

# *Field Report*

# Eastern Sierra Expanded Transit System

## ■ 1.0 Summary

The Eastern Sierra Expanded Transit System (ESETS) service area would serve international, American, as well as regional and local Nevada and California visitors to the various attractions in and adjacent to Inyo and Humboldt-Toiyabe National Forests. The primary destinations of the eastern Sierra area include the Inyo National Forest, Humboldt-Toiyabe National Forest, the Town of Mammoth Lakes and Mammoth Mountain Ski Area, Devils Postpile National Monument, Yosemite National Park (NP), Mono Basin National Forest Scenic Area, and Mount Whitney.

Inyo National Forest attractions include Mono Basin South Tufa/Scenic Area Visitor Center, Mono Lake, Mono Basin National Forest Scenic Area, Mammoth Lakes Basin, Reds Meadow Resort and Campgrounds, Rainbow Falls, Soda Springs, Agnew Meadows Rock Creek Recreation Area, Bishop Creek Recreation Area, Ancient Bristlecone Pine Forest, Whitney Portal, and access to the John Muir Trail. Humboldt-Toiyabe National Forest area attractions in the eastern Sierra include Twin Lakes, Bodie State Park, Virginia Lakes, South Tufa/Scenic Area Visitor Center, Mono Lake, and Mono Basin National Forest Scenic Area.

The ESETS service area's activities include biking, skiing, hiking, camping, hunting, fishing, off-road vehicle and over snow, ranger programs, wilderness areas, and winter recreation opportunities. Many of the area's attractions often are discrete destinations of visitors to the eastern Sierra. In many cases, these attractions (such as Yosemite) are part of larger multi-regional trips or tours that include other discrete destinations, such as Reno and Las Vegas, Death Valley National Park, and the San Francisco Bay Area.

The ESETS service area encompasses a large geographic area from Reno, Nevada to Ridgecrest, California, along the U.S. 395 corridor. For purposes of this site report, the current service area considers Reno, Nevada to Ridgecrest, California and the communities and recreation sites between these two locations. Limited transit services currently available in the ESETS service area include:

- The Carson Ridgecrest Eastern Sierra Transit (CREST) Route, operated by Inyo Mono Transit, serves both regional and local patrons through both Inyo and Humboldt-Toiyabe National Forests.

- The Yosemite Area Regional Transportation System (YARTS), a seasonally contracted service, serves both visitors and residents to Yosemite NP from the eastern Sierra through the Tioga Pass.
- The Reds Meadow/Devils Postpile Shuttle, a seasonally contracted service by the National Forest Service, is the only scheduled transit service to various attractions within the Inyo National Forest, including Reds Meadow, the Devils Postpile National Monument, and Rainbow Falls, among others (see Figure 1).
- The Town of Mammoth Lakes (TML) contracts with Inyo Mono Transit to provide a summer transit service operating in the region five days per week (Monday through Friday) as well as demand responsive service (Dial-a-Ride) operating within the community. Mammoth Mountain Ski Area operates a winter season skier service with a variety of routes within the TML.
- Inyo Mono Transit Service provides a variety of local, town-to-town, and intercity transit services throughout the region. Scheduled local services are offered in Bishop, Lone Pine, Walker, and Benton, with additional Dial-a-Ride services provided in these and other communities.

Visitation to the Inyo National Forest and adjacent area attractions (Yosemite NP, Devils Postpile) has been growing consistently during the past several years and is expected to grow at similar high levels during the next 20 years. The Inyo National Forest currently is one of the 10 most visited forests in the National Forest Service system and also is expected to continue high levels of future visitation. Anticipated high levels of future visitation to Yosemite NP and other area attractions also are expected to impact the transportation system in the eastern Sierra.

The TML is a year round resort. The eastern Sierra, while a specific, discrete destination of international, national, and regional visitors, will continue to serve as one of many attractions along with attractions such as Reno, Lake Tahoe, Las Vegas, Yosemite and Death Valley NPs, western Sierra forests and national parks (such as Sequoia/Kings Canyon National Park), and the San Francisco Bay Area.

The existing eastern Sierra's transportation system, both the roadway system and in particular the transit system, will not be expected to meet the strain of the expected future recreational visitation growth and resulting service sector growth in the ESETS area. Transit service funding provided by Federal agencies and a Fee Demonstration Project for the CREST Route, YARTS, and the Reds Meadow/Devils Postpile will expire sometime in 2004.

The recreational attractions throughout the area, whether campgrounds, trails, national monuments, lakes, and other amenities, have limited (if any) alternative transportation systems (ATS) that provide transportation access. Transportation access to the attractions generally are limited to automobile travel and parking lots in close proximity to the resource, campground, or trailhead. This current situation often results in severe overcrowding, traffic congestion, resource damage, and safety issues associated with visitation to these attractions. This situation will be considerably worse in the next 20 to 25 years if future visitation growth occurs as expected.

**Figure 1. Reds Meadow/Devils Postpile Shuttle Bus Stop at the Postpile**



The ATS proposed for the ESETS service area would include an expansion of existing transit services, the implementation of new transit services, and the integration of each. The expansion of services would focus on expansion of the CREST Route and YARTS to provide increased interregional transit services to better serve visitor and residential long-distance travel. Converting the TML skier shuttle (and summer services) from Mammoth Mountain Ski Area to town operation would be part of this expansion process. Associated bus fleet upgrades, land acquisition, and construction of a maintenance facility would be required for this conversion to meet Federal Transit Administration (FTA) regulations.

The implementation of new services would include services to meet the recreational needs of local attractions adjacent to the TML currently unserved, such as Mammoth Lakes Basin, Whitney Portal, Bristlecone Pine Forest, Rock Creek, Bishop Creek, and Twin Lakes among others in the U.S. 395 corridor. Maintenance of the current Reds Meadow/Devils Postpile Shuttle would be part of this system.

The majority of the proposed components of the ESETS service would require some level of operating subsidy to augment farebox revenues in addition to capital expenditures. Only the TML will have funding from its development transportation tax and a subsidy from Mammoth Mountain Ski Area to provide for operational costs.

The establishment of regional partnerships and relationships will be critical to ensure the success of this potential regional and local ATS. Partnerships between the Forest Service, NPS, TML, Inyo Mono Transit, Mammoth Mountain Ski Area, Caltrans, and other partners will be required to sustain the ESETS service. These potential enhancements would be designed to improve shuttle bus operations and services, move more visitors through transit rather than automobile use, and meet the expected increase in visitor demand to the area.

## ■ 2.0 Background Information

### 2.1 Location

The ESETS service area would encompass several Forest Service, National Park Service (NPS), and Bureau of Land Management (BLM) lands and attractions along the U.S. 395 corridor in California and Nevada. Attractions include Inyo National Forest, Humboldt-Toiyabe National Forest, Sierra National Forest, Sequoia National Forest, Devil's Postpile National Monument, Manzanar National Historic Site, and Yosemite NP. Figures 2 and 3 show the ESETS service area Forest lands in both California and Nevada respectively. Figure 4 shows the various California State Parks (and Reserves), tribal lands, and towns from Reno, Nevada to Lone Pine, California also located within the proposed ESETS service area. (Figure 4 also shows the potential future service area expansion to Klamath Falls, Oregon, that are not part of the proposed ESETS service area outlined in this field report.)

### 2.2 Physical Description

The ESETS service area serves international, American, and regional and local Nevada and California visitors and residents to the various attractions in and adjacent to Inyo National Forest. The primary attractions of the eastern Sierra include:

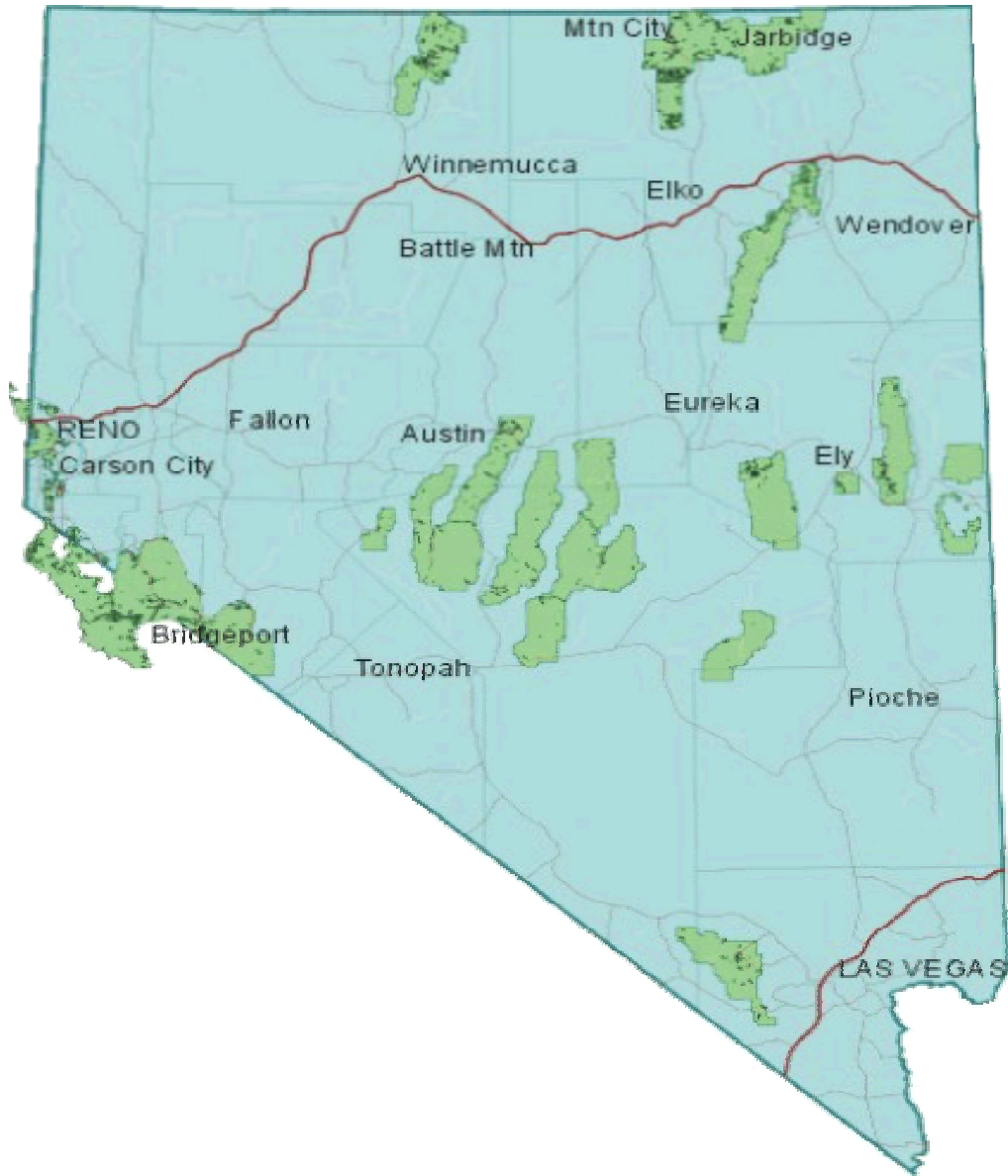
- The Inyo National Forest encompasses approximately two million acres in eastern California. Recreation activities include biking, hiking, camping, hunting, fishing, off-road vehicle and over snow opportunities, ranger programs, wilderness areas, and winter recreation. Inyo National Forest attractions include Mono Basin South Tufa/Scenic Area Visitor center, Mono Lake, Mono Basin National Forest Scenic Area, Mammoth Lakes Basin, Reds Meadow Resort and Campgrounds, Rainbow Falls, Soda Springs, Agnew Meadows Rock Creek Recreation Area, Bishop Creek Recreation Area, Ancient Bristlecone Pine Forest, Palisade Glacier, Whitney Portal/Mount Whitney,; and access to the Pacific Crest Trail, the John Muir Trail, and Ansel Adams Wilderness.

**Figure 2. Inyo National Forest and Other California National Forest Land Areas**



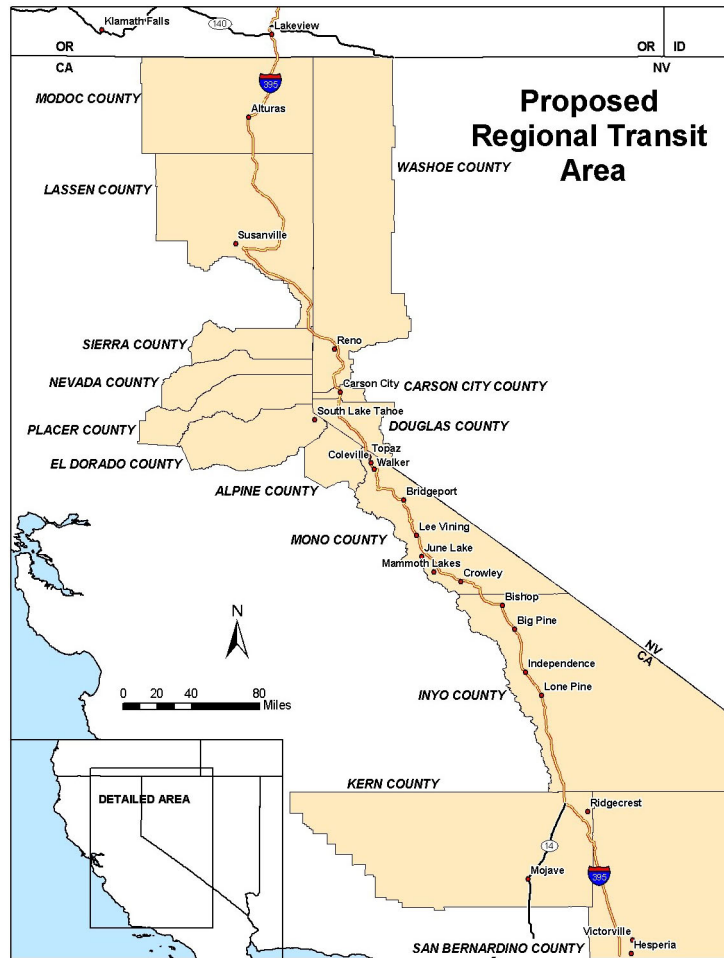
Source: U.S. Forest Service, 2003.

Figure 3. Humboldt-Toiyabe National Forest Land Area



Source: U.S. Forest Service, 2003.

Figure 4. Proposed ESETS Transit Service Area



Source: ESETS, 2003.

- The Humboldt-Toiyabe National Forest encompasses more than 6.3 million acres of Forest land throughout Nevada with some land in eastern California. This Forest offers recreational activities such as biking, hiking, camping, hunting, fishing, off-road vehicle and over snow opportunities, ranger programs, wilderness areas, and winter recreation. Humboldt-Toiyabe National Forest area attractions in the eastern Sierra include Twin Lakes, Bodie State Park, Walker River Canyon, Virginia Lakes, and access to the Hoover Wilderness.
- The TML and Mammoth Mountain Ski Area provide year round activities including skiing, hiking, biking, camping, and fishing among other activities. The Town of Mammoth Lakes provides all the amenities of a resort community and attracts visitors during all times of the year including peak winter and summer seasons. Mammoth Lakes Ski Resort offers world class skiing to visitors.

- Devils Postpile National Monument is a long, thin parcel of nearly 800 acres of Federal lands located within the Reds Meadow valley. Several features comprise Devils Postpile NM; the 101-foot Rainbow Falls, the Devils Postpile itself, and Soda Springs. The Falls are located in the San Joaquin River’s middle fork, at the southern end of the parcel. The Postpile is a fantastic lava formation made up of three- to seven-sided columnar basalt formations that stand as many as 60-feet tall. It is located in the northern section of the site and is said to resemble a giant pipe organ. Soda Springs, just north of the Postpile formation, is a mineral spring. The monument’s attractions are accessible only by foot and are served by the John Muir Trail and other hiking trails.
- Yosemite NP is located in the Sierra Nevada of California. Yosemite is adjacent to several National Forests including Inyo, Humboldt-Toiyabe, Stanislaus, and Sierra. The Park is accessible from the eastern Sierra from U.S. 395 to SH 120 through the Tioga Pass. International and U.S. visitors to the eastern Sierra often make arrangements to visit Yosemite as a major destination of their trip. Attractions in Yosemite include Tuolumne Meadows, Yosemite Valley, and various high cliffs, waterfalls, and giant sequoias.
- Manzanar National Historic Site is located on U.S. 395, between the communities of Independence and Lone Pine. It is a recently-designated Historic Site that is being renovated. It was used as one of the relocation centers in the western U.S. for Japanese citizens during World War II.

The attractions identified above are often discrete destinations of visitors to the eastern Sierra. In many cases, these attractions (such as Yosemite) are part of larger multi-regional trip or tour that includes other discrete destinations, such as Reno and Las Vegas, Death Valley National Park, and the San Francisco Bay Area. The eastern Sierra also is a discrete destination for long distance and multi-day (week and sometimes month) wilderness visitors.

## **2.3 Mission and Goals**

The Inyo National Forest was established by Presidential Proclamation in 1907 to preserve 221,324 acres of land along the Owens River from settlement or entry. It now totals approximately two million acres. The Humboldt-Toiyabe National Forest is the largest forest outside of Alaska. It encompasses more than 6.3 million acres of Forest land throughout Nevada with some land in eastern California. Inyo and Humboldt-Toiyabe National Forests are strongly committed to the management of their Forest lands using sound environmental planning practice. Each Forests’ mission and priorities mirror that of the Forest Service in general, to maintain and improve the health, diversity, and productivity of forest ecosystems for the enjoyment of current and future generations, generally stated as “Caring for the Land and Serving People.”



## 2.4 Visitor Characteristics

The majority of visitors accessing the ESETS service area were destined to attractions within and adjacent to the Inyo National Forest. Many of these visitors stay in Inyo National Forest campgrounds and other accommodations in lands within or adjacent to the Forest. The Inyo National Forest is one of the 10 most visited units in the Forest Service. Visitation levels in the ESETS service area are even higher with various other attractions adjacent to the Forest lands. These specific destinations include Yosemite NP, Death Valley NP, Manzanar National Historic Site, and various attractions in the Humboldt-Toiyabe National Forest.

For purposes of this site report, profiles primarily represent visitation to the Inyo National Forest with some mention of visitation of other attractions that impact the ESETS service area. (Note that the Forest Service prepared visitation summaries for Humboldt-Toiyabe National Forest for the entire Forest but did not provide breakdowns of visitation by each of the 10 districts including the Bridgeport and Carson Districts in the ESETS service area.)

More than 3.8 million recreation users were estimated to visit the Inyo National Forest in 2002.<sup>1</sup> These visitors, termed as national forest visitors, included persons visiting multiple attractions within the Forest. For example, multiple or linked trips by a person to the Lakes Basin and Reds Meadow attractions in Inyo National Forest would be considered one national forest visitor. This annual usage, when translated to single site visits (or unlinked trips) to Inyo National Forest, were estimated at over 5.7 million annual recreational visitors in 2002. The Inyo National Forest also included close to another 174,000 Wilderness visits (such as back country hikers, often visits that include multiple day, week, month hikes throughout the eastern Sierra Wildernesses on the Pacific Coast Trail and Yosemite NP, among other trails and attractions).

The majority of visitors to the Inyo National Forest are male (63 percent male, 37 percent female) with more than 76 percent of total visitors falling between 31 and 60 years of age. Visitation in the Forest considers a wide range of U.S. and local California and Nevada users, including almost two percent of international visitors. The latest information about the Forest visitors' origin location were not available but do consider more than 784 different zip codes in the United States. The average number of persons visiting the Forest by automobile was 2.0.

As indicated by the number of annual site visits summarized above, visitors went to an average of 1.4 attractions in the Forest. The primary activities of the users included viewing natural features, relaxing, hiking and walking, downhill skiing and snowboarding, cross country skiing, camping, fishing, and wildlife viewing. The average stay of overnight visitors in the Forest was estimated to be over 140 hours. Day visits throughout the area range from all day to a few hours depending on the activity. For example, day visits include picnicking for a few hours to all day for fishing and hiking.

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<sup>1</sup> The source of the Inyo National Forest visitor profile information presented in this section was obtained primarily from the *National Visitor Use Monitoring Results* conducted by the U.S. Department of Agriculture Region 5 and prepared in August 2003. Supplementary information about visitors was obtained during the site visits conducted in the eastern Sierra region for this analysis in August and September of 2003.

Ninety-one percent of visitors indicated that Inyo National Forest attractions were their primary destination for visiting the eastern Sierra. This percentage does not include visitors with Yosemite NP or Mammoth Mountain Ski Area as their primary destination with Inyo National Forest and Humboldt-Toiyabe National Forest attractions as secondary visits. Other visitation profiles that significantly impact the ESETS service area include:

- Over 100,000 visitors, from May through October, to the Devils Postpile National Monument and Reds Meadow;
- Approximately 1.2 million summer visitors to the TML with multiple destinations throughout the ESETS service area (90% of which originate from southern California);
- Approximately 1.3 million winter visitors to the TML with the primary destination Mammoth Mountain Ski Resort;
- Approximately 200,000 annual visitors to Bodie State Park; and
- Approximately 600,000 summer visitors (June through September) in 2002 destined for Yosemite NP through the Tioga Pass in the eastern Sierra.

Of the Yosemite NP visitations highlighted above, about 29% (600,000 of the 1,960,000 visitors) entered the unit through the Tioga Pass (Highway 120 East) during the summer season in 2002. The percentage of visitors entering Yosemite NP through the Tioga Pass was higher than the other three gates (South Entrance on Highway 41, Big Oak Flat Highway 120 West, and Arch Rock Highway 140) in August (33%) and September (31%) of 2002. This entrance is open only in the summer and early fall.

## ■ 3.0 Existing Conditions, Issues, and Concerns

### 3.1 Transportation Conditions, Issues, and Concerns

The ESETS service area encompasses a large geographic area from Reno, Nevada, to Ridgecrest, California, along the U.S. 395 corridor. For purposes of this site report, the current service area considers Reno, Nevada, to Ridgecrest, California, and for the communities and recreation sites between these two locations. Limited transit services currently available in the ESETS service area are summarized below.

**CREST.** The CREST Route serves both regional and local patrons through both Inyo and Humboldt-Toiyabe National Forests (Figure 5). CREST currently operates with Federal 5311 (F) start-up funds and was implemented to replace lost Greyhound service. Inyo Mono Transit operates CREST and provides northbound and southbound service in the U.S. 395 corridor three days per week (each direction). CREST service locations include Reno International Airport to the north, Ridgecrest to the south, with local stops in between in the Town of Mammoth Lakes, Bishop, and other local communities in the U.S. 395 corridor. The northbound route consists of 180 miles while the southern route consists of 215 miles in the ESETS service area. CREST is the sole regional transit provider

(public and private) along the U.S. 395 corridor serving the rural populations of Inyo and Mono Counties.

**YARTS.** YARTS serves both visitors and residents to Yosemite NP from the eastern Sierra through the Tioga Pass (Figure 6). YARTS contracts with California Cruisers to provide fixed bus service once a day to and from Yosemite NP. YARTS currently picks-up patrons near Mammoth Mountain and stops in June Lake, Lee Vining, and Yosemite NP. The round trip bus fare ranges from \$5 to \$20 with some discount for one-way trips, seniors, and children. YARTS currently operates with Federal 5311 (F) start-up funds, due to expire in 2004.

**Reds Meadow/Devils Postpile Shuttle.** The Reds Meadow/Devils Postpile Shuttle is currently operated by the Forest Service under a Fee Demonstration Authority also is expiring in 2004 (Figure 7). The system is run by a private contractor to the Forest Service. This is the only scheduled transit service to various attractions within the Inyo National Forest including Reds Meadow, the Devils Postpile National Monument, and Rainbow Falls, among others. The shuttle primarily serves day users to the area from early June to October. If weather permits, the area is open until November. Ridership was estimated to be approximately 68,000 in 2002. Shuttle services operate into and out of Reds Meadow and the Postpile between the Mammoth Mountain Inn and Reds Meadow Resort. At least 10 stops are made at Agnew Meadows, Starkweather Lake, Upper Soda Springs Campground, Pumice Flats Campground, Minaret Falls Campground, Devils Postpile Ranger Station, Sotcher Lake, Reds Meadow Campground, Rainbow Falls Trailhead, and Reds Meadow Resort. The shuttle runs from 7:30 a.m. to 6:30 p.m. daily for a fee of \$7.00 per trip with some discounting for seniors and children.

**Town of Mammoth Lakes Summer Transit and Mammoth Mountain Ski Area Winter Service.** Mammoth Mountain Ski Area operates a winter season skier service (Figure 8). This system currently operates seven days per week from 7:00 a.m. to 2:00 a.m. during the winter primarily providing service to Mammoth Mountain skiers, as well as a transit system within the Town. Ridership has been estimated at 600,000 during the winter months. Mammoth Mountain Ski Area has a fully operational and full service maintenance facility on its property. This facility is run by Mammoth Mountain and is used to service all property vehicles including snowcats, snowplows, shuttle buses, and other vehicles. The TML contracts with Inyo Mono Transit to operate a summer transit service. This summer service area is shown in Figure 9 and considers multiple stops and fixed routes primarily for residents and employees of the area with some visitor ridership. Since 2001, the TML also has contracted with Inyo Mono Transit to provide Dial-a-Ride Service within the community. This demand responsive service operates five days per week (Monday through Friday) from 7:00 a.m. to 5:00 p.m. The service carries approximately 16,000 patrons per year.

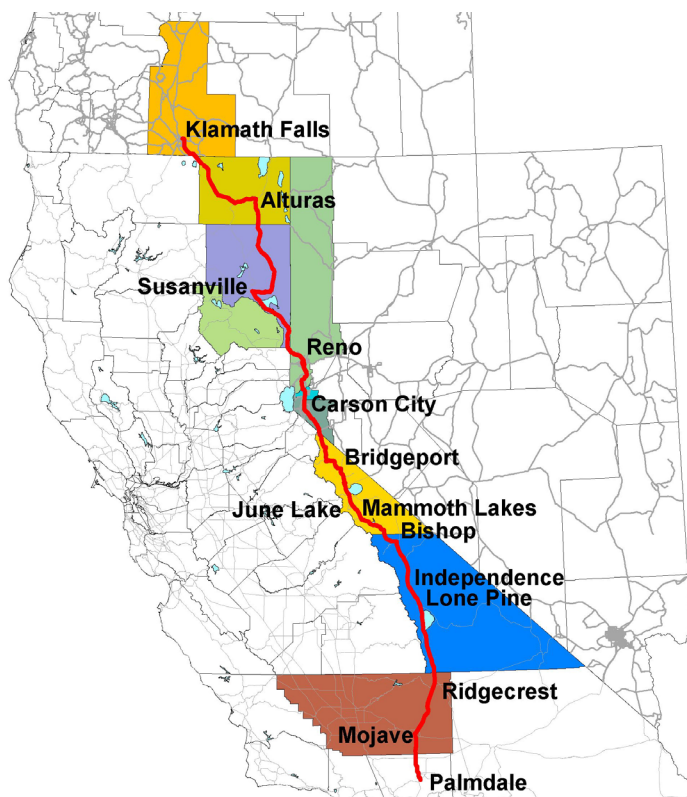
**Inyo Mono Transit.** Inyo Mono Transit services is fully funded through grants from the Local Transportation Commission of Inyo County. Inyo Mono Transit Service provides a variety of local, town-to-town and intercity services throughout the region. Local services are offered in Bishop, Lone Pine, Walker and Benton, in addition to those offered in Mammoth Lakes.

Existing transportation issues and concerns in the ESETS service area are broad and wide ranging as would be expected in such a large geographic and diverse area as the eastern Sierra. Specific local issues and concerns include resource management, quality of the experience, overcrowding and congestion, and transportation safety and access issues.

Resource management issues reflect the Forest Service’s desire to potentially redefine their strategies and planning to address the infringement and (in some cases) the deterioration of Forest Service infrastructure (roadways, parking facilities, camp grounds, lake-side amenities). For example, the implementation of new transit services to access trail heads at the Whitney Portal, for both day and overnight users, could provide the Forest Service with opportunities to implement new parking structure and management strategies. This type of opportunity could be used by the Forest Service to continue to protect their resource while also improving the quality of the visitor experience by reducing traffic congestion.

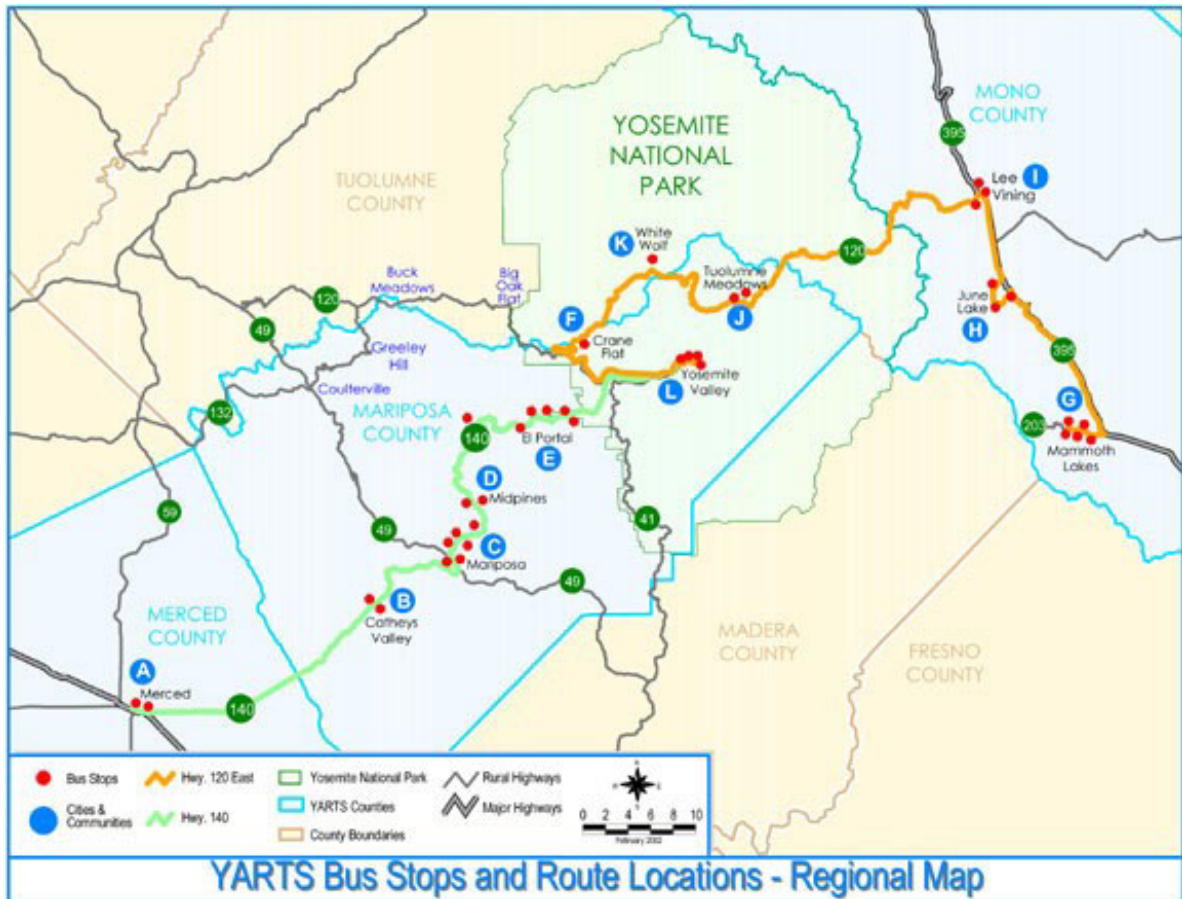
Overcrowding and congestion on Forest Service roadways and parking facilities continue to be an issue of concern throughout the ESETS service area. During the summer season, overflow parking demand, associated with both day and overnight users, negatively impacts trailhead locations at Rock Creek, Whitney Portal, Twin Lakes, Mammoth Lakes Basin, among other area destinations. Transit services would provide an opportunity for the Forest service to address these issues.

**Figure 5. Existing CREST Regional Transit Service Area**



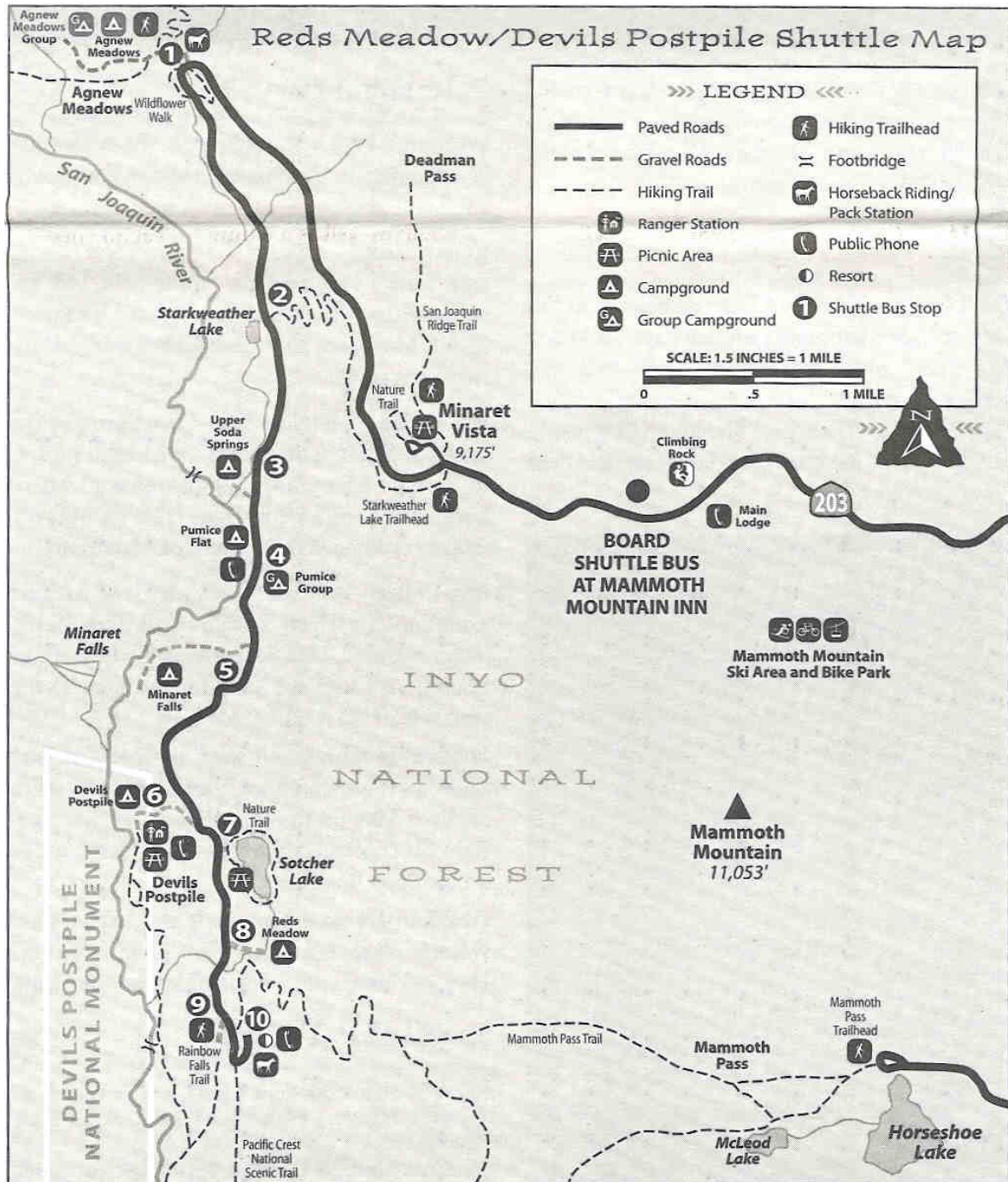
Source: ESETS, 2003.

Figure 6. Existing YARTS Service Area



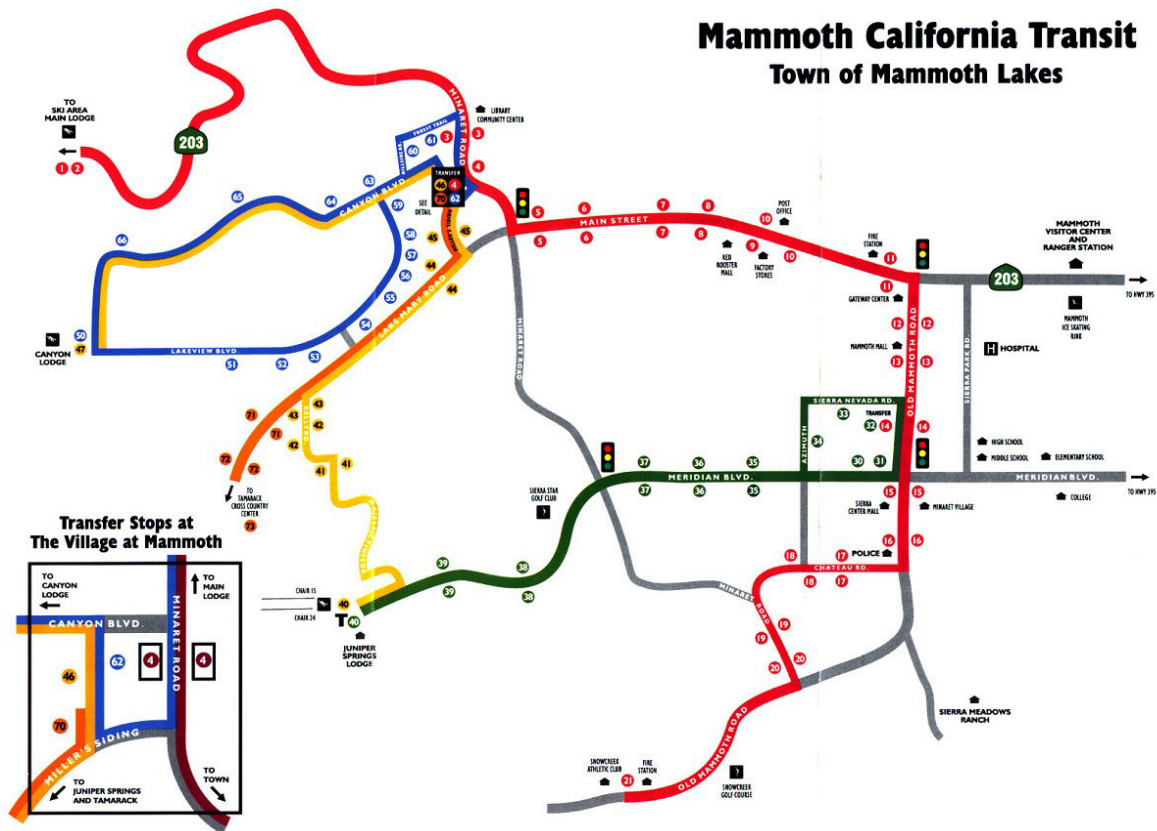
Source: ESETS, 2003.

Figure 7. Current Reds Meadow/Devils Postpile Shuttle Service Area



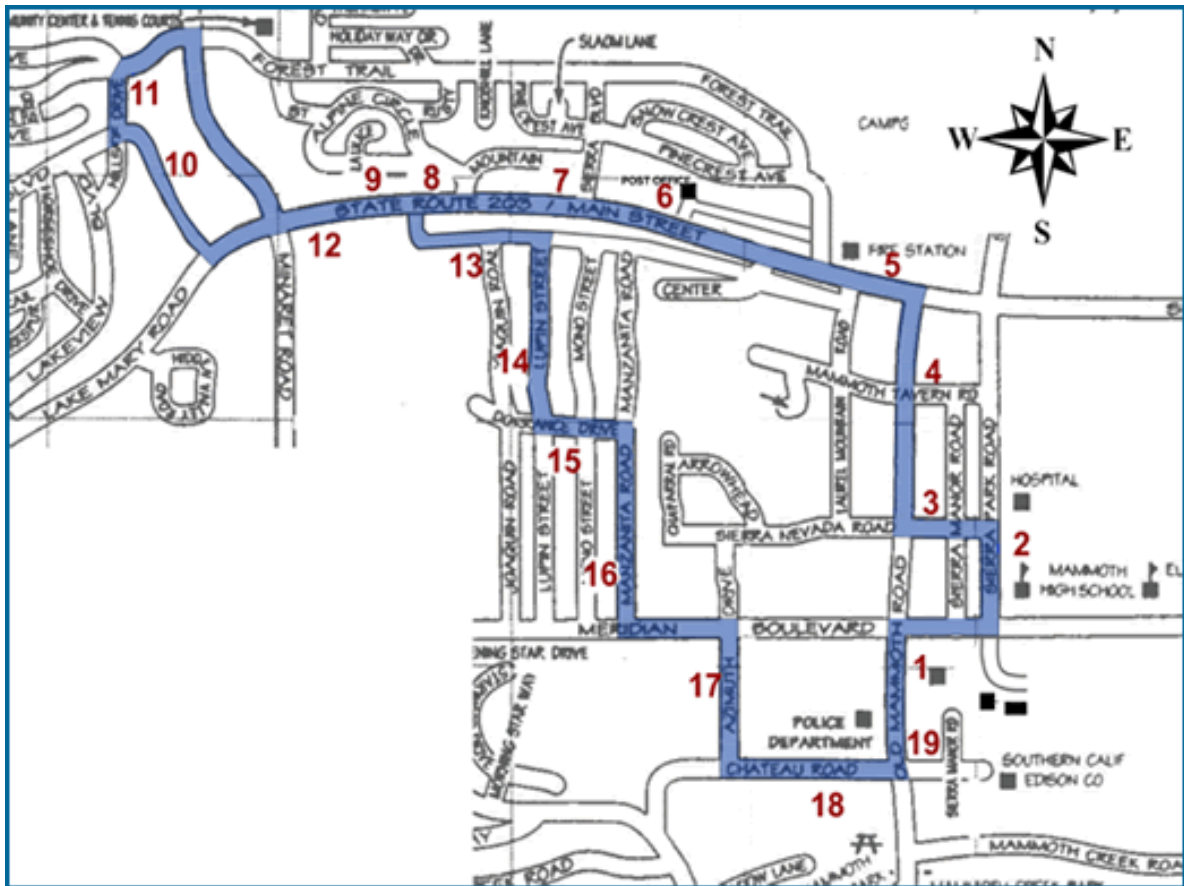
Source: ESETS, 2003.

Figure 8. Existing Mammoth Mountain Ski Area Winter Shuttle Service Area



Source: ESETS, 2003.

Figure 9. Town of Mammoth Lakes Summer Shuttle Service Area



Source: ESETS, 2003.

### 3.2 Community Development Conditions, Issues, and Concerns

The CREST and Inyo Mono Transit services operate year round. The Red's Meadow/Devils Postpile Shuttle Service runs from June through October each year. The TML Mountain Ski Area Shuttle operates during the winter months. TML also contracts with Inyo Mono Transit to provide summer transit services in the community.

Visitation and overall growth in the ESETS service area are expected to continue to grow significantly over the next 20 to 25 years. It is anticipated that Inyo National Forest, currently one of the 10 most visited units in the Forest Service, will continue to grow in annual visitation. Mammoth Mountain Ski Area and the surrounding attractions and amenities (hotels, condominiums, and other services) in the TML area also are expected to grow significantly in the near future. The TML has become a year round attraction, with 1.2 million visitors in the winter months and 1.3 million visitors in the summer months.



This expected growth along with the issues of concern related to resource management, quality of the experience, and various transportation congestion, safety, and access issues were the fundamental reasons for Inyo National Forest to evaluate expanded ATS in the eastern Sierra. The ESETS provides an opportunity for the Forest Service to design and implement an integrated regional and local service to serve a variety of recreation, employee, local, and visitor markets. The ESETS service could contribute to local economic development goals by encouraging visitors to patronize local businesses.

### **3.3 Natural or Cultural Resource Conditions, Issues, and Concerns**

There are many natural and cultural resource issues and concerns in the eastern Sierra that an ATS could help alleviate by reducing resource damage primarily resulting from traffic congestion. The Inyo and Humboldt-Toiyabe National Forests consist of a wide range of natural resources such as ancient bristlecone pines, access to lakes for day use, hiking, fishing, and boating, Hot Creek and other natural hot springs and geologic features, connections with the Pacific Crest Trail which passes through a number of Wildernesses in both national forests, and trail access to Yosemite NP.

BLM public lands feature Areas of Critical Environmental Concern, including Fish Slough and the Bodie Hills. Wildlife is also plentiful and varied within the region. The Middle Fork San Joaquin River is part of the Ansel Adams Wilderness and also a state-designated wild trout water. The Devils Postpile was designated a national monument primarily due to scientific interest in its geological formation. In addition to the postpile geologic formation, the primary natural resource within the monument is a lodgepole pine/red fir forest, and Rainbow Falls. Mono Basin National Forest Scenic Area was designated as a special area because of its scenic and biological resources. Mount Whitney is the highest peak in the lower 48 states, and Palisade Glacier is the southernmost glacier in the western hemisphere.

### **3.4 Recreation Conditions, Issues, and Concerns**

Recreation opportunities are plentiful and diverse in the Inyo National Forest and adjacent areas. The eastern Sierra serves a broad mix of international, American, and regional and local Nevada and California visitors. Recreation activities in both Inyo and Humboldt-Toiyabe National Forests include biking, hiking, camping, climbing, hunting, fishing, off-highway vehicle and over snow opportunities, ranger programs, Wilderness areas, and winter recreation.

Inyo National Forest attractions include the Mono Basin South Tufa/Scenic Area Visitor center, Mono Lake, Mono Basin National Forest Scenic Area, Mammoth Lakes Basin, Reds Meadow Resort and Campgrounds, Rainbow Falls, Soda Springs, Agnew Meadows Rock Creek Recreation Area (see Figure 10), Bishop Creek Recreation Area, Ancient Bristlecone Pine Forest, Whitney Portal, and access to the John Muir and Pacific Crest Trail, and several Wildernesses. Humboldt-Toiyabe National Forest area attractions include Twin Lakes, Bodie State Park, Virginia Lakes, Walker River Canyon, and the Hoover Wilderness.

The Town of Mammoth Lakes and Mammoth Mountain Ski Area provide year round activities for visitors including skiing, hiking, biking, camping, site seeing fishing. The Town of Mammoth Lakes provides all the amenities of a resort community and attracts visitors during all times of the year including peak winter and summer seasons. The John Muir and Pacific Crest Trail runs through Inyo National Forest on its way from Yosemite to Sequoia and Kings Canyon National Parks.

Hiking is the chief attraction in Devils Postpile. There are numerous unnamed trails in and around the east side of the monument. They run chiefly north/south, from the campground, past Soda Springs, circling the Postpile itself, and continuing on to Rainbow Falls. King Creek Trail serves the west side. King Creek Trail enters the park on the west side and heads north. Yosemite NP also is adjacent to the Inyo and Humboldt-Toiyabe National Forests. Primary activities in Yosemite NP include Tuolumne Meadows, Yosemite Valley, and various high cliffs, waterfalls, and giant sequoias.

**Figure 10. Rock Creek Recreation Area Trail Head**



## ■ 4.0 Planning and Coordination

The ESETS service area includes lands and roadways maintained by the Inyo and Humboldt-Toiyabe National Forests, county roads, and state highways managed by Caltrans. The administrative element of the ESETS includes an extensive and broad stakeholder involvement process that is summarized in this section. For purposes of this site report, the classification summary provided in this section considers only the Inyo and Humboldt-Toiyabe National Forests.

The ESETS service area includes working group stakeholders made up of multiple public and private agencies as well as many individuals. In early 2003, the ESETS stakeholder working group developed draft transit service plans designed to increase regional and local transit coverage and ridership. The ESETS plan includes the potential coordination of transit services with Forest Service; NPS; California State Parks BLM; and California and Nevada county, city, and town jurisdictions. The ESETS stakeholder working group is managed by representatives of the Inyo National Forest. A variety of stakeholder participants are part of this team including representatives from:

- Inyo, Humboldt-Toiyabe, Sequoia, and Sierra National Forests;
- Death Valley National Park, Yosemite National Park, Devils Postpile National Monument, and Manzanar National Historic Site;
- Bureau of Land Management, Bodie State Park, and California State Tufa Reserve;
- Inyo, Mono, Madera, and Kern Counties, California;
- Town of Mammoth Lakes, City of Bishop, and City of Ridgecrest, California;
- Douglas County, Nevada;
- Topaz Lake, Gardnerville, Minden, Carson City, and Reno, Nevada;
- Caltrans, Inyo Mono Transit, California Cruisers, and YARTS;
- Mammoth Mountain Ski Area;
- Foro Latino; and
- Native American Tribes.

Resort owners, various transit operators, Local Transportation Commissions, and state agencies also are actively involved with the ESETS including YARTS, California Cruisers, Caltrans, Inyo Mono Transit, Foro Latino and Mammoth Mountain Ski Area. The Native American tribes stakeholders that would be served by ESETS include the Timbi-sha Shoshone, Lone Pine Reservation, Fort Independence Indian Reservation, Big Pine Reservation and Bishop Reservation, Bishop Paiute Indian Tribal Council, Benton Paiute Reservation, Bridgeport Indian Colony, Mono Lake Indian Community, Antelope Valley Indian Community, Walker River Paiute Tribe, Washoe Tribe of Nevada and California,

Carson Colony Community Council, Dresslerville Community Council, Reno-Sparks Indian Colony, Stewart Community Council, and Woodfords Colony. Additional stakeholder representatives from state and local organizations, transit operators, and individuals include:

- Caltrans Rural Transit Assistance Program (RTAP) and Nevada Department of Transportation;
- Inyo and Mono County Local Transportation Commissions (LTCs);
- Inyo-Mono Association for the Handicapped; and
- Salvation Army.

Other stakeholders include the Inyo-Mono Association for the Handicapped, Intrawest, Eastern Sierra Advocate Network, Coalition for Unified Recreation in the Eastern Sierra, High Sierra Packers Association, (various town) Chambers of Commerce, Reds Meadow Resort and Campgrounds, Sierra Business Council, Mammoth Area Mountain Bike Organization, Mammoth and Eastern Sierra Unified School Districts, and (various local) Rotary and Lions Clubs.

The Inyo National Forest was established by Presidential Proclamation in 1907 to preserve 221,324 acres of land along the Owens River from settlement or entry. Inyo was named after Chief George, a Paiute leader. Inyo means the dwelling place of a great spirit and was also used by early settlers to name the White-Inyo Mountain Range. The original 1907 Inyo National Forest was a small area located almost in the center of the present forest and has since assimilated Mono National Forest (incorporated in 1945), parts of Kern National Forest, and additional land from the states of California and Nevada to encompass just more than two million acres. It is divided into the North and South Ranger Districts. These districts include the Mono Lake and the Mammoth Ranger Districts in the north and the White Mountain and Mt. Whitney Ranger Districts in the south. Each Ranger District has a Ranger Station and two Visitor Centers.

No major plans are underway to improve transportation services in the Inyo and Humboldt-Toiyabe National Forests in the eastern Sierra. Each County supports public transit through Local Transit Commissions. In addition, the Eastern California Planning Partnership (counties and transit agencies) and the Tri-State (Oregon, Nevada, and California) Transportation Planning Committee actively seek planning grants to institute or improve transit services in the Eastern Sierra and Eastern Cascade Regions. There are a variety of existing plans, including County, State, and Regional which have been completed and form the foundation for much of the ESETS proposal.

## ■ 5.0 Assessment of Need

### 5.1 Magnitude of Need

Visitation to the Inyo National Forest and adjacent area attractions (Yosemite NP, Devils Postpile) has been growing consistently over the past several years and is expected to grow at similar high levels over the next 20 years. The Inyo National Forest is currently one of the 10 most visited forest in the National Forest Service system and also is expected to continue high levels of future visitation. Expected high levels of future visitation to Yosemite NP and other area attractions also are expected to impact the transportation system in the eastern Sierra.

The TML is a year round resort and is working with Mammoth Mountain Ski Area to develop the amenities of both a world class winter and summer resort community. In addition, the eastern Sierra, while a specific, discrete destination of international, national, and regional visitors, will continue to serve as one of many locations within regional and interregional trips that include Reno, Lake Tahoe, Las Vegas, Yosemite and Death Valley NPs, western Sierra forests and national parks (such as Sequoia-Kings National Park), and the San Francisco Bay Area.

In the eastern Sierra, there is a growing minority and aging population dependent on public transit to access the local National Forest and National Park attractions. Mono County is the county in California with the highest per capita number of service workers, and its Hispanic population is 17.7 percent, many of whom do not have a driver's license. Accessing local services, as well as recreation, is a hardship for much of this segment of the population. Other underserved residents consist of disabled and elderly persons.

The existing eastern Sierra's transportation system, both roadway, and in particular the transit system, will not meet the strain of the expected future recreational visitation growth and resulting service sector growth in the ESETS area. The primary (CREST Route, YARTS, and Reds Meadow/Devils Postpile Shuttle) existing transit services have temporary funding sources. The Federal 3-year 5311 f) start-up funds for the CREST Route and YARTS, and Fee Demonstration Authority for the Reds Meadow/Devils Postpile shuttle service will expire in 2004.

The existing CREST Route offers visitors regional transit services into and out of the ESETS service area, three days per week (each direction), with one daily trip. The CREST Route is the sole regional transit provider (public and private) along the U.S. 395 corridor serving the rural populations of Inyo and Mono Counties as well as recreational users in the eastern Sierra. Crest Route funding through a Federal 5311 f) "start-up" grant only available for the first three years of service. Inyo Mono Transit's three year period ends in 2004.

The Reds Meadow/Devils Postpile Shuttle currently provides excellent levels of service, frequencies, coverage, and comfort for various recreational users during the summer months. This shuttle has been operating for over 25 years and recently has been funded and contracted to a private company by the Forest Service through a Fee Demonstration

Program. This Fee Demo Program also will conclude in 2004 and therefore continuation of this important transit service will be in jeopardy.

Mammoth Mountain Ski Area operates the winter ski shuttle service with routes throughout the TML. The TML contracts with Inyo Mono Transit to provide summer transit service. Mammoth Mountain Ski Area is interested in converting its winter operation to the Town of Mammoth Lakes, including subsidizing a portion of the operation of the system. The TML has recently instituted a development transportation tax to provide support for its system in the future. It has no facilities or land for bus maintenance.

YARTS provides a unique opportunity for the ESETS to take advantage of an existing transit system that operates efficiently and successfully. While offering limited service in the eastern Sierra, YARTS could be expanded to address over 600,000 current visitors (and growing) from the eastern Sierra alone into Yosemite NP during the summer and early fall. YARTS funding, dependent upon three-year 5311 f) Federal funding, also will expire in 2004.

The recreational attractions throughout the area, whether campgrounds, trails, national monuments, lakes, and other amenities, have limited (if any) alternative transportation systems that provide transportation access, other than the Reds Meadow Shuttle. Transportation access to the attractions generally is limited to automobile travel and parking lots in close proximity to the resource, campground, or trailhead. This current situation often results in severe overcrowding, traffic congestion, and safety issues associated with visitation to these attractions. This situation will be considerably worse in the next 20 to 25 years if future visitation growth occurs as expected.

In general, the alternatives presented below can be categorized as Level I in terms of transportation planning effort. This because they are built primarily upon existing systems and services in the region. Some additional work is needed to establish schedules and funding strategies. The new services proposed in Inyo and Mono Counties and in the Reno-Carson City area are more accurately categorized as Level II. Additional work is needed in these areas to define routes, schedules, equipment requirements and funding strategies.

## **5.2 Feasible Transit Alternatives**

The ATS for the ESETS service area would include an expansion of existing transit services, the implementation of new transit services, and the integration of each. The expansion of services would focus on expansion of the CREST Route and YARTS to provide increased interregional transit services to better serve visitor and residential long-distance travel. Converting the Mammoth Mountain Ski Area Skier Shuttle operation to the town would be part of this expansion process. Associated bus fleet upgrades and maintenance facility land acquisition and associated construction would be required for this conversion to meet FTA regulations.

The implementation of new services would include services to meet the recreational needs of local attractions adjacent to the Town of Mammoth Lakes not currently served such as

Mammoth Lakes Basin and other attractions such as Whitney Portal, Bristlecone Pine Forest, Rock Creek, and Twin Lakes among others in the U.S. 395 corridor. Continuance of the current Reds Meadow/Devils Postpile Shuttle would be part of this system.

The establishment of regional partnerships and relationships will be critical to ensure the success of this potential regional and local ATS. Partnerships between the Forest Service, NPS, Mono and Inyo Counties, Town of Mammoth Lakes, Inyo Mono Transit, Mammoth Mountain Ski Area, Caltrans, and other partners will be required to sustain the ESETS service. These potential enhancements would be designed to improve shuttle bus operations and services, move more visitors through transit rather than automobile use, and meet the expected increase in visitor demand to the area.

The majority of the proposed components of the ESETS service would require some level of operating subsidy to augment farebox revenues, in addition to capital expenditures. Only the Town of Mammoth Lakes will have funding from its development transportation tax and a subsidy from Mammoth Mountain Ski Area to provide for operational costs. The proposed ESETS service area transit expansion plan, including interregional and regional, local, and integrated transit services is summarized below.

### ***Interregional and Regional Transit Service Expansion and Implementation***

- Increase the CREST southbound and northbound route levels of service to provide a sustainable, dependable, and year round interregional transit service. CREST would be expanded from three to seven days per week in each direction over the same ESETS service area (Reno, Nevada to Ridgecrest, California). Increased frequencies are proposed in this expansion plan. Capital expenditures would include the purchase of four additional ADA compatible buses with luggage compartments and bike racks. Estimated up front costs for this service expansion are \$600,000 in vehicles and \$90,000 in project development costs. Annual operations and maintenance costs are estimated at approximately \$500,000.
- Increase the YARTS regional transit to provide daily service into and out of Yosemite NP from a larger number of communities in the eastern Sierra. YARTS currently provides an important transit service to eastern Sierra communities and recreational users to Yosemite NP. YARTS operates the eastern Sierra service through a private contractor, California Cruisers. At a minimum, the Forest Service should work with NPS to ensure Federal funding of YARTS to Yosemite NP from the eastern Sierra because funding for YARTS is expected to expire in 2004. Estimated up front costs for this service are \$500,000 in vehicles, \$25,000 in additional capital costs, and \$80,000 in project development. Annual operations and maintenance costs are estimated at \$115,000.
- Implement the East 178 Service Shuttle Bus to connect with the Sequoia National Forest to Kern County communities. This route was operating for several years. It is expected to provide scheduled trailhead service and interregional transit services. This system also provides an all-weather connection for residents and visitors accessing the Sequoia National Forest and San Joaquin Valley. Estimated up front costs for this service include \$140,000 in vehicles, \$75,000 in other capital costs

including storage, and \$30,000 in project development costs. Annual operations and maintenance costs are estimated at \$410,000.

### ***Local Transit Service Expansion and Implementation***

- Continue to fund and operate the Reds Meadow/Devils Postpile Shuttle Service to help meet the Inyo Forest Service mission of resource protection, maintenance of transportation safety, management of resource parking and congestion, and providing a high quality visitor experience. This service has effectively transported visitors into and out of this area for more than 25 years but often with a highly subsidized system. The private sector, Mammoth Mountain Ski Area in particular, has very little interest in operating the system at a loss. California Cruisers operates the system through a contract with the Forest Service. Continuing operations and maintenance costs for this service are estimated at \$650,000 annually.
- Convert the Mammoth Mountain Ski Area Winter Shuttle and Inyo Mono Transit Summer Shuttle services to the TML to operate and maintain. This would include a large capital expenditure to meet the FTA requirements for transit fleet and maintenance facilities including acquisition of land. The current winter system is run by Mammoth Mountain Ski Area with a non-conforming bus fleet and below standard bus maintenance facility. Mammoth Mountain Ski Area would potentially help subsidize the operation of this service to sustain and keep this system operating into the future. The total capital costs associated with this conversion would include a new bus fleet and construction (and associated land acquisition costs) associated with a new maintenance facility. This maintenance facility is proposed to be a shared facility for the TML shuttle services as well as other associated local and regional bus services proposed in this site report. Anticipated costs for new equipment and a maintenance facility are \$4,500,000 in capital costs and \$650,000 in project development costs. Operation of the system is estimated at \$1,600,000 annually.
- Implement a Mammoth Lakes Basin Summer Shuttle Service as part of the TML summer shuttle service. The bus type to be considered would consider an open-air vehicle, possibly a trolley car, with bike racks. Lakes Basin summer visitation ranges from 130,000 to 150,000 visitors per year with frequent residential visitors in addition to recreational visitors from outside of the ESETS area. It is assumed that this service would be provided by a contractor, who would supply vehicles and equipment. Annual operations and maintenance costs for the contract are estimated at \$450,000.
- Implement Forest Service Recreation Area Shuttle Services in Inyo County to meet the needs of recreational users (residents, visitors, wilderness) to the various southern ESETS service area attractions. These services will include separate shuttle services/park and ride facilities with the construction (or renovation of existing) of associated infrastructure (parking lots, shuttle buses, kiosks, etc.) to accommodate the systems. These services are expected to include shuttles, with bike racks, to Rock Creek Recreation Area, Bishop Creek Recreation Area, Ancient Bristlecone Pine Forest, and Whitney Portal/Interagency Visitor Center. Inyo Mono Transit could potentially provide start-up service, possibly with 5311 (F) funding. Estimated up front costs are



\$540,000 for vehicles, \$190,000 for other capital costs including vehicle storage and \$110,000 in project development costs. Annual operations and maintenance costs are estimated at \$270,000.

- Implement Forest Service and State Park Recreation Area Shuttle Services in Mono County to meet the needs of recreational users to the various southern ESETS service area attractions. As with the northern area, these services will include separate shuttle services/park and ride facilities with the construction of associated infrastructure. These services are expected to include shuttles, with bike racks, to Twin Lakes (Bridgeport), Bodie State Park, Virginia Lake, and South Tufa/Scenic Area Visitor Center. Inyo Mono Transit could potentially provide start-up service, possibly with 5311 (F) funding. Estimated up front costs are \$450,000 for vehicles, \$125,000 for other capital costs including vehicle storage and \$90,000 in project development costs. Annual operations and maintenance costs are estimated at \$200,000.
- Implement Forest Service Recreation Area Shuttle Services on the Humboldt-Toiyabe National Forest outside of Reno and Carson City. This service would provide access to major hiking, mountain biking, and cross-country skiing trails (such as the Tahoe Rim Trail); the Mt. Rose Ski Area; Tahoe Meadows; and other recreational sites. This service would operate at a one-hour headway over a loop on U.S. 50 and Nevada State Routes 28 and 431 (Mount Rose Highway). The services would operate from major destinations in Reno and Carson city, likely local casinos that could serve as staging areas for the shuttles. The service also would connect with the CREST Route to provide interregional transit services to recreation visitors to the ESETS service area. Estimated up front costs are \$1,260,000 for vehicles, \$80,000 for other capital costs and \$200,000 in project development costs. Since these services are operating in and around developed areas it is anticipated that some existing maintenance and storage facilities may be used. Annual operations and maintenance costs are estimated at \$820,000.

### ***Integrated Transit Service Expansion and Implementation***

The two alternatives below are long-range options that would probably be implemented by other agencies. Adequate detail is not available to cost these options at this time.

- Increase scheduled Inyo Mono Transit Inter-Community Transit Service and additional demand responsive service (Dial-a-Ride) to integrate with the CREST Route and local services in Bishop, Lone Pine, the Town of Mammoth Lakes, Walker, and Benton. This expansion of service would provide additional fixed route transit services to meet town-to-town needs for recreational visitors, residents, and workers in the eastern Sierra. The current scheduled service, as well as Dial-a-Ride services, is funded through LTCs. The construction of a regional transit facility would benefit this necessary service.
- Expand the CREST Route to provide regional and local inter-connections with the proposed Mono and Inyo County Recreational Shuttle Services, and the Town of Mammoth Lakes Winter and Summer Shuttle Services. This expansion of CREST

would ensure that local recreational and residential users would have regional transit access in the ESETS service area. This integration would not necessarily increase the level of service of the proposed CREST northern and southern routes expansion (shown above) but ensure that service plans of the various regional and local transit services of the ESETS systems are closely coordinated.

In order to achieve and then sustain the proposed ESETS service plan, the Inyo National Forest will continue to work with their ESETS stakeholder partners to establish inter-agency agreements and maintain working relationships. Working with Humboldt-Toiyabe National Forest, FTA, NPS, Inyo Mono Transit, Mono and Inyo Counties, the Town of Mammoth Lakes, Mammoth Mountain Ski Area, and Caltrans among others, the Inyo National Forest and its regional partners and stakeholders should identify and implement strategies to partially finance:

- Capital purchases;
- Associated infrastructure improvements (such as park and ride facilities);
- Operating and maintenance; and
- Conversions of both bus fleets and construction of a regional maintenance facility in the TML (to meet FTA standards).

This subsidy plan would benefit visitors to the area and likely increase visitation to the ESETS service area. These potential enhancements would be designed to improve shuttle bus operations and services, move more visitors through transit rather than automobile use, and meet the expected increase in visitor demand to the various outstanding regional attractions.

### **5.3 Other Feasible ATS Alternatives**

Only transit alternatives are proposed for this project. No other feasible ATS alternatives were identified.

## **■ 6.0 Bibliography**

The primary data source for this report included the detailed analysis conducted by the ESETS stakeholder working group about each potential service. The following web site was also used to support the analysis presented in this report:

<http://www.fs.fed.us/r5/inyo/aboutus/>.

## ■ 7.0 Persons Interviewed

Sandy Hogan, Special Project Coordinator, Inyo National Forest, USDA Forest Service

Gary Oye, District Ranger, Inyo National Forest, USDA Forest Service

Penne Custer, Public Affairs Specialist, Inyo National Forest, USDA Forest Service

Deborah Nelson, Recreation Ranger, Inyo National Forest, USDA Forest Service

Kathy Lucich, District Ranger, Humboldt-Toiyabe National Forest, USDA Forest Service

Julie Molzahn, District Ranger, Inyo National Forest, USDA Forest Service

Kevin Wilmot, Forest Ranger, Humboldt-Toiyabe National Forest, USDA Forest Service

Larry Randall, Supervisory Forester, Humboldt-Toiyabe National Forest, USDA Forest Service

Deanna Dulen, Superintendent, Devils Postpile National Monument, National Park Service

Fred Lenhart, Transit Planning, Caltrans

Bill Manning, Airport Manager, Town of Mammoth Lakes

Sonja Brynelsen, Transportation Planner, Town of Mammoth Lakes

R. Steve Black, Director of Public Works, Town of Mammoth Lakes

Dick Whittington, Public Information/Admin Services Officer, Merced County Association of Governments

Joann Ronci, Mono County Board of Supervisors

Gwenn Plummer, Mono County

Jill Ellis, Inyo Mono Transit

Other members of the ESETS stakeholder working group included representatives from Inyo Mono Transit, Caltrans, YARTS, Bishop Chamber of Commerce, Inyo National Forest, California Cruisers, Reds Meadow, Mammoth Mountain Ski Resort, among others

Public meeting participants, specifically related to ATS needs in the Eastern Sierra, also participated in separate meetings held in Bishop and the Town of Mammoth Lakes, California