

Challenge! Open Governance 2017 Application Form for Citizens & Students

	No.	Title	Name of Municipality
Title of Regional Issue*	- (事務局用)	Aiming to establish sustainable tourism and transport through the fusion of open data and bicycles as a tourism resource.	Kyoto City
Name of the Idea (disclosure)	Aiming for a safe and environmentally friendly Kyoto: Project Bicycle City Kyoto!		

(*Enter the title of regional issue of the applying municipality as described in COG2017 website.

1. Applicant Information

Name of the team (disclosure)	Team Bicycle City Kyoto!		
Team attribution (disclosure)	<input type="radio"/> 1. 市民によるチーム <input type="radio"/> 2. 学生によるチーム <input checked="" type="radio"/> 3. 市民、学生の混成によるチーム		
Number of members	6		
Team leader (only the name will be disclosed)	Name (disclosure)	岡本 菜那	

(※Conditions for information disclosure)

Information provided in “2. Description of Idea” beginning on the next page will be disclosed under the Creative Commons Attribution 4.0 International license (CC BY 4.0) after confirmation of its contents. At the request of the applicant, however, such information will be disclosed under the CC BY-NC (Attribution – Noncommercial) 4.0 International license. Please let us know your preference at the time of application. **In both cases, the name of the applying team will be used.**

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(Notes)

<Name of the file for application and addressee>

1. Send the file with the filename COG2016_applicationform_teamname_municipalityname to the address below. You can also access this address via the application registration column on the COG2016 website of the Graduate School of Public Policy, The University of Tokyo: admin_padit_cog2016@pp.u-tokyo.ac.jp

<Public or private information>

2. The name of the idea, name of the team, team attribution, name of the team leader, and “description of idea” will be open to the public.
3. The contents above will be reviewed before disclosure (anything which is harmful to public order, unethical, or making use of a plagiarized idea will not be disclosed).
4. The “self-evaluation” column of the application form will not be disclosed. However, if the content is excellent and deemed useful for other applicants, it may be disclosed after consultation during the advice stage after the open review.
5. If any element associated with an intellectual property right whose holder is not a member of the applying team, such as texts, photographs, and graphics, is included in the “description of idea,” it should be demarcated stating that it is quoted according to the relevant laws and regulations or that its use has been approved by the right holder. Please do the same for the “self-evaluation” column.

<List of the team members>

Submit the list of the team members in the attached Excel file (Any information about members other than the team leader as specified in 2. above will not be disclosed except to the COG Secretariat. Please see the attachment for details).

2. Description of the Idea

Fill in three items: (1) content of idea, (2) rationale for idea, and (3) how to realize it.

(1) content of the idea

Please show the contents of the idea by putting these elements in the idea as to who, what, where, when, and how it is a public service (activity) to do.

Kyoto is the most popular tourist city in Japan internationally, with figures for overnight stays by tourists reaching 14.15 million people last year, a 3.9% increase over the prior year. The number of foreign tourists is at an all-time high, and trends indicate that it will continue to increase. Consequently, the city's transportation and accommodations are overcrowded, and this is sowing seeds of discontent among visitors to Kyoto. Focusing on the familiar, "bicycle," we thought that we could aim for environmentally-friendly, healthy urban development and relieve traffic congestion within the city by designating the tourist district as a "bicycle-priority" zone. As a mechanism aiming to ensure that all people, including bike-riders, can use the roads safely, we are making a general proposal of the following a four-step idea, and test case.

(1) Specialized map and improved townscape for bicycles

We carried out a total of three field studies of one Kyoto tourist attraction using rental bicycles. Based on these studies, one of the things we understood was that the typical Kyoto road conditions, (i.e., a grid-like surface with many narrow streets), is challenging to navigate by bicycle. Therefore, we propose a road reform. Because this would be untenable in terms of time and labor if conducted across the whole of Kyoto, we instead limited ourselves to the "Toyokuni Shrine Area (Higashiyama Ward)" (approximately 40,000 m²), and created a specialized bicycle-map, by carrying out repeated bicycle riding trials, measuring the road width almost every 100 m, photographing limited-vision areas, and areas hazardous for bicycle-riders, and considering improvements using a pseudo-map.

(2) Establishment of a safe and convenient share-cycles and cycle station

Rental bicycles are already being actively taken up by many municipalities, including Kyoto; however, in the interests of putting forward a bicycle proposal ensuring adequate safety and convenience on streets used by both bicycles and pedestrians, it was decided that there should be a bicycle "gas-station" and parking area to rest and refuel energy supplies. Thus, the following was proposed.

We proposed that bicycles (share-cycle) should have a rear-view mirror, blinker brake light, a light attached to promote night-time use, and a tablet-based map.

In addition, we proposed that a place to rest and refuel energy, called a "Cycle-station" be established, and specifically, that candidate sites should be developed through negotiation with convenience stores, temples, etc. Cycle stations should be a comfortable place for users, offering protection from the sun and the rain, emergency recharge facilities for electric bicycles, as well as the usual tire pumps and vending machines.

(3) Improvement of traffic safety and easy to see road markings

For bicycles, cars, and pedestrians to coexist comfortably, we have also considered the improvement of traffic safety awareness, improvement of bicycle-rider manners, and easy to see road markings and road signs. As a specific example, we propose to create traffic education leaflets and posters and to design new, bicycle-only signs.

(4) Environmental considerations and economic effects

As economics students, we are also interested in environmental issues and have made proposals regarding the reduction of CO2 emissions within Kyoto should bicycle use be expanded, and the overall economic effects.

(2) Rationale for the idea

Describe the Rationale for the idea (why have you chosen this idea?) with numerical data (achievements, statistics, or questionnaire results) and evidence (materials, plans, or existing measures) that support the idea (collectively, the “data”).

This section explains the fundamentals of the idea by providing an overview of the plan, results of the estimation and quotation data.

Overview of the bid

(1) Specialized map and improved townscape for bicycles

Bicycles are classed as light vehicles and in principle, are meant for riding on the road. However, according to a police survey concerning road rules, the percentage of respondents who answered that “there are times they don’t obey” or “don’t often obey,” despite knowing the “road-riding rule,” came to 46%. Moreover, the percentage of respondents who chose “insufficient traffic environment” as the reason for why they did not obey, rose to 58%. As such, we rode around Kyoto City and discovered various issues relating to the bicycle-traffic environment. The first point to raise, as indicated in figure 2.1, is that of cars being left parked in the street and the concern over collisions due to lack of bike lanes.

Additionally, since Kyoto has many narrow, intersecting roads, improvement of public roads is essential. The site shown in figure 2.2 is considered to need underground power line construction work and bike lane road markings. We intend to collate every hazard and warning area for presentation to the municipal government.

We intend to show (1) recommended routes for bicycle travel, (2) hazards, (3) bicycle parking areas, and (4) the specialized bicycle, which we will create after having conducted further field studies.

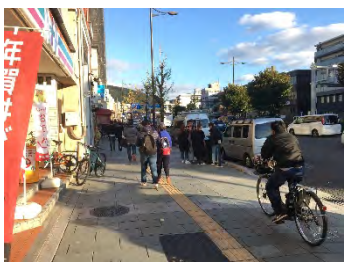


Figure 2.1 Conducting the site survey



Figure 2.2 Example of improvement in Shibuya street in Kyoto

(2) Establishment of a safe and convenient share-cycles and cycle station

According to the Kyoto Prefectural Police, there were 9,328 traffic accidents in Kyoto Prefecture in 2015, of which 1,916 involved bicycles. This indicates that 20% of accidents involved bicycles, with one in five traffic accidents involving bicycles.

In light of these results, and in terms of improving the safety of bicycle-riding, (1) rear-view mirrors, (2) blinkers and brakes to indicate intentions to the vehicles behind, (3) lights on bicycle rims and air bulbs, and (4) chargers and stands for smart-phones and tablets, and mobile batteries to allow for reading of the maps while riding, will be attached. Rental bicycle shops which can provide all of these will be recognized as Kyoto City-approved shops, allowing customers' peace of mind when borrowing a bike. Moreover, if the city makes it possible to rent tablets for attaching to the bicycles, it will always be possible to indicate the easiest routes and bicycle parking areas. However, since the attachment places a large burden on the shops, we would also like to consider the possibility of subsidies from the city. Moreover, in terms of further expansion, we will aim for the above-mentioned equipment to be attached to general use bicycles as standard.



Figure 2.3 An example of a cycle-station (source: Birmingham Mall, UK)



Figure 2.4 Exampled of a refurbished rental bicycle

(3) Improvement of traffic safety and easy to see road markings

For cars and bicycles to co-exist, we consider that road markings need to be clearly visible and that there is a need for road safety education. However, if the number of bicycles on the road increases due to bolstering the bicycle riding environment and if both cars and bicycles do not become even more careful, accidents will increase.

Both overseas and domestically, there are various forms of signage being used for “bicycle-only traffic signs,” however, in all cases it is difficult to distinguish between those for pedestrians and those for bicycles, and visibility is poor. We are aiming to use shape (pentagon) and color (bengala: in accordance with the Kyoto bicycle road environment guidelines) to clarify bicycle-only usage and improve visibility. Moreover, diversifying signs and using pictograms, will enhance the image of Kyoto as a bicycle-friendly city.

In addition, we propose to create educational traffic safety posters for distribution at license centers and police stations, as well as advertising wraps for transportation. Furthermore, we will promote increased focus on bicycle traffic rules and strengthening of various controls.



Figure 2.5 An example of the bicycle-only sign design.

Economic Draft proposal

Next, we will outline the economic effects of the project. Solely as an estimate, it is not very accurate, in the future we will endeavor to confer with expert officials and university specialists to further refine this analysis to gain more accurate results.

***The economic effects of CO2 production (draft)**

Generally, it is expected that car use will decrease in inverse proportion to a rise in bicycle use. According to the example below, it was estimated that an economic benefit would result from the reduction in CO2 emissions.

(1) According to the study of the bicycle sharing service “PBSP,” implemented in Washington D.C., **42%** of people answered that they have **reduced their car usage**, in response to a question about changes in transportation mode before and after the PBSP implementation.

(2) According to the 2016 Kyoto City Tourist General Survey, there were 55.2 million Japanese tourists, of which 9.4% answered that they ride their own bicycle -> **approximately 5,190,868 people use their own bicycle.**

(3) According to the survey on individual CO2 emissions, each person produces **604 kg** of gasoline-based CO2 emission yearly.

(4) It is estimated from (1)(2)(3), that there will be a reduction of **3,597 kg (3.597 tons)** of CO2 annually.

(5) According to carbon emission trading, each ton is traded as approximately ¥1,365.

=>3.597-ton x ¥1,365 = **¥4,910 of economic benefit is expected.**

***Economic ripple effects (draft)**

We carried out an input-output analysis. We calculated the **economic ripple effect** using an estimation of ¥200 million construction demand and ¥100 million manufacturing demand, with inverse matrix coefficients from the Kyoto Prefectural Input-Output Tables.

Induced production amount -> (primary) ¥642.2 million + (secondary) ¥395.9 million = **¥1.3813 billion**

Number of jobs created -> (Primary) 464,371 jobs + (secondary) 77,443 jobs = **541,814 jobs**

(3) how to realize it.

Describe the process and milestones, etc.

The three specific proposals are outlined below with a brief flowchart of how to realize the objectives.

A. Production of a specialized bicycle map and improved townscape for bicycles

1. Project team members will conduct a field survey of the Toyokuni Shrine area to measure roads, identify hazards and select candidate sites for bicycle parking, using their own bicycles and rental bicycles. The map will be collated as a “points-to-note map” by the freehand writing of information gained during the field survey and from photographs and video onto a map.

2. Based on the “point-to-note map,” project members will meet to classify which parts can be

improved through road markings and signs, building and architectural measures, and traffic rules, before documenting it in writing, “Aiming for a safe and environmentally friendly Kyoto: Project Bicycle City Kyoto! - potential townscape improvements.”

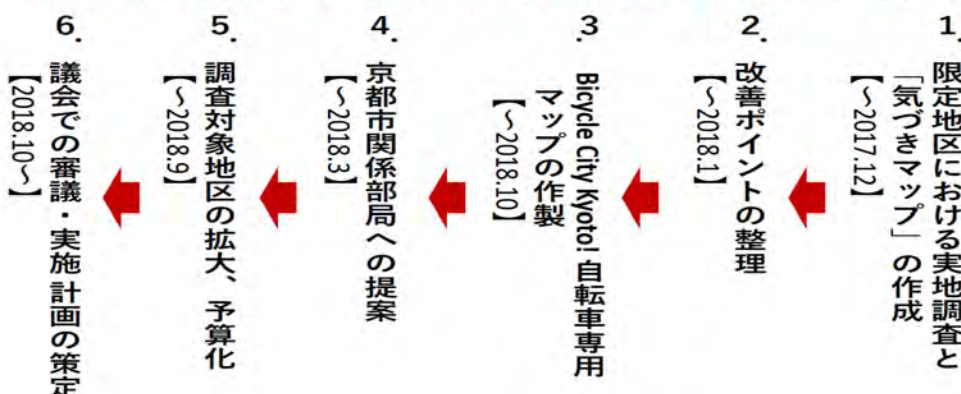
3. To create a specialized bicycle map by developing the “points-to-note map” and taking into consideration the safety and convenience of bicycle riding. A paper and tablet version will be created by placing the highest priority on ease of reading and use, and in the future GPS will be added to develop it into a tool to provide timely, relevant information to cyclists.

4. “Aiming for a safe and environmentally-friendly Kyoto: Project Bicycle City Kyoto! - potential townscape improvements” and “Bicycle City Kyoto! Specialized Bicycle Map (text version),” will be submitted to the relevant Kyoto Municipal Government departments for consideration of their accuracy and practical application

5. Extend the survey to the entire Kyoto metropolitan area with the assistance of the Kyoto municipal government and consider the allocation of city budget funds to support implementation of the project.

6. Kyoto Municipal Government will become the primary stakeholder and carry out construction and architectural planning.

A. 自転車のための町並みの改善と自転車専用マップの作成



A Production of a specialized bicycle map and improved townscape for bicycles

1. Field survey of designated area and compilation of a “points-to-note map” (DEC 2017)
2. Summarize areas for improvement (JAN 2018)
3. Create Bicycle City Kyoto! Specialized Bicycle Map (OCT 2018)
4. Submit proposal to the relevant Kyoto Municipal Government Department (MAR 2018)
5. Expand field survey area, funding approval (SEP 2018)
6. Consideration by the council, plans formulated (OCT 2018)

B. Establishment of a safe and convenient share-cycles and cycle station

- 1-1 Project members will attach the above-mentioned items to assess cost and convenience.
- 1-2 Refer to the “points-to-note Map” in searching for land, within a distinct area, which has the

potential for building a cycle station at the present time, and to consider the location's convenience with respect to access to tourist sights and predicted usage figures, in the event of the station actually being built. Similarly, to search for a convenience store with a large parking lot and consider its accessibility. Following this, to summarize the above points.

2. To consider a cycle station which can promote bicycle use by offering comfortable and convenient facilities. To plan an exterior which does not ruin the Kyoto townscape and yet, ensures satisfaction of users with its functionality.

3-1. To request cooperation of each shop in the instillation of the attachments by explaining their safety aspects and other merits. In addition, to ensure that users can choose shops and borrow with confidence, through the certification of cooperating stores by the Kyoto Municipal government. Furthermore, if a tablet is being borrowed, to display the cycle stations and the nearest route on a map.

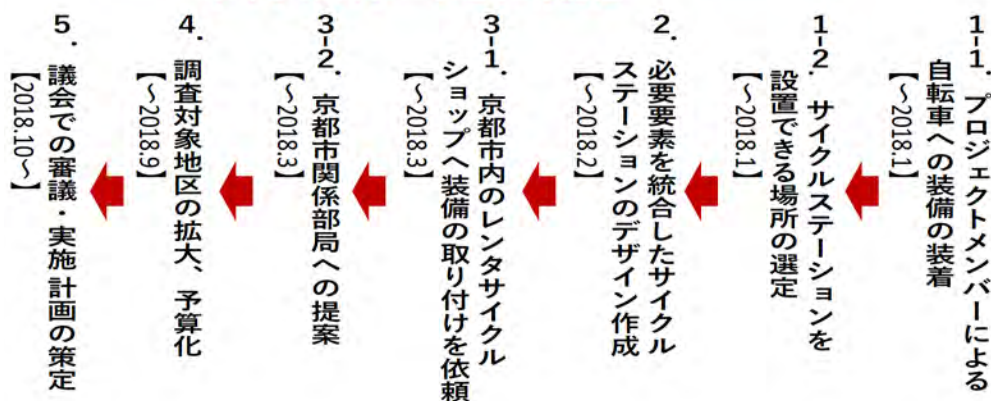
3-2. To submit the “Cycle-station building proposal for the establishment of Bicycle City Kyoto!” to the relevant municipal department for consideration in terms of accuracy and practical application.

4. To extend the survey to the entire Kyoto metropolitan area with the assistance of the Kyoto municipal government, decide upon the design and site for construction, and consider the allocation

of city budget funds to support implementation of the project.

5. Kyoto Municipal Government will become the primary stakeholder and carry out architectural planning and construction.

B.安全で利便性の高いシェアサイクルの提供と サイクルステーションの設置



B. Establishment of a safe and convenient share-cycles and cycle station

1-1. Attach equipment to bicycles by project team members (JAN 2018)

1-2. Select cycle-station sites (JAN 2018)

2. Creation of cycle-station design with all necessary elements (FEB 2018)

3-1. Ask city rental bicycle shops to attach the necessary equipment (MAR 2018)

3-2. Submit proposal to the relevant Kyoto Municipal Government Department (MAR 2018)

4. Expand of field survey area, funding approval (SEP 2018)

5. Consideration by the council, plans formulated (OCT 2018)

C. Improvement of traffic safety and easy to see road markings

Overseas and domestically, there are various forms of traffic signage in use. Signs are crucial in bringing about even the smallest reduction in traffic accidents. Bicycles in Japan are commonly in use daily; and in Europe as well, bicycle use is high and bicycle traffic signs are commonly seen. We attempted to design bicycle-only traffic signs for Kyoto, gleaning hints from Europe's bicycle culture. In addition, aiming for the coexistence of bicycles and cars, educational traffic safety awareness campaigns will continue to be expanded in the following manner.

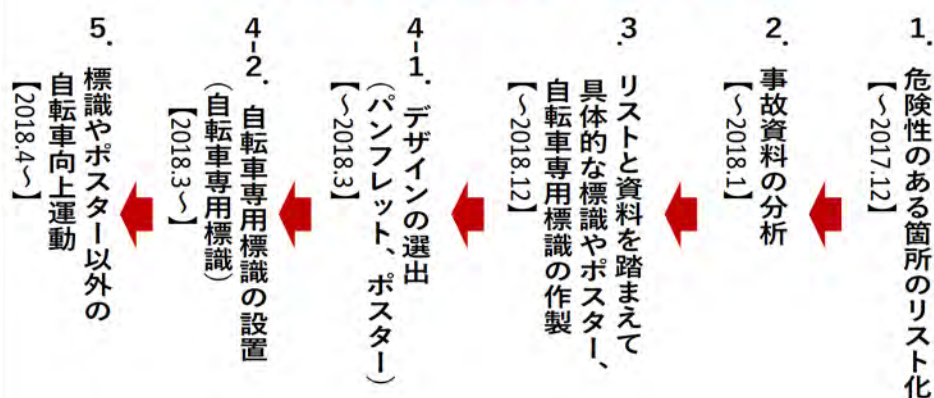
1. Potential traffic blackspots will be listed, referring to the "Points-to-note Map."
 2. Analysis of types of traffic accidents will be conducted using data from the Kyoto Prefectural Police.
 3. Posters, leaflets, bicycle-only traffic signs will be produced where necessary (see design example).
- > Soliciting designs for posters and leaflets, from city / prefectural schools and prefectural citizens, will be considered in order to have residents and tourists feel an affinity toward them.
- => In order to signify the bicycle-only nature of the traffic signs, all bicycle-only traffic signs will be pentagonal in shape and bengala in color.

4-1. Prizes will be given for the winning design entries.

4-2. Bicycle-only traffic signs will be placed where needed.

5. Traffic safety education will be aided by distribution of leaflets at license centers and police stations, as well as advertising wraps for transportation. Similarly, increased focus on bicycle traffic rules and strengthening of various controls by the police, etc. will be carried out to ensure safe bicycle use.

c.交通安全意識向上運動と自転車専用標識



C. Improvement of traffic safety and easy to see road markings

1. List traffic blackspots (DEC 2017)
2. Analyze traffic accident data (JAN 2018)
3. Create actual signs, posters and bicycle-only signs based on the lists (DEC 2017)
- 4-1. Choose Designs (e.g., posters, leaflets) (MAR 2018)

4-2. Place the bicycle-only traffic signs (bicycle-only traffic signs) (MAR 2018)

5. Non-poster / sign safety improvement activities (APR 2018)

本節では、計画の概要と引用データ、試算結果を示すことによって、アイデアの根拠説明といたします。

■ 掲額の概要

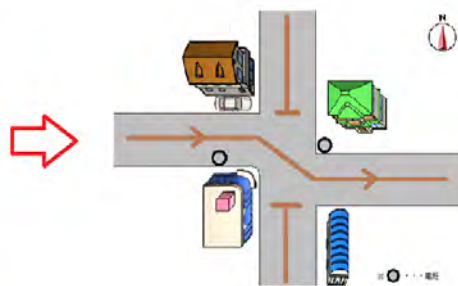
① 自転車のための町並みの改善と専用マップ

自転車は軽車両であり、車道を走るのが原則とされています。しかし、警察庁が行なったアンケートによると、自転車の交通ルールについて、「車道通行の原則」について知っているが「守らないこともある」又は「あまり守らない」と答えた人の割合は46%となっています。そして、交通ルールを知っていても守れない理由として、「通行環境が不十分」と答えた人の割合が58%にも上っています。そこで私たちは、実際に京都市内を自転車で走行し、自転車走行環境における様々な問題点を発見しました。まず挙げられるのが、図 2.1 のように車道に路上駐車した車が止まっていることや、車道における自転車走行ラインの明示がされていないことによる車との接触の懸念です。

さらに京都市内では狭路が多く、それらが交差していることから、公道の改善も要求されます。図 2.2 の場所では電柱の埋設工事や路面への自転車専用線のペイントが必要と考えました。一つ一つの危険箇所、警告が必要な箇所をまとめ、市に提出したいと考えています。



図 2.1 実地調査の様子



さらなる実地調査を経て、今後作成する自転車利用者向けのマップには①自転車走行時のおすすめルート②危険箇所③駐輪場の位置情報④レンタサイクル店の位置情報などを表示させる予定です。

図 2.2 京都市内の渋谷通りでの改善

② 安全で利便性の高いシェアサイクルとサイクルステーションの設置

京都府警によると、平成 27 年中に京都府内で発生した全交通事故発生件数は 9,328 件、そのうち自転車の関係する交通事故発生件数は 1,916 件となっています。これは、全交通事故の 2 割を超え、交通事故の 5 件に 1 件が自転車に関係していることを表しています。

このような結果を踏まえ、自転車の安全性向上に向けた改良として①後方視認性向上のためのミラー②後続車への意思表示のためのウィンカーおよびブレーキランプ③夜間時のアピール向上のための自転車のリムやエアバルブへのライト④スマートフォンやタブレットの充電、地図を映しながらの走行を可能にするモバイルバッテリーやスマホスタンドの取り付けを行います。これら



図 2.3 サイクルステーションの例（出典：英国・Birmingham）



図 2.4 シェアサイクルの改良例

の装備を実施したレンタサイクルショップには、京都市から認定ショップとして指定する事で、顧客も安心して借りる事が出来ます。また、レンタサイクルの装備として市からタブレットの貸し出し等が出来る、常に駐輪場や通りやすいルート等を示す事が出来ます。しかし、装備を取り付けるにあたってのショップの負担も大きい為、市からの補助金も検討して頂きたいと思います。さらに発展構想として、一般の自転車の間でも上記のような装備が標準となることを目指します。

③見やすい道標と交通安全意識の向上

私たちは、自転車と自動車共存していくためには、道路上の標識の明確化とドライバーへの交通安全啓発活動が必要と考えました。自転車走行環境を整えたことにより、車道走行をする自転車が増加すると、自転車、自動車双方がより注意をしないと事故が増加してしまうと考えたからです。

「自転車専用標識」については、海外、国内でも様々なものが提示されていますが、いずれも自動車、歩行者用のものと区別しづらく、視認性が良くありません。私たちは、標識の形状（五角形）と色（ベンガラ色：京都市自転車走行環境整備ガイドラインによる色）を採用することで、自転車専用であることを明確にし、視認性の向上を目指しました。また標識の多様化やピクトグラム化を図り、京都市内を自転車の街として印象付けます。

加えて、交通安全啓発のポスターやパンフレットを作成し、免許センター、警察署での配布や、公共交通機関へのラッピングを提案します。また、各種取り締まりなどの強化をはじめとした自転車の交通ルールの徹底を推進します。



図 2.5 自転車標識デザインの例

■ 経済的試算

次に、本プロジェクトの果たす経済的試算の結果を示します。また荒削りのため精度は高くありませんが、今後並行して、京都市の専門官の方や大学の専門家などと相談しながら、分析方法を極めていき、より高い精度の結果が得られるよう努力したいと考えています。

◎ CO2 削減による経済効果（試算）

一般的に、自転車利用増加に反比例して自動車利用は減少すると考えられます。以下の例に沿って CO2 削減による経済効果が生まれると推測しました。

①ワシントン D.C.が導入した自転車シェアリングサービス「PBSP」の調査では、PBSP 導入前後の交通手段利用の変化を質問し、その結果 **42%**の人が**自動車の利用が減少した**と回答

②平成 28 年京都市観光総合調査によると、日本人の観光客数は 55,222 千人おり、そのうち 9.4%が自家用車を使用すると回答→**約 5,190 人が自家用車を使用**

③1 人当たりの CO2 排出量の調査により、ガソリンによって**年間 604kg**の CO2 を排出

④上記①②③より、**年間 3,597kg(3.597 トン)**の CO2 削減につながると推測

⑤排出量取引により、1 トンあたり約 1365 円で取引される

⇒ $3.597 \text{ トン} \times 1365 \text{ 円} \approx$ **4,910 円**の経済効果が生まれると予想しました。

◎ 経済波及効果（試算）

産業連関分析を用いました。建設費 2 億円、製造業 1 億円の新規需要が出たと推測し、これと京都府産業連関表の逆行列係数（封鎖型）を用いた**経済波及効果**を計算すると以下の結果となりました。

生産誘発額→（第一次）6 億 4222 万円 + （第二次）3 億 9591 万円 = **10 億 3813 万円**

誘発就業者数→（第一次）46 万 4371 人 + （第二次）7 万 7443 人 = **54 万 1814 人**

(3) アイデア実現までの流れ（公開）

アイデアを**実現する主体**、アイデアの**実現に必要な資源（ヒト、モノ、カネ）**の大きな規模とその現実的な調達方法（制約がある場合にはその解決策を含む）、アイデアの**実現にいたるプロセスとマイルストーン**等、アイデア実現までの大きな流れについて、**2 ページ以内**でご記入ください。（必要に応じて図表を入れても構いません）

以下の3つの具体的提案にまとめて、実現までのロードマップを簡潔に記述します。

A. 自転車のための町並みの改善と自転車専用マップの作製

1. このプロジェクトメンバーによる豊国神社周辺エリアの、持ち込み自転車・レンタサイクルによる実地調査をおこない、自転車道の実測、危険箇所の発見、駐輪場候補の選定をおこなう。写真、動画撮影と、自転車走行による実地調査から得た様々な情報をフリーハンドで地図上に書き込み「気づきマップ」として集約する。

2. 「気づきマップ」を基に、プロジェクトメンバーが集まり、標識や道標によって改善できるもの、土木・建築施策によって改善できそうなもの、交通規則によって改善できそうなものに分類し、「安全で環境にやさしいまち京都をめざして、Bicycle City Kyoto! プロジェクト、街並み改善のポイントと可能性」として文書化する。

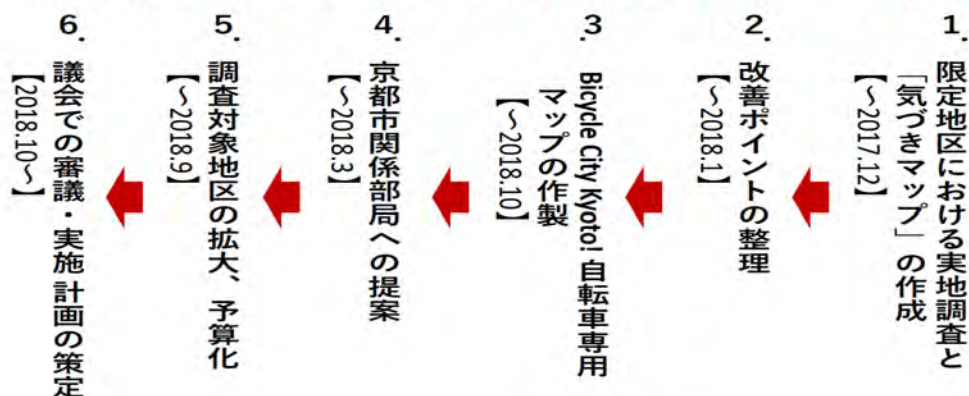
3. 「気づきマップ」を発展させ、自転車走行の安全性、利便性を配慮した「自転車専用マップ」を作成する。見やすさ、使いやすさを最重点事項にペーパー版とタブレット版を製作し、将来はGPSを連動させ適時、適所な情報を自転車利用者に伝えられるツールとして発展させる。

4. 「安全で環境にやさしいまち京都をめざして、Bicycle City Kyoto! プロジェクト、街並み改善のポイントと可能性」と「Bicycle City Kyoto! 自転車専用マップ（テスト版）」を京都市関係部局に提出し、その正当性、実現可能性について検討を依頼する。

5. 京都市の支援を受けながら、調査対象を京都市全域に広げ、実施のための市予算について検討する。

6. 京都市が主体となって、土木計画、建築計画を実行する。

A. 自転車のための町並みの改善と自転車専用マップの作成



B. 安全で利便性の高いシェアサイクルの提供とサイクルステーションの設置

1-1. プロジェクトメンバーで自転車に上記装備を取り付け、価格や利便性を調査する。

1-2. 「気づきマップ」を参考に特定の範囲内において現時点でサイクルステーションを設置できそうな土地を探し、実際に設置した際の観光地へのアクセスや予想利用者数などの立地的な利便性を考える。同じように広い駐車場を所有しているコンビニも探し、利便性を考える。そしてそれらを集約する。

2. 快適で便利な施設の提供を軸に、自転車利用を促進するようなサイクルステーションを考える。京都の景観を損なわない外観にすることと同時に利用者が満足できるよう機能面の充実も図る。

3-1. 各店舗へ安全性やメリットを説明し取り付けの協力を依頼する。また、協力店舗には市が認定ショップとして定める事で、顧客も店を選ぶ上で安心して借りる事ができる。さらに、タブレットなどを貸し出す場合は、タブレットにサイクルステーションや通しやすいルートを示す地図を表示する。

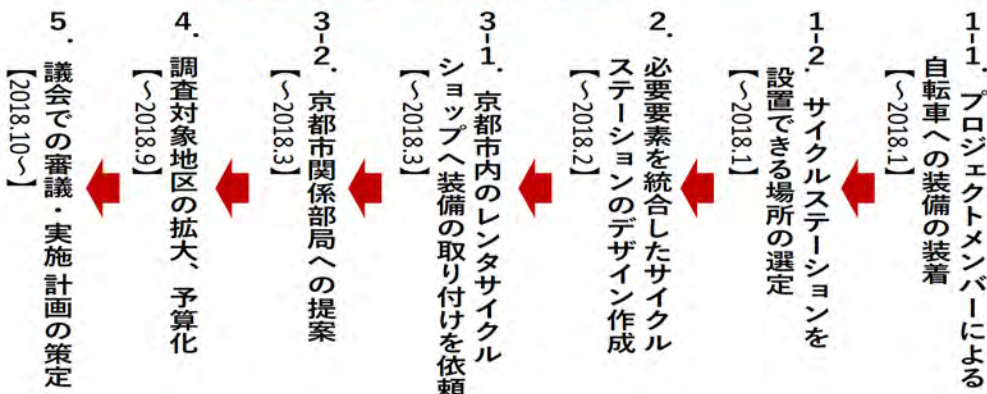
3-2. 「Bicycle City Kyoto! の実現に向けたサイクルステーション建設案」を京都市関係部局に提出し、その正当性、実現可能性について検討を依頼する。

4. 京都市の支援を受けながら、調査対象を京都市全域に広げ、設置箇所とデザインを明確にし、実施のための市予算に

ついて検討する。

5.京都市が主体となって、土木計画、建築計画を実行する。

B.安全で利便性の高いシェアサイクルの提供とサイクルステーションの設置



C.交通安全意識向上運動と自転車専用標識

日本だけでなく、世界にも交通標識がたくさん存在しています。標識は、少しでも交通事故を減らすために必要不可欠なものです。日本では、日常的に自動車を使うことが多いと思いますが、なかでもヨーロッパは、自転車利用が多く、街中でも自転車標識がよく見られます。ヨーロッパの自転車文化や自転車標識を参考に、京都専用の自転車標識を考え、デザインをしてみました。また、自転車と自動車の共存を目指し、交通安全意識の向上の啓発活動について、以下のように今後展開させていただきます。

1. 上記の「気づきマップ」を参考に、自転車と自動車事故の発生の危険性のある箇所をリスト化する。
2. 京都府警のデータも参考に事故類型などの分析をする。
3. 必要に応じた、ポスターやパンフレット、自転車専用標識（以下、デザイン例を参照）を作製します。

→ポスターやパンフレットに関しては、一般市民や観光客に交通安全意識をより身近に感じてもらうため、市内・府内の小中学校や府民への公募を検討する。 ⇒自転車専用標識については、自転車の標識であることを明確にするため、五角形の標識、^{ペんがら}弁柄色に統一する。

- 4-1. 公募作品から、各種表彰作品を選出する。
- 4-2. 自転車専用の標識を必要箇所に設置する。
5. 免許センター、警察署での配布、公共交通機関へのラッピング広告などによって交通安全の向上を啓発する。併せて、警察などによる自転車の安全利用のための、各種取り締まりを徹底させ、交通安全意識の向上を実現する。

c.交通安全意識向上運動と自転車専用標識

