

4th avenue street precedent study

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sustainable urbanism : the hastings corridor

ubc urban studio : fall 2008



Fourth Avenue between Burrard Street and MacDonald Street was developed as a streetcar route during the early 1900s. The street supports a popular shopping district that is well known throughout the city and boasts a vibrant street life that adds to its appeal.

ON THE STREET SECTION

Fourth Ave. has four 2.9 m travel lanes, with all-day parking on both sides of the street. There is no HOV lane, or limited times for parking. The sidewalks range from 3.5 m - 4 m and with the parking lanes and street trees, there's a good buffer for pedestrians from the faster moving traffic. As a result of slow traffic speeds, on-street parking and frequent pedestrian crossings, the character of the street is not dominated by the 30,000 vehicles that pass daily. Instead, the street conditions on 4th allow for a pleasant walking environment for pedestrians.

ON OFFICIAL ZONING DESIGNATIONS

4th Avenue is one of two primary commercial corridors located within Vancouver's Kitsilano neighbourhood. The on-corridor zoning for the 4th Avenue corridor consists of two commercial districts separated by a 2-block zone of multi-family housing. The off-corridor

zoning creates a residential density gradient which rises from a two-family housing form in the West (Macdonald Street) to a multi-family housing form in the East (Burrard Street).

ON OBSERVED FORM

While the zoning for the 4th Avenue corridor is fairly homogenous, what exists on the street is a highly varied mix of building typologies that have evolved over time. From Macdonald Street to Vine Street, on street interaction (as determined by interactive elements such as on-street patios, as well as # of doors on the street) is much higher on the South side of the street. This creates a more pedestrian friendly environment on the South sidewalk, which is enforced by the monotonous walking environment through the two designated multi-family blocks.

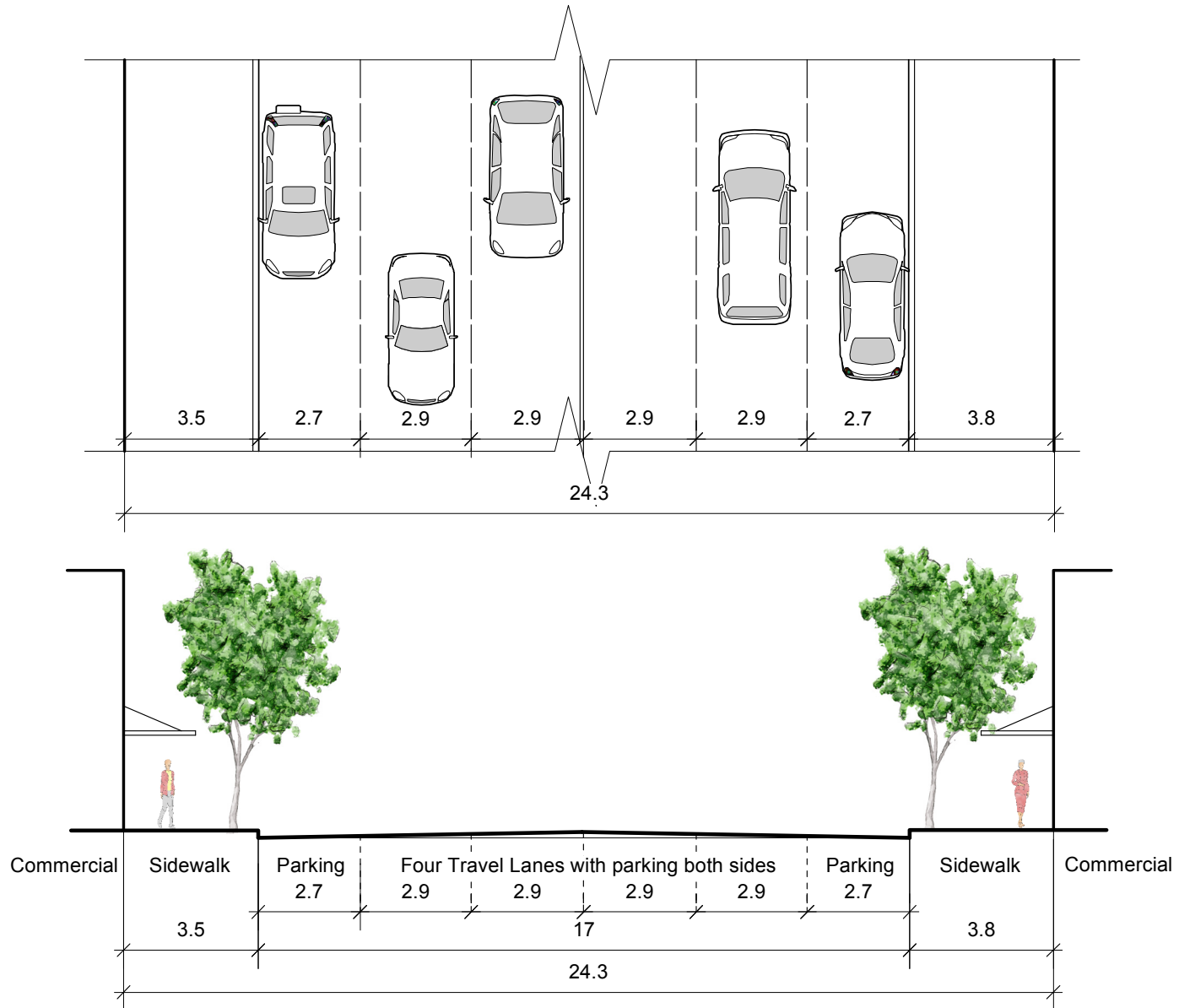
The core commercial district between Balsam and Burrard Streets exhibits both a high level of interaction with the street, as well as a highly varied building typology. Constantly changing building heights, small development parcels with varying facades, and sidewalk spillout create a stimulating pedestrian experience.

ON RESIDENTIAL DENSITY

Along Fourth Ave. the land use is predominantly commercial and mixed-use and the existence of retail-supporting residential density off the corridor (average 22.4 dwelling units per acre) provides a base clientele for this diversity of local shops and businesses. In comparison, the relatively anemic residential density along the Hastings' corridor in Burnaby fails to support the kind of vibrant, diverse "Main Street" experience that residents in Kitsilano enjoy.

street section

fourth avenue precedent

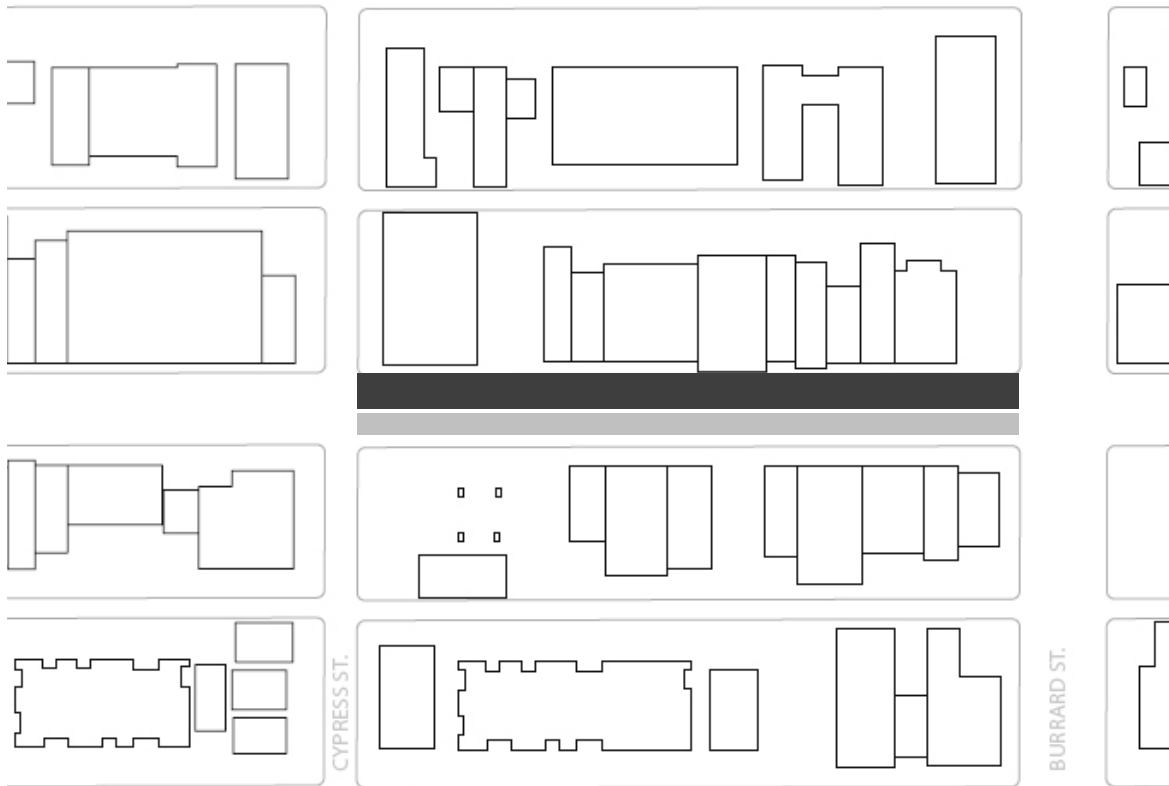


Arterial (4th Avenue midpoint between MacDonald and Burrard)

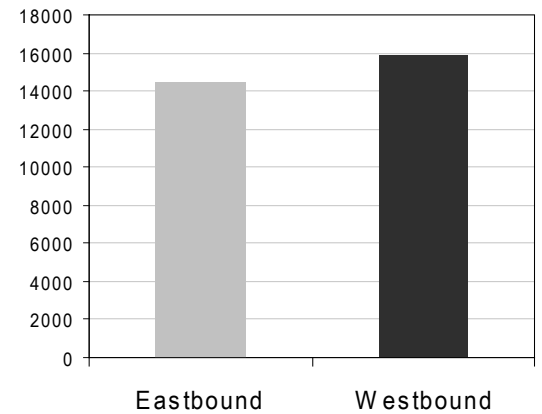
traffic counts

fourth avenue precedent

TRAFFIC VOLUMES BETWEEN BURRARD AND CYPRESS

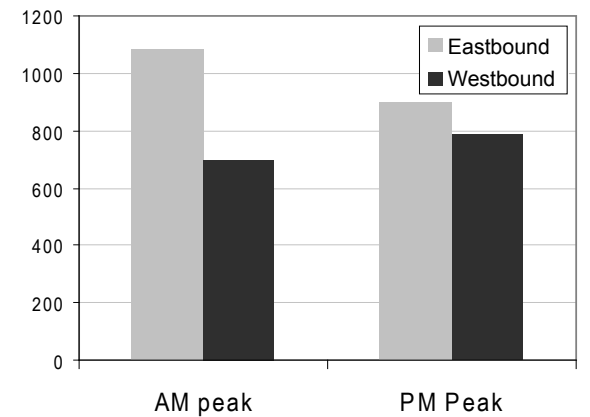


DAILY TRAFFIC VOLUMES



Average daily traffic volume: 30,000 vehicles

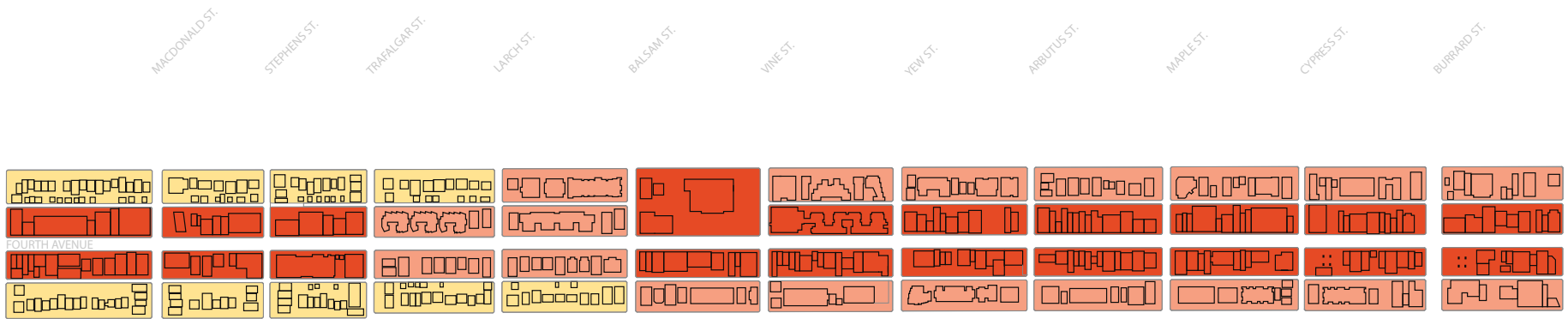
AM & PM PEAK FLOWS



	Eastbound	Westbound
AM Peak	1081	695
PM Peak	901	789

land use

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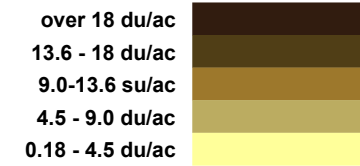
- 2-family residential
- multi-family residential
- commercial



- residential single family
- residential mid-rise walk-up
- mixed-use
- commercial 1-story
- large commercial
- 2+-story commercial
- interaction with the street

population density

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KITSILANO | 4TH AVE

1.6 ppl/du average

DENSITY						APARTMENTS			
census tract	area	population	dwellings	ppl/ac	du/ac	% of duplex	% of < 5 ST	% of > 5 ST	total
0045.01 1	0.66	4759	2652	29.2	16.3	13.6%	65.8%	0.0%	79.4%
0047.01 2	0.32	3606	2483	45.6	31.4	0.9%	74.6%	18.7%	94.2%
0047.02 3	0.37	4082	2825	44.6	30.9	0.4%	92.9%	3.4%	96.7%
0045.02 4	0.74	5384	2810	29.4	15.4	23.5%	52.4%	1.0%	76.9%
0046.00 5	0.49	4927	3118	40.7	25.8	2.7%	87.8%	0.5%	91.0%
0048.00 6	1.20	6335	4399	21.4	14.8	2.6%	65.5%	21.2%	89.3%
average	0.63	4849	3048	35.2	22.4	7.3%	73.2%	7.5%	87.9%
total	3.78	29093	18287						

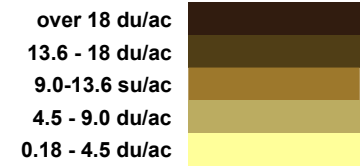
HASTINGS CORRIDOR

2.5 ppl/du average

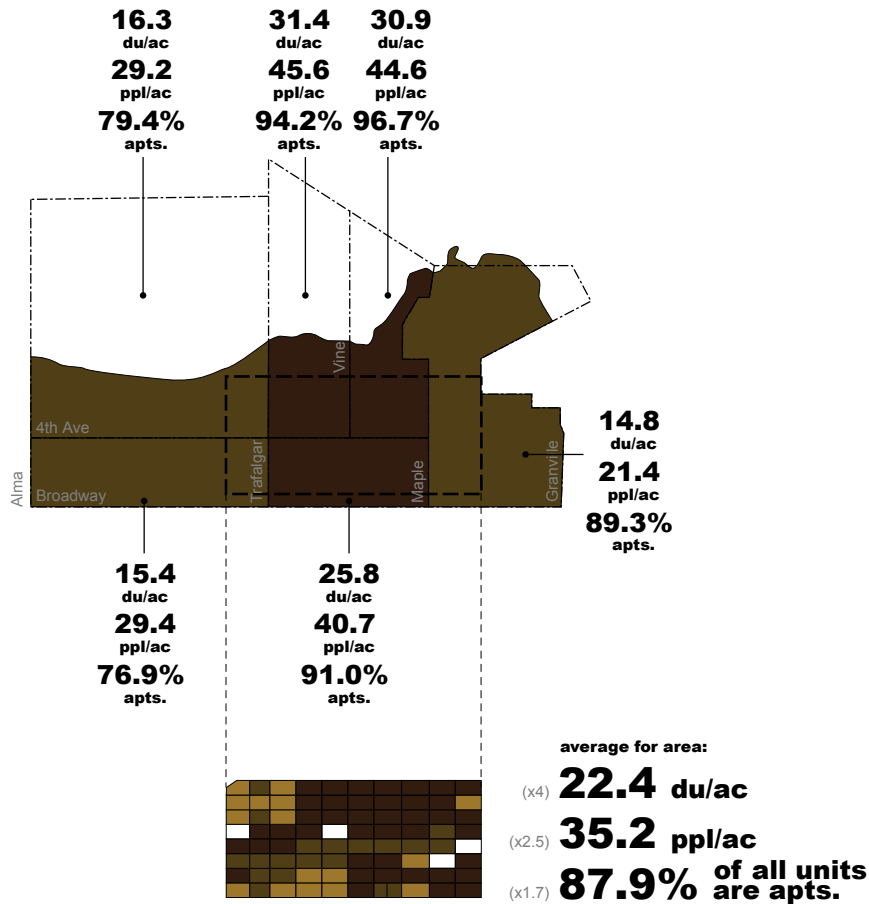
DENSITY						APARTMENTS			
census tract	area	population	dwellings	ppl/ac	du/ac	% of duplex	% of < 5 ST	% of > 5 ST	total
0241.00 1	1.89	7449	3110	15.9	6.7	18.7%	25.8%	15.7%	60.2%
0242.00 2	4.45	6808	2883	6.2	2.6	20.7%	24.4%	0.4%	45.5%
0240.02 3	0.9	5266	2162	23.7	9.7	38.2%	21.6%	5.2%	65.0%
0239.00 4	2.37	7553	3071	12.9	5.2	20.6%	17.4%	21.2%	59.2%
0238.02 5	2.34	6958	2423	12.0	4.2	24.6%	17.2%	0.0%	41.8%
0243.01 6	1.71	6001	2241	14.2	5.3	20.2%	26.4%	0.0%	46.6%
average	2.28	6673	2648	14.2	5.6	23.8%	22.1%	7.1%	53.1%
total	13.66	40035	15890						

population density

fourth avenue precedent



KITSILANO | 4TH AVE 1.6 ppl/du average



HASTINGS CORRIDOR 2.5 ppl/du average

