



United States Department of Agriculture

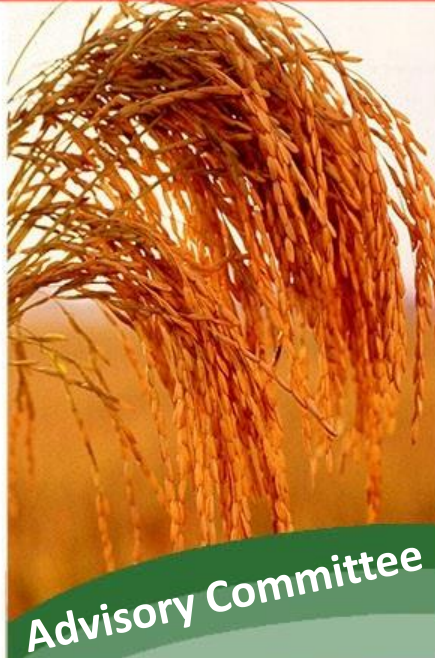
FGIS: An EPPC Journey

LeRoy Capper

Chief Innovation Officer



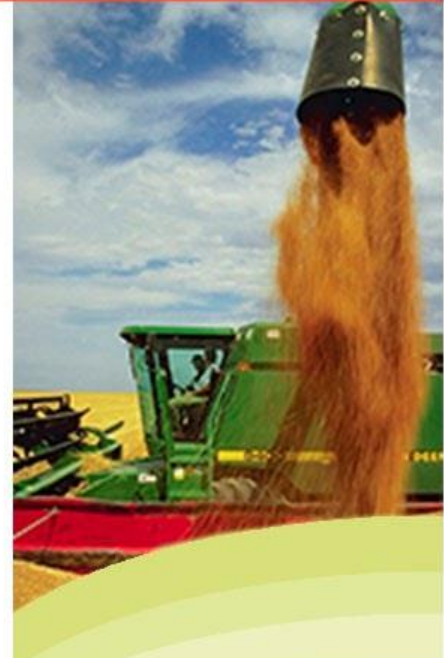
Grain Inspection



Advisory Committee



September 2018



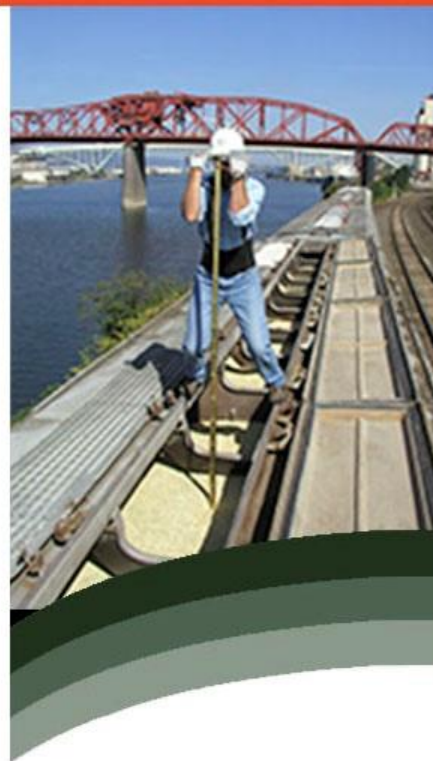
FGISonline



A portfolio of interconnected business applications modernizing operations, digitizing recordkeeping and increasing traceability within the national inspection and weighing system.

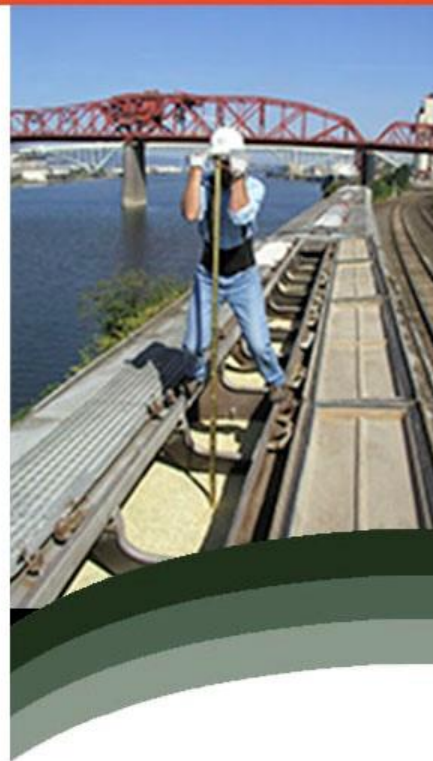
Official Standards

- Factors/Methods/Tests
- Commodity
 - Grades
 - Grading Limits
 - Classing
- Rates/Fees
- Approved Equipment



Authorizations

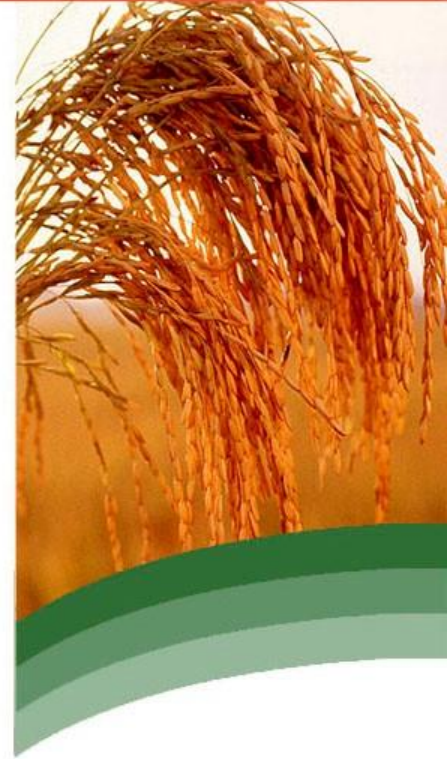
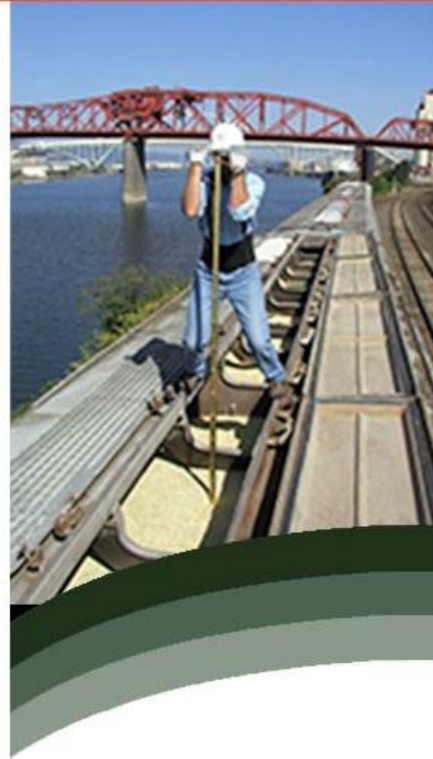
- Organizations
 - Designations
 - Delegations
 - Cooperators
 - Official Service Points
- Equipment
 - Checktest Results



Licensing

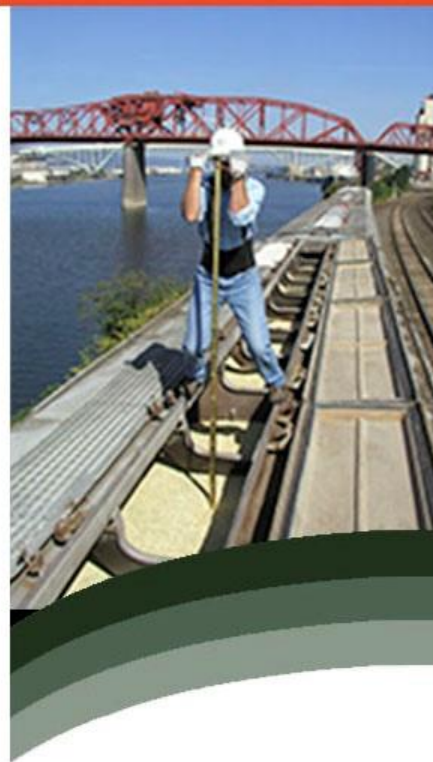
- Licenses defined for particular commodities and functions
- Exams established to obtain particular license
- Multiple tests may be necessary to satisfy a particular exam.
- Managed Question/answer pool.

- Successful completion results in automatic addition of license to individual profile.



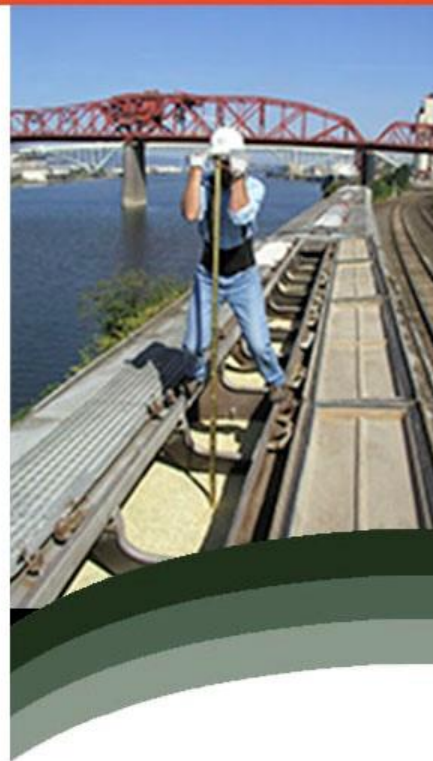
Service Delivery

- Inspection
- Weighing
- Certification
- Billing
- Volume Reporting



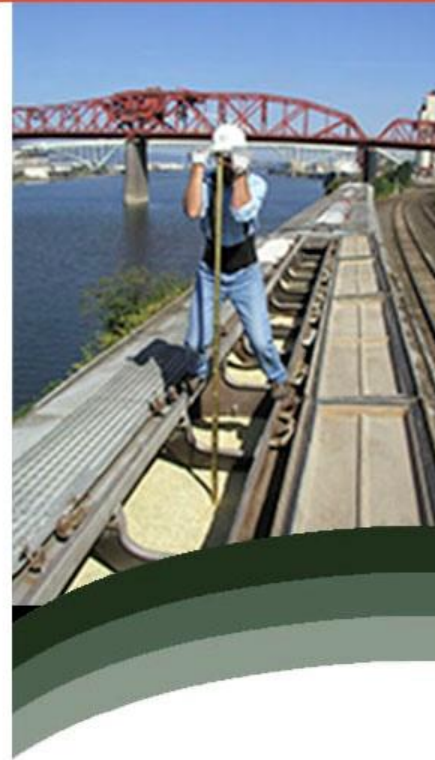
Quality Management

- System Performance
- Individual Performance
- Opinions and Referees



Distributed Platform

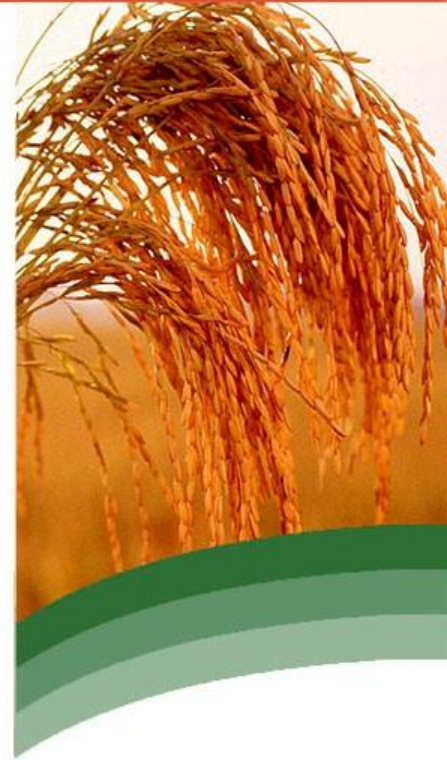
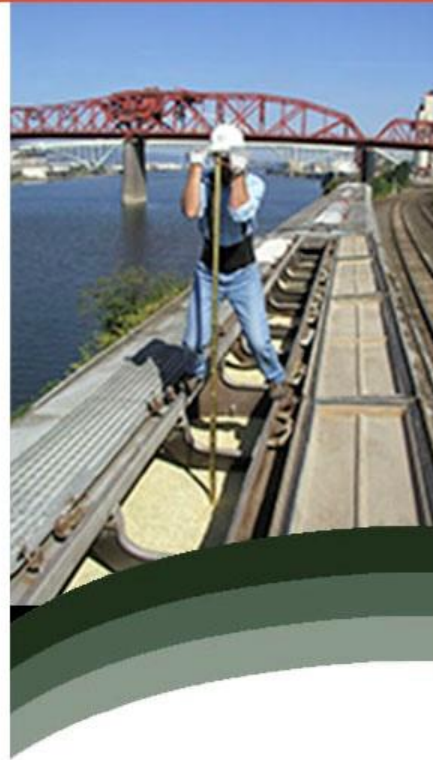
- FGIS*online* Distributed platform provides operational continuity for commodity loading operations
- Initially deployed in 2009
- FGIS has avoided dozens of outages since initial deployment without downtime.



Commitment to Continuity

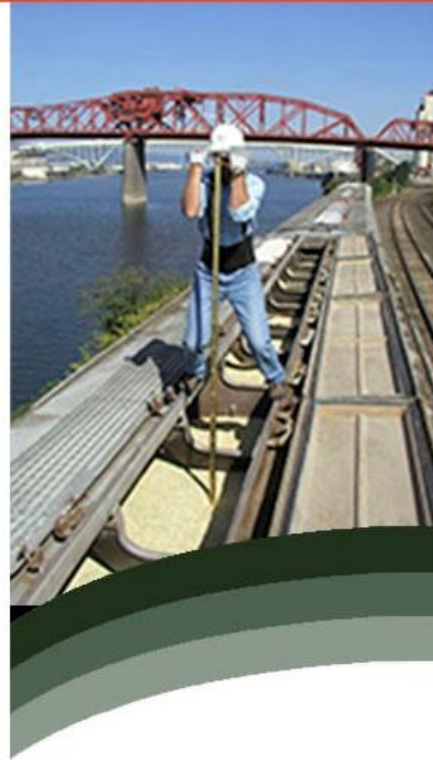
Customer Focus

- Organizations register to obtain an FGIS customer number.
- Records made available through a variety of channels
 - Website
 - Emailed twice daily
 - Webservice
 - Elevator View
- Individual record verification
- Exploring methods to validate and authorize interested parties access to information.
- Exploring options to meet stakeholder requests for centralized result and certification access.

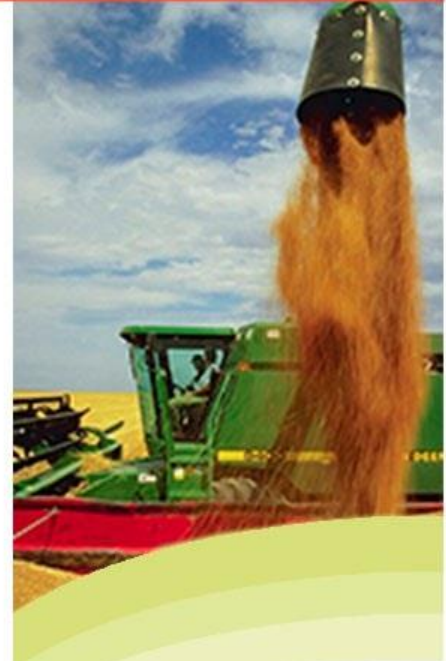
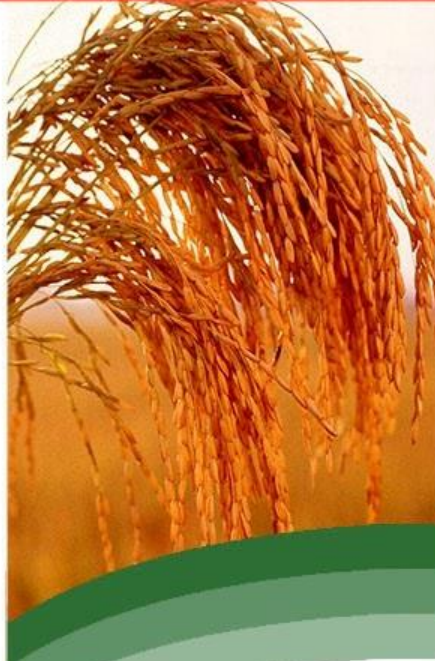
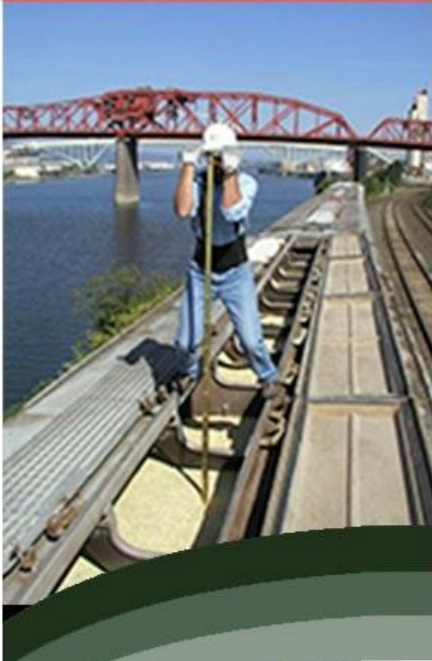


Modern & Secure

- Successfully upgraded to the current Microsoft technology suite in April
- Security Guidelines established by National Institute of Standards & Technology
- Independent 3rd party testing and verification
- Active Authority to Operate (ATO)



EPPC



EPPC: Elimination of Pens, Paper, and Calculators



- Automation of information and work flow, integrating instrumentation and delivery of near-real time information to applicants
- Tailoring and enhancing business processes to support traceability from request through result, bill, certificate and report
- Common patterns to support monitoring and quality control
- Streamlining processes to increase efficiencies

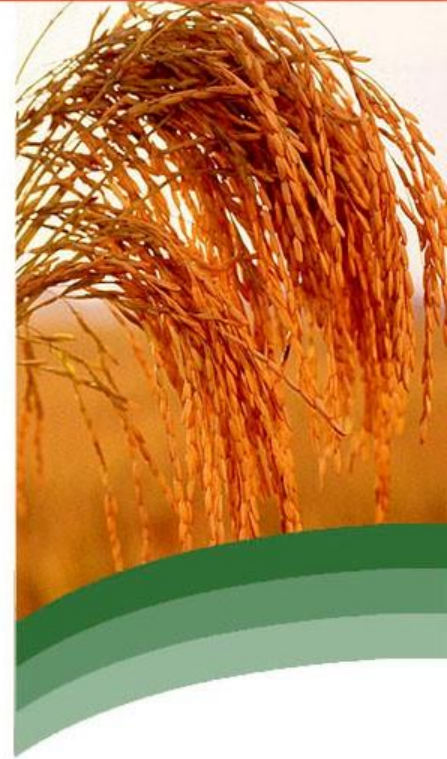
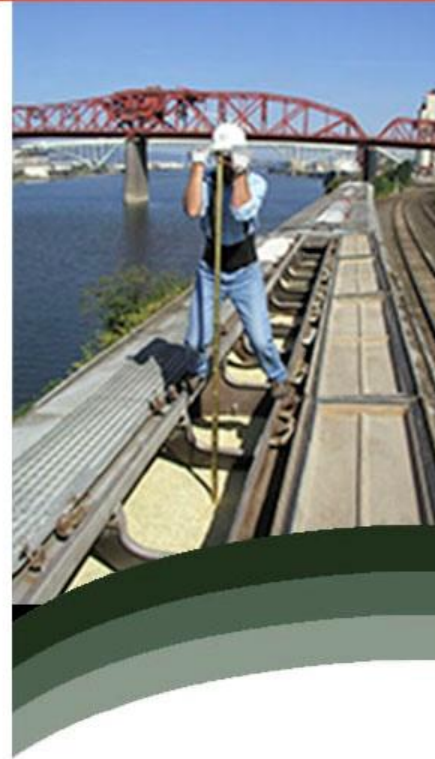
EPPC / MyFGIS



- At a glance, users will be presented with information targeted to their organization, role and location:
 - What I am doing today?
 - How I am currently performing?
 - What's the status of the equipment where I am working?
 - When do I review the collected information?

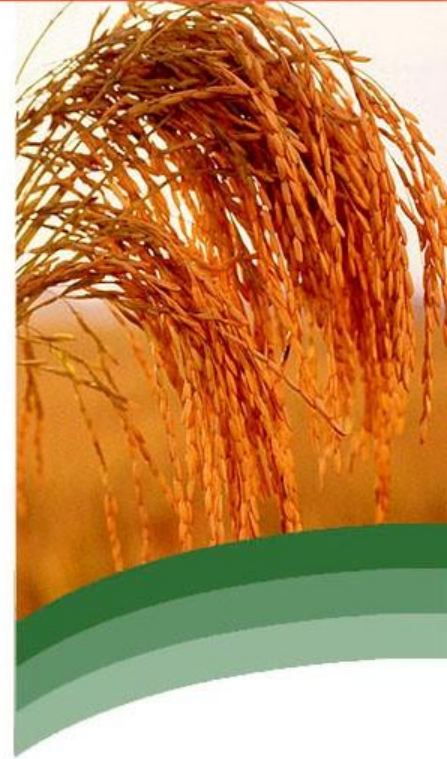
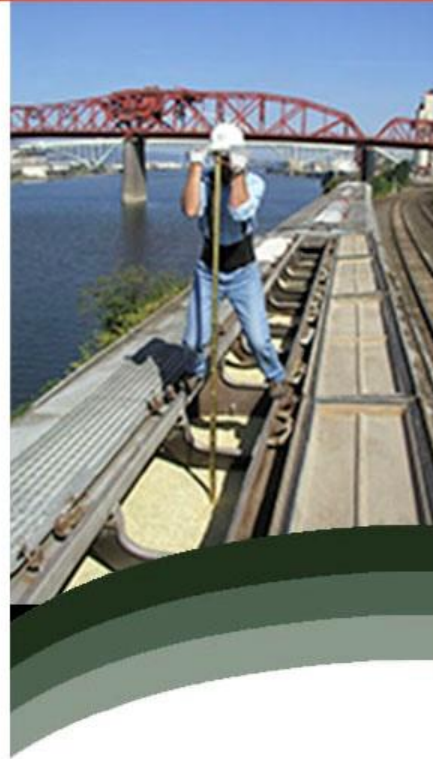
Benefits

- Greater customer access to information
- Reduce manual data entry & error potential
- Faster, more accurate certification
- Traceable billing line items



Commitment to Continuity

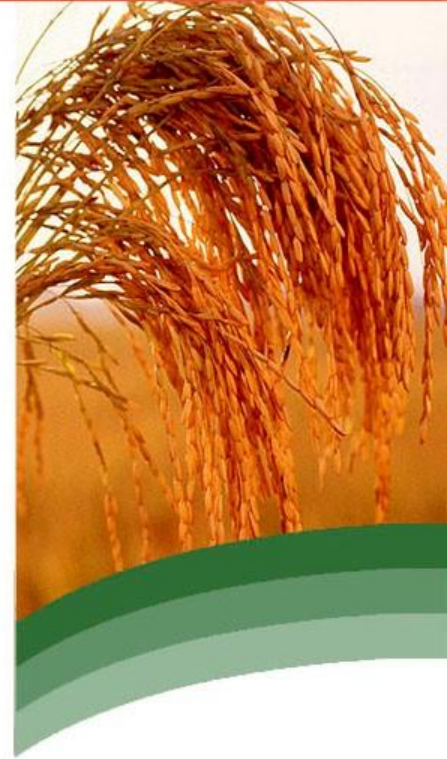
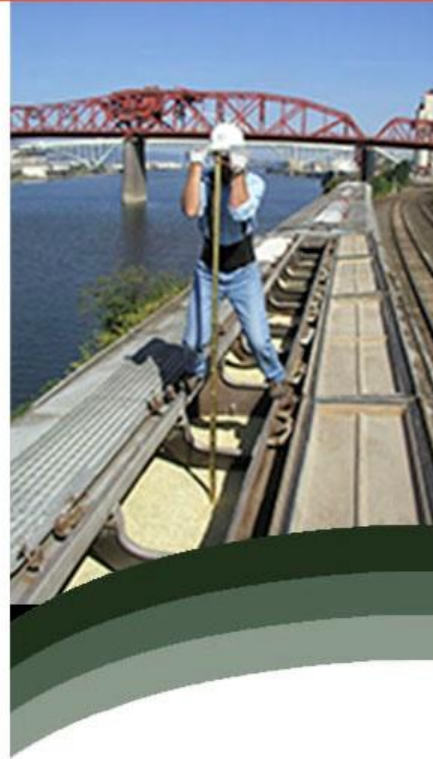
- Commodities are moving 24x7x365
- We are on-site in many locations
- Internet Access not guaranteed.
- Continuity of operations is paramount



Commitment to Continuity

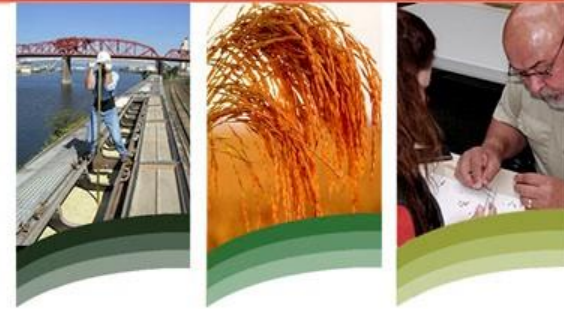
Every Minute Matters

- Customers use our results immediately (<30 seconds) to direct grain flow
- Cargo valued in the millions of dollars
- Customer impact in the \$10k's/hour
- Outage Resistant system design will allow fully offline operation, while providing near-real time information online when connectivity is available



Commitment to Continuity

Why now?



- Cost Avoidance
 - Service Delivery errors - \$112k/year
 - Prefilling paper forms - \$3.2 M/year
 - Eliminating manual processes – \$1.2 M/year
- Continue focus on improved customer service and stakeholder engagement
- Technology is available
 - Blockchain / Microservices / Cloud / Mobile

Commitment to Continuity

Blockchain



- Exploring future for disconnected system
 - only pending blockchain pilot at USDA in FY18
 - support integrated instrumentation data collection
- *USDA Blockchain Workshop – August 20, 2018*
 - Secretary Purdue focused on appropriate use

Commitment to Continuity

Office/Organization Management



- Upgrading Customer Information Management (CIM)
- Enabling role/permission management
 - Roles: Role Manager, Service Requester, Service Request Preparer, Certificate Viewer, Bill Viewer, Inspector, Manager
- Contractual Service Agreement management
- Review license status, equipment status
- Service point request management

Agricultural Marketing Service

Service Request Cart: M/V VENTURE

Service Request Number: 157

Service Provider

Customer Name: BZ Test (35)
 Service Request Date: 10/25/2017 1:57:53 AM
 Provider Name: FGIS - Portland Field Office (70)
 Account: FMMI
 PO:
 Contract:

Location

Location: Columbia River Elevator
 Address: 123 AryStreet
 City: Portland
 State, Zip, Country: OR 11111 USA
 Notes:

[Add Group](#) [Group 1](#)

Group 1

Product Details

Product Description: Yellow Corn

Storage Details

Ship Name: M/V Venture
 Storage Arrangement: Original
 1 - Hold
 2 - Hold
 3 - Hold

Lot Type

Lot Type: Ship
 Product Quantity: 2,000,000 Pounds
 Movement Type: Export
 Shipment Type: Bulk
 Destination: JAPAN

Services

[Add Service Category](#)

Summary

Inspection: Original

Set 1 Cusum, Cusum, 40 (2,000,000 lb) sublots, 25,000 lb, Graded 2, Option 2

- Grade and Factor (per sample)
- Test Weight Per Bushel (54.00 lb/bu min), Sublot
- Moisture (%), Sublot
- Heat-Damaged Kernels (0.20 % max), Sublot
- Damaged Kernels Total (5.00 % max), Sublot, Cusum(3.00 max, 1.00 min)
- Broken Corn And Foreign Material (3.00 % max), Sublot
- Heating (N/A), Sublot
- Live Weevils (ct), Sublot
- Other Colors (%), Sublot
- Odor (N/A), Sublot

Service Request



- Other Colors (%), Sublot
- Odor (N/A), Sublot
- Other Live Insects (ct), Sublot
- Aflatoxin RapidTest
- Aflatoxin (ppb), Sublot, Qual

Weighing Details

Official Weighing

Weighing: Weigh By Entire

Sampling Detail

Sampling Type: Official Sampling
 Sampling Location: Online Protocol
 Sampling Method: Mechanical Diverter

Additional Samples

Set	Sampling By	Number of Samples	Sample Size	Seals	Providing Container	Container Type	Instructions
35	Sublot	5	1 LB	Yes	No	Plastic Bag	

Documents

Subject	File Name	Date/Time Added
No records available.		

No records available.

Comments

Comment	Date	Created By
No records available.		

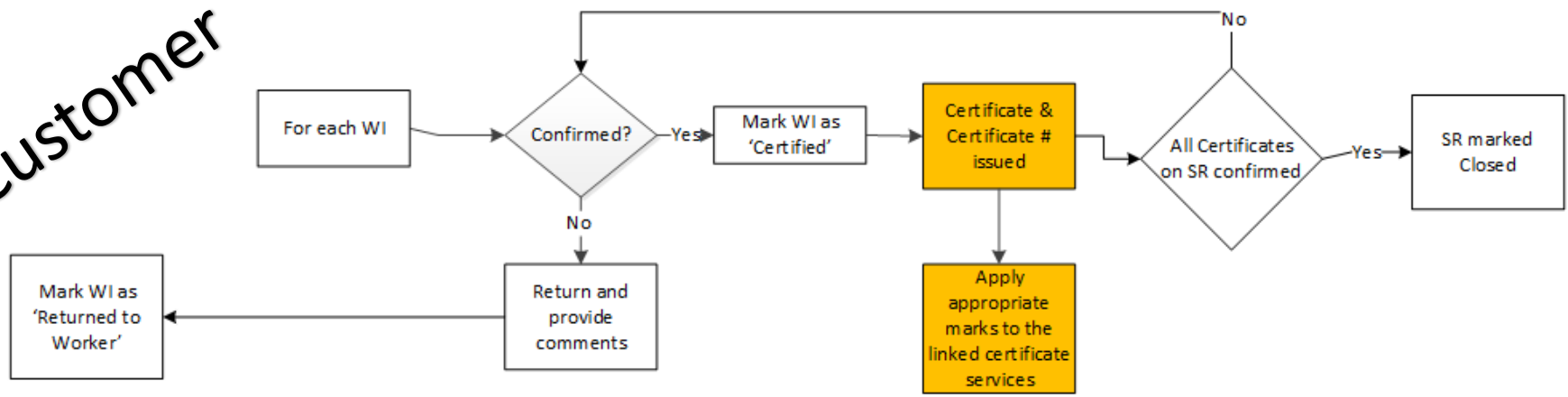
No records available.

[Delete](#) [Print Friendly View](#) [Submit](#)

Workflow::Certificate Issuance



Customer



Certificate previewed, confirmed by Customer after preparation and review


Traceable Inspection


- All Samples will get an identifier/QR code
- Each portion will get an identifier/QR code
- Each inspection pan will get an identifier/QR code





USDA Breakdown 15G

Federal Grain Inspection Service

Test Portion ID: 
ABCD9999ABCDABCD

Assigned Tests: 
ABCD3333ABCDABCD

Work Portion 
95DECD34DF436DEA

Sample ID: 
ABCDABCDABCD9999
WHEAT

USDA 
ABCDABCDABCDABCD

Federal Grain Inspection Service

USDA File

Federal Grain Inspection Service

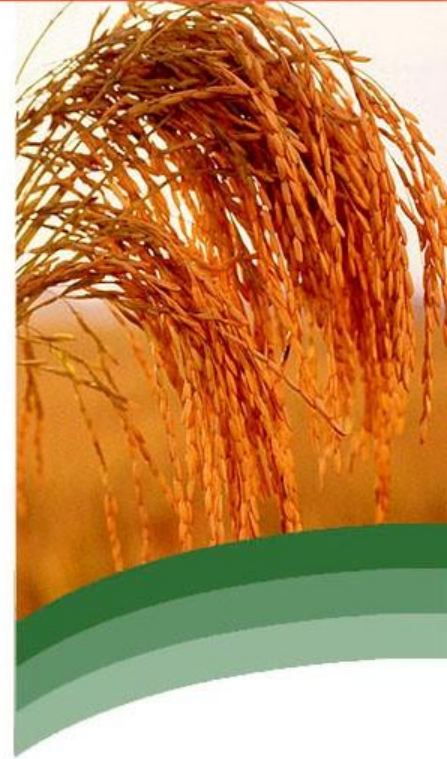
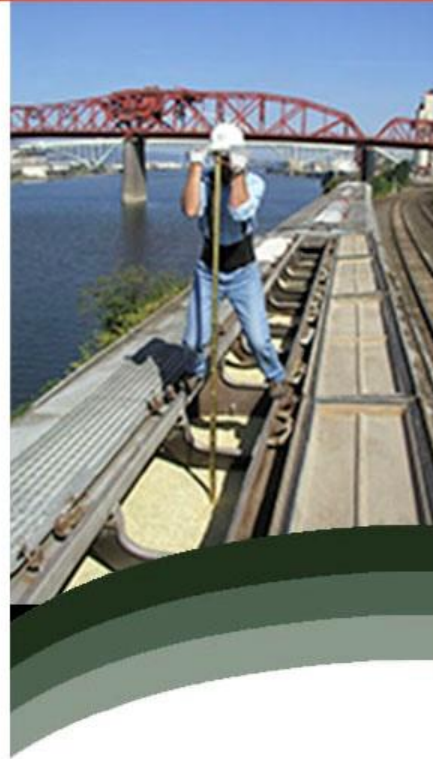
Portion ID: 
A9AB7GBC4ABC2BCD

Sample ID: 
ABCDABCDABCDABCD

Dump Date : 9/21/2016
September

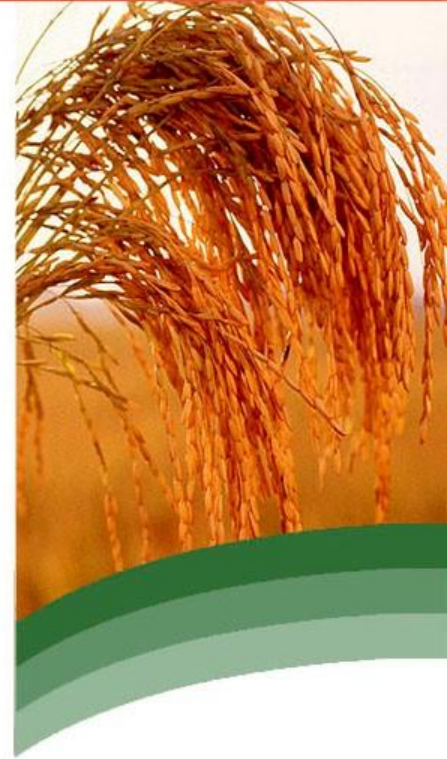
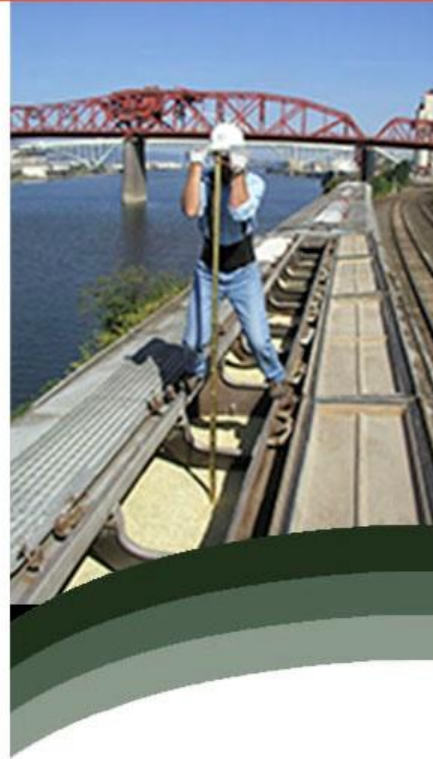
Versioning & Reporting

- Information will be locked, logged and auditable at the point of collection.
- Information collected will be rolled up and aggregated.
- Logs, Bills, Certificates and Reports will be automatically created.
- Near-real-time result delivery



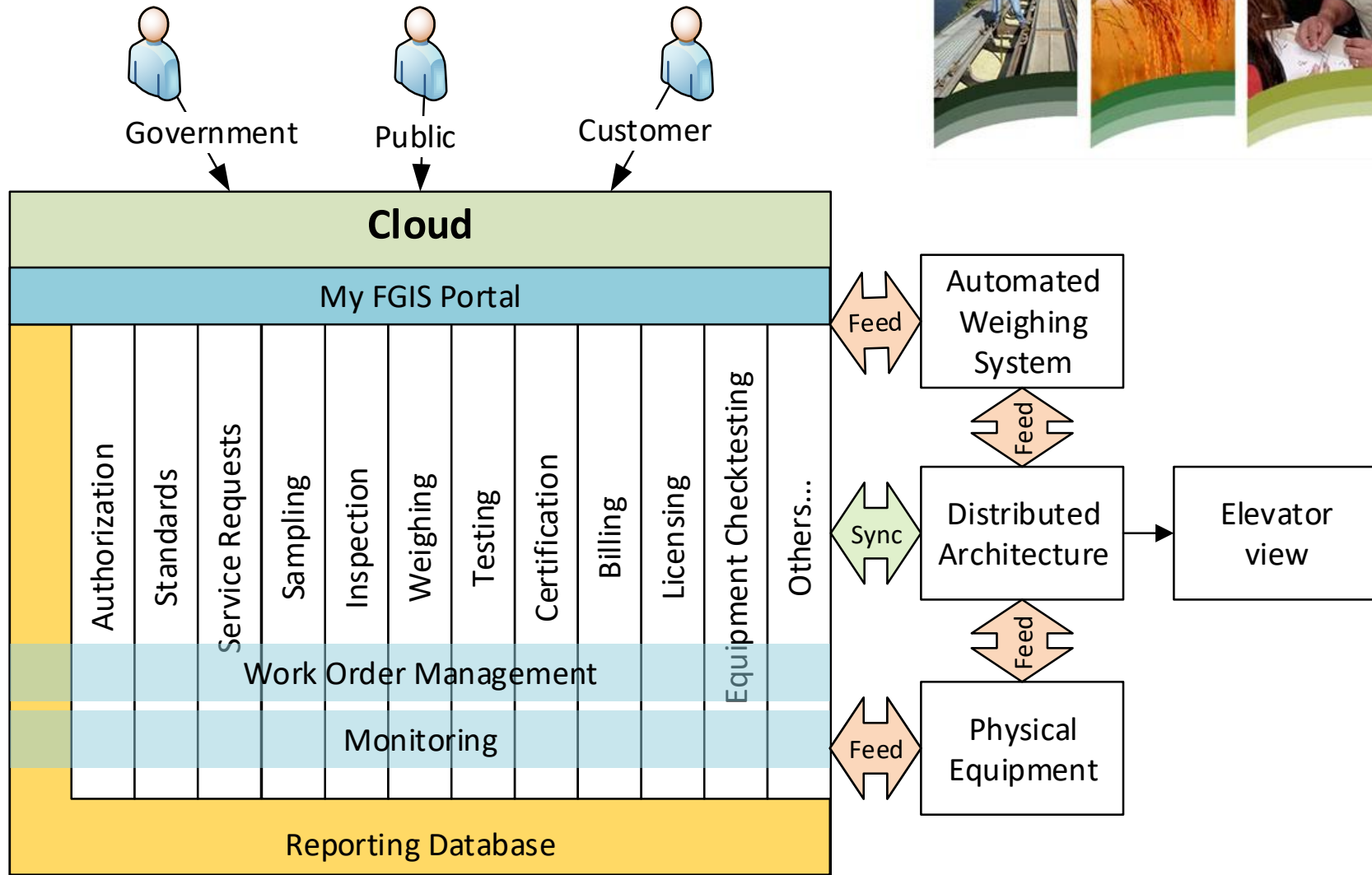
Upcoming

- Service Request
 - Targeting Beta training environment available in early FY19
 - Coordinating Production rollout for FY19
- Iterative functionality rollouts to establish workflow and add depth of service



Commitment to Continuity
Automate Across, Add Depth

FGISonline Future





United States Department of Agriculture

Questions?

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