



# Proprietary Product Request Justifications

Procedure 630-020-007

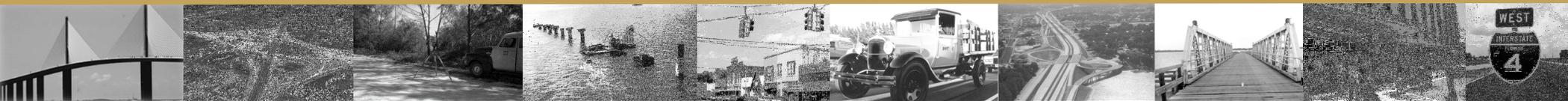


*Celebrating 100 Years of Innovation, Mobility and Economic Development*

**Karen Byram**  
State Product Evaluation Administrator

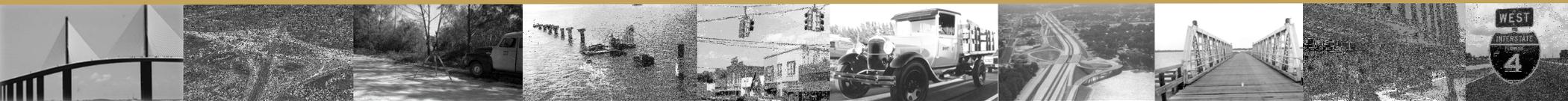
**Alan El-Urfali**  
Traffic Engineering Research Lab Manager

Presenters



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# Proprietary Process Review



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# Review

## *Definition of a Patented or Proprietary Product:*

- A product, specification, or process identified in the plans as a "brand" or trade name.
- A product or a process so narrowly specified that only one provider can meet the specification or requirements.



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# Review

Applies when State or Federal funds are used on a project.

Notes:

1. Since this process should be completed by the 60% Design Phase, it should be assumed that all projects will use Federal funds; Complete Certification
2. Use of 'Or Equal' is required. This does not make the product non-proprietary
3. When the State or FHWA is not paying for the proprietary product, i.e. using designated funds, FDOT Project Manager needs to coordinate with District Local Programs Administrator. (email is sufficient)



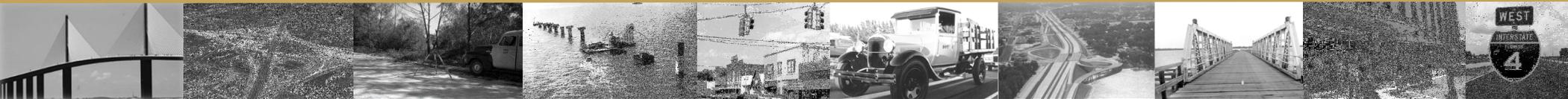
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# Review: Justification's Basis

1. Synchronization, or
2. Unique Need
3. Project level

For any other Justification reason the FDOT is has not been delegated authority.

- Use another process if applicable, or
- Send to FHWA for approval



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# Synchronization Review

- Must use one of the following three:
  - Function
    - Necessary for satisfactory operation of existing facilities.
  - Aesthetics
    - Necessary to match visual appearance of existing facilities.
  - Logistics
    - Interchangeable with existing inventory.

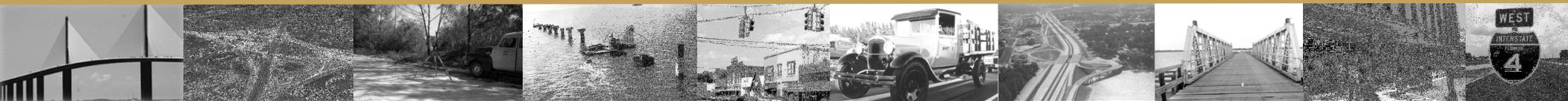


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# Synchronization Review Cont..

In addition, may use any of the follow:

- Lifecycle
  - Relative age of existing system and remaining project life.
- Size/Extent
  - Relative cost of proprietary element compared to replacing the synchronization elements.
  - This can include cost of training maintenance personnel.



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# FDOT Proprietary Product Certification Process 630-020-005-a



1. Initiator submits the request to Department Project Design Manager.
  - Justification and form
2. Project's Design Engineer conducts the review and make recommendations to DDE for approval (in writing).
3. District Design Engineer (DDE) signs the Certification portion of the form when the request is approved and summarizes any special conditions or limitations.
4. The form, complete with signature, and document package will remain with the project documentation.



# Certification Form Requirements

## 630-020-07

**Proprietary Product Certification**

To: \_\_\_\_\_ Date: \_\_\_\_\_  
FDOT District Design Engineer

Financial Project ID: \_\_\_\_\_ New Const. ( ) RRR ( )  
 Federal Aid Number: \_\_\_\_\_  
 Project Name: \_\_\_\_\_  
 State Road Number: \_\_\_\_\_ Co./Sec./Sub: \_\_\_\_\_  
 Begin Project MP: \_\_\_\_\_ End Project MP: \_\_\_\_\_  
 Full Federal Oversight: No ( ) Yes ( ) Note: if Yes, submit to FHWA Director.

A justification and all supporting documents must be attached to this document.  
 Mark the appropriate certification:

"I, \_\_\_\_\_ of the \_\_\_\_\_  
Print Name of Initiator Position Title Name of Agency  
 do hereby certify that in accordance with the requirements of 23 CFR 635.411(a)(2),  
Mark Appropriate:  
 that this patented or proprietary item is essential for synchronization with existing highway facilities.  
 that no equally suitable alternative exists for this patented or proprietary item.

\_\_\_\_\_  
Signature Date

---

**For Department Use Only**

"I, \_\_\_\_\_ of the Florida Department of Transportation, do hereby approve this certification request made in accordance with the requirements of 23 CFR 635.411(a)(2).  
Mark Appropriate:  
 that this patented or proprietary item is essential for synchronization with existing highway facilities.  
 that no equally suitable alternative exists for this patented or proprietary item.  
Identify any conditions and/or limitations on an attached memo.

\_\_\_\_\_  
Signature Date

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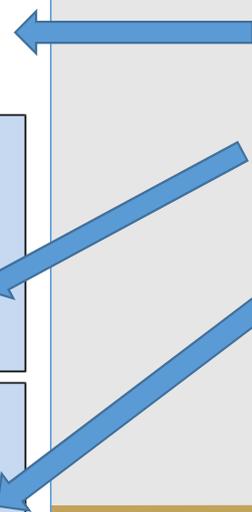
**For FHWA Use Only (use for Full Federal Oversight projects)**

"I, \_\_\_\_\_ of the Federal Highway Administration, do hereby approve this certification.  
Identify any conditions and/or limitations on an attached memo.

\_\_\_\_\_  
Signature Date

The Certification form consists of three parts:

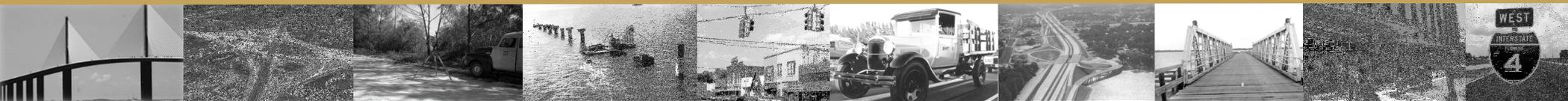
1. The Initiator completes the top portion
2. District (or Turnpike) Design Engineer signs and 'Certifies' the request.
3. Additional Step (if necessary)  
 FHWA signature and certification portion (PODI projects, etc)  
 (Projects of Division Interest)



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# Justification for ITS



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# 630-020-005-a

## Justification Documentation Requirements

630-020-005-a  
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reasonable and necessary to fulfill the project need. The assigned Project Manager shall ensure that the documentation includes, but is not limited to, the following information:

- 1) Description of the project need for the proprietary product,
- 2) Factual and technical supporting evidence for Synchronization (see **Section 4.1**) or Unique need (see **Section 4.2**),
- 3) Explanation how the evidence links it to the project need, and
- 4) Factual and technical supporting evidence that no alternatives are available.

# Intent of Justification

1. (Primary Purpose) Prove the choice benefits the public in spite of restricting competition.
2. Explain the initiator's choice of product.

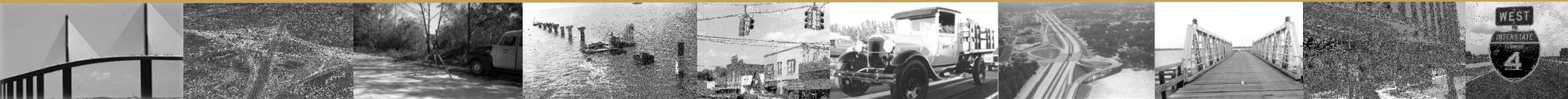


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# Justification Length

Depends on the total cost of the items relative to project:

- If cost is low then a simple justification documentation is acceptable.
  - This may consist of a few paragraphs, each with a few sentences.
- If cost is high, this may be an extensive document.
- Use your judgment.
- Evaluators can ask for more information.



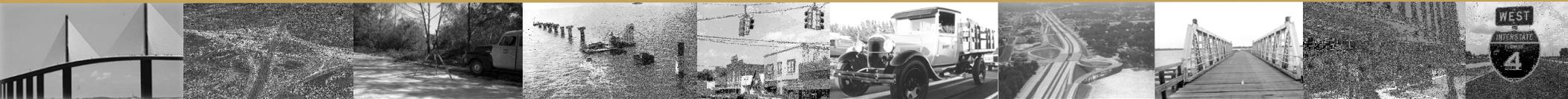
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# Optional Written Form

1. Clear Description of Product
2. Explanation of Unique Performance or Characteristic of the Product
3. Description of the Efforts to Identify Alternatives and Why Alternatives are Unacceptable
4. Other Supporting Facts

reasonable and necessary to fulfill the project need. The assigned Project Manager shall ensure that the documentation includes, but is not limited to, the following information:

- 1) Description of the project need for the proprietary product,
- 2) Factual and technical supporting evidence for Synchronization (see **Section 4.1**) or Unique need (see **Section 4.2**),
- 3) Explanation how the evidence links it to the project need, and
- 4) Factual and technical supporting evidence that no alternatives are available



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# Demonstration Project Example

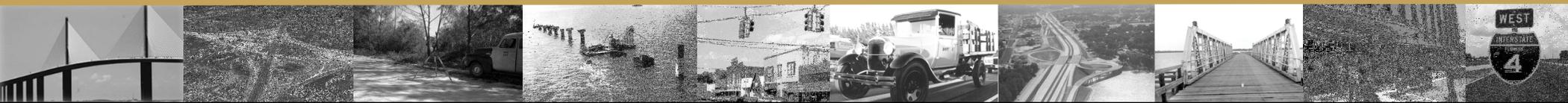
- New Signalized Intersection on the State System within a Maintaining Agency Jurisdiction
- Needs a Traffic Signal Controller



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# Section 1

The Description of Product to be Procured



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## 671 Traffic Controllers Product Type – Controller – NEMA TS2 Type 1

<p><b>Econolite, Controller - NEMA TS2 Type 1</b> Supplier: Econolite</p> <ul style="list-style-type: none"> <li>• Model Number: ASC/3-1000</li> <li>• APL Certification Number: 871-018-007</li> </ul>	<p><b>Siemens Traffic Solutions, Controller - NEMA TS2 Type 1</b> Supplier: Brown Traffic Products, Inc. (formally Siemens and Eagle)</p> <ul style="list-style-type: none"> <li>• Model Number: EPAC M-51</li> <li>• APL Certification Number: 871-018-008</li> <li>• Comment: (EAGLE)</li> </ul>
<p><b>McCain, Controller - NEMA TS2 Type 1</b> Supplier: McCain, Inc.</p> <ul style="list-style-type: none"> <li>• Model Number: XATC eX Type 1</li> <li>• APL Certification Number: 871-018-011</li> <li>• Comment: Note: Evaluated firmware version 1.3.0.4057 with Flashing Yellow Arrow Operation</li> </ul>	<p><b>Trafficware Group, Controller - NEMA TS2 Type 1</b> Supplier: Trafficware Group, Inc.</p> <ul style="list-style-type: none"> <li>• Model Number: 980-A2100</li> <li>• APL Certification Number: 871-018-005</li> <li>• Comment: Note: Re-evaluated new firmware v61.4a with Flashing Yellow Arrow Operation</li> </ul>
<p><b>Peek Traffic , Controller - NEMA TS2 Type 1</b> Supplier: Peek Traffic Corp.</p> <ul style="list-style-type: none"> <li>• Model Number: 3000 TS2-1</li> <li>• APL Certification Number: 871-018-001</li> <li>• Comment: (PEEK)</li> </ul>	<p><b>Trafficware Group, Controller - NEMA TS2 Type 1</b> Supplier: Trafficware Group, Inc.</p> <ul style="list-style-type: none"> <li>• Model Number: 980 ATC Type 1</li> <li>• APL Certification Number: 871-018-008</li> <li>• Comment: Note: Evaluated firmware version 78.1a Build 2827 with Flashing Yellow Arrow Operation</li> </ul>
<p><b>Peek Traffic , Controller - NEMA TS2 Type 1</b> Supplier: Peek Traffic Corp.</p> <ul style="list-style-type: none"> <li>• Model Number: 3000E</li> <li>• APL Certification Number: 871-018-004</li> <li>• Comment: Note: Re-evaluated new firmware 3.7.3 build 420 with Flashing Yellow Arrow Operation</li> </ul>	<p><b>Trafficware Group, Controller - NEMA TS2 Type 1</b> Supplier: Trafficware Group, Inc.</p> <ul style="list-style-type: none"> <li>• Model Number: ATC Type 1</li> <li>• APL Certification Number: 871-018-010</li> <li>• Comment: Note: Evaluated firmware version 78.6B Build 3080 with Flashing Yellow Arrow Operation</li> </ul>
<p><b>Peek Traffic , Controller - NEMA TS2 Type 1</b> Supplier: Peek Traffic Corp.</p> <ul style="list-style-type: none"> <li>• Model Number: ATC-1000</li> <li>• APL Certification Number: 871-018-009</li> </ul>	

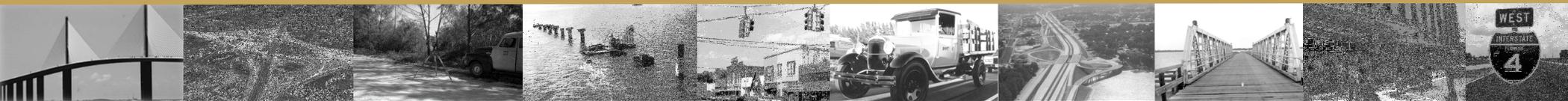


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# 1. Provide a clear description of the product to be procured (630-020-005 Description of the project need for the product)

Purpose:

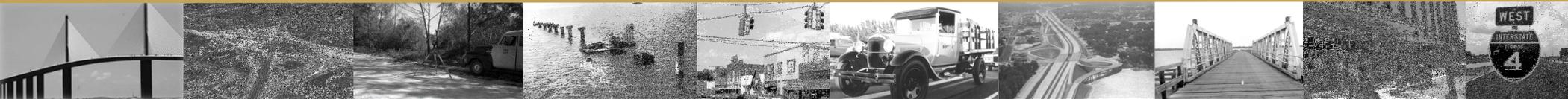
- Serves the purpose of an Executive Summary
- Provides the reviewer with a better understanding of the scope, magnitude and complexity of the project requirements.
  - Include the estimated cost of the procurement and total funding profile for all the years that it will be used if it is an important factor.



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# An Example of Description Language:

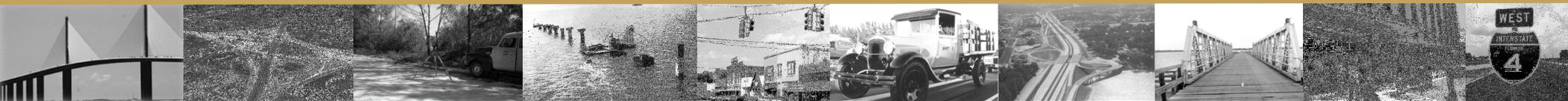
The requirement is to provide (product name) at (location).  
This will allow the office of (requesting agency name) to  
accomplish (agency primary mission objective).



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# Demonstration Project Example:

The requirement is to provide *three Best Manufacturer, Controllers - NEMA TS2 Type 1 Assemblies, APL #671-016-00X, at 56<sup>th</sup> and 3<sup>rd</sup> in City of Pleasantville.* This will allow the *City's Traffic Signal Maintenance Operations Office* to accomplish *timing changes, routine maintenance and repairs to the equipment in a cost effective and timely manner* in accordance with *the Maintaining Agency Agreement with the Florida Department of Transportation.*



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# Section 2

Explanation of each unique performance or feature of the product needed for the project and why that feature(s) is necessary



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# Section 2

This is the most important part of the justification

- Identify all the specialized features required for synchronization, or the unique features
- Explain why each of the features are necessary for the project.

2) Factual and technical supporting evidence for Synchronization (see **Section 4.1**) or Unique need (see **Section 4.2**),

3) Explanation how the evidence links it to the project need, and



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## Common Justification

- Technical characteristic - this equipment must be supportable by City of Pleasantville.
- Explanation - At the end of construction, the maintenance and operations of the equipment will be turned over to City of Pleasantville.

Problem – still doesn't explain why the Best Manufacturer controller is the only controller that can be used.

## Synchronization

- Must use at least one of the following:
  - Function
    - Necessary for satisfactory operation of existing facilities.
  - Aesthetics
    - Necessary to match visual appearance of existing facilities.
  - Logistics
    - Interchangeable with existing inventory.



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## A Better Justification

- Technical characteristic - this equipment must be maintainable by the City of Pleasantville.
- Explanation - At the end of construction, maintenance and operations of the equipment will be turned over to City of Pleasantville. The City of Pleasantville has an integrated system that allows information and alarms from traffic controllers to send messages to the control room and allows for tracking of performance measures. Under the Maintaining Agency Agreement, the City must be capable of responding on-site within an agreed upon timeframe when a signal malfunctions to repair or replace. The city has only trained its maintenance employees in the installation and repair of the Best Manufacturer controller. The training requirements for each type of controller are extensive and the City does not have the resources to train existing personnel in another system not to add additional personnel. Additionally, extra controllers and components must be in inventory to allow the City to respond when a signal malfunctions to repair or replace it. The increase in budget required to maintain two different traffic controllers including training , personnel and inventory space would increase the Maintenance budget by 43%. There are no plans by the City to do this in the next 3-5 years.

Synchronization:

Uses Function, Logistics, and Size/Extent for explanation.



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# Notes

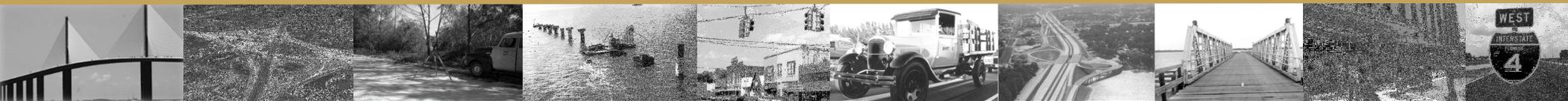
- Local APL equivalents require technical justification
- Lack of advance planning that results in limited availability or concerns regarding funding availability or expiration of funds are not acceptable justifications. In cases where a compelling and unusual urgency exception is cited, you cannot use this process: submit to FHWA.
- Do not assume 'everyone knows'. It is better to add more than you need.



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# Section 3

Describe search for alternatives and why potential alternative fail



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# Section 3: Search for Alternatives

- Activities should include as many options as possible
  - Examples:
    - APL
    - Market search
    - Alternative technical solutions (ex: using an adapter)
    - Cost/Benefit Analysis
  - This should be an explanation of each activity, not a list.
  - Include dates of activities, dates of data used – how old is the data?



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# Section 3 Example: Alternatives

## APL Technical Features:

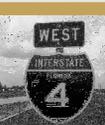
- Other APL products do not have the necessary software interface
  - Product A and Product B have compatible software but these devices are not supported by the City maintenance office training and inventory.

## Alternative solutions:

- There are no other supported devices or software on the Market that would substitute the requested product
  - Review of all APL products was conducted on 1/1/2015. Alternate Physical devices are not available on the APL. The Software cannot be altered to perform the function. Of the existing APL approved products, no manufacturer offers a compatible program.



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# Section 4

Other Supporting Facts



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# Section 4

Provides a section to include other information that does not fit into the previous sections.



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# Justification Review



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# Project Engineer and/or Technical Expert Review Activities

- Review each feature and project needs. Ask for additional information if necessary.
- Identify individual features for disapproval and subsequent exclusion.
- Review Alternatives. Identify if any alternatives will meet all the features if the features for disapproval are excluded.
- Include features, products and alternatives not identified in justification based on expert knowledge. Document resulting correspondence with Agency.
- If one or more alternatives are now available (two or more products are available for bidding), discuss with initiator and request a withdrawal of request. Modify plan requirements to exclude features.
- If no alternatives are available after features for disapproval are excluded, identify exclusions and proceed with approval process.



# QUESTIONS?

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Additional Training Available Upon Request



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