COMPLETE OR BALANCED?

Providing variable treatments will not make a street incomplete!

Plan for all uses, but balance the solutions

Share the road, it is a “public rights-of-way”

Many issues, but can only afford a few solutions

Demand should not drive facilities, vision should

Those exposed to the most danger, need our help

Keep in mind the broader social & environmental goals

Mike Singleton

Avid cyclist, daily commuter, runner & walker for 40 years

LEED AP, AICP, CTP & Landscape architect

Experience for the last decade has been on:

- Complete streets & integrated land use planning
- Multi-modal transportation planning and design

Current projects include:

- Uptown Mobility Plan / Community Plan Update
- SDSU Bike Access Study
- San Diego Pedestrian Master Plan
- UCSD Bike and Pedestrian Master Plan
- Carlsbad ADA Transition Plan

Complete the Streets

apbp

Bicycle Friendly Business

We walk (and ride) **the talk**

BROADER PLANNING GOALS

THINK Small

Big Ideas – Applied at a Human Scale

COMPLETE COMMUNITIES

SMART...

SAFE, MULTI-MODAL, ACCESSIBLE ROUTES TO....TRANSIT, WORK, SCHOOL, SERVICES & RECREATION

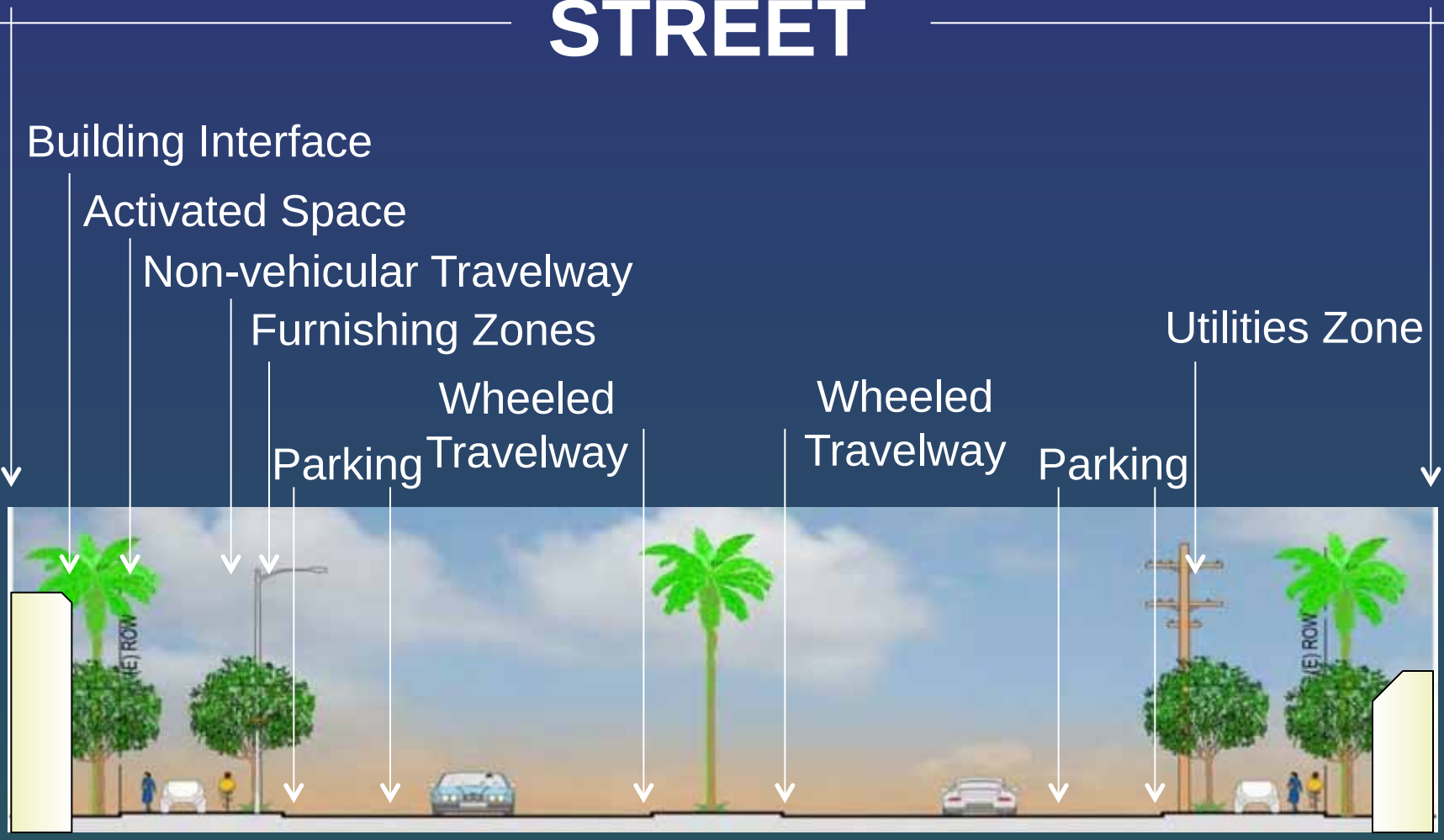
FOUNDATION

StreetWise

Bringing Logic & Balance to Public Streets

Public Rights-of-Way

STREET



ROAD

Public Rights-of-Way

Subject to Vehicular Codes


LEED
ND
Complete Streets /
Smart Mobility
Sustainable
Communities
Transit
Supportive
Planning
Walkable
Communities
It can all
come
together
on the
street!
New Urbanism
/Smart Growth
Urban
Forestry
Smart Mobility
Active
Transport
Healthy
Community Design
Polk Ave
University Ave
Wightman St
47th St
48th St
Menlo Ave
HEALTHY COMMUNITY DESIGN
CENTERS FOR DISEASE CONTROL AND PREVENTION
Smart Mobility 2010


Holt Boulevard
CITY OF ONTARIO CALIF
INCORPORATED 1891
Caltrans
District 8
Serving Riverside and San Bernardino Counties
HOLT BLVD. MOBILITY & COMPLETE ST. STRATEGIC PLAN

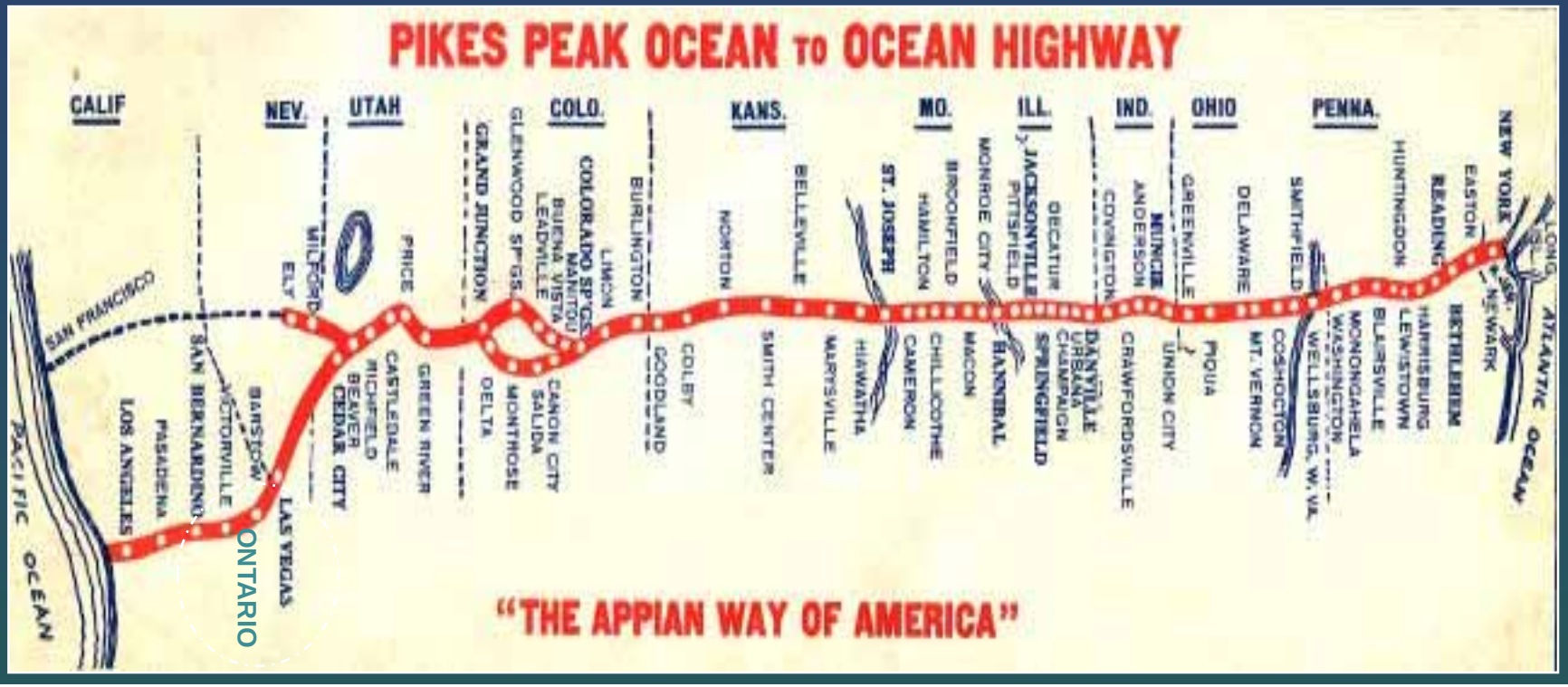
HISTORY OF HOLT BOULEVARD

THE PAST


AL BANK
CAMERA
LIQUOR
BERGER'S
RESTAURANT
Coca-Cola
Berger
LEFT TURN

THE PRESENT


Ontario or
Bust


PIKES PEAK OCEAN TO OCEAN HIGHWAY
CALIF
NEV.
UTAH
COLO.
KANS.
MO.
ILL.
IND.
OHIO
PENNA.
NEW YORK
ATLANTIC OCEAN
LONG BR.
NEWARK
EASTON
BETHLEHEM
READING
HARRISBURG
LEWISTOWN
HUNTINGDON
BLAIRSVILLE
MONONGAHELA
WASHINGTON
WELLSBURG, W. VA.
SMITHFIELD
COSHOCTON
MT. VERNON
DELAWARE
PIQUA
GREENVILLE
UNION CITY
RICHMOND
ANDERSON
CRAWFORDSVILLE
COVINGTON
DANVILLE
URBANA
CHAMPAIGN
SPRINGFIELD
DECATUR
JACKSONVILLE
PITTSFIELD
HANNIBAL
MACON
MONROE CITY
BROOKFIELD
HAMILTON
CHILLICOTHE
CAMERON
ST. JOSEPH
HIAWATHA
MARYSVILLE
BELLEVILLE
SMITH CENTER
NORTON
COLBY
GOODLAND
BURLINGTON
LIMON
COLORADO SP'GS.
MANITOU
BUENA VISTA
LEADVILLE
GLENWOOD SP'GS.
CANON CITY
SALIDA
MONTROSE
DELTA
GRAND JUNCTION
GREEN RIVER
PRICE
CASTLEDALE
RICHFIELD
BEAVER
CEDAR CITY
MILFORD
ELY
LAS VEGAS
BARSTOW
VICTORVILLE
SAN BERNARDINO
PASADENA
LOS ANGELES
SAN FRANCISCO
PACIFIC OCEAN
ONTARIO
"THE APPIAN WAY OF AMERICA"


ORANGE GROVE INN
ENTRANCE


JIFFY LUNCH
Coca-Cola
STEAK
CREAM GRAVY
10¢
HAMBURGERS
HAMBURGERS
MILK
10¢


HORLEY'S


CASA BLANCA
HOTEL
FRIGIDAIRE
FRIGIDAIRE
WHITE-MERRITT


ONTARIO
HOME OF THE
ALL STATES PICNIC
JULY 4


Greetings from
PALM
SPRINGS
CALIFORNIA


FRED PRICE
TIRE & SUPPLY CO.
ONTARIO
KELLY SPRINGFIELD TIRES


SERVICE STATION
JAMES CASTLE
CONTRACTOR

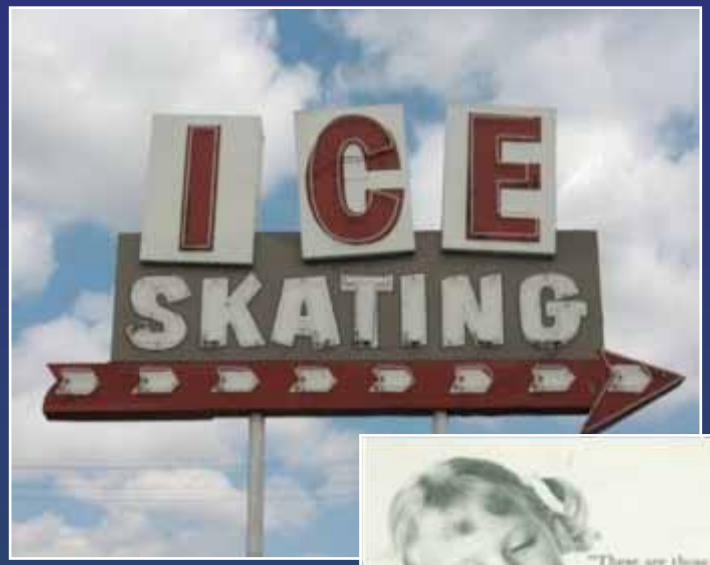

THE TEXAS COMPANY U.S.A.
TEXACO
PETROLEUM PRODUCTS

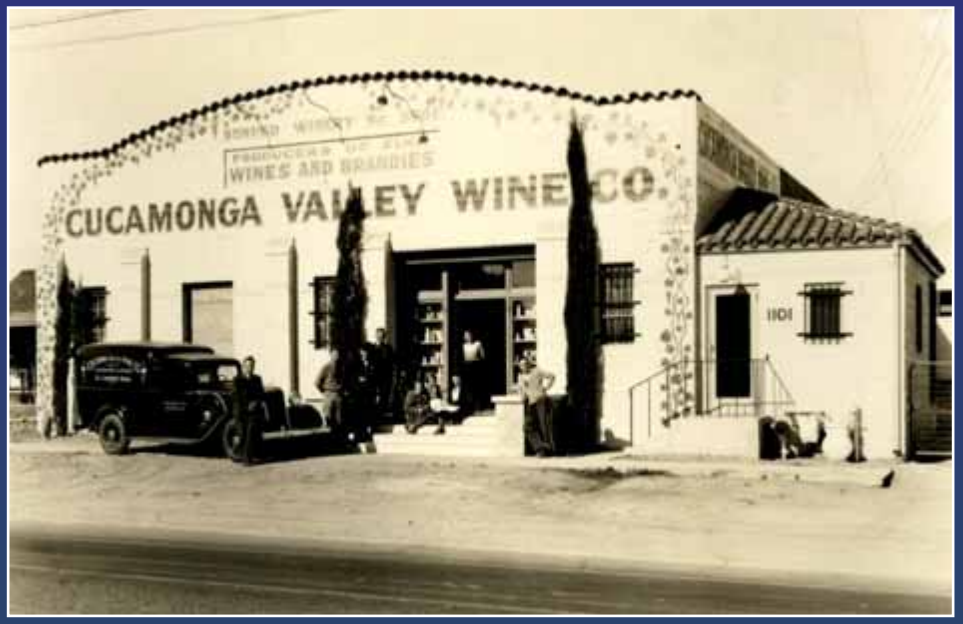
Gulf


ECKLES MOTORS
BRAKE SERVI


COFFEE SHOP

Melody Ranch
MOTEL
"A GOOD PLACE TO SLEEP"


ICE
SKATING


CUCAMONGA VALLEY WINE CO.
WINES AND BRANDIES
1101


"These are those
DELICIOUS ones!"
says junior gourmet...
Graber Olives


LOCANJ
CANDY


CUCAMONGA VALLEY WINE CO.
EL CAMINO REAL
DODGE
Delivering the First
Case of California Wines
Consigned to
President Franklin D. Roosevelt
by
Cucamonga Valley Wine Co.
Dec. 5, 1933


Thirst-aid
station


the Grinder
Haven


Vince's
SPAGHETTI


A&W


GRINDERS


NORTH
5
99
Bakersfield
SOUTH
EAST
99
10
70
San Bernardino

CURRENT CONDITIONS

Challenges and Existing Conditions

Challenges and Existing Conditions

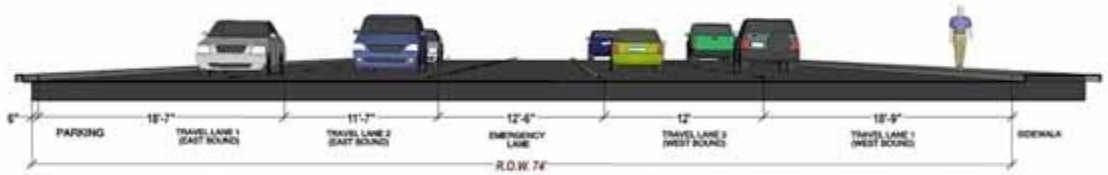
Challenges and Existing Conditions

Challenges and Existing Conditions

107’ ROW

118’ ROW

74’ ROW

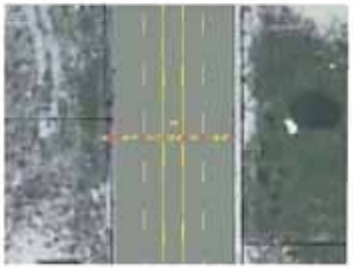


SECTION 3

IMPERIAL / CORONA

(LEAST IMPROVED SEGMENT & TIGHTEST R.O.W.)

WEST



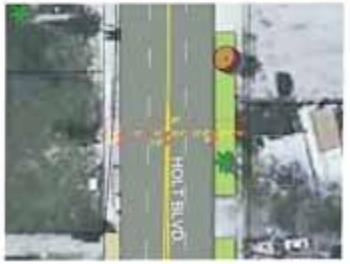
87’ ROW

SECTION 4

ALLYN / CUCAMONGA

(LEAST # OF LANES WITH NO PARKING)

WEST



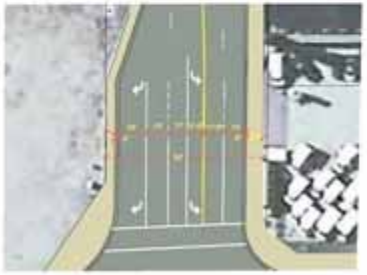
92’ ROW

SECTION 5

ALLYN / CAMPUS

(MOST ABRUPT NARROW TO WIDE)

WEST



98’ ROW

SECTION 6

CAMPUS / BONVIEW

(LARGEST OUTER LANE)

WEST

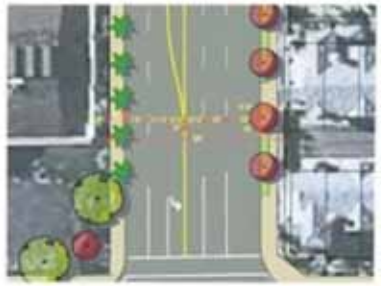
96’ ROW

SECTION 7

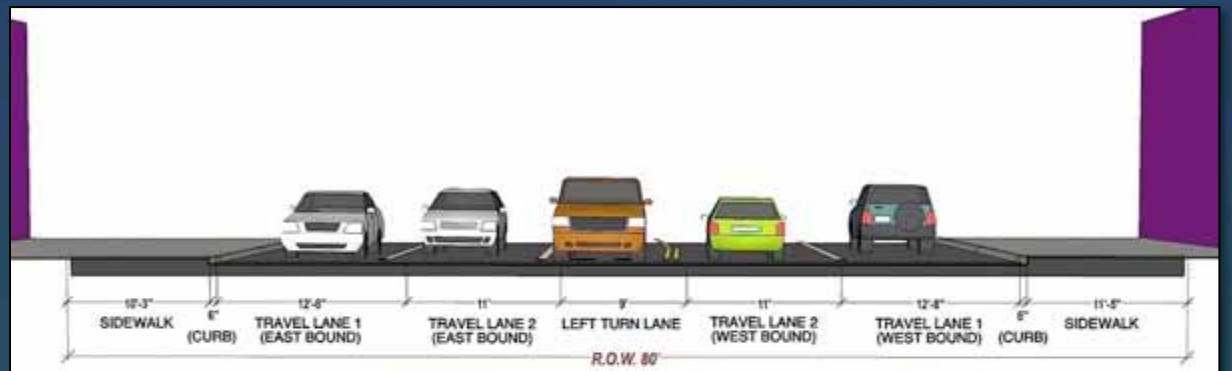
SULTANA / PALM

(GREATEST # OF THRU LANES)

WEST



80’ ROW



SECTION 8

EUCLID / LAUREL

(MOST CONSTRICTED SEGMENT)

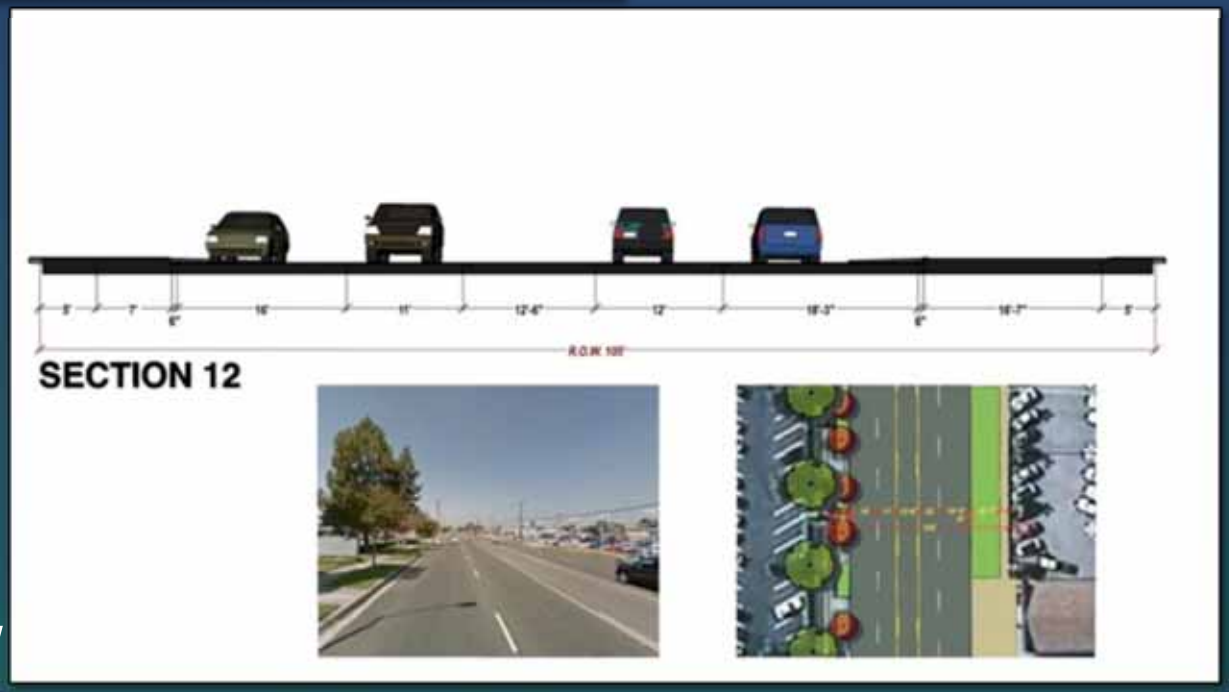
WEST

91’ ROW

103’ ROW

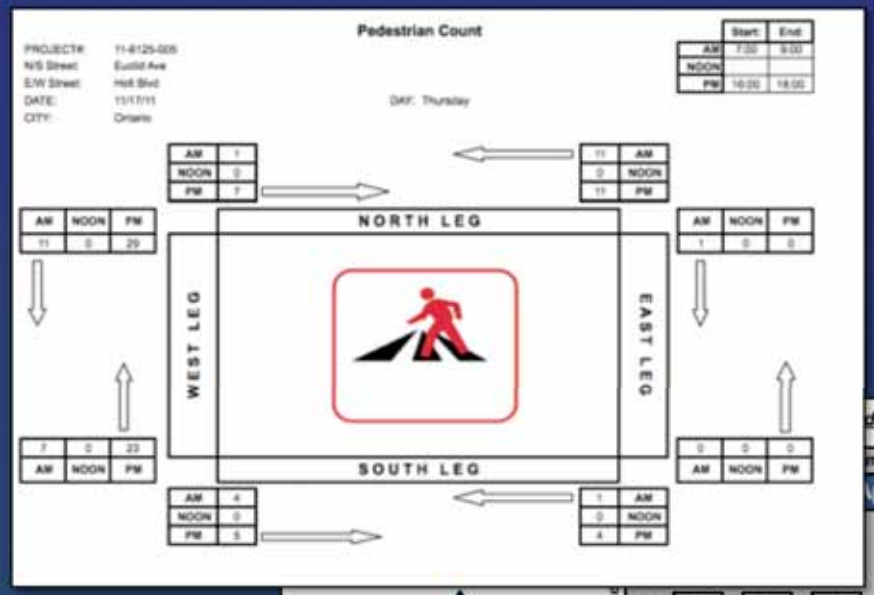
98’ ROW

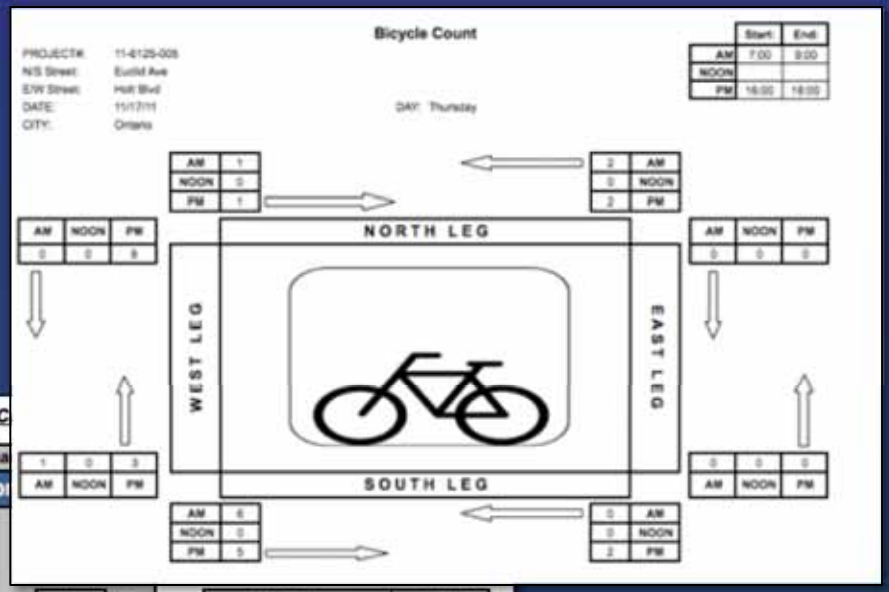
105’ ROW

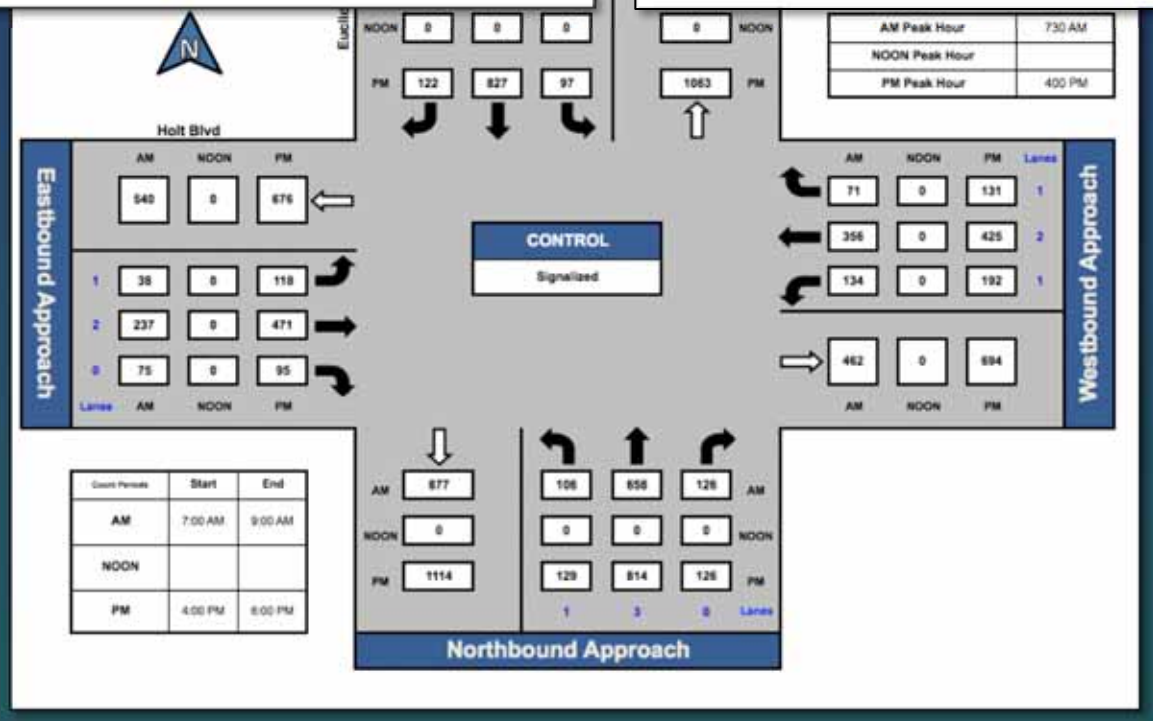



ANALYSIS

Full user counts were completed







Existing and Projected Land Uses

Add more roadway capacity for vehicles

Table 4-2
Summary of Roadway Operations
Future Traffic Conditions

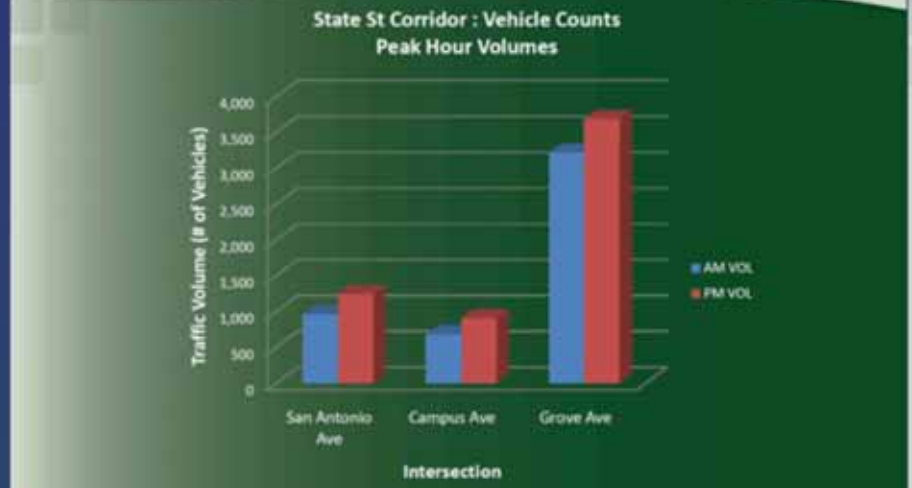
				Current General Plan Buildout			High Intensity Buildout		
Roadway	Segment	Lanes/Classification	Capacity	Volume	V/C	LOS	Volume	V/C	LOS
	South of Philadelphia St.	4 Lane Collector Street	22,000	19,618	0.89	D	21,213	0.96	E
Campus Avenue	North of 4th St.	4 Lane Collector Street	22,000	13,390	0.61	B	18,038	0.82	D
	4th St. to Holt Blvd.	4 Lane Collector Street	22,000	13,646	0.62	B	20,270	0.92	E
	Holt Blvd. to Mission Blvd.	4 Lane Collector Street	22,000	14,551	0.66	B	18,876	0.86	D
	Mission Blvd. to Philadelphia St.	4 Lane Standard Arterial	33,000	15,354	0.47	A	18,388	0.56	A
	Philadelphia St. to Walnut Ave.	4 Lane Standard Arterial	33,000	22,643	0.69	B	26,401	0.80	D
	Walnut Ave. to Riverside Dr.	4 Lane Standard Arterial	33,000	24,297	0.74	C	26,699	0.81	D
	South of Riverside Dr.	4 Lane Standard Arterial	33,000	24,859	0.75	C	27,396	0.83	D
6th Street	West of Grove Avenue	2 Lane Undivided Street	12,500	9,738	0.78	C	13,207	1.06	F
	East of Grove Avenue	4 Lane Collector Street	22,000	5,792	0.26	A	9,036	0.41	A
4th Street	West of Mountain Ave.	4 Lane Collector Street	22,000	9,036	0.41	A	10,053	0.46	A
	Mountain Ave. to San Antonio Ave.	2 Lane Undivided Street	12,500	9,425	0.75	C	9,841	0.79	C
	San Antonio Ave. to Euclid Ave. (SR-83)	2 Lane Undivided Street	12,500	7,021	0.56	A	7,642	0.61	B
	Euclid Ave. to Campus Ave.	2 Lane Undivided Street	12,500	13,081	1.05	F	14,903	1.19	F
	Campus Ave. to Grove Ave.	4 Lane Collector Street	22,000	11,531	0.52	A	17,547	0.80	C
	Grove Ave. to I-10	4 Lane Collector Street	22,000	5,292	0.24	A	8,257	0.38	A
	I-10 to Vineyard Ave.	4 Lane Standard Arterial	33,000	12,003	0.36	A	24,523	0.74	C
	Vineyard Ave. to Archibald Ave.	6 Lane Divided Arterial	49,000	39,309	0.80	D	59,179	1.21	F
	Archibald Ave. to Haven Ave.	6 Lane Divided Arterial	49,000	36,314	0.74	C	52,281	1.07	F
	Haven Ave. to Milliken Ave.	6 Lane Divided Arterial	49,000	23,692	0.48	A	46,731	0.95	E
	Milliken Ave. to I-15	6 Lane Divided Arterial	49,000	37,179	0.76	C	56,476	1.15	F
	I-15 and Etiwanda Ave.	6 Lane Divided Arterial	49,000	23,554	0.48	A	25,328	0.52	A
Inland Empire Blvd	Vineyard Ave. to Archibald Ave.	6 Lane Divided Arterial	49,000	48,967	1.00	E	76,217	1.56	F
	Archibald Ave. to Haven Ave.	4 Lane Standard Arterial	33,000	37,711	1.14	F	46,091	1.40	F
	Haven Ave. to Milliken Ave.	6 Lane Divided Arterial	49,000	6,223	0.13	A	29,836	0.61	B
D St./Convention Center Way	West of Vineyard Ave.	2 Lane Undivided Street	12,500	14,478	1.16	F	22,605	1.81	F
	Vineyard Ave. to Holt Ave.	4 Lane Standard Arterial	33,000	14,937	0.45	A	24,540	0.74	C
	South of Holt Ave.	4 Lane Collector Street	22,000	15,345	0.70	B	38,039	1.73	F
Holt Boulevard	West of Mountain Ave.	6 Lane Standard Arterial	49,000	14,092	0.29	A	15,036	0.31	A
	Mountain Ave. to San Antonio Ave.	6 Lane Standard Arterial	49,000	13,134	0.27	A	15,152	0.31	A
	San Antonio Ave. to Euclid Ave. (SR-83)	6 Lane Standard Arterial	49,000	34,282	0.70	B	39,127	0.80	C
	Euclid Ave. (SR-83) to Campus Ave.	6 Lane Standard Arterial	49,000	37,672	0.77	C	47,955	0.98	E
	Campus Ave. to Grove Ave.	6 Lane Standard Arterial	49,000	34,265	0.70	B	40,642	0.83	D
	Grove Ave. to Vineyard Ave.	6 Lane Standard Arterial	49,000	43,019	0.88	D	58,041	1.18	F
	Vineyard Ave. to Convention Center Way	6 Lane Standard Arterial	49,000	51,410	1.05	F	70,074	1.43	F
	East of Convention Center Way	6 Lane Standard Arterial	49,000	52,252	1.07	F	75,663	1.54	F
	[illegible]	[illegible]	22,000	20,304	0.92	E	24,521	1.11	F
	[illegible]	[illegible]	49,000	32,522	0.66	B	43,065	0.88	D
	[illegible]	[illegible]	49,000	18,129	0.37	A	24,618	0.50	A
	[illegible]	[illegible]	49,000	38,854	0.79	C	48,709	0.99	E
	[illegible]	[illegible]	49,000	20,998	0.43	A	26,744	0.55	A
	[illegible]	[illegible]	33,000	21,412	0.65	B	25,624	0.78	C
	[illegible]	[illegible]	49,000	52,480	1.07	F	66,378	1.35	F
	[illegible]	[illegible]	49,000	21,683	0.44	A	27,467	0.56	A
	[illegible]	[illegible]	49,000	45,530	0.93	E	78,581	1.60	F
	[illegible]	[illegible]	49,000	22,720	0.46	A	43,059	0.88	D
	[illegible]	[illegible]	49,000	66,841	1.36	F	66,785	1.36	F
	[illegible]	[illegible]	49,000	55,987	1.14	F	57,650	1.18	F
	San Antonio Ave. to Euclid Ave. (SR-83)	6 Lane Divided Arterial	49,000	52,765	1.08	F	56,068	1.14	F
	Euclid Ave. (SR-83) to Campus Ave.	6 Lane Divided Arterial	49,000	50,876	1.04	F	55,303	1.13	F
	Campus Ave. to Grove Ave.	6 Lane Divided Arterial	49,000	45,196	0.92	E	51,605	1.05	F
	Grove Ave. to Vineyard Ave.	6 Lane Divided Arterial	49,000	57,682	1.18	F	68,571	1.40	F
	Vineyard Ave. to Archibald Ave.	6 Lane Divided Arterial	49,000	55,690	1.14	F	61,666	1.26	F
	Archibald Ave. to Haven Ave.	6 Lane Divided Arterial	49,000	45,477	0.93	E	48,640	0.99	E
	Haven Ave. to Milliken Ave.	6 Lane Divided Arterial	49,000	52,466	1.07	F	60,752	1.24	F
Francis Street	West of Mountain Ave.	2 Lane Undivided Street	12,500	19,975	1.60	F	20,486	1.64	F
	Mountain Ave. to Euclid Ave. (SR-83)	4 Lane Collector Street	22,000	22,154	1.01	F	23,100	1.05	F
	Euclid Ave. (SR-83) to Grove Ave.	4 Lane Standard Arterial	33,000	16,561	0.50	A	17,844	0.54	A
	East of Grove Avenue	4 Lane Standard Arterial	33,000	15,727	0.48	A	17,012	0.52	A
Philadelphia Street	West of Mountain Ave.	4 Lane Standard Arterial	33,000	14,613	0.44	A	15,376	0.47	A
	Mountain Ave. to San Antonio Ave.	4 Lane Standard Arterial	33,000	13,887	0.42	A	14,793	0.45	A
	San Antonio Ave. to Euclid Ave. (SR-83)	4 Lane Standard Arterial	33,000	23,071	0.70	B	24,477	0.74	C
	Euclid Ave. (SR-83) to Campus Ave.	4 Lane Standard Arterial	33,000	24,102	0.73	C	25,680	0.78	C
	Campus Ave. to Grove Ave.	4 Lane Standard Arterial	33,000	22,397	0.68	B	24,417	0.74	C
	Grove Ave. to Vineyard Ave.	4 Lane Standard Arterial	33,000	18,680	0.57	A	23,201	0.70	C
	Vineyard Ave. to Archibald Ave.	4 Lane Standard Arterial	33,000	12,528	0.38	A	13,951	0.42	A
	Archibald Ave. to Haven Ave.	4 Lane Standard Arterial	33,000	15,314	0.46	A	18,284	0.55	A
	East of Haven Ave.	4 Lane Standard Arterial	33,000	9,907	0.30	A	17,808	0.54	A
Walnut Avenue	Euclid Ave. (SR-83) to Campus Ave.	4 Lane Collector Street	22,000	12,987	0.59	A	13,684	0.62	B
	Campus Ave. to Grove Ave.	4 Lane Collector Street	22,000	21,574	0.98	E	23,203	1.05	F
	Grove Ave. to Vineyard Ave.	4 Lane Collector Street	22,000	20,556	0.93	E	21,579	0.98	E

Anticipated Future Volumes Based on the Ontario Plan

Pedestrian Levels are Relatively High

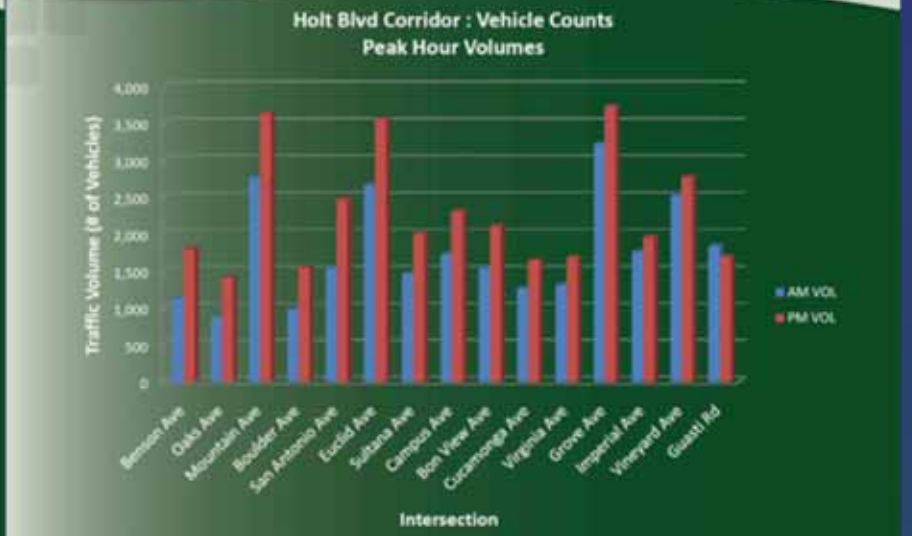
Peak Hour Vehicle Counts

FEHR PEERS



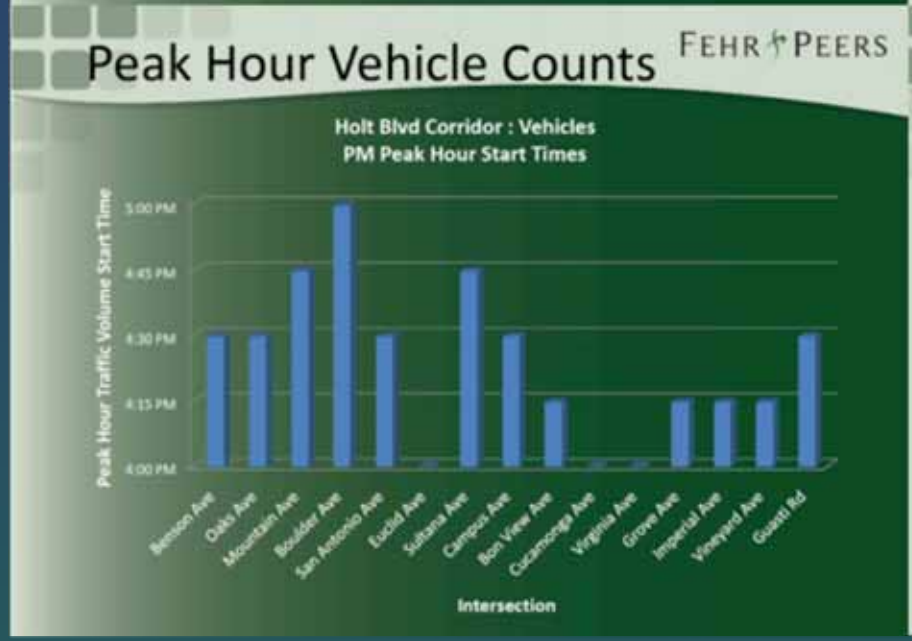
Peak Hour Vehicle Counts

FEHR PEERS



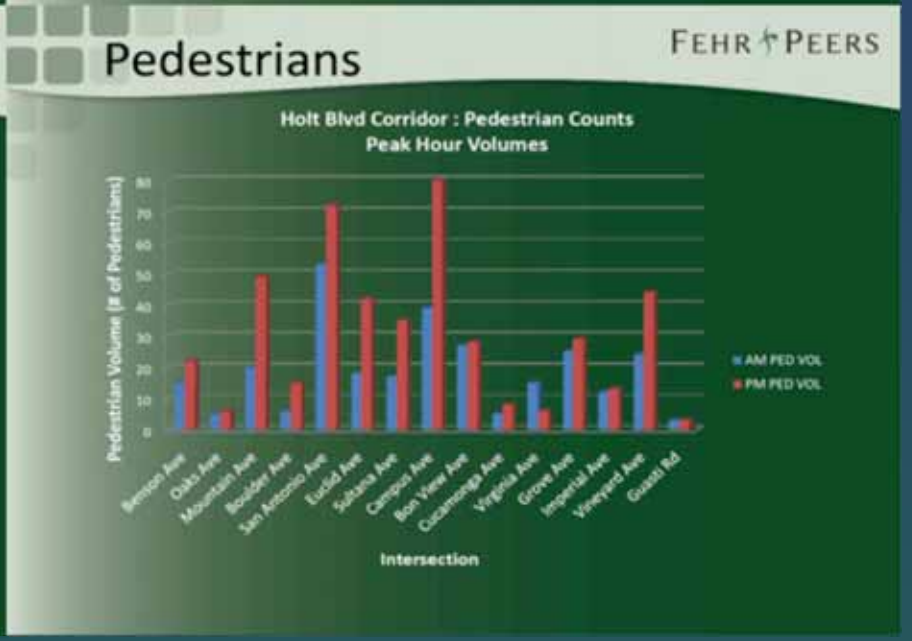
Peak Hour Vehicle Counts

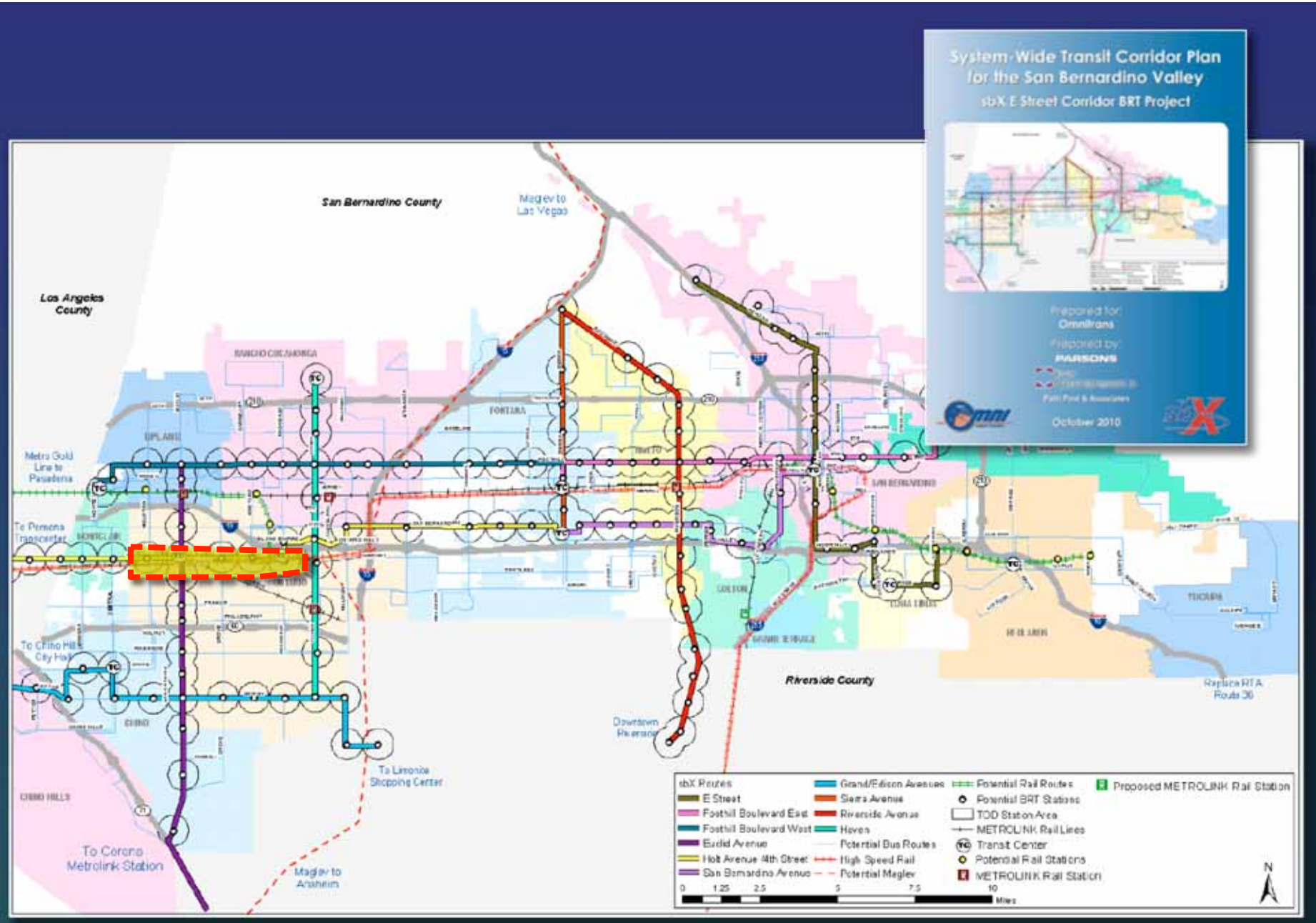
FEHR PEERS



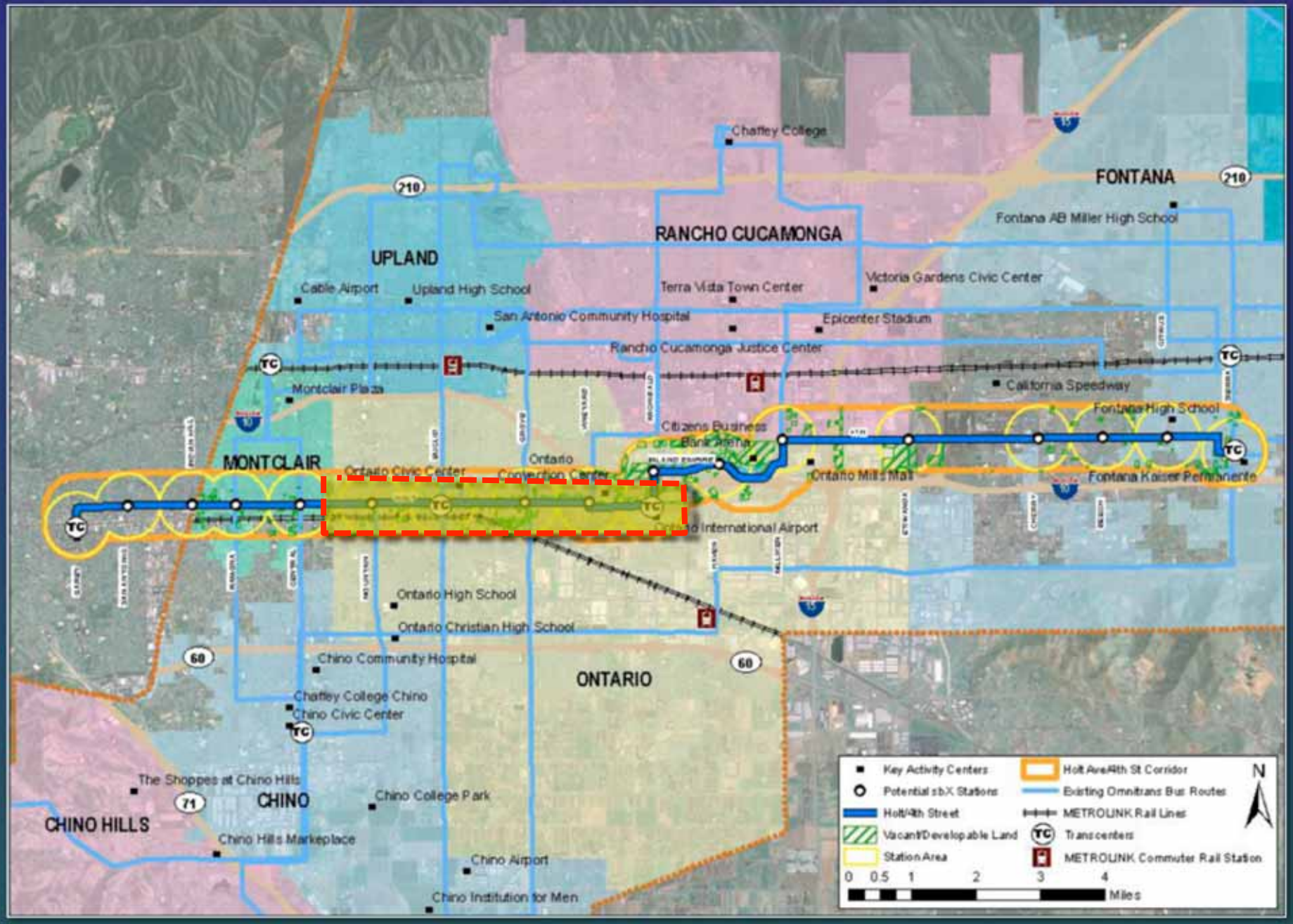
Pedestrians

FEHR PEERS



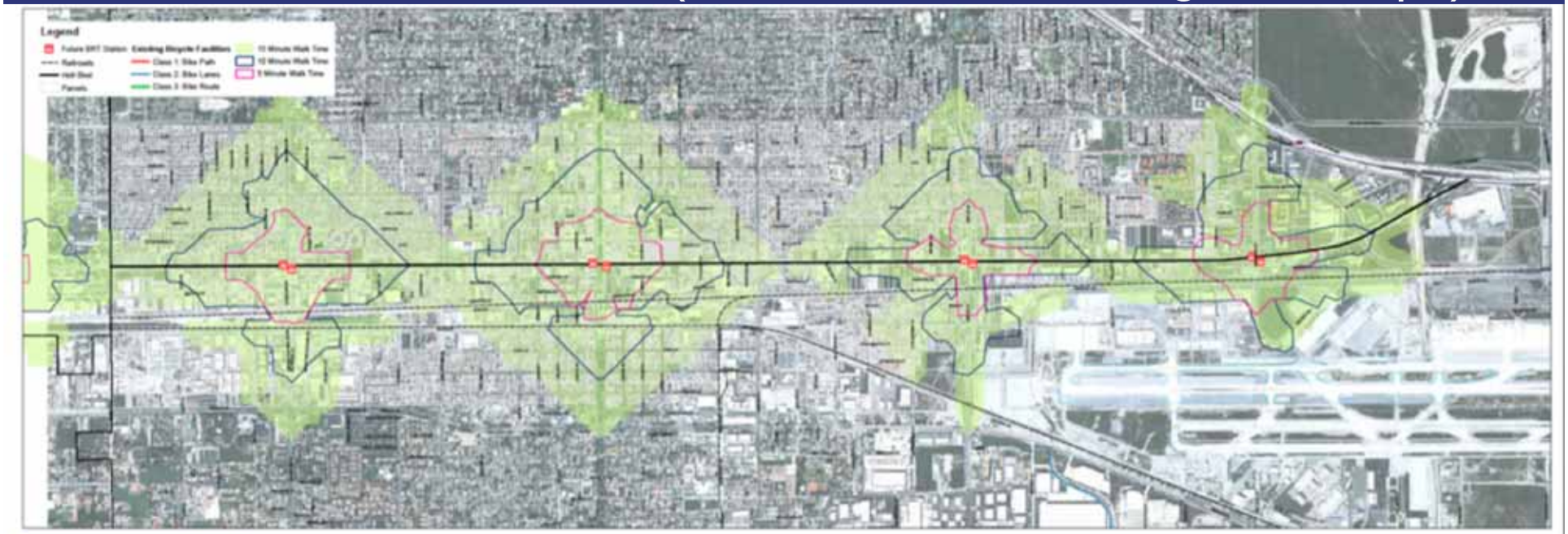


BRT on Holt Boulevard

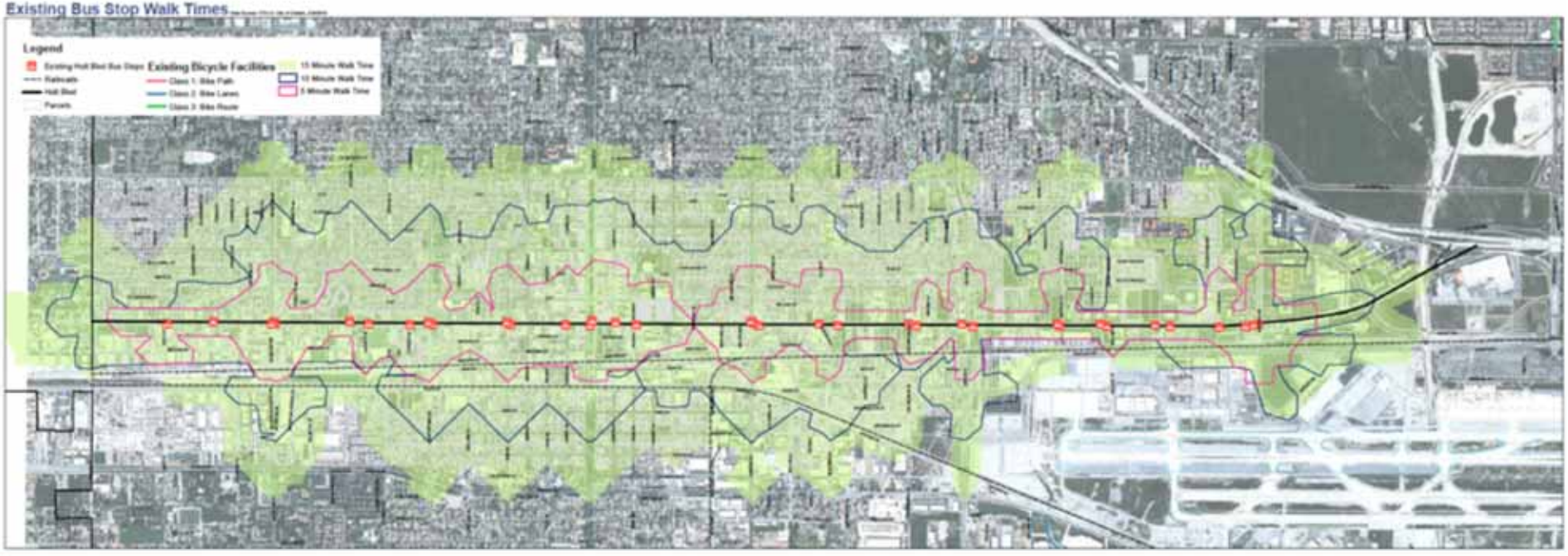


BRT on Holt Boulevard- Segment 6

15 Minute Walk Times (Future BRT & Existing Bus Stops)

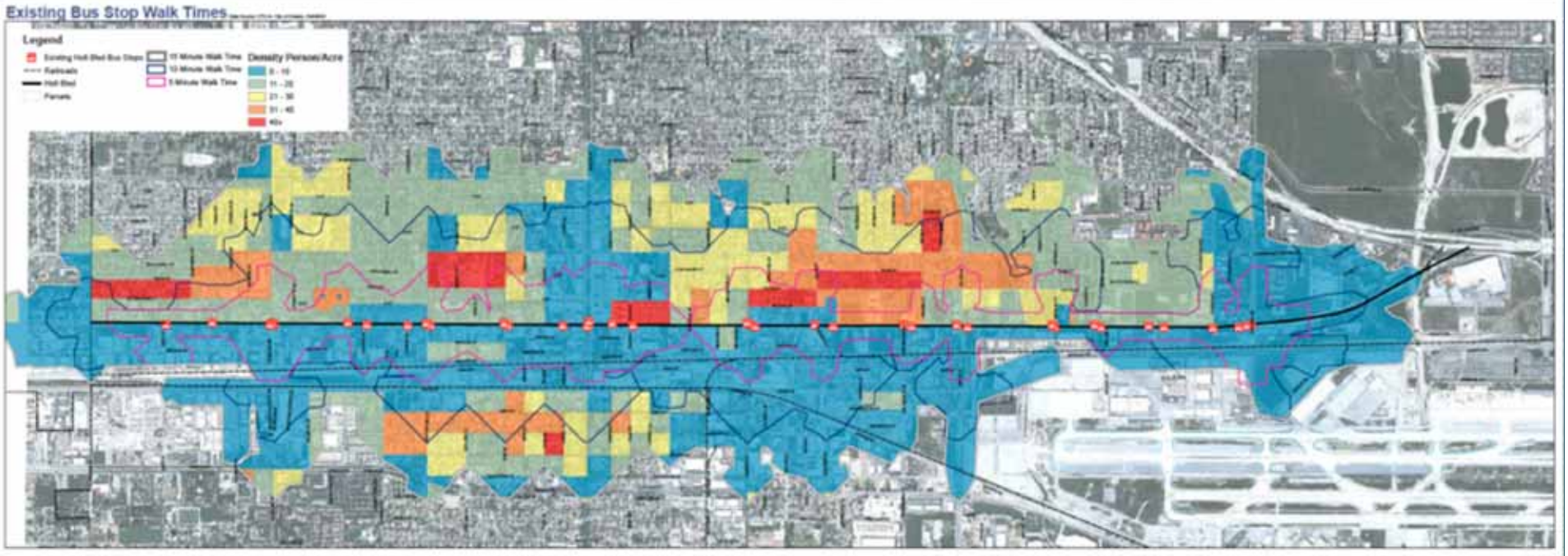


Existing Bus Stop Walk Times

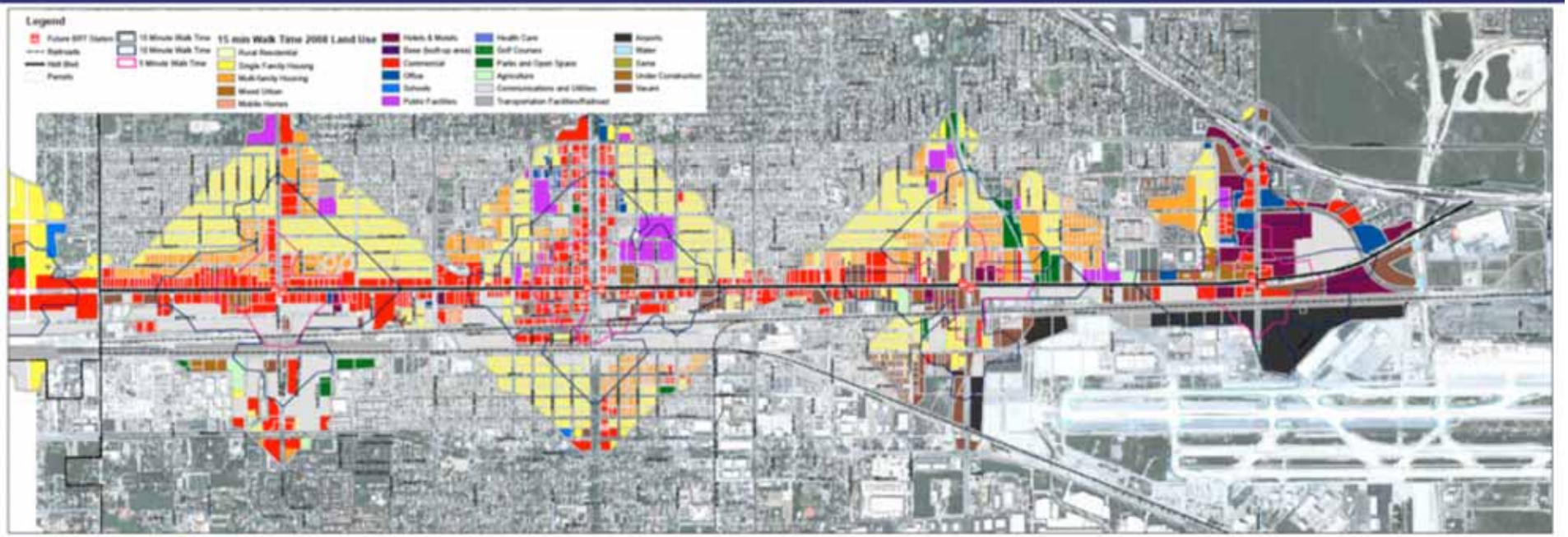


Walk Times / Housing Density (BRT & Existing Bus Stops)

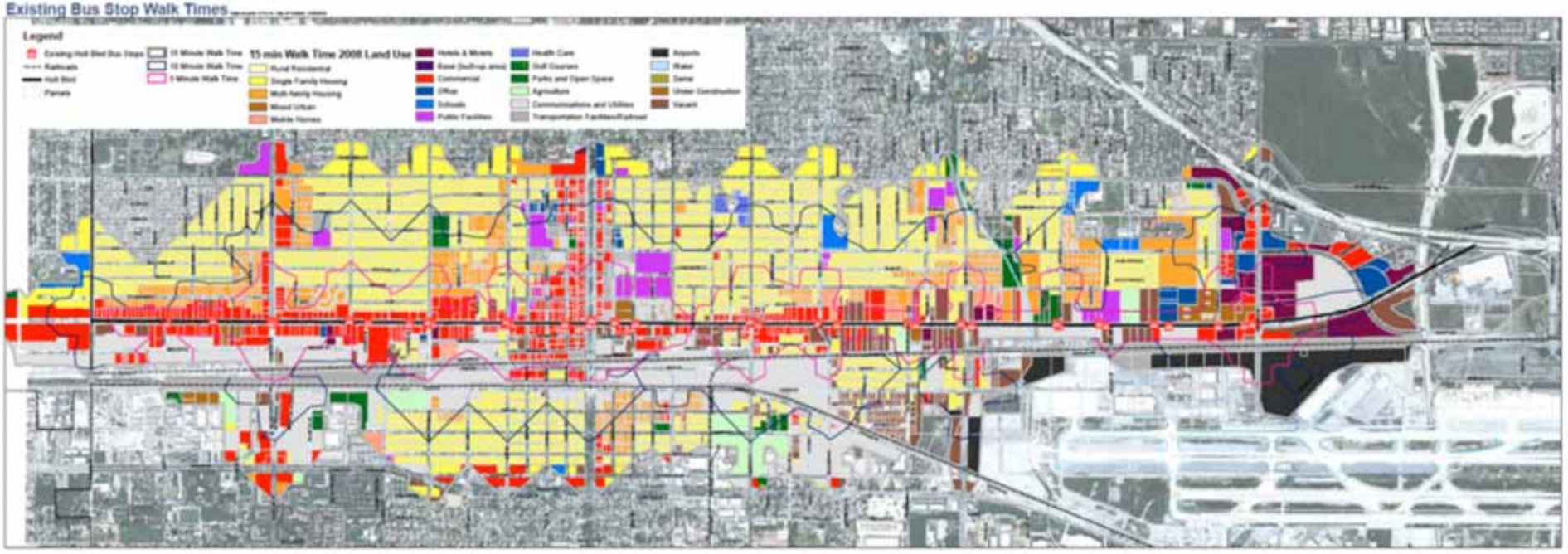
Existing Bus Stop Walk Times



15 Minute Walk Times / Land Use (BRT & Existing Bus Stops)



Existing Bus Stop Walk Times



Adjusted Station Locations (West and East Drift)

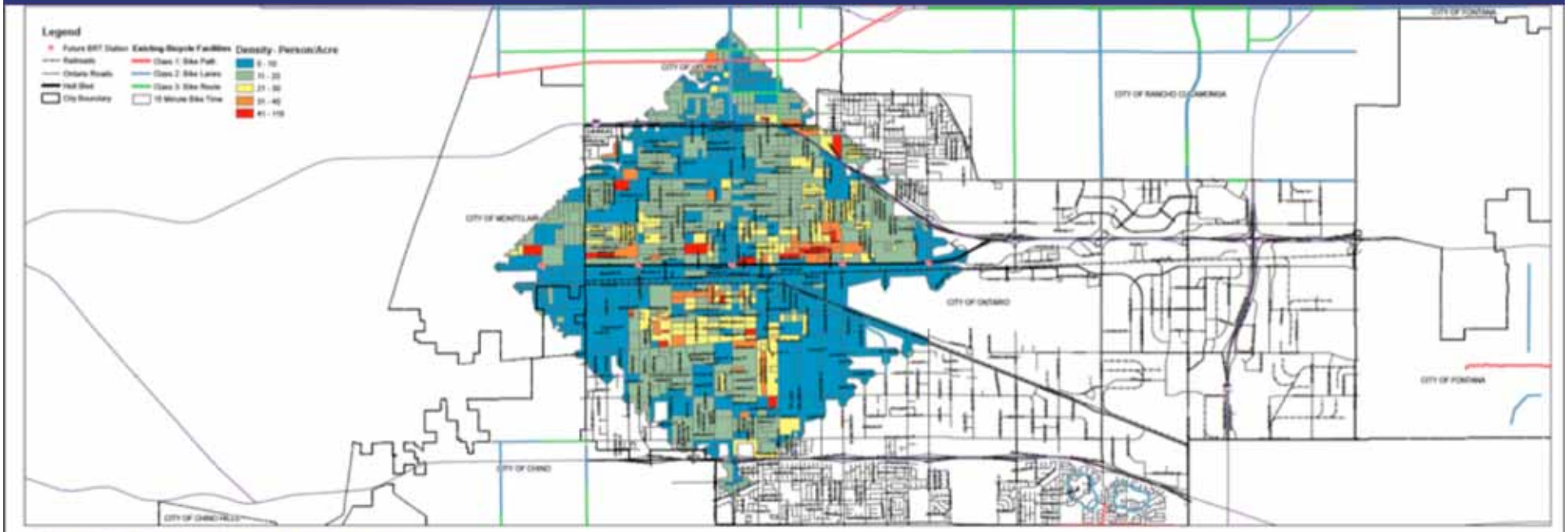
Comparison of Employment Ridership Potentials

Walk Time Minutes	Oaks Alt. 2 (Eastward Drift / New Station)	Mountain Alt. 1 (Westward Drift)	Mountain (OmniTrans)	Mountain Alt 2 (Granite - Eastward Drift)	Euclid Alt 1 (Laurel-Westward Drift)	Euclid (OmniTrans)	Euclid Alt 2 (Sultana-Eastward Drift)	Grove Alt 1 (Cucamonga-Westward Drift)	Grove (OmniTrans)	Grove Alt 2 (Imperial-Eastward Drift)	Vineyard Alt 1(Corona-Westward Drift)	Vineyard (OmniTrans)	Vineyard Alt 2 (Guasti /Transit Center-Eastward Drift)	Future Transit Center (Alt 1 & Omnitrans)
2010 Employment														
5	58	27	106	68	284	321	183	50	60	27	143	165	3	9
10	134	172	280	163	631	721	551	128	247	147	356	625	171	224
15	117	300	441	333	733	704	685	337	448	328	633	565	438	324
20	272	345	396	569	386	379	684	644	716	608	665	615	382	447
Raw	581	844	1,224	1,133	2,034	2,125	2,103	1,159	1,471	1,110	1,797	1,971	993	1,005
Weighted	**1,956**	**2,605**	**3,733**	**3,704**	**6,040**	**6,372**	**6,493**	**3,835**	**4,742**	**3,635**	**5,565**	**6,130**	**2,925**	**3,147**
2020 Employment														
5	77	28	126	51	456	511	386	183	208	111	80	55	66	56
10	177	224	298	241	942	1,082	779	355	543	262	218	385	217	74
15	144	333	622	526	899	839	1,099	673	749	519	474	490	275	123
20	288	476	614	944	612	661	1,077	1,029	1,194	743	734	842	298	306
Raw	686	1,062	1,659	1,762	2,909	3,093	3,342	2,240	2,693	1,635	1,505	1,772	857	559
Weighted	**2,279**	**3,357**	**5,096**	**5,753**	**8,896**	**9,613**	**10,389**	**7,259**	**8,732**	**5,241**	**4,856**	**5,722**	**2,659**	**1,918**
2030 Employment														
5	87	31	140	57	527	591	448	221	251	138	98	64	76	65
10	202	252	341	268	1,082	1,247	904	428	643	318	255	449	250	86
15	163	382	708	598	1,034	964	1,275	789	876	627	556	570	315	141
20	330	543	694	1,086	708	764	1,249	1,198	1,425	871	866	1,000	349	355
Raw	781	1,208	1,884	2,008	3,351	3,566	3,875	2,636	3,195	1,954	1,776	2,083	990	646
Weighted	**2,595**	**3,817**	**5,778**	**6,570**	**10,253**	**11,088**	**12,048**	**8,537**	**10,386**	**6,243**	**5,735**	**6,743**	**3,079**	**2,217**

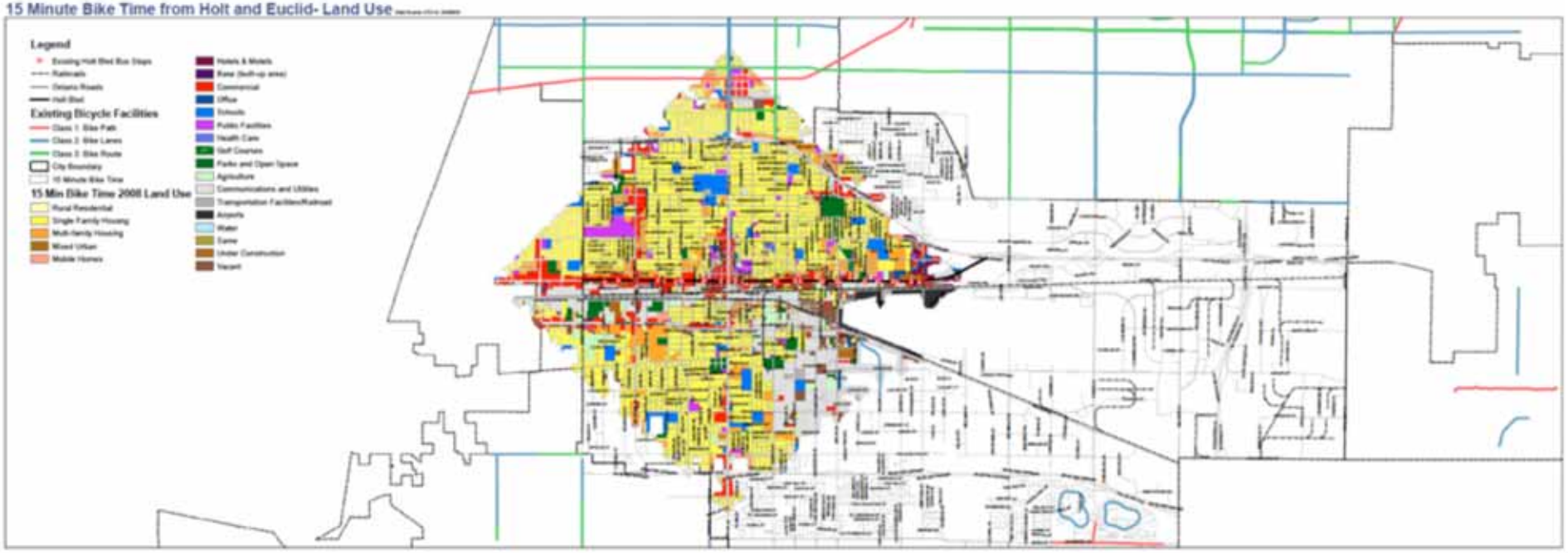
Comparison of Residential Ridership Potentials

Walk Time Minutes	Oaks Alt. 2 (Eastward Drift / New Station)	Mountain Alt. 1 (Westward Drift)	Mountain (OmniTrans)	Mountain Alt 2 (Granite - Eastward Drift)	Euclid Alt 1 (Laurel-Westward Drift)	Euclid (OmniTrans)	Euclid Alt 2 (Sultana-Eastward Drift)	Grove Alt 1 (Cucamonga-Westward Drift)	Grove (OmniTrans)	Grove Alt 2 (Imperial-Eastward Drift)	Vineyard Alt 1(Corona-Westward Drift)	Vineyard (OmniTrans)	Vineyard Alt 2 (Guasti /Transit Center-Eastward Drift)	Future Transit Center (Alt 1 & Omnitrans)
2010 Residential														
5	4	2	57	47	14	17	198	145	255	172	8	0	0	0
10	88	82	443	489	193	241	606	740	743	635	168	27	0	0
15	424	591	1,236	837	781	941	977	1,505	1,433	1,049	517	306	0	0
20	999	1,284	1,192	1,524	1,464	1,756	1,456	1,907	1,623	1,751	1,035	854	0	20
Raw	**1,515**	**1,959**	**2,927**	**2,897**	**2,452**	**2,954**	**3,236**	**4,297**	**4,054**	**3,608**	**1,729**	**1,187**	**0**	**20**
Weighted	**5,124**	**6,571**	**8,794**	**9,425**	**8,053**	**9,694**	**10,386**	**13,439**	**12,608**	**11,697**	**5,713**	**4,109**	**0**	**79**
2020 Residential														
5	50	62	107	132	0	0	156	3	47	69	39	0	0	0
10	246	202	754	536	127	167	618	616	723	687	352	112	0	0
15	512	870	1,384	975	905	1,074	1,116	1,733	1,618	1,211	753	531	0	0
20	1,215	1,363	1,244	1,629	1,562	1,939	1,521	2,095	1,985	2,143	1,186	1,021	0	78
Raw	2,022	2,498	3,488	3,272	2,594	3,180	3,411	4,447	4,373	4,110	2,330	1,664	0	78
Weighted	**6,818**	**8,049**	**10,431**	**10,601**	**8,440**	**10,404**	**10,794**	**13,705**	**13,532**	**13,332**	**7,461**	**5,480**	**0**	**312**
2030 Residential														
5	52	65	111	137	0	0	183	4	55	81	46	0	0	0
10	256	210	785	558	139	189	719	722	847	805	412	131	0	0
15	534	907	1,442	1,017	998	1,207	1,289	2,028	1,891	1,409	882	622	0	0
20	1,266	1,422	1,300	1,706	1,735	2,163	1,705	2,409	2,272	2,442	1,361	1,161	0	91
Raw	2,108	2,604	3,639	3,417	2,873	3,560	3,896	5,162	5,064	4,738	2,701	1,914	0	91
Weighted	**7,109**	**8,392**	**10,884**	**11,078**	**9,355**	**11,635**	**12,288**	**15,869**	**15,628**	**15,327**	**8,629**	**6,282**	**0**	**366**

Bike 15 Minute Ride Times from Holt & Euclid



15 Minute Bike Time from Holt and Euclid- Land Use



PUBLIC INPUT on OPTIONS

Public Input on Preliminary Preferences

By 2020, Holt Boulevard will evolve into a Street with highly visible changes in the public right-of-way that reflect the history and character of the corridor, while creating new imagery and spaces that support increased activity along the Boulevard.

Efforts will focus on leveraging public investments that will encourage private investments that, will in turn, help to redevelop the area while supporting current businesses and services.

Street improvements will recognize current and future demand for vehicular traffic while safely accommodating other roadway users including transit, walking and biking in order to create a complete street that supports mobility in a complete community.

The treatments of the Boulevard do not have to be consistent along its full length, rather solutions can be concentrated at important nodes, districts or gateways and should be sensitive to local context and issues.

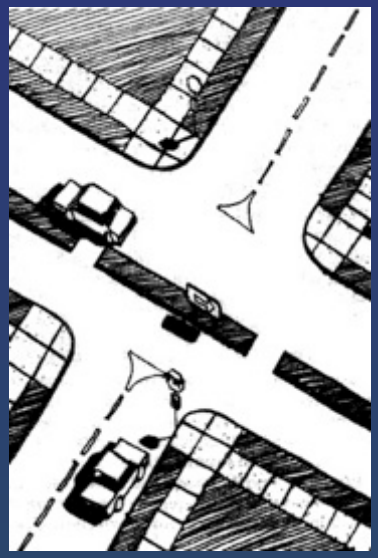
SUMMARY OF VOTING

? 1. Provide alternative intersection design such as roundabouts: 8 Liked, 9 Disliked
2. Provide various traffic calming measures: 15 Liked
3. Keep and enhance on-street parking: 17 Liked, 2 Disliked
? 4. Improve pedestrian crossings that are not at current signalized intersections: 13 Liked, 6 Disliked
2 5. Improve crossings at existing signalized intersections: 19 Liked
3 6. Add tree resources for shade, aesthetics & traffic calming: 18 Liked
7. Add bike facilities on the Boulevard: 13 Liked
1 8. Activate the street edge with commerce & places to sit: 21 Liked
X 9. Add more roadway capacity for vehicles: 2 Liked, 12 Disliked
10. Provide priority transit facilities such as shared bus lanes: 13 Liked, 1 Disliked
11. Where traffic is not as great, reduce the number of lanes: 11 Liked, 2 Disliked
12. Tighten up lanes and redistribute space to other users: 12 Liked, 1 Disliked
13. Add wider parkway strips for trees or medians with trees: 12 Liked, 4 Disliked

Add more roadway capacity for vehicles

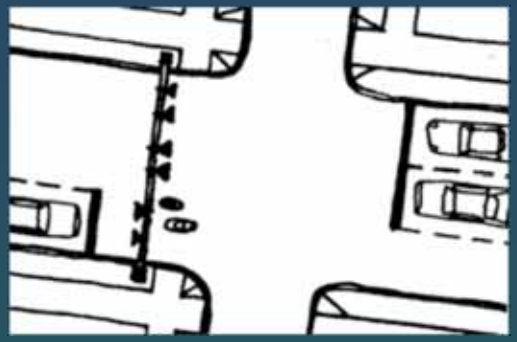
Provide various traffic calming measures to reduce speeds

Speed Monitors

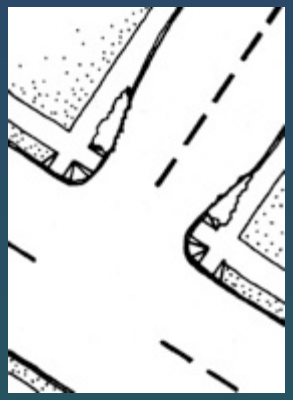


Medians Preventing Cross Movements

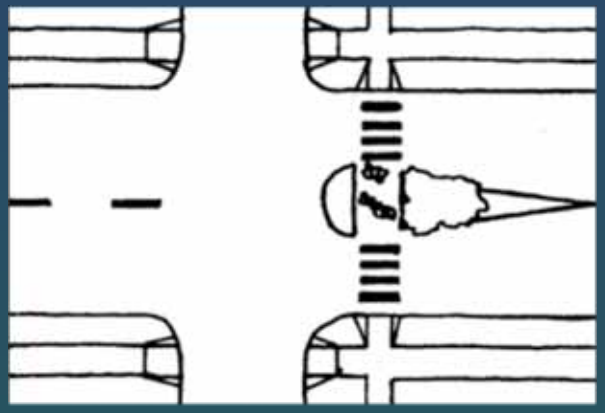
Landscaped Medians



Additional Traffic Signals



Reduced Radius Turns or Bulb-outs



Pedestrian Median Refuges

Keep and / or wrap around the ends of on-street parking

Improve crossings that are not at signalized intersections

Improve crossings at existing signalized intersections

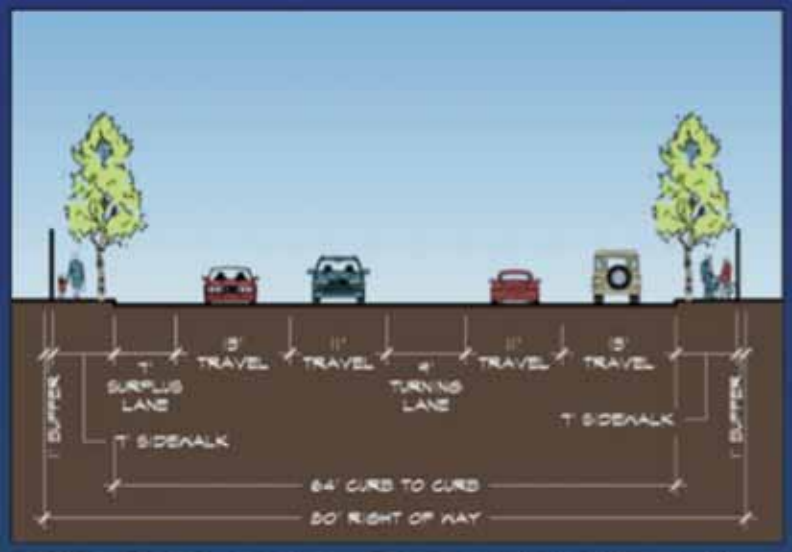
Add tree resources for shade, aesthetics & traffic calming

Add bike facilities on the Boulevard

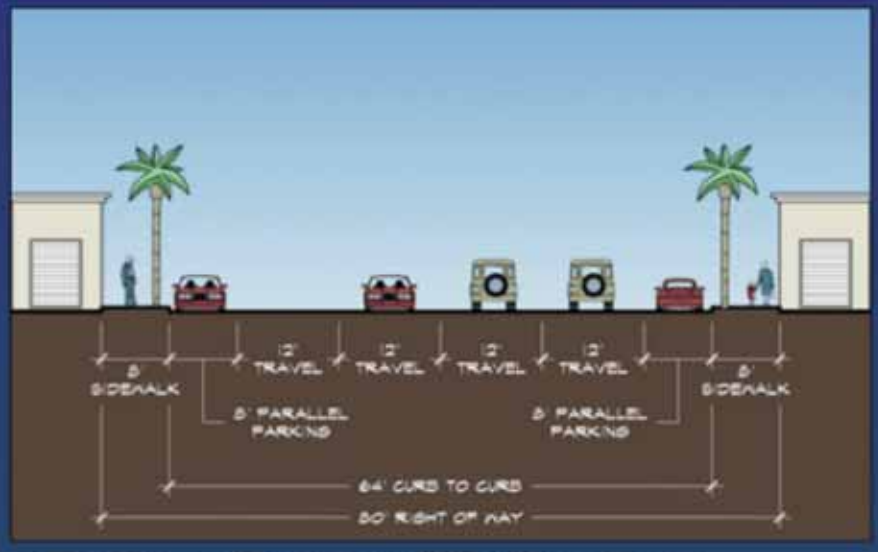
Activate the street edge with commerce & places to sit

Provide priority transit facilities such as shared bus lanes

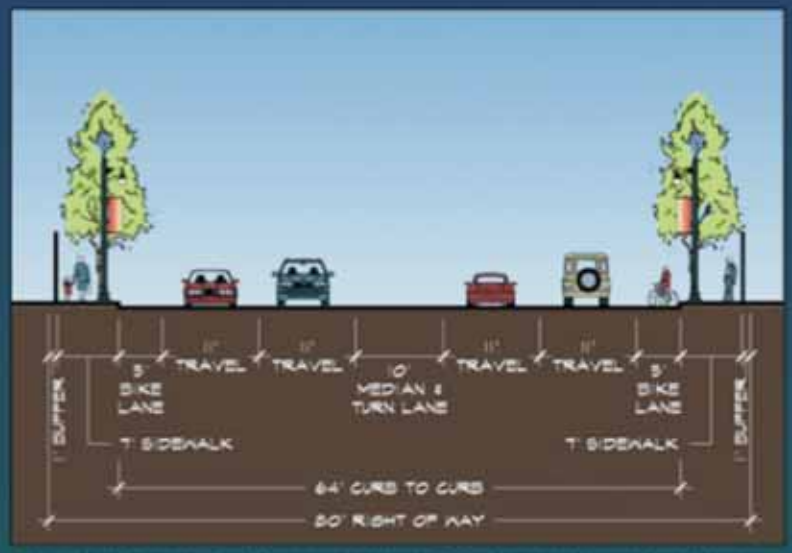
Where traffic is not as great, reduce the number of lanes



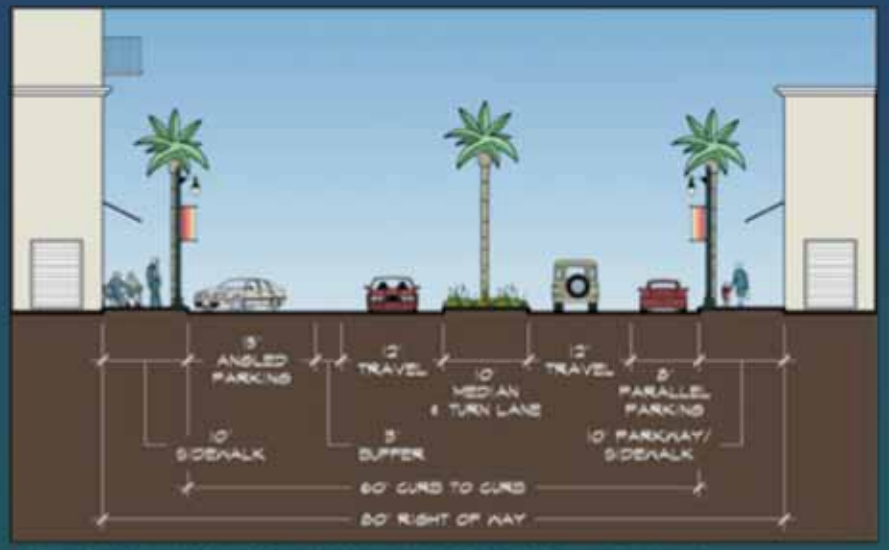
S.1: 8th Street Existing Cross-section between Trolley Station and Hoover Street (facing west)



S.2: 8th Street Existing Street Cross-section between N.C. Blvd. & D Avenue (facing west)



S.1: 8th Street Proposed Street Cross-section between Trolley Station and Hoover Street (facing west)



S.2: 8th Street Proposed Street Cross-section between N.C. Blvd. & D Avenue (facing west)

Add wider parkway strips for trees or medians with trees

RANGE OF CONCEPTS BEING CONSIDERED

INITIAL CONCEPTS CONSIDERED

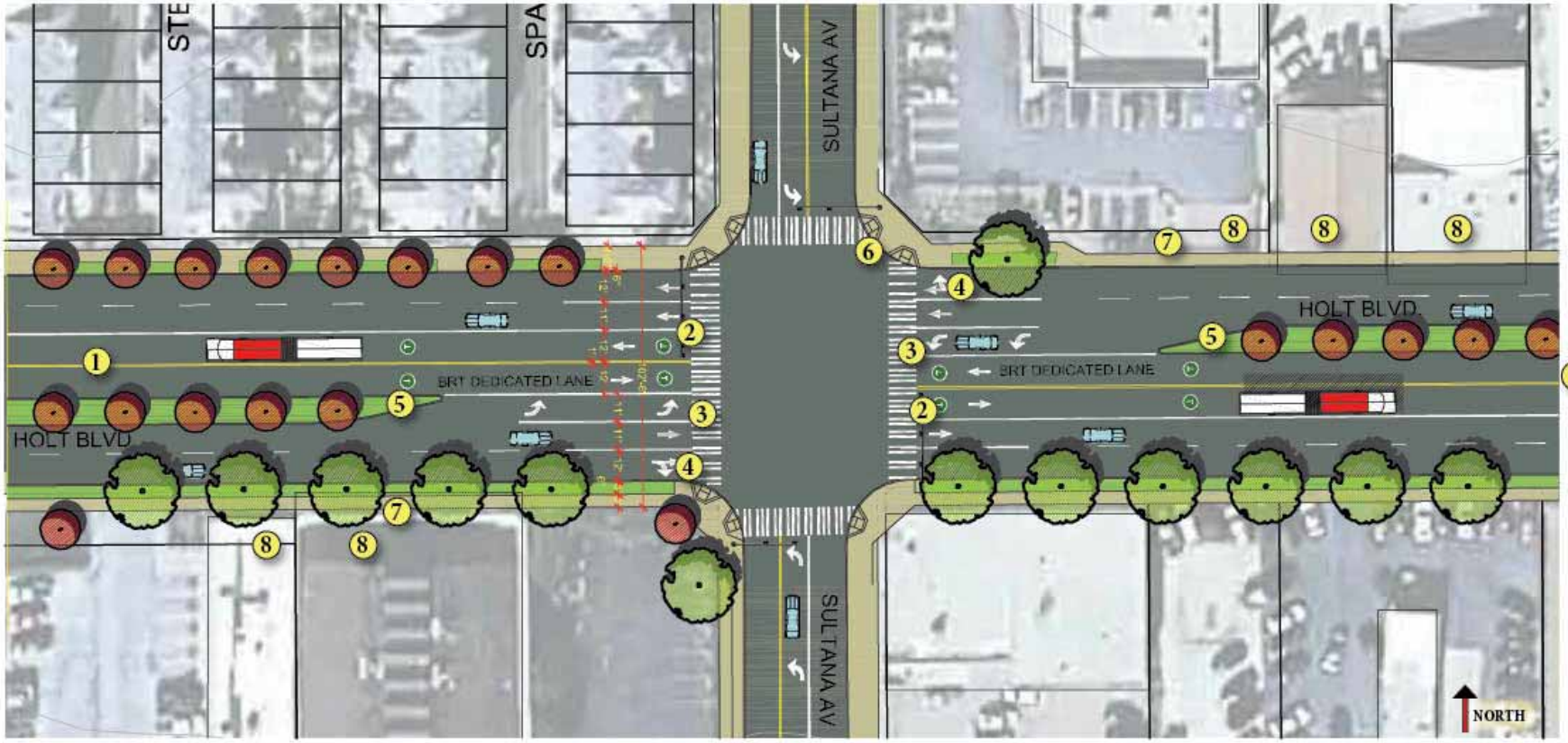
1a: Transit Focus — Dedicated Median Running BRT

1b: Transit Focus — Side Running BRT Lane

1c: Transit Focus — BRT with far-side platforms

2: Vehicular Focus — Roadway Expansion- 6 Lanes

3: Multi-modal Focus — Bike, Ped., Transit, & Vehicle Balance

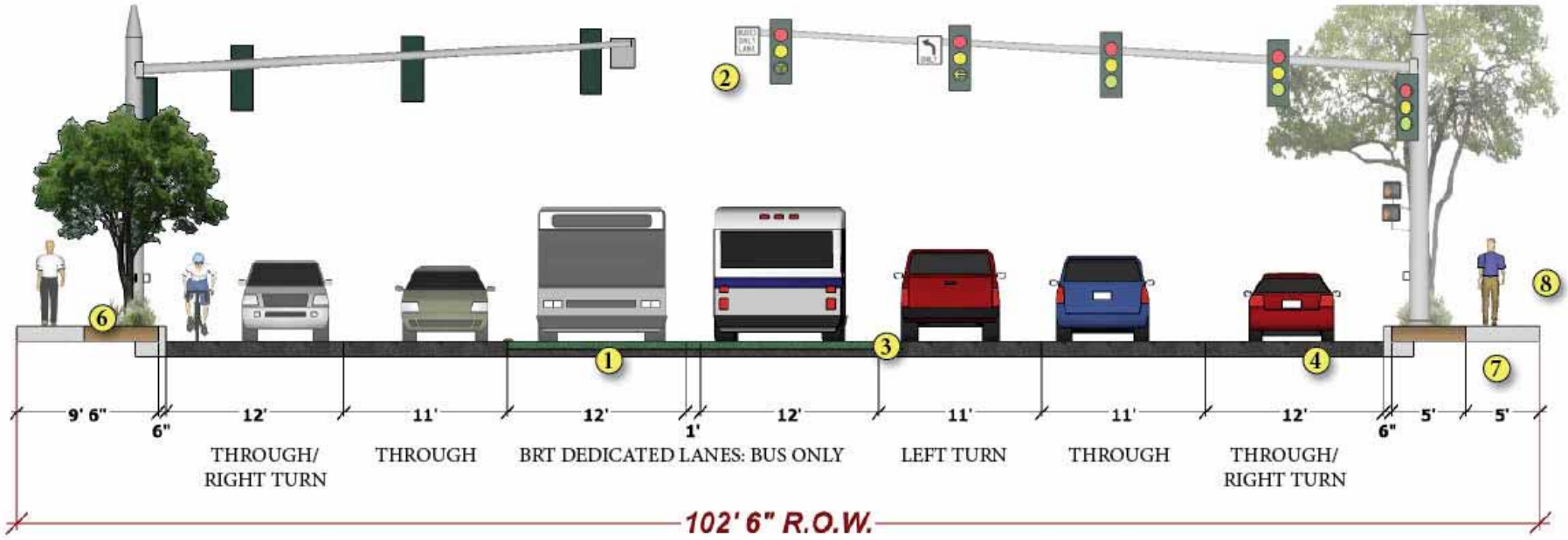


1. Dedicated BRT Lane running in the median
2. Traffic signal que jumper for BRT
3. Special sensors and signal control for vehicular left turns
4. Combined right and through lane
5. Landscaped median for traffic control
6. Improved crosswalks and count-down timers
7. ROW acquisition required / no on-street parking
8. Building demolition required
9. BRT median platforms (not shown on map) with left sided boarding

1a: Transit Focus

Dedicated Median Running BRT

Holt Boulevard



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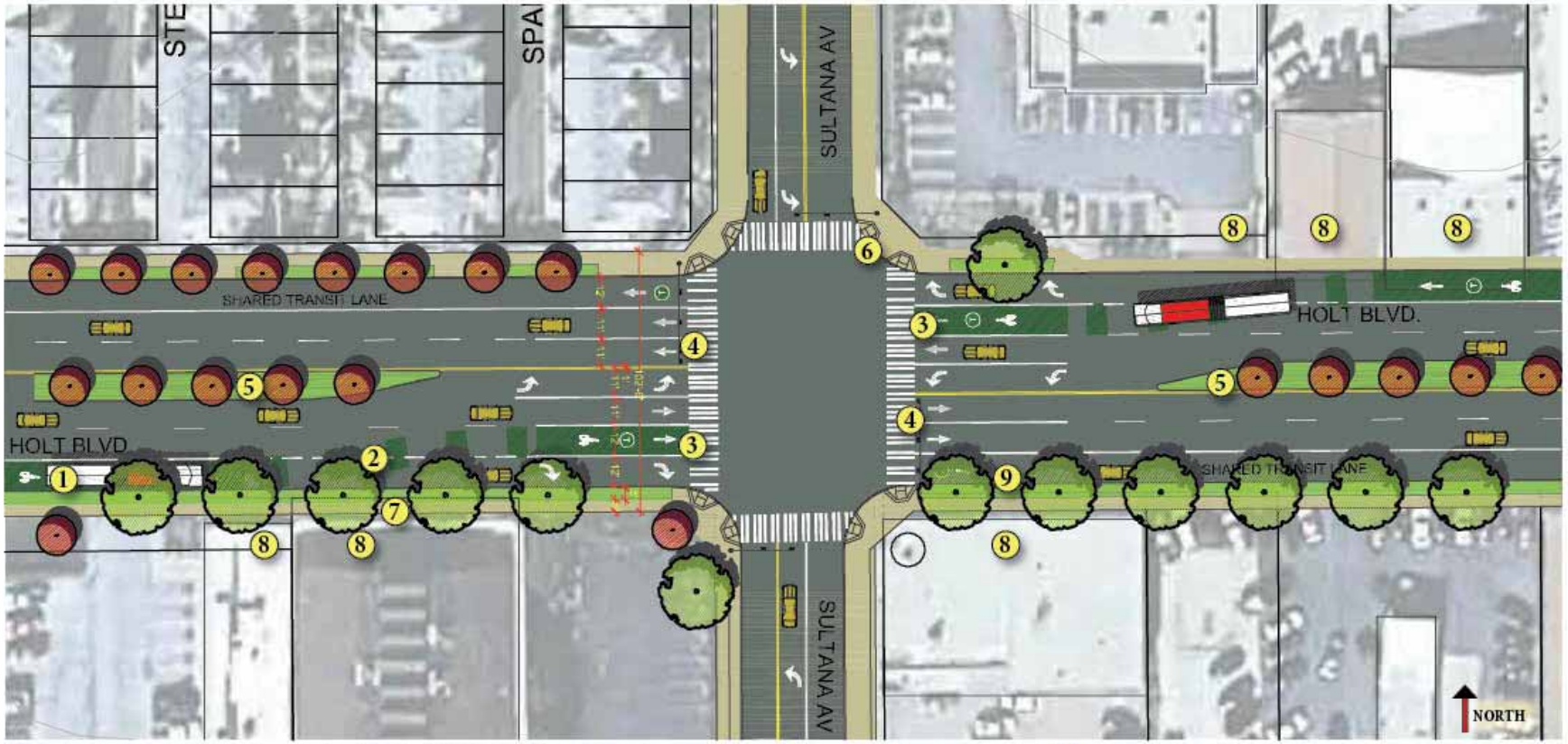
1a: Transit Focus

Dedicated Median Running BRT

Holt Boulevard

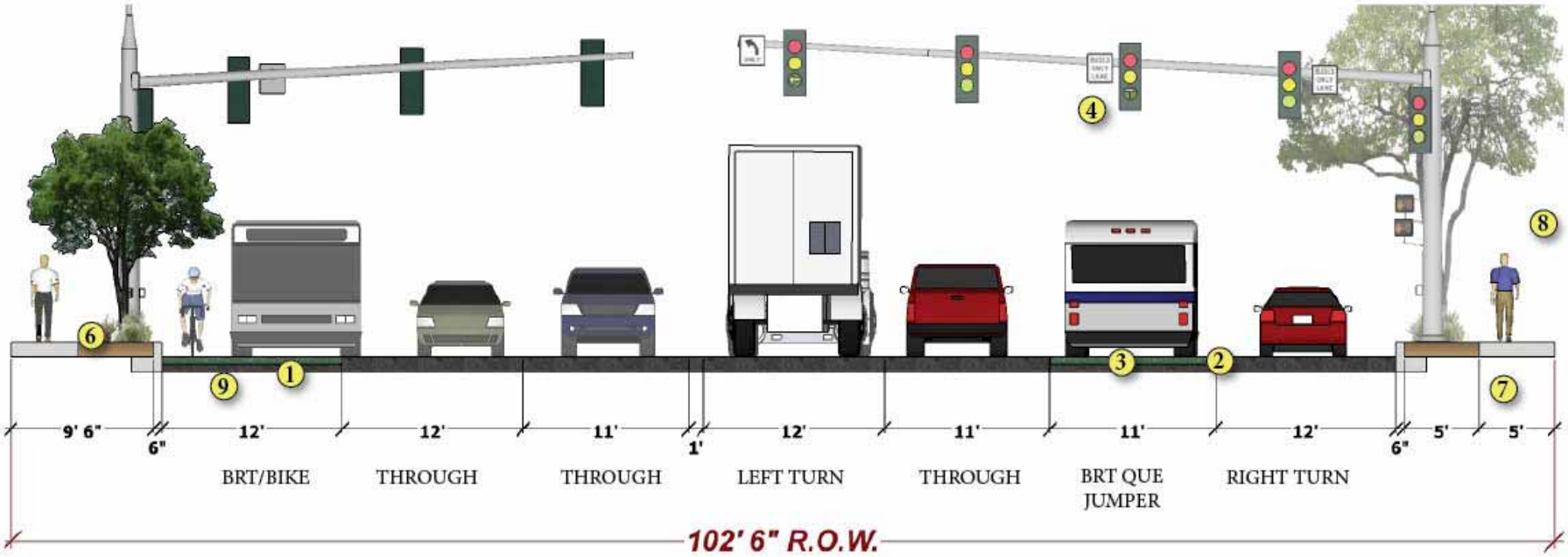


1. Dedicated BRT Lane running in the outer lane (shared with bikes)
2. Transition crossover lane allowing right turning vehicles
3. Holding location for BRT busses at que jumper
4. Traffic signal que jumper for BRT
5. Landscaped median for traffic control
6. Improved crosswalks and count-down timers
7. ROW acquisition required
8. Building demolition required
9. BRT median platforms with BRT stopping in the dedicated lane

1b: Transit Focus

Side Running BRT Lane

Holt Boulevard

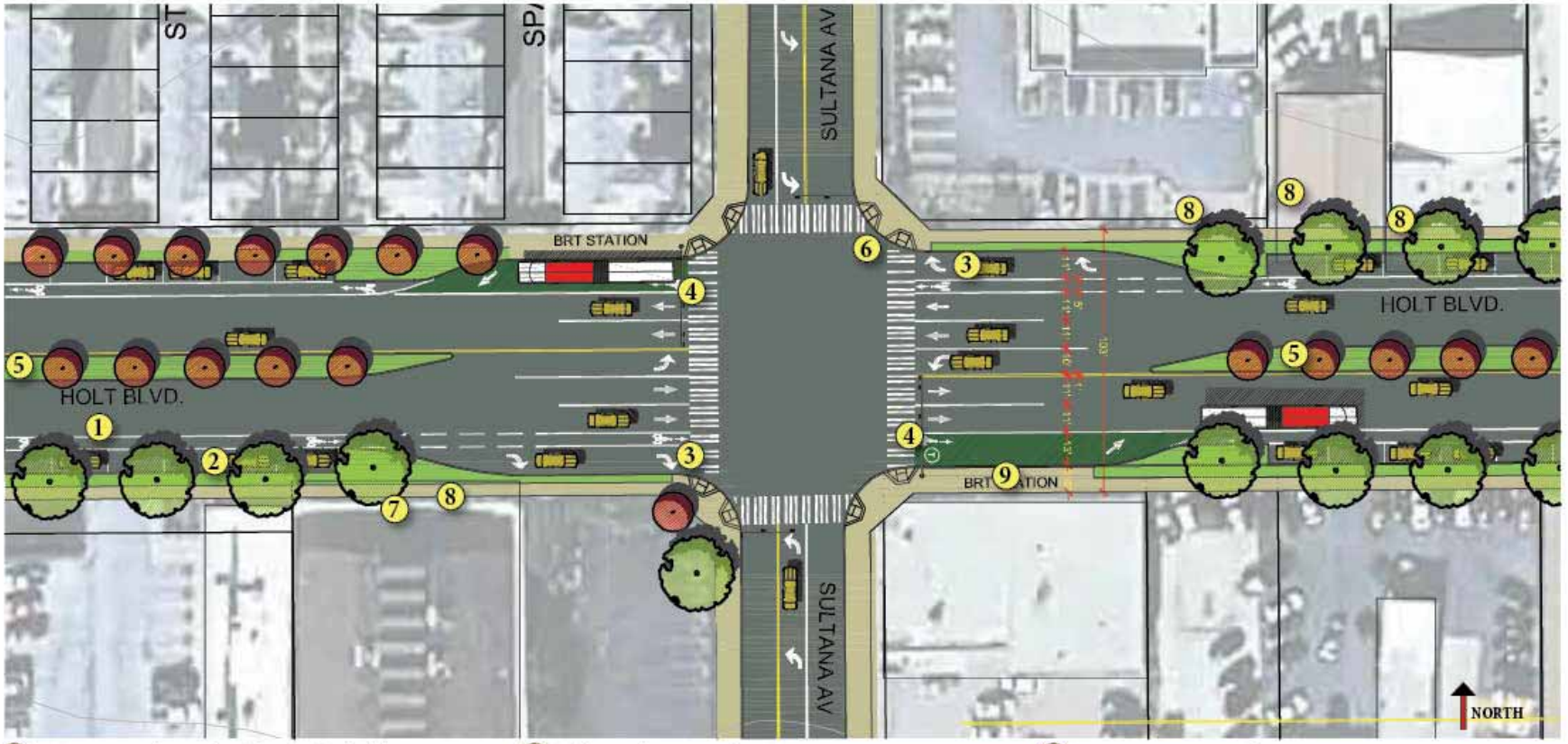


BRT / BIKE | THROUGH | THROUGH | LEFT TURN | THROUGH | BRT QUE JUMPER | RIGHT TURN

1. Dedicated BRT Lane running in the outer lane (shared with bikes)
2. Transition crossover lane allowing right turning vehicles
3. Holding location for BRT busses at que jumper
4. Traffic signal que jumper for BRT
5. Landscaped median for traffic control (not shown)
6. Improved crosswalks and count-down timers
7. ROW acquisition required
8. Building demolition required
9. BRT median platforms with BRT stopping in the dedicated lane

1b: Transit Focus

Side Running BRT Lane

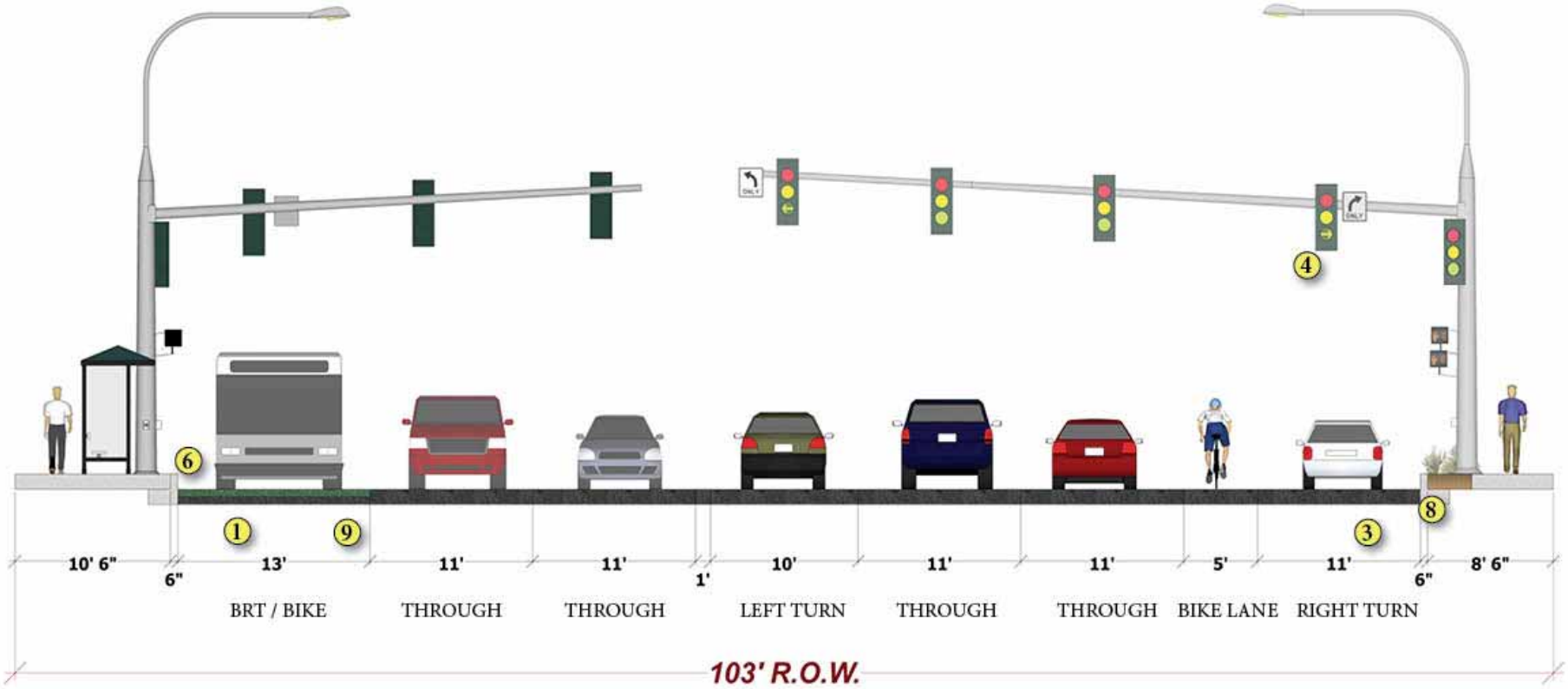


1. BRT running in the outer lane (shared with vehicles)
2. On-street parking with protected bulb-out ends
3. Holding location for BRT busses at que jumper (will block right turning vehicles until special signal is release transit)
4. Traffic signal que jumper for BRT
5. Landscaped median for traffic control
6. Improved crosswalks and count-down timers
7. ROW acquisition required
8. On-street parking prohibited, walkway moved out or bldg. demolished
9. BRT Station areas with painted lane area markings

1C: Transit Focus

BRT with far-side platforms

Holt Boulevard

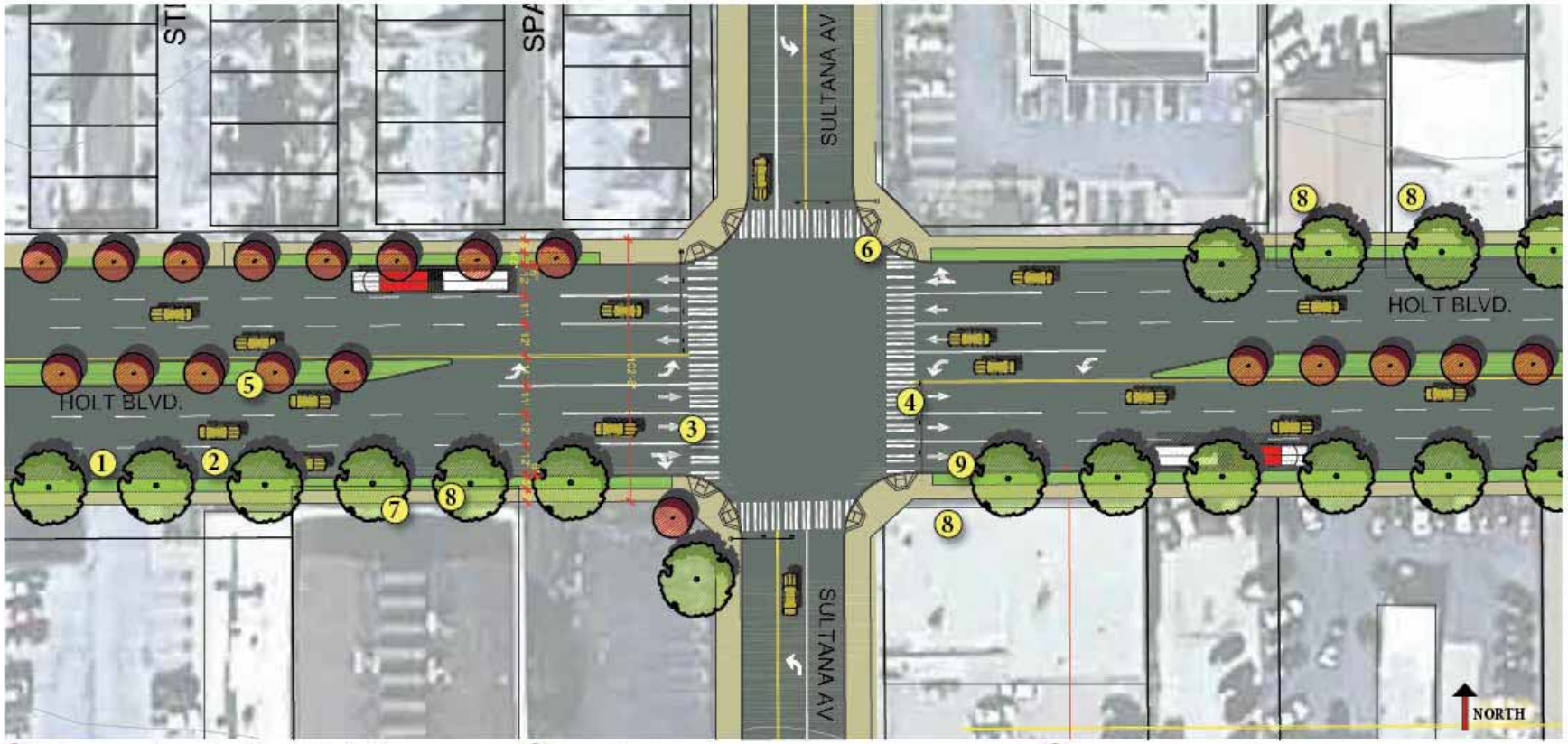


1. BRT running in the outer lane (shared with vehicles)
2. On-street parking with protected bulb-out ends (not shown)
3. Holding location for BRT busses at que jumper (will block right turning vehicles until special signal is release transit)
4. Traffic signal que jumper for BRT
5. Landscaped median for traffic control (not shown)
6. Improved crosswalks and count-down timers
7. ROW acquisition required
8. On-street parking prohibited, walkway moved out or bldg. demolished
9. BRT Station areas with painted lane area markings

1C: Transit Focus

BRT with far-side platforms

Holt Boulevard

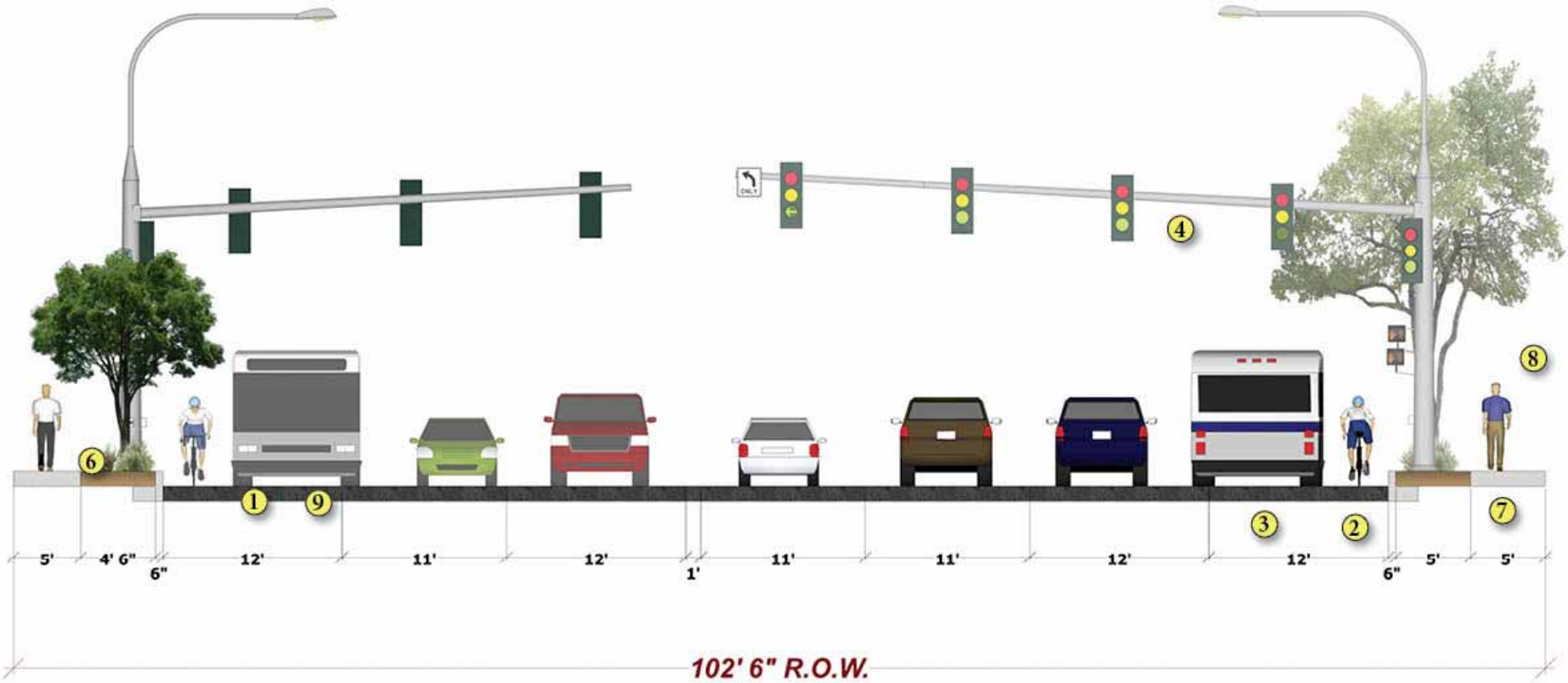


1. BRT running in the outer lane (shared with vehicles)
2. No-on street parking
3. No special holding lane for BRT
4. No special BRT que jumper
5. Landscaped median for traffic control
6. Improved crosswalks and count-down timers
7. ROW acquisition required
8. Building demolition required
9. BRT Station stop in outer lane for platform

2: Vehicular Focus

Roadway Expansion- 6 Lanes

Holt Boulevard



102' 6" R.O.W.

1. BRT running in the outer lane (shared with vehicles)
2. No-on street parking
3. No special holding lane for BRT
4. No special BRT que jumper
5. Landscaped median for traffic control (not shown)
6. Improved cross walks and count-down timers
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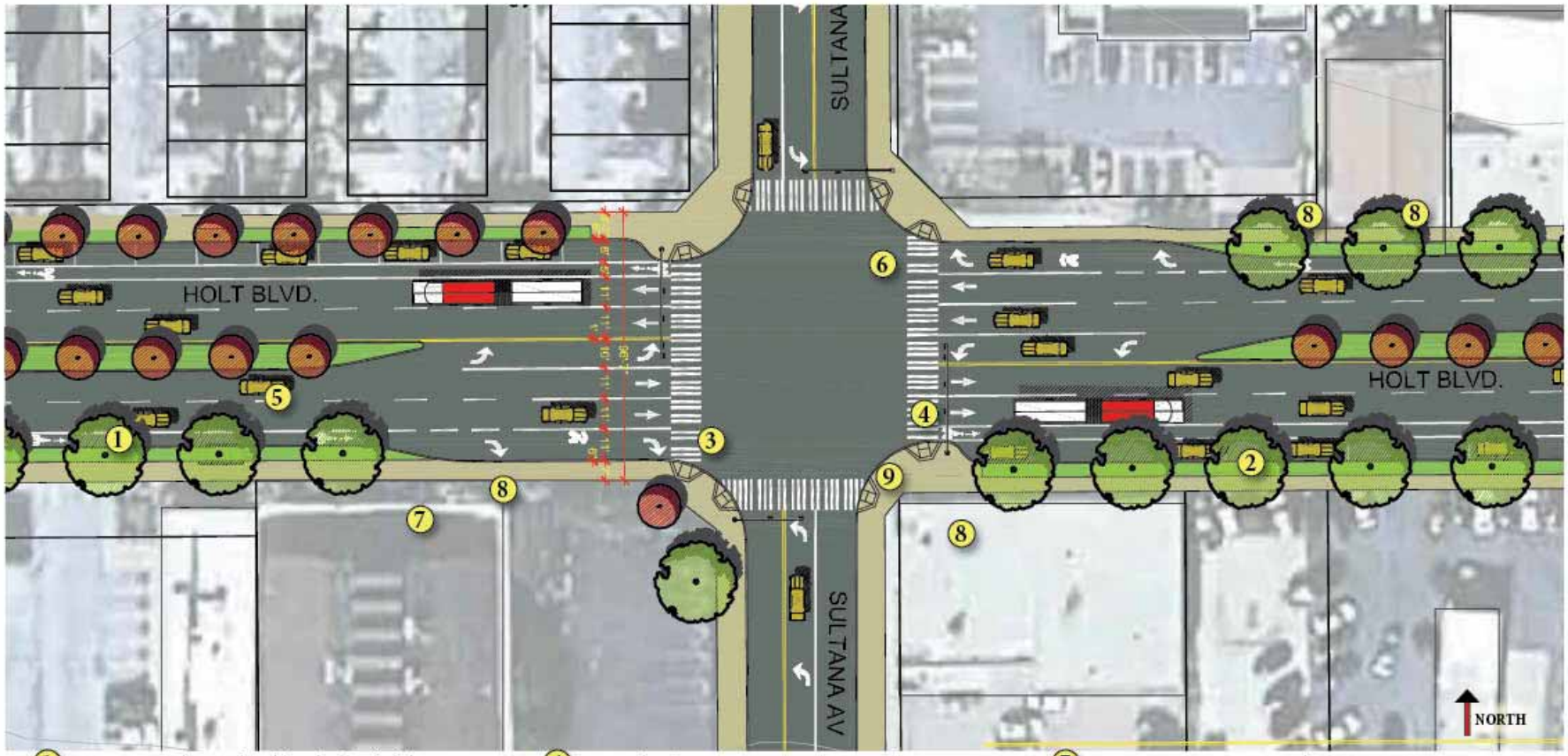
9. BRT Station stop in outer lane for platform

2: Vehicular Focus

Roadway Expansion- 6 Lanes

Holt Boulevard

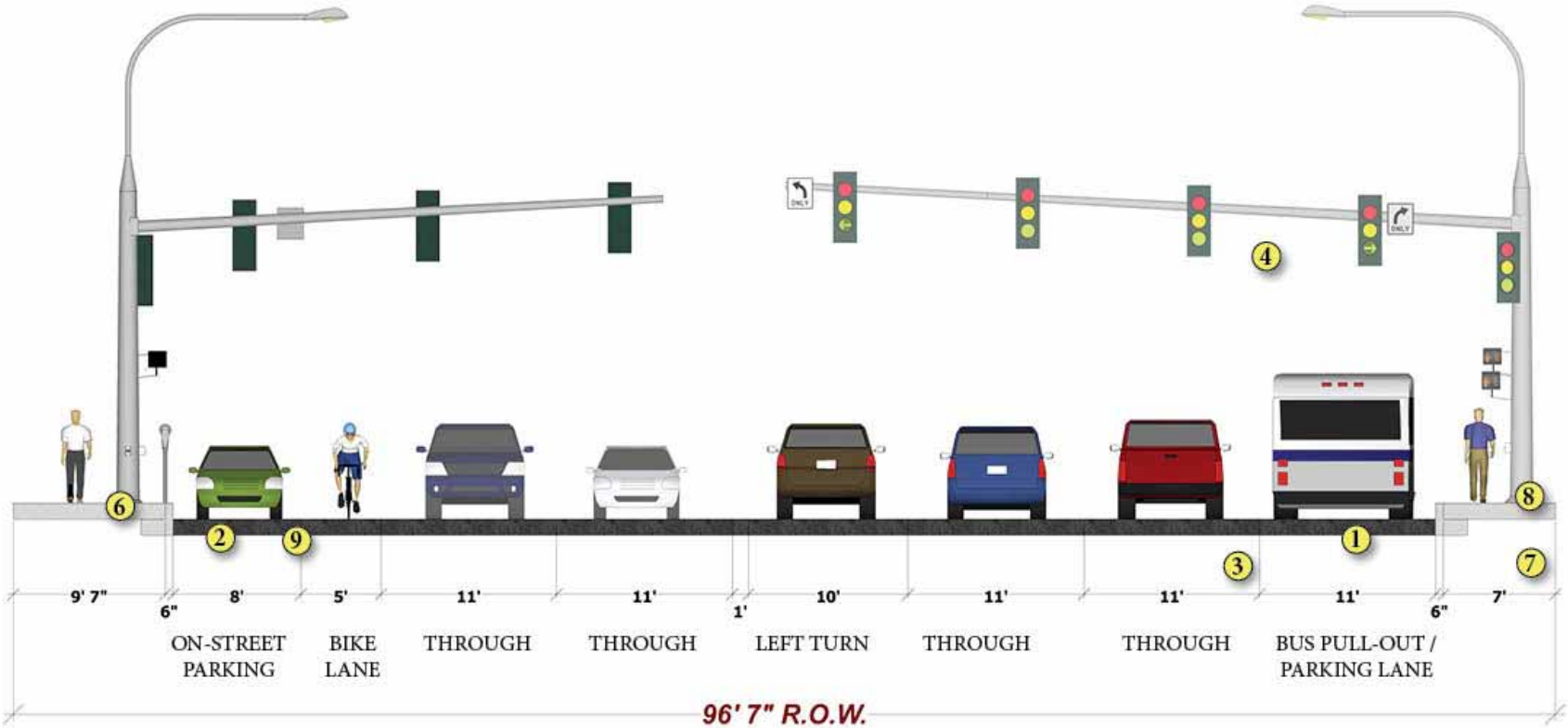


1. BRT running in the outer lane (shared with vehicles)
2. On-street parking
3. No special holding lane for BRT
4. No special BRT que jumper
5. Landscaped median for traffic control
6. Improved crosswalks and count-down timers
7. Minor ROW acquisition required
8. Drop parkway strip at corners to reduce ROW acquisition
9. Wrap around bulb out with parking or with BRT station where appropriate

3: Multi-modal Focus

Bike, Ped., Transit, & Vehicle Balance

Holt Boulevard



1. BRT running in the outer lane (shared with vehicles)
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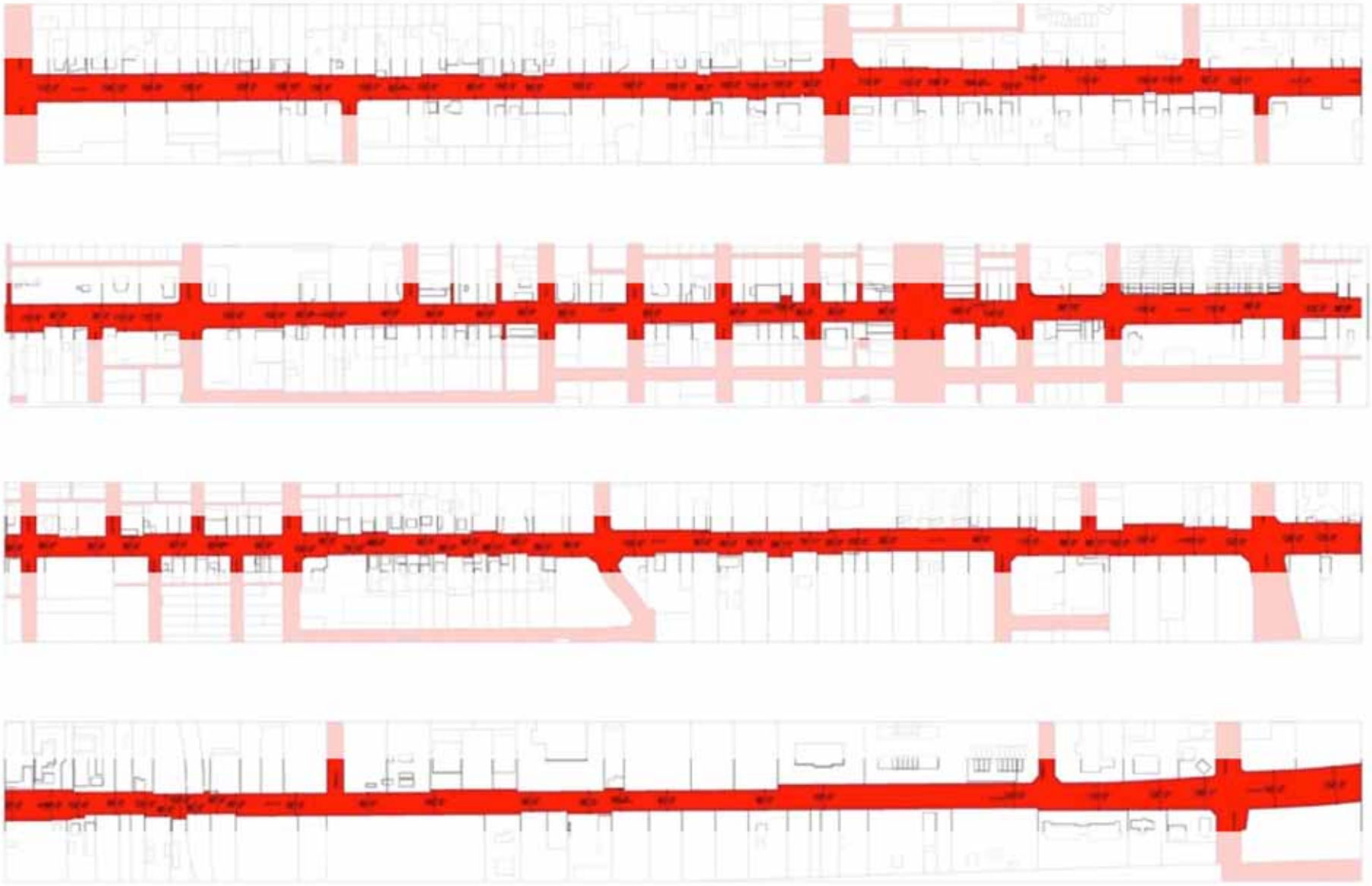
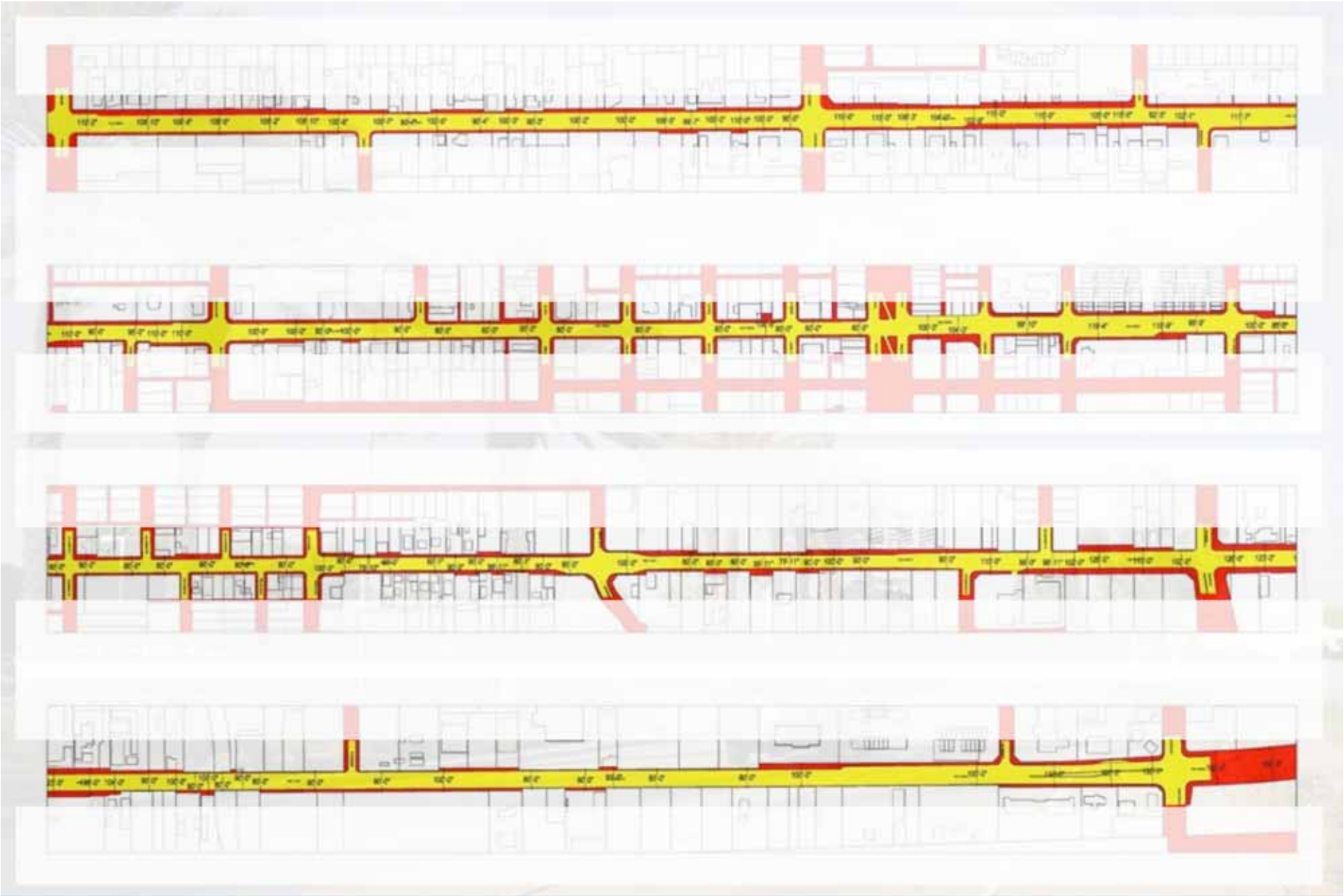
3: Multi-modal Focus

Bike, Ped., Transit, & Vehicle Balance

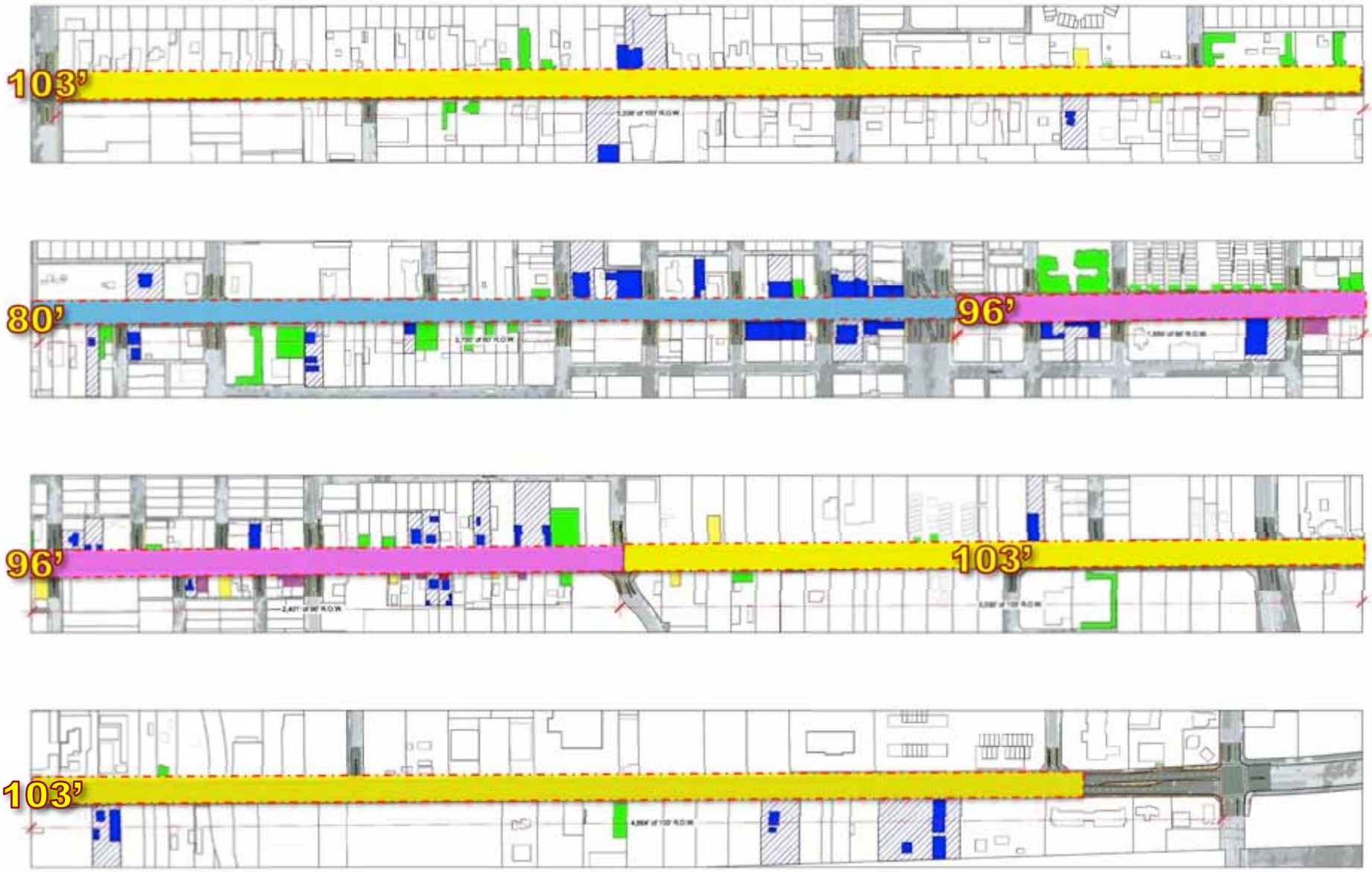
Holt Boulevard



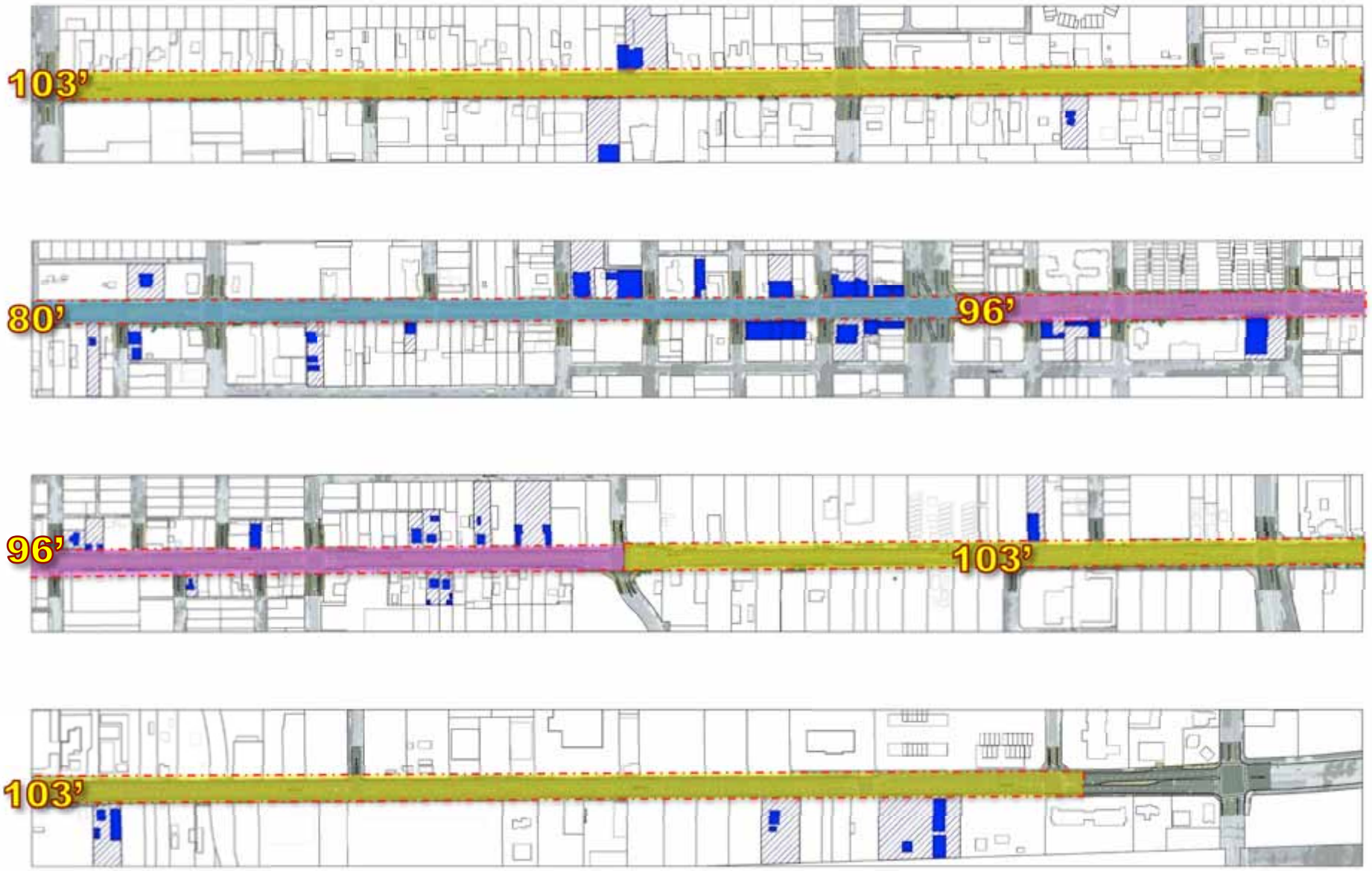
EXISTING ROW (from 74’ to 150’ with everything in between)



CURB-TO-CURB (10’-15’ reserved for walkways / parkways)

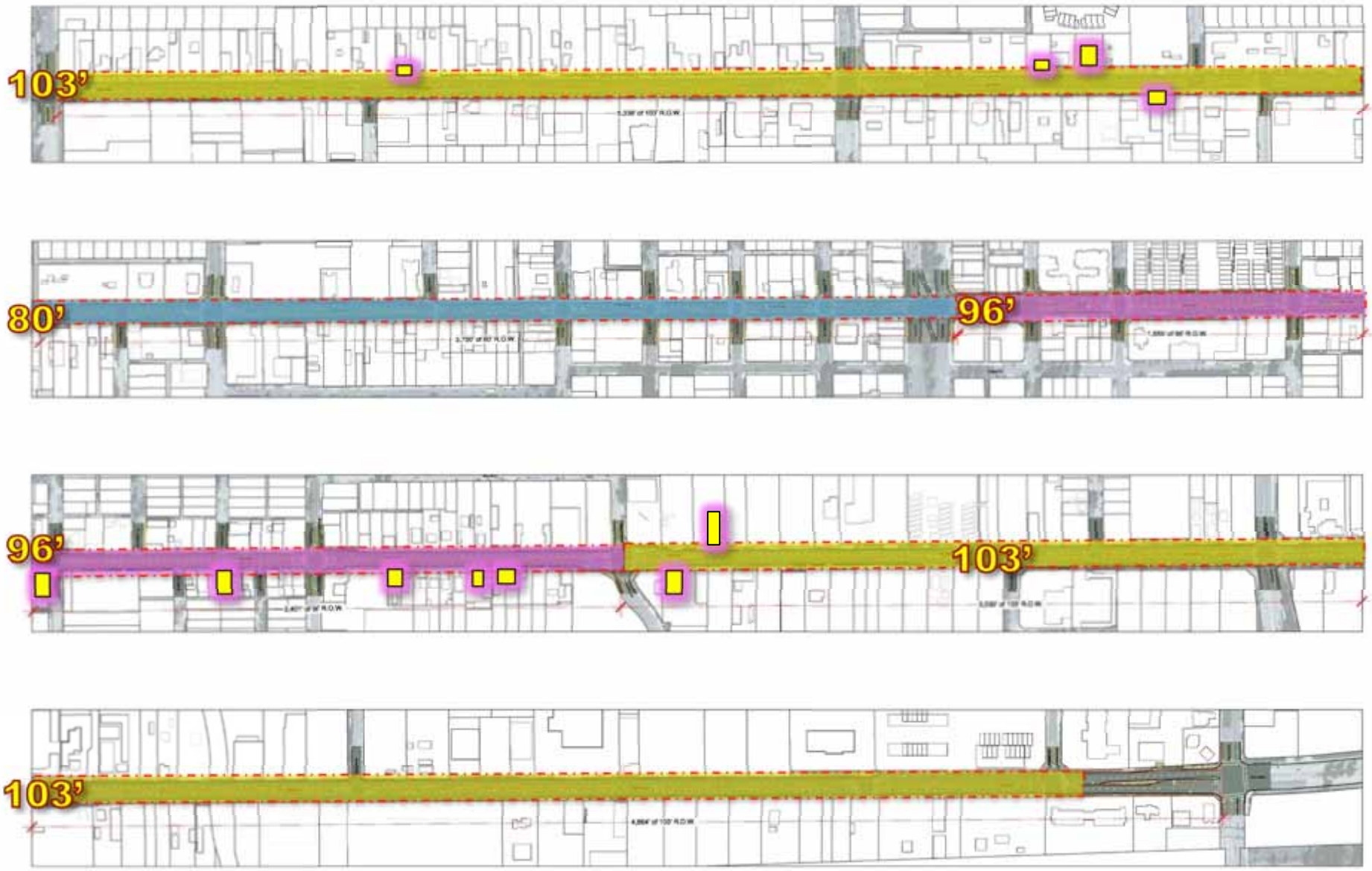


VARIABLE ROW EXPANSIONS TO LIMIT BLDG. DEMOS

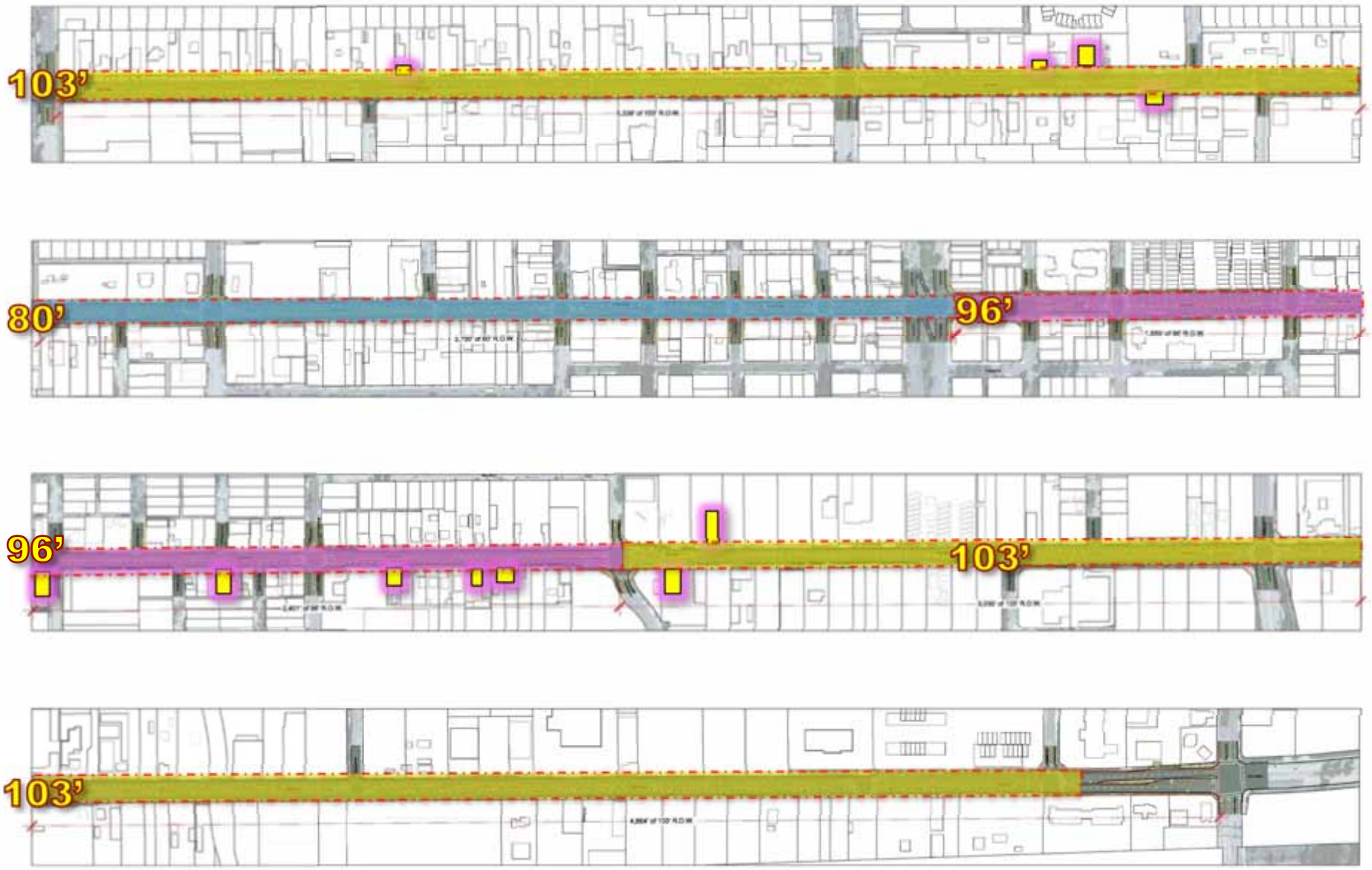


HISTORIC PROPERTIES at risk if ROW expanded as shown above

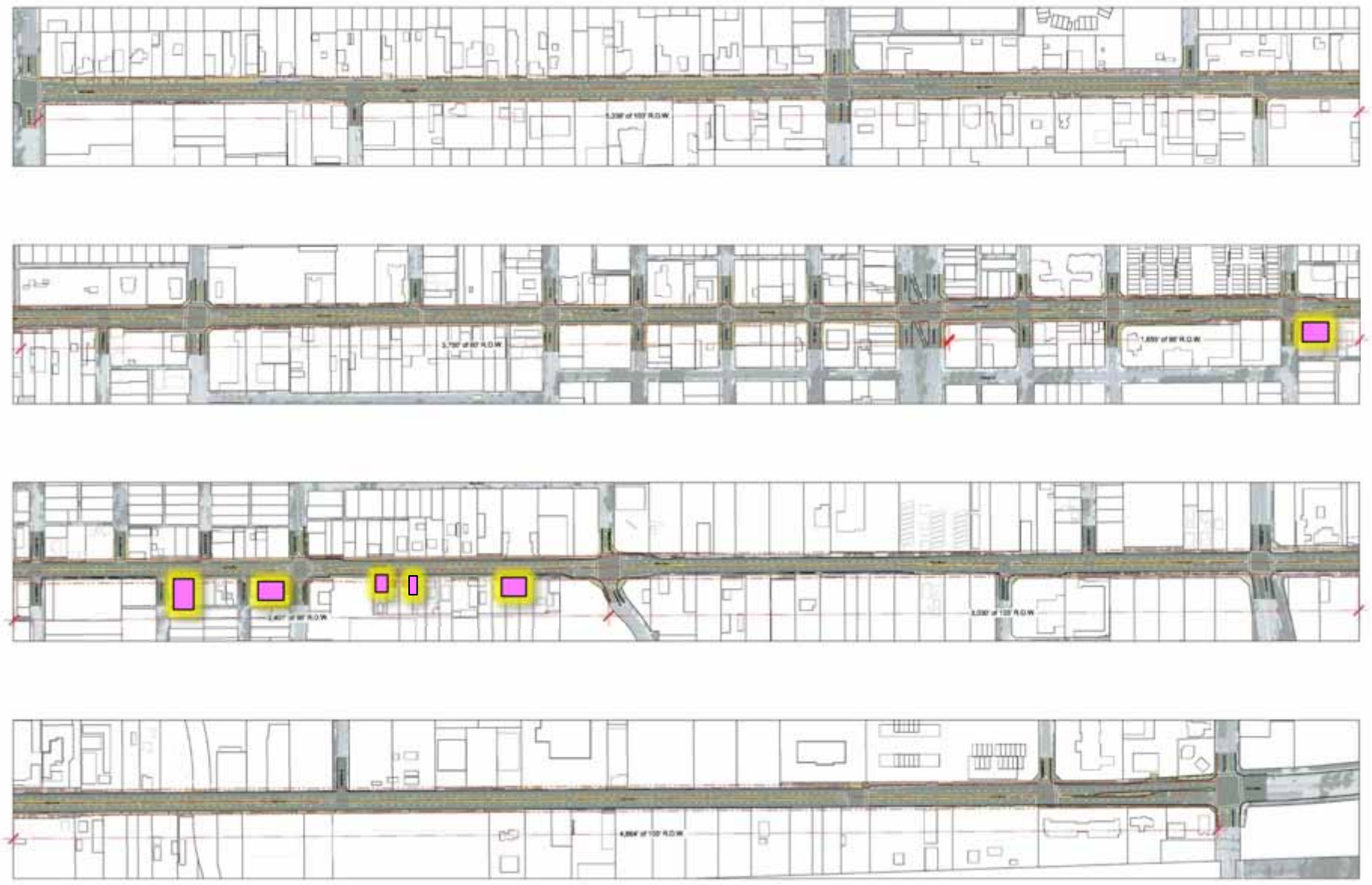
HISTORIC BUILDINGS potentially at risk with ROW expanded to 96’



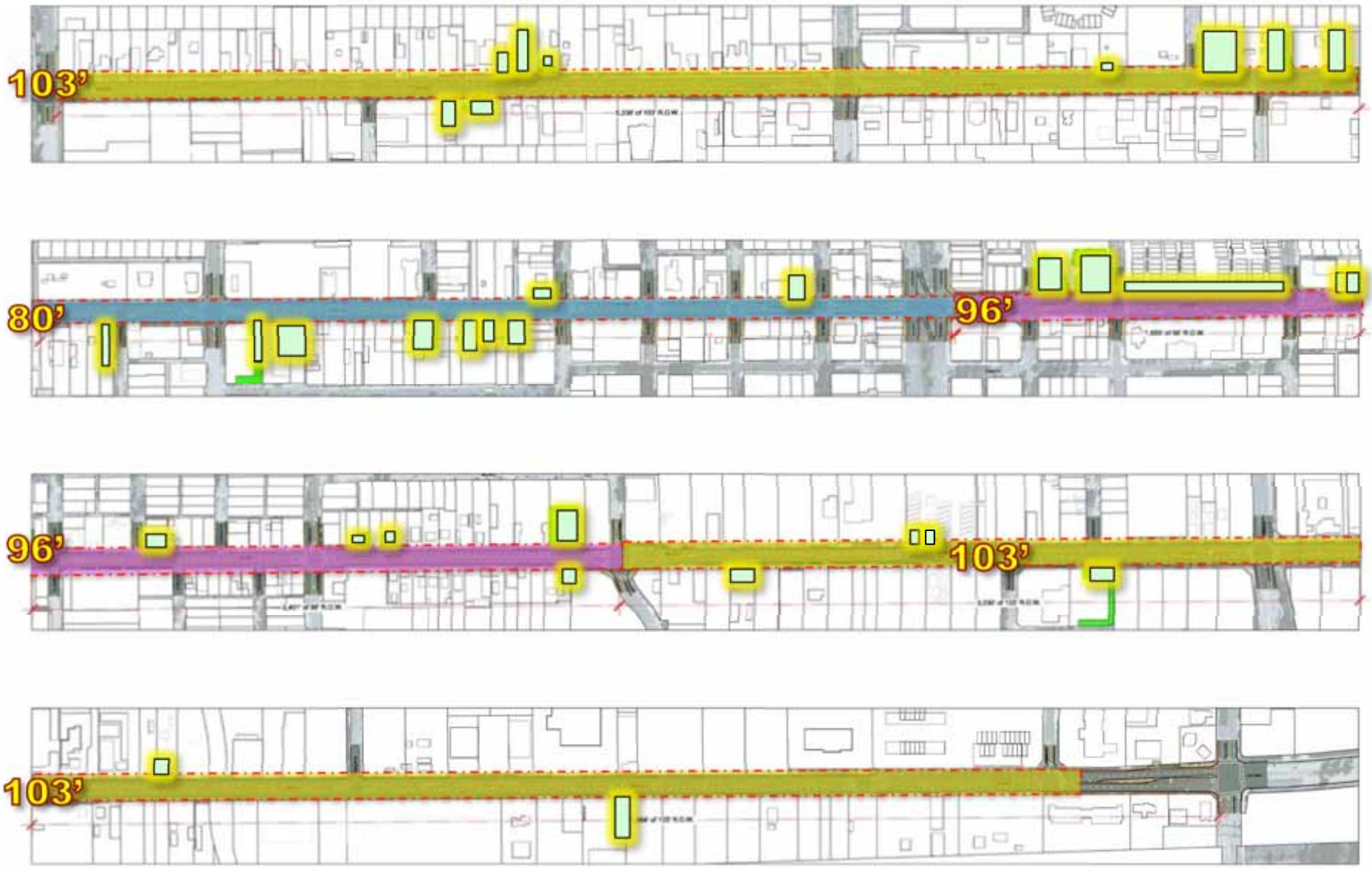
NON-HISTORIC W/O CHARACTER at risk if ROW expanded as shown



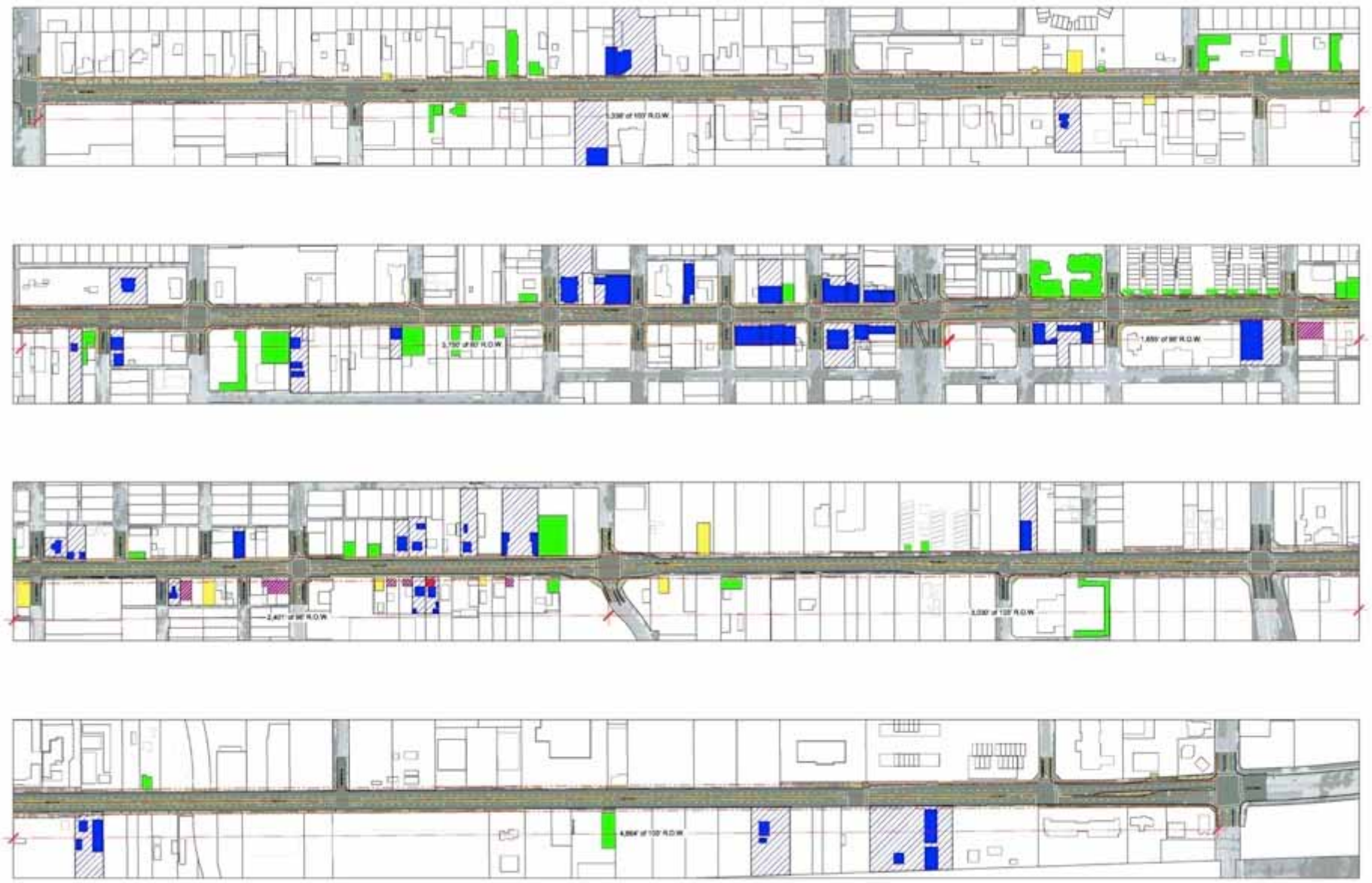
NON-HISTORIC W/O CHARACTER at risk if ROW expanded as shown



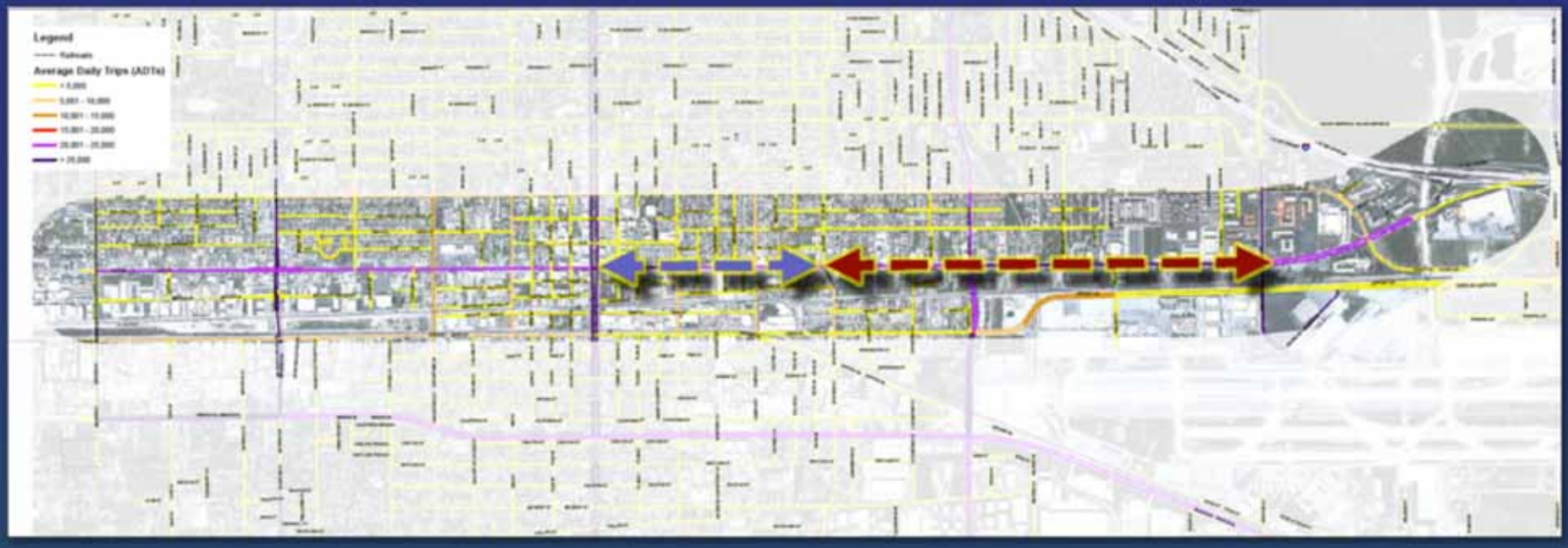
NON-HISTORIC WITH CHARACTER at risk with ROW expanded to 96’

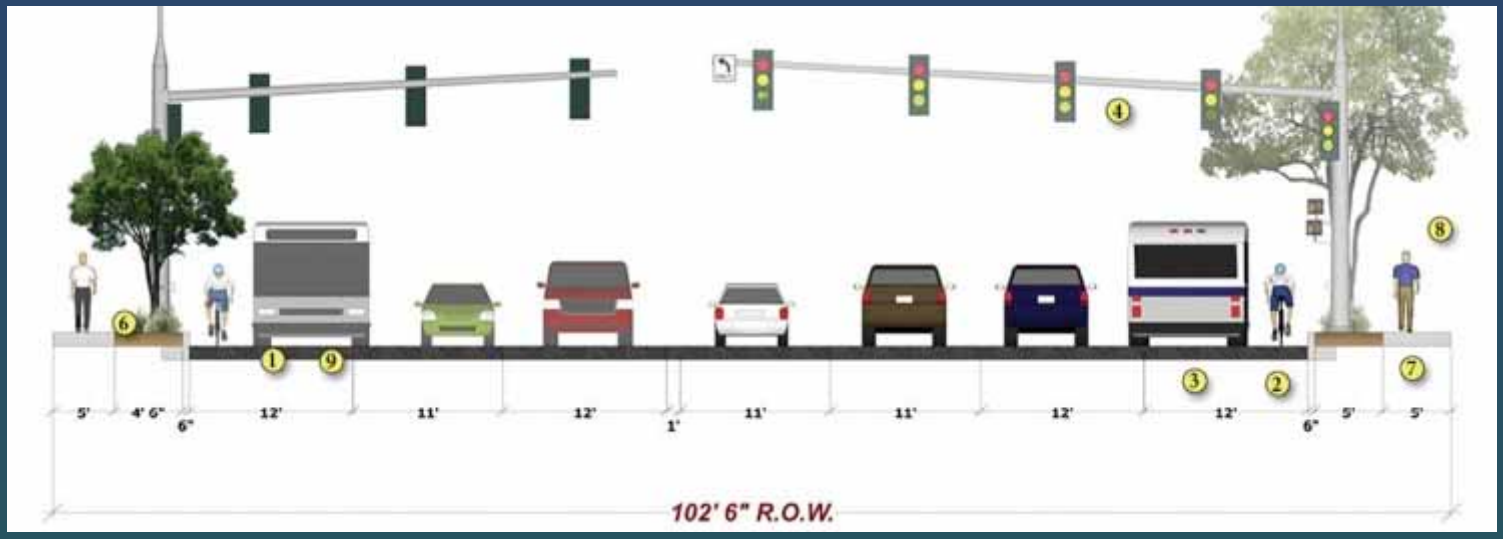


OTHER NON-HISTORIC BLDGS. at risk if ROW expanded > as shown



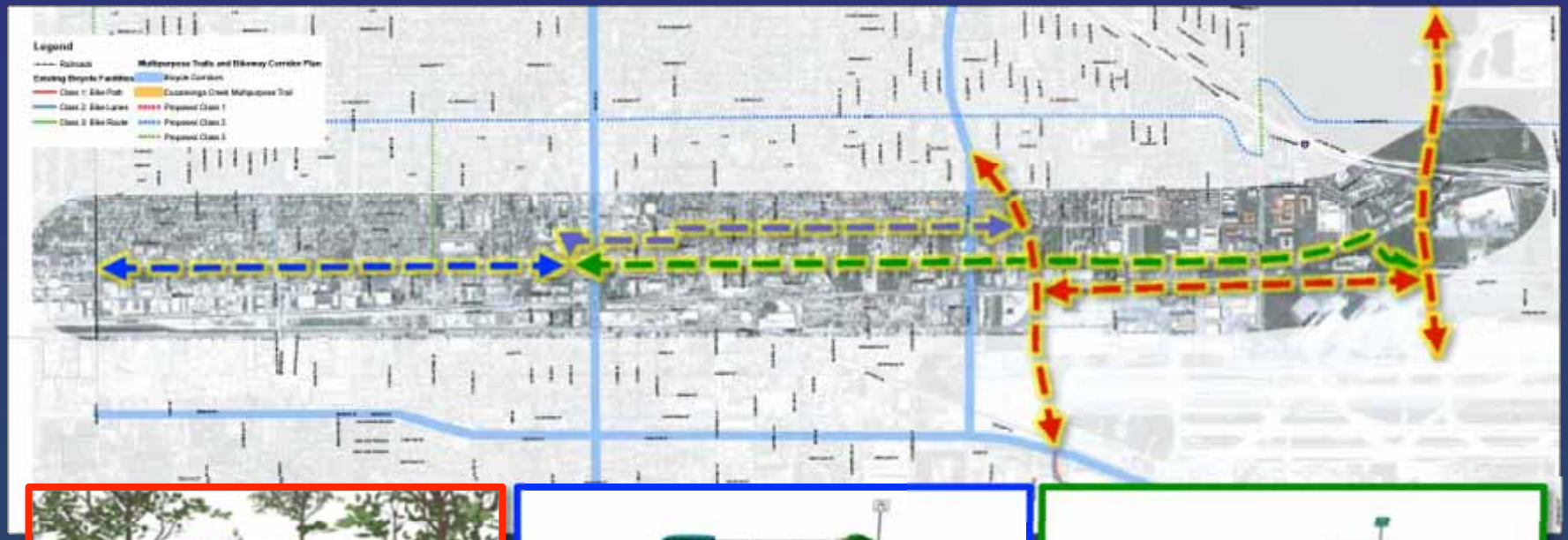
COMPOSITE OF ALL BUILDINGS POTENTIALLY AFFECTED





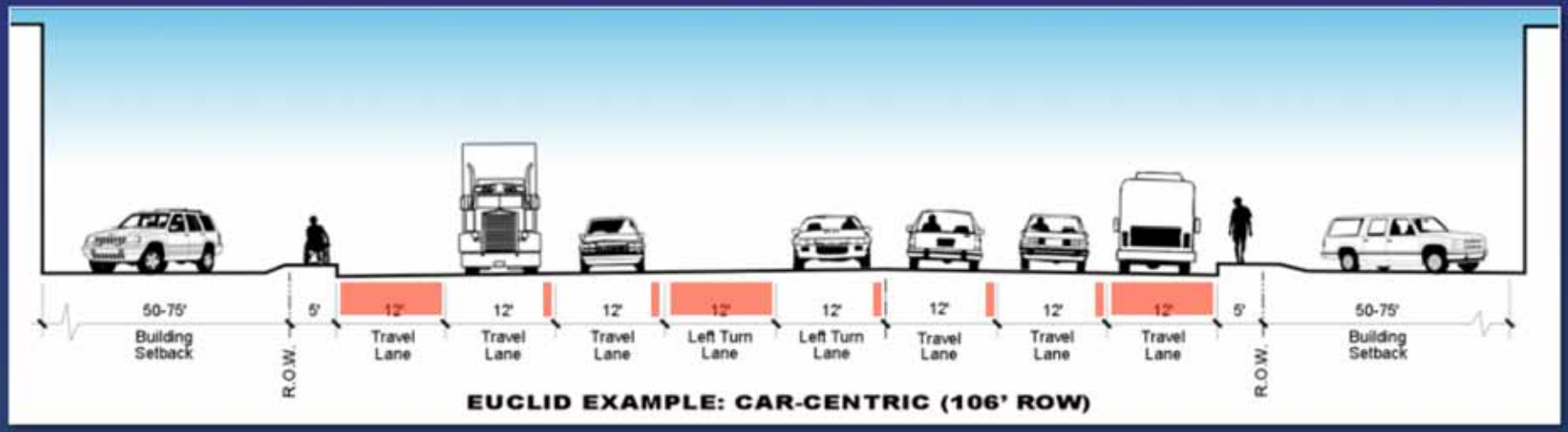
6 Lane Rd. (will not be too difficult) Will be difficult

Possible BRT **and Pedestrian District Nodes**

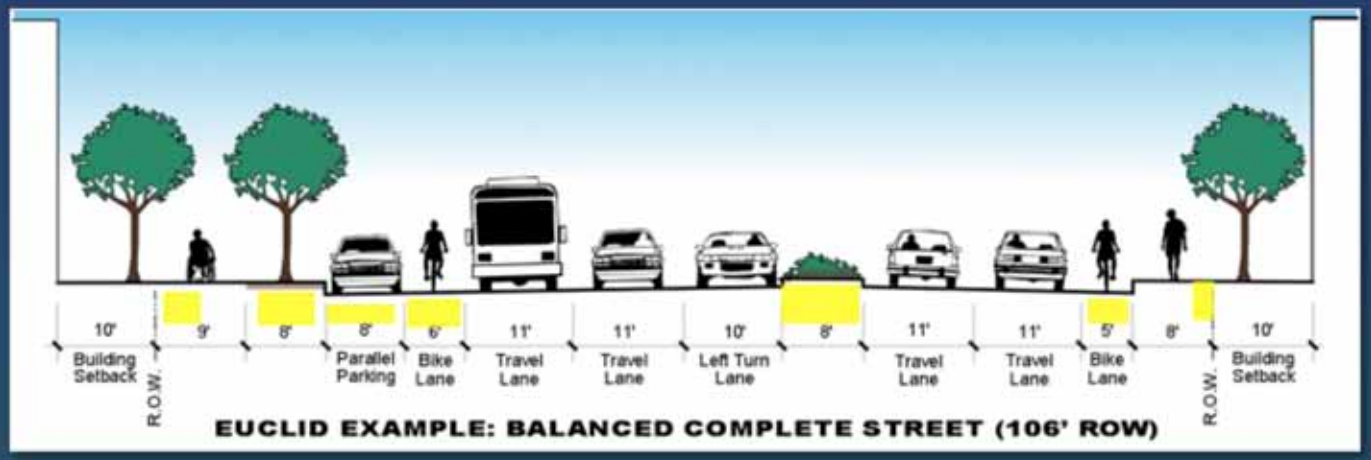


Possible Bike Facilities

WHAT CAN STREETS DO BETTER?



EUCLID EXAMPLE: CAR-CENTRIC (106' ROW)



EUCLID EXAMPLE: BALANCED COMPLETE STREET (106' ROW)

STREET RECLAMATION

Existing Condition

Proposed Condition- Did it need to go from 50’ to 130’?

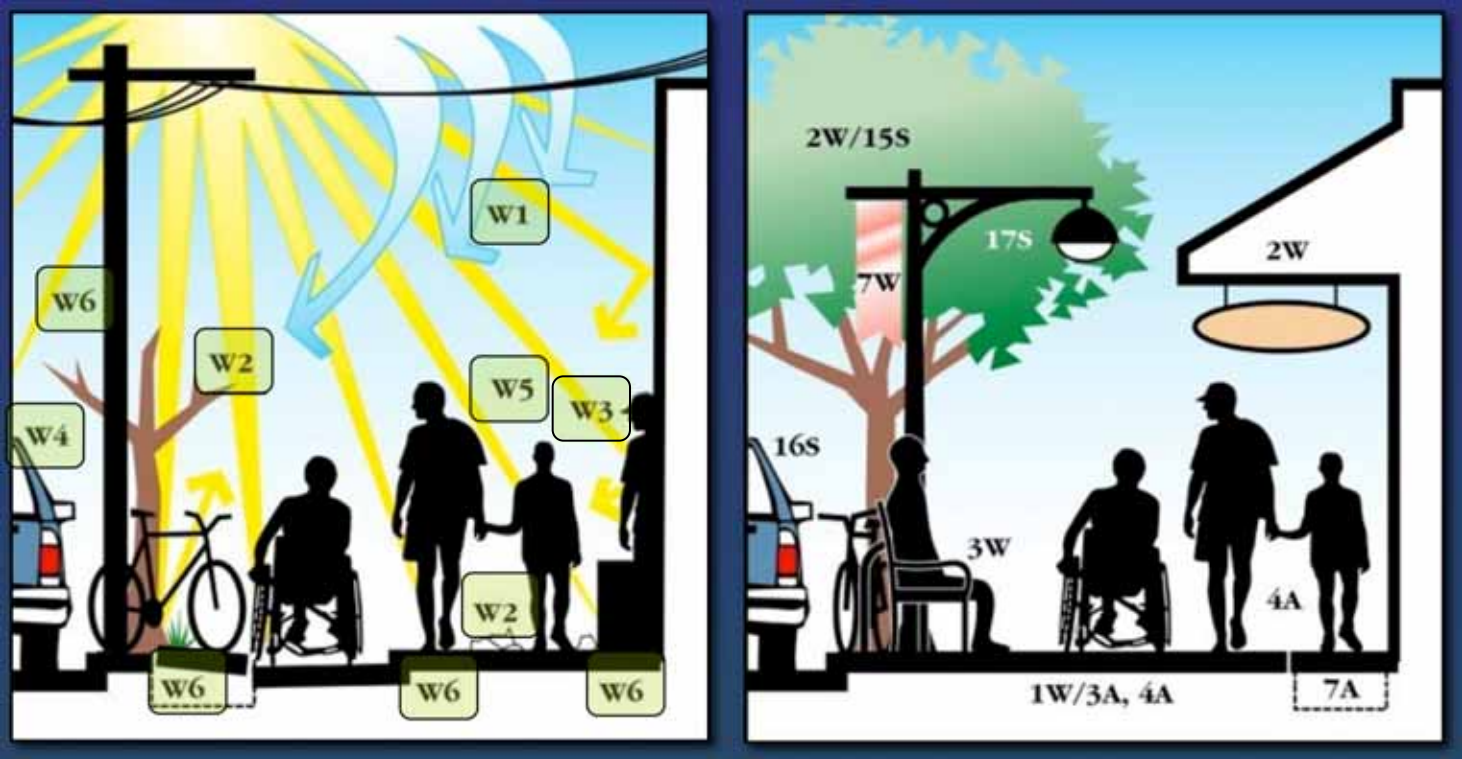
Safety

Accessibility

Connectivity

Walkability

Walkability: Required Components



W1 - Harsh environmental conditions
W2 - Poor maintenance
W3 - Perceived unsafe walkways due to fear of crime
W4 - Lack of buffer from high speed/high volume traffic
W5 - Absence of site amenities
W6 - Walkway obstructions

Changing the scale of a street without changing lane capacity

Using gateways to pinch the roadway down for traffic calming

Concentrating uses and design treatments to create nodes

GREEN STREETS













Streets need to solve their own problems (runoff / urban heat island)

Road diets and edge friction for traffic calming

My Definition of a Complete Street