

# Findings

## Usage by age

### 0 to 9 years

This group includes 34,642 users, with a strong repeat patron base of 20,148 and 17,239 patrons making renewals.

---

### 10 to 19 years

The teen group has 67,320 total users. Out of these, 50,567 are repeat patrons, and 39,570 have renewed materials.

---

### 20 to 24 years

There are 24,484 users in this group, with 16,649 returning patrons and 13,707 renewals.

---

### 25 to 34 years

This is the most active group, with 92,790 users, 56,295 repeat patrons, and 45,933 renewals.

---

### 35 to 44 years

With 80,477 users, this group continues the trend of high engagement. 54,415 are repeat patrons, and 45,900 have renewed items.

---

### 45 to 54 years

This age range includes 48,752 users, 35,520 repeat patrons, and 30,587 renewals.

---

## **55 to 59 years**

This group has 19,281 total users, with 13,851 returning and 11,865 making renewals.

---

## **60 to 64 years**

There are 17,664 patrons in this group, 12,520 of whom are repeat users, with 10,790 renewals.

---

## **65 to 74 years**

This group has 31,906 users, 22,835 repeat patrons, and 19,874 renewals.

---

## **75 years and over**

The oldest group includes 18,872 users, with 14,529 repeat patrons and 12,820 renewals.

---

## **Top 5 Libraries**

### **#1 Main Branch**

The main library location had a total of 11,767,324 checkouts and 5,560,410 renewals totalling 17,327,734 in total activity.

---

### **#2 Richmond Branch**

The Richmond branch had a total of 5,272,993 checkouts and 2,423,445 renewals totalling 7,696,438 in total activity.

---

### #3 Ortega Branch

The Ortega branch had a total of 4,941,691 checkouts and 2,344,618 renewals totalling 7,286,309 in total activity.

---

### #4 Chinatown Branch

The Chinatown branch had a total of 4,444,310 checkouts and 1,491,635 renewals totalling 5,935,945 in total activity.

---

### #5 Sunset Branch

The Sunset branch had a total of 3,438,518 checkouts and 1,723,216 renewals totalling 5,161,734 in total activity.

---

## Combined Activity Overall

---

Total Checkouts:	70,412,694
Total Renewals:	33,101,214
Total Activity:	103,513,908

---

# Performance Metrics

I believe I've normalized the Excel sheet to a good degree by breaking the data into seven separate tables, each designed to reduce repetition and make the relationships between tables clearer. I haven't done any indexing which I recognize would make my database run much more smoothly and efficiently.

Here's a list of tables I used to break up and categorize the data..

- **library\_info** – stores each library's code and name.
- **notification\_preferences** – lists how patrons prefer to get notifications.
- **patron\_types** – defines different patron types, like staff or teachers.
- **patrons** – holds all the main patron info and links to other tables with foreign keys.
- **demographic\_summary** – shows total checkouts and renewals by age group and library.
- **staff\_teachers** – keeps info on patrons who are staff or teachers.
- **library\_mail\_digital** – tracks patrons who use mail or digital library services.

Looking back on it, it may have made more sense to also break up the patrons table a bit further, maybe by creating a separate table for each age demographic but overall I'm happy with how this configuration turned out.