

TRAFFIC ENGINEERING DEPARTMENT



ANNUAL REPORT

1971

CITY OF PROVIDENCE, RHODE ISLAND

JUN 8 - 1972

READ:

WHEREUPON IT IS ORDERED THAT
THE SAME BE RECEIVED.

Vincent Vespe

FRANK A. TIBALDI
TRAFFIC ENGINEER



JOSEPH A. DOORLEY, JR.
MAYOR

TRAFFIC ENGINEERING DEPARTMENT

60 ERNEST ST.

PROVIDENCE, R. I. 02905

781 - 4044

March 1, 1972

The Honorable Joseph A. Doorley, Jr.
Mayor of Providence
The Honorable City Council
Providence, Rhode Island

Gentlemen:

We are hereby submitting for your consideration the Annual Report of your Traffic Engineering Department for 1971. This department was established by the adoption of Ordinance No. 592, approved October 21, and the department has been in active operation since March 1, 1949.

This report is compiled to review the activities of the department including physical changes that have been made in the street system, changes in traffic regulations, and a breakdown of annual expenditures necessary to continue this effort.

The problem of better use of existing streets will continue to be one of the department's major functions. The modernization program of updating traffic signs, signals and markings will also be continued to bring all traffic devices into national conformity.

Through your continued support we hope that a safe, efficient transportation system can be assured for Providence.

Very truly yours,

Frank A. Tibaldi
Traffic Engineer

FAT/fo'b

INTRODUCTION

It is the policy of this department to provide the City of Providence with the best possible use of our existing street system.

Processing of the continuous stream of traffic requests and complaints constitutes a large part of the department work. From the time the request is made until the time our crews install the traffic controls on the street, appropriate surveys must be made, and pertinent information compiled to assure a proper evaluation. The principle behind gathering this information is to place any decisions regarding changes in control or regulation on a factual basis, rather than on a basis which relies strictly on personal opinion.

When the decision is made, and the traffic regulation written, notification is sent to the shop superintendant to implement the traffic orders, and copies of the traffic regulation are sent to the Commissioner of Public Safety, various Police divisions, the City Solicitor, the Chamber of Commerce, the appropriate councilman and the Press.

All traffic regulation changes are advertised once a month in one issue of the Providence newspaper, in accordance with the provisions of Ordinance No. 592. When the necessary signs, signals, painting, etc., are completed, the regulation becomes effective.

BUDGET 1970-1971

<u>Item</u>	<u>Original Appropriation</u>	<u>Spent</u>	<u>Returned General Fund</u>
0	\$221,103.75	\$198,508.55	\$22,595.20
I	36,731.00	35,204.90	1,526.10
II	40,475.00	40,469.32	5.68
V	<u>51,750.00</u>	<u>51,441.10</u>	<u>308.90</u>
	\$350,059.75	\$325,623.87	\$24,435.88

TYPES OF TRAFFIC SIGNAL EQUIPMENT IN OPERATION IN 1971

Traffic Actuated Equipment (Vehicle actuated only)	47
Traffic Actuated Equipment (Vehicle and Pedestrian actuated)	22
Fixed-Time Equipment (No Pedestrian signal heads)	90
Fixed-Time Equipment (Equipped with Pedestrian signal heads)	31
Special Pedestrian Crossing	9
Flashing (Red and Amber)	2

MAINTENANCE WORK

TROUBLE CALLS DURING WORKING HOURS

Mechanical or electrical	531
Lamps burned out	244
Damage to equipment	193
No trouble found	121

TROUBLE CALLS DURING NON-WORKING HOURS

Mechanical or electrical	407
Lamps burned out	92
Damage to equipment	71
No trouble found	102
Miscellaneous	117

SIGN INSTALLATION AND MAINTENANCE

New installations	394
Signs replaced	3,429
Signs repaired	13
Steel posts installed	963
Parking meter posts	334

SIGNS MANUFACTURED

Reflectorized - wood blanks	984
Painted wood blanks	3,173

PAINTING

Gallons of reflectorized paint used	3,200
Miles of street marked (total program)	97
Miles of street repainted this year	96
Number of streets marked (total Program)	123
Number of streets repainted this year	119
Number of intersections marked with crosswalks (total program)	695
Number of intersections repainted this year	646

TRAFFIC REGULATIONS ESTABLISHED

No Parking to Corner	4
No Parking 8AM to 6PM	1
No Parking 8AM to 4 PM	1
No Parking - Bus Stop	3
No Parking - Between Signs	7
No Parking Any Time	13
No Parking 7AM to 6PM	1
No Parking 8AM to 10AM	1
Limited Time Parking	7
No Standing Any Time	1
Loading Zones	10
Stop Control	21
Reverse Stop Control	1
Yield Control	1
Pedestrian Signal Control	1
One-Way Streets	9
School Signs	1
Truck Limit Signs - 4 Ton Gross	2
Miscellaneous	8

DISPOSITION OF INVESTIGATIONS
RESULTING FROM COMPLAINTS AND REQUESTS

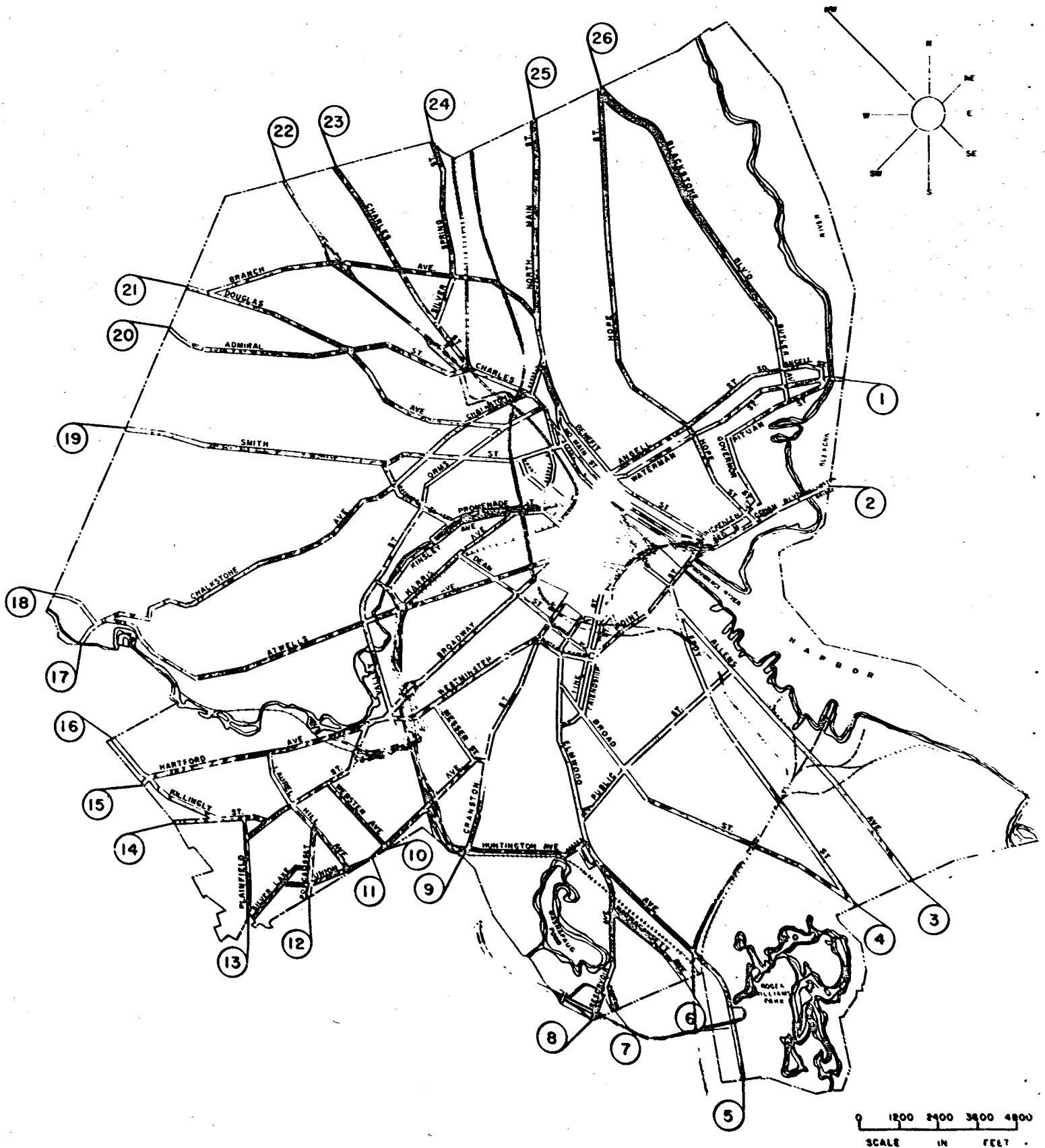
Requests Granted	58%
Requests Denied	16%
Requests Pending	22%
Complaints Dropped	4%

The following is a summary of all revenue collected from parking meters and other parking facilities by the City of Providence:

<u>Year</u>	<u>Pershing Sq. Parking Lot</u>	<u>Street Meters</u>	<u>Number of Meters in Service</u>
1952	\$19,113.22	\$143,345.64	1659
1953	26,063.83	179,344.83	1774
1954	26,229.93	185,996.66	1765
1955	27,492.23	188,145.46	1851
1956	28,673.41	187,724.62	1824
1957	29,593.03	184,713.15	1845
1958	28,021.73	173,094.76	1824
1959	27,016.68	162,395.53	1813
1960	27,383.04	154,213.50	1802
1961	26,201.36	143,213.50	1728
1962	25,331.01	139,226.94	1685
1963	24,962.21	128,293.33	1638
1964	24,824.43	121,807.35	1595
1965	22,769.39	103,111.80	1435
1966	23,599.21	96,725.40	1503
1967	22,692.96	93,326.23	1525
1968	20,446.61	84,016.51	1500
1969	30,099.96	101,527.17	1550
1970	29,875.71	108,535.38	1551
1971	34,159.32	139,712.52	1731

The City also derived income from the Park 'n Lock Lot and the Francis Street Parking Deck.

AVERAGE DAILY VOLUMES OF TRAFFIC
ENTERING AND LEAVING
THE
CITY OF PROVIDENCE
ON
ARTERIAL ROUTES



Average Daily Volume of Traffic
Entering and Leaving the City of Providence

On Arterial Routes

<u>No. (a)</u>	<u>Street</u>	<u>1965</u>	<u>1966</u>	<u>1968</u>	<u>1970</u>	<u>1971</u>
1	New Rod Bridge	29,300	30,200	29,300	21,000	20,500
2	R.I. I-195	70,000	70,100	72,200	85,000	88,000
3	Narragansett Blvd.	20,900	19,900	17,800	16,000	13,300
4	Broad Street	17,500	18,700	6,900	16,200	16,900
5	Elmwood Avenue	18,700	15,800	9,900	11,900	13,600
6	Narragansett Avenue	3,500	2,200	3,700	4,200	3,900
7	Pontiac Avenue	5,300	5,600	6,000	6,600	8,400
8	Reservoir Avenue	42,600	31,400	20,000	21,400	27,600
9	Cranston Street	13,800	16,500	17,400	18,400	18,600
10	Webster Avenue	3,900	6,400	4,400	6,400	6,100
11	Laurel Hill Avenue	2,200	3,400	3,100	2,600	2,300
12	Pocasset Avenue	10,900	10,800	7,900	10,800	10,200
13	Plainfield Street	11,600	10,300	5,200	15,400	16,400
14	Sunset Avenue	3,900	4,000	3,300	6,100	2,700
15	Hartford Avenue	22,100	19,800	13,400	11,500	6,400
16	Killingly Street	7,900	7,800	9,600	14,400	16,300
17	Manton Avenue	12,500	13,000	9,700	11,900	14,700
18	Fruit Hill Avenue	3,600	8,200	9,800	9,800	10,800
19	Smith Street	13,300	15,600	18,000	24,900	17,800
20	Admiral Street	4,200	5,300	3,900	8,900	8,400
21	Douglas Avenue	7,600	8,100	8,900	7,500	10,400
22	Louisquisset Pike	16,600	21,300	23,300	22,000	20,000
23	Charles Street	7,000	5,400	6,300	6,700	6,400
24	Smithfield Avenue	15,700	13,200	15,600	20,900	19,500
25	North Main Street	29,000	15,200	14,000	19,400	11,700
26	Hope Street	10,800	12,000	8,200	12,900	10,800
27 (b)	Route I-95 Cranston Line	--	77,000	94,000	92,000	95,000
28 (b)	Route I-95 Pawtucket Line	40,200	67,000	56,000	41,700	63,000
29 (b)	Huntington Expressway - Cranston Line	---	10,000	17,000	35,700	36,000

Notes: (a) See map on opposite page (b) Not shown on map	444,600	534,200	514,800	582,200	596,200
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TRAFFIC ENGINEERING DEPARTMENT
PROVIDENCE, RHODE ISLAND

CORDON COUNT SUMMARY
October 26, 27, & 28 and 1971
(8:00 A.M. - 6:00 P.M.)

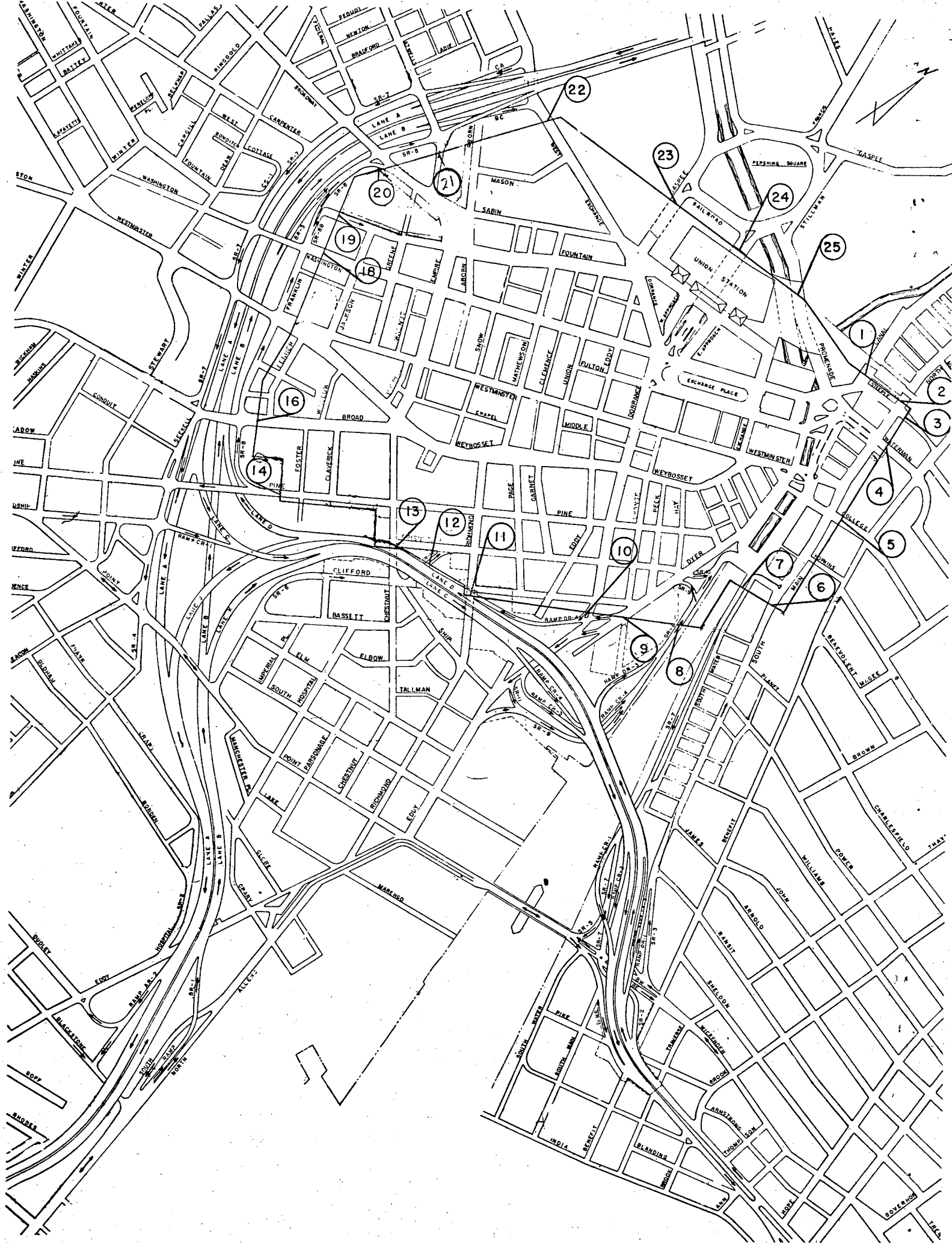
	<u>IN</u>	<u>OUT</u>	<u>TOTALS</u>	<u>%</u>
PASSENGER VEHICLES	57,201	61,138	18,339	87.9
BUSSES	1,159	1,186	2,345	1.7
TRUCKS (All types)	6,555	7,430	13,985	10.4
TOTAL VEHICLES	64,915	69,754	134,669	100.0
PASSENGERS IN AUTO	80,295	84,975	165,270	73.7
PASSENGERS IN BUSSES	17,490	20,208	37,698	16.8
PEDESTRIANS	10,041	11,327	21,368	9.5
	107,826	116,519	224,336	100.0

ACCUMULATION ON CORDON AREA

	<u>TIME</u>	<u>TOTAL ACCUMULATION</u>	<u>%</u>
AUTOMOBILES	10:00 - 10:30 A.M.	9284	7.8
BUSSES	2:30 - 3:00 P.M.	67	2.8
TRUCKS	9:30 - 10:30 A.M.	1117	8.0
TOTAL VEHICLES	10:00 - 10:30 A.M.	10,340	7.7
PASSENGERS IN AUTOS	10:00 - 10:30 A.M.	13,601	8.2
PASSENGER IN BUSSES	11:30 - 12:00 A.M.	6,436	17.0
PEDESTRIANS	12:00 - 12:30 P.M.	3,639	17.0
TOTAL PERSONS	12:00 - 12:30 P.M.	22,973	10.2

<u>%</u>		<u>VEHICLES</u>	<u>PASSENGERS</u>
69.2	ONE PERSON PER AUTO	81,863	81,868
24.3	TWO PERSONS PER AUTO	28,770	57,540
4.9	THREE PERSONS PER AUTO	5,846	17,538
1.0	FOUR PERSONS PER AUTO	1,157	4,628
0.4	FIVE PERSONS PER AUTO	492	2,460
0.2	SIX PERSONS PER AUTO	206	1,236
100.0	TOTAL	118,339	165,270

Average persons per Auto 1.39



COMPARISON OF CORDON LINE STREET VOLUMES FOR 1969 and 1971

CORDON TOTALS

	<u>Cordon Sta. No.</u>	<u>Oct. 21, 22, 23 1969</u>	<u>Oct. 26, 27, 28 1971</u>	<u>Difference</u>
Atwells	21	15,677	5,833	9,844
Broad	16	9,529	8,945	584
Broadway*	20	-	11,377	- 11,377
Canal	1	7,408	7,084	324
Chestnut	13	2,054	1,631	423
College	5	3,629	3,340	289
Dorrance	10	5,229	4,912	317
Dyer	9	6,416	7,765	-1349
Fountain **	19	-	2,271	- 2271
Francis	24	3,387	3,201	186
Gaspee	23	11,759	11,555	204
Hoyle	-	340	340	-
North Main	2	5,102	7,466	-2,364
Pine	14	3,243	3,417	-174
Pond	-	1,139	1,139	-
Promenade	25	7,313	5,330	1,983
Richmond	11	2,685	3,028	-343
South Main	6	5,510	4,697	813
South Water	7	6,046	5,424	622
Thomas	3	5,687	7,212	-1525
Washington	18	5,926	4,588	1338
Waterman	4	4,902	4,925	-23
West Exchange	22	7,724	7,417	307
Service Road No. 3	8	11,083	10,395	688
Service Road No. 12	12	1,650	1,287	363
Grand Total		133,438	134,669	
Total Difference				1231

* Broadway figures included in the 1969 Atwells Avenue Cordon station

** Fountain Street Cordon Station not taken in 1969.

DOWNTOWN PARKING SPACE INVENTORY

Off-Street Lots:

Public	6,494
Private	1,883

<u>Garages</u>	1,550
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TOTAL OFF STREET	9,927
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TOTAL ON STREET	797
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GRAND TOTAL	10,724
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