



# Implementation of an Automated System for the Movement of Overdimensional Vehicles in Colorado

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# CDOT Permits

- ❖ Issues 45,000 Permits per Year
- ❖ Revenue in 2002: \$2.8 Million
- ❖ Type of Permits:
  - ❖ Driveway (Access) Permits
  - ❖ Oversize/Overweight Truck Permits
  - ❖ Port of Entry Permits

# TPS Technical Reasons for Replacement

- ❖ Migration into a Windows 2000 Native Domain
- ❖ Migration to an Oracle 9i environment
- ❖ No Source Code Rights
- ❖ Stand-Alone Environment
- ❖ Old Equipment

# **Business Reasons for Replacement**

- ❖ **Data Processing System**
- ❖ **No Automation**
- ❖ **No Support/Maintenance/Upgrades**
- ❖ **Problems Getting Uniform/Accurate Data**
- ❖ **No Trend Analysis Capabilities**
- ❖ **Limited Reporting Capabilities**

# CDOT Permit Users

## ❖ Internal Users

- ❖ Permit Office
- ❖ CDOT Accounting Unit
- ❖ Bridge Engineers

## ❖ External Users

- ❖ Colorado Ports of Entry
- ❖ Colorado State Patrol

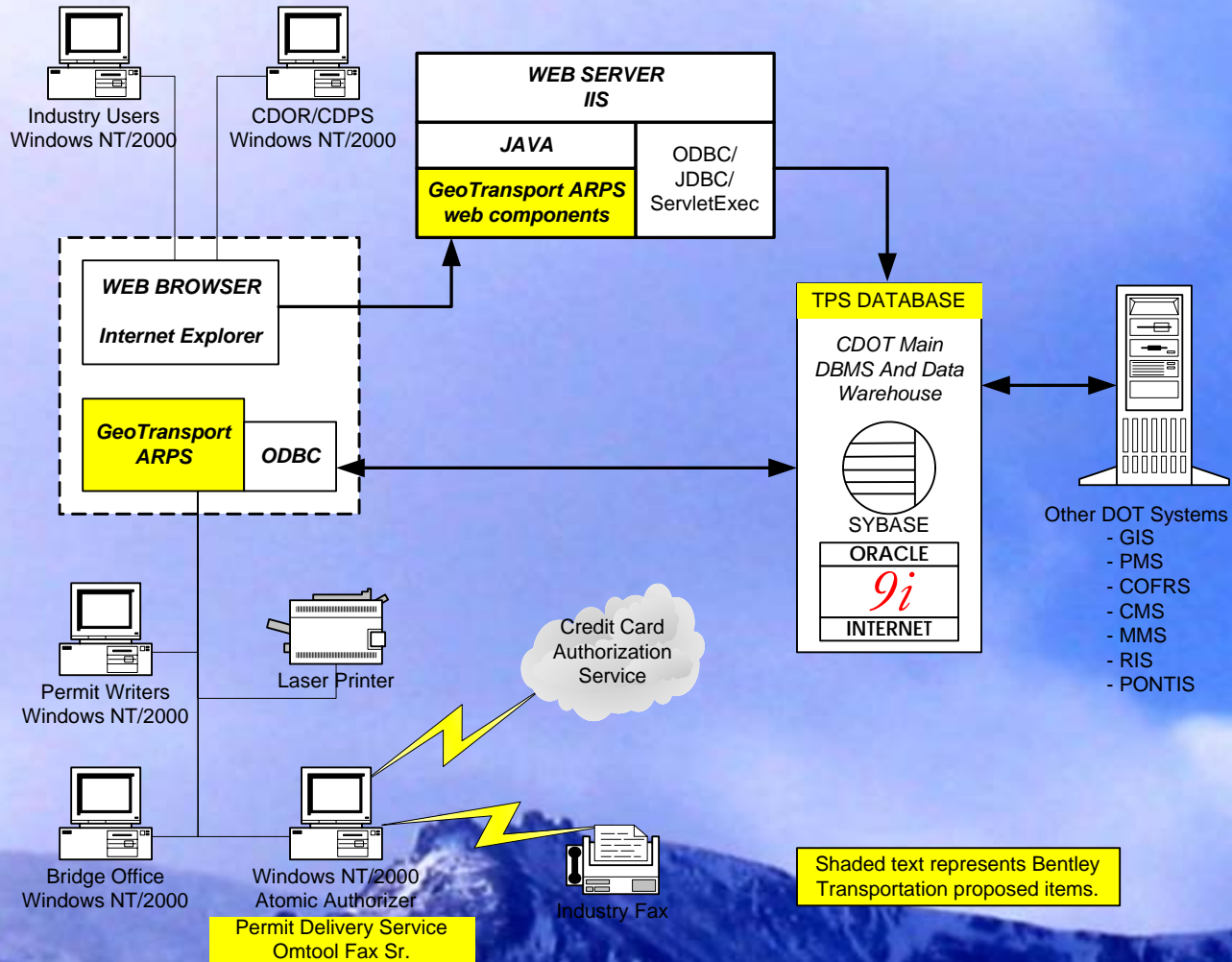
## ❖ Customers

- ❖ Industry and Permit Services

# Desired Benefits of the New System

- ❖ Improved customer service
- ❖ Effective verification and issuance of permits
- ❖ Reduced staff demand due to self-issue permits
- ❖ Automatic routing and verification of restrictions
- ❖ Automatic bridge rating component to reduce wait times
- ❖ Automatic axle weight configurations
- ❖ Electronic credentialing/data sharing
- ❖ Quicker processing of payments
- ❖ Gain network/systems support
- ❖ Achieve WASHTO permitting standards

# TPS Hardware Configuration



# Phased Implementation Approach

- ❖ **Phase 1 - Project Initiation**
- ❖ **Phase 2 - Permit Issuance, Finance, and Automated Permit Delivery**
- ❖ **Phase 3 - Credit Card Payment and Internet Interface for Industry and Enforcement**
- ❖ **Phase 4 - Routing and Bridge Weight Analysis**
- ❖ **Phase 5 - WASHTO Regional Permitting**
- ❖ **Phase 6 - Project Closeout**



# TPS Components

## ❖ Permit Issuance

- ❖ Issues all OS/OW permit types – Single Trip, Annual, Fleet, LVC, OWD, SMME, Special, & Pilot Car
- ❖ Statute compliance analysis

## ❖ Finance

- ❖ Automatic permit fee computations
- ❖ Allows for various payment types
- ❖ Account management functions
- ❖ Interfaces with Colorado's COFRS finance system

## ❖ Automated Delivery

- ❖ Automatic delivery by fax and email

# TPS Components

## ❖ Internet Interface

- ❖ Application submittal by trucking industry
- ❖ Ability to track permit status
- ❖ Auto issuance
- ❖ View issued permits
- ❖ Access by POEs & State Patrol

## ❖ Credit Card Payment

- ❖ Allows carriers to buy permits over the Internet with credit cards
- ❖ Interfaces with State's authorization service

# TPS Components

## ❖ Routing

- ❖ Analysis based on existing GIS, roadway and bridge engineering data
- ❖ Responds to temporary constraints
- ❖ Assigns route specific restrictions

## ❖ Bridge Weight Analysis

- ❖ Determines structural adequacy of bridge for permit vehicle
- ❖ Equivalent HS20 analysis
- ❖ AASHTO VIRTIS interface



# TPS Components

## ❖ WASHTO Regional Permit

- ❖ Western states regional permit
- ❖ Fee computation and accounting
- ❖ Route selection
- ❖ Automatic approval





# SUMMARY

- ❖ Improved level of customer service
- ❖ Automation of CDOT processes
- ❖ Increased data accuracy
- ❖ Compliance with CDOT IT standards