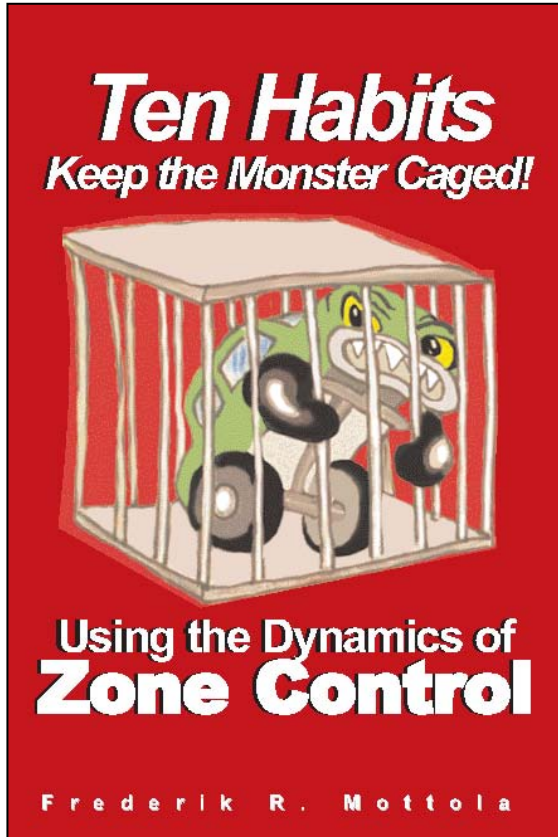


# Section Six

## Ten Habits of Zone Control



by

Professor Frederik R. Mottola  
National Institute for Driver Behavior • NIDB.org



**The traffic light is turning red. Try to time your arrival for a green light.** The red light is a closed front zone. By treating it as a closed front zone—rather than as a red light—you will have an opportunity to practice a behavioral pattern that can be very valuable in a number of other closed front zone situations. An example of a similar situation occurs when you are on a highway and all traffic comes to a sudden stop because of construction or a crash. That becomes a high-risk moment, which you would have very few opportunities to “practice.” When you see a red light as a closed front zone, adjust speed to arrive into an open zone. Most drivers only learn that a red light means to stop. By setting a higher standard (i.e. to arrive at the intersection with a green light rather than a red light), you are able to give yourself a test situation where you can have success or failure. There will be thousands of red traffic lights that you will be approaching. That will give you thousands of opportunities to have success!



**The traffic light just changed from red to green. There are two cars stopped. How many seconds before the vehicle in front of you is able to move?**

**Answer:** The vehicle in front will not move until two seconds after the light changes. It takes one second per vehicle, normally, before the last vehicle is able to move. If it takes longer, there could be a problem delaying the traffic flow such as: a car stopped to make a left turn, a pedestrian crossing, a stalled car, or an inattentive driver.



Even in NYC it is possible for you to use all the principles and habits that we have advocated in this book.

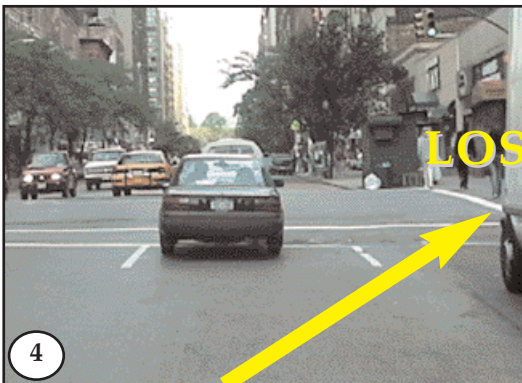
**Photo 1:** A search 15 seconds ahead to our target area shows there is a closed POT caused by the red light.



**Photo 2:** We are applying slight braking action to delay our approach into the closed front zone. The car ahead of us rushed up to the red light only to have a longer delay, and more stress, while stopped for the light.



**Photo 3:** The traffic light changed to green and the car in front is moving. We have an open front zone. We evaluate the LOS conditions at the intersection and see the greatest LOS blockage is created by the stopped delivery truck.



**Photo 4:** We want to search to the front of the parked truck when we are able to see at a 45-degree angle to its front. While moving, this gives us the final view before we are beyond our PONR (point-of-no-return). If we planned to make a right turn at this intersection, what would we be looking for before turning? We should expect that pedestrians may be crossing and we would need to yield the right of way to them.

### Backing is a High-Risk Task

In many corporations, 40-50 percent of all of their fleet crashes occur when the vehicle is backing. Yet, the amount of time a driver spends backing is usually less than 1 percent of the total driving time.

The reason most backing crashes occur is because the driver cannot effectively see to the rear of the vehicle. A driver cannot see the pavement within 45 feet to the rear of the vehicle. Therefore, any number of obstructions lying on the pavement can go undetected. Children are killed each year by parents backing the car over the child playing to the rear of the vehicle!

When backing is required, check to the rear of the vehicle before getting into it. Use convex mirrors.

### To reduce risk while backing:

- Avoid backing if possible.
- If backing is necessary, do it when you first arrive.
- Back the least amount of distance (use reference point).
- Back slowly, inch by inch.
- Continually check all four corners of the vehicle as well as directly to the rear.
- Avoid prolonged stops before backing.
- Look over your right shoulder, and use all three mirrors without fixations of more than 2 seconds.
- Use convex mirrors that show your rear tires.
- Always avoid backing into a traffic flow (don't back out of drive-ways; use turnarounds).

### Reduce Risk: Back Into a Perpendicular Parking Space!

#### 1. Side Position

Get 2-3 feet from the parked cars. Look for cars that may back into your car.

#### 2. Forward Position

As the driver of the car, your body will appear to be aligned in the center of the space. In a van, align your body with the second line of the space (a).

#### 3. Select 45-Degree Target

Use the outside edge of the driver's side mirror to align your vision to a stationary object. Put left signal light on.

#### 4. Creep and Turn Wheel Fast

Check for traffic. Aim for the target.

#### 5. Use The Least Forward Movement

Try to move the car as little as possible to get on target. This will prevent cars from driving to the rear of your car while you are attempting to back up.

#### 6. Line Up Car With Space

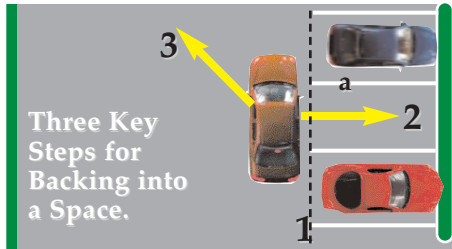
Before straightening the tires, look over your right shoulder, or check the convex mirror, for alignment to the space.

#### 7. Shift To Reverse

Shift to reverse after the back of the vehicle is aligned to the space and the tires are straight.

#### 8. Back To Rear Pivot Point

This is when the corner of the parked car is in your rear window's blind spot (see illustration to the right).



#### 9. Inch and Turn Wheel Fast

Once the car is at the pivot point, move the car inch by inch and quickly turn the wheel fully to the right.

#### 10. Get Car Straight In Space

Observe when car is straight in the space.

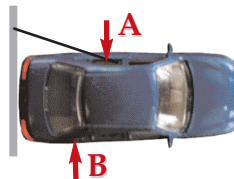
#### 11. Inch, Straighten Tires

Inch the car slowly back while you quickly straighten the tires.

#### 12. Back To Rear Reference Point

Check your rear reference point by glancing over your left shoulder. You should see the rear line appear in the middle of your rear-side window (see illustration below).

#### 13. Apply parking brake.



**A = where you will see the Rear Reference Point.**

**B = the Rear Pivot Point.**