

**MINUTES - Asset Maintenance  
Liaison Subcommittee Meeting #58**

**Friday, December 1, 2017  
Liaison Prep - Go To Meeting**

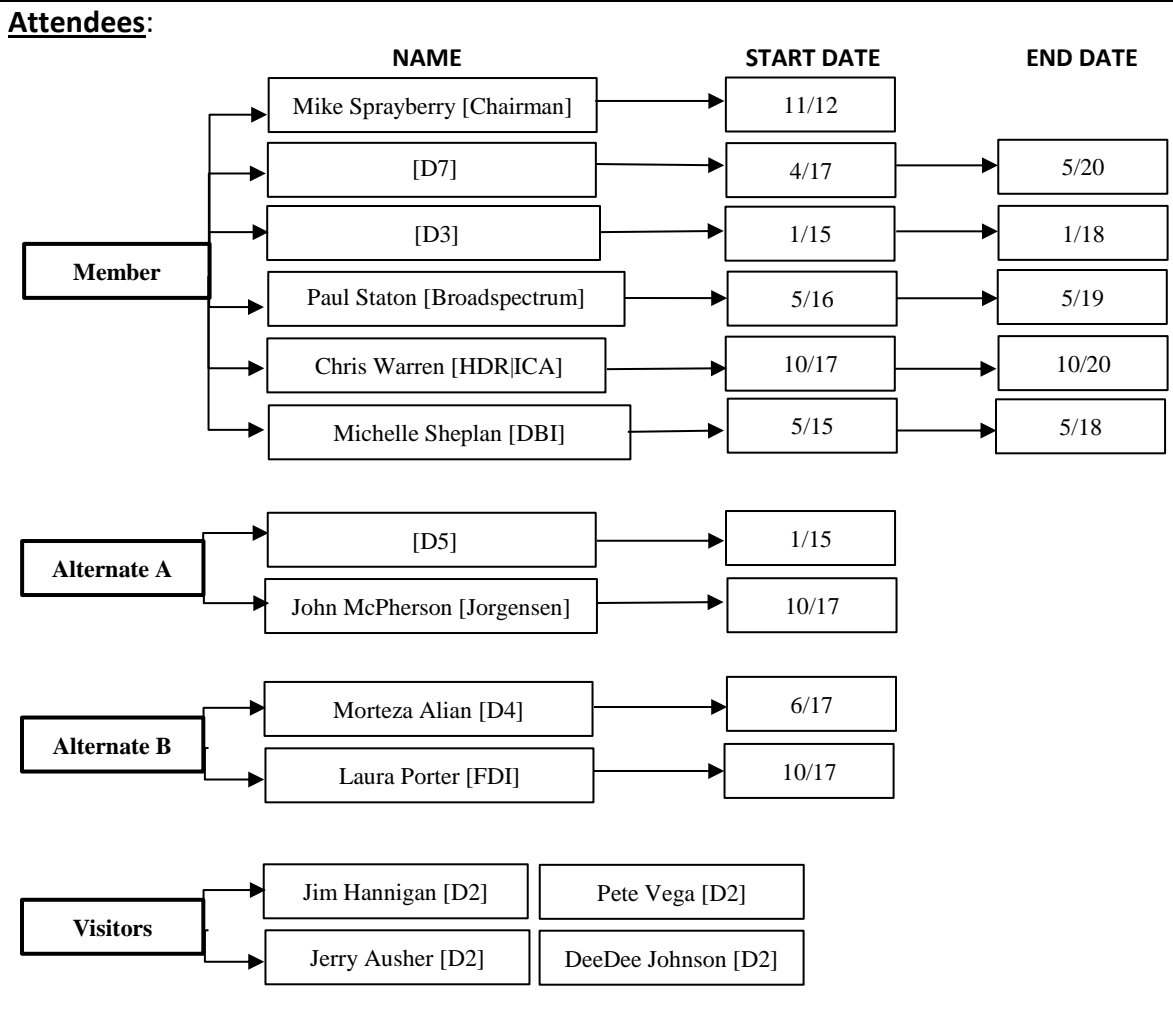
**Team Purpose:**

Members are to review, research, analyze, and discuss topics associated with the Department's Asset Maintenance Program. The Team will develop recommendations and make decisions for Program improvement or change.

**Team Rules:**

1. Discussion issues and agenda topics may come from any source and be brought to the subcommittee by a Team member.
2. The Subcommittee will meet monthly.
3. Before each Liaison Committee Meeting, the Team will prepare a summary document of the status of all issues discussed since the last Liaison Committee Meeting. This summary document will be circulated via e-mail to the frequent Liaison members prior to the Liaison meeting where the summary document will be discussed.
4. The Subcommittee shall be composed of the FDOT State Contracts Administrator (currently Mike Sprayberry) as lifetime Chairman plus 5 Team members (two from FDOT, three from industry). Team Member factions (Industry and FDOT) shall serve on the Subcommittee for a maximum of 3 years. Alternate Member factions have no term limit as an Alternate. FDOT members must be employed by FDOT and industry members must be employed by a company that has at least one active AM contract in Florida.
5. Each faction will assign a primary and secondary Alternate Member to step in for absent Members when needed. Alternates may attend the Subcommittee Meetings as silent participants.
6. Agendas will be circulated to the Alternates and all Members at least 48 hours before the meeting. Minutes will be circulated to the Alternates and all Members within 1 week of the end of the meeting.
7. If a Subcommittee Member plans to be absent from a Subcommittee Meeting, the Member must first attempt to contact an official Alternate Member of same faction as a replacement. If no alternate is available, the absent Member may send a delegate of his/her choosing. If no replacement has been identified by the time the meeting starts (or the Member was an unexpected no-show), a silent listening Alternate of either faction may substitute if available.

8. The Subcommittee has the authority to assemble task teams and sub-subcommittees that report to this Subcommittee and may assign tasks and projects to these bodies.
9. The rights to Membership and Alternate seats are held by Companies/Districts, not the individuals named. Thus, if an individual voluntarily resigns, that individual's Company/District may select another individual from same Company/District as a replacement to finish out the term of that seat. This does not apply if the individual is dismissed from the Subcommittee or reaches seat term limit; in that case, the Company/District loses their seat. Dismissal decisions shall be at FDOT Director of Maintenance and AMOTIA Director levels.
10. It is allowable to have guest listeners. Anyone may submit a request to the chairman to listen in on a particular meeting. The number of listeners that can be approved for any given meeting is line capacity minus 11. Request will be granted on first-come-first-serve. Listeners should be silent during meetings.



Members Lance and Kim were absent. Alternate John was absent and Alternate Morteza was not present at meeting start (but arrived later). Therefore, Mike Heffinger [D5] subbed for Lance and Chad Williams [D3] subbed for Kim.

## **Discussion Topics**

1. **Get update from Industry on AMOTIA Conference presentation videos.**  
**They videoed all presentations. The Videos are posted at [www.amotia.org](http://www.amotia.org).**

2. **Presentation by District 2 considering using AMC as Incident Commanders**



Traffic Incident  
Commander - AM Liaison

**E2088 is ending June 30, 2018. D2 will very likely be doing new contract. We would like to try to get this idea vetting in time to include in this new contract as a pilot type effort detailed in the “Other Requirements” section of that new contract’s scope.**

**Laura asks if FHP would be on-board with this. Jerry says FHP won’t lose any authority, and a single point commander should be useful and appreciated. John says we should review the Turnpike method. Chris concurs. Mike Washburn and John Easterling are good folks to contact. In Turnpike, TMC drives it all and AM has close partnership with all and all have clear responsibilities. The Turnpike method may be more corridor appropriate rather than geographically appropriate.**

**The primary goal here is to try to get the lanes cleared faster and more effectively.**

**Pete shared: sometimes it appears FHP lower level folks are more focused on protocol and their training and are not as interested in opening lanes as they should be.**

**We will discuss at Liaison next week.**

3. **Prepare for Liaison Meeting**  
**The Liaison Decision & Recommendation document is here:**



Recs-Decs for  
Liaison December 20

**Minutes from last Liaison here:**



Minutes from May  
2017 Liaison edited

**We will hand out these minutes from last meeting, but not review in meeting.**

**At Liaison, we need to decide upon a new FDOT Alternate B for the Subcommittee.**

#### 4. Review of Assignments

**ACTIVITY 1 (Priority 3):** The Team needs to research options related to evaluating MRP on non-traditional places (underpasses, bridges, ramps). Need to analyze if this could be done in normal way or with safer windshield-type surveys. Also, study if we should rely on points to fall randomly on these areas by simply including the areas within the population pool, or have a specific routine that generates X points in these areas.

Mike to summarize performance data from TX and send summary and full doc to team for review.

**No progress.**

**ACTIVITY 2:** Analyze and discuss ideas and possibilities of developing performance measures for bridges that are based on some sort of inspection ratings like Sufficiency Ratings or Element Rating (or other rating). This will be done via a sub-subcommittee.

**We read their minutes. No comments.**

**Two meetings ago, Jean wanted us to ask the Sub-Sub team “What was the reason/logic behind why they came up with 95%/1% criteria for all the types of bridge. Should it be the same across all bridge types?” Here is the answer:**

That is a great question from the group.

In actuality, the current percentages that we list are only *place-holders*. As we move forward with the current bridge inspection cycle (utilizing the new evaluation criteria), we are continuously analyzing the new data as it is reported to understand where reasonable thresholds may be established moving forward. Statewide, only approximately 30% of our bridge inspection data has been reported per the new evaluation criteria. Given that we transitioned to the new standards at the start of this year and that bridge inspections are typically conducted on a 2 year frequency, all bridges should have their first report per the new criteria by January 2019. Even after that time period, we may still expect some refinements in the condition data as we work to ensure consistency in how the information is reported by our bridge inspectors.

Also, I wanted to mention that we have developed tools which allow for monitoring and reporting the condition data for individual **Bridge Groups**. Thus far, we have observed that there can be significant variability in the condition data from one bridge group to the next due to a number of factors (i.e. average age, detailing, exposure conditions, etc.) It has been suggested that in the beginning stages of implementation of bridge performance measures, we may want to consider *customization* of the targets for each individual bridge group. The targets would recognize the baseline condition data for the particular bridge group at the start of the contract and set performance targets which are envisioned to be achievable by the end of the contract. This may help to promote standardization of the performance targets over the long term. Further discussion on this item is planned for our next meeting (which is next Wednesday 10/18).

As always, we welcome the questions and input from the AM Liaison Subcommittee group. Please feel free to reach out to either myself or any other members of our working group at any time. Just let us know if you need any additional details on this item.

**Below is a synopsis of discussion topics from Meeting #8 of the Bridge Performance Group (11/15/2017).**

**Meeting #7 Recap** – Information related to the previous discussion on expansion joints and coating systems was reviewed.

- No comments from the group on this information at this time.

**Review of Bridge Performance Report** – The first draft of a consolidated performance reporting tool has been developed and was explained to the group in detail.

- *A Bridge Performance Report* tool has been developed to facilitate reporting on conditions for individual groups of bridges. It includes a summary with the following sections:
- **General Condition Information** – This section provides information on the number of bridges included within each of the general condition categories (Excellent / Good / Fair / Poor). The general bridge condition is established

based on the NBI condition data which is representative of the lowest overall condition rating (on a scale of 0 to 9) for any of the major bridge components (i.e. Deck / Superstructure / Substructure).

- **Element Condition Information** – This section provides information related to the element-level performance measures previously discussed (i.e. on the Deck, Expansion Joints, Coating Systems, etc.) A feature has been provided to allow for tracking of performance as it pertains to achieving progress towards performance goals over time.
- **Bridge Group Details** – This section provides information on items such as Age, detailing, material, etc. for the bridge group identified. This information is intended to provide insight into the intricacies related to achieving and maintaining good conditions for the particular bridge group under review.
- **Performance Exemptions** – This section provides a summary of any performance exemptions which are currently being considered for the bridge group in question. Performance exemptions (if identified) would only factor into the *Element Condition* reporting. Generally, it is anticipated that performance exemptions may be granted on a bridge-by-bridge basis by the bridge owner in conjunction with on-going project work (i.e. such as bridge replacement, painting, etc.)
- Detailed summary information is also provided for each of the previously discussed element level performance measures as well.

**Movable Bridge Information** – Information related to the performance of movable bridges was discussed in detail. It was noted that in general, the structural aspects of movable bridges should be covered under the element-level performance criteria previously discussed however, there may be opportunity to improve the reporting on the performance of machine-related aspects of movable bridges.

- A review of existing criteria related to the operation and repair of movable bridges was provided. Currently, provisions related to the *timeliness of repairs* and to the *overall operation* of movable bridges are included within existing performance-based contracts.
- Ideas for performance reporting were further discussed related to each of the various types of machine-related components (i.e. motors, drives, hydraulics, control systems, etc.) In general, it was noted that many of these types of components may require life-cycle replacement independent of the overall bridge rehabilitation cycle.
- The group is committed to further review in this area. J. Matthews will provide a detailed list of components prone to life-cycle replacement activity prior to the next meeting for review and discussion.

**Below is a synopsis of discussion topics from Meeting #7 of the Bridge Performance Group (10/18/2017).**

**Meeting #6 Recap** – Information related to the previous discussion on bridge decks, expansion joints and coating systems was reviewed. The following items were reiterated.

- The condition data is more complex (now defect information is included). Need to focus on value of information inherent in data sets.
- Performance reporting should acknowledge the benefits of repair activity where available.
- The quality of bridge inspection data directly impacts the quality of performance reporting. We need to make sure that our bridge inspectors are following the guidance provided by the FDOT Field Inspection Guide for reporting condition of bridge components.

**Review of Deck Joints & Coating Systems** – New information related to proposed performance measures on expansion joints and coating systems was reviewed in detail.

- The group is currently reviewing two separate performance measures related to bridge deck joint systems:

**(Deck Joints for Bridges with Steel Components)** – *At least 95% of Deck Joint length is included in condition states 1 or 2 with less than 1% of length including conditions which allow leakage and Metal Damage defects.*

- This measure is intended to limit leakage only for those bridges which contain components vulnerable to corrosion (i.e. steel superstructure and bearing components). It will not be applicable to bridges which do not contain steel components below the deck.
- The reporting on this item will only include those bridges where this item is applicable.

**(Deck Joints for All Bridges)** – *At least 90% of Deck Joint length is included in condition states 1 or 2 with less than 5% of length including Metal Damage defects.*

- This measure contains wider tolerances and is applicable to all bridges. The intention is to limit those scenarios where a more significant breakdown in joint systems is present and could contribute to erosion and debris collection at bridge components below the deck. It was noted that the optimum tolerances on this item may be wider than currently

shown. This item will be evaluated as further condition data is reported through the bridge inspection process.

- The limitation on *Metal Damage* defects is intended to identify those scenarios where the initial stages of expansion joint destabilization may be apparent thus allowing for intervention early enough to mitigate more severe damage. Due to complexities in the reporting criteria on *Metal Damage* defects, the group is still in the process of evaluating if the defect criteria would provide significant value in the overall reporting on this item.
- The intricacies of the proposed measure on steel protective coatings were discussed in detail.

**(Steel Protective Coatings)** – *At least 95% of steel coating system area is included in condition states 1 or 2 with less than 1% of area including Peeling / Bubbling / Cracking and significant loss of Effectiveness defects.*

- This measure is intended to limit those scenarios where the underlying steel is exposed and vulnerable to corrosion.

**Predominant Defect Guidance Update** – Recommendations for revision to the guidance contained in the Inspection Field Guide have been reviewed by the Statewide bridge group and it has been determined that the changes will be implemented moving forward. More specifically, the revised ranking will improve the reporting on exposed reinforcement in concrete components.

**Consolidated Bridge Performance Summary** – A data query tool is currently under development which will provide reporting on all of the proposed performance measures identified thus far.

- The tool will have the capability of recognizing baseline condition data (i.e. at the start of performance period) and the ability to monitor progress in achieving performance goals over time.
- Statistical data (specific to individual bridge groups) will be included in the reporting as well.
- A mechanism will also be provided to document any reporting exemptions implemented as a result of coordination with work under other projects.

**Performance Measures for Other Elements** – Further review is anticipated on components specific to movable bridges.

Notes from previous meetings:



**Below is a synopsis of discussion topics from Meeting #6 of the Bridge Performance Group (8/16/2017).**

**Meeting #5 Recap** – Information related to the previous discussion on the bridge deck performance measures and reporting tools was reviewed. No new thoughts or ideas were discussed related to this information at this time.

**Review of Bridge Deck PM Information** – A few weeks prior to the meeting, all group members were provided information specific to their individual populations of bridges as it relates to the bridge deck performance measures currently under review. Each was given the opportunity to share their thoughts and ideas related to the information. The following main points were discussed:

- With the new types of data generated via the new inspection standards, the challenge now is more related to understanding the significance of various types of information contained within the data. Overall condition is defined by not only condition state, but also the types of defects which are present and the scale to which they exist. It was agreed that all should remain focused on the value of the information which is inherent within our data.
- It was reiterated that the benefit of repair activity should be acknowledged within our performance reporting process.
- All group members should continually examine their data to ensure that condition evaluation criteria is being followed. A few common items to keep an eye out for include:
  - Incorrect condition-state assignment for cracking in concrete
  - Broad reporting of defects over large areas
  - Ensure Predominant Defect Guidance is being used
- The current guidance regarding predominant defect ranking was further discussed in detail. An example was provided to illustrate how the current ranking may not allow for the recording of key defect types (i.e. exposed rebar) if they exist. Recommendations were provided for minor refinements in the ranking system to allow for improved quality in the overall reporting process for concrete components. The recommendations are currently under consideration by the Statewide bridge group.

**Performance Measures for Other Elements** – Information was discussed related to draft performance measures for expansion joints and coating systems.

- Expansion Joint Performance Measures:

**(Expansion Joints)** – *At least 95% of Deck Joint length is included in condition states 1 or 2 with less than 1% of length including conditions which allow Leakage and Metal Damage defects.*

  - It was noted that this performance measure does include a focus on limiting joint leakage in an effort to minimize potential corrosion for steel bridge

components. The occurrence of joint leakage is present in multiple defect types.

- Group discussion suggested that we may want to only apply this measure to bridges which are significantly vulnerable to corrosion (i.e. contain steel superstructure and bearing components). Further review and discussion is warranted.
- Steel Protective Coating System Performance Measures:  
**(Steel Protective Coatings)** – At least **95%** of Steel Protective System area is included in condition states 1 or 2 with less than **1%** of area including Peeling/Bubbling/Cracking and Significant loss of Effectiveness defects.
  - It was noted that this particular measure was structured to minimize conditions where the underlying steel is exposed and vulnerable to corrosion.
- A tool is currently under development which is capable of querying the BrM database and reporting on the specific metrics outlined above. This tool was illustrated and explained in detail. It will be used to provide each group member information specific to their individual population of bridges prior to the next bridge performance group meeting.

**Below is a synopsis of discussion topics from Meeting #5 of the Bridge Performance Group (7/19/2017):**

**Meeting #4 Recap** – Information related to the previous discussion on performance measures was reviewed. Only minor comments were received related to this information. No new ideas or thoughts discussed at this time.

**Draft Bridge Deck Performance Measures** – The following information was discussed related to potential bridge deck performance measures:

- Due to existing condition evaluation and reporting criteria, performance measures have been developed for each individual material type.
  - (Reinforced Concrete)** - At least **95%** of deck area is in condition states 1 or 2 with less than **1%** of overall area including *Exposed Rebar* and *Cracking* defects.
  - (Prestressed Concrete)** - At least **95%** of deck area is in condition states 1 or 2 with less than **1%** of overall area including *Exposed Rebar*, *Exposed Prestressing* and *Cracking* defects.
  - (Steel)** - At least **95%** of deck area is in condition states 1 or 2 with less than **1%** of overall area including *Corrosion* and *Connection* defects.

**(Timber)** - At least 95% of deck area is in condition states 1 or 2 with less than 1% of overall area including *Connection* defects.

**(Other Materials)** - At least 95% of deck area is in condition states 1 or 2 with less than 1% of overall area including *Corrosion, Connection* and *Cracking* defects.

- The above performance measures are designed to implement strategies for minimizing defects which contribute to higher rates of deterioration and they also acknowledge the available work actions which are available within the scopes of Asset Maintenance contracts.
- The structure and format of performance measures has been developed to allow for the flexibility to customize for individual contracts if desired. Customization may be warranted for contracts with longer terms and more complex scopes.
- Performance measures can provide a framework for developing goals and monitoring progress in working towards those goals for individual bridge groups.
- A tool was developed to monitor and report on conditions for individual bridge groups as it relates to the bridge deck performance measures indicated above. This tool was shared with each group member for their usage and review.

**Performance Measures for Other Elements** – Currently, work is in progress to develop performance measures related to other items such as expansion joints and steel protective coating systems. Suggestions and thoughts were provided by group members for performance measures related to other types of components as well (i.e. fender systems and movable bridge components). In addition, group members discussed ideas related to potential refinements in the language contained in the FDOT BMS Coding Guide to allow for better correlation between element level data and the NBI condition rating system.

**Below is a synopsis of discussion topics from Meeting #4 of the Bridge Performance Group (6/21/2017):**

**Meeting #3 Recap** – Information related to the previous discussion on performance measures was discussed. No new thoughts or ideas were brought up at this time related to previous discussion items.

**Summary of Preliminary Thoughts & Ideas** – After review of all past group coordination and information, a list of probable group consensus items was identified and presented to the group. The following items were discussed in detail:

- Movable Bridges will most likely require metrics in addition to those which could be broadly applied to all bridges.
- Overall bridge condition metrics (i.e. based on NBI Condition Ratings) will be a challenge to establish.
- Component-level condition metrics (i.e. based on Element Condition State Data) seem to have more promise.
- Component-level metrics need to support good overall bridge conditions.
- Any condition-based, outcome-driven performance measures need to be in line with reasonable expectations (rooted in reality).
- Available actions need to be able to achieve desired results.

**Future Focus** – It was noted that as we move forward in this initiative, we would begin to narrow our focus towards the development of Component-Level performance measures which are intended to support good overall bridge conditions. The component-level metrics would be based on the Element Condition State Data in the bridge management system. A basic framework was discussed for how the component level performance measures might be structured. It was recognized that although the element condition assessment criteria may not be ideal in many circumstances, the defect information could be used to “customize” the performance measures to achieve the desired objectives and outcomes. It was also noted that (longer) contract terms and “give-back” provisions may be items to consider as well.

**Bridge Performance Measures** – As the group continues to review and analyze the condition data for the individual bridge populations around the State, it was noted that evolutionary changes have taken place within the data-querying tools which were developed to facilitate this activity. Automatic color-coding is now provided to highlight when the information is based on recent inspection activity versus being reflective of migrated data. In addition, a greater degree of detail is now present which reflects the *component-defect* hierarchy and the inspection notes for each individual data set. This should support better understanding for how the various bits of information are inter-related within the individual data sets.

**Below is a synopsis of discussion topics from Meeting #3 of the Bridge Performance Group (5/17/2017):**

**Meeting #2 Recap** – Information related to understanding the true value of bridge repair and maintenance activity was discussed as well as ideas for how best to reflect and report on the benefits of such activity when communicating with others. The previously distributed data evaluation and monitoring tools were demonstrated and discussed. These tools have been developed for the expressed purpose of testing out ideas for using bridge condition data to support future bridge performance measures.

**Bridge Performance Measures** – Group members shared their thoughts and opinions as it relates to using bridge condition data to support performance measures. Some areas of general agreement included that *overall* bridge condition metrics (i.e. related to NBI ratings) may be difficult to tie performance measures to, any *component-level* metrics should support *overall* bridge-condition level metrics, movable bridges will most likely require metrics over and above those required for non-movable bridges, detailing and exposure conditions can have a significant influence on efforts to maintain a bridge in good condition, bridge preservation needs to be a coordinated effort among both bridge owners and industry service providers, etc. Overall, it is understood that as we move forward in this initiative, it is important to recognize what types of activities are available to improve bridge condition ratings. Any performance measures need to be based on reasonable expectations related to this item.

**International Bridge & Structure Maintenance Conference** – John Clark highlighted some of the information which was discussed at the recent International Bridge & Structure Maintenance Conference in Arizona. It was observed that some States may be implementing a greater degree of automation in the process to define and justify work on bridges. It was agreed that the movement towards data-driven decision-making is a good thing however, over-reliance on data which may not accurately depict the entire story can be a danger. We need to continue to ensure that human judgment plays an important role in the decision-making process. The data should be used to support the decision-making process rather than being used as sole justification for actions on bridges.

**Below is a synopsis of discussion topics from Meeting #2 of the Bridge Performance Group (4/19/2017):**

**Meeting #1 Recap** – Information related to ideas and potential strategies for the formulation of bridge performance measures was reviewed. Long-term asset preservation procedures and practices were discussed and shared.

**Value of Bridge Maintenance** – Robert Little (DBI) presented information on past research which was conducted to identify and quantify the value of bridge maintenance activity. This study focused on a group of around 1300 bridges and observed changes in rates of deterioration in conjunction with on-going maintenance activity between 2002 and 2010. It was noted that bridge maintenance activity was shown to reduce rates of deterioration and extend the useful service life of these bridges. The resulting cost savings to the Department over the 8 year period is estimated to be around \$74M.

**Data Monitoring by Bridge Population** – A. Lessard presented information on data-querying / data-monitoring tools which were developed to report on bridge performance metrics. These tools are designed to report on information related to both *overall bridge condition* and *individual component condition* for specific populations of bridges as defined by the user. Where each group member is typically involved with a specific population of bridges (i.e. via Contract, District, etc.), information related to each individual population of interest was shared with each member prior to the meeting. In addition, a demonstration was provided which illustrated data filtering capabilities and mechanisms which allow for data visualization on Google Earth. All members were requested to continue to examine and explore the information contained in each individual bridge population to test out ideas for *condition-based, outcome-driven* performance measures and be prepared to discuss during the next meeting (May 17<sup>th</sup>, 2017).

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First meeting held. Looks like Team is energized and ready to discuss. Aran will send Mike short summaries of meetings after each meeting, then Mike can include in the agenda.

Members are:

1. Aran Lessard (chair) – FDOT D8
2. Richard Kerr – FDOT OOM
3. John Clark – FDOT OOM
4. Ed Kestory – FDOT D5
5. Jim Jacobson – FDOT D7/D1
6. Robert Little – Industry, DBi Services
7. Annette Guidice – Industry, HDR|ICA
8. John Matthews – Industry, Florida Drawbridge

Maria envisions the team developing performance measures with the new BRM in mind and have Richard & John be more of the confirmers of if it will work or not.

Some ideas so far:

1. Maybe bridge performance measure could offer changes to incorporate incentives.

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Aran should give a progress/update every couple of months either in-person (over phone at the Subcommittee Meeting) or by a prepared statement.

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Aran's presentation of obstacles and advantages of performance measures on bridges.



**ACTIVITY 3:** Discuss what do with the six outstanding items from the results of the “MRP shortcomings” study.

**We discussed this at the November DME meeting. Here is are the minutes from that topic:**

**Vegetation on Fence (Sprayberry/McCrary).** Discuss expectations concerning removing or allowing vegetation on fences.

Notes: Location of the fence is important. In general, businesses want clean fence, residents want covered, local drivers want to see through the fence to the scenery, and in the places where sides of the road are woody most citizens would rather see the fence covered (or don't care since in the woods and can't see it). Several suggested a “practical approach” maybe with a caveat of “unless otherwise directed by engineer”. Sharon and Jim recommend a simple “spray twice per year”. Dead stuff will eventually fall off. Jim wonders if overspray is an issue. Sharon says it should not be an issue with twice per year spaying. Lance says would like to see all clear, but acknowledges some may want fence to have vegetation. Many mentioned fence requirements could be placed in each District's Vegetation Management plan. Mike suggested we put in veg plan. Lance is worried AM language is not strong enough to make AM do anything based on Veg Man plan and also pointed out a concern of District inconsistency. Mike will take this info back the AM Subcommittee for further discussion.

Notes: Depends on the context of the location. Herbicide fence a few times a year to ensure the service life of the fence is maintained. Need to be able to see fence to ensure it is intact and functioning. Clear of vegetation as much as possible, but need to be practical. Include in the district vegetation management plan. This is being discussed at the AMOTIA Liaison Subcommittee.

**We want to discuss at Liaison and get resolution/decision so we can move forward.**

**Notes from previous meetings:**

Mike reported on his discussion with McCrary and Tim Allen. Vegetation free fence seems asking too much, especially in rural areas. In urban we may want a higher standard. If residence live on other side of fence we may need a different standard.

Michelle wants to be discuss at the DME meeting: Let's agree statewide on what "vegetation-free" means – what exactly are we looking for? Let's be clear as to what an area of fence is – 1/10 mile? 1 mile? 6 feet? If vegetation is treated is it a pass even if still green? If it is a huge load of dead stuff is that ok? Michelle has seen cases where citizens wanted vegetation-covered fences to stay as they were. Bob added: when getting new contract and previous caretaker ignored fences, that is an issue that requires a ramp-up.

## Vegetation/Aesthetics

1. Fence: Vegetation on or in the fence should have some consequences if it doesn't match the surrounding landscape or is effecting the performance of the fence.

➤ AM Subcommittee response: **We will analyze via "Other Requirements/Fates" task.** {ACTION: This item has conflicting notes as to it final fate. The Subcommittee must readdress}

FDOT needs to have internal FDOT discussion first to see what we want as a department. Clarity of requirements on Fence is needed.

<p><b>ACTIVITY 4:</b> Active List of desired and/or planned AM Scope Changes. This list will remain here until Scope is changed or decision made to not make change.</p>
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Over time **send edit suggestions to Jean and Mike.**

### Tracking of suggestions:

- **Add clarification to duties related to High Mast Light pole. Structure maintenance is different than if lights are lit is different than if lowering mechanism functions.**
- **Rearrange where things are to make easier to read/more flowing (Mark develop a rearranged version and presents it here for our review: [Mark] Mark says:** I present to you for your review an 'improved' version of the current language in the AM scopes that I would classify as cosmetic in that all of the original language is in there. You will see language inserted in light blue that aids in making the sections appear uniform but don't add anything to the boilerplate language. You will find a Table of Contents with hyperlinks to take a project manager to specific parts of the contract relevant to the topic they search from. I understand from Kim once you are in a section and want to return to the TOC, just hit Control Home keys. I mention the word cosmetic because as a project manager, it is possible to miss specific data related to a contract issue of not all pertinent parts are located within one area. Kim generated



a complete scope and then moved all the parts around to flow better and make it easier to manage the contract. I hope you will have time to review before our next meeting to discuss. My thanks to Kim Toole for putting this all together in a manner that I believe benefits contractors and department personnel equally.



MAKEOVER11-4-16  
ScopeDocumentFacto

**Team is to review this document and be ready to discuss ideas in future meetings.**

- **Table of contents with internal Hyperlinks [Mark]**
- **Always have Page numbers [Mark]**
- **Rewrite the reimbursement section [Legal]**
- **Need to address per day deducts (see Activity 10) [Chris] – a possible idea here is to establish a maximum deduction for each Performance Measure, then per days (if appropriate) could work.**
- **Address mobilization (time from contract Execution to NTP is too short) [Chris]**
- **Changes/updates to Scope to be maximum each year synced with Spec release, but could be as often as 6 months [Mike] Possibly a month or two after Liason.**
- **Bridge section really breaks out types of work, but HMLP and OHSigns do not. Let's look at that and propose improvements. [Kelley Hall/Mike]**
- **Mast arms do not have a section and should. [Mike]**

**Tracking of confirmed changes that will be done:**

**1.**

Notes from previous meetings:

**ACTIVITY 5:** Team to stay aware of and keep pushing an agenda to develop standards so that striping performance can be measured with mobile retroreflectometers. We should consider that automated vehicle technology is advancing fast and traffic stripes will become more and more important since automated technology will likely rely on them.

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### Notes from previous meetings:

Mentioned FDOT is having more cases of retroreflectometer readings being very difficult to base contract performance and deducts. The technology is not ready yet.

Lance mentioned he has this as a topic on DME agenda to use State Material's Office retroreflectometer readings instead of MRP eyeball measure.

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As a part of the task that identified activities that are not well measure with MRP, it was suggested we use annual mobile reflectometer readings in addition to MRP reviews to measure striping performance.

FDOT currently has a program to measure retroreflectivity on all or some lines each year. But current thinking is FDOT is not yet ready to 100% rely on results from mobile retroreflectometers for performance measuring purposes.

We need to look into what we are going to do with the numbers collected. We also need to figure out what the minimum number is. Good visual inspection is likely 120-150. We should consider automated vehicles and how reflective markings must be for the systems to work. Mark Garcia may be able to provide information on retroreflect readings as he has currently some perf contracts using MRUs. The Team stressed that this is important topic and the agency needs to look to future on this topic. Let's keep on Agenda to stay abreast and ensure the issue is progressing with the agency and we need to push to be sure someone from maintenance is at the table.

**ACTIVITY 6 (Priority 1):** Sprayberry is to analyze and condense the "other" requirements used by Districts on AM Contracts and present a report to the Team. First step is to prioritize. We should try to have 16 analyzed by next Liaison. For these recommendations, vet through AMOTIA (2 week review timeframe) before sending recommendation to Liaison.



All Districts - Other  
Contractual Requirem

**The new Options for Stormwater Pond Inspection/Maintenance, Highway Lighting, and Permits have been activated. All new AM contracts will use this new language if**

that option is selected. The final Stormwater Pond Inspection/Maintenance and Highway Lighting Options are shown here:



NEW Hwy Lighting Options.zip



NEW Stormwater Options.zip

The Permits Option was reviewed by the team via email and slightly revised since the proposal in these minutes last month. The redlined versions below reflects those changes plus this change we agreed upon today: In the Performance Measures, change the phrase “permits information tracking system” to phrase “appropriate permits processing system”.



NEW Permits Option.zip

There was some concern expressed about the one-time deduction – **Team still needs to address this.**

We still have yet to complete the items for:

- QC/QA language
- Fence
- Traffic Incident Management
- Non-Permitted Signs

Notes from previous meetings:

Sprayberry took all submittals by the Members and drafted proposed new Option language:

- Discuss revised current Stormwater Pond options to (Thomas):



Pond Maint



Pond Maint & Inspection NOT Included



Pond Maint & Inspection Included

Included, Inspection NOT Included

The Team discussed and decided to revised the “Include” options by adding one sentence: “Any deduction resulting in failure to meet this performance measure will be assessed in addition to standard deductions for failure to meet permit requirements.” With this sentence, all on the SubCom approved the proposed language. The approved versions are in the attached ZIP file.



NEW Stormwater Options.zip

- Change Emergency Response item from a FATE 2 to a FATE 4. We do not need this language since it is already covered by Standard Scope (Sheplan).

Team agrees this Emergency response time language is not needed (already covered by Scope and Open Roads Policy).

- Revise current Highway Lighting option to (Connolly):



Highway Lighting  
Included.xml

The SubCom spoke extensively about this proposal and developed and approved the language in the ZIP file below. Some key changes from the proposal is that Nav lights will remain a part of Bridge maintenance, creating a new option that excludes Nav lights from the outage Survey (while the other option includes nav light Survey), and the inclusion of a reference to FDOT-Owned metering points for lights that might be a bit off system.



NEW Hwy Lighting Options.zip

- Revise current Permits options to (Grace):



Permit Inspection  
Only.xml



Permit Inspection &  
Administration.xml

The SubCom did not have time to review the new Permits documents.

Although the SubCom Team approved the new language for all the above options (except Permits), all the above new Options will be sent to the SubCom Team today for a 2 week review.

It is desirable to have all the Options with new, approved language before within the next month. Further language solutions for other FATE 2 items will be sent to the SubCom Team for review over next few weeks.

UPDATE: New, improved language has been developed for Permits (developed further than what is attached above). This will be sent out within a week or so for review.

Mike will take lead to review these and bring comments to the Team. Send to team before next meeting and discuss at next meeting.

---

Several submittals received, including:



Grace Re REMINDER -  
Liaison Subcommittee



Resubmittal: FW AM Liaison  
Subcommittee Task-

Team discussed Permits and Lance has proposed standard language (he resent his proposal on 5/12/17). One tough consideration is do we use Statewide standard or can District have stricter standard.



Darsin RE MINUTES to  
today's Subcommittee



Connolly RE MINUTES to  
today's Subcommittee



Sheplan RE MINUTES to  
today's Subcommittee



Thomas (D3) RE MINUTES to  
today's Subcommittee



RE Please  
investigate.msg

[Ducher info on mowing height](#)

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Remaining item of business is development of standard option language for Fate 2s.

The team asked for volunteers to try to develop the standard, optional performance language for each of the Fate 2s. The volunteers, along with their assigned topic are show here:



Fate 2s Olny With  
Task Volunteers.xlsx

You can find more details in the Word file attached a few paragrpahs below. That file has the original language that a District used in an AM Contract along with some SubCom notes on a few items.

---

All FATE 1s have been placed in Scope that was sent out for review (except the MRP one which will be located in the Options, yet still appear in all AM contracts). Mike met with Rudy and all FATE 4s kept their status as we will not be allowing these topics to be placed into AM Contracts.

---

Fate determinations were completed by this Team and have been presented to DMEs. Feedback from DMEs is shown below in Excel fill and will be discussed. We need to determine implementation plans and specifics to modifying language.



Review of All  
Districts - Other Cor



AM Other Cont Req  
FATES w DME input

Team, agrees exact wording from #8 MRP Points goes into scope. Other changes/note from original document are shown here:



Other Contractual  
Requirements - FATE

**ACTIVITY 7:** Discuss proposed and desired changes to version 2.2 of the AMPER. Maintain list of changes (marked as proposed or accepted) here. This will stay on Agenda until AMPER 2.2 is published.

Over time **send edit suggestions to Jean and Mike.**

**List of suggestions to be discussed:**

1. Errors still seem too common in the MRP section. Attempt to make the MRP Section even less error-prone. Mike explained the idea of MRP Scorecard data archive plan to provide a data check when filling out an AMPER. This will be done in the version of AMPER after 2.2
2. Compliance Indicators for Guardrail Inspections and Maintenance, Crash Cushion Inspection and Maintenance and Sign Inspection and Maintenance sections (Critical Requirements on page 4 of 9) are set at 90% of reviewed items must meet requirements. The Scope is silent on this % thus it is 100%. The suggestion is to leave the % flexible in the AMPER so that Scopes could be written with different %. [D2-Curls]
  - Team Analysis: We recommend Scopes are all written the same with the 100% requirement. If a Scope was written with different requirement in the Other Contractual Requirements section, then instead of a flexible % in AMPER, the AMPER user should marking these as “N/A” and then using Section D) Project-Specific to evaluate those items at the Scope-defined %. The Team agreed that we don’t want the 90% in AMPER to be flexible. Should be standard in Scope & AMPER. – Team agreed resolved and no need to change, but see next bullet
  - HOWEVER, in AMPER the description of the 90% field QA to verify inspections needs to be rewritten to make clear that this is not the QAR we do internally on Districts (spot check random guardrail), instead this is a verification that the inspection reports were done correctly. This was not done in 2.2.
3. Some pointed out issue with duplication in Scope for deducts and duplication in AMPER for Non-Compliances.

- Analysis: Mike stated duplications should be ok as long as clear – they are a tool to put extra emphasis on particularly important items, or items Districts want to draw attention too. This could be a tool used in the User-Defined Performance Indicators too.
  - This pretty well handled with the change to AMPER already confirmed below – but still maybe consider a better way to say the concept of Procedure vital, AMPER-listed items very important, Tech Proposal claims very important. – still consider this for future
4. Under page 4 crash cushion inspection & maintenance, can we add a dead line for contractor to submit the completed inspection forms [D8-Barekat]
    - plan to not change this 2.2 version – will wait on procedure change and then adjust for next time.
  5. [D3-Toole] –Decisions identified in redline in this document.



AM CONTRACT or  
AMPER DISCREPANCII

6. ...

Notes from previous meetings:

**ACTIVITY 8:** Discuss and analyze the concept of cost caps for Structures repairs on bridges. They already exist on movable, but not on fixed. All matters related to this will be on the table. Should we have a cap for fixed and how much? We need to be aware of the two different concepts of caps: 1) An insurance policy that we all hope is never reached or needed; 2) A target point that FDOT wants and tries to reach and that AMC expects and plans to reach and thus knows exactly what structures activities will ultimately cost.

Chris volunteers to be on the new Sub-Sub Team. Chris will gather the team. He will analyze and report next month on how many members he thinks is best and what sort of mix of folks.



**Lance volunteers someone from D7 on the team. Jim Hannigan volunteered for team. Paul Staton volunteered to be on team. Chris will have more info next week.**

Notes from previous meetings:

Maybe previous study team was too structures heavy and not enough AM Contract heavy. We obtained input from each member on if how we should address the concept of placing risk caps on fixed bridges:

Gorski: We should develop a Sub-Subcommittee – experts are need to discuss this topic

Michelle: We should develop a Sub-Subcommittee – experts needed

Lance: We should develop a Sub-Subcommittee – Lance volunteers someone from D7 on the team.

Chris: We should develop a Sub-Subcommittee – Chris volunteers to be on it!

Kelley: We should develop a Sub-Subcommittee

Mike: We should develop a Sub-Subcommittee

<p><b><u>ACTIVITY 9 (Low Priority):</u></b> Incentive for Open Roads policy/opening lanes faster/maybe lanes usage reports.</p>
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**See below for yellowed assignments:**

**Let's comment on Bob's draft question:**

"There are a limited number of asset characteristics where the Department would like to see extra effort and increased results on behalf of the Contractors, and the Department would like to provide minor financial incentives to the Contractors for this increased level of service, which would be in the best interest of the Department. Please confirm that you concur with us that the Department has the ability to follow through with this plan, the details of which will be overseen by the OOM."

**Team decided to send this language as written to legal (Mike will send).**

**UPDATE: A suggestion sent after the meeting proposed slightly different language. Mike sent e-mail to the team asking for their comments on using this language instead:**

“There are a limited number of asset characteristics where the Department desires to see extra effort and corresponding increased efficiency on behalf of Asset Maintenance Contractors. The Department would like to provide minor financial incentives to the Contractors for such increased level of service which would ultimately be in the best interest of the Department. Please provide feedback at your earliest convenience as to the feasibility of pursuing such an incentive mechanism. Please also comment on any constraints/limitations that might be applicable to such a contractual provision as well as any challenges/hurdles associated with pursuing a future incentive provision. Details and administration of any future incentive provision will be overseen by the OOM.”

### Notes from previous meetings:

Further discuss new idea below of high AMPER scores being used to determine a bonus/incentive:

Lance thinks tough to attach incentives to – maybe a bit too complex. Maybe a bit too subjective.

Mike to check with legal to see if allowable. Bob suggests to craft the question carefully. Maybe something like “We want to get better results, so...” Bob will draft a question and send to me.

Opens roads incentives were discussed again. Seems like good idea on surface but could be difficult to verify. Kelley says may be easy to verify on interstates, but maybe more difficult elsewhere. If using sunguide, it could work well on interstate. Chris says some performance contracts have reporting requirements as to when they arrive. We should check some of these to see how they work (E8-P98).

---

New idea!

Explore the possibility of high AMPER scores being used to determine a bonus/incentive structure for AM Contractors.

Watch out for possibility of an undeserved lower AMPER due to tight FDOT budget or we can't afford to pay for an awesome AMPER. E.g., would FDOT try to avoid giving a high AMPER so that they can use that bonus money to instead fund a different contract?

A possible hurdle could be the Subjective section 5 used as a part of the determination of bonus – maybe we should set up bonus that is determined only by combining Sections 1 thru 4 or maybe a different bonus for each Section 1 thru 4 individually. There is also the idea to not split our Section 5 and just use overall AMPER score.

---

The spin-off task to hold a sub-committee to discuss performance measures for bridges has been created as ACTIVITY 2. Maybe bridge performance measure could offer changes to incorporate incentives (This statement added to Activity 2, the PM of Bridges Activity).

---

Mark Thomas was originally selected to spearhead a sub-subcommittee to investigate the idea of performance measures for Sufficiency Ratings or Element Rating (or other rating) on bridges. Maria volunteers Aran to lead this assignment instead of Mark Thomas.

When this sub-sub gets going, OOM Bridge section wants Richard Kerr and John Clark invited to first meeting so they can then determine which of them will be best to become a member. Also, we would like Jim Jacobson in D7 to be on team as well as to provide valuable insight and info.

We will move this item into a new Activity Slot.

---

Contacts have begun. Maria spoke with Aran and he had some really good ideas how we could incentivize with periodic maintenance that can extend bridge life.

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Some ideas from Liaison Mark suggests tying incentive to Sufficiency Ratings on bridges (a single number per structure). May be difficult because Functionally Obsolete is a factor. Or could even have some performance measure for each Rating of each Element of a bridge. Maria volunteered Aran Lessard to be a member of sub-sub. Several in industry spoke up to say they would help and it is a good idea.

Jose further suggested an incentive idea for when 5 year inspection timeframe is required, yet AMC does it in 2.

---

Some ideas from Liaison:

- 5% bonus for exceeding performance measures (Texas)
- Base incentives on results from QA/QC program
- Base incentives on data reflecting reduced crashes for completed projects

--

Jose presented his paper on RISC for AM and gave a great summary. Maria indicated working great on Turnpike. Mark thought difficult to control this since FHP controls when we are allowed to clear lanes. Incentive must be large to even consider. Overall does not seem feasible, but will keep open for future ideas.

--

#### Brainstorming Ideas:

- Apply to timeliness of Guardrail and anything safety that has a time factor.
- Maybe apply a better-than-minimum MRP bonus for just the safety items like striping, RPMs, guardrail.
- Apply for increased response times for incidents – RISK has incentives for Opening Roads.

**ACTIVITY 10 (high priority):** Sprayberry is to look through the AM Scope for performance measures that have per day deductions based on timeliness and convert to one-and-done deducts, or propose a change so that time is not counted for the period between when the Contractor claims work is complete and when the DOT discovers the work is not correct or complete (currently the clock runs straight through from claimed completion to DOT discovery). We may not need a change in cases where contractor can control such risk by performing work promptly, early, or proactively.

#### Michelle submitted this file developed with Industry:



FDOT Per Day  
Penalty Comments.d

**The Team began reviewing but decided to review independently first and discuss next meeting.**

#### Notes from previous meetings:

Paul & Jose & Michelle reviewed this propose ideas to Industry. They discussed and realized they have not reach consensus or totally agreement. Thus, they are going to further discuss internally before releasing any position statements to FDOT. 90 days is target per Liaison meeting.

Michelle's update: Got some feedback from Industry. Planned conference called delayed due to storms. Should have that conference in the next two weeks.

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After initial analysis, Industry's first draft left many "per day" items as is, but not all in Industry necessarily agree.

Here is the list of all “Per Day” deductions:



List of all 'Per Day'  
Items in AM Scope.doc

Lance had great idea to maybe can leave the per-day concept for some items and instead add a maximum deduct amount.

---

Jose suggests we look at the “per occurrence/no time to cure” concept to see if it’s fair.

**ACTIVITY 11:** Vacant.

**ACTIVITY 12:** Analyze the concept of including an end of AM contract transition plan which may include a required end of contract condition state. This has been analyzed/discussed twice before with “do nothing” results. We will start by reviewing the old end-of-contract plan we had previously written.

**No progress...**

**Kelley to provide a report on the RFP EOC plan and how D4 plans to make it work.  
Morteza will try to have something to discuss for next week’s Liaison Subcommittee Meeting.**

**From Liaison, Industry will look at this and make recommendation in by the end of October. We will re-ask Liaison/Industry about this at Liaison next week.**

Notes from previous meetings:

The Team will rely on Industry to keep this moving if they want this.

Mark Thomas/D3 had planned to look into this and propose something, but D3 handing off this task to industry.

We restated that D4 used an idea where the RFP requires a write-up on how bidder would close out contract at end. To enhance this idea, the contract could maybe have unique consequence for failing to meet EOC plan proposed in RFP. D4 is still working on the report.

If contract starts after July 1 – you may have less than 3 MRP periods and deductions are waived in year one grading but gets you on the back end with another small-sample MRP year where deducts will be assessed – may only be graded on two and that is all.

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Here is the Old Proposed Plan from 2011:



End\_of\_Contract\_Transition\_Plan.docx

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Mike hears that this is becoming more and more of an issue. Would like for AMOTIA to discuss and identify cases where AM Contractors have neglected duties at end of contracts.

Industry presented some concern that End-of-contract (EOC) plan could be used to get lots of extra things done. A lot of thought has to be put into this before implementation.

Mike read (paraphrased) the proposed plan from 5/6 years ago. Industry pointed out that the idea of the old contractor sticking around beyond contract time is not good idea – Sprayberry pointed out DFS also would not like this either. This means if deficient project would be left as is with some consequences to old contractor for not meeting EOC criteria.

D4 used an idea where the RFP requires a write-up on how bidder would close out contract at end. To enhance this idea, the contract could maybe have unique consequence for failing to meet EOC plan proposed in RFP.

Maria favors withholding money of last year or two as a pot-o-money to give back at end if EOC is met.

An idea is to have the incoming contractor walk with FDOT to do EOC punch list.

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The previously developed plan basically held back a % of invoices for last two or so years of contract for a pot of money. Then at end of contract, if all things meet, give back to contractor. If not, give to next contractor. That was the idea – not sure if actually doable.

---

Maybe and added value opportunity. Some concerned we have no guarantee that area will left in good shape. Maria suggest a hold back of funds.

---

Mike sent old idea to the Team via e-mail.

**ACTIVITY 13:** Mike is to create a shared space (SharePoint? Internet?) where anyone can research information from our Subcommittee meetings. Post all minutes in PDF format, and post all decision documents in PDF. Ensure there is a way to search all docs at once.

**Website created! It is located at same place as our AM Contract reports on the Internet (<http://www.fdot.gov/maintenance/amlc.shtm>). Activity COMPLETE!**

## **5. Roundtable / Open Discussion**

**Laura: Suggests a debriefing of complications and difficulties and successes of hurricane response. Michelle will add at topic for Liaison next week.**

Notes from previous meeting:

D3 has a new perspective on the QA/QC and is performing a full rewrite. Should take a bit longer than expected.

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**Kim Toole [D3] reports D3 still working on QA/QC.** Maybe a few months away from a document to review. After D3 submits, each SubCom member is to review the new QA/QC language. Michelle suggests a group gather who have experienced using the QA/QC program. Mark thinks

maybe too many unknowns by D3 at this time. Mark wants to finish rewrite process before presenting/discussing with others.

Mark Garcia – D5 thinking of putting out a contract for MOT (regular and emergency response). Should it be performance based or work doc driven? Work doc would be tricky to handle midnight emergencies but would work well for scheduled needs. Maybe contract could be a hybrid. Other states are starting to look at hybrid contracts. AMOTIA is looking into hybrid and may have some input on this topic.

New Memorandum being developed concerning Public Records laws applying to FDOT Contractors. Instead of public going straight to Contractors, they must work through FDOT, then FDOT goes to Contractors.

Where do we stand on QA/QC? That was a Fate 2. Mark Thomas rewrite/improvement of QA/QC language – says language is written, but table still in works. Mark will send draft language to Team for comments.

Some have noted inaccuracies of published Future Project list. Make accuracy and completeness of this document very important. Mention at DME meeting.

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## 6. Next Subcommittee Meeting

Next Subcommittee meeting will be January 5<sup>th</sup> at **9:30 am**.

**850-414-4971**

**PIN:268411**

## 7. Next Liaison Committee Meeting

**DBi has graciously volunteered to chair the next Liaison meeting (Michelle Sheplan). It will be held Wednesday, December 6<sup>th</sup> from 9:00-12:00 am. It will be in Orlando at Turkey Lake building.**

## 8. Next AMOTIA Meeting

**September 2018, Sarasota, FL**