## Outline - Trip planning

1. Discuss driver involvement in trip planning.

**Content:** Driver involvement in trip planning varies from company to company. Drivers who work for a company that runs established routes may have very little involvement in trip planning. Drivers who work for an irregular route carrier are more likely to be involved in trip planning.

In planning a trip, the driver must consider several factors:

The driver. First and foremost the driver must look at his/her abilities and limitations. He/she must have proper rest before starting out, be given a reasonable amount of time to complete the trip in, and must follow the hours of service regulations. Time must be allotted for food, fuel, and rest stops.

The vehicle. The number of trailers, number of axles required for gross weight, and overall weight and length restrictions need to be looked at. Clearance and weight restrictions could be a factor in planning the trip.

The load (cargo). The type of cargo being hauled, its weight, and its center of gravity must be considered. Traffic laws and regulations in certain communities, dealing with the cargo being hauled may play a part in planning the route.

The road conditions. Weather and traffic conditions must be taken into account. Remember, traveling in the northern U.S. or in mountainous areas in the winter may require extra time. Its also a good idea to try and schedule rest stops during rush hours in heavy traffic areas.

**Notes:**This is a good time to open the session to discussion. Ask your veteran drivers for examples of incidents that delayed their travel and if they could do it over again how would they change the situation (take a different route, stop for lunch until traffic cleared etc.).

### **Exercises:**

2. Discuss the hours of service regulations.

**Content:** Part 395 of the Federal Motor Carrier Safety Regulations (FMCSR) sets limits on how long the driver of a commercial motor vehicle may remain on the road.

The hours-of-service regulations play a major part in the way a trip is planned. They are based on three or four basic limits, depending on the nature of your operations:

- \* For property-carrying vehicles: 11 hours driving time, 30-minute breaks every 8 hours, 14 hours duty time, and 60 hours/7 days or 70 hours/8 days.
- \* For passenger-carrying vehicles: 10 hours driving time, 15 hours on-duty time, and 60 hours/7 days or 70 hours/8 days.

Driving Time. All time spent behind the wheel is considered driving time. After 11 hours of driving time in a property-carrying vehicle, the driver must have 10 hours of rest before driving again. In order to have the full 11 hours of driving time available again, the driver must have 10 consecutive hours of rest. For drivers of passenger-carrying vehicles, the limit is 10 hours of driving following 8 hours off duty.

On-Duty Time. A driver may not drive a property-carrying vehicle after the 14th consecutive hour after coming on duty, following 10 hours off duty. In order to drive again, the driver must have 10 hours off. The 14 hours are consecutive and include all off-duty, on-duty, and driving time. For a passenger-carrying vehicle, the driver cannot drive after accumulating 15 hours on duty. In order to drive again he/she must have 8 consecutive hours of off-duty time.

Rest Breaks. A driver may not drive a property-carrying vehicle after 8 consecutive hours have passed since the end of the driver's last off-duty and/or sleeper-berth period of at least 30 consecutive minutes.

The hours-of-service regulations play a major part in the way a trip is planned. They are based on three or four basic limits, depending on the nature of your operations:

60/70-Hour Rule. Under the 60-hour/7-day schedule, a driver is prohibited from driving after having been on duty for 60 or more hours in any 7 consecutive days. Under the 70-hour/8-day schedule, a driver is prohibited from driving after having been on duty for 70 hours in any 8 consecutive days. Any non-driving work done after reaching either limit must be added to the driver's total on-duty hours. Drivers of property-carrying vehicles can reset their 60/70-hour clocks (back to zero) after accumulating a qualifying 34 or more consecutive hours off duty.

The 7 or 8 consecutive days do not mean a work week, they mean any consecutive period of 7 or 8 days. Therefore, a driver doesn't start his on-duty hours clock over at the end of 7 or 8 days. The oldest day's hours drop out of consideration and the new day's hours are added.

**Notes:** The thoroughness of this portion of the lesson will depend on your driver's experience and understanding of the hours-of-service regulations. Use overheads, a dry erase board, and handouts to illustrate the regulations. Detailed hours-of-service lessons can be found in the KellerOnline Training Topics under the titles "Hours of Service: Property-Carrying Vehicles" and "Hours of Service: Passenger-Carrying Vehicles."

## **Exercises:**

3. Discuss driver security issues.

**Content:** Professional drivers, their vehicles, and the loads they haul are the most vulnerable while in transit. Trip planning should include an assessment of possible situations that might be targeted by criminals, cargo thieves, and other individuals or groups with evil intent to victimize drivers while out on the road.

Drivers should be instructed to take the following steps to help reduce risk and increase personal and corporate security:

- \* Maintain regular communication. Companies should have a policy for regular driver check call procedures (either phone or via truck-to-terminal satellite communication system).
- \* Never discuss load-related information. Information such as load content, pick-up and delivery schedules, and routing should never be discussed with anyone while out on the road. Drivers should be very suspicious of anyone asking about their load or destination.
- \* Stop and park safely and securely. When drivers need to stop, instruct them to do so correctly. Stop only at reputable truck stops or high-traffic rest areas. Park in well-lit areas where other trucks are present. Always lock the vehicle.
- \* Be suspicious of anyone asking you to stop. A frequent ploy used by hijackers is to create a scenario that forces or compels the driver to stop.
- \* Inspect the vehicle. The equipment should be inspected after each stop or rest period. In addition to conducting a normal inspection of safety-related items, drivers should also check their seals and look for anything unusual or suspicious on the vehicle.
- \* Hazmat load routes and parking. Drivers hauling hazardous materials must use designated hazardous materials routes when applicable. Generally, avoid heavily populated areas and take as direct a route as possible. Be aware of attendance and parking regulations that might apply.

**Notes:**This would be a good time to discuss any company policies regarding safety and security issues that relate to planning the trip and making the trip.

# Exercises:

4. Discuss estimating time, fuel, and expenses.

**Content:**Estimating the time a trip will take is necessary for planning stops, estimating arrival time, and of course meeting schedules. Fuel usage estimates are needed to plan fuel stops. Estimating the amount of money a trip will take means planning for food, fuel, tolls, and overnight stops.

Estimating trip time. Allow 2.5 hours for every 100 miles traveled. This amount of time is a reasonable amount to cover driving time, meals, fuel stops, and rest stops. Keep in mind weather, traffic and other conditions which could affect trip time. Remember, no driver will be able to drive the maximum speed limit at all times.

Estimating fuel usage. The first step in estimating fuel usage is to determine the range of the vehicle. To find the range of a vehicle, multiply the tank capacity (in gallons) by the miles per gallon the vehicle delivers. Average fuel usage is based on highway driving, city (town) driving, slowdowns and idling time.

Estimating expenses. When estimating expenses the driver must consider the distance to be travelled, the time the trip will take, and the possibility that emergency funds may be needed. Items topping the expense list include meals, layovers, tolls, rest stops and fuel stops. In an emergency a driver may need funds for towing, a service call, or an unexpected layover.

**Notes:** This is a good time to give your drivers some practical work in estimating time, fuel, and expenses. The "Estimating time, fuel, and expenses" exercise can help reinforce what you have just discussed.

### **Exercises:**

Discuss map reading.

Content: The road map is a necessary tool, helping drivers determine routes and locate specific destinations.

Essential map reading skills all professional drivers need to be proficient in include:

- \* locating the starting point, intermediate stops and the destination;
- \* laying the route out on a map;
- \* estimating point to point mileage using the map scale; and

\* reading map symbols.

Maps have many characteristics drivers need to understand in order to successfully plan a trip.

The majority of maps are set on a box or grid pattern with letters along the top and bottom and numbers along the sides of the map. A box or key within the map lists destinations (cities, towns, streets) and where to find them within the grid system.

All maps include a scale. The scale lists how many inches represent a given number of miles. Map scales are good for figuring a rough mileage estimate. Mileage charts give a better idea of true distance.

Symbols are also included on all maps. Symbols represent everything from the size of a community to where to find a rest area. Symbols vary from map to map and all maps include a legend explaining the symbols used.

There are two types of maps most drivers rely on:

Highway maps. Highway maps show an entire state or region. They sometimes include major cities in some detail. Features vary depending on the map, but all include major routes, road types, toll roads and freeways, population centers, and railroad crossings. Highway maps are best used to locate major highways and routes for long distance travel. City maps provide the greatest detail. Major street names are readable and secondary streets can often be located on these types of maps.

**Notes:**This is a good time to give your drivers some practical work in designing a complete trip plan that includes all of the issues that you have discussed. The "Design a complete trip plan" exercise can help reinforce your lesson.

#### **Exercises:**

6. Review the five basic steps in all types of trip planning.

Content: There are five basic steps involved in all types of trip planning.

- 1) Make sure paperwork is up to date. Have proper freight documentation, current hours of service records, and proper permits and licenses.
- 2) Select the route. Remember, many variables are involved including cargo restrictions, traffic conditions, and weather.
- 3) Estimate time and plan for stops. Plan to meet the scheduled deadline but consider driver and vehicle factors as well as weather and road conditions.
- 4) Estimate fuel use and fuel stops.
- 5) Estimate trip expenses. Understand the length and nature of the trip, what conditions to expect on the road, and plan for the unexpected.

**Notes:**At this time you may want to conclude your session by reviewing the five basic steps involved in trip planning. This would be a good time to pass out the handout provided in this lesson (Five Step Trip Planning) that covers the five basic steps involved in trip planning. Also distribute a handout outlining your company's policies and procedures for trip planning.

A third exercise "Trip planning review" can be used to wrap up your lesson.

## Exercises: