



Trip Planning and Navigation



Planning Your Travel

- Local/Short Distance Travel vs. Long Distance Travel

Do you plan the same way?

Short Trip-Questions to Ask Yourself

- Is this trip necessary?
- Do I have enough time?
 - Allow time for the trip
 - Listen to weather and traffic reports
 - Choose the best travel time or best route to travel
- Is my vehicle prepared for a short/long trip?
 - Windshield wiper fluid
 - Tire condition
 - Lights are working properly





Planning an Extended Trip

- Prepare Vehicle (tires, brakes, engine, etc.)
- Loading Considerations
- Basic and Emergency Equipment (maps, jack, flashlight, first aid kit etc.)
- Personal Preparation
 - ✓ Determine route (fastest, shortest, scenic)
 - ✓ Traffic- morning evening rush hour
 - ✓ Miles traveled/day
 - ✓ Extra keys, bagged meals, medicines

Personally Preparing For a Trip

The driver is the most important factor in having a safe road trip.

Remember...

- Sleep is important
- Breaks are essential to stay alert
- Drive during “waking hours”
- Plan on start and end times for the drive





Planning Is Key - Discussion

- Do you have a GPS device or map?
- Do you know the way? Do you have a backup plan in case you get lost?
- Have you considered the time and any hazards you might encounter (e.g. construction, road condition, congestion).
- Will there be people in the area to ask questions for help if you are lost?
- Is my route safe? Can I call someone for help?

Consider Time of Day, Weather, and Lighting

Be sure to consider the time of day that you'll be traveling. Traveling into or away from the sun and or traveling at busy rush hours times may affect progress.



Mapping

- Choose the right type of map.
- Orient the map by using the directional compass on the map, having the “N” pointed up.
- For a road trip, have should have both a road map/atlas and map app on a phone or computer tablet available and programmed before starting a trip.



Reading a Map

- Good maps include a legend that explains the markings and symbols; review to help you understand the map.
- Locate your current position on the map (or starting point/position).
- Locate where you want to go. If there are several points of interest mark them on the map.
- Plot your course of travel creating checkpoints along the way (plotting several routes is a good idea instead of just one long route).



Mapping Learning Activity

Instructions: Using a NYS roadmap, answer the following questions:

- What are the grid location coordinates for Albany?
- How many miles is it from Albany, NY to Binghamton University?
- List all the major routes and map 2 different routes for Albany to Cortland?
- Which route would be fastest? Which route is most direct?
- Which city is larger by size/area: Watertown or New Paltz?



GPS Devices and Phone Apps

- How much time will it take to reach my destination?
 - GPS devices are really good for telling you this information.
 - You can find this information on Google maps or Map Quest to mention only a few of these sites.
- Technology can also help re-route drivers for faster travel around congested areas. Inform regarding how much time can be saved by taking an alternate route can make decision-making easier.

NOTE: Be sure to consider the time of day that you'll be traveling. New technology is constantly being developed to help with traffic alerts. Often they will “red line” traffic delays and “green line” where traffic is moving smoothly.



Additional Mapping Resources: Travel Apps

- Google Maps
- Rand McNally
- Map Quest
- GPS
- Gas Buddy
- WAZE



Checking for the Latest Technology

- Some maps and devices do not take into account changes in traffic patterns, traffic accidents, or detours. Also, weather will play a significant role in your travel time if the weather is bad.
- Let's pull up a few apps to see how this is done.



Navigation Tips

- Have your route all planned and share the plans with others in the car.
- If sharing the drive with someone, ask that they help navigate the trip.
- GPS can sometimes be misleading, so make sure you have the address correct.
- If you have problems with directions N-S-E-W find and use landmarks.
- Do you have a few navigation tips to share?



After You Plot Your Route

Once you have your routes plotted ask yourself:

- Do any of my routes require tolls? If so, how much will it cost me in tolls to take that route?
- Where will the toll start and what toll exit will you need to look out for?
- EZ PASS? How does it work? Benefits of purchasing?



Highway Electronic Tolling Procedures

- Account required – tolls are electronically billed.
- Transponder registered to one specific vehicle.
- Using Electronic Tolling:
 - ✓ Select the correct toll lane
 - ✓ Observe the posted lane speed limit
 - ✓ Watch for pedestrians and other vehicles entering or exiting
 - ✓ Wait for light or message to proceed



Other Trip Preparations

Do you need lodging? How many nights will you need?

On your trip, will you need rest breaks? Do you know where you want to stop and take a stretch break?

Will you be stopping for food or will you be packing food to bring with you?



Service Your Vehicle

Check for major and minor difficulties:

- Brake system
- Exhaust system
- Steering system
- Cooling and heating system
- Engine system
- Tires and spare
- Wipers and windshield wiper fluid



Packing an Emergency Bag

- Every vehicle should have an emergency supply kit.
- Check every six months and replace expired items.
- What emergency equipment should we pack?



Vehicle Emergency Kit Should Include:

- Properly inflated spare tire, wheel wrench and jack
- Jumper cables
- Toolkit and/or multi-use tool
- Reflective triangles
- First aid kit
- Non-perishable foods (granola bars, nuts, dried fruits, hard candies)
- Drinking water
- Car charger
- Fire extinguisher
- Duct tape
- Additional items for cold weather: snow brush, shovel, windshield wiper fluid, warm clothing and blankets, cat litter for traction



Road Trip Planning Learning Activity

Instructions:

- With a group, pick a road trip destination in another state and plan your trip.
- Make sure to include information on what roads you need to check and what you need to pack. How will you find out information about the other states you are driving through?
- What are the potential environmental factors and conditions that you could experience? What will you need to prepare for these possible environmental factors and conditions?



Rental Vehicles

Many trips will be a combination of flying and driving. You may have to get a rental car. Some decisions you'll want to consider ahead of time:

- What size and type of vehicle do you want? Compare prices
- How long do you need it? A weekly rental may be cheaper than a daily rental.
- Will it be a round-trip or one-way rental?
- How will you handle insurance? Check to see if your regular insurance will cover the rental.
- Will you fill the gas tank on return, or will you buy a full tank of gas with your rental agreement?
- Don't forget to bring car seat if needed.



Other Types of Travel Choices

- Uber/ Lyft Type Services
- Ride Sharing
- Car-Pooling



If You Need To Tow a Trailer?

When pulling a trailer:

- 1) Doubling the time and space you need to accelerate, slow, and turn.
- 2) Cutting your fuel economy almost in half.
- 3) Jackknifing can also be a problem if the weight isn't distributed correctly.



Towing a Trailer Takes Planning

Check the following:

- Vehicle's owner manual that it can carry the load you want to carry.
- Check fluids.
- Double check all vehicle and trailer lights.
- Ensure that the trailer is properly fastened to the vehicle.
- Have a spare tire for the trailer.



Loading Tips

- You will need to register your trailer in NYS, in addition to getting it inspected yearly.
- Ensure your insurance will cover you.
- When properly loaded and hitched, the rear of your towing vehicle should support 10 to 15 percent of the trailer load.
- Never load your vehicle to the owner's manual limits when you tow a trailer.
- Assign the heaviest passenger to the front seat and load only light items in the rear seat and trunk of your vehicle.



Curves

- It is easier to control your vehicle if you reduce speed before you enter curves.
- On roads that curve right, all more distance from the edge of the pavement. Otherwise, your trailer wheels could drop to the shoulder, causing a dangerous weight shift and accelerated tire wear.
- Keep toward the center line.
- On left curves, stay to the right so you do not cross the center line.



Trip Planning Exit Quiz

1. When towing a vehicle allow twice as much distance to pass. (T/F)
2. Always carry a spare can of fuel when traveling on a long distance trip. (T/F)
3. In order to stay alert while driving on a long distance trip, take a break every four hours. (T/F)
4. When typing the coordinates into your GPS for short trip travel, make sure to type in the correct address using the correct name of street, road or avenue so as to not be routed to the wrong area. (T/F)
5. Make sure that you have checked windshield wiper fluid before heading out on a long distance trip. (T/F)
6. The odometer can help you determine how many mpg (miles per gallon) you are getting on a given trip. (T/F)
7. Map legends can help identify the type of road that your route will follow, as well as exits numbers. (T/F)
8. Load the heaviest items on the bottom forward part of the trunk. (T/F)

References

1. AAA. Your Driving Costs: How Much Are You Really Paying to Drive.
<https://www.aaa.com/AAA/common/AAR/files/AAA-Your-Driving-Costs.pdf>
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<https://dmv.ny.gov/registration/sample-registration-documents>
3. New York State Department of Motor Vehicles. Sample Abstract of Driving Record.
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