

# NETWORK MANAGEMENT

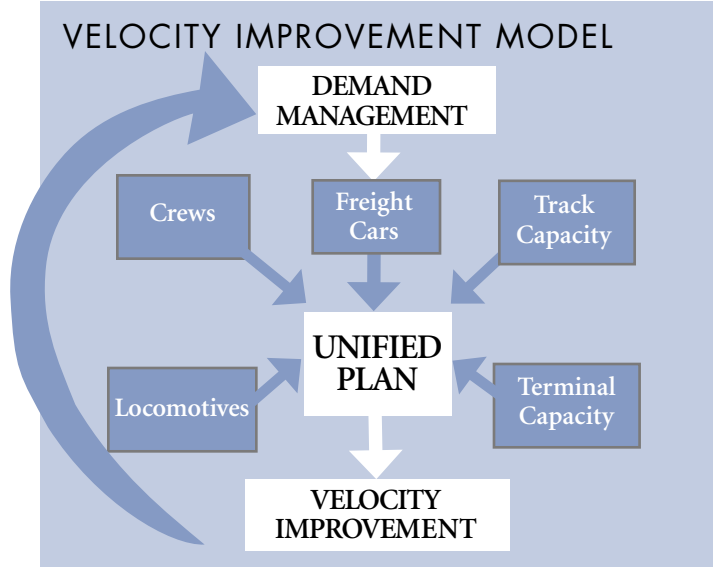
Beginning in 2004, and continuing today, Union Pacific’s approach to velocity improvement has been two-pronged. Tactically, the focus is to improve the health of critical resources — crews, locomotives, freight cars and track. Strategically, the priority is to manage the volumes flowing onto the Railroad as well as optimize the transportation network.

## Resource Supply and Productivity

Last year, Union Pacific trained and graduated nearly 5,000 conductors and 680 engineers. Locomotive and freight car resources were also augmented, adding almost 400 new locomotives, as well as 350 short-term surge power units, to help improve operations. Older car types were replaced and capacity was added in growth areas such as refrigerated boxcars and center-beam flat cars used for hauling lumber.

In 2005, additional trainmen, locomotives and freight cars are being added, bringing resource levels for these critical assets to generally appropriate levels. A tight engineer supply is expected until the end of June, when 1,100 of the 2,000 engineers to be added in 2005 are expected to enter service.

Union Pacific’s long-standing commitment to productivity has not been lost in this time of resource additions. These resources are a vital part of the Company’s strategy to improve network operations and, once in place, will be the focal part of the network initiatives designed to increase network velocity as well as resource productivity.



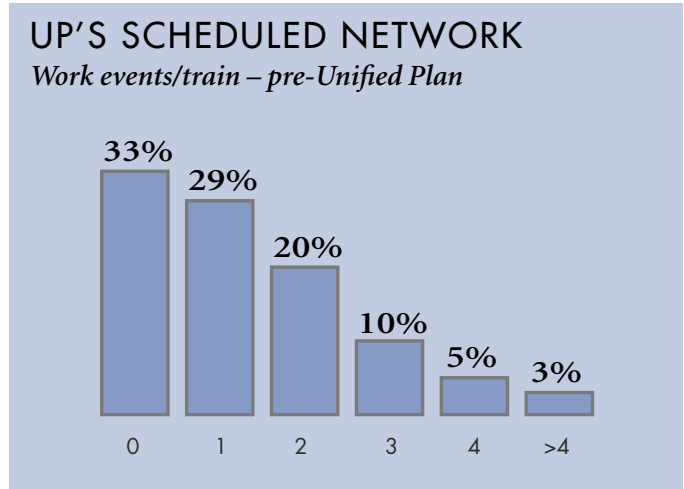
## The Unified Plan

The centerpiece of UP’s network initiatives is the redesign of the transportation plan (or T-Plan), which is the playbook for train operations. Working with Multi-Modal, the Company is taking a “clean sheet” approach to its scheduled network with the goals of:

- reducing the total workload,
- increasing velocity,
- decreasing terminal dwell time, and
- improving plan achievability.

RESOURCE SUPPLY	2004	2005*
<b>CREW GRADUATIONS</b>		
Trainmen	4,979	2,000
Engineers	680	1,900
<b>LOCOMOTIVES</b>		
New	393	317
<b>FREIGHT CARS</b>		
Hoppers, Reefers, Boxcars, Wells, Auto Racks	5,000	4,200

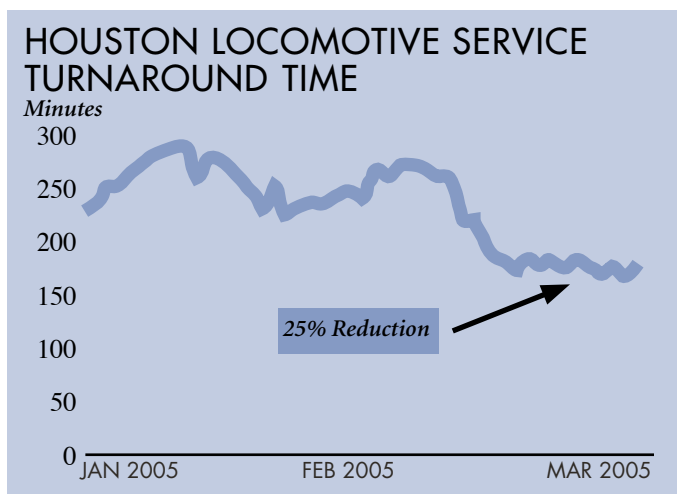
\*Estimates



# Network Management

At the beginning of 2005, only a third of UP's regularly scheduled trains moved from origin to destination without stopping along the way to pick up or set out cars (a work event) while 18 percent stopped three or more times. In addition, manifest cars were switched an average of three times before arriving at their ultimate destination — every switch expensive and time consuming. Through the Unified Plan effort, more trains are being designed that go straight to destination and car switches are being reduced.

The top-level network analysis was completed at the end of March. Over the next several months, changes will be made to four major components of network operations — Autos, Manifest, Mexico and Intermodal. In April, implementation of the Auto plan was initiated and the Manifest plan is scheduled for cut-over in May. The rest of the operational changes are scheduled for completion in the second and third quarters — with continued refinement throughout the year. This will be an ongoing process as the Railroad continues to match demand and capacity.



## Lean Management

Complementing the Unified Plan effort, the Company is also leveraging industrial engineering principles, called Lean management, in its most constrained facilities. Using Lean, bottlenecks in terminal processes are identified that limit productivity and velocity. Because a facility will only produce at the speed of its slowest process, Lean techniques start by measuring component production rates to find the point of greatest constraint. Once the bottleneck is identified, action is focused on accelerating that particular component's production until it is no longer the bottleneck. Then, focus moves to the next constraint and the process repeats itself, increasing total capacity.

For example, Lean projects completed at two Chicago intermodal ramps achieved a 25 percent improvement in terminal capacity

— without significant capital investment. Similar processes were completed at the Centennial Yard in Fort Worth, and work is ongoing at yards in Houston, Tucson and El Paso. Application of the process at a Houston servicing facility has produced a 25 percent reduction in the average time required to service a locomotive. This improvement in maintenance increases locomotive availability to serve customers. This work is ongoing, and the Company plans to review all major locomotive shops, servicing facilities, and classification yards during 2005.

## Gateway Strategy

Beyond its physical network, UP is also working with other railroads to improve operations at major gateways. Considering that 40 percent of UP's business involves another railroad, fluid operations at the point of interchange are critical.

These efforts were started with the Canadian Pacific, working to improve throughput at the Eastport Gateway, which has seen a 35 percent increase in volume since 2000. Applying Lean principles, the customs clearance process was identified as the primary point of constraint. Breakdowns in communication flows between customers, the railroads and brokers often resulted in insufficient customs documentation and trains waiting at the border.

Changes made to improve this procedure have virtually eliminated this bottleneck, resulting in a 53 percent reduction in terminal dwell time. Previous traffic levels have nearly doubled to seven trains per day, enabling carloads moving through the gateway to increase by over 40 percent during the first four months of 2005. Additionally, both UP and CP have made capital investments in sidings and track upgrades to further support growth in this corridor. A similar process will be rolled out at all major gateways, beginning with New Orleans.

