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# Community Transportation

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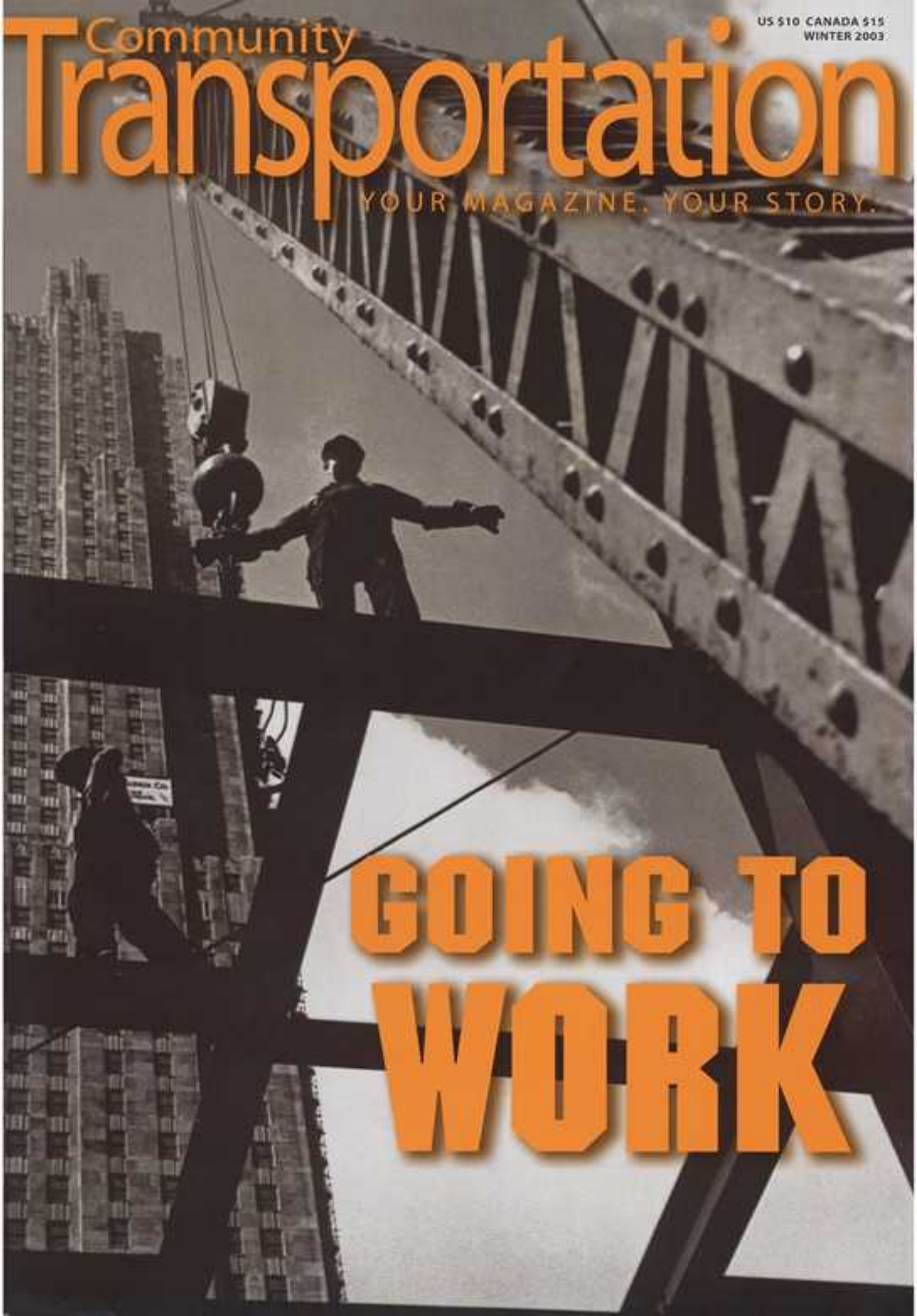

## GOING TO WORK

# Quality of the Ride

By Dave Barbulesco

As the public transportation industry strives to keep pace with a rapidly expanding customer base, agencies are becoming increasingly sensitive to providing more than just a conveyance service.

Transit providers are focusing on improving and maintaining high levels of safety and efficiency while also raising the bar on passenger comfort and convenience, including ride quality.

Overall ride enhancement in larger transit buses is being addressed with a variety of air-ride suspension systems that effectively diminish road impact. Medium- and light-duty bus agencies, particularly in the paratransit sector, are also searching for improved ride performance.

"Someone in a wheelchair or people with limited mobility need to be as comfortable as possible," says Steve Perry, Superintendent Bus Maintenance, Paratransit for the Metropolitan Atlanta Rapid Transit Authority (MARTA). "They don't need to be worried about hanging on when the bus hits bumps or encounters rough roads."

To improve ride quality, MARTA is employing a rubber suspension system developed by MOR/ryde International that absorbs road shock before it reaches the bus frame, and ultimately the passenger.

## More Comfort, Less Maintenance

MARTA had installed air-ride systems to upgrade ride performance, but was still looking for a product that would address two key issues.

"Number one was ride quality," Perry says. "The ride with air suspensions was still rough, especially when the vehicle was partially loaded. The second issue was better utilization of labor-hours. Twice a week we were airing up the whole fleet. MOR/ryde's system requires less maintenance."

The system field tested the MOR/ryde system on two paratransit vehicles and experienced dramatic improvement. Perry began phasing in the MOR/ryde RL system when the 2000 models were introduced. Currently, MARTA has 93 buses in service with MOR/ryde and is looking to switch over the entire fleet of 110 vehicles by this summer.

## Hitting Bottom

Skagit Transit, a public transit agency in Burlington, Wash., detected a telling problem during the acceptance inspection of six paratransit vehicles equipped with an air-ride system.

"The vehicles were bottoming out and leaving a one-inch by one-inch indentation on the frame rail," recalls Maintenance Manager Ben Haigh. "We went back to the supplier and asked them to come up with a remedy. They introduced us to MOR/ryde."

After performing the proper paperwork, Skagit installed an RL system that "completely corrected the problem."

Skagit is currently operating six vehicles with MOR/ryde and has not experienced any recurring problems, according to Haigh.

He adds, "MOR/ryde costs less than air and is a lot more economical to work on. You don't have all the air components. Their system is 90 percent mechanical, so really all you have to do is watch the rubber."

## Riding on Rubber

The RL suspension system works in conjunction with factory leaf springs, creating a shared system to isolate road impact. MOR/ryde's rubber shear spring replaces the rear spring hanger on the factory assembly to significantly increase dynamic axle travel.

"The rubber spring adds another dimension because leaf springs don't have vertical motion at the rear spring eye," says David E. Heitzmann, chief engineer for MOR/ryde. "The RL allows the vehicle to float up and down on rubber, eliminating the steel on steel connection that occurs with leaf springs."

MOR/ryde's exclusive RL design has several applications, including front and rear axles along with double and single eye leaf springs. In many cases, MOR/ryde has custom designed an application based on a transit company's specific requirements.

## Growing Industry Presence

MOR/ryde's suspension system is standard equipment for several major transportation agencies, including New York City Paratransit, which operates around 800 vehicles under the name Access-a-Ride

After encountering similar issues as Atlanta did with air-ride systems, New York City Paratransit began considering and testing MOR/ryde. It is currently in the process of retrofitting approximately 200 vehicles with MOR/ryde and has designated the RL system as a standard on all new paratransit buses.

### Other Case Histories

- Outreach Paratransit in San Jose, Calif. recently equipped 90 Braun® vans with the RL system and is considering MOR/ryde as a major supplier over the next five years. The RL system's success prompted California to make MOR/ryde standard equipment on Ford Econoline E-350 mobility van specifications.
- Bi-State Development Agency, St. Louis, Mo., has retrofitted its paratransit fleet with MOR/ryde and included the RL system as a standard on new vehicle purchases.
- Denver RTD was experiencing problems with a rough, uncomfortable ride in its paratransit buses, in part due to heavy construction. Steve Francom with Intermountain Coach, a major bus dealer for Denver RTD, reports "doctors were writing prescriptions stating they didn't want patients riding on the buses." Denver eventually retrofitted 90 vehicles and will include MOR/ryde on all new purchases.

Access Services in Los Angeles, with a fleet of around 300 buses, is using MOR/ryde as a standard on all of the company's paratransit vehicles.

As public and community transportation operations increasingly serve seniors and people with disabilities, a smoother, comfortable ride is critical. But it is equally important to everyday commuters and everyone else who rides.

*Dave Barbulesco has logged several years in print journalism as a newspaper reporter and editor, and has freelanced for a variety of national magazines. Currently he works for a marketing communications agency in northwest Indiana.*