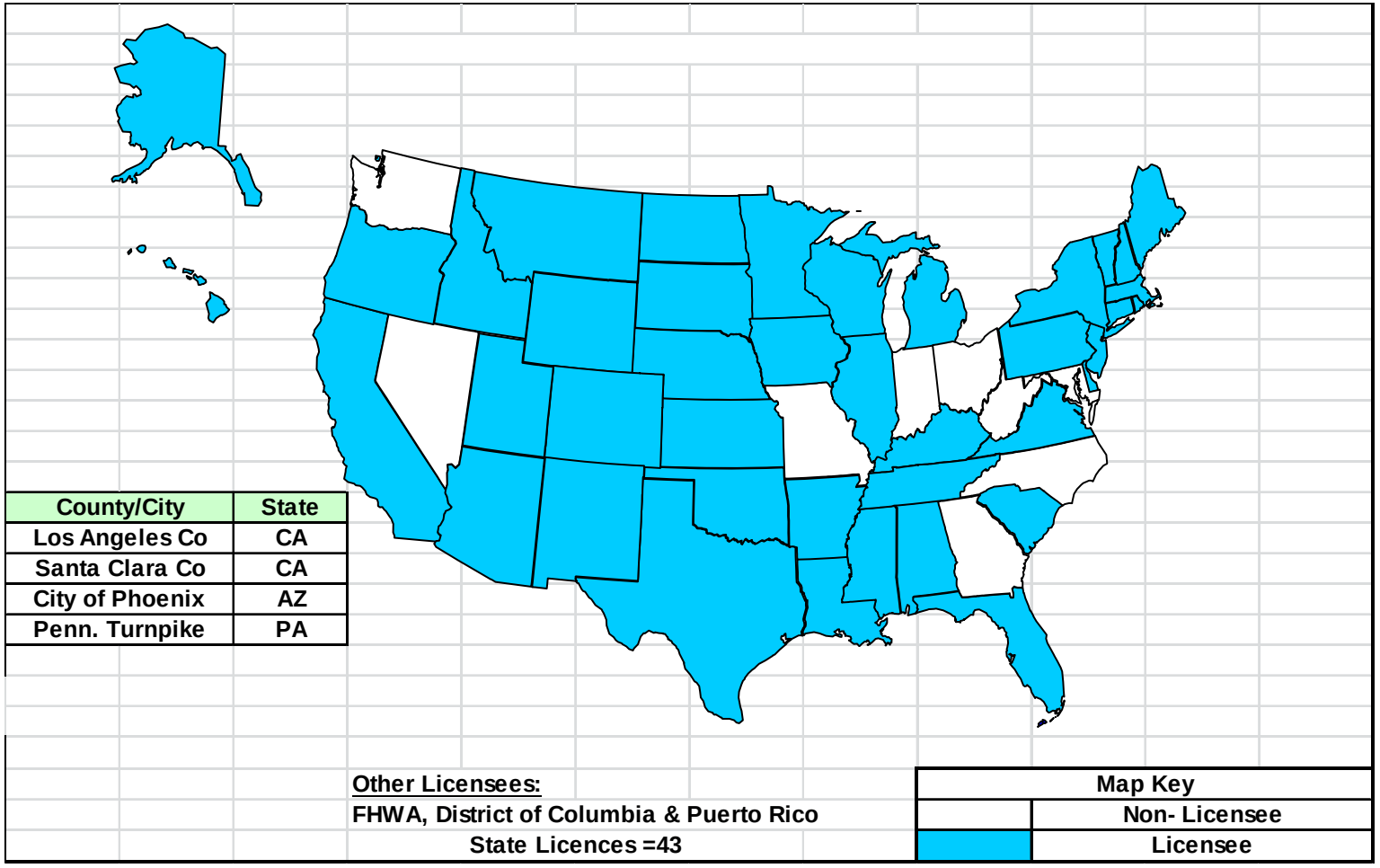
Bridge Management 2014 Administrative Overview

Bridge Management Users Group Meeting

Rapid City, SD

FY2013 Licensees



County/City	State
Los Angeles Co	CA
Santa Clara Co	CA
City of Phoenix	AZ
Penn. Turnpike	PA

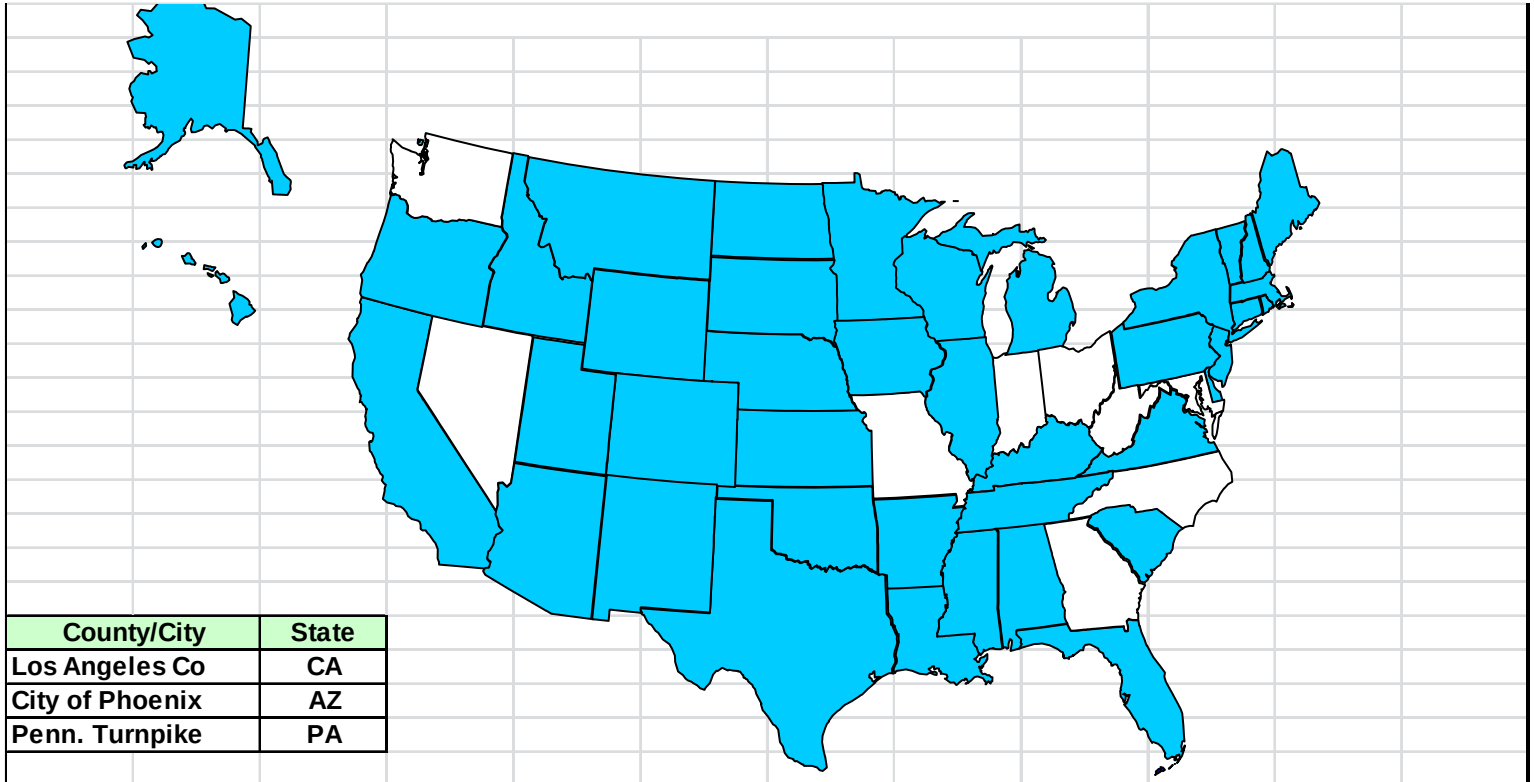
Other Licensees:

FHWA, District of Columbia & Puerto Rico

State Licences =43

Map Key	
	Non- Licensee
	Licensee

FY2014 Licensees

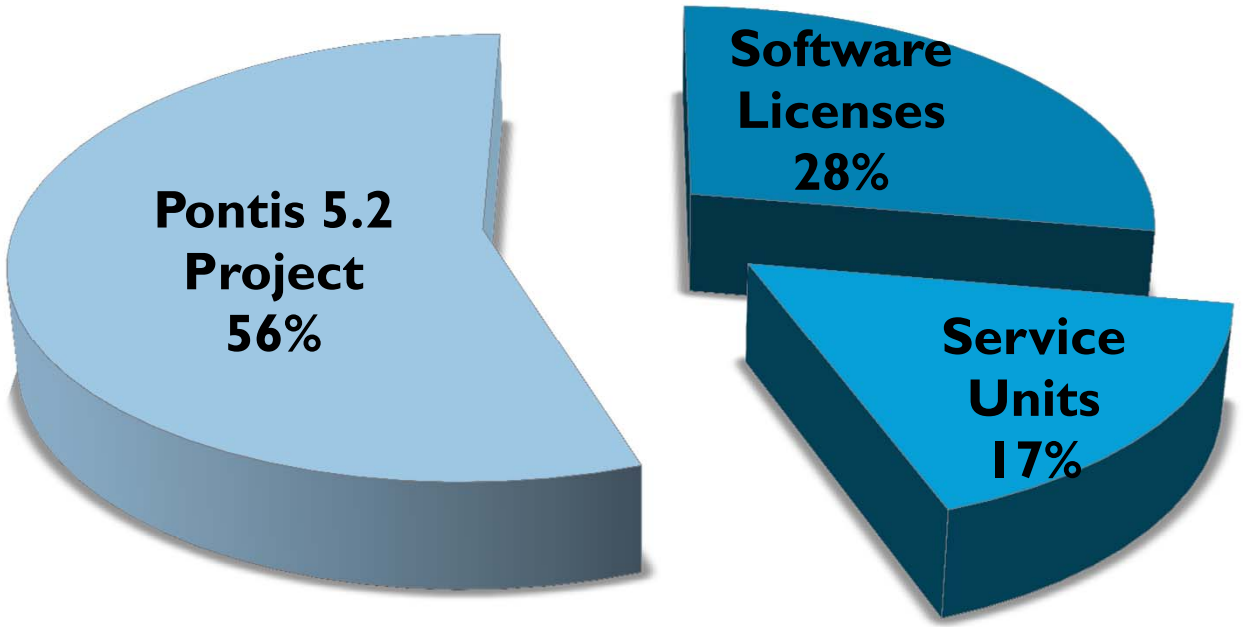


County/City	State
Los Angeles Co	CA
City of Phoenix	AZ
Penn. Turnpike	PA

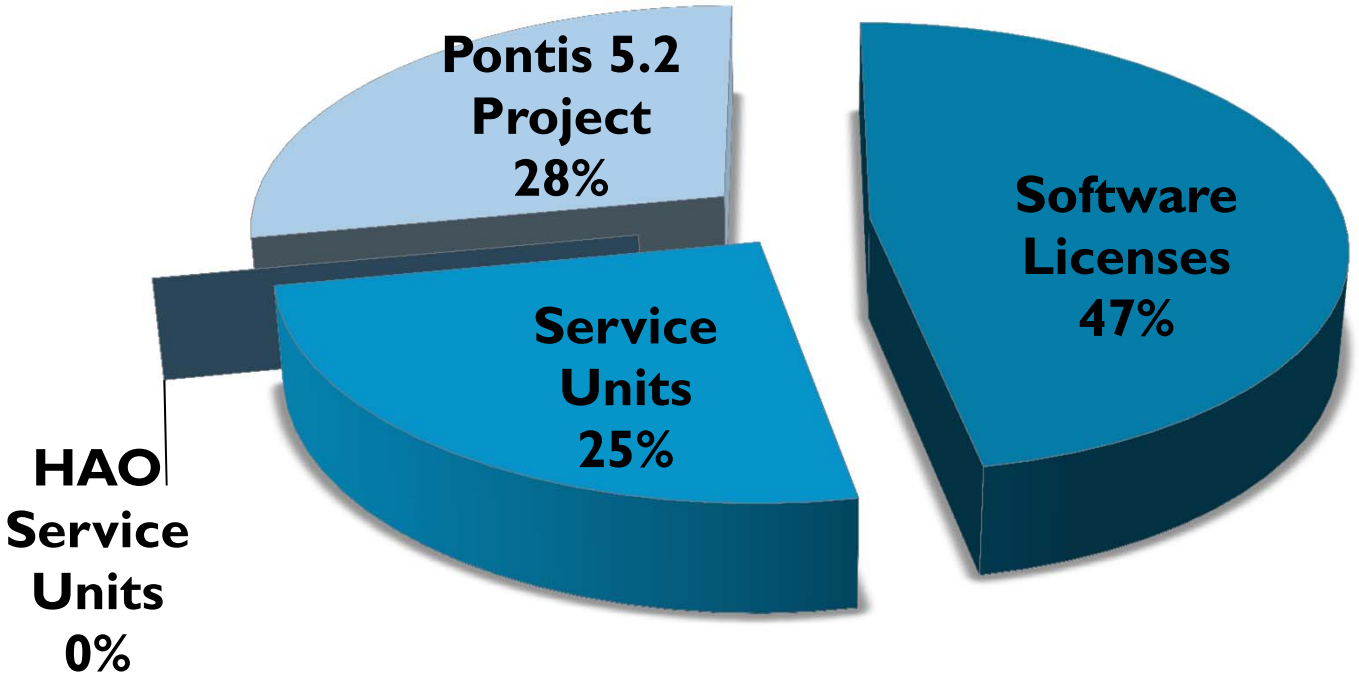
41 State Departments of Transportation + Manitoba, FHWA, District of Columbia & Puerto Rico

Map Key	
	Non- Licensee
	Licensee

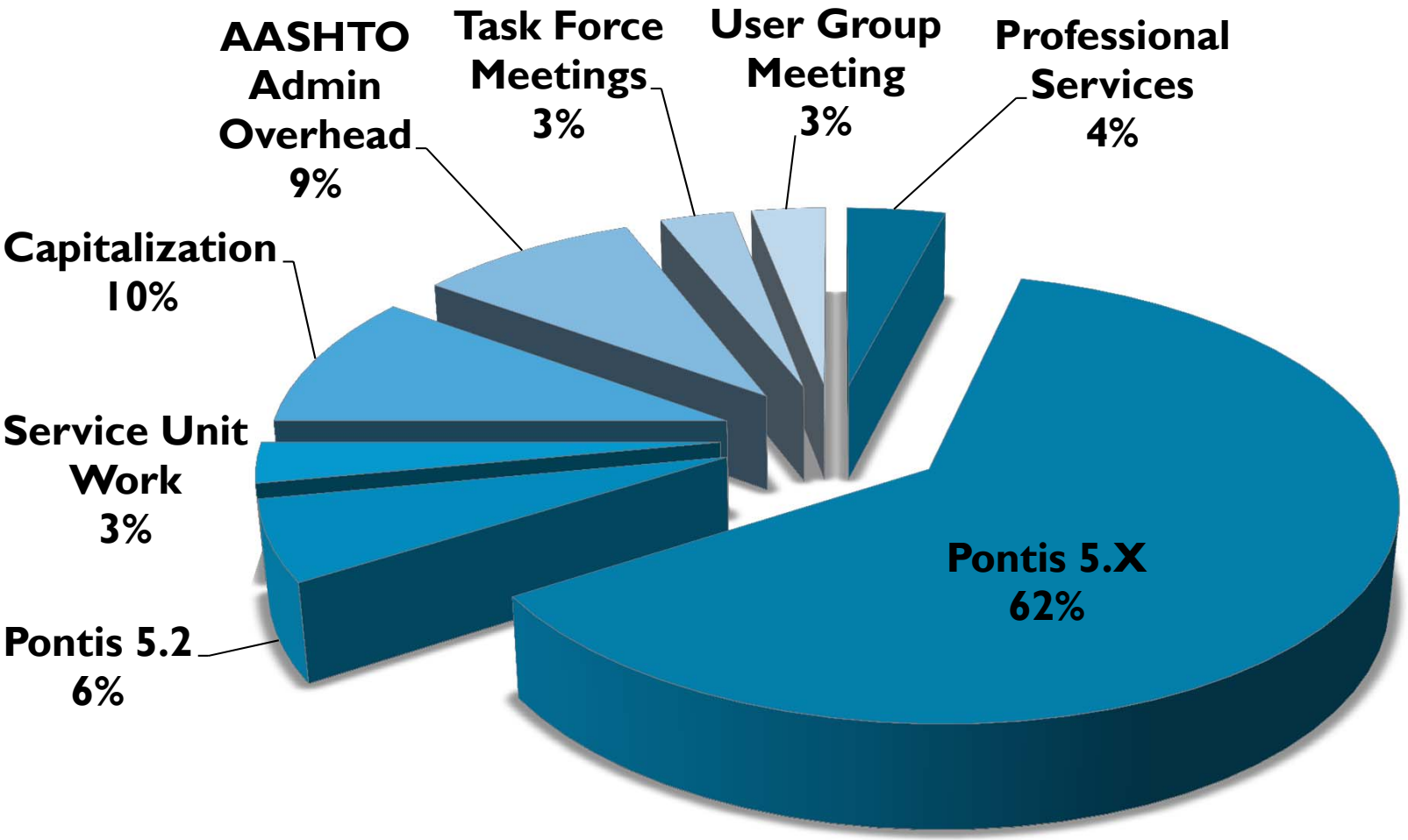
FY2013 Revenue



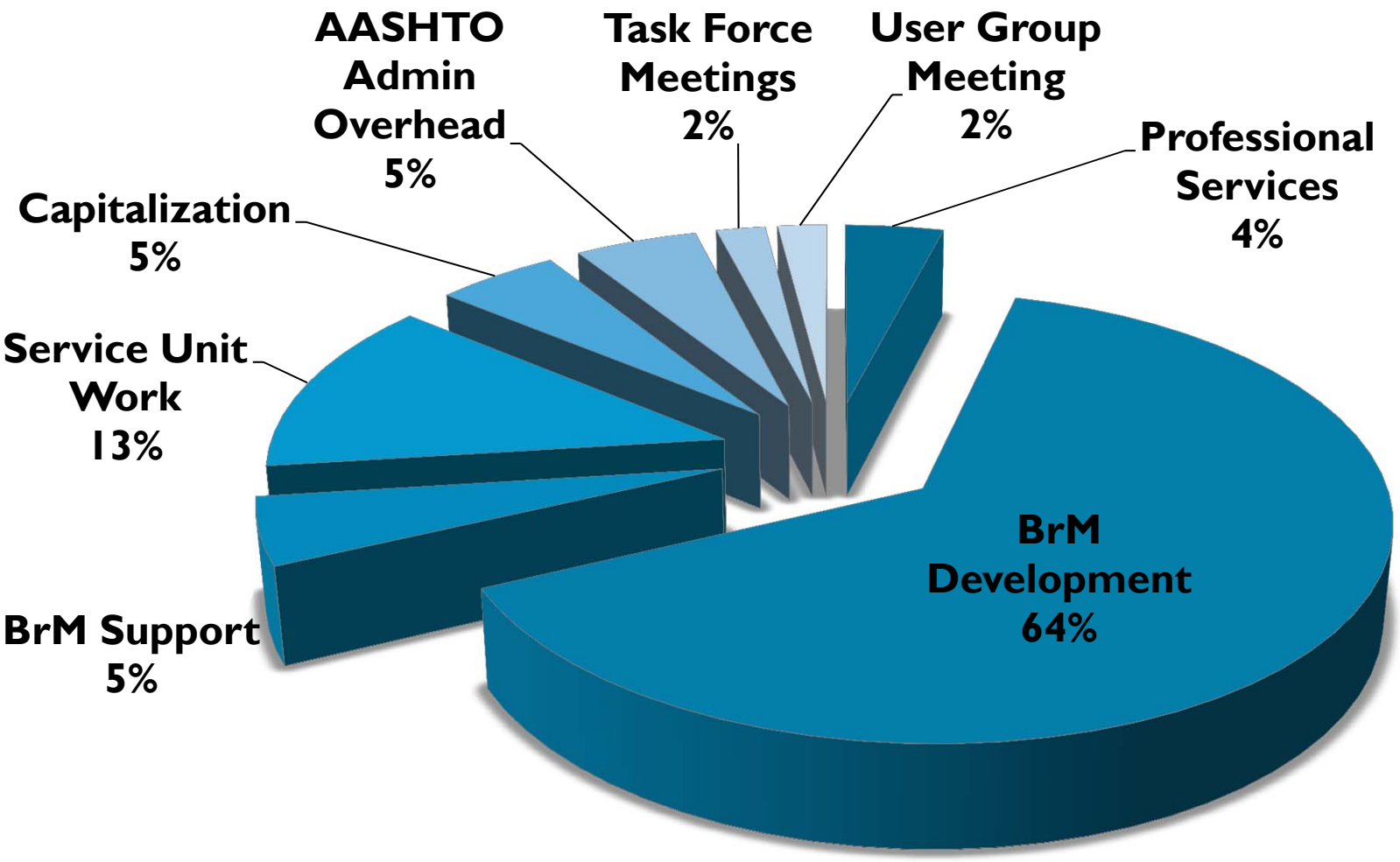
FY2014 Revenue



FY2013 Expenditures



FY2014 Expenditures



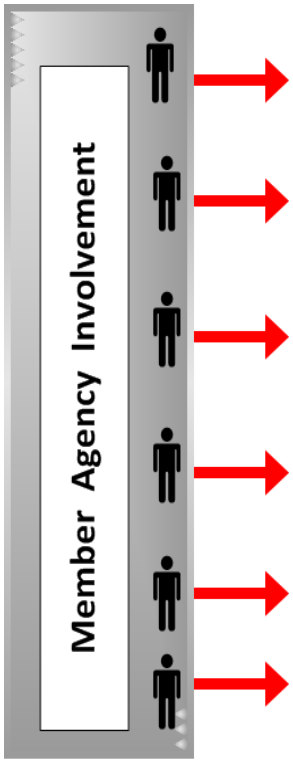
AASHTO Administrative Overhead

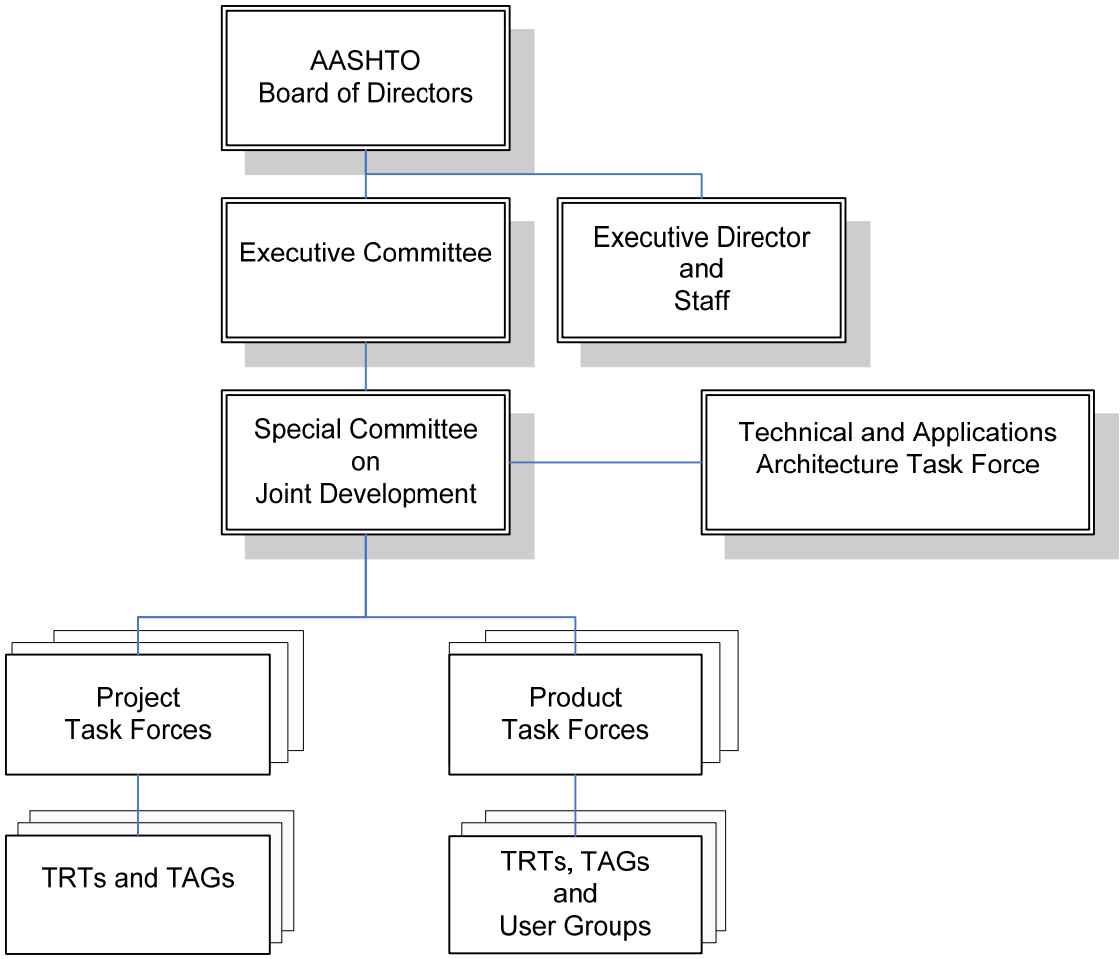
- AASHTO Administration & Overhead
  - Staff salaries, benefits, and overhead for AASHTO support staff
  - Contracted Project Manager
  - Proportional share of SCOJD, T&AA indirect costs and legal services
- Technical and Applications Architecture Task Force
  - Technical resource for SCOJD and product task forces
  - Develop and maintain software standard
  - Perform Annual QA Reviews

Why Use AASHTOWare?

- Incorporates "best practices"
- Users share solutions and costs
- License fees cover overall expenses ensure software products are kept current with technology and functional requirements
- Each product is self-supporting
- Non-profit operation
- Management and oversight by agency (DOT) personnel
- AASHTO staff project management/assistance

AASHTOWare Program Management





AASHTOWare Capitalization

- 5% of Revenues
  - Governed and controlled by the AASHTO Executive Committee
  - Covers risks associated with software development
  - Provides seed money for new projects
  - Covers legal expenses associated with trademark activities and third-party testing
  - Supports the National Transportation Marketing Campaign (Federal Transportation Bill)
  - Funded the AASHTOWare Rebranding Effort
  - Support for AASHTOWare Research Efforts

AASHTOWare Branding and TradeMark Guidelines

Brand Identity

AASHTOWare Branding and Trademark Guidelines have been established to ensure the strength of our brand is maintained

- Internal Communication –
  - Task Force Meeting discussion
  - Task Force / Licensee Emails
  - SharePoint workspace folders and files
  - Internal presentations at Task Force and User Group Meetings
  - User Group websites, etc.

Brand Identity

- External Communication – communication to groups outside the AASHTOWare community, including other AASHTO committees, AASHTO member agencies and the public
  - Presentations
  - Advertisements
  - Product Brochures
  - Product Newsletters
  - AASHTOWare Website, etc.

Brand Identity - Naming

- Full Name (External)
  - AASHTOWare Bridge Management™
- Abbreviated Name (Internal only)
  - BrM

Strictly speaking, a trademark should always be used as an adjective, never as a noun or verb; however, if the product name is used repeatedly, the full name should be presented every time, but the name may be used as a noun

AASHTOWare Service Units

A Brief Overview

AASHTOWare Service Units

- Allow agencies to obtain convenient access to services provided by the AASHTOWare contractor
- AASHTO serves as facilitator by accepting the commitment for contractor-provided services, invoicing and receiving payment from the agency and forwarding the order to the contractor for the appropriate number of service units.
- AASHTO makes payment for services rendered to the contractor following agency approval of the invoice.
- Service units remaining at the conclusion of a fiscal year are carried forward into the next fiscal year.

AASHTOWare Service Units

- Assist the licensee in the implementation of AASHTOWare products
- Provide consultation and support to incorporate customized enhancements

Service Unit – Example Activities

- Support agency implementation of the software
- Develop agency-specific features within the system
- Develop custom reports
- Provide specialized training in the use of the products
- Update prior releases of product databases
- Fund an agency's contribution to software development projects / solicitations

Service Unit – Example Activities

- Support common software enhancements unfunded through product licensing fees that will become part of the code base and will be supported by Maintenance, Support and Enhancement (MSE) costs
- Incorporate analytical or specification engines into AASHTOWare products

Use of Service Units

- May not be used to provide reimbursement for travel expenses by agency personnel
- May be converted to provide additional enhancement funding under the guidance of the Task Force.
- Should not be used for work involving major new software development by member agencies.

- Activities may require more than one Service Unit each, depending on the scope of the effort defined

Fee for Service Units

- Service Units can be ordered in unit increments of $11,600 (this fee includes AASHTO administrative costs).
- Each service unit provides $10,000 in routine contractor services.
- Service Units must be paid upon receipt of the invoice.

Service Units – Routine Use

86.2		**the percentage of the Bridge Products Service Unit fee directly allocated to the software service provider**
8.8		the percentage of the Bridge Products Service Unit fee used to offset AASHTO internal administrative costs
5.0		the percentage of the Bridge Products Service Unit fee dedicated to support the Cooperative Development Capitalization Fund as required by governing policy approved by the Board of Directors

Hosting and Add-On Service Units

- Hosting and maintenance of 5.2.X on contractor servers
- Purchase of approved plug-in modules for 5.2.X (as they become available)
- Ordered in unit increments of $3,000
- Each HAO Service Unit provides $2,500 in contractor services
- HAO Service Units must be paid upon receipt of the invoice.

Service Unit Process

- Partnership between requesting agency, Task Force and contractor.
- Task Force approval to ensure contractor resources are available.
- Analyze opportunities for collaboration between agencies and Task Force product work plans.

www.aashtoware.org
Service Unit Procedures

AASHTOWare
Service Unit Procedures

Service Unit Acquisition 2

Service Unit Work Options 3

Process for Service/Support Activities Funded by Service Units 4

1) Concept 4
2) Contractor Resource Identification 5
3) Work Plan Development 5
4) AASHTO Project Manager Review 6
5) Product Task Force Review / Approval 6
6) AASHTO Project Manager Processing 7
7) Contractor Work Performed 7
8) Product Task Force Review 8
9) Payment 8

Process for Enhancement Activities Funded by Service Units 8

1) Concept 8
2) Contractor Resource Identification 9
3) Work Plan Development 10
4) AASHTO Project Manager Review 11
5) Product Task Force Review / Approval 11
6) AASHTO Project Manager Processing 12
7) Contractor Work Performed 13
8) Product Task Force Review 14
9) Payment 14

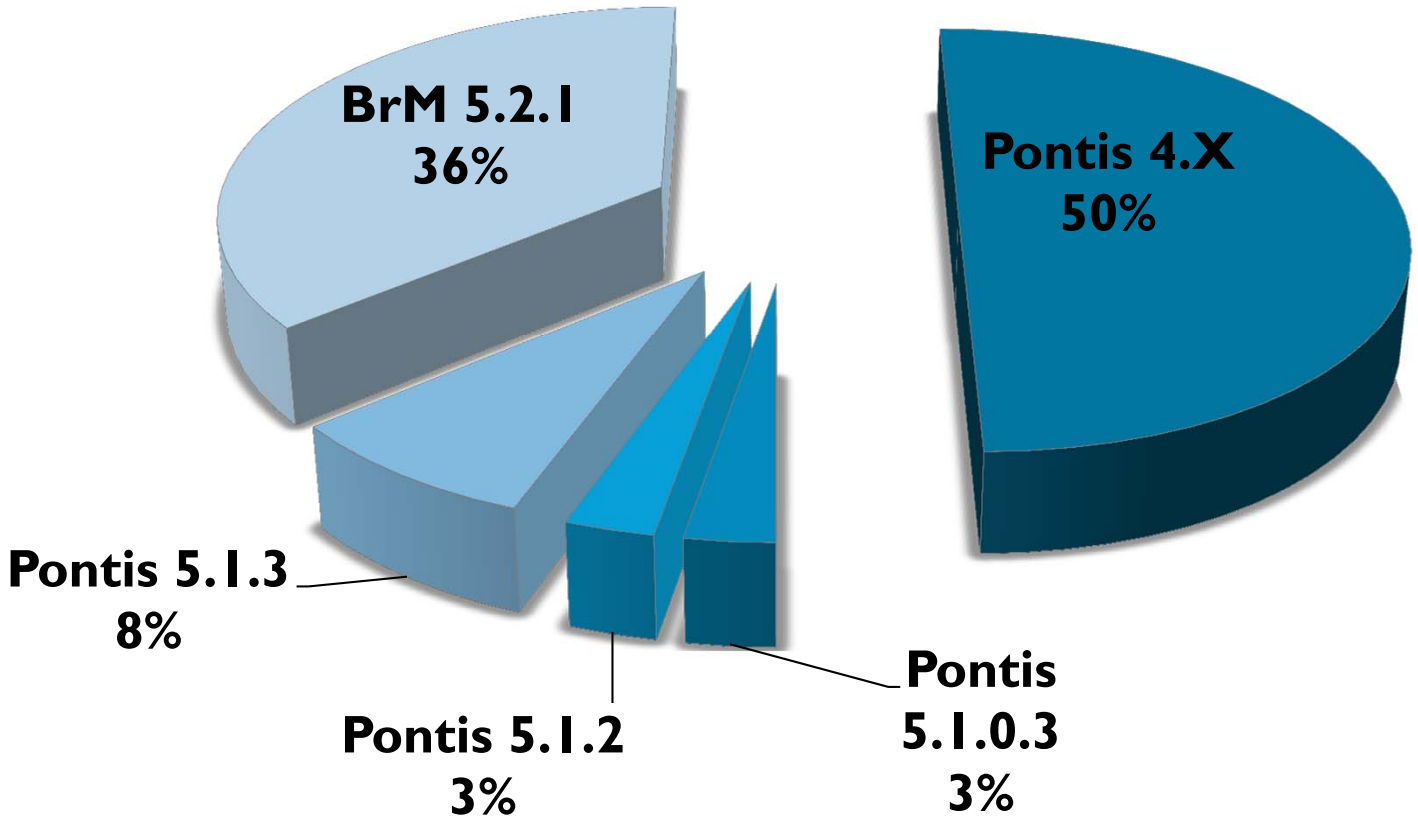
2014 Bridge Management
Customer Satisfaction Survey Results

Conducted July 29 – September 5, 2014

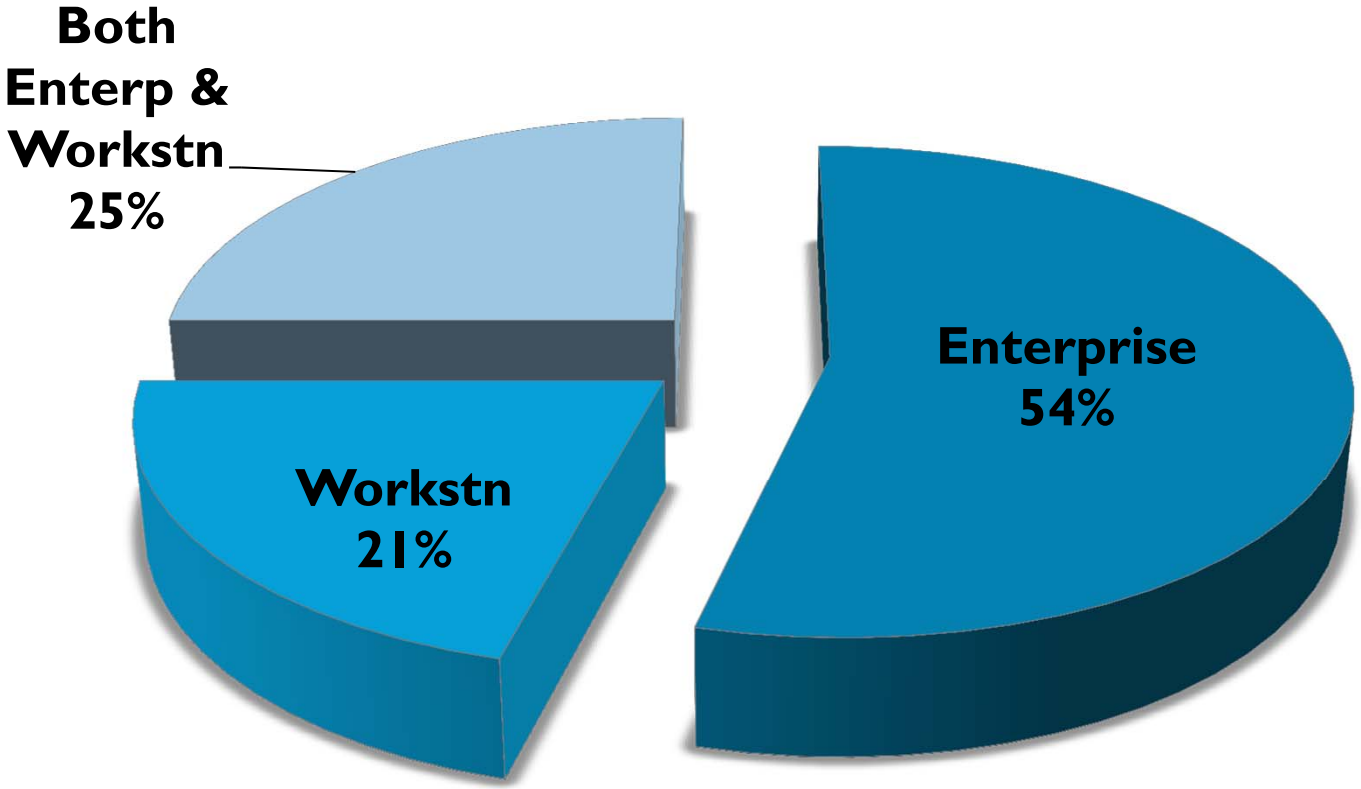
Survey Participation

- 37 Responses (55 in 2013)
  - 33 member agencies (46 in 2013)
  - 4 consultants (9 in 2013)

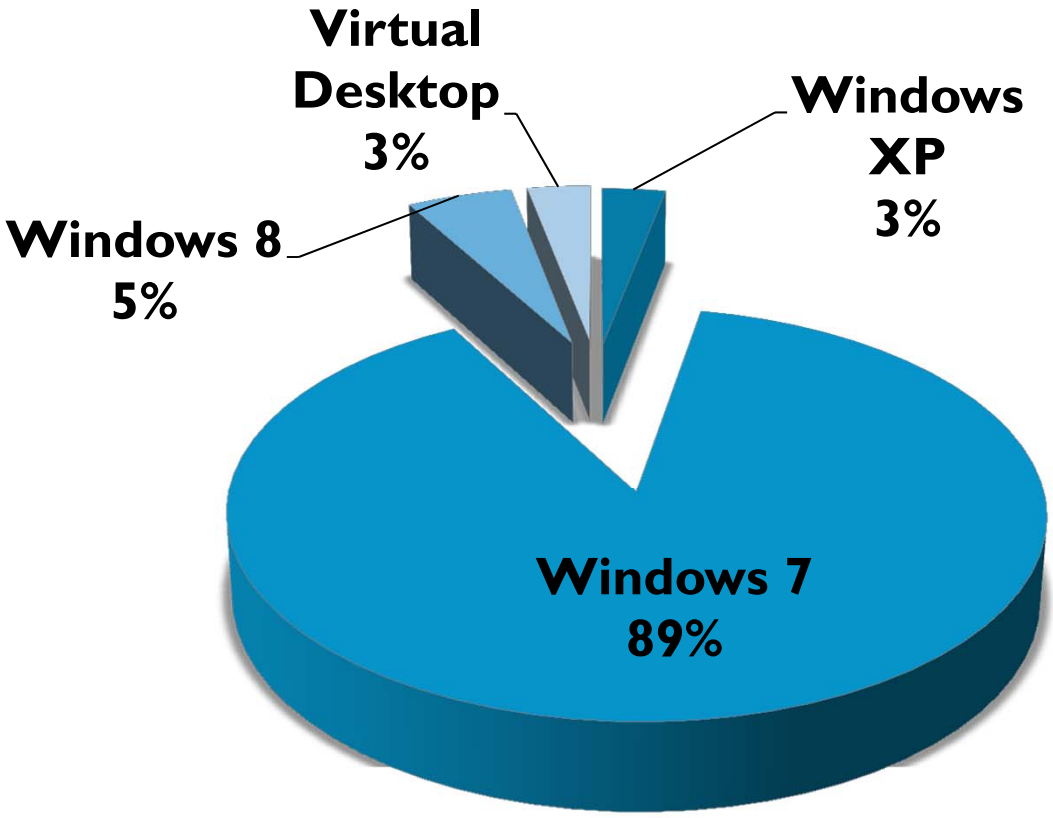
Software Version Used



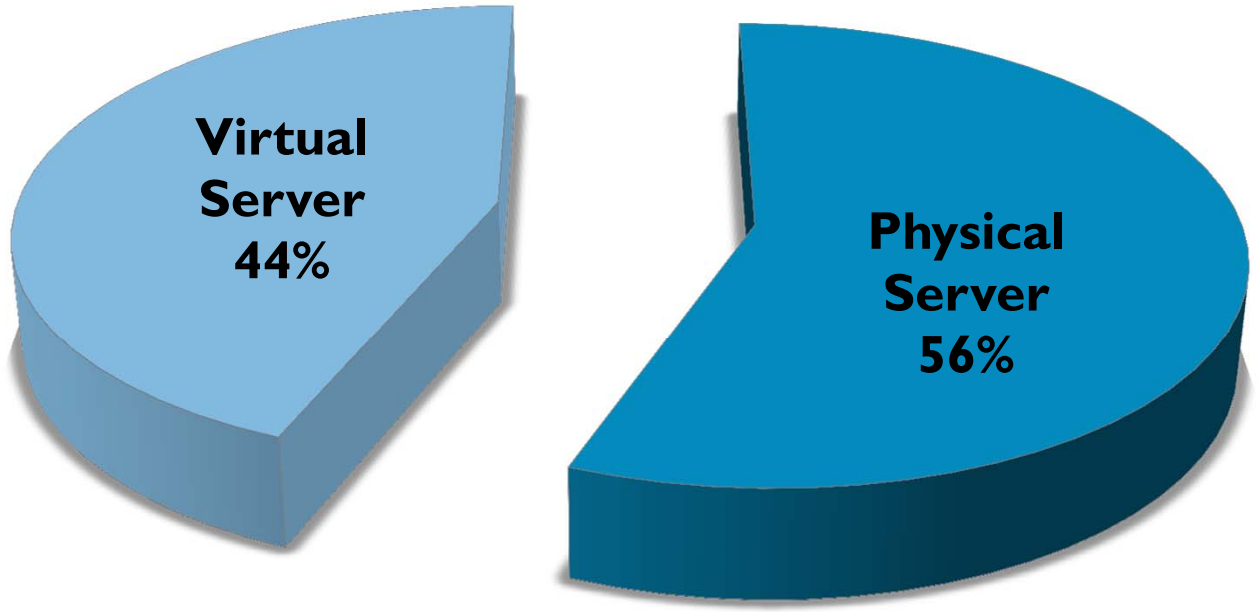
If you are using version 5.X, which platform are you using?



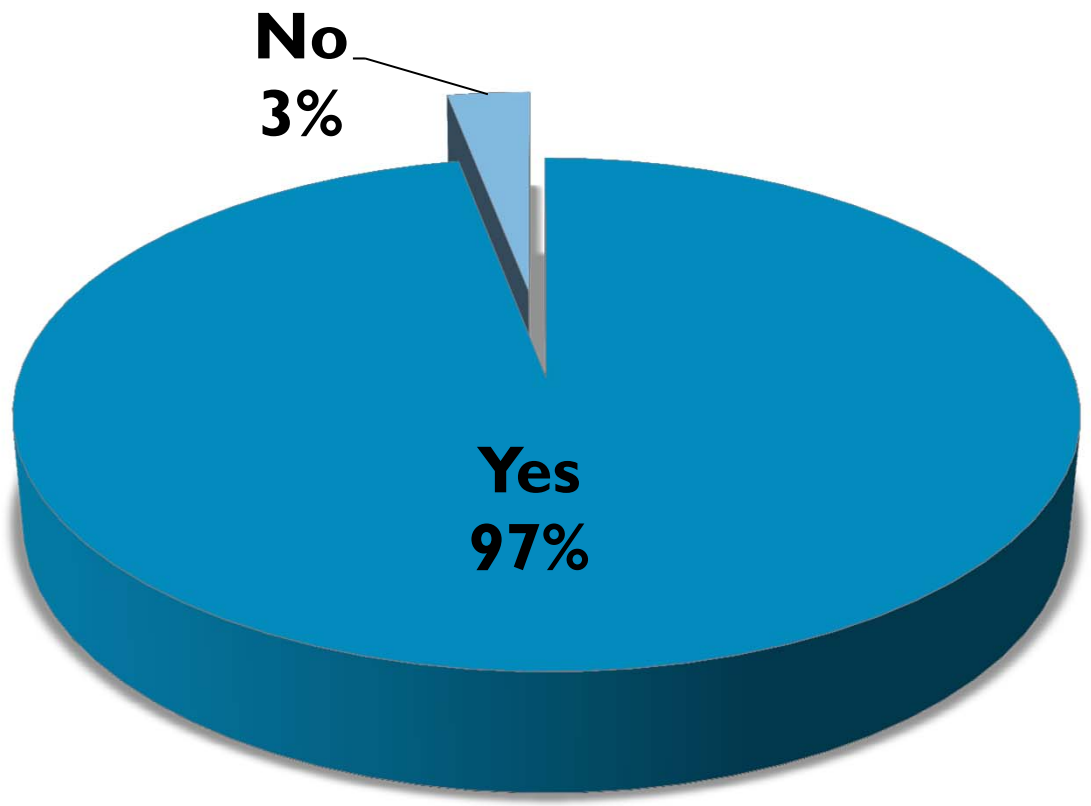
Workstation Operating System



Server Environment



If you are not currently using 5.2.1, do you plan to move to version 5.2.1 in the next year?



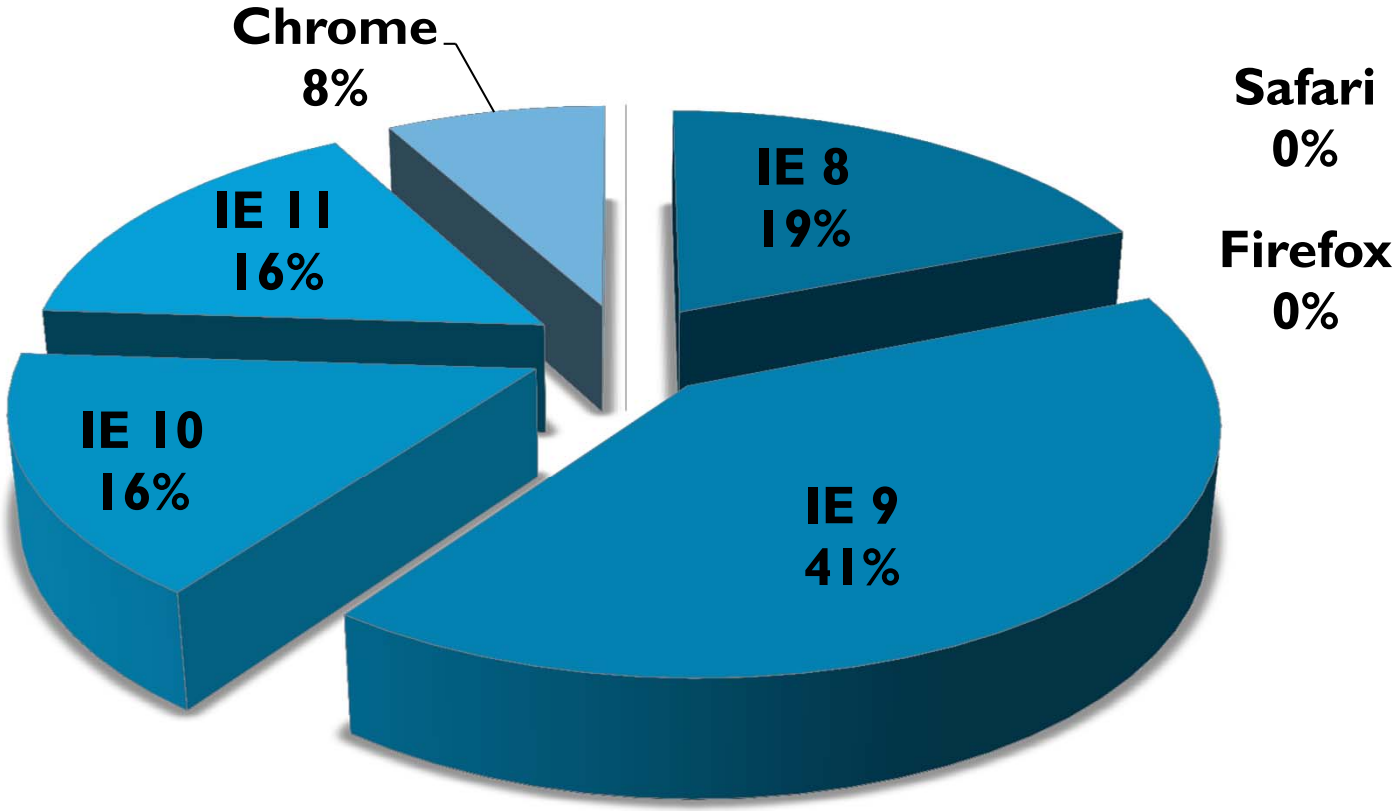
What do you need to start using 5.2.1? (1 of 2)

- DOT requires heavy customization for BrM usage. Several data entry/display screens for the user table data must be created. We also have over 200 reports from 4x which must be recreated for 5.2.1.
- Need to get it downloaded and installed.
- The system must accommodate more that two users. The original vision document for 5.X was 20 concurrent users.

What do you need to start using 5.2.1? (2 of 2)

- Need the state DOT to start using 5.2.1.
- The gateway module is not working. We cannot import any files using xml, pdi or nbi import.

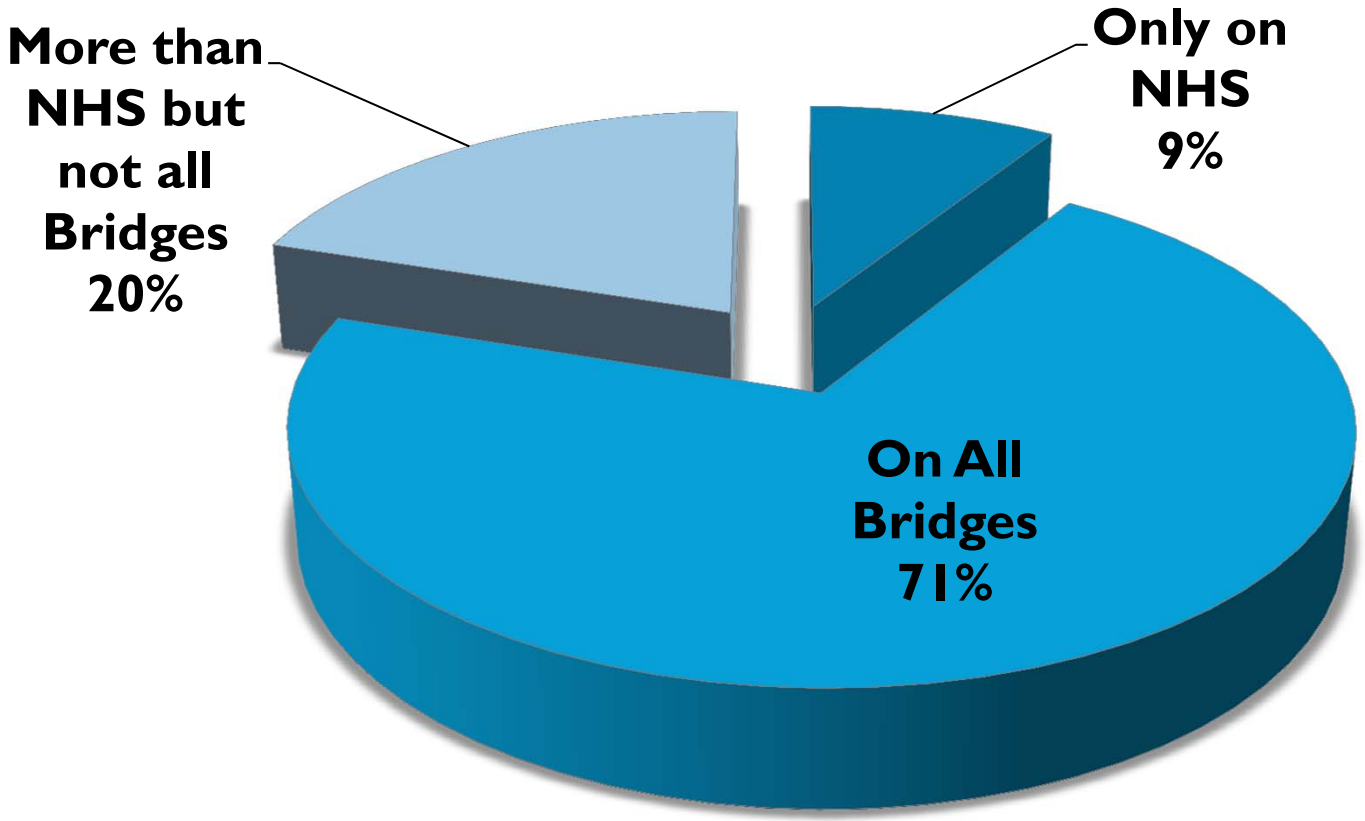
Web Browser Used



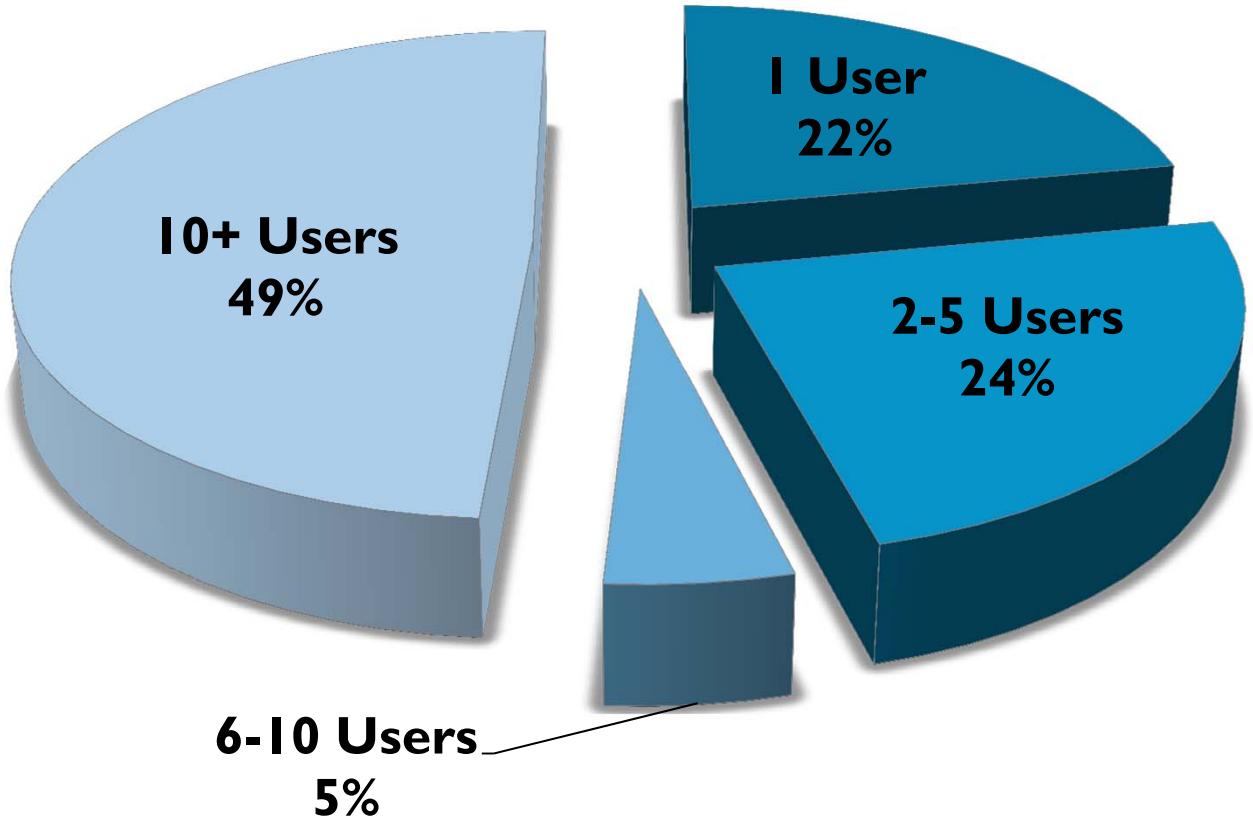
If using IE 8-10, when to you plan to upgrade to IE 11?

- Unknown (10)
- Sometime in 2015 (5)
- When IE11 compatibility issues are resolved (4)
- Decision made by the IT organization (2)
- Far in the future (2)
- Sometime in 2014
- In Progress
- DOT doesn't support IE11

Element Data Collection



Number of BrM Users



Most Significant Bridge Management Challenge? (1 of 3)

- Time to train users (4)
- Implementation of agency customizations (3)
- Data migration to element data (3)
- Deterioration modeling (3)
- Getting 5.2.1 to work properly/stable (3)
- Compliance with NBIS (2)
- Confidence in forecasting structurally deficient bridges for budget projections

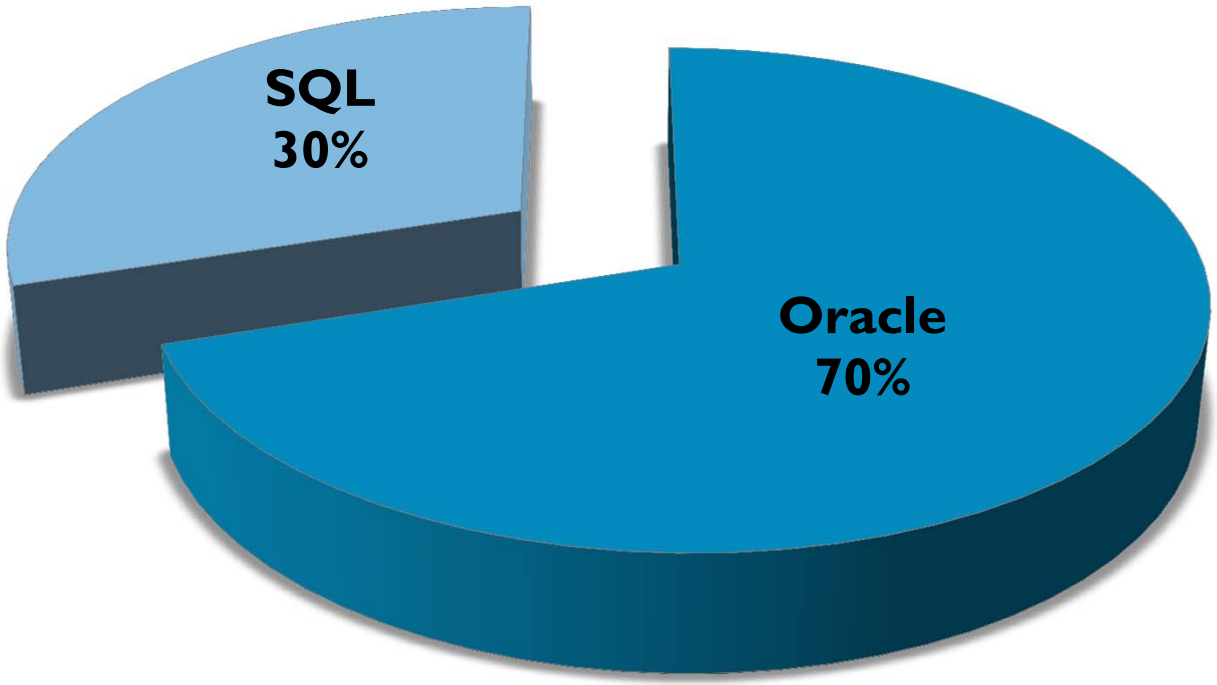
Most Significant Bridge Management Challenge? (2 of 3)

- Implementation of new versions and availability of technical support
- Data-driven asset management
- Data integrity and security
- Implementing element inspections
- Asset management module is not yet available
- End user and installation documentation

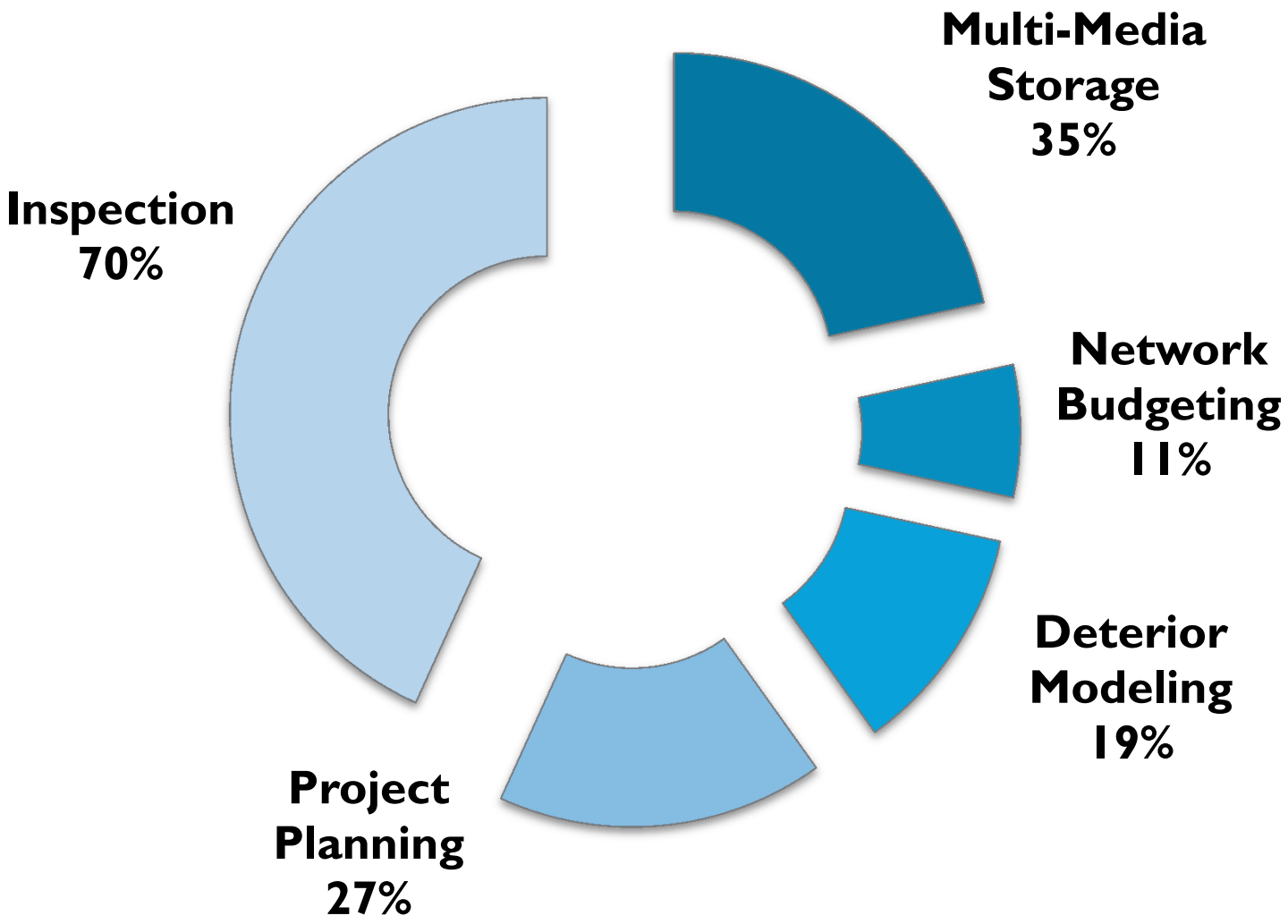
Most Significant Bridge Management Challenge? (3 of 3)

- BrM's inability to support a large number of users
- Software performance
- Sufficient employee resources
- Limited agency funding
- Overcoming agency procurement bureaucracy
- Have not used 5.2.1

Database Used



Features Used



Use of 'Previous Date' Field

- Record Last Inspection Date (15)
  - Manually enter the previous date to reflect the inspection just performed. Do not trust the date provided by BrM.
- Do Not Use this Field (6)
  - Doesn't work correctly
- Calculate the Next Inspection Date (3)
- Enter the Date of the Current Inspection
- Check for inspection compliance

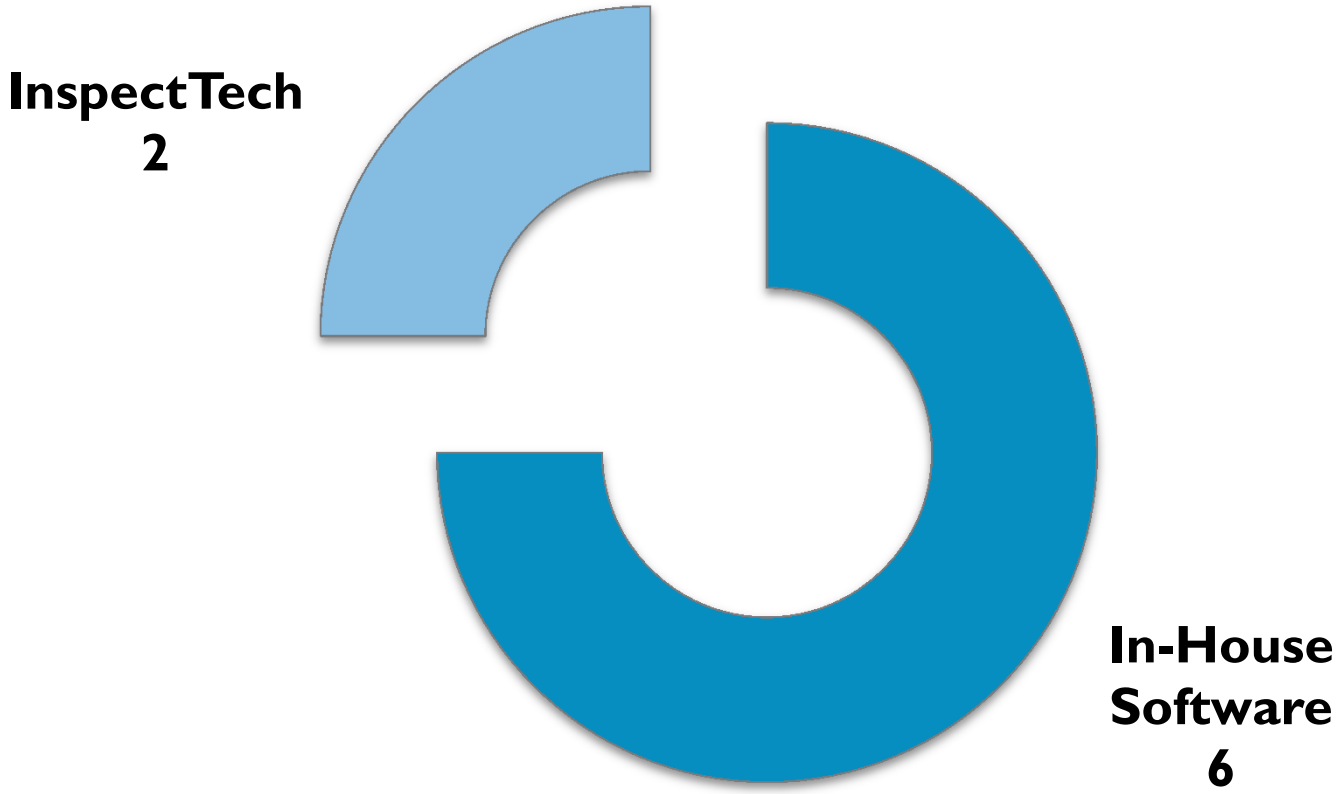
Use of 'Next Date' Field (1 of 2)

- Record Next Scheduled Inspection Date (16)
  - Relevant inspection type based on inspection frequency and the previous date
  - Next routine inspection
  - Manually enter the next date based on the most recent inspection. Do not trust the date provided by BrM.
  - Next date = inspection + frequency
- Schedule inspectors (3)

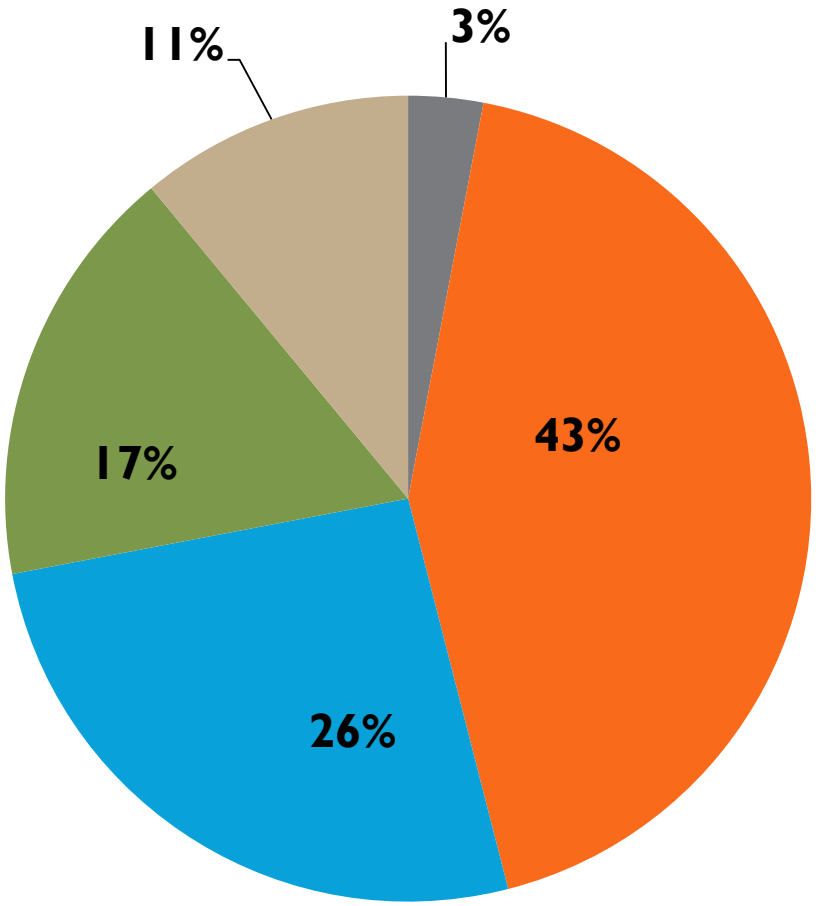
Use of 'Next Date' Field (2 of 2)

- Do Not Use this Field (3)
- Check for inspection compliance
- Allow Pontis 4.X to update it automatically

Inspection Software Used (if not using BrM)

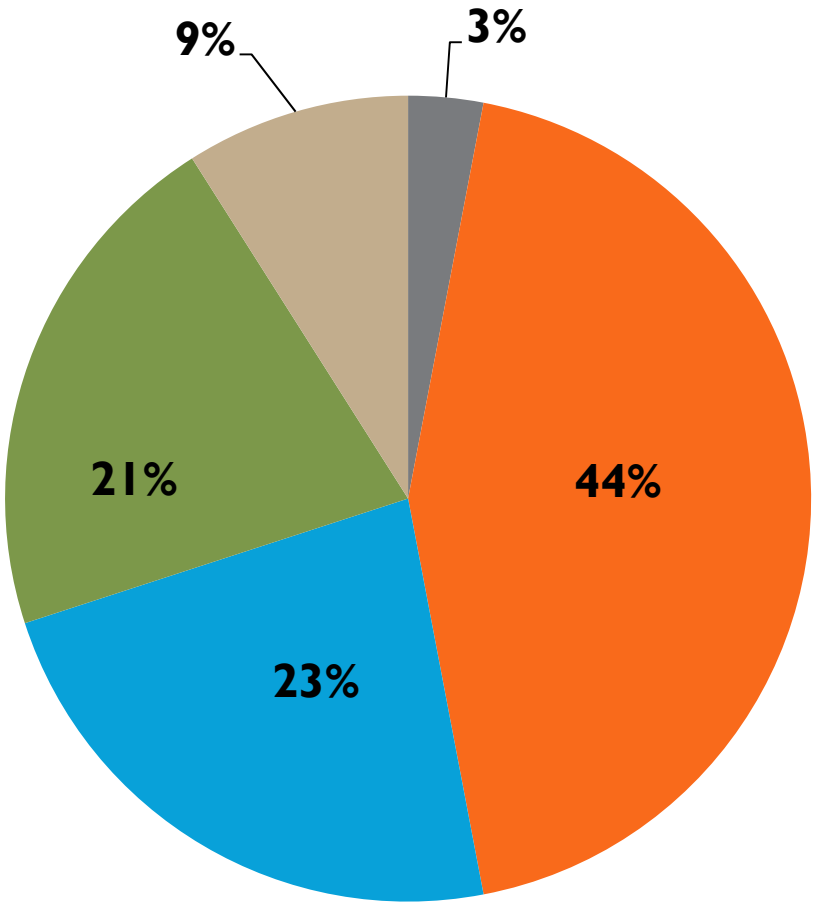


Ease of Installation



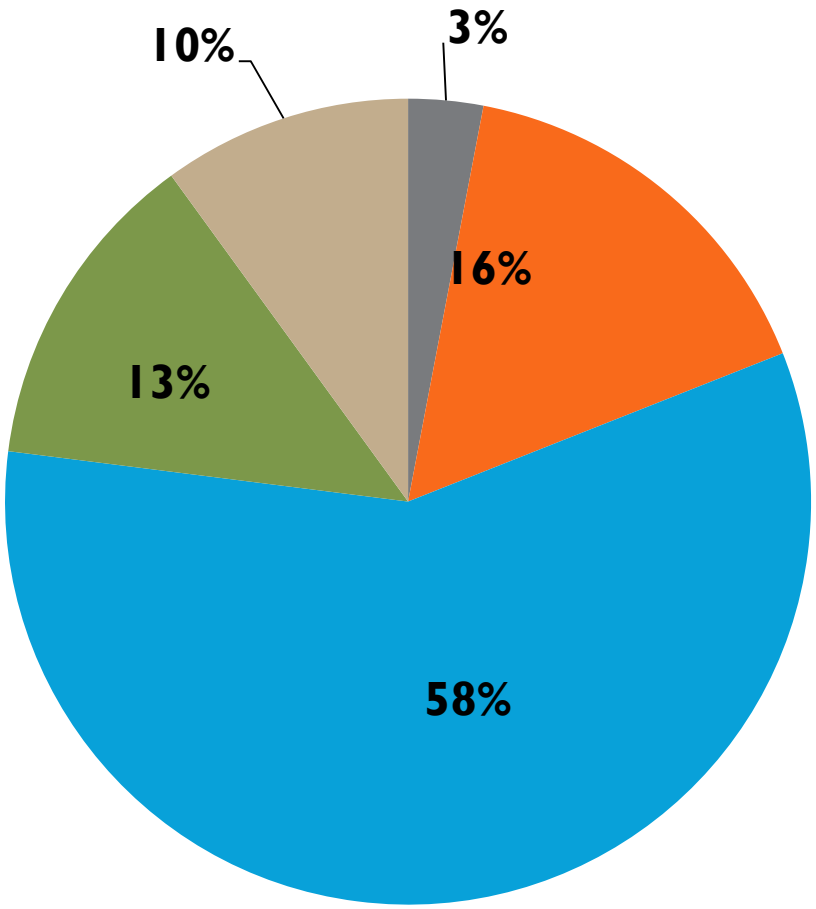
	2013
Extremely Satisfied	2%
Moderately Satisfied	50%
Neither satisfied nor dissatisfied	27%
Moderately dissatisfied	15%
Extremely dissatisfied	6%

Software Operation (speed, ease of use, reliability)



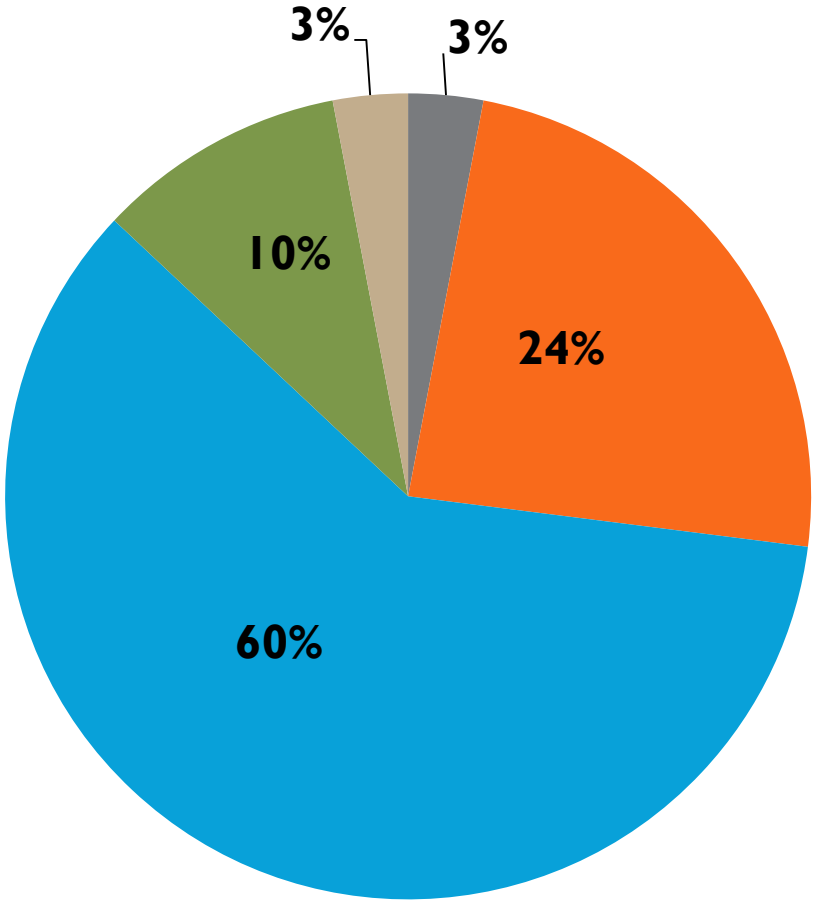
	2013
Extremely Satisfied	2%
Moderately Satisfied	40%
Neither satisfied nor dissatisfied	35%
Moderately dissatisfied	19%
Extremely dissatisfied	4%

Analysis Features of Pontis 4.X



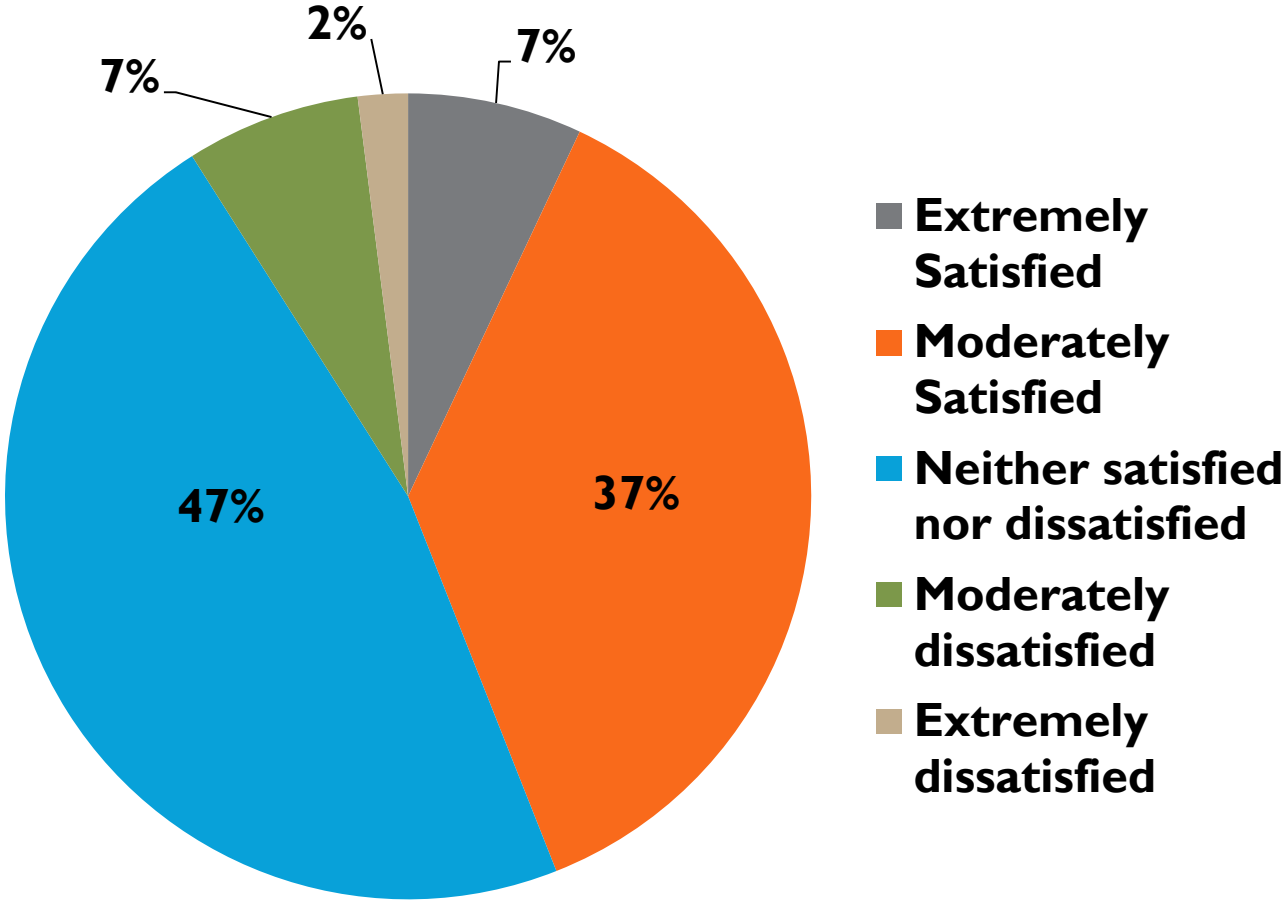
	2013
Extremely Satisfied	4%
Moderately Satisfied	20%
Neither satisfied nor dissatisfied	50%
Moderately dissatisfied	22%
Extremely dissatisfied	4%

Inspection Features of Pontis 5.1.2 / 5.1.3

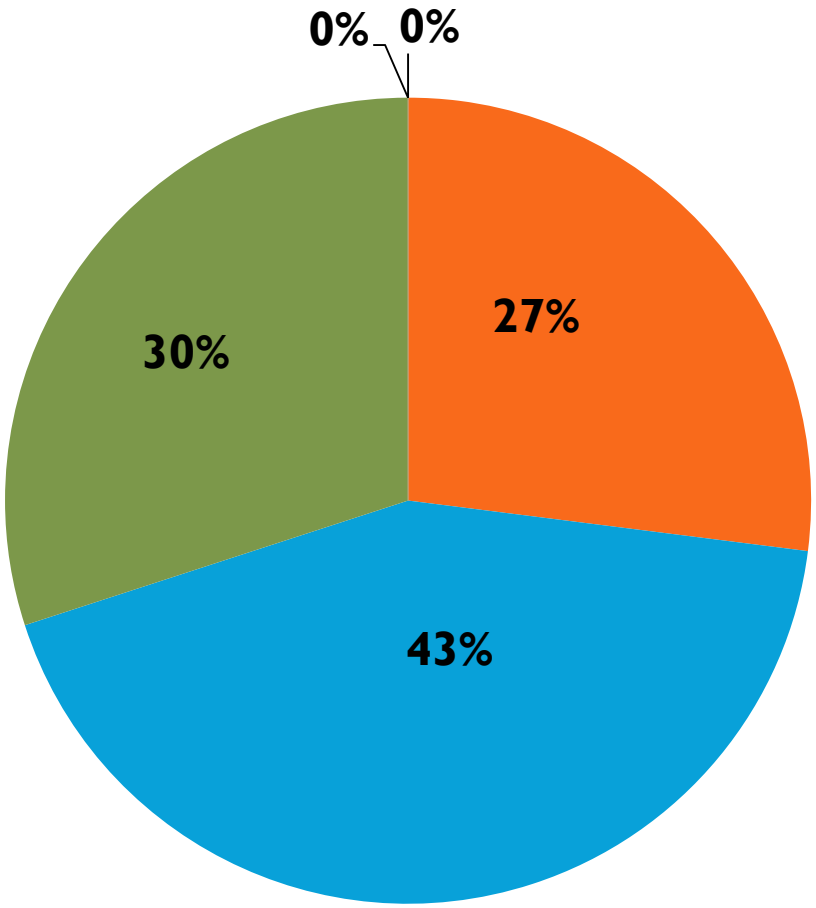


	2013
Extremely Satisfied	4%
Moderately Satisfied	25%
Neither satisfied nor dissatisfied	51%
Moderately dissatisfied	18%
Extremely dissatisfied	2%

Inspection Features of Pontis 5.2.1



Reports (delivery, quality and completeness)



	2013
Extremely Satisfied	2%
Moderately Satisfied	23%
Neither satisfied nor dissatisfied	49%
Moderately dissatisfied	20%
Extremely dissatisfied	6%

Enhancements to support using features not currently using (1 of 3)

- 5.2.1 is very slow and buggy (3)
- Easier customization to add state requirements (3)
- Application should work – Get 5.2.1 stable – correct memory issues
- GUI Makeover
- Multimedia needs to be able to interface with corporate document management system to be practical and useful

Enhancements to support using features not currently using (2 of 3)

- Limited functionality – unable to scroll up or down one bridge while in inspection module (very cumbersome)
- API
- Better documentation of features and how to use them – explain deterioration, risk and utility functions – explain generic IIS requirements and setup instructions
- 5.2.x project needs to be completed

Enhancements to support using features not currently using (3 of 3)

- Unit cost of work candidates to store decimal points (cents)
- Ability to group work candidates into projects
- Deterioration modeling
- Inspection and Utility function

Comments on Software Use (1 of 3)

- 5.2.1 is too slow and is unstable at times (2)
- Post backs need to be minimized
- More timely technical support
- Every 'improvement' causes the program to be slower and more complicated
- Question 14 lists deterioration modeling which is not included in 5.2.1
- Report creation takes too long and the output file (both .doc and .pdf) are too large

Comments on Software Use (2 of 3)

- Making use of agency fields and the user tables is tedious and difficult – agency tab generator doesn't work when trying to work with roadway data
- BrM needs to keep up with Microsoft operating system and database updates
- BrM needs to be a 64-bit program
- Waiting for a robust API to add their internal data to the application database.
- Risk-based data input for future modeling

Comments on Software Use (3 of 3)

- Incorporate import of full element specifications: condition state language, defect definitions, material definitions, categories, types, etc.
- Expand the size of the Inspection Notes field
- DOTs are expecting a true bridge management software – expect AASHTO to deliver a system that works and meets their needs
- The program is getting much better
- Waiting for functionality of 5.2.3

Use of Technical Support from Bentley - 74% of respondents

	Extremely satisfied	Moderately satisfied	Neither satisfied nor dissatisfied	Moderately dissatisfied	Extremely dissatisfied
a) quality of the support provided	19% 40%	54% 32%	8% 25%	15% 8%	4% 0%
b) contractor communication and follow-up	23% 28%	50% 40%	8% 16%	11% 16%	8% 0%
c) effectiveness of contractor telephone & e-mail support	31% 28%	31% 36%	15% 24%	15% 12%	8% 0%
d) knowledge of the contractor help desk staff	23% 40%	46% 24%	12% 32%	19% 4%	0%
e) overall quality of contractor problem resolution	16% 32%	44% 32%	20% 24%	12% 12%	8% 0%

Use of Development or Custom Technical Support - 20%

	Extremely satisfied	Moderately satisfied	Neither satisfied nor dissatisfied	Moderately dissatisfied	Extremely dissatisfied
a) quality of the support provided	0% 14%	86% 14%	14% 14%	0% 8%	0%
b) contractor communication and follow-up	0% 57%	57% 29%	29% 14%	14% 0%	0%
c) effectiveness of contractor telephone & e-mail support	0% 57%	86% 29%	14% 14%	0%	0%
d) knowledge of the contractor help desk staff	29% 57%	57% 29%	14% 14%	0%	0%
e) overall quality of contractor problem resolution	0% 57%	86% 29%	14% 14%	0%	0%

Comments on Contractor Support (1 of 3)

- Waiting on support for basic Pontis 4.2 functionality as well as answers regarding 5.2
- Timeliness and thoroughness seem to be a general issue. - It takes forever to hear back
- Need to setup a better process for using Bentley development and customization services – need to know who to get it going
- Response time has decreased since Bentley took over

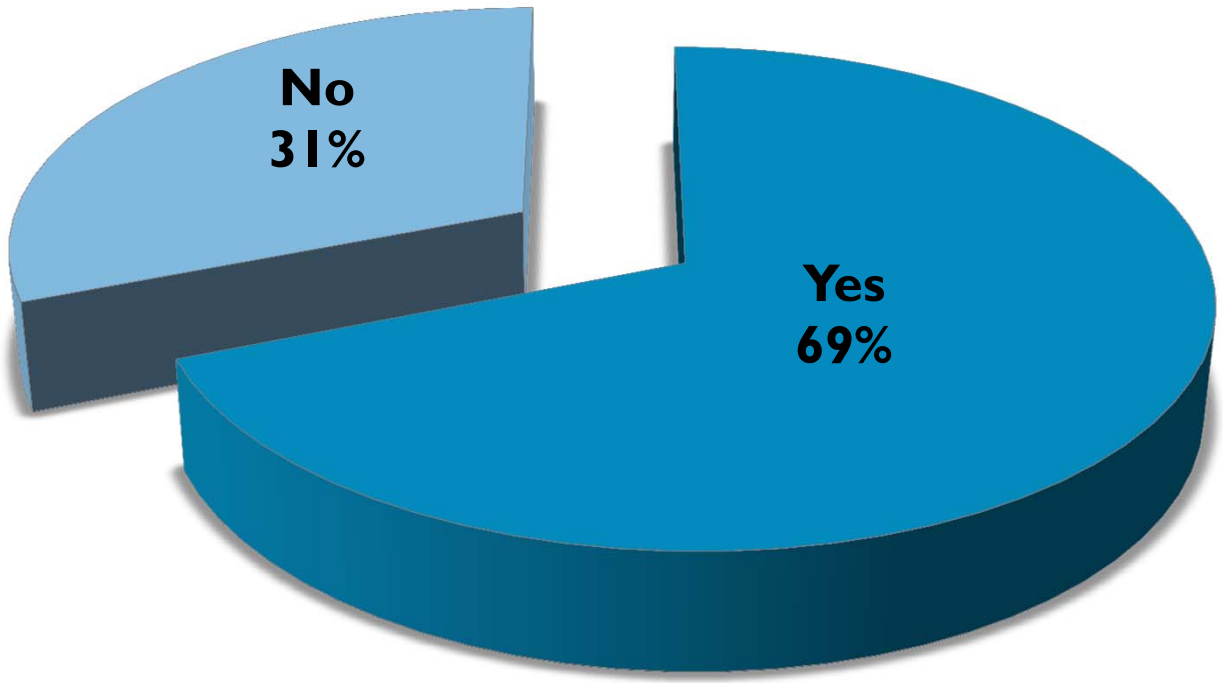
Comments on Contractor Support (2 of 3)

- Customizations for our DOT were planned in advance and we were assured they would be ready for implementation in May; however, these were still not complete in August
- Contractor is cooperating but the application needs a lot of improvement
- Relationship with AASHTO and Contractor does not protect agency when using Service Units
- Since last year, the overall development, support and customization has improved a lot

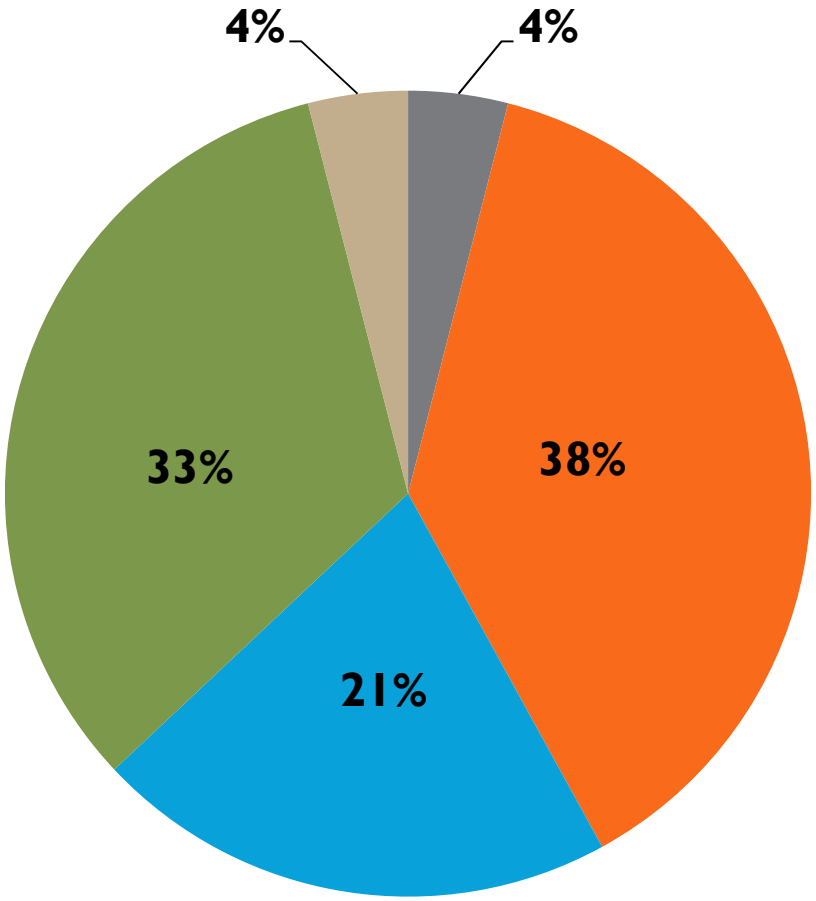
Comments on Contractor Support (3 of 3)

- JIRA is a pain
  - Previously reported issues cannot be searched to save time
  - Notifications to support requests only work about half the time – users must check JIRA every day to see if questions or responses have been posted
  - Too much Bentley internal communication is stored in JIRA – users shouldn't have to wade through the Bentley internal discussions in JIRA

Exposure to Pontis 5.2.1 Documentation

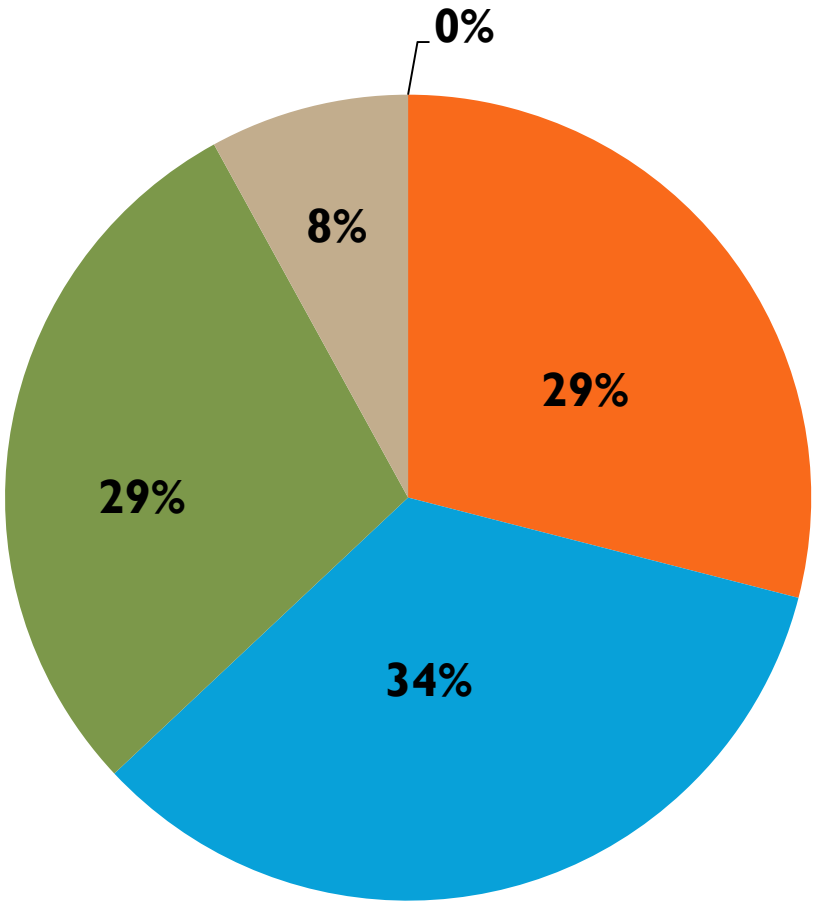


Pontis 5.2.1 Documentation Quality



	2013
Extremely Satisfied	0%
Moderately Satisfied	29%
Neither satisfied nor dissatisfied	58%
Moderately dissatisfied	13%
Extremely dissatisfied	0%

Pontis 5.2.1 Documentation Usefulness



	2012
Extremely Satisfied	0%
Moderately Satisfied	14%
Neither satisfied nor dissatisfied	59%
Moderately dissatisfied	18%
Extremely dissatisfied	9%

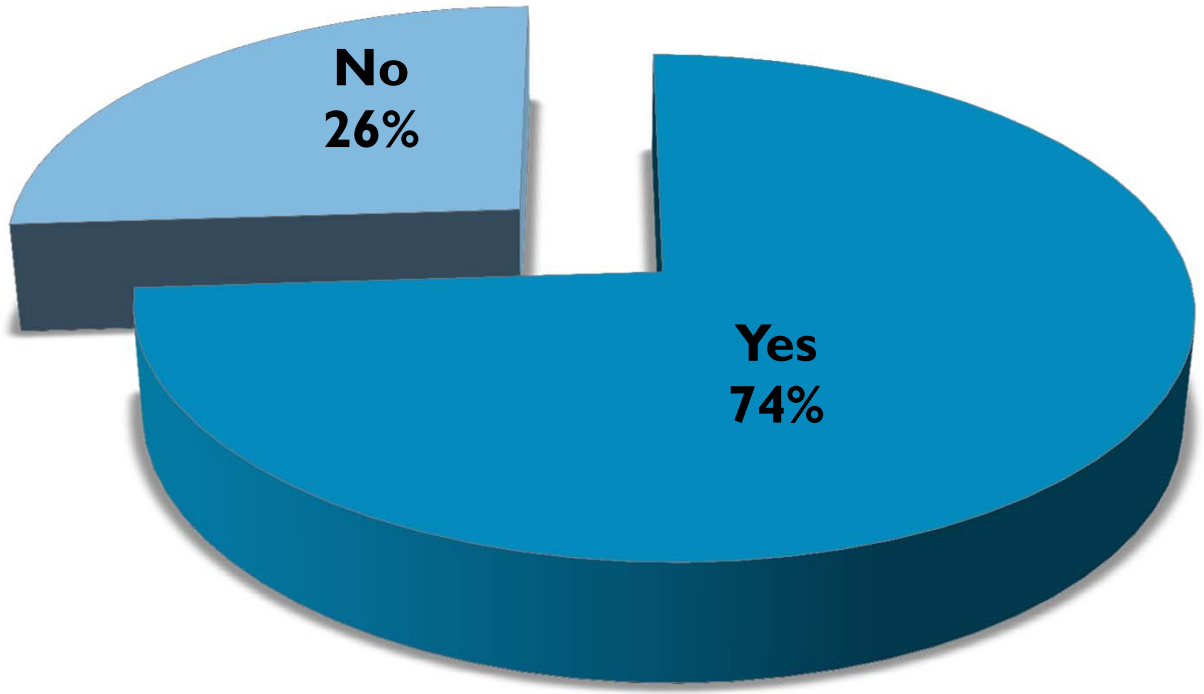
Comments on Documentation (1 of 2)

- Technical and user manuals need to be completely up to date
- Needs a complete redesign and rewrite
- Manuals need to be updated for an agency to select and derive basis for developing risk, utility functions, etc.
- More detail on customization is needed (who, what, when, where, and how) – what happened to the technical writer that Bentley said they hired last year?

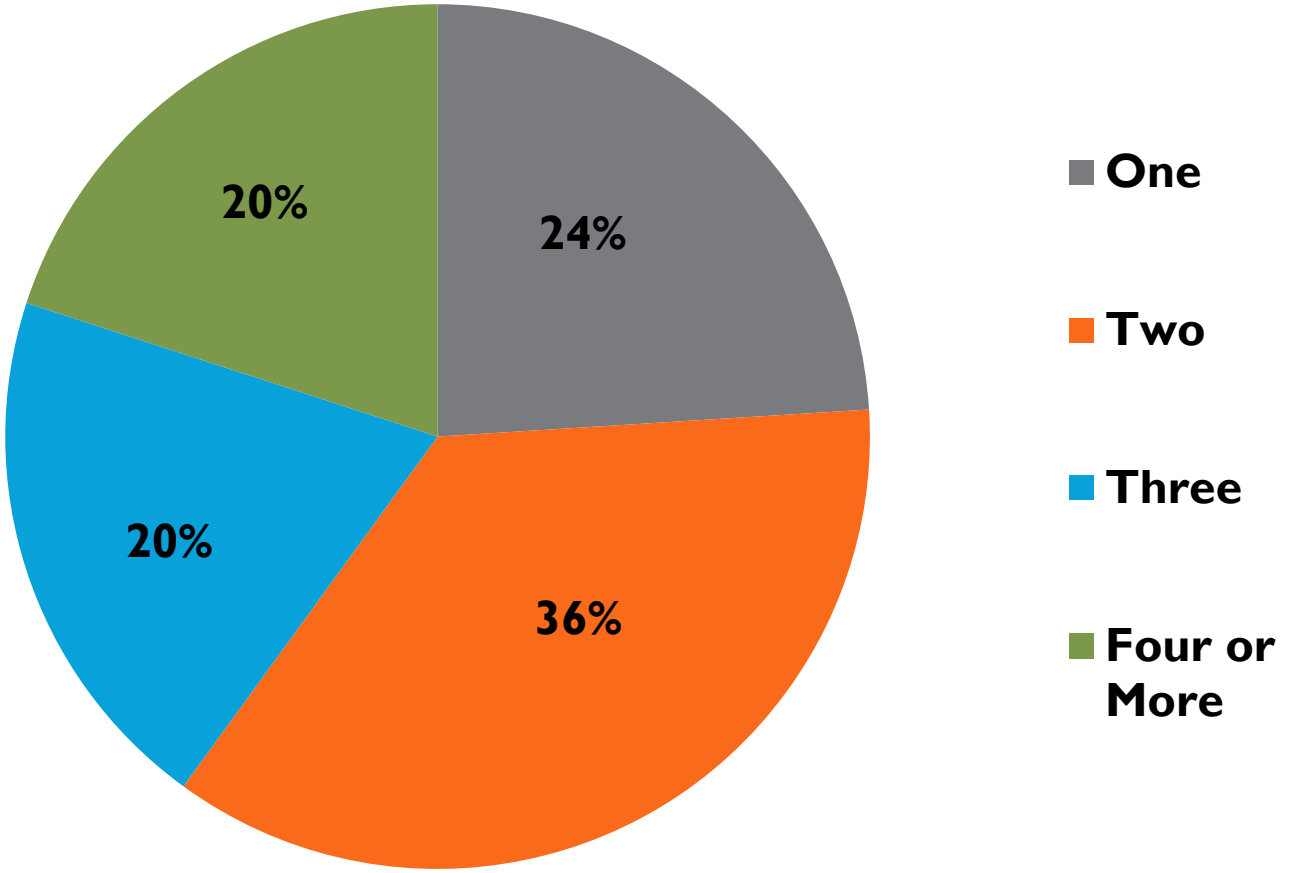
Comments on Documentation (2 of 2)

- Customization/configuration and general usage documentation is out of date and not useful
- The technical guide was easy to find but it took a while to find the user guide
- Is there a 5.2.1 Technical Manual?
- Include more tactical information on setup
- Installation documentation is fairly complete
- Big improvement over previous versions

Participation in Contractor-led Webinars



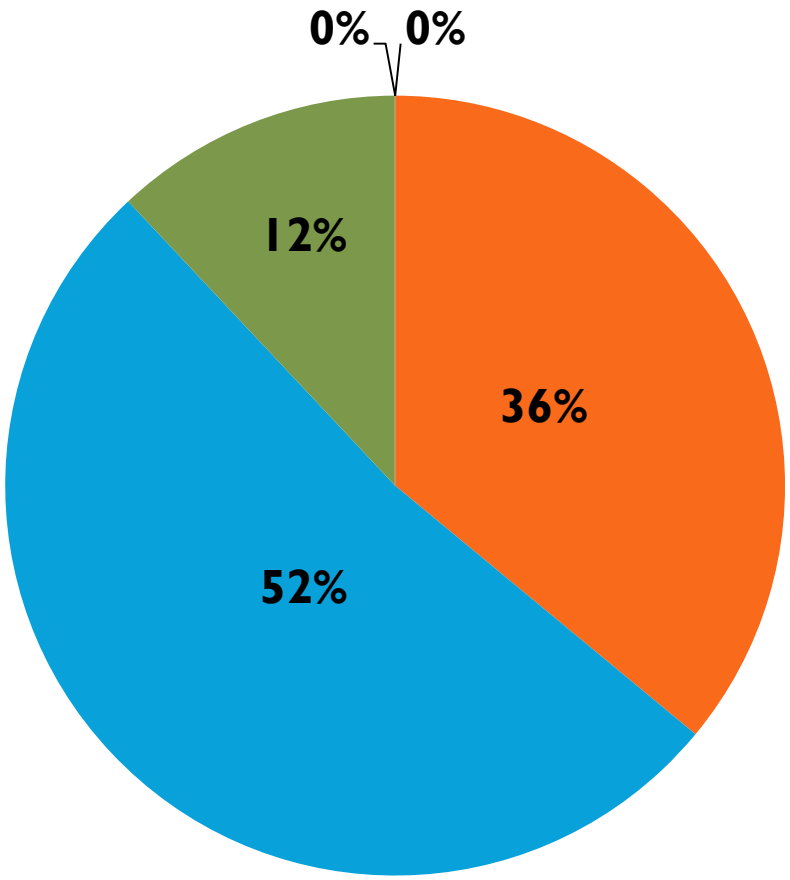
Webinar Participation (number of webinars attended)



Webinars

	Extremely satisfied	Moderately satisfied	Neither satisfied nor dissatisfied	Moderately dissatisfied	Extremely dissatisfied	Don't Know
a) Quality	16% 28%	60% 46%	16% 23%	4% 3%	0%	4% 0%
b) Length	20% 31%	68% 33%	8% 33%	0% 3%	0%	4% 0%
c) Frequency	4% 17%	48% 25%	28% 44%	12% 14%	4% 0%	4% 0%
d) Recordings	17% 17%	46% 22%	17% 47%	0% 3%	0%	20% 11%

Webinars - Usefulness



	2013
Extremely useful	8%
Very useful	24%
Moderately useful	60%
Slightly useful	5%
Not at all useful	3%

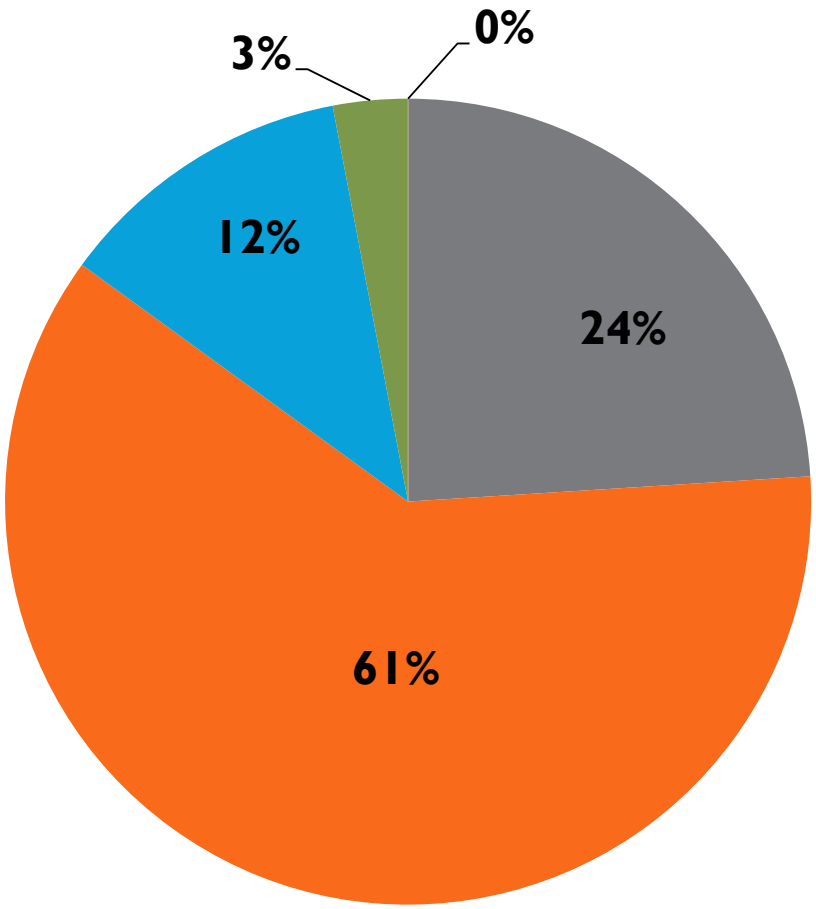
Comments on Webinars (1 of 2)

- Recording the webinars is great – allows users to watch them later
- More walk-through on modules and their setup
- I'm the end user designee; however, I never receive notifications on webinar schedules
- Many webinars are too high level and shallow in content
- More 'how to' instructional webinars are needed

Comments on Webinars (2 of 2)

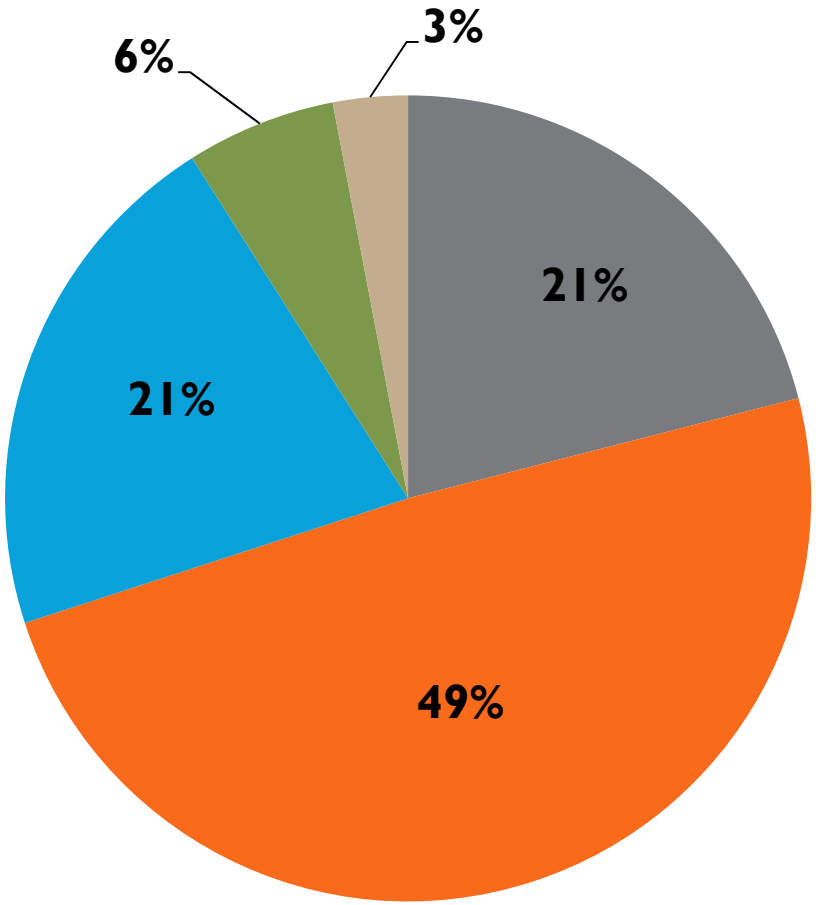
- Future Topics:
  - Using the Multimedia Tab (with media on a network drive)
  - Writing Crystal Reports
  - Creating Forms
  - Data Collection
  - Customizations
  - Integration
  - Synching BrR and BrM
  - Deterioration Module webinar on programming, developing costs, deterioration, etc.

Agency / Task Force Contact



	2013
Extremely Satisfied	16%
Moderately Satisfied	66%
Neither satisfied nor dissatisfied	14%
Moderately dissatisfied	2%
Extremely dissatisfied	2%

Task Force Responsiveness

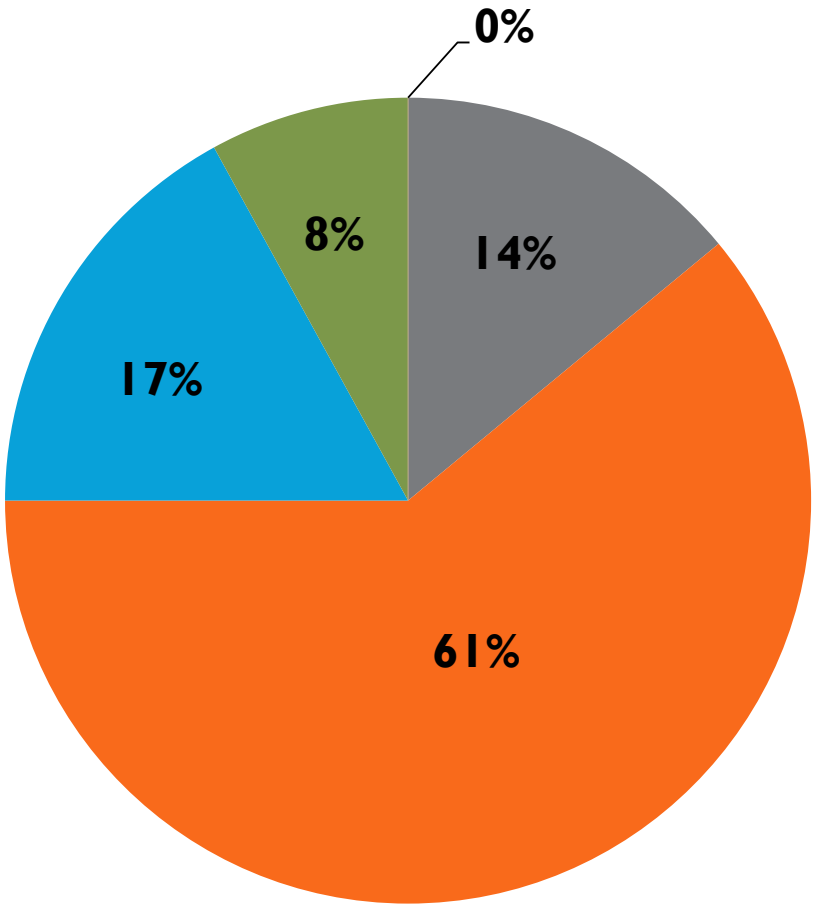


	2013
Extremely Satisfied	7%
Moderately Satisfied	52%
Neither satisfied nor dissatisfied	36%
Moderately dissatisfied	5%
Extremely dissatisfied	0%

Suggestions for Improvement Agency / Task Force

- Task Force needs to focus on making the software more usable
- More work on how to set up the custom agency tab
- More information on how to have work done by Bentley
- Some follow-up on issues would be helpful
- We don't have much interaction with the Task Force

User Group / Task Force Relationship



	2013
Extremely Satisfied	10%
Moderately Satisfied	57%
Neither satisfied nor dissatisfied	31%
Moderately dissatisfied	2%
Extremely dissatisfied	0%

Suggestions for Improvement User Group / Task Force

- TAG and TRT members should be invited to the BrMUG Meeting (AASHTO Reimbursed travel?)
- Things have improved – continue to listen to the users
- Task Force needs to consider end user wants/needs higher than the cost of the requested changes
- Communication with contractor – Bentley needs to improve on their Service Unit work

Specific Issues / Concerns (1 of 2)

- Speed up the software (2)
- Our agency is not satisfied with the contracts in place for Service Unit work
- Need better coordination with other AASHTOWare products (specifically, Project)
- The move to 5.2.1 from 4.5 is very painful
- BrM should be available for remote hosting
- BrM requires Crystal Reports (2008, SP2) – BrM should be continuously evaluated for compatibility with new releases of support software; or provide a method to obtain the specific version required

Specific Issues / Concerns (2 of 2)

- For Version 5.2.1
  - Agency custom fields can currently only be text fields or drop-downs –date fields are needed (putting a date in a text field crashes BrM)
  - Ability to add agency custom fields to all tabs and have them access the User Tables – currently this only works for the roadway tab
  - Ability to modify the inspection status outside of the four pre-set options – this is needed to meet our workflow
  - Three User Tables with different functions – they don't update or reference each other

Follow-up Actions

- AASHTOWare Bridge Task Force Meetings (September 18 and October 28-29, 2014)
  - Review the detailed results of the survey
  - Discuss opportunities for improvement
  - Assign action items to implement changes
  - Incorporate changes into FY15/16 work plans as appropriate
- Special Committee on Joint Development (January 22-23, 2015)
  - Bridge Management survey results presented/discussed

Travel Expenses (AASHTO Reimbursement)

- One representative per **AASHTO Member** agency licensing the Super Site License
- **Receipts are REQUIRED for <u>all</u> reimbursable expenses regardless of the amount.**
  - Original receipt
  - Debit/credit card transaction record or statement of account is not acceptable

Travel Expenses (AASHTO Reimbursement)

- Meals during the conference (i.e., Breakfast and Lunch on Tuesday and Wednesday) are provided by the conference.
- Other meals reimbursed at actual cost with maximum reimbursement limited to an average not to exceed $45 total per day. **(receipts required)**

Travel Expenses (AASHTO Reimbursement)

- Sign the travel expense form
- Scan the form and all receipts
- **Email** to Judy Skeen jskeen@aashto.org

Thank You

- Questions?
- Comments?