

# METRO ORANGE LINE CAPACITY REPORT



# PURPOSE OF REPORT

- TO DETERMINE THE MAXIMUM RIDERSHIP CAPACITY OF THE METRO ORANGE LINE (REQUESTED BY THE GOVERNANCE COUNCIL).
- TO DEVELOP A TOOL FOR LINE MANAGMENT AND PLANNING FUTURE CHANGES TO ACCOMMODATE RIDERSHIP GROWTH.

# POTENTIAL ORANGE LINE RIDERSHIP GROWTH AND IMPACTS

- ***CURRENT WEEKDAY BRDGS = 25,475***  
***(Zero violations of 120% load standard)***
- 10% INCREASE = 2,548 Riders  
(5 to 10 minor violations of 120% load standard)
- 15% INCREASE = 3,823 Riders  
(10 to 15 violation of the 120% load standard)
- 20% INCREASE = 5,095 Riders  
(15 to 20 violations of the 120% load standard and  
passenger pass-ups and overloads.

ORANGE LINE  
MAXIMUM PHYSICAL CAPACITY  
60 FOOT COACHES

- ASSUMES CURRENT ENVIRONMENT (27 BUSES, 4 MINUTE HEADWAYS, EXISTING SIGNAL PRIORITY & LEVEL TRAFFIC GROWTH).
- CURRENT BRGDS (25,475) X 120%  
LOAD= MAXIMUM CAPACITY (30,720 )  
WEEKDAY BRDGS.

# ORANGE LINE

## MAXIMUM PHYSICAL CAPACITY

ASSUMES 65 FOOT COACHES

- ASSUMES INTRODUCTION OF 65 FT. ARTICULATED BUSES, CURRENT SCHEDULED TRIPS & SIGNAL PRIORITY)
- CURRENT BRGDS (25,475) X 140%  
LOAD = MAXIMUM CAPACITY (35,665)  
WEEKDAY BRDGS.



# ORANGE LINE BOARDINGS PROFILE

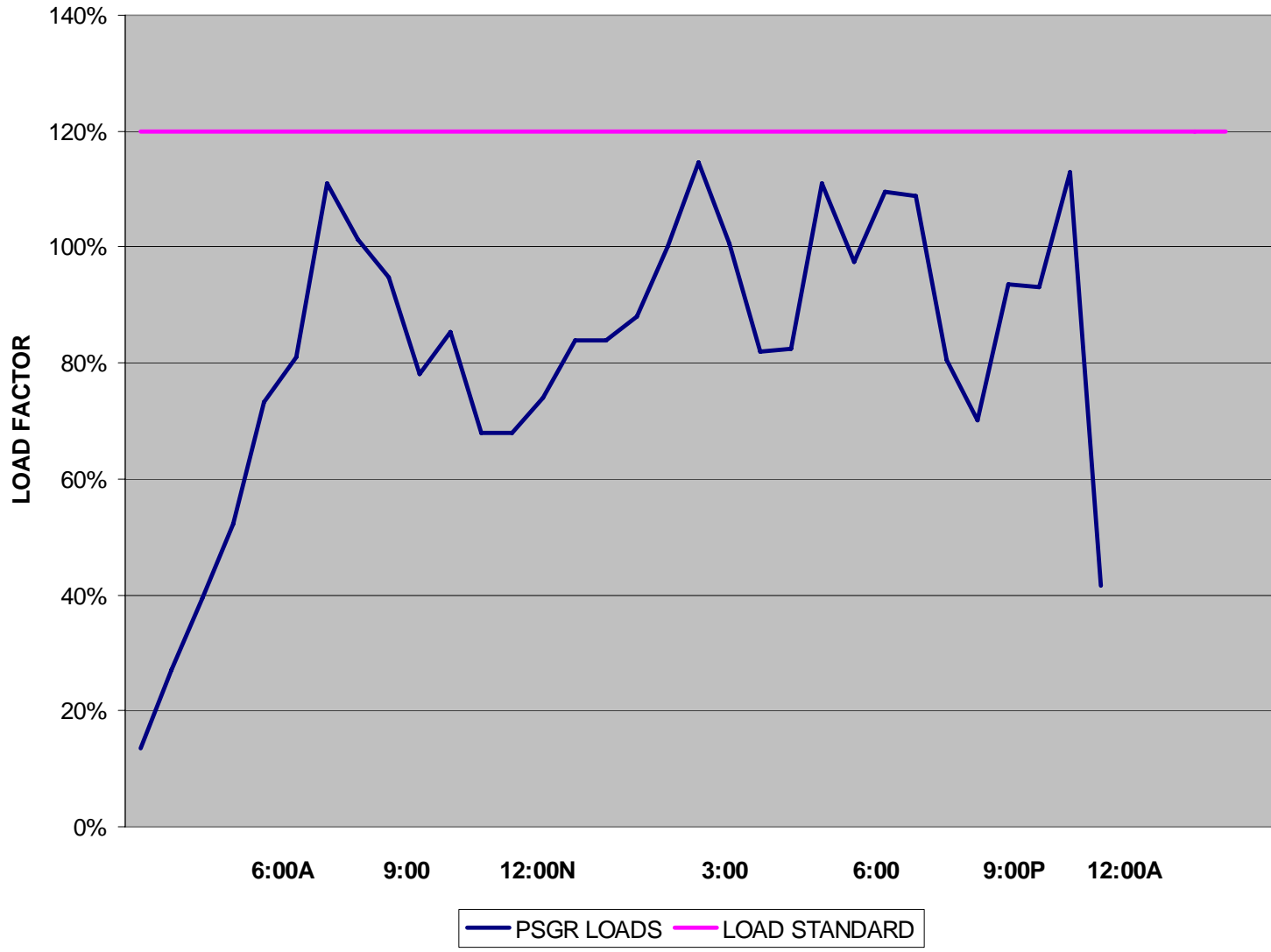
- AVG. WEEKDAY BRDGS = 25,475

## BREAKDOWN BY TIME OF DAY

- EARLY (4 – 6am) BRDGS = 1.7%
- AM (6 – 9am) BRDGS = 21.9%
- MIDDAY (9- 3pm) BRDGS = 32.9%
- PM (3 – 6pm) BRDGS = 25.4%
- EVENING (6 – 9pm) BRDGS = 12.3%
- NIGHT (9–1next am) BRDGS = 5.7%



# ORANGE LINE PSGR LOADS - EASTBOUND



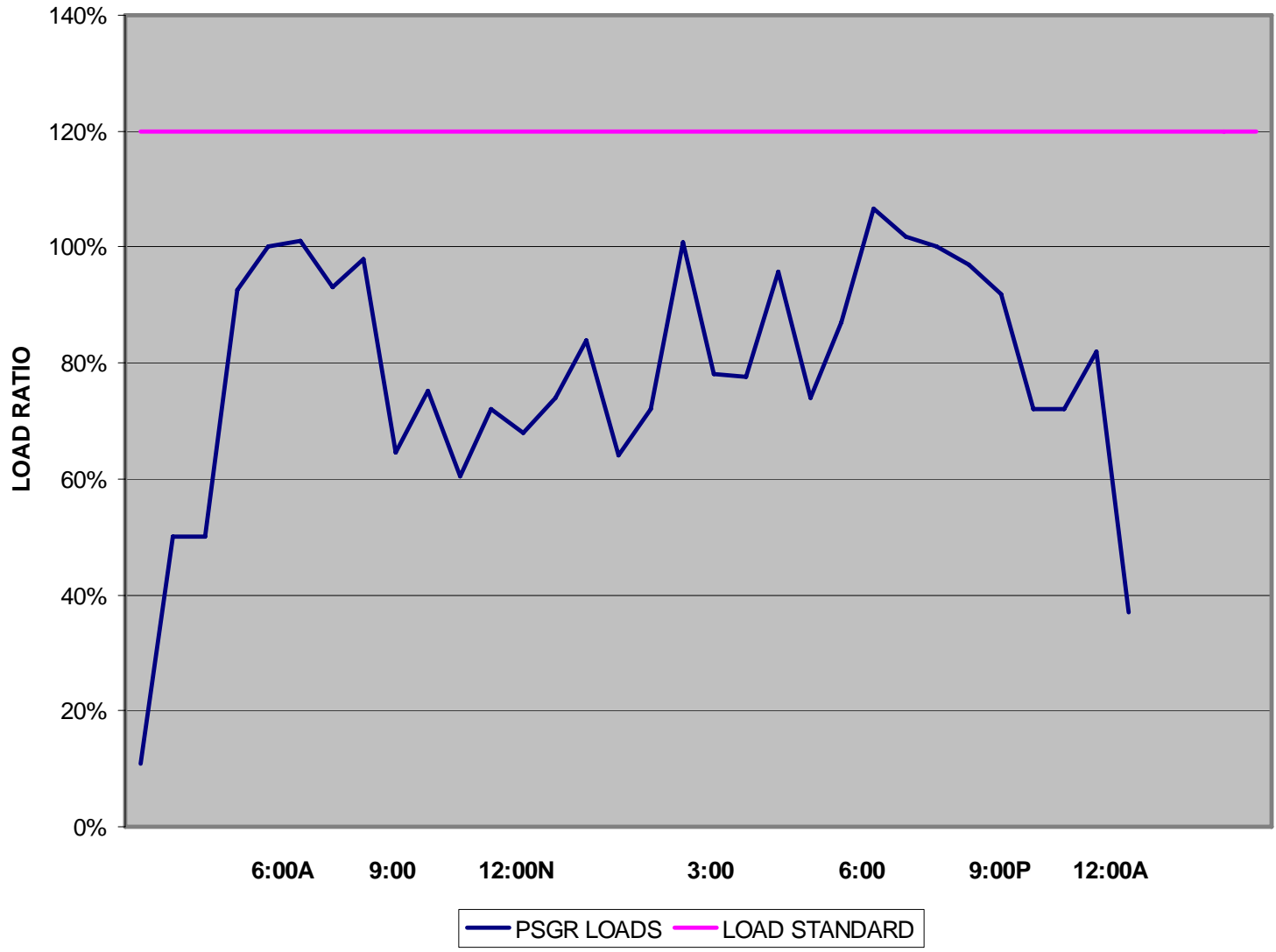
# METRO ORANGE LINE ON-BOARD CAPACITY

<b>SUMMARY</b>			
<b>EASTBOUND</b>			
<b>TIME</b>	<b>MAX</b>	<b>LOAD</b>	<b>UNUSED</b>
<b><u>OF DAY</u></b>	<b><u>PERIOD</u></b>	<b><u>RATIO</u></b>	<b><u>CAPACITY</u></b>
<b>AM</b>	<b>7:20-7:40A</b>	<b>111%</b>	<b>9 – 30%</b>
<b>MIDDAY</b>	<b>2:00-3:00P</b>	<b>88%</b>	<b>12-30%</b>
<b>PM</b>	<b>3:20-3:40P</b>	<b>115%</b>	<b>5 – 20%</b>
<b>NIGHT</b>	<b>9:00 –10:00P</b>	<b>93%</b>	<b>27 %</b>

**NOTE: ORANGE LINE LOAD STANDARD EQUALS 120% OF SEATED CAPACITY OR 68 PASSENGERS PER METRO ORANGE LINE BUS.**



# ORANGE LINE PSGR LOADS - WESTBOUND



# METRO ORANGE LINE ON-BOARD CAPACITY SUMMARY

WESTBOUND			
<b>TIME</b>	<b>MAX</b>	<b>LOAD</b>	<b>UNUSED</b>
<b><u>OF DAY</u></b>	<b><u>PERIOD</u></b>	<b><u>RATIO</u></b>	<b><u>CAPACITY</u></b>
<b>AM</b>	<b>7:00-7:20A</b>	<b>101%</b>	<b>19 – 30%</b>
<b>MIDDAY</b>	<b>12:00-1:00P</b>	<b>84%</b>	<b>16-30%</b>
<b>PM</b>	<b>5:00 –5:20P</b>	<b>107%</b>	<b>13 – 20%</b>
<b>NIGHT</b>	<b>10:00 –11:00P</b>	<b>82%</b>	<b>38%</b>

**NOTE: ORANGE LINE LOAD STANDARD EQUALS 120% OF SEATED CAPACITY OR 68 PASSENGERS PER METRO ORANGE LINE BUS.**

# Questions and discussion

