Setting yourself up for success
A Case Study from New Westminster's Urban Forest Strategy

Trevor Cox & Camille Lefrançois

Diamond Head Consulting

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Departments involved in the managing the urban forest:

Parks	Private/Planning/Parks	Engineering	Planning/Engineering/Parks

PARK TREES AND FORESTS

FRONT-YARD, BACK-YARD AND SIDE-YARD TREES

BOULEVARDS AND STREET TREES

PLANTERS, PLAZAS AND PARKING LOT TREES

PARKS / PUBLIC REALM

RESIDENTIAL NEIGHBOURHOODS / PRIVATE REALM

STREETS / PUBLIC REALM

COMMERCIAL + INSTITUTIONAL AREAS / PRIVATE + PUBLIC REALM

Step-by-step process for New Westminster's Urban Forest Strategy, from development to implementation:

- Key factors leading to success

- Lessons for successful implementation

Steps for developing the Urban Forest Strategy

| Identify need | Interviews, policies + trends | BMPs + tools | Adopt the UFMS | Implementation |

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Why did New Westminster need a plan?

- New awareness of urban forestry
- Recognition of increasing development & the loss of trees

Policies + trends　　BMPs + Tools　　Adopt the UFMS　　Implementation

What did the data say?

VANCOUVER
*down from 22.5% canopy cover in 1995, spurring the adoption an Urban Forest Management Strategy in 2012
18%

VICTORIA
*no additional data was available prior to adoption of the Urban Forest Master Planning 2013
18%

NEW WESTMINSTER
*down from 22% canopy cover in 1994, with a steeper decline since 2004...
18%

DUNCAN, BC
26%

NANAIMO, BC
28%

Bar chart: 22.0% (1994), 21.2% (2004), 18% (2013), 15% decline since '04

Inventory and analysis was fundamental to telling the story

Policies + trends → BMPs + Tools → Adopt the UFMS → Implementation

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NEW WESTMINSTER 18%
*down from 22% canopy cover in 1994, with a steeper decline since 2004…

DUNCAN, BC 26%

NANAIMO, BC 28%

22.0%   21.2%   18%
15% decline since …
1994   2004   2013

A good news story?

- Highlighted opportunities
- Looked at how the public & private sector could participate

✳ **Presented the issue as > than a parks problem & > than a public sector problem**
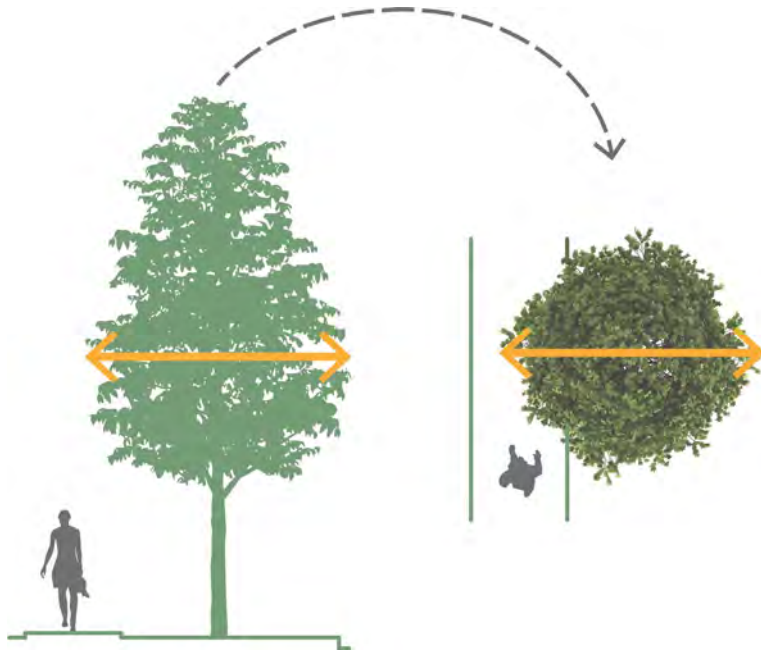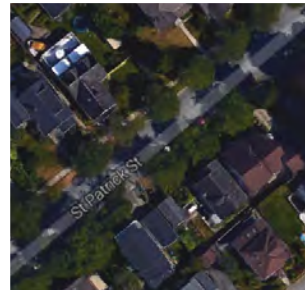
Policies + trends → BMPs + Tools → Adopt the UFMS → Implementation
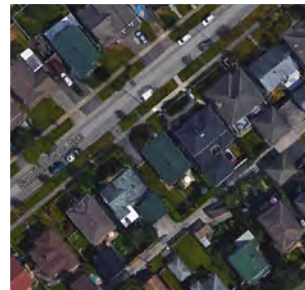
What was the story?

Key metric:
Canopy cover

85% West 10th Avenue, Vancouver

40% St Patrick Street, New Westminster

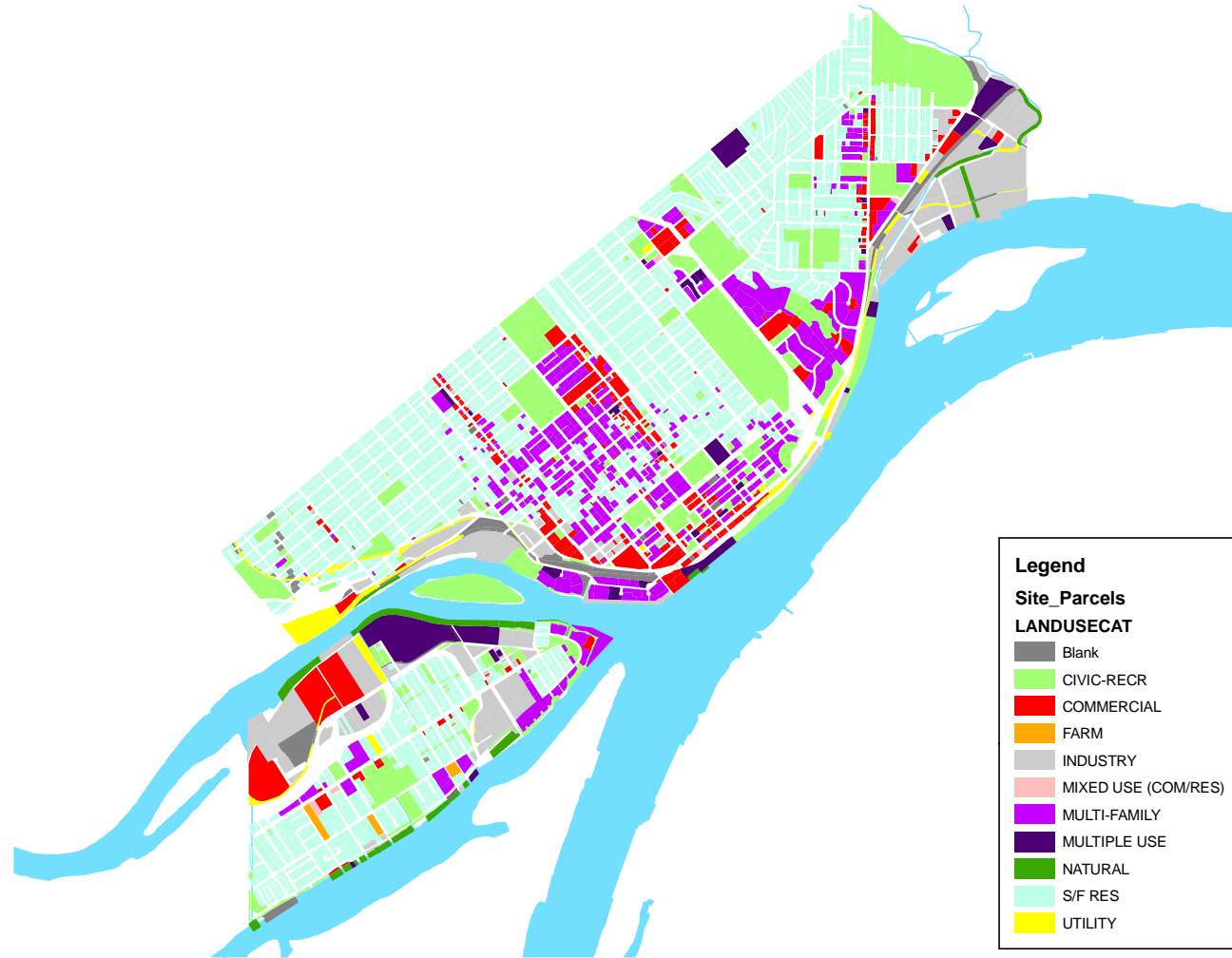10% Sandringham Avenue, New Westminster

Identify need → BMPs + Tools → Adopt the UFMS → Implementation

What was the story?

Legend

Site_Parcels

LANDUSECAT
- Blank
- CIVIC-RECR
- COMMERCIAL
- FARM
- INDUSTRY
- MIXED USE (COM/RES)
- MULTI-FAMILY
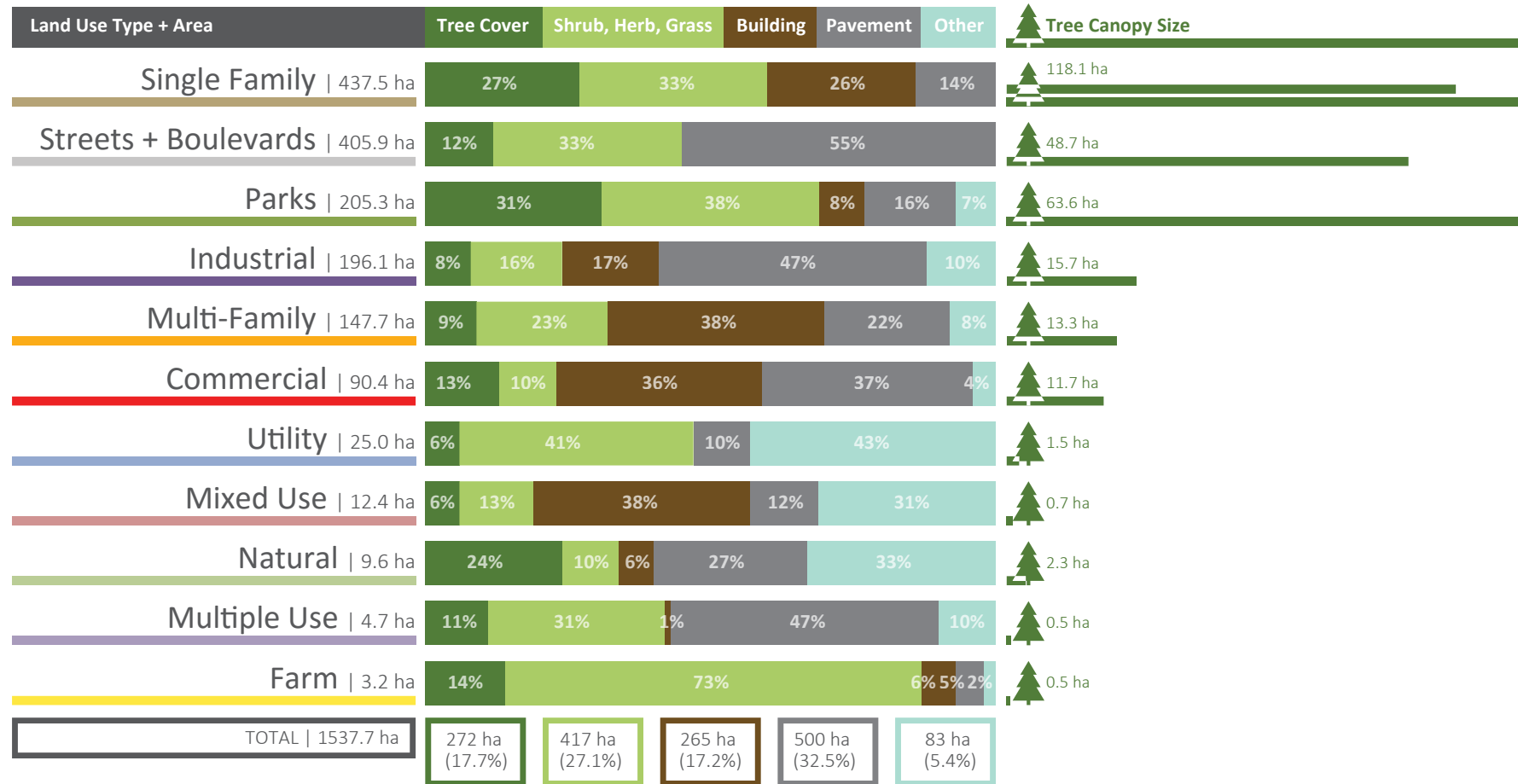- MULTIPLE USE
- NATURAL
- S/F RES
- UTILITY

Identify need | BMPs + Tools | Adopt the UFMS | Implementation

What was the story?

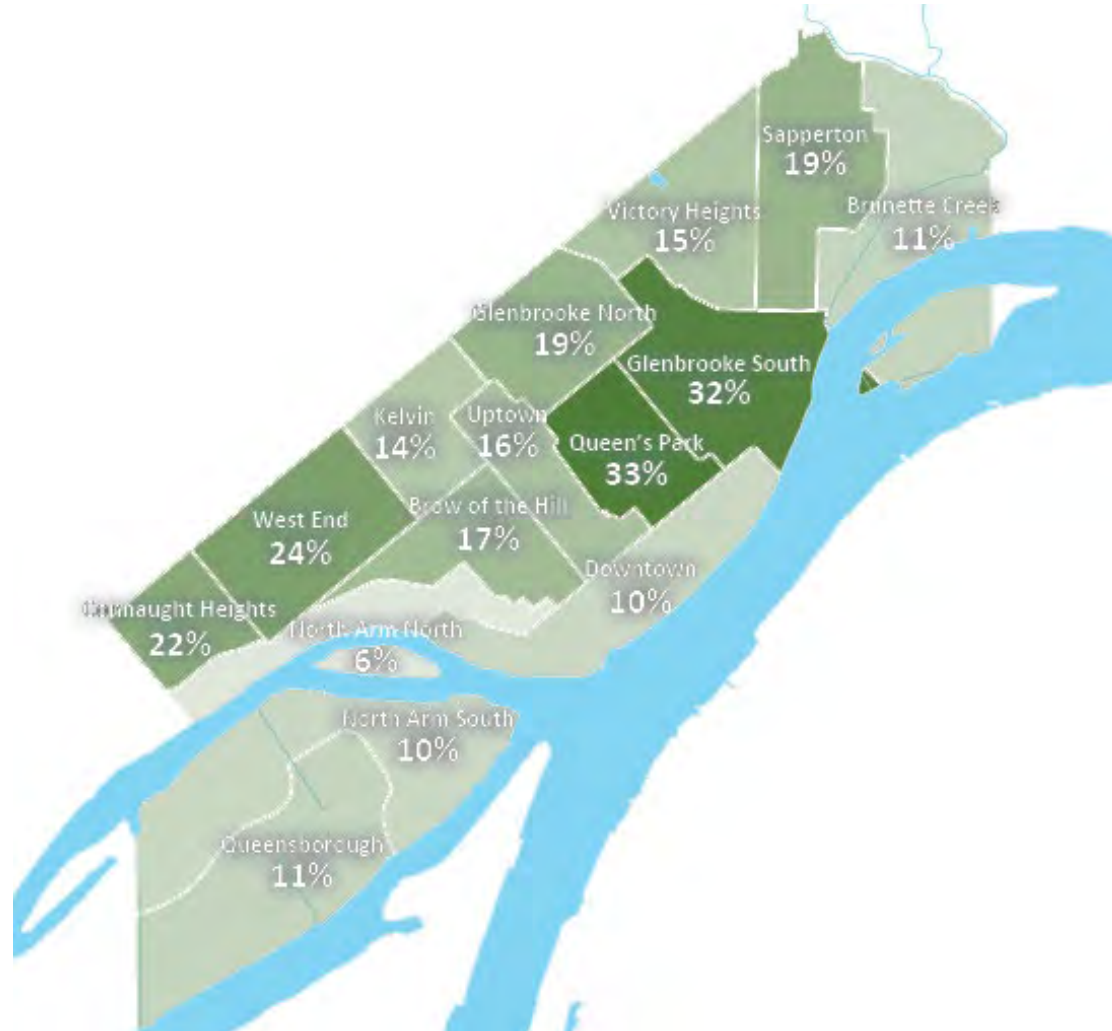### LAND USE STATISTICS - RELATIVE (%) COVERAGE and ABSOLUTE (ha) COVERAGE

Land Use Type + Area	Tree Cover	Shrub, Herb, Grass	Building	Pavement	Other	Tree Canopy Size
Single Family	437.5 ha	27%	33%	26%	14%		118.1 ha
Streets + Boulevards	405.9 ha	12%	33%	55%			48.7 ha
Parks	205.3 ha	31%	38%	8%	16%	7%	63.6 ha
Industrial	196.1 ha	8%	16%	17%	47%	10%	15.7 ha
Multi-Family	147.7 ha	9%	23%	38%	22%	8%	13.3 ha
Commercial	90.4 ha	13%	10%	36%	37%	4%	11.7 ha
Utility	25.0 ha	6%	41%	10%	43%		1.5 ha
Mixed Use	12.4 ha	6%	13%	38%	12%	31%	0.7 ha
Natural	9.6 ha	24%	10%	6%	27%	33%	2.3 ha
Multiple Use	4.7 ha	11%	31%	1%	47%	10%	0.5 ha
Farm	3.2 ha	14%	73%	6%	5%	2%	0.5 ha
TOTAL	1537.7 ha	272 ha (17.7%)	417 ha (27.1%)	265 ha (17.2%)	500 ha (32.5%)	83 ha (5.4%)	

Identify need | BMPs + Tools | Adopt the UFMS | Implementation

What was the story?

Sapperton
19%

Victory Heights
15%

Brunette Creek
11%

Glenbrooke North
19%

Glenbrooke South
32%

Kelvin
14%

Uptown
16%

Queen's Park
33%

West End
24%

Brow of the Hill
17%

Downtown
10%

Connaught Heights
22%

North Arm North
6%

North Arm South
10%

Queensborough
11%

Identifying people who work around trees

Public sector: What are all the departments that work on or around trees?

- Everyone was engaged: from policy planners to maintenance and operations

- The story was adapted to the audience

Community: provide a role to the community

- Visioning

- Are there key stakeholders?

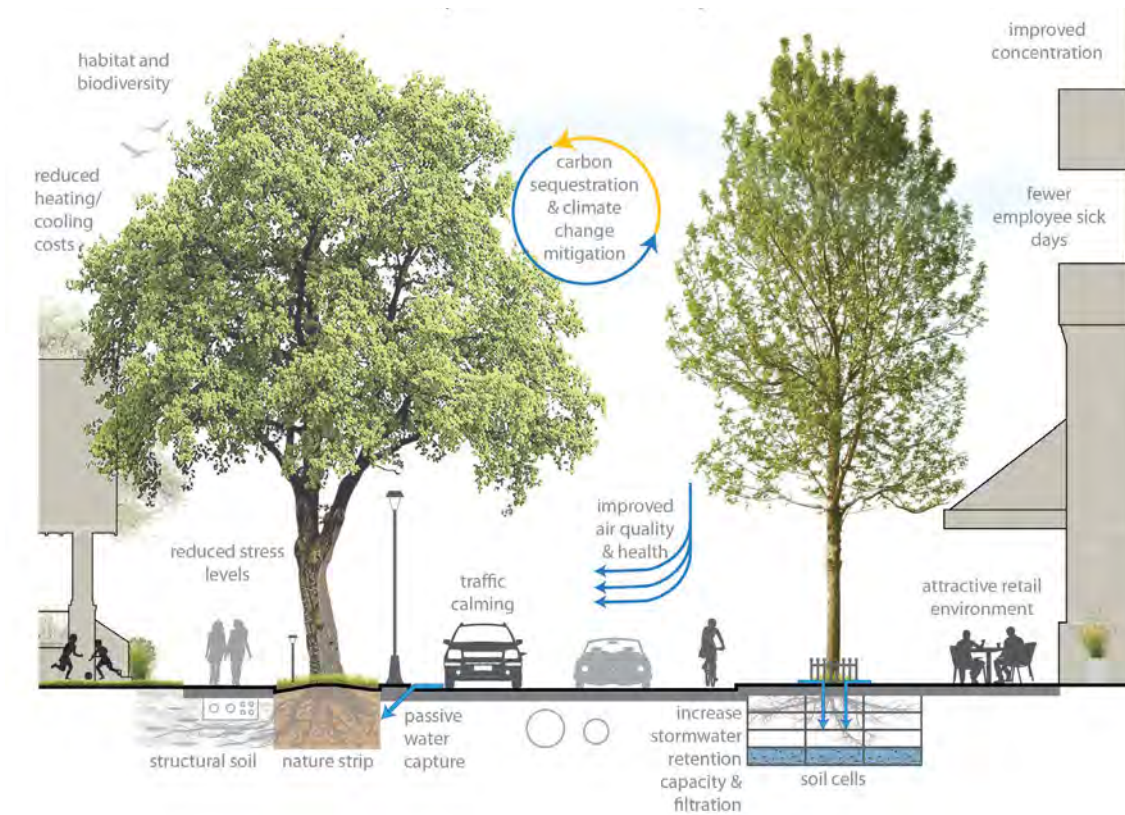✳ **Council was brought along from the very beginning of the process**

Identify need | BMPs + Tools | Adopt the UFMS | Implementation

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Considering green infrastructure as a capital asset

Identify need · BMPs + Tools · Adopt the UFMS · Implementation

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Choosing from the tools available to manage green infrastructure

In the case of New Westminster, the tool that would have the biggest impact was regulatory, a tree protection bylaw.

Tools to address these targets:

- Protect
- Enhance
- Engage

✳ **New West didn't reinvent the wheel, they just found the right tools**

Identify need   Policies + trends   Adopt the UFMS   Implementation
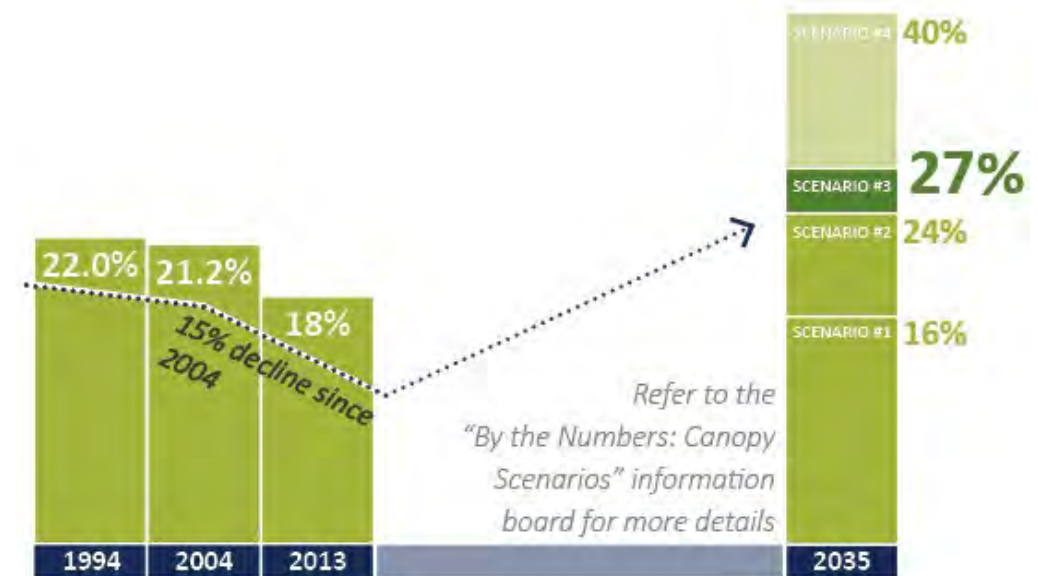
Choosing a reasonable target

"Ambitious but achievable" - Mayor Côté

To achieve this target, NW will require:

- 3,300 tree planted on private land

- 8,500 trees planted on public land

Over the next 20 years

Identify need   Policies + trends   BMPs + Tools   Implementation

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Say what?!

New Westminster
RECORD ≡ MENU

New West trees are rapidly declining

City of New Westminster takes action to reverse the trend

Theresa McManus / New West Record
JANUARY 14, 2016 10:57 AM

👍 Like 122

"city council has also adopted in principle the new "10,000 trees in 10 years" program"

"Mayor Jonathan Cote said the city isn't just placing the burden of tree retention on private property owners through a tree protection bylaw but is showing leadership through its goal of planting of 10,000 trees in 10 years."
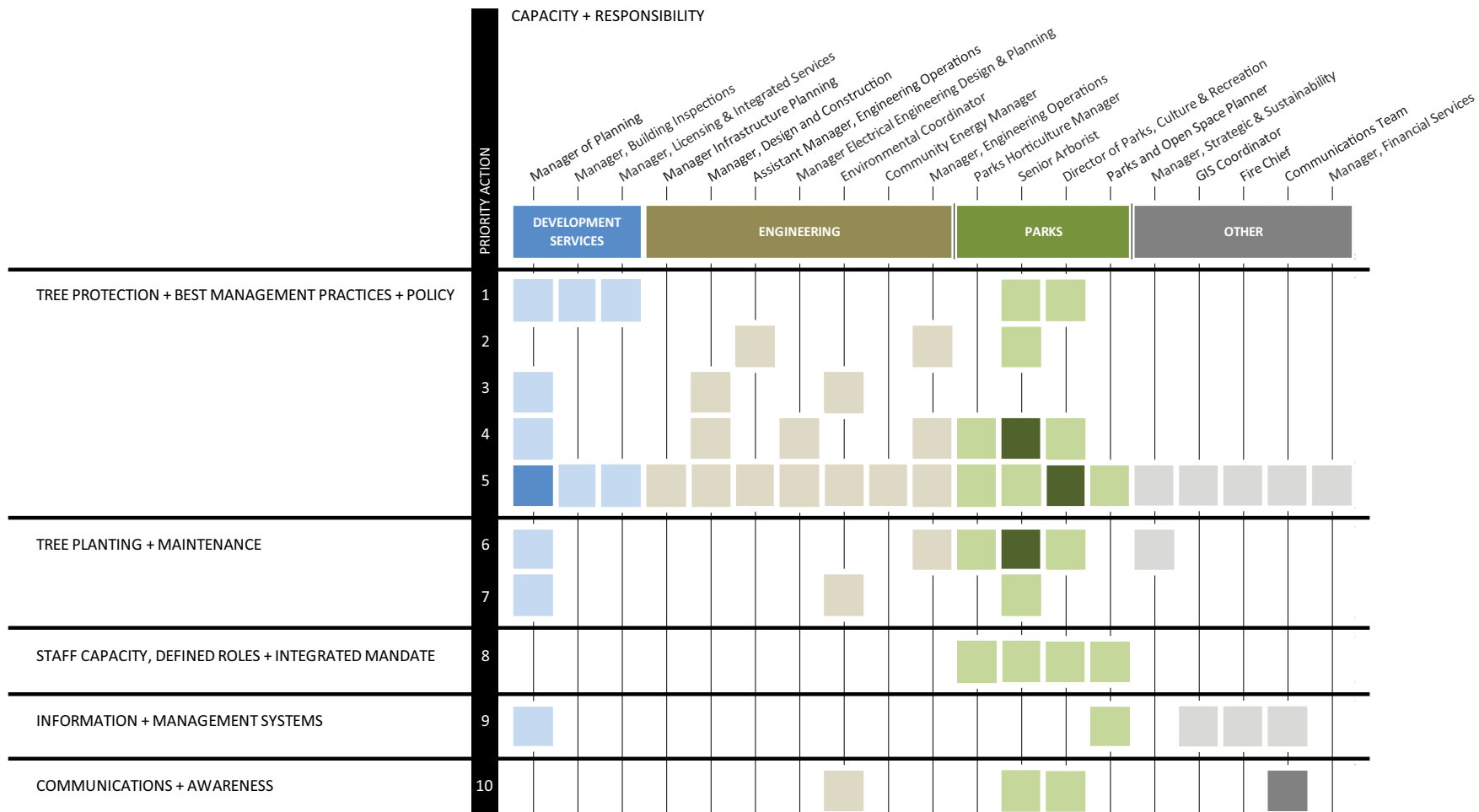
Identify need Policies + trends BMPs + Tools Implementation

Adopt the Urban Forest Management Plan

Evaluating the required resources and responsibilities

Planning for the resources that will be required to achieve the target
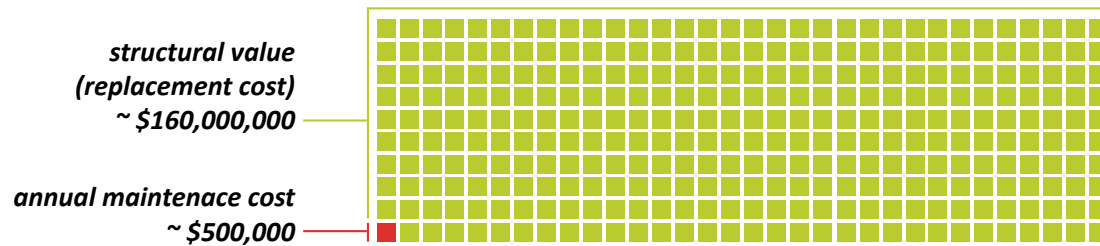
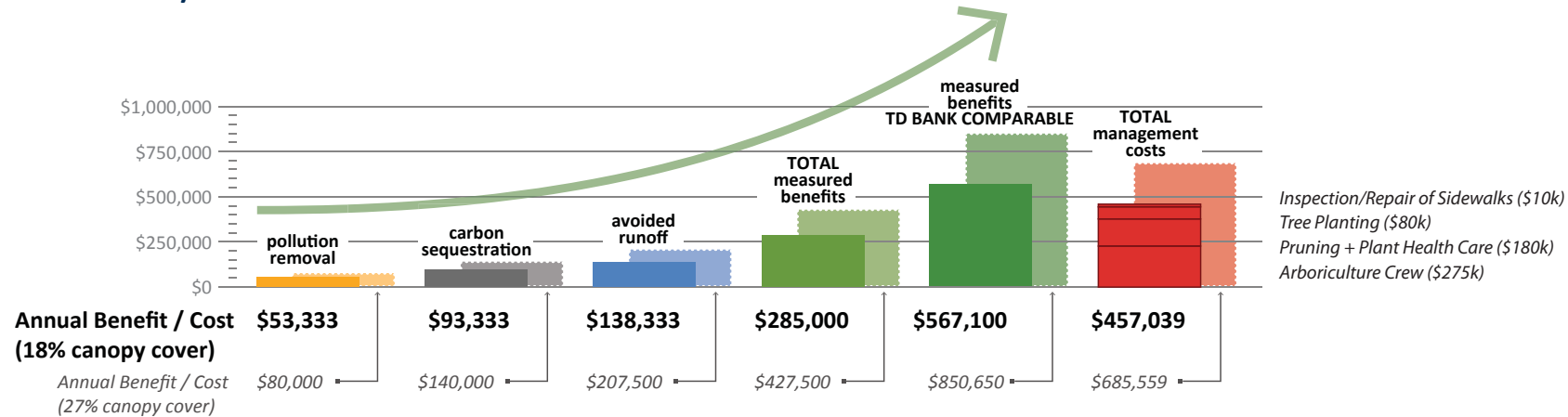Identify need → Policies + trends → BMPs + Tools → Implementation

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The cost benefit analysis

structural value
(replacement cost)
~ $160,000,000

annual maintenace cost
~ $500,000

Currently "measured" benefits + annual maintenance

Highlighted the cost for managing the asset vs. replacing it over time:

- Trees generally appreciate over time

	pollution removal	carbon sequestration	avoided runoff	TOTAL measured benefits	measured benefits TD BANK COMPARABLE	TOTAL management costs
Annual Benefit / Cost (18% canopy cover)	**$53,333**	**$93,333**	**$138,333**	**$285,000**	**$567,100**	**$457,039**
Annual Benefit / Cost (27% canopy cover)	$80,000	$140,000	$207,500	$427,500	$850,650	$685,559

Inspection/Repair of Sidewalks ($10k)
Tree Planting ($80k)
Pruning + Plant Health Care ($180k)
Arboriculture Crew ($275k)

Identify need → Policies + trends → BMPs + Tools → Implementation

Where is the City with the implementation?

Identify need → Policies + trends → BMPs + Tools → Adopt the UFMS →

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What were the success factors?

- Staff champion

- Continued interdepartmental collaboration

- Appropriate resourcing over time

- Prioritized implementation plan/roadmap

- Time and timing!

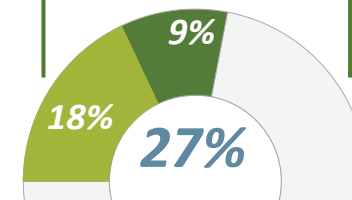- Strong support from within the municipality and the community

SCENARIO 3

shared priority
private - public partnership

9% canopy increase over the next 20 years

10% *canopy increase for **single family neighbourhoods***

19% *canopy increase for **public streets and boulevards***

7% *canopy increase for **public parks***

9%

18%

27%

The private and public partnerships were key

Identify need | Policies + trends | BMPs + Tools | Adopt the UFMS

Thank you!