

Riverside Transmission Reliability Project

Technical Advisory Committee
March 28, 2007

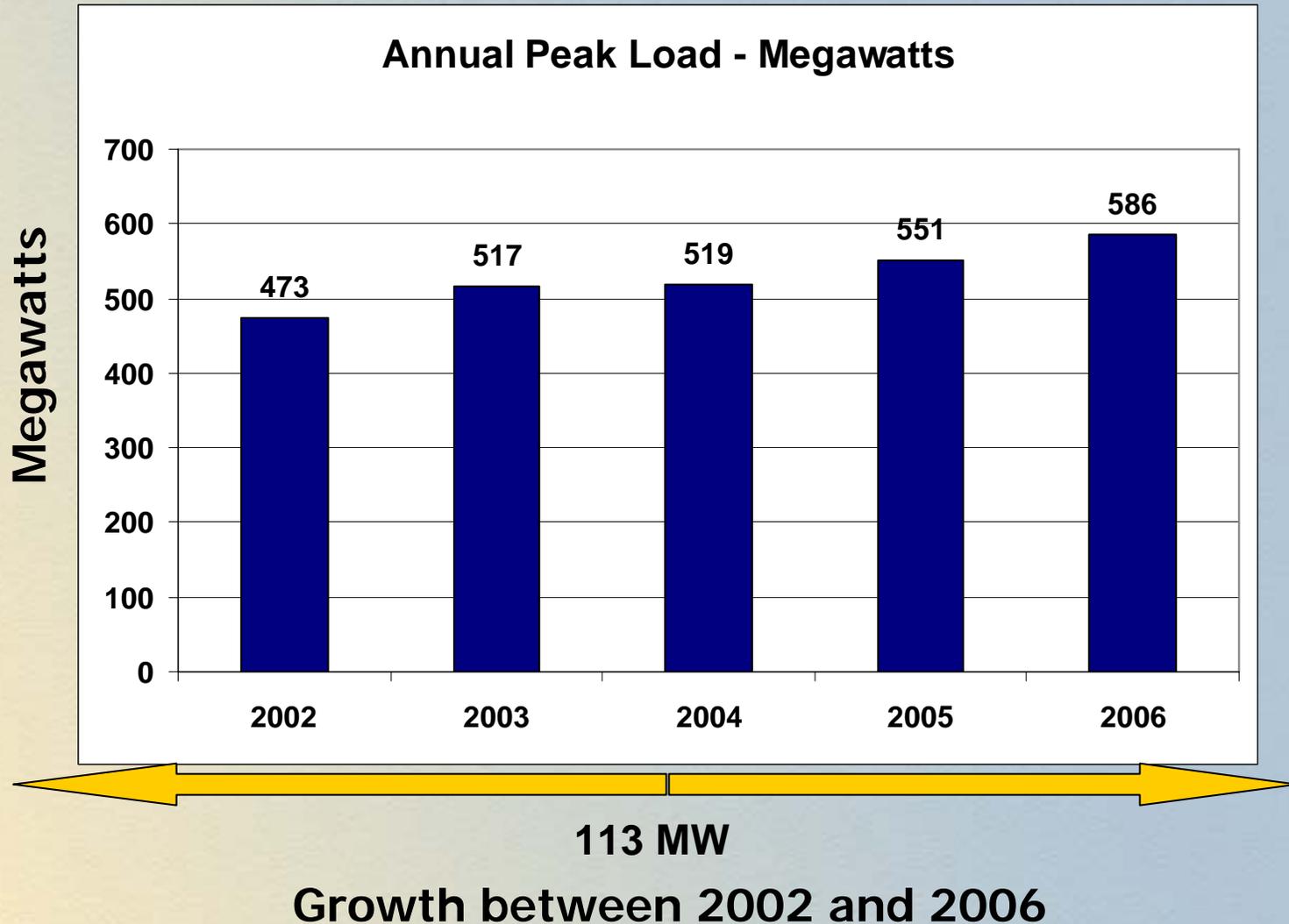


Meeting Agenda

- **Introductions**
- **Project Need and Description**
- **Scoping Summary**
- **Project Status**
- **Impact Assessment and Mitigation Planning**
- **Route Comparison and Selection**
- **Questions and Answers**

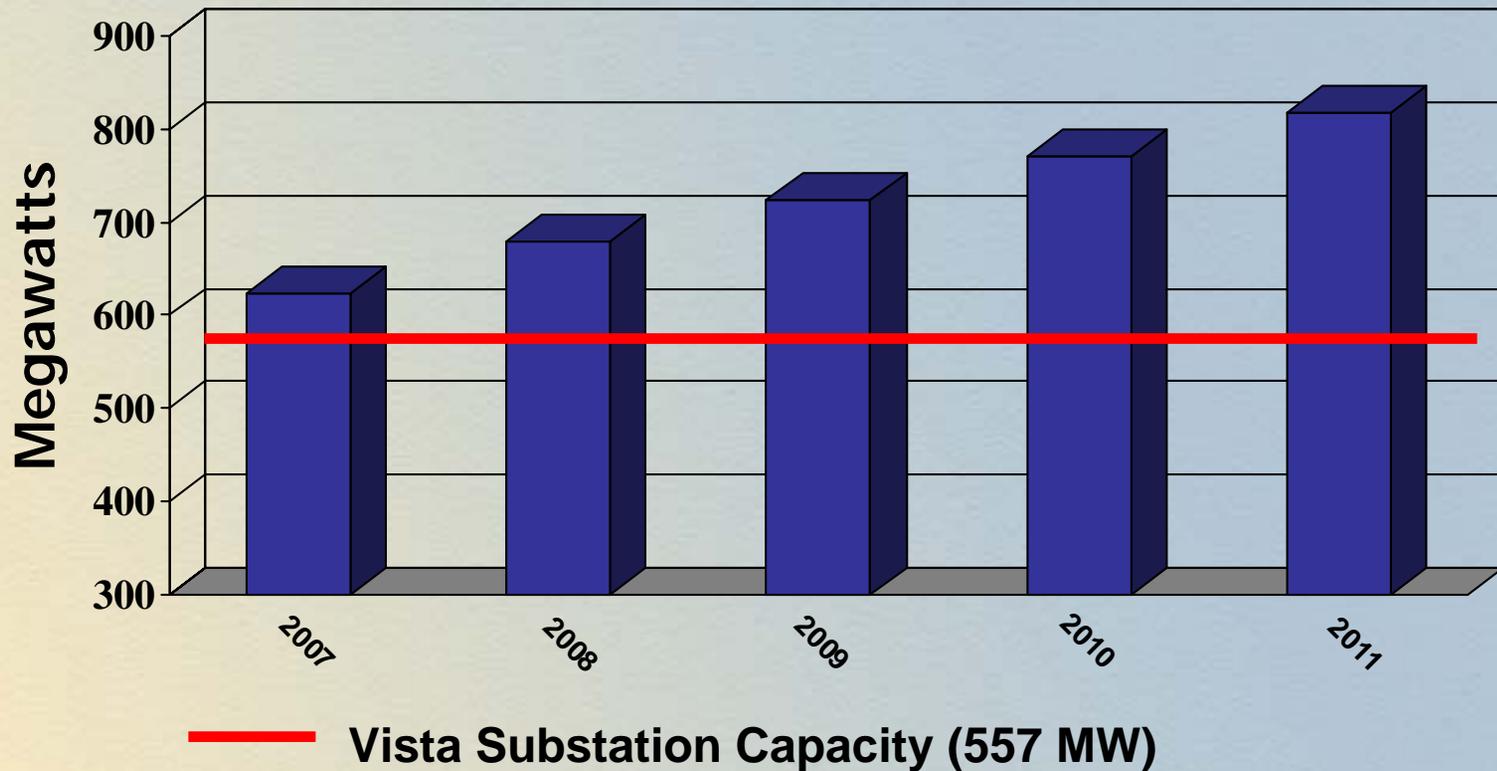
Project Need

Electrical demand has grown over the past 5 years.



Project Need

In addition, projected system peaks will soon exceed available supply.



Project Need

Vista Substation is the sole supply for electrical energy to the Riverside area.

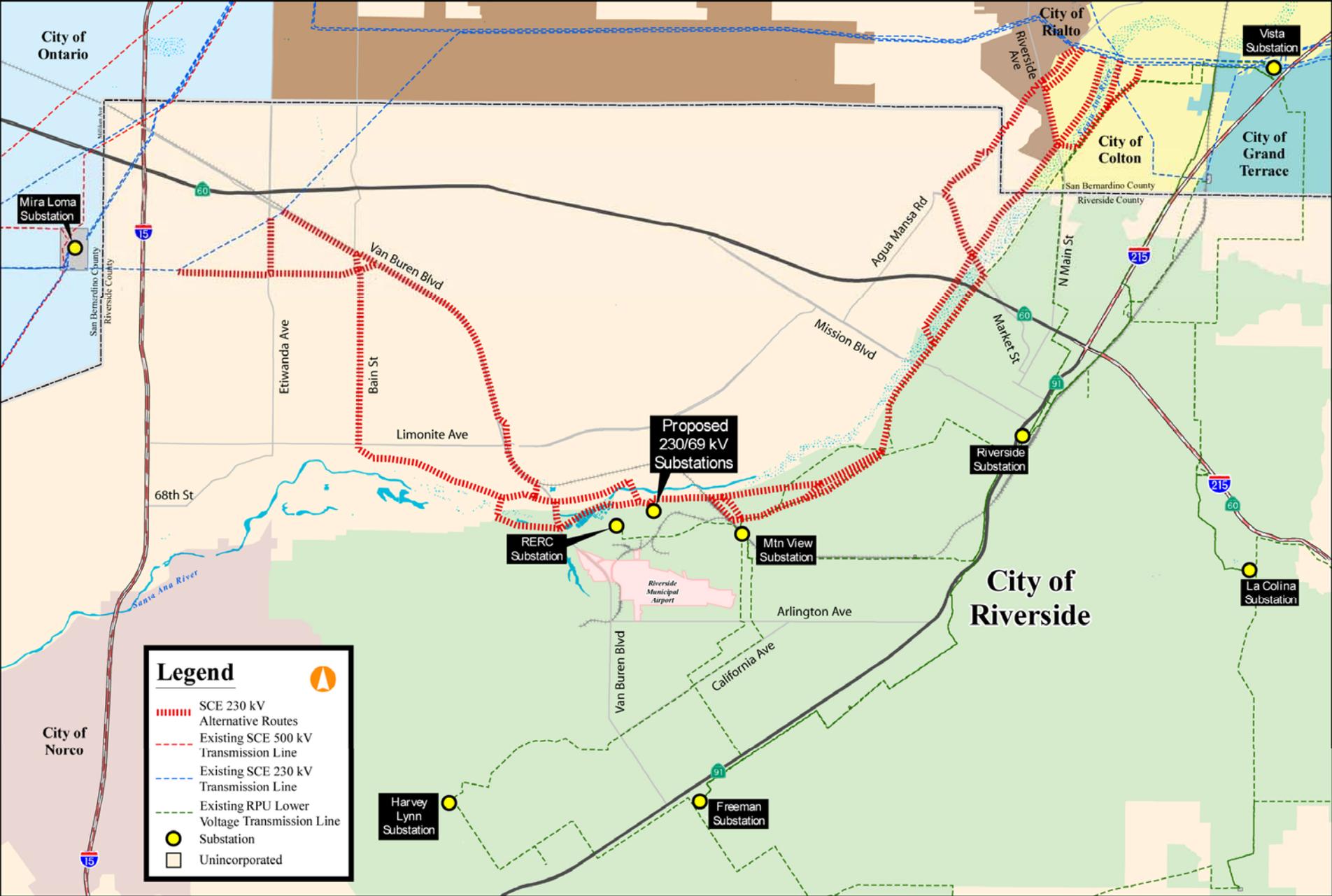
The project is needed to:

- **Reduce dependence on the Vista Substation**
- **Provide needed reliability and capacity**

Planned Facilities

- **New double-circuit 230 kV transmission line**
 - Interconnection with existing Vista-Mira Loma 230 kV transmission line
- **New 230 kV substation and new 69 kV substation**
 - Located adjacent to each other on RPU-owned property
 - 20-acre site purchased for substation in 1970s
- **New 69 kV transmission lines**
- **Upgrades to existing 69 kV substations**

Alternative 230 kV Routes Map



Public Involvement Activities

- **Newsletter 2 distributed in early January (26,000 people on mailing list)**
- **Open house held January 25**
 - 29 people attended, 2 comment forms returned at meeting, 3 by mail
 - Attendees expressed preference for western route (Van Buren)
 - Mailed comment forms expressed opposition to western route
- **Telephone information line**
 - 951-710-5013

Scoping Summary

Public, agency, and TAC comments reflected concerns regarding:

- Conflicts with flight paths and proximity to schools
- Impacts on recreation areas (along river)
- Potential radio interference
- Opportunities to avoid residential areas
- Visual impacts

Project Status

Flow Diagram of Process



Process Flow Chart/Schedule

Project Status

Completed tasks:

- Scoping (initial identification of public and agency issues)
- Collection of resource data and analysis of the existing environment
- Identification of alternative routes

Current task:

- Impact assessment and mitigation planning

Next step:

- Preferred route selection and Draft EIR

Project Status

The Initial Study and Notice of Preparation was completed and mailed on January 23, 2007.

- **Potentially significant impacts were identified for the following resources:**
 - **Visual resources / Aesthetics**
 - **Biological resources**
- **Impacts on other resources were determined to be less than significant with mitigation.**

Project Status

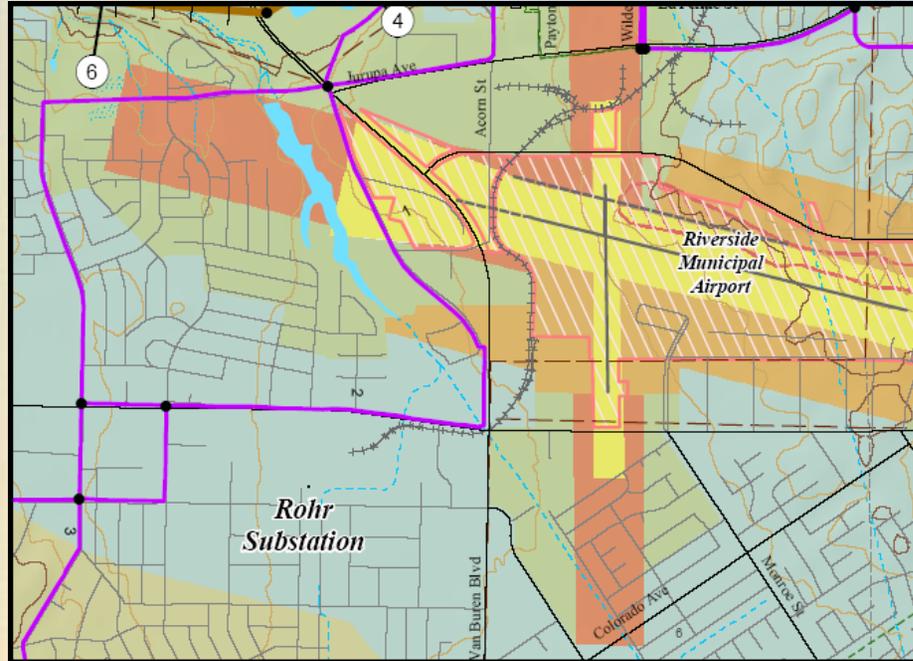
Project discussions and recent topics:

- 69 kV alternatives
- Airport planning zones
- School districts
- American Indian tribes

69 kV Alternatives



Airport Planning Zones



Doolittle Street, west of airport

- Riverside County Land Use Commission
- Zone A, potential conflict with 69 kV transmission line route

Schools

- **School district meetings**
- **Department of Education recommended set-backs**
 - 230 kV – 150 feet
 - 69 kV – 100 feet
- **Schools potentially located within set-backs are:**
 - Mira Loma Middle School (230 kV)
 - Jurupa Valley High School (230 kV)
 - Norte Vista High School (69 kV)
 - The Learning Montessori Academy
- **EMF management plans**

Jurupa Valley High School



Current view of Galena Street with Jurupa Valley High School on the right.

American Indian Tribes

The following American Indian tribes have expressed interest in the project:

- **Morongó Band of Mission Indians**
- **Pechanga Band of Mission Indians**
- **Soboba Band of Mission Indians**

Impact Assessment

Visual Resources

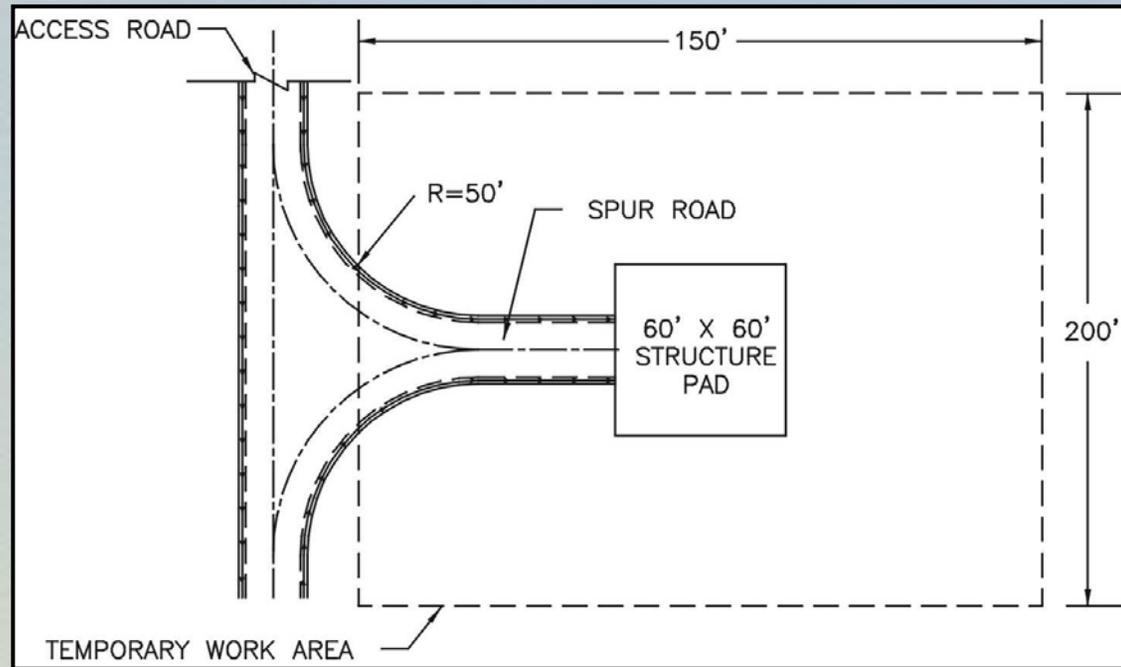
- Simulations have been prepared at key project locations to identify impacts.
- Potential impacts could occur in the following sensitive areas:
 - Scenic areas
 - Santa Ana River corridor
 - Residences
 - Parks
 - Scenic roadways, gateways

Biological Resources

- Surveys have been conducted to identify sensitive species and habitat.
- Potential impacts could occur on:
 - Riparian habitat
 - Threatened and endangered species

Impact Assessment

- Define project description
 - Construction
 - Operational
 - Maintenance
 - Abandonment
- Determine initial impacts
- Define mitigation measures
- Determine residual impacts (those that remain after mitigation)



Impact Assessment

How will the project specifically affect the environment?

Determine impact types:

- **Construction Impacts**
 - **Ground disturbance (temporary and permanent)**
 - **Noise and air emissions**
 - **Traffic interference**
 - **Restricted uses in right-of-way**
- **Increased access**
 - **Long-term impacts of access roads**
- **Operation impacts**
 - **Presence of transmission line and substations**

Impact Assessment

Impact Models

- Criteria for impact models
 - Resource sensitivity – resource response to project activities
 - Resource quality – condition of the resource
 - Resource quantity – amount of the resource
 - Duration of impact – short term or long term

Impact Assessment

Impact Levels

- High impact – Proposed project potentially would cause a significant or substantial adverse change or stress on an environmental resource or resources.
- Moderate impact – Proposed project potentially would cause some adverse change or stress (ranging between significant and insignificant) on an environmental resource.
- Low impact - Proposed project potentially would cause an insignificant or small change or stress on an environmental resource.
- No identifiable impact – No impact would occur on the specific resource.

Link	Milepost Begin	Milepost End	Distance	Initial Impact	Description	Project Protocols	Residual Impact	County	Jurisdiction
56	0.8	1.7	0.9	H	40 Single Family Dwellings		H	Riverside	Temecula
56	2.5	2.7	0.2	H	1-200 Unit Apartment	41, 46, 50	L	Riverside	County
56	2.8	3.0	0.2	H	School (Private)		H	Riverside	County
56	3.1	3.3	0.2	H	3 Single Family Dwellings	41, 46, 50	L	Riverside	County
56	3.3	4.0	0.7	H	Agriculture (Orchard/Vineyard) (Unique Farmland), Agricultural Preserve	50	L	Riverside	County
56	4.5	4.6	0.1	H	2 Single Family Dwellings	41, 46, 50	L	Riverside	County
56	4.6	5.6	1.0	M	Agriculture, Agricultural Preserve	50	L	Riverside	County
57a	1.1	1.6	0.5	M	Other Agriculture	50	L	Riverside	County
57a	1.7	1.8	0.1	M	Other Agriculture	41, 50	L	Riverside	County
58	0.6	0.8	0.2	M	Agricultural Preserve	50	L	Riverside	County

Example impact assessment table

Mitigation Planning

Mitigation measures are used to reduce potential impacts.

Potential site-specific mitigation:

- Reroute
- Span sensitive features
- Raise structure heights
- Single pole versus lattice tower
- Rehabilitate access roads
- Helicopter construction to minimize ground disturbance
- Underground 69 kV transmission line

Route Comparison and Selection

Route Selection Process

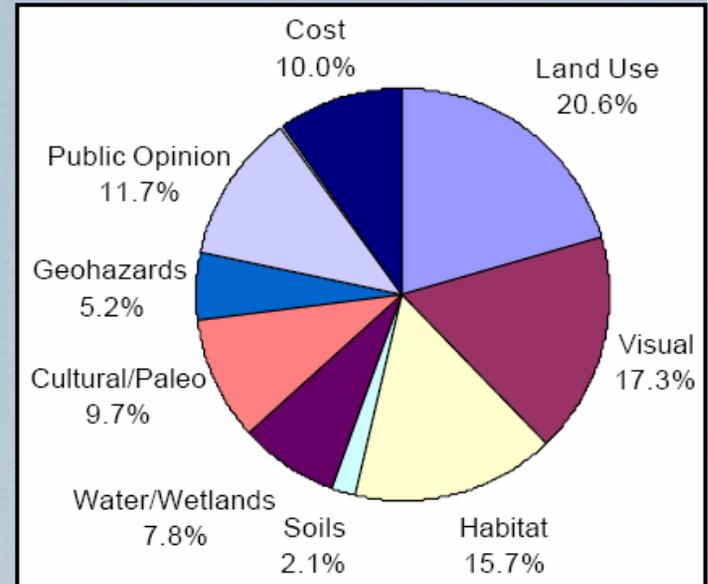
Relative importance of resources

Subroute analysis and selection

- Construct “end-to-end” routes

Preferred route selection

- Rank each route; may take multiple rounds to reach a consensus.



Routes	Geo	Cultural	Wetlands	Visual	Biology	Soils	Land Use	Public Involvement	Cost
1	1	4	6	4	3	6	3	4	6
2	1	2	4	7	4	7	2	1	1
3	3	1	2	1	3	2	1	2	2
4	2	5	5	3	1	1	6	4	7
5	2	3	3	6	3	5	5	3	3
6	4	2	1	2	2	4	4	3	4
7	5	7	7	5	1	3	7	3	5

Ranking Examples

Next Steps

- **Newsletter 3 (April)**
- **Public open houses (late April)**
 - Two public open houses in the study area, held on consecutive nights
- **Route selection (early May)**
- **TAC Meeting 3 (June)**