Recap: Project Goals

Create data-driven decision support tools to provide an additional input into the decisions being made to safely reopen the PA economy and achieve the following policy goals:

- Minimize the diffusion of COVID-19
- Maximize return to work and revitalize the economy
- Limit long-term economic impact of COVID-19 & the shut down
- Achieve equitable outcomes for vulnerable residents
Our Vision: Suite of Data-driven Decision Support Tools

<table>
<thead>
<tr>
<th>Inputs: Data &amp; Priorities</th>
<th>Decisions we plan to inform</th>
<th>Outputs we seek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current version primarily relies on Public Data from Census, BLS, BEA, and DOH (Future Versions will hopefully use data from ) State Agencies: UI Claims, Wage Records, Revenue, SNAP, TANF, Medicaid, Revenue, DCED, Health Health and Human Services Forecasts/Models from Partners (Pitt, Penn, and other partners) State Priorities &amp; Policy Goals</td>
<td>Which industries can safely open, in which counties, and under what conditions? What will be the health risks and economic impact associated with opening an industry? Which industries can re-engineer workflows? What impact will this have on vulnerable workers &amp; businesses?</td>
<td>Health and Economic Monitoring Dashboard Health Risks Economic Impact Impact on Equity Evaluating the Impact of policy interventions</td>
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Risk-Based Approach

We take a wide variety of risks associated with re-opening a set of industries in a county or region. In addition to what we show in this presentation using public data, we are exploring and developing additional ones including:

● Face-to-Face Contact Risk (in workplaces)
● Nursing Home Spread Risk
● Customer Contact risk
● Supply Chain Risk
● Business Resilience risk
● Unemployment Risk
● Social Service Benefits Risk
● Equity Risk
How we intend the current risk indices to be used

- The current version primarily relies on public data sources to generate risk indices along a variety of dimensions.

- The scores and risk indices do not correspond to “open” or “not open” recommendations.

- These indices are provided to the State as one of many inputs they consider in making decisions affecting the “Process to Reopen Pennsylvania”.
Risk Indices

**COVID Case Risk**: # of reported COVID-19 cases / population of area

**Commute Risk**: Additional # of infected workers commuting from neighboring counties / Total # of workers in the county

**ICU Capacity Risk**: # of 60+ year olds in area / # of unoccupied ICU Beds

**Population Density Risk**: Population of Region / Area of Region

**Population Age Risk**: % of population in area > 60 yr old

**Re-Opening Contact Risk**: % of workers in an area employed in currently "physically closed" industry sectors
# County Risk Indices

<table>
<thead>
<tr>
<th>Somerset</th>
<th>Westmoreland</th>
<th>Greene</th>
<th>Butler</th>
<th>Washington</th>
<th>Armstrong</th>
<th>Allegheny</th>
<th>Cambria</th>
<th>Indiana</th>
<th>Beaver</th>
<th>Fayette</th>
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<tr>
<td>Commute Risk</td>
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</table>

**Risk Index**
- Orange: 14-Day COVID-19 Cases Risk
- Brown: Commute Risk
- Blue: ICU Capacity Risk
- Green: Population Density Risk
- Purple: Population Age Risk

*Note: The diagram visualizes the risk indices for various counties, with colors indicating different risk factors.*
County Risk Indices

Risk Index
- 14-Day COVID-19 Cases Risk
- Commute Risk
- ICU Capacity Risk
- Population Density Risk
- Population Age Risk

Schuykill | Bucks | Montgomery | Chester | Berks | Lancaster | Philadelphia | Delaware
--- | --- | --- | --- | --- | --- | --- | ---
| | | | | | | | |

Legend:
- Orange: 14-Day COVID-19 Cases Risk
- Purple: Commute Risk
- Blue: ICU Capacity Risk
- Green: Population Density Risk
- Pink: Population Age Risk
How we intend these risk indices to be used

- The risk indices and colors are relative risks and do not correspond to “open” or “not open” recommendations
- These indices are provided to the State as one of many inputs they consider in making decisions affecting the “Process to Reopen Pennsylvania”