Wanco® ITS Solutions
Powered by PDP Smart Work Zone Systems

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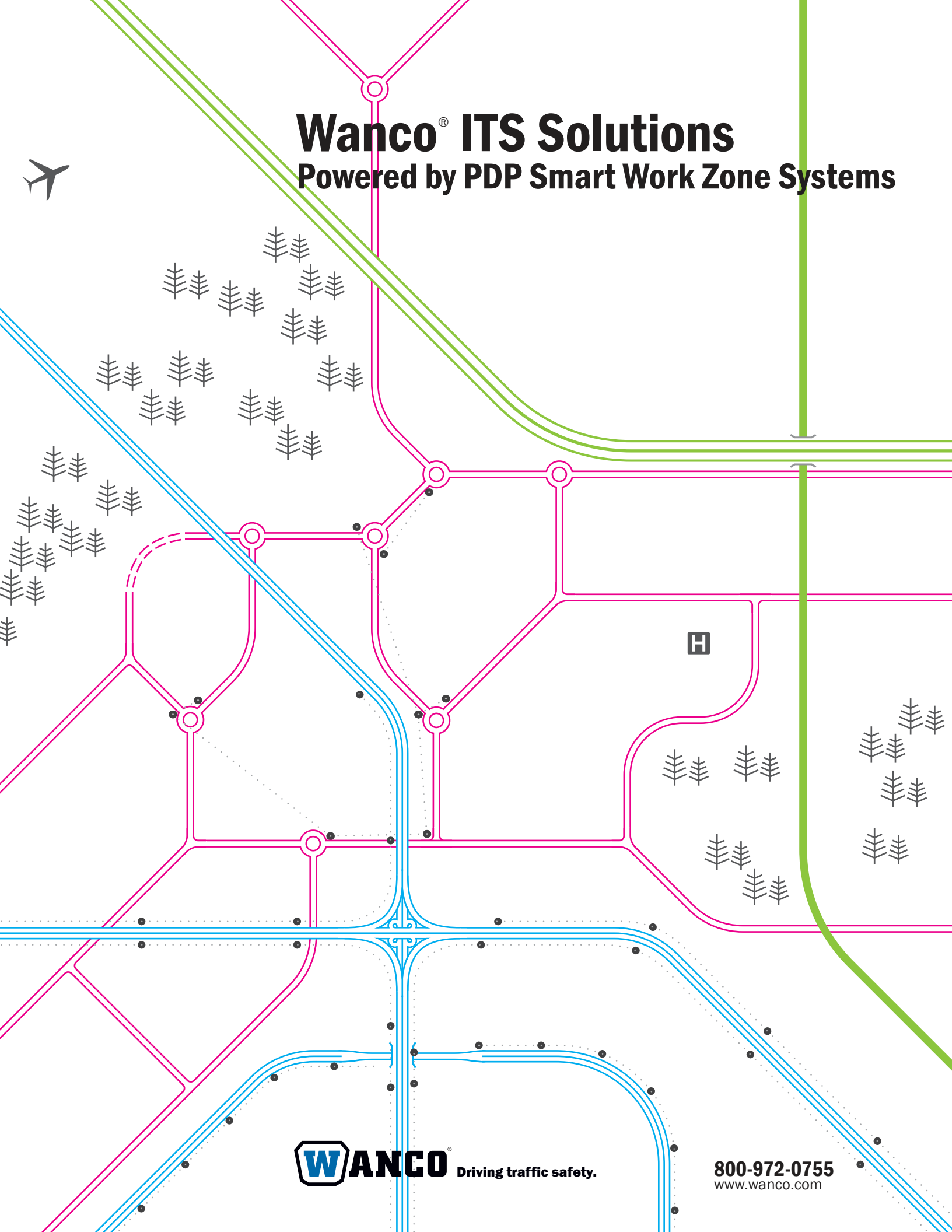
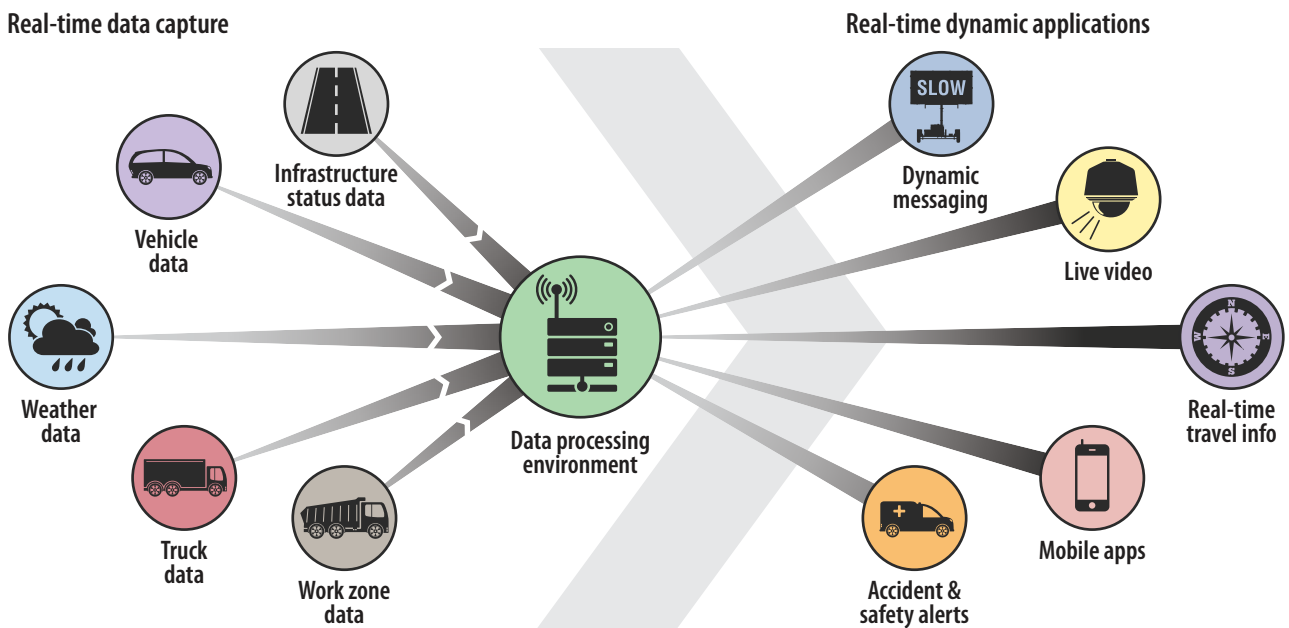# Integration for managing and operating transportation systems

What is ITS?

Technological advances in information processing and communications have created new opportunities for safer and more efficient transportation services. Intelligent Transportation Systems (ITS) provide a proven set of strategies for capitalizing on these opportunities.

What does ITS do?

ITS solutions provide a connected environment among equipment, infrastructure and motorists, receiving and sending real-time information about road conditions and potential hazards. ITS technologies advance mobility, transportation safety and environmental sustainability.

ITS data capture and management

Real-time data capture

Real-time dynamic applications

Vehicle data

Infrastructure status data

Weather data

Truck data

Work zone data

Data processing environment

SLOW

Dynamic messaging

Live video

Real-time travel info

Mobile apps

Accident & safety alerts

How can Wanco and PDP help?

Wanco is the industry's leading manufacturer of portable traffic control devices. PDP develops ITS solutions for automated, real-time Smart Work Zone Systems (SWZS). PDP integrates Wanco equipment and ITS solutions for implementing, managing and operating 21st-century transportation systems.

PDP Associates Inc.

With a history of nearly 20 years providing reliable high-quality ITS integrations, PDP stands out for its knowledge of the roadside equipment, hardware, software and systems necessary for smooth-running SWZS. PDP Associates was founded by Dr. Prahlad D. Pant, who published and presented the first research on SWZS in 1995.

Simple or complex — each ITS solution is custom designed

ITS technologies transform surface transportation by offering a connected environment. Every solution is custom designed by experts who understand the intricacies, needs and risks involved. PDP works with DOTs and others to successfully implement complex ITS solutions.

- "Trucks entering highway" warnings
- Queue detection/warning systems
- Portable camera systems
- Crash prevention and safety
- Traveler information applications
- Travel-time systems
- Event-traffic management
- Collision avoidance systems
- Dynamic late-merge systems
- Portable ramp metering
- Doppler radar systems
- "Speed Ahead" warnings
- "Sharp curve" and "wrong way" warnings
- Freeway and arterial management

Travel-time measurement system ▶

Sensors identify vehicles at one point in a road network, and then at another point downstream to calculate travel time for each defined road segment.

Appropriate instructions are transmitted to variable message signs and other traffic calming devices in real time, well in advance of road work zones and traffic congestion. The signs display relevant information, such as end-of-queue warning, travel time and "speed ahead" messages.

A report on the implementation of route information and management systems in Germany determined that, on roads with high traffic volumes, traffic accidents decreased as much as 64% after system implementation.*

*W. Siegener, K. Träger, K. Martin & T. Beck, "Accident occurrence in the area of route information and management systems, allowing particularly for traffic load." IVT Ingenieurbüro für Verkehrstechnik GmbH. BAST. 2000.
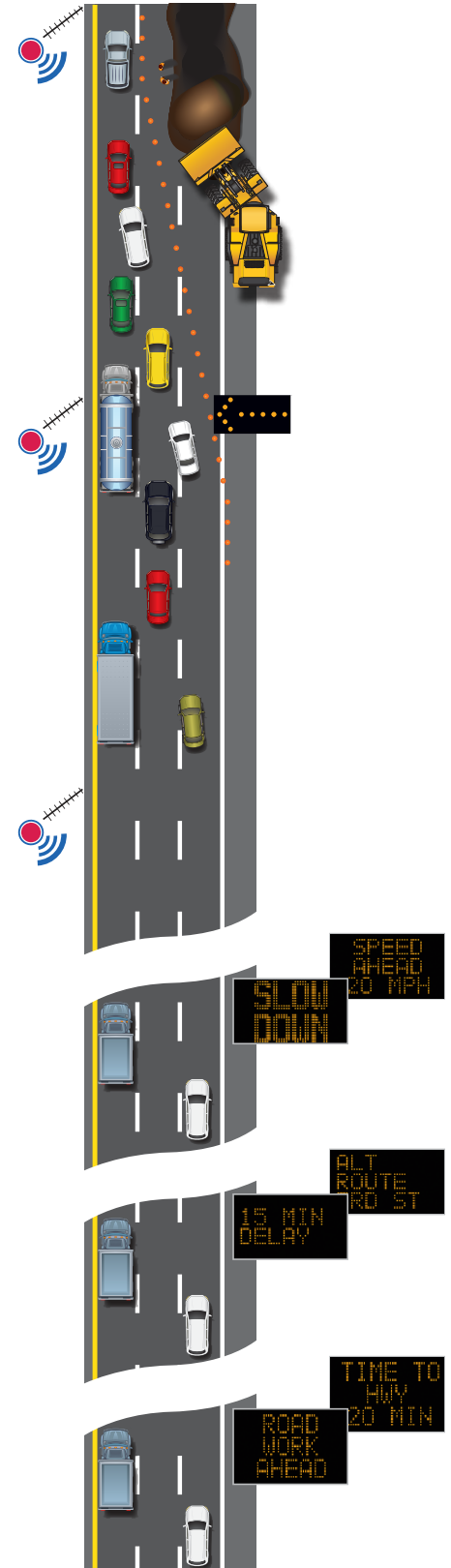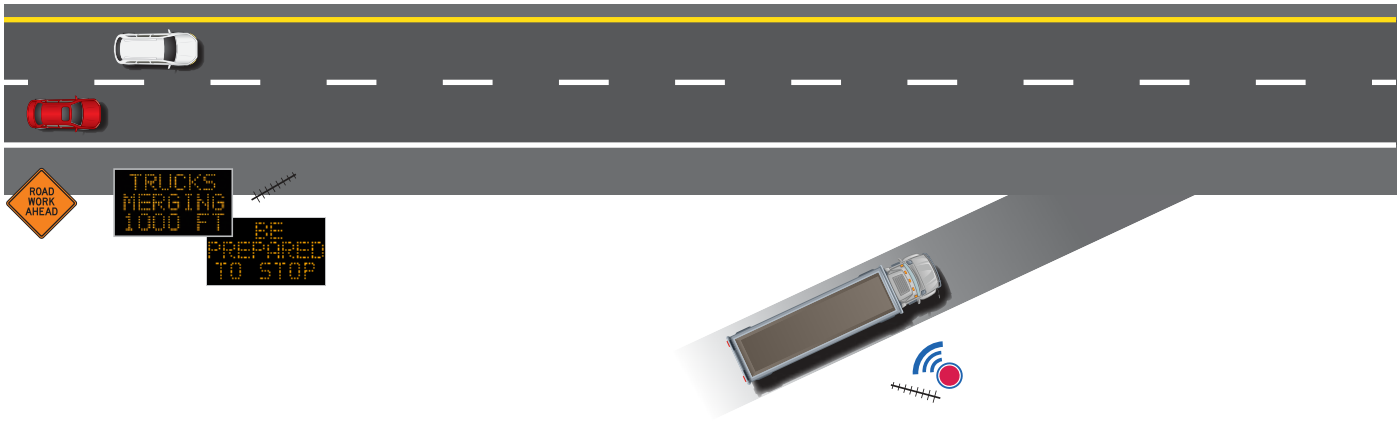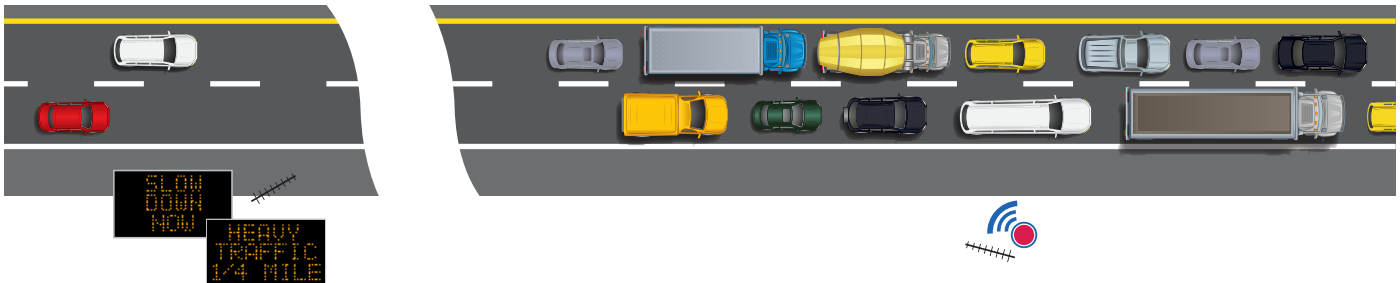
▲ Trucks entering highway

Temporary traffic-control warning signs call out potential hazards but cannot change with conditions.

Dynamic messaging responds to signals from sensors on haul roads and provides information about hazards in real time. When haul roads change locations as construction progresses, portable traffic control devices can also be moved.

▼ Queue detection

Abrupt slowdowns in work zones are common, often resulting in serious rear-end collisions. And drivers who veer off the road to avoid accidents put worker lives at risk.

Automated queue detection systems provide real-time warnings well in advance of slowdowns, allowing motorists to brake early, avoid accidents and save lives by remaining on the roadway.

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