

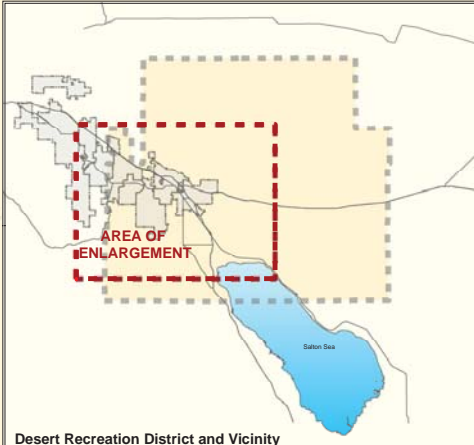
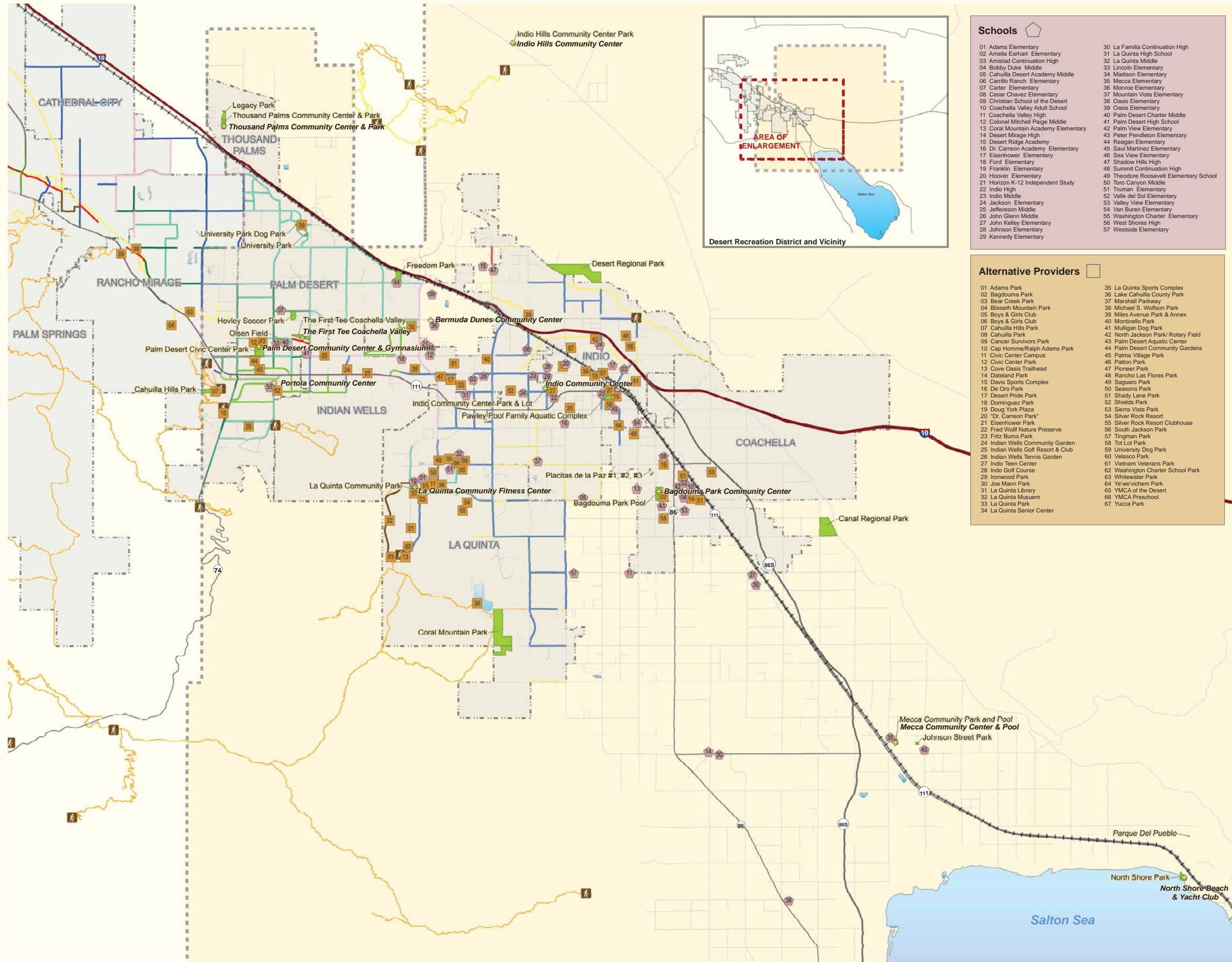
Appendix B: GRASP® Perspectives

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Desert Recreation District: Parks and Recreation Master Plan

Resource Map A: System Map

Fun In the Sun!



Schools

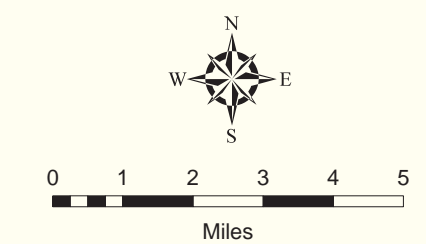
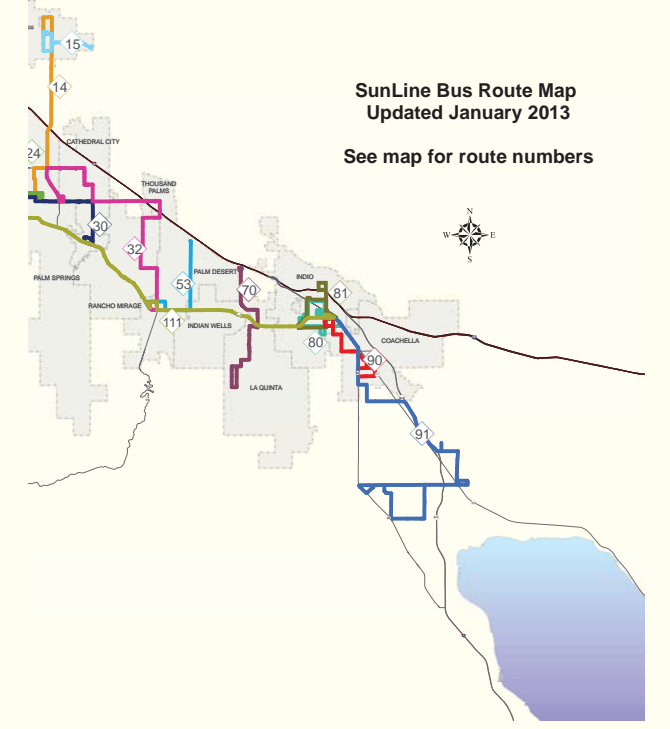
01 Adams Elementary	30 La Familia Continuation High
02 Amelia Earhart Elementary	31 La Quinta High School
03 Amstad Continuation High	32 La Quinta Middle
04 Bobby Duke Middle	33 Lincoln Elementary
05 Cahulla Desert Academy Middle	34 Madison Elementary
06 Carrillo Ranch Elementary	35 Mecca Elementary
07 Carter Elementary	36 Monroe Elementary
08 Cesar Chavez Elementary	37 Mountain Vista Elementary
09 Christian School of the Desert	38 Oasis Elementary
10 Coachella Valley Adult School	39 Oasis Elementary
11 Coachella Valley High	40 Palm Desert Charter Middle
12 Colonel Mitchell Paige Middle	41 Palm Desert High School
13 Coral Mountain Academy Elementary	42 Palm View Elementary
14 Desert Mirage High	43 Peter Pandleton Elementary
15 Desert Ridge Academy	44 Reagan Elementary
16 Dr. Carreon Academy Elementary	45 Saul Martinez Elementary
17 Eisenhower Elementary	46 Sea View Elementary
18 Ford Elementary	47 Shadow Hills High
19 Franklin Elementary	48 Summit Continuation High
20 Hoover Elementary	49 Theodore Roosevelt Elementary School
21 Horizon K-12 Independent Study	50 Toro Canyon Middle
22 Indio High	51 Truman Elementary
23 Indio Middle	52 Valle del Sol Elementary
24 Jackson Elementary	53 Valley View Elementary
25 Jefferson Middle	54 Van Buren Elementary
26 John Glenn Middle	55 Washington Charter Elementary
27 John Kelley Elementary	56 West Shores High
28 Johnson Elementary	57 Westside Elementary
29 Kennedy Elementary	

Alternative Providers

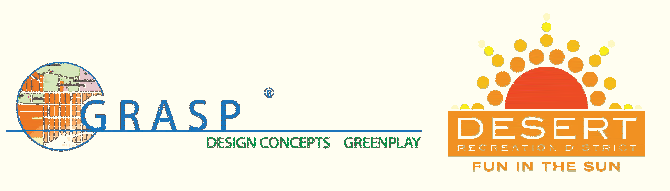
01 Adams Park	35 La Quinta Sports Complex
02 Bagdouma Park	36 Lake Cahulla County Park
03 Bear Creek Park	37 Marshall Parkway
04 Blissett Mountain Park	38 Michael S. Wolfson Park
05 Boys & Girls Club	39 Miles Avenue Park & Annex
06 Boys & Girls Club	40 Monticello Park
07 Cahulla Hills Park	41 Mulligan Dog Park
08 Cahulla Park	42 North Jackson Park/ Rotary Field
09 Cancer Survivors Park	43 Palm Desert Aquatic Center
10 Cap Homme/Ralph Adams Park	44 Palm Desert Community Gardens
11 Civic Center Campus	45 Palma Village Park
12 Civic Center Park	46 Patton Park
13 Cove Oasis Trailhead	47 Pioneer Park
14 Datteland Park	48 Rancho Las Flores Park
15 Davis Sports Complex	49 Saguaro Park
16 De Oro Park	50 Seasons Park
17 Desert Pride Park	51 Shady Lane Park
18 Dominguez Park	52 Shields Park
19 Doug York Plaza	53 Sierra Vista Park
20 "Dr. Carreon Park"	54 Silver Rock Resort
21 Eisenhower Park	55 Silver Rock Resort Clubhouse
22 Fred Wolff Nature Preserve	56 South Jackson Park
23 Fritz Burns Park	57 Tingman Park
24 Indian Wells Community Garden	58 Tot Lot Park
25 Indian Wells Golf Resort & Club	59 University Dog Park
26 Indian Wells Tennis Garden	60 Velasco Park
27 Indio Teen Center	61 Vietnam Veterans Park
28 Indo Golf Course	62 Washington Charter School Park
29 Ironwood Park	63 Whitewater Park
30 Joe Mann Park	64 Ye've'vichem Park
31 La Quinta Library	65 YMCA of the Desert
32 La Quinta Museum	66 YMCA Preschool
33 La Quinta Park	67 Yucca Park
34 La Quinta Senior Center	

Legend

District Boundary	Hiking/Equestrian Trail
City Boundary	Hiking Trail
Indoor Facility	Golf Cart Lane
Outdoor Facility	Golf Cart Path
School	Sidewalk Path
Alternative Provider Facility	Multi-Purpose Path
Local Road	Bikeway Class III Route
Major Highway	Bikeway Class II Lane
Interstate Highway	Bikeway Class I Path
Railroad	Trailhead
Lake/Pond	



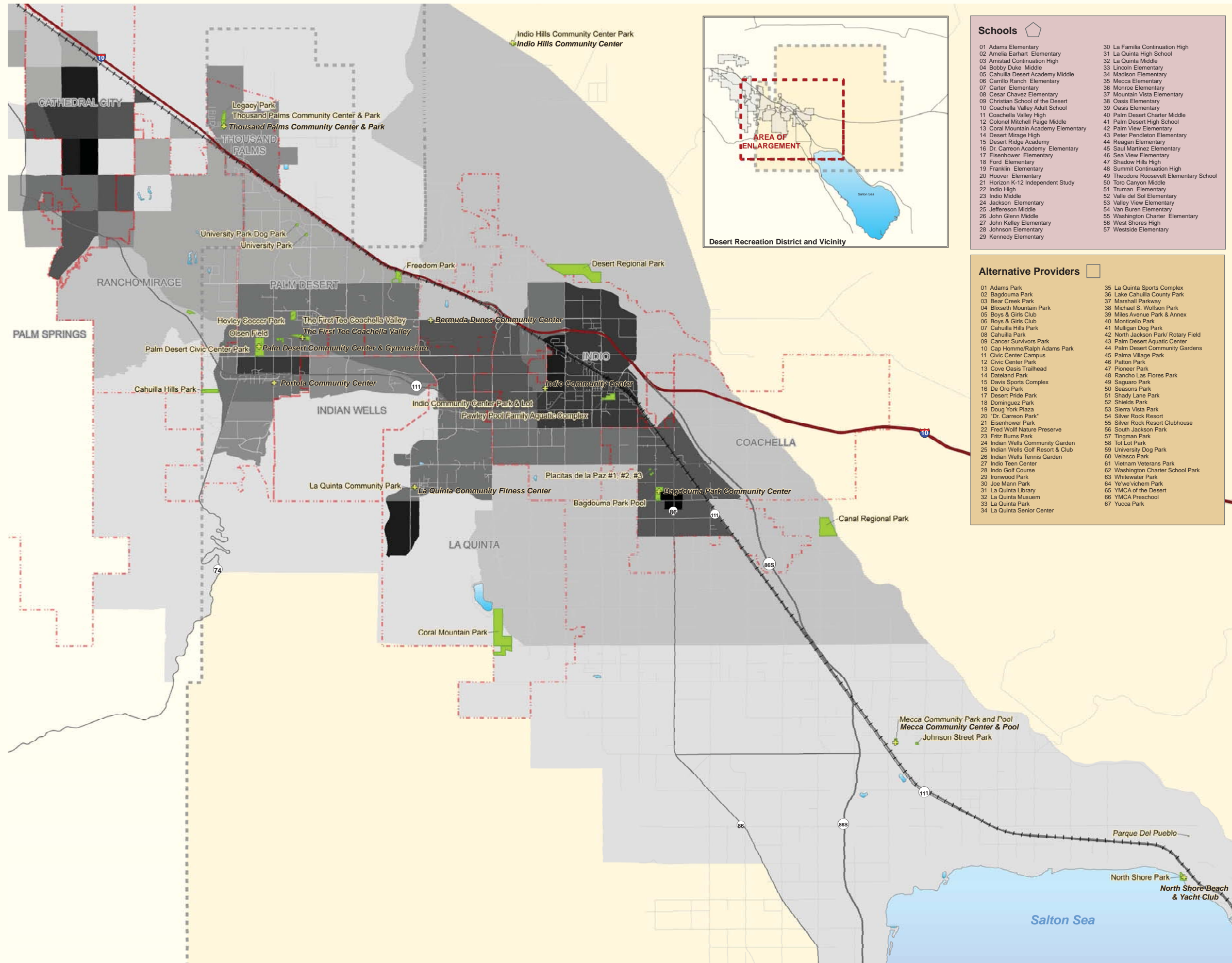
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Desert Recreation District: Parks and Recreation Master Plan

Resource Map B: Population Density Map

Fun In the Sun!



Schools

01 Adams Elementary	30 La Familia Continuation High
02 Amelia Earhart Elementary	31 La Quinta High School
03 Amistad Continuation High	32 La Quinta Middle
04 Bobby Duke Middle	33 Lincoln Elementary
05 Cahulla Desert Academy Middle	34 Madison Elementary
06 Carrillo Ranch Elementary	35 Mecca Elementary
07 Carter Elementary	36 Monroe Elementary
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24 Jackson Elementary	53 Valley View Elementary
25 Jefferson Middle	54 Van Buren Elementary
26 John Glenn Middle	55 Washington Charter Elementary
27 John Kelley Elementary	56 West Shores High
28 Johnson Elementary	57 Westside Elementary
29 Kennedy Elementary	

Alternative Providers

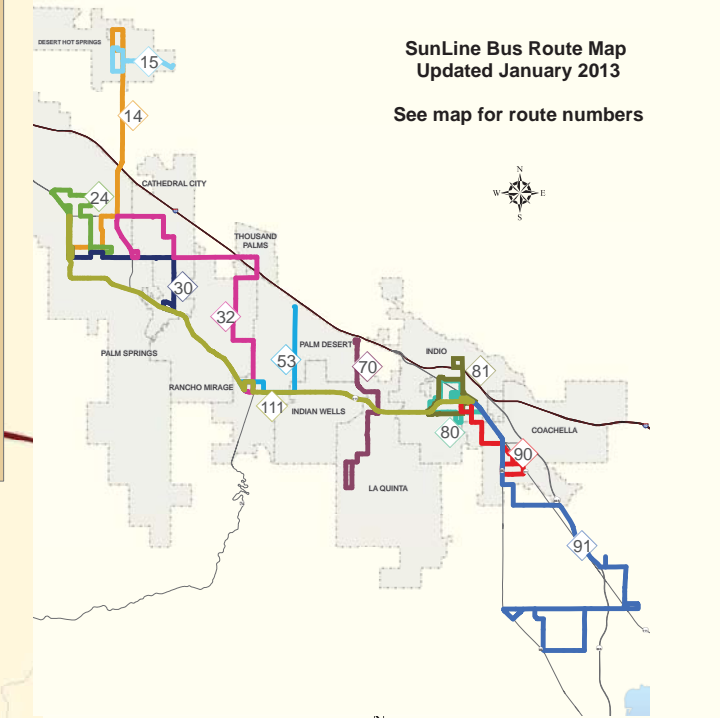
01 Adams Park	35 La Quinta Sports Complex
02 Bagdouma Park	36 Lake Cahulla County Park
03 Bear Creek Park	37 Marshall Parkway
04 Blissett Mountain Park	38 Michael S. Wolfson Park
05 Boys & Girls Club	39 Miles Avenue Park & Annex
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13 Cove Oasis Trailhead	47 Pioneer Park
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15 Davis Sports Complex	49 Saguro Park
16 De Oro Park	50 Seasons Park
17 Desert Pride Park	51 Shady Lane Park
18 Dominguez Park	52 Shields Park
19 Doug York Plaza	53 Sierra Vista Park
20 "Dr. Carreon Park"	54 Silver Rock Resort
21 Eisenhower Park	55 Silver Rock Resort Clubhouse
22 Fred Wolf Nature Preserve	56 South Jackson Park
23 Fritz Burns Park	57 Tingman Park
24 Indian Wells Community Garden	58 Tot Lot Park
25 Indian Wells Golf Resort & Club	59 University Dog Park
26 Indian Wells Tennis Garden	60 Velasco Park
27 Indio Teen Center	61 Vietnam Veterans Park
28 Indo Golf Course	62 Washington Charter School Park
29 Ironwood Park	63 Whitewater Park
30 Joe Mann Park	64 Ye We'vichem Park
31 La Quinta Library	65 YMCA of the Desert
32 La Quinta Museum	66 YMCA Preschool
33 La Quinta Park	67 Yucca Park

Legend

2010 Population per Square Mile

- 0.8 - 50.0
- 50.1 - 228.3
- 228.4 - 396.1
- 396.2 - 1032.3
- 1032.4 - 1850.2
- 1850.3 - 3322.5
- 3322.6 - 4954.9
- 4955.0 - 7668.8
- 7668.9 - 10919.6
- 10919.7 - 14085.7

- District Boundary
- City Boundary
- Indoor Facility
- Outdoor Facility
- School
- Alternative Provider Facility
- Local Road
- Major Highway
- Interstate Highway
- Railroad
- Lake/Pond

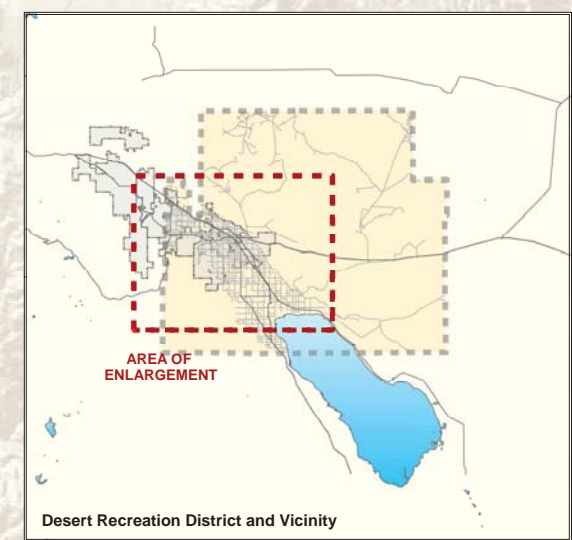
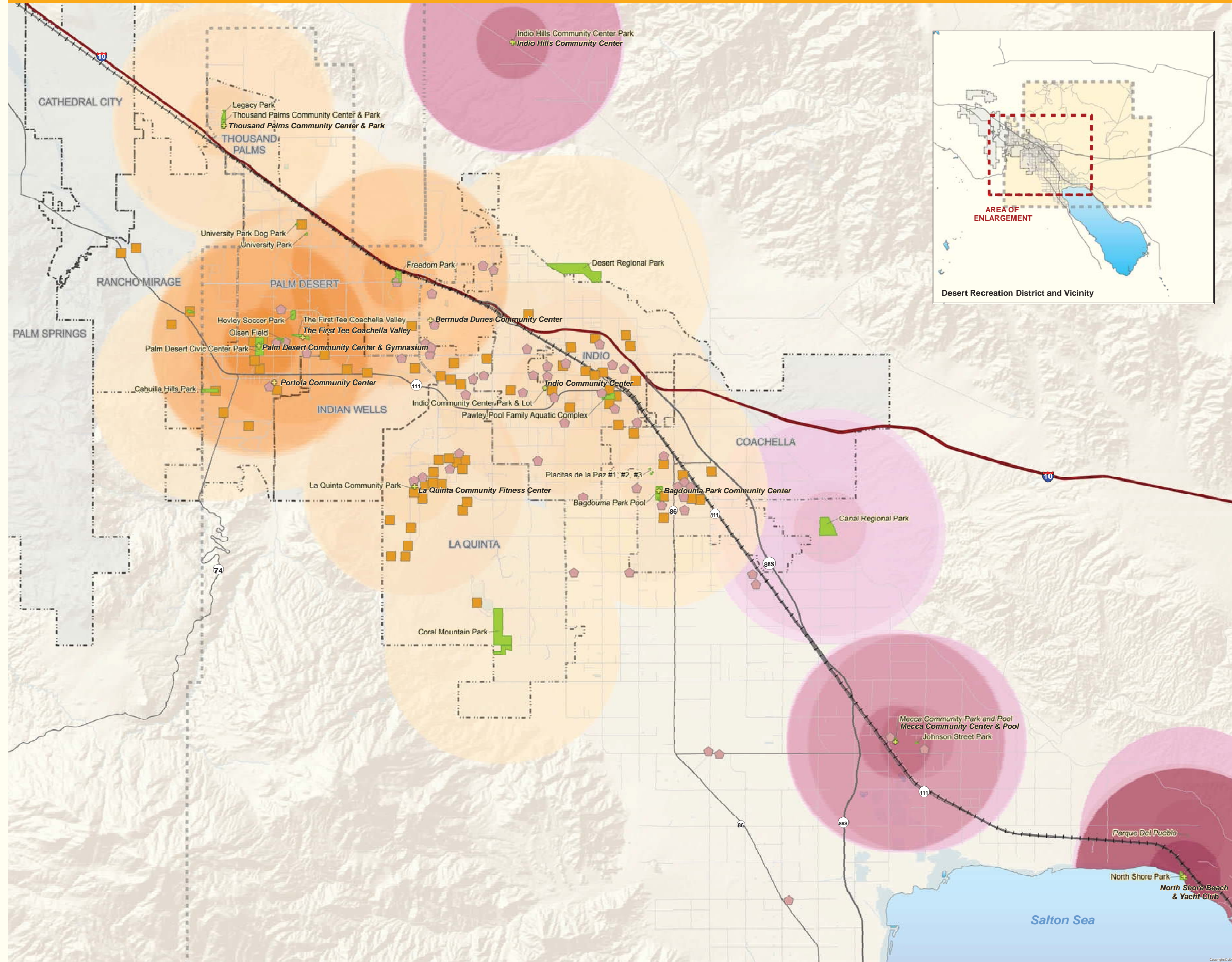


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Desert Recreation District: Parks and Recreation Master Plan

Perspective Map A: General Access to All In-System Recreation

Fun In the Sun!



Legend

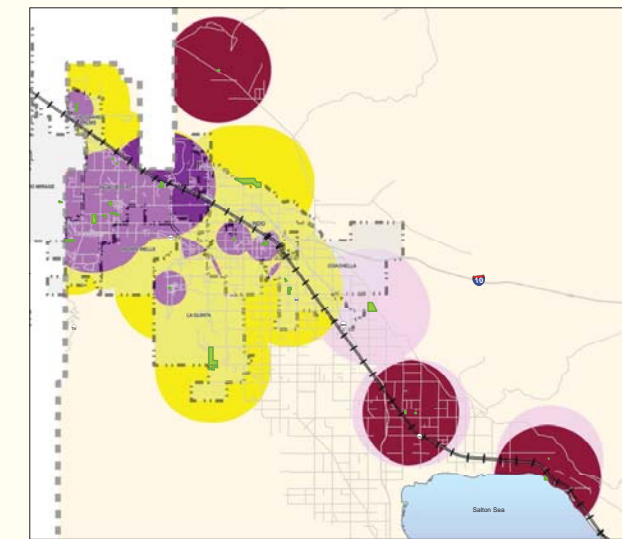
- Indoor Facility
- Outdoor Facility
- School
- Alternative Provider
- Local Road
- Major Highway
- Interstate Highway
- Railroad
- City Boundary
- Lake/Pond

GRASP® Value: General

- Greater Access
- Greater Access
- Less Access
- Less Access

GRASP® Value: Rural

- Greater Access
- Greater Access
- Less Access
- Less Access



GRASP® Value: General Threshold

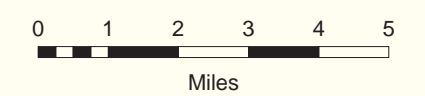
- Above Threshold
- Below Threshold

Bracketted GRASP® Value ≥ 213.6

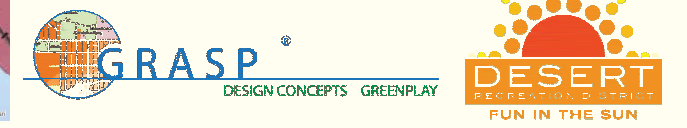
GRASP® Value: Rural Threshold

- Above Threshold
- Below Threshold

Bracketted GRASP® Value ≥ 40.8



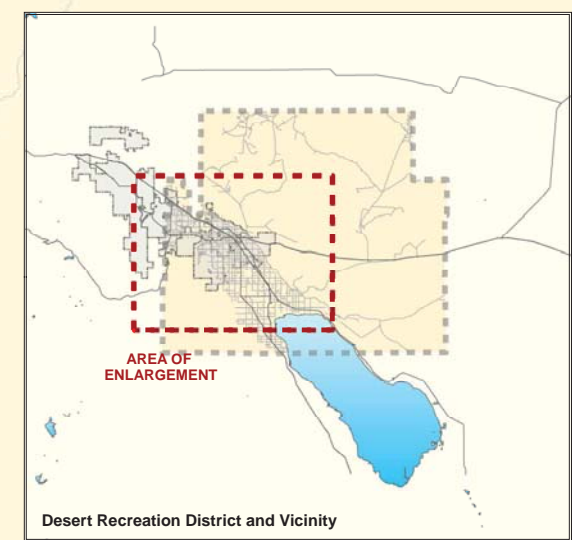
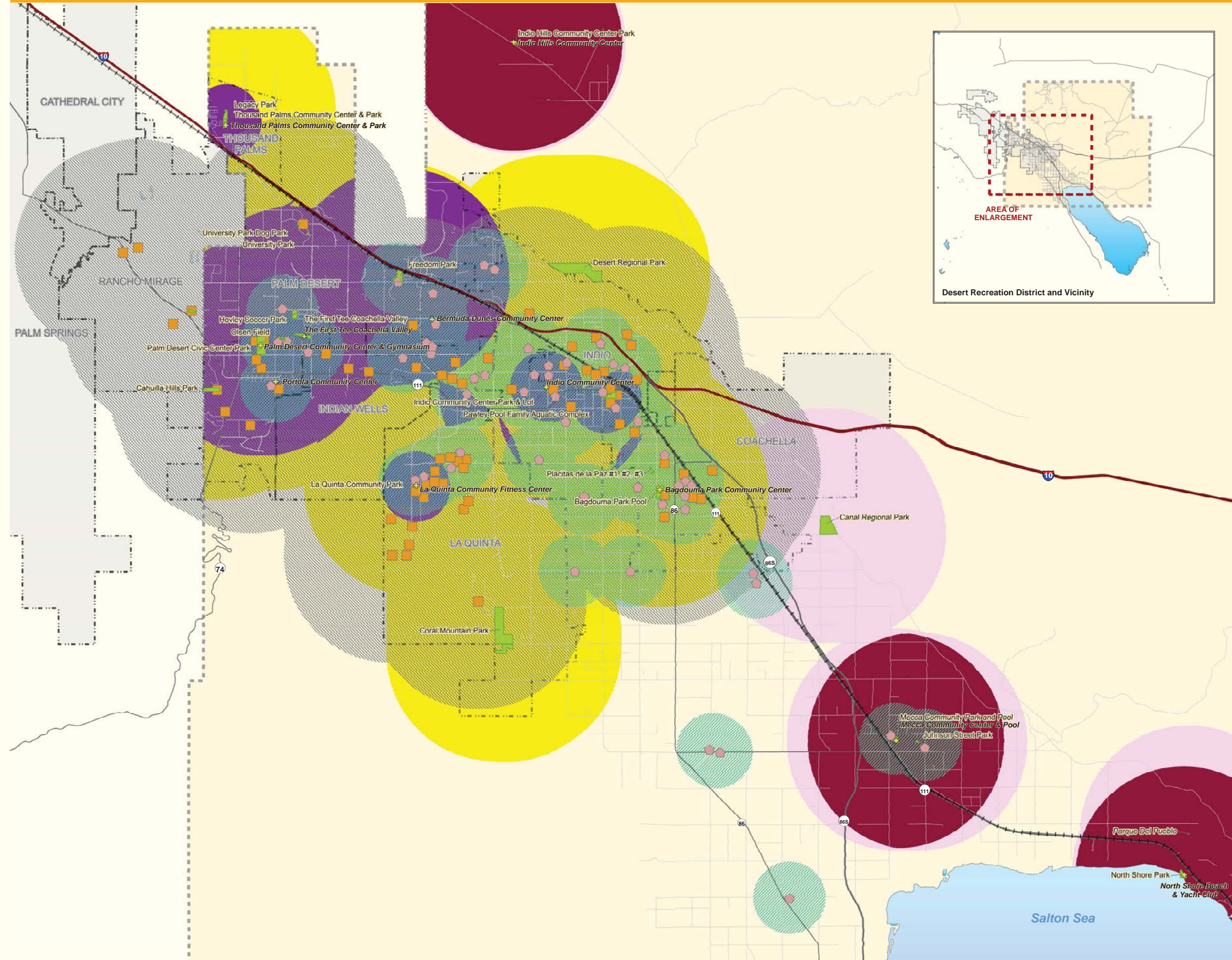
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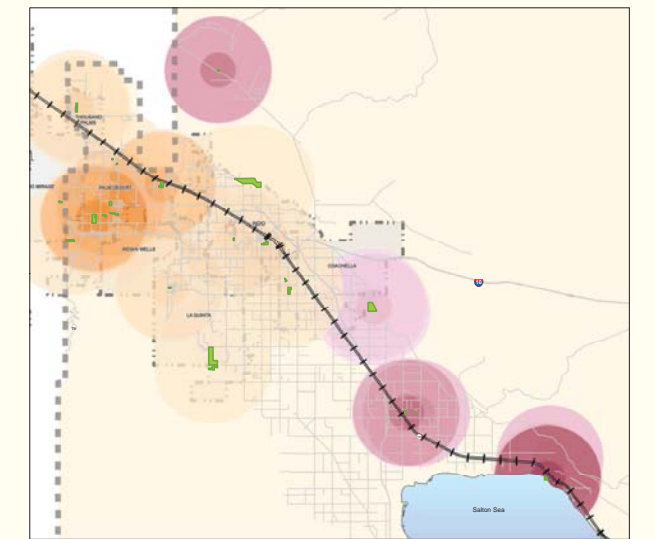
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Perspective Map B: General Access to Recreation From All Providers

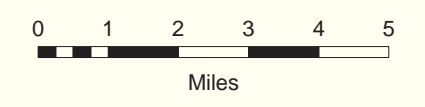
Fun In the Sun!



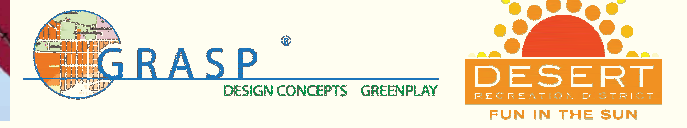
- Legend**
- ◆ Indoor Facility
 - Outdoor Facility
 - School
 - Alternative Provider
 - Local Road
 - Major Highway
 - Interstate Highway
 - Railroad
 - ⬢ District Boundary
 - ⬢ City Boundary
 - 🌊 Lake/Pond
- GRASP® Value: General Threshold**
- Above Threshold
 - Below Threshold
- GRASP® Value: Rural Threshold**
- Above Threshold
 - Below Threshold
 - ▨ School Catchment
 - ▨ Alternative Provider Catchment



- GRASP® Value: General**
- Greater Access
 - Less Access
- Bracketted GRASP® Value >= 213.6
- GRASP® Value: Rural**
- Greater Access
 - Less Access
- Bracketted GRASP® Value >= 40.8



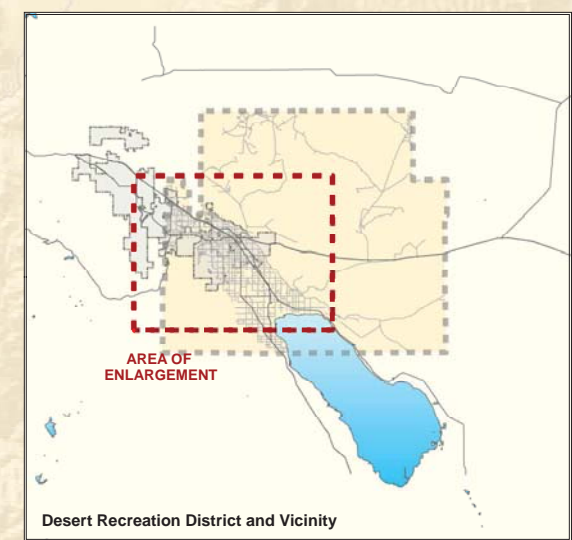
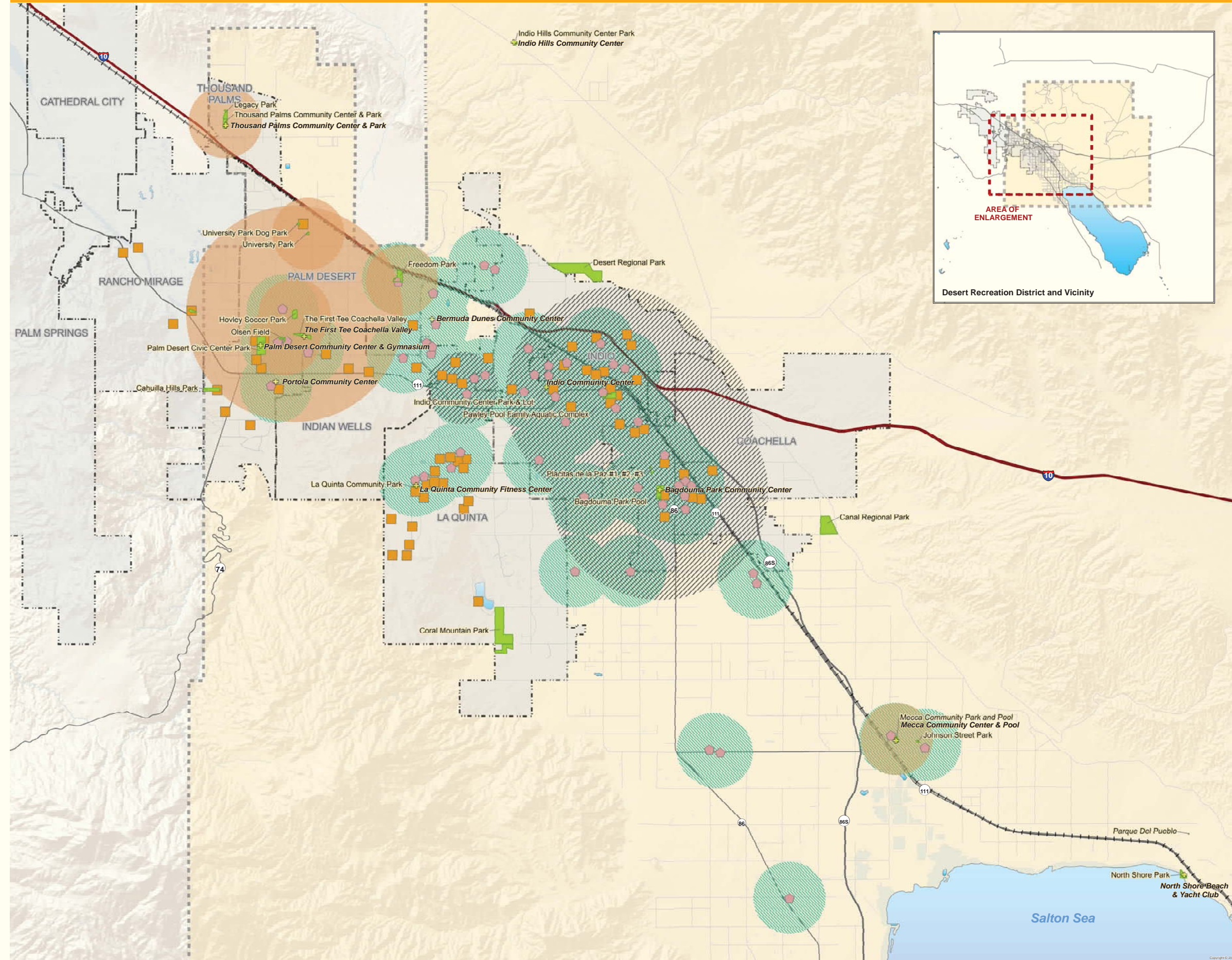
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Perspective Map C: Access to Multipurpose Fields

Fun In the Sun!

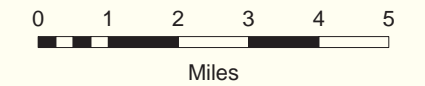


Legend

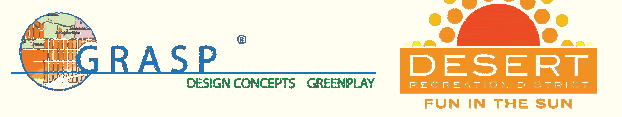
- DRD Catchment
- Multipurpose Field
- Alternative Provider Catchment
- Multipurpose Field
- School Catchment (1 Mile)
- Indoor Facility
- Outdoor Facility
- School
- Alternative Provider
- Local Road
- Major Highway
- Interstate Highway
- Railroad
- District Boundary
- City Boundary
- Lake/Pond

Note: A catchment of one mile is used for all multipurpose fields not part of a larger complex.

A three mile catchment area is used for all multipurpose field complexes. A multipurpose field complex includes several multipurpose fields in one location. Complexes are often used for tournaments.



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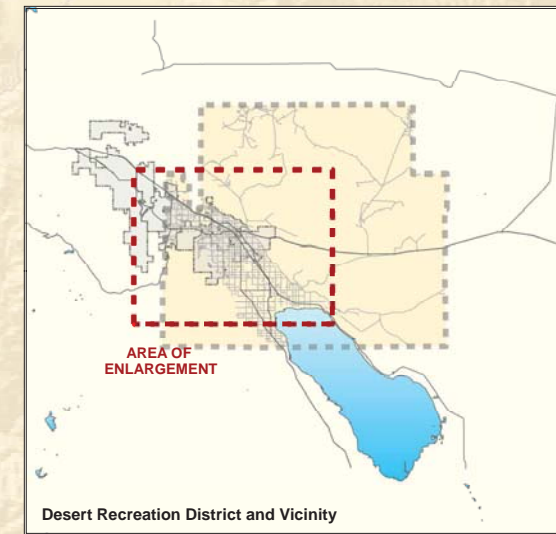
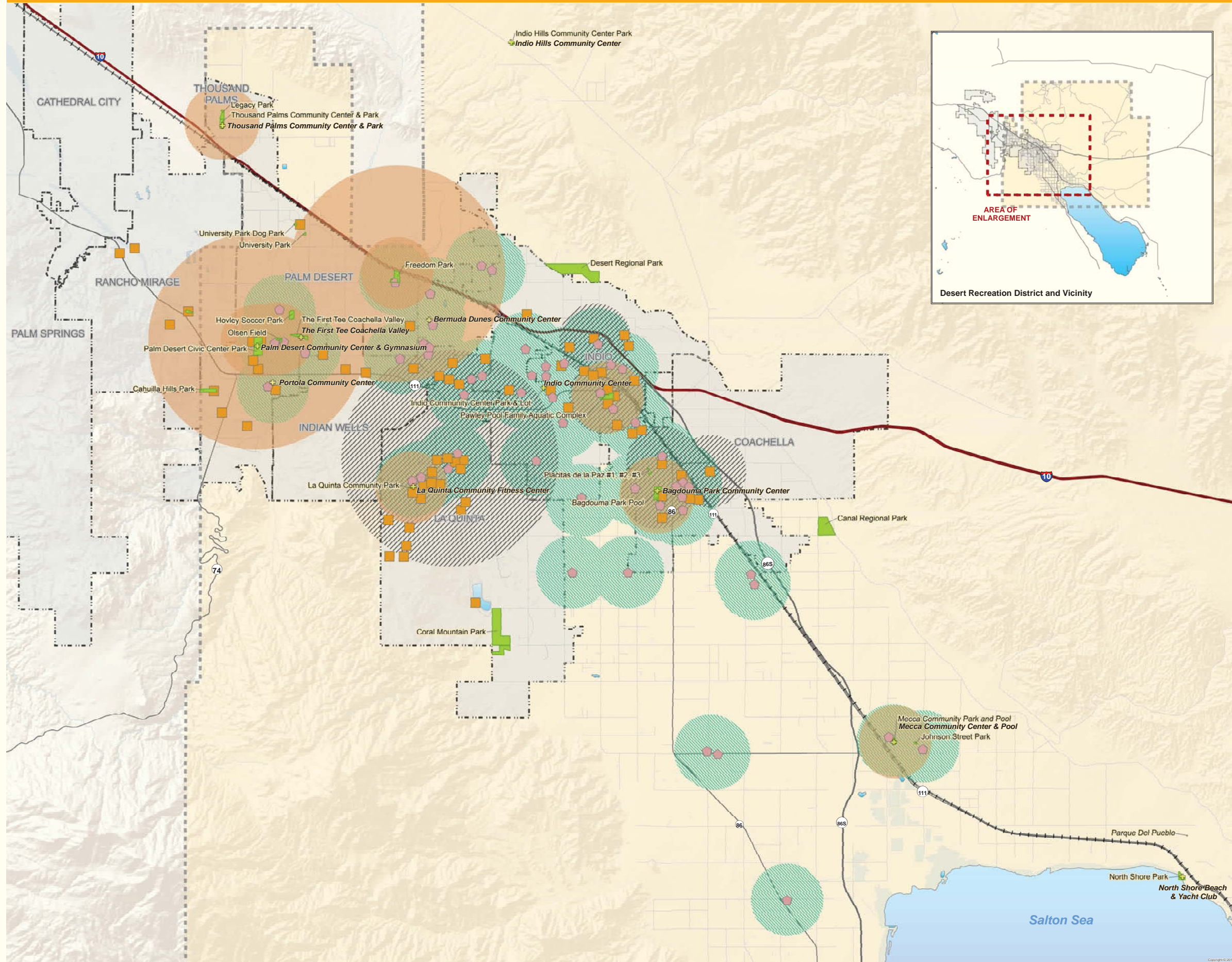


Desert Recreation District: Parks and Recreation Master Plan

Perspective Map D: Access to Ballfields

Fun In the Sun!

PD

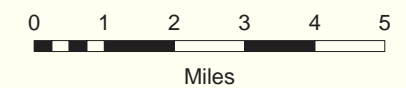


Legend

- DRD Catchment
- Ballfield
- Alternative Provider Catchment
- Ballfield
- School Catchment (1 Mile)
- Indoor Facility
- Outdoor Facility
- School
- Alternative Provider
- Local Road
- Major Highway
- Interstate Highway
- Railroad
- District Boundary
- City Boundary
- Lake/Pond

Note: A catchment of one mile is used for all ballfields not part of a larger complex.

A three mile catchment area is used for all ballfield complexes. A ballfield complex includes several ballfields in one location. Complexes are often used for tournaments.



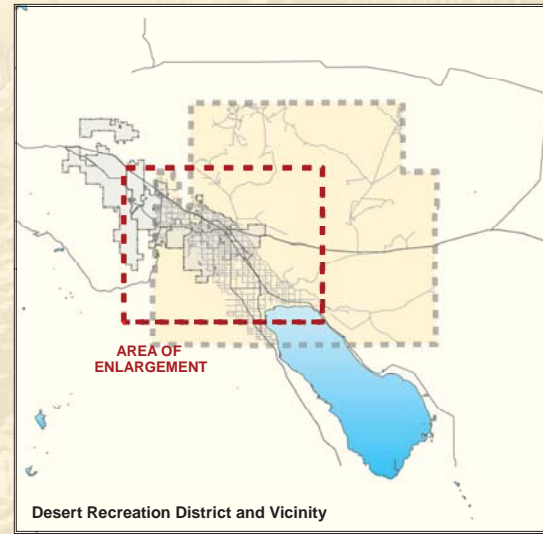
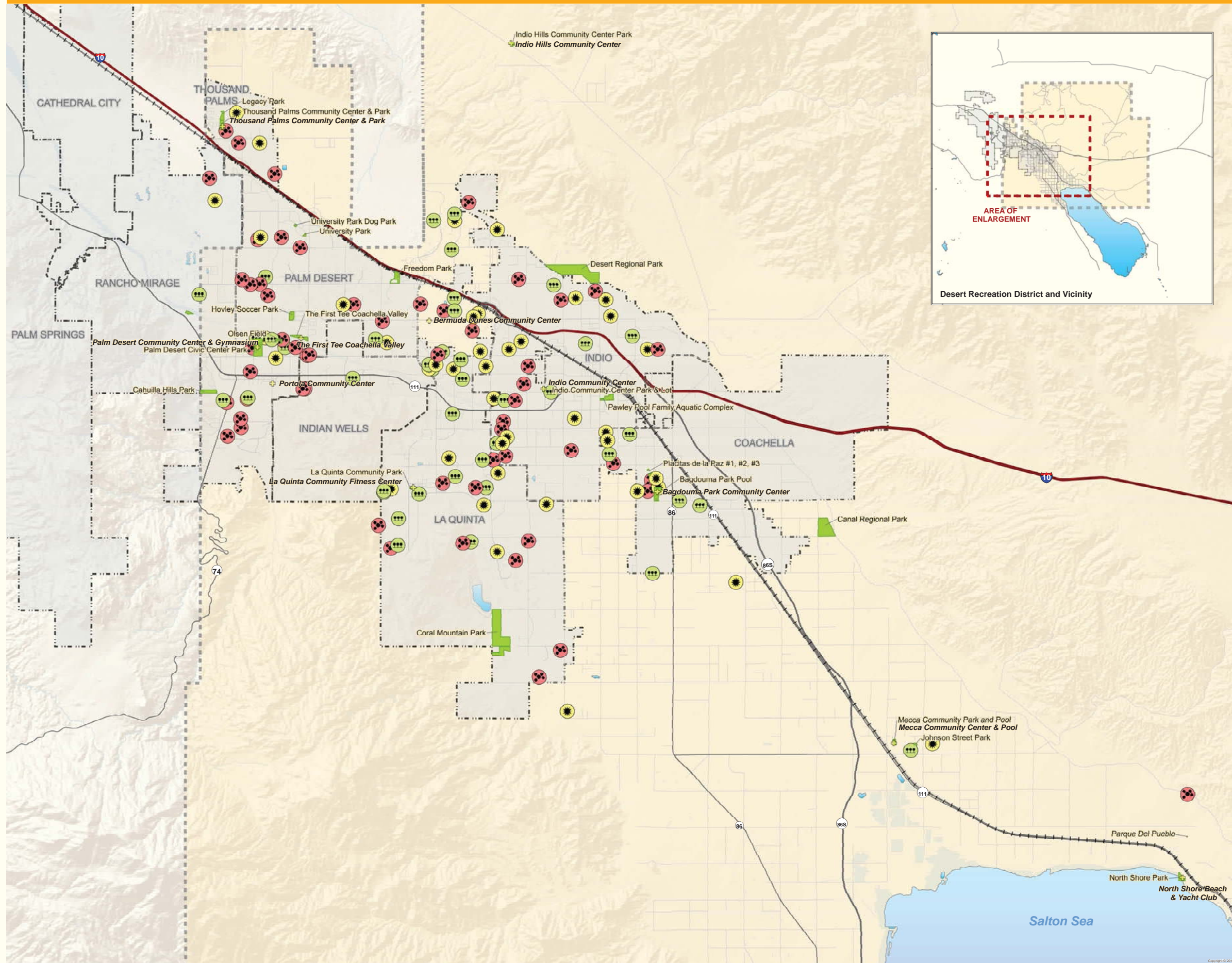
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Desert Recreation District: Parks and Recreation Master Plan

Survey Map A: Highest Priority in Outdoor Amenities

Fun In the Sun!



Legend

- Survey Reponse**
- Outdoor Priority**
 - Community Gardens
 - Playgrounds (Covered)
 - Dog Parks
 - ⊕ Indoor Facility
 - Outdoor Facility
 - Local Road
 - Major Highway
 - Interstate Highway
 - ⚡ Railroad
 - ⊞ District Boundary
 - ⊞ City Boundary
 - 🌊 Lake/Pond



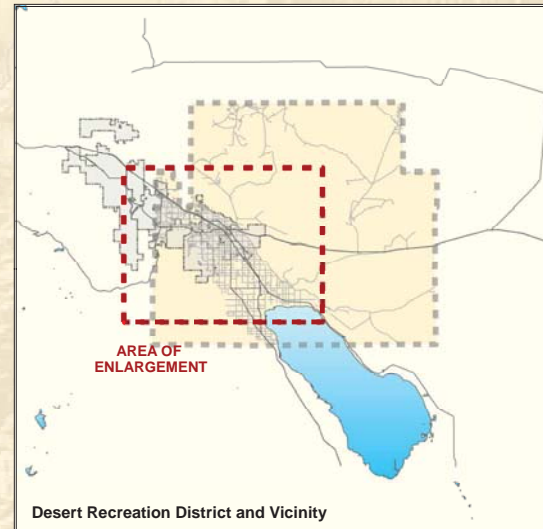
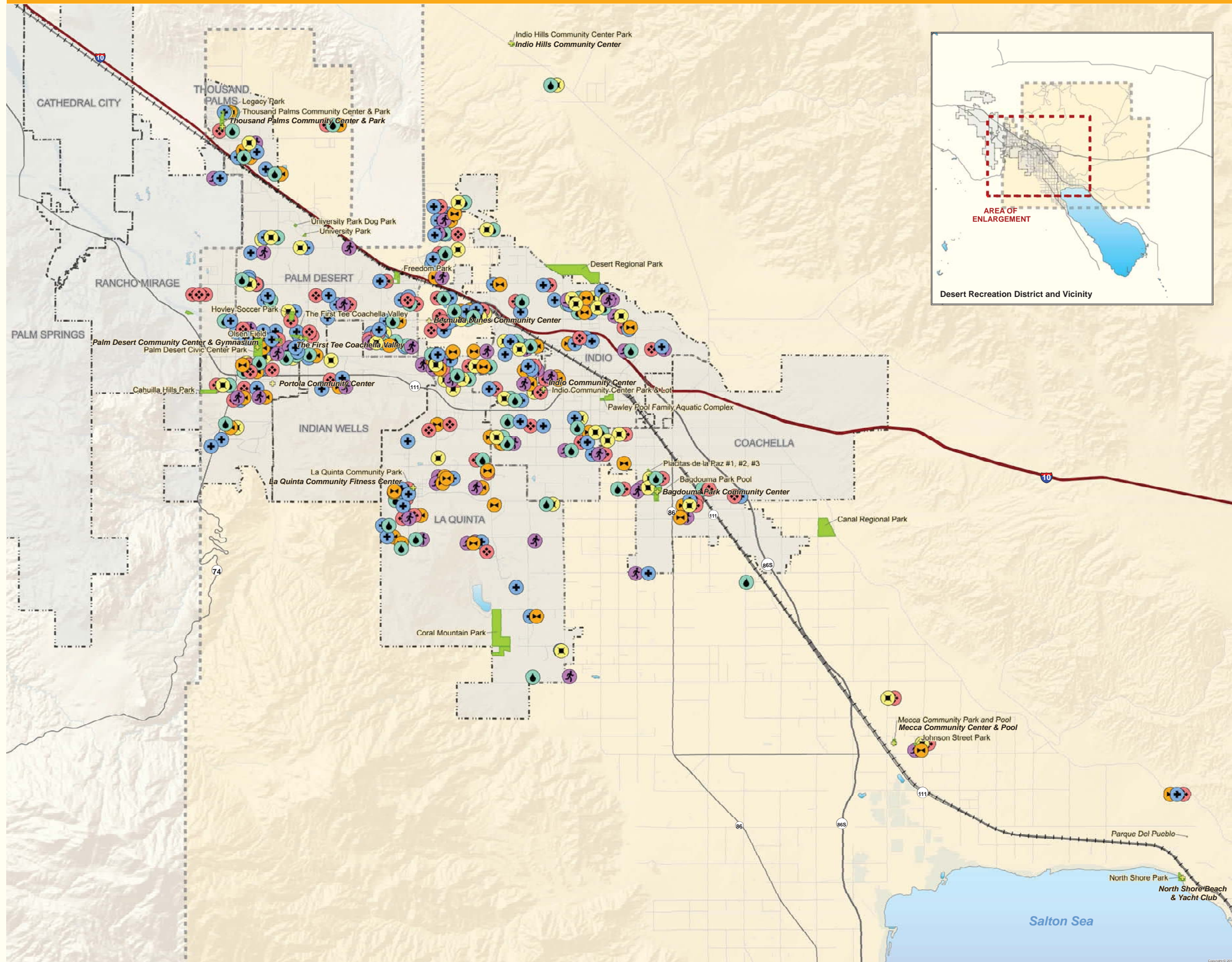
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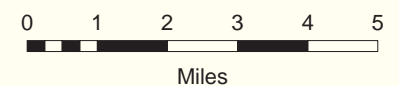
Survey Map B: Highest Priority in Indoor Amenities

Fun In the Sun!

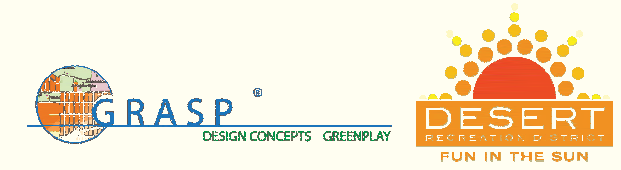


Legend

- Survey Response**
- Indoor Priority**
- Indoor Playgrounds
 - Senior Areas
 - Teen Areas
 - Indoor Track
 - Indoor/Outdoor Pool
 - Weight Room/Fitness
 - Indoor Facility
 - Outdoor Facility
 - Local Road
 - Major Highway
 - Interstate Highway
 - Railroad
 - District Boundary
 - City Boundary
 - Lake/Pond



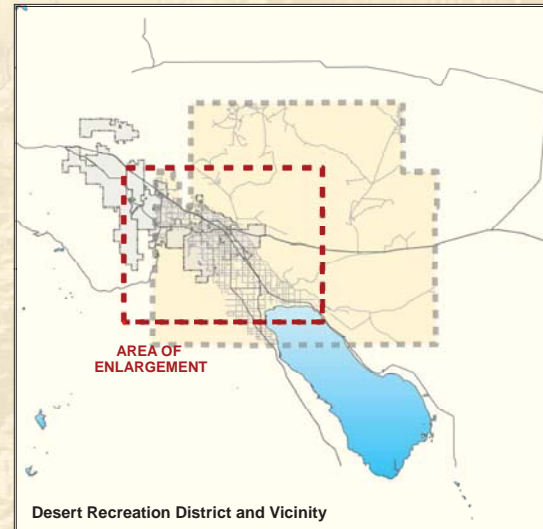
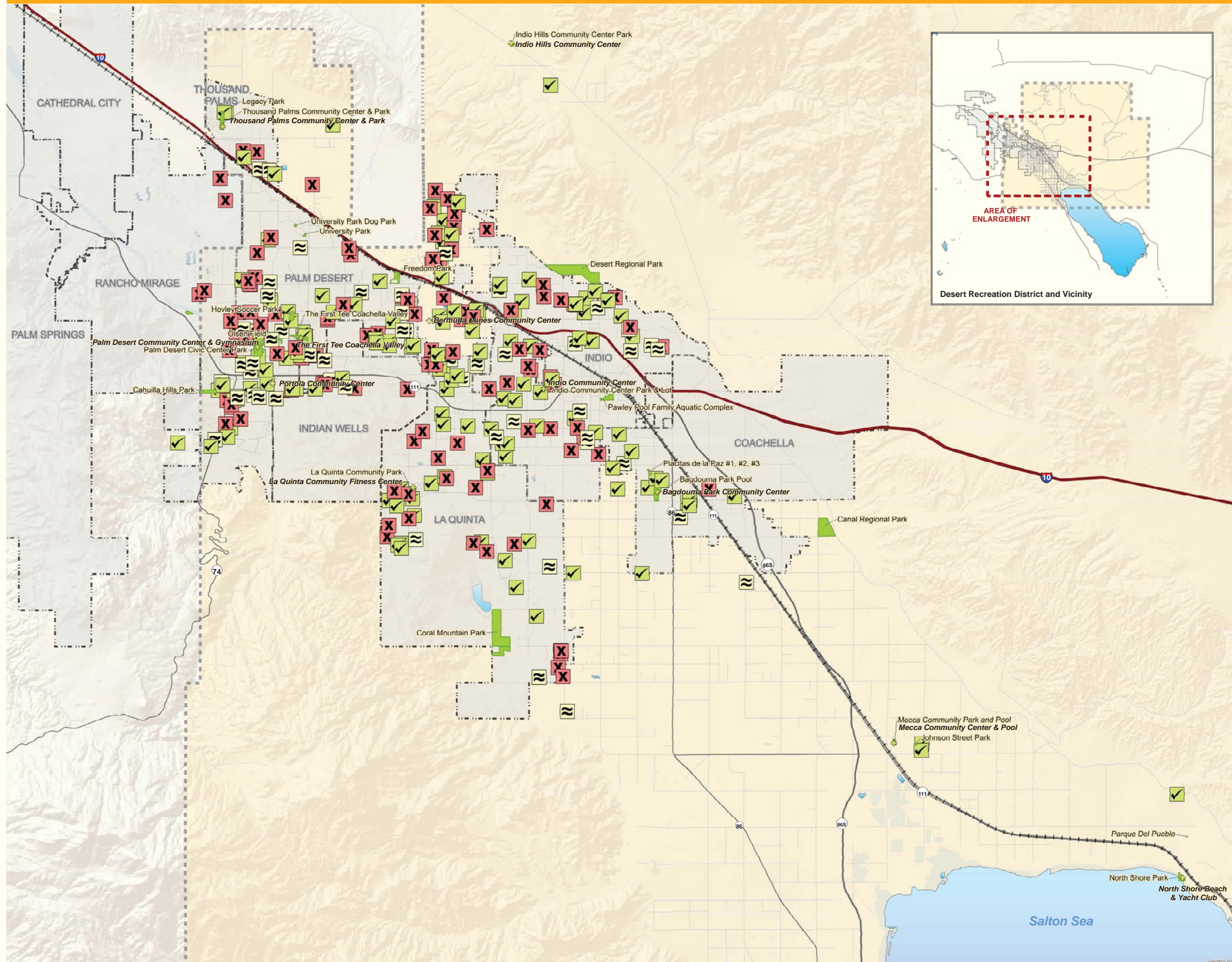
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Desert Recreation District: Parks and Recreation Master Plan

Survey Map C: Support for Benefit District by Sales Tax

Fun In the Sun!



Legend

Survey Response Benefit District by Sales Tax

- Support
- No Support
- Neutral
- Indoor Facility
- Outdoor Facility
- Local Road
- Major Highway
- Interstate Highway
- Railroad
- District Boundary
- City Boundary
- Lake/Pond



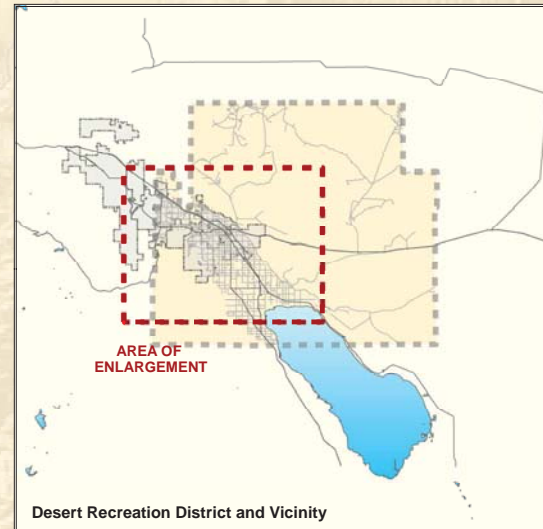
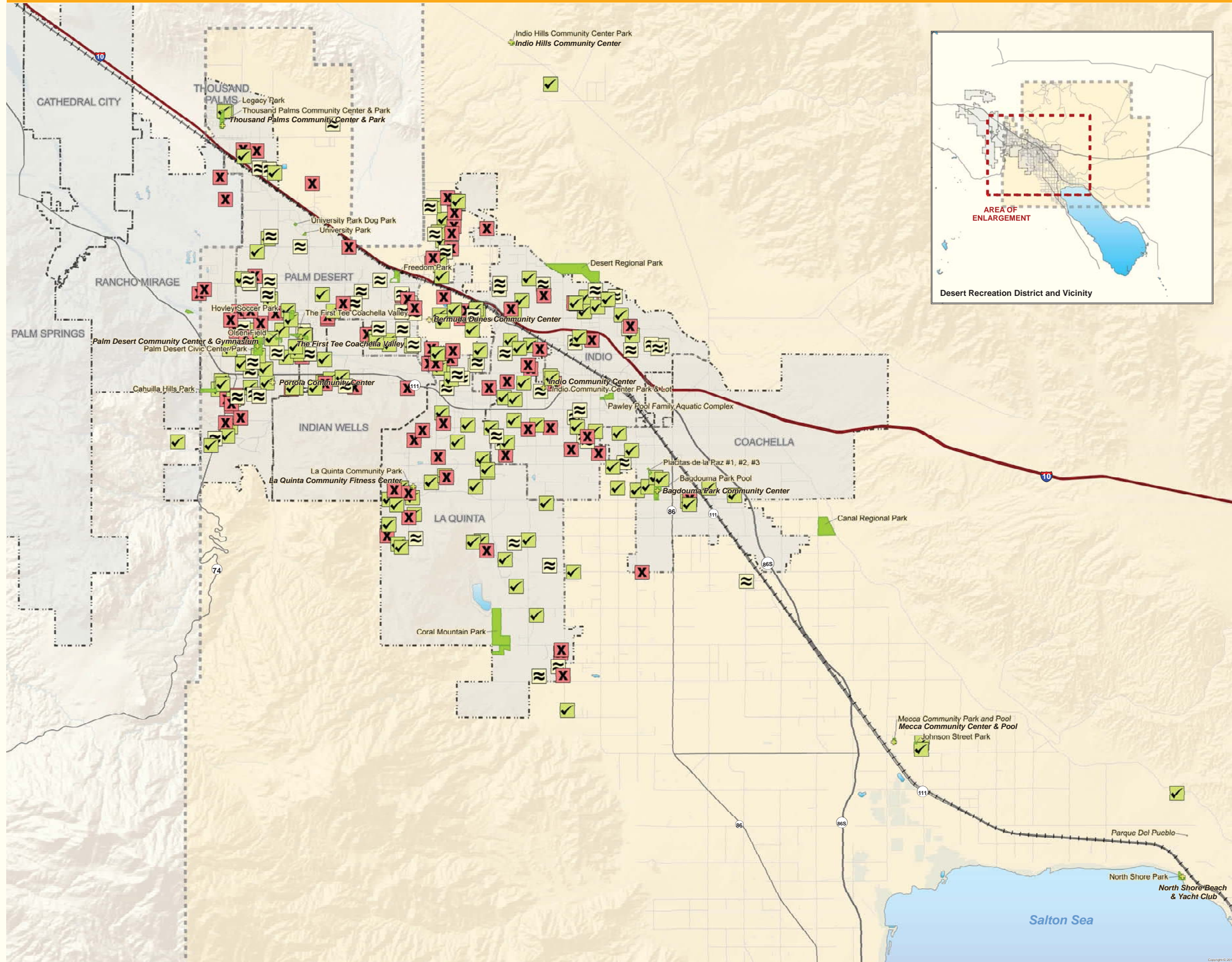
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Desert Recreation District: Parks and Recreation Master Plan

Survey Map D: Support for Benefit District by Property Tax

Fun In the Sun!



Legend

Survey Response

Benefit District by Property Tax

- Support
- No Support
- Neutral
- Indoor Facility
- Outdoor Facility
- Local Road
- Major Highway
- Interstate Highway
- Railroad
- District Boundary
- City Boundary
- Lake/Pond



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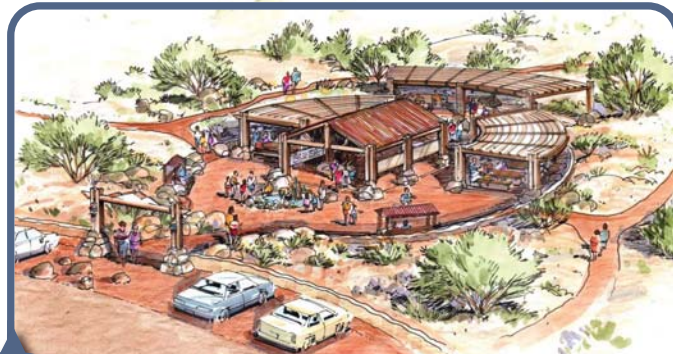


DESERT RECREATION DISTRICT, CALIFORNIA



Opportunity Map – Currently in Planning

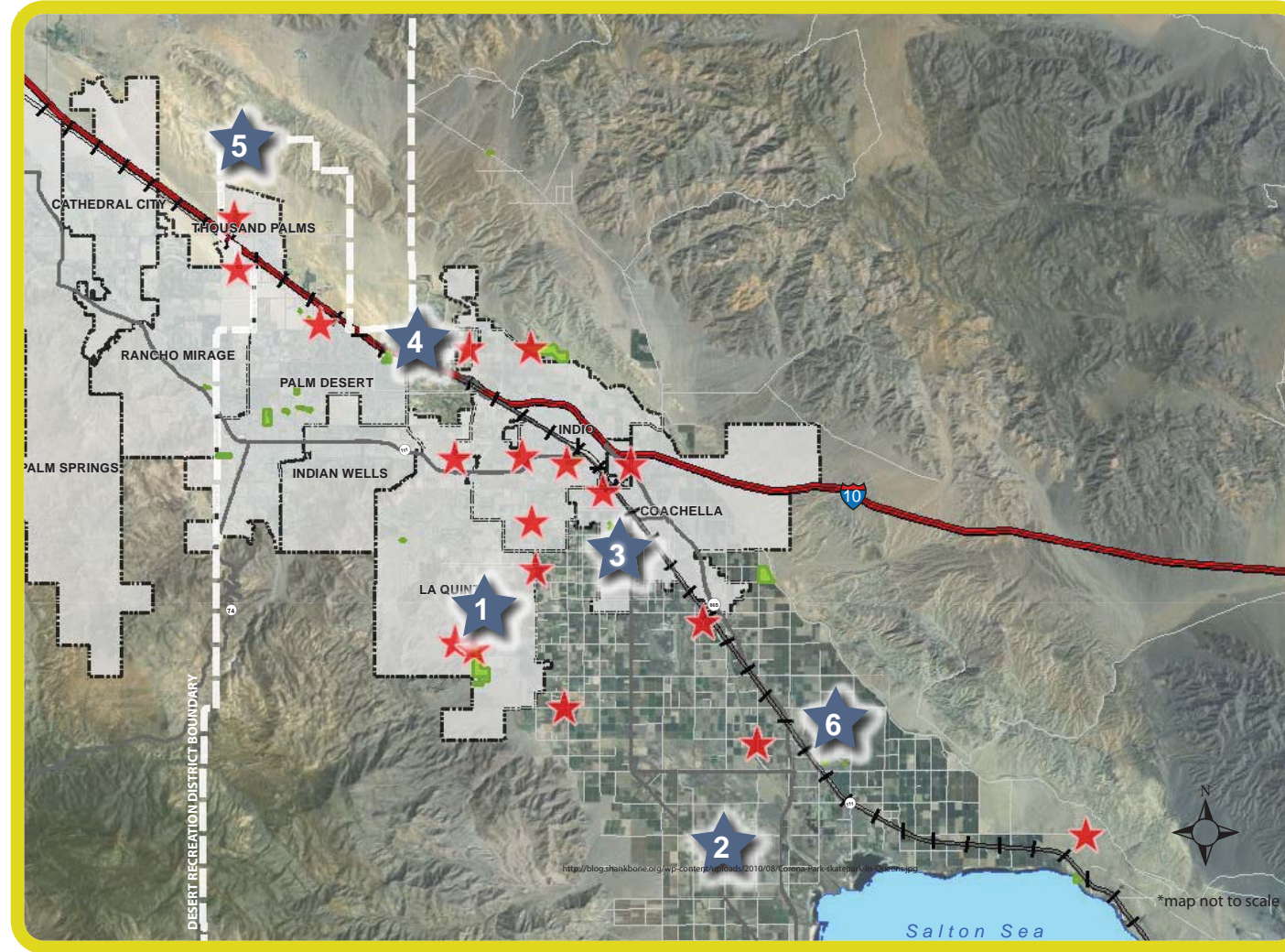
get your fun



- 1 Coral Mountain Discovery Center**
- Passive/Interpretive Site
 - Explore Collaboration with Lake Cahuilla
 - Camping
 - Hiking



- 2 Oasis Community Park**
- Soccer & Baseball Fields
 - Shade Structures
 - Restroom
 - Walking Path



Opportunity within the Desert Recreation District is rich with activities that will not only provide recreation, but will also help us strengthen our communities. Presented here are exciting opportunities that are currently planned within the District.

- Legend**
- ★ Opportunity Site - Other
 - 🚶 Hiking
 - 🏡 Recreation Center
 - 🏕️ Camping
 - 👨👩👧👦 Community Park
 - 🛹 Skate Park



- 3 Thermal Senior Center**
- Multi-Generational Center
 - Possible Community Park



- 4 Christian School of the Desert**
- Gymnasium
 - Swimming Pool
 - Soccer & Baseball Fields
 - Shade Structure
 - Restroom
 - Walking Path
 - Public Access



- 5 Thousand Palms Community Park**
- Tennis Courts
 - Soccer Fields
 - Desert Garden
 - Skate Park
 - Basketball Courts
 - Playground
 - North Extension of Thousand Palms Community Park



- 6 Mecca Park and Community Center**
- Skate Park
 - Repurpose Center to Fitness and/or Senior Services

DESERT RECREATION DISTRICT, CALIFORNIA

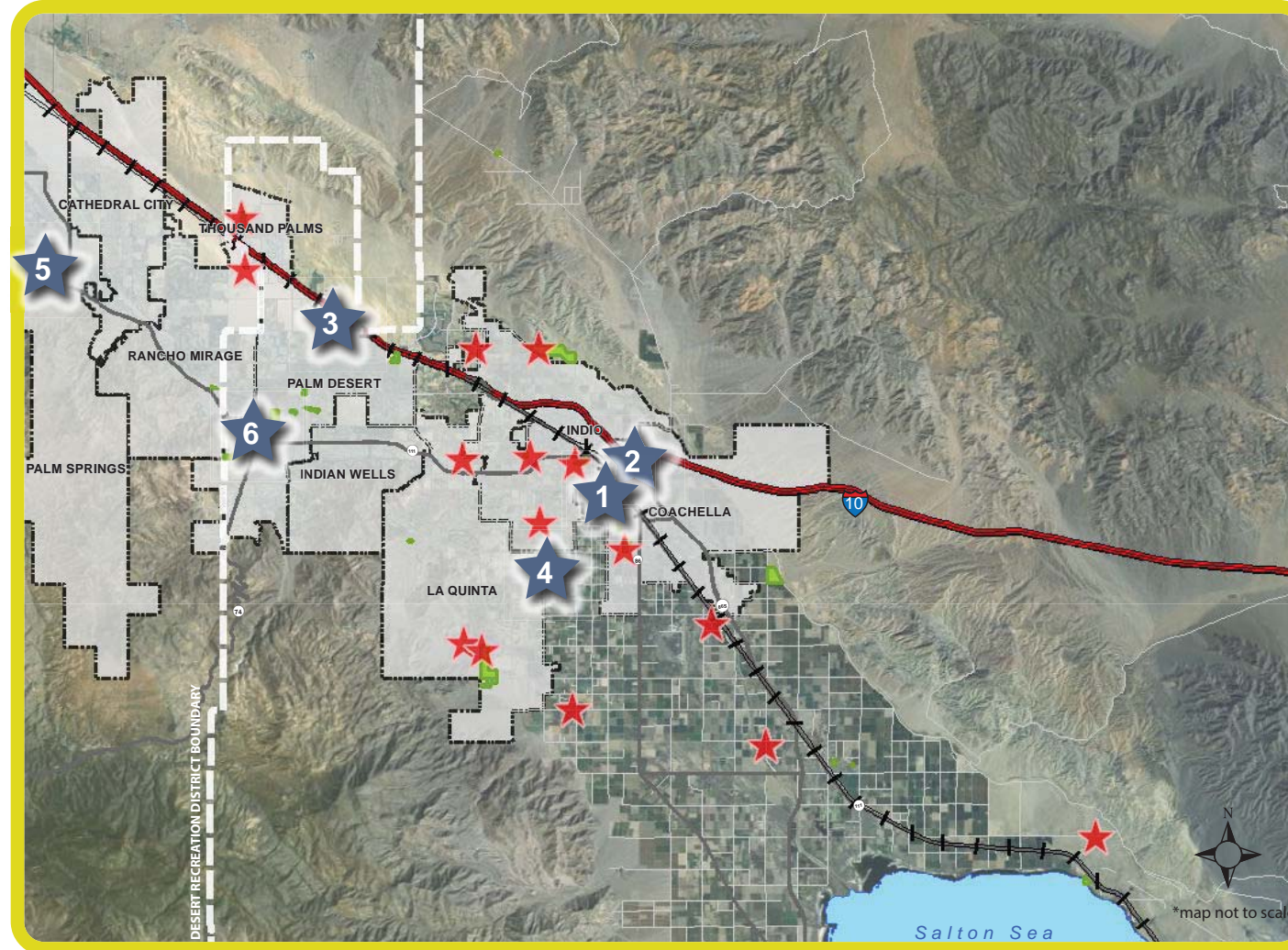


Opportunity Map – Sports Fields, Athletics Complexes, Tournament Venues

get your fun



SOFTBALL



Tournament Venues

- ★ **1** Rancho Las Flores
 - Expand to a Tournament Venue
- ★ **2** La Entrada Development
 - Soccer Stadium and Multi-field Complex
 - MLB Training
- ★ **3** Cal State SB on Cook and Frank Sinatra
 - 200 Acres for Campus Recreation
 - Wellness Athletics Venue
- ★ **4** 53rd and Monroe
 - Potential Future Tournament Venue
- ★ **5** Palm Springs Airport
 - Cooperative Venture with Palm Springs
- ★ **6** Pierce and 64th
 - Joint Venture College of Desert (COD) Mecca Campus

Legend

- ★ Opportunity Site - Other
- Baseball/Softball Tournament Venue
- Soccer/Multi-Field Tournament Venue



Dick's Sporting Fields, Denver, CO - Tournament Soccer Venue



Town of Cary, NC - MLB Training



Town of Cary, NA- Tournament Soccer Venue

DESERT RECREATION DISTRICT, CALIFORNIA



get your fun

Opportunity Map – Potential Additions, Developments, Partnerships & Collaborations



1 Rancho Mirage Property

- Wellness/Fitness/Warm Water Therapy Pool
- Development with the medical community as a partner



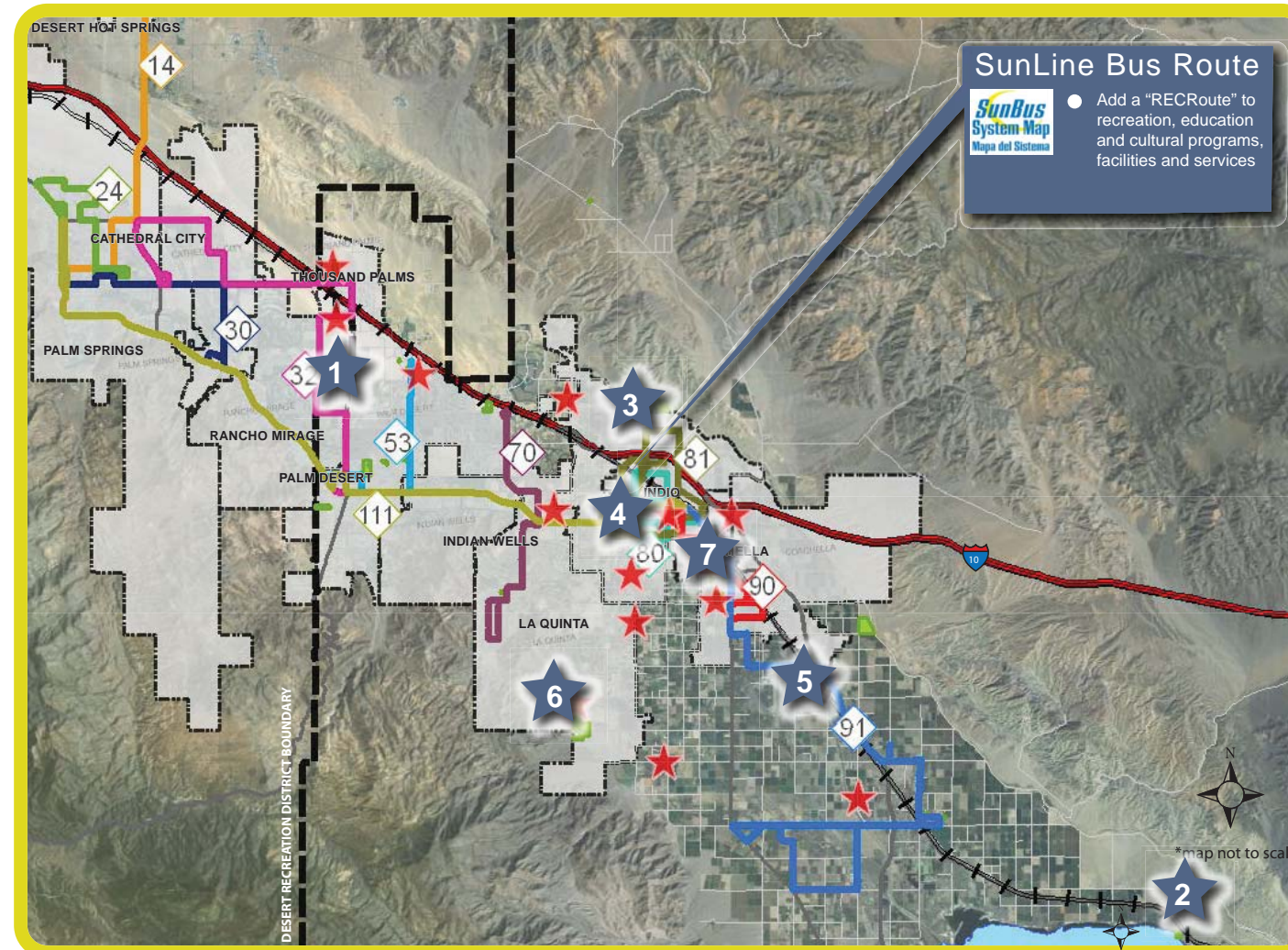
2 North Shore (South Valley)

- Baseball Field
- Basketball
- Playground
- Youth Center



3 Desert Regional Park (North Valley)

- Action Sports Park
- BMX park and Training Facility
- Mountain Bike (Pump Track)



SunLine Bus Route
 Add a "RECRoutE" to recreation, education and cultural programs, facilities and services

- Legend
- Water Access
 - Recreation Center/Nature Center
 - Sports Fields
 - BMX Park
 - Community Park
 - Camping
 - Health/Wellness



4 Dune Palm & Westward Ho

- New Community Center



5 Coachella Valley & Desert Sands Unified School Districts

- Coordinate Additional School Use and Development



7 Pawley Pool Family Aquatic Center

- Water Park



6 RIVCOS Lake Cahuilla

- Camping Venue
- Nature Center
- Public Water Access

Opportunity for potential additions, developments, partnerships and collaborations exist throughout the District. These opportunities range from BMX park to camping to sports fields.

DESERT RECREATION DISTRICT, CALIFORNIA



Opportunity Map – Valley Wide Trails Project



Public Art

- Public art will be added along the path to highlight the culture, history, and vibrance of the region.



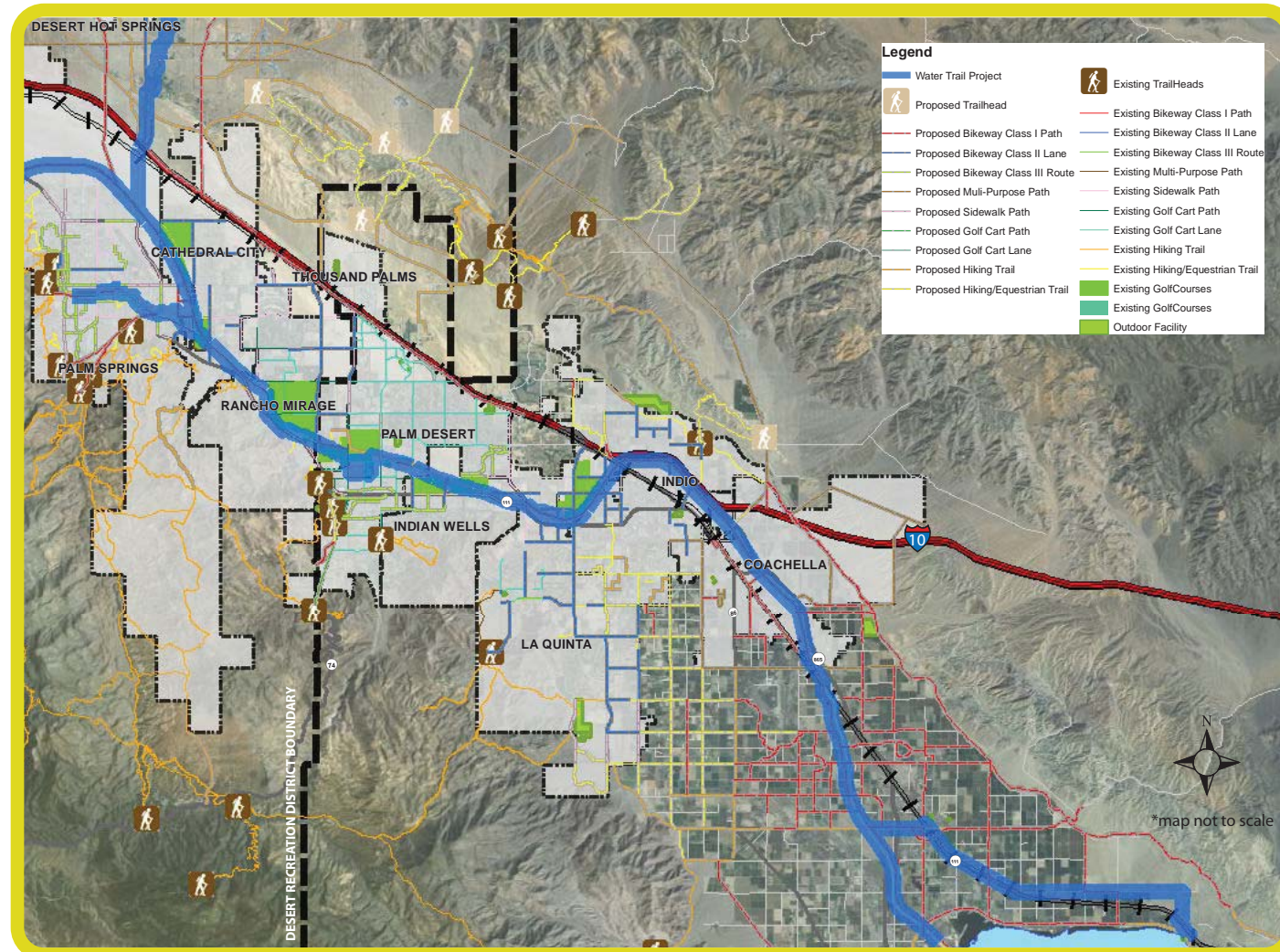
Education Wayfinding

- Interpretive signage will be also be added along the path for the user's information, as well as educational experience.



Trail Amenities

- Trail amenities such as fitness stations and bike repair stops can be added as part of the Whitewater Trails Project.



- One of the goals of the Whitewater Trails Project is to provide Safe Routes to Schools and Safe Routes to Play.

The CVAG is evaluating a project that would connect all nine Coachella Valley cities with a neighborhood electric vehicle/bicycle/walking path. The parkway would extend along the Whitewater River from Palm Springs to Coachella with a connection to Desert Hot Springs. The concept builds upon a decade's old plan to build bike and hiking paths along the Whitewater River. In 2009, the Desert Recreation District and Riverside County Regional Park and Open Space District commissioned a study that estimated the 45 mile path (all of the way to the Salton Sea) would cost about \$38 million. It was projected to take decades to assemble the funding, local agency commitments and construct the project.



Dinah Shore Underpass



Jackson Park



Overpass Fred Waring

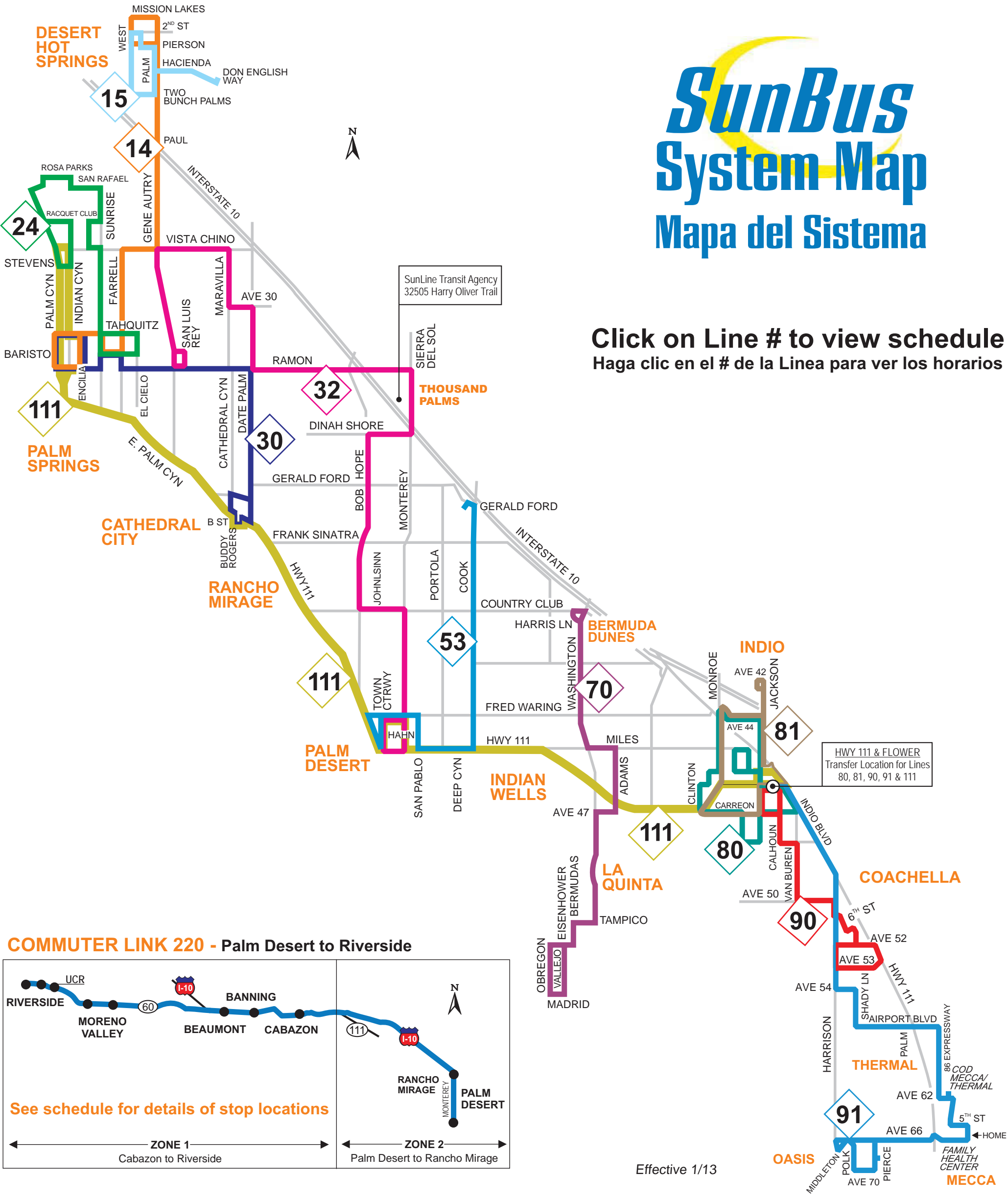


Demuth Park

SunBus System Map

Mapa del Sistema

Click on Line # to view schedule
Haga clic en el # de la Linea para ver los horarios



Appendix C: GRASP® Methodology

A. Level of Service Analysis

Analysis of the existing parks, open space, trails, and recreation systems are often conducted in order to try and determine how the systems are serving the public. A Level of Service (LOS) has typically been defined in parks and recreation master plans as the capacity of the various components and facilities that make up the system to meet the needs of the public. This is often expressed in terms of the size or quantity of a given facility per unit of population.

Brief History of Level of Service Analysis

In order to help standardize parks and recreation planning, universities, agencies, and parks and recreation professionals have long been looking for ways to benchmark and provide “national standards” for how much acreage, how many ballfields, pools, playgrounds, etc., a community *should* have. For example, in 1906 the fledgling “Playground Association of America” called for playground space equal to 30 square feet per child. In the 1970s and early 1980s, the first detailed published works on these topics began emerging (Gold, 1973, Lancaster, 1983). In time “rule of thumb” **capacity** ratios emerged with 10 acres of parklands per thousand population becoming the most widely accepted standard application. Other normative guides also have been cited as “traditional standards,” but have been less widely accepted. In 1983, Roger Lancaster compiled a book called, Recreation, Park and Open Space Standards and Guidelines, that was published by the National Park and Recreation Association (NRPA). In this publication, Mr. Lancaster centered on a recommendation “that a park system, at minimum, be composed of a core system of parklands, with a total of 6.25 to 10.5 acres of developed open space per 1,000 population.” (Lancaster, 1983, p. 56) The guidelines went further to make recommendations regarding an appropriate mix of park types, sizes, service areas, and acreages, and standards regarding the number of available recreational facilities per thousand population. While the book was published by NRPA and the table of standards became widely known as “the NRPA standards,” for Level of Service Analysis, **it is important to note that these standards were never formally adopted for use by NRPA.**

Since that time, various publications have updated and expanded upon possible “standards” – several of which have also been published by NRPA. Many of these publications did benchmarking and other normative research to try and determine what an “average LOS” should be. It is important to note that NRPA and the prestigious American Academy for Park and Recreation Administration, as organizations, have focused in recent years on accreditation standards for agencies, which are less directed towards outputs, outcomes, and performance, and more on planning, organizational structure, and management processes. The following table gives some of the more commonly and historically used “capacity standards.”

Common Historically-Referenced LOS Capacity “Standards”

Activity/ Facility	Recommended Space Requirements	Service Radius and Location Notes	Number of Units per Population
Baseball Official	3.0 to 3.85 acre minimum	¼ to ½ mile Unlighted part of neighborhood complex; lighted fields part of community complex	1 per 5,000; lighted 1 per 30,000
Little League	1.2 acre minimum		
Basketball Youth	2,400 – 3,036 vs.	¼ to ½ mile Usually in school, recreation center, or church facility; safe walking or bike access; outdoor courts in neighborhood and community parks, plus active recreation areas in other park settings	1 per 5,000
High school	5,040 – 7,280 s.f.		
Football	Minimum 1.5 acres	15 – 30 minute travel time Usually part of sports complex in community park or adjacent to school	1 per 20,000
Soccer	1.7 to 2.1 acres	1 to 2 miles Youth soccer on smaller fields adjacent to larger soccer fields or neighborhood parks	1 per 10,000
Softball	1.5 to 2.0 acres	¼ to ½ mile May also be used for youth baseball	1 per 5,000 (if also used for youth baseball)
Swimming Pools	Varies on size of pool & amenities; usually ½ to 2-acre site	15 – 30 minutes travel time Pools for general community use should be planned for teaching, competitive, and recreational purposes with enough depth (3.4m) to accommodate 1m to 3m diving boards; located in community park or school site	1 per 20,000 (pools should accommodate 3% to 5% of total population at a time)
Tennis	Minimum of 7,200 s.f. single court area (2 acres per complex)	¼ to ½ mile Best in groups of 2 to 4 courts; located in neighborhood community park or near school site	1 court per 2,000
Volleyball	Minimum 4,000 s.f.	½ to 1 mile Usually in school, recreation center or church facility; safe walking or bike access; outdoor courts in neighborhood and community parks, plus active recreation areas in other park settings	1 court per 5,000
Total land Acreage		Various types of parks - mini, neighborhood, community, regional, conservation, etc.	10 acres per 1,000

Sources:

David N. Ammons, *Municipal Benchmarks - Assessing Local Performance and Establishing Community Standards*, 2nd Ed., 2002

Roger A. Lancaster (Ed.), *Recreation, Park and Open Space Standards and Guidelines* (Alexandria, VA: National Recreation and Park Association, 1983), pp. 56-57.

James D. Mertes and James R. Hall, *Park, Recreation, Open Space and Greenways Guidelines*, (Alexandria, VA: National Recreation and Park Association, 1996), pp. 94-103.

In conducting planning work, it is important to realize that the above standards can be valuable when referenced as “norms” for capacity, but not necessarily as the target standards for which a community should strive. Each community is different, and there are many varying factors which are not addressed by the standards above. For example:

- Does “developed acreage” include golf courses? What about indoor and passive facilities?
- What are the standards for skateparks? Ice Arenas? Public Art? Etc.?
- What if the agency is an urban land-locked community? What if the agency is a small town surrounded by open Federal lands?
- What about quality and condition? What if there are multiple ballfields, but they haven’t been maintained in the last ten years?
- And many other questions....

B. GRASP® Composite-Values Method (CVM) for Level of Service Analysis

In order to address these and other relevant questions, a new methodology for determining Level of Service was developed. It is called a **Composite-Values Methodology (CVM)** and has been applied in many communities across the nation since 2001 to provide a better way of measuring and portraying the service provided by parks and recreation systems. Primary research and development on this methodology was funded jointly by GreenPlay, LLC, a management consulting firm for parks, open space, and related agencies, Design Concepts, a landscape architecture and planning firm, and Geowest, a spatial information management firm. While Composite-Values Methodology can be utilized by anyone, the proprietary trademarked name for the **CVM process** that these three firms use is called **GRASP® (Geo-Referenced Amenities Standards Process)**. The **GRASP®** name for the methodology for analysis is proprietary, but the CVM process is generic, and the software used is common and typical for most agencies. The data and information collected is owned and can be updated and managed by the agency for ongoing usage.



For CVM analysis, capacity is only part of the LOS equation. Other factors are brought into consideration, including *quality, condition, location, comfort, convenience, and ambience*. To create GRASP® inventory and analysis, parks, trails, recreation, open space, and any other relevant amenities and properties being studied are looked at as part of an overall infrastructure for a community made up of various components, such as playgrounds, multi-purpose fields, passive areas, etc. The methodology inventories characteristics that are part of the context and setting of a component. They are not characteristics of the component itself, but when they exist in proximity to a component they enhance the value of the component.

The characteristics of components include:

- Quality** – The service provided by anything, whether it is a playground, soccer field, or swimming pool is determined in part by its quality. A playground with a variety of features, such as climbers, slides, and swings provides a higher degree of service than one with nothing but an old teeter-totter and some “monkey-bars.”
- Condition** – The condition of a component within the park system also affects the amount of service it provides. A playground in disrepair with unsafe equipment does not offer the same service as one in good condition. Similarly, a soccer field with a smooth surface of well-maintained grass certainly offers a higher degree of service than one that is full of weeds, ruts, and other hazards.
- Functionality** – Functionality is a measure of how well something serves its intended purpose, and is a result of its quality and condition.
- Location** – To receive service from something, you need to be able to get to it. Therefore, service is dependent upon proximity and access. All components are geographically located using GPS coordinates and GIS software.
- Comfort** – The service provided by a component is increased by having amenities. For example, outdoor components are often enhanced by attributes such as shade, seating, and a restroom nearby. Comfort enhances the experience of using a component.
- Convenience** – Convenience encourages people to use a component, which increases the amount of service that it offers. Easy access and the availability of trash receptacles, bike rack, or nearby parking are examples of conveniences that enhance the service provided by a component.
- Ambience** – Simple observation will prove that people are drawn to places that “feel” good. This includes a sense of safety and security, as well as pleasant surroundings, attractive views, and a sense of place. For example, a well-designed park is preferable to poorly-designed one, and this enhances the degree of service provided by the components within it.

Capacity is still part of the LOS analysis and the quantity of each component is recorded as well. By combining and analyzing the composite values of each component, it is possible to measure the service provided by a parks and recreation system from a variety of perspectives and for any given location. Typically this begins with a decision on “**relevant components**” for the analysis, collection of an accurate inventory of those components, analysis and then the results are presented in a series of maps and tables that make up the analysis of the study area.

Data for Analysis and Making Justifiable Decisions

All of the data generated from the GRASP[®] evaluation is compiled into an electronic database that is then available and owned by the agency for use in a variety of ways. The database can help keep track of facilities and programs, and can be used to schedule services, maintenance, and the replacement of components. In addition to determining LOS, it can be used to project long-term capital and life-cycle costing needs. All portions of the information are in standard available software and can be produced in a variety of ways for future planning or sharing with the public.

It is important to note that CVM analysis not only provides accurate LOS and facility inventory information, but also works with and integrates with other tools to help agencies make decisions. It is relatively easy to maintain, updatable, and creates easily understood graphic depictions (analysis maps and/or “Perspectives”) of issues. Combined with a needs assessment, public and staff involvement, program, and financial assessment, CVM analysis allows an agency to make defensible recommendations on priorities for ongoing resource allocation, along with capital and operational funding.

C. Inventory Data Collection Process

A detailed inventory of relevant components for the project is conducted. The inventory locates and catalogues all of the relevant components for the project, and evaluates each one as to how well it was serving its intended function within the system. The planning team first prepares a preliminary list of existing components using aerial photography and the community’s Geographic Information System (GIS). Components identified in the aerial photo are given GIS points and names according to a list of standard components.

Next, field visits are conducted by the consulting and project team staff to confirm the preliminary data and collect additional information. Additionally, indoor facilities are scored and for the purposes of this study, each relevant space is considered a component and is scored based on its intended function. During the field visits and evaluations, any missing relevant components are added to the data set, and each component is evaluated as to how well it meets expectations for its intended function. During the site visits the following information is collected:

- Component type and location
- Evaluation of component functionality
- Evaluation of comfort and convenience features
- Evaluation of park design and ambience
- Site photos and general comments

After the inventory is completed, it is given to the project team for final review and approval for accuracy.

D. Standardized Process for Scoring Components

Component Scoring

The approved inventory is the basis for the creation of values used in analysis. Each component received a functionality score that is related to the quality, condition, and ability of the space to meet operational and programming needs.

For the GRASP® process, the range of scores for each component is as follows:

- **Below Expectations (BE)** – The component does not meet the expectations of its intended primary function. Factors leading to this may include size, age, accessibility, or others. Each such component is given a score of **1** in the inventory.
- **Meeting Expectations (ME)** – The component meets expectations for its intended function. Such components are given scores of **2**.
- **Exceeding Expectations (EE)** – The component exceeds expectations, due to size, configuration, or unique qualities. Such components are given scores of **3**.
- If the feature exists but is not useable because it is unsafe, obsolete, or dysfunctional, it may be listed in the feature description, and assigned a **score of zero (0)**.

If a feature is used for multiple purposes, such as a softball field that is also used for T-Ball or youth soccer games, it is scored only once under the description that best fits the use that for which the component is designed.

Neighborhood and Community Scoring

Components are evaluated from two perspectives: first, the value of the component in serving the immediate neighborhood, and second, its value to the entire community.

Neighborhood Score

Each component is evaluated from the perspective of a resident that lives nearby. High scoring components are easily accessible to pedestrians in the neighborhood, are attractive for short and frequent visits, and are unobtrusive to the surrounding neighborhood. Components that do not have a high neighborhood score may not be located within walking distance of residents, may have “nuisance features” such as sports lighting, or may draw large crowds for which parking is not provided.

Community Score

Additionally each component is evaluated from the perspective of residents in the community as a whole. High scoring components in this category may be unique components within the parks and recreation system, have a broad draw from throughout the community, have the capacity and associated facilities for community-wide events, or are located in areas that are accessible only by car.

Indoor Components

Indoor components are generally thought to be accessible to the entire community, partially because it is often not financially feasible to provide indoor facilities at a walking distance from every distance from each residence. Additionally, indoor facilities often provide programs and facilities that are geared to the community as a whole, or in larger communities, are intended for a region of the community. For these reasons, unless a detailed indoor analysis is completed, indoor facilities are given only one score.

Modifiers (Comfort and Convenience Features) Scoring

Outdoor Modifiers

Besides standard components, this inventory also evaluates features that provide comfort and convenience to the users. These are things that a user might not go to the parks specifically to use, but that may enhance the user's experience by making it a nicer place to be and include: drinking fountains, seating, BBQ grills, dog stations, security lighting, bike parking, restrooms, shade, connections to trails, park access, parking, picnic tables, and seasonal and ornamental plantings. These features are scored as listed above with the 1-3 system. In this case it is not important to get a count of the number or size of these components; instead the score should reflect the ability of the item to serve the park.

Indoor Modifiers

For indoor facilities, the comfort and convenience features change slightly to reflect the characteristics of the building. Building modifier categories include: site access, setting aesthetics, building entry function, building entry aesthetics, overall building condition, entry desk, office space, overall storage, and restrooms and/or locker rooms.

Activity and Sports Lighting

This modifier accounts for lighting that allows for component use in the evening/night hours and is applied to the quantity of the component as it affectively expands the capacity of the component. This modifier does not apply to security lighting.

Shade

Like Activity and Sports lighting, shade can be added to outdoor components to extend use beyond normal hours or seasons.

Design & Ambience Scoring

Using the same rating system that is used for components and modifiers, the quality of Design and Ambience is scored. Good design not only makes a place look nice, it makes it feel safe and pleasant, and encourages people to visit more often and stay longer

Trails and Greenways Scoring

Trails and/or greenways can be scored as independent parcels or as individual components within another parcel. The former type of trail receives its own set of scores for modifiers and design and ambience. The trail in the latter situation takes on the modifiers and design and ambience of the larger park in which it resides. Multi-use trails are assumed to consist of three components including one active component, one passive component, and the parcel itself. Because traveling the length of any given trail is time consuming, trail information is often collected with the aid of staff.

For the purposes of most studies, a list of trails is obtained to provide a reasonable dataset that offers some park and recreational value to the public. While no specific listing of components at each greenway or trail is generated, it is assumed that each greenway provides a value equivalent to three (3) components. Think of these as one active component (walking, running, biking, etc.), one passive component (quiet contemplation along the trail), and one experiential component (observing nature, perhaps art and interpretive signage).

These three components and the parcel are assumed to be meeting the expectations (scores 2) of the community in the same way that park components meet expectations. The other parts to the GRASP® score relate to the comfort and design of the location, and are called modifiers. The aesthetic and recreational standards for greenways are typically similar to those for parks, so modifiers at greenways are generally assigned a value of meeting expectations (score 2). Multi-use trails that typically are adjacent to major roads are assumed to have less aesthetic and recreational standards and are therefore assigned a value of below expectations (score 1). The final component in the GRASP® score is the ownership modifier. This is a percentage that is applied to the score that relates to the general public's ability to access the facility.

This translates into the following formula for calculating the GRASP® score:

Trails or Greenway Scoring

(Component number + Parcel) x Component score x (Comfort x Design) x ownership = GRASP® score or
 $(3 + 1) \times 2 \times 2.2 \times 1 = 17.6$

Multi-Use Trail Scoring

(Component number + Parcel) x Component score x (Comfort x Design) x ownership = GRASP® score or
 $(3 + 1) \times 2 \times 1.1 \times 1 = 8.8$

In the GRASP® Perspectives t, that value is assigned to the location where each trail is found and buffered accordingly. This value also is included in computations for the GRASP® Indices that are calculated along with each Perspective.

Ownership Modifier

This modifier is generally weighted with a percentage that is applied to the GRASP® score after other modifiers have been applied. It accounts for access and control of components that are provided by alternative providers. For example, in most cases components that are owned and managed by schools are given a 50% weighted ownership modifier, which halves the GRASP® score to account for the limited access that the neighborhood has to school facilities (it's only open to the public outside of school hours).

E. Calculating GRASP® Functional Scores

Once the components are inventoried and scored, calculations can be made for any combination of components to derive average scores, scores per combinations of various components, scores per sub-areas, etc., depending on the key issues being studied and objectives for the project. These are very helpful for analyzing area comparisons and setting of target scores for component service and agency target standards.

For example, a total composite GRASP® score for each individual component is determined by using the following formula:

$$(\text{total component score}) \times (\text{adjusted modifier score}) \times (\text{design and ambiance score}) \times (\text{ownership modifier}) = \text{Composite GRASP® Score}$$

These individual scores can be additively combined in various ways to examine service from various subsets of the agency's system.

F. GRASP® Perspectives and Target Threshold Scores

GRASP® scores are often used to create analysis maps to show how the study area is being served for parks and recreation benefits. These maps are called Perspectives, because each one provides a certain perspective on the way service is being provided. Types of Perspectives include heat maps, threshold maps, and composition maps, as well as others.

On heat maps, the numerical value of LOS available to a person at any given location is represented by an orange tone. Where the tone is darker, the available LOS is higher. Locations on the map with no orange tone (i.e. a grey tone) have no service. Heat maps can be produced from any set of components in the inventory. For example, if the intent is to measure the relative LOS available for seniors, then a heat map can be generated using only those components in the inventory that relate to seniors.

Heat maps can be further analyzed to determine where the LOS on them falls above or below a certain threshold. The threshold may vary, and can be set to represent an assumed "target" value for LOS, or can be the median, average, or other value for the Perspective. On the threshold maps, colors are used to show whether any given location is above or below the threshold value.

The types of Perspectives used to analyze and depict the community's LOS will depend upon the key issues being studied.

Typical and Standard GRASP® Perspectives

Below are some types of Perspectives typically used to analyze service in an area.

Neighborhood Composite

This Perspective depicts service from a neighborhood point of view. Multiple buffers (or "catchment areas") are used to reflect multiple ways of travelling to reach components. The threshold for this Perspective is typically the value that results from being within 1/2 mile of 4 recreation components and one recreational trail.

Walkability (same as Neighborhood Composite but with only 1/2 mile buffers)

The threshold scores for this Perspective are normally the same as for the Neighborhood Composite.

Perspectives showing Neighborhood LOS for one component

The threshold here is equivalent to being within 1/2 mile of the selected component, and assumes that the component, modifiers, and design and ambiance are meeting expectations.

Note: Aside from meeting a single goal, the mix of components also needs to be considered. For example, a home that is within 1/2 mile away from four tennis courts and no other amenities would meet the basic numeric standard, but not the intent of the standard. Composition analyses are another type of Perspective that is used to analyze the mix of options available to residents.

On a composite map, selected components are grouped into categories and the map shows how many categories are represented by at least one component within a given proximity to any location on the map.

G. GRASP® Project Technical Standards for GIS Data

The GRASP® Team utilizes the most up to date computer hardware and software to produce and enhance project-based GIS data. The following technical details are standard with all GRASP® Team projects.

- All GRASP® Team GIS workstations employ Microsoft® Windows® operating systems. All project files conform to PC-based architecture and extension naming standards.
- The GRASP® Team employs ESRI® ArcGIS™ 9.3 for all GIS applications. Final project GIS data is submitted to the client in Microsoft® Access™-based Geodatabase (*.mdb) Feature Class format and/or Shapefile (*.shp/*.dbf/*.shx) format. ArcMap™ Layer files (*.lyr) are submitted to ease client replication of all project map legend formats. The GRASP® Team will not resubmit original client source data that has not undergone enhancement.
- All final GIS datasets (deliverables) area submitted to the client using the geographic coordinate system(s) from the original client source data. The GRASP® team will assign a coordinate system that is most appropriate for the client location if the client does not require a predetermined standard coordinate system. Most GRASP® project data is submitted in State Plane Coordinates (Feet) with a NAD83/NAD83 HARN datum.
- All GRASP® Perspectives and Resource Maps (deliverables) are submitted to the client in standard PDF and JPEG formats. The project PDFs are high resolution, print-ready files for scalable print operations. Most project map-based PDFs are 300dpi, 36"x54" images. The project JPEGs are lower resolution digital presentation-ready files for insertion into Microsoft® Office® productivity suite applications – MS Word®, MS Power Point®, etc. Most project map-based JPEGs are 300dpi 4"x6" images.

Appendix D: Summary of Outdoor Inventory and Summary of Indoor Inventory Tables

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Outdoor Inventory Summary

LOCATION	Aqua Feat, Pool	Aqua Feat, Spray	Backstop, Practice	Ball field	Basketball	Bocce Ball	Complex, Ballfield	Complex, MP Field	Concessions	Disk Golf	Dog Park	Driving Range	Educational Experience	Event Space	Fitness Course	Garden, Community	Garden, Display	Golf	Horseshoes	Loop Walk	MP Field, All Sizes	Natural Area	Open Turf	Open Water	Other-Active (Model Airplane Field)	Passive Node	Picnic Grounds	Playground, All Sizes	Public Art	Shelter, All Sizes	Skate Feature	Skate Park	Tennis	Trail, Primitive	Volleyball	Water Access, General	Water Feature		
Bagdoura Park Pool	2																																						
Cahuilla Hills Park												1									1					1							2	1					
Canal Regional Park																					1		1						4										
Coral Mountain Park																					1													1					
Desert Regional Park																					1								1					3					
Freedom Park		1		3	3		1		1		1	1			1					1	1		1			1	1	1	1	1	5	1		2		2			
Hovley Soccer Park						2		1	1	1									3	1	5							1		8									
Indio Community Center Park & Lot													1							1			1					1											
Indio Hills Community Center Park			1		1																							1		1									
Johnson Street Park																				1	1					1													
La Quinta Community Park				1	1				1				1	1						1			1					1		3									
Mecca Community Park and Pool	1			2	2				1												1		1					1		1									
North Shore Park																								1		1		1										1	
Olsen Field				1																	1							1											
Palm Desert Civic Center Park				4	3		1		1		1	1	1	1			2			1			2	1		1	5	1	1	1	1		1	6		4	1	1	
Parque Del Pueblo					0.5																							1	1	1									
Pawley Pool Family Aquatic Complex	2	1																												4									
Placitas de la Paz #1																						1						1		1									
Placitas de la Paz #2																				1																			
Placitas de la Paz #3																				1			1					1											
The First Tee Coachella Valley												1					1							3															
Thousand Palms Community Center & Park				3	0.5				1						1					1	3							1		6									
University Park					1											1					1							1		1									
Total:	5	2	1	14	12	2	2	1	6	1	2	1	3	3	2	2	2	1	3	9	13	4	8	5	1	3	8	14	3	37	1	1	10	5	6	2	1		