# 4. ANALYSIS OF EXISTING RIDERSHIP AND ROUTE PERFORMANCE

### **Data Collection**

Metro Transit collects bus stop-level ridership data using Automatic Passenger Counter (APC) equipped vehicles on a routine basis. This section of the report summarizes this data. The number of passengers on and off by stop for weekday, Saturday and Sunday service periods for each route that operates in the Study Area is included. Data used in this section were collected during 2012.

Metro Transit measures route productivity in "passengers per in-service hour," which represents the total passengers on a route or segment divided by the in-service time. This measure is most often calculated at the route level and should be used with caution at a route segment or trip level.

#### Weekday Transit Ridership

On weekdays, 614 in-service hours are provided in the Study Area. The distribution of these in-service hours by route is illustrated in the first chart of **Figure 28**. The second chart of **Figure 28** illustrates the distribution of the total number of passengers boarding on each route. An average of about 23,680 weekday boardings was counted. The final chart in **Figure 28** illustrates the average number of boarding passengers per in-service hour throughout the day. This chart shows that the level of transit service in the Study Area throughout the day is reasonably well matched with the distribution of demand throughout the day. **Figure 28a** shows the average passengers per in service by route on weekdays.

#### Weekend Transit Ridership

On weekends, 388 in-service hours are operated each Saturday and 180 in-service hours each Sunday in the Study Area. The distribution of these revenue hours by route is illustrated in the top chart of **Figure 29**. This chart also illustrates the distribution of total number of passenger boardings on Saturdays and Sundays. An average of about 13,000 passenger boardings was observed on Saturday, and an average of about 6,650 passenger boardings on Sunday. This chart shows that the level of transit service in the Study Area on weekends is reasonably well matched with the distribution of demand throughout the day. **Figure 29a** shows the average passengers per in-service hour by route on weekends.











Figure 28a-Chart Passengers per In-Service Hour by Route Weekdays - 2012



# Figure 29-Service and Boardings by Time of Day on Weekends - 2010







Figure 29a-Passengers per In-Service Hour by Route on Weekends – 2010

#### **Boardings by Route and Day of Week**

**Figure 30** – Weekday, **Figure 31** – Saturday and **Figure 32** - Sunday show the number of daily boardings per bus stop on each route for an average weekday, Saturday and Sunday. Routes are overlaid on the land use/density map to show the correlation between boardings and population and employment densities. The highest ridership areas are located along East 3rd (Route 63), Payne/Maryland (Route 64) and East 7th/Minnehaha (Route 74). These are also the areas with the highest levels of population density.

#### Figure 30-Map of Weekday Ridership



## Figure 31-Map of Saturday Ridership



## Figure 32-Map of Sunday Ridership



# **Service Performance by Route**

Service performance is summarized for each of the routes on the following pages. For weekdays, please see **Figure 33**; for Saturdays, see **Figure 34**; and for Sundays, **Figure 35**. The values in these tables reflect the service levels and ridership during the fall of 2012. The in-service hours and passengers per inservice hour are calculated for the entire route and not just for the route segment within the Study Area. Boardings are the total average of Automatic Passenger Counter counts per day, and PPISH is the average Passengers per In-Service Hour.

Service	Route Type	Route	In-Service Hours	Boardings	PPISH
Weekday	Local	61	80.1	3,178	39.7
Weekday	Local	63	93.3	4,517	48.4
Weekday	Local	64	122.2	5,505	45.0
Weekday	Local	70	38.0	960	25.3
Weekday	Local	71	70.4	2,117	30.1
Weekday	Local	74	122.5	5,568	45.5
Weekday	Local	80	13.9	506	36.3
Weekday	Local	219	52.1	792	15.2
Weekday	Local Total		592.5	23,143	39.1
Weekday	Limited Stop	350	5.9	139	23.6
Weekday	Express	294	15.7	398	25.3
Weekday	Limited Stop/Express Total		15.7	398	25.3
Weekday	All Route Total		614.1	23,680	38.6

#### Figure 33-Weekday Route performance

#### Figure 34-Saturday Route performance

Service	Route Type	Route	In-Service Hours	Boardings	PPISH
Saturday	Local	61	30.3	999	32.9
Saturday	Local	63	68.8	2,781	40.4
Saturday	Local	64	98.2	3,745	38.2
Saturday	Local	70	10.8	351	32.4
Saturday	Local	71	37.6	876	23.3
Saturday	Local	74	103.5	3,485	33.7
Saturday	Local	80	13.6	360	26.4
Saturday	Local	219	25.2	281	11.2
Saturday	Local Total		388.0	13,000	33.5

Service	Route Type	Route	In-Service Hours	Boardings	PPISH
Sunday	Local	63	29.4	1,241	42.2
Sunday	Local	64	64.7	2,479	38.3
Sunday	Local	70	7.4	228	30.9
Sunday	Local	71	9.8	280	28.5
Sunday	Local	74	61.4	2,207	35.9
Sunday	Local	80	7.3	218	29.7
Sunday	Local Total		180.0	6,653	37.0

#### Figure 35-Sunday Route performance