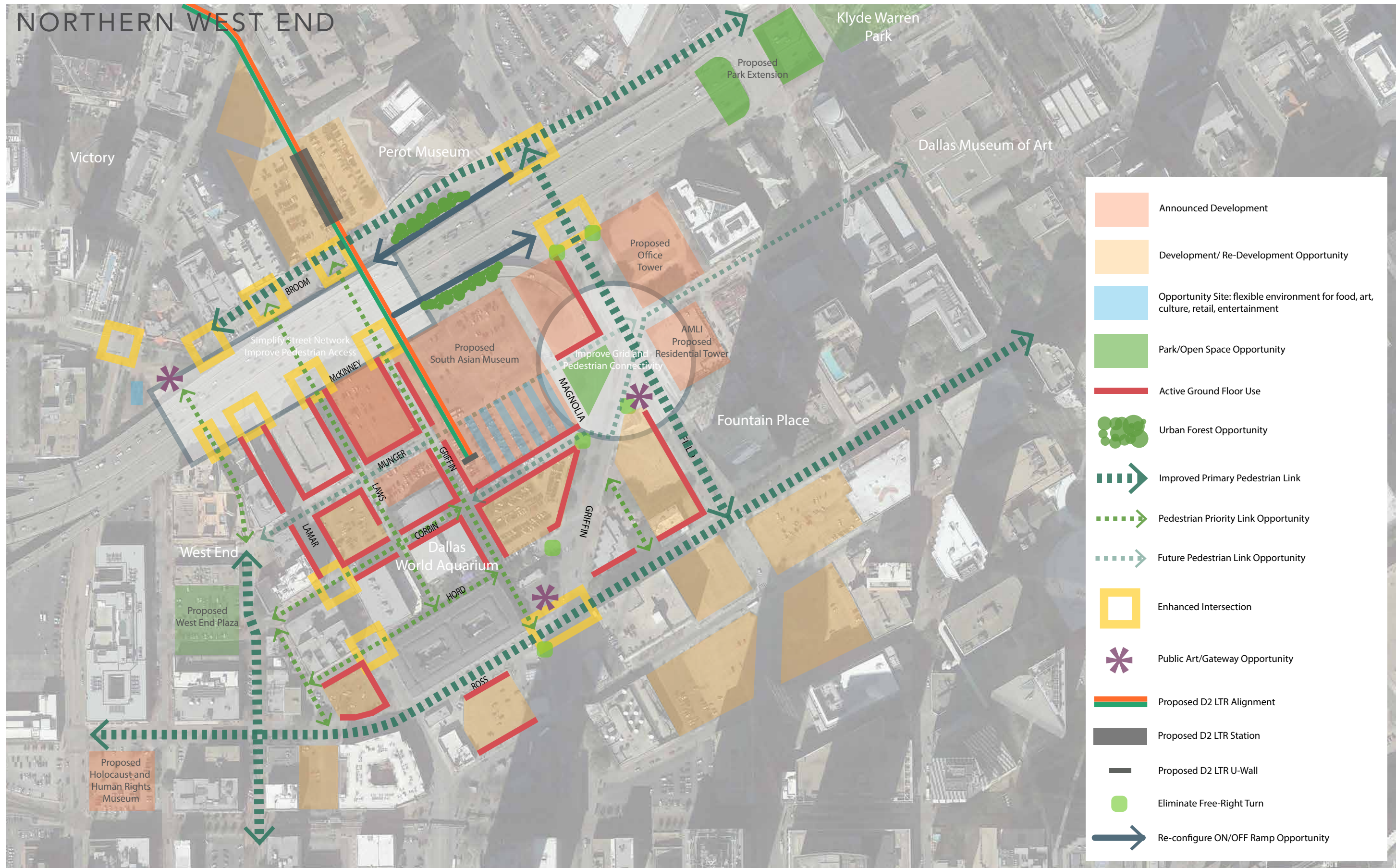




# HIGH SPEED RAIL STATION AREA









# WESTERN FARMERS MARKET

