

## Lean Project Charter

**Project Name: Public Safety Radio Inventory Assessment**  
**Date Chartered: September 5, 2013**  
**Expected Completion Date: February 28, 2014**  
**Team Leader: Jennifer Lord, Radio Communications Specialist**



### **Team Goal/Mission:**

This team will apply Lean Six Sigma (LSS) principles to streamline current process issues and further explore, recommend potentially an interoperable radio equipment inventory system that can be accessed by DNR staff and the Wisconsin State Patrol Radio technicians.

The team will implement improvements that accomplish the following:

1. Development of efficient and effective mechanisms to deal with radio inventory control (mobiles, portables, repeaters, portable repeaters, etc.). It will improve methods for maintaining accountability of radio communication equipment. This will make it easier to account for various items that were purchased using federal grant funds.
2. Reduce lead (delivery) time. Instituting an improved, more efficient ~~a trouble ticket~~ system for radio equipment maintenance which will help reduce the time a piece of equipment is out for repair
3. This project will improve customer satisfaction by providing a set framework and process for getting radio equipment repaired in a prompt and efficient manner.
4. The project will through inventory control and maintenance tracking allow for a more cohesive replacement schedule development and setting the stage for next generation radio purchase to ensure interoperability internally and externally with our radio communication equipment.

### **Measure(s) to be used to determine success:**

How will we quantify our progress?

1. DNR staff time is reduced by 10% and 10% process cycle reduction with improved radio maintenance, improved DOT radio repair/radio replacement/transfer process cycle times, improved DNR purchasing cycle times, in inventory control and tracking of radio communication equipment as recommended as a solution by this Lean team.
2. Utilizing December 2013 customer satisfaction measurement survey, improve existing customer satisfaction levels identified by survey by 50% by December 2014.
3. Develop a radio communication replacement schedule, and streamline purchase process.
4. Ensure safety of radio users.

### **Team Members:**

Jennifer Lord, Forestry (Team Lead)  
Trent Marty, Forestry (Sponsor)  
Jeff Oimoen, Forestry  
Barry Espeseth, DOT Radio Tech.  
Brian Hudson, , DOT Radio Tech Supervisor  
Jason Fritz, Parks  
Brian Knepper, LE  
Mark Burmesch, LE  
Jeff Weatherly, Internal LEAN Consultant

**Issues to be addressed:**

What Problems or opportunities will the team solve?

1. The project will work towards making the radio equipment inventory reliable and usable.
2. Project will help decrease extensive radio equipment repair times.
3. Work towards planning budget and replacement schedule.

**Expected Results:**

After the project is complete, with reduced cycle time yields, DNR as a customer will have radio equipment in a more timely/expedient manner. This will help facilitate DNR personnel with the ability to increase “on duty/on the job” hours to benefit the citizens the DNR serves.

**Support/Resource People:**

We will need support from DNR Finance, Information Technology, and Web Management, along with support from DOT radio technicians and supervisors. We will also consult other states, and county radio system managers to glean best practices for inventory control and maintenance systems.

**Responsibilities and Boundaries:**

1. Team to look at...
  - a. Data and facts of current DNR radio communication inventory
  - b. Comparative cost associated inventory management systems
  - c. Comparative cost associated with trouble ticket systems
  - d. Program management replacement schedules and costs
  - e. Customer needs
2. Team will not look at...
  - a. Radio Pool budget
  - b. Tower systems and infrastructure.



# DNR Lean Project – Public Safety Radio Inventory Final Report

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**Project Name:** Public Safety Radio Inventory

**Project Team Leader:**

Jennifer Lord & Jeff Oimoen

**Project Purpose:**

Development of efficient and effective mechanisms to deal with radio inventory control (mobiles, portables, repeaters, portable repeaters, etc.). Improve methods for maintaining accountability of radio communication equipment. This will make it easier to account for various items that were purchased using federal grant funds.

Reduce lead (delivery) time associated with repairs and programming.

This project will improve customer satisfaction by providing a set framework and process for getting radio equipment repaired in a prompt and efficient manner or providing replacement equipment so personnel remain operational in regards to radio communications equipment needs. Personnel transfers to become much more efficient.

**Project Team Members:**

Team sponsor: Trent Marty.

Team Members: Jennifer Lord, Forestry (Team Lead)

Jeff Oimoen, Forestry (Co-Lead)

Barry Espeseth, DOT Radio Tech.

Brian Hudson, DOT Radio Tech Supervisor

Jason Fritz, Parks

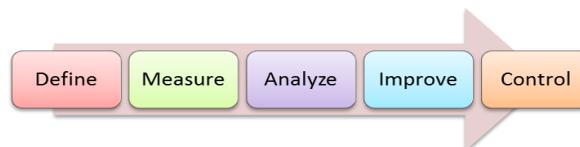
Brian Knepper, LE

Mark Burmesch, LE

Jeff Weatherly, Internal LEAN Consultant

**Summary of Improvements:**

After the project is complete, with reduced cycle time yields, DNR as a customer will have radio equipment in a more timely/expedient manner. This will help facilitate DNR personnel with the ability to increase “on duty/on the job” hours to benefit the citizens the DNR serves.



**Project Results:**

<b>Goal</b>	<b>Baseline</b>	<b>Target</b>	<b>Expected After Improvements</b>	<b>Goal Met?</b>
DNR staff time is reduced by 10% for the radio purchase cycle times.	470 Hours	47 Hours	185 Hours	Yes Verify through ongoing measure.
Reduce lead (delivery) time by 10%. Instituting an improved, more efficient system for radio equipment maintenance which will help reduce the time a piece of equipment is out for repair and improve transfer cycle times.	36.6 Hours Repairs	32 Hours Repairs	2 Hours Repairs	Yes Verify through ongoing measure.
	28 Hours Transfers	25 Hours Transfers	2 Hours Transfers	
Utilizing December 2013 customer satisfaction measurement survey, improve existing customer satisfaction levels identified by survey by 50% by December 2014.	Survey results show that DNR staff depends on their radios. They need them ASAP. Without radios they cannot do their job.	Follow up survey results will show that most radio repairs will be done within 24 hours or a spare will be issued until the radio is repaired and comes back in service.	Follow up survey results will show that goals have been met.	Dec 2014, VOC survey target is 50% improvement.
Simplify the process. Reduce steps by 10%.	Reduce handoffs in all three processes. Total steps 30	Decrease handoffs by 10%	Total steps 21	Yes Verify through ongoing measure.

**Amount of staff time saved per year in hours:** 20914 Hours. This includes an estimated total of 20 warden transfers, 6 purchase process cycles and 540 repairs.

**How will that time be reinvested?:**

Time can be expended on other priority Department work.

**Project Cost:**

	<b>Hours</b>	<b>Dollars</b>
Project Team Leaders	330 Hours	
Project Team Members	158.5	
Meeting Costs		\$0
Improvement Costs		\$0
Total	488.5	\$0

**Recommendations for Future Code/Statute Changes:**

None

**Lessons Learned:** With the implementation of the lean project we learned that repairs, transfers and radio purchases processes can be streamlined and become much more efficient. Not only can the DNR save tax dollars but safety can be improved for DNR staff and the public as well.