

Right First Time The City of Edinburgh Council Road Services



Presentation to APSE roads, highways and
street lighting advisory group

November 2010

by
Alison Angus & Alan Simpson

the guardian
**Public Services
Awards 2009**

in partnership with **HAYS**

Winner



In the beginning...

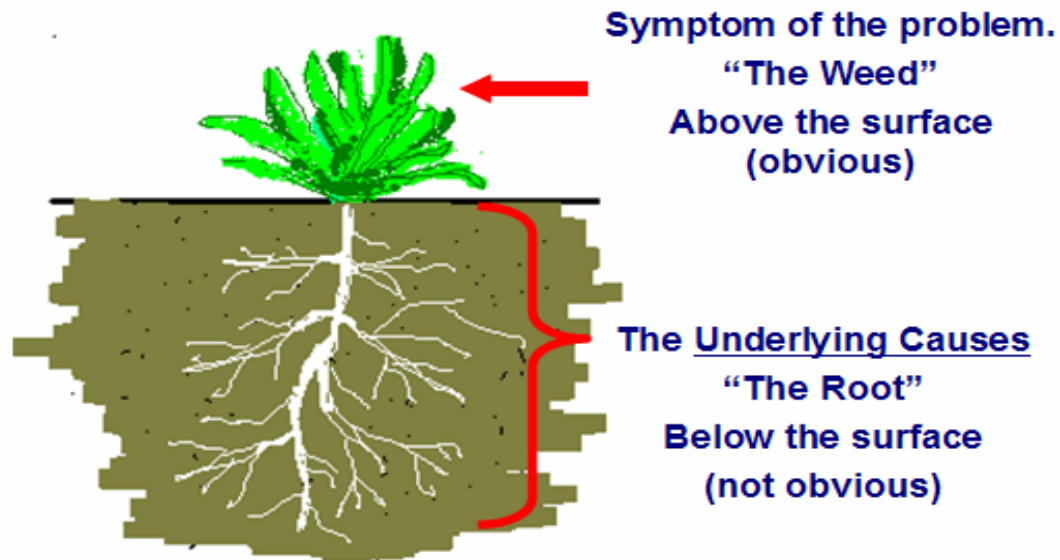


**Duplication
Confusion
Delay
Chasing
Quality suffered**

Looking at Whole Systems



Root Cause Analysis Basics

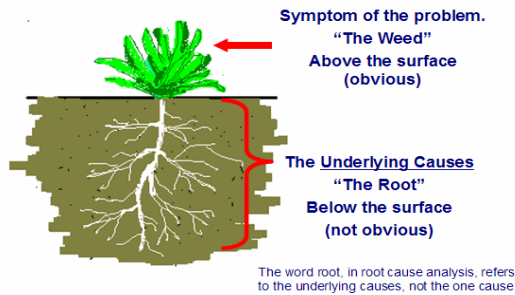


The word root, in root cause analysis, refers to the underlying causes, not the one cause.

Looking at Whole Systems



Root Cause Analysis Basics

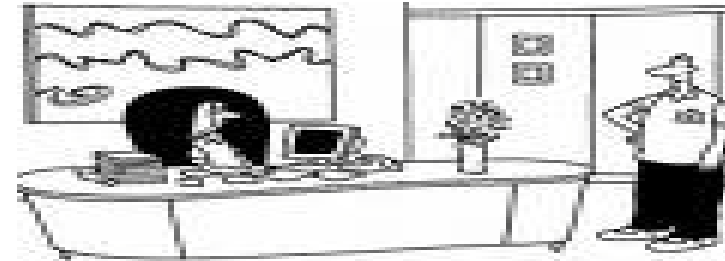
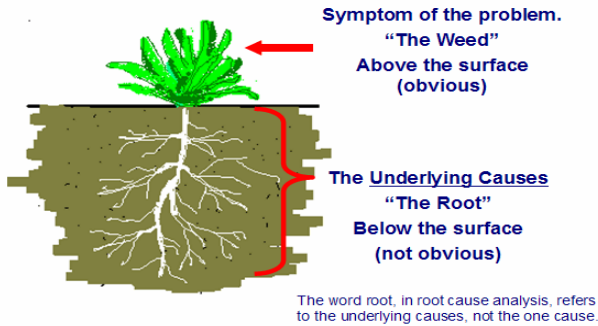


"Someone calling themselves a customer says they want something called service."

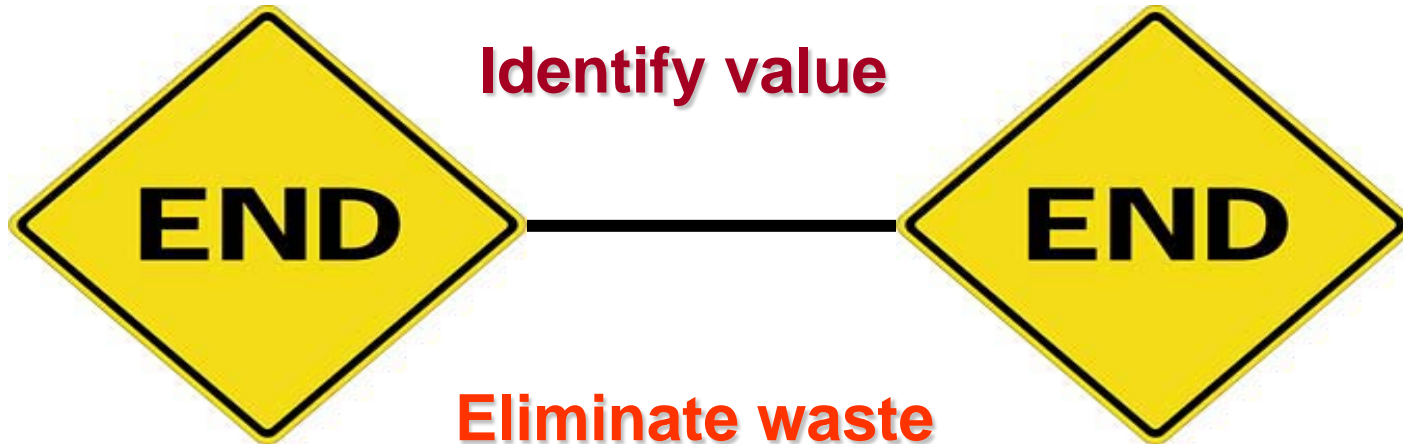
Looking at Whole Systems



Root Cause Analysis Basics



"Someone calling themselves a customer says they want something called service."



Some of what was wrong with previous measurement methods?

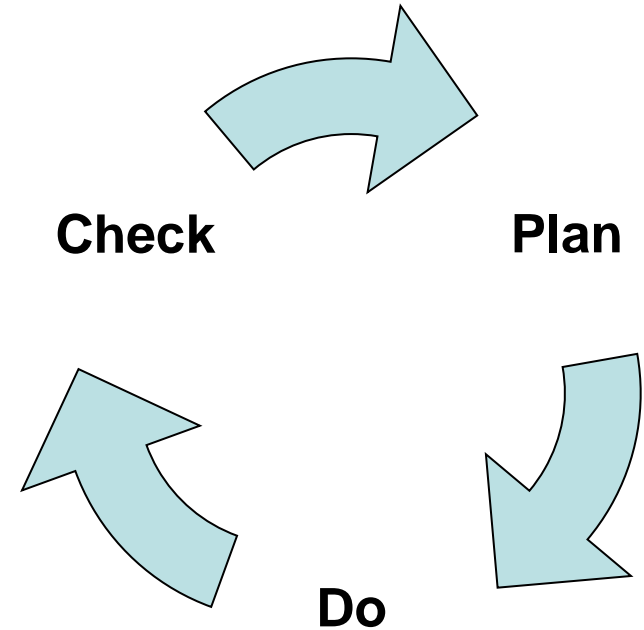


- We measure from an internal perspective
 - VIP MAIL (10 working days)
 - Temporary Pothole repairs (3 working days)
- We only measure parts of the process
 - Gully's
- The use of targets and standards cause "cheating" – drives the wrong behaviour
- Targets and standards cause Parkinson's law



Systems Thinking: Experts at the Front

- Front-line staff have the best data and ideas
- Check – plan – do
- This is ongoing and leads to Continuous Improvement



RFT Projects in Edinburgh



Correspondence



Potholes



Gullies



Roadworks
Support



Street
Lighting



Right First Time

Gully Cleaning & Jetting



Pre-RFT

- 4 Vehicles \Rightarrow City split into 4 quadrants
- Service was managed from 2 depots
- Vehicles diverted to reported blockages
- Operatives paid in line with Output Based Incentive Scheme
- Poor recording of gully cleaning data



2005 – Gully Routes

- List of streets
- No gully locations/numbers
- No way of recording which gullies cleaned



• EDINBURGH •
 THE CITY OF EDINBURGH COUNCIL
 EDINBURGH ROADS SERVICES

ROUTINE GULLY CLEANSING ROUTE

348	GULLIES
BUCKSTONE AVENUE	
BUCKSTONE BANK	
BUCKSTONE CHURCH	
BUCKSTONE CHURCH	
BUCKSTONE CHESSANT	
BUCKSTONE DRIVE	
BUCKSTONE GARDENS	
BUCKSTONE GREEN	
BUCKSTONE GROVE	
BUCKSTONE HILL	
BUCKSTONE HOLE	
BUCKSTONE JAY	
BUCKSTONE JAY	
BUCKSTONE JAY SOUTH	
BUCKSTONE KILBE	
BUCKSTONE KILBE	
BUCKSTONE ROAD	
BUCKSTONE ROW	
BUCKSTONE SEAN	
BUCKSTONE TOSACHE	
BUCKSTONE VIEW	
BUCKSTONE WAY	
BUCKSTONE WOOD	
BUCKSTONE WYND	
HIGH BUCKSTONE	



2005 to 2008 – Gully Routes



- Each gully recorded in GIS with a unique identification number
- Record of most appropriate method of cleaning
- Gully Cleaning Routes issued as a list of streets with the number of gullies on each street and a location map for each gully



The Journey of a Gully Route (2008)



Gully Team retrieve data from GIS

↪ Gully Team Print Route & Maps (30 – 40 pages)

↪ Info passed to Supervisor

↪ Info passed to Operative

↪ Operative cleans gully and records actions/exceptions

↪ Info returned to Supervisor

↪ Info returned to Gully Team

↪ Gully Team input into GIS



Pre-RFT – Exception Reports Process

Details recorded by Operative

- ↪ Information returned to Neighbourhood Team
- ↪ N'hood Team produced HP Jetting Works Instruction
- ↪ Works Instruction passed to Road Services
- ↪ Works Instruction passed to Operative for HP Jetting
- ↪ Information returned to Neighbourhood Team



WASTE



- Supervision – joint management
- Bonus Payments
- Route management
- Report management
- Duplication
- Not closing the loop



RFT Improvements



Centrally managed team:

- 8 Operatives
- 4 Gully Vehicles
- High Pressure Jetting Squad
- Hand-cleaning Squad

Suspension of Incentive Scheme





RFT Improvements

- 52,000 gullies assigned to new Neighbourhood based routes
- 3 Gully Vehicles, Jetting and Hand squads operate in one Neighbourhood until completion
- 1 Gully Vehicle deals with Reports across the City



RFT – Journey of a Gully Route



Supervisor retrieves data from GIS

- Data transferred onto Tablet PC
- Tablet PC passed to Operative to identify gully route and record actions/exceptions
- Tablet PC returned to Supervisor
- Data transferred onto GIS



RFT – Exception Reports Process



Details recorded by operative in tablet PC

- Tablet PC returned to Supervisor
- Data transferred onto GIS
- HP Jetting Route generated within GIS
- HP Jetting Route transferred onto tablet PC
- Tablet PC passed to Jetting Operative to identify jetting route and record actions/exceptions
- Tablet PC returned to Supervisor
- Data transferred onto GIS
- Defective gully details emailed to Neighbourhood Teams

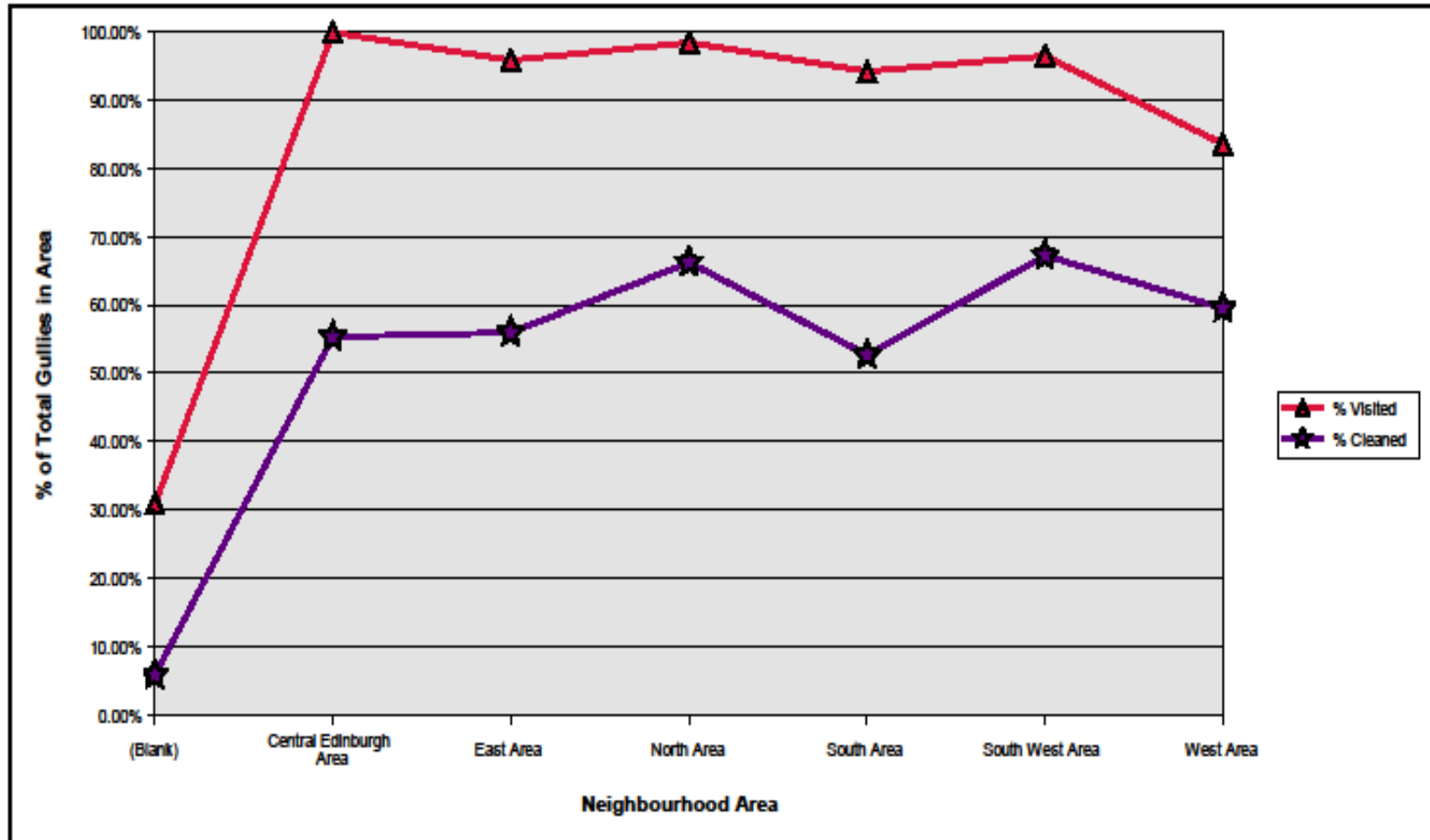
RFT – Results over last 6 months



- 93% of gullies visited on a routine basis were cleaned, with 87% cleaned RFT
- 86% of reported blocked gullies were cleared, with 84% cleared RFT
- 77% of high pressure jetting work was successful, with 89% of blockages cleared RFT
- In-cab IT system has produced annual savings of:
 - admin time by 80%
 - printing 20,000 sheets of paper

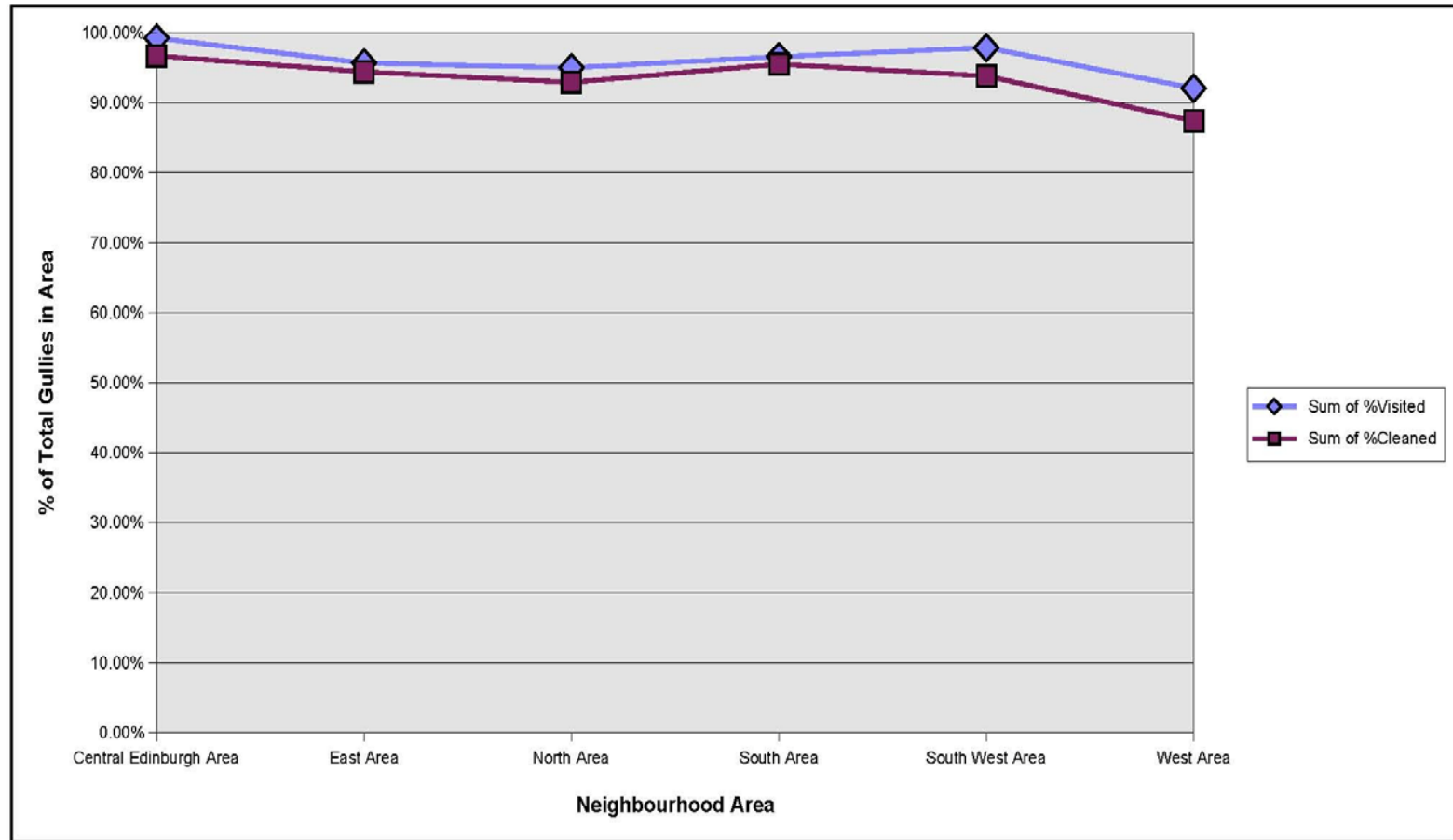
% Gullies Visited & Cleaned By Area

Gullies Cleaned Between 11/11/2007 And 09/11/2008



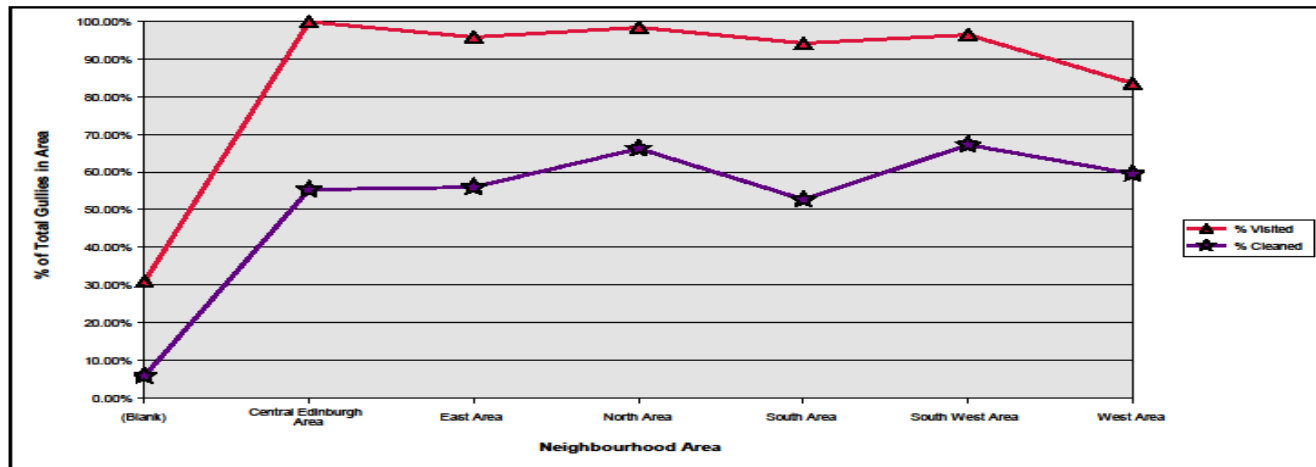
% Gullies Cleaned by Neighbourhood Area

Gullies Cleaned Between 01/04/2009 And 20/05/2010



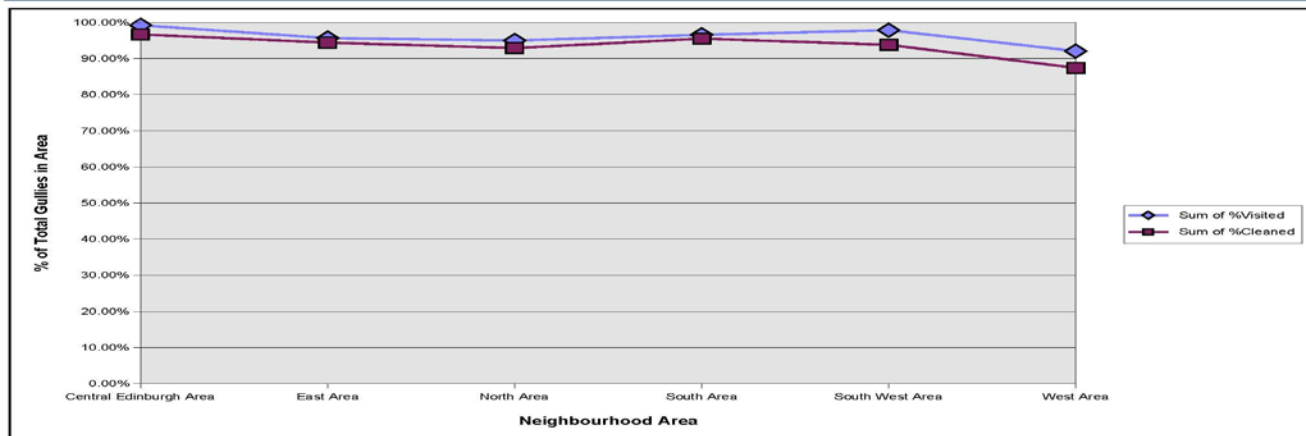
% Gullies Visited & Cleaned By Area

Gullies Cleaned Between 11/11/2007 And 09/11/2008



% Gullies Cleaned by Neighbourhood Area

Gullies Cleaned Between 01/04/2009 And 20/05/2010



Gully Cleaning & Jetting – The Future



- Increase front-line team to undertake gully repairs
- Recovery of justifiable costs for Public Utility damages
- Relocation of back-office team to Operational Depot
- Production of suite of Reports for Neighbourhood Teams, Elected Members and Community Groups

RFT – Quotes from staff

- *“I can now see the progress we have made over the past year and I hope to continue”*
- *“I like working as part of the gully team and can see the progress made over the last year”*
- *“I have been with the Council for 20 years and this is the first signs of real improvement in gully cleaning system and can now see how the system progresses”*



Expect the Unexpected



APSE – Winner “Best Efficiency” Award - 2010







Thank You