Light-Duty Trailer Safety Fact Sheet

HS21-004A (05-21)

illions of lightduty trailers travel along Texas roads each year. Some are for recreation, but others are used for businesses, from food vending and landscaping to mobile pet grooming and livestock hauling. Hitching and towing a light-duty trailer requires extra care to prevent accidents and keep employees injury-free. The following maintenance, usage, and driving tips can help

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ensure workers have a safe trip from start to finish when towing a light-duty trailer.

What is a light-duty trailer?

Many manufacturers use varying axle capabilities and tongue weights to describe trailers. In this safety publication, "light-duty trailers" refers to those with a pulling capacity of 12,000 pounds or less and use a ball to hitch the trailer to the towing vehicle.

What businesses use light-duty trailers?

Light-duty trailers offer perfect opportunities for new business start-ups and companies needing to get equipment to job sites. A few of the businesses that depend on light-duty trailers to get work done include:

- · lawn care and landscaping companies;
- water sports rentals and guides;
- construction, contracting, and excavation crews;
- agriculture and hay haulers;



- · automobile and motorcycle deliverers;
- mobile office renters;
- food and beverage vendors;
- livestock haulers;
- mobile pet groomers;
- on-location auto detailers;
- on-location mobile mechanics;
- cleaning services;
- pool cleaners;
- DJ services;
- massage and spa services;
- computer and electronics repair services;
- mobile clinics;
- moving and business storage services; and many more.

Pre-Departure Safety

Whether pulling a light-weight trailer for the first time or if towing one is part of an employee's daily routine, it is important to prepare before hitting the road. Always follow these precautions:

 Choose the proper towing equipment. Check the vehicle's weight capacity in the owner's manual to ensure it can handle the trailer and cargo load. Choose a size of hitch, coupler, and components that provide a secure fit. Each vehicle may require different equipment to tow safely and legally. According to <u>Consumer Reports</u>, incorrectly sized hitch balls are the number one cause of trailer accidents.

Light-Duty Trailer Hitch Classes		
T	Pull	Tongue Weight
	2,000 lbs	200 lbs
-		small cars small vans
II	Pull	Tongue Weight
	3,500 lbs	350 lbs
		full-size cars SUV's small trucks
III	Pull	Tongue Weight
	5,000 lbs	800 lbs
		full-size vans full-size trucks SUV's
IV	Pull	Tongue Weight
	10-12,000 lbs	1,000 lbs -1,200 lbs
		full-size vans

Business Light-Duty Trailer Types and Weights* by gross vehicle weight rating

oy gross vehicle weight rating (GVWR) and average load capacity (ALC) in pounds.



Canoe/Kayak Trailer 200 to 800 GVWR 200 ALC



Jet Ski Trailer 800 to 3,000 GVWR 1,500 ALC



Motorcycle Trailer 1,300 to 3,500 GVWR 1,900 ALC

Fishing Boat Trailer 900 to 6,000 GVWR 2,700 ALC

Tow Dolly 3,000 to 5,000 GVWR 3,400 ALC

*GVWR is the maximum allowable weight a trailer can weigh in total, including cargo, fluids, and more, as rated by the manufacturer. ALC is the total weight of the cargo a trailer is rated to carry. The weights listed are approximate. Always use the manufacturer's rating specific to the trailer.



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• Check the tires.

Check the tire pressure on both the towing vehicle and the trailer. The vehicle's tires may require a higher pressure while towing, as outlined in the owner's manual. Inspect the trailer tires for dry rot and cracking, especially if it is stored outdoors. Even if the tires have plenty of tread, age can lead to tire failure. Always check the lug nuts to ensure they are tight.

• Be prepared for roadside emergencies.

Ensure there is at least one spare tire for the trailer. Keep a jack and a lug nut wrench that works properly with the trailer and its wheels. Keep the trailer's wheel bearings greased and check the brakes (if equipped). Towing can put extra stress on a vehicle, so ensure the towing vehicle's maintenance is up-to-date.

• Hitch up the trailer correctly.

Make sure the following proper procedures for hooking up the trailer are used before towing:

• Line up the vehicle.

With the help of a friend, back the vehicle straight toward the trailer.

• Raise the coupler.

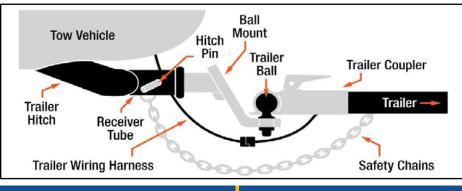
When the vehicle is about a foot away from the trailer tongue, stop and adjust the trailer coupler height to clear the trailer ball.

o Align the ball and coupler.

Back the vehicle the rest of the way so the coupler lines up perfectly above the trailer ball.

o Lower the coupler onto the ball.

With the vehicle in park and the emergency brake engaged, use the trailer jack to lower the unlocked coupler until it rests on the ball.



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Business Light-Duty Trailer Types and Weights*

by gross vehicle weight rating (GVWR) and average load capacity (ALC) in pounds.



Small Open Utility Trailer 1,000 to 3,000 GVWR 1,800 ALC



Small Enclosed Trailer 2,000 to 7,000 GVWR 2,200 ALC



Car Trailer 6,000+ GVWR 7,100 ALC



Boat Trailer 5,400+ GVWR 11.400 ALC



Large Enclosed Trailer 3,000 to 10,000 GVWR 4,400 ALC

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o Latch the coupler.

Once the coupler is fully seated on the ball, engage the latch, and secure it with a hitch pin or coupler lock.

• Attach the safety chains in a crisscross pattern.

This is required by law. Ensure the safety chains are rated to meet the gross trailer weight

• **Retract or swivel the trailer jack.** Move it out of the way for towing.

• Plug in the trailer wiring.

Ensure the harness does not touch the ground but has enough length to make turns without tension.

• Check the trailer lights.

With a helper, ensure the turning lights, running lights, and brake lights are functional.

• Use wheel chocks.

Before unhooking the trailer from the tow vehicle, place chocks (sturdy, wedge-shaped blocks) in front of and behind the trailer's tires. This keeps the trailer from rolling away when it is released from the tow vehicle.

Driving Tips

Extra caution on the road is needed when towing a light-duty trailer. These tips can help prevent accidents.

• Allow plenty of stopping distance.

One of the reasons people get into accidents is because they tailgate. It takes longer to stop with a trailer than with a vehicle alone. Allowing for extra stopping distance helps prevent collisions. It also prolongs the life of the towing vehicle when sudden accelerations, braking, and maneuvers are avoided.

• Anticipate problems ahead.

Since it takes longer to stop when towing a trailer, scan ahead farther than usual. Look for problems developing down the road. Observe the traffic flow and be ready to react if needed.

Business Light-Duty Trailer Types and Weights*

by gross vehicle weight rating (GVWR) and average load capacity (ALC) in pounds.



Small Travel Trailer 1,000 to 4,500 GVWR 800 ALC



Small Horse Trailer 7,000 to 8,000 GVWR 4,300 ALC

Large Flatbed Trailer 2,900+ GVWR 7,400 ALC



Dump Trailer 3,000+ GVWR 12,000+ ALC



Large Travel Trailer 6,300 to 10,500 GVWR 1,600 ALC

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• Watch for trailer sway.

Crosswinds, large trucks, downhill grades, and high speeds can lead to the trailer swinging back and forth like a pendulum behind the towing vehicle. If this occurs, the driver should remove their foot from the gas and gently apply the trailer brakes until the swaying stops.

Swing out when making turns.

The amount of space needed to make a turn when towing a trailer is increased. Account for this extra space by swinging out farther when taking a turn. Watch out for curbs, corners, and other cars.

- Use care when changing lanes.
 When changing lanes with a trailer, blind spots increase, and it's more difficult to accelerate quickly. Make sure to leave plenty of space between the trailer and other vehicles when moving from one lane to another.
 Consider installing tow mirrors to increase visibility.
- Use a spotter when backing. If available, have a helper assist the driver in looking for blind spots and providing directions when backing a trailer. While reversing, the driver must turn the wheel in the opposite direction from where he or she wants to go. This can be challenging and confusing. However, these steps can help:



- o Hold the bottom of the steering wheel.
- o To turn left, move the steering wheel to the left.
- o To turn right, move the steering wheel to the right.
- Do not pull into a place if there is no way out.

It is easy to get stuck or blocked in with a trailer. Avoid pulling into a small parking lot that requires complicated backup maneuvers to leave. Leave plenty of space when parking so a complete turnaround can be made when exiting. Choosing a parking spot that is farther away may be a better option.

 Use a parking brake and chock the trailer's wheels.

Once the trailer is in its desired position, set the towing vehicle's parking brake and chock the trailer's wheels. Avoid parking on hills.



Texas Light-Duty Trailer Laws

The <u>Texas Department of Public Safety</u> (TxDPS) oversees the laws and regulations for trailers. The list on the following page is subject to change and may not be inclusive. It is designed for reference only. Contact TxDPS for current requirements.

- Texas Trailer Brake Laws

 A trailer is required to have brakes if
 its gross weight exceeds 4,500 pounds.
 A trailer with a gross weight between
 4,500 to 15,000 pounds is not required
 to have brakes if towed at 30 miles per
 hour (mph) or less.
- **Texas Trailer Dimension Laws** The total length of a trailer and the towing vehicle cannot exceed 65 feet, including bumpers. There is no law regulating trailer length alone. Height cannot exceed 14 feet, and width may not exceed 102 inches, excluding mirrors and safety devices.
- **Texas Trailer Hitch and Signal Laws** The connection between a towing vehicle and a trailer must be strong enough to pull all the weight towed. The distance between the towing vehicle and the trailer may not exceed 15 feet, except when transporting poles, pipe, machinery, or other objects of a structural nature that cannot be readily dismembered.

A driver towing another vehicle using a chain, rope, or cable must display a white flag or cloth not less than 12 inches square on the connection.

Safety chains of a type approved by TxDPS must be crisscrossed and attached in an approved manner from the trailer (or trailered vehicle) and the towing vehicle.

• Texas Trailer Lighting Laws

A trailer that is at least 80 inches wide must be equipped with:

- o two front clearance lamps, one on each side;
- o two rear clearance lamps, one on each side;
- o four side marker lamps, one on each side near the front, and one on each side near the rear;
- o four reflectors, one on each side at or near the front and one on each side at or near the rear; and
- o hazard lamps.

A trailer that is at least 30 feet long must be equipped with:

- o two side marker lamps, one centrally mounted on each side;
- o two reflectors, one centrally mounted on each side; and
- o hazard lamps.

Light-duty trailers (and all pole trailers) must be equipped with:

- o two side marker lamps, one at each side at or near the front of the load;
- o one reflector at or near the front of the load; and
- o one combination marker lamp on the rear that emits an amber light to the front and a red light to the rear and side.

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- **Texas Trailer Mirror Laws** A towing vehicle must be equipped with a mirror to reflect a distance of at least 200 feet behind it.
- Texas Trailer Speed Limit Laws
 For trailers with a GVWR under 26,000
 pounds, the speed limit is the same for
 passenger cars and trucks.
- **Texas Trailer Towing Laws** A person may not ride in a trailer while it is being towed.

This fact sheet provides essential safety information for towing light-duty trailers. For more information on trailer safety awareness or creating a workplace driving safety program, please contact a Workplace Safety Training Specialist at the Texas Department of Insurance, Division of Worker's Compensation at <u>safetytraining@tdi.texas.gov</u>.



www.txsafetyatwork@com 1-800-252-7031, Option 2

The Texas Department of Insurance, Division of Workers' Compensation (DWC)-Workplace Safety P.O. Box 12050 Austin, TX 78711-2050

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