



# Industry 4.0

## Description

- Includes product development, advanced materials and manufacturing and supply chain and logistics

## Why attractive

- Scale of change is massive, affecting \$12T+ global supply chain, logistics, and machinery markets<sup>5</sup>, growing at ~30% / year<sup>6</sup>
- Seismic shift in contours of national competition as countries' economic capabilities converge
- Winners and losers across regions and cities will define future of economy
- Large equity and employment impacts must be managed; otherwise, people will get left behind

## Chicago's Right to Win

- Top graduate programs in materials engineering at Northwestern (#2) and University of Illinois Urbana-Champaign (#6)<sup>1</sup>
- Illinois hosts 8/100 Fortune 500 companies across many advanced materials related sectors, second only to Texas<sup>2</sup>
- Illinois has 9/95 Fortune 500 companies across advanced manufacturing, making it the leader alongside California<sup>3</sup>
- MxD received a \$70M grant from the DOD to pursue manufacturing tech research, matched by \$250M in private sector, academic, and other government funding
- Chicago has 73 startups focused on logistics and transportation, 15% more dense than the national average<sup>4</sup>

## Key Gaps

- Low development of low and middle skills talent pipeline
- Low coordination among ecosystem efforts due to lack of connective tissue
- Few shared cohabitation spaces to collaborate and demonstrate ideas
- Low VC funding to commercialize startup projects
- Minimal public branding of Industry 4.0 in Chicago
- Little consideration by Chicago industry players to leverage local R&D assets

1. US News and World Report; 2. Fortune; 3. OAG Megahubs International Index 2018, based on total flights in 2018; Trains Magazine; 4. Crunchbase 5. Represents global market size by 2022; Marinelink, Global Market Insights; 6. Represents growth rate of advanced manufacturing, advanced analytics, and Industrial IoT