

PARKS MASTER PLAN UPDATE 2023

Town Of Springdale
118 Lion Blvd
PO Box 187
Springdale, UT 84767



October 2023

PREPARED BY:
Sunrise Engineering, Inc.





MAYOR Barbara Bruno
TOWN MANAGER Rick Wixom
COUNCIL MEMBER Randy Aton
COUNCIL MEMBER Jack Burns
COUNCIL MEMBER Suzanne Elger
COUNCIL MEMBER Lisa Zumpft



Blaine Worrell, P.E.
Project Engineer
State of Utah No. 13229751-2202

TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	1
1.1	USER ANALYSIS.....	1
1.2	INVENTORY	1
1.3	DEMAND ANALYSIS.....	2
2	INTRODUCTION.....	3
2.1	PURPOSE AND SCOPE.....	3
2.2	BACKGROUND INFORMATION.....	3
2.3	ANALYSIS AREA	3
3	USER ANALYSIS.....	4
3.1	GROWTH RATE.....	4
3.2	LENGTH OF PLANNING HORIZON	4
3.3	POPULATION PROJECTION	4
3.4	EQUIVALENT POPULATION.....	6
4	INVENTORY	9
4.1	EXISTING FACILITIES.....	9
4.2	EXISTING LEVEL OF SERVICE.....	10
4.2.1	Existing LOS - Population.....	11
4.2.2	Existing LOS – Equivalent Population.....	11
4.3	NRPA METRICS.....	12
4.4	NRPA METRICS COMPARISON	12
4.4.1	Town Residents Population.....	12
4.4.2	Equivalent Population	12
5	DEMAND ANALYSIS	14
5.1	DEMANDS DUE TO GROWTH – MAINTAIN EXISTING LEVEL OF SERVICE.....	14
5.2	PROJECTED LEVEL OF SERVICE	14
5.2.1	Projected Parks LOS.....	14
5.2.2	Projected Trails LOS	15
5.2.3	Projected NRPA Metrics	15
5.3	TARGET LEVEL OF SERVICE.....	15
5.3.1	Target LOS – Median NRPA Metrics	16
5.3.2	Target LOS – Indoor Recreation	17
6	RECOMMENDATIONS AND CONCLUSION	18
6.1	PARKS	18
6.1.1	10-year Planning Period	18
6.1.2	20-year Planning Period.....	18
6.2	TRAILS.....	19

6.2.1	10-year Planning Period	19
6.2.2	20-year Planning Period	20
6.3	INDOOR RECREATION.....	20
6.4	CONCLUSION	20

LIST OF FIGURES

Figure 1: Population Estimates	5
Figure 2: Total Equivalent Population Estimates.....	8

LIST OF TABLES

Table 1: 20-year Population Estimates	5
Table 2: Transient Unit Guests Equivalent Population.....	7
Table 3: 20-year Transient Unit Guests Equivalent Population Estimates.....	7
Table 4: 20-year Total Equivalent Population Estimates.....	8
Table 5: Existing Parks Inventory	9
Table 6: Existing Trails Inventory.....	10
Table 7: 2023 NRPA Metrics (Under 20,000 Residents).....	12
Table 8: NRPA Metrics Comparison – 2023 Population.....	12
Table 9: NRPA Metrics Comparison – 2023 Equivalent Population	13
Table 10: NRPA Metrics Comparison – 2042.....	15
Table 11: Additional Parks – Median NRPA Metric.....	16
Table 12: Additional Park Area – Median NRPA Metric	16
Table 13: Additional Facilities Summary	18

EXHIBITS

Exhibit 1 – Existing Inventory

APPENDICES

Appendix A – Population and Growth Projections

Appendix B – Level of Service Calculations

1 EXECUTIVE SUMMARY

Detailed information regarding the summarized numbers and figures presented herein are provided in the body of this Springdale Parks Master Plan Update.

1.1 USER ANALYSIS

The Town of Springdale has experienced growth in both residents and visitors over the last several years, owing in part to the rich recreational offerings in and around the Town. This growth will continue to impact the Town's recreational facilities, resulting in the need for planning for future demand. The following assumptions and calculations comprise the basis for the analysis presented in the Plan:

- Population Growth Rate = 2%
- 20- year Planning Period
- Visitor Growth Rate = 1.5%
- Existing Statistics for 2023
 - Population = 588
 - Recreational Equivalent Population = 1,777
 - Equivalent Population = 2,365
- Future Projections for 2042
 - Population = 867
 - Recreational Equivalent Population = 2,368
 - Equivalent Population = 3,235

1.2 INVENTORY

Providing an accurate inventory of parks and trails is vital in determining the existing recreational Level of Service (LOS) for the community. To accomplish this, an inventory of park and trail facilities was collected from Town staff as well as online resources. Once the inventory was complete, the existing LOS was calculated as presented in the Plan:

- Existing Facilities:
 - 2 Parks = 29.6 acres
 - 9.9 miles of trails
- Existing LOS:
 - Parks = 12.5 Acres/1000 Equivalent People
 - Trails = 4.2 Miles/1000 Equivalent People

1.3 DEMAND ANALYSIS

The demand analysis focuses on the desired or target LOS, understood as the level of service the Town would like to provide going forward and the efforts necessary to maintain the current level of service. Discussion on the target LOS and future demand placed on recreational facilities are outlined in the Plan:

- Target LOS:
 - *The Town has selected the average NRPA metric for communities under 20,000 residents as its target LOS for parks*
 - 1,255 residents per park
 - 13 acres/1000 residents
 - *The Town has elected to use its current LOS for trails as the target LOS*
- Growth Demand for Planning Horizon:
 - *1 additional park with 12.5 acres*
 - *3.7 additional miles of trails*

2 INTRODUCTION

This section reviews the purpose and scope of this Parks Master Plan Update, provides background information, identifies the plan's area or limits, and considers connections with adjacent entities related to recreation facilities in Springdale.

2.1 PURPOSE AND SCOPE

Springdale commissioned Sunrise Engineering, Inc. to prepare a Parks & Recreation Master Plan Update. The Town understands the importance of an early planning process to ensure that a comprehensive community-wide recreation system fulfills the current and future recreational needs of Springdale residents and visitors.

Recreation facilities are an integral part of the community. The location and attributes of park and trail facilities have a meaningful impact on the type and course of growth in the community. Likewise, these facilities can enhance the quality of life and contribute positively to a neighborhood's aesthetics.

As directed by the Town, the specific objectives of this plan are to analyze population growth rates and projections, identify existing parks and trails, and establish a facility plan to guide future growth. Ultimately, the goal of this plan is to provide a general guide to the Town for making decisions pertaining to future recreation facility development.

2.2 BACKGROUND INFORMATION

The Town of Springdale is located in Washington County, Utah, just outside the south entrance of Zion National Park, along S.R.-9. From Utah Division of Water Rights data gathered in 2021, Springdale has an approximate population of 650 residents. Since the Town is located at the entrance of Zion National Park (ZNP), it is actively involved in maintaining the natural features, vegetation, and views of Zion Canyon as well as the overall village character of the Town itself. The Town and Zion National Park are mutually dependent on each other. The Town's economy relies on the tourists visiting the Park, and the Park depends on Springdale as a gateway community to provide services that Park visitors want. Springdale's businesses include hotels, restaurants, and various retail shops.

2.3 ANALYSIS AREA

The plan area is contained within the existing Springdale limits; see Exhibit 1.

3 USER ANALYSIS

An essential element in any community plan is a user analysis and a projection of the Town's population growth. This projection gives the planner an idea of the future demands the Town should expect throughout the planning period. This section summarizes how the growth rate, planning period, and population projections were derived.

3.1 GROWTH RATE

To determine the existing recreation system Level of Service (LOS), projections for the population and growth rate must be estimated. Projecting the future population is a subjective process, especially with fluctuating growth trends typical of the Town and other surrounding communities. For population growth, this plan will use a growth rate of 2%. This growth rate corresponds with the estimated growth rates determined in the March 2023 Town of Springdale Water Management and Conservation Plan.

Due to the unique nature of Springdale with its proximity to Zion National Park, a separate growth rate for park visitors will be used to determine equivalent population. Based on the average visitorship growth rate over the last 20 years, ZNP has had an average growth rate of 3%. Hotel room growth is limited based on available area for the addition of hotels, but the occupancy rate of the existing hotels may increase due to park visitorship growth. The Town's lodging ordinance allows for up to 3 new lodging facilities every other year, contributing to potential growth. The equivalent population may also grow based on growth to hotel guests in nearby communities as well. Considering the combined effect of these factors and discussion with the Town staff, a visitorship growth rate of 1.5% was assumed for this plan.

3.2 LENGTH OF PLANNING HORIZON

It is typical for a parks master plan to use a 10 or 20-year planning horizon or period. This plan will assume a 20-year planning horizon. It should be noted that assumptions, objectives, goals, etc. can change within a 20-year period. This change in conditions may especially be realized if dramatic population changes take place within the 20-year planning horizon.

3.3 POPULATION PROJECTION

An essential element in the development of this plan is the projection of the Town's assumed growth rate to an anticipated planning horizon. The future population for each year is calculated using the compound interest formula and inserting the projected growth rate, the existing population, and the length of the planning horizon.

Equation 1: Compound Growth Formula

$$F = P(1 + i)^n$$

where:

F = Future Population

P = Present Population

i = Projected Growth Rate

n = Years

As of 2022, the Town's census population is 576. Using the compound growth formula in Equation 1, the projected populations were calculated as shown in Figure 1. and Table 1. A full population projection can be found in Appendix A.

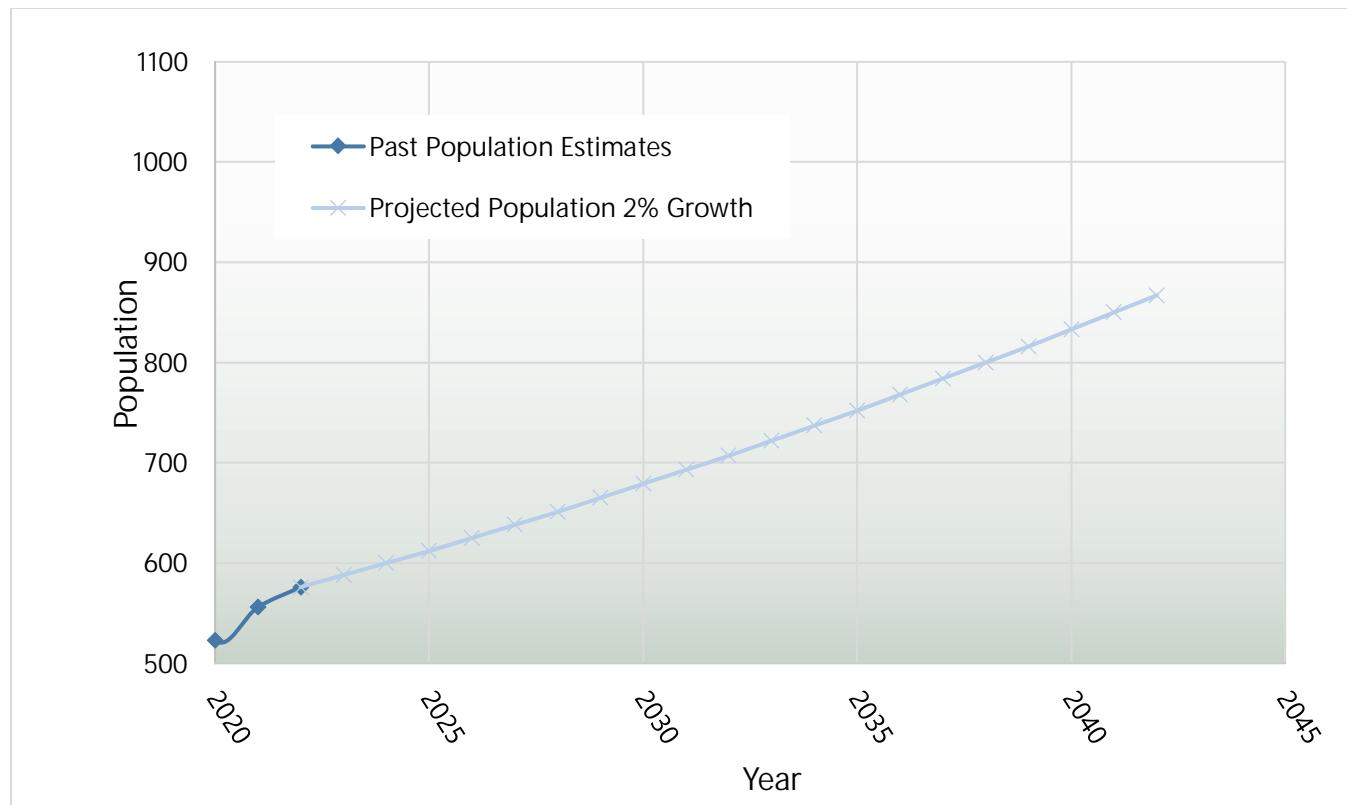


Figure 1: Population Estimates

Table 1: 20-year Population Estimates

Year	Estimated Population
2023	588
2032	707
2042	867

3.4 EQUIVALENT POPULATION

While population data for this plan has been taken from the census, it is important to note the population figures presented in this plan may not fully reflect the recreational needs of Springdale due to the significant number of visitors to the Town.

Springdale is a tourist destination located near Zion National Park, which receives over 4 million visitors each year. There are currently 1,233 standard lodging units and 120 recreational lodging units located within the Town. These figures include hotel rooms, bed & breakfasts, vacation rental properties, and campgrounds. Guests staying at these locations frequent the parks, trails and other recreation facilities within the Town. In addition to the lodging guests there are many visitors who travel to Springdale and the Park that are either local or have lodging outside of the Town. The intent of the Town is to be able to adequately provide these amenities, not only for the citizens of the Town, but also for these guests.

In order to determine the existing level of service, this plan will outline the method by which the transient occupancy of lodging within the Town is related to a full-time Springdale resident using the recreational facilities. An occupancy factor and a visitorship factor was applied to the number of available lodging units to calculate a recreational equivalent population. This population combined with the census population results in an overall equivalent Town population that reflects both visitors and residents.

It is important to note that this method aims to quantify the equivalent population of all visitors to the Town not just those who are using the transient lodging. However, data is only available for the lodging units. Assumptions have been made using the available lodging data to represent the number of all visitors that are coming to Springdale and Zion National Park that are using the Town's existing parks and trails.

It was assumed that the peak season rate of occupancy per night of the transient units was 85%. The 2023 Utah State Tax Commission Report of Transient Room Capacity for Springdale assumes that standard lodging units and recreational lodging units house 3 and 4 guests a night, respectively. This results in 3,553 transient unit guests per night. If the rate of occupancy was assumed to be higher than 85%, or if the number of guests per room per night was selected to be higher, the recreational equivalent population would increase. This would result in a higher assumed demand on the recreational facilities. Conversely, if the rate of occupancy was assumed to be lower than 85%, or if the number of guests per room per night was selected to be lower, the recreational equivalent population would decrease. This would result in a lower assumed demand on the recreational facilities.

It was also assumed that 50% of these peak season nightly transient unit guests would use the recreational facilities within the Town, and the remaining 50% of nightly guests would solely visit Zion National Park. Considering this, a ZNP visitorship factor of 50% was selected. It is important to note that increasing this factor above 50% would increase the recreational equivalent population and in turn increase the assumed demand on the recreational facilities, and decreasing this factor below 50% would decrease the recreational equivalent population and in turn decrease the assumed demand on the recreational facilities. Applying this factor to the transient unit guests number results in a recreational equivalent

population of 1,777. This number of guests per night during peak season was assumed to be equivalent to a Springdale resident, as those guests would impact the recreational facilities during the peak recreational season just as a resident would. The full transient unit recreational equivalent population calculations can be found in Appendix A. A summary of the equivalent population calculations is given in Table 2.

Table 2: Transient Unit Recreational Equivalent Population

Transient Unit Guests (People/Night)	ZNP Visitorship Factor	Recreational Equivalent Population (People/Year)
3,553	50%	1,777

The 2023 recreational equivalent population assumed to be contributed by the transient units is 1,777. Using the compound interest formula given in Equation 1, the projected transient unit recreational equivalent populations over the 20-year planning horizon were calculated as shown in Table 3. It is important to note that these figures were determined based on historic visitorship growth trends and hotel data. These estimates may be affected by any change to hotel or visitorship growth, including by future decisions within the Town legislature or the National Park Service.

Table 3: 20-year Recreational Equivalent Population Estimates

Year	Estimated Population
2023	1,777
2032	2,037
2042	2,368

The projected population numbers combined with the estimated transient unit recreational population can be used to project a total equivalent population. The total equivalent population estimates are shown in Figure 2 and Table 4.

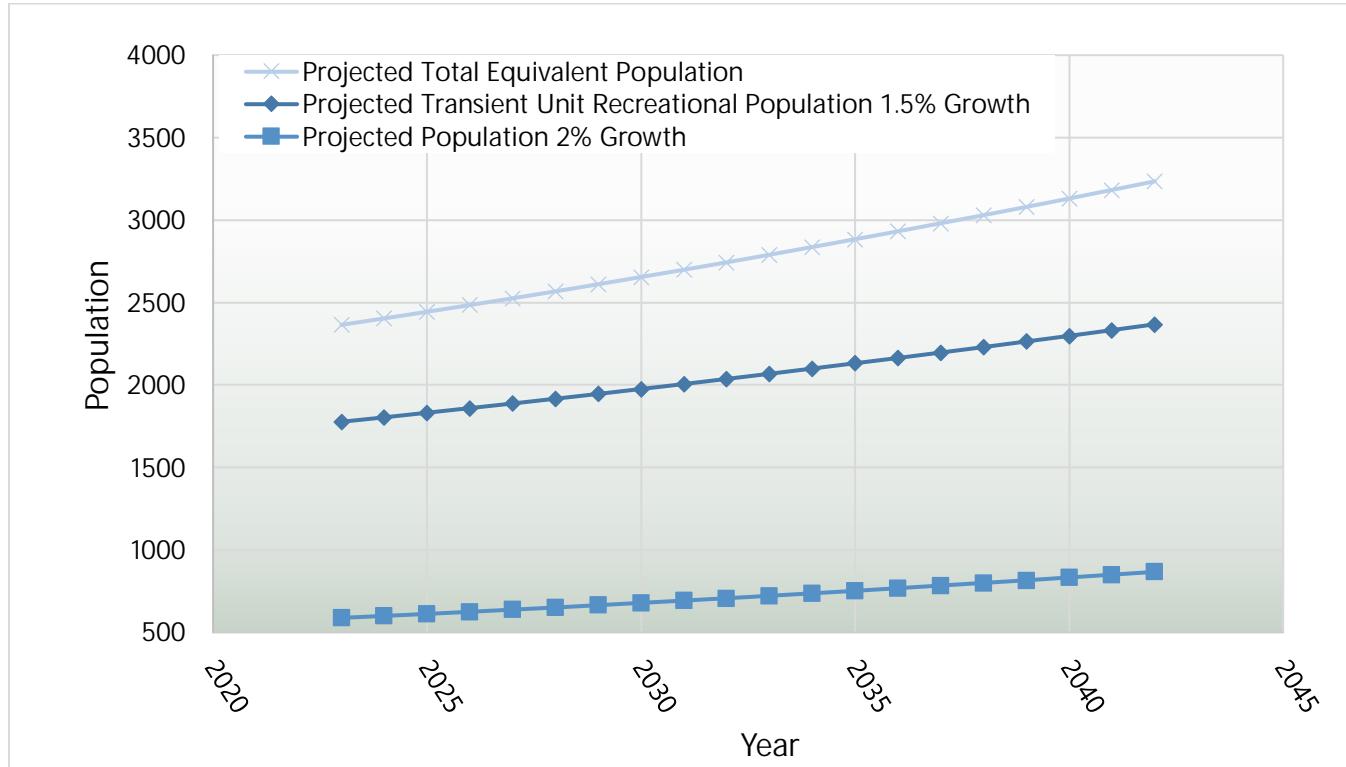


Figure 2: Total Equivalent Population Estimates

Table 4: 20-year Total Equivalent Population Estimates

Year	Total Equivalent Population
2023	2,365
2032	2,744
2042	3,235

These total equivalent population estimates are considered to be representative of the demand on the Town's recreation facilities. These figures will be used for the remainder of the report to predict the existing and future recreation system LOS. This data will inform the recommendations for any future additional recreational facilities.

4 INVENTORY

This section seeks to inventory the existing recreation facilities within Springdale and establish guidelines, standards, classifications, and Existing Level of Service (LOS) to be used throughout this plan and in future recreation planning efforts. Information in this section was gathered from the state's GIS database along with various investigations and online research, and with information provided by Town personnel.

4.1 EXISTING FACILITIES

An inventory of the existing parks and trails within the Town of Springdale was completed. There are two existing parks for community access within the Town of Springdale. The existing trail system consists of both paved concrete and unpaved trails. A map identifying these facilities is given in Exhibit 1.

The two parks in Springdale are Town Park and George Barker River Park. The amenities offered at Town Park include a basketball court, gazebo, picnic tables, pickleball court, volleyball court, ball field, playground, and a nine-hole disc golf course. At George Barker River Park, amenities such as benches, grills, and picnic tables are offered. Marj Bonner Dog Park, a natural area directly across the Virgin River, has been included toward the George Barker River Park acreage.

Table 5 summarizes the names and areas of the parks included in the existing facilities inventory. These areas include improved areas on Town-owned parcels. The total area of existing parks is approximately 29.6 acres.

Table 5: Existing Parks Inventory

Name	Type	Area (acres)
Town Park	Neighborhood Park	11.5
George Barker River Park	Neighborhood Park	18.1
Total		29.6

Note: Existing parks are shown in Exhibit 1

Table 6 summarizes the names and lengths of trails included in the existing facilities inventory. These existing trails include both paved and natural trails, and trails currently in construction. The total length of existing trails is approximately 9.9 miles.

Table 6: Existing Trails Inventory

Name	Type	Length (miles)
Edgemont Trail	Natural	0.37
BLM Access Trail	Natural	0.12
Zion Canyon Trail	Paved and Natural	1.88
Steamboat Mountain Trail	Natural	1.98
Paiute Trail	Natural	1.54
Paiute Trail - Phase 2	Natural	1.42
Paiute Trail West Loop	Natural	0.23
Paiute Trail East Loop	Natural	0.83
Moenave Trail	Paved (Concrete)	0.41
Chinle Trail	Natural	1.11
		9.9

Note: Existing trails are shown in Exhibit 1

4.2 EXISTING LEVEL OF SERVICE

Establishing an existing LOS is a fundamental part of a parks master plan. Specific terms used in this plan to characterize a LOS are defined as follows:

Existing LOS: the level of service, calculated as the quantity and quality of facilities owned and operated by the Town, divided by the existing population. This is the LOS currently being provided by the Town to the community.

Perceived LOS: the current total level of service, or what a user perceives as the quantity and quality of available recreational opportunities. This level of service includes both Town-owned and maintained recreational opportunities and recreational facilities owned, operated, or maintained by others. The perceived level of services is not the basis for calculating the existing, or impact fee eligible, level of service.

Target LOS: the level of service the Town desires to provide on a long-term basis to its citizens, sometimes categorized by facility types such as parks, trails and recreation centers, etc.

In rural areas such as Springdale, the perceived LOS can be significantly greater than the calculated existing LOS because of citizens' access to nearby state, federal and other outdoor and recreational areas such as Zion National Park. Urban areas require a higher LOS to be provided to the community because of the lack of or difficulty accessing other outdoor or recreational opportunities.

The Town of Springdale currently provides approximately 29.6 acres of park area and approximately 9.9 miles of improved and natural trails within the Town boundary for its residents. The 2023 estimate for the population of Springdale is 588, with an equivalent population of 2,365. These population figures will be used to calculate an existing LOS for parks and trails.

4.2.1 Existing LOS - Population

4.2.1.1 Parks

The existing LOS for the Town resident population is given by the existing acreage of parks provided by the Town per 1,000 residents (acres/1000 people). The calculation for the existing parks LOS is given in the following equation:

$$\frac{29.6 \text{ acres}}{588 \text{ people}} (1000) = 50.3 \text{ acres}/1000 \text{ people}$$

Therefore, the existing LOS for parks is calculated as 50.3 acres per 1,000 people.

4.2.1.2 Trails

The existing LOS for the Town resident population is given by the existing length of trails within the Town boundary per 1,000 residents (miles/1000 people). The calculation for the existing trails LOS is given in the following equation:

$$\frac{9.9 \text{ miles}}{588 \text{ people}} (1000) = 16.8 \text{ miles}/1000 \text{ people}$$

Therefore, the existing LOS for trails is calculated as 16.8 miles per 1,000 people.

4.2.2 Existing LOS – Equivalent Population

Though the residents of the Town are the primary users, visitors cause a significant impact to the Town's recreational facilities. Therefore, an existing level of service including these visitors is necessary to quantify that impact.

4.2.2.1 Parks

The existing LOS for the equivalent population including the national park visitors is given by the existing acreage of parks provided by the Town per 1,000 equivalent people (acres/1000 equivalent people). The calculation for the existing parks equivalent LOS is given in the following equation:

$$\frac{29.6 \text{ acres}}{2,365 \text{ people}} (1000) = 12.5 \text{ acres}/1000 \text{ people}$$

Therefore, the existing equivalent LOS for parks is calculated as 12.5 acres per 1,000 people.

4.2.2.2 Trails

The existing LOS for the equivalent population including the national park visitors is given by the existing length of trails within the Town boundary per 1,000 equivalent people (miles/1000 equivalent people). The calculation for the existing trails equivalent LOS is given in the following equation:

$$\frac{9.9 \text{ miles}}{2,365 \text{ people}} (1000) = 4.2 \text{ miles}/1000 \text{ people}$$

Therefore, the existing equivalent LOS for trails is calculated as 4.2 miles per 1,000 people.

4.3 NRPA METRICS

The National Recreation and Park Association (NRPA) previously identified and established guidelines for the development of park facilities to help communities establish a framework for the types, sizes, proximity, and number of recreational facilities that should be provided for the communities. However, the guidelines have been replaced with metrics showing the benchmark quantity of facilities offered based on community size. These metrics provide data on the lower quartile, median, and upper quartile of communities. Table 7 summarizes the quartiles of various metrics for communities such as Springdale that serve under 20,000 residents according to the 2023 NRPA Agency Performance Review.

Table 7: 2023 NRPA Metrics (Under 20,000 Residents)

	Lower Quartile	Median	Upper Quartile
Residents per Park	2042	1,225	666
Acres per 1,000 Residents	6	13	21.1
Miles of Trail	2	4	10
Average Community Size with Recreation Centers		9,745	

4.4 NRPA METRICS COMPARISON

4.4.1 Town Residents Population

For the target LOS to be established, it is necessary to understand how the existing LOS that is being provided to the citizens of Springdale compares with other similarly sized communities. Table 9 shows how Springdale's current facilities compare with the NRPA metrics.

Table 8: NRPA Metrics Comparison – 2023 Population

	Springdale	NRPA Range
Residents per Park	294	Upper Quartile
Acres per 1,000 Residents	50.3	Upper Quartile
Miles of Trail	9.9	Above Median
Average Community Size with Recreation Centers	588	9,745

Considering the Town's 2023 resident population, the current recreational offerings in Springdale are well above the average for a community in its size range.

4.4.2 Equivalent Population

Though the amenities offered by Springdale currently exceed median NRPA metrics for the Town's population, the impact on recreation facilities by visitors is significant. The impact of visitors should be considered in future planning to maintain a level of service that satisfies Town residents.

Table 9 shows how Springdale's current facilities compare with the NRPA metrics using the equivalent population.

Table 9: NRPA Metrics Comparison – 2023 Equivalent Population

	Springdale	NRPA Range
Residents per Park	1,183	Below Median
Acres per 1,000 Residents	12.5	Below Median
Miles of Trail	9.9	Above Median
Average Community Size with Recreation Centers	2,365	9,745

The Town of Springdale has 2 parks for its 2023 equivalent population of 2,365. Referring to Table 9, this figure is just below the median Residents per Park NRPA metric. The area of Springdale's parks is approximately 29.6 acres. Using the parks existing LOS of 12.5 acres per 1000 people, Springdale's existing park area is just below median of the Area per 1,000 Residents metric. Considering the approximately 9.9 miles of trails within the Town boundary, Springdale's existing trails length is near the upper quartile range for the Miles of Trails NRPA metric. With respect to indoor recreation centers, the NRPA average size of community with a recreation center is 9,745 people. Since Springdale's equivalent population of 2,365 is below the NRPA average, the lack of indoor recreation in Springdale is reasonable. The Town's equivalent LOS for parks and trails as well as indoor recreation offerings are sufficiently in line with the related NRPA metrics.

The Town may consider NRPA metrics in its future planning efforts, subject to the following nuances:

- NRPA metrics are only benchmarks provided by the pool of communities surveyed; each community should adjust their recreational offerings to meet their individual requirements.
- Springdale is ideally located for outdoor recreation and access to numerous state, federal, and other outdoor and recreational areas such as Zion National Park. A relatively low existing LOS when compared to what the NRPA metrics outline can be satisfactory for rural areas such as Springdale since the perceived LOS for the Town may account for the disparity between existing LOS and the NRPA metric.

5 DEMAND ANALYSIS

As the Town grows and visitorship to ZNP increases, an extra demand will be placed on the Town's recreation facilities. This section sets forth the goals established by Springdale for parks and trails in the community, establishes a Target Level of Service (LOS) desired by Springdale and quantifies the future demand for parks and trails necessary to maintain the existing LOS.

5.1 DEMANDS DUE TO GROWTH – MAINTAIN EXISTING LEVEL OF SERVICE

The additional growth demand or impact on recreational facilities in terms of additional population and visitors is calculated by taking the difference between the estimated future equivalent population at the end of the planning horizon (2042) and the current equivalent population (2023) as shown in the following equation.

$$3,235 \text{ people} - 2,365 \text{ people} = 870 \text{ people}$$

Once the population increase due to growth over the planning period is calculated, this figure is simply multiplied by the existing LOS to obtain the increase in demand at the end of the planning period due to new growth, as shown in these equations:

Parks:

$$870 \text{ people} \left(\frac{12.5 \text{ acres}}{1000 \text{ people}} \right) = 10.9 \text{ acres}$$

Trails:

$$870 \text{ people} \left(\frac{4.2 \text{ miles}}{1000 \text{ people}} \right) = 3.7 \text{ miles}$$

These figures represent the additional quantity of parks and trails that would need to be provided over the 20-year planning period to maintain the existing LOS.

5.2 PROJECTED LEVEL OF SERVICE

As stated previously, the Town currently provides approximately 29.6 acres of park area and approximately 9.9 miles of improved and natural trails within the Town boundary for its residents. The 2042 estimate for the equivalent population of Springdale is 3,235. This population figure will be used to calculate a projected LOS for parks and trails.

5.2.1 Projected Parks LOS

The projected LOS for the equivalent population including the national park visitors is given by the projected acreage of parks provided by the Town in 2042 per 1,000 equivalent people (acres/1000 equivalent people). The calculation for the projected parks equivalent LOS is given in the following equation:

$$\frac{29.6 \text{ acres}}{3,235 \text{ people}} (1000) = 9.1 \text{ acres}/1000 \text{ people}$$

Therefore, the projected LOS for parks in 2042 is calculated as 9.1 acres per 1,000 people. This projected LOS can be raised to match the existing LOS by adding the previously calculated 11.0 acres of park area to the Town's current park offerings.

5.2.2 Projected Trails LOS

The projected LOS for the equivalent population including the national park visitors is given by the projected length of trails within the Town boundary in 2042 per 1,000 equivalent people (miles/1000 equivalent people). The calculation for the projected trails equivalent LOS is given in the following equation:

$$\frac{9.9 \text{ miles}}{3,235 \text{ people}} (1000) = 3.1 \text{ miles}/1000 \text{ people}$$

Therefore, the projected LOS for trails in 2042 is calculated as 3.1 miles per 1,000 people. This projected LOS can be raised to match the existing LOS by adding the previously calculated 3.7 miles of trails to the Town's current park offerings.

5.2.3 Projected NRPA Metrics

The demands due to growth affect how well Springdale will meet the current NRPA metrics in the future. Table 10 shows the expected NRPA range the existing facilities of Springdale would fall in due to growth by 2042.

Table 10: NRPA Metrics Comparison – 2042

	Springdale	NRPA Range
Residents per Park	1,618	Below Median
Acres per 1,000 residents	9.1	Below Median
Miles of Trail	9.9	Above Median
Average Community Size with Recreation Centers	3,235	9,745

5.3 TARGET LEVEL OF SERVICE

As Springdale undertakes planning efforts in the future, it is recommended that the Town consider target levels of service for its recreational offerings and then budget appropriately to achieve the level of service. The Town of Springdale General Plan dated July 2022 (General Plan) indicates that a goal of the Town is to seek additional open space for the community, and that additional trails would be considered. The Town has also indicated that they would like to provide amenities in line with the median NRPA metric at a minimum. The demand due to future growth indicates that additional amenities will be necessary to satisfy both the General Plan and the Town's expectations.

5.3.1 Target LOS – Median NRPA Metrics

This section assumes the Town would like to target the median NRPA metrics as the target LOS. Referring to Table 7, in order to meet the median Acres per 1,000 Residents NRPA metric, Springdale needs to offer 13 acres of parks per 1,000 residents. The Town would also need to provide 1 park for every 1,225 residents, and 4 miles of trails to be considered average with respect to NRPA metrics.

5.3.1.1 Additional Parks Demand

The Town currently offers 2 parks for its equivalent population of 2,365. Table 11 shows the additional number of parks needed above the current offerings to satisfy the median Residents per Park NRPA metric of 1,225.

Table 11: Additional Parks – Median NRPA Metric

Year	Population	Springdale (Residents/Parks)	NRPA (Residents/Park)	Additional Parks
2023	2,365	1,183	1,225	0
2032	2,850	1,372		1
2042	3,235	1,618		1

Springdale's current parks LOS is 12.5 acres per 1000 people. This LOS is expected to decrease to 9.1 acres per 1,000 people by 2042. Knowing that Springdale would like to meet the average NRPA metrics, selecting the NRPA metric of 13 acres per 1000 people as the target LOS, rather than maintaining the existing level of service of 12.5 acres per 1000 people, is more desirable. Table 12 shows the additional areas of parks needed above the current offerings to satisfy the median Acres per 1,000 Residents NRPA metric of 13.

Table 12: Additional Park Area – Median NRPA Metric

Year	Population	Springdale (Acres/1,000 Residents)	NRPA (Acres/1,000 Residents)	Additional Area (Acres)
2023	2,365	12.5	13	1.1
2032	2,850	10.8		6.1
2042	3,235	9.10		12.5

In order to satisfy the median NRPA metrics for parks, the Town will need to add 1 additional park with an acreage of 12.5 acres by the year 2042.

5.3.1.2 *Additional Trails Demand*

The Town currently offers 9.9 miles of trails. Referring to Table 7, the Town would only need 4 total miles of trails to meet the median Miles of Trail NRPA metric. The Town currently exceeds the median NRPA metric for Miles of Trail. However, the Town has expressed the value it places on trails as well as the frequency of their use by both residents and visitors. Therefore, maintaining a trails LOS that is in line with the existing LOS is more reflective of the Town's needs. Referring to Section 5.1, the Town will need to provide an additional 3.7 miles of trails by the year 2042.

5.3.2 Target LOS – Indoor Recreation

Springdale's current population and 2042 population are both below the average population of 9,745 for indoor recreation centers. Therefore, an indoor recreation center would not be necessary to meet the NRPA metric. However, according to survey data on recreational offerings in the Town, residents have expressed interest in an indoor recreation facility. A community recreation center is also referenced as a future consideration in the General Plan. Amenities preferred by a majority of surveyed residents include yoga, dance, and aerobic and strength training gym equipment. The addition of an indoor recreation facility will be considered in this plan as part of the target LOS.

6 RECOMMENDATIONS AND CONCLUSION

To reach the target LOS established in Section 5, this Plan recommends the Town provide additional amenities. This section will break down the recommended improvements into facilities to be constructed within the 10 and 20-year planning periods. A summary of the recommended amenities over the two planning horizons is given in Table 13.

Table 13: Additional Facilities Summary

Type	2032	2042
New Parks	1	1
Park Area (Acres)	6.1	12.5
Trails (Miles)	1.6	3.7
Indoor Recreation Facilities	0	1

In working with the Town staff, several recreational facilities that are in various stages of development have been identified to include in future planning. This section will detail these amenities in concept. The future planned parks and trails contribute a total of 5.9 acres and 1.9 miles, respectively.

6.1 PARKS

6.1.1 10-year Planning Period

The target parks LOS to reach within the 10-year planning horizon is 1 new park with an acreage of 6.1 acres. The Town has identified planned park areas that total approximately 5.9 acres toward the 2032 target parks LOS. An additional 0.2 acres of park area beyond those already planned will need to be considered to satisfy the target LOS in 2032.

6.1.1.1 *George Barker River Park Addition*

The Town has purchased 0.91 acre parcel adjacent to George Barker River Park. This parcel will add to the improved area of George Barker River Park. This additional park expansion area would qualify toward the target parks LOS acreage.

6.1.1.2 *Cemetery Memorial Grove*

The Town is planning construction of a memorial grove near the Jolley-Gifford Cemetery. This area would be considered a recreational open area and would qualify toward the target parks LOS as a new park. The existing Steamboat Mountain Trail would be improved and run through the grove. Facilities planned to be added to this area include benches and public restrooms. The approximate area of the grove is 5 acres.

6.1.2 20-year Planning Period

The target LOS to reach within the 20-year planning horizon is 1 new park with an acreage of 12.5 acres. The facilities proposed to be constructed by 2032 will add 1 new park and a total acreage of 5.9 acres.

However, 6.6 additional acres of park area beyond those already planned will need to be considered to satisfy the target LOS in 2042. Though this Plan will not detail specifics regarding acreage and amenities for the additional park areas, this section will recommend ideas to consider in future planning should funding and land become available.

6.1.2.1 Recommended Improvements

Should land become available, this Plan recommends the addition of new parks outside of the areas already discussed. New parks and related recreational amenities would fall in line with the intent of the General Plan and would count toward the parks area target LOS. The Town should consider any land that becomes available when funding permits to satisfy the remaining recommended 6.6 acres of park by 2042. Future improvements that could be considered toward the parks and recreational area include botanical gardens, expansion of the existing disc golf course, additional disc golf courses, traditional landscaped park areas, open areas, gazebos, playgrounds, basketball courts, skate parks, picnic areas, and dog parks. To achieve the target level of service in the 20-year planning window, it is recommended that the town use this Plan as a starting point to seek out future opportunities to expand parks and recreation facilities such as these.

6.2 TRAILS

6.2.1 10-year Planning Period

The target trails LOS to reach within the 10-year planning horizon is 1.6 miles of additional trail length. The Town has identified planned trails that total approximately 1.9 miles toward the 2032 target trails LOS.

6.2.1.1 Zion Canyon Trail Extension

IN 2007 UDOT performed a feasibility study of the Zion Canyon Trail. The study investigated a trail from Rockville to Zion National Park. Since the study was done, portions of the trail have been constructed. These segments are shown in Exhibit 1. It is recommended that the remaining portions of the trial be constructed in the 10-year planning period. The trail addition would allow the Zion Canyon Trail to connect from the Town's southern boundary across the Town to Zion National Park. This trail's exact length and path are not yet determined but would add to the additional length of trails needed to meet the target LOS.

6.2.1.2 Balanced Rock Trail

The Town has also expressed interest in a trail near the Balanced Rock Hills subdivision. The alignment of this trail is still in concept, but it is currently proposed to run through the subdivision. This trail would be constructed within the 5-year planning horizon. The length of this trail is to be determined but would count toward the target trails LOS.

6.2.1.3 *Town Park Loop*

GIS data provided by the Town has indicated a planned trail loop passing through the Town Park and connecting to the existing Steamboat Mountain Trail. The proposed trail loop alignment is in concept. This trail would add 1.71 miles to the additional length of trails needed to meet the target LOS.

6.2.1.4 *Steamboat Mountain Trail Extension*

GIS data provided by the Town has indicated a planned trail loop connecting to the existing Steamboat Mountain Trail. The proposed trail loop alignment is in concept. This trail would add 0.17 miles to the additional length of trails needed to meet the target LOS.

6.2.2 20-year Planning Period

The target trails LOS to reach within the 20-year planning horizon is 3.7 miles of additional trail length. The facilities proposed to be constructed by 2032 will add 1.9 miles of trails. However, 1.8 additional miles of trail beyond those already planned will need to be considered to satisfy the target LOS in 2042.

6.2.2.1 *Recommended Improvements*

This Plan recommends the addition of new trails outside of the areas already planned. New trails are aligned with the intent of the General Plan and would count toward the trails target LOS. The Town should consider any land that becomes available with potential for the construction of new trails when funding permits to satisfy the remaining recommended 1.8 miles of trails by 2042.

6.3 INDOOR RECREATION

The addition of an indoor recreation center has been identified in this plan as a target LOS. Though one would not be needed to meet the median NRPA metric, the Town's General Plan and survey of the public indicates desire toward the construction of an indoor recreation center. This Plan recommends the construction of this center occur within the 20-year planning window, by the year 2042.

6.4 CONCLUSION

Springdale is a unique community with growing demand on its recreational offerings. The existing parks and trails will continue to be impacted as the Town experiences even more growth. The construction of additional parks and trails should be considered in supporting the Town's goals for the future and accommodating the recommended areas of parks and lengths of trails toward the target LOS. This plan should be used to emphasize the importance of recreation to the Town and support future recreational projects to best serve the needs of its residents and visitors.

EXHIBIT 1

SPRINGDALE PARKS AND TRAILS

MAP LEGEND



0 775 1550
1 In = 1,550 Feet

Existing Trails

- Chinle Trail
- Edgemont Trail
- Moenave Trail
- Paiute Trail
- Paiute Trail - East Loop
- Paiute Trail - West Loop
- Paiute Trail - Phase 2
- Steamboat Mountain Trail
- Zion Canyon Trail

Springdale Parks

- Springdale Town Park - Existing
- George Barker River Park - Existing
- George Barker River Park - Proposed
- Memorial Grove - Proposed

Disc Golf

Parcels

Springdale Town Boundary



APPENDIX A

Hotel Occupancy/Transient Units

Standard Lodging

Property Type	# of Units
Vacation Rentals	72
B&Bs	37
Hotels	1124
Total	1233

Recreational Lodging	
Zion Canyon Campground	120

Lodging Transient Unit
Guests (People/Unit/Night)

Lodging Transient Unit Guests
(People/Night)

3145

From Utah State Tax Commission

Recreational Transient Unit
Guests (People/Unit/Night)

408

From Utah Tax Commission

Peak Season Transient Unit
Occupancy Rate

3553

Assumed

Total Equivalent Transient
Unit Population

1777

Assumed

Total Recreational Equivalent
Population

Data from May 11th, 2023 Utah State Tax Commission Report of Transient Room Capacity for Springdale

Population Growth Projections

YEAR	ESTIMATED POPULATION
2023	588
2032	707
2042	867

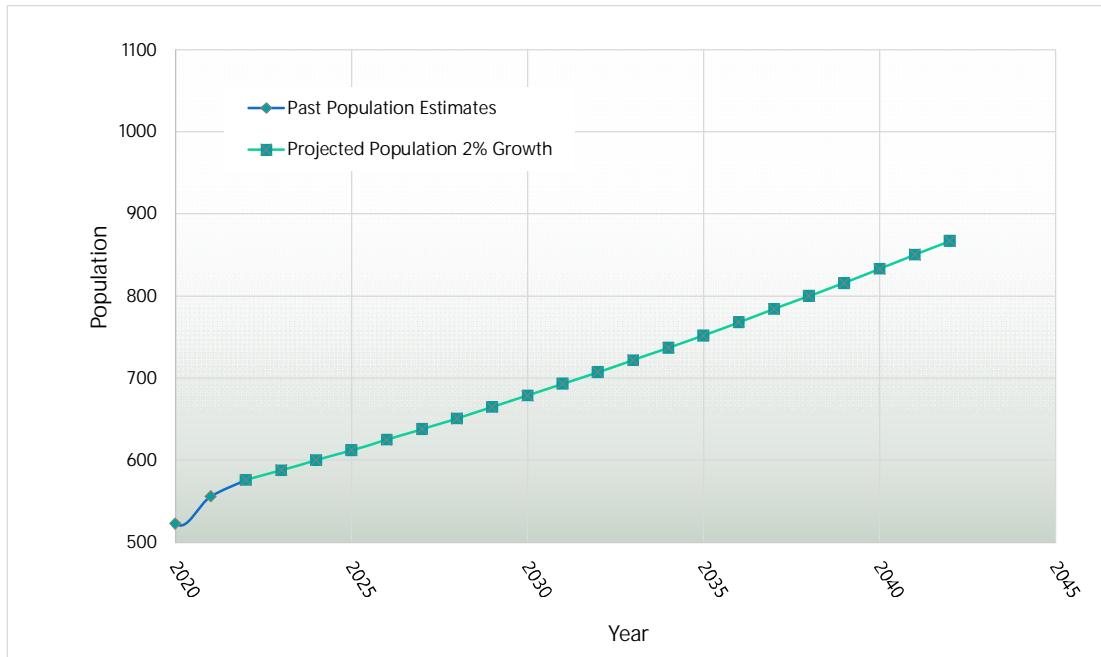
Selected growth rate (WMCP)

2%

Census Data

2018	606	2.36%
2019	629	3.80%
2020	523	-16.85%
2021	556	6.31%
2022	576	3.60%
2023	588	2%
2024	600	2%
2025	612	2%
2026	625	2%
2027	638	2%
2028	651	2%
2029	665	2%
2030	679	2%
2031	693	2%
2032	707	2%
2033	722	2%
2034	737	2%
2035	752	2%
2036	768	2%
2037	784	2%
2038	800	2%
2039	816	2%
2040	833	2%
2041	850	2%
2042	867	2%

Population Growth Projections



Equivalent Population
(Recreational and Resident)

Equivalent Population (Recreational)

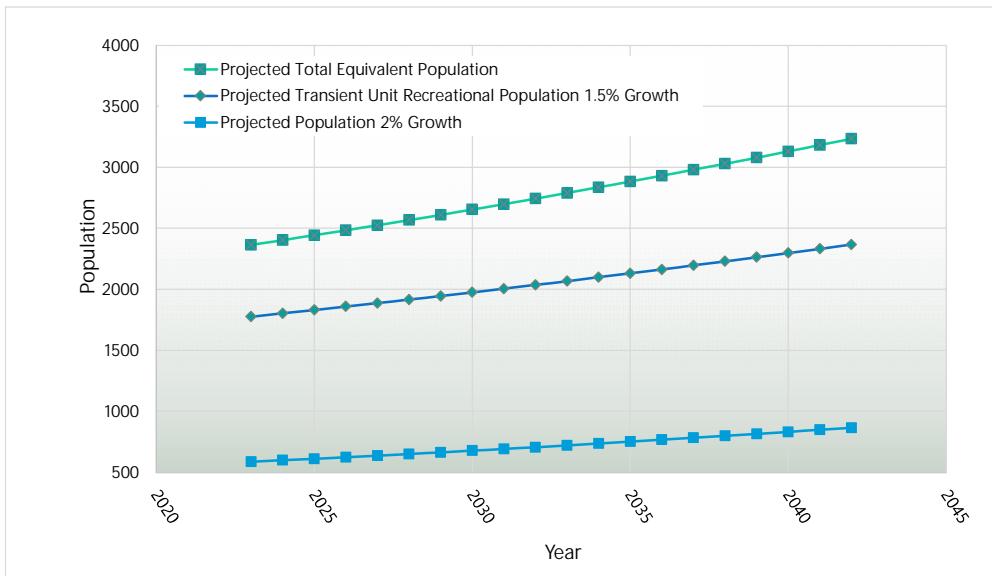
Calendar year	Total Population	Growth Rate
2023	1777	1.50%
2024	1804	1.50%
2025	1832	1.50%
2026	1860	1.50%
2027	1888	1.50%
2028	1917	1.50%
2029	1946	1.50%
2030	1976	1.50%
2031	2006	1.50%
2032	2037	1.50%
2033	2068	1.50%
2034	2100	1.50%
2035	2132	1.50%
2036	2164	1.50%
2037	2197	1.50%
2038	2230	1.50%
2039	2264	1.50%
2040	2298	1.50%
2041	2333	1.50%
2042	2368	1.50%

YEAR	ESTIMATED POPULATION
2023	1,777
2032	2,037
2042	2,368

Equivalent Population (Total)

Calendar year	Transient	Resident	Total
2023	1777	588	2365
2024	1804	600	2404
2025	1832	612	2444
2026	1860	625	2485
2027	1888	638	2526
2028	1917	651	2568
2029	1946	665	2611
2030	1976	679	2655
2031	2006	693	2699
2032	2037	707	2744
2033	2068	722	2790
2034	2100	737	2837
2035	2132	752	2884
2036	2164	768	2932
2037	2197	784	2981
2038	2230	800	3030
2039	2264	816	3080
2040	2298	833	3131
2041	2333	850	3183
2042	2368	867	3235

YEAR	TOTAL EQUIVALENT POPULATION
2023	2,365
2032	2,744
2042	3,235



APPENDIX B

Parks

Existing LOS

Name	Type	Area (acres)	LOS (Acres/1000 people)	Equivalent Population LOS (Acres/1000 Equivalent People)
Town Park	Neighborhood Park	11.50	19.56	4.86
George Barker River Park	Neighborhood Park	18.08	30.75	7.64
	Total	29.60	50.30	12.50

Town Park Amenities

Basketball court, benches, gazebo, grill, parking, pickleball, picnic tables, restrooms, volleyball court, ball field, playground, Nine hole Disc Golf

George Barker River Park Amenities

Marj Bonner dog park, benches, grills, parking, picnic tables, restrooms

2042 LOS

Name	Type	Area (acres)	LOS (Acres/1000 people)	Equivalent Population LOS (Acres/1000 Equivalent People)
Town Park	Neighborhood Park	11.50	13.26	3.55
George Barker River Park	Neighborhood Park	18.08	20.85	5.59
	Total	29.60	34.10	9.10

Trails

Existing LOS

Name	Type	Length (miles)	LOS (miles/1000 people)	Equivalent Population LOS (Miles/1000 Equivalent People)
Edgemont Trail	Natural	0.37	0.63	0.16
BLM Access Trail	Natural	0.12	0.20	0.05
Zion Canyon Trail	Paved and Natural	1.88	3.20	0.79
Steamboat Mountain Trail	Natural	1.98	3.37	0.84
Pauite Trail	Natural	1.54	2.62	0.65
Pauite Trail Phase 2	Natural	1.42	2.41	0.60
Pauite Trail West Loop	Natural	0.23	0.39	0.10
Pauite Trail East Loop	Natural	0.83	1.41	0.35
Moenave Trail	Paved (Concrete)	0.41	0.70	0.17
Chinle Trail	Natural	1.11	1.89	0.47
		9.89	16.83	4.20

2042 LOS

Name	Type	Length (miles)	LOS (miles/1000 people)	Equivalent Population LOS (Miles/1000 Equivalent People)
Edgemont Trail	Natural	0.12	0.12	0.04
BLM Access Trail	Natural	0.37	0.36	0.11
Zion Canyon Trail	Paved and Natural	1.88	1.85	0.58
Steamboat Mountain Trail	Natural	1.98	1.95	0.61
Pauite Trail	Natural	1.54	1.52	0.48
Pauite Trail Phase 2	Natural	1.42	1.40	0.44
Pauite Trail West Loop	Natural	0.23	0.23	0.07
Pauite Trail East Loop	Natural	0.83	0.82	0.26
Moenave Trail	Paved (Concrete)	0.41	0.41	0.13
Chinle Trail	Natural	1.11	1.09	0.34
		9.89	9.74	3.10

2023 NRPA Metrics

	Lower Quartile	Median	Upper Quartile
Residents per Park	2,042	1,225	666
Acres per 1,000 residents	6	13	21.1
Miles of Trail	2	4	10

2023 NRPA Metrics Comparison - Residents

	Springdale	NRPA Range
Residents per Park	294	Upper Quartile
Acres per 1,000 residents	50.30	Upper Quartile
Miles of Trail	9.89	Above Median

2042 NRPA Metrics Comparison - Residents

	Springdale	NRPA Range
Residents per Park	434	Upper Quartile
Acres per 1,000 residents	34.1	Upper Quartile
Miles of Trail	9.89	Above Median

2023 NRPA Metrics Comparison - Equiv

	Springdale	NRPA Range
Residents per Park	1,183	Above Median
Acres per 1,000 residents	12.5	Below Median
Miles of Trail	9.89	Above Median

2042 NRPA Metrics Comparison - Equiv.

	Springdale	NRPA Range
Residents per Park	1,618	Below Median
Acres per 1,000 residents	9.1	Below Median
Miles of Trail	9.89	Above Median

Median NRPA

Year	Population	Springdale (Acres/1,000 Residents)	NRPA (Acres/1,000 Residents)	Additional Area (Acres)
2023	2,365	12.5	13	1.1
2032	2,744	10.8		6.1
2042	3,235	9.10		12.5

Year	Population	Springdale (Residents/Parks)	NRPA (Residents/Park)	Additional Parks
2023	2,365	1,183	1,225	0
2032	2,744	1,372		1
2042	3,235	1,618		1

Additional Facilities Summary		
Type	2032	2042
New Parks	1	1
Park Area (Acres)	6.1	12.5
Trails (Miles)	1.6	3.7
Indoor Recreation Facilities	0	1

Less than 20k population

Residents per	
Rec Center	9,754
Playground	2,014
Basketball courts	3,729
Baseball Field - Youth	3,114
Baseball Field - Adult	7,627
Outdoor Tennis Courts	2,805
Dog park	11,100
Community gardens	8,178
Multiuse court - basketball	
volleyball	5,093
Pickleball court	3,252