EXHIBIT 2

currently ranging from 7-9 days.

5. The case fatality rate among individuals presenting with symptoms has been estimated at 1.4% in Wuhan, the capital city of Hubei province, with higher rates in those over 65 and those with comorbidities. Case fatality rates are likely to vary from setting to setting, increasing as the healthcare system in an area becomes overburdened and sick patients are unable to be prioritized. Case fatality rates are also affected by surveillance practices in any setting which affect the number of cases included in the denominator of this rate.

6. Hospitalization with COVID-19 commonly is associated with need for intensive care and a ventilator to assist breathing. There are currently estimated to be ~45,000 ICU beds and ~160,000 ventilators in the USA, many of which are occupied by individuals sick with illnesses other than COVID-19. Uncontrolled spread of the virus would likely result in over 50% of the population becoming infected. Model projections, except under the most strict control measures, predict incidence of patients requiring hospitalization or ventilators rising well above the US capacity.

7. SARS-CoV-2 is a respiratory pathogen, meaning that it is spread through respiratory secretions, for example droplets expelled by an infected individual coughing or sneezing, in which the pathogen can remain viable

for at least 3 hours. Transmission can occur either by direct person-to-person contact, inhalation of these droplets, or by touching surfaces contaminated with these droplets.

8. There are multiple sources of evidence documenting pre-symptomatic transmission (i.e. the ability of an infected individual to infect others before their symptoms appear). A study in Singapore and Tianjin, China, estimated that 50% of transmission is due to pre-symptomatic individuals. Interventions targeting only transmission by sick individuals (such as isolation of those with symptoms) are therefore unlikely to contain transmission.

9. Timely and widespread testing of symptomatic individuals and their contacts is therefore essential to slowing transmission of the virus. The success of massive testing, active contact tracing, and isolation of individuals showing any COVID-19 symptoms has been demonstrated by the case of the Republic of Korea, which appears to have controlled local transmission. The scale and extent of transmission in the United States makes these tactics on their own infeasible, as contact tracing is very resource-intensive. However, without widespread availability of testing for individuals experiencing symptoms, it is impossible to know if local transmission is occurring in a

county or city and impossible to refine interventions in a specific location with the information that accurate surveillance provides.

10. There is no vaccine against SARS-CoV-2 infection, nor are there prophylactic

13. Detained populations, including those in immigration detention facilities, are at high risk for infectious disease compared to the general population. Factors contributing to this excess risk include poor sanitation, lack of access to hygiene precautions, and high population density. In addition, transfer of detained immigrants between facilities complicates efforts to control infection and trace contacts. A recent outbreak of mumps in immigration detention facilities demonstrate the ability of an infectious agent to spread rapidly between centers, infecting at least 900 people from September 2018-August 2019.

14. The ability of SARS-CoV-2 to spread rapidly and widely in a closed population is demonstrated by the experience of cruise ships, including the Diamond Princess, on which around 700 (19%) of passengers and crew on board were infected over the course of three weeks despite the initiation of quarantine protocols. 11 of these individuals subsequently died.

15. Transmission of SARS-CoV-2 in detention facilities in the United States would lead to widespread and severe illness among the detained population, particularly among those considered at high risk.

16. Personal hygiene measures are effective at reducing infection risk, but for a virus as transmissible as SARS-CoV-2 they will be not be sufficient on their

own to curtail its spread. Furthermore, hygiene measures are only effective when there is sufficient access to them, and many individuals in incarcerated populations do not have adequate access to soap and water. Finally, other measures, such as regular disinfecting of surfaces, should supplement these efforts.

17. Due to the substantial amount of pre-symptomatic transmission observed in other settings, it is impossible to prevent intake of infectious individuals through screening for symptoms alone. Moreover, due to inadequate rates of COVID-19 testing in the United States, it is not possible to rule out local transmission because of lack of confirmed cases. Merely asking about travel history to areas with sustained community transmission, or contact with infected individuals, cannot rule out the possibility that an individual is infected with SARS-CoV-2 upon intake into a detention center.

18. Moreover, staff members who may be living in areas with sustained community transmission are able to transmit the disease to detained immigrants. This transmission too could occur while the staff members are asymptomatic, and thus cannot be controlled by screening for symptoms or contact history.

19. These concerns are not hypothetical: a detained immigrant in the Bergen

County Jail, NJ, tested positive for SARS-CoV-2 on March 24, 2020, and that staffers at Elizabeth Detention Center, NJ, and Aurora Detention Center, CO, have also tested positive for SARS-CoV-2

20. Isolation of symptomatic individuals within detention settings similarly will not stop transmission before symptom onset. As there are several modes of transmission other than direct person-to-person contact, it is not possible to identify all individuals who have had contact with a COVID-19 case. Quarantine of suspected contacts will therefore likely reduce the rate of spread of the virus in a facility but will not eliminate transmission.

EXHIBIT A

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4V0!%:6<A7 5 ! / 2TA:!&32Z:2'!! '!&13!LgL I EJPMbGQPNGE'!
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OP'!! 9;2RX [77A!WC! " **7 8 89: ;<! 0 *)** C!,2 5 ?:3:4V2 [736! / C! $ 7V26:!U'! " 70?!1034T??:?!>2RR:624:76!30ATR0!
4326? 5 :??:76!73!?= 5 147 5 24:R!A:?02?0!76;=q!&6!0c2 5 1;0!T?:6<!2<0N?43TR4T30A!A242!837 5 ! (V2:;26A'!!
'!LG'!LNP'!
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fOI'!) ;21V2 5 !BC! " **7 8 89: ;<! 0 *)** C! - :?2;2X!&C!%2;2=262377\! / C! (V2:?7 5 Z776?TX! 9C!%;T6<4V76<!) C!
@03626A0d! / C! / 3:X:24XV2RV736!&C! + 2R2307!D $C!D0??;03!WC! $ 0:?03!WC! ` 776!,%'!#1:A0 5 :7;7<=!78!,68264!
" 06<T0!) 2?0?!,;;T 5 :6240?! / 0374=10N / 10R:8:R:4=!:6!4V0!,64032R4:76!Z04 [006!, 5 5 T6:4=!26A! " :?02?0C!26A!
) V26<0?!:6! (326? 5 :??:76! " =62 5 :R?'!UD7 / ! - 0<;! (371! " :?'!FHLQ! " 0R!LLgOJLFMb0HHHKFGF'!
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OO'!%320 5 03! + * C!U03X:6?! (&C! " **7 8 89: ;<! 0 *)** C! j 2X23! $C!B2=! / ,C! / 5 :4V! " DC! $ 0:603! $) !W3'!
9:<!R:4=C!? 5 2;;! [73;Ab!A06?:4=C!R7642R4!3240?C!26A!4326? 5 :??:76!78!A06<T0!2R37??!U2X:?426'!
W! $! / 7R!,640382R0'!FHLQ! a R4!GgLFJLLLMbFHLQHKG I !
!
LHH'!W:26<!) o C!D0??;03!WC!%: 5 !DC!% [7X!% a C! $ 02A!W + C! Y 26<! / C! (26!DC!B2?4! + C! j VT!BC! . T26! ` C! $:;0=! / C!
" **7 8 89: ;<! 0 *)** '!) 7V734!U378:;0b!&!?4TA=!78!:68;T06d2!: 5 5 T6:4=!:6!4V0!T3Z26!26A!3T32;! . T26<dV7T!
30<:76!78!) V:62b!4V0!@;T?R210! / 4TA='!,64!W!#1:A0 5 :7;'!FHLG!@0Z!LK'!!
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LHL'!! - :?2;2X!&C!) ;21V2 5 !B#C!%2;2=262377\! / C!%;T6<4V76<!) C! (V2:?7 5 Z776?TX! 9C!@03626A0d! / C! $ 0:?03!
WC! / 3:X:24XV2RV736!&C! + 2R2307!D $C!D0??;03!W (C! " **7 8 89: ;<! 0 *)** C! ` 776!,%'!@734=! ` 023?!78! " 06<T0!
/ T3>0:;;26R0!24!2! (034:23=!U0A:243:R!B7?1:42;!:6!926<X7XC! (V2:;26AC!LOPENFHLF'!& 5 !W! (371! + 0A!B=<'!
FHLG! + 23!FI'!1::b!LQNHEEP'!
!
LHF'!! . TR;T!BC! $ 02A!WC!] TX74:RV!) W!W3C! . 2;;7 [2=! " " C! . 27!BC! $ 2:60=!WWC! * d:R26:6!&C! j : 5 5 03! / + C!
" **7 8 89: ;<! 0 *)** '! / 7R:2;!) 7642R4! - 04 [73X?!26A! + :c:6<!2 5 76<! / 4TA064?!:6!%NLF! / RV77;?!:6!U:44?ZT3<VC!
U&'! '!FHLG! + 23!LQgLLJEMb0HLQLLEO!
!
LHE'!D0??;03!WC! " **7 8 89: ;<! 0 *)** ' + 0RV26:?4:R! + 7A0;?!78!,680R4:7T?! " :?02?0!26A! (V0:3!, 5 12R4!76!UTZ;:R!
B02;4V'! '!FHLG! + 23!LgL I EJQMbKLQNFF'!
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fLHK'!) V2A?T4V:! / C!,2 5 ?:3:4V2 [736! / C! (3:2 5 17! Y C! " **7 8 89: ;<! 0 *)** '! (V0!: 5 12R4!78!32:682;;!26A!
40 5 10324T30!76!4V0!?124:2;!137<30??:76!78!R2?0?!AT3:6<!4V0!RV:XT6<T6=2!30N

LHI'!$0:RV! - . C!D0??;03!W (C! / 2X30\A2!%C!D2T03! / &C!,2 5 ?:3:4V2 [736! / C! " **7 8 8 9 : ; <! 0 *)** '!#>2;T24:6<!4: 5 0N
?03:0?!130A:R4:76! 5 7A0;?!T?:6<!2!<06032;:d24:76!78!4V0! + 026!&Z?7;T40! / R2;0A!#3373'!!
'!!FHLGgPHJEMbFIQNFOF'!

LHO'!$2A767>:RV!DC!90??0?06! + (C! " **7 8 8 9 : ; <! 0 *)** C! . 2=A7?!) C! - = l T:?4!) C!U3:R0!) C! . :;Z034!) DC! . 73?0!
. C!$0:RV! - . C!$7A3:<T0dN92332A2?! + C! / : 5 Z03X788! + C!U03;! (+ '! (V0!$0?1:32473=!U3740R4:76!#880R4:>060??!
) ;:6:R2;! (3:2;!J$0?U#) (Mb!&!R;T?403N326A7 5 :d0A!R;:6:R2;!43:2;!47!R7 5 1230!4V0!0880R4:>060??!78!30?1:32473!
26A! 5 0A:R2;! 5 2?X!0880R4:>060??!2<2:6?4!30?1:32473=!:680R4:76!26A!:;;60??!:6!V02;4VR230! [73X03?'!!

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LLO'!%:3?RV! (" C! + 7?0?76!BC! + 2??2lT7:! + C! - =06? [2V! (. C! . 77A03 5 740! $C! $ 7A3:<T0dN9 2332lT03!
,C"D0??;03"WC" **" 7 8 8 9 : ; <! 0 *)** C!U0403?! " B'!, 5 12R4!78!:6403>064:76?!26A!4V0!:6R:A06R0!78!0Z7;2!>:3T?!
A:?02?0!:6!D:Z03:2N: 5 1;:R24:76?!873!8T4T30!01:A0 5 :R?'!

LFI'!92;;!W"C!U37?103:!+&C!937[6!&C!)V06!hC!%062V!#C!`26<!`C!)T55:6<?!"&(C!$:>03?!)+'!(V0!37;0!
78!Z06d24V:60!106:R:;;:6!.!:6!130A:R4:6<!26A!130>064:6<!2;;NR2T?0!2RT40!30?1:32473=!A:?02?0!:6!5:;:423=!
30R3T:4?b!LOOLNFHLP'!'!FHLI'!WT;!QbLNP'!
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LFO'!)V2A?T4V:!/C!&;4V7T?0!9+C!,25?:3:4V2[736!/C!(3:25 17!YC!.3264d!%BC!)T55:6<?!"&('!(32>0;!
A:?426R0!26A!VT526!57>05064!130A:R4!124V?!78!05 03<06R0!78!?124:2;!?1302A!78!)V:XT6<T6=2'!
'!FHLI'!WT;'!ObLNO'!
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LEH'!/5:4V!+%C!/7;75 76!//C!)T55:6<?!"&(C!/3:X3:?V626!&%C!%T523!+/C!]2?TA0>26!)%C!+R@2;;!
&+C!DTR2?!.+C!)0;064267!""C!+0V42!/B'!a>03;21!Z04[006!V23 5!30ATR4:76!26A!B,]!?03>:R0!T4:;:d24:76!

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F'!/7;7576!9C!$225!+/C!U:60A2N&;>230d!"#C!"**7 8 8 9:;<!0 *)** '!!U24:064?![:4V!]&)(#$D!2??7R:24:76!
A0?03>0!R2308T;!?R3T4:6=b!$0?176?0!47!W0604dX=!04!2;'! !
FHLLgLQQbFHKFNE'!
!
E'!$7A3:<T0dN92332lT03!,C!+:03N=N(0326N$7 5 037!DC!@03<T?76!- +C!9T3X0!"/C!"**7 8 8 9:;<!0 *)** '!
":8803064:2;!088:R2R=!78!A06<T0!>2RR:60!Z=!:5 5 T60!?424T?'!! '!!+2=!FgEIQJOOPOMbLPFG'!A7:b!
LH'LHLG_/HLKHNGPEGJLQMGHIIONE'!
!
K'!$7A3:<T0dN92332lT03!,C!/2;\0!BC!"**7 8 8 9:;<!0 *)** '!"06<T0!]2RR:60!:6!$0<:76?!78!#6A05:R!":?02?0'!!
'!FHLG!&13!PgEPKJLKMbLEII'!
!
Q'!.3264d!%BC!$260!+/C!/2;\0!BC!.;2??!.#C!/RV2RV403;0!/#C"**7 8 8 9:;<!0 *)** '!,-./0"12"345678"569"
:;<695=-›"?560"./5<8@A/-"B-C456@8B8"2D".569-B@C"B2;15/@10"9@8.5;@1@-8E!
'!FHLP!&13!G'!
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L'!"**7 8 8 9:;<!0 *)** C!D0??;03!W'!!,680R4:7T?!":?02?0!"=62 5:R?'!!,6!,680R4:7T?!":?02?0!"=62 5:R?b!(V073=!
26A!U32R4:R0'!(V:3A!#A:4:76'!FHLG'!
!
2'!!U03X:6?!(&C!$0:603C!W3'C!$)C!$7A3:<T0dN92332lT03!,C!/5:4V!"DC!/R744!(YC!"**7 8 8 9:;<!0 *)** '!!&!
30>:0[!78!4326?5:??:76!5 7A0;?!78!A06<T0b!2!lT264:424:>0!26A!lT2;:424:>0!262;=?:?!78!5 7A0;!8024T30?'!!,6!
"06<T0!26A!"06<T0!B05 733V2<:R!@0>03'!/0R76A!#A:4:76'!FHLK_I_FO'!!)&9,!UTZ;:?V:6<'!
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fLO'!

EL'!!9T:;A:6<!5 7A0;?!78!?RV77;NZ2?0A!:6403>064:76?!47!R76437;!:68;T06d2!26A!74V03!30?1:32473=!124V7<06?b!
4V0!37;0!78!137c: 5 :4=!A040R473?!26A!R7642R4!?T3>0=?!47!A0?R3:Z0!4V0!?7R:2;! 5 :c:6<!78!?RV77;!2<0A!RV:;A306'!
" 7 8 8 9 : ; <! 0 *) C!) 7T?:6?!WBC!) 30112<0!%C! . 2;;7 [2=! " C! . TR;T!BC!D:!%C! - 7Z;0!#C! 937 [6! / C! $2:60=!WC!
$02A!WC! . 27!BC! * d:R26:6!&C!] TX74:RV!) W! / 3'C! j : 5 5 03! / + '!! " =62 5 :R?!78!U301230A60??'!! * 6:>03?:4=!78!
U:44?ZT3<V'!
!
EF'!! / 037130>2;06R0!78!A06<T0!: 5 5 T6:4=!2 5 76<! 5 T;4:1;0!?10R:0?!78!676NVT 5 26!13: 5 240?!:6! / 060<2;'!!
& 5 03:R26! / 7R:04=!78! (371:R2;! + 0A:R:60!26A!B=<:060'!! **" 7 8 8 9 : ; <! 0 *)** C!&;4V7T?0! 9 &C!) T 5 5 :6<?! " & (C!
. T03Z7:?! + C!&;4V7T?0! 9 + C! / 2;;!&&C! " :2;;7! + C! " :2;;7! " C! " :71! a C! 90608:4! 9C! / : 5 76?!#C! Y 244?! " + C! Y 02>03!
/) C!B26;0=!%&'!! !
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fEE'!!

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fKK'!] 23:2Z:;:4=!:6!A06<T0!4:403!0?4: 5 240?!837 5 !1;21T0!30ATR4:76!60T432;:d24:76!40?4?!17?0?!2!RV2;;06<0!47!
01:A0 5 :7;7<:R2;!?4TA:0?!26A!>2RR:60!A0>0;71 5 064'!/ 2;\0!B©!$7A3:<T0dN9 2332 l T03!,©!$2:6 [2403ND7>044!%©!
- :?2;2X!&©! (V2:?7 5 Z776?TX! 9©! (V7 5 2?! / WC!@03626A0d! / ©!W23 5 26!$. ©! ` 776!,%©! **" 7 8 8 9 : ;** <! **0 *)** =!
FHLK!

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fKQ'! Y V24!1371734:76!78!A06<T0!>:3T?!:680R4:76?!30?T;4!:6!67!2112306 4!A:?02?0q!) ;21V2 5 !B#©! **" 7 8 8 9 : ;** <!
0 *) ©!W7V26??76! + &'! FHLK!

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KG'!$0R76?43TR4:6<!4326? 5 :??:76!RV2:6?!78!:68;T06d2!2 5 76<!?RV77;!RV:;A306!T?:6<!A001!?01T06R:6<!26A!
5 T;4:1;0!?7T3R0?!78!R7642R4!:6873 5 24:76'! ! Y 2?V:6<476©! ") '! + 2='!FHLG'!

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KP'! " 06<T0!R7V734!R7 5 123:?76!137\0R4'!& 5 03:R26! / 7R:04=!78! (371:R2;! + 0A:R:60!26A!B=<:060'!&4;2642©!
. &' - 7>'!FHLG'!

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KI'!) 7330;24:76!78!) 7330R4:>0!#=0 [023!47!&RT40!$0?1:32473=!,680R4:76!J&$,M!& 5 76<! a T4124:064!
B02;4VR230!U03?7660;!JB) UM'!, " ! Y 00X'! - 0 [! a 3;026?©!D&'! a R4'!FHLG'!

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KO'!U30A:R4:6<!R7T64=N;0>0;!:68;T06d2!2R4:>:4=!T?:6<!?RV77;!2Z?06400:? 5 !A242!:6!&;;0<V06=!) 7T64=©!U&!
837 5 !FHLHNFHLQ'!, " ! Y 00X'! - 0 [! a 3;026?©!D&'! a R4'!FHLG'!

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QH'!,68;T06d2!26A! a 4V03!$0?1:32473=!] :32;!,680R4:76?!& 5 76<! / RV77;!) V:;A306!:6!U:44?ZT3<V©!U066?=;>26:2'!
, " ! Y 00X'! - 0 [! a 3;026?©!D&'! a R4'!FHLG'!

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QL'!] 064:;2473N&??7R:240A! / 421V=;7R7RRT?!2T30T?!26A!U?0TA7 5 762?!203T<:67?2!,680R4:76?!& 5 76<!
,6406?:>0!) 230! * 6:4!J,) * M!U24:064?!:6! / :c!B02;4VR230! / =?40 5 ?b! (0 5 1732;! (306A?!26A!$:?X!@2R473?'!, " !
Y 00X'! - 0 [! a 3;026?©!D&'! a R4'!FHLG'!

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QF'!&RT40!$0?1:32473=!,680R4:76?!J&$,?M!& 5 76<! a T4124:064!B02;4VR230!U03?7660;!JB) UM'!, " ! Y 00X'! - 0 [!
a 3;026?©!D&'! a R4'!FHLG'!

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QE'!U30A:R4:6<!R7T64=N;0>0;!:68;T06d2!2R4:>:4=!T?:6<!?RV77;!2Z?06400:? 5 !A242!:6!&;;0<V06=!) 7T64=©!U&!
837 5 !FHLHNFHLQ'!,6403624:762;! / 7R:04=!873! " :?02?0! / T3>0:;;26R0'!&66T2;! + 004:6<'!&4;2642©! " 0R'!FHLG'!

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QK'! * 4:;:4=!78! - 76432A:4:762;! " 242! / 7T3R0?!873!#23;=! " 040R4:76!78!,68;T06d2'!,6403624:762;! / 7R:04=!873!
" :?02?0! / T3>0:;;26R0'!&66T2;! + 004:6<'!&4;2642©! " 0R'!FHLG'!

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/ R:064:8:R!U30?06424:76?!J [:4V7T4!2Z?432R4?M!

L'! (: 5 0N?03:0?!A0R7 5 17?:4:76! 5 04V7A?!873!:680R4:7T?!A:?02?0!01:A0 5 :7;7<='!!

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F'! / 124:2;!R7V0306R0!26A!2??7R:24:76!78!40 5 10324T30©!32:682;;!26A!4V0!:6R:A06R0!78!A06<T0!V0 5 733V2<:R!
80>03!:6! (V2:;26A'!

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E'! + 7A0;:6<!60 [!>2RR:60?!873! 5 02?;0?'!

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FL'!! " 06<T0! 5 7A0;:6<!R76?734:T 5 b!&62;=?:?!78!) ` " FE!A242'!! / 2678:'!!FHLK'!!
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FF'!! / 124:740 5 1732;!1244036?!78! " 06<T0!26A!) V:XT6<T6=2!>:3T?'!! + , " & / !&66T2;! 5 004:6<'!FHLK'!!
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FE'!! + :AA;0!#2?4036! $0?1:32473=! / =6A37 5 0!J + # $ / Mb!,6>0?4:<24:6<!2! - 7>0;!) 73762>:3T?'! + , " & / !&66T2;! 5 004:6<'!FHLK'!! '!
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FK'!! / 124:2;!A=62 5 :R?!78!A06<T0!24! 5 T;4:1;0!?R2;0?'!! . 240?! . 326A!) V2;;06<0?! + 004:6<'!FHLK'!! !
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FQ'!! (326? 5 :??:76!A=62 5 :R?!78!A06<T0!24! 5 T;4:1;0!?R2;0?'! Y B a !) 76?T;424:76!76! " 06<T0! 9 T3A06'!FHLK'!!

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FG'!! $01734:6<!301T:30 5 064?'!! / 10R:8:R!301T:30 5 064?!873!A06<T0!:6403>064:76! 5 7A0;?'!! Y B a !) 76?T;424:76!76!4V0!: 5 12R4!78!A06<T0!>2RR:60?'!!FHLK'!!
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FP'!! (326? 5 :??:76!A=62 5 :R?!78!A06<T0!26A!: 5 5 T6:d24:76!: 5 12R4!24! 5 T;4:1;0!?R2;0?'! Y B a !) 76?T;424:76!76!4V0!: 5 12R4!78!A06<T0!>2RR:60?'!!FHLK'!!
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FI'!) V232R403:d:6<!#Z7;2! (326? 5 :??:76!26A! / T3>0:;;26R0!:6! Y 0?4!&83:R2'! / 7R:04=!873!#1:A0 5 :7;7<:R! $0?023RV'!WT60C!FHLQ'! '!
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FO'!, 5 5 T67;7<:R2;!;26A?R210?!78!:68;T06d2!:6!) V:62'!! - ,B!$&U, " " ! + 004:6<!76!D26A?R210!4V073=!:6!:680R4:7T?!A:?02?0!A=62 5 :R?'! / 0140 5 Z03C!FHLQ'! !
!
EH'! (306A?!:6!R2?0?!78!A06<T0!:6!:68264?b!:6?:<V4?!:647!?0374=10!A:880306R0?!:6!A:?02?0!:6!62:>0!26A!676N 62:>0!:6A:>:AT2;?!26A!171T;24:76!4326? 5 :??:76!A=62 5 :R?'!) ;21V2 5 !B#C! - :?2;2X!&C!%2;2=262377\! / C!

K'!U03:7A:R! (32>0;:6<! Y 2>0?!:6! " 06<T0!B0 5 733V2<:R!@0>03!,6R:A06R0!:6! (V2:;26A'!!!
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Q'!

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FH'! + 7A0;?!78!4V0!: 5 12R4!78!A06<T0!>2RR:60?b!2!30>:0 [!78!RT33064!30?023RV!26A!174064:2;!211372RV0?'!!!
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FL'! / [:60!BL - L!:68;T06d2!&b!4326? 5 :??:Z:;:4=C!624T32;!V:?473=!26A!4V0!174064:2;!: 5 12R4!78!676N
1V23 5 2R0T4:R2;!:6403>064:76?'!!!
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FF'! $0R064!8:6A:6<?!78!4326? 5 :??:76!A=62 5 :R?!78!A06<T0'!!!
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FE'! " =62 5 :R?!26A!624T32;!V:?473=!78!BL - L!:68;T06d2'!!!
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FK'! (V0!: 5 12R4!78!?124:2;!V04037<060:4=!:6!4V0!4326? 5 :??:76!78!A06<T0!76!4V0!?=6RV376=!78!:6R:A06R0'!
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FQ'! / 124:2;!>23:24:76!:6!4V0!4326? 5 :??:76!78!A06<T0!:6! (V2:;26Ab!4V0!37;0!78!A0 5 7<321V=!26A!A06?:4='!!!

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FG'! " 06<T0!] :3T?b! . ;7Z2;!4306A?C!R=R;0?!26A! [2>0?'
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FP'! / 124:2;!V04037<060:4=!:6!4V0!4326? 5 :??:76!78!A06<T0!24! 5 T;4:1;0!?124:2;!?R2;0?'!!!
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FI'! + 7A0;:6<!211372RV0?!:6!;76<N403 5 !?2804=!2??0?? 5 064!78!;:>0!24406T240A!A06<T0!>2RR:60?'! (0RV6:R2;!
R76?T;424:76!76!;76<!403 5 !?2804=!2??0?? 5 064!78!;:>0!24406T240A!A06<T0!>2RR:60?'!!

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FO'!, 5 5 T60!;26A?R210?!78!VT 5 26!:68;T06d2!:6!?7T4V036!) V:62b! (V0!@;T?R210!U37\0R4'!!!
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EH'! + 7A0;:6<!211372RV0?!:6!;76<N403 5 !?2804=!2??0?? 5 064!78!;:>0!24406T240A!A06<T0!>2RR:60?'!! (0RV6:R2;!
TQF (>) 24000 . 2412 5 8 9 . 92cmBT - 0 . 0024Tc4600462 5 0 - 1240Tm / TT6646 [(R76?) - 1 (T;ETJETQq0 . 24000 . 2412 5 8 9 . 92cmBT

EG'!! (V0!@;T?R210!?4TA='!! . T26<dV7T!) 06403?!873! " :?02?0!) 76437;'!!
!
EP'!! / 7R:2;! + :c:6<!26A!$0?1:32473=! (326? 5 :??:76!:6! / RV77;?! / 4TA='!!
!
!
EI'!! + :AA;0!#2?4036!$0?1:32473=! / =6A37 5 0!J + #$ / Mb!,6>0?4:<24:6<!2! - 7>0;!) 73762>:3T?'!!W7V6?!B71X:6?!
B02;4V!&A>:?73=!9723A'!FHLE'!!
!
EO'!! / 7R:2;! + :c:6<!26A!$0?1:32473=! (326? 5 :??:76!:6! / RV77;?'!! * / !) 06403?!873! " :?02?0!) 76437;'!!FHLE'!
!
!
KH'!! a 11734T6:4:0?!26A!RV2;;06<0?!47!43024 5 064!2?!130>064:76!211372RV0?!873!B0124:4:?!) !>:3T?!R76437;'!!
W7V6?!B71X:6?! * 6:>03?:4=!) 06403!873!&, " / !$0?023RV'!FHLK'! !
!
KL'!!$0>:0 [!78! " 06<T0! + 7A0;?'!! Y V:40!B7T?0! a 88:R0!78! / R:06R0!26A! (0RV67;7<=!U7;:R=! 5 004:6<!76!
,640<324:6<!U30A:R4:76!26A!@730R2?4:6<! + 7A0;?!873! " 0R:?:76N 5 2X:6<b! " 06<T0!#1:A0 5 :R!U30A:R4:76'!!FHLK'!!

KF'!!U74064:2;!711734T6:4:0?!26A!103:;!78!: 5 10380R4!A06<T0!>2RR:60?'!!W7V6?!B71X:6?! + 0A:R2;! / RV77;'!
FHLK'!! '!
!
KE'!!] 064:;2473!&??7R:240A!U60T 5 76:2!2 5 76<!,) *!124:064?b! / '!2T30T?!26A!U?0TA7 5 762?!?11'!!
+ 0A: 5 5 T60'!FHLK'!!
!
KK'!!&??0??:6<!;7R2;!4326? 5 :??:76!78!#Z7;2!>:3T?!:6!D:Z03:2'!!, 5 103:2;!) 7;;0<0'!FHLK'! !
!
KQ'!! / 124:2;!A=62 5 :R?!78!A06<T0!26A!>2RR:60! 5 7A0;?'!!$7=2;! / 7R:04='!!FHLK'!
!
KG'! / 124:2;!?R2;0?!78!:68;T06d2!: 5 5 T6:4=b!$0?T;4?!837 5 !4V0!@;T?R210!137\0R4'!!$&U, " " ! . 37T1'!!FHLQ'!

!
KP'!!U30A:R4:76!78!A06<T0!:6R:A06R0!:6! (V2:;26A'!! " :?02?0!@730R2?4:6<! . 37T1'! Y V:40!B7T?0'!!FHLQ'!

KI'!! (0 5 1732;!>23:24:76!:6!A06<T0!R2?0!6T 5 Z03?!26A!30;24:76!47!R;: 5 240!26A!T?:6<!2<0!47! 5 21!V2d23A?!78!
:680R4:76'!! Y B a ! " 06<T0! . ;7Z2;! 9 T3A06! + 004:6<'!FHLQ'!

KO'!, 5 5 T67;7<:R2;!;26A?R210?!78!:68;T06d2!:6!) V:62'!! - ,B!$&U, " " ! + 004:6<!76!D26A?R210!4V073=!:6!
:680R4:7T?!A:?02?0!A=62 5 :R?'! / 0140 5 Z03C!FHLQ'!

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QK'!

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U7?4N

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- :RV7;2?!$0:RV!! ! ! ! ! ! ! FHLHNFHLL!
) T33064!U7?:4:76b!&??7R:240!U3780??73C!*6:>03?:4=!78!+2??2RVT?044?C!9:7?424:?4:R?!
!
WT?4:6!D0??;03! ! ! ! ! ! ! ! FHHINFHLL!
) T33064!17?:4:76b!&??7R:240!U3780??73C!W7V6?!B71X:6?!9;77 5 Z03<!/RV77;!78!UTZ;:R!B02;4V!
!
) 23;!D2:3A! ! ! ! !! ! ! ! FHHPNFHHI!!
) T33064!U7?:4:76b!&??7R:240!U3780??73C!(0c2?!&v +!*6:>03?:4=C!"01234 5 064!78!) V0 5 :R2;!#6<:6003:6<!
!
!
UV "!!

[:6403!78!FHLFNFHLE!
!
W2R7Z!) 230=! ! ! + / !:6!#1:A0 5 :7;7<=! ! ! FHLKNFHLG

B0:A:!B2;;526!!! ! +B/!:6!,6403624:762;!B02;4V!! ! FHHG!
! !
%3:?4:6!%0;;:6<!!!!! ! +B/!:6!,6403624:762;!B02;4V!! ! FHHQ!
!
&;0c!$T26! ! ! *6A03<32AT240!:6!UTZ;:R!B02;4V!! FHLF!
!

-250! ! "240!
!!
(2;:2!oT26A0;2R=! ! UV"! FHLQ!
$0ZORR2!U:03R0f! ! UV"! FHLK!
&6A30[!&d526!! ! UV"!! FHLF!
B063:X!/2;\0! ! ! UV"! FHLL!
,?2Z0;!$7A3:<T0dN92332lT03!! UV"! FHLL!
906\25:6!&;4V7T?0! ! UV"!! FHLH!
/TNB?T6!D:T! ! ! UV"!! FHHO!
&526A2!D24:5730! ! UV"!! FHHP!
93:A<04!&5Z37?0! ! UV"!! FHHG!
!

!
/V0;A76!Y2T<V!! ! UV"! #1:A05:7;7<=! ! ! ! FHLP!
UT625!&5324:2!! ! UV"! @730?4!$0?7T3R0?!26A!)76?03>24:76! FHLP!
/401V26:0!):6X7>:RV! ! UV"! 9:7;7<=! ! ! ! FHLP!
W2R7Z!92;;! ! ! UV"! #1:A05:7;7<=! ! ! ! FHLG!
(2;:2!oT26A0;2R=! ! UV"! #1:A05:7;7<=! ! ! ! FHLQ!
+23:25!@78262!! ! UV"!! #1:A05:7;7<=! ! ! ! FHLK!
B7;;=!/RVTV! ! ! UV"! ,6403624:762;!B02;4V! ! ! FHLK!
%3:?406!D:44;0! ! ! UV"!! #1:A05:7;7<=! ! ! ! FHLK!
BT:476<!oT:! ! ! UV"! 9:7?424:?4:R?! ! ! ! FHLK!
+T8237!%26=26<23232! ! UV"! ,6403624:762;!B02;4V! ! ! FHLK!
,26!)32:<! ! ! UV"! ,6403624:762;!B02;4V! ! ! FHLE!
W0??:R2!&4[0;;! ! ! UV"! ,6403624:762;!B02;4V! ! ! FHLE!
$:R23A7!)2?4:;;7! ! UV"! #1:A05:7;7<=! ! ! ! FHLF!
&6A30[!&d526!! ! UV"! #1:A05:7;7<=! ! ! ! FHLF!
906\25:6!&;4V7T?0! ! UV"! #1:A05:7;7<=! ! ! ! FHLF!
.060>:0>0!Y7\R:X! !! UV"! #1:A05:7;7<=! ! ! ! FHLL!
+:RV0;;0!+03<:03f! ! UV"!! ,6403624:762;!B02;4V! ! ! FHLL!
&;:?76!(T36ZT;;f! ! UV"!! #1:A05:7;7<=! ! ! ! FHLL!
#5:;=!.T3;0=! ! ! UV"! #1:A05:7;7<=! ! ! ! FHLL!
B063:X!/2;\0! ! ! UV"! #1:A05:7;7<=! ! ! ! FHLL!
/TNB?T6!D:T!! ! ! UV"! #1:A05:7;7<=! ! ! ! FHLL!
&526A2!D24:5730!! ! UV"! #1:A05:7;7<=! ! ! ! FHLH!
W250?!/423X! ! ! UV"! #1:A05:7;7<=C!*6:>03?:4=!78!U:44?ZT3<V! FHLH!
,?2Z0;!$7A3:<T0dN92332lT03! UV"! #1:A05:7;7<=! ! ! ! FHLH!
-:X7;2?!Y2A2f!! ! UV"! #1:A05:7;7<=! ! ! ! FHLH! !
&A3:0660!/V21:37! ! UV"! #1:A05:7;7<=!! ! ! ! FHHO!
93:A<04!&5Z37?0!! ! UV"! #1:A05:7;7<=!! ! ! ! FHHI!
Y:;;05!>26!U26VT:?! ! UV"! ,6403624:762;!B02;4V! ! ! FHHI!

- :RV7;2?!$0:RV!! ! UV"! 9:7?424:?4:R?!

,68;T06d2!, 5 5 T6:4=!26A! / T3>:>2;!:6!&<:6<!U71T;24:76?!
HO_HL_LQNHI_EL_FHLPC! * / ! - , B! $QG! (742;!2 [23A!47! * @!?TZR76432R4b!xFGCEOQ!
U3:6R:12;!,6>0?4:<2473b!WT?4:6!D0??;03C! " 030X!) T 5 5 :6<?!J;7R2;!U,M!
U3: 5 23=! . 72;b!! ! (V:?!?4TA=!2: 5 ?!47!T6A03?426A!V7 [!26A! [V=!4V:?!:6R302?0!:6!264:Z7A=!4:403?!
7RRT3?C!26A! [V24!37;0!?T3>:>2;!0880R4?C!12440 36?!78!:680R4:76!26A!4V0!Z:7;7<=!78!4V0!: 5 5 T60!30?176?0!7>03!
5 T;4:1;0!:680R4:76?!1;2=!:6!:4?!A0>0;71 5 064'!
$7;0b!

HO_HL_LKNHI_EL_LGC! - ,B!!
U3:6R:12;!,6>0?4:<2473?b! " 030X!) T 5 5 :6<?!J;7R2;!U,MC! - :RX! $ 0:RV!J7>032;;!U,M!
@T6A:6<!D0>0;b!! L'QG!R2;06A23! 5 764V?!
U3: 5 23=! . 72;b!! " 0>0;71!:680306R0!832 5 0 [73X!47!0?4: 5 240!:64032R4:76?!78! 5 T;4:1;0!124V7<06?!4V24!
R7NR:3RT;240!26A!:6ATR0!: 5 5 T60!30?176?0?!4V24! 5 :<V4!R30240!R7 5 104:4:>0!26A_73!
06V26R:6<!30;24:76?V:1?'!
$ 7;0b!! ! ! ,6>0?4:<2473!

+ 7A0;:6<!78!:680R4:7T?!A:?02?0g!&!?4TA=!78!301024!:68;T06d2!>2RR:624:76C!26A!V7 [!171T;24:76!Z2?0A!
: 5 5 T6:4=!: 5 12R4?!4V0!<0604:R! 5 2X0T1!78!A06<T0!>:3T?0?'!
HK_HL_LKNO_EH_FHLGC! Y $&, $!

LH_L_HINHO_EL_LEC! - ,B!
U3:6R:12;!,6>0?4:<2473b!! /R744!Y02>03!! ! ! ! ! ! !
@T6A:6<!D0>0;b!! L'I!R2;06A23!5764V?!
U3:5 23=!.72;b!! (V0!<72;!78!4V:?!137\0R4!:?!47!?4TA=!4V0!A=62 5 :R?!78!4326?5 :??:76!78!A06<T0!26A!
RV:XT6<T6=2!>:3T?!2 5 76<!676NVT 5 26!13:5 240!?10R:0?!:6!/060<2;!26A!A0403 5 :60!
[V:RV!?10R:0?!?T11734!4326?5 :??:76!78!4V0?0!>:3T?0?!06A0 5 :R2;;=!26A![V:RV!760?!
211023!47!Z0!76;=!?1:;;7>03!?10R:0?'!
$7;0b!! ! ! ,6>0?4:<2473!
!
+T;4:N/R2;0!+7A0;:6<!78!,680R4:7T?!"":?02?0?!:6!@;TR4T24:6<!#6>:376 5 064?!!
HO_HL_HO!^!HI_EL_LEC! - ,B!
U3:6R:12;!,6>0?4:<2473b!! "030X!)T 5 5:6<?C!D732!9:;;:6<?!JR7M!
@T6A:6<!D0>0;b!! H'G!R2;06A23!5764V?! ! ! ! ! ! !
U3:5 23=!.72;b!! (V0!7Z\0R4:>0!78!4V:?!13717?2;!:?!47!A0>0;71!60 [!5 24V0 5 24:R2;!5 7A0;?!78!
:680R4:7T?!A:?02?0!4326?5 :??:76!4V24!0880R4:>0;=C!R214T30!4V0!:5 12R4!78!
?47RV2?4:R:4=!76!A=62 5 :R?!26A!;02A!47!5 730!0880R4:>0!R7637;'!(V0!<37T1![:;;!
?4TA=!4V0!A=62 5 :R?!78!A:?02?0!?1302A!:6!8;TR4T24:6<!06>:376 5 064?!5 7A0;0A!24!
>23:7T?!171T;24:76!?R2;0?'!!
$7;0b!!)7NU3:6R:12;!,6>0?4:<2473!
!
U301230A60??!26A!)242?4371V:R!#>064!$0?176?0!JU&)#$M!
HG_HL_HO!^!HQ_EL_LFC!*/!A01234 5 064!78!B7 5 0;26A!/0RT3:4=!
U3:6R:12;!,6>0?4:<2473b!! .2Z0!%0;06!! ! ! ! ! ! !
@T6A:6<!D0>0;b!! H'LF!R2;06A23!5764V?!
U3:5 23=!.72;b!! U&)#$!:?!2!R76?734:T 5 !78!30?023RV!:6?4:4T4:76?!?4TA=:6<!V7 [!4V0!624:76!R26!Z0?4!
1301230!873!26A!30?176A!47!174064:2;!;23<0N?R2;0!:6R:A064?!26A!A:?2?403?'!!+=![73X!
76!4V:?!137\0R4!:?!76!5 7A0;!A0>0;71 5 064!873!126A0 5 :R!:68;T06d2!5 7A0;?!
1234:RT;23;=C!5 04V7A?!873!1232 5 0403!0?4:5 24!266 - 90.24000.2412 5 89.7(:) - 17(X0.2412 5 89.9

HK_HL_HK!^!HK_HL_HO! - ,BN - , . + /!
U3:6R:12;!,6>0?4:<2473b!! " 76!9T3X0!!! ! ! ! ! ! ! !
@T6A:6<!D0>0;b!! K'F!R2;06A23!5 764V?! !! ! ! ! !!
U3: 5 23=! . 72;b!! ,640<3240!4V0! 5 7?4!2A>26R0A!26A!17 [038T;!40RV6:1T0?!78!01:A0 5 :7;7<:R2;!!A242!!
! 262;=?:?! [:4V!4V7?0!78!R7 5 1T403!?: 5 T;24:76!47!137ATR0!2!T6:8:0A!! R7 5 1T424:762;!
! 01:A0 5 :7;7<='!
$7;0b!! U37<32 5 !) 773A:62473!26A!,6>0?4:<2473!
!
U:44?ZT3<V!,68;T06d2!U30>064:76!U37<32 5 !!
LH_HL_HG!N!HO_EL_HI!) ")!
U3:6R:12;!,6>0?4:<2473b!! " 76!9T3X0!! ! ! ! ! ! ! !
@T6A:6<!D0>0;b!!! H'G!R2;06A23! 5 764V?!
U3: 5 23=! . 72;b!! ! /4TA=!4V0!4326? 5 :??:76!A=62 5 :R?!78!:68;T06d2!:6!U:44?ZT3<V!0;0 5 06423=!!

! ! ! :6437ATR4:76!:647!4V0!*/&C!26A!78!1TZ;:R!V02;4V!?43240<:0?!47!R7642:6!! !
! ! ! ?52;;17c!01:A05:R?'!!
$7;0b!! ! ! ,6>0?4:<2473!!
!
B23 5 76:R!"0R76?43TR4:76!:6!4V0!&62;=?:?!78!#1:A05:7;7<:R!26A!);:5 24:R!"242'!!!
HI_HL_HF!^!HP_EL_HEC!-a&&! !!
U3:6R:12;!,6>0?4:<2473b!! "76!9T3X0! ! ! ! ! ! !!
@T6A:6<!D0>0;b!!

,680R4:7T?!A:?02?0C!A=62 5 :R?C!:68;T06d2C!A06<T0C! 5 02?;0?C!V0124:4:?!) C!0Z7;2C!?7R:2;!A=62 5 :R?C!>2RR:60N
130>0642Z;0C! 5 24V0 5 24:R2;! 5 7A0;?C!0R7;7<=!