



# Oregon

Theodore R. Kulongoski, Governor

## Department of Transportation

Traffic Management Section

355 Capitol Street NE, Fifth Floor

Salem, OR 97301-3871

Phone (503) 986-3568

Fax (503) 986-4063

April 21, 2003

FILE CODE:

Shelley J. Row, P.E.  
Director, Office of Transportation Operations  
Federal Highway Administration  
400 Seventh St., S.W.  
Washington, D.C. 20590

**RE: REQUEST TO EXPERIMENT USING "RV FRIENDLY" SYMBOL**

Dear Ms. Row:

The Oregon Travel Information Council (TIC), a state agency separate from the Oregon Department of Transportation that administers the Interstate Logo and Tourist Oriented Destination sign programs in our state, was recently approached by a national Recreational Vehicle (RV) organization with a proposal for an "RV Friendly" symbol program that could prove to be a beneficial aid to the safety and convenience of drivers of large RVs.

Motorists driving RVs and motor homes, and/or towing trailers, have difficulty identifying and locating service facilities that have large parking spaces and other amenities that over-sized vehicles need. Drivers of RVs wanting to stop at restaurants, tourist attractions, and other facilities are faced with uncertainty that they will be able to safely maneuver into a business until they arrive and enter. If the facility does not have adequate space for parking or turning around they may be faced with having to turn their large vehicles around sometimes in unsafe situations. Faced with those doubts and the fear of getting into a tough spot, RV motorists may bypass destinations and businesses not knowing that they could have been well accommodated to park, to buy fuel, or to camp.

This problem could be alleviated by advance symbol signing that would alert RV motorists of facilities that catered to the special needs of large vehicles. If these symbols were attached to the Logo signs of qualified facilities, RV motorists would know with confidence that those businesses would provide them with an easily accessible and maneuverable destination.

Shelley J. Row, P.E.  
Page 2  
April 21, 2003

Enclosed for your review and approval is a more detailed description of the proposed experiment using a format given to the TIC by members of your office. Also enclosed are photographs of the proposed symbol. The TIC will be responsible for completing the evaluation. If you need any additional information or have any revisions to the proposed experiment or evaluation plan, please contact me at 503-986-3606 or Mr. Jim Renner of the Oregon Travel Information Council at 503-373-0870.

Thank you for your consideration of this matter.

Sincerely

A handwritten signature in cursive script, appearing to read "Edward L. Fischer".

Edward L. Fischer, P.E.  
State Traffic Engineer

cc: Nick Forte, Salem, FHWA Division Office  
Jim Renner, TIC  
(both w/ attachments)

EF:dpy

Enclosure

## Request to Experiment using "RV Friendly" Symbol

### A. Statement indicating nature of the problem.

Motorists driving recreational vehicles and motor homes, and/or towing trailers, have difficulty identifying and locating service facilities that have large parking spaces and other amenities that over-sized vehicles need. Drivers of RVs wanting to stop at restaurants, tourist attractions, and other facilities are faced with uncertainty that they will be able to maneuver into and park safely at a business until they arrive and enter. Faced with those doubts and the fear of getting into a tough spot, RV motorists will bypass destinations and businesses not knowing that they could have been well accommodated to park, to buy fuel, or to camp.

This problem could be alleviated by advance symbol signing that would alert RV motorists of facilities that catered to the special needs of large vehicles. If these symbols were attached to the Logo signs of qualified facilities, RV motorists would know with confidence that those businesses would provide them with an easily accessible and maneuverable destination.

### B. Description of application of the traffic control device, how it was developed, the manner in which it deviates from the standard, and how it is expected to be an improvement over existing standards.

Representatives of the Family Motor Coach Association (FMCA) approached the Oregon Travel Information Council (TIC) with a request to develop a symbol sign that would provide motorists driving RVs or pulling large trailers notice of facilities that provided large parking spaces and other amenities that cater to over-sized vehicles.

The design concept recommended by the FMCA was a variation on the widely recognizable "smiley face", but with the letters RV substituted for eyes. The symbol was called "RV Friendly".

At its March 7, 2003 meeting, TIC (which includes ODOT representation) gave its approval to proceed with a pilot project to test the RV Friendly symbol on Logo signs along a portion of Interstate 5.

Working with the ODOT Sign Shop, a variety of sizes and colors of the "RV Friendly" symbol were fabricated for evaluation and testing. A prototype symbol consisting of a 10" circle with black 6" letters, smile, and border on yellow high-intensity sheeting was given preliminary review by FHWA. FHWA directed that the design use a minimum 8" letter and the elimination of the smile. As with prior designs, this last design was placed temporarily for drive-by visibility tests and photographing (see under C and D below).

The use of the "RV Friendly" symbol deviates from the standard supplemental message sign used under logo plaques in that it is a symbol sign that is a part of the logo plaque versus a text message that is placed below the plaque. Common supplemental plaque messages carry such texts as, "24 Hours" and "Diesel" in 6" letters. The "RV Friendly" symbol is a yellow circle with black 8" RV letters. The symbol is placed on the lower right corner of the logo plaque.

The use of the symbol is an improvement over the supplemental text messages because it is far more visible and recognizable. At a long distance, the placement and color of the round shape is easily discernable. As motorists approach the sign, the letters RV are recognizable and the motorists are able to focus their attention on the name and location of the associated business, rather than trying to read multiple text messages arrayed under various logo plaques.

C. Illustration that would be helpful to understand the use of the traffic control device.

Illustrations are attached as Exhibit A.

D. Supporting data explaining how the traffic control device was developed, if it has been tried, in what ways it was found to be adequate or inadequate, and how this choice of device or application was derived.

On January 27, 2003, a variety of symbols were tested on scrap logo plaques. High intensity sheeting in a variety of colors was cut into 8" squares and circles to test for best fit on scrap logo plaques. Circles were found to be preferable to squares because they required less space to fit on the plaque, but circles required smaller letters (2.75") than were possible with squares (3.5"). The following colors were also tested for visibility: silver on black, black on silver, silver on yellow, yellow on silver, yellow on black, and black on yellow. Black on yellow was found to be the most visible combination of colors.

The original concept for use of the symbol was to simply adhere the symbol directly to the logo plaque as a sticker. This idea was dropped because of the damage that would be inflicted on a logo plaque if the RV Friendly sticker would have to be removed. Instead, it was determined that it would be preferable to adhere the symbol to a piece of round aluminum and then attach the symbol with screws to the logo sign and/or backboard.

On February 13, 2003, a day and night field test was made by temporarily attaching RV Friendly symbols to a logo board. Circles with 7" diameters and 2.75" letters were used in both high-intensity and diamond-grade sheeting for visibility. The test results were that the 7" circles were too small, as were the

letters; and that the high-intensity sheeting had good reflectivity, but the diamond-grade sheeting was too intense for the overall sign display.

On February 25, 2003, another day test was made by temporarily attaching a 10" round symbol with 4" letters, and a 12" symbol with 4.75" letters to a logo board. The results showed that the 10" circle was a better fit than the 12" circle because it covered less space around the corner of the logo plaque, but was still large enough to be easily discernible from a distance. The test also showed that the 4.75" letter was better, but still not big enough.

These test results were reviewed at the March 7, 2003 TIC meeting. The Council directed that the symbol be modified by increasing the letter size to 6" to conform with the MUTCD standard for supplemental plaque messages, and that a black border be added to the circle to set the symbol apart from a logo plaque that may also be using a yellow background.

On March 26, 2003, a 10" circle with 6" letters, a black border, and a decreased smile was fabricated for testing and shown to ODOT Traffic Section on March 31. On April 1, an electronic version was sent to FHWA for viewing and on April 2, another temporary logo board test was conducted. The results showed that the 6" letters were an improvement, but that the smile is not discernible until reaching a short distance from the sign.

On April 7, 2003, FHWA directed that the symbol use a minimum 8" letter size and the elimination of the smile. This symbol was tested on April 10, 2003. The size of the circle was increased from a 10" to a 12" diameter to accommodate the 8" letters which raised concerns of whether the symbol would still fit the limited space available in the lower right corner of a logo plaque. Test results however showed that the larger circle was still a good fit and that the 8" letters were clearly discernible. Overall, the symbol appears to have good proportion in comparison to the logo plaque and compliments, rather than distract from, the information displayed on the logo board.

Pictures of this last symbol and test can be seen in Exhibit A.

E. Legally binding statement certifying that the traffic control device is not protected by a patent or copyright.

All work done in this experiment for the design of the RV Friendly symbol has been preformed by TIC and the ODOT, both of which are state agencies who operate within the public domain and do not seek a patent or copyright of this sign.

F. Time period and location of the experiment.

The time period of the experiment would occur from June through August of 2003 on Interstate 5 between exit 233 (Albany) and exit 278 (Aurora). Existing TIC customers who have logo signing and who meet qualifications will be asked to participate in the pilot project.

G. Detailed research or evaluation plan providing for close monitoring of the experimentation, with before and after studies and quantitative data describing the performance of the experimental device.

TIC customers with logo signing on Interstate 5 between Albany and Aurora are being screened to see if they meet the qualifications necessary for their businesses to be considered RV Friendly. Candidate businesses will then be asked if they would like to participate in the experiment. If they do, an application with qualifying standards will be administered to the business. Volunteers from FMCA and other RV groups may visit the facility to observe whether the standards are met.

Qualifying standards to be RV Friendly include the following. For all facilities, roadway access and egress must be hard surface, free of potholes, and need lane widths 12' wide, and never less than 11' wide with a minimum swing radius of 50' to enter and exit the facility itself. For facilities that require short-term parking, such as restaurants and tourist attractions, the facility must have two or more spaces that are 12' wide and 65' long with a swing radius of 50' at both ends to enter and exit the spaces. For fueling facilities, canopies must have a minimum 14' clearance and those selling diesel fuel to RVs must have non-commercial nozzles on pumps. For campgrounds, there must be two or more spaces that are 18' wide and 45' long.

If qualified, TIC will install RV Friendly symbols on the business' logo plaques and provide the business with follow up RV Friendly symbols to guide RV motorists to the location of their RV Friendly services, such as parking spaces, or diesel fuel pumps with non-commercial nozzles.

The Travel Information Council is working closely with FMCA to educate and inform RV motorists as to the meaning and purpose of the RV Friendly symbol. In order to receive coverage in summer issues of major RV magazines, a press release has been issued to Family Motor Coaching, Motor Home, Highways, and Trailer Life magazines. Press releases to local media and membership organization newsletters are planned for May. A presentation to an FMCA area rally in Albany, Oregon is scheduled for June 5<sup>th</sup>.

The information campaign is being done to coordinate with a short customer questionnaire that will be administered by participating businesses in late June,

late July and late August. The questionnaire will ask whether the customer observed the RV Friendly symbol on the business' logo plaque, if the customer knew the meaning of the symbol, and how the customer learned about the symbol.

At the conclusion of the experiment, the owner/manager of each participating business will be interviewed to assess whether they found the symbols to be beneficial to their business and customers. They will also be asked if they think the symbol should become permanent offering.

H. Agreement to restore the site of the experiment to a condition that complies with the provisions of MUTCD within three months following the end of the time period of the experiment.

It is agreed that all RV Friendly symbols will be removed from logo signs and on-site locations at participating businesses before November 30, 2003. This agreement also provides that ODOT will terminate the experiment at any time that it determines significant safety concerns are directly or indirectly attributable to the experimentation.

I. Agreement to provide semiannual progress reports for the duration of the experimentation, and an agreement to provide a copy of the final results of the experimentation to FHWA within three months following completion of the experimentation.

It is agreed to provide semiannual progress reports should the experimentation be extended to such a time frame. It is agreed that a copy of the final results will be provided to the FHWA's Office of Transportation Operations within three months of the scheduled completion of the experimentation (copy by November 30, 2003).

RV Friendly Symbol



EXIT 252

FOOD	LODGING
 RESTAURANT 24 HOURS 	 PHOENIX INN SUITES 
 McDonald's	