

H-RXUQDO RI 7D[5HVHDFK YRO QR SS

%OXUULQJ WKH VHSDUDWLRQ
SROLWLFDO VWXG\ RI WKH S
DGPLQLVWUDWLRQV PRYLQJ I
EUDQFK WRZDUGV WKH OHJLVC

<YHWWH /LQG

\$EVWUDFW

7KLV DUWLFOH HOXFLGDWHV WKH PRUH UHFHQW GHYHORSPHQWV FRQFHUQLQJ
FRQVHTXHQLDO FRQWHPSRUDU\ FKDOOHQJHV WKDW WKHVH HYHQWV SRVH WR
MXULVGLFWLRQV WKHUH KDV EHHQ D QRWLFHDEOH HYROXWLRQ ZKHUHE\ WD[DG
VWDWHG GLIIHUHQWO\ HQIRUFLQJ WD[ODZV DQG FROOHFWLQJ WD[UHYHQXH
SDQGHPLF DQG WKH HPHUJHQF\ PDQGDWHV WKDW ZHUH HQDFWHG DPLGVW LW ID
DGPLQLVWUDWLRQ WR JDLQ JUHDWHU QXPEHUV RI PDQGDWHV DQG WR RSHUDWH
H[WHQVLRQ RI WKH PDQGDWH JLYHQ WR WD[DGPLQLVWUDWLRQV ZDV DOUHDG\ G
6ZHGHQ EHLQJ RQH JRRG H[DPSON D SUH H[LVWLQJ SURFHVV WKDW WKH DXWKR

7D[\$GPLQLVWUDWLRQ KRVWHG E\ 816: %XVLQHVV 6FKRRO

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSDUDWLRQ RI S

,1752'8&7,21 \$1' 5(6(\$5&+ \$3352\$&+

7KH WK \$7\$; FRQIHUHQFH 7D\$ \$5PLQ WWHUDWLRQ RI(YROX
5HYROXQVWRQV DUWLFOH WKH WKHPH LV H[SORUHG WKU
DGPLQLVWUDWLRQ EXW WKH ILQGLQJV LQ WKH DUWLFOH
DURXQG WKH JOREH JLYHQ RQJRLQJ JOREDO GHYHORSPHQ

&RQVHTXHQWO\ WKH REMHFWLYH RI WKLV DUWLFOH LV W
RI WD[DGPLQLVWUDWLRQV LQ WKH FRQWH[W RI LQWH
SURPLQHQWO\ WKRVH WDNLQJ SODFH DW WKH 2UJDQLVD
'HYHORSPHQW 2(&' DQG (XURSHDQ 8QLRQ (8 OHYHOV RY
LQWURGXFWRQ RI D WRROER[RI PLQLPXP VXEVDQFH U
3URILW 6KLIWLQJ %(36 DFWLRQV DQG WKH WZR SLOODU
RQ WKH ODZ PDNLQJ SURFHVV LQ PDQ\ FRXQWULHV QRW

VHWWOHPHQW ~~RR ZIRYHUJQVMD~~ DUWLFOH KDV FKRVDHQ WR I
LPSOHPHQWDWLRQ RI WKH H[LW WD[DQG PDQGDWRU\ U
DPRQJ WKH PRVW GHEDWHG WD[HV ,Q WKLV FRQWH[W WK
H[WUDFWLQJ WKH HYROXWLRQ RI WKH WD[DGPLQLVWUDW
DQG JRYHUQPHQWDO VRXUFHV OHJDO VFKRODUVKLS DQG

7KH WZR FDVH VWXGLHV HQDEOH D FRQFUHHW IUDPLQJ R
RI WD[DGPLQLVWUDWLRQV PRYLQJ IURP WKH H[HFXYLYH
7KH FDVH VWXGLHV DUH QDWXUDOO\ OLPLWHG E\ WKHLU
WZR VSHFLILF WD[HV \HW JLYHQ WKH QDWXUH RI WKH VH
DUH VWLOO UHOHYDQW WR PRVW MXULVGLFWLRQV LQYRC
0HPEHU 6WDWHV

7KH DUWLFOH DSSOLHV D UHVHDFK DSSURDFK FRQVLV
LQIXVHG ZLWK SROLWLFDO SKLORVRSK\ ZKHQ LGHQWL
EOXUULQJ RI WKH VHSUDUDWLRQ RI SRZHUV DQG DQ
GHPRFUDF\ PRVW SURPLQHQWO\ GHPRFUDWLF OHJLWL
WUDGLWLRQDO OHJDO PHWKRGRORJ\ WKH DUWLFOH UH
DSSURDFK RIWHQ DVFHUWDLQH ZLWKLQ ~~WHD~~ VFKRODU
DSSOLFDWLRQ RI D GRFWULQDO DSSURDFK LQ WD[VFKRO
RQ WD[WHFKQLFDOLWLHV GHULYHG IURP OHJDO VRXUFHV
7KLV GRFWULQDO DSSURDFK LV DV LV RIWHQ WKH FDVH Z
ZLWK SROLF\ FRQVLGHUDWLRQV H[WUDFWHG IURP OHJLV
UHSRUWV RI JRYHUQPHQWDO DQG SROLWLFDO QDWXUH
HOHPHQWV SULPDULO\ WKHRUHWLFDO FRQVLGHUDWLRQ
WUDGLWLRQV HPEHGGHG LQ WKH GHVFULSWLYH DQG DQ

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%OXUULQJ WKH VHSDUDWLRQ RI S

,Q WKH FRQWH[W RI VHSDUDWLRQ RI SRZHUV DQG WKH C
FODULI\ ZKDW PDQGDWH WKH H[HFXWLYH WKH WD[DGP
GLVFUHWLRQ DQG GH IDFWR ODZ PDNLQJ 7KHUH LV DQ
GLVFUHWLRQ DV LW ZLOO YDU\ EHWZHHQ GLIIHULQJ MXU
FRQWHPSRUDU\ FKDOOHQJHV WKDW FXUUHQWO\ VWUHV
EHWZHHQ WKH OHJLVODWXUH WKH H[HFXWLYH DQG WKH
WKHRULHV RQ UXOH RI ODZ DQG WD[DGPLQLVWUDWLRQ D

+HDWK PDNHV D FRPSHOOLQJ FODLP ZKHQ GLVFXVVLQJ D
RI ODZ LQ WKH FRQWH[W RI ~~RIK SX ELOP SO DGP LQ SVW WPDWLRQ DS~~
WKH UXOH RI ODZ WKHRU\ ZKHUH WKH WZR H[WUHPHV RI
SHUIHFW MXVWLFH RQ WKH RWKHU DUH FRQWUDVWHG
UHGLVWULEXWLRQ WKDW DQ LGHDO FRQFHSWLRQ RI MXV
ZD\ WKDW VDWLVIDFWRU\ WR LWV H[DFW ZRUGLQJ \HW DV
WKDW LV VDWLVIDFWRU\ WR LWV H[DFW ZRUGLQJ \HW DV
ODZ DQG VXEVTXHQWO\ UHVXOW LQ DQ DUELWUDU\ FDS
RU VHFUHWLYH ~~HHRFXRQFRPTXHQWO\ SURPRWHV D SUDJPDW~~
DSSOLFDWLRQ E\ WKH WD[DGPLQLVWUDWLRQV DV D ZD\ F

6XFK DQ DSSURDFK UHTXLUHV WKH WD[DGPLQLVWUDWLR
H[WHQW 7KHUHIRUH LW LV LPSRUWDQW WR FRQVLGHU Z
OHJDO WUDGLWLRQV RI WKH VWDWH LQ TXHVWLRQ DOOR

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSDUDWLRQ RI S

DPRQJ WKH LQGLYLGXDO 1RUGLF FRXQWULHV 7KLV PL[V
GLYHUJHQFHV EHWZHHQ WKH V\ VWHPV DV ZLOO EHFRPH H
1RUZHJLDQ 3URIHVVRU DQG -XVWLFH 3HWHU /iGUXS DUJX
+HUH LQ WKH 8QLWHG 6WDWHV WKHUH LV D ZLGHVS

H-RXUQDO RI 7D[5HVHDUFK

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%OXUULQJ WKH VHSUDWLRQ RI S

FKDQJH WKH LQWHUQDWLRQDO WD[ODQGVFDSH DQG WK
3URILW 6KLIWLQJ %(36 3URMHFW EHJDQ WR VORZO\ HYR

7KH 2(&' SXEOLVKHG LWV LQLWLDO UHSRUW RQ WKH XVH F
LQ 7KLV ZDV WKH ILUVW PDMRU VWXG\ RQ K\EULG ILQ
OLJKW RQ KRZ FRQWHPSRUDU\ GHYHORSPHQWV KDG IDFLC
DV DJJUHVVLYH WD[SODQQLQJ DQG WD[DYRLGDQFH

)LQDQFLDO PDUNHWV KDYH EHHQ GHUHJXODWHG H
OLEHUDOLVHG DQG LQ PRVW FRXQWULHV FRPSOHWH

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSDUDWLRQ RI S

5HSRUWLQJ¶ \$FWLRQ μ0XWXDO \$JUHHPHQW 3URFHGX
,QVWUXPHQW¶

7KH DERYH OLVWHG %(36 \$FWLRQV DUH RIWHQ UHIHUHG
DUJXDEO\ OLPLWDWLRQV ZLWK WKH WRROV RIIHUG E\ V
GLJLWDO WUDQVDFWLRQV DQG WKH GHYHORSPHQWV RI
PDQQHU 7KH OLPLWDWLRQV RI WKH WRROV RIIHUG E\
VXEVTXHQWO\ LQVWLJDWHG %(36

%(36 H[SDQG HG WKH IUDPHZRUN DQG LQWURGXFHG WK
DLPHG DW DGGUHVVLQJ WKH JOREDO DFWLRQ SODQ 3LOO
SURILWV OLQNHG WR WKH GLJLWDO HFRQRP\ ZKLOH 3LOO
%ULHIO\ DIWHU WKH LQWURGXFWRQ RI %(36 FDPH V
IUDPHZRUN DJUHHG RQ LQ -XO\ DQG WKH PLQLPXP
'HFHPEHU

,Q 1RYHPEHU WKH 8QLWHG 1DWLRQV *HQHUDO \$VVHF
XQDQLPRXV FRQVHQVXV WKDW PDQGDWHV W~~WKH~~ 81 WR VW
PDUNV D KLVWRULF WXUQLQJ SRLQW DV WKH 2(&' KDV UH
JOREDO WD[PDWWHUV IRU WKH ODVW VL[W\ HDUV 7KLV

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSUDUWLRQ RI S

RYHUDOO WD[VRYHUHLJQW\ RYHU GLUHFU WD[DWLRQ UH
DV WKHVH WD[HV KDYH QRW EHHQ SRVLWLYHO\ KDUPRO

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSDUDWLRQ RI S

WKHUHIRUH EH SURYLGHG HLWKHU GLUHFWO\ HJ GLUH
LQFHQWLYHV

7KH SURKLELWLRQ DJDLQVW VWDWH DLG LQFOXGHV WD[H
QHFWUDOLW\ DQG WKH WUDSGWDEHWWZDWHUHQMRUWGLDDWHV

x DSSOLFDWLRQ RI DGMDFHQW OHJDO DUHDV ZKHQ X
LQWHUQDO PDUNHW PRUH VSHFLILFDOO\ W\ (8 W\ PRPSHWL
DLG SURYLVLQRQ

7KH LPSDFW DQG LPSRUWDQFH RI WKHVH LQGLYLGXDO FR
WLPH ZKLFK FRQWULEXWHV WR D JHQHUDO OHJDO XQFHU
7KHUH LV FXUUHQWO\ DQ XQSUFHGHHQWHG QXPEHU RI QH
LQWURGXFHG 7KLV GHYHORSFHQW PD\ EH LQWHUSUHWH
VWDQFH LQ SURWHFWLQJ WKH WD[EDVHV RI LWV 0HPEH
FRQVLGHULQJ KRZ WKH &-(8 KDV KLVWRULFDOO\ UXOHG L
RI QDWLRQDO WD[EDVHV

7KH XSKROGLQJ RI WKH IUHH PRYHPHQW ODZ DQG WKH L
SUHFHGHHQFH RYHU WKH DWWHPSWV RI LQGLYLGXDO 0HP
7KLV FDVH ODZ LV QRZ LQ VDPH SDUWV UHYLVHG DV
LQWURGXFHG DQG HQIRUFHG LQ D PRUH UDSLQ IDVKLRQ V
DV WKH EHORZ GHVFULEHG H[LW WD[HV LQ DGGLWLRQ WR
DUH IDYRXUDEOH H[DPSONV RI VXFH FKHQJH 7KH &-(8 KDV
WD[PHDVXUHV ZKHQ DSSOLHG GRPHVWLFDOO\ E\ (8 0HPE
DSSURDFK LV LQ VWDUN FRQWUDVW WR WKH FRQWHPSRUD
DUH SUHVHQWO\ EHLQJ HQIRUFHG DW (8 0HPEHU 6WDWH O
'LUHFWLYH \$7\$'

7KLV GUDVWLF FKHQJH LV PRVW OLNHO\ DVVRFLDWHG ZL
FXUUHQWO\ WDNLQJ SODFH DW WKH 2(&' * OHYHO LQ ZKL
EHHQ DQG VWLOO DUH GLUHFWO\ LQYROYHG *HUPDQ\
GULYLQJ IRUFH ,Q IDFV VHYHUDO RI WKH (8 WD[WRROV
\HDUV IRU LQVWDQFH H[LW WD[HV WKDW DUH QRZ PDQ
PRGHOHG DIWHU WKH *HUPDQ UXOHV

,W FRXOG DOVR EH DUJXHG WKDW WKH (8 KDV WDNHQ D S
3URMHFW GHYHORSFHQWV 7KH (8 \$QWL 7D[\$YRLGDQF
LPSOHPHQWDWLRQ RI WKH 2(&' %(36 \$FWLRQ WRROER[D
UXOHV \$UWLFDOO\ 2\$\$\$(36 \$FWLRQ D JHQHUDO DQW
*\$\$5 \$UWLFDOO\ \$7\$' DQG 2(&' %(36 \$FWLRQ &)& UXOH
DQG 2(&' %(36 \$FWLRQ K\EULG PLVPDWFK UXOHV \$UWL
\$FWLRQ FRXQWU\ E\ FRXQWU\ DQG 2(&' %(36 \$FWLRQ DQW

DUUDQJHPPHQWV LI WKH\ GLVSOD\ RQH RU PRUH FKDUDFW
 SURYLGHG LQ WKH GLUHFWLYH &RQVHTXHQWO\ WKH
 SUHVXPHG WR EH LQ D KLJKHU ULVN RI WD[DYRLGDQFH D
 WKHVH DUUDQJHPPHQWV ,Q -XQH '\$ ZDV SXEOLVKHG
 (XURSHDQ \$QLRQV FULEHG DERYH 6ZHGHQ DQG WKH RWKH
 QRZ PDQGDWHG WR LPSOHPPHQW WKHVH UXOHV LQWR WK
 GHDGOLQH IRU WKLV LPSOHPPHQWDWLRQ ZDV LQLWLDOO\ V
 H[WHQVLRQ GXH WR WKH &RYLG SDQGHPLF

7KHUH ZDV D ZLGH UDQJH RI GLIIHULQJ '\$& LPSOHPPHQWD
 GXH WR WKH GLUHFWLYH PHUHO\ SURYLGGLQJ PLQLPXP VW
)UDQFH DQG WKH 1HWKHUODQGV LPSOHPPHQWHG WKH GL
 IUDPHZRUN WKDW ZDV SURYLGHG ZKLOH RWKHU VWDWHV
 IXUWKHU DQG LQWURGXFHG PRUH IDU UHDFKLQJ VWDQG
 DSSOLFDWLRQ WR D ZLGHU UDQJH RI WD[HV DQG DSSOLF
 LQ DGGLWLRQ WR FURVV ERUGHU DUUDQJHPPHQWV

7KH PRVW IXQGDPHQWDO GLVFXVVLQJ RI WKH LPSOHPPHQ
 ZRXOG DSSO\ RQO\ WR FURVV ERUGHU WUDQVDFWLRQV RU
 DUUDQJHPPHQWV 7KH ODWWHU ZRXOG HQWDLO IDU UHDF
 KLJKO\ GHEDWHG DPRQJ ODZ PDNHUV WD[SD\HUV DQG V
 6ZHGLVK SURSRVDO LQLWLDOO\ FRQWDLQHG DQ LQFOXVLF
 ZDV UHPRYHG DW D ODWHU VWDJH +RZHYHU LW VKRXOG
 KDV VWUHVHG WKDW WKHUH PD\ EH IXWXUH OHJLVODWL
 FRXOG EH LQFOXGHG ZHUVH DQG GLWLRQDO IXQFWLRQV RI
 VXEMHFW WR KHDWHG GLVFXVVLQJ

)RU LQVWDQFH WKHUH LV D YDULDWLRQ EHWZHHQ 0HP
 LQWHUPHGLDULHV WKH PDQGDWRU\ UHSRUWLQJ VWDQGDU
 VHW IRUWK E\ WKH GLUHFWLYH \$V D UHVXOW WKH WH
 DFFRXQWDQWV DQG WD[DGYLVRUV DQG LQGLYLGXDO 0
 H[HPSWLRQV)RU LQVWDQFH 6ZHGHQ LQWURGXFHG DQ H
 GXH P €UV HH

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSUDWLRQ RI S

ZRUGV WKH UROH RI WKH 6ZHGLVK 7D[\$JHQF\ DQG WKH F
3DUOLDPHQW LV DEOH WR HQDFW WD[HV

2QH H[DPSON RI KRZ WKH ERXQGDU\ EHWZHHQ WKH H[HF
RI EFRPLQJ EOXUHG LQ WKLW FRQWH[W ZDV WKH EU
UHTXLUHPHQW DWDFKHG WR WKH PDQGDWRU\ UHSRUW
WR GHWHUPLQH ZKLFK GRPHVLF WD[DUUDQJHPHQW V
PDQGDWRU\ UHSRUWLQJ VWDQGDUGV ZKHQ JLYHQ WKH I
&RQYHUVHO\ WKH WD[DGPLQLVWUDWLRQ ZRXOG EH LQ
WD[SD\HUV IURP PDQGDWRU\ WD[UHSRUWLQJ GHSHQGLQ
WKH KDOOPDUNV ,Q RWKHU ZRUGV WKH 7D[\$JHQF\ ZRXC
WD[DUUDQJHPHQW GLVSOD\V DQ\ RI WKH FKDUDFWHULV
GLUHFWLYH \$QG GHSHQGHQW WR WKDW DVVHVPHQW WK
WD[SD\HU LV WR EH VXEMHFW WR WKH \$DQGWRU\ UHSRU
GHVFULEHG LQ VHFWRQ RI WKLW DUWLFOH WKH 6ZHGLV
EH DPHQG HG RU UHSHOHG ZLWKRXW OHJLVODWLYH VXS
3DUOLDPHQW WR PDNH VXFK GHFLVLRQV DQG QRW WKH H

7KH VDPH DUJXPHQW FDQ EH DSSOLHG WR WKH H[SUHV
\$JHQF\ WR SURSRVH QHZ OHJLVODWLYH WD[PHDVXUHV R
VFKHPHV KDYH EHHQ LGHQWLILHG WKURXJK WKH PDQGD
FRQVWLWXWLRQDO VXSSRUW IRU WKH WD[DGPLQLVWUDW
GLVFXVVHG IXUWKHU EHZ

7KH 6ZHGLVK H[LW WD[DQG WKH DIWHUPDWK RI \$7\$'

\$Q H[LW WD[LV SDLG ZKHQ D SHUVRQ RU DQ DVVHW PR
REMHWLYH RI D WD[PHDVXUH VXFK DV WKLW LV WR WD[
ZLWKLQ WKH WHUULWRU\ RI WKH VWDWH EHLQJ PRYHG IU
WLPH RI FURVVLQJ WKH ERUGHU &RQVHTXHQWO\ DQ H[L
EDVHVP 0EHW@° H VYHDI` 1 EH`VÿÿP

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSUDWLRQ RI S

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSDUDWLRQ RI S

DSSOLFDEOH IRU \HDUV GXH WR OLPLWDWLRQ RI WD[W
WKH PRVW QRWLFHDEOH H[HPSWLRQV ZRXOG EH LQ UHO
WHUPLQDWHG WKH WD[WUHDW\ EHWZHHQ 6ZHGHQ DQG 3
WKH \HDU UXOH LV RQFH PRUH DSSOLHG IRU D IXOO

7KH QXPHURXV H[LW WD[SURSRVDOV WKDW KDYH EHHQ EU
SHULRG KDYH QRW EHHQ DV SROLWLFDOO\ UHVLOLHQW
JRYHUQPHQWV KDYH H[SORUHG WKH SRVVLELOLW\ RI OHJ
H[LW WD[UHJLPH RQ FDSLWDO JDLQV 2QH RI WKH PRVW
LQ FRQQHFWLRQ WR WKH LPSOHPHQWDWLRQ RI WKH \$
FDVHV VXFDWLRQ *ULGGLXVDEHG PPLVVLRQ Y
3RUWXJDO

,Q 1RYHPEHU WKH 6ZHGLVK 7D[\$JHQZKLSXEOLVKHG
FRQWDLQH D FRQFUHWH OHJLVODWLYH SURSRVDO IRU

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSDUDWLRQ RI S

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSUDWLRQ RI S

UHYHQXMM ODWWHU RQO\ VSDUNHG DQWDJRQLVP IURP 6
FRUSRUDWLRQV ZKLOH WKH IRUPHU OLQH RI DUJXPHQWD
FRQWURYHUVLDO DV 6ZHGHQ JHQHUDOO\ ERSDYHUPHQWV (8
LW LV DQ XQGHUVWDQGDEOH DUJXPHQWDWLRQ DV WKH UR
WD[HV DQG PD[LPLVH WD[FRPSOLDQFH UDWKHU WKDQ WR
FDQ EH VXSSRUWHG E\ RWKHU FLUFXPVWDQFHV IRU LQVV
DQ\ FRQVHTXHQFH DQDO\VHV RQ KRZ WKH SURSRVHG H[L
6ZHGHQ 7KLV LV JHQHUDOO\ FRQVLGHUHG FRPPRQ SUDFV
DGPLQLVWHUHG E\ WKH JRYHUQPHQW DZLWV SDUOH DPHUPW R
6ZHGLVK WD[HV ZDV FRUUHFWHG LQ WKH LQLWLDWLY
WKH WDVN RI LQYHVWLJDWLQJ D QHZ H[LW WD[WR WK
JRYHUQPHQW SXW IRUZDUG D SURSRVDO LQLWLDOO\ G
)XUWKHUPRUH WKH JRYHUQPHQW FOHDUO\ H[SUHVVHG L
LQWURGXFWRQ RI DQ H[LW WD[ZRXOG EH GRQH ZLWK WK
DQG HQVXUH (8 ODZ FRPSOLDQFH 7KXVH DUH WZR FRPP
MXVWLILFDWLRQV IRU QHZ WD[LQVWUXPHQWV
)XUWKHUPRUH WKH 6ZHGLVK LPSOHPHQWDWLRQ RI '\$& I

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSUDWLRLQ RI S

UDWKHU WKDQ WKH QDWLRQDO OHJLVODWXUH \$V VXFK
RI D WD[WHFKQLFDO DFW KDQGOHG E\ WKH WD[DGPLQL
RIILFLDOO\ HQDFWHG DV GRPHVWLF ODZ UDWKHU WKD
JRYHUQPHQW DQG 3DUOLDPHQW

H-RXUQDO RI 7D[5HVHDFK

%OXUULQJ WKH VHSUDWLRQ RI S

RWKHU WRZDUGV JOREDO FRRSHUDWLRQ DQG WD[KDUPRO
WR EH PRUH DFWLYH LQ WKH ODZ PDNLQJ SURFHVV DV W
SURLGHHG E\ WKH 2(&' DQG (8 EFRPHV PRUH RI D WD[WH
SDVW SUDFWLFHV ZKHUH WKH GRPHVWLF OHJLVODWXUHV
WKH QHHGV DQG WUDGLWLRQV RI UHVSHFWLYH LQGLYLGX
7KH WD[DGPLQLVWUDWLRQV KDYH DQ LQKHUHQW WHFKQ
WD[SD\HU GDWD VXLWDEOH IRU WKLV GHYHORSPHQW DQG