

CITY OF BLOOMINGTON: PLAN FOR MANAGING CITY OPERATIONS DURING THE COVID EMERGENCY

I. EXECUTIVE SUMMARY

The recommendations in this report for how City operations should cope with an ongoing COVID-19 epidemic are based on a) the predictions of science and health experts, b) how effectively both our initial response to the epidemic and our plans for reopening City facilities to the public and returning employees to in-office work have allowed us to continue operations while also protecting employee health, and c) a survey of department heads about the effects of the pandemic on their operations.

Information provided by these sources has guided our recommendations and will continue to suggest our approach to this emergency as it plays out.

Our recommendations are summarized below:

- The City must prepare for the future waves of COVID-19 infection predicted by national experts, whether multiple peaks and valleys, or one large event in the fall or winter, or some other version altogether.
 - We should hone the operational model we developed for dealing with the arrival of the coronavirus (the “Remote/Protective Model”) and keep it ready for reuse during times of peak infection.
 - We should likewise hone the partial or full return to work model we implemented for reopening City facilities to the public, for use when infections are appropriately on the wane.
- The models should be used alternately when rates of infection dictate and adjusted as needed to fit changed or evolving circumstances. For example:
 - If infection rates have declined for 14 days, testing is available to anyone who needs it, ICU beds are widely available, and infection rates among Indiana University (IU) students and in the Monroe County Community School Corporation (MCCSC) are declining, the City may use the “partial reopening” model.
 - If the indicators demonstrate that infection rates are on the rise again, the City should revert to the “remote/protective” model.
- There is no question the COVID-19 epidemic will have negative financial effects on City operations, and those effects will likely increase the longer we must wait for widespread testing and a vaccine. The City will have to adjust budgets and may have to adjust staffing during the course of the epidemic.

- In addition, we have identified some possible “triggers” that could change the course of the coronavirus epidemic or combine with the virus to intensify the distress in our community and region. The City must continually monitor trigger situations and the effects on, and responses of, the various sectors of our community. The triggers and the state of the community will inform and direct the City’s response. The following “triggers” could change current City operations:

Partial Reopening

- There is no longer a stay-at-home order in effect.
- Testing is limited to residents and employees meeting specific criteria and/or there is no vaccine

Full Reopening

- Testing is available to anyone requesting it; all employees who are able have been vaccinated
- Finally, we note that phrases like “full return to work” or “resume normal operations” may not have the same meaning they would have had in the past. We must continue to evaluate the work we are doing and the way in which we do it. The COVID crisis has prompted changes such as remote working, alternate schedules, shifting services to online, reconfiguring or modifying programs and services, and other things that may be of value to the City as a service provider or employer and warrant being adopted for the long term.

II. BACKGROUND

The global COVID-19 pandemic began surfacing in the public consciousness in late 2019, and by early March, the virus had spread to nearly every country in the world. On March 11, 2020, the World Health Organization declared COVID-19 a pandemic, and on March 13, the speed with which COVID-19 had spread and the actual and predicted effect on the U.S. population and economy were so alarming that President Trump declared a national emergency. Correspondingly, many Governors and many local government officials have since declared emergencies and issued orders designed to reduce COVID-19 infections within their jurisdictions.

On March 23, 2020, Governor Holcomb issued Executive Order 20-08, “DIRECTIVE FOR HOOSIERS TO STAY AT HOME,” which, among other things, ordered all non-essential businesses and operations to cease activities as of 11:59 pm March 24 but carved out an exception for “Essential Businesses and Operations,” of which one category is “Essential Governmental Services.” Executive Order 20-08, moreover, ordered individual citizens to stay at home except for certain limited reasons deemed to be essential for human health, or to perform work for Essential Businesses and Operations, including employers considered to be Essential Governmental Services. The Governor extended his Stay at Home Order until April 20 in Executive Order 20-18, and further extended it to May 1 in Executive Order 20-22. On May 1 he issued Executive Order 20-26 which set forth a plan for phased reopening of the state beginning on May 4 and culminating by July 4. The Governor has continued to issue executive orders up to and including Executive Order 20-42 issued on September 24. The most recent additional orders extended Phase 4.5 of the reopening due to increased COVID rates, and it was not until Executive Order 20-42 that the state moved to Phase 5 or final reopening. Even at Stage 5, some protective measures will continue, for example recommendations on the wearing of masks and continuation of virtual public meetings.

Throughout this period, the City of Bloomington, as an essential governmental entity, has continued to provide programming and services but has adapted its operations in order to protect the health and safety of its employees and the residents of Bloomington. Among other things, the City closed all of its facilities to the public, required all employees who could work from home to do so unless they needed to come in to work periodically in order to fulfill their functions, and put in place personal and workplace hygiene and sanitizing procedures and practices. As of May 26, City Hall was reopened to the public but with interactions between the public and City staff limited to essential interactions only, and those with increased personal protections. In addition, new workplace rules and procedures designed to protect staff and, by extension, the community have been put in place for employees working in City Hall and other City facilities.

Because the COVID-19 virus is one scientists haven’t seen before, the ongoing course of the COVID pandemic is unpredictable. Still, infectious disease experts throughout the world advise

that similar pandemics have involved renewed waves of infection separated by periods of lower infection. And in fact, as autumn is upon us, infection rates appear to be rising again world-wide. Experts also suggest that this pandemic is not going to be a several-month phenomenon because we do not yet have the means effectively to address it. We are likely to be facing a many-month phenomenon that will continue until we have both sufficient testing capacity and an effective vaccine, which are the only things that will allow us to reduce the rates of infection to manageable levels. On the assumption, therefore, that Bloomington could be looking at one or more intermittent waves of infection, the Office of the Mayor requested a committee of staff members to develop recommendations for managing City operations during the full course of the COVID epidemic, whatever shape that course may take. The following report details those recommendations.

III. RECOMMENDATIONS

As mentioned in the introduction, the City has adapted its operations in order to comply with the Governor of Indiana's and the Monroe County Public Health Authority's Stay at Home and reopening orders, and to protect City employees and residents. These adaptations were arrived at quickly due to the speed with which the COVID epidemic spread across Indiana, but they were informed by Centers for Disease Control ("CDC"), Occupational Safety and Health Administration ("OSHA") and other federal and state guidelines. They appear to have been effective in achieving their intended goals in that very few city employees have become infected through spread from colleagues who tested positive. Therefore, we recommend that they be used throughout the COVID epidemic, with adjustments as needed and recommended below.

A. City Operations during Periods of Escalating COVID Infection

To this point in the COVID emergency, the City has used various indicators to judge the severity of the epidemic, for example, whether the numbers of new cases are declining over a 14-day period, the availability of testing, and the number of available ICU beds at IU Health. The City must continue to monitor these and other indicators, including rates of infection among IU students and staff and the Monroe County Community School Corporation, to determine the severity and extent of COVID infection in the community. The MCCSC's metrics for determining the appropriate educational approach throughout the COVID pandemic, for example, is data-driven and may provide useful information on general local infection rates. The District's chart on re-entry metrics is below.



MCCSC Re-Entry Metrics

The following metrics will be taken into consideration when consulting with the local health department to determine the overall MCCSC Learning Status. While Percent Positivity will be the primary indicator, the other indicators will be closely monitored as well.

				9/7/20	9/15/20	10/6/20
a. Percent Positivity (7 day rolling average)	≤ 5%	6% to 9%	≥ 10%	7.40%	8.80%	1.40%
b. Positive Case Per Day (7 day rolling average)	Downward trend or Stable	Stable	Upward trend	Upward trend	Upward trend	Downward trend or Stable
c. Positive Cases Per Day (per 100,000-person population 7 day rolling avg.)	Downward trend or Stable	Stable	Upward trend	Upward trend	Upward trend	Downward trend or Stable
d. Test Turnaround (average number of days from test to notification for MCCSC students and employees)	≤ 2 days	3 to 6 days	≥ 7 days	≤ 2 days	≤ 2 days	≤ 2 days
e. MCCSC Contact Tracing (average number of days from positive test to notification of close contacts)	≤ 2 days	3 to 4 days	≥ 5 days	≤ 2 days	≤ 2 days	≤ 2 days
Learning Status	Phase Green	Phase Yellow	Phase Red	Phase Yellow	Phase Yellow	Phase Green

a, b, ISDH Dashboard c Harvard Global Health d, e MCCSC Health Dept.

*Due to individual circumstance, there may be schools or programs that vary from the MCCSC Learning Status.

**MCCSC is working closely with the Monroe County Health Department and Indiana University. If an isolated cluster is found these positive cases will be taken into consideration.

***This is subject to change based on new information.

****The State Board of Health has stated "All Tests" should be used for data and policy decisions.

When at any point the Administration determines that we are in a period of escalating infection, and protecting the safety of employees from coronavirus outbreaks requires more severe reductions in personal interactions, the City should implement the Remote/Protective Model. This model was developed in response to the initial wave of COVID infections in the US and Monroe County and the resulting Stay at Home orders issued by the Governor and the Monroe County Health Department. It applies across the board to every City department and function.

As noted above, as the COVID-19 epidemic plays out, experts forecast that there will be periods of high infection alternating with periods of decreasing infection. These periods may be of varying length. The basic Remote/Protective Model is described below and should be implemented in periods of higher infection. The City may take other additional or different steps in the future depending on the circumstances.

1. Shorter Term Periods of Infection

- For employees who can conduct their work duties from home:
 - Any such employees shall be encouraged to do so as much as possible, with their supervisor’s permission.

- ITS will provide equipment and online access to City servers to employees who need it in order to work at home.
- For those employees who must report to their usual workplace:
 - Staggered shifts or seating reassignments may be required.
 - At least a six-foot distance will be required between work stations wherever possible.
 - Employees will be required to wear facial coverings in accordance with the City's facial covering directive, generally whenever they cannot maintain a six-foot distance from other employees.
 - Protective barriers and physical distancing (six-foot minimum) between employees and between employees and customers will be required.
 - Appropriate cleaning procedures and recommended frequency will be provided.
 - Signage detailing cleaning procedures, distancing and other safety procedures will be prominently displayed.
 - Employees may be required to leave their workplace by a certain hour in order to allow for cleaning by a contracted cleaning crew.
 - Other facility alterations, especially to limit contact with external customers, will be made as needed.
 - Conference rooms will have limited occupancy. Limits will be posted in a prominent location.
 - City vehicles will be cleaned in between users. Appropriate cleaning supplies will be provided and departmental protocols developed.
- For all employees:
 - All employees will be provided with Personal Protective Equipment (PPE) appropriate to their work circumstances and instructions as to their use.
 - All employee hours during stay-at-home will be reported on Timetrack or their usual method of reporting.
 - Departmental and employee meetings will be held as needed but via online format (Zoom, Google Meet, etc.)
 - Board and Commission meetings will be held online so long as permissible under state law.
 - Employees with symptoms of COVID-19 or flu-like symptoms, whether at home or at work, should inform the Risk Department (Gary Connor: connorg@bloomington.in.gov; 812-340-9804) and their supervisor as soon as possible. A Risk Department representative will ask the employee some screening questions and ensure appropriate medical referral takes place.

- Employees who have come in contact with someone who may or does have COVID-19 shall quarantine for 14 days.
- The City will continue online Pulse surveys in order to monitor employees' mental/emotional well-being.
- The City offers mental health counseling through the Life Assistance Program (LAP) and may offer group mental health services through special arrangement with an external provider like Centerstone.
- For employees who are unable to work due to their own illness, childcare needs, or caring for a family member, Human Resources offers leave through the following federal programs: FMLA, FFCRA. The City will explore new options as they are made available.
- City-sponsored programs and events that cannot be held safely will be cancelled or converted to online events.
- Department Heads shall inform the Mayor and Deputy Mayor in writing of anticipated budgetary effects as soon as possible.

2. Longer Term Periods of Infection

- The Remote/Protective model should be utilized as long as new infections are not declining.
- The City may need to take steps to ensure that child care is available for employees the longer a period of increased infection goes on.
- The City may need to make adjustments to the Remote/Protective Model, e.g. more significant modifications to programs and services.
- Department Heads shall inform the Mayor and Deputy Mayor in writing of anticipated budgetary effects as soon as possible.

B. City Facilities Reopen to the Public and Employees Return to Place of Work

1. Partial Reopening

a) Scenario

- There is no longer a stay-at-home order in effect.
- Testing is limited to residents and employees meeting specific criteria and/or there is no vaccine.
- Facilities are open, but residents are encouraged to conduct business by phone or online if possible and enter the facility only if they cannot conduct their business remotely.
- Facilities are modified to encourage compliance with safe physical distance and minimize the number of residents/customers allowed to access a physical space simultaneously.
- Residents/customers are not allowed to meet in departmental offices.

- In-person meetings of 25 or fewer people are allowed if appropriate physical distancing can be adhered to. Internal and public meetings that cannot comply with safe physical distancing of 50ft² per person will be held virtually.
- Schools may still be closed or partially closed and youth programs and childcare are limited, conducted differently, or canceled.
- Departments determine on-site staffing based on resident/customer demand and the ability to keep employees safe.
- Employees conduct a self-screening at home before coming to work and remain at home if experiencing any symptoms.
- When staff are on-site they confirm that they are asymptomatic, wear face coverings, maintain safe physical distance, and comply with sanitizing procedures for themselves and common surfaces.

b) Impacts to Staffing and Services

- Most internal and public meetings will be virtual (so long as the state continues to allow virtual public meetings). Technology needs for internal and public meetings may require a shift of priority for communications and/or ITS staff.
- More time spent disinfecting by all staff could reduce the speed with which other requests are completed.
- If the number of staff needed on-site exceeds the ability to maintain safe physical distance, departments will design staggered shifts. Where staggered shifts are implemented, this may impact staff schedule and availability of specific personnel.
- Staff who need to be on-site but cannot arrange for childcare and/or who need to care for other family members will need to take extended leave (historically, this has been in Public Works and Utilities).
- Staff who do not need to be on-site and who cannot arrange for care of children or other family will likely continue to work virtually. Remote working is encouraged whenever possible.
- Depending on how long this phase lasts, staff may need to use PTO and comp time.
- Some programming will be modified to be conducted virtually.
- Depending on how long this phase lasts, permits and applications could slow down as a reflection of the economic impact. Board/Commission' agenda items may be limited to essential items only. The frequency of meetings may also decrease and will impact the amount of work staff performs.
- Some in-person programming will be modified to accept fewer participants and prevent sharing of equipment (e.g. Parks).

- In-person services requiring registration and/or payment will be transitioned to online and/or residents/customers will be asked to mail in payment.
- There will be significant staff time spent determining how to modify programming and services for multiple scenarios, communicating with staff about changes and training them on new processes.
- If programs are canceled or reduced, some staff may have availability to assist other departments.
- If programs are canceled or reduced, typical numbers of hires for part-time seasonal staff will also be reduced, however some staff who focus primarily on disinfecting/sanitizing may be needed.
- Transitioning registration and payment systems to be fully online may require re-prioritization of ITS projects.
- The paving schedule may be slowed due to more Public Works Street employees taking advantage of leave options.
- Timing of contract terminations will need significant review.

c) Impacts to Budget

- Unanticipated expenditures related to the purchase of thermometers, masks, gloves, sanitizer and sanitizer dispensers, wipes for both employees and visitors to city facilities.
- Unanticipated costs associated with signage and barriers (plexiglass shields) to encourage appropriate physical distance.
- Increased ITS expenses with decreased revenue from Telecom. Expenses include additional laptops, webcams, increased VPN capacity, new software (remote access, community engagement, surveys with better data analysis, dashboards, help desk, cybersecurity, digital signatures, virtual inspections, higher quality virtual programming, video editing), and associated training on any new hardware/software or process change.
- There may need to be an investment in ITS equipment, infrastructure, and software for meeting rooms across all City facilities to ensure that virtual meeting attendance in any room is an option.
- Significant reduction in expense to hire and manage seasonal staff.
- Significant reduction in revenue from facility rental, field rental, facility memberships, and program participation.
- Significant reduction in revenue from parking garages.
- Increased expenses associated with increased trash and recycling pick-up.
- Unanticipated purchase of disposable bags and boxes for food distribution (Parks-Banneker).
- Expenses related to travel would be lower due to travel restrictions.

- Revenue sources from the state (Department of Transportation) will likely decrease.
- Unemployment and health insurance claims increase which could impact renewal rate.

2. Full Reopening

a) Scenario

- Testing is available to anyone requesting it; all employees who are able have been vaccinated.
- There is no limit to the number of people allowed to attend in-person meetings.
- Facility modifications to limit infection routes between the public and employees remain.
- Where possible, residents doing business in City facilities are met in common areas. Residents only access deeper areas of facilities when their business requires it.
- Departments determine on-site staffing based on resident/customer demand. Long-term remote working is allowed on a case-by-case basis.
- When staff are on-site they comply with sanitizing procedures for themselves and common surfaces.
- Virtual attendance at internal meetings is always an option, and at public meetings as long as the State will allow it.
- All registration and payment services are or will be transitioned to being fully online.

b) Impacts to Staffing and Services

- Staff will need to acclimate to a blended workforce where some of their colleagues operate mostly remotely. Departments that experimented with staggered shifts and found them to be more efficient and effective may opt to keep that schedule.
- Fewer residents come to City facilities as much of their business can be conducted online. Assuming these online systems are user-friendly, resident satisfaction may improve.
- Maintenance of new online systems and processes may require a re-prioritization of ITS projects.
- Hiring of part-time seasonal help will gradually return to “normal” levels. Note that resident unemployment and inability to pay for programming may influence program demand which, in turn, influences hiring.

c) Impacts to Budget

- There may need to be an investment in ITS equipment, infrastructure, and software for meeting rooms across all City facilities to ensure that virtual meeting attendance in any room is an option.
- Assume that revenue from facility rental, field rental, facility memberships, and program participation gradually returns to previous levels. Understand that unemployment levels may impact this revenue for some time.

C. Response to Possible Waves of Infection

Infectious disease and epidemiological experts are warning that the COVID-19 pandemic is likely to follow a course similar to ones that viral epidemics have followed in the past. In addition, the course of the epidemic could continue to change depending on human behavior and what the virus does. Two recent studies have produced epidemiological models showing possible ways that the COVID-19 pandemic could develop. As the New York Times reported in summary on May 8, 2020:

Two recent studies provide a picture of how the pandemic could play out. The first, out of the University of Minnesota, describes three possibilities following the current wave of initial cases: “peaks and valleys” that gradually diminish over a year or two; a larger peak in the fall or winter, with smaller waves thereafter, similar to what transpired during the 1918-1919 flu pandemic; or an intense spring peak followed by a “slow burn” with less-pronounced ups and downs.

The second study, from Harvard T.H. Chan School of Public Health, projected a similarly wavy future characterized by peaks and valleys. Social distancing is turned “on” when the number of Covid-19 cases reaches a certain prevalence in the population, so as not to overwhelm the healthcare system, and turned “off” when cases drop to a lower threshold, perhaps 5 cases per 10,000.

What is clear overall is that a one-time social distancing effort will not be sufficient to control the epidemic in the long term, and that it will take a long time to reach herd immunity. Lacking a vaccine, our pandemic state of mind may persist well into 2021 or 2022 — which surprised even the experts.

Full article available here:

<https://www.nytimes.com/2020/05/08/health/coronavirus-pandemic-curve-scenarios.html>

These studies reinforce what experts have been saying with supportive scientific modeling and provide us with possible roadmaps to consider. However, given the unknowns, the City will need to be adaptive and flexible, continually monitoring the scientific data on infection rates, hospital occupancy, and trends to inform our approach,

and our response at any given time may depend as well on the general public's response to government directives.

1. Response During Varying Periods of the Epidemic

a) High Infection Periods: Implement Remote/Protective Model

At the time this document was first released, the City had just partially reopened its facilities to the public and returned some staff who had been working remotely to on-site work. However, in periods where the data indicate that new infections are on the rise and the threat to public health locally is increasing, the City should revert as much as possible to the Remote/Protection Model.

b) Low Infection Periods: Partial Reopening to Full Reopening

In periods where the data indicate that new COVID-19 infections are significantly decreasing, the City may revert to the phased operational model developed and utilized in response to the lifting of the state and local Stay At Home orders, but should continue to abide by any state and local executive and health orders to determine the appropriate level of opening. Again, whether the City reopens facilities to the public and returns employees to on-site work, and to what extent, will depend on the scientific data and the behavior of the public.

c) Continue to alternate as needed

As the coronavirus runs its course, the City must continually monitor the evidence on infection rates and the health system's ability to respond in deciding whether or not to have its facilities open to the public, staff back in the office, and most programs and services operating at partial or full capacity. We foresee that if indeed there are peaks and valleys of infection, we will need to alternate between the models referenced above, with modifications as needed depending on the circumstances and the data.

2. Impacts to Staffing and Services

When the City is operating under a full or modified Remote/Protective Model, the impacts to staffing and services will vary with the length of time we are on "lockdown," and whether departments whose programs and services could be postponed or cancelled (that is, not essential services such as public safety, water and waste treatment or sanitation) are able to plan for and run programs without threatening the public health. The predicted variability of the COVID-19 epidemic's course, and possible abrupt changes in its direction, could make it very difficult to offer the same programs and services the City offered before the coronavirus arrived in Bloomington. It is possible programs and services might be successfully modified, as the Farmers' Market was, and

that should be our first attempt to adapt. However, if in fact services need to be reduced or modified, staffing is likely ultimately to be affected, including but not limited to reduced hiring of seasonal or other employees, redeployment of employees whose functions are on hold or no longer viable, and/or possible furloughs or terminations. We note also that as the City shifts from one model to another, it will likely become increasingly difficult in the long run to provide some programs and services if they either a) could end up being abruptly curtailed or cancelled, or b) would need to but cannot be ramped up to operation on a very short time frame.

3. Budget Impacts

The budget impacts will be due primarily to a general economic downturn across the state and therefore reduced property tax receipts, and reduced revenues from those City operations that generate them. The effects could be severe and would require budget reductions across the City as well as a reallocation of available funds to the most essential services and projects.

4. Other Impacts

In an environment where predictability is at an all-time low, programs and services may or may not be implemented, what is offered may continually need modification, staffing may need to be reduced or redeployed, and budgets are likely to decrease, the impact on the morale and productivity of staff will be severe and chronic. Uncertainty is difficult to deal with at the best of times, but when it is compounded by so *many* unknowns, and the underlying reason for it all is a deadly disease that could affect the health and even survival of every employee and his or her family, the stress of the situation is made even worse. The City will need to find creative ways to respond to this crisis of employee confidence and well-being over the long term.

D. Triggers Requiring Changed Response

As this report has described, the course of the COVID-19 pandemic is unpredictable, both globally, and locally, and contingent on multiple factors, including the speed with which a vaccine is created and administered, and the degree to which individuals act to limit transmission. While numerous factors contributing to the trajectory of the disease are beyond our control, the trajectory of its local effects might be made steeper, or longer, or have a cascading pattern/domino effect in response to certain events, triggers, or tipping points that might be anticipated in advance and mitigated against or, in some cases, taken advantage of. Whether born of the cumulative effects of the medical, social, and economic effects of the pandemic itself, or unrelated events that would interact with the pandemic in a way that would exacerbate its effects, these trigger points might include the following:

1. Resurgence of disease

Whether this happens along the peaks and valleys model, or the large second peak in fall or winter 2020-2021 model, an increase in certain local health indicators (new cases, new hospitalizations, use of ventilators, death rate) will demand that the City government change course/return to more restrictive protocols and guidelines.

2. Indiana University's plan for the 2020-21 academic year

Indiana University announced in May that students would be back on campus for the fall 2020 semester. The plan outlined by President McRobbie in his press release on May 27 included:

- The Fall Semester will run from August 24 through December 20. Classes may be in-person or online until Thanksgiving week (November 20), when all in-person instruction will end. The rest of the semester will be online only. There will be no Fall break.
- Campuses will have the flexibility to use the online-only period (November 30 to February 7) in various ways: to finish fall semester courses, to begin spring semester courses, or to create new intensive courses that use either or both the December and January online periods (a new Winter Session).
- The Spring Semester will begin with online-only instruction on January 19 and then resume in-person instruction on February 8. The semester will run to May 9 without a Spring break.
- Undergraduate students who take advantage of IU's banded tuition rates can include courses from the Fall Semester, Winter Session or Spring Semester as part of the new calendar without any additional cost.

The presence of the IU community--in particular its 45,000 students--is critical to Bloomington life both economically and culturally. The areas most predictably impacted by the presence, absence, or diminution of the student population include the following:

- a. Retail and restaurant sector, including third-party providers
- b. Housing--student apartment complexes and rental houses
- c. Personal services -- salons, massage, housekeeping, pet care, tutoring
- d. Gyms, yoga studios
- e. Rideshare services, scooters

In anticipation of the students' return, the Monroe County Health Department and Mayor John Hamilton both issued COVID-related orders, as discussed in the Introduction to this plan, designed to prevent super-spreader events that might be expected from students excited to be back at the university and perhaps feeling the invincibility of youth. Not

surprisingly, infection rates very shortly increased to the point that Monroe County was shortly thereafter flagged as a hotspot on the Indiana State Department of Health's COVID resources page at <https://www.coronavirus.in.gov/>. In the intervening month, perhaps in part due to the orders and their enforcement, testing in the IU community began to show declining rates. The County and City orders are in place until rescinded.

3. Tourism Decline

In addition to causing declines in demand in the aforementioned sectors, the absence or diminution of the IU student population would have a stultifying effect on the arts, entertainment and leisure sectors in Bloomington, much of which are produced, created, performed, staffed, and attended by students. Even shortened semesters and options for online instruction could lead to similar effects on our local economy. Students play a very big role in the institutions that define Bloomington's ethos and appeal as a regional, national and global destination--from IU Athletics to the Jacobs School of Music, local festivals and fairs, local theater companies, and general student-led traditions like the Little 500--and the impact of a reduced student presence and the tourism that follows that presence could be enormous. IU's decisions regarding when and for how long students will be in residence will significantly affect Bloomington's economy.

4. Tax shortfalls

The pandemic's toll on the restaurant and other economic sectors, as well as its effect on individuals, are predicted to also trigger a significant shortfall in food and beverage, corporate and real property tax revenues to the City. Food and beverage tax receipts have already demonstrated a decline for the months of April through August of 2020, and the effect on many businesses, both large and small, has been widely reported. In addition, according to a recent interview with the Monroe County Assessor in the Herald Times, property owners may begin to contest that their real estate has retained its value, and properties may be reassessed at a lower value for 2021, leading to a reduction in the property tax revenues to the City.

https://www.hoosiertimes.com/herald_times_online/news/covid19/county-assessor-prepares-for-tough-road-ahead/article_1d68250a-8be7-11ea-81b9-13201d34a4e2.html

Steep declines in revenues might lead to the cancellation or postponement of capital infrastructure projects, reduction in programming and services, and furloughs or reductions in force in the City organization.

5. Census Undercount

As a result of the departure of students from Bloomington before the official April 1 Census Day, the unusual circumstances surrounding the fall semester, and the short period of time remaining after students' return in August for the state to complete

information collection, many student residents may not be accounted for in the 2020 census. Undercounting could lead to a reduction in federal apportionments for our projects and nonprofits, and a diminished representation in Congress. In addition, getting a census count can be challenging in the best of times; it may be even more difficult when personal interaction is being discouraged during a pandemic.

6. Childcare; Women's Employment; Increased Family Tensions

Local school systems reopened in August using various hybrid models and day care centers reopened during the summer. If schools and childcare centers are unable to remain open during the 2020-21 academic year because of the pandemic or insufficient operating funds, parents will need to shift priorities to ensure that their children are cared for and their instruction monitored. These shifting priorities may result in departures from the workforce. Traditionally, women have been more likely to leave the workforce in order to care for family members, so we might anticipate a decline of women in the workforce with resulting declines in income. In fact, a recent study shows just that--women are leaving the workforce due to the pressures of the COVID epidemic on their families in greater numbers than men:

<https://www.nytimes.com/2020/10/03/us/jobs-women-dropping-out-workforce-wage-gap-gender.html>

<https://www.mckinsey.com/about-us/new-at-mckinsey-blog/how-are-working-women-doing-during-covid-19-our-women-in-the-workplace-study-explores>

These declines will be compounded by the fact that childcare centers are predominantly staffed by women--when these centers close, women lose jobs (330,000 childcare workers in the US lost their jobs in April.)

In addition, especially in single-parent and/or low-income families, the difficulty of managing both childcare and work may make many more families dependent on social services and government programs (at a time when resources are already strained), and will undoubtedly contribute to increased mental health issues, marital stress/divorce, substance use disorder, child abuse and neglect, and partner abuse/violence, which will in turn burden our court system and social service sector even more.

https://www.huffpost.com/entry/child-care-industry-coronavirus-no-bailout-congress_n_5ebe9ea0c5b6ae86c2fd2c00?ncid=newsltushpnews

The following trigger points are not born of the pandemic but would interact with it in a way that would exacerbate the effects of either crisis:

7. Natural disaster

Our region could suffer a tornado, earthquake, drought, fire, floods, effects of climate change, or other types of natural disasters. Such events have already occurred with massive fires in the western US and hurricanes and resulting flooding in the southern US. Displacing residents at a time when resources are stretched, and forcing them to congregate in emergency shelters, would further risk disease transmission and cause additional financial strain on individuals, governments, and nonprofits at a time when budgets are already severely reduced.

8. Cyberattack

At a time when so many transactions are taking place online, a cyberattack that interferes with communications would be more treacherous than usual. Additionally, a cyberattack that dismantled utilities such as water or electricity would be especially acute in a quarantine situation or in the midst of a viral outbreak.

9. Civil Unrest

In the wake of George Floyd's death while in police custody in Minneapolis, and the cumulative effects of a series of other deaths of Black citizens across the country during police encounters, widespread demonstrations, sometimes accompanied by looting and violence, exacerbated the societal instability and anxiety the pandemic had already created. The disproportionate toll the pandemic has taken on people of color and lower socio-economic status has highlighted societal disparities to the extent that additional and prolonged civil unrest would not be surprising. Such unrest will place an additional toll on our public safety sector and our healthcare system. Moreover, people already deeply affected by the COVID shutdown may now incur property damage and insurance costs.

The pandemic might also trigger the following effects, with possible positive ramifications (See: <https://www.brookings.edu/research/how-covid-19-will-change-the-nations-long-term-economic-trends-brookings-metro/> for additional information on this idea)

10. Migration From More Densely Populated Areas

There is evidence that the pandemic has prompted some residents of big cities (e.g. New York and Seattle) and companies headquartered there to relocate to smaller, less densely populated urban centers that nonetheless have highly sought after assets such as a qualified workforce, quality of life, and relative affordability. Bloomington is a community with just such assets that might begin to attract migration from larger urban areas. This migration might be compounded by the climate-change-inspired migration from the coasts already predicted (See link for more on the migration issue:

<https://www.citylab.com/environment/2020/02/climate-change-migration-map-sea-level-rise-coastal-cities/605440/>)

11. Growth of Tech Sector

The new economy continues to indicate that the tech sector, including cybersecurity, innovation, and entrepreneurship, will become ever more important in our world, and the pandemic may have pushed us farther down the road of ubiquitous connectivity and work performed online. Bloomington is well-placed to take advantage of this trend, with elements of the new economy well-seeded and flourishing here already.

12. Growth of the Local Healthcare Sector

We are already seeing such growth with the expansion of operations and employment at Catalent. Bloomington's healthcare sector is robust (Catalent, Cook, Baxter, new IUH Regional Academic Center) and this crisis might serve to amplify it.

13. Addressing Income Inequality

Social inequities have been amplified by the coronavirus pandemic. This could be an opportunity to increase public funding for tools that increase equity.

14. Growth in the Arts/Creative Sectors

The arts have traditionally flourished in a crisis and may well do so now. Productivity and investment in this sector would plant seeds for future economic growth and cultural enhancements for our community.

15. Parks and Trails

The necessity of sheltering in place during this first wave of the pandemic, and likely again in the future, may well increase demand for parks and trails and other public quality of life improvements that benefit all residents.

16. Addressing the Digital Divide

The grave inequities regarding Internet access based on economic status or rural/urban residency have been highlighted during the pandemic. It is now indisputable that Internet access is absolutely necessary to ensure that individuals from all walks of life have a chance at an education, a decent job, and the opportunity to participate in society. The specter that pandemics will continue to arise may finally convince Americans that universal Internet access is essential for our survival as a society. Bloomington should take advantage of any opportunities that develop to address this issue locally and regionally.

17. Changes to the Way We Work

Up to one half of American workers have been able to successfully perform their jobs remotely during this pandemic. This surprising outcome may prompt a complete overhaul of notions about office culture and office space, convincing employers to permit more remote working, which would provide cost savings to employers and also reduce demand for commercial real estate. In addition, cities across the globe have realized dramatic decreases in pollution with the marked reduction in workers commuting to their job sites. The rethinking of the workplace could lead to expansions of healthcare or other benefits that allow for a more thorough and equitable consideration of workers' human needs. Locally, allowing workers to eliminate or even reduce their commute days would have a positive impact on the local environment, and could potentially reduce the City's responsibilities related to road maintenance, parking and parking facilities, and fleet vehicle numbers. Remote working could offer City employees better options for childcare and lead to greater work-life balance for them. *See:* (<https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/>)

IV. Conclusion

Health pandemics that span the world are here to stay, and Bloomington's participation in the global economy means it will not be immune to them. The recommendations in this plan will allow the City of Bloomington to continue to provide essential services while still protecting employee health and safety on an ongoing basis, no matter the nature of the pandemic, or how long it lasts.