

Kansas Department of Commerce Office of Innovation

Trent Armbrust

Chief Strategy Officer

Senate Committee on Commerce | March 2022



OUR FRAMEWORK FOR GROWTH

Target Sectors

Advanced
Manufacturing

Aerospace

Distribution,
Logistics and
Transportation

Food and
Agriculture

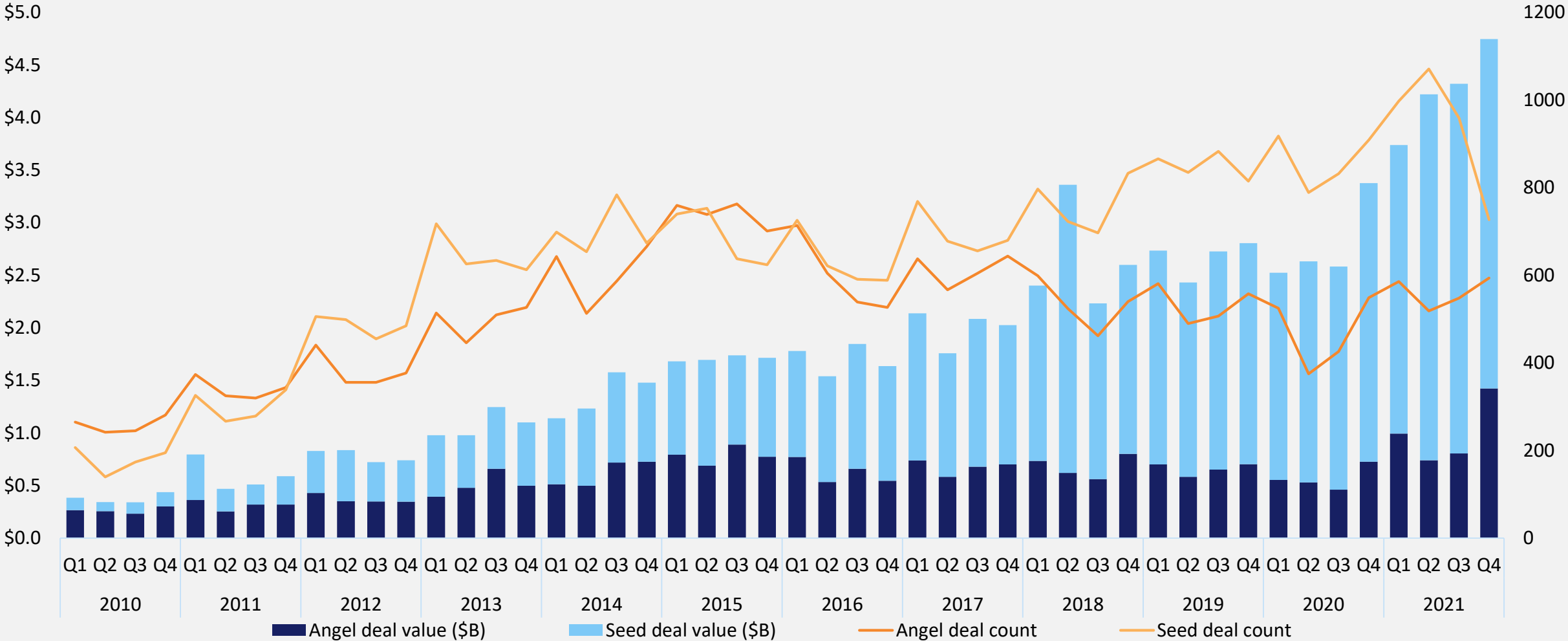
Professional
and Technical
Services

Strategic Pillars



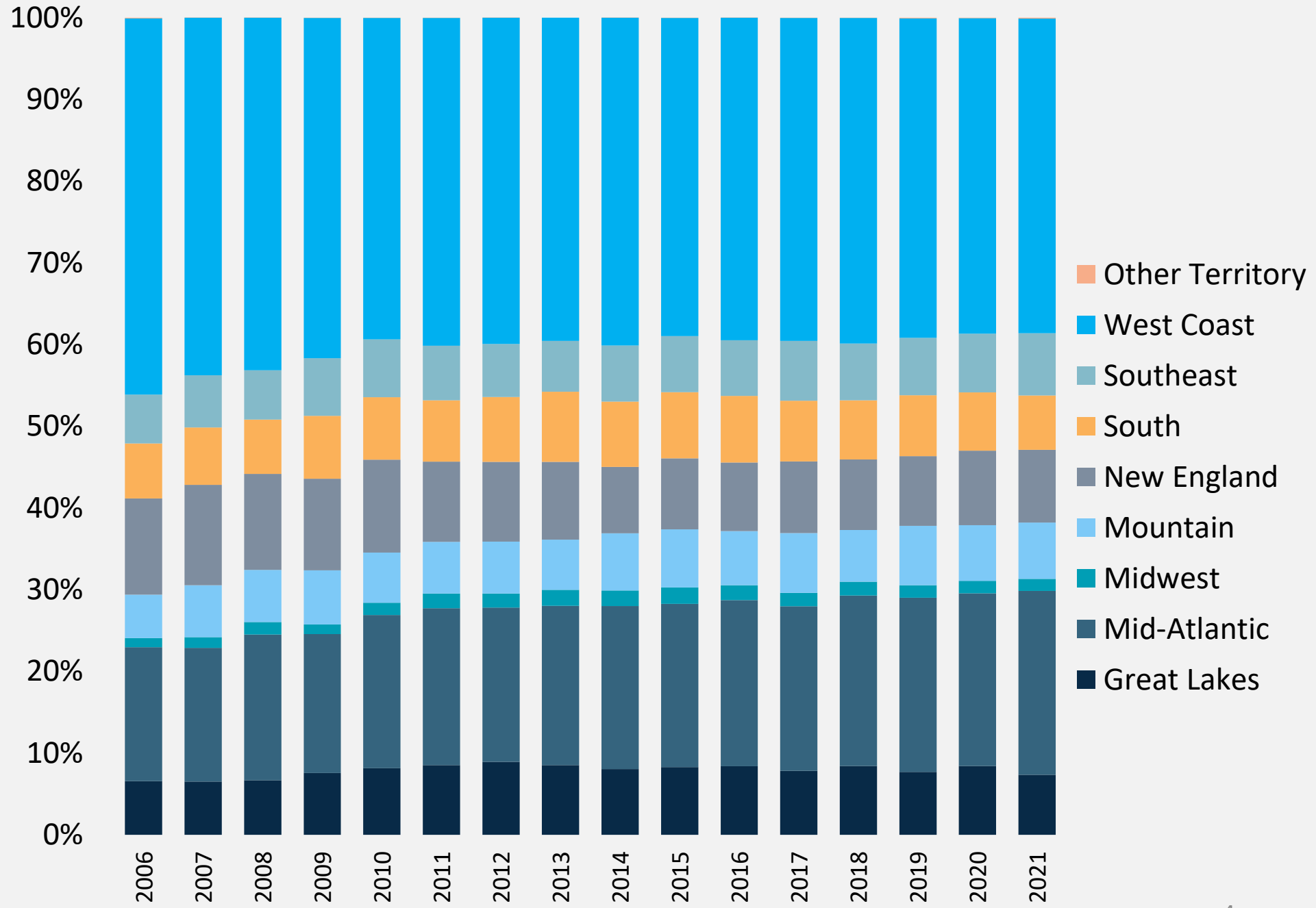
Economic Regions

US Angel and Seed Deal Activity



Seed defined at <\$500K or if first round and self defined as seed.

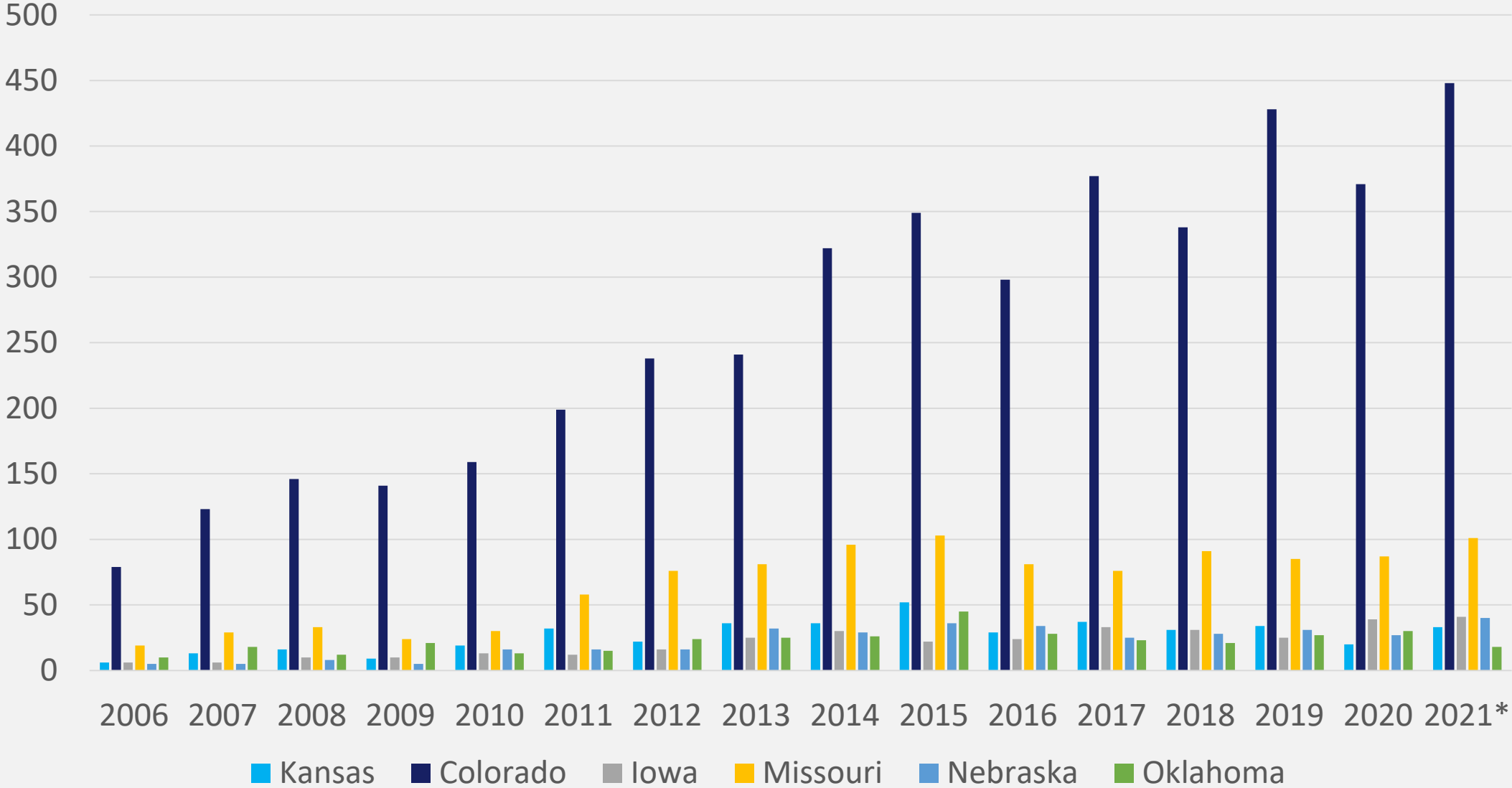
VC Deals by Region



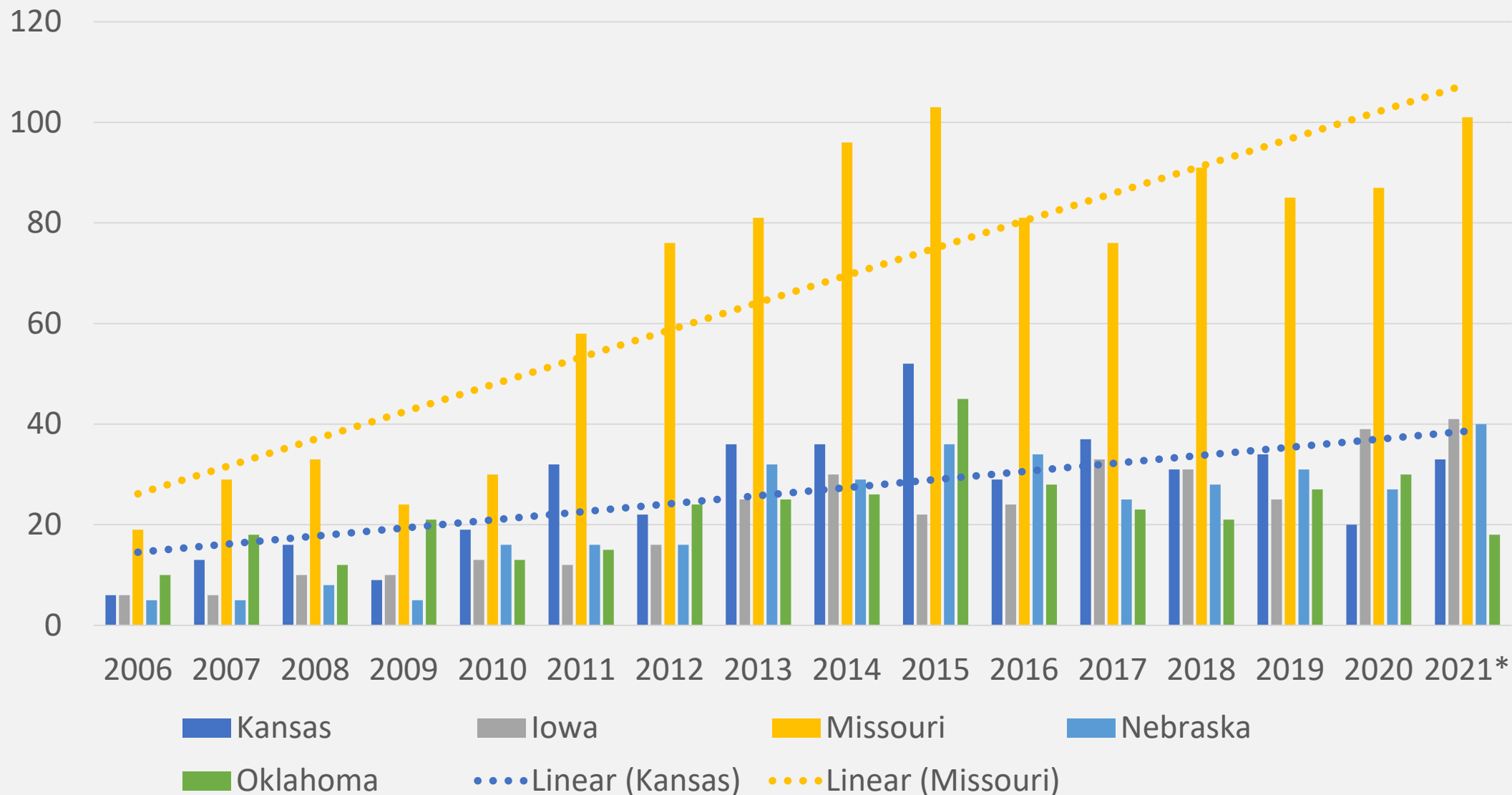
VC Deal Activity by State

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021*
Kansas	6	13	16	9	19	32	22	36	36	52	29	37	31	34	20	33
Colorado	79	123	146	141	159	199	238	241	322	349	298	377	338	428	371	448
Iowa	6	6	10	10	13	12	16	25	30	22	24	33	31	25	39	41
Missouri	19	29	33	24	30	58	76	81	96	103	81	76	91	85	87	101
Nebraska	5	5	8	5	16	16	16	32	29	36	34	25	28	31	27	40
Oklahoma	10	18	12	21	13	15	24	25	26	45	28	23	21	27	30	18

VC Deal Activity (Number of deals)



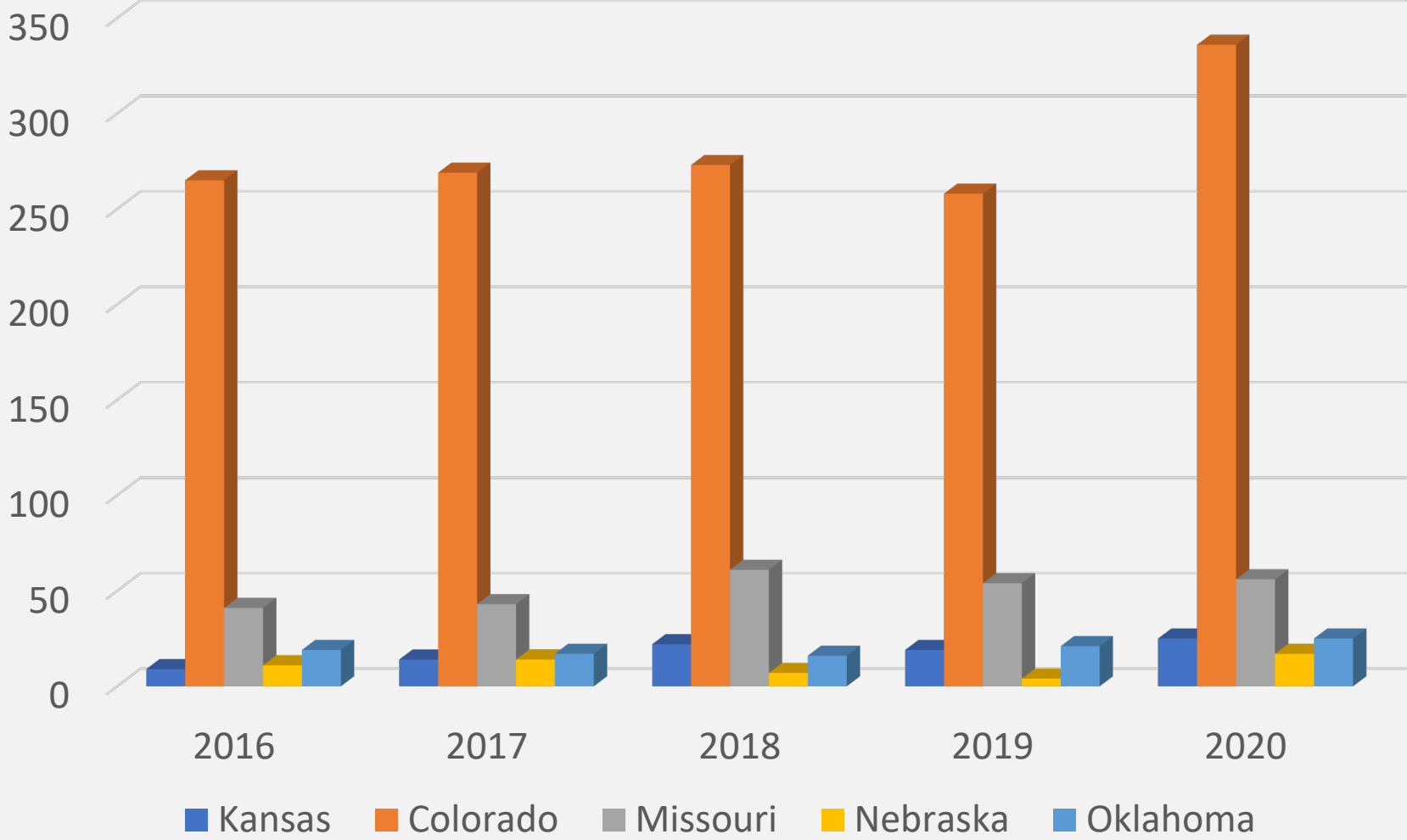
VC Deal Activity (Number of deals)



VC Deal Activity by State (\$M)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021*
Kansas	\$1.8	\$18.3	\$114.2	\$5.5	\$56.5	\$97.4	\$52.7	\$74.3	\$71.6	\$171.1	\$41.7	\$151.5	\$187.0	\$283.1	\$116.6	\$283.9
Colorado	\$775.8	\$667.2	\$1,525.0	\$803.6	\$771.3	\$1,165.4	\$1,111.8	\$1,179.1	\$2,380.4	\$1,458.4	\$2,089.7	\$1,290.6	\$1,698.9	\$2,734.5	\$2,736.8	\$6,515.6
Iowa	\$104.5	\$38.4	\$32.7	\$20.9	\$49.2	\$62.6	\$55.8	\$58.9	\$69.5	\$35.1	\$43.2	\$57.5	\$96.4	\$24.3	\$169.7	\$204.5
Missouri	\$140.0	\$108.2	\$114.0	\$87.4	\$83.1	\$319.2	\$101.5	\$142.8	\$348.2	\$314.4	\$228.9	\$318.1	\$680.8	\$445.5	\$576.6	\$1,222.9
Nebraska	\$29.7	\$14.2	\$5.1	\$1.1	\$12.9	\$32.1	\$32.7	\$39.8	\$52.4	\$211.6	\$71.4	\$86.5	\$153.8	\$60.8	\$104.7	\$316.9
Oklahoma	\$12.7	\$23.3	\$34.1	\$19.7	\$14.8	\$9.8	\$64.6	\$23.1	\$30.0	\$109.1	\$23.4	\$30.6	\$74.6	\$51.5	\$51.6	\$110.4

Total SBIR/STTR Awards



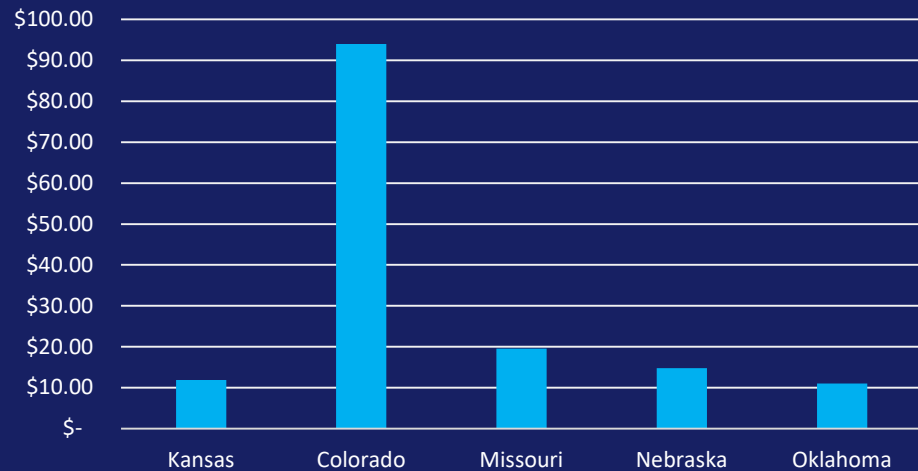
	2016	2017	2018	2019	2020
Kansas	9	14	22	19	25
Colorado	265	269	273	258	336
Missouri	41	43	61	54	56
Nebraska	11	14	7	4	17
Oklahoma	19	17	16	21	25

SBIR/STTR Awards

Total Awards Value

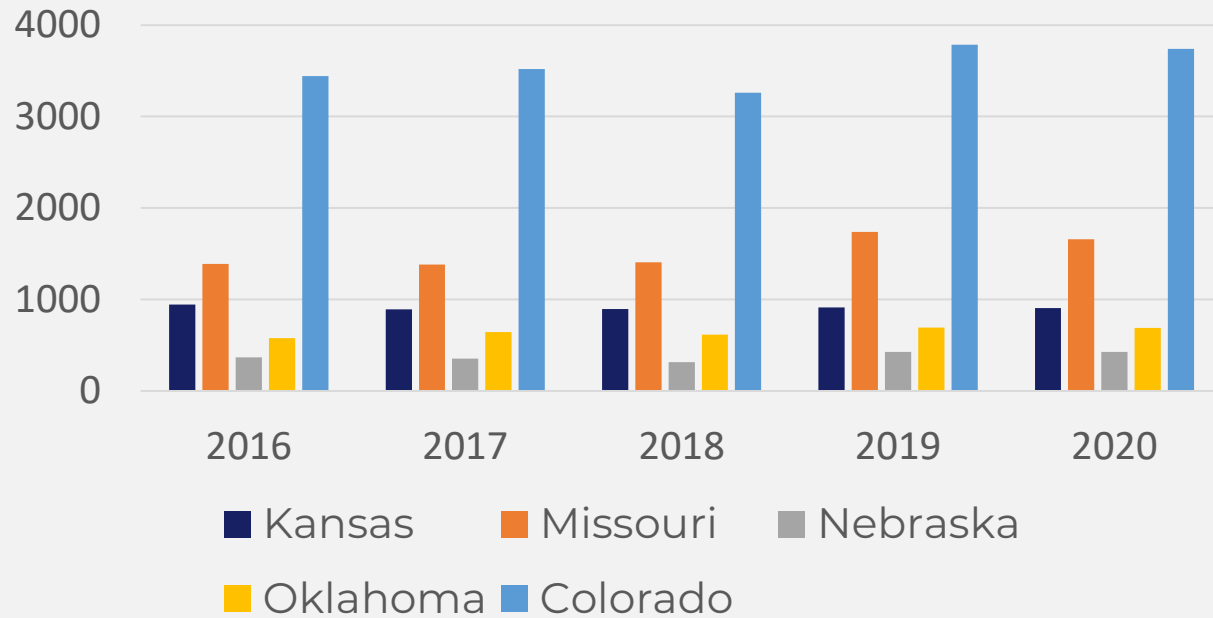
	2016	2017	2018	2019	2020
Kansas	\$ 5,930,196	\$ 6,549,569	\$ 6,984,416	\$ 5,703,801	\$ 9,679,957
Colorado	\$ 36,521,047	\$ 115,208,772	\$ 143,719,615	\$ 82,462,726	\$ 164,828,203
Missouri	\$ 17,554,613	\$ 23,364,320	\$ 27,263,342	\$ 21,317,661	\$ 30,876,152
Nebraska	\$ 4,214,093	\$ 6,997,051	\$ 5,884,152	\$ 4,203,490	\$ 7,635,951
Oklahoma	\$ 7,546,359	\$ 11,997,731	\$ 7,545,584	\$ 3,251,299	\$ 13,221,341

Per Capita SBIR/STTR Awards Value

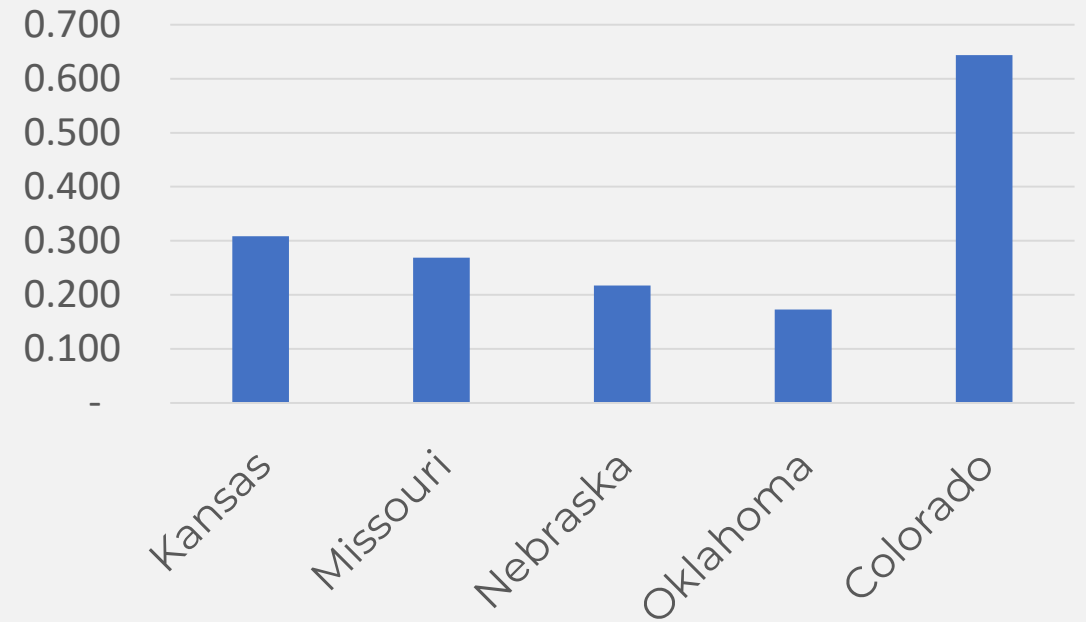


Patent Production

Patents Granted



CY 2020 Patents per 1000 residents



Rebuilding the *Innovation* **Ecosystem**

- Re-establish the Department of Commerce and the State of Kansas as a participant through Office of Innovation
- Trusted partner
- Resource partner
- Help elevate and celebrate innovation

Rebuilding the *Innovation* Ecosystem

- Launched Kansas Innovation & Technology Enterprise (KITE)
- Proof of Concept Fund
- Angel Tax Credits
- R&D Tax Credits

KS Dept of Commerce Proof of Concept Grants

9 For Profit Companies: \$221,500

2 Faculty Led: \$35,000

11 Awards in CY 2021 totaling \$256,500

Inaugural year (2 quarters)



Research and Development Tax Credit

Tax Year	Number of Filers	Amount of Tax Credit Allowed
2016	199	\$ 1,411,303
2017	171	\$ 3,682,121
2018	183	\$ 5,469,023
2019	180	\$ 2,553,127
2020	98	\$ 268,435

As of Jan 2022; TY 2020 will increase as returns are received and processed.

Angel Investors Tax Credit CY 2021

\$4,664,630 tax credits allotted to 23 companies

10 additional companies were approved but unable to raise capital or investors were ineligible for tax credits

Total Capital Raised: \$43,060,059

Total payroll: \$12,056,933



Knowledge as a Service, Inc.



Innovation **Ecosystem** Conclusions

Continue building entrepreneurial support

- Start more businesses
- Help businesses grow faster (commercialize product, exits)

Entire Capital stack needs strengthening

- Seed, Angel, VC
- Non-dilutive (SBIR/STTR, POC grants)

Dollars invested per deal increasing;

- Pent up investor demand for quality deal flow

Patent production in Kansas is solid

- Need to translate invention into commercialization

• **Ecosystem building takes years**

- Realizing results and significant year to year variability can exist.

Office of Innovation: 2022

Facilitate and participate with partners to align efforts to better serve the innovators and entrepreneurs

SBDC, Network Kansas, Kansas Manufacturing Solutions, higher education

VC, angel and seed capital funds

Continue to promote and administer programs, highlight and celebrate success

Seek federal and private funding sources

Supporting innovation and entrepreneurial programing and investment support



Office of Innovation

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