Spencer Greenway & Public Art

Preliminary Feasibility Study

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Acknowledgements

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Project Background

The Spencer utility corridor extends approximately 2.5 miles north to south from Charleston Boulevard to Katie Avenue, ending just north of the Flamingo Wash in central Las Vegas. The corridor includes four NV Energy transmission lines and two substations. The 200-foot wide corridor is located adjacent to many neighborhoods, schools, and churches and is used informally for walking in some unfenced areas. The corridor may provide an opportunity to develop a “Spencer Greenway” paved trail with recreation enhancements and public art. Transforming this utility corridor would have many benefits, as described below:

Implements Regional and Local Plans

Through Southern Nevada Strong’s regional planning process, the Maryland Parkway Corridor emerged as a priority corridor to direct reinvestment and revitalization. Through the Southern Nevada Strong planning outreach efforts, the community overwhelmingly pointed to improvements to pedestrian facilities and personal safety as priorities. Located a half mile east of Maryland Parkway, the Spencer corridor was specifically identified by the community as an opportunity for trail connectivity and enhancements.

This trail project also contributes to Regional Transporation Commission’s vision “to provide a safe, convenient and effective regional transportation system that enhances mobility and air quality for citizens and visitors.” The Spencer alignment is also a regional trail identified in the City of Las Vegas’ Off-Street Multi-Use Transportation Trail Alignments Map.

Provides Intermodal Connectivity

The corridor also provides an opportunity for a needed north-south trail connection between Downtown Las Vegas and the UNLV main campus, filling a gap in the regional trail system. A trail along the Spencer corridor would be especially beneficial to surrounding neighborhoods, where there is lower car ownership1.

Providing viable walking and biking options in this area would serve transit-dependent riders, and particularly UNLV students. The trail could be utilized by residents to access bus stops along Charleston Boulevard (Route 206), Sahara Avenue (Sahara Express), and Desert Inn Road (Route 203). This north-south trail project would also complete a gap in the regional bicycle network by connecting to east-west bicycle lanes on St. Louis Avenue and Sahara Avenue.

1 Source: Spencer Greenway RTCA application prepared by Southern Nevada Strong (August 2014)
Increases Park and Recreation Access

While the southern portion of the corridor is located adjacent to the William Orr Middle School’s baseball field, playground, and open grass areas, the northern portion of the corridor has limited access to parks. Huntridge Circle Park, a 3-acre park located a half mile east of the corridor near Charleston Boulevard, has high levels of use. The 18-acre Justice Myron E. Leavitt and Jaycee Community Park, located 0.5 mile west of the corridor near St. Louis Avenue, is separated from the neighborhood by Eastern Avenue, a high volume roadway.

The Spencer Greenway helps to close a gap in the regional park system and increases access to recreation. Additionally, a trail in this corridor provides a potential location for organizations to conduct special events and races such as 5K runs, an increasingly popular recreational activity.

Provides Connectivity to Schools

The Spencer corridor is located near several schools, including Crestwood Elementary School, Lake Elementary School, Thomas Elementary School, Orr Middle School and Valley High School. The trail could provide a route from residential neighborhoods to area schools, possibly being integrated into the Safe Routes to Schools program.

Revitalizes and Beautifies Neighborhood

The Spencer Greenway is located in an older, low-income neighborhood that could benefit from revitalization and public improvements. The viewshed throughout most of the Spencer corridor is dominated by utility poles and chain link fencing. Enhancements to this corridor could improve aesthetics, property values, and potentially increase economic activity at nearby businesses. Trail usage would also serve as a deterrent to illegal activities, such as dumping.

Recognizing the potential to revitalize the Spencer corridor, the Southern Nevada Strong project team convened a planning team consisting of the City of Las Vegas, Clark County, the RTC and NV Energy in order to determine the feasibility of a multi-use paved trail with a focus on land ownership/easement issues. The internal planning process, supported by a technical assistance grant from the National Park Service’s Rivers, Trails and Conservation Assistance Program, included a series of planning team meetings (December 2014-April 2015) and field trip (February 2015) in order to identify opportunities, challenges, and recommended next steps. This Preliminary Feasibility Study serves as a foundation for future conceptual planning and community engagement.
Utility Design Considerations

According to the NV Energy Lands Right-of-way Management and Transmission Engineering Uniform Standards (Appendix A), transmission corridors may be utilized for secondary uses including parks, open space and trails, contingent on an NV Energy review and approval process. There are several local examples of trails and parks being co-located with power lines, as described in Local Case Studies (Appendix B).

Due to safety and liability concerns and the need to maintain access to utility infrastructure, design parameters are often imposed, such as:

- **Types of Amenities**: Some recreation amenities are typically not permitted, including parking lights, buildings or structures, pine and palm trees, trash enclosures, and playground equipment.

- **Irrigation**: The construction of parallel utilities, such as sewer, water, gas or irrigation, are also not typically permitted, which could limit options for vegetation and greenspace in the corridor.

- **Pole Clearances**: Improvements must adhere to minimum pole clearances and other standards established by the National Electric Safety Code and Operational Safety and Health Administration.

- **Continued Access**: The paved trail should be designed so that it could serve as an access road for NV Energy and other utility company personnel that maintain and inspect infrastructure.

**Undergrounding Power Lines**

Relocating the existing power lines underground would allow greater flexibility in the design of greenway improvements while also improving the aesthetics of the corridor. For example, height restrictions and other limitations would no longer be an issue, allowing greater creativity in the design of recreational amenities and public art. During undergrounding, opportunities to install fiber optic cable for high-speed internet access within a conduit that is separate from NV Energy power lines could also be explored. However, the cost of undergrounding is considerable; according to preliminary estimates provided by NV Energy, the cost to underground all power lines within the corridor would be at least $50 million.

Additionally, NV Energy’s rights within the corridor would remain as primary, with priority given to NV Energy for maintenance and emergency access. If maintenance or access to power lines requires digging or other disturbance to greenway improvements, additional costs for the repair or replacement of trail, recreation and public art amenities could also be incurred.

During the Phase 2 planning and community engagement process, additional analysis of costs and options will be completed.
Land Ownership

According to a January 2015 title survey completed by NV Energy entailing fee, easements and crossings for the Spencer Transmission Corridor, land in the corridor between Charleston Boulevard and Twain Avenue is fee owned by NV Energy, except for seventeen lateral street easements. Easements for parking lots and flood control have also been granted within the corridor, as follows:

- Crestwood Elementary School parking lot, located north of Wegnert Avenue
- Griffith United Methodist Church parking lot, located north of East Oakey Boulevard
- Robert E. Lake Elementary School parking lot, located north of Coronado Avenue
- Regional Flood Control District flood control channel, located east of Coronado Avenue and south of the Robert E. Lake Elementary School
- LDS Church driveway, located north of Golden Arrow
- William E. Orr Middle School parking lot, located south of East Twain Avenue

Future outreach meetings will be held with the Clark County School District, Regional Flood Control District, and Clark County Public Works in order to explore the possibility of routing a trail through or around these locations. Opportunities and constraints related to land ownership are also shown in the corridor assessment maps (pages 6-10).

Operations/Maintenance and Liability

If a trail was constructed within the Spencer transmission corridor for recreational and alternative transportation uses, Clark County and the City of Las Vegas would assume responsibilities related to operations and maintenance of trail improvements within their respective jurisdictions. Additionally, similar to other trail projects within transmission line corridors, an agreement would be developed to address roles, responsibilities and indemnification of NV Energy from liability related to recreational uses.
Corridor Assessment Maps

The following corridor assessment maps identify opportunities and challenges related to existing land ownership, structures, access points and land uses. Potential trail connections to transit, parks and other destinations are also identified. The maps were prepared through an initial field investigation of agency staff and serve as a starting point for future study. Maps are provided according to the following potential trail segments, each approximately ½ mile in length:

- Map 1: Charleston Boulevard to Oakey Avenue
- Map 2: Oakey Avenue to Sahara Avenue
- Map 3: Sahara Avenue to Vegas Valley Drive
- Map 4: Vegas Valley Drive to Desert Inn Road
- Map 5: Desert Inn Road to Katie Avenue
Hillside Heights Neighborhood

Opportunity for improvements to backyard walls and fences

CRESTWOOD ELEM. SCHOOL PARKING EASEMENT
- Potential trailhead location
- Connects to school and learning garden
- Explore reconfiguration of excess parking and storage units to allow trail access
- Consider elevation change during design

CHURCH PARKING EASEMENT
- Explore potential trail connection through parking lot

Church

Potential bike/ped facility improvements through Charleston Boulevard Complete Streets project

Church/daycare playground

Potential trailhead/shared parking at Wells Fargo?

Existing crosswalk

CROSSING @ CHARLESTON
- Existing crosswalk at Bruce Street

Potential shopping center access

Charleston Plaza

SPENCER GREENWAY
Preliminary Corridor Assessment

LEGEND
- Spencer Greenway & Trail
- Trail Connection (potential)
- Bike lane (existing)
- Bike lane (potential)
- Easement
- Trail access (potential)
- Crossing
- Public & Community Facilities

Map 1: Charleston to Oakey
Existing bicycle lane on St. Louis Ave. connects to Jaycee-Leavitt Park, Baker Park & Main Street.

SPENCER STREET
- Route trail along existing roadway to avoid conflict with substation
- Existing road is 60' wide with 5' sidewalk and 5' planting area
- Adequate space in right-of-way for widened sidewalk/trail

CROSSING @ SAHARA
- Modify existing raised median to provide a refuge island with traffic control devices
- Pedestrian bridge not possible at this location
CROSSING @ SAHARA
- Modify existing raised median to provide a refuge island with traffic control devices
- Pedestrian bridge not possible at this location

ROBERT E. LAKE ELEM. SCHOOL PARKING EASEMENT
- Parking and lighting installed recently
- Explore potential trail connection

INFORMAL PEDESTRIAN ACCESS
- Existing east-west path along flood control facility provides access to school
- Add crosswalk?

LEGEND
Spencer Greenway & Trail
Trail Connection (potential)
Bike lane (existing)
Bike lane (potential)
Easement
Trail access (potential)
Crossing
Public & Community Facilities
**LDS Church Drive Easement**
- Explore locating trail on east side of driveway
- Steep slope may limit ADA access

**Line of sight limited at this potential crossing location; potentially an option with trail crossing warning signs**

**Pawnee Drive**
- Potential alternative trail alignment
- Wide street could allow 10-15' trail corridor

**Crossing @ Desert Inn Road**
- Add refuge island with traffic control devices

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**Legend**

- Spencer Greenway & Trail
- Trail Connection (potential)
- Bike lane (existing)
- Bike lane (potential)
- Easement
- Trail access (potential)
- Crossing
- Public & Community Facilities

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**Map 4: Vegas Valley to Desert Inn**
FLAMINGO WASH TRAIL
- Future trail connects to UNLV
- Located within existing flood control easement

TWAIN AVENUE
- Potential bike/ped facility improvement
- Connects to Boulevard Mall (future transit hub)

Orr Middle School
Playground & Ball Fields
(10 acres)

High potential for "parkway" design from Seneca Drive/Nahatan Way to Twain Avenue

Substation

DESERT INN RD.

Potential trail connections between Spencer Greenway & Flamingo Wash Trail

POTENTIAL TRAILHEAD
- Explore location between Twain Ave. and Katie Ave.
- Potential for shared use with adjacent school
- Provide parking and possibly restrooms

LAS VEGAS NATIONAL GOLF COURSE
Elevation change for flood control

Existing crosswalk
Extend bike lane

* Public & Community Facilities

LEGEND
Spencer Greenway & Trail
Trail Connection (potential)
Bike lane (existing)
Bike lane (potential)
Easement
Trail access (potential)
Crossing

MAP 5: DESERT INN TO FLAMINGO WASH
**Next Steps**

While challenges were identified, the Planning Team did not identify any “deal breakers” related to land ownership that would preclude further study. The Planning Team recommends moving forward with community engagement and conceptual planning. Recommended next steps follow:

**Clarify Phase 2 Project Study Area & Scope**

Funding for consultant services to support completion of the Phase 2, which will include conceptual site planning and community engagement, has been secured through the Regional Transportation Commission Unified Planning Work Program. Before initiating Phase 2, core partners will evaluate if the Spencer Greenway Phase 2 project will potentially be combined with the UNLV Master Bike Plan.

**Complete Stakeholder Analysis & Community Engagement Strategy**

Complete a stakeholder analysis and develop and implement a bilingual community engagement strategy that reaches people through a variety of methods, including public meetings and online tools. The following preliminary lists of objectives and stakeholders will be refined through Phase 2:

**Community Engagement Objectives**

- Determine the level of community support;
- Identify desired design elements and uses;
- Address anticipated concerns regarding crime and public safety; and
- Explore potential partnership and stewardship opportunities.

**Preliminary Stakeholder Identification**

- Property and business owners: Five Points Business Association
- Large employers: Charleston Plaza, Boulevard Mall
- Homeowner and neighborhood associations: Huntridge, Crestwood, Hillside Heights, Winchester
- Educational institutions and students: Schools, UNLV
- Community organizations: Maryland Parkway Coalition, Downtown Project, community garden groups, artists
- Nonprofits: The Center, City Impact Center, Nevada Partnership for Homeless Youth (Siegel Suites)
- Public facilities and churches: LDS, St. Anne’s, Cambridge Recreation Center
- Community policing: Shield of Hope

**Form Technical Advisory Committee**

Form an RTC project technical advisory committee (TAC) that includes members of the current Spencer Greenway Planning Team* and invited participants from other key organizations, which may include:
• Government Agencies: Regional Transportation Commission*, City of Las Vegas*, Clark County*, Regional Flood Control District, Regional Open Space and Trails Workgroup, Southern NV Health District

• Primary Landowner: NV Energy*

• Utilities: Southwest Gas, Century Link, Las Vegas Water District

• Education: UNLV Planning, Clark County School District

• Nonprofit: Outside Las Vegas Foundation

TAC members contribute time and resources as possible towards the completion and implementation of the Phase 2 plan, serve as liaisons to their agencies, provides expertise related to trail and park planning, government policies, and approval processes, and develop the project scope of work.

Develop a Shared Vision and Conceptual Plan Alternatives
Develop a shared community vision for the corridor and create conceptual plan alternatives and estimated costs for corridor improvements, including costs to underground, consolidate, and/or relocate one or more power lines within the corridor. Identify locations and design concepts for trails, recreational amenities, and future public art installations. In cases where the trail alignment or trail connections are located within existing roadways, evaluate design options for the most appropriate pedestrian/bicycle facility (i.e. on-street trail, widened sidewalks, bike lanes, cycle tracks). Develop the theme(s), trail name and branding for the corridor.

Evaluate Land Rights & Obtain Landowner Permissions
Complete a full title report in order to identify other land rights and permissions that may be needed. Obtain permissions from the primary landowner, NV Energy, and existing easement holders if feasible. Where permission is not feasible, identify potential alternative trail routes.

Evaluate Trail Roadway Crossings
Evaluate options and for trail roadway crossings. There are twenty locations where the greenway crosses major and minor streets, with few crosswalks or other pedestrian or bike enhancements. Explore traffic control devices at trail crossings on high volume roadways, such as Charleston Boulevard, Sahara Avenue, Desert Inn Road and Twain Avenue.

Prepare an Implementation Strategy
Prepare an implementation strategy with priority phases, potentially beginning with a pilot segment with less complex land ownership patterns and design challenges. Through an initial field investigation, potential candidates for a first phase or pilot may include: 1) Charleston Boulevard to Oakey Boulevard, 2) Senaca Drive/Nahatan Way to Twain Avenue, the southern limit of land owned by NV Energy, or 3) Seneca Drive/Nathan Way to the Flamingo Wash, located just south of Katie Avenue.
Formalize Agreements

Obtain all local government and jurisdictional approvals and agreements, which may include:

- Clark County: Update the Clark County trail map to include the Spencer Greenway and amend the existing Special Use Permit held by NV Energy and issued by Clark County.

- Federal: Complete environmental clearances/NEPA if federal funds are used for the project.

- NV Energy: Obtain a new trail easement and/or amend existing easements as needed. Determine mechanism (donation or compensation) and obtain approval from NV Energy Senior Executive team.

- Intergovernmental: Prepare intergovernmental agreements between the City of Las Vegas, Clark County, NV Energy and other entities as needed in order to address project construction, liability, operations and maintenance.

Integrate into Related Plans

Explore opportunities to integrate the Spencer Greenway project into upcoming planning processes, which may include:

- Maryland Parkway Public Art Plan, Clark County (2015)
- Las Vegas Mobility Master Plan, City of Las Vegas
- Downtown Master Plan, City of Las Vegas
- Swenson Street and Twain Avenue Complete Streets, RTC
- Regional Transportation Plan update, RTC (2015-2017)
- UNLV Bicycle Study, RTC (2015)

Seek Funding

Seek funding for detailed design and construction. Potential sources may include federal funds (Federal Transit Administration MAP-21, Transportation Alternatives Program, Recreational Trails Program, Congestion Mitigation and Air Quality Improvement Program, Clear Skies Program), County funds, and/or RTC planning funds. In order to support funding requests, evaluate potential emission reductions resulting from the development of the trail and begin tracking in-kind and cash matching funds.
Appendix A: Local Case Studies

Charlie Kellogg and Joe Zahe Sports Complex (KZ Park)

Location: 7901 W. Washington Avenue in Summerlin
Landowner: City of Las Vegas
Jurisdiction: City of Las Vegas
Power Company: NV Energy
Voltage: 230kV & 138kV circuits
Mechanism: The City of Las Vegas patent for this land is subject to several BLM Grants to NV Energy. Since the city agreed to accept the land with those grants in place, an agreement between the city and NV Energy was not necessary. NV Energy has a right to this location via the grants.
Recreational Amenities: Parking lots, lighting fixtures, trees, landscaping and open play areas are located under existing power lines.

215 Beltway Trail

Location: Extends along western beltway from Tropicana Avenue to West Alexander Road
Landowners: Howard Hughes and public right-of-way
Jurisdictions: Clark County, City of Las Vegas
Power Company: NV Energy
Voltage: 230kV & 138kV circuits
Mechanism: The trail is located within a public right-of-way adjacent to the I-215 beltway and an easement over private lands.
Recreational Amenities: Portions of the trail are located adjacent to NV energy utility poles. The paved trail is approximately 14-feet wide and has a few enhancements (doggie bag stations, trash cans). Pedestrian bridges are provided at major roadway crossings.

Lone Mountain East

Location: Along the Buffalo Drainage Channel, between Buffalo Drive and Tenaya Way, from Summerlin Parkway north to Cliff Shadows Parkway
Landowners: Underlying ownership by adjacent subdivisions
Jurisdiction: City of Las Vegas
Power Company: NV Energy
Voltage: 230kV & 138kV circuits
Recreational Amenities: Landscaping enhancements near street intersections, benches, trash cans, picnic tables, decorative fence, and other amenities are maintained by home owners association.
Appendix B: NV Energy Standards

Recreation improvements within the Spencer utility corridor are subject to the NV Energy Lands Right-of-way Management and Transmission Engineering Uniform Standards. The following excerpts from this document relate to recreation within power line corridors. While the standards indicate that trails are not permitted where NV Energy owns the land, NV Energy staff have indicated that exceptions may be granted for community-led projects. Additional information is available at this website:
https://www.nvenergy.com/business/newconstruction/newconstructionS/plansubmittals.cfm

2.1 Development Within Transmission Corridors

Development within or adjacent to Transmission corridors require a case-by-case review. All projects require NV Energy approval for conductor clearances. Customers are responsible for complying with all OSHA (Operational Safety and Health Administration) and NESC (National Electric Safety Code) minimum clearances within and outside NV Energy corridors.

NV Energy transmission corridors may be utilized (with the proper NV Energy authorization letter/agreement) for the following secondary uses:

- General Parking of operational vehicles not exceeding 8’ in height. Non-operational vehicles and trailers are not allowed.
- Driveways
- Passive recreational parks
- Open space/wildlife corridors
- Bike, walking and hiking trails within existing ROWs; but not within NV Energy fee owned properties
- Free standing signs

This is also to inform you that it is necessary to obtain prior approval from NV Energy’s ROW Management Department for future projects and any changes or revisions to this project.

Certain improvements, for safety and liability reasons, are typically not allowed within transmission corridors. These include, but not limited to, the following:

- Parking or storage of vehicles exceeding 8’
- Covered parking
- Parking lights
- Metallic fences or block walls
- Excavation, elevation or grade changes
- Parallel Utilities
- Buildings or structures
- Swimming pools
- Pine and palm trees
- Trash enclosures
- Playground Equipment
- Stockpiling of materials and equipment