KEY RECOMMENDATIONS

The following figures quantify the overall recommendations in the plan for off-street trail facilities, on-street bicycle facilities, and pedestrian facilities. These recommendations are informed by the planning process, which involved public and stakeholder engagement, assessment of the existing city, and analysis of current and future trends, on-going City projects, and regional connectivity opportunities. As providing quality alternative transportation routes remains a priority of the City of Garland, the proposed pedestrian and bicycle facilities will provide guidance for planning and prioritization of future projects. See pages 94-97 for an explanation of these different facility types.

Off-Street Trails

59 miles of proposed Off-Street Trails

- **31.9 miles of proposed Spine Trails**
- **27.1 miles of proposed Sidepaths**

On-Street Bikeways

73.1 miles of proposed On-Street Bikeways

- **60.5 miles of proposed Shared-Use Lanes**
- **10.3 miles of proposed Bike Lanes**
- **2.3 miles of proposed Cycle Track**

Enhanced Sidewalks

68.5 miles of proposed Enhanced Sidewalks

DEMOGRAPHIC PROFILE

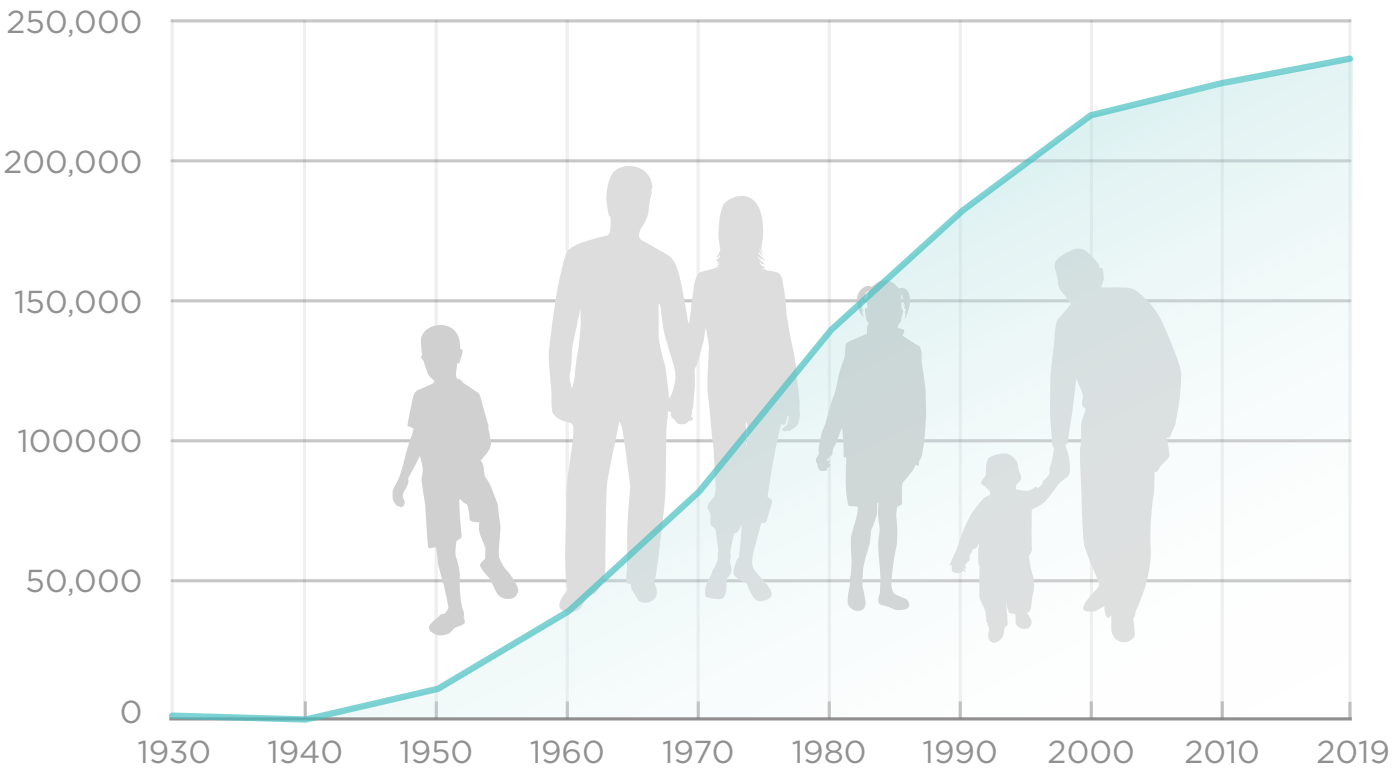
Growth Trends

Similar to neighboring cities in the Dallas-Fort Worth Metroplex, Garland experienced a population boom during the 1950s to 1970s. The growth rate during this three-decade time period was 670%, however, in more recent years, population growth has tapered off as the City has approached build-out. By 1980 the City's population had surpassed 100,000 and 20 years later in 2000 the population was over 200,000. As of 2018 the population of Garland is 239,684, which constitutes 9.4% of the total population for Dallas County. **Figure 2.2** depicts population growth over time in Garland.

Looking to the future, it is estimated that in 2030 Garland's population will increase to 241,767, as stated in the Envision Garland 2030 Comprehensive Plan. Dallas County is also predicted to have a substantial increase in population within the next 10-20 years. The projected population growth will consequently create a greater demand for an expanded trail and bikeway network. The popularity of trails and bikeways as both a recreational activity and commuting option has continued to grow. This trend is predicted to continue in the future, requiring cities to implement appropriate infrastructure to accommodate demand.

For this section, the 2013-2017 American Community Survey (ACS) Five-Year Estimates were used. This represents the latest data available at the time of report development.

Figure 2.2, Historical Growth (1930-2019)



Source: U.S. Census Bureau

Zip Codes 75040 | 75041 Barrios Urbanos	Communities classified as Barrios Urbanos are typically diverse, with Hispanic residents making up a large majority of the population. Young families with children and single-parent households are predominant in this community, often living in multi-generational households. With multi-generational households commonly found in Barrios Urbanos the average household size is 3.62, which is larger than the national average. Most residents occupy single-family homes that they own. Unemployment is higher in these communities with labor force participation at only 61%. Residents tend to be more fiscally-conscious; spending tends to be solely on necessities but make an exception when purchasing the latest trends and brands.
Zip Codes 75042 | 75043 American Dreamers	The majority of American Dreamers are homeowners living in single-family homes further outside the city. Choosing affordable housing outside on the periphery of the city leads to increased distances in commutes to work, typically via automobile. Households are typically comprised of younger married-couple families with children and sometimes grandparents. This community is diverse; many residents identify as Hispanic or Latino. Living in multi-generational homes increases the average household size compared to the rest of the nation. The majority of residents are high school educated, and a considerable percentage have earned a college degree. In these communities, unemployment is slightly higher and so is labor force participation. Spending for these residents is primarily focused on necessities.
Zip Codes 75044 Home Improvement	Residents of Home Improvement communities are predominantly married-couple families that own single-family homes. Similar to the U.S. as a whole, diversity tends to be moderate. The median household income for Home Improvement communities tends to be significantly higher than the rest of the nation. Labor force participation is high, with typically two or more workers per household and unemployment is lower than the U.S. average. Many of the individuals living in these communities would consider themselves as cautious consumers, where much of their money goes towards student loans, home mortgages, and vehicle gas and maintenance.
Zip Codes 75089 Soccer Moms	Residents belonging to the Soccer Mom community are affluent and family-oriented. They prefer to live in newly built houses that are away from the city center but close enough to commute for work in professional job centers. These neighborhoods are primarily composed of single-family homes that have been built in newer neighborhoods. Educational attainment is high among these residents, with a significant percentage that have some college education. Labor force participation is higher than the national average with households typically having two or more employed people. Consequently, the median household income tends to be considerably higher than the national average. Diversity among these residents is lower than that or the rest of the United States, with a population that is largely composed of one race.
Zip Codes 75098 Up & Coming Families	These communities are characterized by their younger, ethnically diverse and mobile residents. Their neighborhoods are new housing developments in the suburban periphery. Families choose to live further outside the city where they can find more affordable housing while accepting longer commute times. The majority of these residents have some college education and participate in the labor force. Unemployment for these communities is generally low, in fact most households have two or more workers. The median household income for Up and Coming Families is typically higher compared to the rest of the United States. These communities have experienced substantial population growth in recent years and can anticipate further growth in the future.

TRAIL TRENDS MOVING FORWARD

When looking to the future of trail planning and observing the heightened importance of trails, parks, and recreational amenities, it is crucial to continue providing safe and desirable public places that adapt to future trends. Notably, during unprecedented times, cities need to be equipped to implement interim or temporary solutions to adjust to the current situation, whatever that may be. Over the past several years, equitable public health measures have become increasingly important for cities worldwide to address, with parks and trails playing an important role. Public health aspects such as rising rates of obesity and the spread of disease can be mitigated through the implementation of public spaces that provide appropriate amenities.

Examples of trail amenity design that align with future trail trends include the following:

Implementing wider trails so it is easier for people to keep a 6' distance from each other while utilizing trails. Additionally, avoiding obstruction along facilities that prevent people from being able to pass other users, notably utility obstructions that frequently occur along sidewalks.

Touchless water bottle fill stations along trails or at trailheads allow users to refill personal water bottles in a manner that considers the safety of all users and prevents the spread of germs.

To optimize the use of spaces for public activities, municipalities should consider **temporarily closing lanes along roadways with excess capacity** to be utilized by bicyclists.

Increasing the frequency of rest stops allows space for separation from others along portions of trail that are experiencing higher volumes of users as well as the ability to more conveniently provide amenities such as water filling stations and sanitation stations.

MICRO-MOBILITY CONSIDERATIONS

What is Micro-Mobility

Micro-mobility refers to small, low-speed transportation devices that are electric or human-powered and typically available through a public sharing platform. The most common forms of micro-mobility devices include bicycles and scooters and are intended for utilitarian uses for short trips in urban environments. These micro-mobility devices are intended to fill in the 'first and last mile' between major destinations and existing transportation infrastructure.

Why Should We Plan for Micro-Mobility?

While this micro mode of transportation has been around for some time, recently various forms of micro-mobility devices have taken over cities at a speed at which municipalities are unprepared to address. Most cities have not provided micro-mobility specific infrastructure, implemented standards and guidelines for designated use of micro-mobility vehicles, or created policies detailing management of dock and dockless device locations. A new part of planning transportation infrastructure includes planning for micro-mobility and defining where it fits in with the existing system of roadways, on-street bicycle facilities, and off-street trails.

Planning for the Future

The global pandemic has interrupted continued growth of micro-mobility in cities worldwide. Fewer people are commuting to jobs, tourism has declined, and there is increased concern over shared spaces. Micro-mobility vehicles available for public use are generally managed by private companies, who have increased efforts to work in partnership with municipalities to encourage use of public transportation options. Moving forward it will be important for companies and cities to continue collaboration to find solutions for ensuring safety and access to devices with consideration to heightened concerns about public health and sanitation. The City of Austin has implemented Micro-mobility Laws and Regulations that provides clear guidelines for appropriate licensing, how to operate, where to park, and safety tips for micro-mobility devices. The City has also developed an Open data platform, available to the public, that collects and analyses information about locations, trips, and mileage to provide more efficient and safe use of micro-mobility devices in the City. More information about the regulation of micro-mobility can be found here at the following website: http://austintexas.gov/department/shared-mobility-services.

Rental bike parked at bike racks at the Toyota Music Factory in Irving, Texas.