



# Emergency Management Performance Metrics

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WHY THEY MATTER!

2016 .11 . 08

NORTH SHORE EMERGENCY MANAGEMENT



NORTH SHORE  
EMERGENCY  
MANAGEMENT

*Disaster  
Exercise  
in  
progress*

city  
of north  
vancouver



WEST VANCOUVER

# Disasters Always Happen in Communities



*How can we tell if we did the right things...?*

# Overview

**Context**

**Performance  
Metrics**

**Pros and Cons**

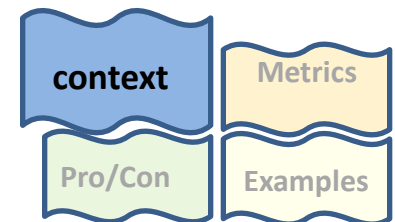
**Examples**

# North Shore Emergency Management

- Emergency Management department for
  - City of North Vancouver
  - District of North Vancouver
  - District of West Vancouver
- Established in 1978
- 3 Bylaws for each municipality
- Provide following services:
  - Emergency plans, training, exercising, public education, volunteer management, stakeholder engagement, EOC, .... Etc.

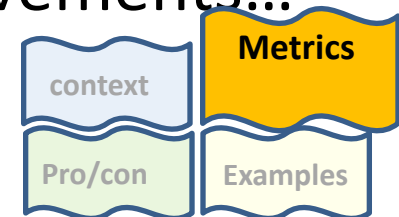


~ ***A disaster resilient North Shore*** ~



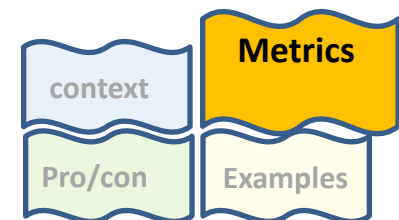
# Performance Measures

- Tools to measure:
  - Service levels, quality, efficiency, effectiveness
  - Changes over time
  - Assess success or failure
    - Goals and objectives
    - Within budget, timeframe, resources, satisfaction, etc.
- Can provide:
  - Support for budgets, better decisions, transparency, better productivity, improvements...



# Performance Measures

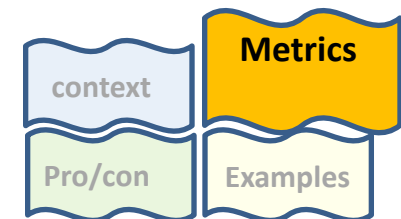
- Consider:
  - Input (resources, \$, etc.)
  - Processes (what is done)
  - Outputs (the result)
  - Effectiveness over time: intermediate, immediate, medium, long term
- Evaluate:
  - Physical measures against cost, time, each other
    - Cost per capita, response time, compare EP programs



# What You Need to Consider

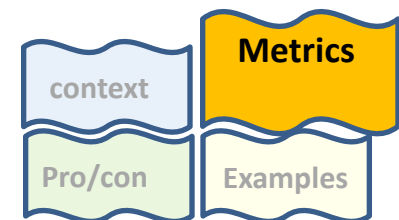


- Should be linked to goals (broad statements) and objectives (activities /cost/responsible), reported, support changes
  - e.g. municipal annual report
- Goals need to be:
  - **S**pecific, **M**easurable, **A**chievable, **R**elevant, **T**ime related
- Consider: workload, efficiency, effectiveness



# Outcome

- Enhanced accountability, innovation, cost effectiveness, improved performance
- Public have a right to know how a community is functioning





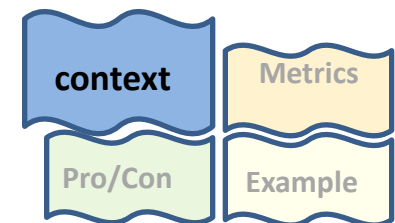
# Concept Example: Personal Preparedness



- Workload:
  - # of personal preparedness courses delivered
- Efficiency
  - # hours of preparation time required for each course (over time want to see a decrease)
- Effectiveness
  - Increase in number of courses delivered
  - % attendees more confident in knowledge that they have the ability to act before, during and after an emergency

# Legislation & Best Management Practices

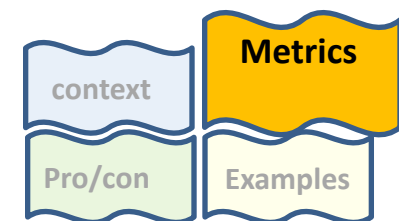
- Local government Act, Community Charter (CC)
  - CC Section 98: must produce an annual report
- Emergency Program Act
  - Local Authority Emergency Management Regulation
- Other Legislation...
- Municipal Bylaws
- Best Management Practices
  - Canadian Standards Association, National Fire Protection Association, International Standards Association, etc.



# Concept Example:

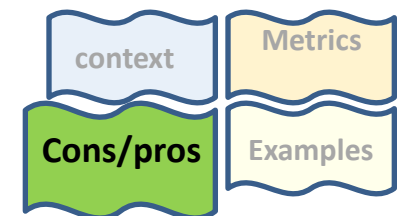
## Logic Model (measuring using explicit goals and objectives)

ITEM	INPUTS	OUTPUTS		OUTCOMES		
		Action	To Who	Short	Medium	Long
Staff & community educated in emergency prepared-ness	resources (staff, \$) use of facilities handouts, supplies, etc.	Website Social Media Workshops Displays ShakeOut drill	Staff Citizens Businesses	Increased awareness and knowledge/skills/abilities Motivated individuals Increased emergency supplies on hand	Change in behaviour (i.e., ongoing rotation of emergency food supplies) everyone knows the hazards; are prepared to look after themselves for minimum 72 hours	A more resilient community that can quickly recover to the 'new' normal.



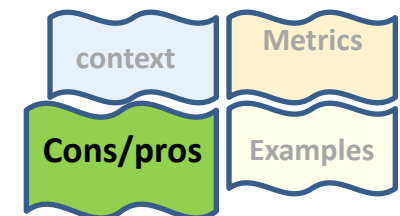
# Benefits of Performance Metrics

- Identify trends
- Continually improve
- Due diligence
- Increase productivity and employee satisfaction
- Transparency and accountability to public/stakeholders
- Helps to make better decisions
- Support of budgets....



# Pitfalls of Performance Metrics

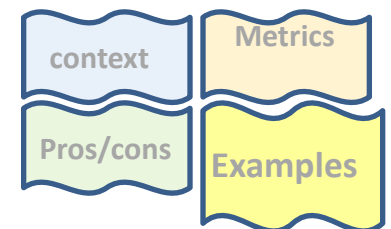
- Standards not always available
- Can't compare ... or unfair comparison
- Time consuming
- No meaningful application of results
- Irrelevant data collected
- Impact of external factors – uncontrollable



# Examples

## NSEM Annual Work Plan

- Number of departmental plans developed
- Number of public preparedness courses offered
- Number of staff/volunteers trained
- Number of exercises conducted





# Examples

## City of North Vancouver Annual Report (2015)

### North Shore Emergency Management

#### Services and Operations

- ✓ Emergency Preparedness information for residents and businesses through website materials and training workshops
- ✓ Development of relevant emergency plans to help prepare for, respond to and recover from emergencies and disasters
- ✓ An operationally ready Emergency Operations Centre for use by individual or multiple North Shore municipalities as required
- ✓ Emergency Operations Centre training and exercises for staff and NSEM volunteers
- ✓ Stakeholder engagement to enhance North Shore emergency management capabilities
- ✓ Management of public safety lifeline volunteers who make themselves available to support the community during emergencies and disasters

#### 2015 Objectives and Measures

2015 Objectives	2015 Measures
1. Development and maintenance of relevant emergency plans to help prepare for, respond to, and recover from emergencies and disasters.	1. Plans were either created or updated including the following: extreme heat initial response, north shore downed power line, active threat template, north shore spill response, evacuation, and rapid damage assessment.
2. An informed North Shore community with knowledge of their emergency management responsibilities.	2. Many activities occurred to engage the public in their personal responsibility with being prepared including: an earthquake simulator sponsored by industry (three days located at Night Market, Lynn Valley Library and Park Royal Shopping Centre), nine community displays, three youth emergency preparedness sessions, seven evenings and weekend emergency preparedness workshops, a presentation to Eagle Island residents, 20 one hour presentations to groups and one childcare emergency preparedness course.

3. Effectively trained and exercised municipal staff and public safety lifeline volunteers to support planning, response and recovery activities on the North Shore.

3. NSEM presented 10 Emergency Operations Centre courses to staff and volunteers. In addition, staff and volunteers attended over 10 other courses provided by external agencies. Amateur Radio participated in Field Day, NSEM facilitated a rapid damage assessment exercise and all municipal staff was encouraged to participate in the annual ShakeOut earthquake drill. NSEM facilitated the most extensive full-scale earthquake exercise ever held on the North Shore, complete with Emergency Operations Centre activation and field activities which tested movement of resources, new technologies, hazmat response and rapid damage assessment. Over 50 external organizations participated in this exercise. NSEM and municipal staff also participated in numerous exercises facilitated by external agencies.

4. Support the municipalities in their emergency response and recovery activities when an emergency or disaster occurs.

4. NSEM staff and volunteers responded to 13 emergencies that ranged from house fires to apartment fires across the North Shore. Responding to the MV Marathassa marine oil spill was an additional significant task where the whole shoreline was threatened and West Vancouver was most significantly impacted.

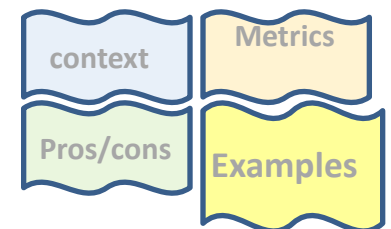
#### 2016 Objectives

2016 Objectives
1. Development and maintenance of relevant emergency plans to help prepare for, respond to and recover from emergencies and disasters.
2. An informed North Shore community with knowledge of their emergency management responsibilities.
3. Effectively trained and exercised municipal staff and public safety lifeline volunteers to support planning, response and recovery activities on the North Shore.
4. Support the municipalities in their emergency response and recovery activities when an emergency or disaster occurs.

# Examples

## District of North Vancouver Annual Report (2015)

- Continue to build community resilience through planning, response, recovery, training and education:
  - 2015 initiatives included: tri-municipal simulation/training exercise
  - Release of a comprehensive District wide earthquake risk assessment and “When the Ground Shakes” a plan language guide regarding earthquake risk and preparedness

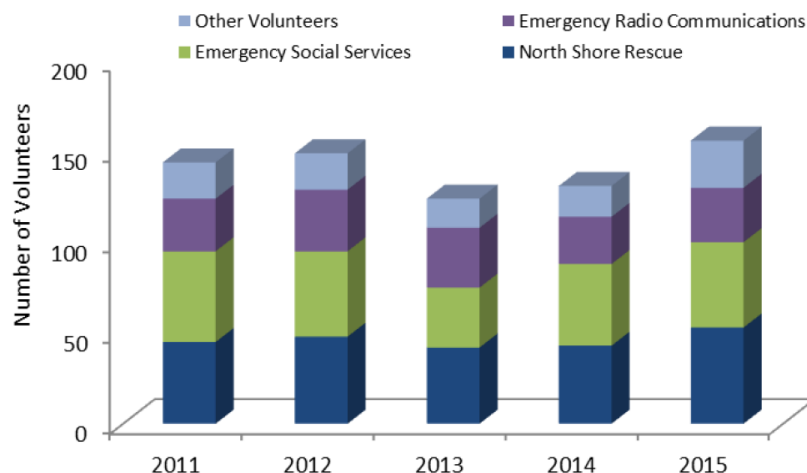




# Protective Services – Activity Measures

(Fire, Police, Emergency Management, Bylaws)

## Number of Volunteers



## Emergency Training Offered to the Public



*North Shore Emergency Management (NSEM) provides an extensive range of services to the North Shore municipalities, including emergency support services, search and rescue, and emergency communications with the vision of being a “disaster resilient North Shore”.*

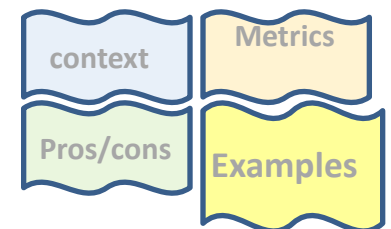
*NSEM has been offering free personal preparedness training to the public for over two decades. In recent years NSEM has enhanced their online presence and now offers residents extensive information on a wide range of emergency management topics through their website [nsem.info](http://nsem.info). Whether it is information on personal preparedness, natural hazards, or emergency response and recovery, NSEM’s website provides a wealth of information in convenient, accessible formats (videos, fact sheets, etc.). NSEM’s social media channels (Twitter and Facebook) provide topical updates to residents. They also maintain RapidNotify, a North Shore wide emergency notification system which residents can sign up for to receive emergency alerts.*

*In 2015, NSEM supported the municipalities in a number of emergency responses ranging from house and apartment fires to the significant marine oil spill in English Bay which impacted the North Shore beaches. NSEM also increased public outreach by participating in numerous community events to engage attendees in taking steps to become personally prepared.*

# Examples

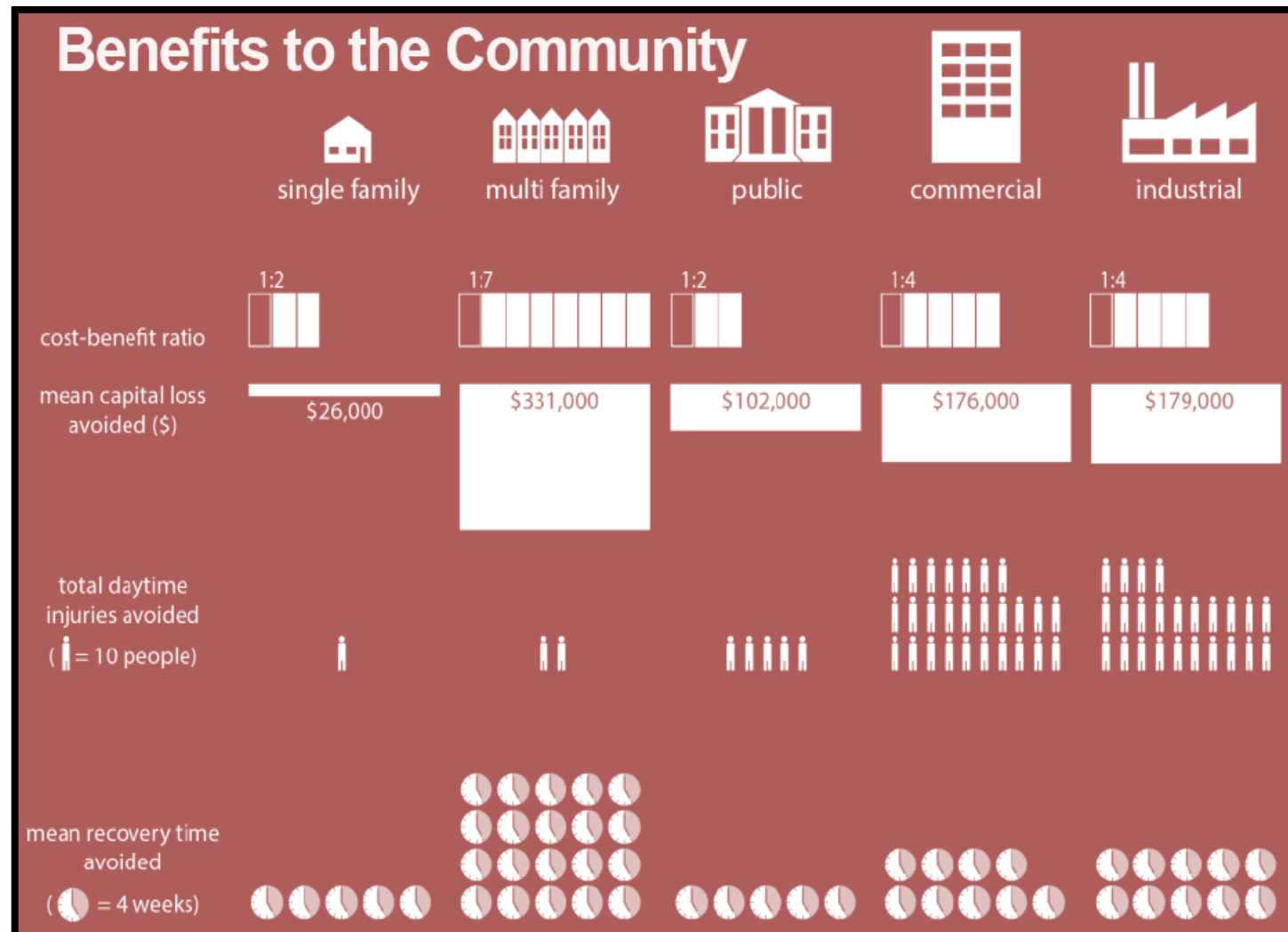
## NSEM Business Employers Emergency Preparedness Program

- 584 businesses reached at initial visit (face-to-face).
- 184 business owners were contacted by phone (out of 275 attempted follow-ups):
  - ***AT LEAST 11% of 584 businesses visited are better prepared***
  - ***Of the 184 owners who responded during follow-up, 37% are better prepared***



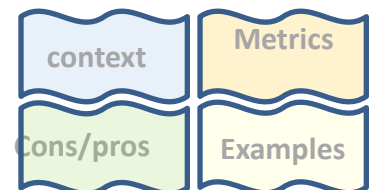
# Examples

District of North Van Earthquake Study ([www.dnv.org](http://www.dnv.org))



# Conclusion

- Consider performance metrics
  - Identify goals and objectives
  - Develop measures for each:
    - Workload, efficiency, effectiveness
- Measure basics, don't create work, start small
- Learn from metrics - adjust work plans
- Use metrics to “tell a story”



# A disaster is ALWAYS a disaster

**Performance Measurements can help to continually improve emergency management programs, and tell the story of what you have been doing.**



# Questions?

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NORTH SHORE EMERGENCY MANAGEMENT

City of North Vancouver District of North Vancouver District of West Vancouver