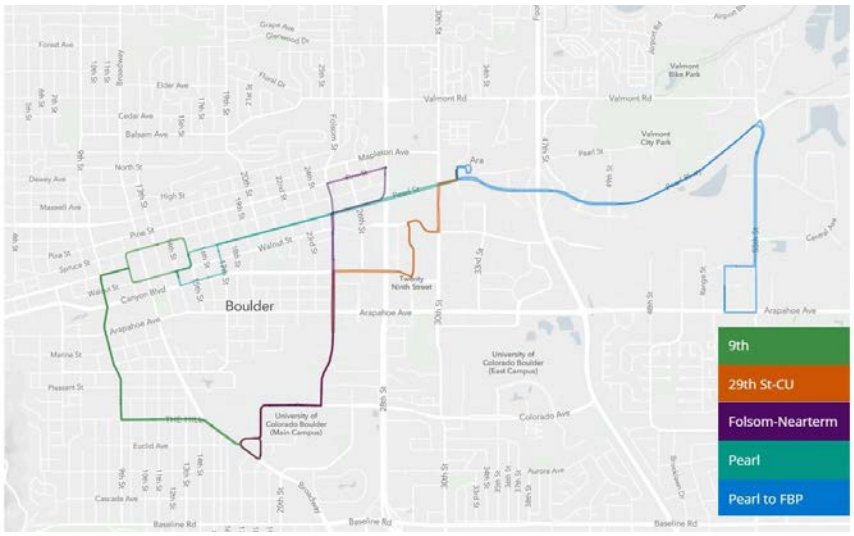
Part 1 Base Information

1. Project Title	**HOP Transit Service Expansion**
2. Project *Start/End* points or Geographic Area *Provide a map with submittal, as appropriate - An additional Vicinity map is included at the end of this application*	Pearl St and Junction Pl to 55th St and SH7/Arapahoe Ave 
3. Project Sponsor *(entity that will construct/ complete and be financially responsible for the project)*	City of Boulder
4. Project Contact Person, Title, Phone Number, and Email	Gerrit Slatter, Principal Transportation Projects Engineer, 303-441-1978, slatterg@bouldercolorado.gov

5. Does this project touch CDOT Right-of-Way, involve a CDOT roadway, access RTD property, or request RTD involvement to operate service?	☒ Yes ☐ No *If yes, provide applicable concurrence documentation with submittal*	
6. What planning document(s) identifies this project?	☒ DRCOG 2040 Fiscally Constrained Regional Transportation Plan (2040 FCRTP)	
	☒ Local plan:	Boulder Transportation Master Plan, HOP Service Study
	☐ Other(s):	
	Provide link to document/s and referenced page number if possible, or provide documentation with submittal	

7. Identify the project's **key elements**.

- ☐ Rapid Transit Capacity (2040 FCRTP)
- ☒ Transit Other:
- ☐ Bicycle Facility
- ☐ Pedestrian Facility
- ☐ Safety Improvements
- ☐ Roadway Capacity or Managed Lanes (2040 FCRTP)
- ☐ Roadway Operational

Grade Separation

- ☐ Roadway
- ☐ Railway
- ☐ Bicycle
- ☐ Pedestrian

- ☐ Roadway Pavement Reconstruction/Rehab
- ☐ Bridge Replace/Reconstruct/Rehab
- ☐ Study
- ☐ Design
- ☐ Transportation Technology Components
- ☐ Other:

8. **Problem Statement** What specific Metro Vision-related subregional problem/issue will the transportation project address?

The HOP is a local circulator route connecting four major activity centers in Boulder including downtown, CU, 29th St Retail District, and Boulder Junction. For the last 25 years, the HOP has been funded by a partnership between the City of Boulder, RTD, and CU. The city contracts with Via Mobility Services to operate the HOP. HOP service runs 7-days per work from 7 a.m. to 10 p.m. every 10 minutes on weekdays, and every 15 minutes on weekends.

In August 2018, the City of Boulder rebranded HOP service and worked with Via Mobility Services to provide schedule-based service that is more frequent and reliable for customers. Now, the City and Via are positioned to implement Boulder's vision to expand the HOP service to serve north and east Boulder with local, high frequency connections to CU main campus, and Flatiron Business Park.

HOP ridership is stable, averaging approximately 3,000 riders per weekday, and weekend ridership is growing with the recent increase in weekend service. Total HOP annual ridership is approximately 750,000 boardings, which is greater than most local routes that RTD provides throughout the district.

In order to achieve Boulder's Transportation Master Plan and Sustainability goals, the City of Boulder needs to take on a larger role in providing local transit service, and the HOP is an exemplary model. RTD funds are limited and constrained by competing priorities throughout the district, so additional funding is needed to expand this important local service.

The City and Via have acquired federal and state funding to purchase three electric vehicles, and Via is converting one diesel bus to electric. By mid-2020, 25% of the HOP fleet will be fully electric. The City is applying for additional federal and state funds to purchase two more electric vehicles, and if awarded the vehicles will be available in 2021. The expansion would provide high frequency local connections to regional travelers connecting from Boulder Junction on Routes FF4 and BOLT, providing important first and final mile connections for people traveling to east Boulder from US 36 corridor communities and Denver during off peak times when FF6 service in unavailable, and for people traveling from Longmont, Niwot, and Gunbarrel.
3,100 more people and 7,400 more jobs would be within a ¼ mile of the expanded service.

Flatiron Business Park employees would have access to frequent service during working hours to connect downtown for errands, lunch and business meetings.

9. Define the **scope** and **specific elements** of the project.

This project would segment the existing HOP loop and extend HOP service on east Pearl to Flatiron Business Park and SH7/Arapahoe Avenue. The city would coordinate with RTD on changes to Route 206 and funding.

10. What is the status of the proposed project?

The vehicles have been obtained for this service.

11. Would a smaller DRCOG-allocated funding amount than requested be acceptable, while maintaining the original intent of the project?	☒ Yes ☐ No

If yes, define smaller meaningful limits, size, service level, phases, or scopes, along with the cost for each.

The service level from Boulder Junction Station to Flatiron Business Park could be scaled to less frequency or as a micro-transit on-demand service if full funding isn't available for a high frequency, fixed route service.

A. Project Financial Information and Funding Request

1. Total Project Cost		**$12,900,000**
2. Total amount of DRCOG Subregional Share Funding Request	**$2,400,000**	**18.6% of total project cost**
3. Outside Funding Partners ***(other than DRCOG Subregional Share funds)*** List each funding partner and contribution amount.	**$$ Contribution Amount**	**% of Contribution to Overall Total Project Cost**
City of Boulder	$5,325,000	41.28%
RTD	$4,200,000	32.56%
CU Boulder Students	$975,000	7.56%
	$	
	$	
	$	
Total amount of funding provided by other funding partners *(private, local, state, Regional, or federal)*	**$10,500,000**	

Funding Breakdown (year by year)*

**The proposed funding plan is not guaranteed if the project is selected for funding. While DRCOG will do everything it can to accommodate the applicants' request, final funding will be assigned at DRCOG's discretion within fiscal constraint. Funding amounts must be provided in year of expenditure dollars using an inflation factor of 3% per year from 2019.*

	FY 2020	FY 2021	FY 2022	FY 2023	Total
Federal Funds	$800,000	$800,000	$800,000	$	**$2,400,000**
State Funds	$	$	$	$	**$0**
Local Funds	$3,500,000	$3,500,000	$3,500,000	$	**$10,500,000**
Total Funding	$0	$0	$0	$0	**$0**
4. Phase to be Initiated *Choose from Design, ENV, ROW, CON, Study, Service, Equip. Purchase, Other*	Service	Service	Service	Choose an item	

5. By checking this box, the applicant's Chief Elected Official (Mayor or County Commission Chair) or City/County Manager for local governments or Agency Director or equivalent for others, has certified it allows this project request to be submitted for DRCOG-allocated funding and will follow all DRCOG policies and state and federal regulations when completing this project, if funded. ☒

Part 2 Evaluation Criteria, Questions, and Scoring

A. Subregional significance of proposed project

WEIGHT **40%**

*Provide **qualitative and quantitative** (derived from Part 3 of the application) responses to the following questions on the subregional significance of the proposed project.*

1. Why is this project important to your subregion?

The HOP Transit Service is a significant circulator transit service route connecting four major activity centers in Boulder including downtown,' CU, 29th St Retail District, and Boulder Junction. The existing and proposed expansion links with the city's key north-south and east-west corridors including SH93/Broadway, SH119/Canyon Boulder, US36/28th Street, SH7/Arapahoe Avenue and Pearl Street/Pearl Parkway which are identified in the DRCOG Regional System map. There are over 40,195 residents and 59,777 jobs in the surround 1 mile area of this proposed transit service expansion area.

This project benefits the Boulder County subregion with connections from regional and local transit services as well as planned future BRT services expanding options for residents, visitors and employees.

2. Does the proposed project cross and/or benefit multiple **municipalities**? If yes, which ones and how?

Yes, the proposed project benefits multiple municipalities and includes the US36 corridor communities and SH93 and SH7 corridor communities. The project benefits residents and employees who use the local and regional transit services connecting to the new destinations served with this transit service expanion.

3. Does the proposed project cross and/or benefit another **subregion(s)**? If yes, which ones and how?

Yes, the project's benefits support the first and final mile access to regional transit benefiting the residents and employees of Boulder, Denver, and Broomfield subregions.

4. How will the proposed project address the specific transportation problem described in the **Problem Statement** *(as submitted in Part 1, #8)*?
The HOP Transit service expansion would provide high frequency local connections to regional travelers connecting from Boulder Junction on Routes FF4 and BOLT, providing important first and final mile connections for people traveling to east Boulder from US 36 corridor communities and Denver during off peak times when FF6 service in unavailable, and for people traveling from Longmont, Niwot, and Gunbarrel.

5. One foundation of a sustainable and resilient economy is physical infrastructure and transportation. How will the **completed** project allow people and businesses to thrive and prosper?

The HOP Transit Service Expansion fulfills economic sustainability goals by increasing access and connections between regional and local transit services which benefits local businesses through improved transportation for customers, services and employees.

6. How will connectivity to different travel modes be improved by the proposed project?

This project supports the first and final mile access to and from regional transit providing direct connections from this local circulator transit service to the regional transit service.

7. Describe funding and/or project partnerships *(other subregions, regional agencies, municipalities, private, etc.)* established in association with this project.

The HOP service is a multi-agency partnership with the City of Boulder, RTD, and CU-Boulder students. The city of Boulder plans, funds, and contracts with Via Mobility Services to operate the HOP, and RTD and CU students contribute to funding. This is a long-standing partnership that has existing since the HOP's inception in October 1994.

B. DRCOG Board-approved Metro Vision TIP Focus Areas

WEIGHT **30%**

*Provide **qualitative and quantitative** (derived from Part 3 of the application) responses to the following questions on how the proposed project addresses the three DRCOG Board-approved Focus Areas (in bold).*

1. Describe how the project will **improve mobility infrastructure and services for vulnerable populations (including improved transportation access to health services).**

The proposed project will improve transit service for vulnerable populations that currently ride this segment of Route 206, and for non-riders who need more frequent and convenient bus service that connects from downtown Boulder to 55th and Arapahoe via Pearl Parkway. Several of Boulder's low-income and latino community members, live within walking distance of 30th and Pearl and the Boulder Junction Transit Station including a mobile home park and affordable apartments with a majority of latino residents less than half mile from a HOP stop. This route would increase bus service for these neighborhoods, and provide a commute option for people working in downtown or east Boulder.

Additionally, there is an existing 150+ unit affordable housing development at Boulder Junction, and another in planning and development by Boulder Housing Partners on the northeast corner of 30th and Pearl. The existing and future affordable housing residents in this area will greatly benefit from this proposed project.

2. Describe how the project will **increase reliability of existing multimodal transportation network.**

The proposed project will increase frequency and reliability for local transit service from the Downtown Boulder Station and Boulder Junction Station to east Boulder and the Flatiron Business Park employment center. The existing RTD route 206 from Boulder Junction to 55th & Arapahoe operates every 30 minutes. The proposed project would likely replace this portion of RTD's 206 route, and increase frequency to every 15-20 minutes making the route a more reliable and convenient option for employees connecting from regional transit at Boulder Junction to jobs in east Boulder. The proposed project also provides an option for employees in east Boulder to travel directly to 30 & Pearl retail center, and downtown Boulder for shopping, dining, and recreation.

3. Describe how the project will **improve transportation safety and security.**

The proposed project will improve transportation security by providing extended hours of service until 10 p.m. so that non-traditional office hour employees or other employees working late hours have transportation options at night.

C. Consistency & Contributions to Transportation-focused Metro Vision Objectives

WEIGHT **20%**

*Provide **qualitative and quantitative** responses (derived from Part 3 of the application) to the following items on how the proposed project contributes to Transportation-focused Objectives (in bold) in the adopted Metro Vision plan. Refer to the expanded Metro Vision Objective by clicking on links.*

MV objective 2	**Contain urban development in locations designated for urban growth and services**.

1. Will this project help focus and facilitate future growth in locations where urban-level infrastructure already exists or areas where plans for infrastructure and service expansion are in place?

☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

This project is within the City of Boulder's Area 1 Planning Area, as defined Boulder in the Valley Comprehensive Plan which fully supports growth where urban-level infrastructure already exists and/or there are plans in place for infrastructure and service expansion. Consistent with the BVCP, the urban level infrastructure has been planned to accommodate any and all future redevelopment.

	MV objective 3	**Increase housing and employment in urban centers**.

2. Will this project help establish a network of clear and direct multimodal connections within and between urban centers, or other key destinations? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*
The HOP Transit Service Expansion within the central Boulder residential area which has higher density residential uses and links to regional transit service.

	MV objective 4	**Improve or expand the region's multimodal transportation system, services, and connections**.

3. Will this project help increase mobility choices within and beyond your subregion for people, goods, or services? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

The HOP Transit Service Expansion project provides direct multimodal connections transit stop facilities and services and are within the Boulder urban center

	MV objective 6a	**Improve air quality and reduce greenhouse gas emissions**.

4. Will this project help reduce ground-level ozone, greenhouse gas emissions, carbon monoxide, particulate matter, or other air pollutants? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

The HOP Transit Service Expansion supports and encourages the shift towards transit use which supports a reduction in greenhouse gas (GhG) emissions.

	MV objective 7b	**Connect people to natural resource or recreational areas**.

5. Will this project help complete missing links in the regional trail and greenways network or improve other multimodal connections that increase accessibility to our region's open space assets? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

Yes, the HOP Transit Service Expansion will provide access to the Boulder Greenways system including access to Boulder Creek, South Boulder Creek and Goose Creek Greenways paths which are both local walking and bicycling facilities as well as regional commuting and recreational facilities. From these paths users can also access the Valmont Bike Park a local and subregional recreational bicycling facility.

	MV objective 10	**Increase access to amenities that support healthy, active choices.**

6. Will this project expand opportunities for residents to lead healthy and active lifestyles? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*
Yes, the proposed project will encourage more people to walk to transit. Riding transit is a healthy lifestyle choice because, on average, people walk about ¼ mile to transit stops on both ends of their trip. This could result in 0.5-1.0 mile of walking per day.

"Riding the bus or train to work is associated with a lower risk of high blood pressure, diabetes, and being overweight, according to research presented at the American Heart Association's Scientific Sessions 2015.

Compared to drivers, public transportation users were:

- 44 percent less likely to be overweight;
- 27 percent less likely to have high blood pressure; and
- 34 percent less likely to have diabetes.

Interestingly, the bus/train commuters had even lower rates of diabetes, high blood pressure and overweight than the walkers or bikers. The researchers suggested that one explanation could be that these commuters actually walked farther to and from the train or bus station than walkers or bikers traveled to and from work." (Source: https://newsarchive.heart.org/taking-public-transportation-instead-of-driving-linked-with-better-health/)

	MV objective 13	**Improve access to opportunity**.

7. Will this project help reduce critical health, education, income, and opportunity disparities by promoting reliable transportation connections to key destinations and other amenities? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

Yes, the HOP Transit Service Expansion project will improve access to a number of opportunities by linking central Boulder and the US 36 Flatirons Flyer BRT service to the Pearl Parkway commercial corridor and the Flatirons Business Park connecting employees, residents and visitors with their employment, shopping and other destinations.

	MV objective 14	**Improve the region's competitive position**.

8. Will this project help support and contribute to the growth of the subregion's economic health and vitality? ☒ Yes ☐ No

Describe, *including supporting quantitative analysis*

The HOP Transit Service Expansion project will connect local and regional transit services in the central and east Boulder areas which increases options for residents and employees to 29th Street Retail Center and Flatirons Business Park employment centers.

D. Project Leveraging

WEIGHT **10%**

9. What percent of outside funding sources (non-DRCOG-allocated Subregional Share funding) does this project have?	80%	60%+ outside funding sources .....High 30-59% .....Medium 29% and below .....Low

Part 3 Project Data Worksheet – Calculations and Estimates

(Complete all subsections applicable to the project)

A. Transit Use

1.	Current ridership weekday boardings	2,800
2.	Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	40,195	59,777	**99,972**
2040	45,241	76,375	**121,616**

Transit Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional daily transit boardings after project is completed. *(Using 50% growth above year of opening for 2040 value, unless justified)* *Provide supporting documentation as part of application submittal – Please see response to question 10 below for this information.*	260	390
4. Enter number of the additional transit boardings (from #3 above) that were previously using a different transit route. (Example: **{#3 X 25%}** *or other percent, if justified)*	65	97
5. Enter number of the new transit boardings (from #3 above) that were previously using other non-SOV modes (walk, bicycle, HOV, etc.) (Example: **{#3 X 25%}** *or other percent, if justified)*	65	97
6. = Number of SOV one-way trips reduced per day (#3 – #4 – #5)	**130**	**196**
7. Enter the value of **{#6 x 9 miles}**. (= **the VMT reduced per day**) *(Values other than the default 9 miles must be justified by sponsor; e.g., 15 miles for regional service or 6 miles for local service)*	1,170	1,764
8. = Number of pounds GHG emissions reduced (#7 x 0.95 lbs.)	**1,111**	**1,675**

9. If values would be distinctly greater for weekends, describe the magnitude of difference:

10. If different values other than the suggested are used, please explain here:

A 9% increase in daily ridership is projected for this project. About 25% of the increase in ridership would be from the existing Route 206, which would change with this new service added to the network. The city would coordinate with RTD on this change. The remaining 75% of the ridership is expected to be new riders connecting from SH119 and US36 regional routes at the Boulder Junction Station, and from riders connecting to downtown.

B. Bicycle Use

1.	Current weekday bicyclists	0
2.	Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	0	0	**0**

2040	0	0	**0**

Bicycle Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday one-way bicycle trips on the facility after project is completed.	0	0
4. Enter number of the bicycle trips (in #3 above) that will be diverting from a different bicycling route. (Example: **{#3 X 50%}** *or other percent, if justified)*	0	0
5. = Initial number of new bicycle trips from project (#3 – #4)	0	0
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: **{#5 X 30%}** *(or other percent, if justified)*	0	**0**
7. = Number of SOV trips reduced per day (#5 - #6)	0	0
8. Enter the value of **{#7 x 2 miles}**. (= the VMT reduced per day) *(Values other than 2 miles must be justified by sponsor)*	0	0
9. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	0
10. If values would be distinctly greater for weekends, describe the magnitude of difference:		
11. If different values other than the suggested are used, please explain here:		

C. Pedestrian Use

1. Current weekday pedestrians (include users of all non-pedaled devices)	0
2. Population and Employment	

Year	Population within 1 mile	Employment within 1 mile	Total Pop and Employ within 1 mile
2020	0	0	**0**
2040	0	0	**0**

Pedestrian Use Calculations	Year of Opening	2040 Weekday Estimate
3. Enter estimated additional weekday pedestrian one-way trips on the facility after project is completed	0	0
4. Enter number of the new pedestrian trips (in #3 above) that will be diverting from a different walking route (Example: **{#3 X 50%}** *or other percent, if justified)*	0	0
5. = Number of new trips from project (#3 – #4)	0	0
6. Enter number of the new trips produced (from #5 above) that are replacing an SOV trip. (Example: **{#5 X 30%}** *or other percent, if justified)*	0	0
7. = Number of SOV trips reduced per day (#5 - #6)	0	0

12. Enter the value of **{#7 x .4 miles}**. (**= the VMT reduced per day**) *(Values other than .4 miles must be justified by sponsor)*	0	0
8. = Number of pounds GHG emissions reduced (#8 x 0.95 lbs.)	0	0
9. If values would be distinctly greater for weekends, describe the magnitude of difference:		
10. If different values other than the suggested are used, please explain here:		

D. Vulnerable Populations

	Vulnerable Populations	Population within 1 mile
Use Current Census Data	**1.** Persons over age 65	3,616
	2. Minority persons	9,415
	3. Low-Income households	3,173
	4. Linguistically-challenged persons	1,014
	5. Individuals with disabilities	2,997
	6. Households without a motor vehicle	1,710
	7. Children ages 6-17	3,433
	8. Health service facilities served by project	21

E. Travel Delay *(Operational and Congestion Reduction)*

Sponsor must use industry standard Highway Capacity Manual (HCM) based software programs and procedures as a basis to calculate estimated weekday travel delay benefits. *DRCOG staff may be able to use the Regional Travel Model to develop estimates for certain types of large-scale projects.*

1. Current ADT (average daily traffic volume) on applicable segments	0
2. 2040 ADT estimate	0
3. Current weekday vehicle hours of delay (VHD) (before project)	0

Travel Delay Calculations	Year of Opening
4. Enter calculated future weekday VHD (after project)	0
5. Enter value of **{#3 - #4} =** Reduced VHD	0
6. Enter value of **{#5 X 1.4}** = **Reduced person hours of delay** *(Value higher than 1.4 due to high transit ridership must be justified by sponsor)*	0
7. **After project peak hour congested average travel time reduction** per vehicle (includes persons, transit passengers, freight, and service equipment carried by vehicles). *If applicable, denote unique travel time reduction for certain types of vehicles*	0
8. If values would be distinctly different for weekend days or special events, describe the magnitude of difference.	

9. If different values other than the suggested are used, please explain here:

F. Traffic Crash Reduction

1. Provide the current number of crashes involving motor vehicles, bicyclists, and pedestrians *(most recent **5-year** period of data)*		Sponsor must use industry accepted crash reduction factors (CRF) or accident modification factor (AMF) practices *(e.g., NCHRP Project 17-25, NCHRP Report 617, or DiExSys methodology).*
Fatal crashes	0	
Serious Injury crashes	0	
Other Injury crashes	0	
Property Damage Only crashes	0	
2. Estimated reduction in crashes <u>applicable to the project scope</u> *(per the five-year period used above)*		
Fatal crashes reduced	0	
Serious Injury crashes reduced	0	
Other Injury crashes reduced	0	
Property Damage Only crashes reduced	0	

G. Facility Condition

Sponsor must use a current industry-accepted pavement condition method or system and calculate the average condition across all sections of pavement being replaced or modified.
Applicants will rate as: Excellent, Good, Fair, or Poor

Roadway Pavement

1. Current roadway pavement condition	Choose an item
2. Describe current pavement issues and how the project will address them.	
3. Average Daily User Volume	0

Bicycle/Pedestrian/Other Facility

4. Current bicycle/pedestrian/other facility condition	Choose an item
5. Describe current condition issues and how the project will address them.	
6. Average Daily User Volume	0

H. Bridge Improvements

1. Current bridge structural condition from CDOT
2. Describe current condition issues and how the project will address them.

3. Other functional obsolescence issues to be addressed by project	
4. Average Daily User Volume over bridge	0

I. Other Beneficial Variables *(identified and calculated by the sponsor)*

1.	
2.	
3.	

J. Disbenefits or Negative Impacts *(identified and calculated by the sponsor)*

1. Increase in VMT? *If yes, describe scale of expected increase*	☐ Yes ☐ No
2. Negative impact on vulnerable populations	
3. Other:	