

Sustainable NREL

TRANSPORTATION | South Table Mountain



Photo by Dennis Schroeder, NREL/PIX 19406

OUR MISSION

NREL is the only federal laboratory solely dedicated to the research, development, and commercialization of renewable energy and energy efficiency technologies. Throughout its history, NREL employees have played a dynamic role in our “living laboratory”—bringing innovation to technology, sustainability, and community outreach and education. Employee engagement in our Sustainability Program has enabled NREL to reduce its carbon footprint, waste generation, and energy consumption.

SUSTAINABLE OPERATIONS

NREL's campus-wide transportation infrastructure and programs demonstrate our commitment to sustainability. Integration of smart growth principles with provisions for multi-modal, alternative transportation is reducing our greenhouse gas (GHG) emissions.





Photo by Alex Myers NREL/PIX, 19409

PUBLIC TRANSIT

BUS STOP PROXIMITY

Public transportation provided by the Regional Transportation District (RTD) is convenient for many NREL employees who live in the Denver metro area. Several RTD routes include stops in close proximity to NREL's STM campus. The South Table Mountain campus, which is approximately 0.9 mile wide from east to west, has three entrances. Bus service to these entrances is described below and pictured on the map at right.

EAST CAMPUS ENTRANCE

Route #20: The east/west local route connects Golden, Lakewood, Denver, and Aurora along 20th Avenue. The route terminates at the STM's east entrance. This bus stop is located approximately 175 feet from the east main entrance.

Runs between 5:00 AM and 6:30 PM with half-hourly service during peak hours and hourly service mid-day.

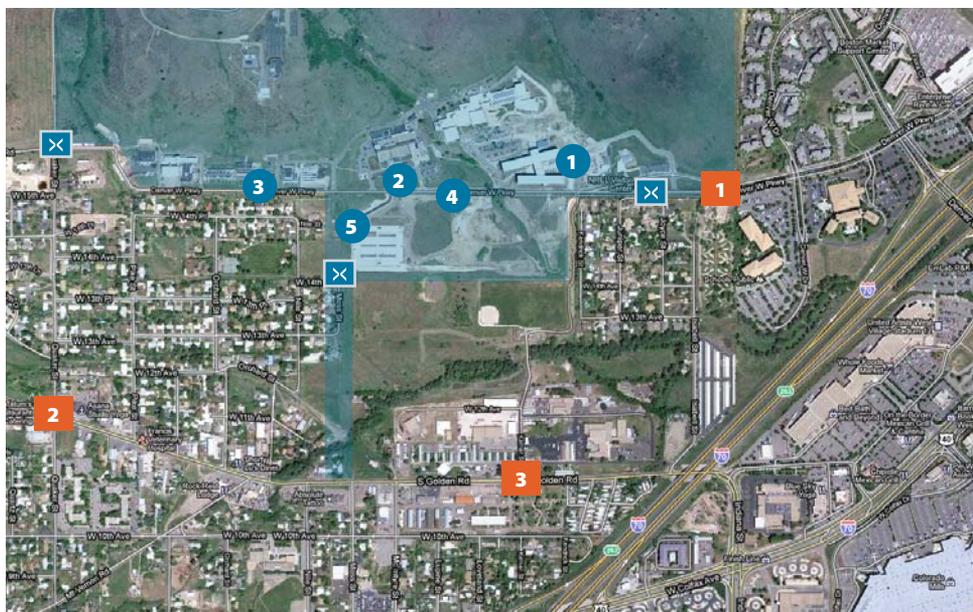
WEST CAMPUS ENTRANCE

Route #65: The regional bus route connects Boulder, Golden, and Lakewood. This route runs along South Golden Road with a stop at Quaker St. The bus stop is located approximately 2,156 feet (0.41 mile) from the west entrance.

Runs between 5:30 AM and 9:30 AM and again between 3:00 PM and 7:00 PM with service approximately every half-hour.

Route #16/16L: The east/west local route connects Golden, Lakewood, Denver, and Aurora along Colfax. The route runs along South Golden Rd. with stops at Quaker St. The bus stop is located approximately 2,156 feet (0.41 mile) from the west entrance.

Runs between 5:00 AM and 9:30 PM with fifteen minute service in the peak hours and half-hourly service mid-day.



- 1** RTD Routes 20: East Campus Entrance **2** RTD Routes 16, 16L, GS: West Campus Entrance (S. Golden Rd. at Quaker)
- 3** RTD Routes 16, 16L, GS: South Campus Entrance (Colfax at Kilmer) NREL Property Boundary X NREL Entrance Gates
- 1** - **5** NREL STM Campus Shuttle Stops: 1 RSF, 2 FTLB, 3 TTF, 4 Garage, 5 Surface Parking Lot

Photo from Google Imagery, DigitalGlobe, USDA Farm Service Agency, GeoEye, U.S. Geological Survey, Map data ©2011 Google

SOUTH CAMPUS ENTRANCE

Route #GS: The regional bus route connects Boulder, Golden, and Lakewood. The route runs along South Golden Road with a stop at Kilmer St. The bus stop is located approximately 1,517 feet (0.3 mile) from the south entrance.

Runs between 5:30 AM and 9:30 AM and again between 3:00 PM and 7:00 PM with service approximately every half-hour.

Route #16/16L: The east/west local route connects Golden, Lakewood, Denver, and Aurora along Colfax. The route runs along South Golden Rd. with a stop at Kilmer St. The bus stop is located approximately 1,517 feet (0.3 mile) from the south entrance. *Runs between 5:00 AM and 9:30 PM with fifteen minute service in the peak hours and half-hourly service mid-day.*

BUS PASSES

NREL provides ECO PASSES that include free unlimited RTD regional, express, local, light rail, and Call-n-Ride service for NREL employees. SkyRide service to and from Denver International Airport is only \$5.

A blurred photograph of a busy pedestrian walkway in a modern building complex. The image is taken from a low angle, looking down a long, brightly lit corridor. The floor is made of light-colored tiles, and the walls are a mix of brick and glass. The people walking are out of focus, creating a sense of motion and activity. The sky is a clear, bright blue. The text "IN TRANSIT" is overlaid in white, sans-serif font on the left side of the image.

IN TRANSIT

NREL SHUTTLES

In addition to the RTD routes that have stops near NREL's STM campus, NREL operates shuttles (during the AM and PM peak hours) that connect with two major RTD hubs and a major bus stop. The hubs are located at Cold Spring park-n-Ride and Applewood Transfer Center. The bus stop is located on South Golden Road. The two hubs provide connections to many more RTD routes including, but not limited to those shown in the following tables:

RTD ROUTES WITH SERVICE AT APPLEWOOD TRANSFER CENTER OR COLD SPRING PARK-N-RIDE

ROUTE # SERVICE AREA DESCRIPTION

17	East/West, Jefferson County
28	East/West, Lakewood, Denver on 28th Avenue
32	East/West, Lakewood, Denver on 32nd Avenue
38	East/West, Lakewood, Denver on 38th Avenue
44	East/West, Lakewood, Denver on 44th Avenue
3	East/West, Lakewood, Denver, Aurora, on Alameda Avenue
9	East/West, Lakewood, Denver on West 10th Avenue
14	East/West, Lakewood, Denver on West Florida Avenue
21	East/West, Lakewood, Denver, Aurora on Evans Avenue
100	North/South, Westminster, Arvada, Wheat Ridge, Lakewood, Littleton on Kipling St.
2X	Morison and Cold Spring Express
5X	Civic Center (Denver) and Cold Spring Express
6X	I-25/Broadway and Federal Center Express
CS	Pine Junction, Conifer, Denver
ES	Evergreen/Aspen Park, Denver
AF	SkyRide to Cold Spring, Denver, Denver International Airport

NREL also operates shuttles that move people around NREL facilities: the STM, Denver West, and Golden Hill. NREL's shuttles are shown in the table below.

SHUTTLES TO RTD HUBS AND NREL FACILITIES

ROUTE	HOURS		FREQUENCY
	A.M.	P.M.	
Cold Spring (Red)	6:30 – 9:30	3:30 – 6:30	20 min.
Applewood (Purple)	6:30 – 9:30	3:30 – 6:30	20 min.
South Golden Road (Pink)	7:00 – 9:00	4:00 – 6:30	30 min.
STM Surface Parking Lot/RSF/SERF (Blue)	6:30 – 9:30	3:30 – 6:30	10 min.
Denver West 15/STM/RSF/SERF Shuttle (Gold)	7:30 – 5:30		20 min.
On-demand Shuttle (Turquoise)	7:30 – 5:30		



VEHICLES

HIGH OCCUPANCY VEHICLES: CARPOOL AND VANPOOL

PARKING

NREL provides incentive parking located closer to building entrances for high occupancy vehicles (HOV) (i.e., carpools and vanpools). For all new construction that is LEED certified, NREL reserves at least 5% of total parking spaces for HOVs. HOV parking is also provided near older buildings where feasible. NREL provides monthly vanpool vouchers for up to \$200 to pay the fare for official vanpools.

STM PARKING GARAGE

This facility, centrally located on the NREL STM campus, is a parking hub that minimizes the need for surface lots adjacent to NREL offices and laboratories. Of the approximate 1,800 parking spaces, 90 are designated for carpools and vanpools, and 126 are designated for low emitting and fuel-efficient vehicles. On-site renewable technologies are built into the structure to achieve high energy efficiency performance for the garage and other STM buildings.



Top photo by Warren Gretz, NREL/PIX 11950; Illustration by RNL

ON-SITE FUELING STATIONS

NREL has on-site compressed natural gas fueling infrastructure. NREL has also established electric charging stations on both the STM and National Wind Technology Center (NWTC) sites. The parking garage accommodates 36 electric vehicle charging stations and potentially more in the future.



Photo by Andrew Hudgins, NREL/PIX 17416



Photo by Envisoin solar International Inc., NREL/PIX 16610

LOW EMITTING AND FUEL EFFICIENT VEHICLES

PARKING

NREL provides incentive parking located closer to building entrances for low emitting vehicles (LEV). For all new construction that is LEED certified, NREL reserves at least 5% of total parking spaces for LEV and fuel efficient vehicles. LEV parking is also provided near older buildings where feasible.

NREL FLEET VEHICLES

NREL uses alternative and flexible-fuel vehicles to the maximum extent practical

for its vehicle fleet. NREL's fleet currently consists of 46 GSA-leased vehicles with the following fuel configurations:

- 27 ethanol 85 (E85) vehicles
- 4 compressed natural gas (CNG) vehicles
- 2 hybrid-electric vehicles
- 5 diesel vehicles
- 7 unleaded vehicles.

In addition to these GSA-leased vehicles, NREL owns one dedicated CNG vehicle and one diesel freightliner service truck.

NREL evaluates the size of its fleet to ensure that the vehicle supply corresponds with demand. NREL continually monitors vehicle miles traveled and alternative fuel used monthly from log sheets and periodic reports. Monitoring also allows NREL to optimize its fleet size.



Photo by Lissa Myers, NREL/PIX 19408



ALTERNATIVE WORKING

TELECOMMUTING AND ALTERNATIVE WORK SCHEDULES (AWS)

NREL promotes telecommuting and AWS to reduce trips to and from NREL by reducing the number of days staff members commute to the lab. Workers in all employment classifications are eligible for our voluntary telecommuting and AWS programs with supervisor/manager permission based on work performance expectations.

Approximately 19% of NREL staff telecommutes at least one day per week; and, approximately 25% of NREL staff works an AWS.

VIDEO AND TELECONFERENCING

NREL also provides video and teleconferencing services that allow staff to reduce trips around campus for meetings and conferences on- and off-site. Training and technical assistance is provided.



BIKING

BICYCLE PARKING

Secure bicycle parking is available at various locations on the NREL STM campus. For all new construction that is LEED certified NREL provides at least 5% bicycle parking located at buildings entrances.

BICYCLE AND REPAIR STATION

To support NREL employees who ride their bikes to work, a bicycle repair station is located in the S&TF loading dock. The station includes a variety of tools, a bike stand, and supplies such as patching kits and inner tubes. The tools and supplies are available for staff.

SHOWER FACILITIES AND CHANGING ROOMS

NREL maintains two on-site fitness facilities, including locker rooms and showers at the SERF Wellness Center and RSF II. Additional shower facilities will be available at all new LEED-certified buildings.



Photo left by Dennis Schroeder, NREL/PIX 19262; photo above by Christina Chase, NREL/PIX 19411



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