Environmental Information Exchange Network

EN2015

US EPA/NHTSA Data Transfer Project

Sara Zaremski, US EPA/OAR/OTAQ
Dawn Timmons-Jones, US DOT/NHTSA

2015 Exchange Network National Meeting

Supporting the Business of Environmental Protection

September 29–October 1, 2015
Sheraton Philadelphia Society Hill Hotel
Philadelphia, Pennsylvania

http://www.exchangenetwork.net/en2015

ABSTRACT

The Compliance Division (CD) within the Office of Transportation and Air Quality (OTAQ) under the Office of Air and Radiation protects human health and the environment by implementing OTAQ's programs. Some of the programs that CD implements are the light-duty vehicle Fuel Economy and Greenhouse Gas (GHG) programs and the heavy-duty manufacturer GHG program. An element of both the light-duty and heavy-duty programs is sharing these results with the National Highway Traffic Safety Administration (NHTSA). For light-duty vehicles, EPA previously shared Corporate Average Fuel Economy (CAFE) data by emailing PDF files to NHTSA. This process is time consuming and not machine-friendly. EPA and NHTSA together decided it was time to look for a new approach to data sharing. This presentation will be an overview of the data sharing project.

EPA Background

EPA sets and regulates criteria pollutant and greenhouse gas standard

EPA issues certificates of conformity for **all** vehicles and engines introduced into US commerce

EPA collects, calculates and validates all fuel economy and greenhouse gas data submitted by manufacturers

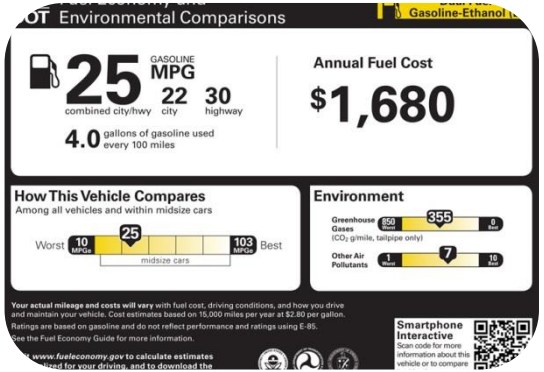
EPA shares fuel economy data with NHTSA

Integrating Many Data Sources For Many Sectors

NHTSA Background

Corporate Average Fuel Economy (CAFE) standards

Reduce energy consumption



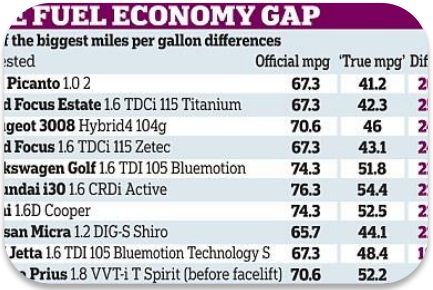
Regulate and enforce fuel economy standards

NHTSA Background

Fuel Economy data

Fuel Consumption data

Vehicle Information



FUEL ECONOMY GAP

the biggest miles per gallon differences

sted	Official mpg	'True mpg'	Dif
Picanto 1.0 2	67.3	41.2	2
d Focus Estate 1.6 TDCi 115 Titanium	67.3	42.3	2
geot 3008 Hybrid4 104g	70.6	46	2
d Focus 1.6 TDCi 115 Zetec	67.3	43.1	2
kswagen Golf 1.6 TDI 105 Bluemotion	74.3	51.8	2
ndai i30 1.6 CRDi Active	76.3	54.4	2
i 1.6D Cooper	74.3	52.5	2
san Micra 1.2 DIG-S Shiro	65.7	44.1	2
Jetta 1.6 TDI 105 Bluemotion Technology S	67.3	48.4	1
Prius 1.8 VVT-i T Spirit (before facelift)	70.6	52.2	

Provide CAFE data and reports to the general public

Receive data from the Environmental Protection Agency

Legacy data sharing was time consuming and labor intensive

Collaboration WIN-WIN

Meet common goals

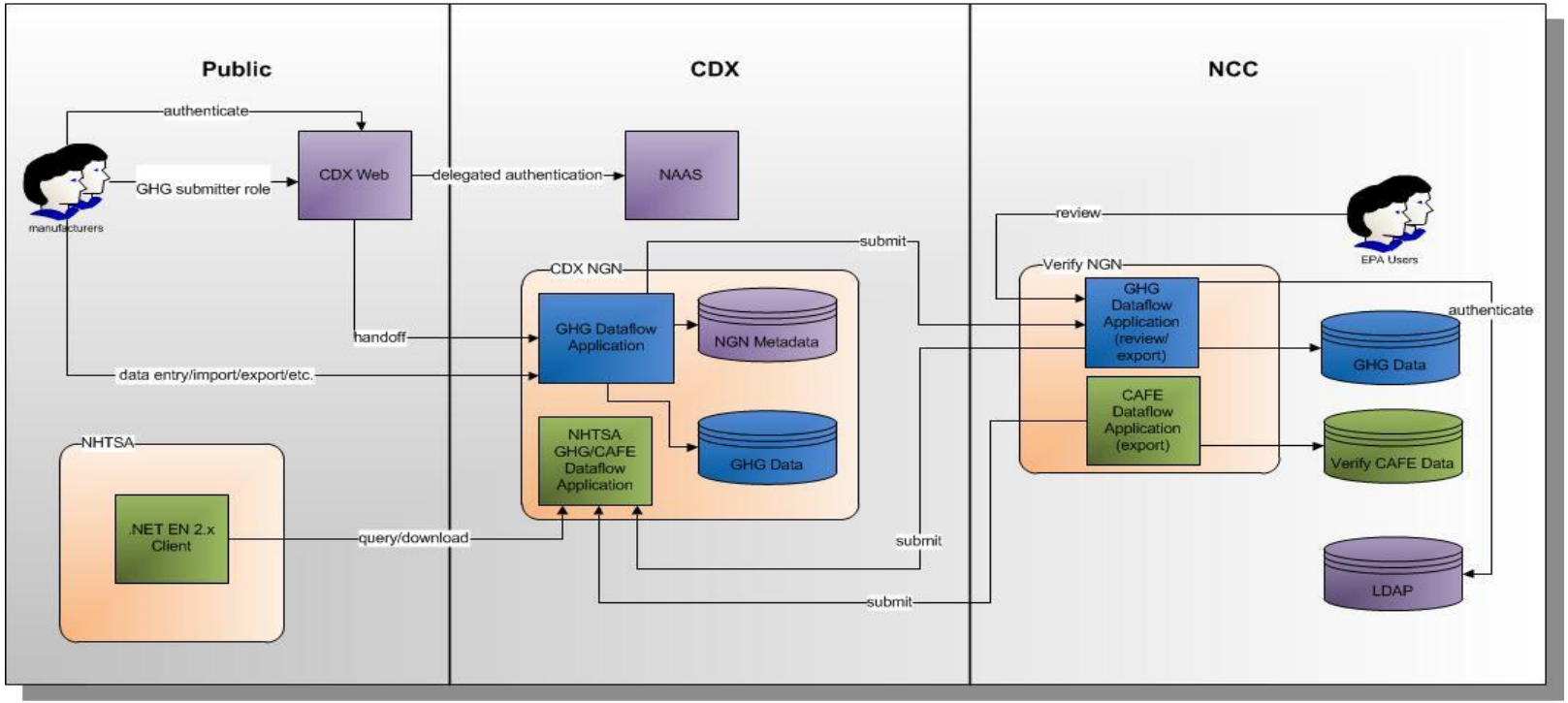
Support joint agency regulations

Single data collection point

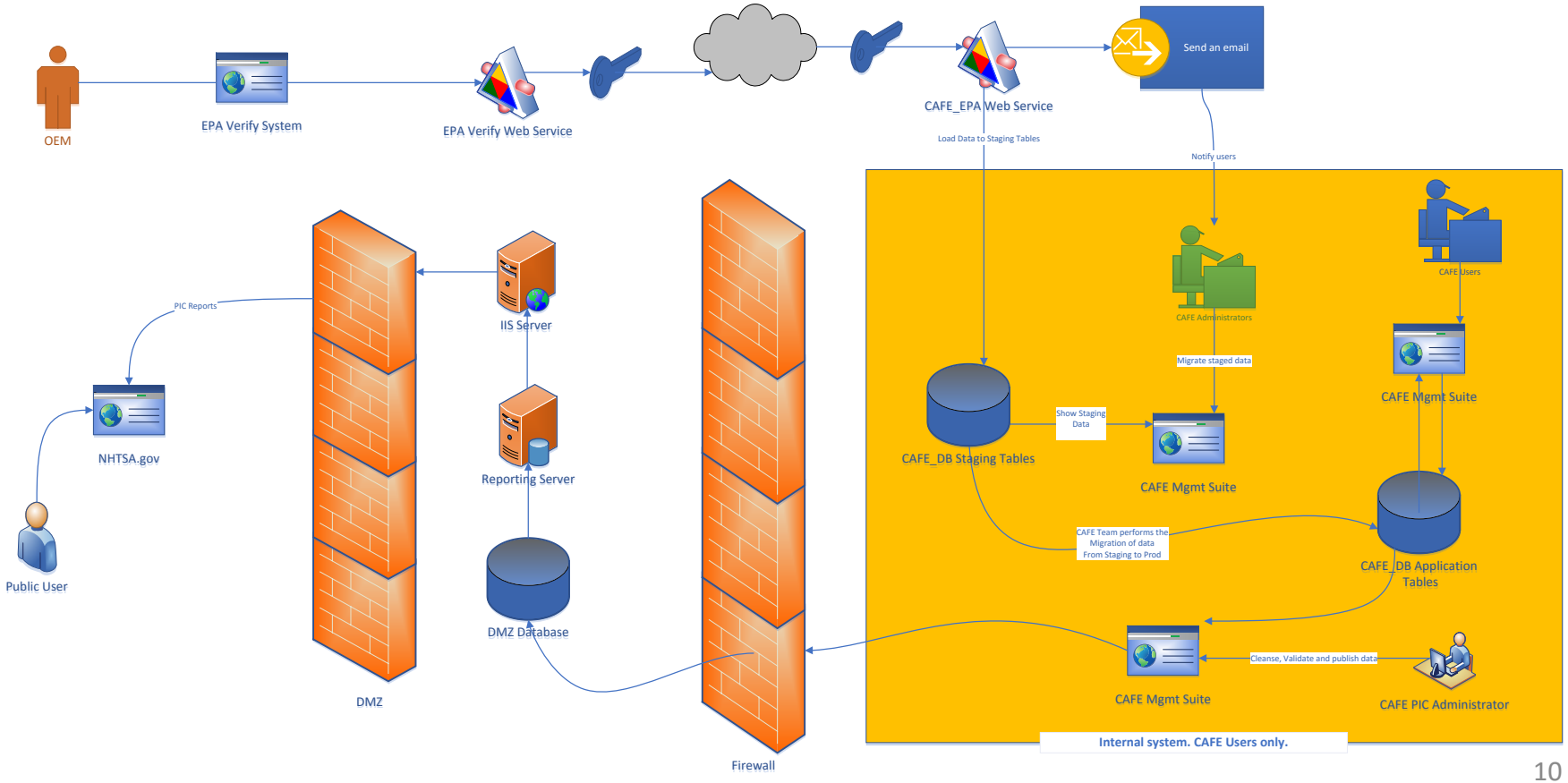
Development Process

- Formed Integrated Project team
- Developed Interagency Agreement (IAA)
- Defined Requirements
- Defined Technical Architecture
- Developed MOU/ISA

CAFE Data Transfer Process Flow



CAFE Data Transfer Process Flow



Technical Highlights

Exchange Network protocols leveraged

Node Client software reduced NHTSA code development

XML- formatted data transferred seamlessly

Status

CAFE Data Transfer - Completed

HD GHG Data Interface – In process

- Certification
- Compliance

NHTSA Pre & Mid Model Year Data Interface - TBD

Project Benefits

EPA/NHTSA

- Teamwork
- Support
- Improved Internal Efficiencies and Effectiveness

Meets Open Government Directive

- Customer service improved to OEMs
- Utilization of data to serve multiple organizations
- Reduced man hours required for manual data entry

Presidential E-gov Strategy

- Reuse of existing technologies
- Elimination of redundant data submissions
- Easily public access to CAFE related reports/data

Questions