## Telematics Deployment Preparation

<table>
<thead>
<tr>
<th>Area</th>
<th>Challenge</th>
<th>Considerations</th>
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</table>
| Internal   | Staffing – Ownership, Time Allocation, Authority | ✓ Who owns it?  
✓ Do they have enough time to allocate for effective receipt, review, and action?  
✓ Do they have the authority to engage all needed to use data proactively and efficiently? |
| Internal   | Additional Staff                                | ✓ Determining staffing needs can be difficult  
✓ Consider management of data, equipment, communication of repair |
| Internal   | Education/Training                              | ✓ Educate your team/organization on the tech and features  
✓ Make sure it is utilized appropriately to its fullest potential |
| Internal   | Consumption of Data                             | ✓ How do you plan to consume the data?  
✓ How do you plan to disseminate the data?  
✓ How do you plan to react to the data? |
| Internal   | Liability                                      | ✓ How does liability protection happen when telematics devices are on the unit?  
✓ Lessor should not be responsible simply due to proactive use of telematics |
| Internal   | ROI                                            | ✓ Post testing review of pros and cons to ensure an accurate ROI statement is completed |
| Internal   | ROI Measurability                               | ✓ A lot of info is generated  
✓ Lack of measured ROI makes it difficult to justify the investment |
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<tbody>
<tr>
<td>Systems</td>
<td>Expansion</td>
<td>✓ Is the system expandable/adaptable/ customizable to add functionality down the road?</td>
</tr>
<tr>
<td>Systems</td>
<td>Quality</td>
<td>✓ Is the technology forward-looking or will it be outdated and incompatible in the near future?</td>
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<tr>
<td>Systems</td>
<td>Integration</td>
<td>✓ Can the system integrate easily with your equipment management systems to provide visibility and capturing of issues in your normal business processes?</td>
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| Systems                     | Maintenance/Damaged Telematics Equipment       | ✓ Systems should be modular with easy to replace components when they fail  
✓ M & R staff should be able to easily replace non-working sensors with working sensors                                                      |
| Systems                     | Loss of Utilization                            | ✓ Often does not put unit out of service  
✓ Parts replacement may be delayed, but equipment can be used without reporting.                                                                                                                               |
| Systems                     | Maintenance/Damaged Telematics Equipment       | ✓ Hard to capture, troubleshoot, walk through with mechanic and repair  
✓ Need to consider replacement parts                                                                                                                  |
| Systems                     | Risk of Damage - Stacking Equipment            | ✓ Stacking can put equipment at risk of damage                                                                                                                                                               |
| Systems                     | Hardware                                       | ✓ Subject to installing components, receivers, sensors, etc.  
✓ Maintaining equipment  
✓ Ordering parts  
✓ Losing use of equipment while in process  
✓ Private fleet probably less problematic, but intermodal presents challenge due to interchange and movement.                                           |
| Systems                     | Location Tracking/Visibility                   | ✓ Getting consistent tracking can provide ease of locating and repair  
✓ Connecting this to current user can ease communication of repairs needed                                                                                                                                     |
| Systems                     | Where to Deploy - (i.e., Port, Outsource, ILA Labor, etc.) | ✓ New technology can create obstacles in capability and push you toward a certain vendor  
✓ Location of install on the chassis is critical for protection and security  
✓ Retrieval should be considered as well                                                                                                               |
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| Data         | Actionable                         | ✓ Is the data actionable?  
✓ Is your team prepared to react?  
✓ What are they going to do with the data? [Example: a flat tire notification. Who is going to get the notification? (Breakdown department? Driver? Etc.) What is the plan when they receive it?] |
| Data         | Interchanged Equipment - Proactive Use of Data | ✓ Dissemination of information to user while in use  
✓ Contact is driven by phone and is hunt and find  
✓ Outgated units create significant communication barrier |
| Data         | IT Involvement                      | ✓ Involved IT from the start of the project  
✓ Ensure the data is received in appropriate formats for your organization, so it translates, aligns, and flows within the organization |
| Data         | Dissemination                       | ✓ How do you get the info into the field?  
✓ Can you direct data by location?  
✓ Movement of equipment can hamper ability to capture data |
| Data         | Integration                         | ✓ Is the manufacturer capable of integrations?  
✓ Are you limited to using their interface?  
✓ Is there API available? |