

Executive Summary

PLANO'S LAND USE AND TRANSPORTATION STUDY FOR THE DART PARKER ROAD STATION

DECEMBER 1997

Introduction/Background

- Plano has been a DART member city since 1983. In that time, a substantial investment in DART has been made in many ways. Furthermore, it is recognized that the DART light rail line—scheduled to open in Plano in the year 2003—can be utilized as a tool to encourage development and redevelopment of higher and better land uses within its influence area. Therefore, this study was initiated to help Plano and its citizens maximize the benefits derived from DART in terms of promoting development and achieving its transportation utility through the Parker Road Light Rail Station. A more specific statement of the study goals is as follows:
 - 1) To optimize all transportation elements within and affecting the study area as to reduce congestion, increase accessibility, and therefore maximize the utility of mass transit.
 - 2) To develop land use plans and/or development guidelines to help create a transit-oriented vision for all future land uses within the study area.
 - 3) To build consensus for the plan among area land owners, DART, and the City of Plano.
 - 4) To promote effective public and private development by creating a sense of place.
- Transit-Oriented Development (T.O.D.) principles are being utilized on this study and include development of a balanced mix of land uses designed to reinforce transit and reduce dependence on the automobile within $\pm 1,500$ feet of the station.

- A long-term process facilitating effective public/private cooperation will be necessary to implement key components of this plan, particularly development of the station, surrounding properties, and transportation improvements (Implementation Program).
- Real estate and development trends have shown that light rail transit can play an important role in attracting new development and encouraging redevelopment and reinvestment adjacent to a station.

Existing Conditions and Analysis

Land Use Development

- Within the defined study area of 160± acres, much of the property has been previously developed, with 40± acres remaining undeveloped, primarily between U.S. 75 and the future DART rail line. Many of the existing uses are underdeveloped, creating excellent opportunities for redevelopment and/or reinvestment.
- Existing zoning is primarily Light Commercial and Light Industrial. These categories would permit development of incompatible uses (mini-warehouse, auto dealership, etc.), while excluding some beneficial uses (upper-story residential, etc.). Some existing uses present opportunities for redevelopment to better capitalize on the transit center investment.
- Existing drainage facilities and utilities appear to be adequate to serve future development. Existing topography provides excellent views into the site from U.S. 75, but blocks the existing DART station.
- The study area includes existing, low aesthetic quality elements that create a significant problem in attracting high-quality development. In addition, U.S. 75 access may lead to premature retail development, in advance of the transit station, that is not complementary to the transit function. Without a specific public-private program to encourage transit-oriented development, little redevelopment may occur, and new development that does occur will likely *not* be transit supportive.

Transportation

- The site is currently accessed by freeways and major thoroughfares including North/South by U.S. 75 and Avenue K, and East/West by Parker Road and Park Boulevard. Traffic in the North Central Corridor is indicative of the population concentrations northwest of the site and employment destinations south of the site.
- "Bottleneck" conditions exist at certain key movements of the major thoroughfare network and will worsen with future development if not addressed. The most

significant transportation demand, when compared to existing infrastructure, is found at the U.S. 75/Parker and U.S. 75/Park interchanges, where circuitous or indirect traffic links contribute to less than desirable access from the frontage roads and a low level of service. Improving access from the frontage roads is a critical need to allow maximum flexibility for future development.

- The transportation benefit of a "T-ramp" type HOV access link into the site is negligible due to the low volumes expected from the site to the HOV. The massive structure of such a ramp could also negatively impact the potential for high-quality, future development in the study area (assuming space for the structure could be found). Nevertheless, this finding does not exclude HOV access points at other locations outside the study area.
- With the future addition of the light rail station, it may be necessary to accommodate up to an additional 400 to 700 parking spaces over the existing supply. To ensure a successful T.O.D., alternatives to traditional on-site surface parking should be considered.
- Working in conjunction with the City of Plano, DART has recently developed a preliminary five-year action plan to expand and enhance transit service in Plano. The principal goals of the plan are to increase ridership and improve the cost effectiveness of service, but also to develop new service modes. Specific projects to be implemented in Plano over the next five years could include new employer shuttle service, neighborhood circulators, demand-responsive service, and rail feeder routes. In addition, the City and DART should continue to study transit routes to identify those that encourage a "reverse commute" to Plano employment centers.

Station Area Plan and Recommendations/Conclusions

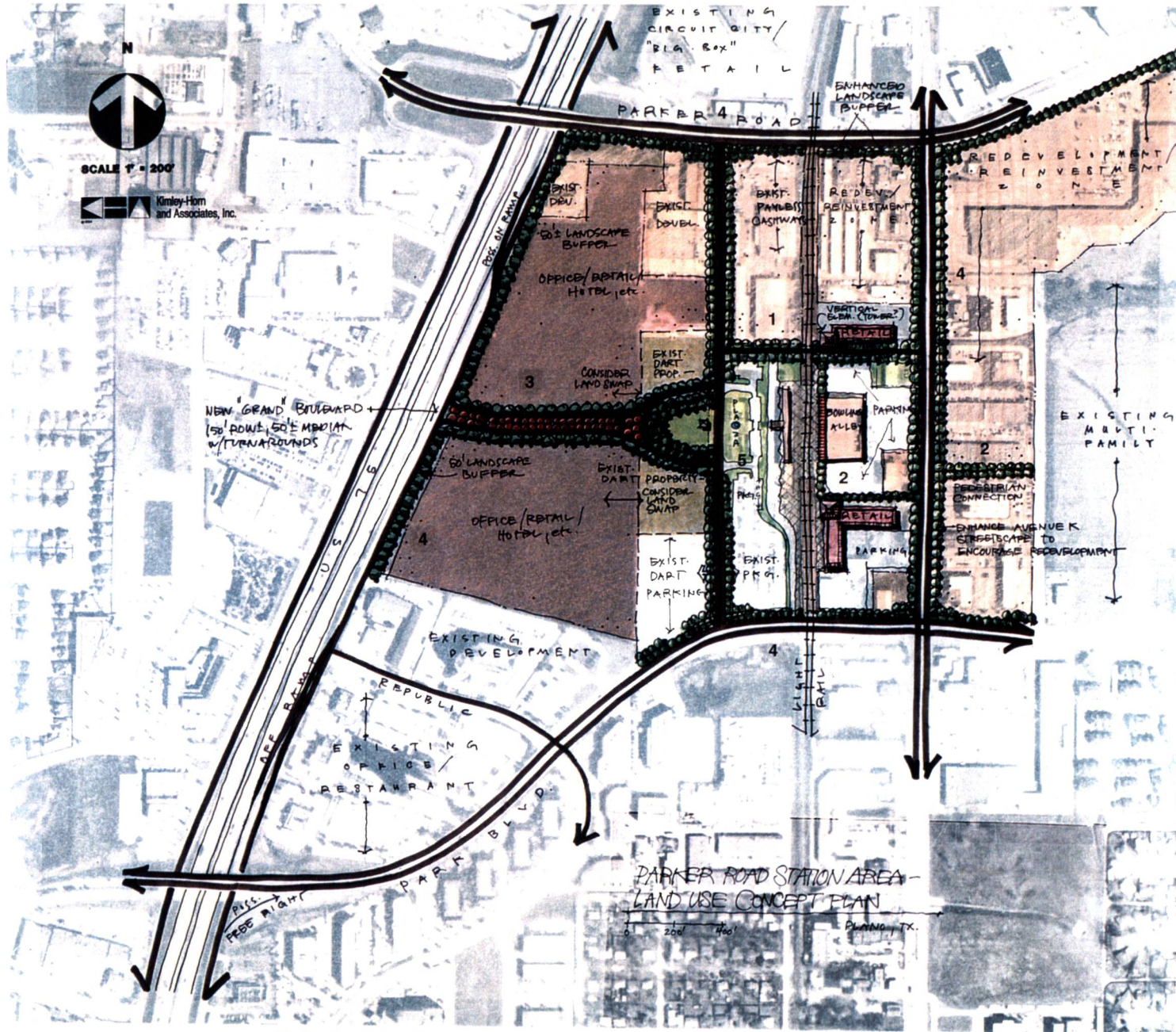
(Refer to Exhibits on pg. 5)

- Because of the scale/nature of capital improvement and private development necessary to implement this vision, continue consensus/team building approach with DART, TxDOT, property owners, and public at large. An "Implementation Plan or Process" should be developed for the recommendations herein.
- Create east/west "grand boulevard" from U.S. 75 into the site to enhance frontage-road access, minimize additional traffic at the Parker Road interchange, and improve visibility of the station. Reverse the northbound U.S. 75 on/off-ramps to improve freeway congestion and accommodate the boulevard. Further study the need for an additional frontage road lane to accommodate the ramp reversal and additional site traffic.

- Encourage the **highest intensity** of development, thereby creating an activity focus, within 500-600 feet of the station by shifting the Park & Ride function to another location (perhaps further west of Archerwood), to allow commercial development directly on Archerwood across from the station.
- Develop a **“connector”** drive between Avenue K and Archerwood to enhance pedestrian and vehicular access to the site and existing commercial areas, and create opportunities for transit-related retail. Offset from Grand Boulevard to minimize cut-through traffic volumes on the connector.
- Encourage **“double-sided”** retail between Avenue K and the rail lines to serve both transit and neighborhood users, and to strengthen pedestrian connection to Avenue K with a **“C-shaped”** pedestrian promenade.
- Provide **bottleneck, intersection geometric improvements** at the following key locations to improve operations:
 - ▶ West Park and Chisholm
 - ▶ Chisholm and U.S. 75 frontage road (southbound)
 - ▶ U.S. 75 frontage road (northbound) and Park
 - ▶ Central Parkway East and Park
 - ▶ Park and Archerwood
 - ▶ Parker Road/U.S. 75 interchange
- Reconfigure existing DART bus station to **minimize conflicts** between buses, automobiles, and pedestrians, and relocate existing small parking lot to create a **public entry plaza** on east and west of Archerwood.
- Enhance the rear of the bowling alley to provide additional pedestrian space and to **“pull”** users across the tracks. This will help complete the **“C-shaped”** pedestrian promenade connecting the station and Avenue K.
- Encourage the development of land uses with **off-peak parking demands** to create shared parking opportunities and **“round-the-clock”** activity.
- Encourage building orientation and parking designs which accommodate future infill development and structured parking as demand for more intense development builds.
- Consider enhanced landscape buffers along the U.S. 75 and Parker Road frontages, and other arterial corridors serving the site, to create a more cohesive project edge.
- Consider adding a traffic signal at the Archerwood/Park intersection. In the future, additional signals may be warranted at the grand boulevard/Archerwood intersection and the connector drive/Avenue K intersections.

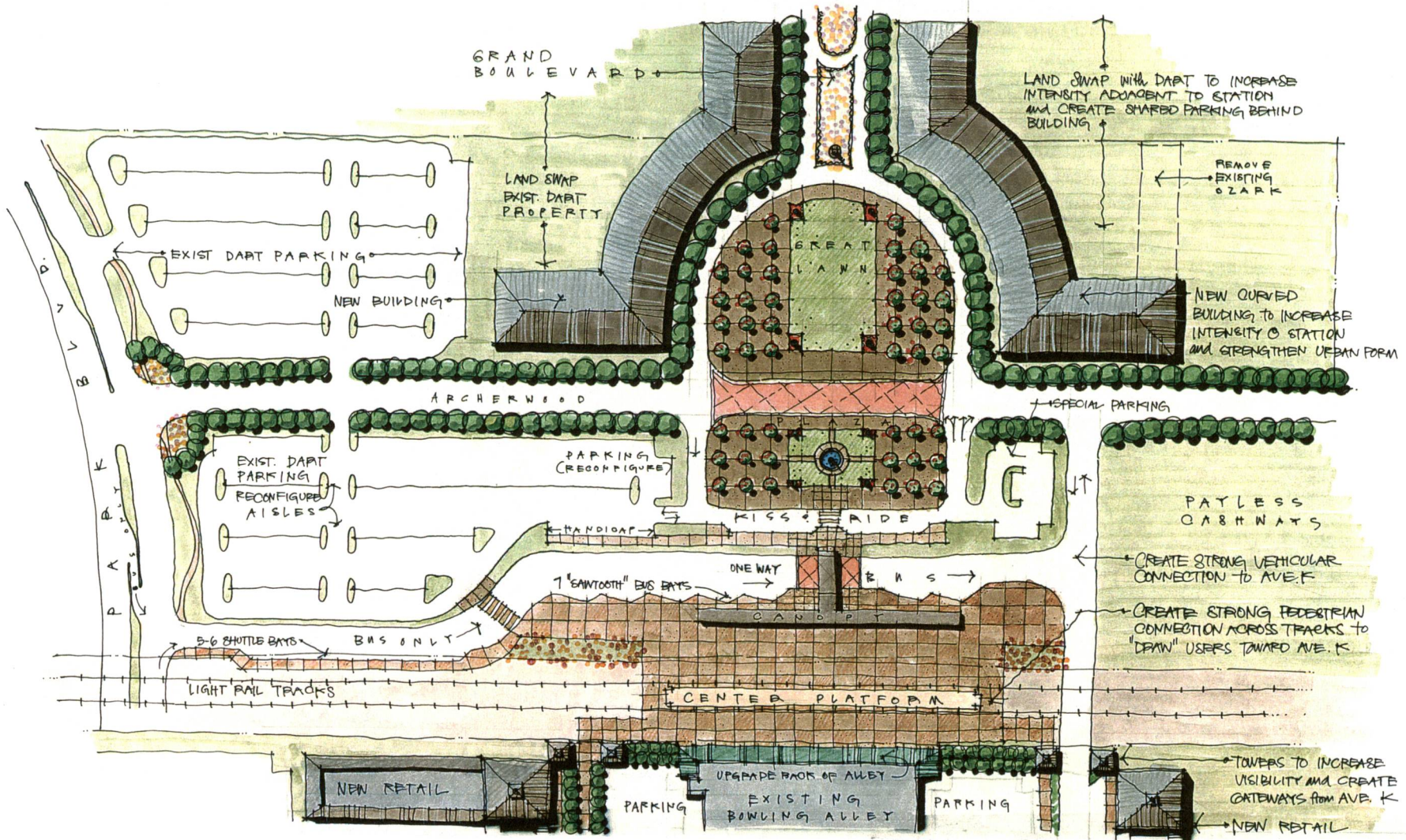
- Consider rezoning the primary study area and preparing development guidelines to ensure a cohesive and transit-oriented vision for development in the vicinity of the Parker Road DART station.
- Implement capital improvements to the grand boulevard, Avenue K connector drive, and other functional and aesthetic improvements to the station area. Approximate implementation estimates include:

▶ Transportation	\$ 2.7 million
▶ Streetscape/Aesthetics	\$ 2.5 million
▶ DART Improvements	<u>\$ 270,000</u>
TOTAL	\$ 5.47 million±



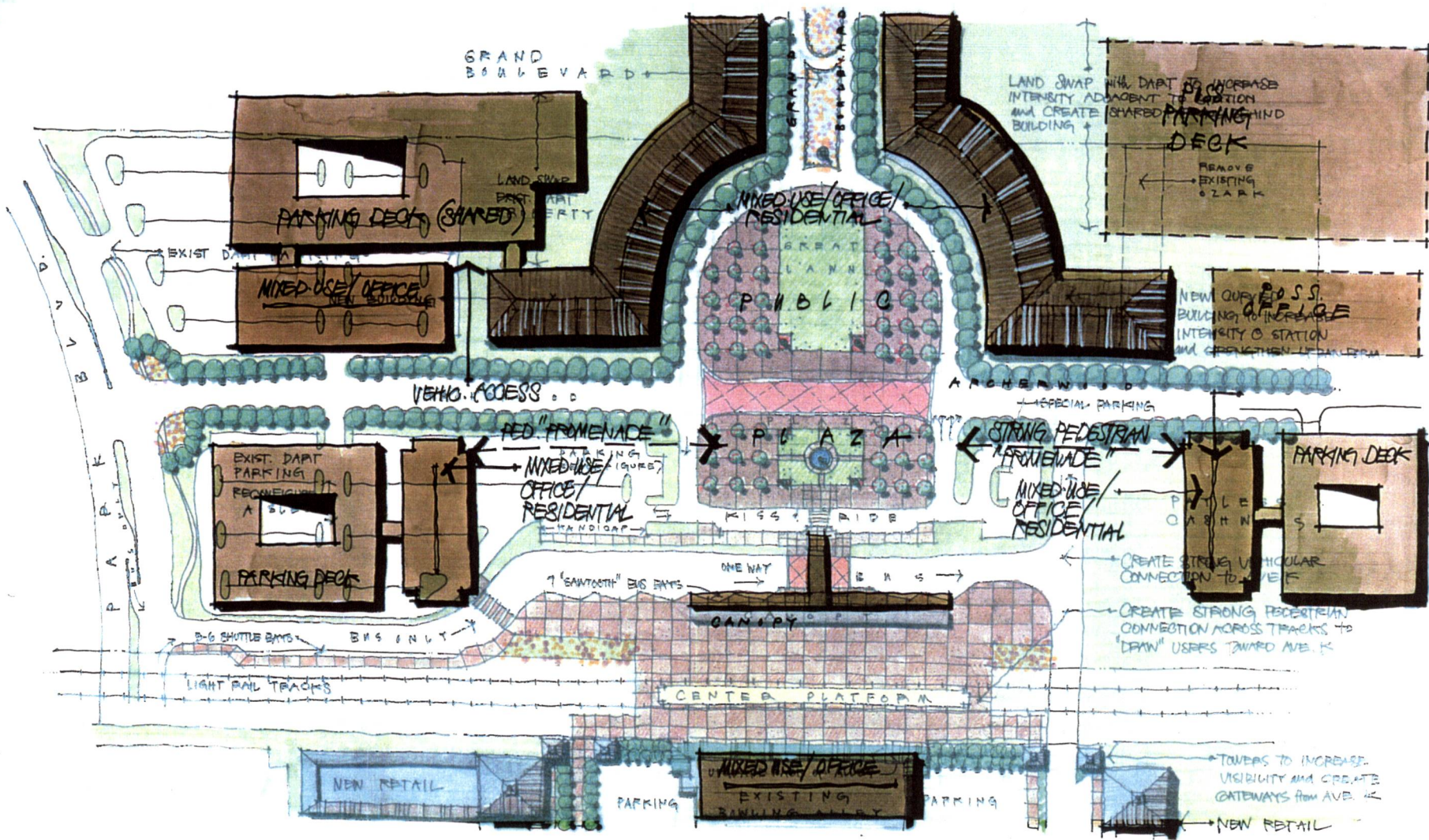
**PLANO'S DART TRANSPORTATION
AND LAND USE STUDY
Eastern Plano Transit Center**

EXHIBIT R-2

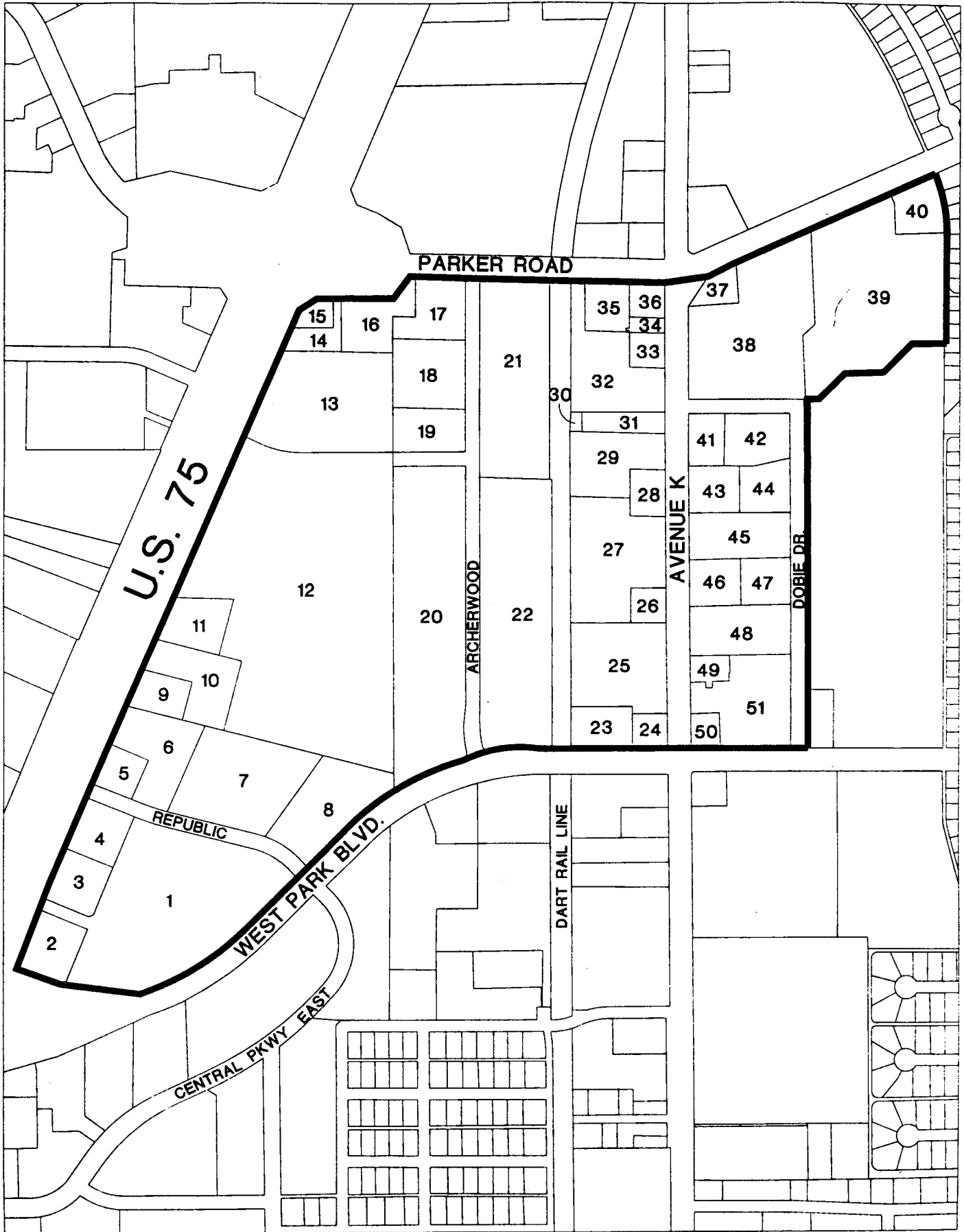


Parker Road Station - Detail Plan

Plano, Tx.



Parker Road Station - Detail Plan with Potential Future Development
Plano, Tx.



NOT TO SCALE



NOTE: NUMBERS IN
PARCELS REFERENCE
TABLE ON FOLLOWING
PAGE.

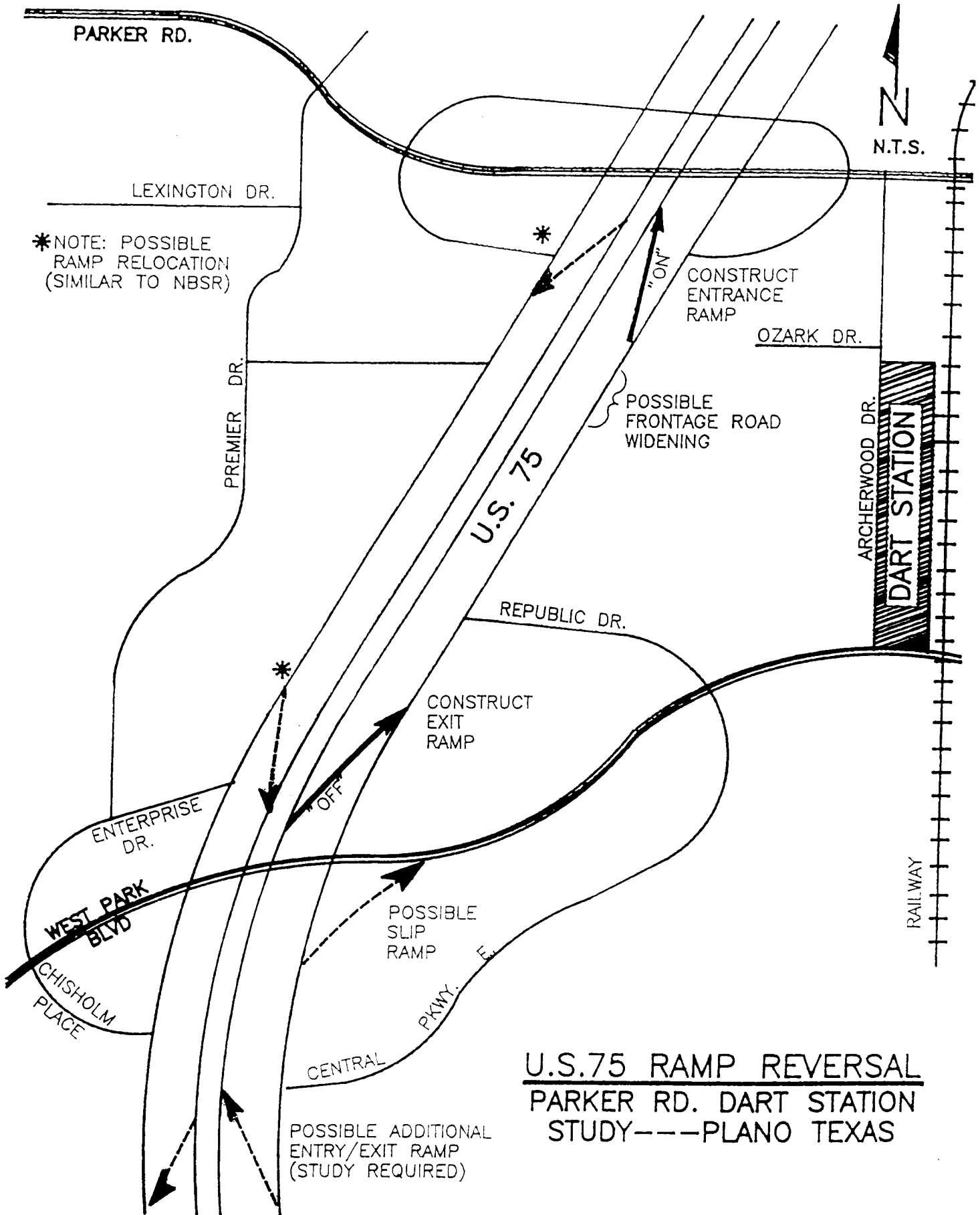
EXISTING LAND USE MAP

EXHIBIT L-4



EXHIBIT L-4 (Continued)
EXISTING LAND USE - ACREAGE

Parcel No.	Approximate Acreage	Existing Land Use
1	9.8	Nations Bank
2	1.4	Restaurant
3	1.2	Restaurant
4	1.2	Restaurant
5	0.8	Restaurant
6	2.3	Hotel
7	4.3	Office
8	3.0	Bank
9	0.9	Open
10	2.0	Open
11	1.3	Open
12	22.3	Open
13	5.5	Open
14	0.6	Restaurant
15	0.4	Restaurant
16	1.5	Open
17	1.5	Gas
18	2.1	Rental
19	1.3	DART
20	9.2	DART
21	5.8	Building Supply
22	8.2	DART
23	1.1	Strip Retail
24	0.5	Tire
25	3.5	Strip Retail
26	0.5	Pawn
27	4.2	Bowling/Restaurant
28	0.7	Transmission Shop
29	2.1	Open
30	0.1	Rental
31	0.7	Rental
32	3.0	Storage
33	0.5	Retail
34	0.2	Retail
35	0.9	Retail
36	0.5	Retail
37	0.5	Gas
38	6.6	Parker Crossing Retail/50% Leased
39	8.5	Parker Crossing Retail/50% Leased
40	1.1	Parker Crossing Retail/50% Leased
41	0.8	Commercial/Retail
42	1.4	Commercial/Retail
43	1.0	Commercial/Retail
44	1.0	Commercial/Retail
45	1.9	Commercial/Retail
46	1.0	Commercial/Retail
47	1.0	Commercial/Retail
48	2.1	Office/Retail
49	0.4	Restaurant
50	0.4	Gas
51	3.0	Office/Warehouse



**U.S.75 RAMP REVERSAL
PARKER RD. DART STATION
STUDY---PLANO TEXAS**

**PLANO'S PARKER ROAD STATION STUDY
Mode Split Percentage Comparison**

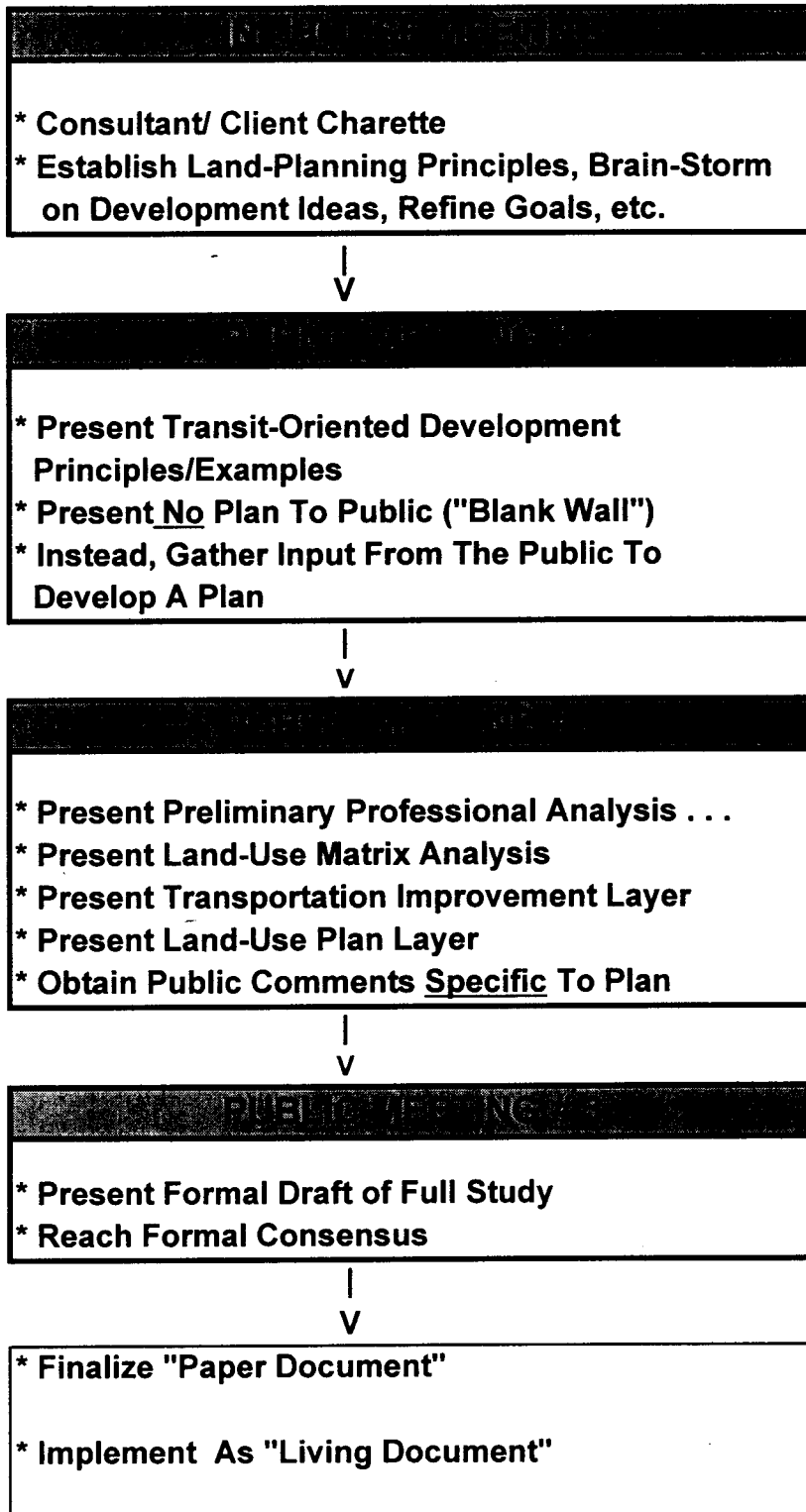
Station	Walk	Auto		Bus
		Park	Drop-off	
Park Boulevard				
2010 Projected*	39%	26%	N/A	35%
1997 Observed	2%	55%	6%	37%
Wesmoreland Drive				
2010 Projected*	4%	39%	N/A	57%
1997 Observed	2%	60%	7%	31%
Parker Road				
2010 Projected**	8%	49%	N/A	43%
North Central Corridor				
2010 Projected*	30%	31%	N/A	39%

* Source: Planning (04/97)

** Source: DART (08/97)

STUDY DEVELOPMENT AND CONSENSUS PROCESS

PLANO'S LAND-USE AND TRANSPORTATION STUDY FOR THE DART PARKER ROAD STATION AREA



ACKNOWLEDGMENTS

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