Chapter 13: Traffic and Vehicular Safety

Traffic Safety Requirements

1 Purpose

The purpose of these requirements is to ensure traffic safety. They cover registration and operation of vehicles, including requirements for specific types, and pedestrian safety. They apply to workers, visitors, and supervisors; and SLAC Site Security, Fleet Services, and Occupational Health.

2 Requirements

Driving one’s own personal vehicle at SLAC is a privilege, not a right. Individuals must follow all applicable rules in order to retain this privilege. The California Vehicle Code applies in full at SLAC. Additional SLAC-specific requirements also apply, as described below. Violations of any of these requirements are subject to disciplinary action per Human Resources Development and Services and the Stanford University Administrative Guide.

2.1 Traffic Safety Training

All workers issued a SLAC identification badge (SLAC employees, users, subcontractors) receive basic information about traffic safety as part of the SLAC environmental, safety, and health orientation required the badging process. (See Chapter 55, “Site Access Control”,)

Workers involved in a vehicle accident may be required to take ESH Course 160, Defensive Driving Training (ESH Course 160).

2.2 Registration

2.2.1 Driver’s License

Consistent with the California Vehicle Code, SLAC requires operators of all motorized vehicles, including government cars, trucks, carts, motorcycles and scooters, to have a valid California driver’s license or a California-recognized license issued by another state or by a foreign jurisdiction of which the operator is a resident. Personnel must obtain a California driver’s license within 20 days of becoming a California resident. Drivers must present their license whenever requested by SLAC Site Security and must notify SLAC Site Security of any change in license status.
2.2.2 Insurance

Drivers must have insurance for any privately owned vehicle. If a privately owned vehicle is being used for SLAC business, the driver is required to have insurance coverage to the level required by Stanford University (see SLAC Fleet Manual, “Personal Vehicles for SLAC Business”.)

2.2.3 SLAC Vehicle Registration

It is strongly recommended that personal vehicles operated on site be registered with SLAC Site Security (see SLAC vehicle registration). SLAC vehicle registration applies to vehicles belonging to SLAC employees, long-term users, subcontractors, and temporary workers. Registering vehicles with SLAC speeds up site access – drivers of registered vehicles can enter the site during business hours through the Main Gate without stopping to show personal identification – and makes it easier to contact vehicle owners when necessary.

Individuals register their vehicles by bringing a valid driver’s license to the SLAC Site Security office and receiving a decal. The decal must be placed in a location visible when entering the Main Gate (see Auto Registration and Traffic Control Program).

2.3 Operation

Every vehicle operator is responsible for the safe operation of the vehicle he or she is driving. Drivers are expected to exercise defensive driving skills and operate vehicles safely at all times, moderating speed and following distance for all conditions. Drivers are accountable for unsafe driving that causes or contributes to a vehicle accident.

2.3.1 Vehicle Condition

Operators must take precautions to ensure that they are operating a road-worthy vehicle. This includes making sure that tires are properly inflated, the rear-view mirror is properly positioned, visibility is good through all windows, and that any loads are properly secured.

2.3.2 Road Condition and Information

Operators must take precautions to ensure that the travel path is safe. Current information regarding on-site road traffic and safety is made available in the “Access Information” column of SLAC Today. Informational signs are posted along the road as necessary to remind drivers of such requirements as wearing seatbelts and reducing speed in certain areas.

Vehicles may only be operated on the existing road network (including fence line roads) on the SLAC site unless explicit permission is granted by Facilities and Operations.

For vehicle operation requirements inside buildings, see Traffic and Vehicular Safety: Indoor Vehicle Use Requirements.
2.3.3 Traffic Rules

All vehicle operators must observe the California Vehicle Code, posted traffic regulations, and the requirements of this program. On-site infractions are cited by SLAC Site Security.

2.3.3.1 Seat Belts

California seat belt law applies at SLAC, and not wearing a seat belt constitutes a moving violation.

*Note* Only passengers in a bus are not required to wear seat belts. Passengers in other types of vehicles may not sit or stand without proper restraining devices. Riding in the bed of a pick-up truck is prohibited.

2.3.3.2 Speed Limit

The default speed limit for all vehicles on SLAC property is 25 miles per hour (38 kilometers per hour). Lower speed limits may apply to the following areas:

- Areas with posted lower speed limits where congestion, foot traffic, or road configuration frequently present greater hazards
- Areas where temporary conditions such as road repair, foul weather, or congestion may warrant speeds below posted limits
- Areas where temporary conditions such as construction work along road ways, road repair, foul weather, or congestion may warrant speeds below posted limits
- In all areas when vehicles are being escorted by SLAC vehicles equipped with flashing lights
- All on-site construction areas

*Note* Speed control devices (radar guns) are used by SLAC Site Security officers to determine the speed of a moving vehicle. These devices are accurate to within one mile per hour. The instruments are calibrated at least daily and are fully serviced annually. A log of the calibrations is maintained on file. The instruments do not pose any type of radiation or other hazard to the operator of the instrument or the approaching vehicle’s occupants.

2.3.3.3 Backing Up

The operator/driver of any vehicle is required to perform a physical walk around the rear and sides of the vehicle to verify that there are no obstructions, pedestrians, or other vehicles in the backing path before putting the vehicle into reverse.

**Limited Visibility Vehicles**

When operating a *limited visibility vehicle (LVV)*, for example a pick-up truck with a loaded bed limiting rear or side vision or a vehicle of excessive size or mass (mobile crane, loaded tractor-trailer, loaded stake bed truck, tanker truck, vacuum truck), the operator/driver is required to have a vehicle *spotter* positioned who can safely observe and safely direct the path of reverse.

The spotter must be within sight of the operator/driver at all times. If the spotter’s location cannot be observed by the operator/driver, the operator/driver will come to a complete stop until the spotter can again be seen. The spotter will be required to observe the path of reverse of the vehicle and keep pedestrians and
other vehicles out of the path of the reversing vehicle. The spotter will use appropriate hand signals (agreed upon by operator/driver and spotter) to give clear directions to the operator/driver at all times while the vehicle is in motion. The spotter is required to wear a reflective traffic vest or reflective jacket while performing spotter duties.

Any vehicle that has a rear back-up camera system or obstacle detection system will be exempt from having a spotter if the electronic devices provide full coverage of the path in rear of the vehicle. The device must be used in conjunction with performing a physical walk around the rear and sides and utilizing the rear view and side mirrors to verify no obstructions are present, before the vehicle is put into reverse. The spotter is required to wear a reflective traffic vest or reflective jacket while performing spotter duties.

2.3.3.4 Parking

Prohibitions

All state and local parking regulations apply at SLAC. Specifically, parking is prohibited

- Along red curbs
- In front of fire hydrants
- In fire lanes
- Where a vehicle may block building exits
- In zones marked NO PARKING

Designated Areas

Vehicles may not park in designated parking spaces unless applicable to that designation. Examples include government (for example, General Services Administration) vehicles, parking for persons with disabilities, electric vehicles, and carpool vehicles.

Parking on Inclines

When parking on an incline, all vehicles must have their parking brakes set. Passenger vehicles and light duty trucks (for example, pick-up trucks) and electric carts must also properly curb their wheels when parked on inclines. All carts, construction haulage, and delivery vehicles parked on inclines must have their parking brake engaged and at least one wheel properly chocked.

Abandoned Vehicles

Privately owned vehicles parked on site for longer than three days without permission from SLAC Site Security will be declared abandoned and treated in accordance with the applicable California regulations regarding abandoned vehicles on private property. The owners must pay for towing and storage to recover their vehicles. Vehicle storage is not allowed at SLAC.

Disabled Parking Permit

Disabled parking permits issued by the state of California are valid at SLAC. In addition, personnel who are temporarily disabled may request a special temporary disabled parking permit issued by SLAC Site Security that is valid for use at SLAC only. The Occupational Health Center must verify the disability.
2.3.3.5 No Idling

Idling of vehicles should be kept to a minimum, especially near buildings:

1. After starting the engine, minimize idling time and set the vehicle in motion immediately; be prepared to drive before turning the ignition key.
2. Turn the engine off whenever the vehicle is to be left unattended for any length of time (and remove and secure the key).

*Note* Vehicles may be left idling if necessary to power accessories and tools. In such cases follow the *Fleet Services Vehicle Procedure: Operating Exterior Accessories or Equipment That Require Vehicle to be Running*.

Diesel-fueled off-road vehicles and equipment may not idle for more than five consecutive minutes. The idling limit does not apply to idling:

- When queuing
- To verify the vehicle is in safe operating condition, to ensure safe operation of the vehicle, or to bring the machine system to operating temperature
- For testing, servicing, repairing or diagnostic purposes
- Necessary to accomplish work for which the vehicle was designed (such as operating a crane)

(See Chapter 30, “Air Quality”.)

2.3.4 Traffic Hazards Due to Construction or Other Large-scale Projects

Additional traffic safety precautions for large vehicles or equipment include:

- Yielding the right-of-way to vehicles involved in the movement of heavy equipment or materials
- Only crossing a double yellow line to pass slow moving equipment and vehicles after being signaled by the driver or operator that it is safe to pass
- Only operating vehicles during the hours of darkness when there are sufficient lights, or lighted escort vehicles or persons

Temporary traffic control plans may be required for some projects (see Traffic and Vehicular Safety: Temporary Traffic Control Plan Procedure for details).

2.3.5 Government Vehicles

2.3.5.1 Vehicles

All government vehicles (Department of Energy and General Services Administration) must be:

- Operated in compliance with the requirements of the SLAC Fleet Manual
- Maintained in safe operating condition and returned to Fleet Services for maintenance and repair as necessary
- Tracked; a use log must be kept
• Furnished with an accident form (SF-91), accident procedure, and Stanford insurance card
• Visually inspected before use for any physical damage to the exterior or interior. If the damage is not already recorded in the vehicle log, such damage must be reported to the vehicle custodian and SLAC Site Security before operating the vehicle.
• Assigned to a department custodian

2.3.5.2 Driver Age

Drivers under the age of 18 are not permitted to drive any motorized government vehicle, nor are they permitted to work as an outside helper on a motor vehicle.

2.3.6 Carts

Carts, also known as low-speed vehicles (LSVs), used for transportation of personnel and cargo on SLAC property must be compliant with 49 CFR 571.500. This standard governs the specifications for the purchase of new carts, and the operation and maintenance of existing carts. Carts that are not compliant with this standard must be removed from service until they repaired or brought up to compliance with this standard.

Frequent (more than four hours a day) operators of carts may complete ESH Course 155APR, Electric/Gas Low Speed Vehicle Training (ESH Course 155APR).

2.3.7 Motorcycles, Mopeds, Personal Transporters, and Bicycles

Appropriate protective headgear must be worn by anyone who operates a motorcycle, moped, personal transporter, or bicycle on site, as follows:

• Motorcyclists and operators of a moped or scooter must wear a helmet that meets Department of Transportation standards (49 CFR 571.218).
• Cyclists and personal transporters operators must wear a Consumer Product Safety Commission-approved bicycle helmet (16 CFR 1203). Helmets can be purchased once approved by supervisor and for SLAC use only.

In addition to wearing the appropriate headgear, operators and cyclists must

• Obey all road signs and follow the California Vehicle Code
• Use both hands for handlebar control
• Carry items in the vehicle basket or in a backpack or belt pack that does not hinder vehicle operation
• Drive defensively
• Never travel faster than road conditions warrant
• Watch for road hazards
• Ride on roads or other designated bicycle pathways and not on pedestrian pathways/sidewalks

SLAC-owned bicycles may not be ridden outside of SLAC and must be transported by vehicle for off-site maintenance. (University-based staff should refer to their respective departments regarding departmental bikes and policies.) For additional information on safe bicycle use and availability of SLAC-owned bicycles, see Bicycle Safety, It’s no accident! and the Sustainability and Energy Management Program.
2.3.7.1 Bicycle Parking

Bicycles must be parked in designated racks or lockers. Parked bicycles must not obstruct walkways, railings, doorways, or ramps intended for use by pedestrians or people with disabilities. Bicycles must be kept in good working order and must not be allowed to deteriorate or become otherwise derelict. If left unattended, a bicycle may be tagged as abandoned with a warning notice by SLAC Site Security.

A bicycle is determined to be abandoned when it is found in the same location over an extended period of time (generally two weeks or more) with any combination of missing parts, dust/cobwebs, flat tires, and rusted chain. SLAC Site Security will remove abandoned bicycles from racks/lockers in order to maintain an adequate number of secure parking spaces and discourage bicycle theft. Bicycles may also be removed from racks/lockers that are being relocated due to construction.

Bicycles identified for removal are posted with a notice informing the owner that he or she must remove the bicycle from its current location within 14 days or the bicycle will be impounded. Simply removing the notice will not stop the bicycle from being impounded: the bicycle must be removed from the rack/locker.

SLAC Site Security is not responsible or liable in any way for lost, stolen, or damaged bicycles and is not responsible for the cost of locks, chains, other security devices, or any other item that may be damaged or destroyed as a result of removing any bicycle.

2.3.7.2 Electric Bicycles

Use of electric bikes (e-bikes) at SLAC is allowed.

Electric bikes are broken down into three categories in the California Vehicle Code:

1. Class 1 e-bikes assist riders up to 20 miles per hour, with pedaling only.
2. Class 2 e-bikes assist riders up to 20 mph, with or without pedaling.
3. Class 3 e-bikes assist riders up to 28 mph, with pedaling.

Class 1 and 2 e-bikes are classified as conventional bicycles by the California Vehicle Code, may be used on dedicated bicycle paths, and are subject to conventional bicycle rules at SLAC.

Class 3 e-bikes may not be used on dedicated bicycle paths, unless the paths are posted to allow motorized bicycles, and the riders must be 16 years or older. Class 3 e-bikes are subject to motorized vehicle rules at SLAC. Class 3 e-bikes are not approved for use at as SLAC-owned bicycles.

Electric cargo tricycles are available under special circumstances as job aides approved by management and may be obtained through SLAC Fleet Services. Some SLAC organizations have developed and require training for users. Check with your ESH coordinator for any organization-specific training requirements.

Removable batteries for personal and SLAC owned e-bikes may be charged indoors if the batteries and their matched chargers are UL 2271 listed and in good condition. Charging locations are limited to an electrical outlet in the user’s personal office space or another outlet location acceptable to the building manager. Use of exterior receptacles for e-bike battery charging is not permitted, unless designated with signage for e-bike charging. Re-charging personal e-bike batteries at SLAC to enable commuting is classified as de minimis electricity usage and not subject to electricity cost reimbursement.
2.3.8 Skateboards, Rollerblades, and Personal Transporters

Skateboarding, including the use of motorized skateboards or single-wheel personal transporters, is not allowed at SLAC. Rollerblading is allowed. (Persons using rollerblades are strongly recommended to wear knee and elbow pads and gloves.) Use of personal transporters is also allowed, provided they have handlebars and hand-operated brakes.

2.3.9 Pedestrian Safety

Pedestrians are subject to the California Vehicle Code. Although they do have the right of way at marked crosswalks and unmarked intersections, they must not move into the paths of moving vehicles so suddenly as to constitute a hazard. At all other points on roadways, pedestrians must give way to vehicles.

3 Forms

The following forms and systems are required by these requirements:

- None

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- SLAC Site Security will maintain vehicle registration records

5 References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 13, “Traffic and Vehicular Safety”
  - Traffic and Vehicular Safety: Indoor Vehicle Use Requirements (SLAC-I-720-0A21S-001)
  - Bicycle Safety, It’s no accident! (SLAC-I-720-0A21T-001)
  - Traffic and Vehicular Safety: Temporary Traffic Control Plan Procedure (SLAC-I-720-0A21C-004)
  - Auto Registration and Traffic Control Program

- Chapter 30, “Air Quality”

- Chapter 55, “Site Access Control”

Other SLAC Documents

- ESH Course 154, SLAC Traffic Safety Training (ESH Course 154)
- ESH Course 155APR, Electric/Gas Low Speed Vehicle Training (ESH Course 155APR)

SLAC Today, “Access Information”
- **SLAC Site Security**
- **Facilities and Operations** (for Fleet Services)
- **SLAC Fleet Manual** (SLAC-I-708-703-001-00)
- **Fleet Services Vehicle Procedure: Operating Exterior Accessories or Equipment That Require Vehicle to be Running**
- **Sustainability and Energy Management Program**
- **SLAC Occupational Health Center**

Other Documents

  - Section 3, “Definitions” (49 CFR 571.3)
  - Section 218, “Motorcycle Helmets” (49 CFR 571.218)
  - Section 500, “Low-speed Vehicles” (49 CFR 571.500)
- **California Vehicle Code**
- Underwriters Laboratories (UL) 2271, “Standard for Batteries for Use In Light Electric Vehicle (LEV) Applications” (UL 2271)
- Stanford University. Administrative Guide Memo 7.6.1, “Accident and Incident Reporting”