# RSI Risk Reduction and RollerMouse

Small Batch Data Review of Seattle City Light Office Workers

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# Takeaways

- Short term results of risk and pain reduction using RollerMouse.
- Potential long term effects of continual use of RollerMouse.
- Productivity changes with measured employees.
- Company savings.


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# Initial evaluation

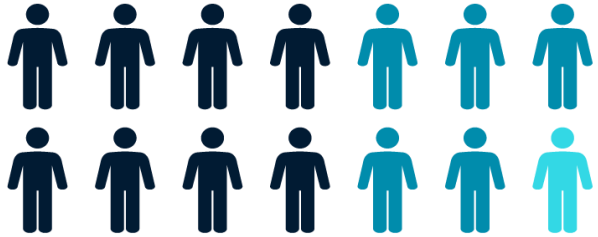
- A standard ergonomic assessment was conducted for each individual.
- The ergonomic assessment for all office workers is now an annual requirement for all City Light employees who spend at least 40% of their week at a workstation.
- Determinations for changes to the workstation are based on an ergonomic review and the employees inputs to the online risk assessment tool.

# Employees in the Review

- There were 14 employees that were in this review:
- Their initial risk levels were:
  - 8 High Risk (750 or higher)
  - 5 Medium Risk (300-749)
  - 1 Low Risk (0-299)
- They initially had the following types of input devices (mouse):
  - 6 had a different type of rollermouse
  - 2 were using “ergonomic” style devices with roughly 45 degrees of slant
  - 6 had the standard mouse issued with desktop PC setups

**14**

**TOTAL USERS**

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# Employees in the Review

- No employees were using an ergonomic keyboard such as the Sculpt, Logitech Wave, or other contoured type keyboard.
- All employees were initially using standard keyboards.
- 8 employees were later transitioned to a keyboard without a 10-key attached due to minimal 10-key usage.
  - 6 Kinesis Freestyle 2 keyboards
  - 2 Evoluent keyboards


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# Data Review


- Primary data was taken solely from our online risk management tool.
  - Baselines were each employees initial assessment and evaluation.
  - Additional information was pulled using interviews with both users and supervisors:
    - Quality of work
    - Efficiency changes
    - Perceived comfort levels (verified with the risk tool)
  - Employees were from a variety of job descriptions within City Light:
    - 60% were from Customer Service jobs
    - 30% were DAs or Department Administration
    - 10% were from Engineering

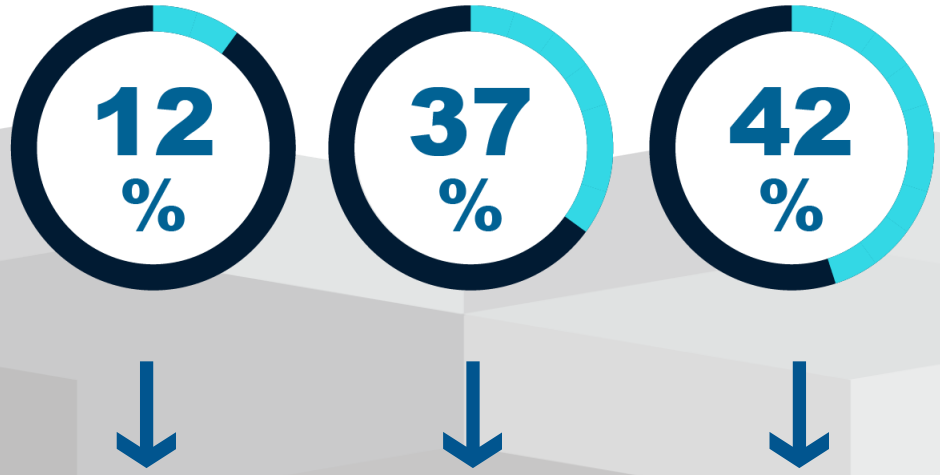
# WMSD Complaints

- All 14 employees had discomfort with their shoulders, neck, elbows, and hands to varying degrees.
  - Discomfort levels are measured by the tool as:
    - None
    - Occasional
    - Frequent
    - Constant
- A review of the data showed:
  - All users had elevated levels of discomfort.
  - Level was measured as either frequent or constant.
  - The lone low risk employee was beginning to develop issues.

# Changes to the Workstations

- Employees were given the Contour RollerMouse Red because:
  - Elevated shoulder discomfort from reaching for their standard mouse.
  - Prolonged computer work due to the nature of their job tasks.
  - Trial usage of other ergonomic devices did not show any improvement in the affected areas.
- Follow-ups for the employees were done based on Risk levels:
  - High risk were followed up at 30 days.
  - Medium risk were followed up at 60 days.
  - Low risk were followed up at 90 days.

# Initial Follow-up Data




- Excellent results using the RollerMouse Red.
- Follow-up assessments from the users showed:
  - 42% decrease in risk scores for High Risk employees.
  - 37% decrease in risk scores for Medium Risk employees.
  - 15% decrease in risk score for the Low Risk employee.
- This number speaks directly to the overall score for the employee.
- This change can also be impacted by other changes that were made to each employees workstation, however those changes were minimal in scope.

# 6 Month Check-up


- After 6 months there was an additional 20-33% decrease in discomfort.
  - This decrease was directly related to the affected areas:
    - Shoulders 33%
    - Neck 25%
    - Elbows 27%
    - Hands 20%
- The requirement for annual assessments has shown (only 8 of this 14 have completed to date):
  - A further 15% decrease in discomfort for High Risk users (5).
  - A further 11% decrease in discomfort for Medium Risk (3).

# Productivity Changes

- Although difficult to directly measure, our online risk tool does calculate for changes in lost productivity.
- The average loss time for the users of RollerMouse Red prior to issuance was 38 minutes daily.
- After 6 months of usage this number has decreased to 30 minutes.
- This translates to an efficiency increase by this group alone of 347.6 recouped productive minutes.
- That is roughly $287K in recouped productivity (based on avg. salary).

# Conclusions

- Short term pain mitigation was evident when the RollerMouse Red was issued and the employees were coached on how to effectively use it.
- Data shows that mid and long term use has continued to show further decreases in both targeted discomfort levels and overall employee risk.
- There were measured productivity increases and decreases in lost or unproductive time for each employee.
- Supervisors and employees were happy with the results from using the RollerMouse Red and the fact that there is a solid ergonomic process to use now.

# Questions?

# Thank you

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