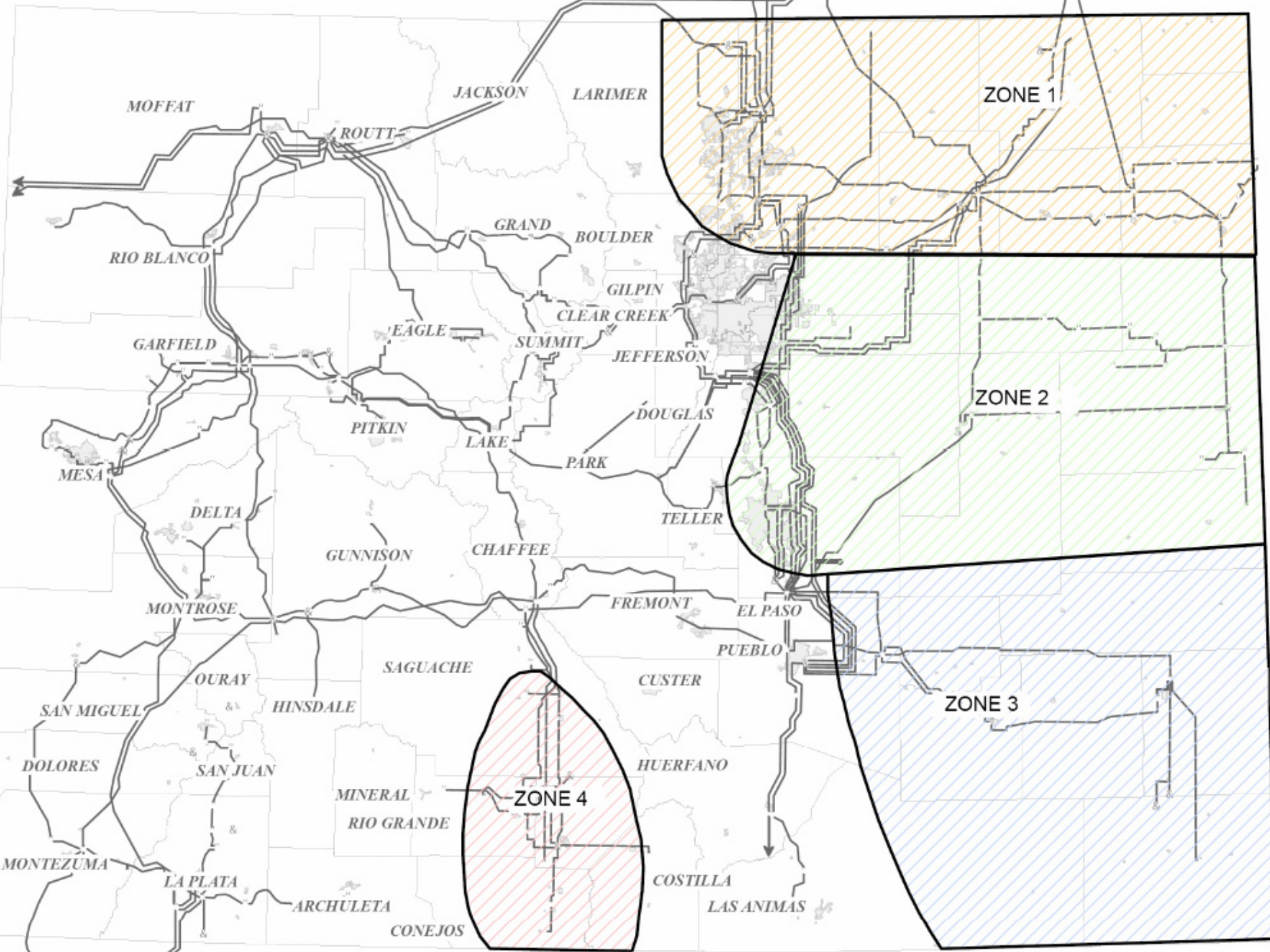




Energy Resource Zones

March 4, 2008

Joe Taylor



ZONE 1

ZONE 2

ZONE 3

ZONE 4

MOFFAT

JACKSON

LARIMER

ROUTT

ZONE 1

RIO BLANCO

GRAND

BOULDER

GILPIN

CLEAR CREEK

GARFIELD

EAGLE

SUMMIT

JEFFERSON

PITKIN

LAKE

PARK

DOUGLAS

MESA

DELTA

GUNNISON

CHAFFEE

TELLER

MONTROSE

FREMONT

EL PASO

SAN MIGUEL

OURAY

HINSDALE

SAGUACHE

CUSTER

DOLORES

SAN JUAN

MINERAL

RIO GRANDE

HUERFANO

MONTEZUMA

LA PLATA

ARCHULETA

CONEJOS

COSTILLA

LAS ANIMAS

Senate Bill 07-91 Report

- Identifies Generation Development Areas
- 8 Wind GDAs
- 2 Solar GDAs
- Locations with potential for:
 - Hydro
 - Geothermal
 - Biomass

http://www.colorado.gov/energy/in/uploaded_pdf/SB91TaskForceReport.pdf

COLORADO Wind Resource

- Wind GDA
- 50 meter Wind Power Class 7
- 50 WPC6
- 50 WPC5
- 50 WPC4
- 50 WPC3
- 50 WPC2
- Interstate Highways
- Transmission

GDA 1
4 GW

GDA 2
6 GW

GDA 3
15 GW

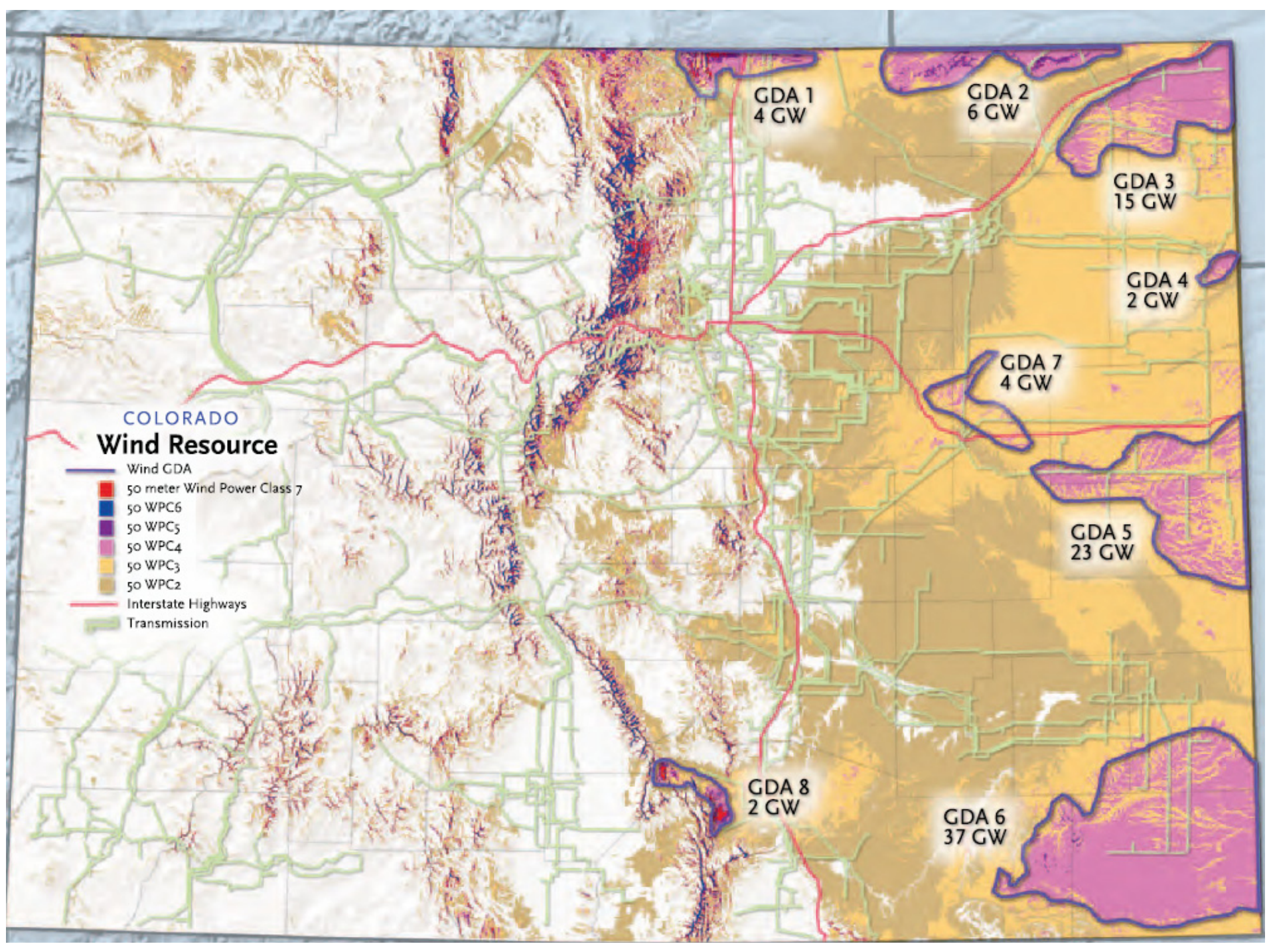
GDA 4
2 GW

GDA 7
4 GW

GDA 5
23 GW

GDA 8
2 GW

GDA 6
37 GW



Combine GDAs and Zones

- Thought is to retain the four Zones
- SB100 is for renewables and all other forms of generation
- GDAs “fit” into the zones
- Comments?

COLORADO Wind Resource

- Wind GDA
- 50 meter Wind Power Class 7
- 50 WPC6
- 50 WPC5
- 50 WPC4
- 50 WPC3
- 50 WPC2
- Interstate Highways
- Transmission

GDA 1
4 GW

GDA 2
6 GW

GDA 3
15 GW

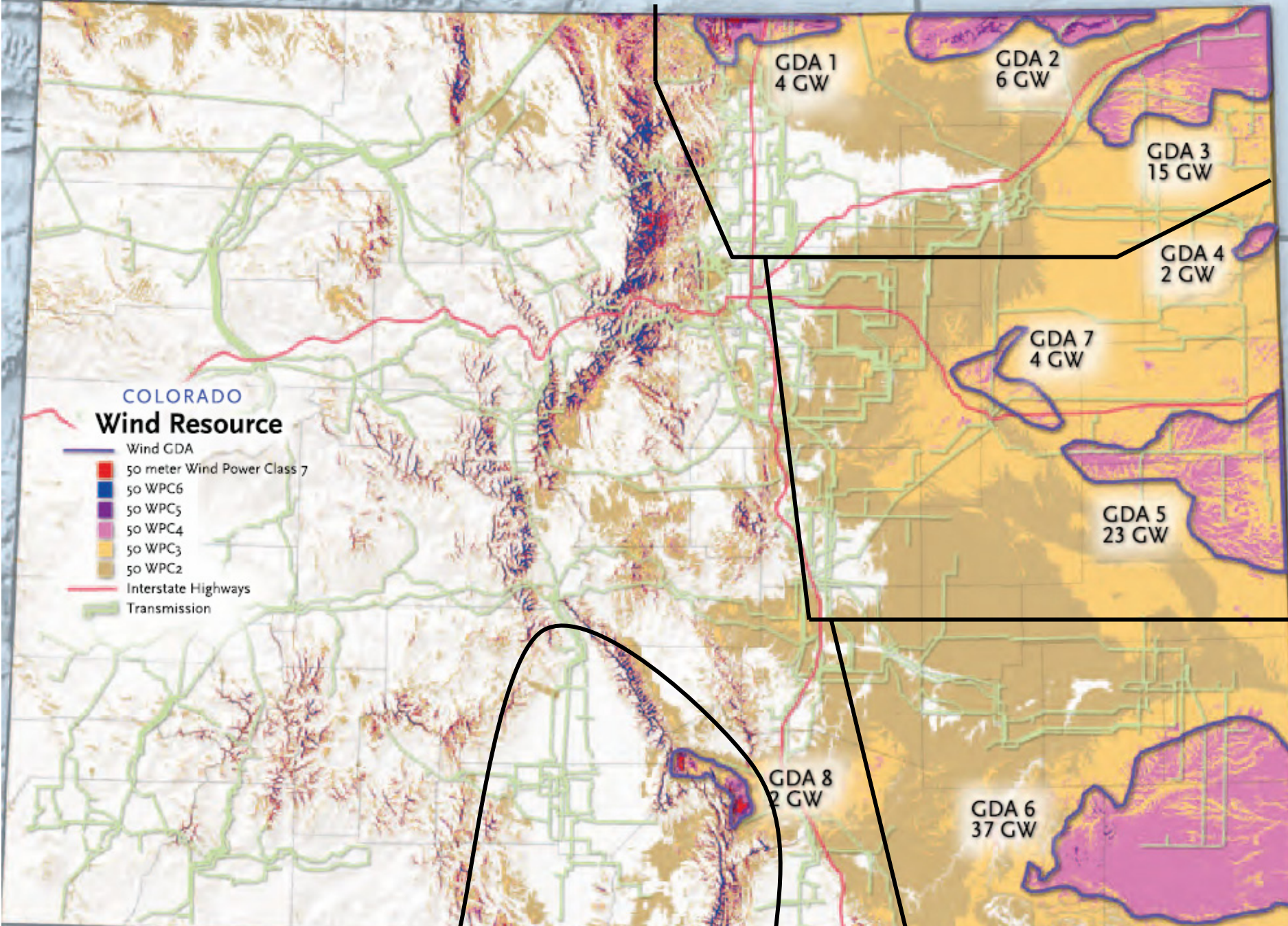
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GDA 8
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GDA 6
37 GW



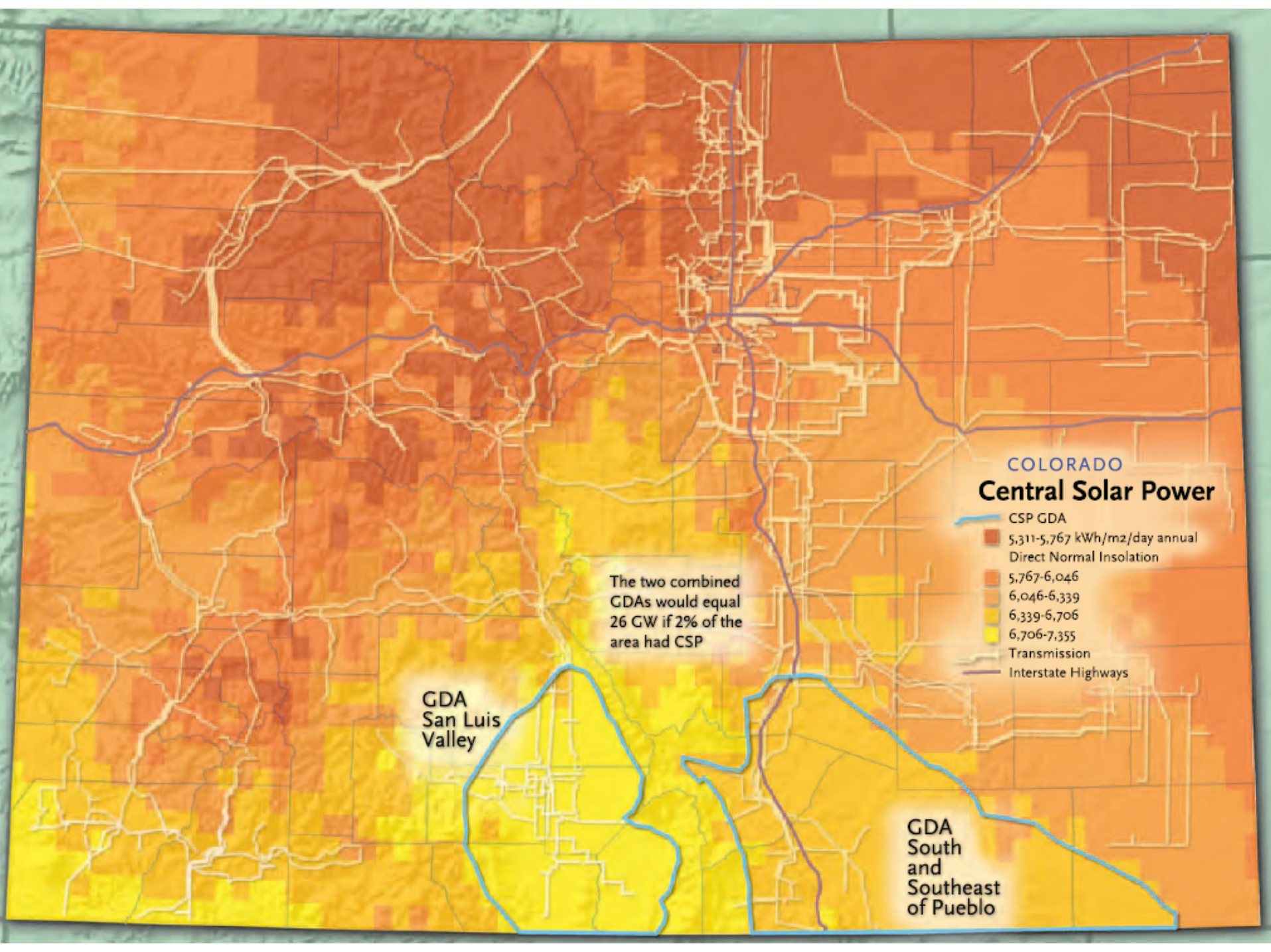
COLORADO
Central Solar Power

- CSP GDA
- 5,311-5,767 kWh/m²/day annual Direct Normal Insolation
- 5,767-6,046
- 6,046-6,339
- 6,339-6,706
- 6,706-7,355
- Transmission
- Interstate Highways

The two combined GDAs would equal 26 GW if 2% of the area had CSP

GDA San Luis Valley

GDA South and Southeast of Pueblo



West Slope

- West slope region growing rapidly
- Injection capability exists
- Not necessarily a “Zone” as there is available capability to install generation without transmission upgrades

West Slope Load/Transmission Expansion Proposals

