

Multi-Use Vehicles

Utilisation | Challenges | Benefits | Efficiencies | Justification

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Glasgow's experience in the use of multi-functional vehicles

- Reasons
 - Challenges
 - Innovation
 - Versatility
 - Benefits
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- **Case Study: Other Scottish Local Authorities**
 - **Summary**



Reasons

- 1,800km road network to maintain
- Potholes levels increasing to unprecedented amounts
- Limited resources
- Decreasing budgets
- Traditional outputs of 50m² – 100m² per day
- Hand Arm Vibration Syndrome (HAVS)
- Increased network disruption due to using traditional methods



Challenges

- **Breaking conventional council departmental barriers** (highways vs street scene etc.)
- **Convention vs innovation** (smarter thinking)
- **Short-termism** (ie: cost of Jackhammers vs Multihog)
- **Scepticism/resistance to change**
- **Taking the easy option**



Innovation

Multihog came on the scene

(Initially only intended as a 3 month trial for patching)

- **Mobility improvements** (road legal machine quickly travels ahead of gang)
- **Transportation savings** (one machine and man self drive)
- **Productivity** (tripled from 100m² to 300m² daily average (dependant on ground condition))
- **Safety** (almost eliminates hand arm vibration)
- **Minimised disruption** (due to planing performance, mobility and manoeuvrability)
- **Planing versatility** (against curbs/iron works, pavements, potholes, junctions, larger carriageway works, hot rolled asphalt – up to 125mm depth)
- **Planing consistency** (controlled set depth – precisely take out = precise infill/cost)



Enhanced Versatility

- **Additional Applications:**

- Flail Mowing & Arms Length Cutters for central reservations etc.
- Jetting unit/Power washer - upto 6000psi, 1200ltr tank
- Weed Kill Spraying
- Winter Maintenance 1.3m³ gritter, snow plough, and snow blower
- High Volume Pump upto 5000ltr per min
- Brush Attachments
- Vacuum Attachment
- Bucket Attachment



Benefits

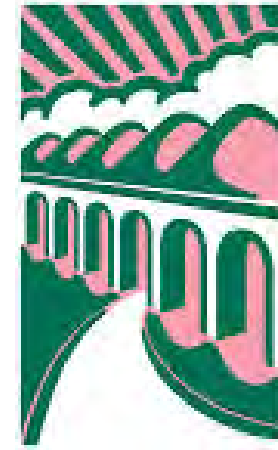
- Various attachments ensures the Multihog is used 24/7
- 2-5 minute change over between attachments
- One Machine, One Operator → less plant to maintain
- Road Legal: it can travel to sites without support
- Excellent manoeuvrability
- High productivity
- Less disruptive to road users



Case Studies – Other Local Authority Examples

- **West Lothian Council (Using Multihogs)**

- Road planer
- Stump grinder
- Snow blower
- Snow plough
- Salt spreader



West Lothian
Council

- **Aberdeen City Council (Using Multihogs)**

- Road planer
- Brush bucket sweeper
- Flood water pump
- Stump grinder
- Snow plough
- Salt spreader



ABERDEEN
CITY COUNCIL

Summary

- **IMPORTANT TO IDENTIFY THE RIGHT ROLE & ADD VALUE**
 - **INTERNAL COLLABORATION IS KEY - BREAKING CONVENTIONAL DEPARTMENT BUDGETS / PRACTICES / PLANNING**
 - **REALISING OPPORTUNITIES AND TAKING ADVANTAGE – INCREASING ADAPTABILITY**
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- ✓ **REDUCES OVERHEADS**
 - ✓ **IMPROVES PERFORMANCE**
 - ✓ **DELIVERS MORE FOR LESS**











THANK YOU.



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