Strategic Lean Project Report

For Reporting Period: July 1, 2016 through December 31, 2016

I. General Information:
   Lead agency name: Department of Ecology
   Partner agencies: None

   Improvement project title: Anti-hacking code

   Date improvement project was initiated: 6/1/2015

   Project type: New Project

   Project is directly connected to:
   ☒ Results Washington performance measure
   ☐ Agency Strategic Plan
   ☒ Other –Office of Financial Management Performance Measure

   If applicable, specify the alignment:
   3.3 Increase the percentage of population living where air quality meets federal standards to 100% by 2020.
   N/A
   Percentage of population living where air quality meets federal standards.

   Report reviewed and approved by: Polly Zehm, Deputy Director

II. Project Summary:
Ecology improved how we protect our air quality data, reducing hacking attempts from 3,000 per site a day to less than 20. We also reduced staff hours from 30 to 40 hours a week to 5 to 10 hours a week.

III. Project Details:

   Identify the problem: Ecology started to see a large number of hacking attempts to our air monitoring data systems in summer 2015. There were up to 3,000 hacking attempts per site a day. The attacks affect the integrity of the data we use to measure air quality. Sometimes the hacks shut down the computer systems. When this happens, a staff person has to travel to the site to reboot the computer.

   Problem statement: Currently, our air monitoring data system is being hacked 3,000 times per site a day compared to our target of zero, which we want to reach by 6/1/2017.

   Improvement description: Instead of buying software or hardware to stop the hacking attempts, a developer wrote custom anti-hacking code to protect our air monitoring data system. This reduced the number of hacking attempts from 3,000 per site a day to less than 20 and saved 30 – 35 hours a week hours of staff time.

   Customer involvement: N/A
IV. Impact to Washingtonians:

We improved the protection of our air monitoring data system.

Hacking attempts are eliminated.

Data integrity is ensured.

The public and our stakeholders are confident in the data we collect to protect public health.

V. Project Results:

<table>
<thead>
<tr>
<th>Improved process as measured by: (Click those that apply)</th>
<th>Specific results achieved: (Complete the narrative boxes below)</th>
<th>Total Impact: (Actuals; Current Reporting Period)</th>
<th>Results status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Safety</td>
<td>N/A</td>
<td>☒ N/A</td>
<td>Select from dropdown.</td>
</tr>
<tr>
<td>☒ Cost</td>
<td>Avoided $55,554.00 in costs by developing the anti-hacking software in house for a one-time labor cost of $4,446.00.</td>
<td>Avoided costs of $55,554.</td>
<td>Final</td>
</tr>
<tr>
<td>☐ Quality</td>
<td>N/A</td>
<td>☒ N/A</td>
<td>Select from dropdown.</td>
</tr>
<tr>
<td>☒ Time</td>
<td>Decreased the amount of time staff traveled to reboot computers from 40 hours a month to less than 10 hours a month. Some sites can be reached in less than 2 hours and other may take 8 hours for a complete trip.</td>
<td>Time savings of up to 30 hours per month.</td>
<td>Final</td>
</tr>
<tr>
<td>☐ Customer Satisfaction</td>
<td>N/A</td>
<td>☒ N/A</td>
<td>Select from dropdown.</td>
</tr>
<tr>
<td>☐ Employee Engagement</td>
<td>N/A</td>
<td>☒ N/A</td>
<td>Select from dropdown.</td>
</tr>
</tbody>
</table>

VI. Contact information:

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