Lean, mean & frontline: Service transformation for the frontline
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MATCHING HUMAN RESOURCES TO SERVICE NEEDS

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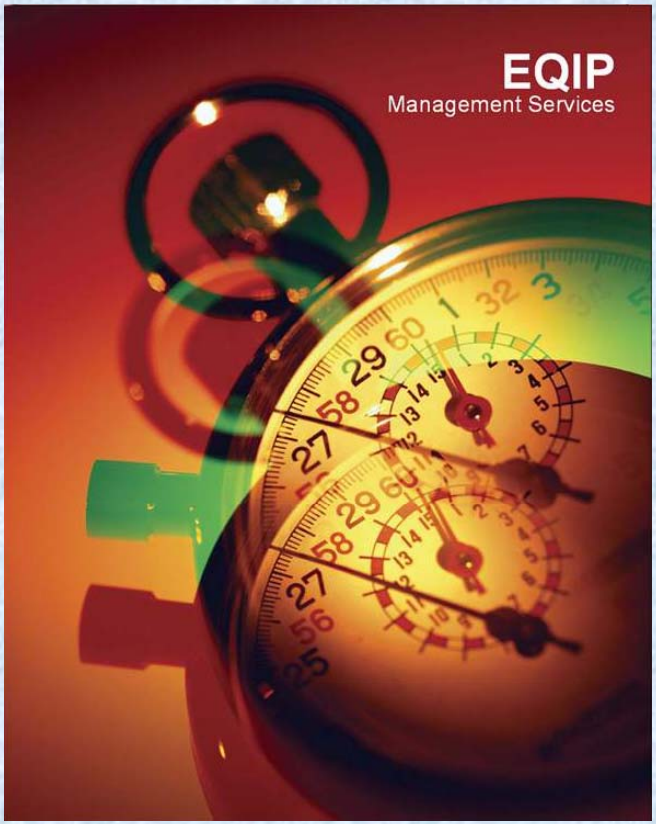
LOCAL SERVICES
LOCAL SOLUTIONS

EQIP Management Services



⇨ **Efficiency**

⇨ **Quality**

⇨ **Improvement**

⇨ **Performance**

Management Services

- In the 1980's most local authorities had a Management Services or Work Study Unit
- Used to set targets or compare performance or for manpower planning
- The driver behind bonus incentive schemes

Management Services

“The practice of management services involves the use of a range of skills, methodologies and techniques. It also involves a particular attitude and approach to problems, opportunities and potential for change.”

Institute of Management Services (www.ims-productivity.com)

Work Measurement

- **Determination of the length of time it should take to complete a job;**
- **Determine the workload in an operation, the time that is required, and the number of workers needed to perform the work efficiently;**
- **Also known as:- Work Study, Time Study, Time & Motion Study**

Matching human resources to service needs

- Workforce Reconfiguration
  - Critical Examination
  - Understanding the business need
- Overtime Reduction
- Peaks & Troughs
- Working Time Solutions

Critical Examination

WHAT is achieved?	**Is It Necessary? (if so - WHY?)**	**What ELSE could be done?**	**What SHOULD be done?**
WHERE is it done?	**WHY THERE?**	**Where ELSE could it be done?**	**Where SHOULD it be done?**
WHEN is it done?	**WHY THEN?**	**When ELSE could it be done?**	**When SHOULD it be done?**
WHO does it?	**WHY THAT PERSON?**	**Who ELSE could do it?**	**Who SHOULD do it?**
HOW is it done	**WHY THAT WAY?**	**How ELSE could it be done?**	**How SHOULD it be done?**

Critical Examination

Identify	Challenge	Brainstorm	Requirement
WHAT is achieved?	Is It Necessary? (if so - WHY?)	What ELSE could be done?	What SHOULD be done?
WHERE is it done?	WHY THERE?	Where ELSE could it be done?	Where SHOULD it be done?
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HOW is it done	WHY THAT WAY?	How ELSE could it be done?	How SHOULD it be done?

EXAMPLE – Street Cleansing

What should be done?

- **The Law:**

  ENVIRONMENTAL PROTECTION ACT 1990

  - **"places a duty on each local authority to ensure that the land is, so far as is practicable, kept clear of litter and refuse."**

- **COPLAR:**

  Code of Practice on Litter and Refuse (2006)

  - **"sets out minimum standards of cleanliness for relevant land and the maximum response times to return land to be free from litter and refuse if it falls below the minimum standard"**

Where should it be done?

- **Zoning is based on location and land use inc.**

Zone 1 town centres, shopping centres & shopping streets; central car parks; other busy public places; local roads within these areas

Zone 2 high density residential areas; busy recreational land; suburban car parks; high density industrial estates; local roads within these areas

Zone 3 low density residential areas; low density industrial estates; local roads within these areas

Zone 4 rural / semi rural roads that do not directly link towns & villages

Zone 7 rural roads linking towns and villages

When should it be done?

Category Zone		CLEANLINESS STANDARD			
		A	B	C	D
1	TOWN CENTRES ETC.	←	6hrs	3 Hrs	1 Hr
2	HIGH DENSITY RESIDENTIAL ETC.	←	12 Hrs	6 Hrs	3 Hrs
3	LOW DENSITY RESIDENTIAL ETC.	←	2 weeks	12 Hrs	6 Hrs
4	AREAS NOT FALLING INTO ZONES 1-3	←	2 weeks	1 week	60 Hrs
7a	LOCAL ROADS (Hard Surface Areas)	←	←	2 weeks	5 days
7b	LOCAL ROADS (Grassed Areas)		←	2 weeks	5 days

Who should do it?

Manual or Mechanical ?

How should it be done?

- Sweeping routes based on time study data to match zonings?
- Neighbourhood / area based?
- Mix of manual & mechanical using local knowledge
- Timing of operation for most efficient use of resources

How should it be done?

Grade A

A Grade A area has no litter or refuse, it is the standard which thorough conventional sweeping/litter-picking should achieve.

How should it be done?

Grade B

A Grade B area is predominantly free of litter and refuse apart from a few small items.

Understanding the Business Need

- Establishing the work demand
- Meeting the demand
  - Working hours?
  - Cover?
  - Shifts?
  - Overtime?

EXAMPLE – Waste Collection

Getting the balance right

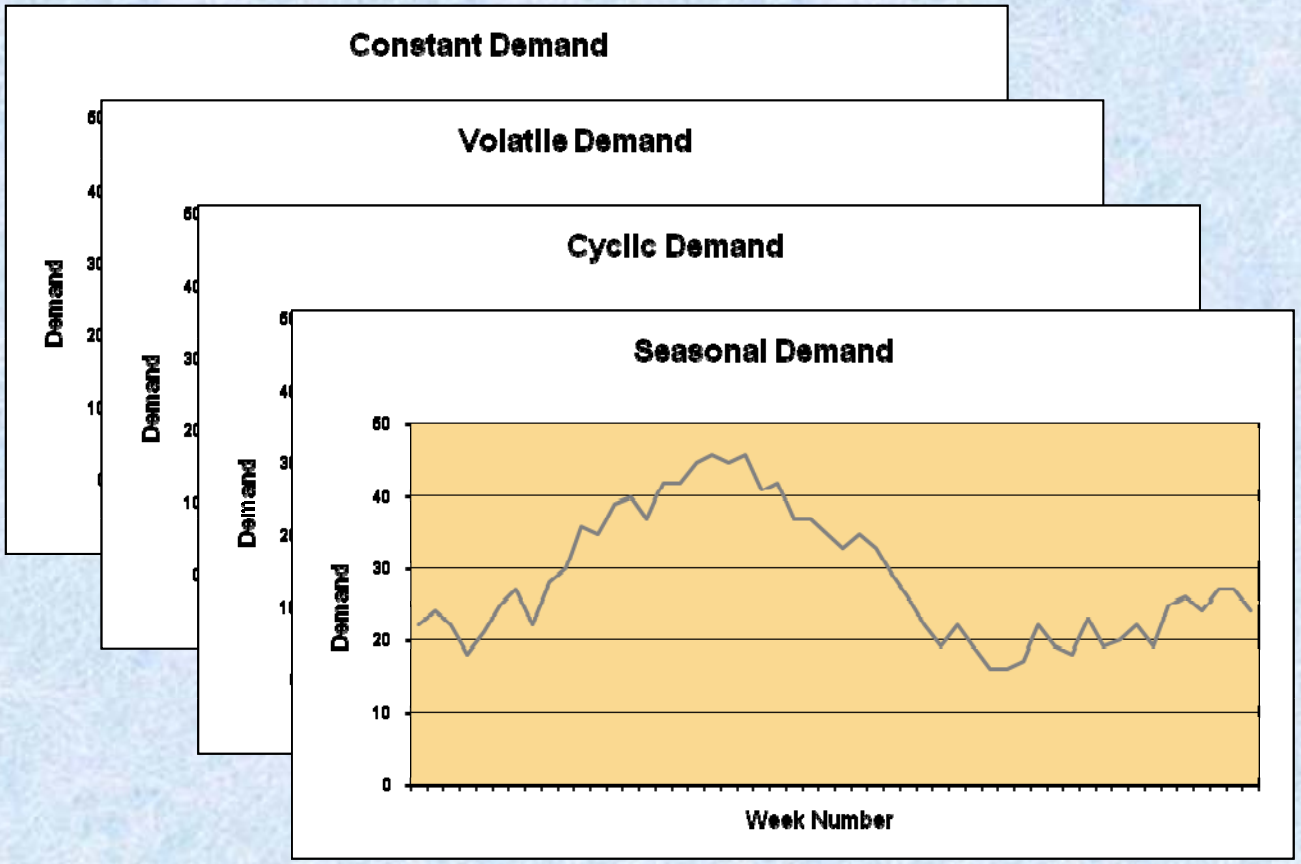
Residual Waste v. Recycling

EXAMPLE – Waste Collection

FACTORS

- Recycling collected
  - Green waste
  - Food waste
  - Cardboard
- Task and Finish

What is the work demand?



Examples of work demands

Constant demand

- Refuse Collection
- CCTV Monitoring

Volatile demand

- Housing Repairs
- Call Centres

Examples of work demands

Cyclic demand

- Street Cleansing
- Street Lighting

Seasonal demand

- Grass Cutting
- Green Waste Collection
- Winter Maintenance

Meeting the Demand

- How much work is involved?
- How much work can be achieved?
  - Bins that can be emptied per day / week
  - KM swept per day
  - KM gritted per load
- Standard Minute Values

EXAMPLE – Security

- **Demand: 1 presence required 24/7**

  1 mornings

  1 afternoons

  1 nights

  1 rest

  TOTAL OF 4 ?

EXAMPLE – Security

- **Requirement (39 hour week)**

  365.25 days x 24 hrs = 8,766 hrs

  39 hrs x 45.58 working weeks = 1,778 hrs

  Labour 8,766 / 1,778 = 4.93

  TOTAL OF 5

EXAMPLE – CCTV Monitoring

The Brief

Review the shift rota for nine staff

24 hour / 7 day continuous service

37 hour week

Shift patterns dictated by incident rates

Mathematics

- **There are 21 different ways to allocate 5 shifts per week**
- **If you wanted to schedule for 2 staff, the 21 ways are squared = 441**
- **For 9 staff, 21 to the power of 9**

  (21x21x21x21x21x21x21x21x21) **= 794 billion !!**

	MON	TUE	WED	THU	FRI	SAT	SUN
WEEK 1	D	D	D	D	D		
WEEK 2	D	D	D	D		D	
WEEK 3	D	D	D	D			D
WEEK 4	D	D	D		D	D	
WEEK 5	D	D	D		D		D
WEEK 6	D	D	D			D	D
WEEK 7	D	D		D	D	D	
WEEK 8	D	D		D	D		D
WEEK 9	D	D		D		D	D
WEEK 10	D	D			D	D	D
WEEK 11	D		D	D	D	D	
WEEK 12	D		D	D	D		D
WEEK 13	D		D	D		D	D
WEEK 14	D		D		D	D	D
WEEK 15	D			D	D	D	D
WEEK 16		D	D	D	D	D	
WEEK 17		D	D	D	D		D
WEEK 18		D	D	D		D	D
WEEK 19		D	D		D	D	D
WEEK 20		D		D	D	D	D
WEEK 21			D	D	D	D	D

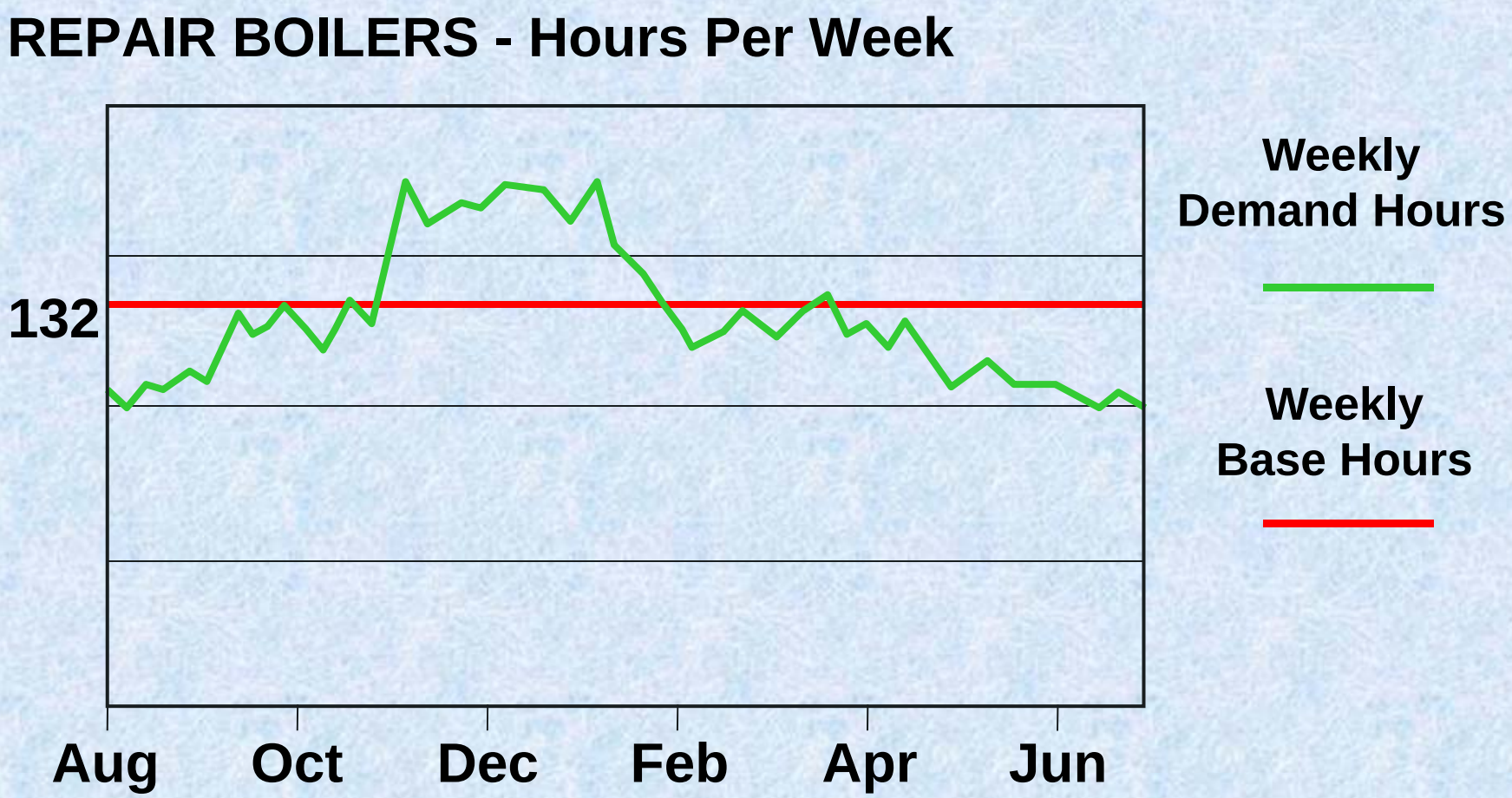
WORK Scheduling™

WORK Scheduling™ Core, Rota '8s V1'

Week/Team	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
1	D 0600-1410	D 0600-1410	D 0600-1410		A 1800-0100	A 1800-0100	A 1800-0100	45.51
2	A 1400-2210	A 1400-2210	A 1400-2210			D 0600-1410	D 0600-1410	40.85
3	D 0600-1410	D 0600-1410		A 1400-2210	A 1400-2210	A 1400-2210	A 1400-2210	49.02
4	A 1400-2210			D 0600-1410	D 0600-1410	N 2200-0610	N 2200-0610	40.85
5								0
6			D 0600-1410	D 0600-1410	D 0600-1410	A 1400-2210	A 1400-2210	40.85
7		A 1400-2210	A 1400-2210	A 1400-2210	A 1400-2210			32.68
8	N 2200-0610	N 2200-0610	N 2200-0610	N 2200-0610	N 2200-0610			40.85
9								0
Totals	40.85	40.85	40.85	40.85	47.85	39.68	39.68	**290.61**

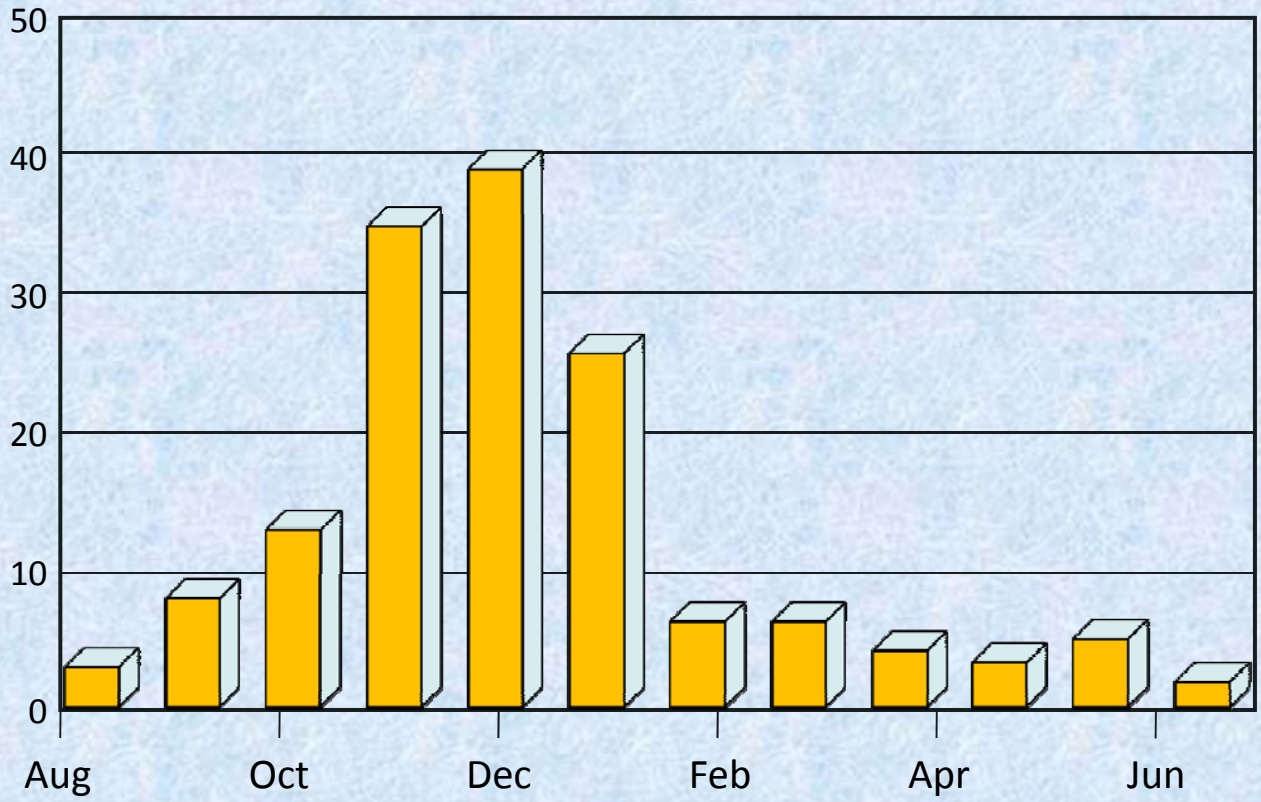
- **Dedicated work scheduling software**
- **Working Time Solutions Ltd.**
- “annual hours / shift pattern planning / workforce forecasting & scheduling / matching workforce supply to business demand”
- **Working with APSE to develop public sector solutions**

EXAMPLE – Housing Repairs



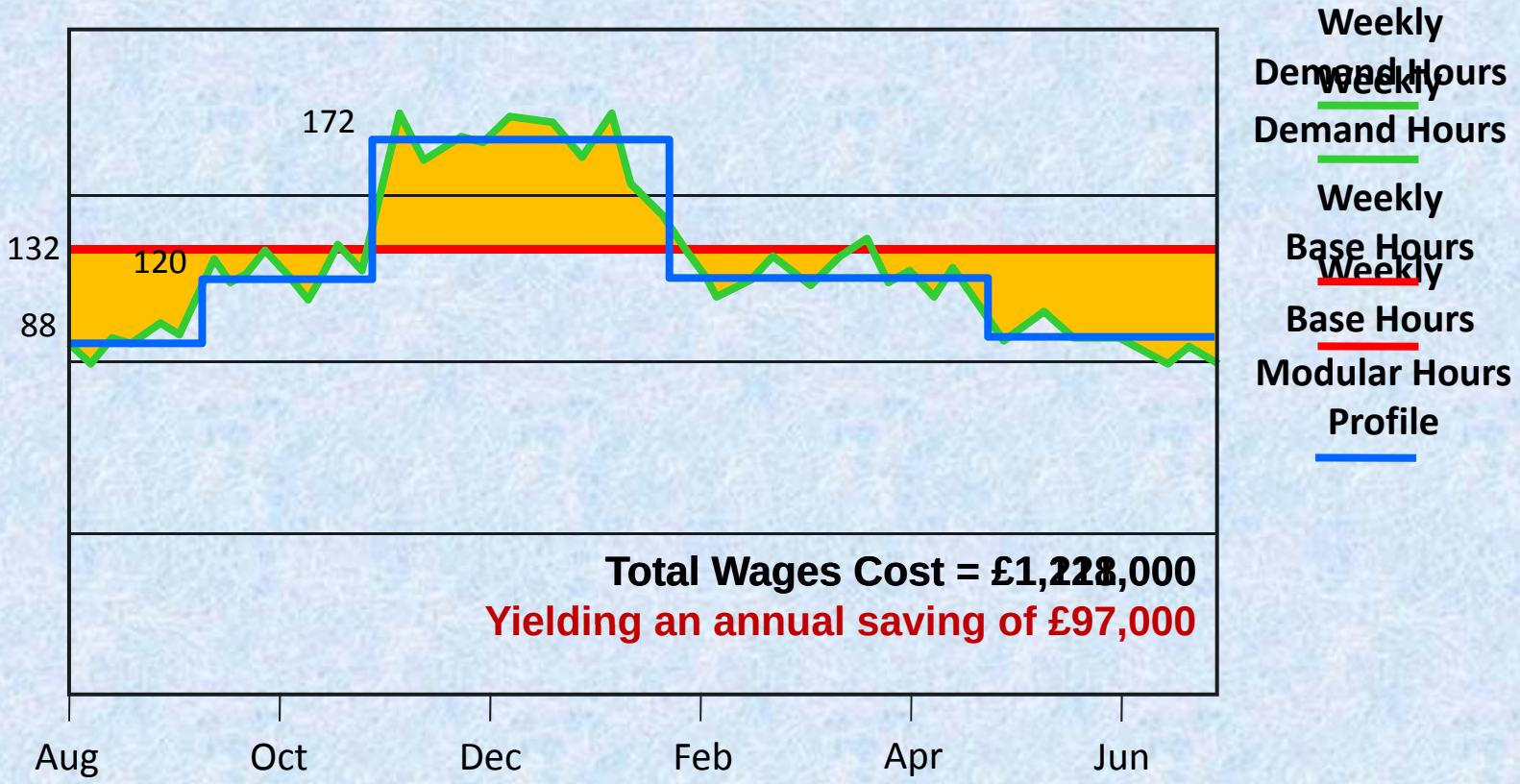
Overtime Profile (%)

Monthly Percentage



Seasonal Demand Profile & Modular Solution

Hours Per Week



Seasonal Working

EXAMPLE - Grounds Maintenance

- **Higher demand in summer**

e.g. 5 hrs per week overtime x
20 employees x 32 weeks
= 3,200 hours of overtime

Seasonal Hours

42 hours per week x 32 weeks
29 hours per week x 20 weeks
= NO OVERTIME HOURS

Seasonal Working

EXAMPLE – Green Waste

Drivers needed in summer months

Redeployed in winter months ?

Reducing Overtime

- **Planned overtime can be rostered**
  - **Street Cleansing / Markets / Bulk Collections / Public Conveniences / Libraries & Museums / Leisure Centres / Winter Maintenance / Street Lighting checks etc.**
- **Different shift patterns available**
  - **“Continental” / “Four On – Four Off” / “Five over Seven” etc.**
- **Unplanned overtime has to be dealt with differently. Can’t plan for emergencies.**

Matching human resources to service needs

- These are extraordinary times
- Thinking “outside the box” is required
- Business demand – need to go back to basics?
- Service needs may have to change

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