Appendix R AIR QUALITY/HEALTH RISK ASSESSMENT MAPS

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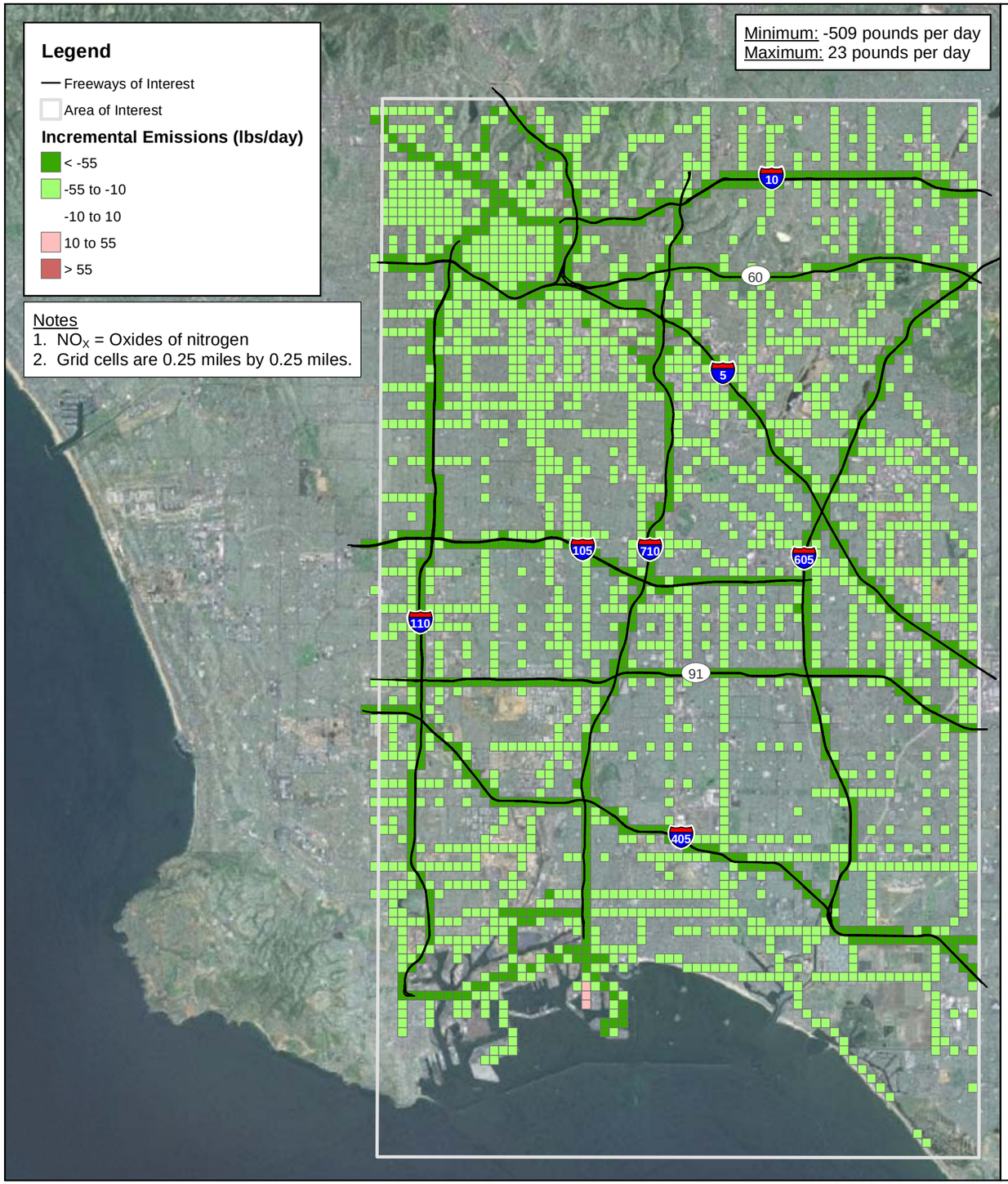

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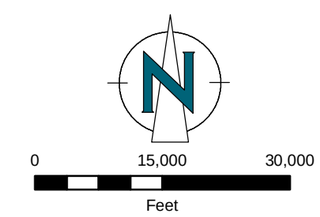

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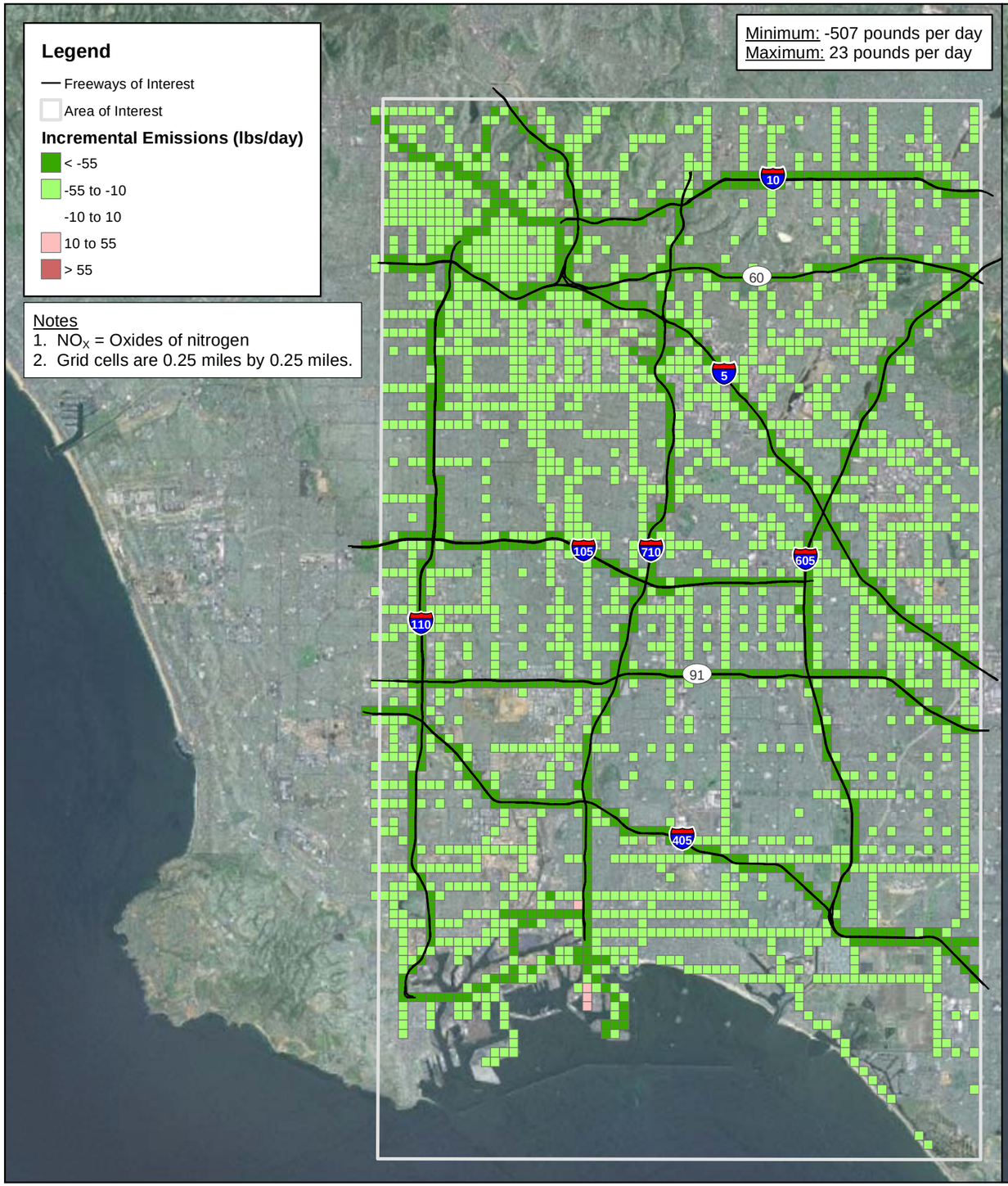
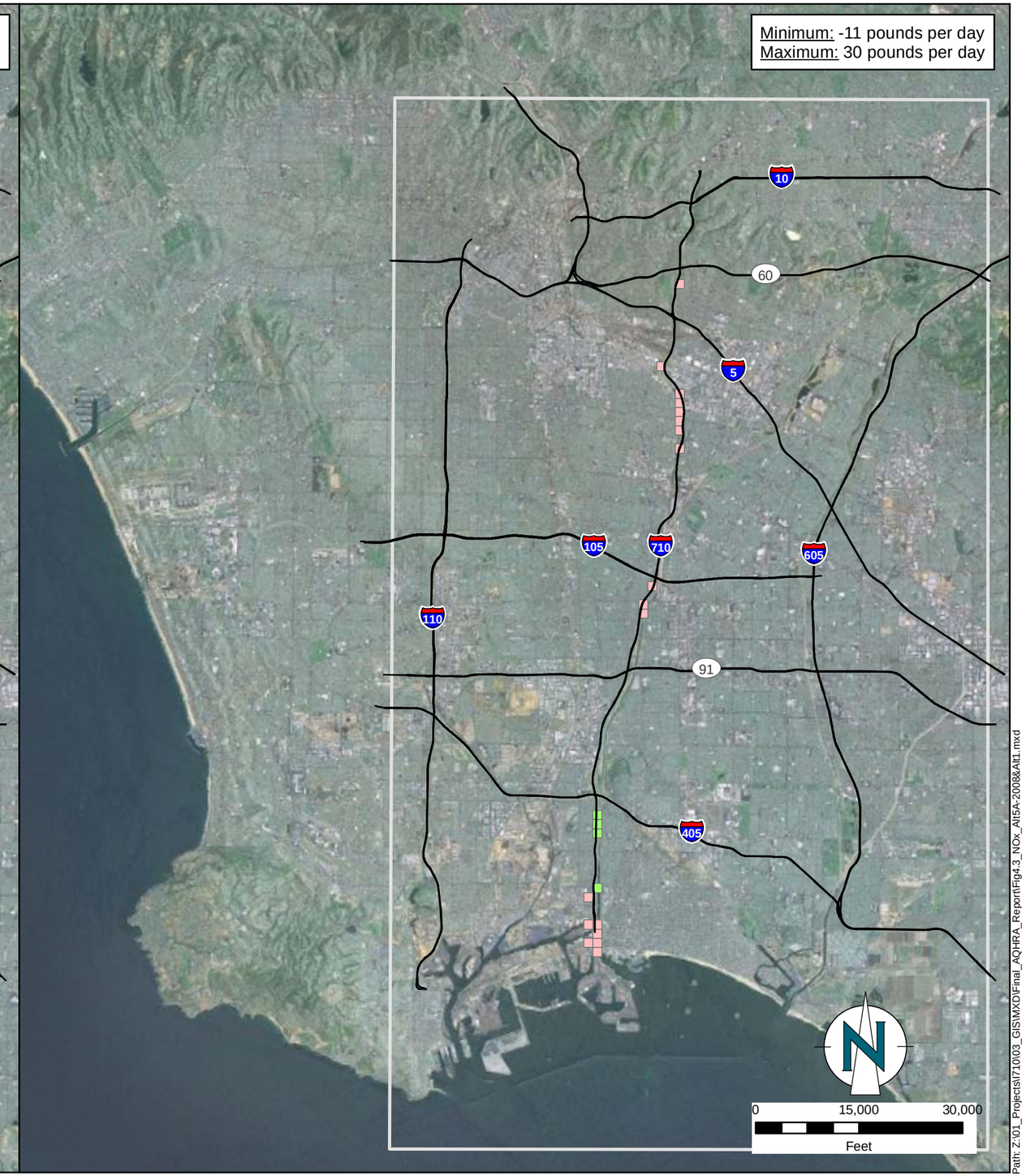
Comparison of
2035 Alternative 1 to 2008 Baseline
NO_X Emissions

Figure
4.2

PROJECT: 05-18574E4





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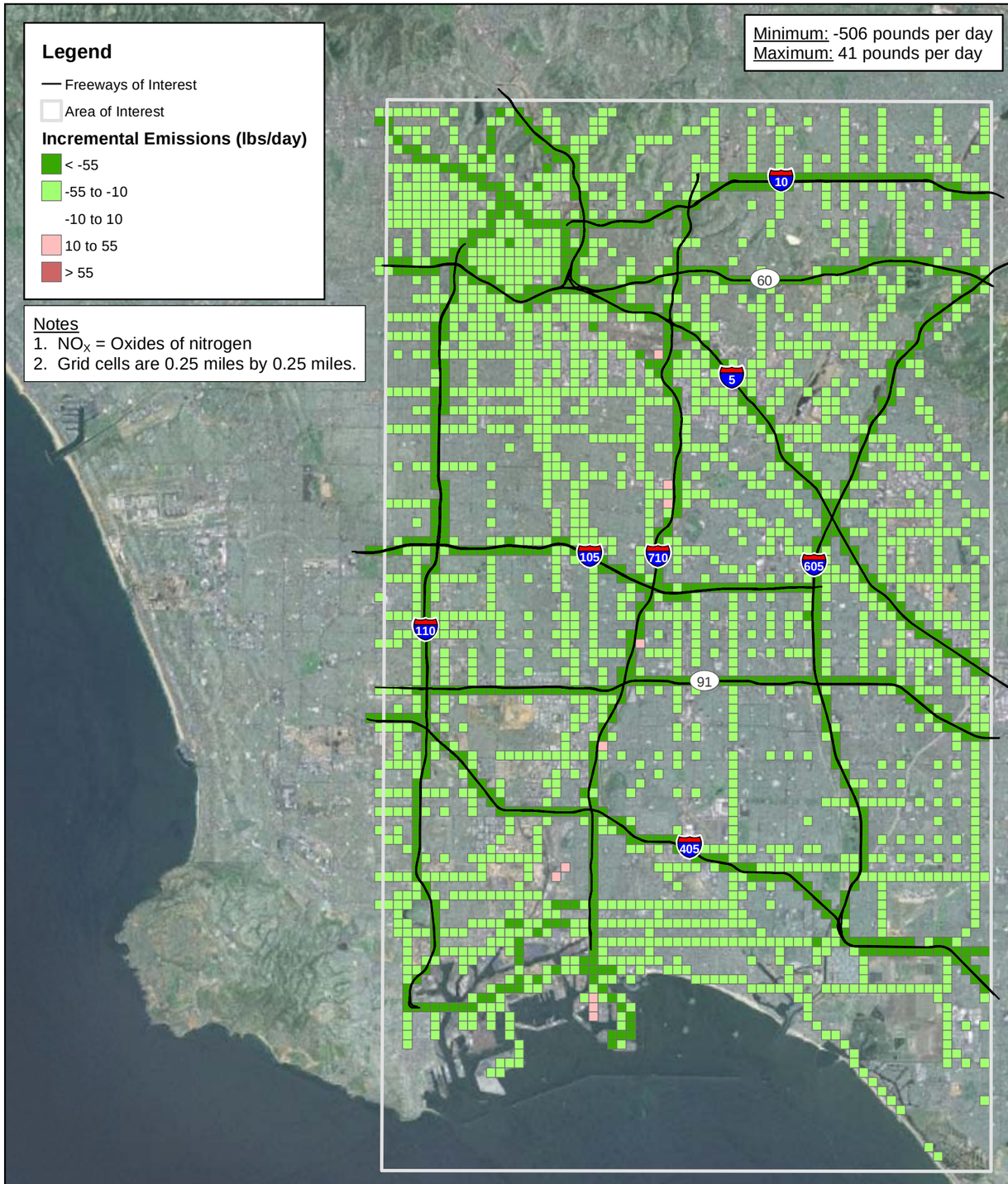
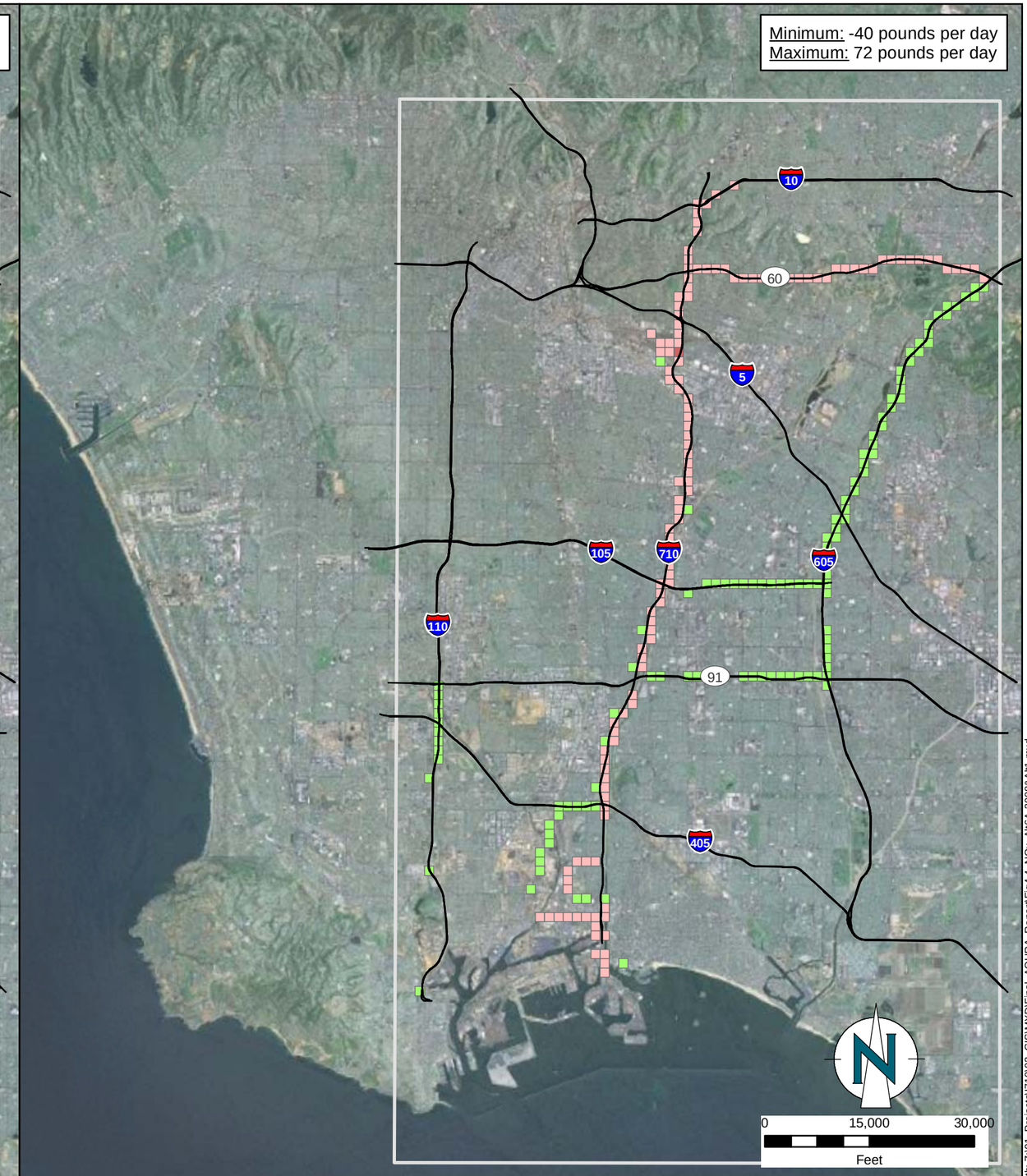
Comparison of
2035 Alternative 5A to 2008 Baseline
NO_X Emissions

Comparison of
2035 Alternative 5A to 2035 Alternative 1
NO_X Emissions

Figure
4.3

PROJECT: 05-18574E4





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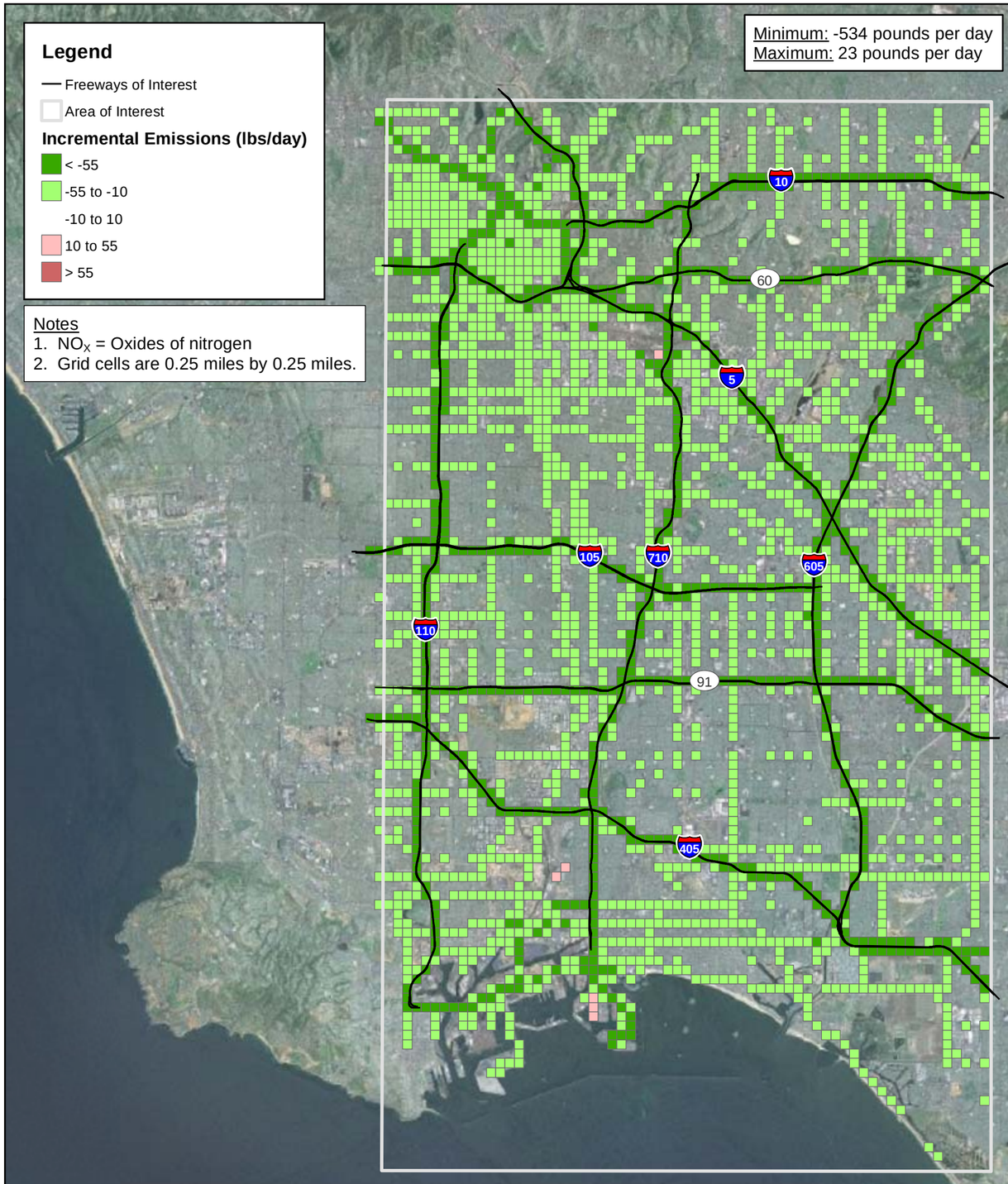
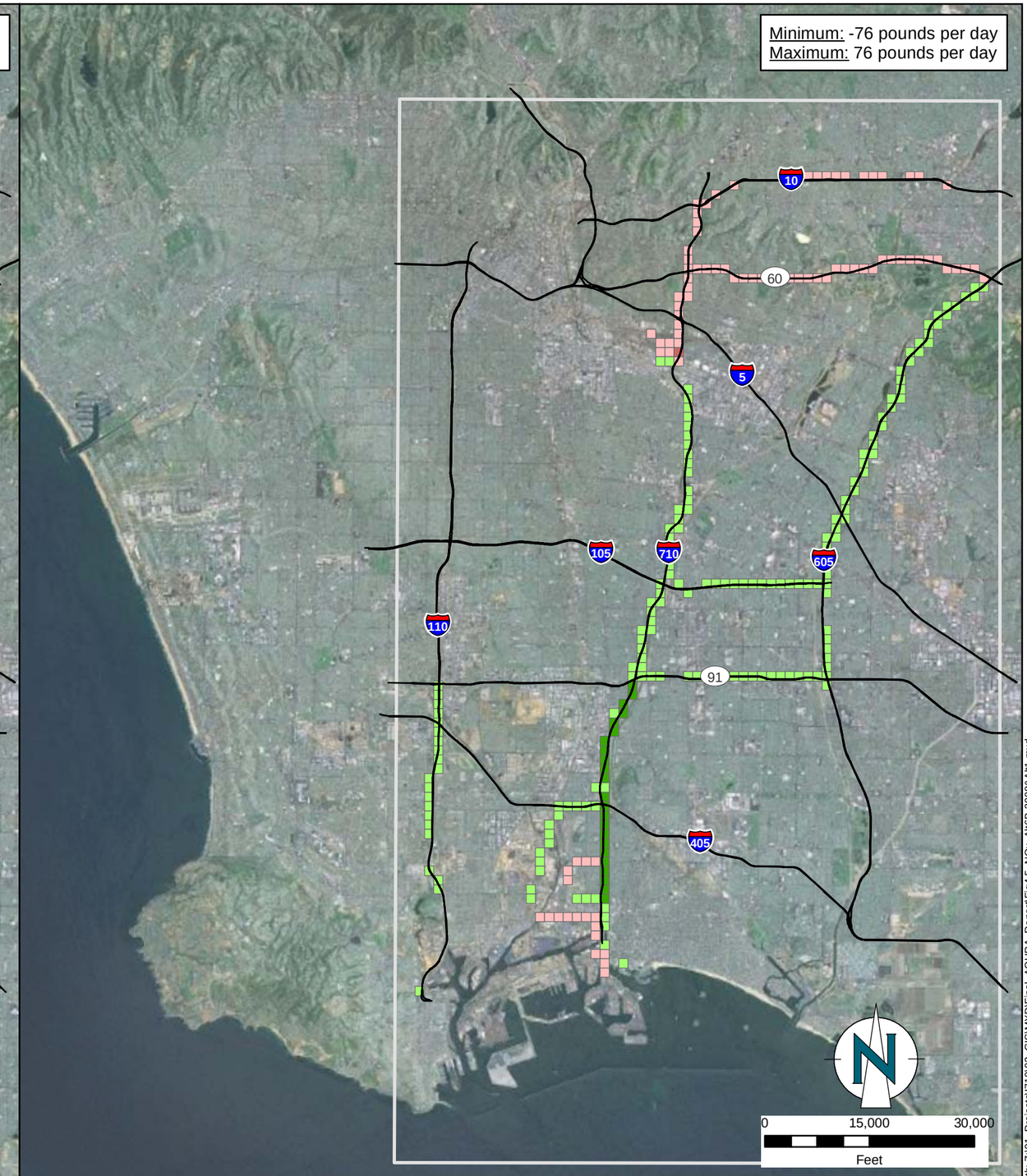
Comparison of
2035 Alternative 6A to 2008 Baseline
NO_X Emissions

Comparison of
2035 Alternative 6A to 2035 Alternative 1
NO_X Emissions

Figure
4.4

PROJECT: 05-18574E4





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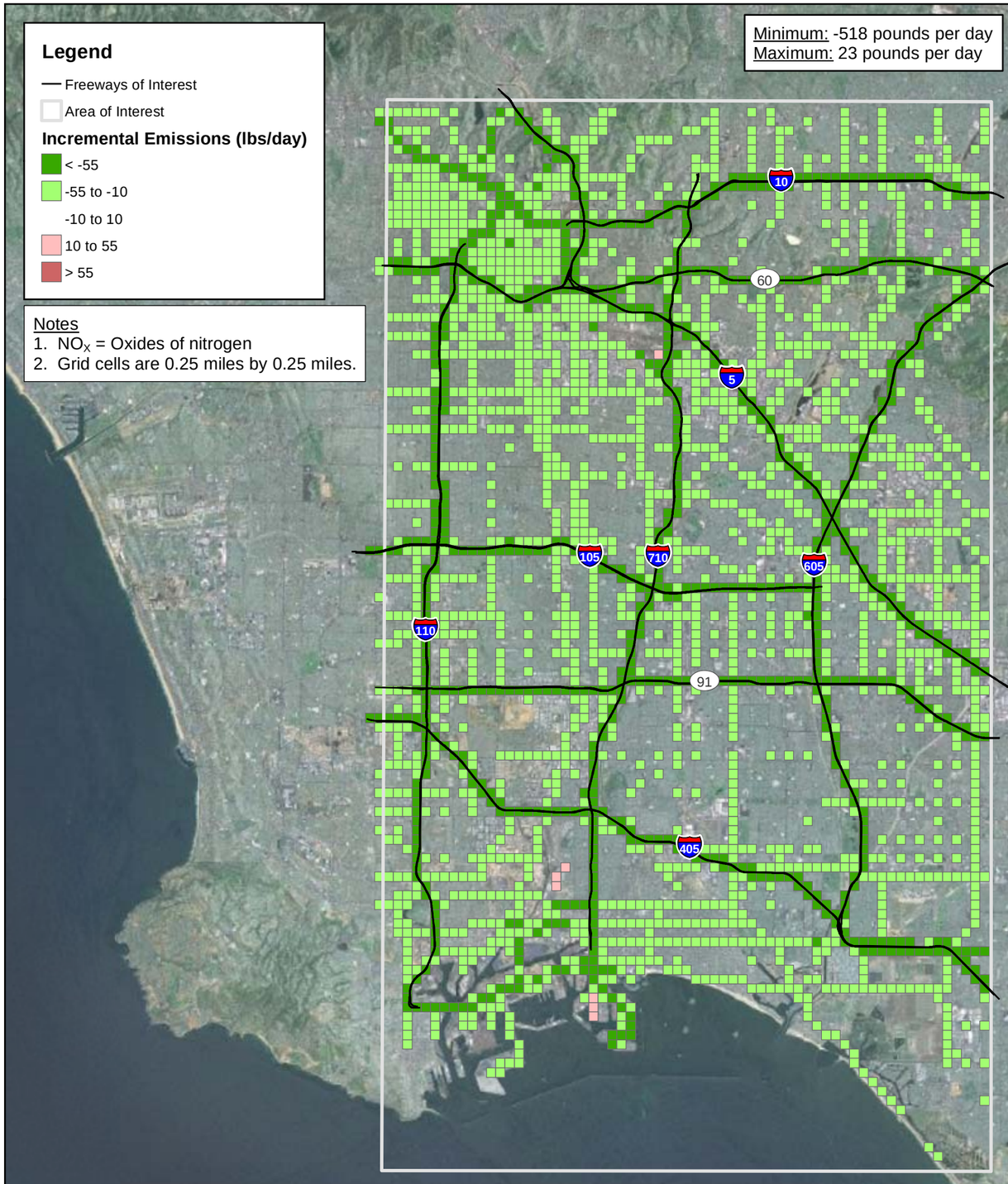
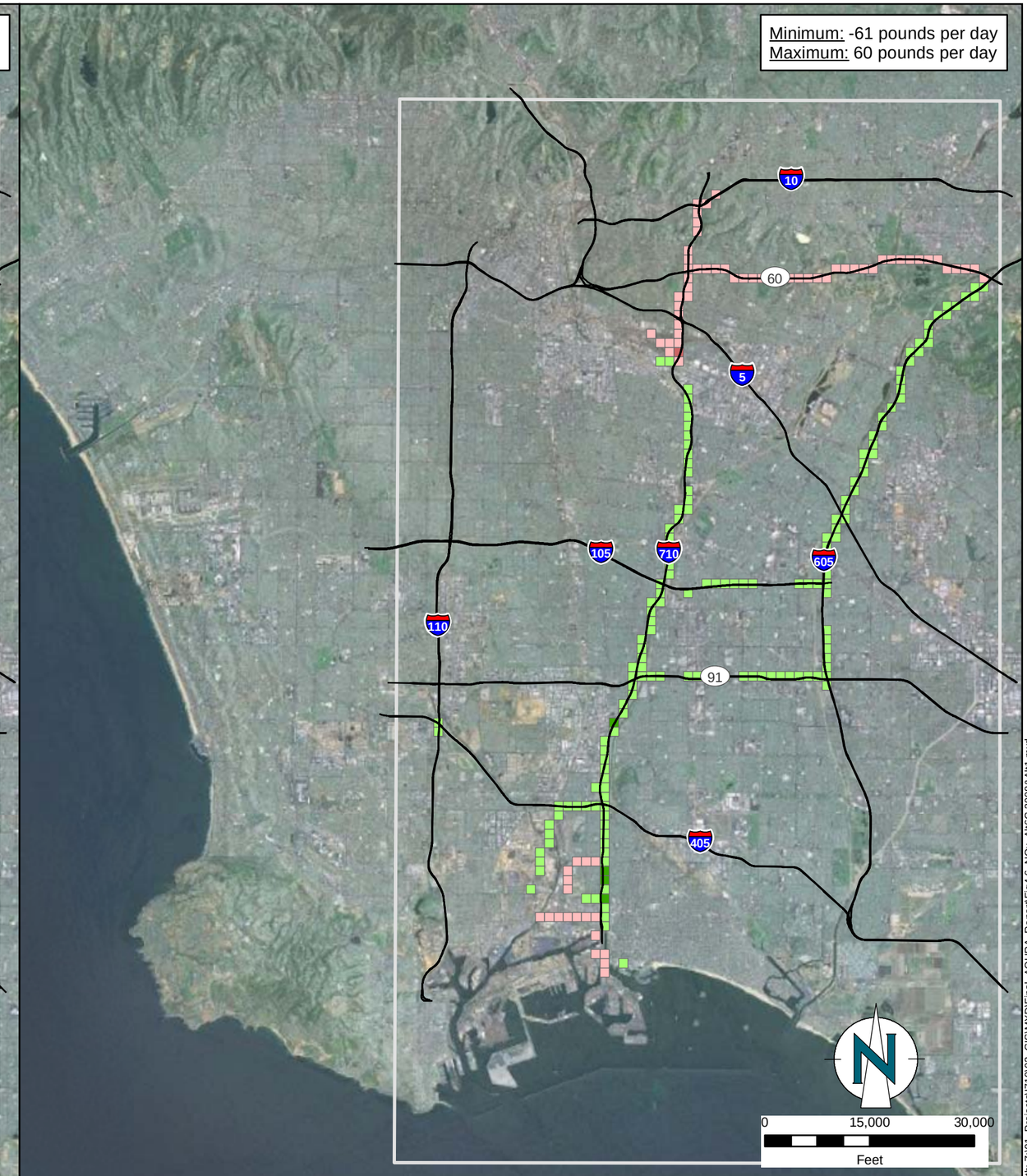
Comparison of
2035 Alternative 6B to 2008 Baseline
NO_X Emissions

Comparison of
2035 Alternative 6B to 2035 Alternative 1
NO_X Emissions

Figure
4.5

PROJECT: 05-18574E4





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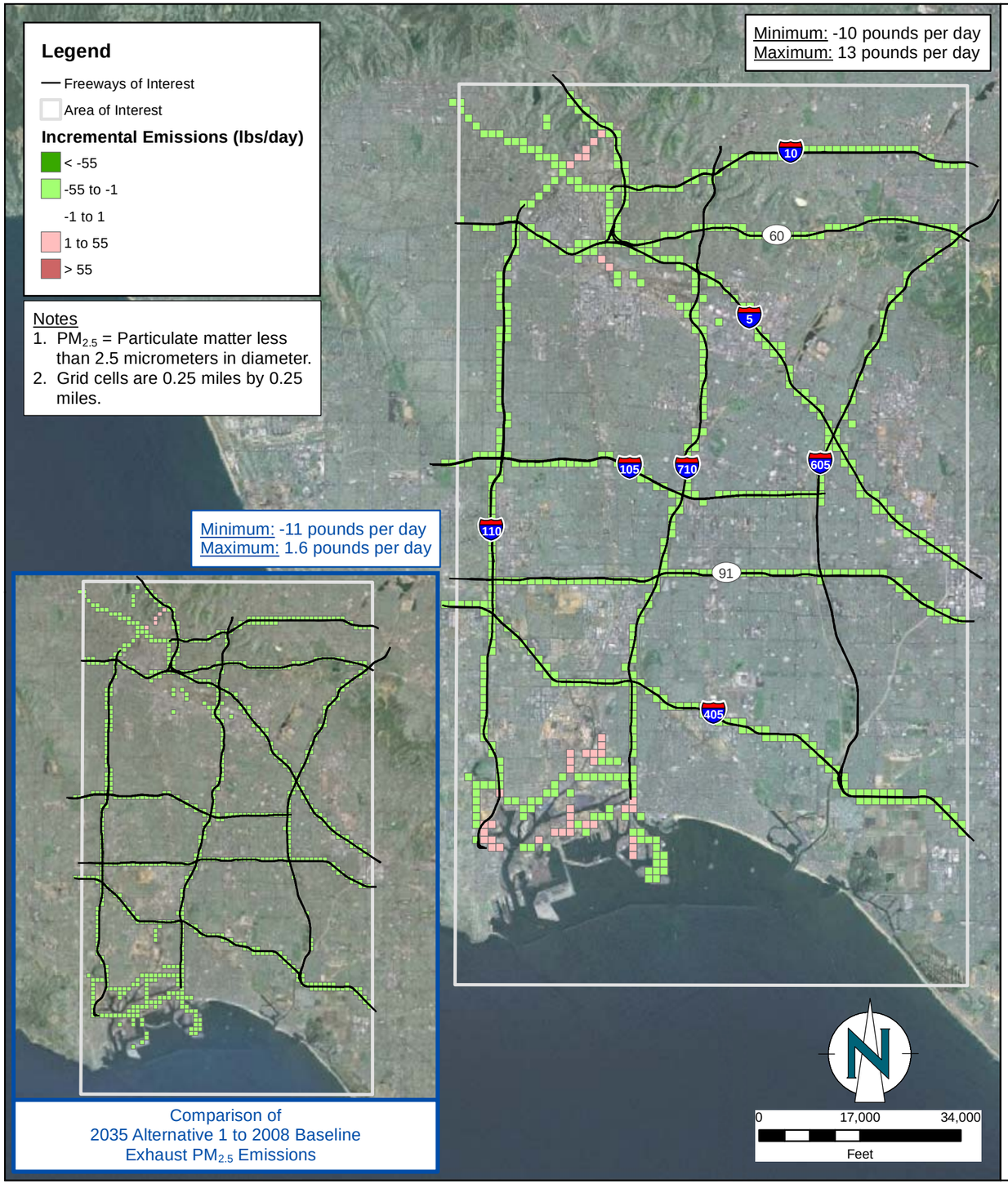
Comparison of
2035 Alternative 6C to 2008 Baseline
NO_X Emissions

Comparison of
2035 Alternative 6C to 2035 Alternative 1
NO_X Emissions

Figure
4.6

PROJECT: 05-18574E4



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ENVIRON

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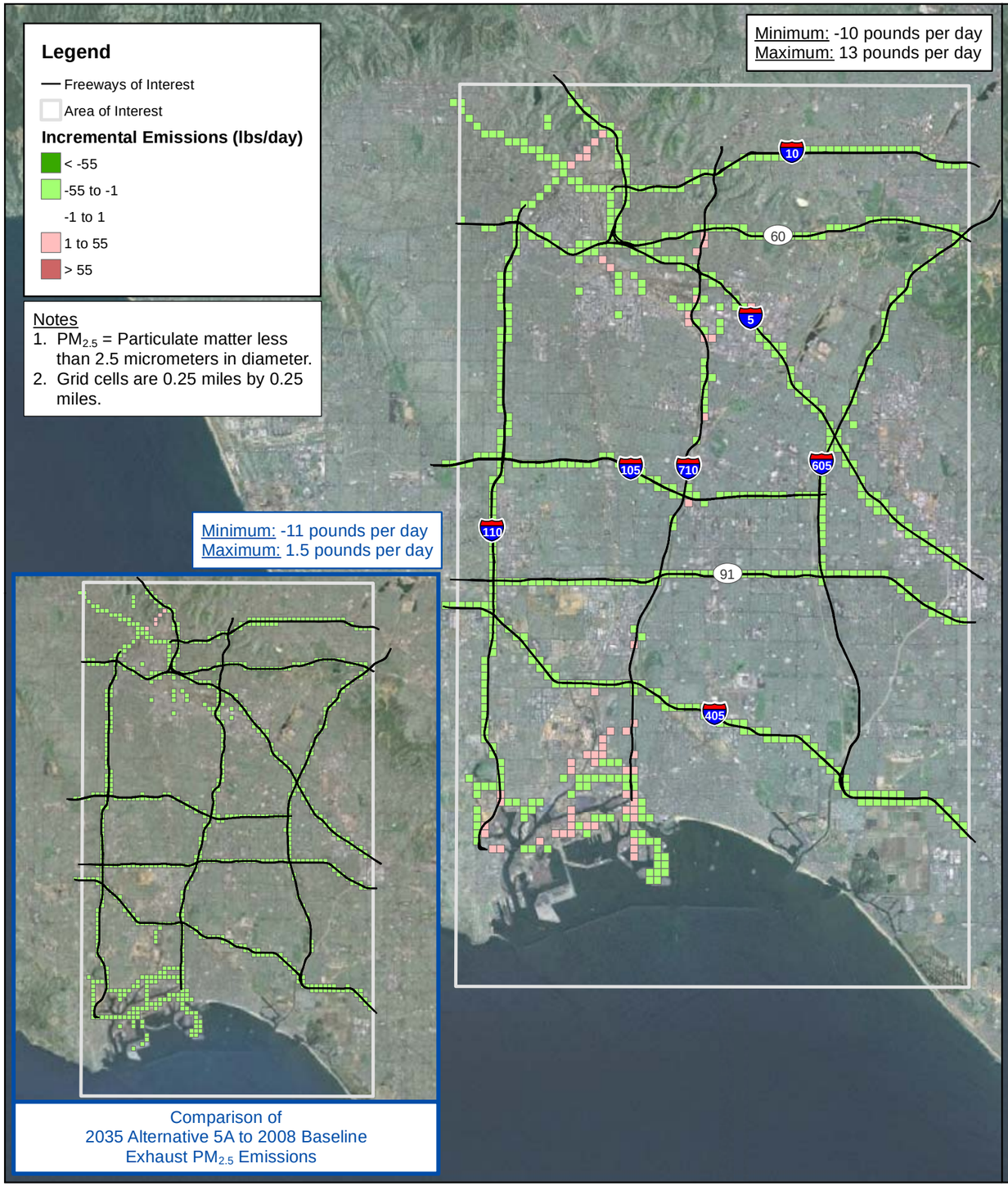
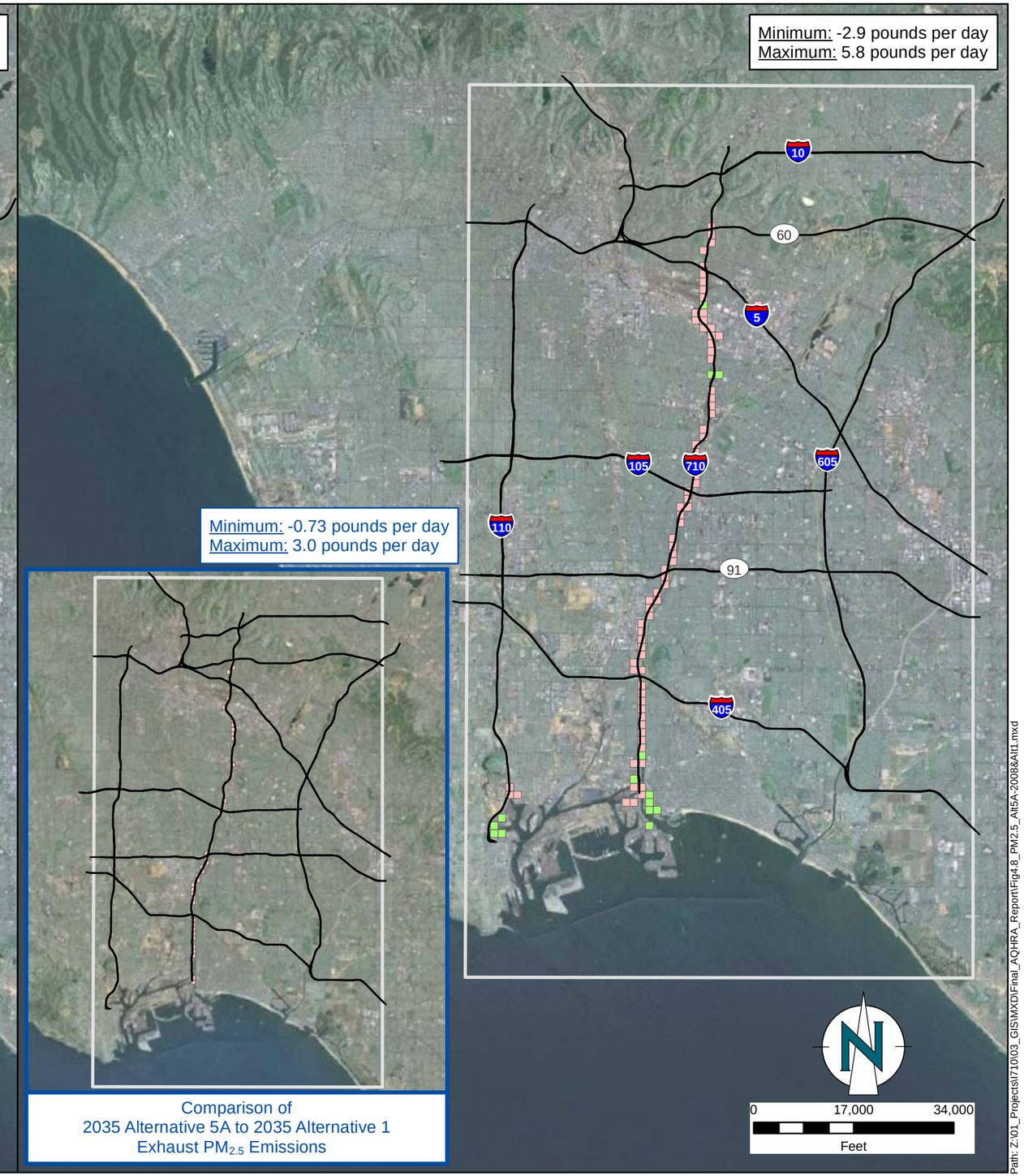
Comparison of
2035 Alternative 1 to 2008 Baseline
Total $PM_{2.5}$ Emissions

Figure
4.7

PROJECT: 05-18574E4



Comparison of
2035 Alternative 5A to 2008 Baseline
Exhaust $PM_{2.5}$ Emissions



Comparison of
2035 Alternative 5A to 2035 Alternative 1
Exhaust $PM_{2.5}$ Emissions

Path: Z:\01_Projects\I710\03_GIS\MXD\Final_AQHRA_Report\Fig4.8_PM2.5_Alt5A-2008&Alt1.mxd

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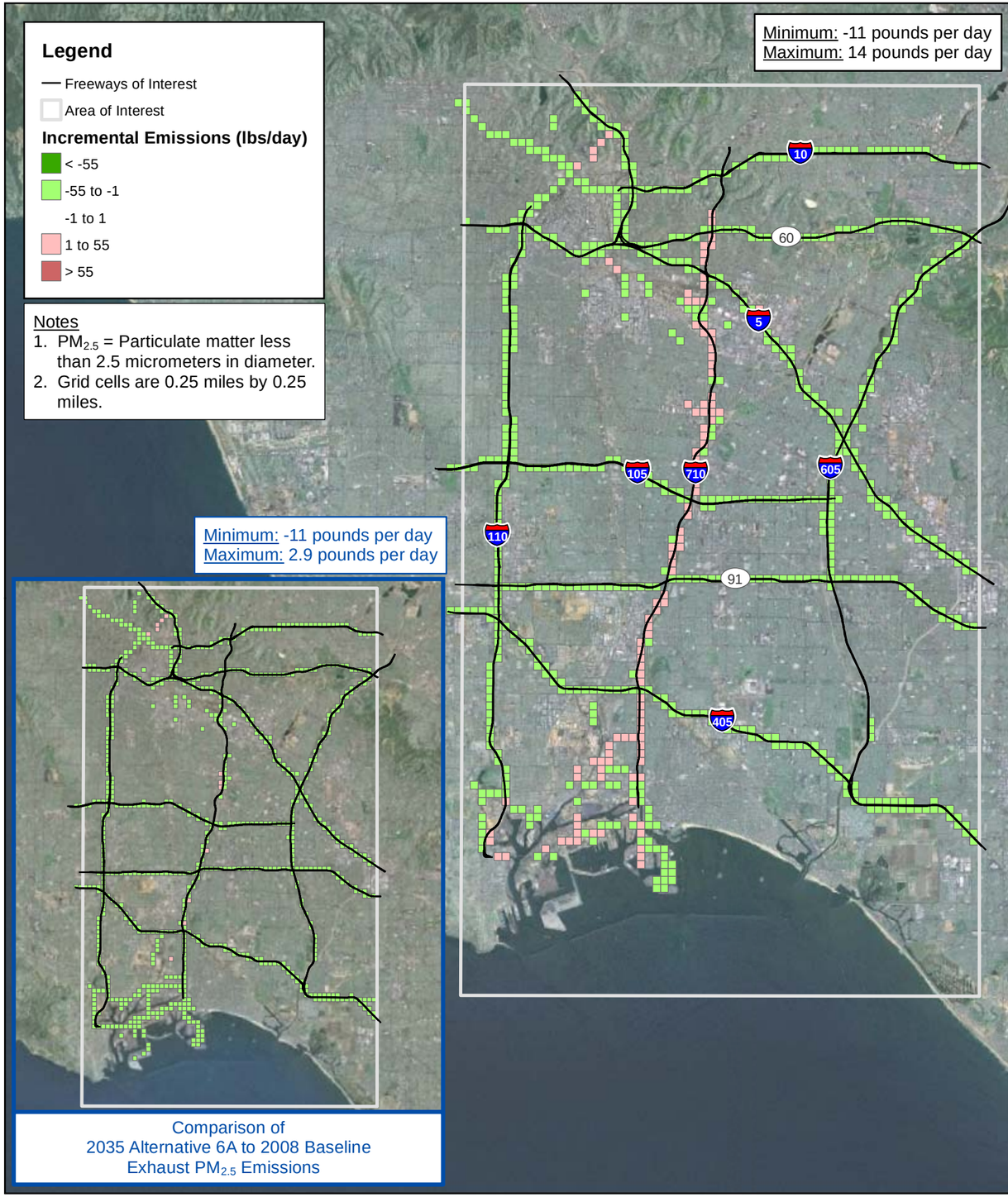
Comparison of
2035 Alternative 5A to 2008 Baseline
Total $PM_{2.5}$ Emissions

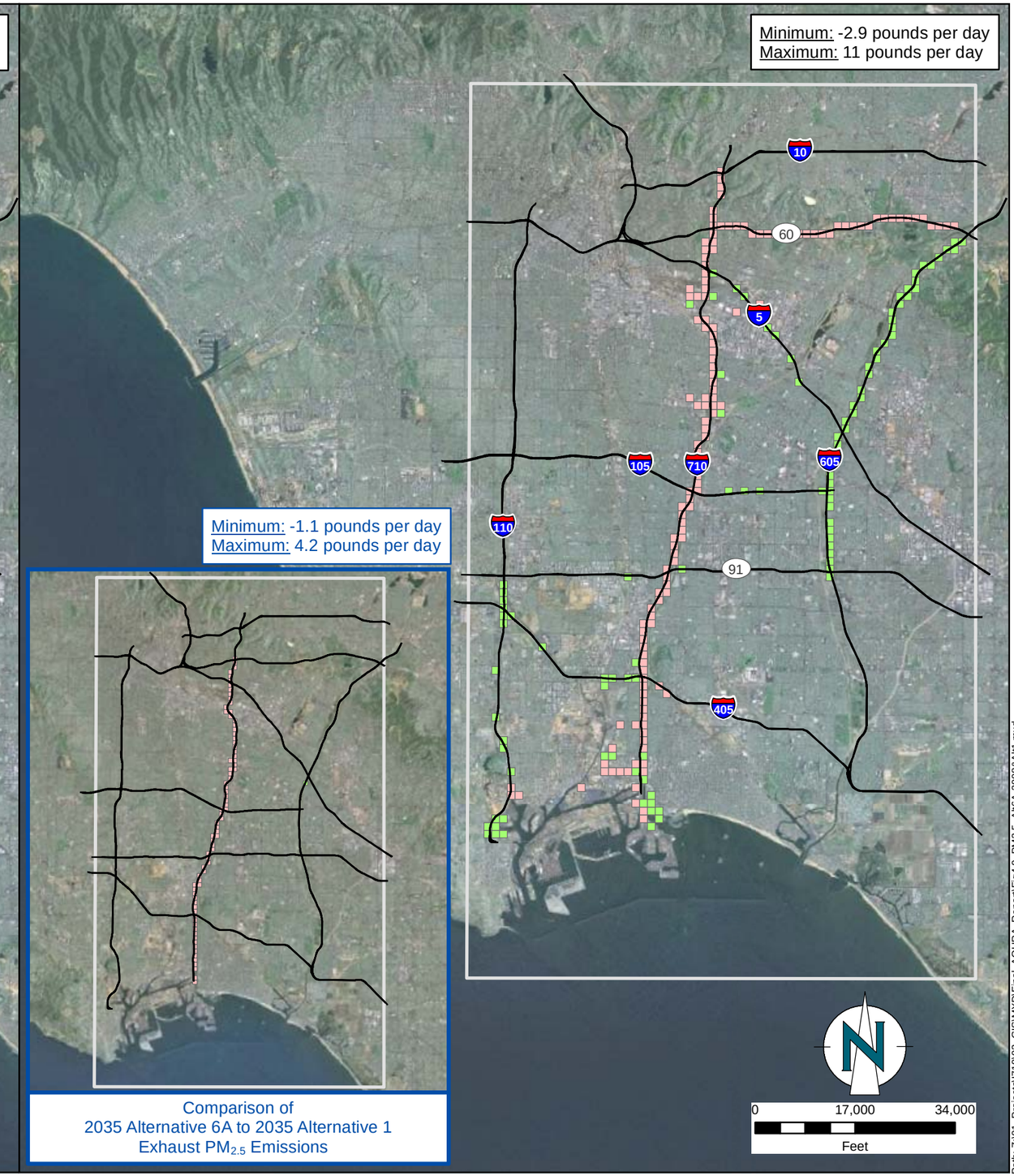
Comparison of
2035 Alternative 5A to 2035 Alternative 1
Total $PM_{2.5}$ Emissions

Figure
4.8

PROJECT: 05-18574E4



Comparison of
2035 Alternative 6A to 2008 Baseline
Exhaust $PM_{2.5}$ Emissions



Comparison of
2035 Alternative 6A to 2035 Alternative 1
Exhaust $PM_{2.5}$ Emissions

Path: Z:\01_Projects\l710\03_GIS\MXD\Final_AQHRA_Report\Fig4.9_PM2.5_Alt6A-2008&Alt1.mxd

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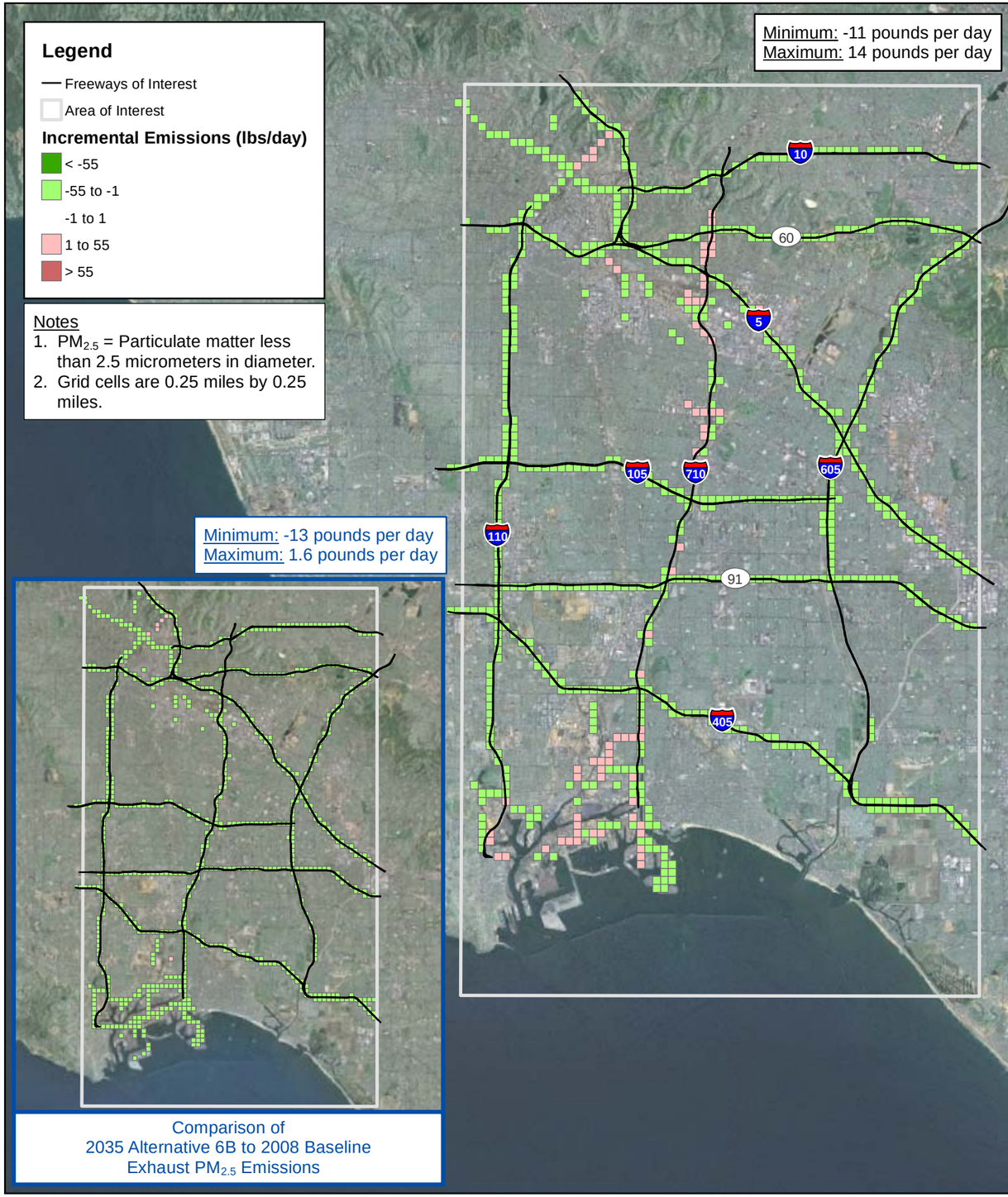
Comparison of
2035 Alternative 6A to 2008 Baseline
Total $PM_{2.5}$ Emissions

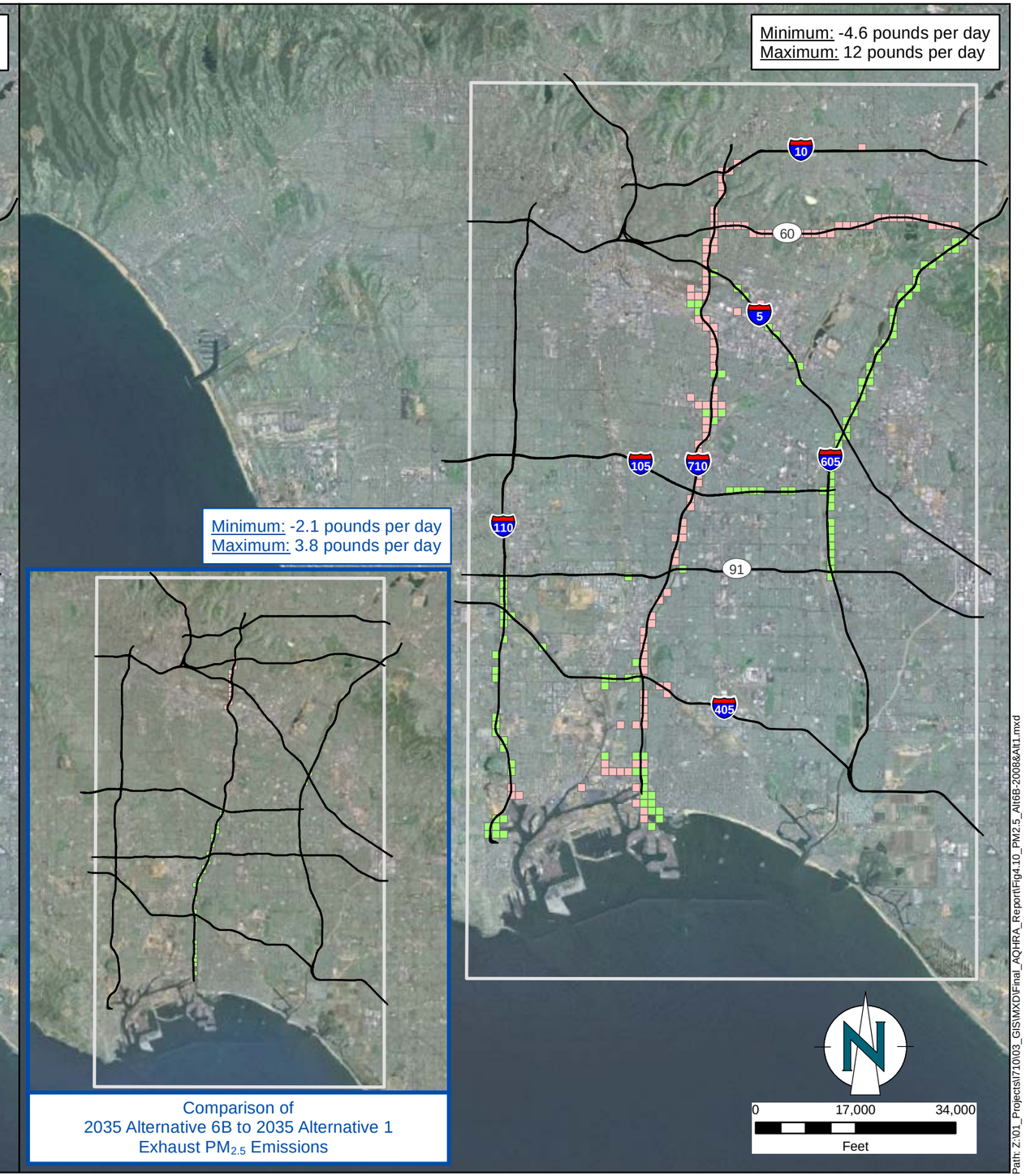
Comparison of
2035 Alternative 6A to 2035 Alternative 1
Total $PM_{2.5}$ Emissions

Figure
4.9

PROJECT: 05-18574E4



Comparison of
2035 Alternative 6B to 2008 Baseline
Exhaust $PM_{2.5}$ Emissions



Comparison of
2035 Alternative 6B to 2035 Alternative 1
Exhaust $PM_{2.5}$ Emissions

Path: Z:\01_Projects\710\03_GIS\MXD\Final_AQHRA_Report\Fig4.10_PM2.5_Alt6B-2008&Alt1.mxd

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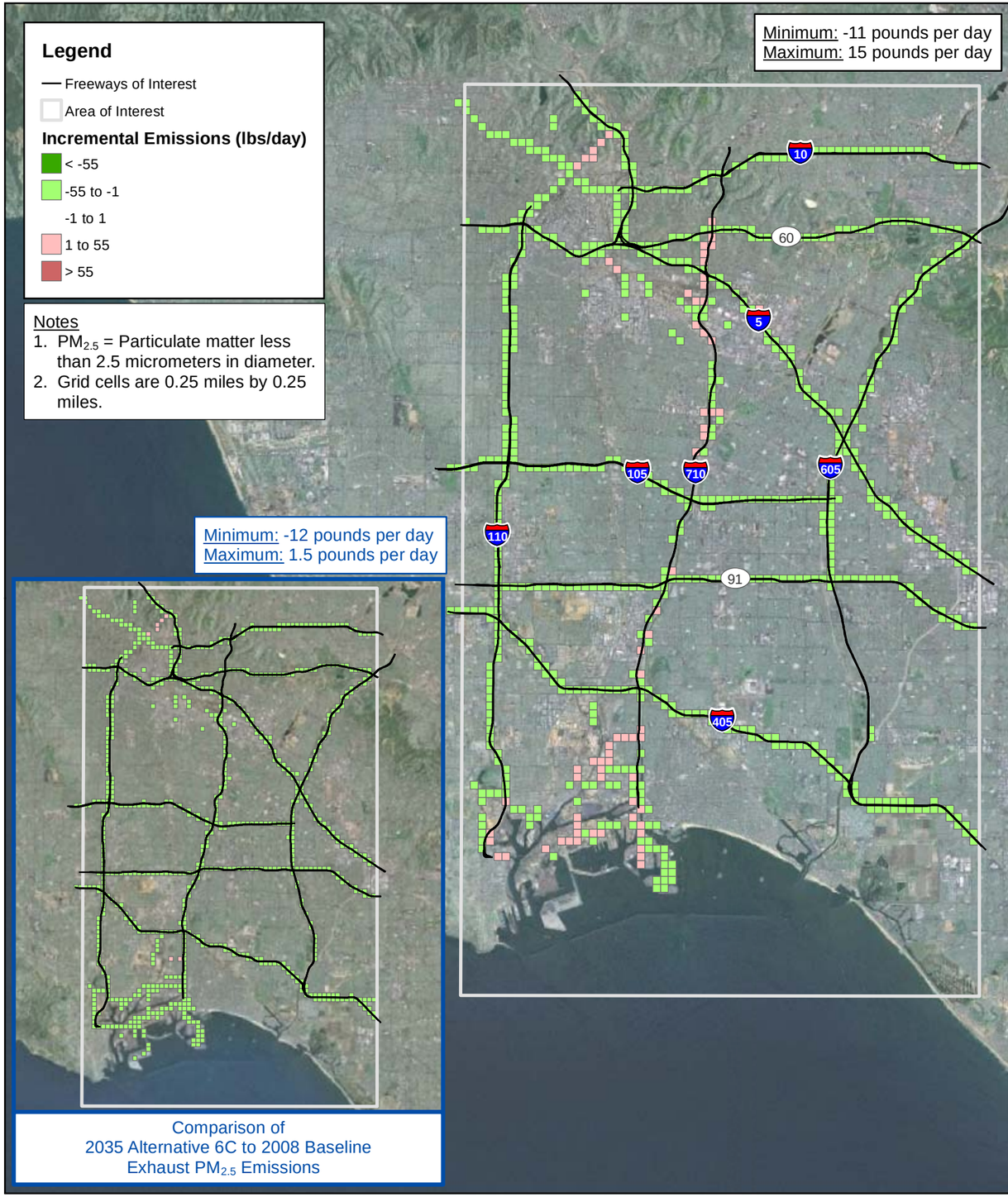
Comparison of
2035 Alternative 6B to 2008 Baseline
Total $PM_{2.5}$ Emissions

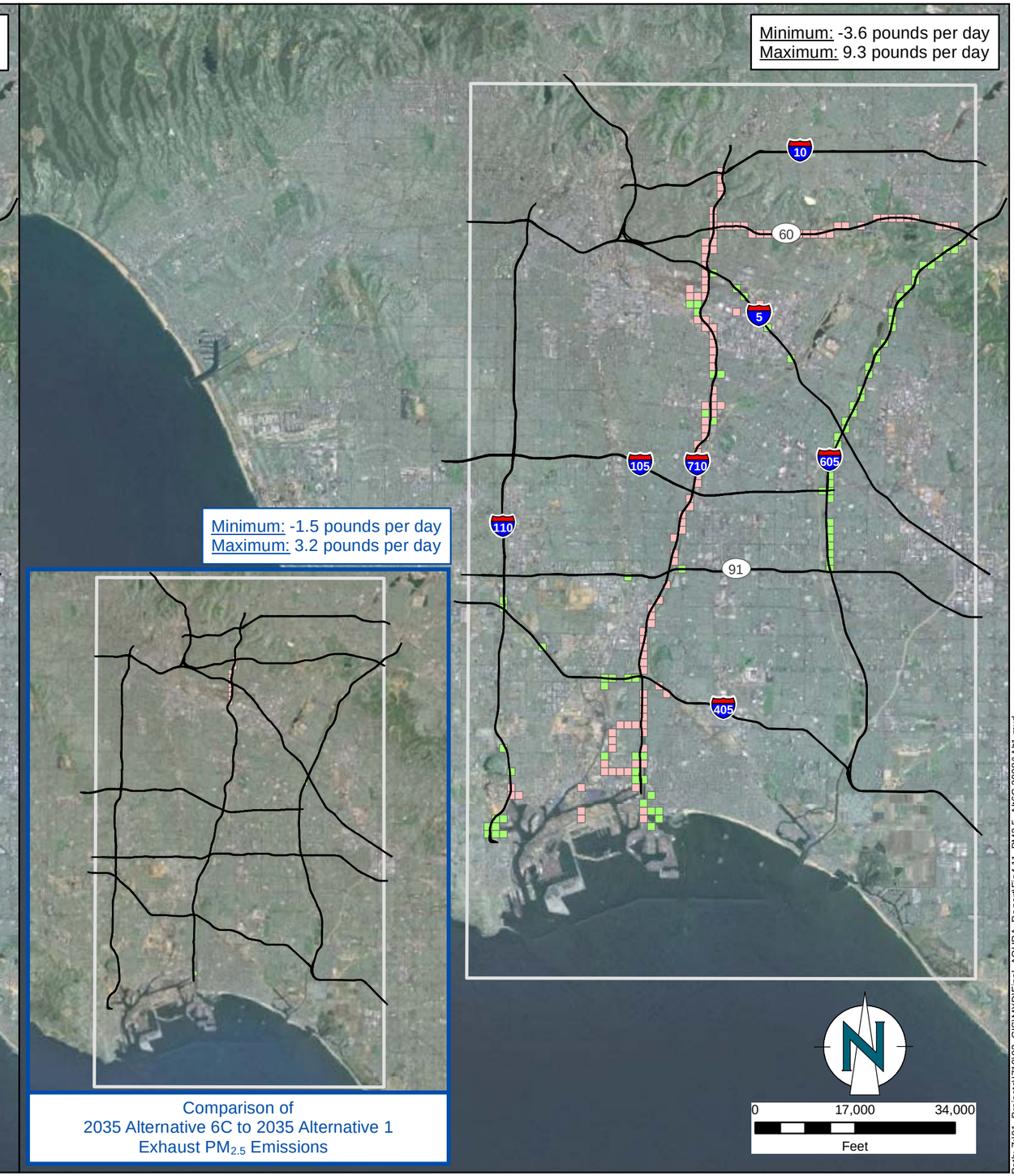
Comparison of
2035 Alternative 6B to 2035 Alternative 1
Total $PM_{2.5}$ Emissions

Figure
4.10

PROJECT: 05-18574E4



Comparison of
2035 Alternative 6C to 2008 Baseline
Exhaust $PM_{2.5}$ Emissions



Comparison of
2035 Alternative 6C to 2035 Alternative 1
Exhaust $PM_{2.5}$ Emissions

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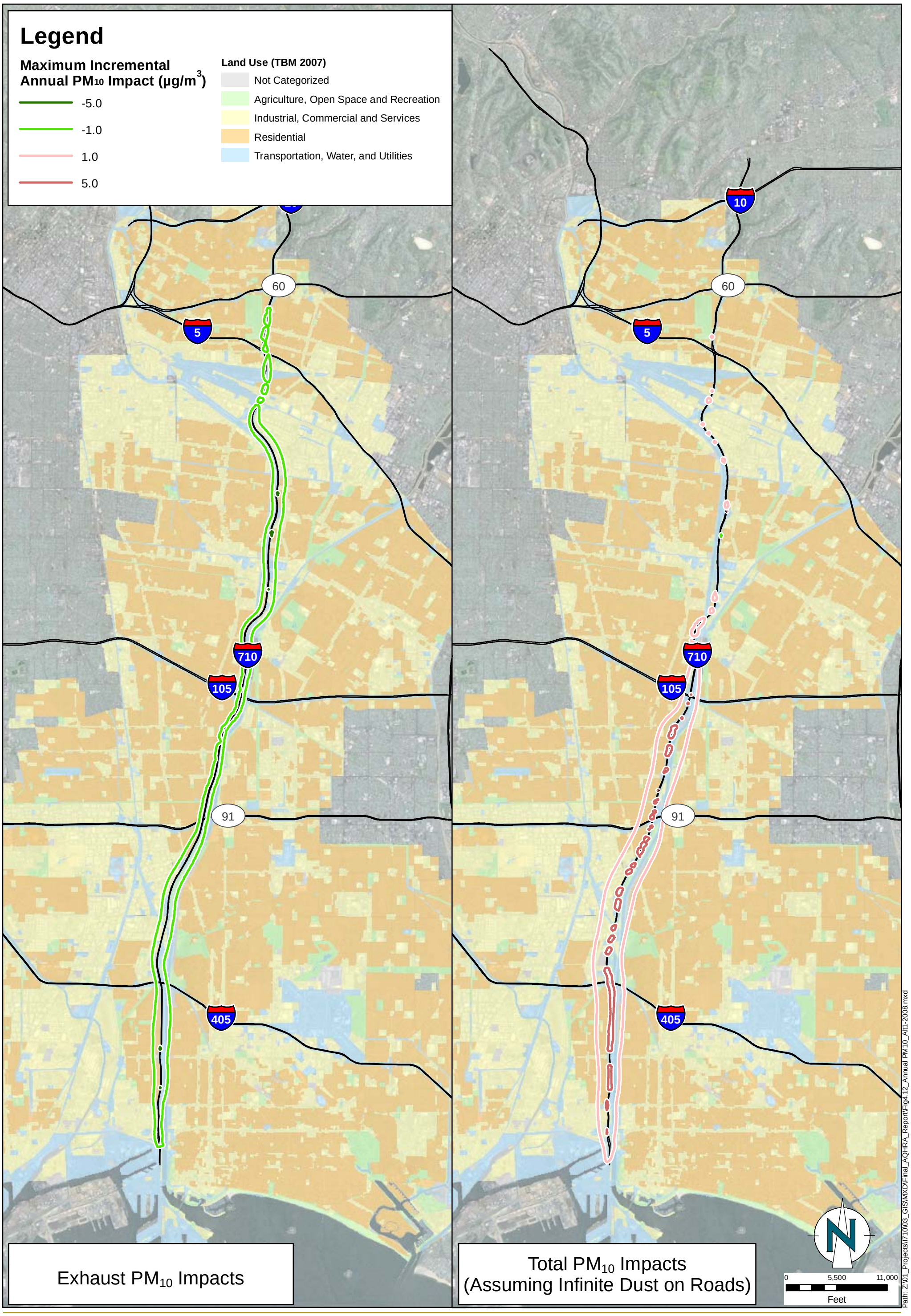
Comparison of
2035 Alternative 6C to 2008 Baseline
Total $PM_{2.5}$ Emissions

Comparison of
2035 Alternative 6C to 2035 Alternative 1
Total $PM_{2.5}$ Emissions

Figure
4.11

PROJECT: 05-18574E4



ENVIRON

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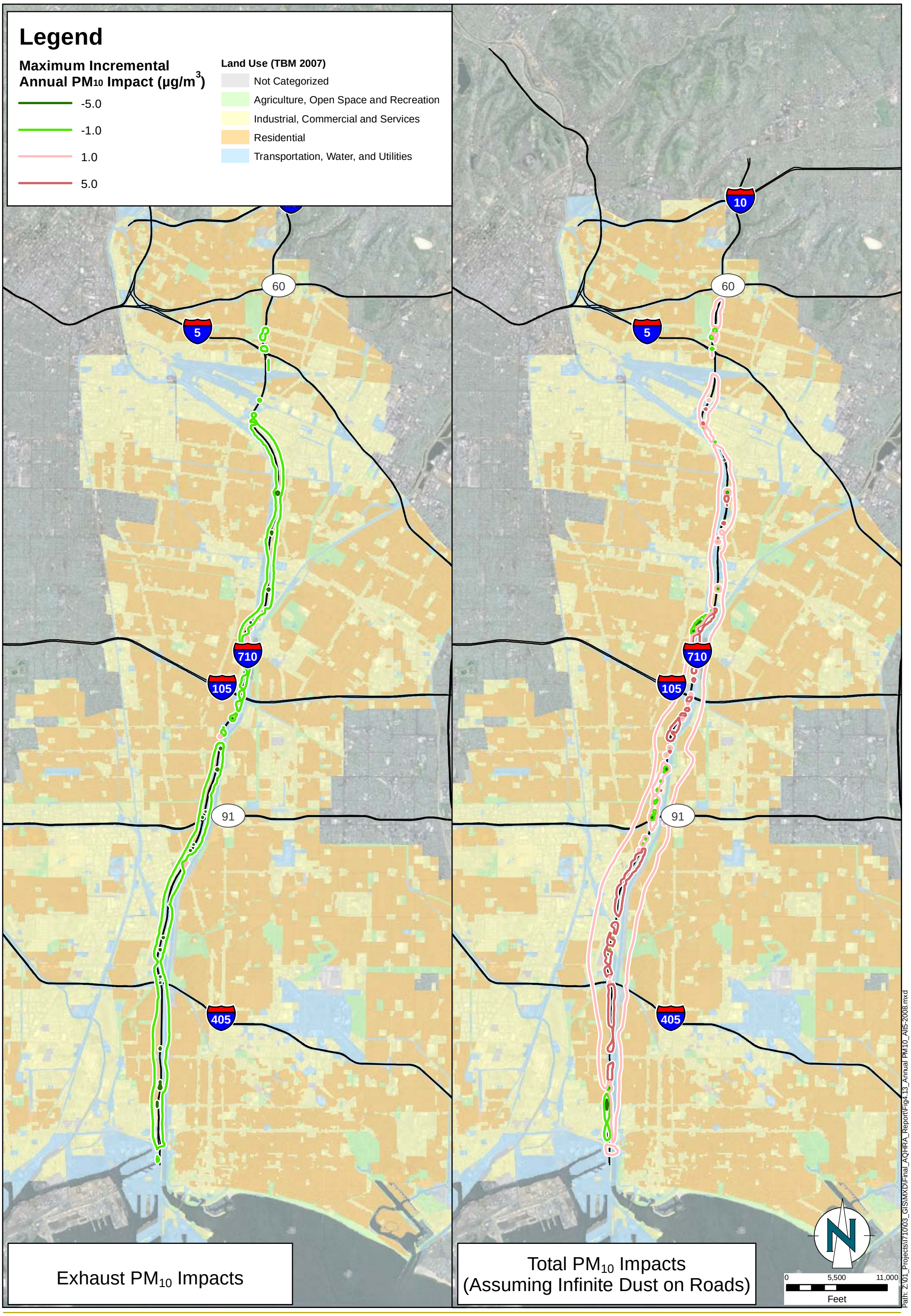
Comparison of
2035 Alternative 1 to 2008 Baseline
Maximum Incremental Annual PM_{10} Impacts

Figure
4.12

PROJECT: 05-18574E4



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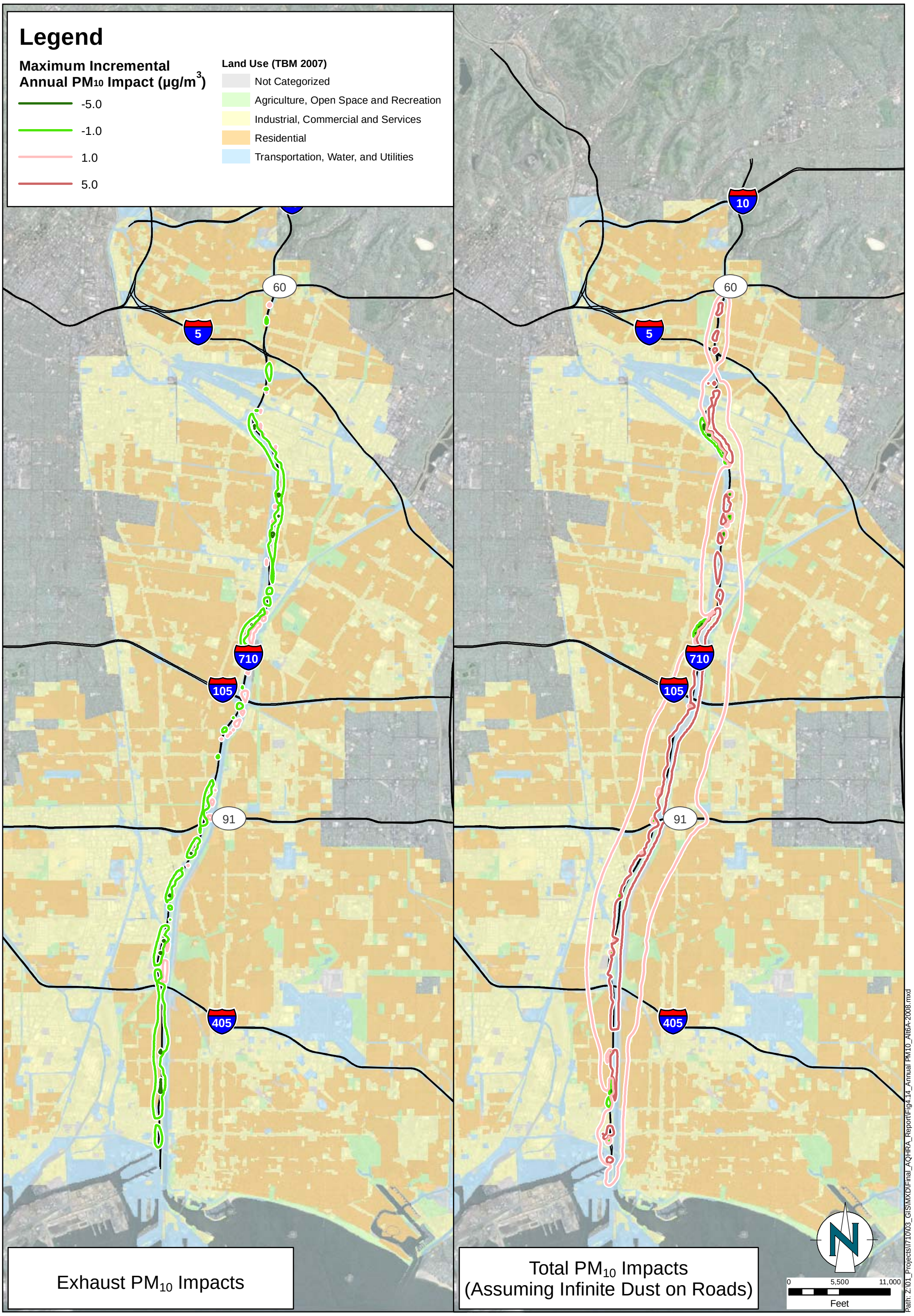
Comparison of
2035 Alternative 5A to 2008 Baseline
Maximum Incremental Annual PM_{10} Impacts

Figure
4.13

PROJECT: 05-18574E4



ENVIRON

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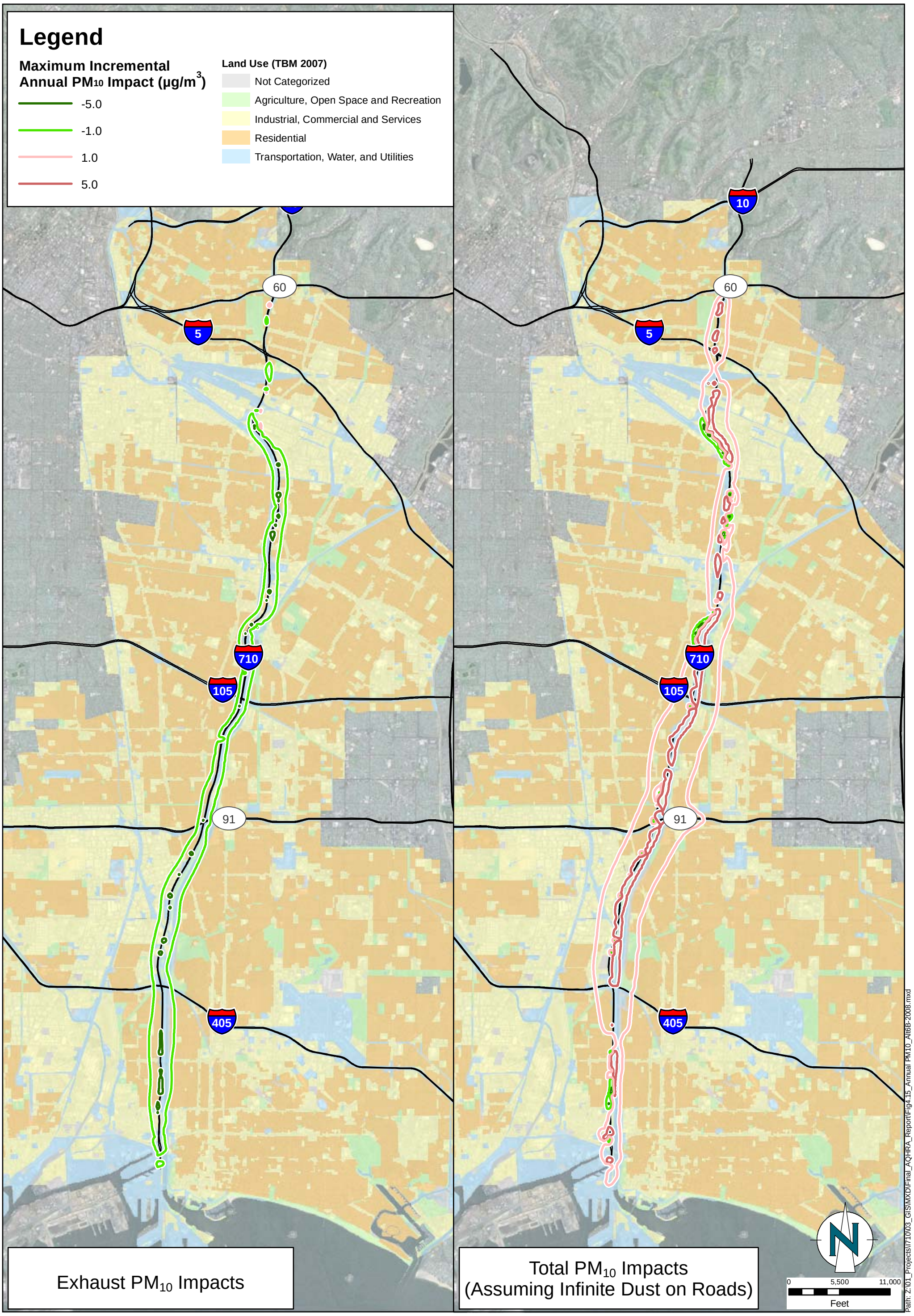
Comparison of
2035 Alternative 6A to 2008 Baseline
Maximum Incremental Annual PM_{10} Impacts

Figure
4.14

PROJECT: 05-18574E4



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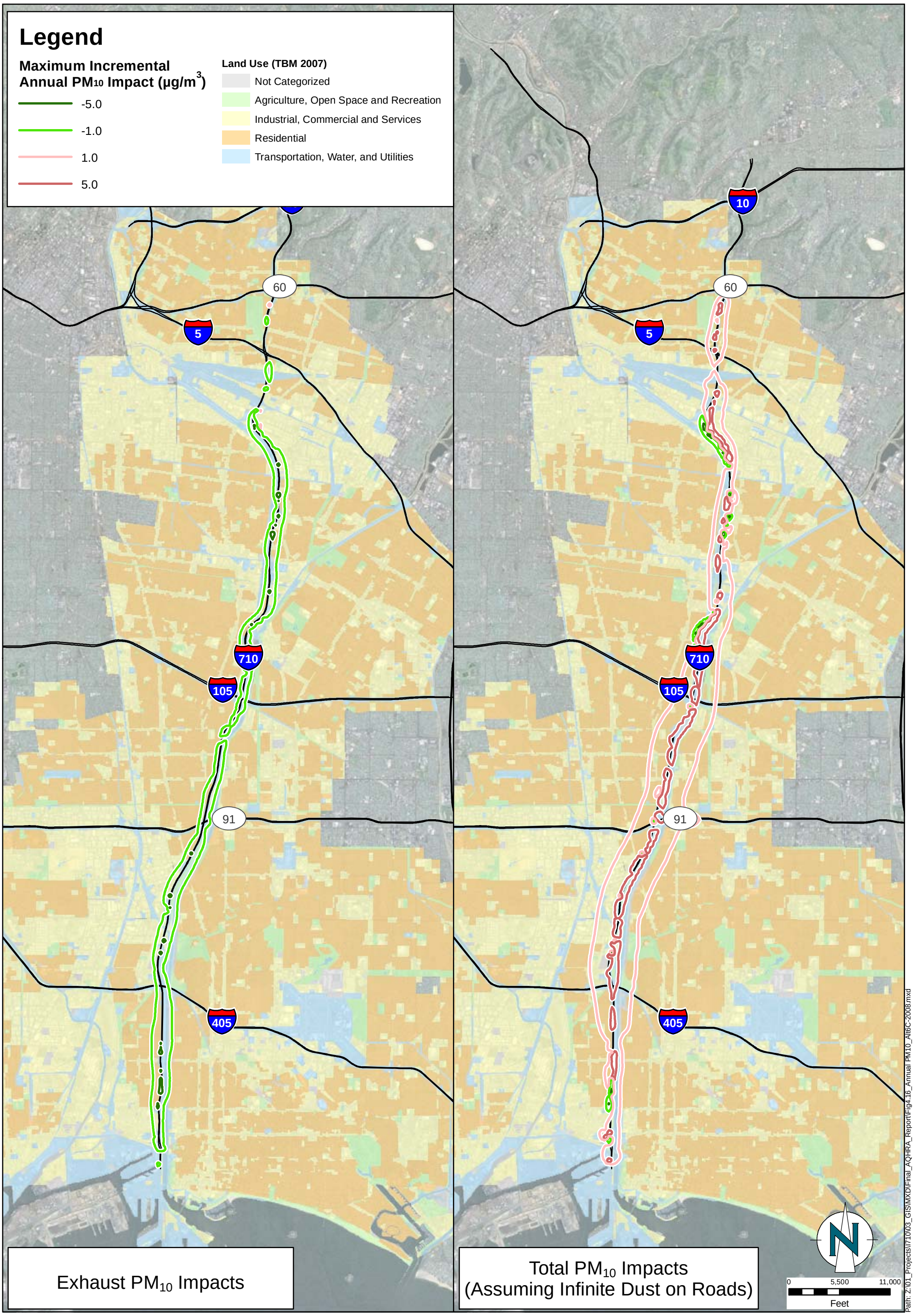
Comparison of
2035 Alternative 6B to 2008 Baseline
Maximum Incremental Annual PM_{10} Impacts

Figure
4.15

PROJECT: 05-18574E4



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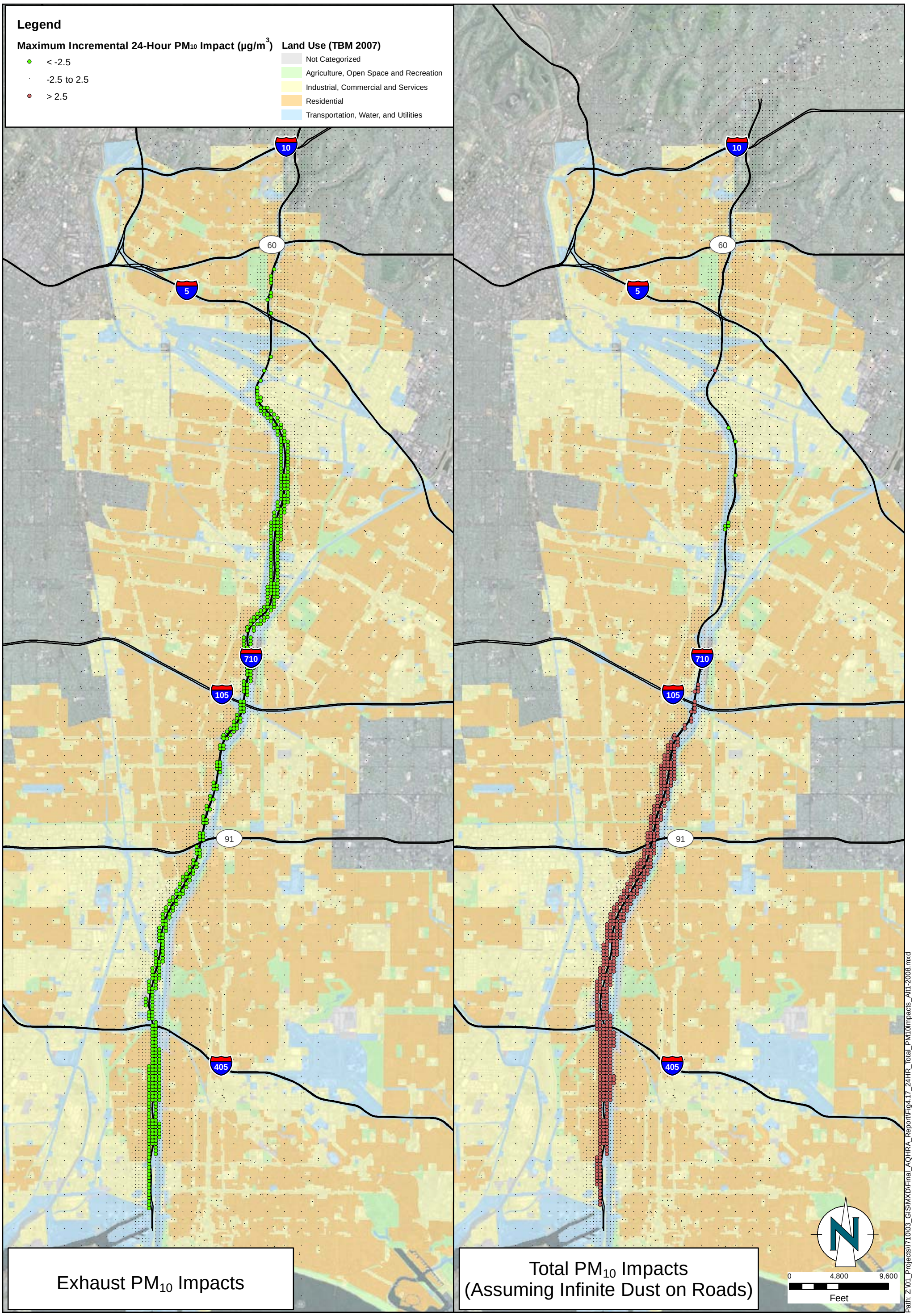
Date: 5/24/2012

Comparison of
2035 Alternative 6C to 2008 Baseline
Maximum Incremental Annual PM_{10} Impacts

Figure
4.16

PROJECT: 05-18574E4



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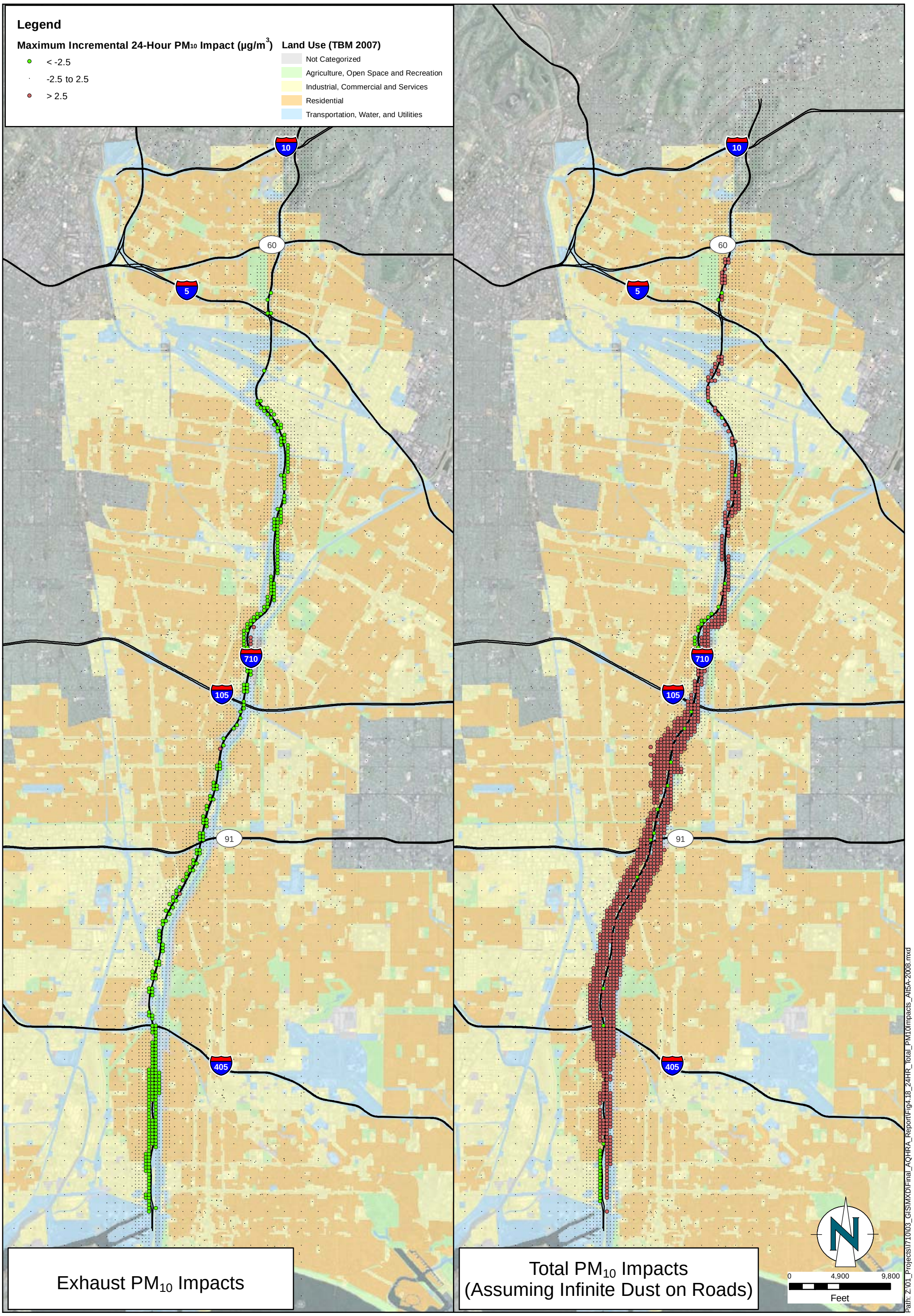
Comparison of
2035 Alternative 1 to 2008 Baseline
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
4.17

PROJECT: 05-18574E4



ENVIRON

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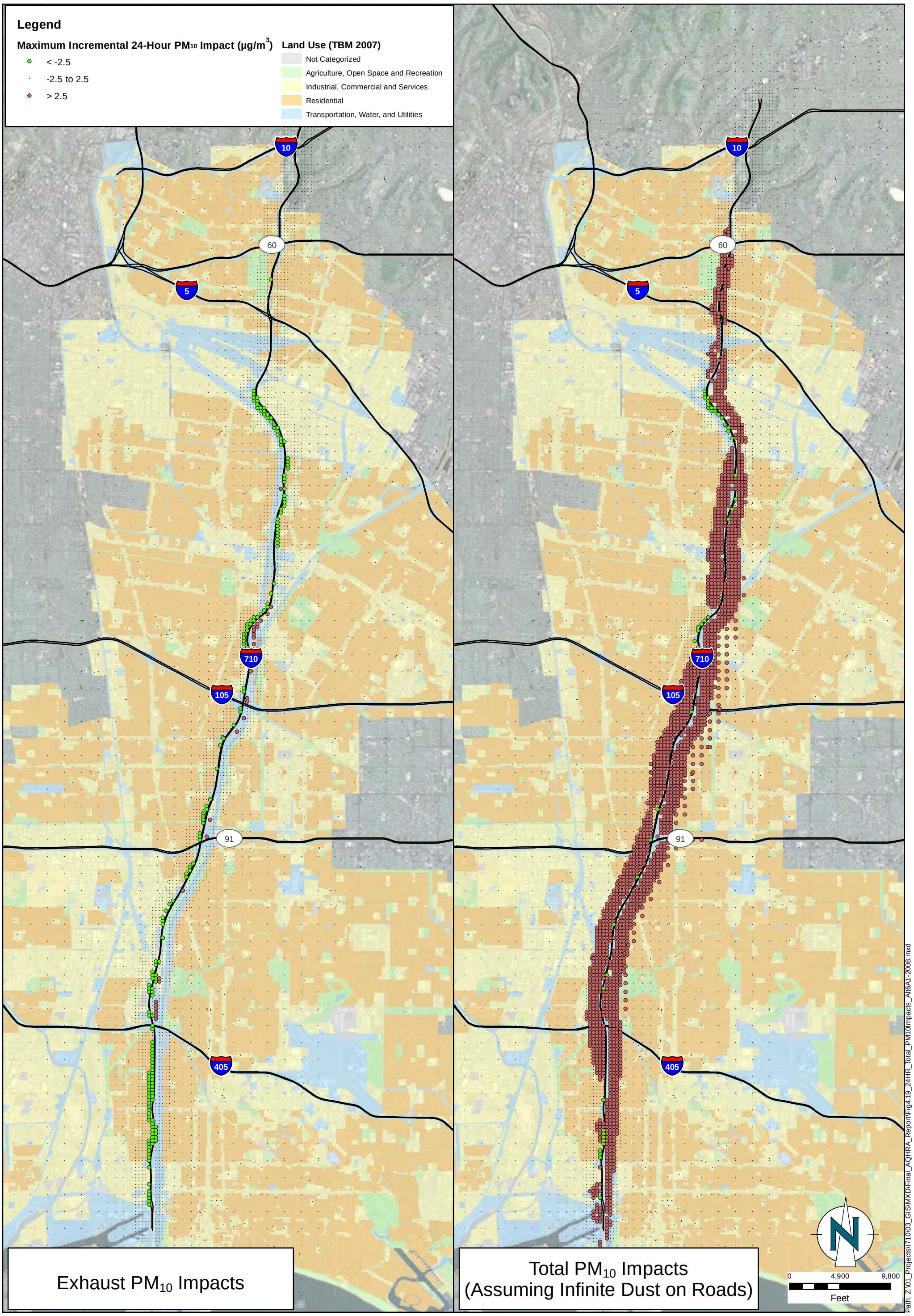
Comparison of
2035 Alternative 5A to 2008 Baseline
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
4.18

PROJECT: 05-18574E4



ENVIRON

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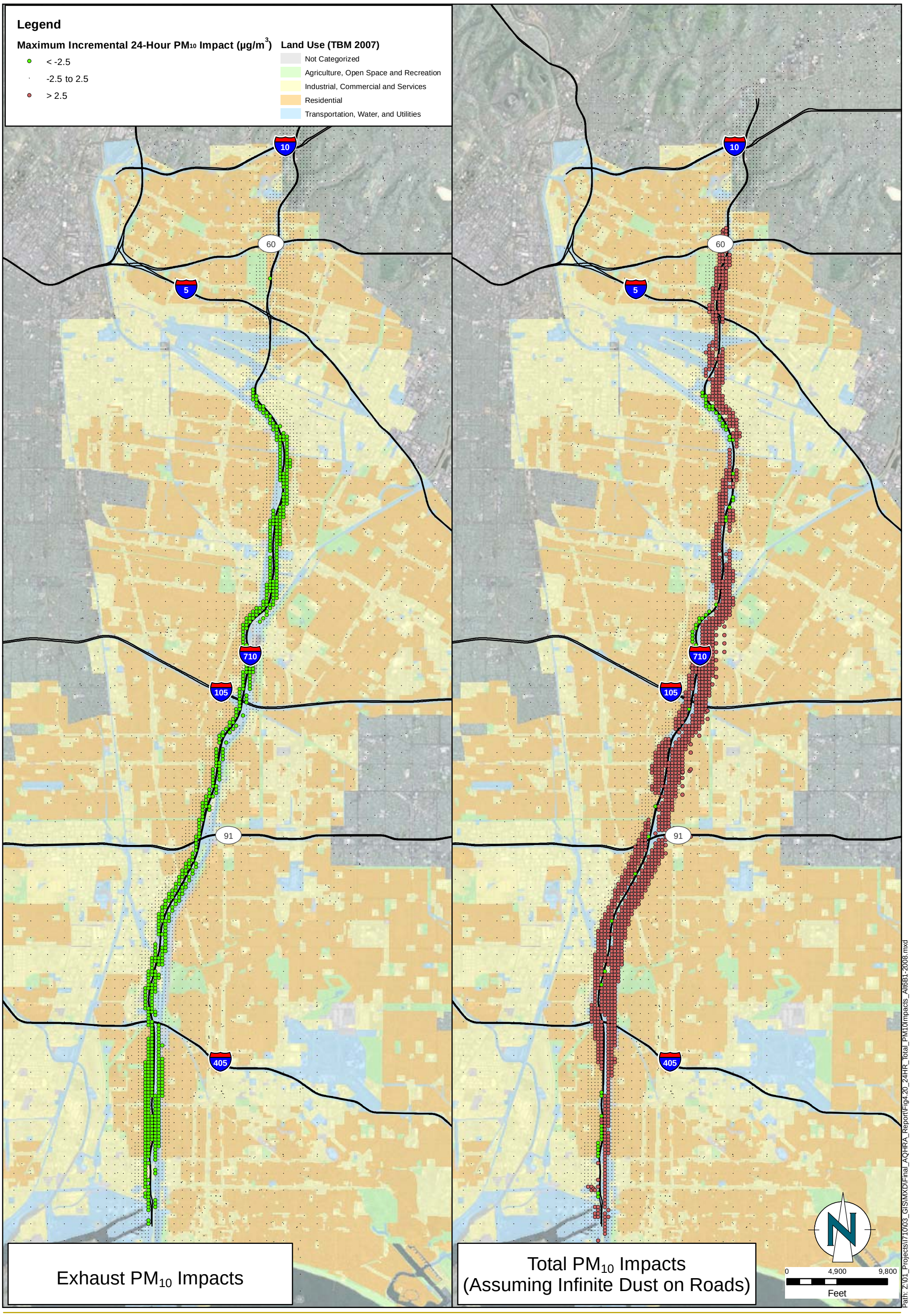
Date: 5/24/2012

Comparison of
2035 Alternative 6A to 2008 Baseline
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
4.19

PROJECT: 05-18574E4



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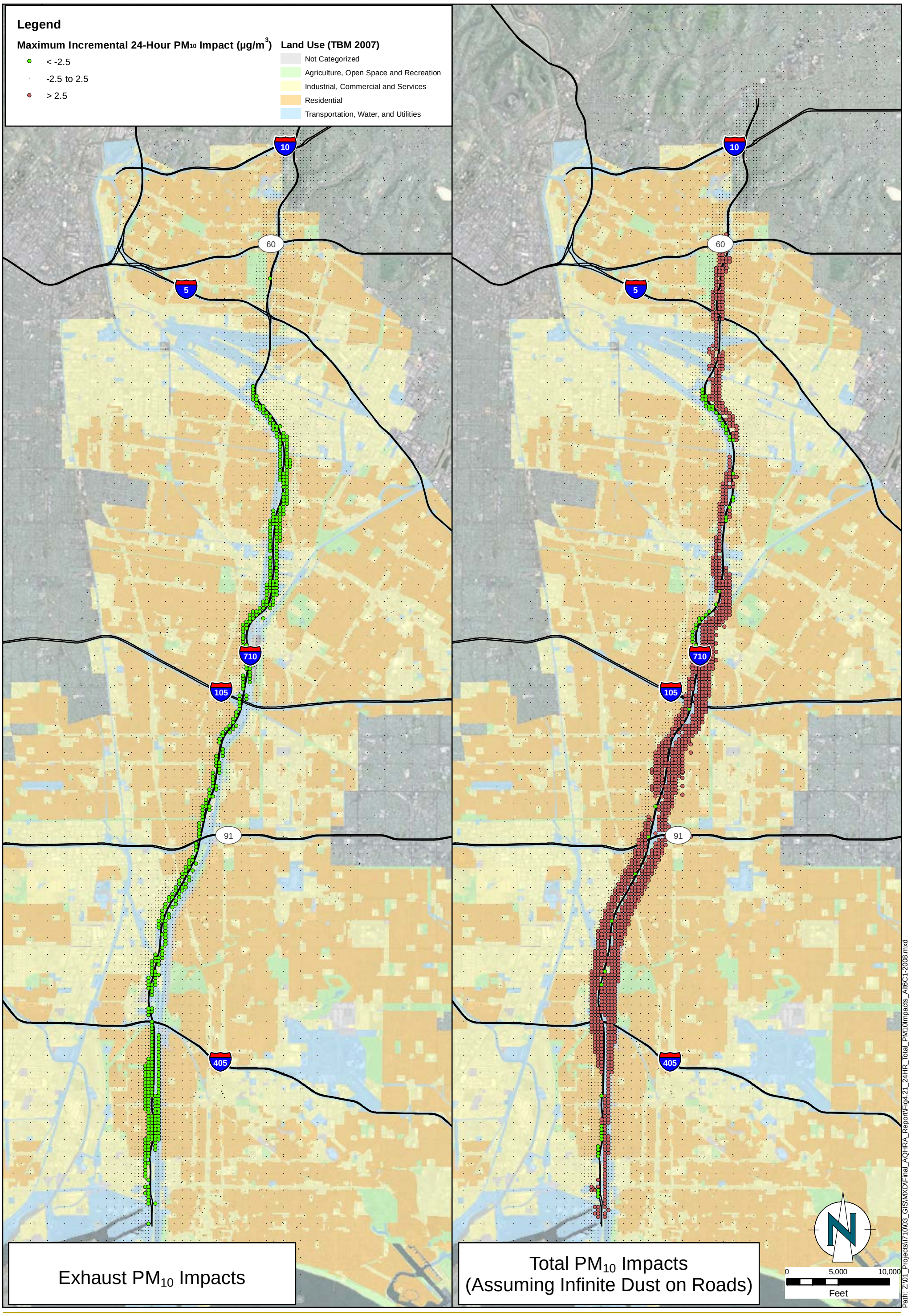
Comparison of
2035 Alternative 6B to 2008 Baseline
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
4.20

PROJECT: 05-18574E4



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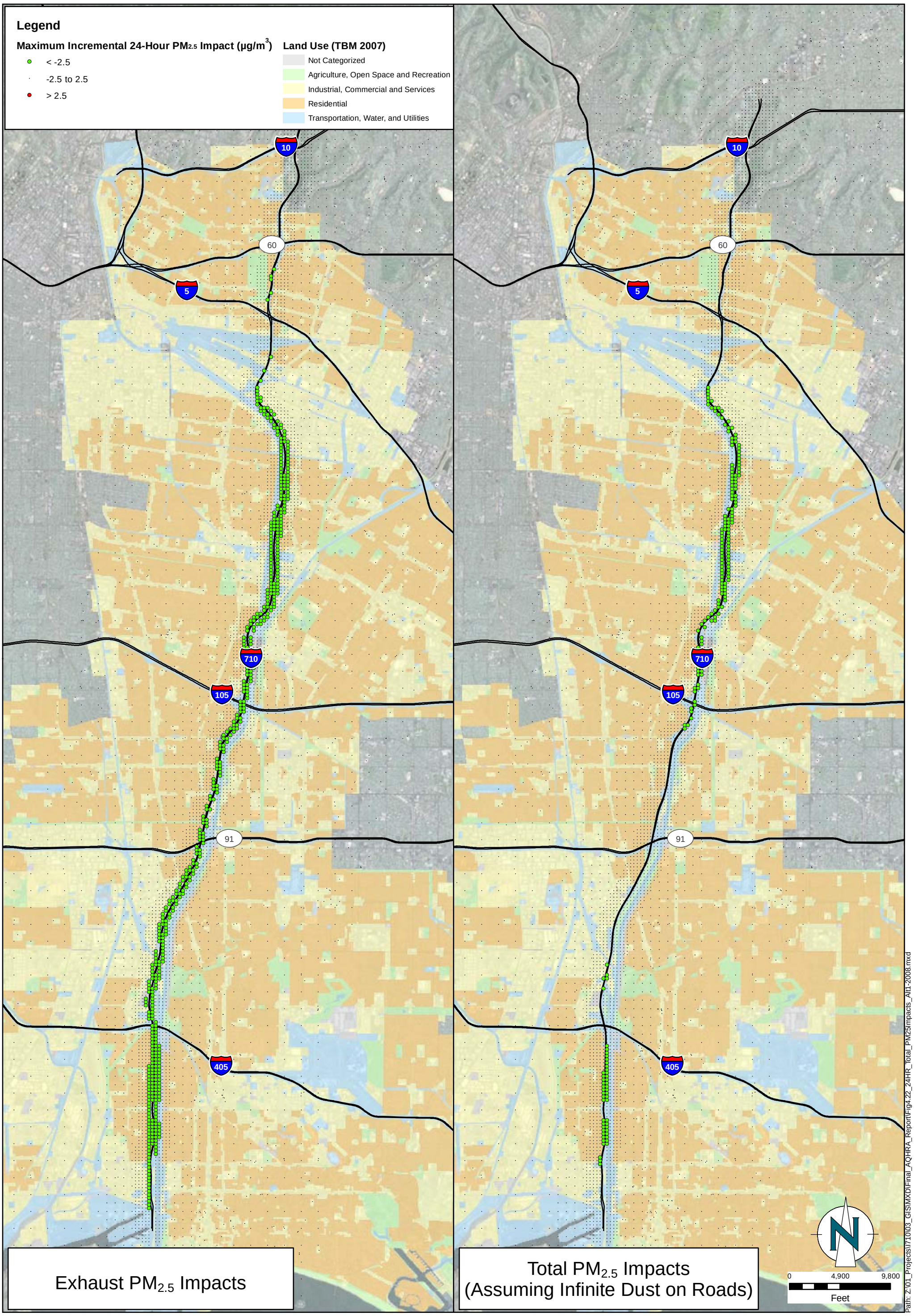
Comparison of
2035 Alternative 6C to 2008 Baseline
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
4.21

PROJECT: 05-18574E4



ENVIRON

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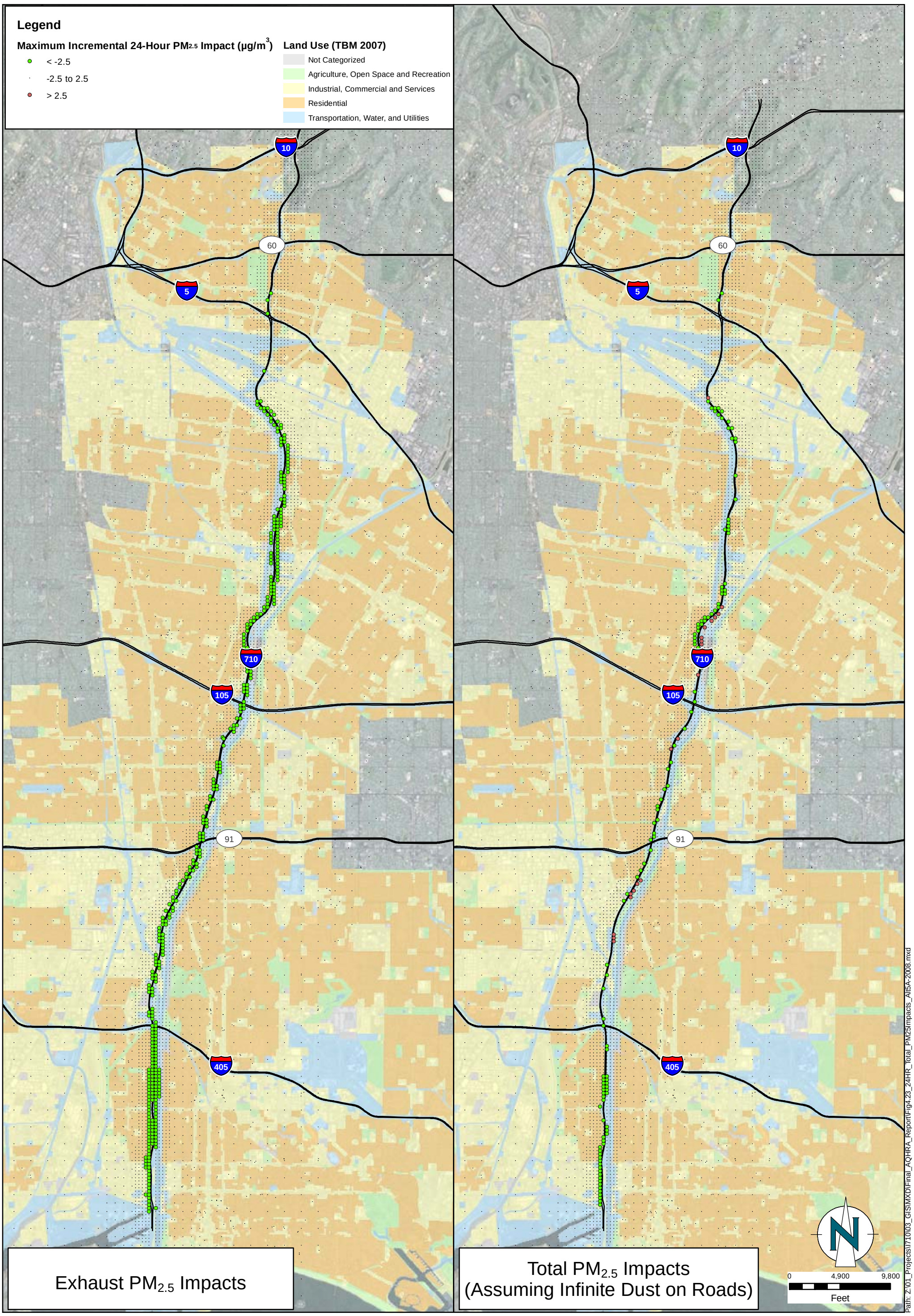
Date: 5/24/2012

Comparison of
2035 Alternative 1 to 2008 Baseline
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
4.22

PROJECT: 05-18574E4



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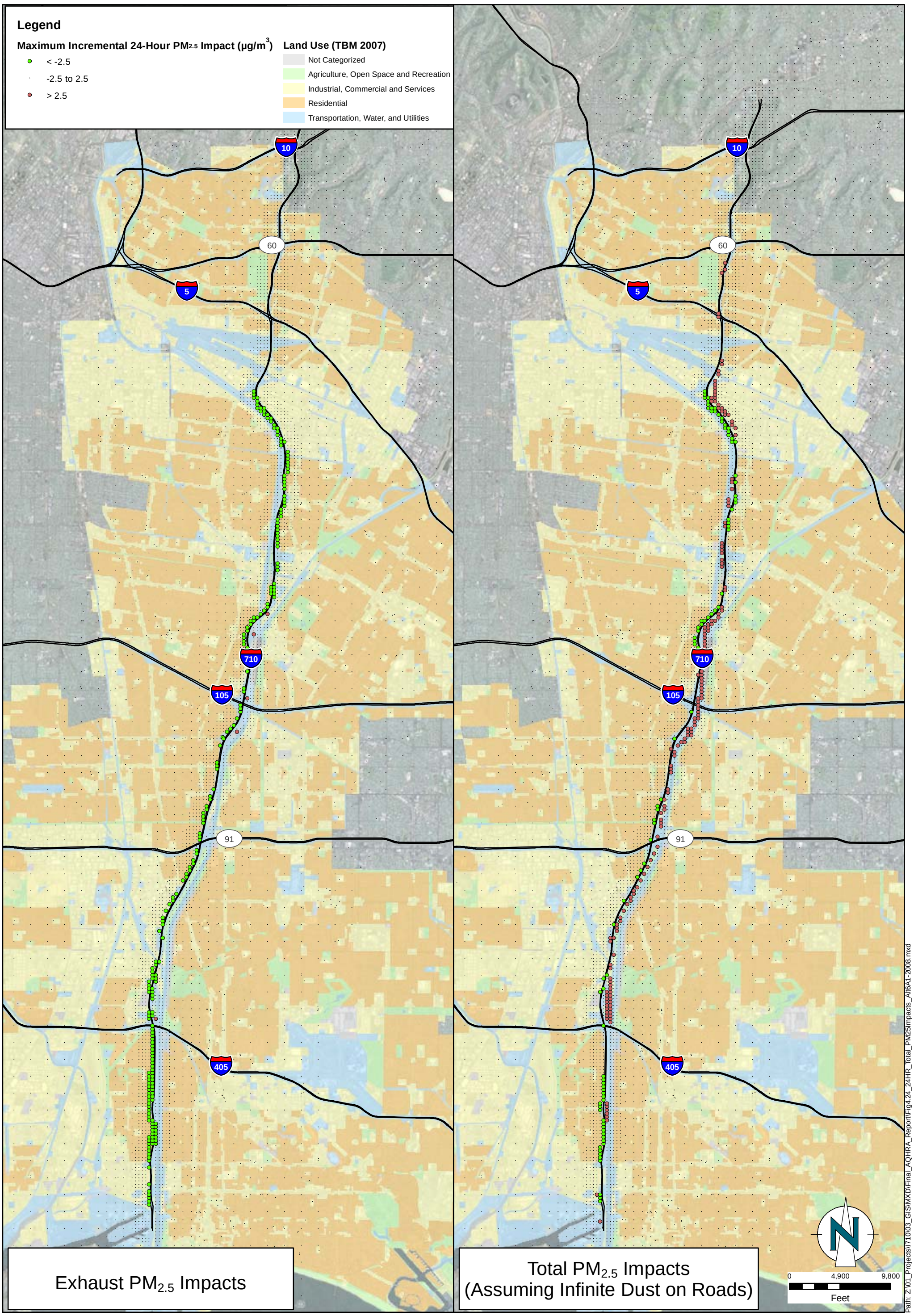
Date: 5/24/2012

Comparison of
2035 Alternative 5A to 2008 Baseline
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
4.23

PROJECT: 05-18574E4



ENVIRON

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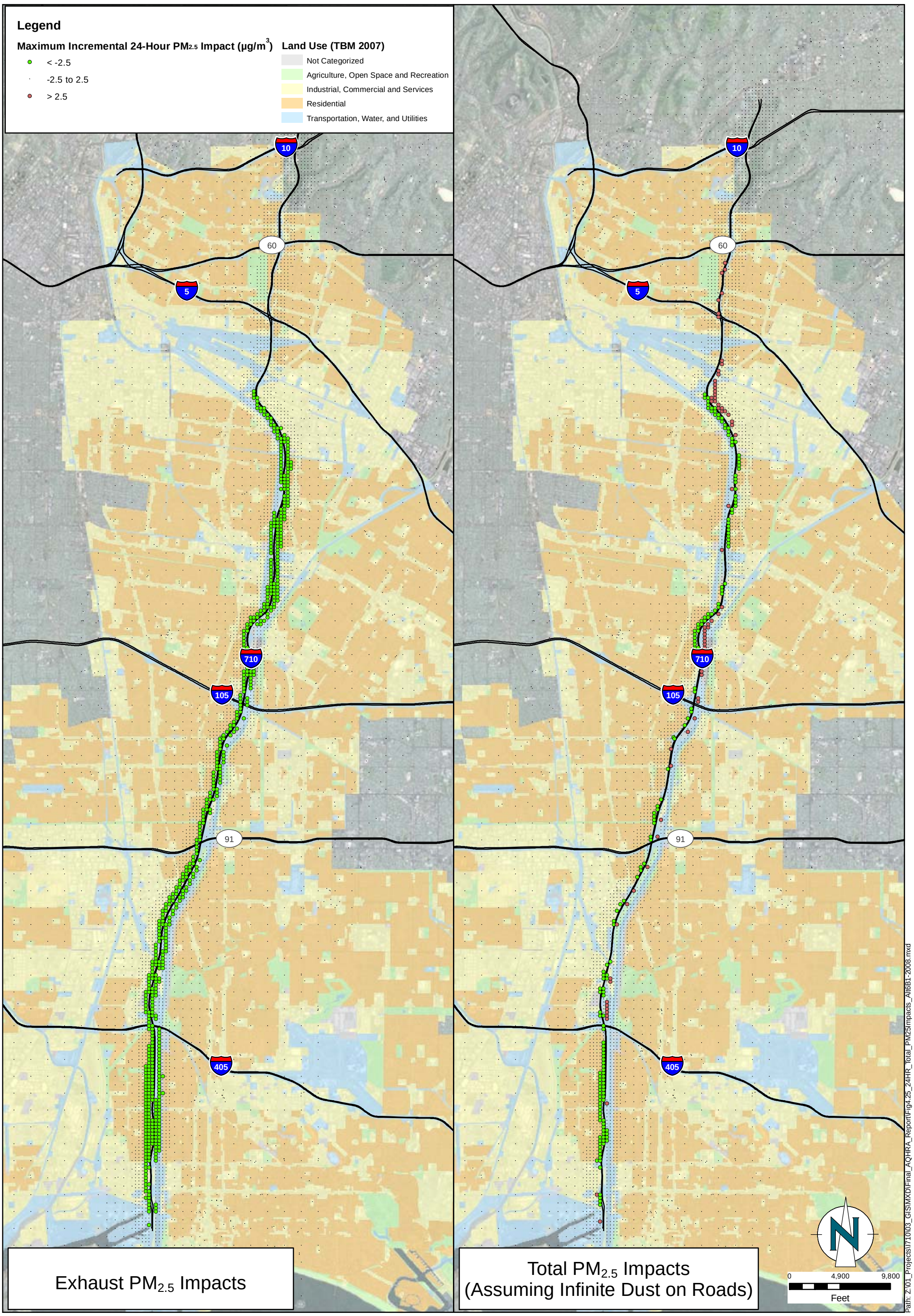
Date: 5/24/2012

Comparison of
2035 Alternative 6A to 2008 Baseline
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
4.24

PROJECT: 05-18574E4



ENVIRON

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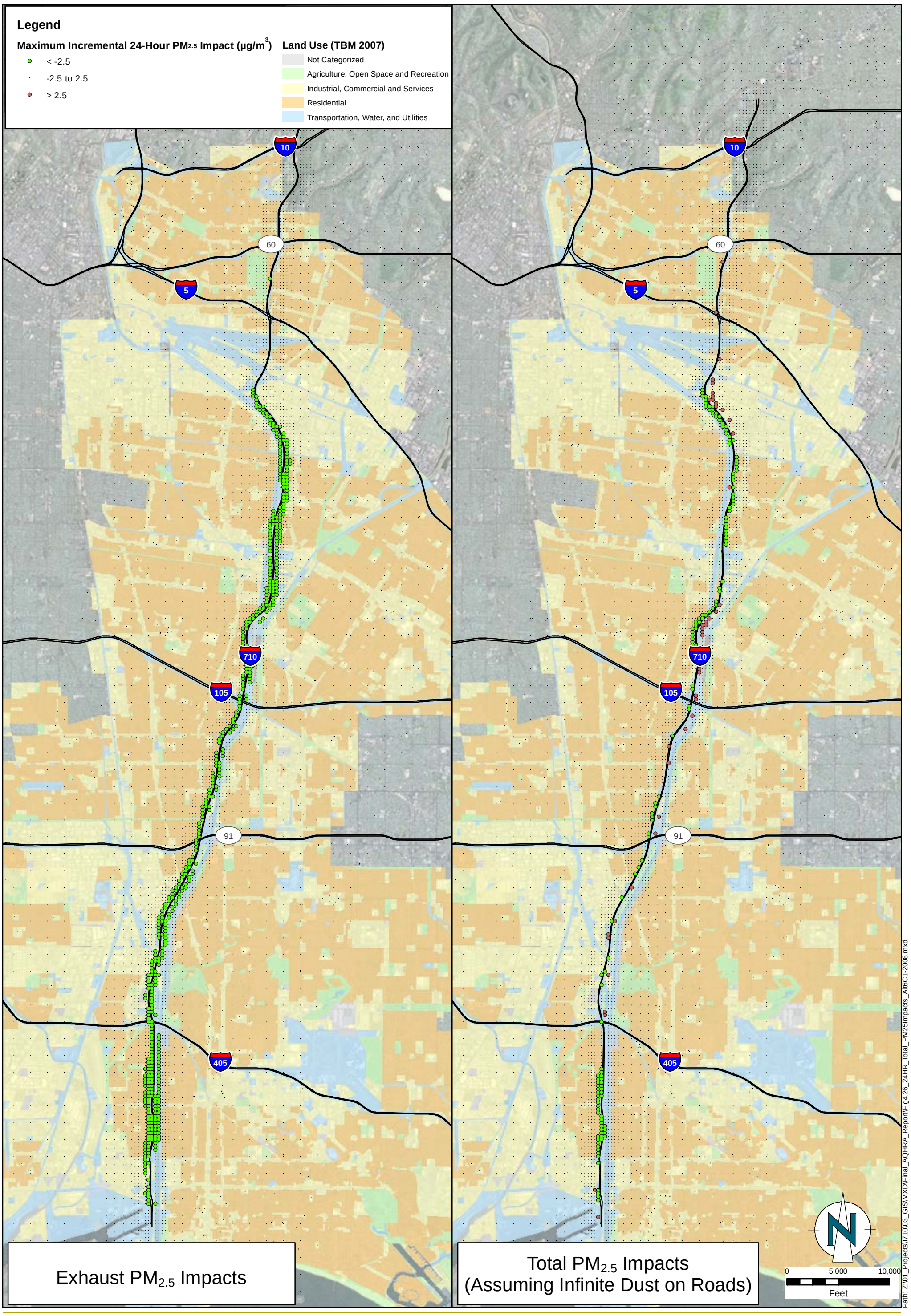
Date: 5/24/2012

Comparison of
2035 Alternative 6B to 2008 Baseline
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
4.25

PROJECT: 05-18574E4



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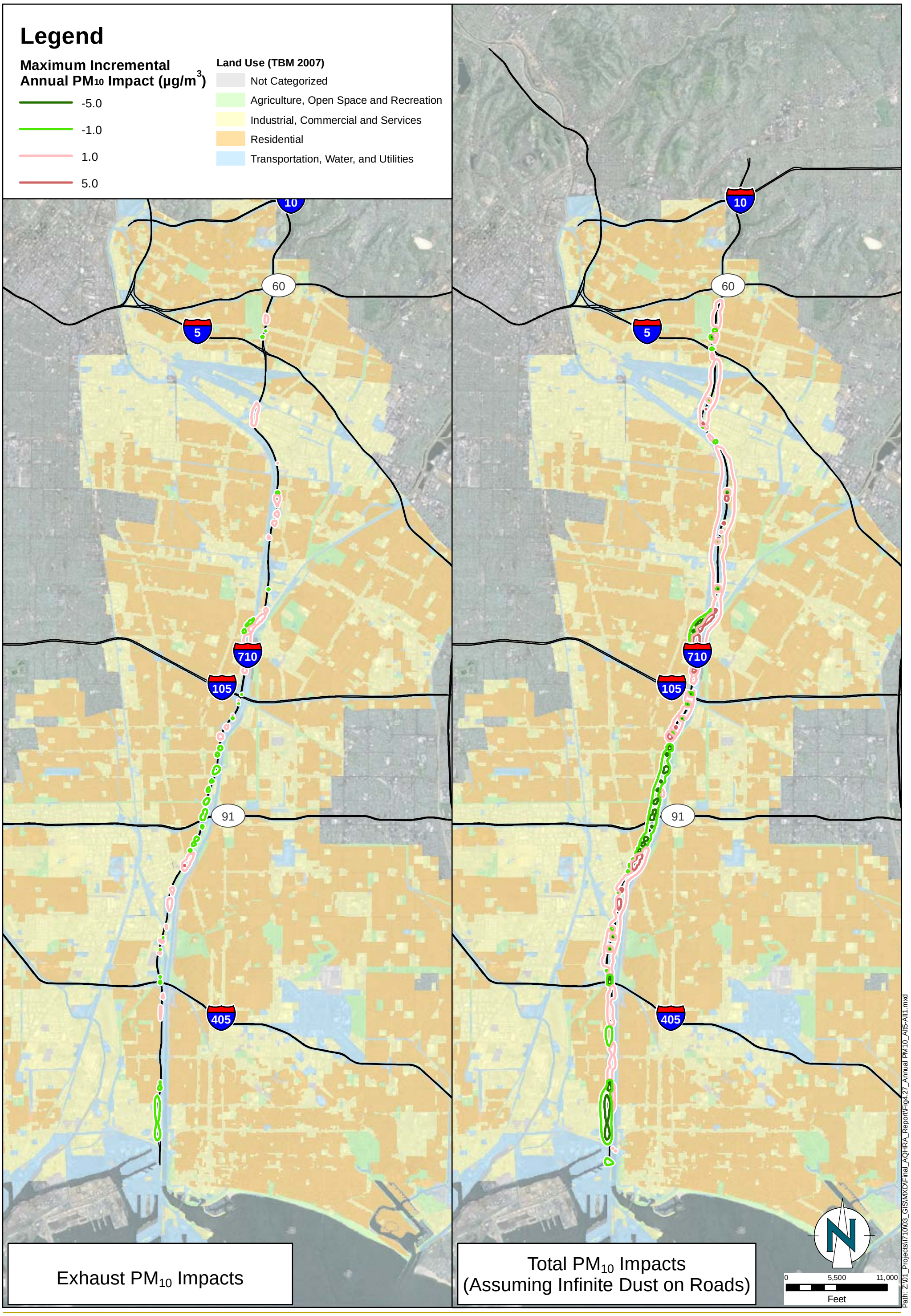
Date: 5/24/2012

Comparison of
2035 Alternative 6C to 2008 Baseline
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
4.26

PROJECT: 05-18574E4



ENVIRON

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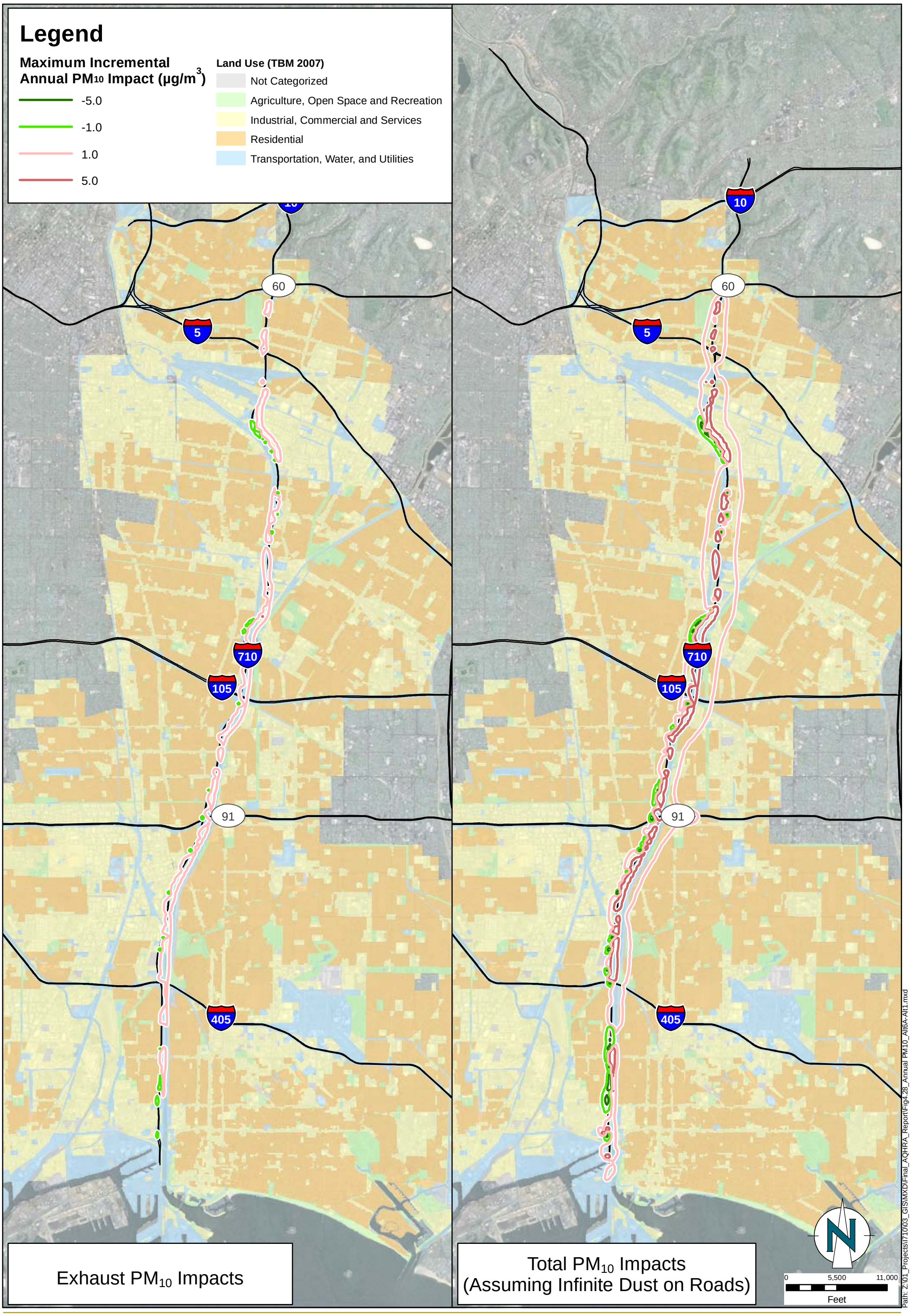
Comparison of
2035 Alternative 5A to 2035 Alternative 1
Maximum Incremental Annual PM_{10} Impacts

Figure
4.27

PROJECT: 05-18574E4



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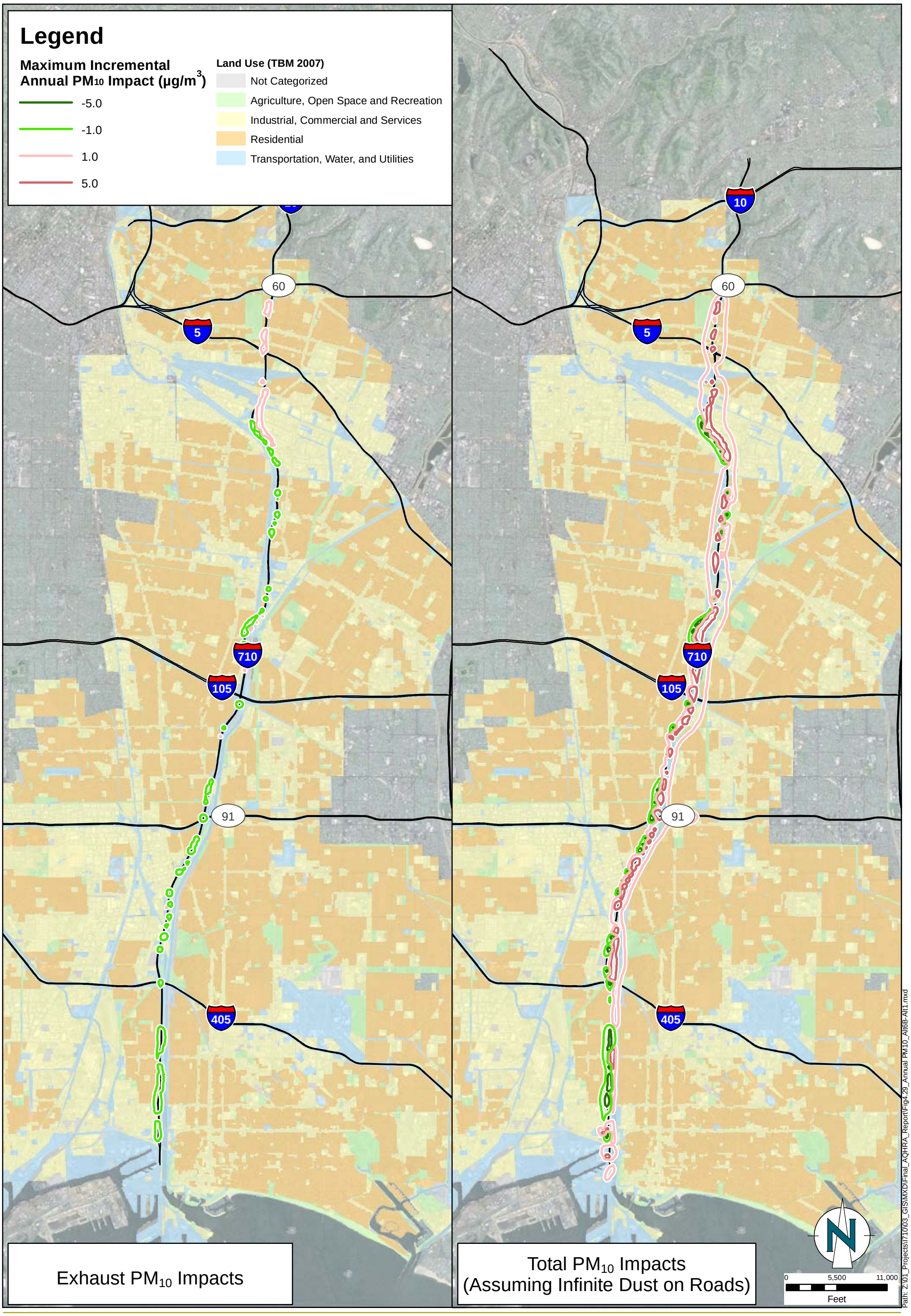
Date: 5/24/2012

Comparison of
2035 Alternative 6A to 2035 Alternative 1
Maximum Incremental Annual PM_{10} Impacts

Figure
4.28

PROJECT: 05-18574E4



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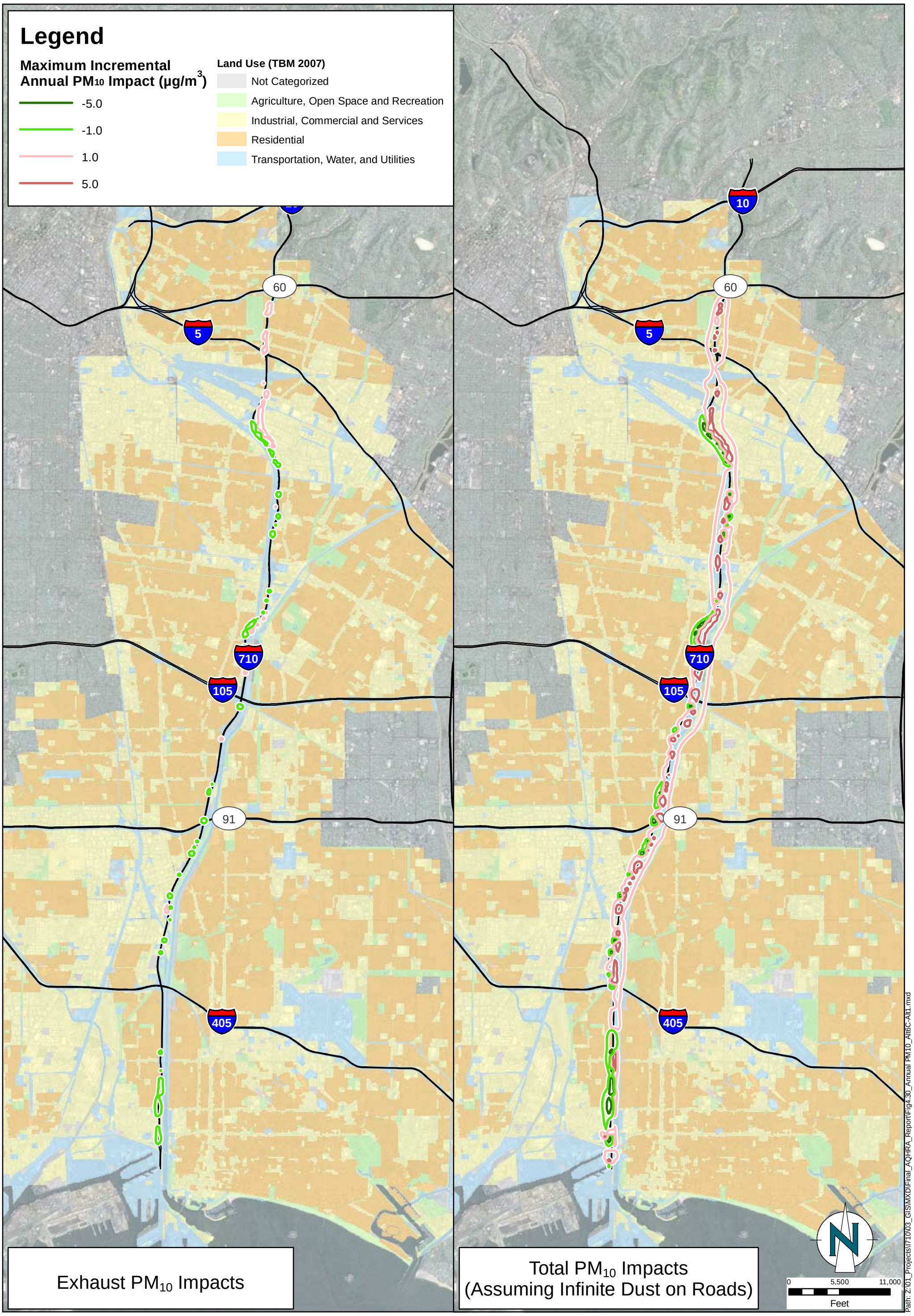
Comparison of
2035 Alternative 6B to 2035 Alternative 1
Maximum Incremental Annual PM_{10} Impacts

Figure
4.29

PROJECT: 05-18574E4



ENVIRON

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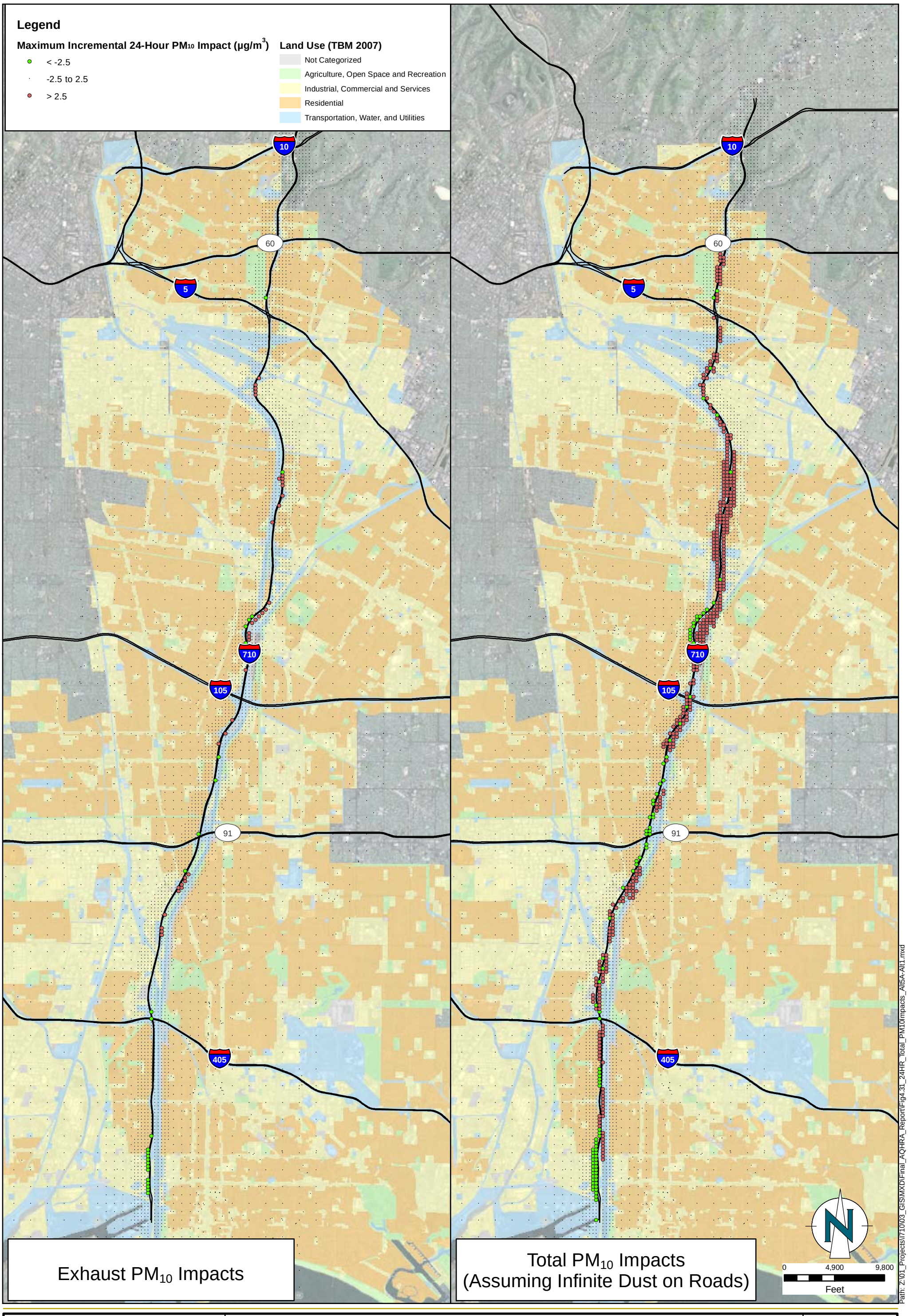
Comparison of
2035 Alternative 6C to 2035 Alternative 1
Maximum Incremental Annual PM_{10} Impacts

Figure
4.30

PROJECT: 05-18574E4



ENVIRON

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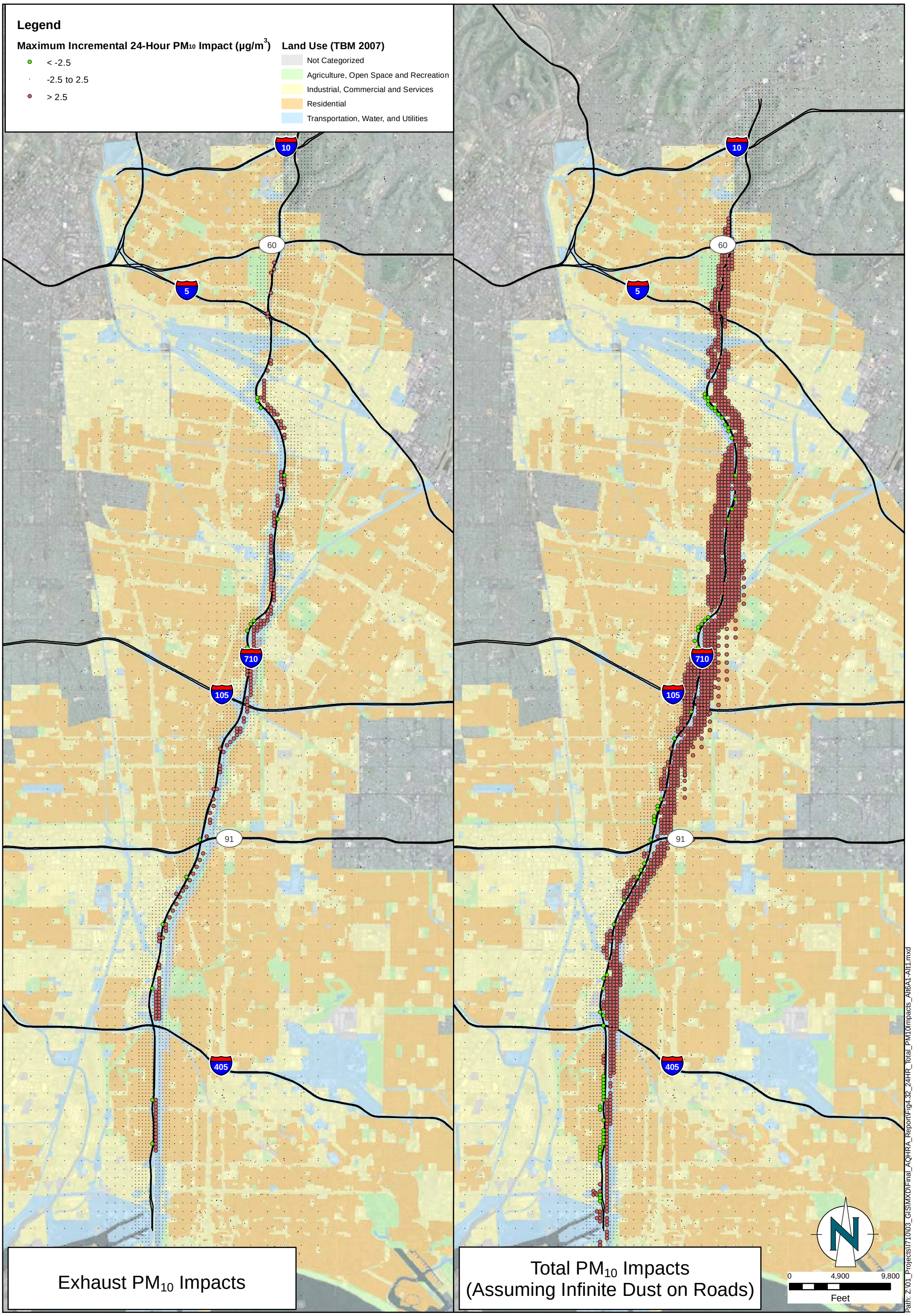
Date: 5/24/2012

Comparison of
2035 Alternative 5A to 2035 Alternative 1
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
4.31

PROJECT: 05-18574E4



ENVIRON

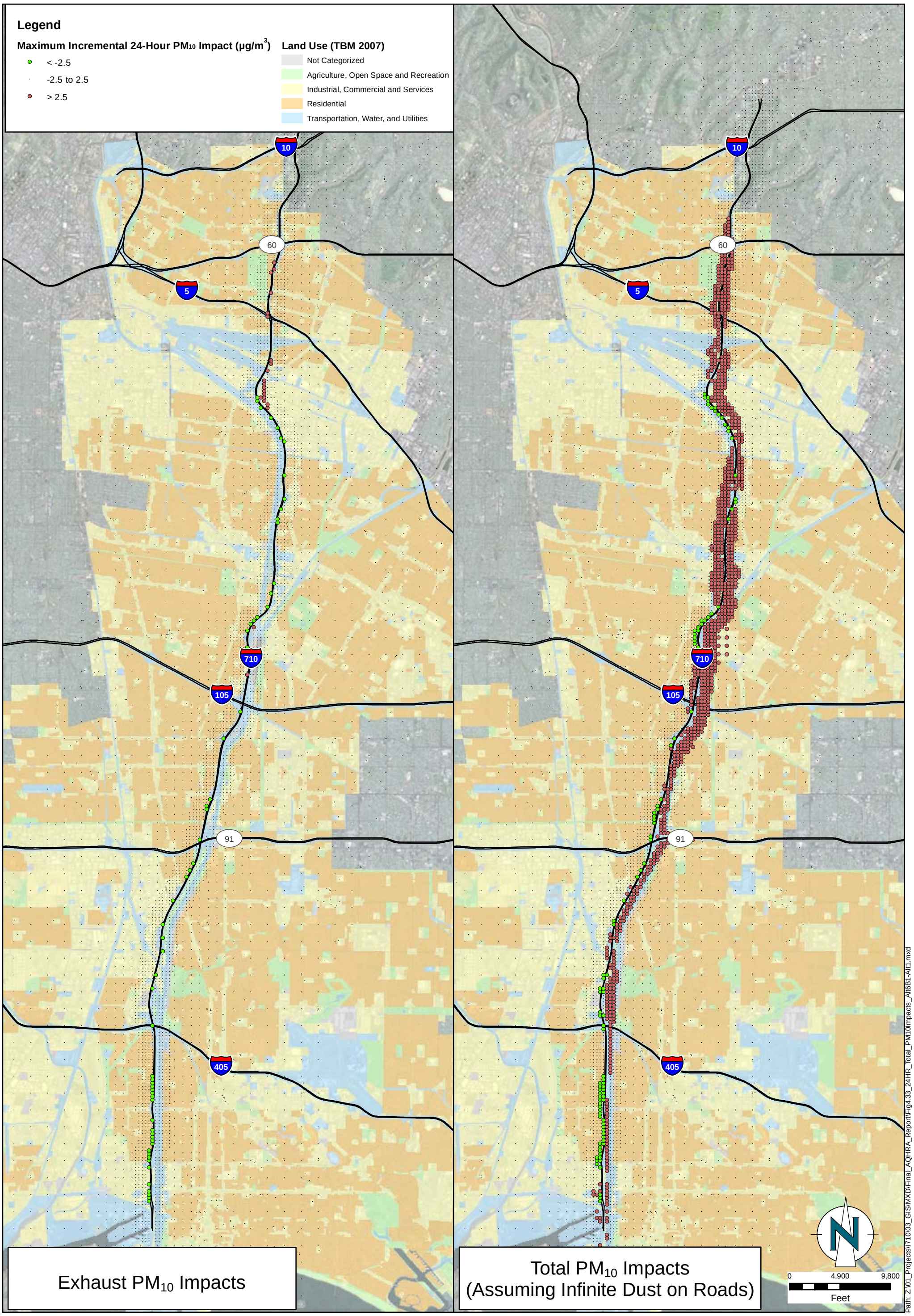
DRAFTED BY: SD

Date: 5/24/2012

Comparison of
2035 Alternative 6A to 2035 Alternative 1
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
4.32

PROJECT: 05-18574E4



ENVIRON

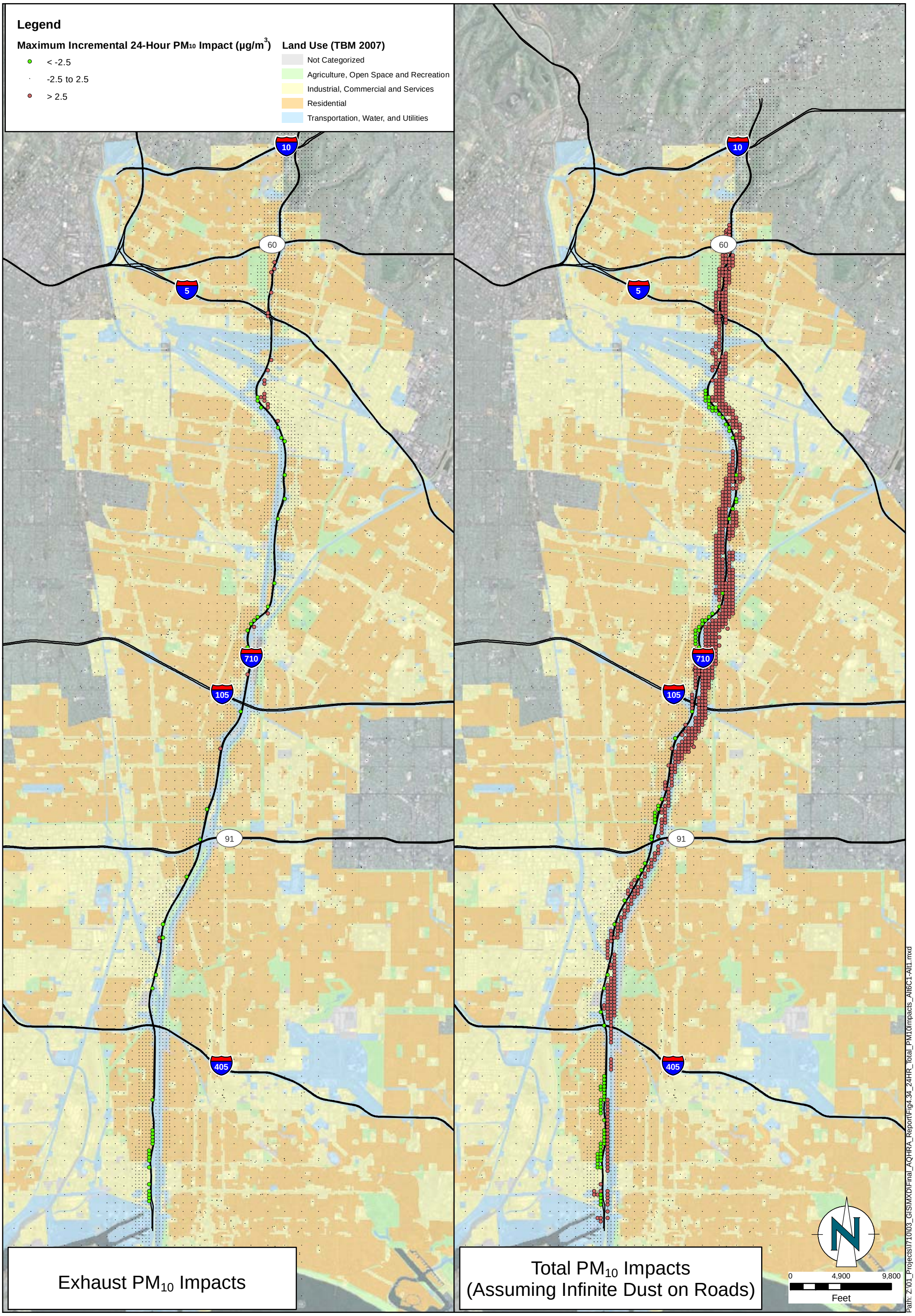
DRAFTED BY: SD

Date: 5/24/2012

Comparison of
2035 Alternative 6B to 2035 Alternative 1
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
4.33

PROJECT: 05-18574E4



ENVIRON

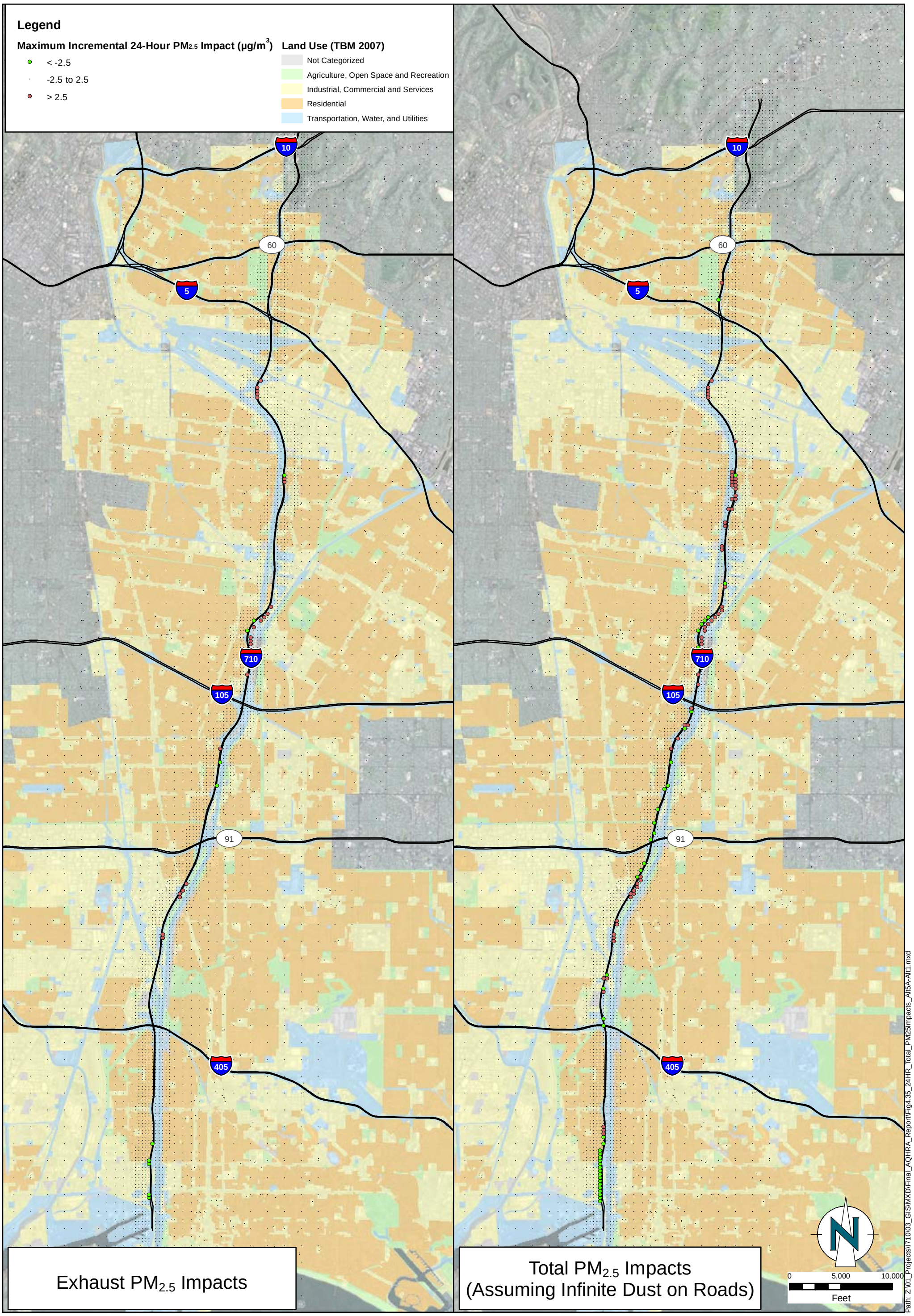
DRAFTED BY: SD

Date: 5/24/2012

Comparison of
2035 Alternative 6C to 2035 Alternative 1
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
4.34

PROJECT: 05-18574E4



ENVIRON

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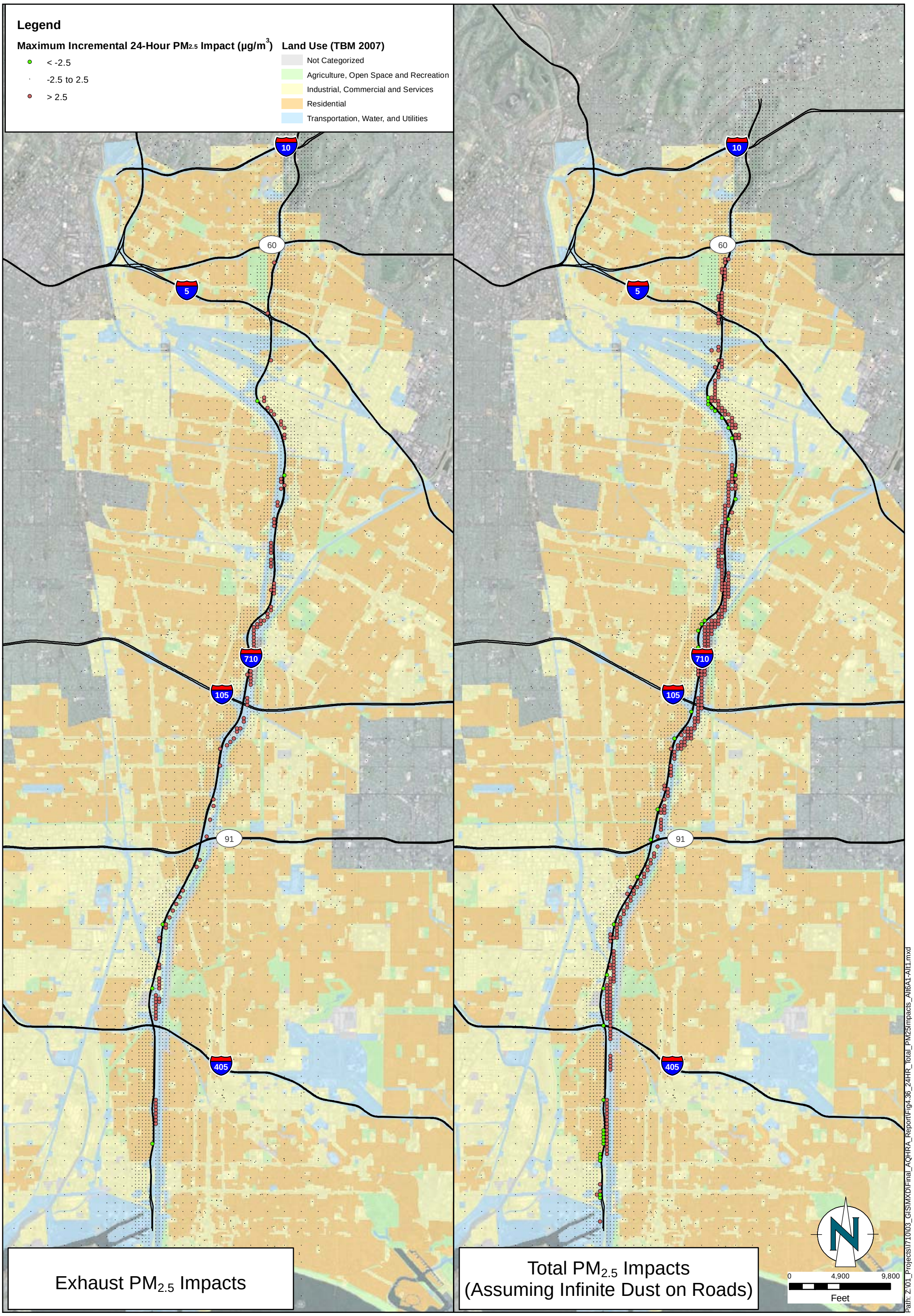
Date: 5/24/2012

Comparison of
2035 Alternative 5A to 2035 Alternative 1
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
4.35

PROJECT: 05-18574E4



ENVIRON

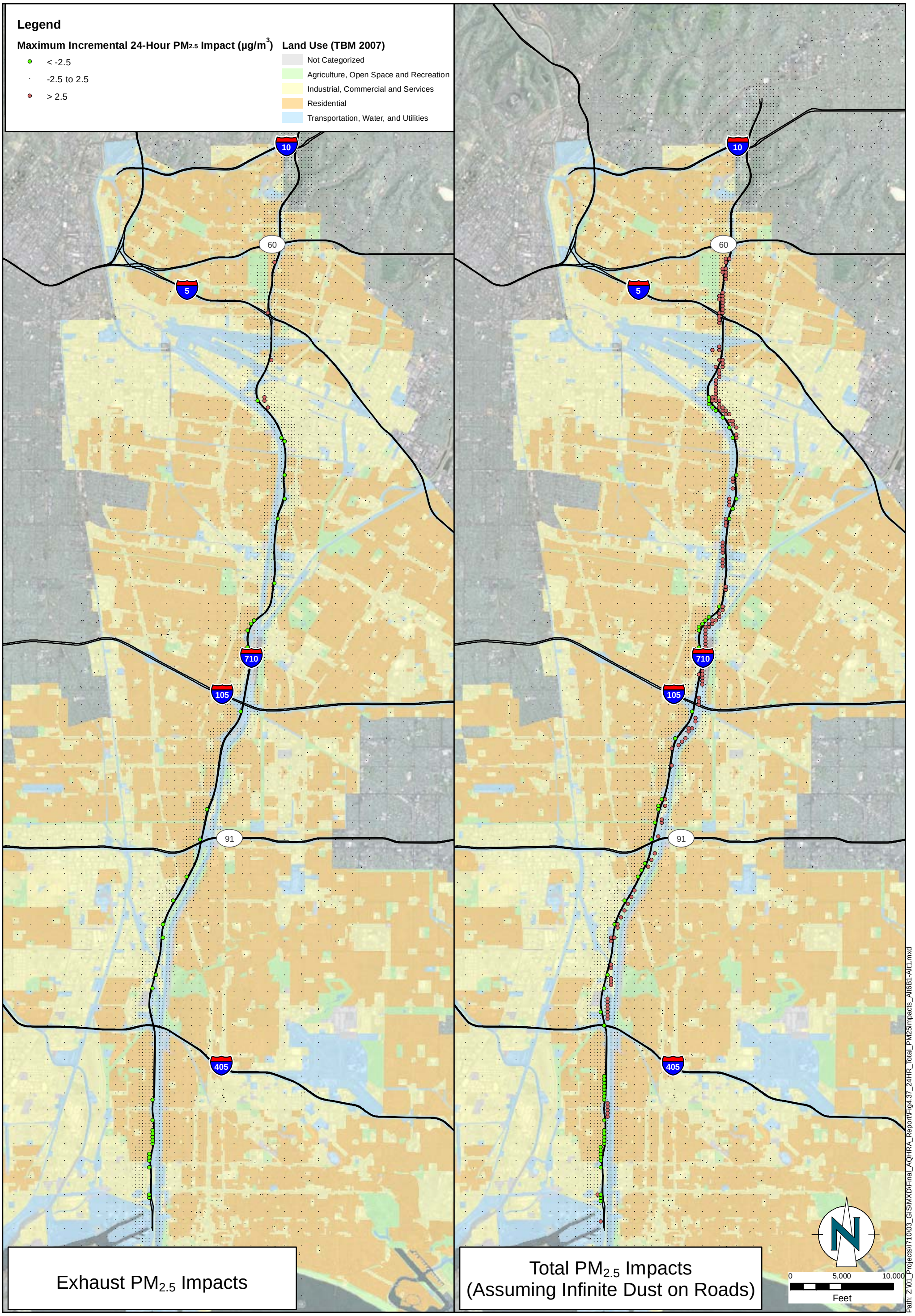
DRAFTED BY: SD

Date: 5/24/2012

Comparison of
2035 Alternative 6A to 2035 Alternative 1
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
4.36

PROJECT: 05-18574E4



ENVIRON

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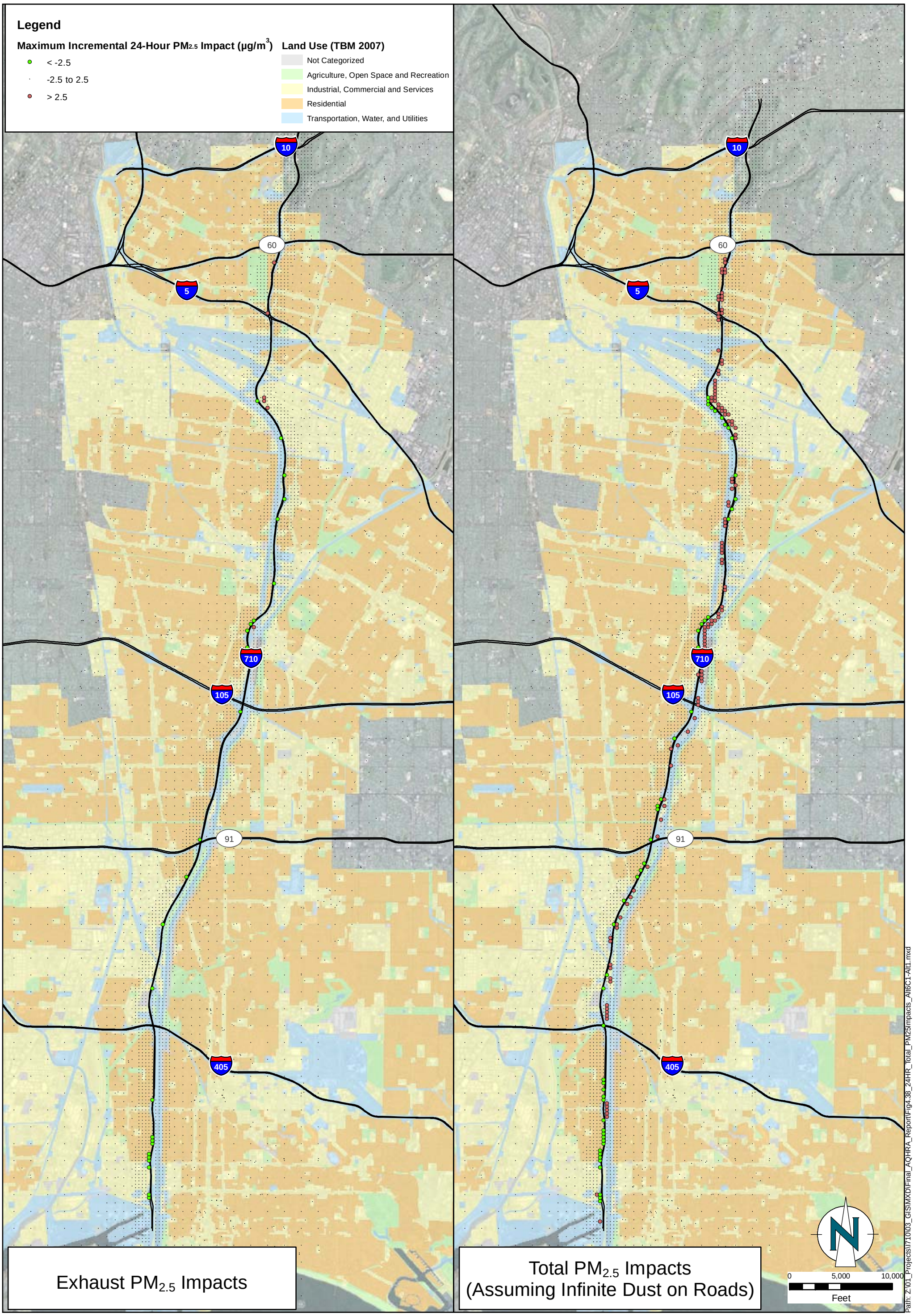
Date: 5/24/2012

Comparison of
2035 Alternative 6B to 2035 Alternative 1
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
4.37

PROJECT: 05-18574E4



ENVIRON

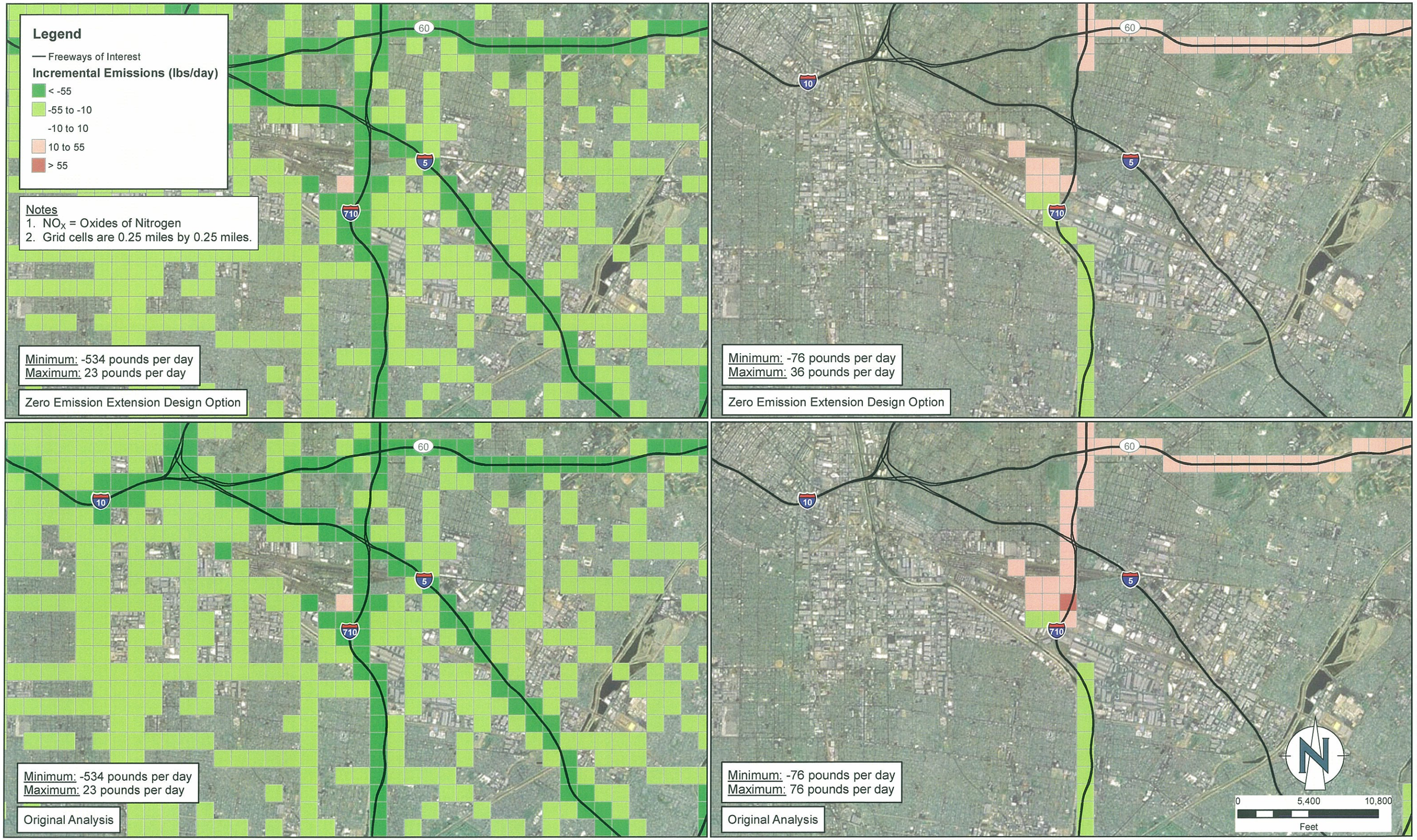
DRAFTED BY: SD

Date: 5/24/2012

Comparison of
2035 Alternative 6C to 2035 Alternative 1
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
4.38

PROJECT: 05-18574E4



Path: Z:\01_Projects\I710\03_GIS\MXD\East LA Analyses\Fig1_NOx_Alt6B-2008&Alt1_Opt18ELA.mxd

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DRAFTED BY: MMM

Date: 6/1/2012

Comparison of
2035 Alternative 6B to 2008 Baseline
NO_X Emissions

Comparison of
2035 Alternative 6B to 2035 Alternative 1
NO_X Emissions

Figure
1

PROJECT: 0518574F4

Path: Z:\01_Projects\I710\03_GIS\MXD\East LA Analyses\Fig2_NOx_Alt6C-2008&Alt1_Opt1&ELA.mxd

ENVIRON

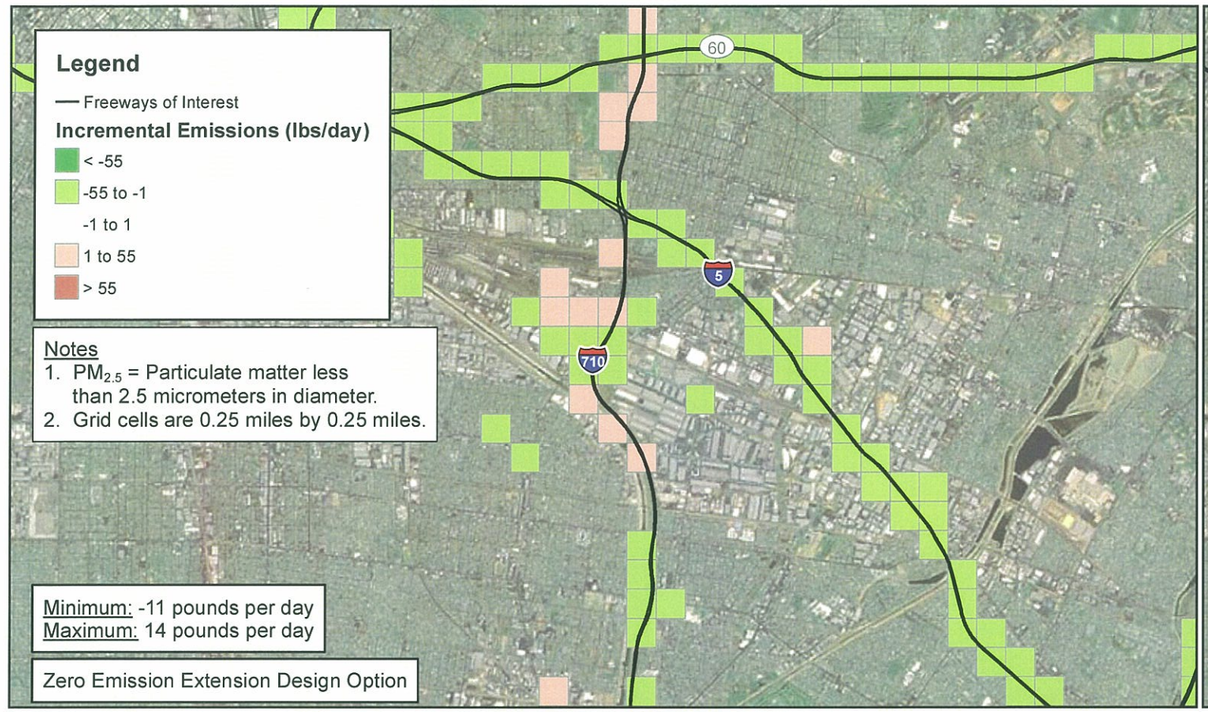
DRAFTED BY: MMM | Date: 6/1/2012

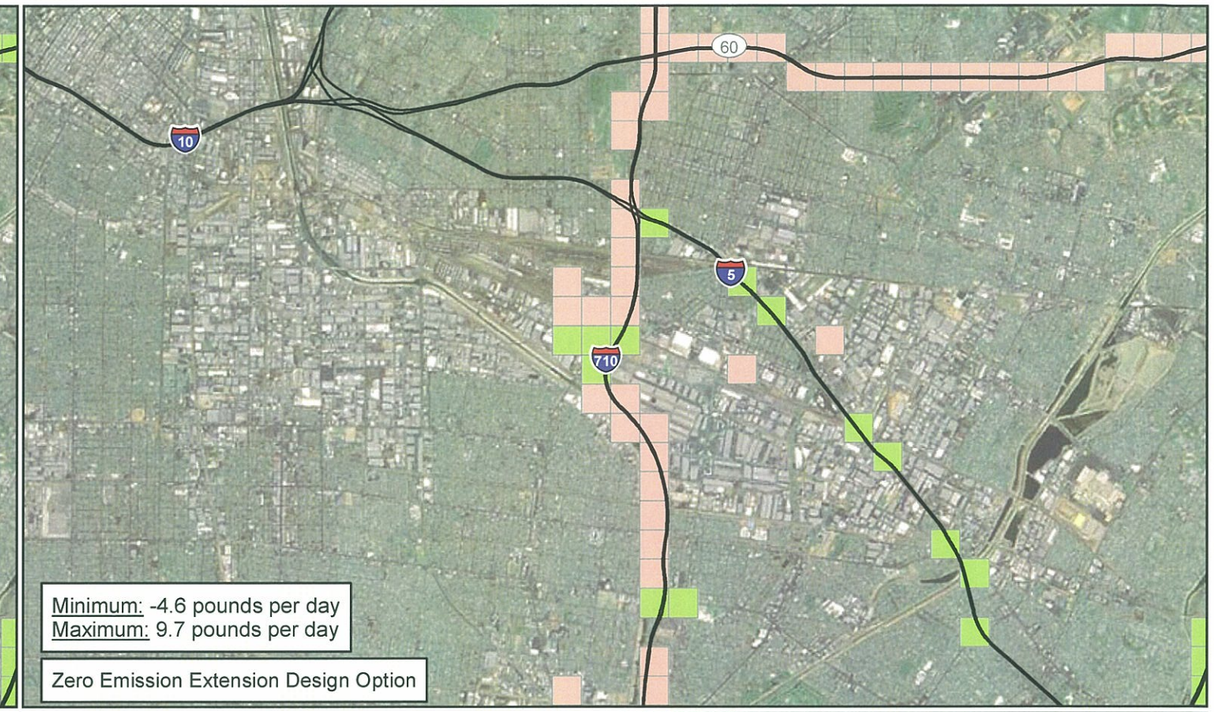
Comparison of
2035 Alternative 6C to 2008 Baseline
NO_X Emissions

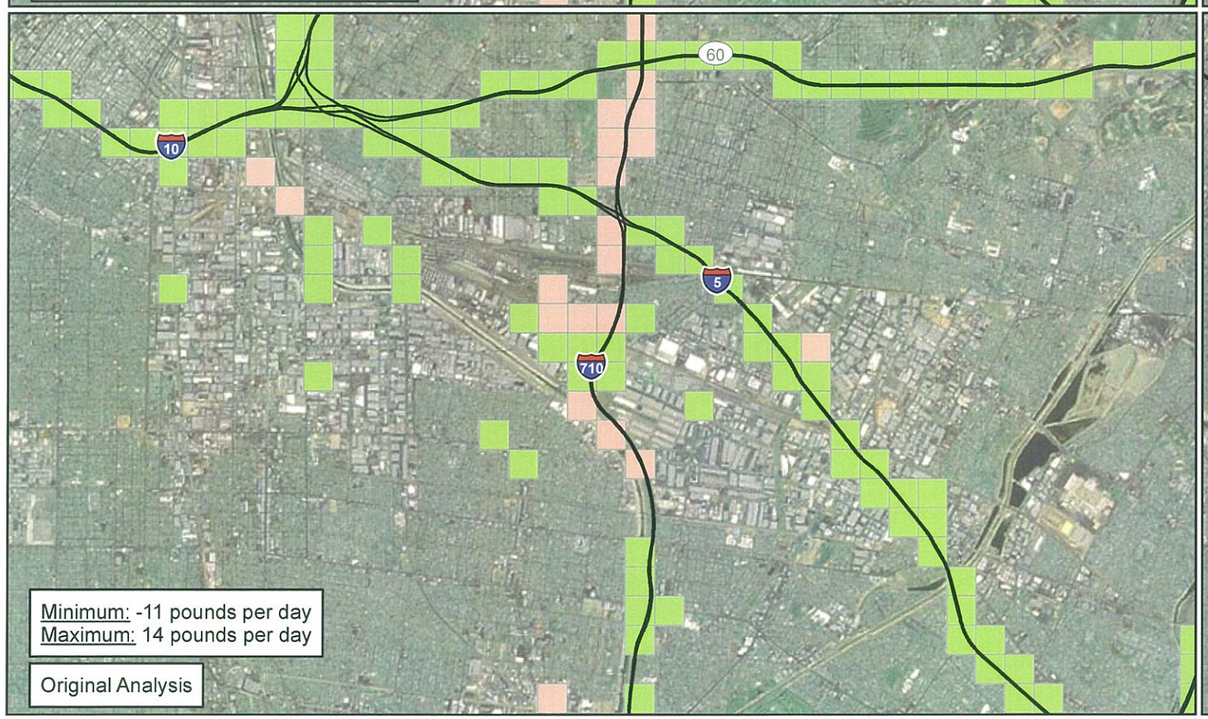
Comparison of
2035 Alternative 6C to 2035 Alternative 1
NO_X Emissions

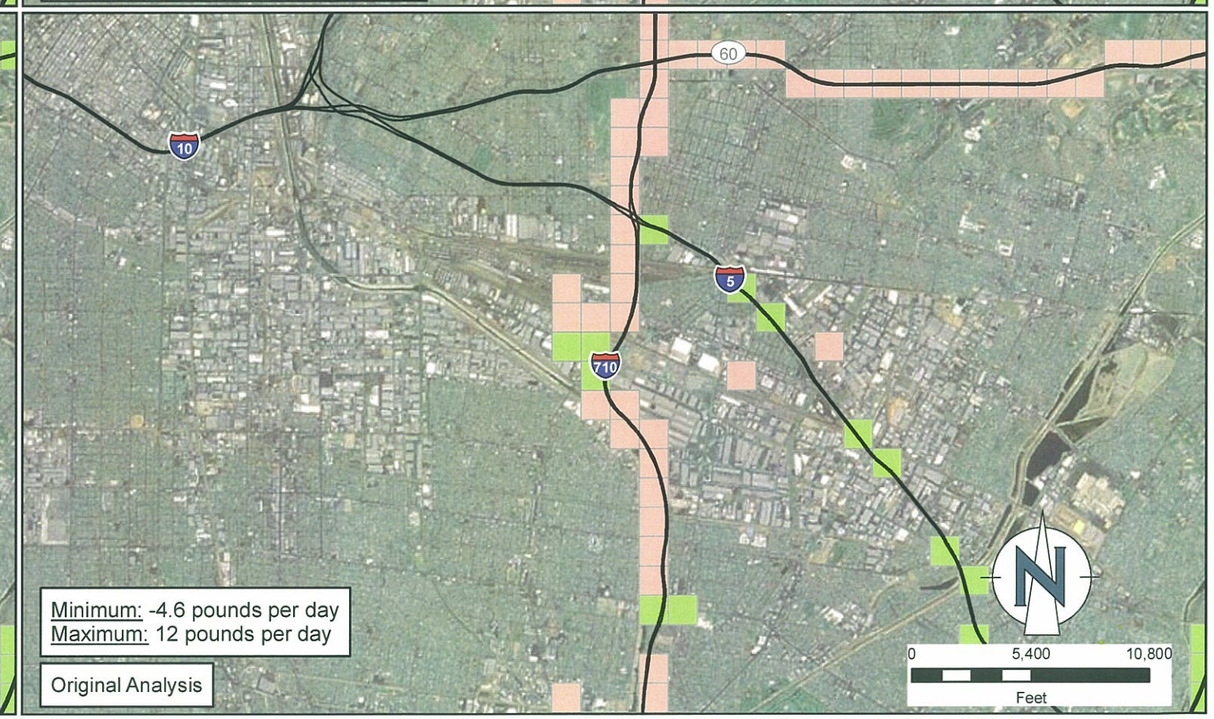
Figure
2

PROJECT: 0518574F4









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ENVIRON

DRAFTED BY: MMM

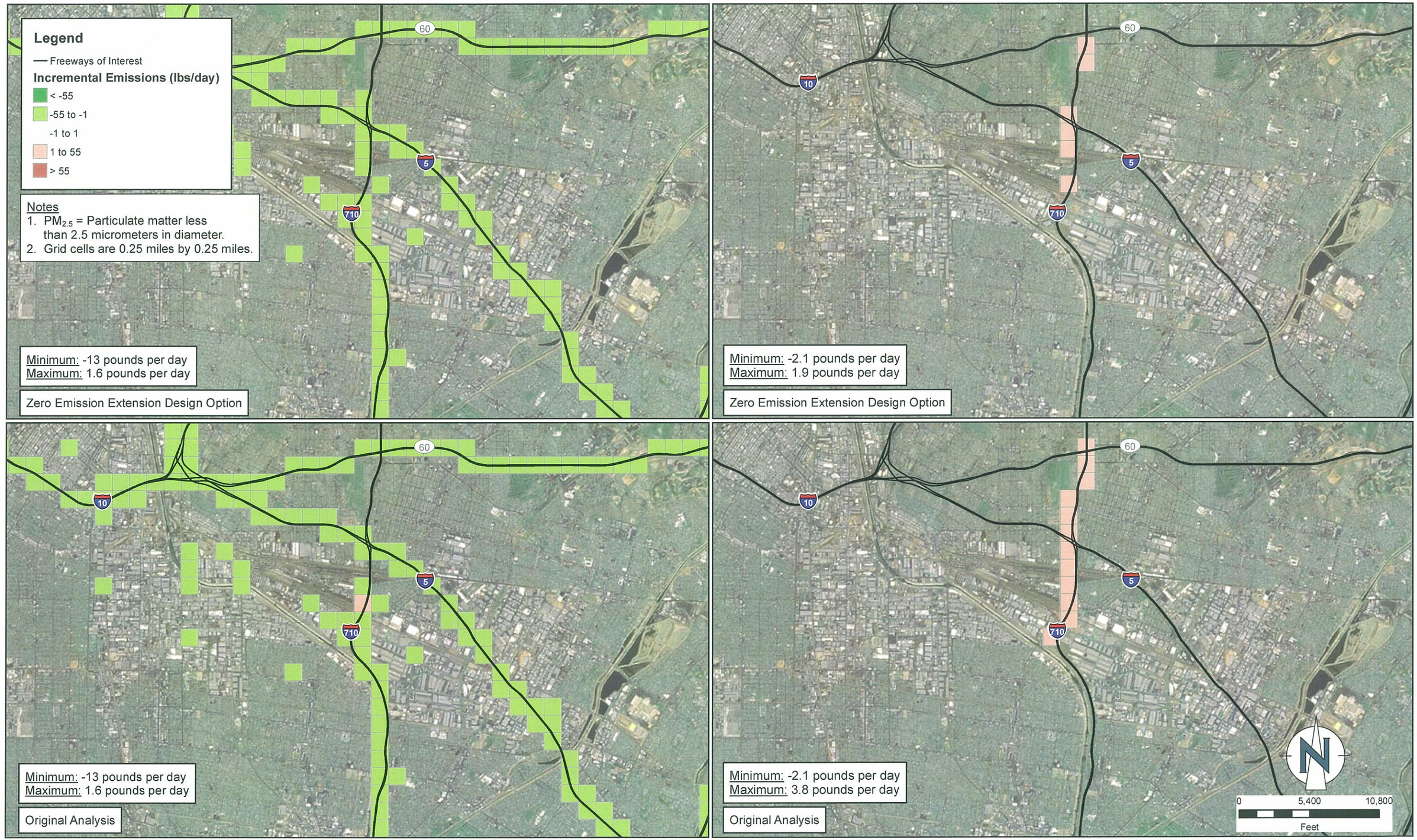
Date: 6/1/2012

Comparison of
2035 Alternative 6B to 2008 Baseline
Total $PM_{2.5}$ Emissions

Comparison of
2035 Alternative 6B to 2035 Alternative 1
Total $PM_{2.5}$ Emissions

Figure
3A

PROJECT: 0518574F4



Path: Z:\01_Projects\I710\03_GIS\MXD\East LA Analyses\Fig3B_ExhaustPM2.5_Alt6B-2008&Alt1_Opt1&ELA.mxd

ENVIRON

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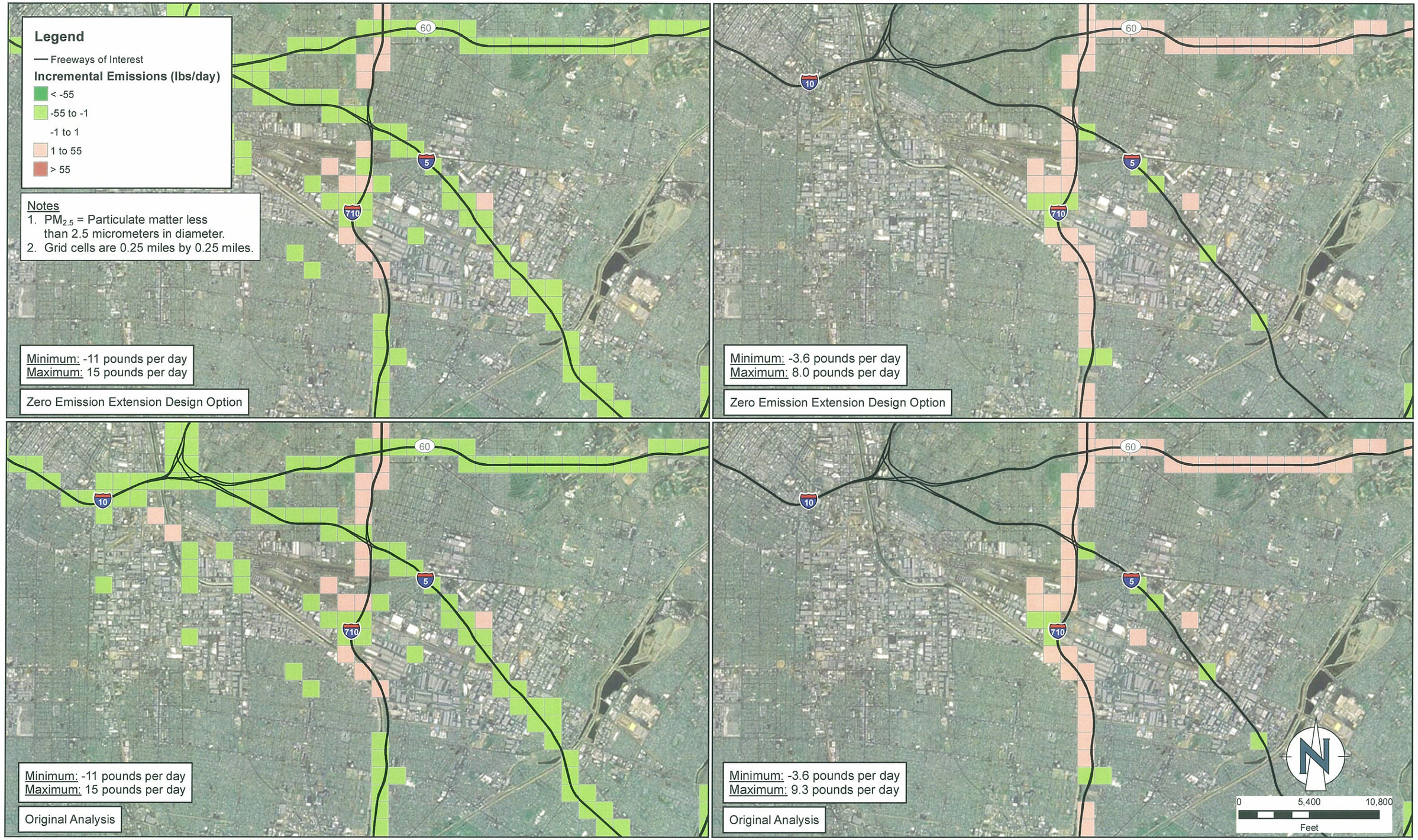
Comparison of
2035 Alternative 6B to 2008 Baseline
Exhaust $PM_{2.5}$ Emissions

Comparison of
2035 Alternative 6B to 2035 Alternative 1
Exhaust $PM_{2.5}$ Emissions

Figure
3B

PROJECT: 0518574F4



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ENVIRON

DRAFTED BY: MMM

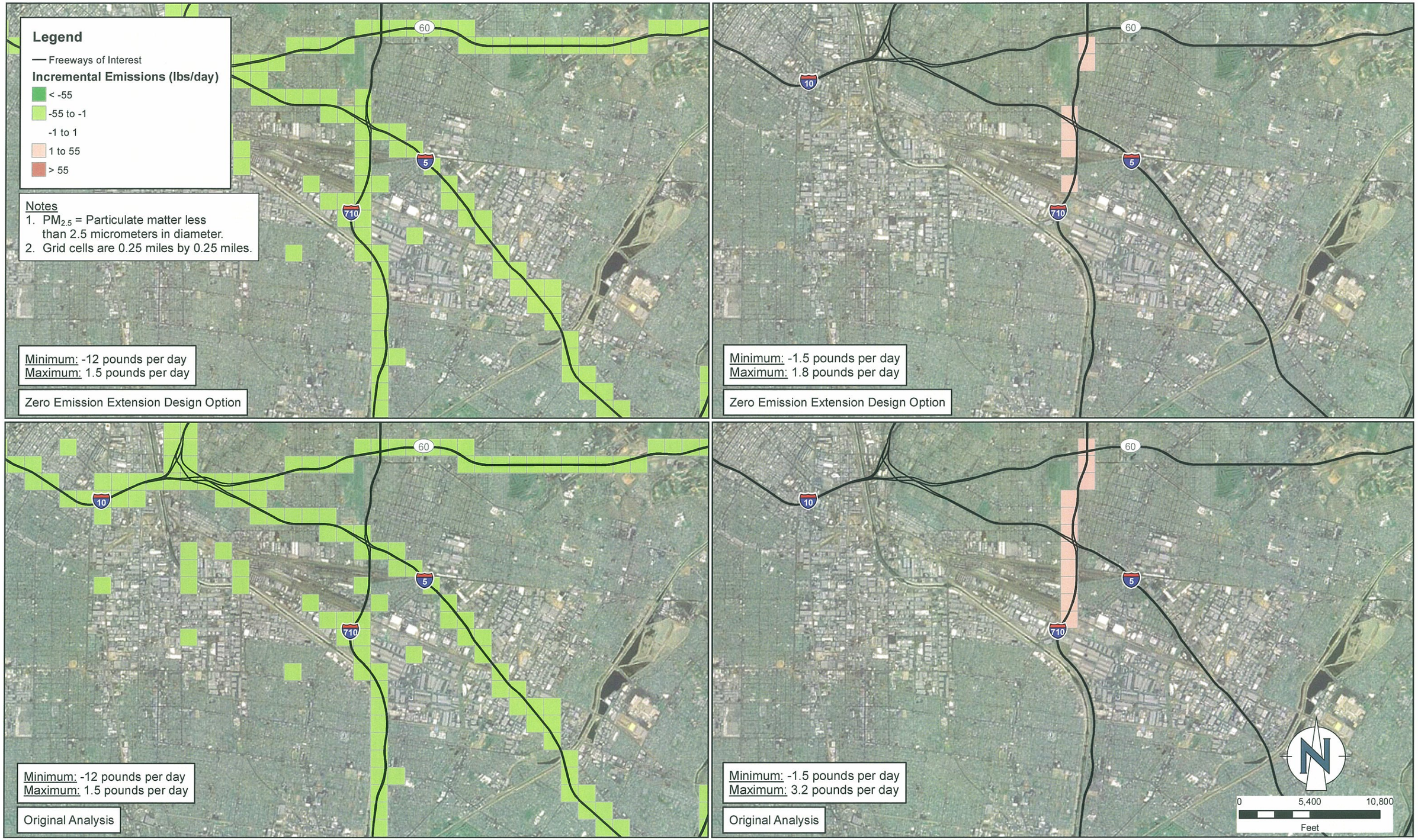
Date: 6/1/2012

Comparison of
2035 Alternative 6C to 2008 Baseline
Total $PM_{2.5}$ Emissions

Comparison of
2035 Alternative 6C to 2035 Alternative 1
Total $PM_{2.5}$ Emissions

Figure
4A

PROJECT: 0518574F4



Path: Z:\01_Projects\710\03_GIS\MXD\East LA Analyses\Fig4B_ExhaustPM2.5_Alt6C-2008&Alt1_Opt18ELA.mxd

ENVIRON

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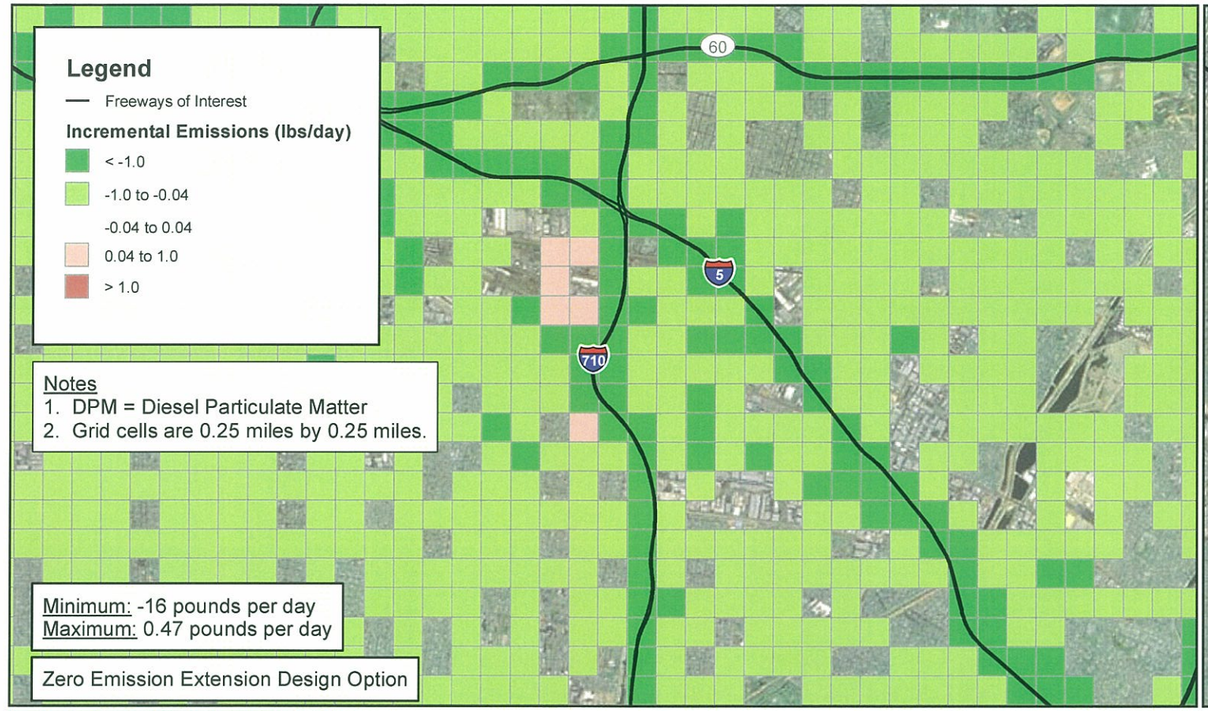
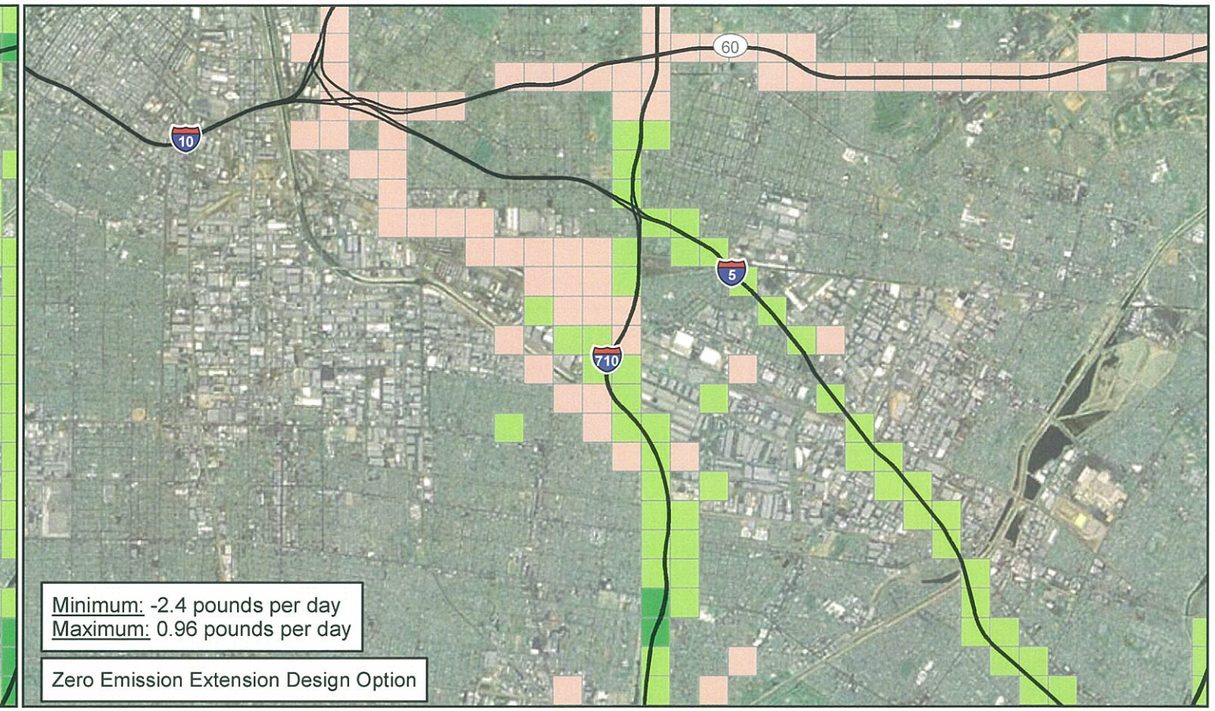
Comparison of
2035 Alternative 6C to 2008 Baseline
Exhaust $PM_{2.5}$ Emissions

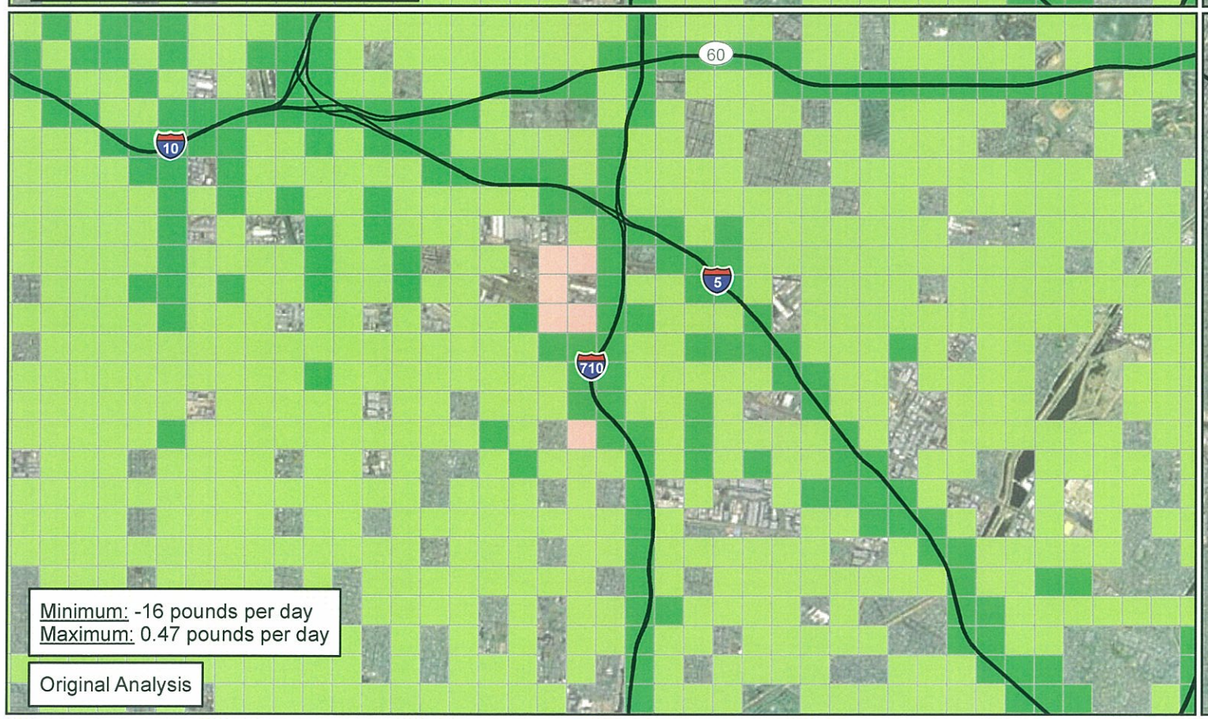
Comparison of
2035 Alternative 6C to 2035 Alternative 1
Exhaust $PM_{2.5}$ Emissions

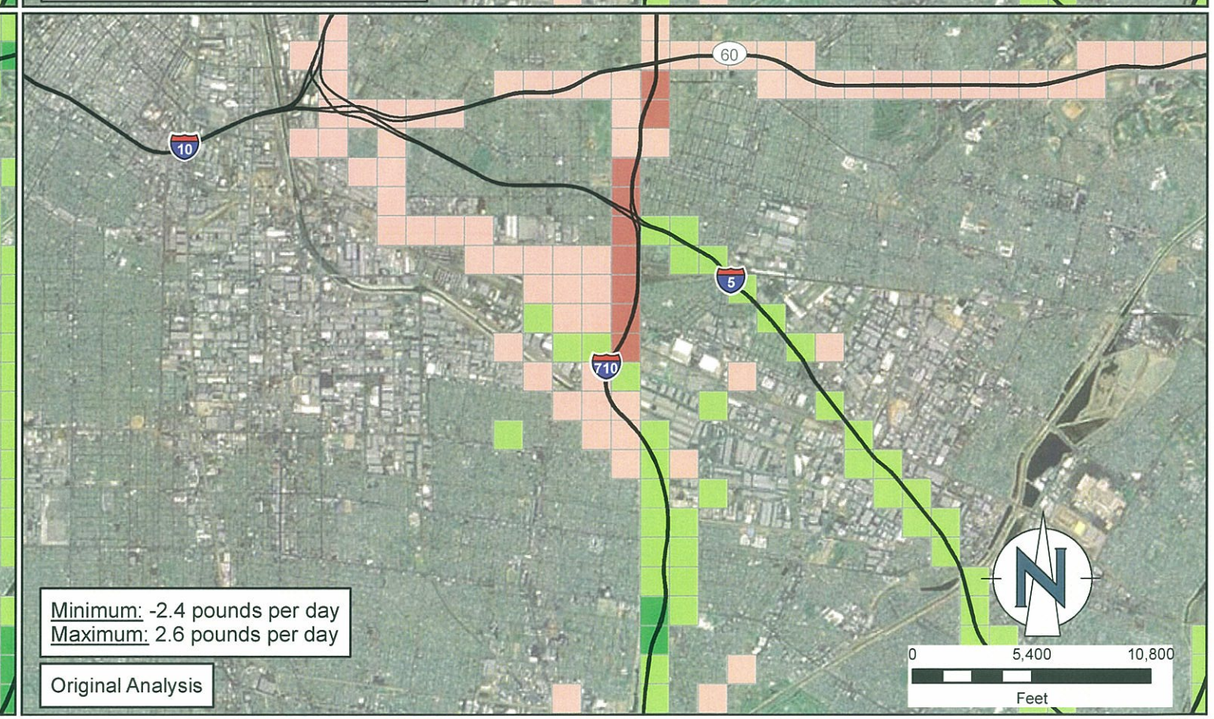
Figure
4B

PROJECT: 0518574F4









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ENVIRON

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Date: 6/1/2012

Comparison of
2035 Alternative 6B to 2008 Baseline
DPM Emissions

Comparison of
2035 Alternative 6B to 2035 Alternative 1
DPM Emissions

Figure
5

PROJECT: 0518574F4

Path: Z:\01_Projects\I710\03_GIS\MXD\East LA Analyses\Fig6_DPM_Alt6C-2008&Alt1-ELA.mxd

ENVIRON

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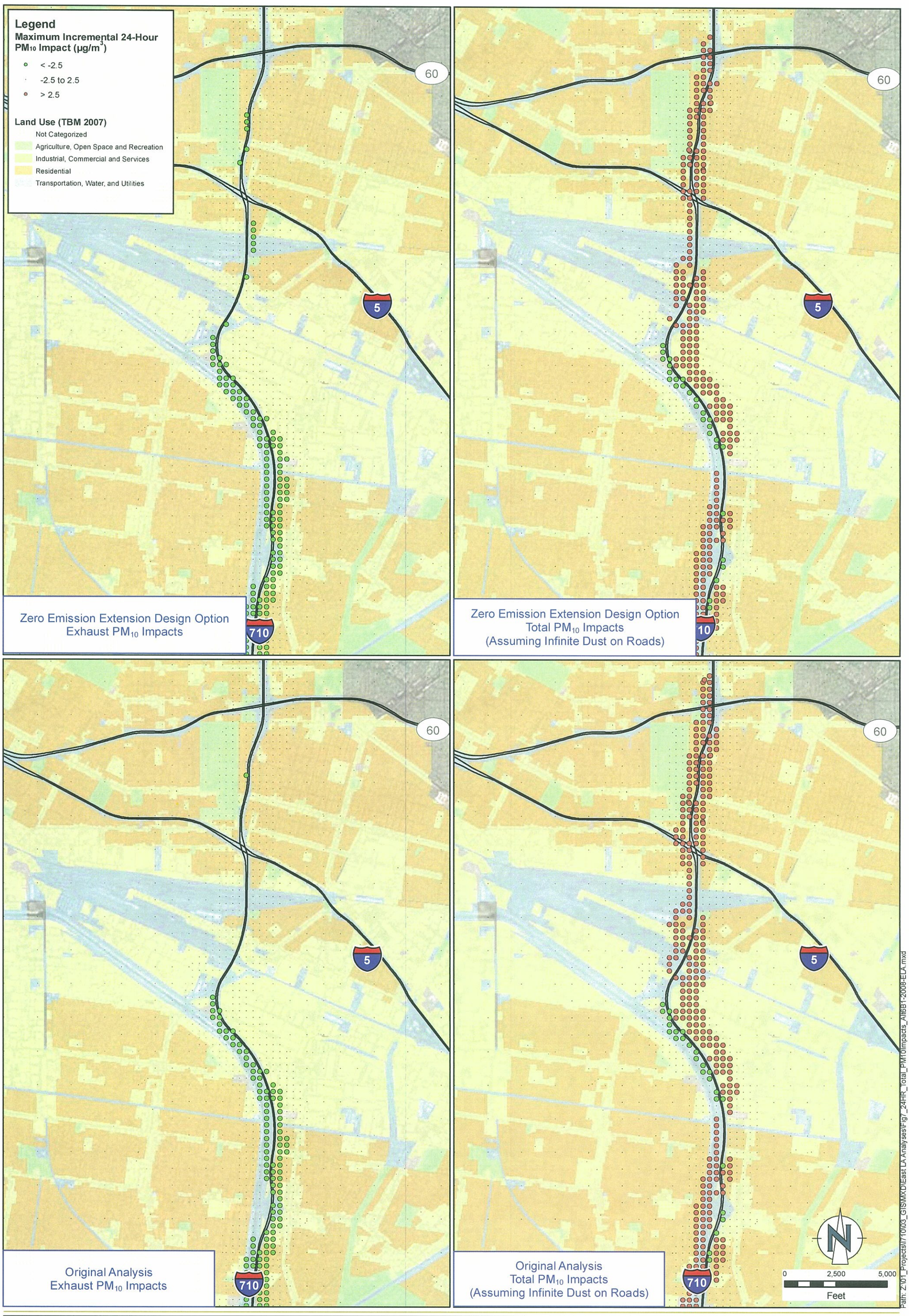
Date: 6/1/2012

Comparison of
2035 Alternative 6C to 2008 Baseline
DPM Emissions

Comparison of
2035 Alternative 6C to 2035 Alternative 1
DPM Emissions

Figure
6

PROJECT: 0518574F4



ENVIRON

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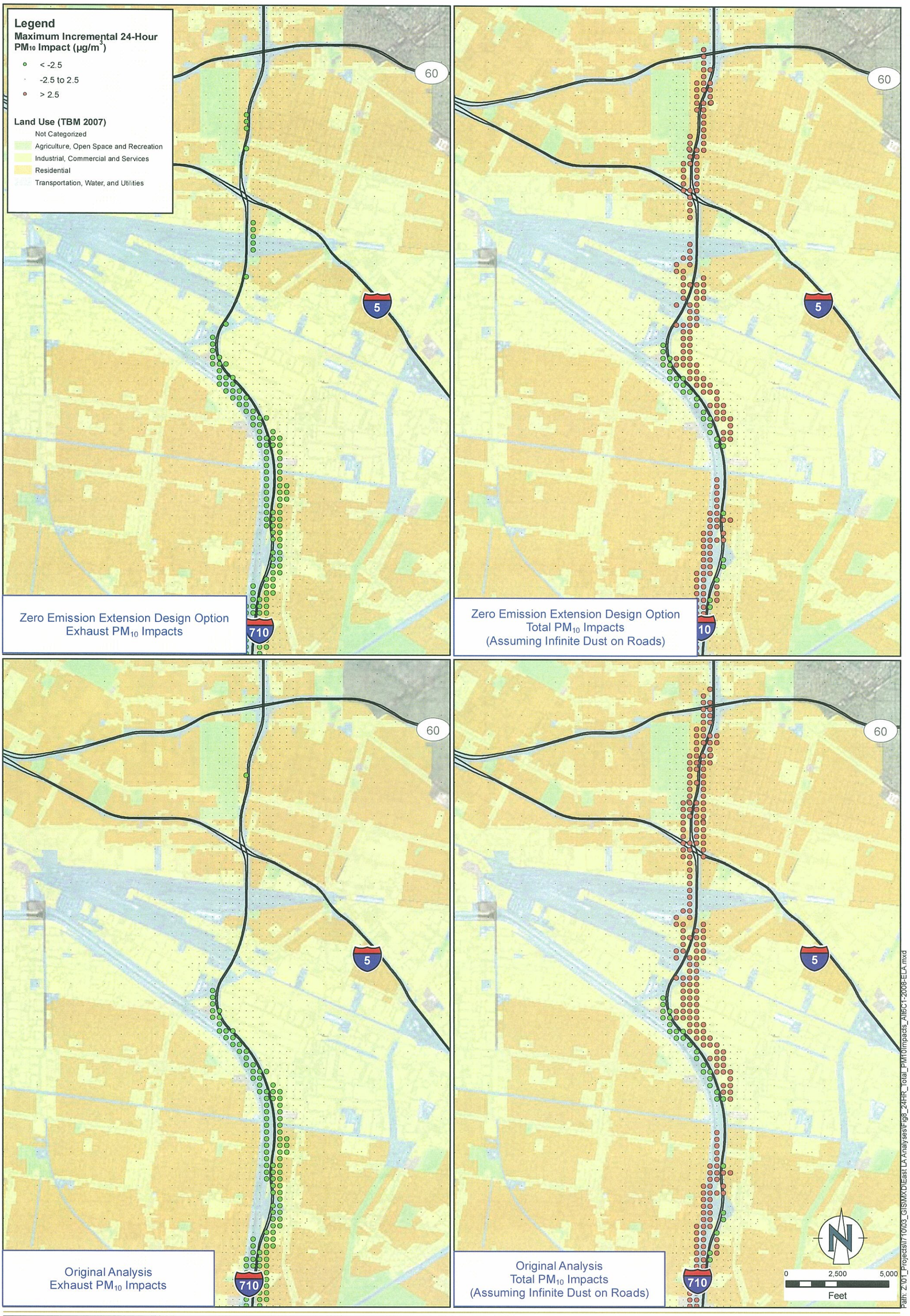
Comparison of
2035 Alternative 6B to 2008 Baseline
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
7

PROJECT: 05-18574F4



ENVIRON

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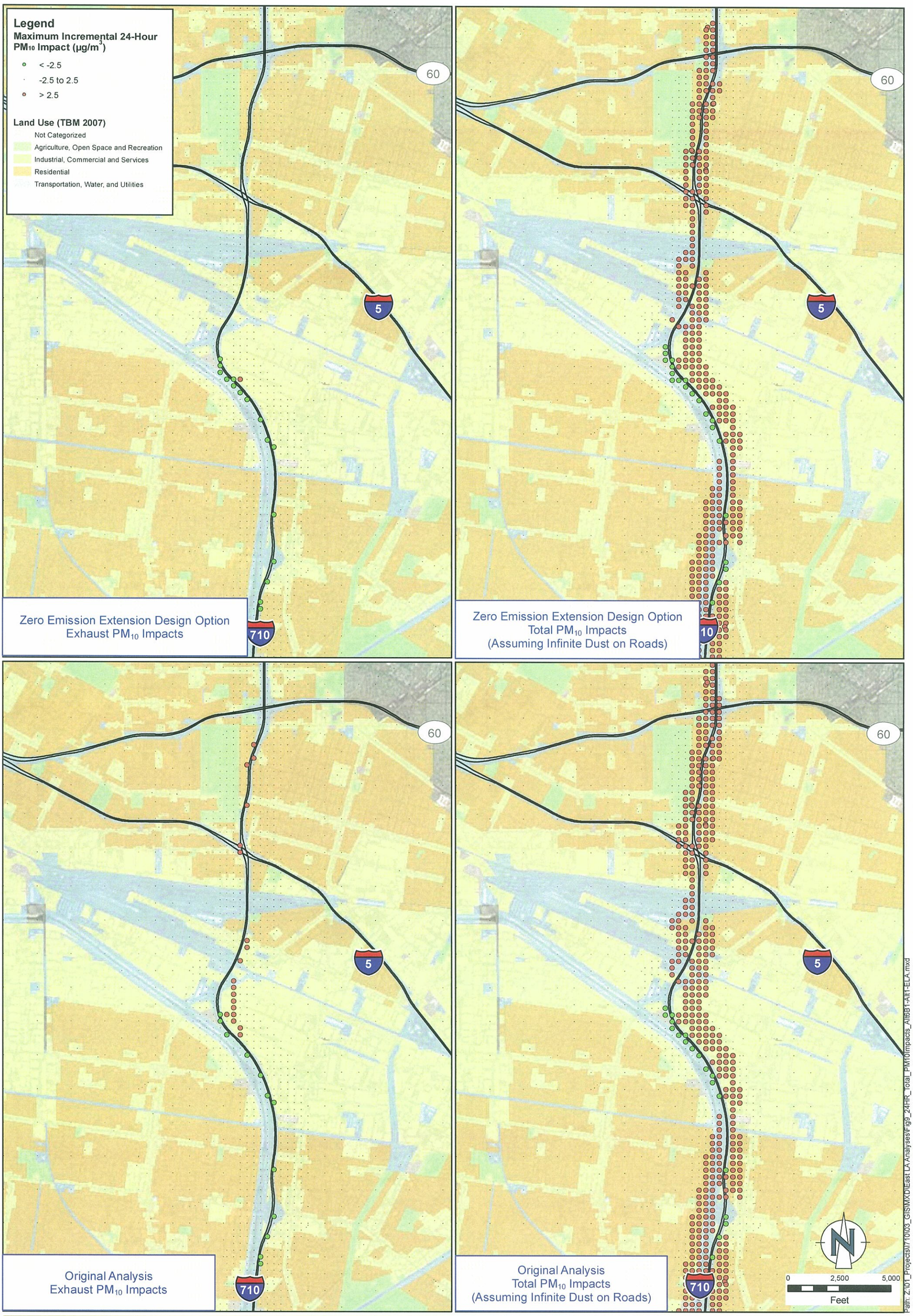
Comparison of
2035 Alternative 6C to 2008 Baseline
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
8

PROJECT: 05-18574F4



ENVIRON

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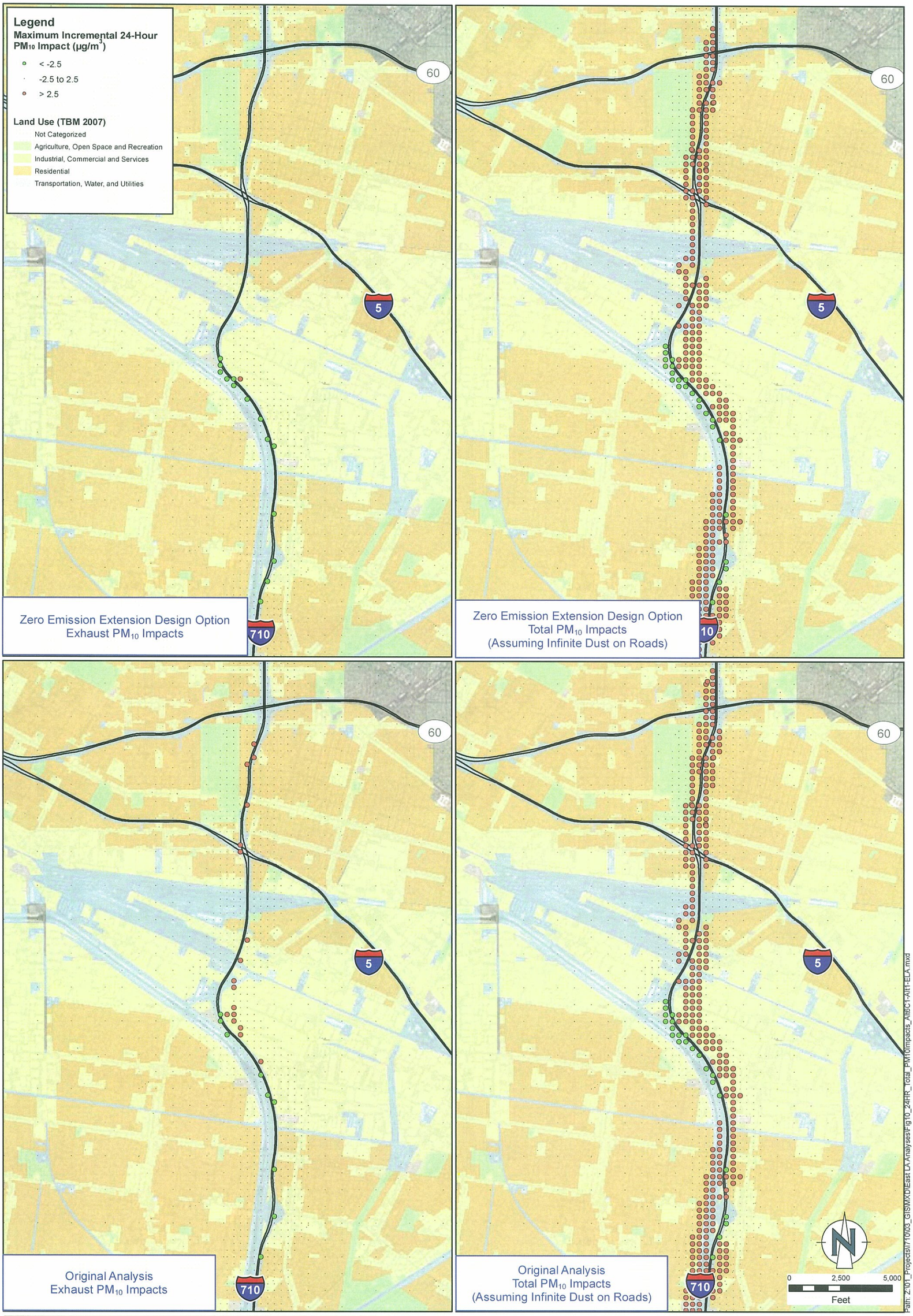
Comparison of
2035 Alternative 6B to 2035 Alternative 1
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
9

PROJECT: 05-18574F4



ENVIRON

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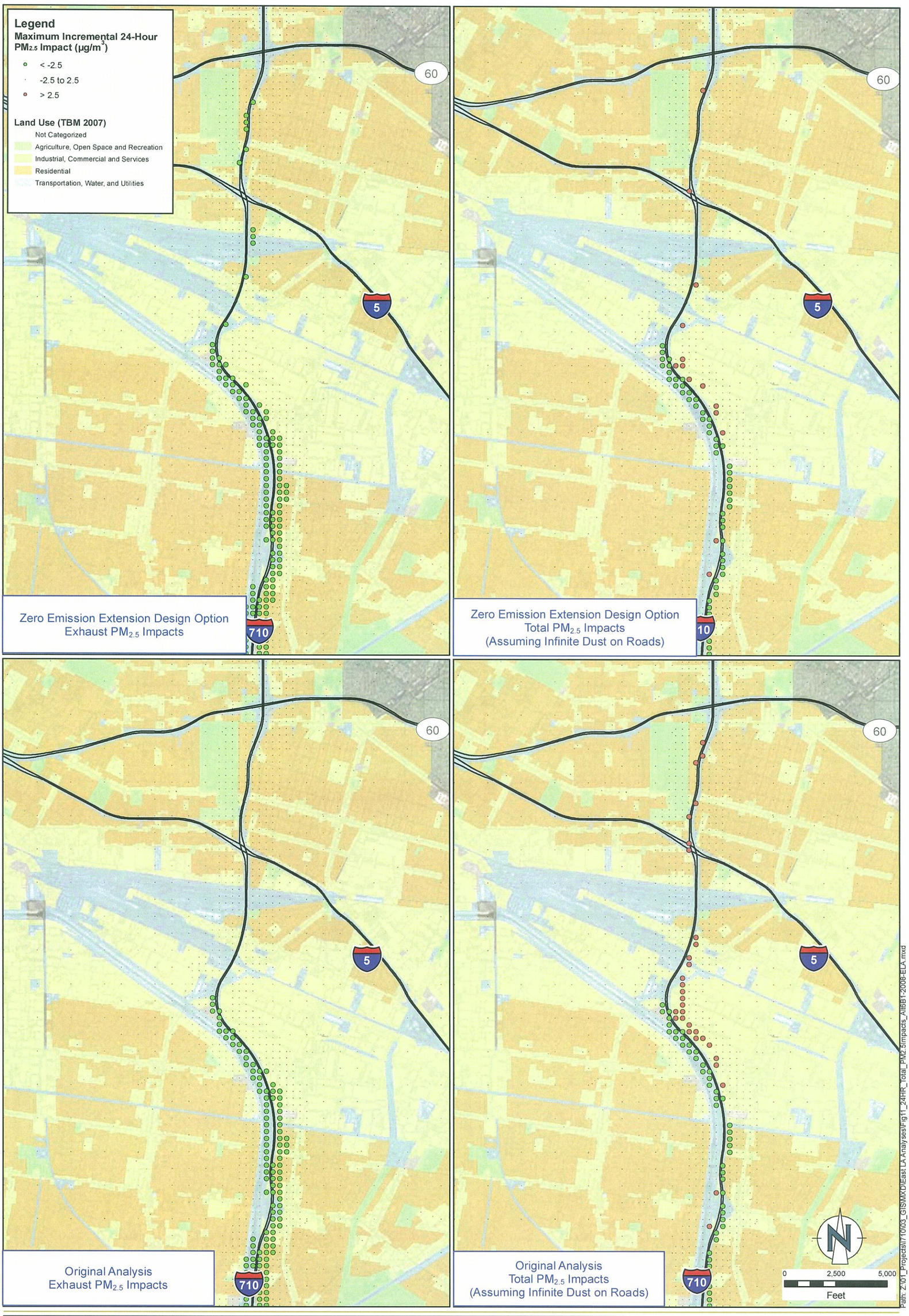
Comparison of
2035 Alternative 6C to 2035 Alternative 1
Maximum Incremental 24-Hour PM_{10} Impacts

Figure
10

PROJECT: 05-18574F4



ENVIRON

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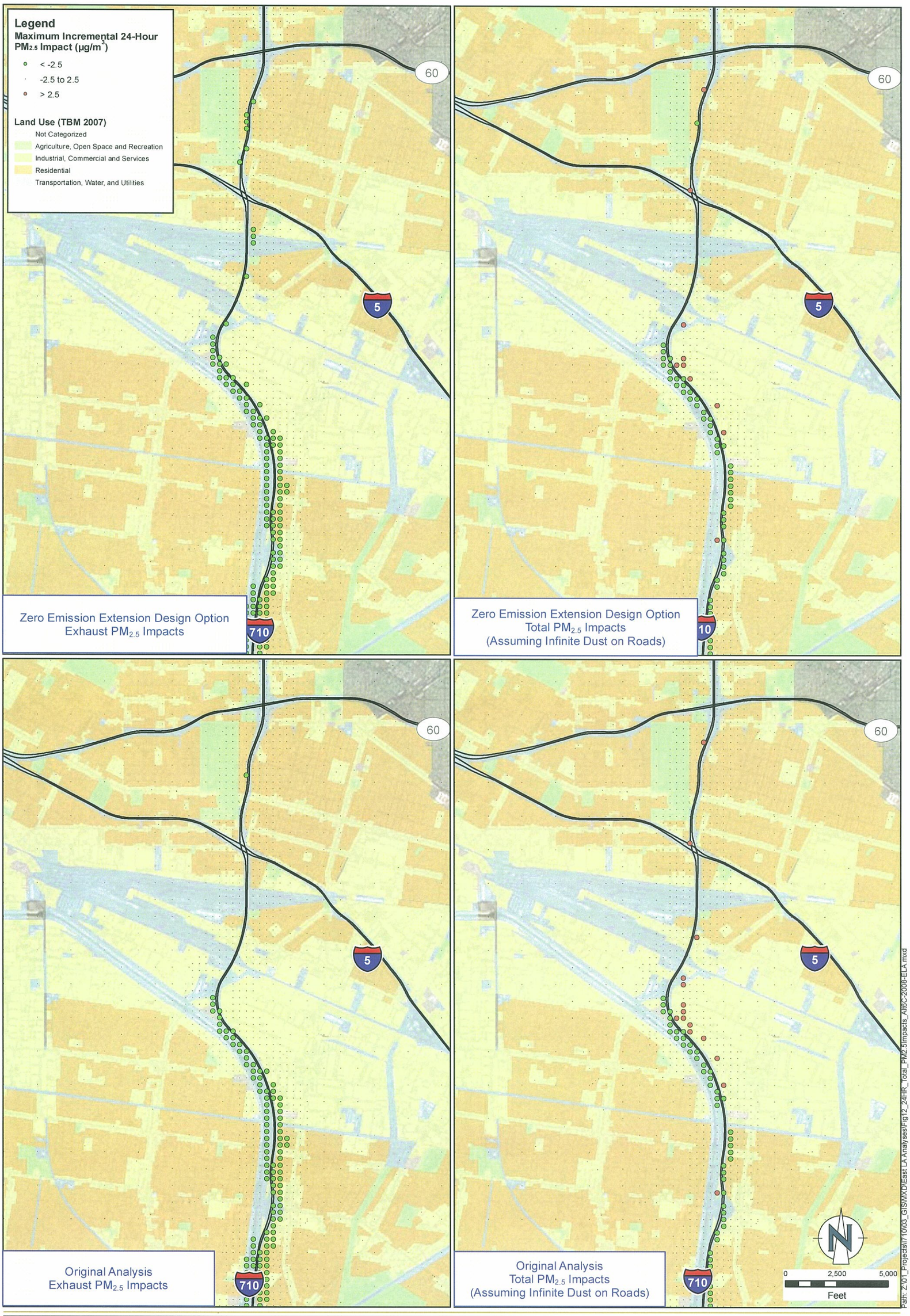
Comparison of
2035 Alternative 6B to 2008 Baseline
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
11

PROJECT: 05-18574F4



ENVIRON

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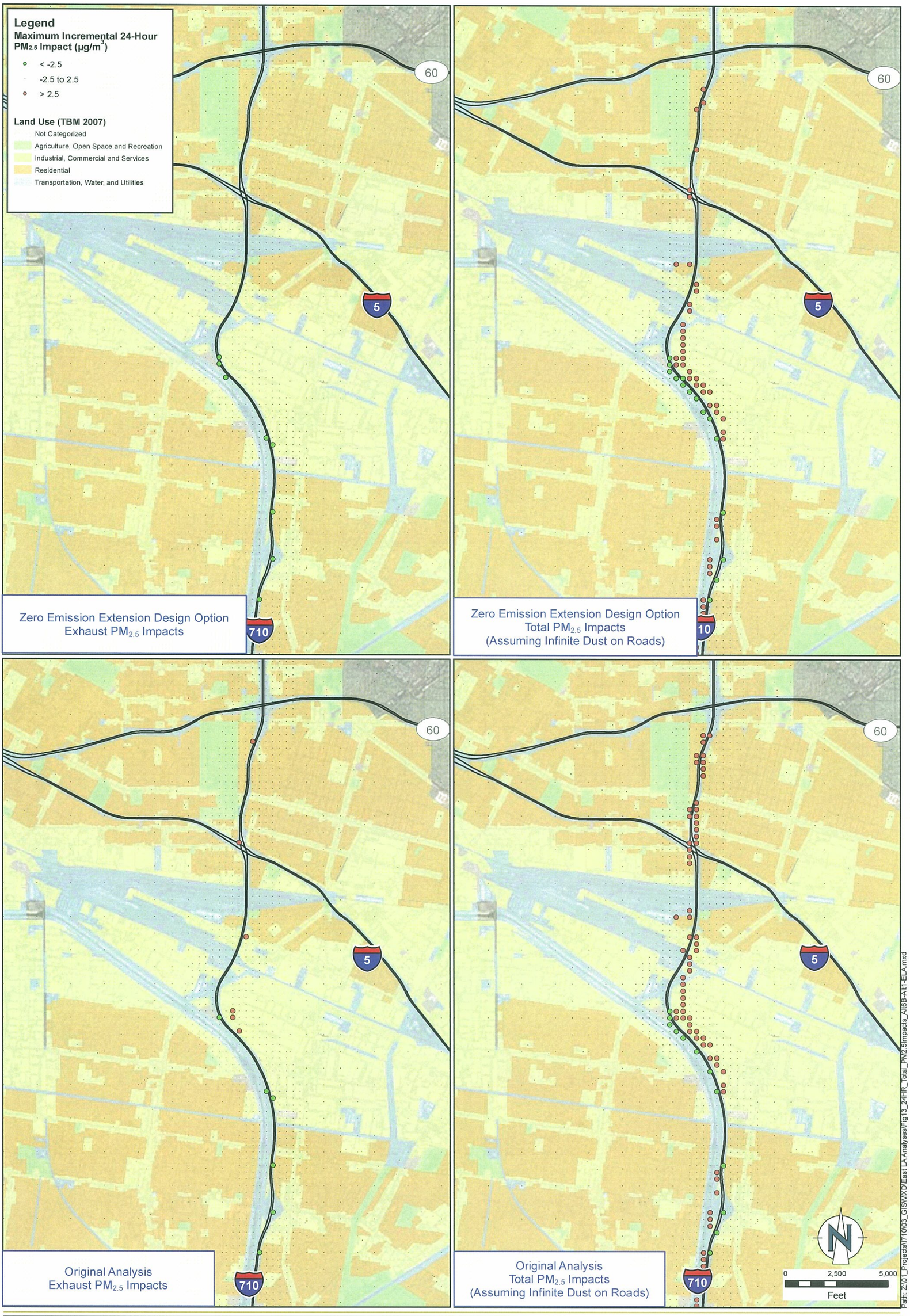
Comparison of
2035 Alternative 6C to 2008 Baseline
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
12

PROJECT: 05-18574F4



ENVIRON

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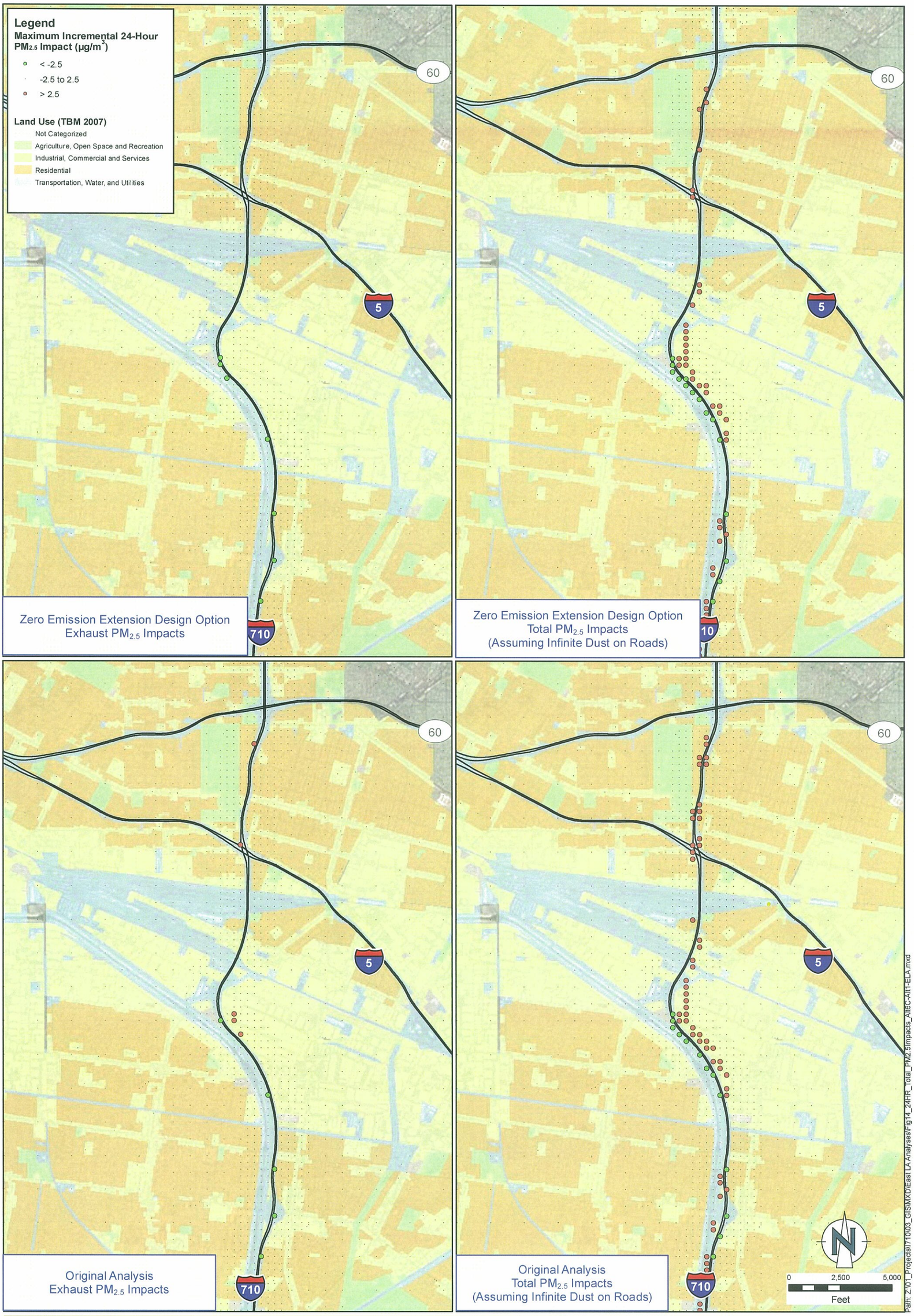
Comparison of
2035 Alternative 6B to 2035 Alternative 1
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
13

PROJECT: 05-18574F4



ENVIRON

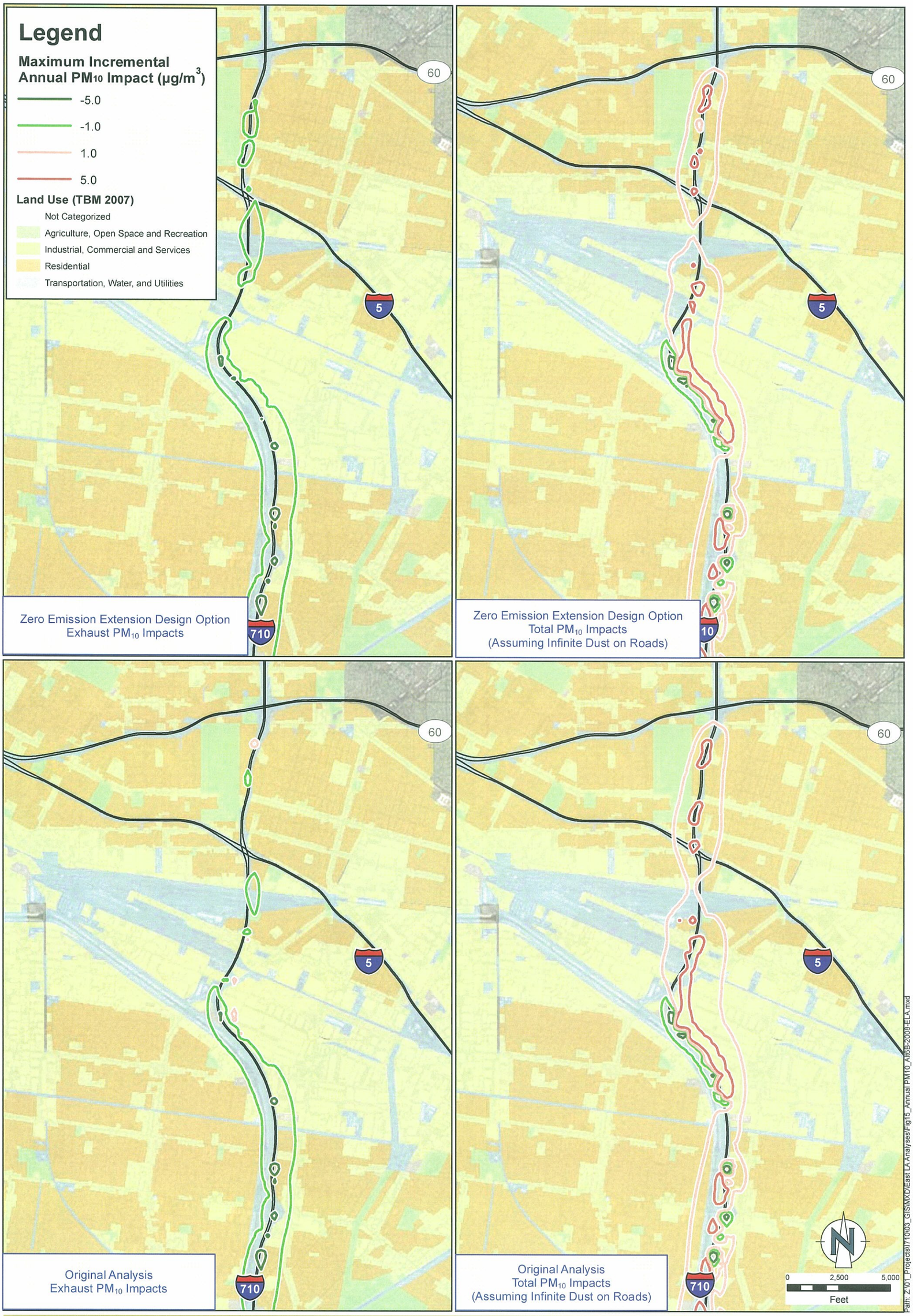
DRAFTED BY: SD

Date: 6/1/2012

Comparison of
2035 Alternative 6C to 2035 Alternative 1
Maximum Incremental 24-Hour $PM_{2.5}$ Impacts

Figure
14

PROJECT: 05-18574F4



ENVIRON

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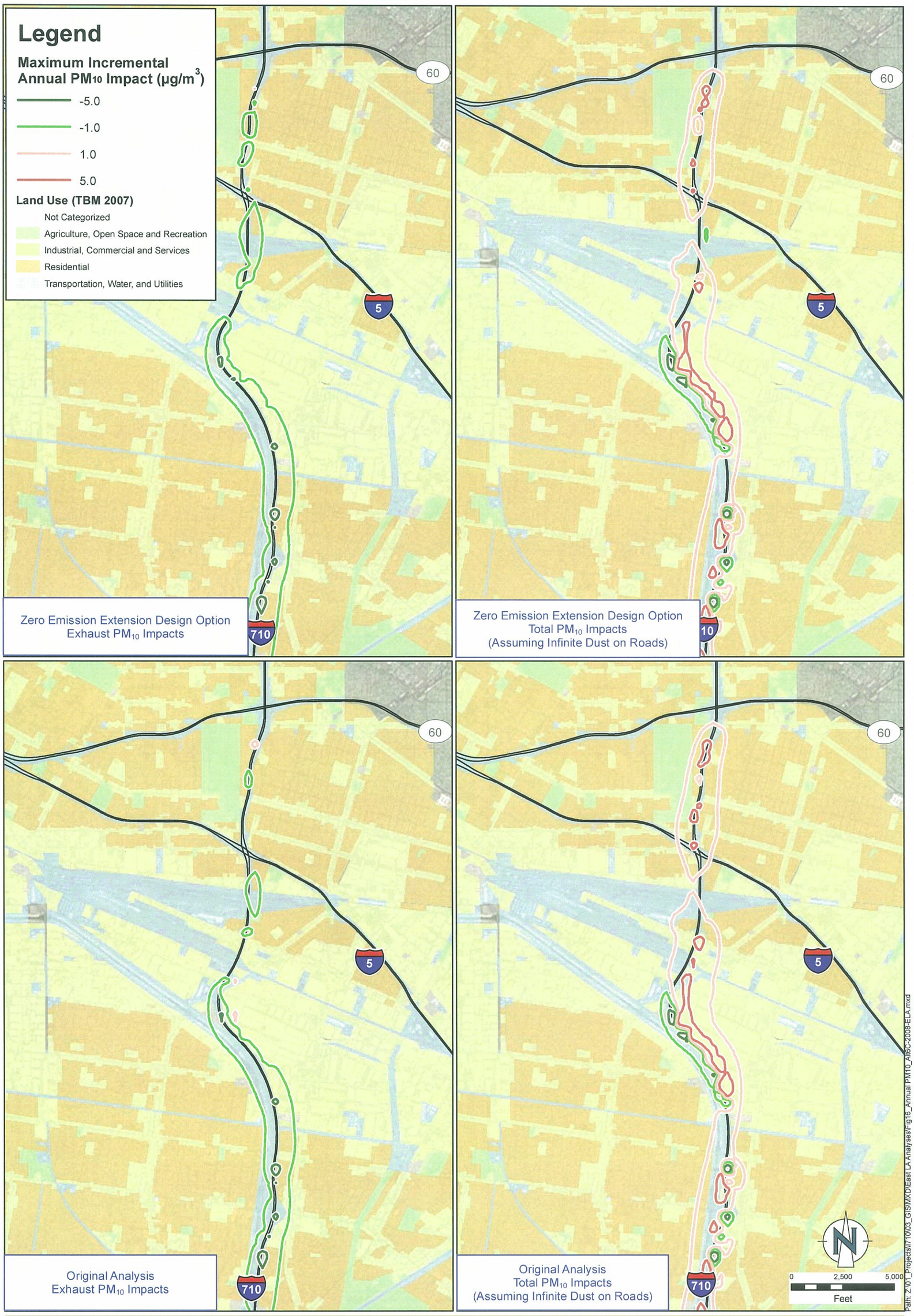
Comparison of
2035 Alternative 6B to 2008 Baseline
Annual PM_{10} Impacts

Figure
15

PROJECT: 05-18574F4



ENVIRON

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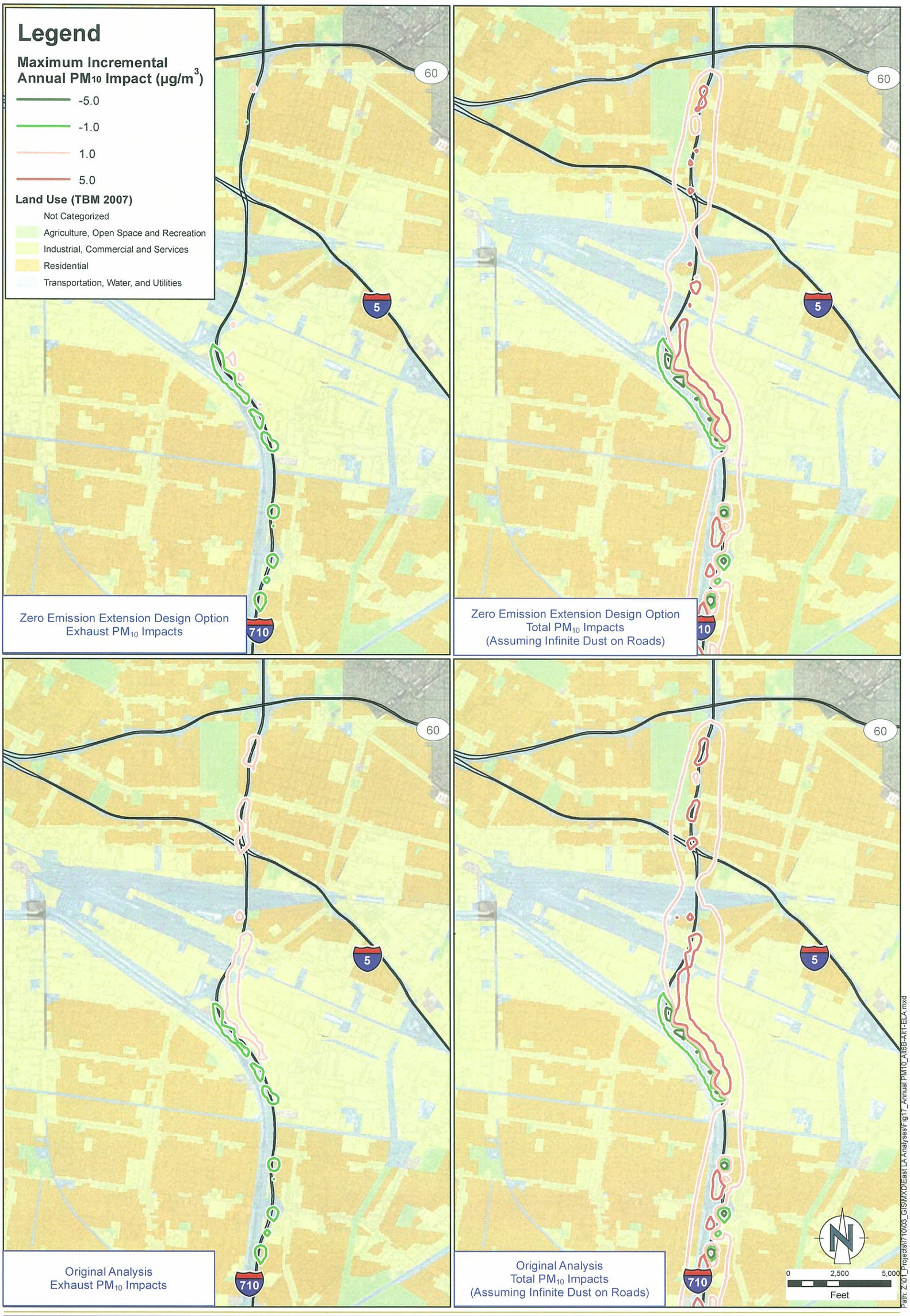
Comparison of
2035 Alternative 6C to 2008 Baseline
Annual PM_{10} Impacts

Figure
16

PROJECT: 05-18574F4



ENVIRON

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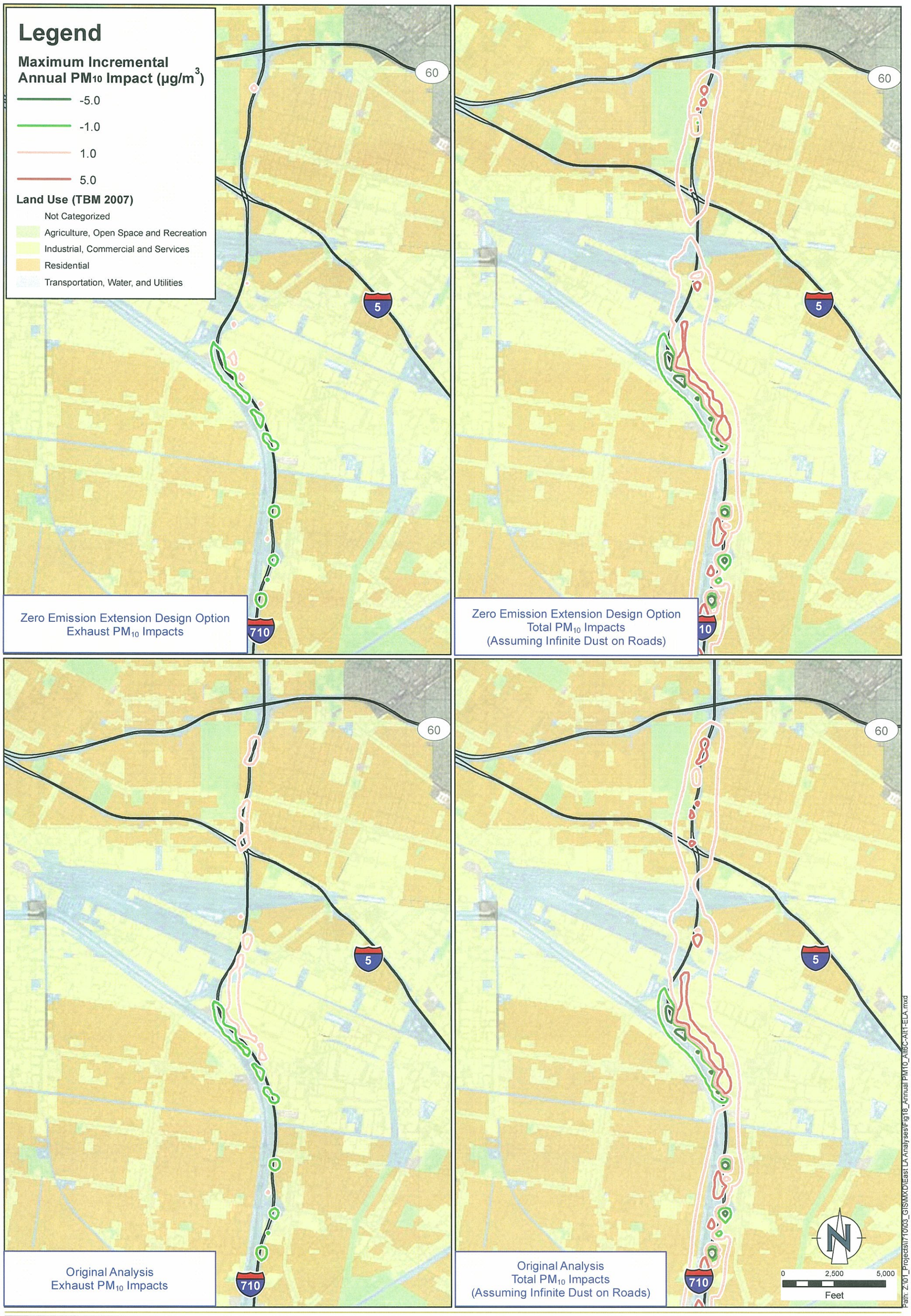
Comparison of
2035 Alternative 6B to 2035 Alternative 1
Annual PM_{10} Impacts

Figure
17

PROJECT: 05-18574F4



ENVIRON

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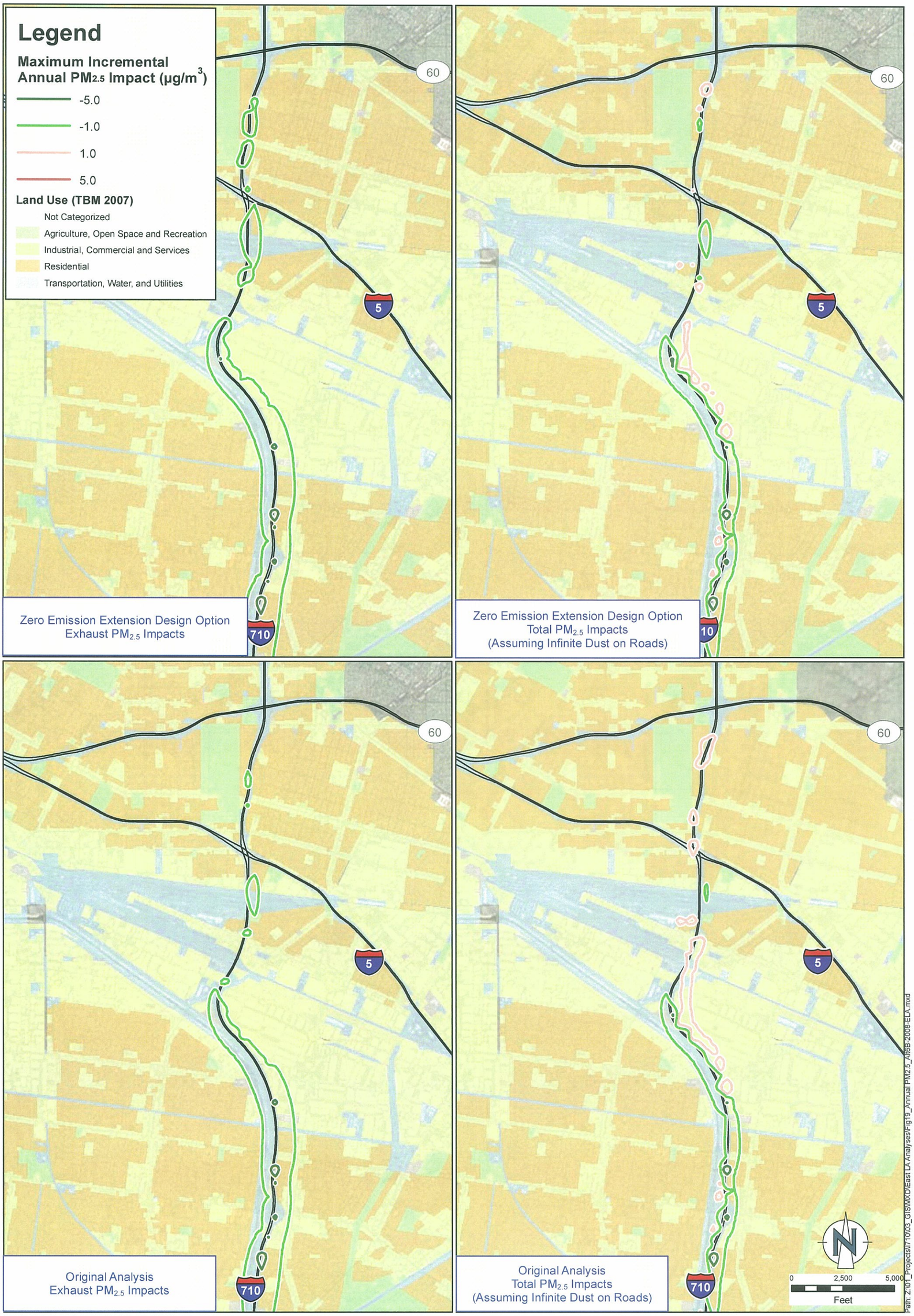
Comparison of
2035 Alternative 6C to 2035 Alternative 1
Annual PM_{10} Impacts

Figure
18

PROJECT: 05-18574F4



ENVIRON

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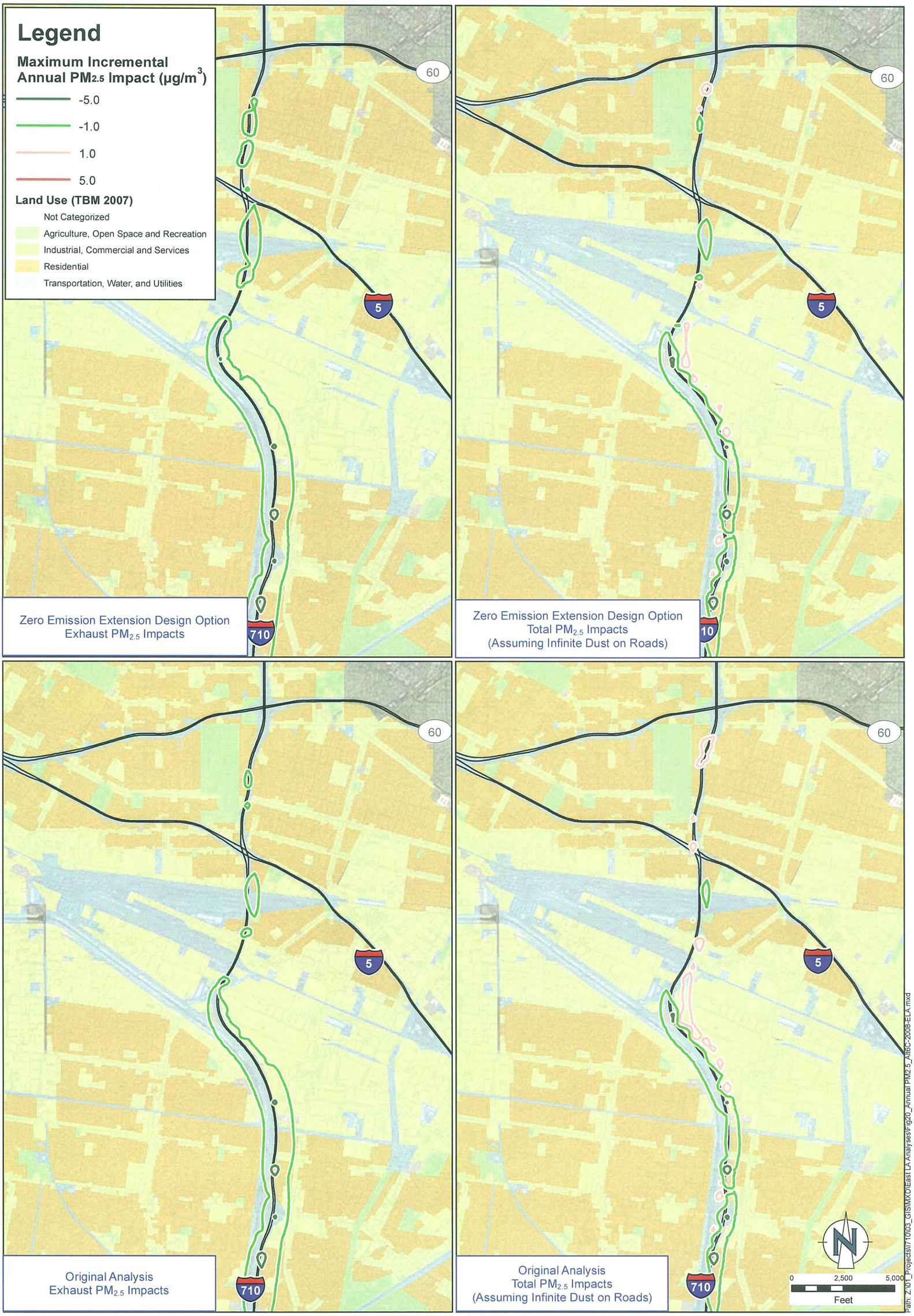
Comparison of
2035 Alternative 6B to 2008 Baseline
Annual $PM_{2.5}$ Impacts

Figure
19

PROJECT: 05-18574F4



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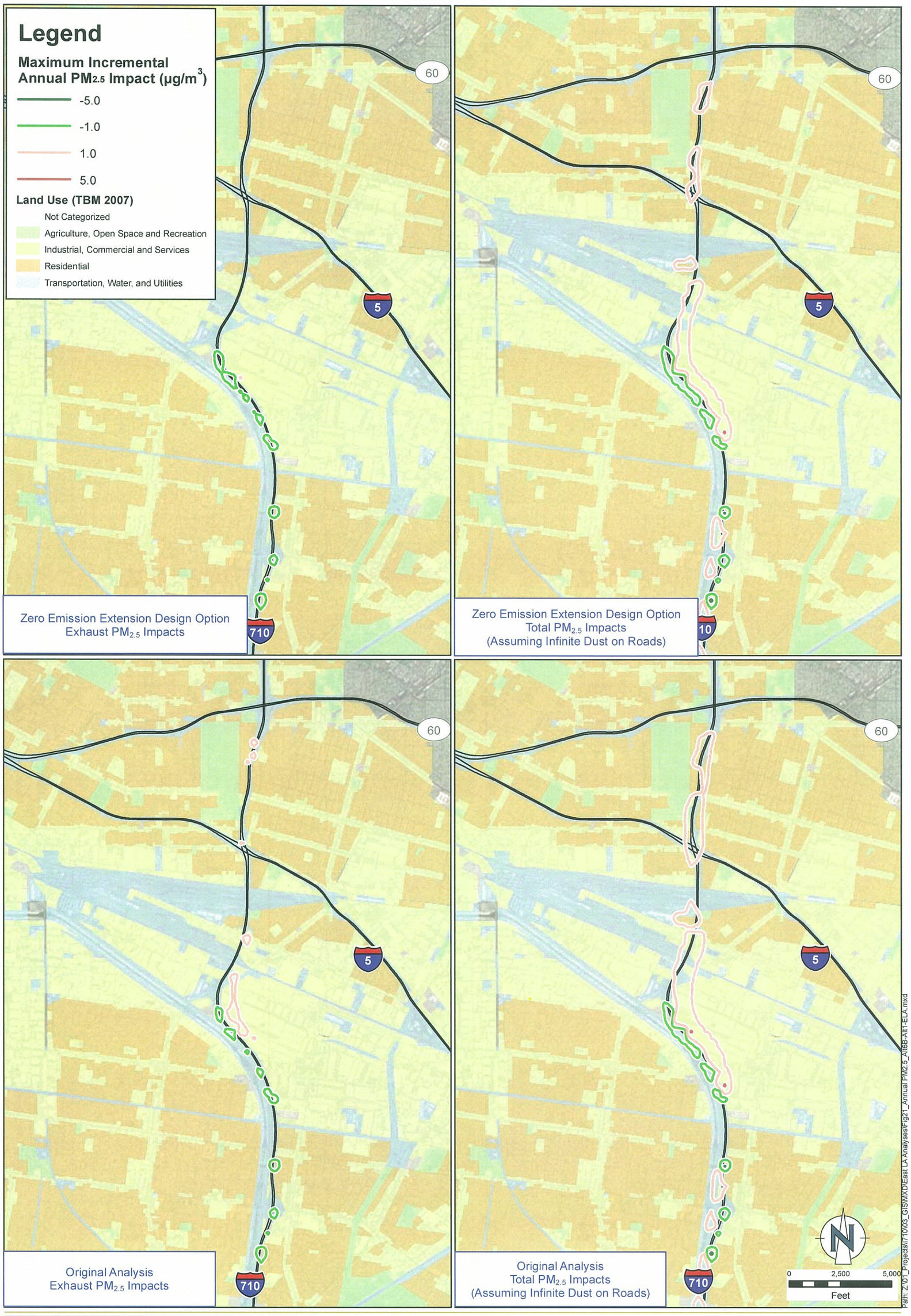
Comparison of
2035 Alternative 6C to 2008 Baseline
Annual $PM_{2.5}$ Impacts

Figure
20

PROJECT: 05-18574F4



ENVIRON

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Comparison of
2035 Alternative 6B to 2035 Alternative 1
Annual $PM_{2.5}$ Impacts

Figure
21

PROJECT: 05-18574F4

ENVIRON

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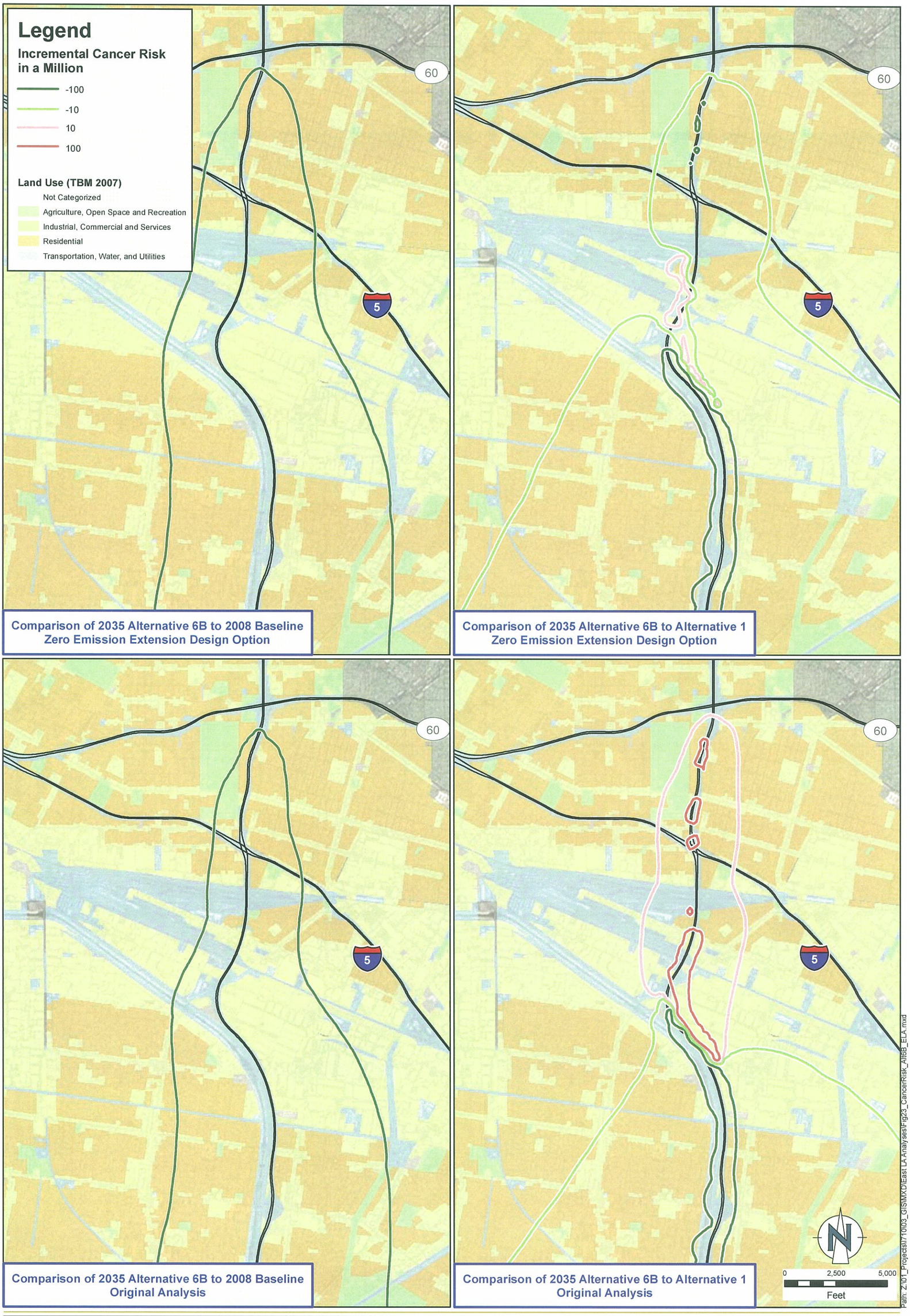
Comparison of
2035 Alternative 6C to 2035 Alternative 1
Annual $PM_{2.5}$ Impacts

Figure
22

PROJECT: 05-18574F4



ENVIRON

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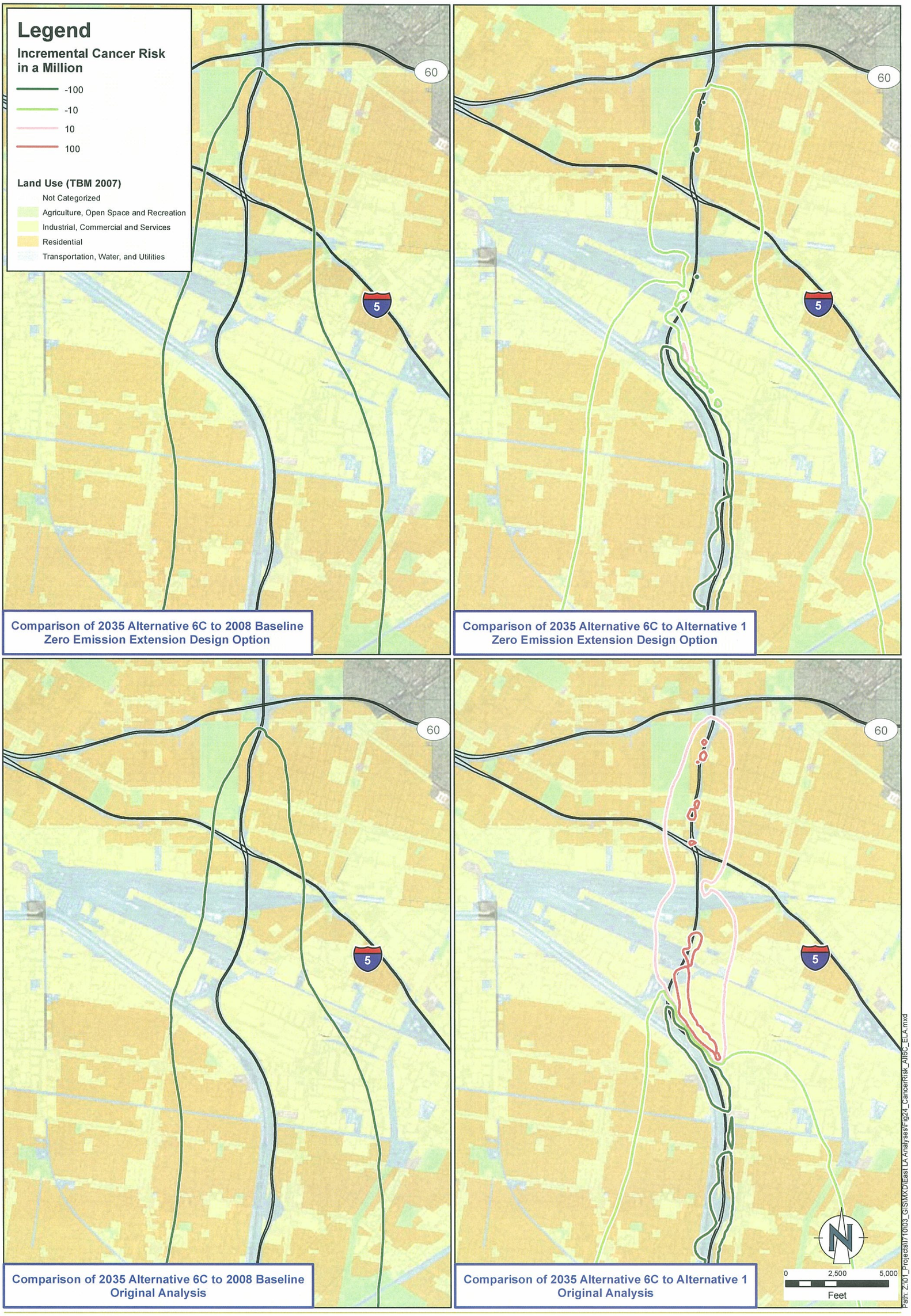
Comparison of 2035 Alternative 6B
Incremental Cancer Risk in a Million
(Residential Scenarios)

Figure 23

PROJECT: 05-18574F4



ENVIRON

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Comparison of 2035 Alternative 6C
Incremental Cancer Risk in a Million
(Residential Scenarios)

Figure 24

PROJECT: 05-18574F4