

# **BEAUMONT**

# **SFD Generator**

# Intro

- Previously managed the Fecal Sludge Omni-Ingestor project for the foundation
- SFD Generator is a self-inflicted effort to make the SFD easier to interpret

# Purpose




## Creation

- Requires PowerPoint
- Time consuming (1 day)
- New information requires resizing bars and arrows
- Inaccurate

## Interpretation




- Not always legible
- Not intuitive except to those familiar with it
- Low audience comprehension

# Data Entry

Stockholm		925,900		Sweden			
Collection Type		Percent Utilized	Percent Safely Emptied	Percent Safely Delivered	Percent Safely Treated	Percent Safely Managed	Percent Unsafely Managed
WC to Sewer 	Centralized Sewer	20		60	40	4.8%	15.2%
	Decentralized Sewer	16		50	50	4%	12%
On-Site Sanitation 	On-Site: Emptied	40	80	70	30	6.7%	33.3%
	On-Site: Stored	10	90			9%	1%
Other 	Open Defecation & Direct Discharge	14				0%	14%
Total		100%				24.5%	75.5%




- Location & population information
- Percent properly managed
- Error checking
- Customizable

# Data Entry

Stockholm		925,900		Sweden			
Collection Type		Percent Utilized	Percent Safely Emptied	Percent Safely Delivered	Percent Safely Treated	Percent Safely Managed	Percent Unsafely Managed
WC to Sewer 	Centralized Sewer	20		60	40	4.8%	15.2%
	Decentralized Sewer	16		50	50	4%	12%
On-Site Sanitation 	On-Site: Emptied	40	80	70	30	6.7%	33.3%
	On-Site: Stored	10	90			9%	1%
Other 	Open Defecation & Direct Discharge	14				0%	14%
Total		100%				24.5%	75.5%

- Location & population information

# Data Entry

Stockholm		925,900				Sweden	
Collection Type		Percent Utilized	Percent Safely Emptied	Percent Safely Delivered	Percent Safely Treated	Percent Safely Managed	Percent Unsafely Managed
WC to Sewer 	Centralized Sewer	20		60	40	4.8%	15.2%
	Decentralized Sewer	16		50	50	4%	12%
On-Site Sanitation 	On-Site: Emptied	40	80	70	30	6.7%	33.3%
	On-Site: Stored	10	90			9%	1%
Other 	Open Defecation & Direct Discharge	14				0%	14%
Total		100%				24.5%	75.5%

- Location & population information
- Percent properly managed

# Data Entry

Stockholm		925,900		Sweden			
Collection Type		Percent Utilized	Percent Safely Emptied	Percent Safely Delivered	Percent Safely Treated	Percent Safely Managed	Percent Unsafely Managed
WC to Sewer	Centralized Sewer	20		60	40	4.8%	15.2%
	Decentralized Sewer	16		50	50	4%	12%
On-Site Sanitation	On-Site: Emptied	40	80	70	30	6.7%	33.3%
	On-Site: Stored	10	90			9%	1%
Other	Open Defecation & Direct Discharge	14				0%	14%
Total		100%				24.5%	75.5%

- Location & population information
- Percent properly managed
- Error checking

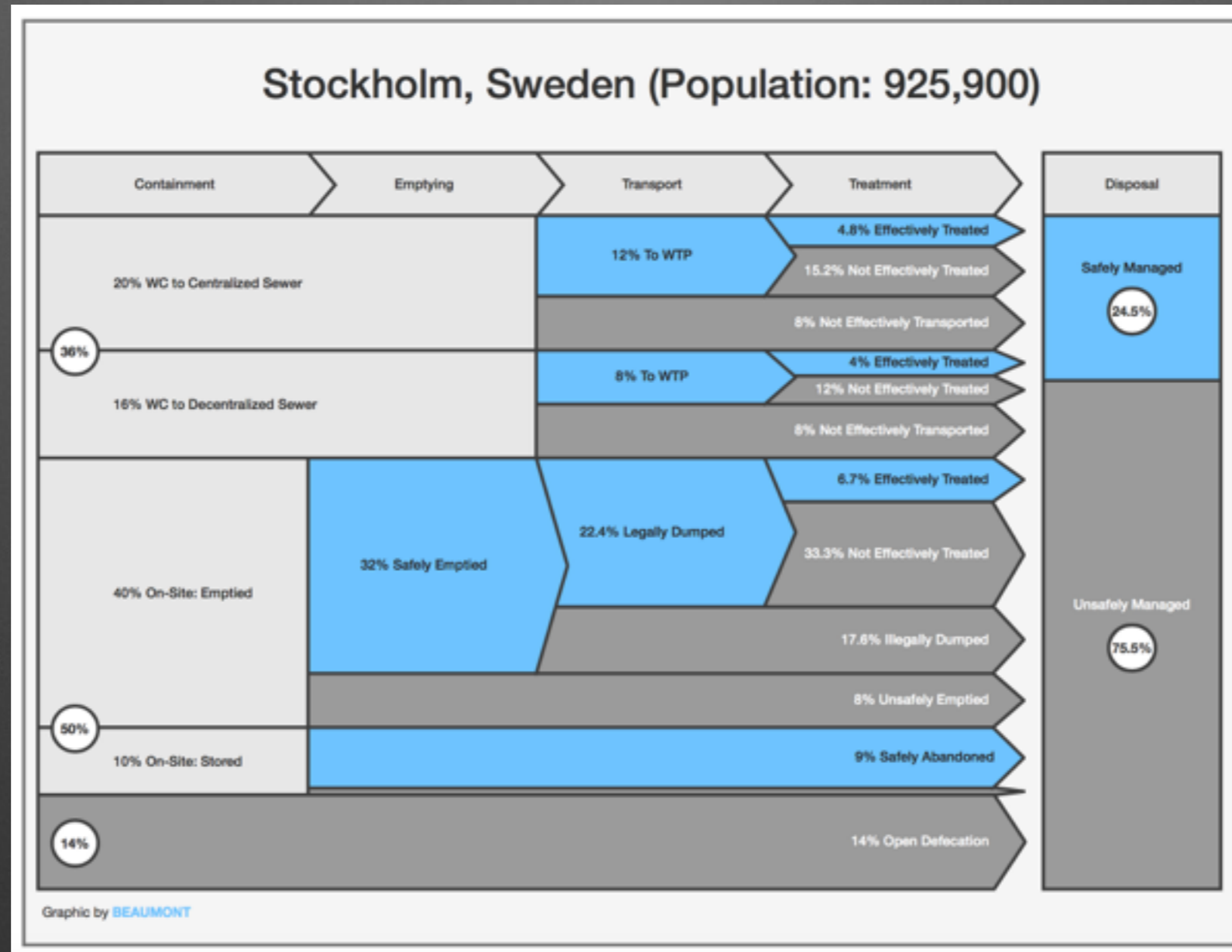
# Data Entry

Stockholm		925,900		Sweden			
Collection Type		Percent Utilized	Percent Safely Emptied	Percent Safely Delivered	Percent Safely Treated	Percent Safely Managed	Percent Unsafely Managed
WC to Sewer	Centralized Sewer	20		60	40	4.8%	15.2%
	Decentralized Sewer	16		50	50	4%	12%
On-Site Sanitation	On-Site: Emptied	40	80	70	30	6.7%	33.3%
	On-Site: Stored	10	90			9%	1%
Other	Open Defecation & Direct Discharge	14				0%	14%
Total		100%				24.5%	75.5%

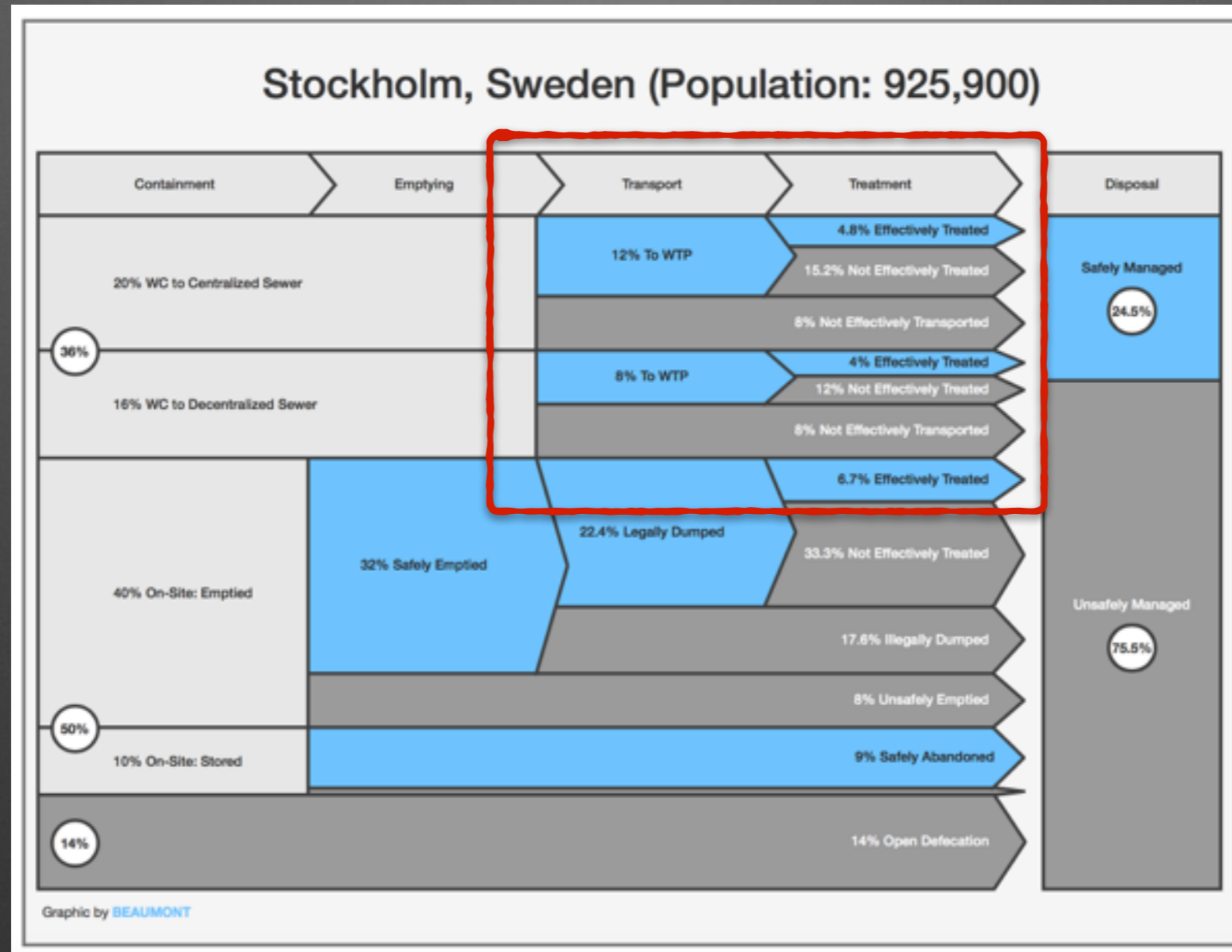
- Location & population information
- Percent properly managed
- Error checking
- Customizable



# Diagram Generator

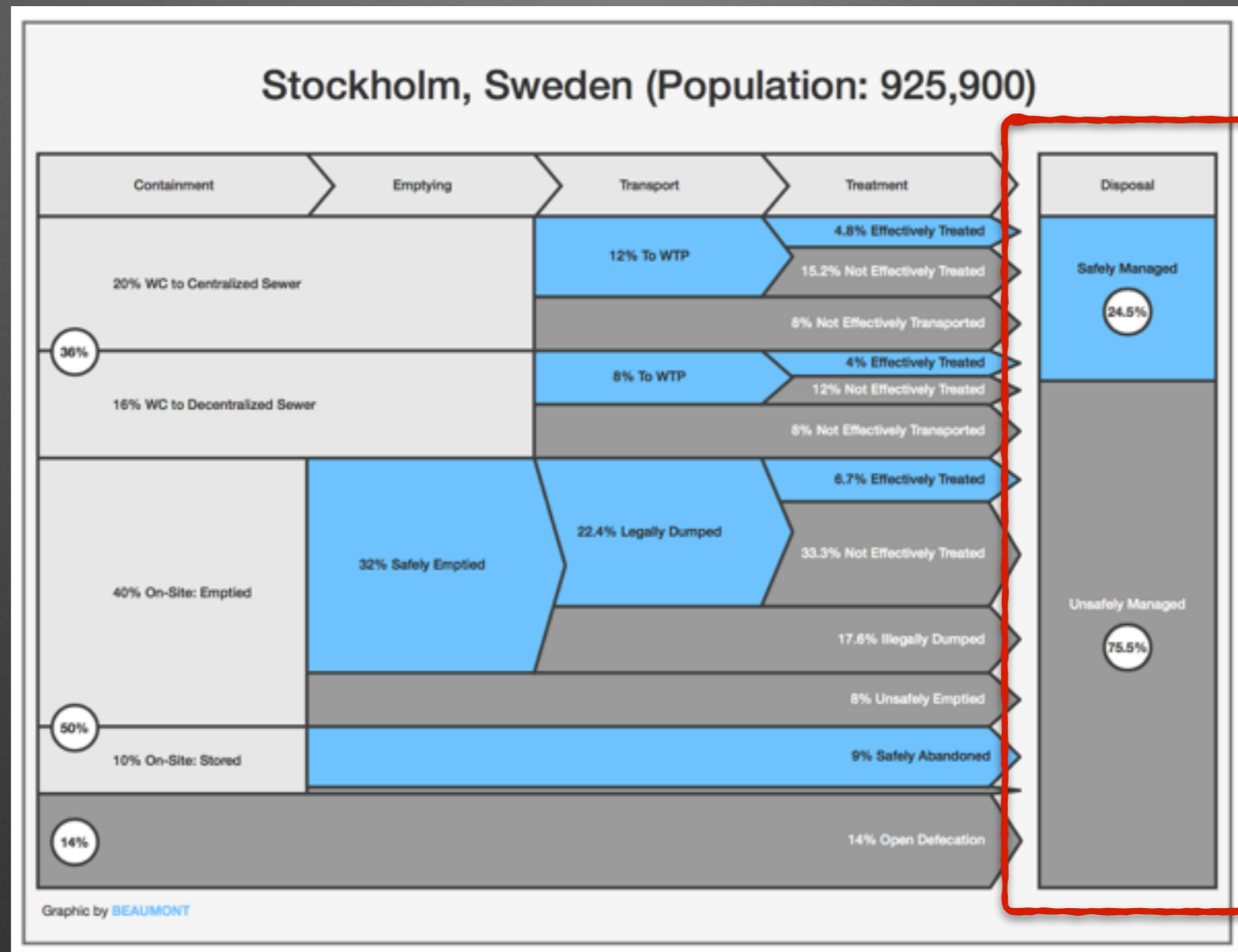


# Diagram Generator



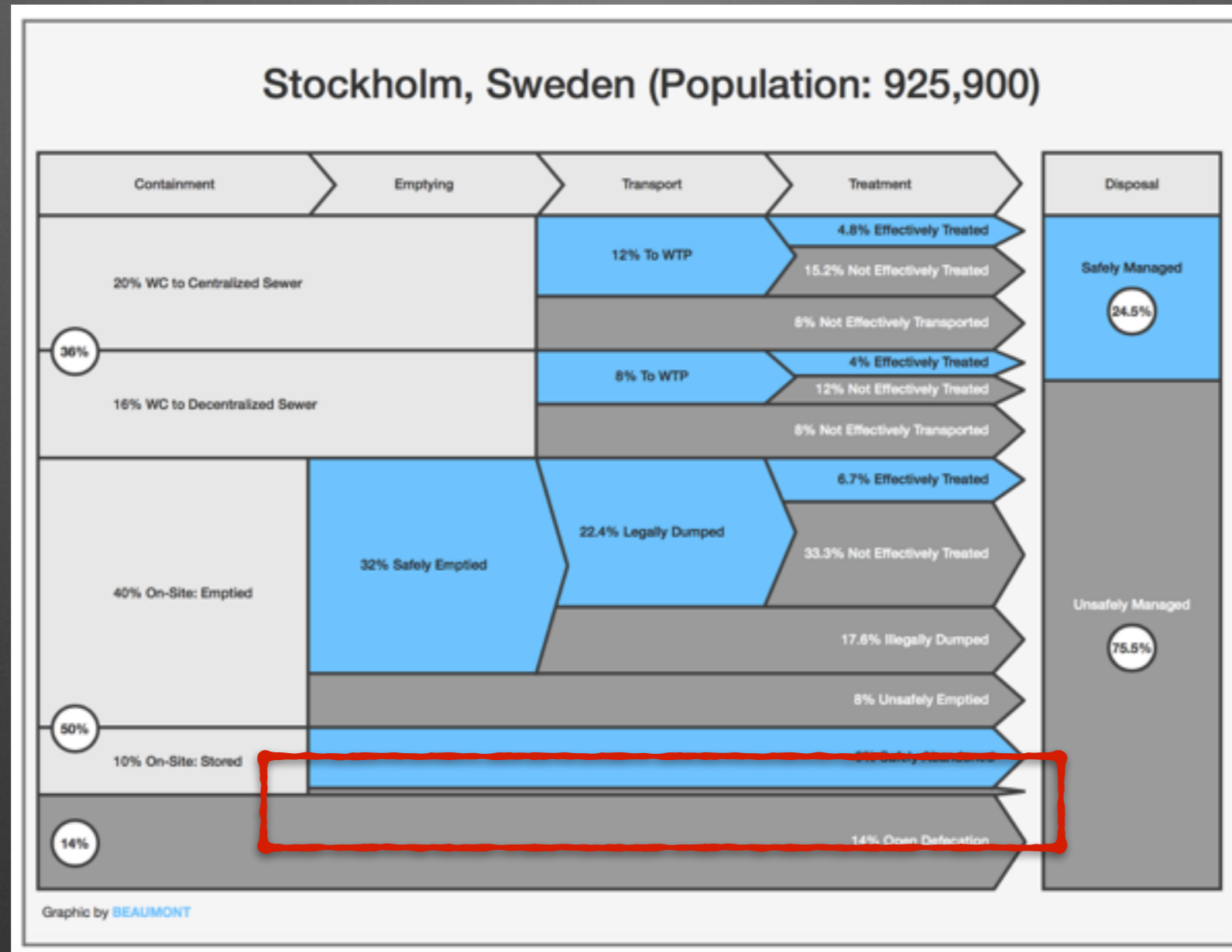
Row heights are proportional and auto-updating

# Diagram Generator



Bar Graph is proportional and easy to interpret

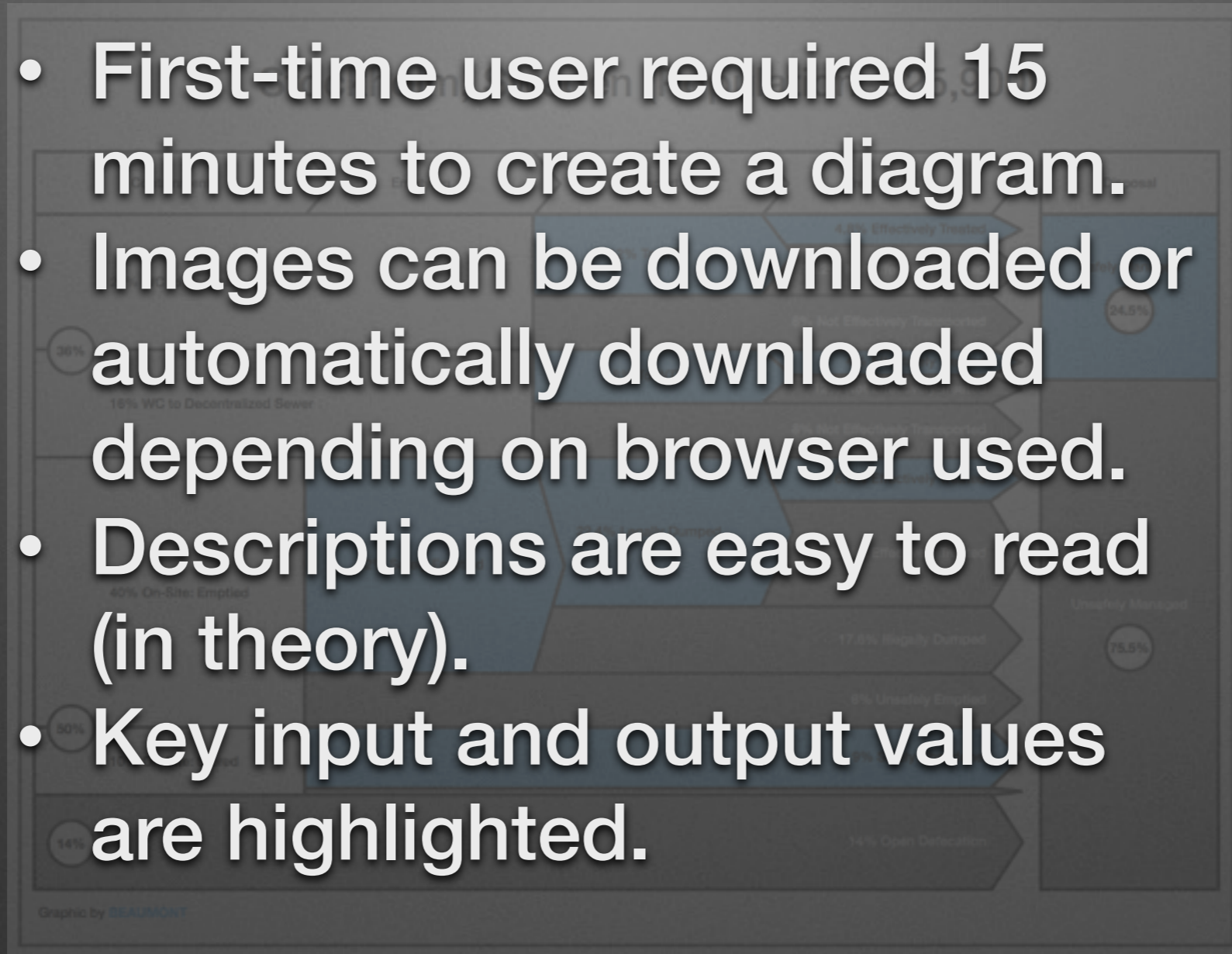
# Diagram Generator



Text removed from narrow rows

# Diagram Generator

- First-time user required 15 minutes to create a diagram.
- Images can be downloaded or automatically downloaded depending on browser used.
- Descriptions are easy to read (in theory).
- Key input and output values are highlighted.

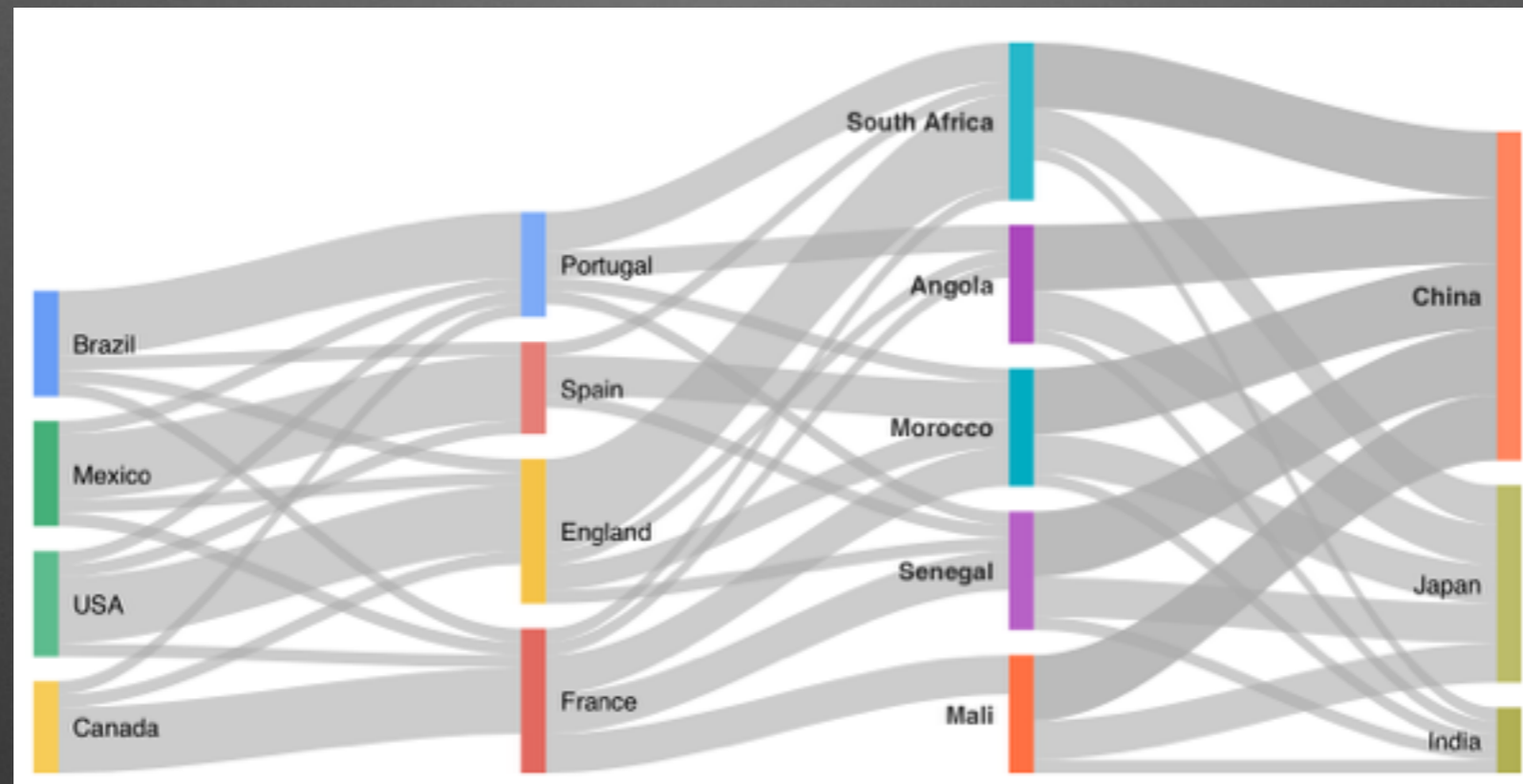


# Tools & Support

- Javascript Software as a Service (SaaS) platform using Javascript, NodeJS, Meteor JS
- Rendered using HTML Canvas and SVG
- Database is document structured, schema-less design developed with MongoDB
- Works with Chrome, Firefox, Safari (OSX & Windows)
- Partial compatibility with Internet Explorer

# Version 2

- Alternative diagram output - Sankey Chart



- Highlight reused material
- Advanced reporting (by country?)
- Other improvements?

**sfd.beaumontllc.com**