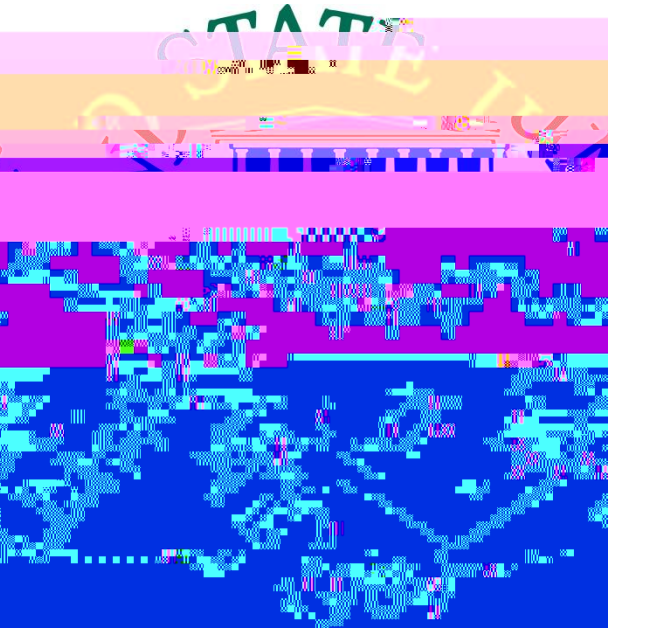


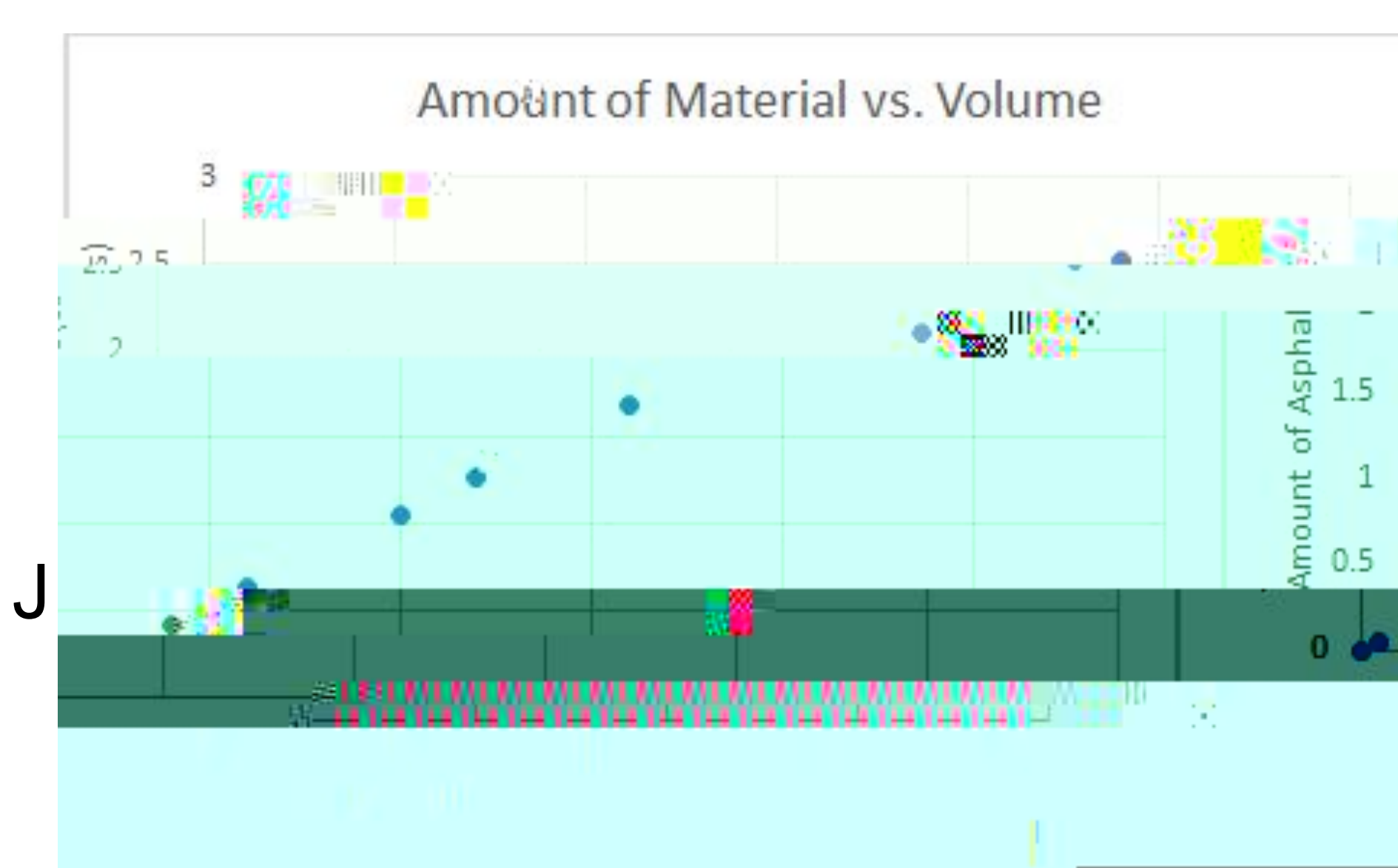
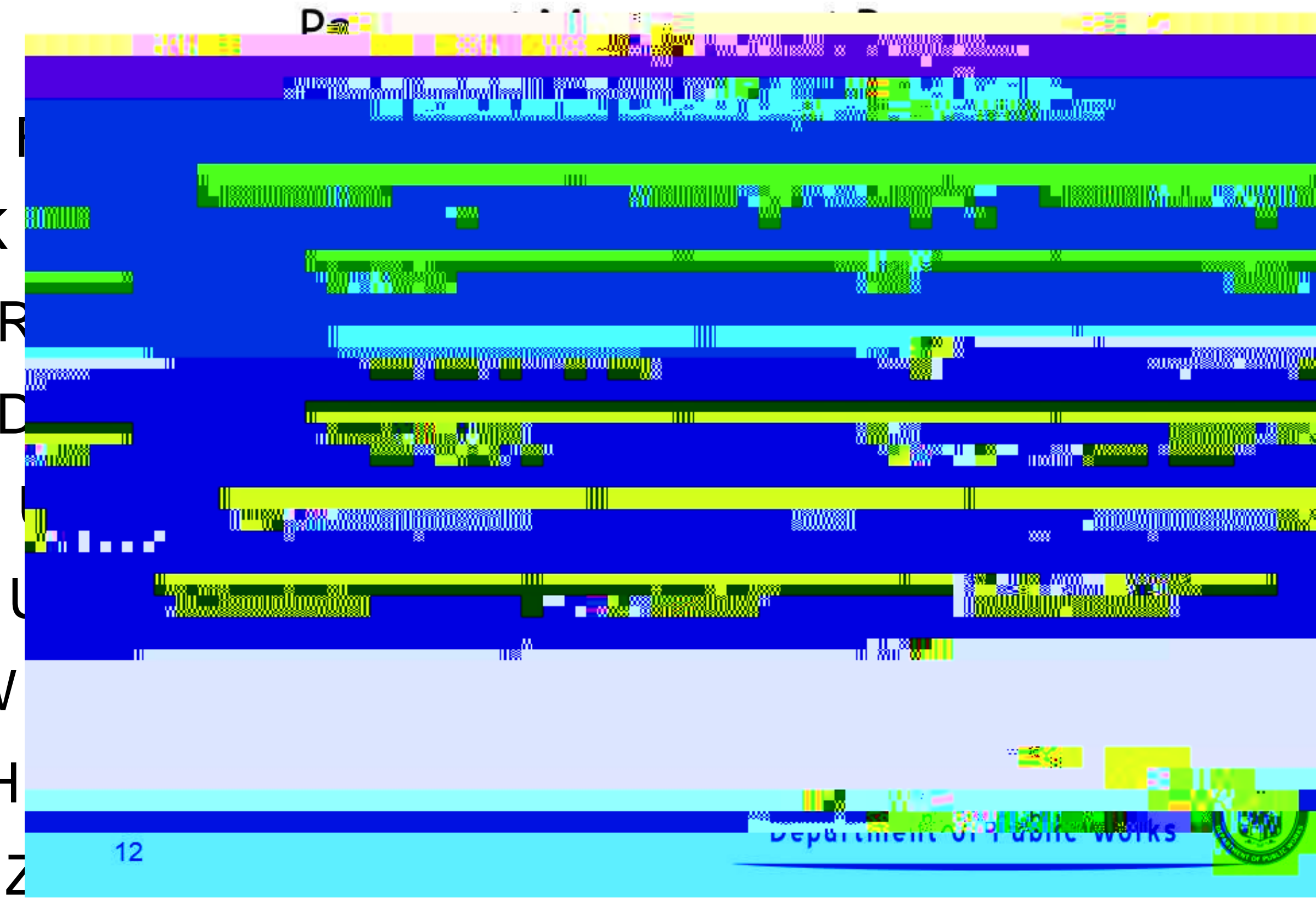
Potholes and Their Effects on Wages

Verlaunte Hawkins, Owen McFetridge



Abstract

,Q & OHYHODQG SRWKROHV KDYH EHF
SHRSOH ZKHQ GULYLQJ RQ URDGV 7K
URDG FRQGLWLRQV ZKLFK FDQ QRW R
VHYHUHO\ KDUP SHRSOH LQ WKRVH FD
WKHVH SUREOHPV PDQ\ SRWKROHV D
HIILFLHQWO\ DV WKH\ FRXOG EH 7KH
SRWKROHV FDQ EH GHDOV ZLWK EXW
ILOOHG DW RQFH 7KLV VWXG\ ZLOO H
W\SLFDO SRWKROH %\ H[DPLQLQJ KRZ
KRZ PXFK WKH PDWHULDO FRVWV DQG ILQG RXW WKH WUHQQV RQ
KRZ SRWKROHV IRUP ZH FDQ GHWHUPLQH WKH PRVW HIHFWLYH
ZD\ RI PDLQWDLQLQJ URDGV 6LQFH WKH PDWHULDO PDQ\ ZD\ RI
UHSDLULQJ SRWKROHV ZH FDQ DOVR VHH ZKLFK PHWKRG LV WRH
PRVW HIILFLHQW DW SUHYHQWLQJ SRWKROHV LQ WKH VWXG\ ZKLOH VWLQO\
GULYLQJ GRZQ FRVW



OBJECTIVES

- Find the most cost efficient way to to reduce the plague of potholes in areas with climate similar to Ohio.
- Find what type of asphalt is viable depending on the season

| Region | Number of Potholes | Average Cost of Pothole | Total Cost |
|--------|--------------------|-------------------------|------------|
| North | 100 | \$50 | \$5000 |
| South | 150 | \$40 | \$6000 |
| West | 120 | \$60 | \$7200 |
| East | 180 | \$30 | \$5400 |

3RWKROH UHSDLUV FDQ W\SLFDOO\ FRVW UDQJH IURP WR
7KLV YDULHV EDVHG RQ KRZ IDVW WKH FDU LV JRLQJ DQG KRZ ODUJH
WKH PDWHULDO PDQ\ ZD\ RI
UHSDLULQJ SRWKROHV ZH FDQ DOVR VHH ZKLFK PHWKRG LV WRH
PRVW HIILFLHQW DW SUHYHQWLQJ SRWKROHV LQ WKH VWXG\ ZKLOH VWLQO\
GULYLQJ GRZQ FRVW

CONCLUSIONS

\$FFRUGLQJ WR WKH WUHQQV ZH IRXQ
DUH EHRPLQJ D PDMRU SUREOHP LQ
SDUWV RI WKH 8 6 7KH FKDUWV DQG
VKRZ WKDW WKH LVVXH RI SRWKROH
SHRSOH ZRXOG WKLQN +RZHYHU E\ D
LPSRUWDQW IDFWRUV ZH FDQ FRPH X
PHWKRG DW WDFNOLQJ SRWKROHV LQ
SRVVLEOH

METHODS

- " Use reports made about potholes from government websites and articles
- " Look for a correlation between size of potholes and the cost to fix the pothole
- " Found charts for the reports made about the pothole and the cost estimates to fix these potholes

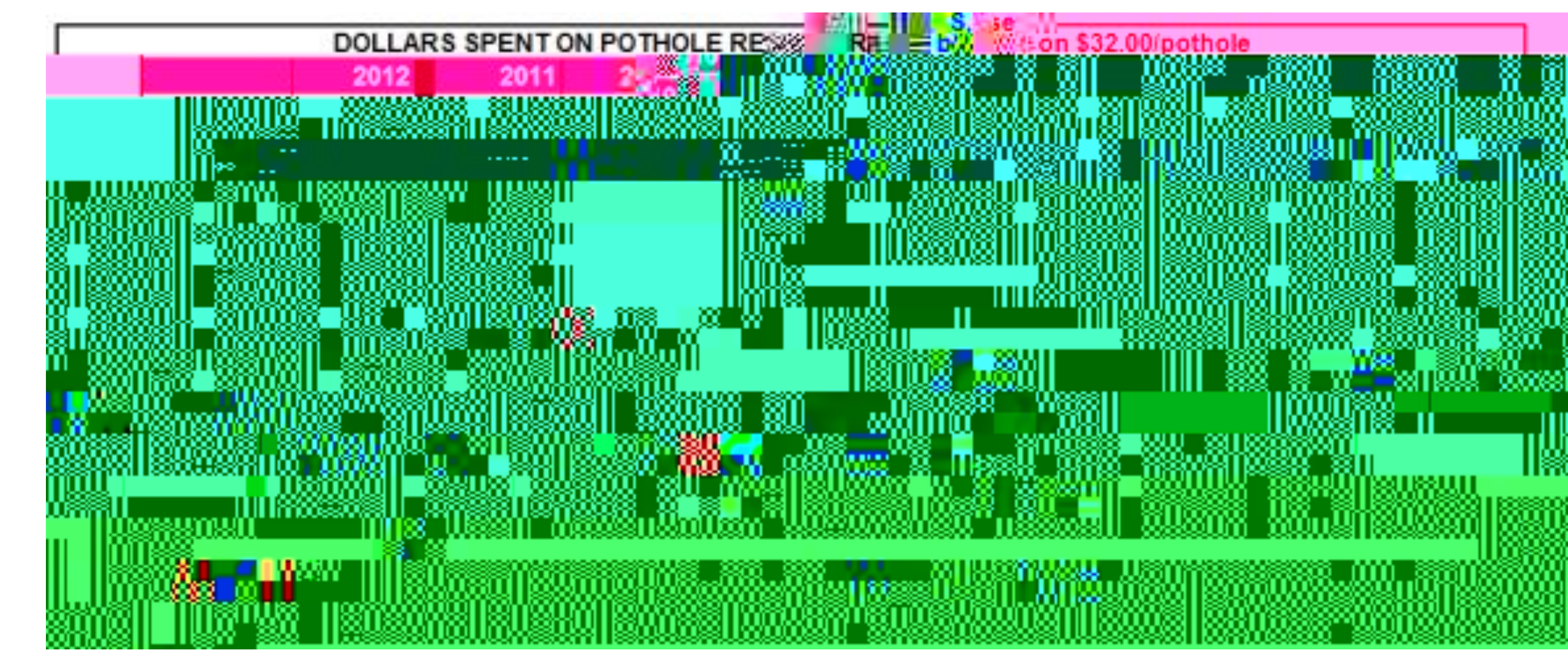
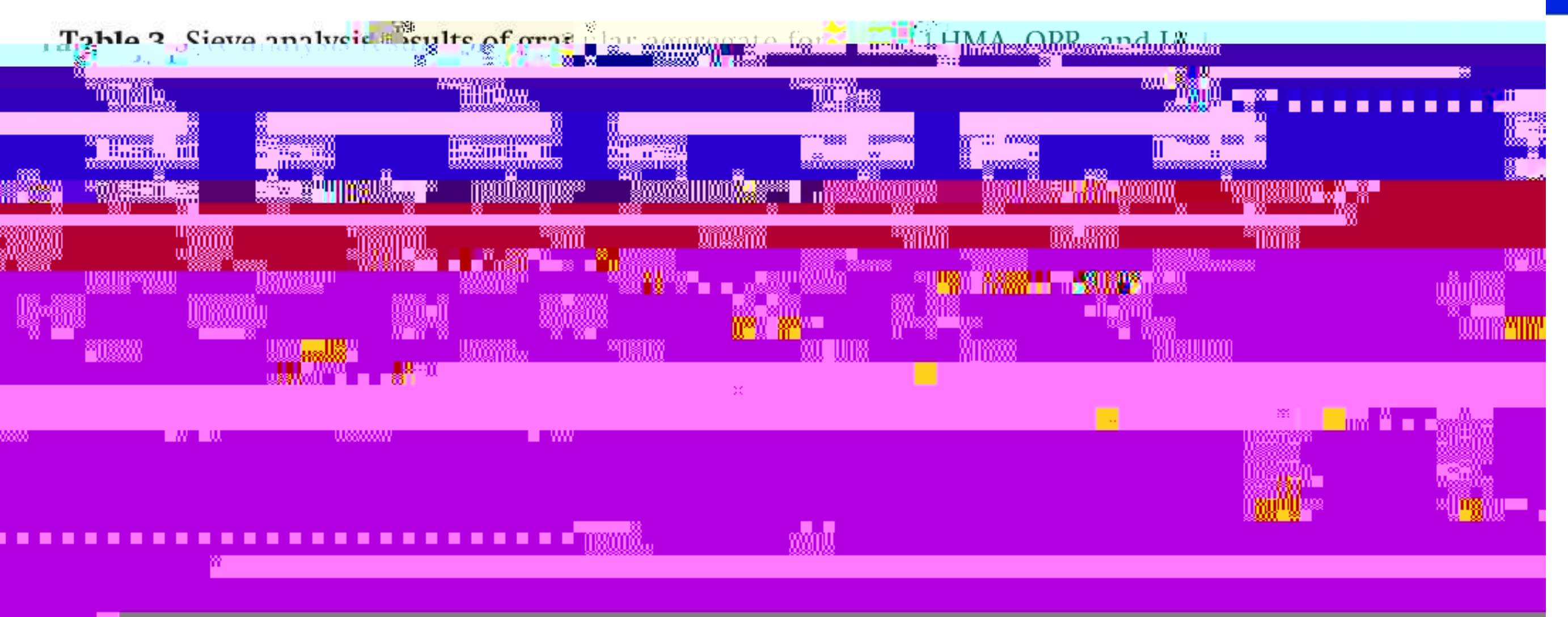


Table 1. Po...

| Year | Spending |
|------|---------------|
| 2012 | \$1.2 billion |
| 2011 | \$1.0 billion |



FUTURE WORK

ZH FDQ XVH WKLV GDWD FROOHFWHG
PDMRU SUREOHPV DUH DQG SULRULWL
HQJLQHHUV WR GHWHUPLQH ZKLFK PH
HIHFWLYH ZKLOH DOVR EHLQJ WKH E

References

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GRL FMFH \$FFVHG ODU