posted on the NTIS website as soon as they are available (https://www.ntis.gov/about/advisorybd/index.xhtml).

The teleconference will be via controlled access. Members of the public interested in attending via teleconference or speaking are requested to contact Ms. Shaw at the contact information listed in the FOR FURTHER INFORMATION CONTACT section above not later than Wednesday, June 1, 2022. If there are sufficient expressions of interest, up to one-half hour will be reserved for public oral comments during the session. Speakers will be selected on a first-come, first-served basis. Each speaker will be limited to five minutes. Questions from the public will not be considered during this period.

Speakers who wish to expand upon their oral statements, those who had wished to speak but could not be accommodated on the agenda, and those who were unable to attend are invited to submit written statements by emailing Ms. Shaw at the email address provided in the FOR FURTHER INFORMATION CONTACT section above.

Dated: April 19, 2022.
Gregory Capella,
Director.

BILLING CODE 3510–04–P

DEPARTMENT OF COMMERCE
National Telecommunications and Information Administration
[Docket No. 220418–0099]
RIN 0660–XC052
Developing a Report on Competition in the Mobile App Ecosystem

AGENCY: National Telecommunications and Information Administration, U.S. Department of Commerce.

ACTION: Notice; request for comment.

SUMMARY: Restoring competition in the American technology sector is a critical priority of the President’s Executive order on Promoting Competition in the American Economy. On behalf of the U.S. Department of Commerce, the National Telecommunications and Information Administration (NTIA) is requesting comments on competition in the mobile application ecosystem. The data gathered through this process will be used to inform the Biden-Harris Administration’s competition agenda, including, but not limited to, the Department of Commerce’s work developing a report to submit to the Chair of the White House Competition Council regarding the mobile application ecosystem.

DATES: Written comments must be received on or before 11:59 p.m. Eastern Time on May 23, 2022.

ADDRESSES: All electronic public comments on this action, identified by docket number NTIA–2022–0001 may be submitted through the Federal e-Rulemaking Portal at www.regulations.gov. The docket established for this rulemaking can be found at www.regulations.gov, NTIA–2022–0001. Click the “Comment Now!” icon, complete the required fields, and enter or attach your comments. Responders should include a page number on each page of their submissions. Please do not include in your comments information of a confidential nature, such as sensitive personal information or proprietary information. All comments received are a part of the public record and will generally be posted to Regulations.gov without change. All personal identifying information (e.g., name, address) voluntarily submitted by the commenter may be publicly accessible. For more detailed instructions about submitting comments, see the “Instructions for Commenters” section at the end of this Notice.

FOR FURTHER INFORMATION CONTACT:
Please direct questions regarding this Notice to app-rfc@ntia.gov, indicating “Notice and Request for comment” in the subject line, or if by mail, addressed to Ruth Yoddaiken, National Telecommunications and Information Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Room 4725, Washington, DC 20230; telephone: (202) 482–4067. Please direct media inquiries to NTIA’s Office of Public Affairs, telephone: (202) 482–7002; email: press@ntia.gov.

SUPPLEMENTARY INFORMATION:
I. Background and Authority

On July 9, 2021, the President signed Executive Order 14036 on Promoting Competition in the American Economy (E.O.). As the E.O. explains, “[t]he American information technology sector has long been an engine of innovation and growth, but today a small number of dominant internet platforms use their power to exclude market entrants, to extract monopoly profits, and to gather intimate personal information that they can exploit for their own advantage. Too many small businesses across the economy depend on those platforms and a few online marketplaces for their survival.”

The E.O. includes numerous initiatives to address the problem of dominant tech platforms undermining competition and reducing innovation. Included among them is a directive to the Secretary of Commerce to, in consultation with the Attorney General and the Chair of the Federal Trade Commission (FTC), conduct a study— including by conducting an open and transparent stakeholder consultation process— of the mobile application (app) ecosystem, and submit a report to the Chair of the White House Competition Council, regarding findings and recommendations for improving competition, reducing barriers to entry, and maximizing user benefit with respect to the ecosystem.

By one account, the app economy was valued at $1.7 trillion in 2020, and over 300,000 U.S. companies work in this sector, employing more than 5.9 million Americans. The two main app stores are operated by companies with headquarters in the United States. Global consumer spending in this ecosystem is also growing rapidly, estimated by some as nearly doubling from 2016 to 2020, to reach $120 billion. Entire new sectors of industries have been spawned as a result of app innovation, such as ride sharing, or have experienced technical advancement, such as smart home appliances. The app economy is becoming a fundamental way that Americans interact with their environment. Thus, it is critical that this market be robust, open, innovative, and secure—and without barriers to entry and growth.

On behalf of the Department, and in furtherance of this requirement, NTIA is requesting comments from the public on competition in the ecosystem in which mobile apps exist. The goal is to support the Administration’s efforts to promote competition in the tech sector and to inform NTIA’s analysis of ways to support healthy competition in the market for mobile apps, in particular.

NTIA is the executive branch agency that is principally responsible by law for advising the President on telecommunications and information policy. NTIA studies and develops policy advice for the Administration related to communications and the

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internet, including to promote the efficient and effective use of telecommunication and information resources. In that role, NTIA regularly works on national policies on the communications infrastructure. Additionally, the Department more broadly is charged with promoting job creation and economic growth. This study is aimed at examining unique aspects of competition involving apps on mobile phones and tablets. In doing so, we recognize that the general mobile ecosystem is comprised of a number of distinct types of entities and interrelated markets. Mobile service providers play a role in a range of relevant aspects, including broadband service and determining which apps are pre-loaded or set as defaults. At the same time, functionality and app distribution are also dependent upon operating systems and app stores, which function as sub-ecosystems. For this study, we are seeking to look beyond the general to examine particular environments in which different types of apps and associated businesses operate. For example, there might be different opportunities and barriers.

that distinguish some types of apps, such as those used for medical purposes, payments, streaming, social networks, messaging, or apps that connect to other items by virtual or physical connections (e.g., to tracking or Internet-of-Things devices). Other app ecosystems that exist or extend beyond mobile, such as those for gaming consoles and personal computers, might be relevant to our review, but only to the extent that analysis of them offers clear facts for comparison. The Executive Order specifically refers to the NTIA study with the Department of Justice (DOJ) and the FTC, who are the primary enforcers of competition law at the federal level. Law enforcement agencies have been assessing the evolving digital markets in which apps operate. Along with actions by the states, private actors, the courts, and legislators, such legal examinations are shaping the mobile app ecosystem and have helped elevate the discussion of competition barriers, as well as proposals to facilitate greater competition in the marketplace. These actions have also been tangibly altering the ecosystem. For example, the roles of the two major app stores, including the commission fees they charge, and restrictions they place on how apps interact with consumers, as well as technical barriers, have been impacted by decisions by lawmakers across the globe.

Another area of inquiry has centered around the potential for abuse of commercial data obtained by competitors, to the detriment of privacy and competition. In addition, there are concerns about whether companies interfere with the creation of innovative new products and services by limiting the ability of mobile apps and their associated products and services from accessing a particular set or network of customers. While this study will not include a legal assessment of whether certain practices violate the law, we are interested in learning about practices that make it harder to open and run businesses or that harm innovation.

In addition to competition agencies, other agencies have relevant roles in overseeing specific types of apps as part of a broader ecosystem. For example, the Federal Communications Commission (FCC) also oversees the communications marketplace, including aspects of competition between mobile service providers, and has for years assessed the competitive landscape of the ecosystem. The Consumer Financial Protection Bureau (CFPB) has also been examining payment ecosystems.

In the study, NTIA will take a holistic approach to analyzing the mobile app ecosystem with the goal of identifying recommendations to improve competition, reduce barriers to entry, and maximize user benefit with respect to the ecosystem. In addition to

Games, Inc. v. Apple, Inc., No. 4:20-cv-05640 (N.D. Cal. Sept. 10, 2021) (regarding Apple taking a percentage of apps’ revenues and limiting their communication with consumers); see also, Deal on Digital Markets Act, E.L. rules to ensure fair competition and more choice for users, Press Release, European Parliament, IMCO (Mar. 24, 2022) (noting the proposed legislation requires “. . . that the largest messaging services (such as Facebook iMessage) will have to open up and interoperate with smaller messaging platforms, if they so request”), https://www.europarl.europa.eu/news/en/press-release/20220315PST5504/deal-on-digital-markets-act-ensuring-fair-competition-and-more-choice-for-users.


Barriers that could make it harder to enter a field or succeed might include funding hurdles, restrictions by operating services or regulators, technical variations requiring additional software development and maintenance, or obstacles that prevent a business from obtaining a big enough user base to make their product workable (e.g., a dating app).
fundamentals about the structure of the ecosystem, including how the apps are distributed, there are many issues that might be relevant to developers and app users. For example, common occurrences of fraud—or perceptions of it—might impact whether consumers download apps and businesses are comfortable offering their products through specific distribution channels. While there are many issue areas and markets that could be brought into this study, the scope will only address topics most relevant to the mobile app ecosystem.

Given the incredible promise that the app system holds, NTIA is also interested in learning what app users need to maximize user benefit, particularly users who use apps in their daily life or for business operations. There is limited information on how people use apps. For example, some sources estimate that each mobile device has 20–46 apps loaded at any time, but there is limited comparable data to confirm whether that is an accurate or optimal number to foster innovation.

Topic areas that the agency will use to address mobile app ecosystem competition in the forthcoming report will be informed by input from public comment. Possible topics are outlined below.

II. Request for Comment

Through this Request for Comment, NTIA is seeking public input to further develop its understanding of competition within the mobile app ecosystem. NTIA is looking for concrete and specific information as to what app developers, organizations, and device (i.e., phones; tablets) users experience, and any potential challenges or barriers that limit app distribution or user adoption. To the extent commenters choose to respond to the specific questions asked, responses should generally follow the structure below and note the number corresponding to the question. As detailed below, through this Request for Comment, NTIA is seeking information on the state of competition, the factors affecting app development and distribution, and active ways to increase competition, through government or private sector action.

**Definitions and Statistics**

1. How should we measure whether the app ecosystem is competitive?
   a. How should the “success” of an app be measured?
   b. How should the “failure” of an app be measured?

2. Are there any important and specific entities (or categories of entities) such that it would be a mistake to omit—or improperly include—them by defining the “mobile app ecosystem” to focus on mobile devices, such as phones and tablets?

3. Apps are not all the same. For example, some have different technical features and capabilities (e.g., location-based apps compared to messaging apps), while others are bound by specific regulatory guardrails (e.g., banking apps or children’s apps). In the context of framing competitiveness within the ecosystem, how should we categorize types of apps so that they are grouped by distinguishable barriers and other significant factors? Are there ways to best categorize or segment the market to diagnose specific market barriers, such as those that could impact app developers, or consumers?

   a. Should distinctions be made based on type of content and app functionality?
   b. Should distinctions be made based on the level of hardware or operating system integration required for the app to function? For example, categories might include apps that access location data, special-purpose hardware (e.g., near field communications), secure elements for payment, or other credentials.

   c. Should a distinction be made for apps that are the primary way (or the only way) the app provider interacts with users, as opposed to apps that are an extension of an existing digital or physical business? Do app-based businesses face different competitive constraints than businesses that have a brand and presence outside of mobile apps?

4. How should web apps (browser-based) or other apps that operate on a mobile middleware layer be categorized?

5. There are some indicators that there is a difference in kind between some apps that generate large amounts of money or are downloaded often and most other apps. For example, one industry analyst reported that 97% of publishers that monetize through the Apple App Store earned less than $1 million per annum in 2021, compared to other reports of more than $1 billion earned by the top 13 apps (including games) on both Apple and Google platforms. What is the best way to assess the competition environment for less popular apps and start-ups?

   a. Can any potential harms, such as deficiencies in data security and privacy protections, be traced back to the current market imbalance?
   b. Is there evidence to suggest that consumers are less likely to avoid or stop using a particular app even if they would prefer a more privacy enhancing environment because of a lack of competitors offering similar services?

**Software and Support for Developers**

6. What unique factors, including advantages and obstacles, are there generally for app development—especially start-ups—that are relevant for competition?

   a. Are there unique market dynamics in this ecosystem (such as the existence of a small number of dominant technology companies) that affect...
mobile apps’ ability to secure funding? 25
b. Are some methods of monetization essential to the economic success of an app? What are they? For example, is there pressure to incorporate advertising or collect personal data of users 26 or engage in unique relationships with data aggregators?
7. Are there particular obstacles preventing more development from different communities, such as by location/region, ethnicity/race, language, or gender? 27
8. Are there studies or specific examples of the costs or advantages for app developers to build apps for either, or both, of the main operating systems, iOS and Android (which have different requirements)? 28
a. What are the challenges specific to multi-platform development and how can they be mitigated?
b. What are the costs and advantages of developing standalone apps for these platforms relative to other means of providing the same services or content, such as web apps, which can operate across platforms?
9. What role does interoperability play in supporting and advancing a competitive mobile app ecosystem?
   a. What are the key characteristics of interoperability as it relates to the mobile app ecosystem?
   b. What other barriers (e.g., legal, technical, market, pricing of interface access such as Application Programming Interfaces (APIs)) exist, if any, in fostering effective interoperability in this ecosystem? How are these barriers different or similar to those present in other ecosystems?
c. How does data portability, or lack thereof, factor into consumers keeping the same app if they switch from one operating system (iOS or Android) to another? 29
10. While apps can be coded from scratch, Software Development Kits (SDKs) and other technical tools can make it easier for developers to create apps. What data is available to show how such tools shape the ecosystem and affect the ability of developers to compete?
   a. Which tools are most often used by app developers and what are the entities that offer those tools?
   b. Do these tools make it easier for a developer to create apps for multiple platforms? How so? Are there any trade-offs (e.g., performance, battery life, or stability) for using these tools?
c. Are developers of certain types of apps more likely to use the assistance?
   d. Are there privacy or security concerns associated specifically with these tools?
   e. What empirical data exists to support findings on this topic?
11. How do policy decisions by firms that operate app stores, build operating systems, or design hardware impact app developers (e.g., terms of service for app developers)? What empirical data exists to support those findings?
   a. In particular, how does a lack of transparency about app market rejection affect app developers (e.g., costs)?
   b. How do the policy decisions affect or limit the feasibility or availability of alternative models of app development (e.g., open source), delivery (e.g., browser-based apps), or funding (e.g., non-commercial or donation-based models)?
12. What types of labor restrictions or workforce pipeline challenges, if any, limit paths for app innovation? What may solutions look like?

Avenues for App Distribution

13. Some mobile apps are pre-loaded on mobile devices or set as default apps, while others are only available through an app store, through a browser (web apps), or, for devices using the Android system, by sideloading. Is there data comparing these mechanisms and their effect on app distribution?
   a. Is there a competitive advantage to being preloaded or available by default to the users of phones and tablets? What is the evidence to support or contradict there being an advantage? 30
   b. Is there data on the number of developers that have been able to have their apps preloaded or available as default apps or the types of apps?
   c. What information is available on the types of agreements these developers reached and with whom to preload or set their app as a default app?
14. As noted above, governments and courts are already exploring concerns about control of app access to users exercised by mobile app stores and other ecosystem participants.
   a. What data and studies exist that identify specific additional obstacles that developers and businesses might face related to the distribution of apps? 31
   b. In particular, what studies have been done on requirements that apps use an app store or operating system’s own services or the appeal of alternative mechanisms that do not tie app access to using other products or services from those mechanisms?
15. How do, or might, alternative app stores (other than Google Play or the Apple App Store), affect competition in the mobile app ecosystem?
   a. What data is there to assess how well existing alternative stores distribute apps, in general or specific types of apps?
   b. What unique barriers are there affecting each of the main operating systems (Android, iOS) that might prevent web apps or—to the extent allowed on Android systems—alternative app stores and sideloading apps, from gaining more popularity with users and app developers than they currently have?
   c. Is there analysis comparing competition on iOS ecosystem (where app distribution is limited) to that of alternative distribution mechanisms on Android operating systems?
16. What evidence is there to assess whether an app store model is necessary

25 See, e.g., Written Testimony of FTC Commissioner Rohit Chopra before the U.S. House of Representatives, Committee on the Judiciary, Subcommittee on Antitrust, Commercial, and Administrative Law Hearing on Online Platforms and Market Power, Part 3: The Role of Data and Privacy in Competition, (Oct. 18, 2019) (expressing concern “that many investors are reluctant to allocate capital to innovators that seek to challenge and disrupt this dominance. Instead, investors tell me they prefer to fund companies that can eventually be sold an incumbent”).
27 See, e.g., Free and paid distribution for Android and iOS 2022, Statista, March 14, 2022, (last visited April 14, 2022) (Most apps are offered at no direct monetary cost to the user), https://www.statista.com/statistics/263797/number-of-applications-for-mobile-phones/
28 See, e.g., Copyright and Innovation, https://www.commerce.gov/appchallenge.us/impact/#Diversity; see, generally, Congressional App Challenge (last visited April 18, 2022), https://www.congressionalappchallenge.us/
30 While the UK CMA’s Interim Report, for example, refers to some studies in this area, the raw data and it suggests further study is necessary. See, e.g., UK CMA Interim Report at 277.
for mobile devices, instead of the general-purpose model used for desktop computing applications?

17. Mobile app stores act as initial screeners and responders for concerns about mobile app content, such as fraudulent apps and malware. Similar issues for screening and responding exist in other contexts, such as website hosting and search engine retrieval. What empirical data is there analyzing any unique content screening issues related to mobile app stores that affect competition?

18. Are there other areas, specific technologies or procedures, that offer security and privacy protections offered by alternative app stores? Is there evidence that this is a common occurrence or happens to significant numbers of apps?

19. How does the existence of impersonator and other fraudulent apps affect developer incentives or legitimate app lifecycles?

20. What research exists regarding the number of active apps consumers have on their mobile devices at any one time and how often they try new ones?

21. How do most consumers find and make decisions to use apps?

22. The E.O. asks the Department to explore ways to maximize “user benefit” with regard to competition in the mobile app ecosystem. How should we measure or consider user benefit?

23. Do apps that are developed for, or used by, certain communities (such as by income, ethnicity/race, or gender) affect competition among certain categories of apps more than others, or their non-app counterparts?

24. Some apps make use, or would like to make use, of additional mobile device components beyond those that are more commonly accessible (e.g., camera, microphone, contacts) in order to offer an innovative product or service, but the operating system or device provider does not allow such access. Similarly, for some apps, it might be essential to be able to interconnect to other hardware and services, such as cloud services. What are the valid security concerns and technical limitations on what device functionality an app can access?

25. What unique challenges, if any, do software updates pose for app competition, including updates driven by the app developers and those necessitated by other ecosystem changes, such as operating system updates? How does this impact security and costs for those apps, products, and services?

26. Are there governance practices, regulations or laws that impact competition among certain categories of apps more than others, or their non-app counterparts?

Potential Actions To Increase Competition

27. What specific measures might the federal government take to foster healthy competition, especially for nascent app innovation—such as technical standards development or monitoring?

Instructions for Commenters

NTIA invites comment on the full range of issues presented by this Notice, including issues that are not specifically identified in the Notice.
raised in the above questions. Commenters are encouraged to address any or all of the questions above. To the extent commenters choose to respond to the specific questions asked, responses should generally follow the structure above and note the number corresponding to the question.

Comments that contain references to studies, research, and other empirical data that are not widely available should include copies of the referenced materials along with the submitted comments. Commenters should include the name of the person or organization filing the comment, which will facilitate agency follow up for clarifications as necessary.

Commenters are advised not to incorporate information that concerns business trade secrets or other confidential commercial or financial information as part of the comment.38

Dated: April 18, 2022.

Milton Brown,
Chief Counsel (Acting), National Telecommunications and Information Administration.

[FR Doc. 2022–08573 Filed 4–21–22; 8:45 am]
BILLING CODE 3510–60–P

COMMITTEE FOR PURCHASE FROM PEOPLE WHO ARE BLIND OR SEVERELY DISABLED

Strategic Plan Notice

AGENCY: Committee for Purchase From People Who Are Blind or Severely Disabled.

ACTION: Request for comments on the agency’s draft Strategic Plan for FY 2022–2026: reopening of comment period.

SUMMARY: The Commission is reopening the deadline for the submission of written comments in response to its March 18, 2022, draft Strategic Plan.

DATES: The comment period for the draft Strategic Plan, a non-rulemaking notice published March 18, 2022, at 87 FR 15412, is reopened. Initial written comments must now be received no later than 11:59 p.m. Eastern Time on April 30, 2022.

ADDRESSES: You may submit comments, identified by CPPBSD–2022–0003 only by the following method: Internet—Federal eRulemaking Portal. Electronic comments may be submitted through https://www.regulations.gov. To locate the document, use CPPBSD–2022–0003 or key words such as “Strategic Plan.”

38 See also 15 CFR 4.9(c) [concerning the designation of business information by commenters].

“Committee for Purchase,” or “AbilityOne,” to search documents accepting comments. Follow the instructions for submitting comments. Please be advised that comments received will be posted without change to https://www.regulations.gov, including any personal information provided.

Accessible Format: On request to the program contact person listed under FOR FURTHER INFORMATION CONTACT, individuals with disabilities can obtain this document in an alternative accessible format.


FOR FURTHER INFORMATION CONTACT: Shelly Hammond, Director of Contracting and Policy, by telephone 571–457–9468 or by email at shammmond@abilityone.gov.

During and after the comment period, you may inspect all public comments about the draft Strategic Plan by accessing Regulations.gov.

Assistance to Individuals With Disabilities in Reviewing the Draft Strategic Plan: Upon request, we will provide an appropriate accommodation to an individual with a disability who needs assistance to review the draft Strategic Plan. If you want to contact us to request assistance, please contact the person listed in this section.

SUPPLEMENTARY INFORMATION: On March 18, 2022, the Commission issued a request for comments on the agency’s draft FY 2022–2026 Strategic Plan. To ensure that members of the public have sufficient time to comment, and to ensure the Commission has the benefit of a complete record, the Commission is reopening the deadline for submission of initial comments to no later than 11:59 p.m. Eastern Time on April 30, 2022.

Michael R. Jurkowski,
Acting Director, Business Operations.

[FR Doc. 2022–08616 Filed 4–21–22; 8:45 am]
BILLING CODE 6353–01–P

COMMITTEE FOR PURCHASE FROM PEOPLE WHO ARE BLIND OR SEVERELY DISABLED

Procurement List; Additions

AGENCY: Committee for Purchase From People Who Are Blind or Severely Disabled.

ACTION: Additions to the Procurement List.

SUMMARY: This action adds a product to the Procurement List that will be furnished by nonprofit agencies employing persons who are blind or have other severe disabilities.

DATES: Date added to and deleted from the Procurement List: May 22, 2022.

ADDRESSES: Committee for Purchase From People Who Are Blind or Severely Disabled, 1401 S Clark Street, Suite 715, Arlington, Virginia 22202–4149.

FOR FURTHER INFORMATION CONTACT: Michael R. Jurkowski, Telephone: (703) 785–6404 or email CMTEFedReg@AbilityOne.gov.

SUPPLEMENTARY INFORMATION: Additions

On 11/26/2021, the Committee for Purchase From People Who Are Blind or Severely Disabled published notice of proposed additions to the Procurement List. This notice is published pursuant to 41 U.S.C. 8503(a)(2) and 41 CFR 51–2.3.

After consideration of the material presented to it concerning capability of qualified nonprofit agencies to provide the product(s) and impact of the additions on the current or most recent contractors, the Committee has determined that the product(s) and service(s) listed below are suitable for procurement by the Federal Government under 41 U.S.C. 8501–8506 and 41 CFR 51–2.4.

Regulatory Flexibility Act Certification

I certify that the following action will not have a significant impact on a substantial number of small entities. The major factors considered for this certification were:

1. The action will not result in any additional reporting, recordkeeping or other compliance requirements for small entities other than the small organizations that will furnish the product(s) to the Government.

2. The action will result in authorizing small entities to furnish the product(s) to the Government.

3. There are no known regulatory alternatives which would accomplish the objectives of the Javits-Wagner-O’Day Act (41 U.S.C. 8501–8506) in