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Submitted Via Website and E-Mail:
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Mr. Todd Wyatt
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Re: ***Comments from Protect our Parks to Environmental Assessment***

Dear Ms. Elmer and Mr. Wyatt:

The following document represents comments by Protect Our Parks with respect to the Environmental Assessment (EA) dated September 28, 2020.

As we shall further explain below, the EA itself contains several fundamental flaws, all of which relate back to the single, repeated error of consciously excluding and segmenting work done by the City of Chicago into a separate box from the work that will follow from federal agencies once the demolition of Jackson Park as we know it is completed. That artificial separation will insulate the final stages of a single project from any and all federal review. The adverse effects in question cover an extensive amount of land, and the removal of several local roads and historic vistas which will in turn necessitate adding new roads to offset the massive dislocations of these ostensibly "city-only" efforts. The destruction of old roads and public areas and spaces is intimately related to the construction of these new public roads and facilities. The extensive destruction and reconstruction of these public areas is one integrated project whose effects have to be analyzed as one large project. The changes involved here go far beyond those normally handled through an EA. Given the significant number and intensity of the impacts of the actions here, a full environmental impact statement (EIS) is required to analyze the major transformations contemplated by the construction of the proposed Obama Presidential Center (OPC) and all the other adjustments to traffic and local habitat that the construction of this massive facility entails. Indeed, the substantial flaws that we identify in the current EA show a failure to come to grips with a wide range of impacts, many of which are ignored, others simply dealt with without the needed thoroughness – put differently, a "hard look" at the impacts and was not performed. In a sentence, the OPC is a major federal project that covers all aspects of development, not two small projects, (the first of which is said to escape federal review altogether) which significantly impact

the environment and while not adequately addressed in the EA, more than trigger and require an EIS.

I. General Standards.

The National Environmental Policy Act (NEPA) requires every agency to rigorously explore and objectively evaluate reasonable alternatives to any proposed project. *See* 49 C.F.R. §1502.14(a). Under NEPA, federal agencies are required to perform a "hard look" at the adverse environmental consequences of their actions, ensuring that significant environmental impacts are not overlooked, and that alternatives are considered. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349-50 (1989). That hard look applies to the artificial effort to shrink the scope of federal review.

II. The Purpose And Need Statements In The Current EA Are Inadequate, Incomplete, And Misleading.

The project Purpose and Need (P&N) Statement is not just some idle requirement that can be satisfied in a *pro forma* way. It, in effect, requires a full and candid statement of the public purpose and identification of the needs. The effort here fails in at least four fundamental ways: (i) the failure identify a need for the work (rather than an elaborate discussion of purpose, namely all to accommodate the Obama Presidential Center in Jackson Park); (ii) reliance up on a predetermined set of findings to support the purposes; (iii) a systematic failure to review alternatives; (iii) the failure to utilize a proper preexisting baseline against which the changes in the report should be measured. These issues will be all be part of the discussion in these comments.

III. The EA Is Fundamentally Flawed By Its Use Of An Improper Baseline For Evaluation And Comparisons.

An EA must rigorously explore and objectively evaluate the impacts, both positive and negative, of all reasonable alternatives to the no action alternative. 49 C.F.R. § 1502.14(a) The use of a faulty baseline in dealing with the OPC reveals a fundamental flaw in this EA.

In this matter, Section 4 of the EA discusses the various alternatives that are included to complete the analysis of the purpose and need. In this project, Alternative A is called "No Action," Alternative B is called "No Build." That supposed analysis already assumes that construction of the OPC has been completed even though no roadwork has been done. Alternative C incorporates every demand from the City and Obama Foundation and labels it the "preferred alternative," blessing the construction of the OPC at its exact proposed location, with the removal of all current roadwork needed to complete the proposed plan.

While the EA pays lip service to the Alternative A of no action, as applied, the entire analysis starts from Alternative B, which assumes that the OPC will be built, and so simply presents a baseline condition that ignores the construction of the OPC and all of the road closures and other significant impacts. It then only evaluates the transportation void that is left when the initial project is completed. Alternative B is the official basis of comparison with Alternative C. Shortcutting any analysis of Alternative A as the true baseline to measure the alternatives is a manifest violation of the NEPA requirements, given that the project is the entire transformation

from Alternative A to Alternative C. The agency's artificially truncated analysis is a form of bootstrapping already rejected by other NEPA cases, including a recent decision in which similar agencies assumed that certain major "improvements" could be built without utilization of proper baseline.

In *Openlands v. U.S. Dept. of Transportation*, 124 F.Supp. 3d 796, 807 (N.D. Ill. 2015), the District Court held that the EIS for the proposed Illiana Tollway did not comply with either NEPA nor section 4(f) of the Transportation Act because it engaged in an illicit comparison of the sort made here. The Agency only compared the proposed route to the no action alternative, and thus committed a fatal mistake by failing to take into account an alternative route for the construction of the proposed road. In this case, there are no issues of an alternative route, but there are parallel issues of whether the removal of the existing road structure in Jackson Park is consistent with the environmental concerns that are covered by both NEPA and section 4(f). As the District Court concluded: "In short, the purpose and need for the Illiana Corridor identified in the EIS are derived directly from the faulty 'no build' analysis. Because that analysis does not substantiate the purpose and need, the FHWA's approval of the ROD [record of decision] and final EIS is arbitrary and capricious and in violation of NEPA." *Id.*, 124 F. Supp. 3d at 807. "[A]bsent a supported no build analysis, the EIS does not comply with NEPA's directive to analyze the project's direct impacts." 124 F. Supp. 3d at 808.

The concerns raised in *Openlands* are equally present here. Indeed, that is evidenced by FHWA conclusions that: "[w]ithout improvements to address the road closures, many intersections would experience considerable increases in delay and operate over capacity. Thus, there is a need to improve roadway and intersection facilities to accommodate the future changes in travel patterns and provide desirable levels of intersection safety and operation. In addition to the future congested traffic conditions, the need to improve the existing deficiencies in bicycle and pedestrian access and circulation in Jackson Park is being evaluated." EA at 13-14. This stance ignores all the requirements and conflicts with the alternatives section under Section 4 of the EA, by ignoring the major transformations that take place in moving from Alternative A (the status quo ante) to Alternative B (the removal of the existing road structure and other key park elements) by wrongly using Alternative B as the baseline, thereby assuming that the OPC and roadwork is properly built. Every step of the movement from Alterative A to Alternative C has to be included in the overall evaluation.

These massive failures make the limited comparisons in the EA between Alternatives B and C inaccurate and fatally flawed (as noted earlier Alternative A is ignored). The "no build" alternative is improper not only because it uses the built OPC for a baseline, but also because it suggests that the next-best alternative is one where the roads and trees have been removed even though the OPC has not been constructed. The "no build" alternative simply refers to the building of the new roads, roads that were reasonably foreseeable as a result of the OPC and road closures. In order to perform the required analysis – one which evaluates the impacts, both positive and negative, of all reasonable alternatives to the no action alternative – there must be a proper baseline and non-segmented analysis, which does not exist here, and appropriately applying a "hard look" as to alternatives as to where the OPC could be built that satisfies the various statutory concerns necessitated by a project of such size and significant impacts. *See, e.g., Sierra Club v. Marita*, 46 F.3d 606, 619 (7th Cir. 1995)("Where an 'agency has relied on factors which Congress has not

intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise,' the agency has violated the standards of the APA.")

IV. The EA Utilizes Improper Segmentation.

The EA offered here ignores the dictates of the hard look doctrine by its effort to accept a slim downed interpretation of the overall project in order to avoid NEPA's obligations:

> "Segmentation" or "piecemealing" is an attempt by an agency to divide artificially a "major Federal action" into smaller components to escape the application of NEPA to some of its segments. "As a general rule under NEPA, segmentation of highway projects is improper for purposes of preparing environmental impact statements." *Piedmont Heights Civic Club, Inc. v. Moreland,* 637 F.2d 430, 439 (5th Cir. Unit B 1981). Segmentation becomes suspect in light of an investigation to determine whether the project (1) has logical termini; (2) has substantial independent utility; (3) does not foreclose the opportunity to consider alternatives; and (4) does not irretrievably commit federal funds for closely related projects. *See, e.g., Piedmont Heights,* 637 F.2d at 439; *San Antonio I,* 446 F.2d at 1024–26. In the context of a highway within a single metropolitan area, as in Jackson Park—as opposed to projects joining cities—courts have focused most heavily on the factor of "independent utility." *See, e.g., Coalition on Sensible Transp.,* 826 F.2d at 69; *Piedmont Heights,* 637 F.2d at 440. Consequently, our analysis, while assigning the other factors their modest weight, will focus primarily on the "independent utility" factor. *See Association Concerned About Tomorrow, Inc. v. Dole,* 610 F.Supp. 1101, 1108 (N.D.Tex.1985) ("the illogic of a terminus is at best a secondary inquiry, shadowed by the independent utility inquiry") (citation omitted).

Save Barton Creek Ass'n v. Federal Highway Administration, 950 F.2d 1129, 1139-41 (5th Cir. 1992).

Here, virtually every element of the EA's analysis segmented essential components to a single project. Thus, the placement of the OPC was regarded as a separate matter from the destruction of the roads, which was in turn separated artificially from the takeover of the most usable 20 acres of Jackson Park, which in turn was separated from the destruction of trees on ten acres of park lands—all in the effort to keep these separate activities exempt from review. That faux analysis ignores that it is not only reasonably foreseeable but also virtually certain the activities will trigger further work on roadways and land that are considered protected Section 4(f) properties given the explicit request by the City for federal highway funds, and the need to satisfy new obligations under the Urban Parks and Recreation Recovery Act (UPARR) by taking land that is covered by UPARR covenants. By so designating these as "city actions" or otherwise acting to remove items from review by recharacterizing the nature and scope of the project, the EA hopes to ensure an escape of scrutiny under various federal laws implicated here, which includes an

evaluation of whether the actions meet, in order, the tripartite tests of "avoidance, minimization and mitigation" or other similar requirements under various statutes and regulations.

Segmentation in one form or another has been a proximate cause in the failure to properly apply those statutory requirements, and naturally flaws the EA which is built on such segmentation. In so doing, the EA seeks to avoid the obvious objection that the extraordinary number of significant and intense impacts could be entirely avoided by moving the OPC to a different area on the south side abutting Washington Park, with better public access and less social and physical disruption, or to some other South Side location. The report should acknowledge that it has been recognized by the City that the area near Washington Park is a proper location; in fact, an Obama Foundation study determined that it was the optimal location. That alternative should be thoroughly reviewed and considered through this process given the significant and intense impacts, the largess of the project, which has not occurred. But even if it were not dispositive, minimization issues would then have to be addressed, including shrinking the tower from its massive 235-foot height on the one hand, and/or moving the entire project south so as to avoid closing the Midway Plaisance going east toward Lake Shore Drive.

The federal agencies adopted this flawed segmentation strategy during the course of the Section 106 review, which then allowed the EA to downplay the severe adverse effects on existing historical and cultural resources. That flaw is incorporated in this EA.

Similarly, the transportation review under Section 4(f) makes the same fundamental error, by treating as irrelevant and beyond its jurisdiction the actions that the City has taken in developing alternatives for the existing roadways in Jackson Park. Once again, any substantive evaluation of the avoidance, minimization and mitigation measures for the roadways in Jackson Park was side-stepped—a fatal violation of any EA or EIS that it prepared. That too is carried forward in this EA.

The same issue is evidenced by the NPS that at no point conducted an independent analysis of alternatives for lost UPARR replacement lands when it woodenly accepted the City's proposal, without the needed statutory review associated with all alternatives. That error is carried forward in this EA.

Finally, the actions of the Army Corps of Engineers in its review of issues associated with amendments to the Great Lakes Fishery and Ecosystem Restoration project ignored many similar statutory obligations, which again is carried forward in this EA.

These conscious and systematic failures undermine the EA and totally discredit any suggestion (express or implied) that denies any credible need to conduct an EIS, when such is imperative given the immediate magnitude of the proposed alterations.

V. Items That The EA Wrongly Determined To Be Insignificant Were Not Properly Carried Over For Further Review.

The EA erroneously excludes from consideration a host of impacts from further analysis (Section 5.1) in ways that improperly ignore or understate the specific and cumulative impact of such impacts.

A. The Significant Impact of Tree Removal Is Ignored.

The EA provides the following conclusion regarding trees:

> In conclusion, the alternatives would result in no impacts on recognized natural areas, the Lake Michigan Shoreline, or on nesting for migratory birds. Additionally, any temporary impacts to wildlife habitat due to tree removal within Jackson Park would be minor, with ample habitat remaining throughout the property. Because Jackson Park is an urban park, wildlife within Jackson Park is acclimated to human activity and development. The proposed actions would not alter the overall quality of the wildlife habitat of Jackson Park. Therefore, the impact topic of other wildlife and wildlife habitat is not carried forward for further analysis.

EA at 30.

This statement is amazingly flawed substantively, because it claims that the project has no impacts whatsoever when in fact the impacts are significant. It compounds the error by pretending that permanent impacts are only temporary. Such flaws are exhibited throughout the various sections of the EA.

The EA acknowledges that a number approaching 1,000 trees must be cut to make way for the proposed OPC to be built, and then inexplicably treats that massive transformation of landscape, in which some 19.2 acres of Jackson Park will be cleared of old-growth trees as insignificant. The clear cutting of the 19.2 acres is significant. And, the removal of these trees is a permanent loss that is not eliminated by planting small saplings in their place.

The EA then compounds the error by insisting that only mitigation need be considered for this loss of these trees, such that it then it concludes that there will be no change in the "net result" when old-growth trees are replaced by new saplings. Amazingly, Section 4.2.1 of Appendix D of the EA suggests that "the UPARR conversion would not impact trees because the UPARR conversion itself does not have ground impacts," without asking about the disruption of ground cover of shrubs, grasses, the aesthetic changes to the world class Olmsted landscape, the habitat destruction, the impact on migratory birds, the impact of drainage and use patterns among other issues. The scale of this intervention is too large, significant and intense to be brushed under the rug with an indefensible conclusory finding of no real impact.

At no point does the EA make a true analysis and comparison of the trees removed and those that they rely upon as creating no impact because of the alleged 1 to 1 ratio of removal to replacement. Thus, the EA ignores that of the 417 trees that are to be removed to accommodate

changes to the local road system, 301 trees are classified as being in good condition, and 242 trees vary in diameter from 6 to 19 inches. Ninety-seven (97) trees have a diameter between 20 and 59 inches. According to its tree memorandum (Appendix D), the City is proposing to plant a motley mix of 2.5- and 4-inch caliper trees, largely at the smaller end, as a supposed form of mitigation, without noting the enormous losses that remain, and without any recognition of further impacts on the surrounding environment. Even if it were somehow true that there was actual "mitigation" (which this proposal is not) that does not diminish or undermine significance. Even when a project is allegedly "mitigated to insignificance" there can be significant environmental impacts when those effects are aggregated with the foreseeable effects of other similar environmentally impacting human activities and natural occurrences. Here are some examples.

The issue of aesthetics is completely ignored despite the fact that this report is alleged to deal with environmental concerns. The clearcutting of the 19.2 acres, as well as the removal of hundreds of trees along Lake Shore Drive and Stony Island Avenue will drastically and for the long term change the views of the Park and from the Park, drastically altering the visual screen.

B. The EA Ignores The Impact On Both Migratory Birds And Threatened And Endangered Species And Wildlife.

As noted in Section 5.1.3, Jackson Park is part of an Audubon Important Bird Area (Chicago Lakefront) in the state. According to the Audubon Society, "More than three-fourths of all bird species seen in Illinois have passed through or paused to rest and feed along the Chicago lakefront. The vegetation along the lakefront provides the rest and shelter birds need as they are migrating along Lake Michigan, which is on the Mississippi Flyway." (https://www.audubon.org/important-bird-areas/state/illinois)

Section 5.1.2 ignores the significance on migratory birds, and several endangered and threatened species, which mitigation efforts do not begin to touch. The EA's meager analysis ignores any impact of the massive tower and other buildings on these endangered species, as well as the many migratory birds in the Mississippi Flyway. It also omits any discussion of the impact of road construction on local wildlife, including nesting birds, which are especially vulnerable to external impact.

There is no documentation in the EA to support the conclusion that Alternative C would result in no migratory bird impacts within Jackson Park. That assertion is not only unsupported, but is false as birds and wildlife are significantly and adversely impacted by the size and age of the trees that are being removed, a fact that is unaddressed. Indeed, there is no analysis or understanding regarding the impact of the removal of trees on wildlife, or efforts to explain that the replacement of old growth trees with saplings impacts the needs of migrant birds, resident birds or wildlife in general. For example, those species of birds in the park that nest in trees are almost certainly not going to be able to nest in the "mitigation trees" because they are too small. Nests are built in places which are inaccessible and are concealed from view. Mitigation trees do not offer those opportunities because of their low height and relative lack of leaves. As an example, the scarlet tanager prefers to nest 30 feet or higher in a tree and locate its nest on a horizontal branch well away from the trunk. Mitigation trees do not have those characteristics and will not obtain them for years. In addition to not providing the height or branch structure to accommodate

nests, the small mitigation trees cannot supply the same amount of food as the larger trees being removed. The buds, flowers, and leaves of large trees, particularly large native trees, attract insects and insects attract birds. The mitigation trees will be too immature to provide anything close to the same volume of insects as the trees they replaced.

To the extent that such systematic failure is masked by mitigation or by using the word "temporary," a term that is neither accurate nor proper for purposes of NEPA. The EA makes the ludicrous assumption that a tree is a tree from a wildlife habitat standpoint. Yet it generally takes oak trees 20 to 30 years before they produce acorns; sugar maples can take 30 years before they produce seeds. The wholesale tree removal in Jackson Park will be one of the most notable project failures that will permanently impact migrant songbirds, resident birds and wildlife. Yet none of these concerns are addressed.

C. The EA Ignores Water Resources And Related Issues.

The EA's discussion of water resources fails to consider many impacts, most importantly on rising water levels in Lake Michigan that in turn impact the lagoons in Jackson Park, which come within feet of the foundations of the proposed OPC.

The EA's Impact Summary Table states that Alternatives B and C would impact a 0.4-acre wetland (Wetland 1) in Midway Plaisance. Mitigation for that wetland impact would be located, far removed, at the Cedar Creek A1 wetland bank site in Will County southwest of Chicago. While the proposed mitigation will result in no net loss of wetlands on a regional basis, the stormwater storage and sediment retention function the local wetland performed will be lost by the relocation of the project area far away. As such, the "no change" rating in the Impact Summary Table is inaccurate.

Flood plain impacts also fail to consider that the impacts of rising lake levels on the staging of the OPC will require extensive time and disruption, which will surely compromise the operations and generate collateral consequences throughout Jackson Park. None of these maneuvers would be necessary if the proposed OPC is not built in Jackson Park, or is moved to a site near Washington Park. The no mitigation point ignores the dislocations just as it ignores the possible consequences on the internal operations of the park from the removal of parklands to widen Stony Island Avenue.

The EA offers no express study of how the creation of a mammoth tower interacts with the specter of the rising lake levels, or the possibility of groundwater flooding given the impact of the stabilization that will be necessary for such a tower. Relatedly, the creation of a large underground garage is proposed wholly bereft of real analysis of a rising, floodplain that takes place in the context of rising lake levels.

D. The EA Ignores Significant Air Quality Impacts.

The EA virtually ignores all air quality impacts including those that are caused by creating new T roads (in which traffic from the base of the T has to move into both of its branches) which slows down the movement of cars, increases noise and pollution, and reduces overall access to the

area. Given the regular rectangular grid near Washington Park, none of these problems are likely to emerge if the OPC is constructed on the site near Washington Park.

Furthermore, the EA never addresses air quality impacts from the removal of hundreds of mature trees that currently remove 5.8 tons of carbon and 341.5 pounds of air pollution each year, as well as providing significant and recognized health benefits for city residents. *See* https://www.chicago.gov/content/dam/city/depts/dcd/supp_info/jackson/OPC-Tree-Study.pdf)

E. The EA Ignores Highway Traffic Noise And Construction Noise.

The Impact Summary Table states that Alternative B would have no noise impacts, and Alternative C would have impacts at only 20 receptor sites, 15 of which are located in Jackson Park and 5 are located in nearby residential areas outside the park. Table A-3.1 of that analysis represents the existing noise levels and includes the improvements made in Alternative B. However, the statement in that Table is incorrect insofar as it asserts that Alternative B would have no noise impacts.

The Future Modeled Existing Condition noise levels at the 5 residential receptors adversely affected by Alternative C are 66 or 67dBA, which means they are adversely affected by Alternative B. Of the 15 park receptors adversely affected by Alternative C, the Future Modeled Existing Condition noise levels at 13 of the receptors are considered adverse impacts.

Furthermore, the displacement from the four thoroughfares will put extra pressure on the new expansion of LSD, thereby increasing the delays at the 57th Street turnoff. There will be more waiting and more noise on both roads. A complete analysis looks at noise levels under ordinary and peak load conditions, neither of which is present.

VI. The EA Does Not Establish UPARR Compliance Nor Does It Analyze Recreational Impacts.

The National Park Service has determined that the placement of the four buildings (including the massive tower) will take what are recreational lands and turn them into non-recreational spaces. The creation and placement of the proposed OPC must meet UPARR standards for finding suitable lands for substitute uses, which leads to the following statement in the EA:

> [T]he City has identified potential replacement property to accommodate these losses to recreation and articulate the equivalency of proposed replacement recreation opportunities that will be developed upon them. The prerequisites for conversion approval are set out in 36 C.F.R. § 72.72(b). They include: (1) whether practical alternatives to the conversion have been evaluated; (2) whether the proposed conversion and replacement are in accord with the current recreation plans; (3) whether the proposal assures reasonably equivalent replacement recreation opportunities; (4) whether the remainder of the Jackson Park remains recreationally viable; and (5) whether environmental requirements are satisfied. NPS would consider these factors in reaching a decision on the conversion proposal.

EA at 11.

Locating replacement land requires compliance with the UPARR statute. The EA superficially and inaccurately addresses these matters, which require significantly greater study via an EIS. For example, the EA provides no indication that the statutory prerequisites to a land conversion have been complied with. The request for conversion requires that "*all* practical alternatives to the proposed conversion have been evaluated." 36 C.F.R. § 72.72(b)(1). That was not done. The eastern end of the Midway has been the *only* location identified, while ignoring the exacting preconditions to approval of such a request in the Statute which requires "adequate recreation properties and opportunities of reasonably equivalent usefulness and location." 36 C.F.R. § 72.72(b)(3). That needed work simply has not been done, as alternatives that did not require the conversion were not considered or explored.

Importantly, "[r]eplacement property need not necessarily be directly adjacent to or close by the converted site. This policy provides the administrative flexibility to determine location recognizing that the property should meet existing public recreation needs." *Id.*, 72.72(b)(3)(ii). Here, the EA ignores the fact that the alleged areas impacted include Woodlawn, South Shore and Hyde Park. There is a marked lack of recreational space in Woodlawn, which must be evaluated (under (b)(1)). Further, the idea of taking an already recreational space and claiming that as replacement parkland as done here violates both the letter and spirit of the regulation and the related inquiry under the circumstances of this matter. An EIS is absolutely necessary to address these issues.

Among their many omissions, the Agencies do not adequately consider how widening roads to accommodate more traffic from the earlier closures could endanger children playing in the area. Nor do they discuss how an increase of over 5.2 acres of roadways as substitute space will also be in violation of governing regulations. *See* 72.72(b)(4). In addition, the conversion will permanently destroy the existing Women's Garden, and negatively impacts nearby wetlands, solely to allow that area to be used for storm water retention.

Separately, the EA's reliance upon the South Lakeshore Plan is off base, and cannot be used to justify the conversion. The South Lakeshore Plan did not include the destruction of this area of Jackson Park to non-recreational resources; that an amendment occurred well after the Foundation and City published a faux report that championed a gerrymandered configuration that would yield a predetermined result does not make the study one that can be used to support the EA. To the contrary, the actual plan never considered closing all of the roads and converting this area as the EA now suggests. It is factually inaccurate to state otherwise.

Indeed, the entire analysis in the EA regarding recreational resources is largely perfunctory and contains non-compliant indirect and cumulative effect discussions (an issue that is repeated throughout the EA). For example, the cumulative effects analysis for recreation resources does not provide specific information about impacts in the seven representative actions in Section 5.2.1. Furthermore, the discussion therein is overly narrow, for it also fails to address issues associated with certain discrete programs such as the Great Lakes Fishery and Ecosystem Restoration (GLFER) and the socioeconomic impacts, but it excludes other newly proposed facilities such as

the expanded golf course, for which certain additional road closures (having little or nothing to do with the OPC) are being included as part of this EA.

The problem associated with the analysis of cumulative and indirect effects is also evident in Section 5.2.2 (Recreation). The section (5.2.2.3) describes the loss of recreational opportunities on the proposed OPC site, but treats these only as an indirect effect of the Section 1010 boundary conversion, but also treats the mitigation for those impacts in the Midway Plaisance as a direct effect. Such distinction does not make sense because the impacts within one portion of the proposed site and Midway Plaisance are not "farther removed in distance" from the project study area shown in Figure 2, because they fall within it. Put differently, the direct and indirect impacts are the same, which implies that the EA fails to meet the separate requirement of looking at indirect effects.

Another illustration of the close connection between NPS' potential approval of the City's conversion request and the *direct* impacts requirement is found on page 30 of the EA which states that 39 trees were removed by the track and field relocation…" In addition to the loss of trees, the former baseball field area is surrounded by construction (chain link) fencing and the baseball fields are gone. As such, and well before the NEPA-phase of the project has been completed, two direct on-the-ground impacts of the City's conversion request have already occurred, and that site transformation cannot be treated as if it were indirect. The bottom line is that the City did not conduct an indirect effects analysis that comports with the definition of indirect analysis or that would be typical for a NEPA analysis. Such failures regarding cumulative and indirect impacts affect all areas of the EA (and is further discussed below).

Other issues regarding the recreation impacts include but are not limited to the following:

1. In Table B-2 (Impact Summary Table) the recreation impact for Alternatives B and C says: "some road closings *may* occur, traffic *may* increase…" (emphasis supplied). This claim is inaccurate and downplays what are significant adverse impacts on recreation.

2. The Impact Summary Table does not discuss the recreational impacts caused by the acquisition of 5.2 acres of new right-of-way along existing roadways with Alternative C.

3. Related to the comment above, Section 5.2.2.1 incorrectly describes the new right-of-way acquired adjacent to expanded roads as "narrow, linear spaces that mainly serve as a buffer between roadways and more active recreation areas. These narrow, linear areas that are proposed for partial conversion of recreation use are not typically used for recreation purposes." Section 4.3.4 inconsistently states that "The areas within Jackson Park, where existing roadways would be converted to park space, offsets the recreation lost due to other roadway work (*see* Figure 12).

4. The Impact Summary Table does not even describe recreation impacts to Midway Plaisance described on page 37 of the EA.

VII. The EA Does Not Adequately Address Traffic Congestion and Parking Impacts.

The discussion on traffic congestion and parking is woefully inadequate in at least two ways: First, its suggestion that these impacts are not significant seriously understates the effect of major road closures, and their collateral consequences. Second, the methodologies are wrong. Accordingly, these two faulty premises lead the EA to overlook and/or mischaracterize at least the following issues:

1. The roadways shown in Table 1 do not all utilize constant design parameters throughout the study area, therefore, the maximum projected capacity must necessarily vary for each roadway segment. Given that omission, the EA fails to explain how the maximum projected capacity values shown in Table 1 were either calculated or obtained.

2. The EA offers travel time comparisons in the technical memorandum, without first explaining what counts as an "acceptable" travel time. Average travel speed, rather than total travel time, is typically used to measure time intervals on urban street segments, again without documentation as to source and validity. Studies utilizing average travel speeds were not performed.

3. Section 3.2.1 denies any direct traffic impacts associated with Alternative B. That is wholly improbable. When Alternative B closes Cornell Drive and Midway Plaisance South, and thereby shifting traffic to other routes, they are likely to experience significant delays that the report does not address.

4. The report's parking assessment relies on the parking counts collected in the 2018 Sam Schwartz study, which were made in the fall when Jackson Park usage is usually lower. Therefore, the parking demand referenced within the technical memorandum fails to reflect typical parking conditions.

5. As seen in Section 3.3.1.1, the loss of on-street parking is noted for some roadways, but not for all.

6. The Report wrongly excludes the Marquette Drive on-street parking supply (125 spaces) from the Alternative C Parking Supply Summary (Table 14) for two reasons:

    a) On-street parking is legal along Marquette Drive and therefore should be included.
    b) Its failure to observe parked vehicles along Marquette Drive. The parking occupancy counts were collected by Sam Schwartz in the fall when Jackson Park has much lower activity than in summer and thus understates typical use conditions.

7. The technical memorandum notes 680 additional parking spaces are to be constructed at the completion of the South Lakefront Framework Plan. The Plan, however, only offers an abstract long-term vision for the park, prepared without construction timelines or funding commitments. As such it would be wrong to count these spaces towards parking mitigation for the loss of surface spaces from the planned OPC construction.

8. The 2018 Sam Schwartz study that is referenced utilized assumptions that yielded low traffic and parking values for the proposed Obama Presidential Center. For example, the study assumed a high average auto occupancy value, without fully considering other multimodal factors (transit, pedestrian/bicycle, taxi/Uber/Lyft, school bus, etc.). The 2018 report also did not take into account any special events at the proposed OPC, which could raise significant parking and traffic impacts. The 2020 Traffic Congestion Technical Memorandum continues to rely on these artificially low traffic and parking numbers.

9. In Table B-2 (Impact Summary Table) the recreation impact for Alternatives B and C says: "some road closings may occur, traffic may increase…" However, Section 2.4 of the EA makes it clear that the roadway closures are certain to occur with both alternatives. In addition, Exhibit 5 (Alternative B) and Exhibit 35 (Alternative C) in the Alternatives To Be Carried Forward memorandum clearly show the proposed road closures and the increase in year 2040 traffic within and adjacent to Jackson. As an example, year 2040 average daily traffic volumes on Hayes Drive with Alternative B will range between 24,500 and 28,100 while the volumes with Alternative C will range between 28,700 and 32.300.

These efforts and actions downplay all those impacts both in intensity and in duration, without a much needed detailed analysis that only an EIS could accomplish.

The Sam Schwartz traffic engineering study relied on in the EA failed to either address or resolve key issues about the Jackson Park site. If that were not enough, while silent in the report in regards to alternatives, in fact, a report looking at traffic in the Washington Park area shows that there are far fewer traffic issues, all of which can be resolved at lower costs than under the current predetermined plan. To that end, the same engineering firm had the following to say:

> Analyses have been conducted under existing and future conditions of the intersections in the study area to determine the impact from the proposed Barack Obama Presidential Library (OPL) Washington Park site. The capacity analysis results indicate that the implementation of geometric and signal improvements permits the surrounding roadways to operate at acceptable levels of service under all design hours to accommodate the increase in projected traffic due to the OPL, along with general traffic growth associated with new development in the surrounding area. Overall, vehicles will be able to easily access the site and the

> OPL will not have a significant impact on the traffic operations in the neighborhoods.

Ex. 1, Washington Park Traffic Study (prepared by Sam Schwartz) at page 32 (document can be viewed as part of the University of Chicago's responses to request for proposal at https:/www.obama.org/updates/rfp-responses-release/)

Additionally, the same report notes that parking is largely not an issue in the Washington Park area. That study notes that there are approximately 3,725 on street spaces in the overall area. Further, based on their surveying that usage of these spaces on "a weekday and Saturday is approximately 30%" which means that 70% of the existing parking spaces are available for use. Other recommendations regarding parking for busiest times (adding approximately 404 spaces), additional bicycle parking and the provision of five bus sparking spaces are typically easy to address without the significant and intense impacts that exist with such issues in Jackson Park (for example involving the need to build an underground garage) that remain largely unaddressed.

Furthermore, other proposed alternatives have been provided that also raised issues regarding the flimsy analysis that continues to be advanced.

VIII. The 4(f) Analysis Is Fundamentally Flawed.

The 4(f) analysis in this EA (at 69 & Ex. K) repeats many of these significant flaws which largely ignores or otherwise downplays significant impacts.

The standard for a Section 4(f) analysis is set by the U.S. Supreme Court in *Citizens to Preserve Overton Park, Inc. v. Volpe,* 401 U.S. 402, 411-413 (1971).

> Section 4(f) of the Department of Transportation Act and s 138 of the Federal-Aid Highway Act are clear and specific directives. Both the Department of Transportation Act and the Federal-Aid to Highway Act provide that the Secretary 'shall not approve any program or project' that requires the use of any public parkland 'unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park * * *.' 23 U.S.C. s 138 (1964 ed., Supp. V); 49 U.S.C. s 1653(f) (1964 ed., Supp. V). This language is a plain and explicit bar to the use of federal funds for construction of highways through parks—only the most unusual situations are exempted.
>
> Despite the clarity of the statutory language, respondents argue that the Secretary has wide discretion. They recognize that the requirement that there be no 'feasible' alternative route admits of little administrative discretion. For this exemption to apply the Secretary must find that as a matter of sound engineering it would not be feasible to build the highway along any other route. Respondents argue, however, that the requirement that there be no other 'prudent' route requires the Secretary to engage in a wide-ranging balancing of competing interests. They contend that the Secretary should weigh the detriment resulting from the destruction of parkland against the cost of other routes, safety considerations, and other factors, and

> determine on the basis of the importance that he attaches to these other factors whether, on balance, alternative feasible routes would be 'prudent.'
>
> But no such wide-ranging endeavor was intended. It is obvious that in most cases considerations of cost, directness of route, and community disruption will indicate that parkland should be used for highway construction whenever possible. Although it may be necessary to transfer funds from one jurisdiction to another, there will always be a smaller outlay required from the public purse when parkland is used since the public already owns the land and there will be no need to pay for right-of-way. And since people do not live or work in parks, if a highway is built on parkland no one will have to leave his home or give up his business. Such factors are common to substantially all highway construction. Thus, if Congress intended these factors to be on an equal footing with preservation of parkland there would have been no need for the statutes.
>
> Congress clearly did not intend that cost and disruption of the community were to be ignored by the Secretary. But the very existence of the statutes indicates that protection of parkland was to be given paramount importance. The few green havens that are public parks were not to be lost unless there were truly unusual factors present in a particular case or the cost or community disruption resulting from alternative routes reached extraordinary magnitudes. If the statutes are to have any meaning, the Secretary cannot approve the destruction of parkland unless he finds that alternative routes present unique problems.

A. Section 4(f) analysis fails because it improperly segments the undertaking.

In the instant case, the proposed OPC, its road closures and the further expansion of Lakeshore Drive and Stony Island all adversely effect the many critical and historic areas of Jackson Park, the Midway Plaisance, and the Chicago Boulevard Historic District. The proposition that all of road closures, park destruction and location of the four buildings fall outside the scope of the EA or EIS is laughable given that these are certain to have major impacts on the site that will necessitate the very road work that the FHWA is evaluating.

The FHWA performed *no work* to deal with the statutory requirements under Section 4(f) that require review of all feasible and prudent alternatives to avoid, minimize and mitigate damage from the expanded use of parkland and historic sites. No such work was performed because the federal agencies wrongly segmented out virtually everything – including the placement of the proposed OPC and all of the related road closures—to which the standard three-part analysis applied. (*See* EA at 69 (discussing all matter they carved out)). By effectively carving up the project in his fashion, the FHWA improperly segmented out from their review key elements needed to evaluate so as properly determine avoidance, minimization and mitigation measures, as noted at page 3 *supra*. To that end, the FHWA "no build" scenario is false, based not on a review of alternatives, but instead based on its segmentation of the proposed project out of its analysis.

B. An EIS Is Required To Evaluate The Extensive New Roadwork And Its Impacts.

There is no credible way to deny that these extensive and costly roadwork changes involve a significant impact that requires additional study through an EIS, given its impact on at least three city neighborhoods – Hyde Park, South Shore and Woodlawn. "[W]e do not quarrel with the proposition that federal involvement can in some circumstances be so massive, so pervasive, that 'the acts of the state are in reality federal actions.'" *Atlanta Coalition on Transp. Crisis, Inc. v. Atlanta Regional Commission,* 599 F.2d 1333, 1346 (5th Cir. 1979) (citation omitted). Here, main and historic roadways are being closed while the expansion of other roadways will necessarily tear into critical elements of the Jackson Park and the surrounding neighborhood. The significance of the impacts, their intensity and the massive size of the project all require that an EIS be performed.

IX. The EA Fails To Address The Project's Impact on Many Major Cultural Resources of Jackson Park.

The EA effort to belittle these adverse effects ignores the documentation of just that effect that was contained in the Assessment of Effects report of July 2019:

First, with respect to the OPC itself, the AOE Report provides:

> The OPC will transform the cultural landscape within the project footprint. The project site overlays part of the western park perimeter of the historic property. The proposed design replaces contributing landscape characteristics, which include spatial organization, topography, vegetation, and circulation, with new features. While location of proposed partially underground buildings and development of green roofs on three of the buildings reduces the visibility of new buildings within the landscape and provides the appearance of green space within the footprint of the project, its implementation will alter the character of the historic landscape. In particular, the historic design principles of the prominence of landscape scenery, unified composition, and orchestration of use will be changed within the historic open space of the project footprint by the addition of the Museum Building and other buildings. This is not consistent with the SOI standards that state: "When alterations to a cultural landscape are needed to assure its continued use, it is most important that such alterations do not radically change, obscure, or destroy character-defining spatial organization and land patterns or features and materials."

AOE Report at 30.

Second, the AOE Report states with respect to nearby lands to the South of the OPC:

> With the exception of the English Comfort Station building (Exhibit 3b-16), the remainder of the contributing historic features south of the Perennial Garden/Women's Garden to 62nd Street will be removed or altered to accommodate the elements associated with the OPC. The western perimeter exhibits integrity to the period of significance and demonstrates continuity in the larger patterns of spatial organization, land use, views, circulation, and tree

> massing. The area designed and designated by Olmsted as an outdoor place for exercise [he used the term "gymnasia"] retains the designed composition and general form of two open fields surrounded by canopy trees that are joined in the middle by the historic layout of the Western Perimeter Playground and English Comfort Station (Exhibit 4b: 1-7). Olmsted's use of "men's gymnasium" and "women's gymnasium" for the north and south fields refers to the original meaning of the word as a general place of exercise, rather than as a room or building for enclosed sports activities. The change to this portion of the historic property is not consistent with SOI standards that stipulate the need to preserve contributing historic features and discourage "placing a new feature where it may cause damage to, or be intrusive in spatial organization and land patterns."

AOE Report at 31.

Finally, the AOE Report makes this observation about the road closures:

> Closure of the Midway Plaisance (South Roadway; eastbound) between Stony Island Avenue and Cornell Drive removes a historic circulation route. This roadway segment demonstrates a particularly strong expression of historic landscape character related to the design of the property. The south roadway of the Midway Plaisance forms part of the formal and balanced juncture between the eastern parts of the original South Park (Jackson Park, the Midway Plaisance, and Washington Park). Closure of the roadway section removes an aspect of spatial organization that is fundamental to the historic design of Jackson Park at its connection to the Midway Plaisance.

AOE Report at 29.

If this were not enough, engaging in improper acts of segmentation in violation of the National Historic Preservation Act and its regulations ignores avoidance, minimization and mitigation measures needed to eliminate the adverse effects. Thus, from the outset, the sole strategy that the Agencies were prepared to consider was mitigation, in the most meager and minimal fashion. For example, in the August 5, 2019 meeting that followed the issuance of the AOE Report, the federal agencies and the City focused exclusively on "mitigating" the damage by tree screening, documentation, and public outreach—an improperly feeble and predetermined focus flatly inconsistent with the governing statute by sidestepping the needed statutory prior review of avoidance and minimization of adverse impacts.

On avoidance, the site near Washington Park has to be considered if only to avoid the drastic consequence of removing Olmsted's Jackson park from the National Register.

At most, the EA only offers vague and hollow assurances that the draconian result of delisting will not occur, given the massive and permanent actions that adversely and permanently impact Jackson Park, the Midway and Chicago Boulevards Historic District. Even it if were correct (and there is no actual evidence to support such a pronouncement), that is not the threshold in regards to the significant impacts to the environment that are created from the proposed actions.

X. The Report's SocioEconomic Impacts Analysis Is Flawed And Incomplete.

The EA's discussion of socioeconomic impacts is also fundamentally flawed. On economic impacts, the EA relies solely on an outdated 2016 consulting report that fails to tie its economic analysis to the placement of the proposed OPC in Jackson Park, given its economic impacts on local, city and state activities. Moreover, that EA necessarily ignores the effects of the pandemic, the economic downturn, and anticipated deficits, all of which postdate the 2016 Report. By way of example the following conclusory statement is not supported by anything in the record:

> With the construction occurring later than originally estimated, shifting economic conditions between 2016 and the OPC's actual construction timeline have the potential to affect the realized impacts. However, the IMPLAN multipliers experience only small shifts over time. As a result, if the modeling were completed with updated figures, any changes are expected to be insignificant. Therefore, the results of the economic impact analysis continue to be accurate and reliable.

Why is never explained, let alone in a fashion that meets the required "hard look" that must occur. Instead what is offered is a wide array of untested assumptions and outdated data about housing, employment and the like largely stemming from the construction of the proposed OPC. Budgetary difficulties raise a serious risk that the Jackson Park project could be sidetracked when half done for want of funds, given the shaky finances of the state of Illinois and local governments. As Mayor Lightfoot's recent budget reveals, the City of Chicago's budget faces massive deficits deriving from the pandemic, unemployment, and the like. Similar uncertainties arise with the funding and regulatory issues at the federal level, given the uncertain parameters of future stimulus plans, quarantines and other regulation.

The issues regarding environmental justice also provide no actual detail whatsoever to support its conclusions. In fact, to the contrary, the EA leads with a gross and misleading statement that there are a plethora of parks on the South Side. Statistics from the Mayor's office and other organizations reveal a distinct lack of public parkland on the south side. The suggestion to take existing parkland (found in Alternatives B and C) is horribly misguided even before taking note that this EA absolutely flunks the environmental justice test.

This localized project involves the very kinds of displacement that environmental justice is intended to target. The adverse effects are all local. How they could be rectified or avoided by creating improvements elsewhere is left unexplained. The idea that those deficits will be mitigated by actions outside the community is both fanciful and improbable. The area near Washington Park presents a significant enhancement to environmental justice where lower densities are located in land far away from the dicey shores of Lake Michigan, and where actual economic development benefits could be achieved, along with the building of needed infrastructure to a community that is in need. It is imperative that such an alternative (or others) be considered and studied through an EIS.

Beyond these issues, the road congestion and traffic situation brought about by the Jackson Park site create sheer havoc for the impacted communities. Road congestion will knock out a key entry point to the south side. The anticipated new growth on the Midway will require better not

worse access to the Jackson Park area. In contrast, in the Washington Park area, the traffic is lighter, the grid has clean crossings and none of the T junctions that impact traffic, along with large tracts of developable land to facilitate expansion without local disruption that will encourage community resistance from building in Jackson Park, which will in turn lead to needless political strife and contention. These urgent concerns make it even more important to perform an EIS to remedy the manifest gaps of the proposed EA that largely ignores all sites near Washington Park.

XI. The EA's Analysis Of The Great Lakes Fishery And Ecosystem Restoration Project Analysis Is Inaccurate And Incomplete.

The EA admits that both permanent and temporary impacts to various parts of the GLFER project will be created by this major federal action, but provides a largely unsatisfying response:

> All impacts to GLFER areas would be restored or replaced within Jackson Park. Areas impacted temporarily by construction would be restored in place using the GLFER planting palate as a guide. Permanently impacted GLFER areas would be replaced on the east side of the Jackson Park Inner Harbor to the south of Hayes Drive. This area was included in the original USACE GLFER restoration planting plans but has not yet been implemented. Therefore, implementing the GLFER planting in this area would serve as a replacement for the permanent impacts by providing a net gain of 1.11 acres compared to the existing restoration area. This implementation is consistent with the overall restoration plan. Replacement and restoration area plans are included in Attachment J-5. All replacement and restoration locations were coordinated with the CPD and the USACE. Table 4 provides a summary of the GLFER impact replacement areas.

This superficial statement does not meet the requirements of giving this project a hard look, and recognizing the intensity and significance of the recognized (and unrecognized) impacts. First, the approach on mitigation improperly assumes that the only issue involves acreage, not the specific purpose, placement, or value of the GLFER areas slated to be permanently destroyed, whether or not they are "replaced" elsewhere. Contrary to the relied upon analysis, the GLFER areas do not all share a uniform, cookie-cutter design. Indeed, years were spent in the effort to specifically develop and implement the GLFER project, which is based on the working interrelationship of various features and elements designed to work together to meet critical environmental, ecological, historical and other goals. Contrary to the current suggestion, it fully undermines the conditions, purposes and outputs of the GLFER project to simply take out one piece of land and plug another piece elsewhere.

Furthermore, the EA ignores the changed reality since the GLFER project was conceived and designed in 2012-14. While acknowledging the significant changes proposed for the GLFER project area: "the proposed alteration to the Jackson Park GLFER project [is] to construct roadway improvements, relocate utilities, resurface and connection walking paths," the impact to that planned area is so intense and significant that an EIS is required.

Wrongly styling these massive changes as "roadway improvements" ignores the deleterious effects of tearing out Cornell Drive along a significant edge of the GLFER project area

between 59th and 63rd streets. It replaces the buffer between the GLFER acreage and the locally used portion of the park, which currently includes a track, playground, and (former) athletic playing field. That space is also designed to allow tourists to frequent the entire acreage up to the edge of the west lagoon. The change in usage of the GLFER acreage between the west lagoon and Cornell Drive on the GLFER is also ignored, as is the significant impacts on the purposes and outputs of the GLFER project. Nothing in the record contradicts this grim conclusion. An EIS is needed to evaluate these stark and significant impacts.

Likewise, the EA ignores that the proposed OPC landscape design plan envisions collecting storm water on the site, which will then be directed to the west lagoon, a risky maneuver that is *neither part of or consistent with the* GLFER project. Given that Lake Michigan is expected to rise further, this one new feature is likely to significantly impact a major portion of the GLFER project acreage, thereby interfering with the project's goals and output. Any evidence that these massive actions will not undermine the GLFER project are not found in the record, because these actions have not been thoroughly examined as required before committing significant funds, resources and time toward implementing the GLFER project. The problem is still more acute because (as also seen with traffic issues) the EA makes no effort to measure both peak and average effects. Ignoring the former is to overlook the risk of a major environmental collapse. It is necessary therefore to consider variation of every relevant element: season, time of day, holidays, and more, because even one break could have damage that extends for weeks, months and years.

The same analysis applies to particular features of the GLFER project. For example, the creation of a berm and adjacent narrow area of GLFER plantings on the west side of S. Lake Shore Drive between the 59th street bridge and the approach to Hayes Drive was a carefully considered and remains important design element of the GLFER project. That berm is to be permanently destroyed to facilitate another of the supposed "roadway improvements" to close a portion of Cornell Drive to accommodate the OPC. Indeed, the addition of one southbound lane of Lake Shore Drive will impose further dislocation in exactly that same area. Collectively, these two events will result in the clear and significant adverse impact of a large and critical element of historic Jackson Park. The negative environmental impacts of removing GLFER design elements cannot be mitigated by construction elsewhere. Evaluating the major impact requires an EIS to make good on the evident shortfalls of the EA, which failed to perform the necessary "hard look."

Finally, and much like the unreasonable and incomplete analysis applied throughout the EA, the emphasis on "mitigation" is inadequate and inaccurate on multiple levels. What the EA claims are "temporary" are permanent alterations. Such permanent alterations are significant and cannot be denigrated by using the word temporary. Similarly, it is incorrect to use the word "mitigate" as a synonym for "restoration" because such a transformation is a physical impossibility. These extensive transformations require the "hard look" that the EA has studiously avoided. An EIS is needed to deal with all of the many and significant impacts of the proposed OPC project, which are dangerous considered in isolation from each other, and fatal when their synergistic impacts are taken into account. As a practical matter, a thorough EIS is needed to remedy the defects here.

XII. The Report Does Not Identify Or Evaluate The Cumulative And Indirect Impacts Of The Massive OPC Project.

The failure to perform a "hard look" taking into consideration the intensity of significance of the impacts and unique characteristics of the area is a recurrent issue in this EA. This is further demonstrated by the refusal to evaluate the indirect and cumulative effects of this major project, both during construction and afterwards. Indirect effects are defined to include the following:

> Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
>
> Cumulative impacts include:
>
> the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7; *see also* 40 C.F.R. § 1508.25 (requiring that agencies take cumulative impacts into consideration during NEPA review). The regulation states that "[c]umulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. In that vein, we have held that a consideration of cumulative impacts must also consider "[c]losely related and proposed or reasonably foreseeable actions that are related by timing or geography. *Vieux Carre Prop. Owners, Residents, & Assocs., Inc. v. Pierce*, 719 F.2d 1272, 1277 (5th Cir.1983).

See O'Reilly v. U.S. Army Corps of Engineers, 477 F.3d 225, 235 (5th Cir. 2007).

On the issue of cumulative effects, the analysis advanced in the EA does not comport with what is typical and what is required for such an analysis. For example, a cumulative effects analysis typically uses a larger project area than that analyzed under other environmental disciplines. Here, as seen in the discussion in Section 5.2, there is not a description of the project's cumulative effects analysis area. The seven past, present, and reasonably foreseeable actions described in Section 5.2 are limited to public projects conducted by CDOT and CPD, four of which are in or include Jackson Park. In so doing, the past, present, and reasonably foreseeable actions that have affected or are expected to affect the area are unreasonably constrained and they do not even include impacts to two impact topics identified in Section 5.2 range (GLFER and Socio-Economic Impacts). The analysis is not detailed in any fashion about the expected effects from the other actions.

Further, the cumulative analysis does not describe the overall impact that can be expected if individual impacts are allowed to accumulate. The CEQ regulations identify the following "significance factors" that should be considered in evaluating intensity, including whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on

the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts. 40 C.F.R. § 1508.27(b)(4), (5), (7). An assessment of cumulative effects properly and necessarily asks whether a project with individually "mitigated-to-insignificant" effects may yet result in significant environmental impacts when those effects are aggregated with the foreseeable effects of other environmentally impacting human activities and natural occurrences. Such an analysis was not performed, or performed properly, in this EA.

The EA provides at most a superficial analysis of the indirect and cumulative analysis, by resorting to buzz words that reflect largely the predetermined outcome of its drafters. As the Court said in *O'Reilly*:

> As above, we agree with the district court that this bare assertion is simply insufficient to explain *why* the mitigation requirements render the cumulative effects of this project less-than-significant, when considered with past, present, and foreseeable future development in the project area, including the project's other two potential phases. The intervenor argues that: "one may presume that through the mitigation requirement contained in NEPA all permits issued prior to the one under consideration had their respective impacts mitigated to levels of insignificance." We cannot accept that presumption as legally and empirically valid, however, because the Corps's EA provides no rational basis for concluding that when the individually "mitigated-to-insignificant" effects of this permit are added to the actual post-dredge and fill effects of 72 other permits issued to third parties by the Corps in the area, that the result will not be *cumulatively* significant. In so holding, we do not, as Mr. Bopp asserts, ask the agency to treat the EA as a "local land-use planning guide." We simply agree with the district court's determination that the EA provides too little information as to the workability of the mitigation measures to conclude that the Corps took a "hard look" at the project, realistically assessed its individual and cumulative environmental effects, and reasonably found that the mitigation measures imposed will reduce those effects to a less-than-significant level.

O'Reilly, 477 F.3d at 235.

The failure in this case to aggregate small effects into the actual impact is a serious error that weaves its way throughout the "analysis" set forth in the EA generally. Such issues should be addressed through a comprehensive EIS.

XIII. Public Engagement and Involvement Was Infrequent And A Sham.

The City's public involvement prior to making the EA available for public comment does not meet the spirit of NEPA to facilitate public participation in major decisions. The failure to observe the requirements of sound democratic and administrative process reinforces the need for an EIS.

More concretely, the City conducted the first and only public information meeting (PIM) more than two years ago on September 17, 2018. By the first PIM was conducted the following milestones in the merged NEPA-404 process had been completed:

- Purpose and Need presented to agencies – March 16, 2018
- Alternatives to be carried forward presented – May 4, 2018
- Preliminary preferred alternative presented – June 21, 2018
- Agency concurrence on preliminary preferred alternative – July and August 2018

The purpose and need information presented at the September meeting consisted of two slides with several bullet points on each slide identifying the purpose and need for NPS and FHWA. There was also a brief slide showing the NPS Action/FHWA No Build Alternative and the FHWA Action Alternative, but that exhibit offered no sense of the range of build alternatives that the Agencies in secrecy had developed and screened in the search for its preordained preliminary alternative. This meager effort falls far short of meaningful and proper public participation.

The agencies and the City also failed to hold other meetings to share information regarding alternatives and impacts. Instead they chose to spring this threadbare EA at this opportune point in time, cluttering it with hundreds of pages of appendices for which various groups and individuals faced constrained and limited time to respond. While a complete project website is a benefit, it is not a replacement for the information sharing that occurs at well-run public information meetings. Because most people are unfamiliar with the project development process under NEPA, it is unrealistic to expect them to make sense of the information offered on the project website. The City should understand the social benefits derived from a thorough public involvement program, so that it should encourage, not stymie public feedback before making its decisions.

Instead the City only held sham meetings with predetermined outcomes. As described above, the August 2019 meeting scheduled to discuss the efforts to address adverse effects -- avoidance, minimization and mitigation – did not none of that, but instead reflected an orchestrated filibuster followed by censored questions all designed to squelch any public conversation. But at the same time, the agencies had *ex parte* communications with the Obama Foundation (directly or indirectly) to advance its interests demonstrated by the sole advancement of "mitigation" and by identifying the only plan for UPARR conversion that was presented and considered (then and now as seen in the EA).

CONCLUSION

The present EA is an exercise in obfuscation, omission and misdirection. There is a failure to employ the hard look doctrine. The intensity of the project and significance of the impacts demand a carefully done EIS that evaluates all of the many problematic features of the proposed OPC.

Respectfully submitted,

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EXECUTIVE SUMMARY

Sam Schwartz Engineering, DPC (SSE) conducted a traffic impact study for the proposed University of Chicago Washington Park site for the Barack Obama Presidential Library (OPL). Existing and future conditions in the study area have been described, analyzed, and evaluated with respect to transportation operations and the impact of the proposed development.

The location of the Washington Park site is easy to access for visitors and staff. It is located approximately 0.75 miles from the Dan Ryan Expressway and is directly adjacent to the CTA Green Line station at Garfield.

The study analyzed the following major intersections within the proximity of the site:

- Garfield Boulevard/Wells Street
- Garfield Boulevard/Wentworth Avenue
- Garfield Boulevard/Martin Luther King Drive
- Garfield Boulevard/Ellsworth Drive/Morgan Drive
- 51st Street/Martin Luther King Drive/Ellsworth Drive

Garfield Boulevard, part of Chicago's system of historic boulevards, has a right of way of 200' and provides three travel lanes in both the eastbound and westbound directions. Peak hour parking regulations provide a forth lane in each direction. Garfield Boulevard has significant vehicular capacity between the site and the Dan Ryan Expressway. Traffic currently moves along Garfield Boulevard without much delay and the additional traffic generated by the OPL can be accommodated without adding significant delay to any of the study intersections. Overall, vehicles will be able to easily access the site and the OPL will not have a significant impact on the traffic operations in the neighborhoods.

The following details the recommendations for parking, access, and improvements to the safety and operations of multi-modal access.

- Access to visitor parking should be provided on Prairie Avenue and/or 54th Street. Access should be prohibited on Garfield Boulevard in order to create a direct pedestrian connection between the Garfield Green Line station and the site.

- Service access and secure access can be provided from Martin Luther King Drive or Ellsworth Drive.

- Minor traffic signal timing/phasing modifications should be implemented along Garfield Park, as appropriate, to provide optimal operations and to facilitate traffic to and from the OPL.

- Ellsworth Drive should be vacated, between Garfield Boulevard and 51st Street, and be considered as a secondary access for handicap parking, taxis, tour buses and service vehicles. Vacating Ellsworth Drive will not only potentially reduce the amount of asphalt within Washington Park, but it will also significantly improve the safety and operations of the

intersections of 51st Street/Martin Luther King Drive/Ellsworth Drive and Garfield Boulevard/Morgan Drive/Ellsworth Drive. Closing Ellsworth Drive at 51st Street/Martin Luther King Drive will necessitate a redesign of signals, striping and some curbs at that intersection. It is recommended that pedestrian facilities be updated in the redesign.

- A traffic signal and signalized and marked pedestrian crossings should be installed at the intersection of Garfield Boulevard/Morgan Drive/Ellsworth Drive to improve the safety for all users.

- It is estimated that the site will generate a peak parking demand of 404 parking spaces on the 30th highest visitor day of the year (typical design day). It is recommended that all parking be provided on the portion of the site located on the northwest corner of Garfield Boulevard and Martin Luther King Drive.

- There are a number of options to accommodate any overflow parking for special events and the highest visitor days, including the garages that serve the University of Chicago Medicine and the University of Chicago at Ellis Avenue. There is also a considerable amount of available on-street parking in the area.

- It is estimated that the site will generate a peak bus demand of 5 buses on the 30th most popular day (typical design day). Special programs and exhibits within the OPL can increase the demand for buses. It is recommended that buses be staged on Ellsworth Drive or on the portion of the site located on the northwest corner of Garfield Boulevard and Martin Luther King Drive.

- A staff member should be given the responsibility of coordinating all transportation, particularly for special events.

- There are plans to provide bus rapid transit on Garfield Boulevard. This would provide additional transit access for residents on the west side of the city and visitors arriving on the Red Line. It is recommended that bus shelters be provided for both the northbound and southbound stops at Garfield Boulevard for the #3 bus. Train arrival information should be provided at street level, and possibly within the Library entrance, for the Garfield Green Line station. The Garfield Green Line station should be renamed Garfield-Obama Library to make it easy for visitors to identify their stop.

- The streets within the park were originally designed to allow horse and buggies to easily traverse through them. This design provided excess space for modern vehicles, which has led to vehicles using these streets to speed through the park. The following are the recommended geometrics for each internal street:

    - Morgan Drive, between Rainey Drive and Payne Drive: Reduce lane width to 10.5 feet and parking lane on the east side to 8 feet. This would reduce the street by 15 feet in width and remove approximately 0.35 acres of asphalt.

  - Payne Drive, between Rainey Drive and Morgan Drive: Reduce lane width to 10.5 feet and the parking lanes to 8 feet. This would reduce the street by 7 feet in width and remove approximately 0.08 acres of asphalt.
  - Rainey Drive, between Payne Drive and Morgan Drive: Reduce lane width to 10.5 feet. This would reduce the street by 19 feet in width and remove approximately 0.35 acres of asphalt.

- A roundabout should be considered at the intersection of Morgan Drive/Rainey Drive and Payne Drive/Rainey Drive. Additional traffic calming measures, such as speed humps, chicanes, and signage should be installed within the park streets.
- Safe pedestrian crossings should be installed at Morgan Drive/Rainey Drive and Payne Drive/Rainey Drive if roundabouts are not installed. They may include underpasses, stop control, or speed tables, similar to other pedestrian crossings within the University of Chicago.
- The sidewalk on the north side of Garfield Boulevard, between Prairie Avenue and Martin Luther King Drive, should be widened to at least 18 feet.
- The sidewalk on the west side of Martin Luther King Drive should be widened to 18 feet.
- A 12-foot wide sidewalk should be provided on the east side of Martin Luther King Drive, between 51st Street and Garfield Boulevard.
- Consideration should be given to developing a streetscape for Martin Luther King Drive and removing the guard rail.
- The intersection of Garfield Boulevard and Martin Luther King Drive should be modified to provide more safety and priority for pedestrians.
- There is currently a cycle track on 55th Street, which allows for safe bicycle travel on 55th Street protected from vehicular traffic. An on-street bike lane connects this facility through Washington Park, requiring bicyclists to ride next to fast-moving traffic through the park. It is recommended that a shared use path be designated within Washington Park that connects the 55th Street cycle track to the OPL. This should connect to the future bicycle facility on Garfield Boulevard.

INTRODUCTION

Sam Schwartz Engineering, DPC (SSE) was retained by the University of Chicago to conduct a traffic impact study for the proposed Washington Park site for the Barack Obama Presidential Library (OPL). The Washington Park site location is illustrated on ***Figure 1***.

The following report presents and documents SSE's methodology, data collection, analyses, and identifies improvements, as necessary, to mitigate impacts the development's traffic may have on the adjacent roadway network.

As proposed, the project consists of the construction of the library itself within Washington Park between Martin Luther King Drive and Ellsworth Drive, north of Garfield Avenue. Visitor parking will be provided on the west portion of the site, on the northwest corner of Martin Luther King Drive and Garfield Boulevard. Vehicular access to visitor parking can be provided via 54th Street and Martin Luther King Drive and/or Prairie Avenue and Garfield Boulevard. This study analyzes the more conservative scenario where primary access is via Martin Luther King Drive, which carries more traffic than Prairie Avenue.

Ellsworth Drive will be vacated and closed to through traffic. Vehicular access to the site will be provided by Ellsworth Drive at Garfield Boulevard. This access will be used for handicapped parking, visitor pick-up and drop-off by private vehicles and taxis, and tour bus pick-up and drop-off, and service vehicle access.

The purpose of this study is to fulfill the criteria for accessibility, circulation and parking set forth by the Barack Obama Foundation. The objectives of the study are as follows:

- Analyze the existing traffic, parking and multi-modal operations in the study area.
- Estimate the new traffic generated by the proposed Presidential Library.
- Analyze the future traffic, parking and multi-modal operations in the study area.
- Analyze the future site access and circulation.
- Provide mitigation strategies and recommendations related to traffic, parking and multi-modal operations, site access and circulations, as well as to the management of traffic during construction.

The study area, with the study intersections identified, is shown on ***Figure 2***.

N

Not to Scale

Figure 1

Site Location Map

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D.P.C.

N

Not to Scale

Figure 2

Study Intersections Map

● = Study Intersection

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EXISTING CONDITIONS

This section of the study provides a description of the Washington Park site, the adjacent land uses, a summary of the data collection process and an analysis of the existing transportation conditions.

Site Location

The eastern portion of the site, where the OPL would sit is owned by the Chicago Park District. Current use of the site is parkland and path, with no formal recreational uses. The Chicago Park District is home to many of the nation's and city's most popular museums and attractions, including the Museum of Science and Industry, the Field Museum, the Shedd Aquarium, the Adler Planetarium, the DuSable Museum and the Lincoln Park Zoo. The western portion of the site is currently owned by the Chicago Transit Authority (CTA) and the University of Chicago. Current uses include the CTA Garfield Green Line station, surface parking for the CTA station, a Citgo gas station, and empty lots, including a lot which was used for staging of vehicles and buses during the reconstruction of the Green Line station.

Proposed Presidential Library Use and Operation

The Barack Obama Presidential Library will serve as a repository of the historical documents related to Barack Obama, the 44th President of the United States of America. It will include exhibits, displays, and souvenir shops. The building footprint is estimated at approximately 200,000 square feet. The typical hours of operation are anticipated to be between 9:00 AM and 5:00 PM and it is expected to be closed on major holidays such as Thanksgiving, Christmas, and New Year's Day. An estimated 800,000 visitors will come to the OPL each year, of which, approximately 350,000 are expected to be from outside the Chicagoland area.

Area Land Use

The site is currently unoccupied and owned by the City of Chicago. To the west of the site is the CTA Garfield Green Line station. To the northwest and southwest are mainly vacant lots and residential land uses. To the east of the site is Washington Park, including sports fields and the DuSable Museum. East of Washington Park is the University of Chicago and Medical Center.

Existing Area Roadway System

Unless otherwise noted, all streets described below are under the jurisdiction of the Chicago Department of Transportation (CDOT). Roads are described in the study area from west to east, then from north to south.

Garfield Boulevard is a 6-lane 200-foot wide roadway, with eastbound and westbound lanes separated by an 80-foot median with grass and trees. Garfield Boulevard is part of Chicago's historic boulevard system. On-street parking exists on the north and south curbs and is restricted during peak hours, providing an additional travel lane during those times. At its signalized intersection with Wentworth/Dan Ryan northbound ramps, Garfield Boulevard provides four through lanes and one right-turn lane in the westbound direction, and three through lanes and two left-turn

lanes in the eastbound direction. At its signalized intersection with Wells Street/Dan Ryan southbound ramps, it provides three through lanes and two left-turn lanes in the westbound directions, and provides five through lanes and one right-turn lane in the eastbound direction. At its intersection with Martin Luther King Drive it provides three lanes in the eastbound direction, and three lanes and a left-turn lane in the westbound direction. At its intersection with Morgan Drive, it provides a left-turn lane and two right-turn lanes in the eastbound direction.

Martin Luther King Drive is a two-lane, 38-foot roadway. On-street parking is provided on the west side of the roadway. Bike lanes are provided in the northbound and southbound directions. North of 51st Street, it also provides a service drive on the each side of the roadway which provides two lanes of parking each. At its signalized intersection with Garfield Boulevard it provides one lane in the northbound direction, and two lanes in the southbound direction. At its intersection with 51st Street and Ellsworth Drive, it provides one wide lane in the northbound direction, and a left-turn lane, a through lane to Ellsworth and a shared through/right-turn lane in the southbound direction.

Ellsworth Drive is a two-lane, 46-foot roadway. Parking is provided. Buffered bike lanes are provided in the northbound and southbound directions. At its signalized intersection with Martin Luther King Drive, it provides a shared through/right-turn lane and a left-turn lane in the northbound direction. At its unsignalized intersection with Garfield Boulevard and Morgan Drive, it provides a shared through/right-turn lane with right-turn channelization.

51st Street is a two-lane, 38-foot roadway. On-street parking is provided on the north and south sides of the street. At its signalized intersection with Martin Luther King Drive & Ellsworth Drive, 51st Street provides a right-turn pocket, a through lane and a left-turn lane in the eastbound direction, and two lanes and a left-turn lane in the westbound direction.

Pedestrian/Bike Facilities

Numerous paths for pedestrian travel are provided within the park. Sidewalks are provided along all study roadways on both sides of the street with the following exceptions. No sidewalks are provided along Ellsworth Drive within Washington Park and no sidewalk is provided on the east side of Martin Luther King Drive along the park. No sidewalks are provided on the interior median of Garfield Boulevard. Crosswalks are not provided on the west side of Wentworth Avenue and the east side of Wells Street at Garfield Boulevard. A bike route is provided along Martin Luther King Drive, Morgan Drive, and Ellsworth Drive. A Divvy bikeshare docking station is provided at the Garfield Green Line station. This is currently the last bikeshare station going south and west. Additional stations to expand the service in 2015 are planned along Garfield and at the CTA Garfield Red Line station.

Existing Transit Service

The proposed site is well-served by public transportation. The Chicago Transit Authority (CTA) operates multiple existing bus routes adjacent to the proposed site, as listed below:

- #55 - Garfield
- #3 - MLK

- #15 - Jeffrey Local
- #59 - 59th / 61st

The Green Line Garfield station is just within and west of the site. The #55 bus route connects riders 0.75 miles to the Garfield Red Line station as well.

Existing Traffic Volumes

Existing traffic volumes were determined by manual traffic counts conducted in October 2014 during the weekday and Saturday midday peak periods (10:00 AM to 2:00 PM) at the following intersections:

- Garfield Boulevard at Wentworth Avenue/Dan Ryan Expressway northbound ramps
- Garfield Boulevard at Wells Street/Dan Ryan southbound ramps
- Garfield Boulevard at Martin Luther King Drive
- Garfield Boulevard at Ellsworth Drive and Morgan Drive
- 51st Street at Martin Luther King Drive and Ellsworth Drive

Intersection traffic counts include measuring the auto and bicycle traffic passing through each intersection as well as the number of pedestrians crossing each intersection approach in order to best represent existing operations at the study intersections. The weekday afternoon and Saturday peak periods were chosen since they coincide with the anticipated peak periods of the surrounding roadway system and the proposed development. The results indicate that the peak hour of existing traffic during the weekday midday peak occurred from 1:00 pm to 2:00 pm and the Saturday midday peak occurred from 11:30 am to 12:30 pm.

Based on traffic count data retrieved from the Illinois Department of Transportation website, the average daily traffic in the vicinity of the development is:

- 30,2000 vehicles on Garfield Boulevard, (year 2010)
- 8,700 vehicles on Martin Luther King Drive (year 2010)
- 2,800 vehicles on Indiana Avenue (year 2010)
- 3,500 vehicles on Michigan Avenue (year 2010)
- 3,020 vehicles on Morgan Drive (year 2010)
- 11,600 vehicles on Rainey Drive (year 2010)

The existing peak hour volumes are illustrated on ***Figure 3***. ***Figure 4*** depicts the pedestrian volumes.

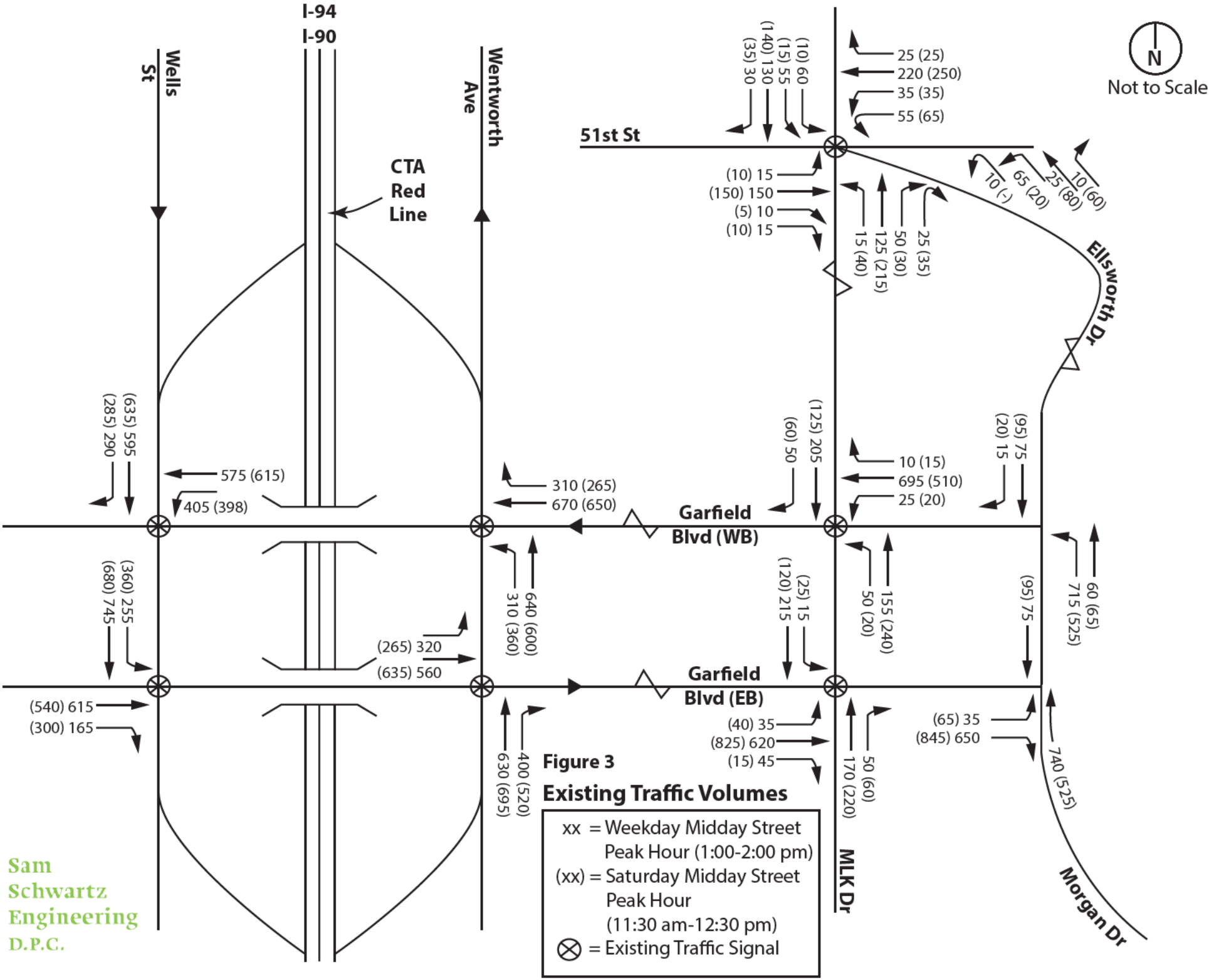

Figure 3

Existing Traffic Volumes

xx = Weekday Midday Street Peak Hour (1:00-2:00 pm)

(xx) = Saturday Midday Street Peak Hour (11:30 am-12:30 pm)

⊗ = Existing Traffic Signal

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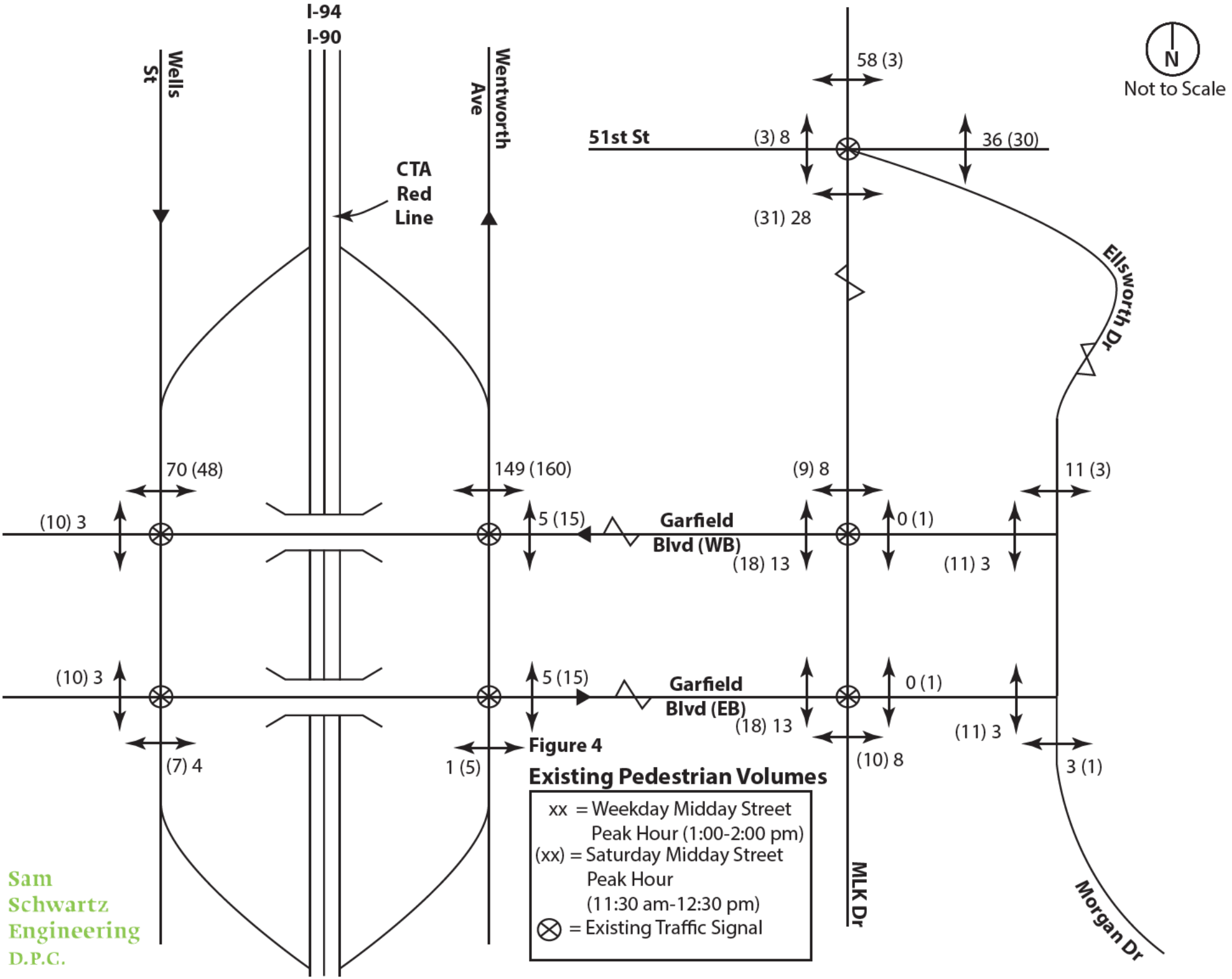


Figure 4

Existing Pedestrian Volumes

xx = Weekday Midday Street Peak Hour (1:00-2:00 pm)
(xx) = Saturday Midday Street Peak Hour (11:30 am-12:30 pm)
⊗ = Existing Traffic Signal

Existing Operations

The effectiveness of an intersection's operation is measured in terms of Level of Service (LOS), which is assigned a letter from A to F based on the average total delay experienced by each vehicle passing through an intersection. LOS A is the highest, representing the least delay, LOS E represents saturated or at-capacity conditions, and LOS F represents oversaturated conditions. The minimum intersection LOS that is generally accepted by industry standards is LOS D.

An intersection capacity analysis was performed for the study intersections for the weekday and Saturday peak hour using the methodologies outlined in the *Highway Capacity Manual (HCM)*[1], using Synchro software for the analysis. The existing timings at this intersection were obtained from the Chicago Department of Transportation. The results in ***Table 1*** show that all approaches at the study intersections operate at acceptable levels of services, at LOS C, or better.

Table 1: Existing Intersection Level-of-Service

Intersection/Peak Hour/Lane	Weekday Midday Peak Hour		Saturday Midday Peak Hour	
	Delay [A]	LOS [B]	Delay	LOS
Garfield EB at Wentworth Ave				
LT EB approach	7.5	A	7.9	A
TR NB approach	25.7	C	27.7	C
Overall Intersection	**17.3**	**B**	**19.3**	**B**
Garfield WB at Wentworth Ave				
TR WB approach	23.9	C	22.5	C
LT NB approach	1.8	A	1.9	A
Overall Intersection	**13.0**	**B**	**11.9**	**B**
Garfield EB at Wells Street				
TR EB approach	20.0	B	18.7	B
LT SB approach	2.2	A	2.2	A
Overall Intersection	**10.0**	**B**	**9.6**	**A**
Garfield WB at Wells Street				
LT WB approach	7.6	A	7.8	A
TR SB approach	28.8	C	29.1	C
Overall Intersection	**17.7**	**B**	**18.0**	**B**
Garfield EB at MLK Drive				
LTR EB approach	17.9	B	20.1	C
TR NB approach	18.1	B	20.9	C
LT SB approach	6.5	A	8.1	A
Overall Intersection	**15.7**	**B**	**18.9**	**B**
Garfield WB at MLK Drive				
LTR WB approach	18.2	B	17.5	B
LT NB approach	6.6	A	5.8	A
TR SB approach	14.6	B	11.5	B
Overall Intersection	**15.4**	**B**	**13.3**	**B**
MLK Drive at 51st Street/Ellsworth Drive				
LTR EB approach	24.2	C	24.7	C
LTR WB approach	24.2	C	25.2	C
LTR NB approach	23.7	C	30.6	C
LTR SB approach	31.1	C	33.5	C
LTR NWB approach	29.6	C	32.6	C
Overall Intersection	**26.3**	**C**	**28.8**	**C**

[A] Average control delay in seconds per vehicle.
[B] Level of service.

[1]Highway Capacity Manual, Transportation Research Board, National Research Council, Washington, D.C., 2010.

FUTURE TRAFFIC CHARACTERISTICS

This section of the report presents the traffic characteristics associated with the OPL Washington Park Site and evaluates the impact of future traffic on the area street system. This includes discussions regarding site development plans, site-generated traffic volumes and their distributions on the surrounding roadway network. Site access, site traffic assignment and future traffic volumes will also be discussed.

Traffic Growth

Construction and occupancy of the proposed OPL is currently expected to occur in seven years, by the year 2021. It is anticipated that this development would stimulate the redevelopment of Garfield Boulevard corridor. Accordingly, in order to account for the general traffic growth associated with new development in the surrounding area as the proposed development is constructed, SSE applied an annual, compounded growth rate of 2% to existing traffic volumes along Garfield Boulevard and 0.5% to the remaining study area roadways.

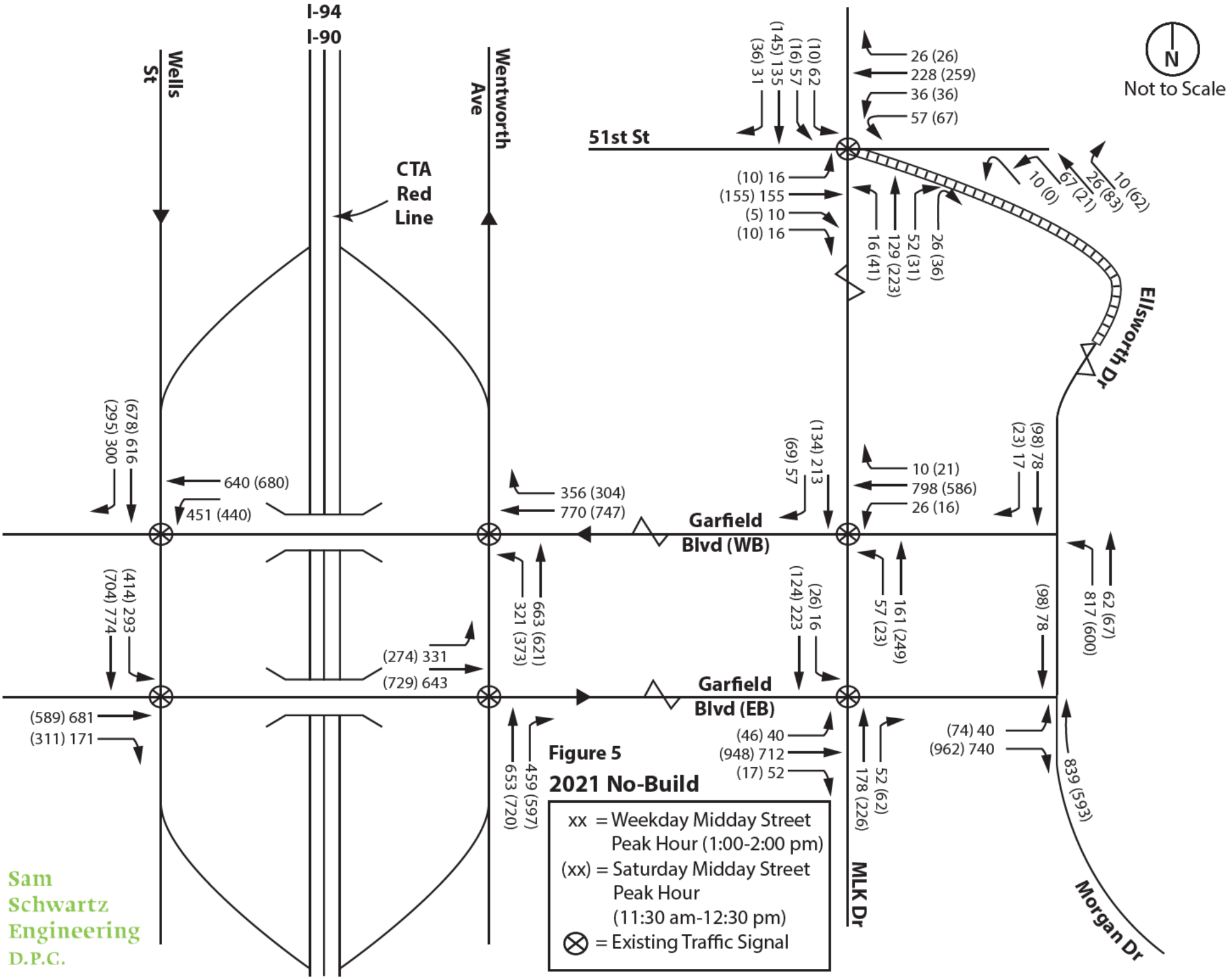
2021 No-Build Conditions (without Proposed Presidential Library)

The 2021 No-Build peak hour traffic volumes were accordingly developed by applying the base 2.0 percent and 0.5 percent annual growth rate (approximately 1.14 and 1.04 percent over 7 years, respectively) on Garfield Boulevard and other roadways, respectively, to the existing traffic (Figure 3). The 2021 No-Build traffic-flow networks are graphically depicted on ***Figure 5***.

Proposed Development Plan

The proposed development plan includes the construction of the Barack Obama Presidential Library. The building footprint is estimated at approximately 200,000 square feet. Its anticipated typical hours of operation are between 9:00 AM and 5:00 PM and closed on major holidays such as Thanksgiving, Christmas, and New Year's Day. It is estimated that 800,000 visitors will come to the OPL each year, of which, approximately 350,000 are expected to be from outside the Chicagoland area. It is anticipated to be served by a minimum of 404 vehicular parking spaces on site. It will provide a dedicated bus area for drop-off/pick-up operations and storage for a minimum of 5 buses.

The proposed development plan includes the vacation of Ellsworth Drive within Washington Park. Traffic currently using Ellsworth Drive will be rerouted. The re-assignment of 2021 No-Build traffic is graphically depicted on ***Figure 6***.


I-94
I-90
Wells St
Wentworth Ave
CTA Red Line
51st St
Ellsworth Dr
Garfield Blvd (WB)
Garfield Blvd (EB)
MLK Dr
Morgan Dr
N
Not to Scale
(10) 62
(16) 57
(145) 135
(36) 31
26 (26)
228 (259)
36 (36)
57 (67)
(10) 16
(155) 155
(5) 10
(10) 16
16 (41)
129 (223)
52 (31)
26 (36)
10 (0)
67 (21)
26 (83)
10 (62)
(678) 616
(295) 300
640 (680)
451 (440)
356 (304)
770 (747)
(134) 213
(69) 57
10 (21)
798 (586)
26 (16)
(98) 78
(23) 17
(414) 293
(704) 774
(274) 331
(729) 643
663 (621)
321 (373)
(26) 16
(124) 223
57 (23)
161 (249)
(98) 78
62 (67)
817 (600)
(589) 681
(311) 171
(46) 40
(948) 712
(17) 52
653 (720)
459 (597)
178 (226)
52 (62)
(74) 40
(962) 740
839 (593)
Figure 5
2021 No-Build
xx = Weekday Midday Street Peak Hour (1:00-2:00 pm)
(xx) = Saturday Midday Street Peak Hour (11:30 am-12:30 pm)
⊗ = Existing Traffic Signal
Sam Schwartz Engineering D.P.C.

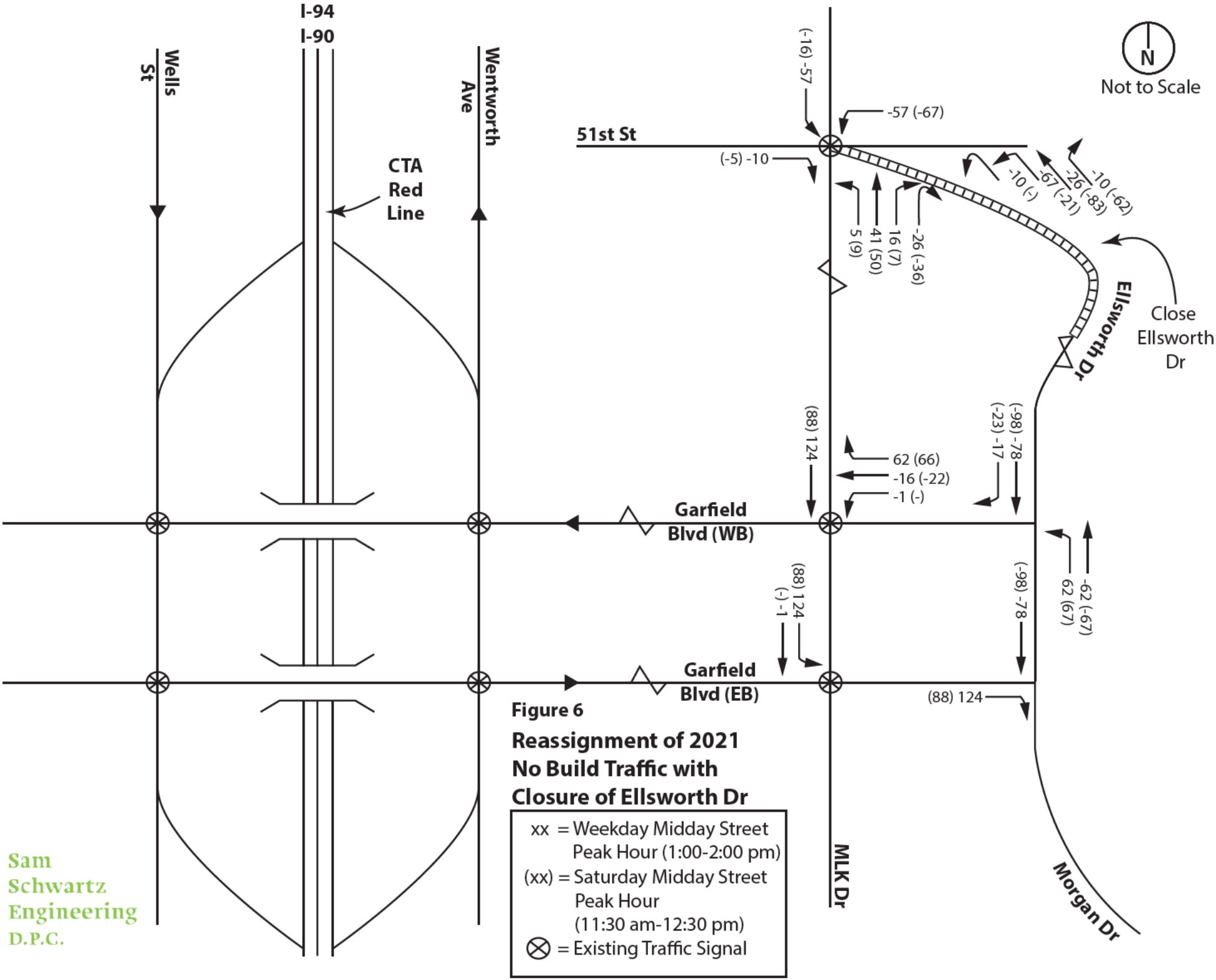


Figure 6

Reassignment of 2021 No Build Traffic with Closure of Ellsworth Dr

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Site Access

With the location of the OPL Washington Park site in close proximity to major roadways (Lake Shore Drive, Dan Ryan Expressway), as well as the University of Chicago Campus, Chicago's lakefront, other cultural attractions, and public transportation, OPL visitors will use a variety modes of transportation to access the site. All visitors arriving by automobile (personal or taxi) will enter and exit the site via the proposed access on Prairie Avenue, 54th Street, or Martin Luther King Drive. Buses associated with student or other organized groups are planned to pick-up/drop-off OPL visitors using a dedicated bus area to be located as close to the site as possible either within the site or curbside along Martin Luther King Drive.

Public transportation options such as the CTA Green Line, CTA Red Line, and CTA bus provide excellent access to the OPL Washington Park site. The CTA Garfield Green Line station is located adjacent to the site. CTA bus routes operate along Garfield Boulevard and Martin Luther King Drive.

Based on data from other museums in the City of Chicago, travel time data, and availability of public transportation to the OPL Washington Park site, the mode of transportation distribution assumed for visitors to and from the proposed site is summarized in ***Table 2***.

Table 2: Mode of Transportation

Mode	Percentage
Car	50%
Walk	10%
Taxi	10%
Transit	20%
Tour / School Bus	9%
Bike	1%
Total	**100%**

Trip Generation

The amount of traffic generated by a development depends on the type and density of the land use being proposed. SSE estimated the trip generation for the proposed OPL based on visitor estimates provided by the University of Chicago, mode of transportation data in the site vicinity, and data from other museums in the City of Chicago and New York City.

SSE used the following assumptions to develop the trip generation for the OPL Washington Park site:

- 800,000 visitors
- Approximately 4,919 visitors would arrive on the 30th day (design day)
- Approximately 8,694 visitors would arrive on the peak day
- 50% of the visitors would travel by car

- 10% of the visitors would arrive by taxi
- 9% of the visitors would arrive via a tour / school bus
- The average automobile occupancy would be 2.56 persons per vehicle
- The average bus occupancy would be 41 persons
- The average visitor time would be 2.5 hours

Table 3 presents the estimated trip generation for the proposed OPL Washington Park site.

Table 3: Estimated Trip Generation

Vehicle	Weekday / Saturday Midday Peak Hour		
	In	Out	Total
Automobile (Car/Taxi)	208	202	410
Bus	2	2	4
Total Development	**210**	**204**	**414**

As shown in Table 3, during the weekday midday peak hour, the development is expected to generate approximately 414 new vehicle trips (210 entering and 204 exiting) during the 30th day peak hour.

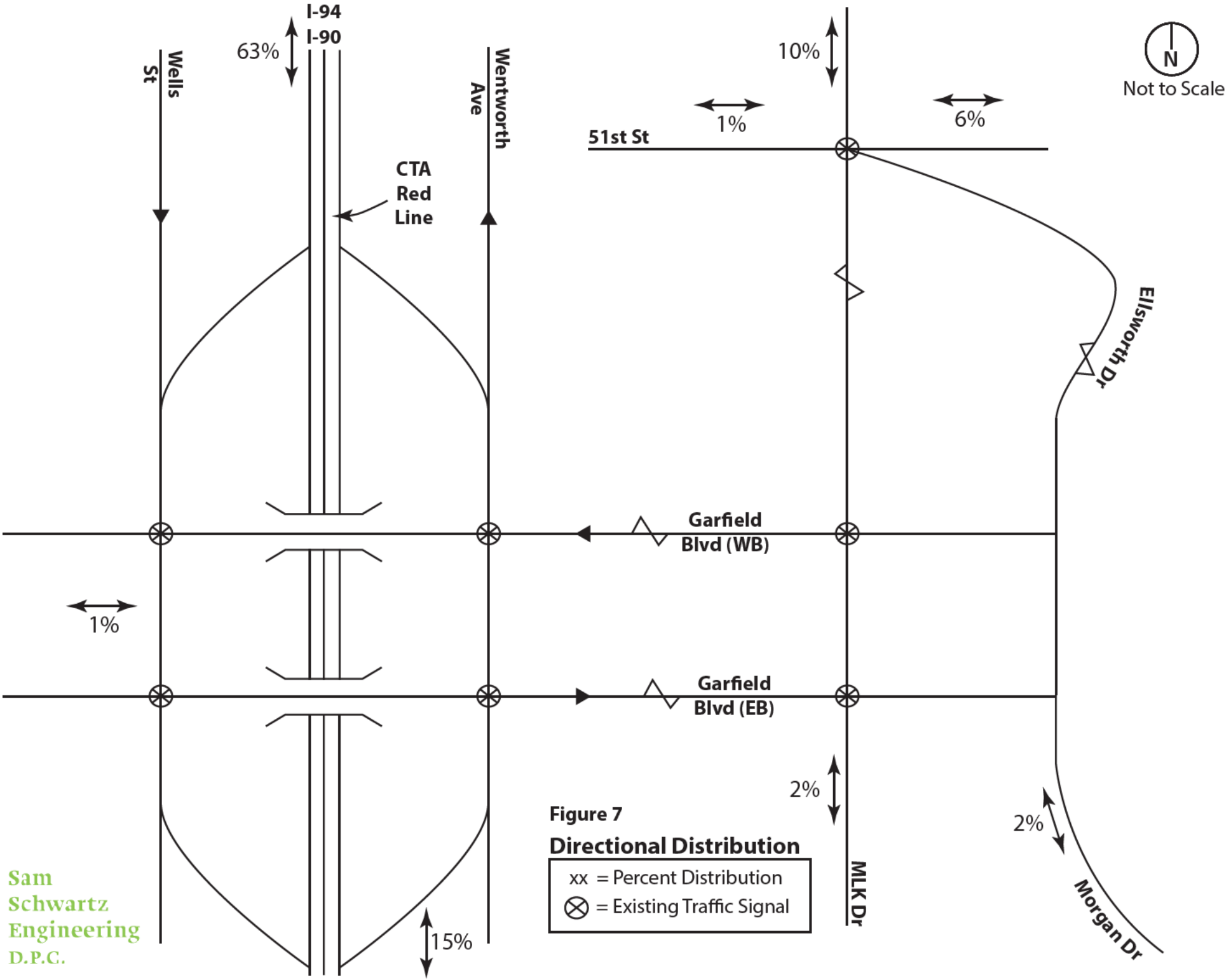
Directional Distribution

The directional distribution of the site-generated traffic is a function of several variables, including the proposed land use, the adjacent roadway network and access, information from the University of Chicago, and engineering judgment. Accordingly, the anticipated origin and destination of the OPL visitors is summarized in ***Table 4***.

Table 4: Visitor Origin / Destination

Origin / Destination	Percentage
North Side (Chicago)	8%
Near West Side (Chicago)	4%
Central (Chicago)	30%
South Side (Chicago)	8%
Other (Chicago)	15%
Outside Chicago City Limits	35%
Total	**100%**

The resulting expected directional distribution of site traffic for the proposed OPL Washington Park site is illustrated on ***Figure 7***.


I-94
I-90
63%
Wells St
Wentworth Ave
CTA Red Line
10%
1%
6%
51st St
N
Not to Scale
Ellsworth Dr
Garfield Blvd (WB)
1%
Garfield Blvd (EB)
2%
2%
MLK Dr
Morgan Dr
15%
Figure 7
Directional Distribution
xx = Percent Distribution
⊗ = Existing Traffic Signal
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Site Traffic Assignment

Based on the direction of travel, the site-generated trips were assigned to the roadway network by utilizing the site estimated trips listed in Table 4 and the anticipated directional distribution outlined on Figure 7. The site traffic assignment is illustrated on ***Figure 8***.

2021 Build Traffic Assignment (with Presidential Library, Washington Park site)

The site-generated traffic volumes (Figure 8) were then added to the 2021 No-Build traffic volumes (Figure 6) to develop the 2021 Build traffic volumes. The total traffic volumes for the year 2021 are shown on ***Figure 9***.

Background Development (Master Plan) Traffic Growth

Traffic growth would also be associated with the expected land developments in the study area. However, there are no known background developments in the study area. There are no "vested" trips to include in this analysis.

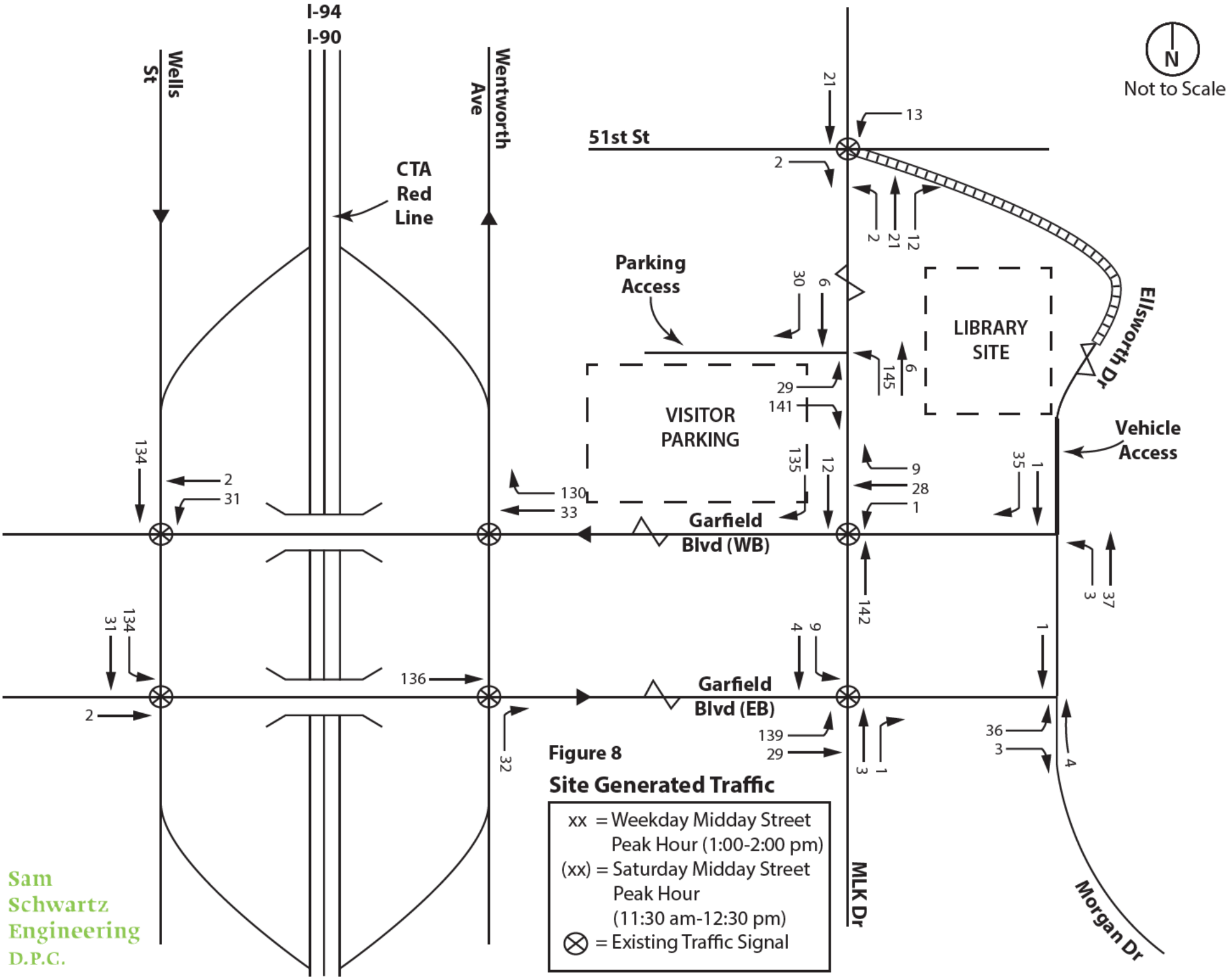

Figure 8

Site Generated Traffic

xx = Weekday Midday Street Peak Hour (1:00-2:00 pm)

(xx) = Saturday Midday Street Peak Hour (11:30 am-12:30 pm)

⊗ = Existing Traffic Signal

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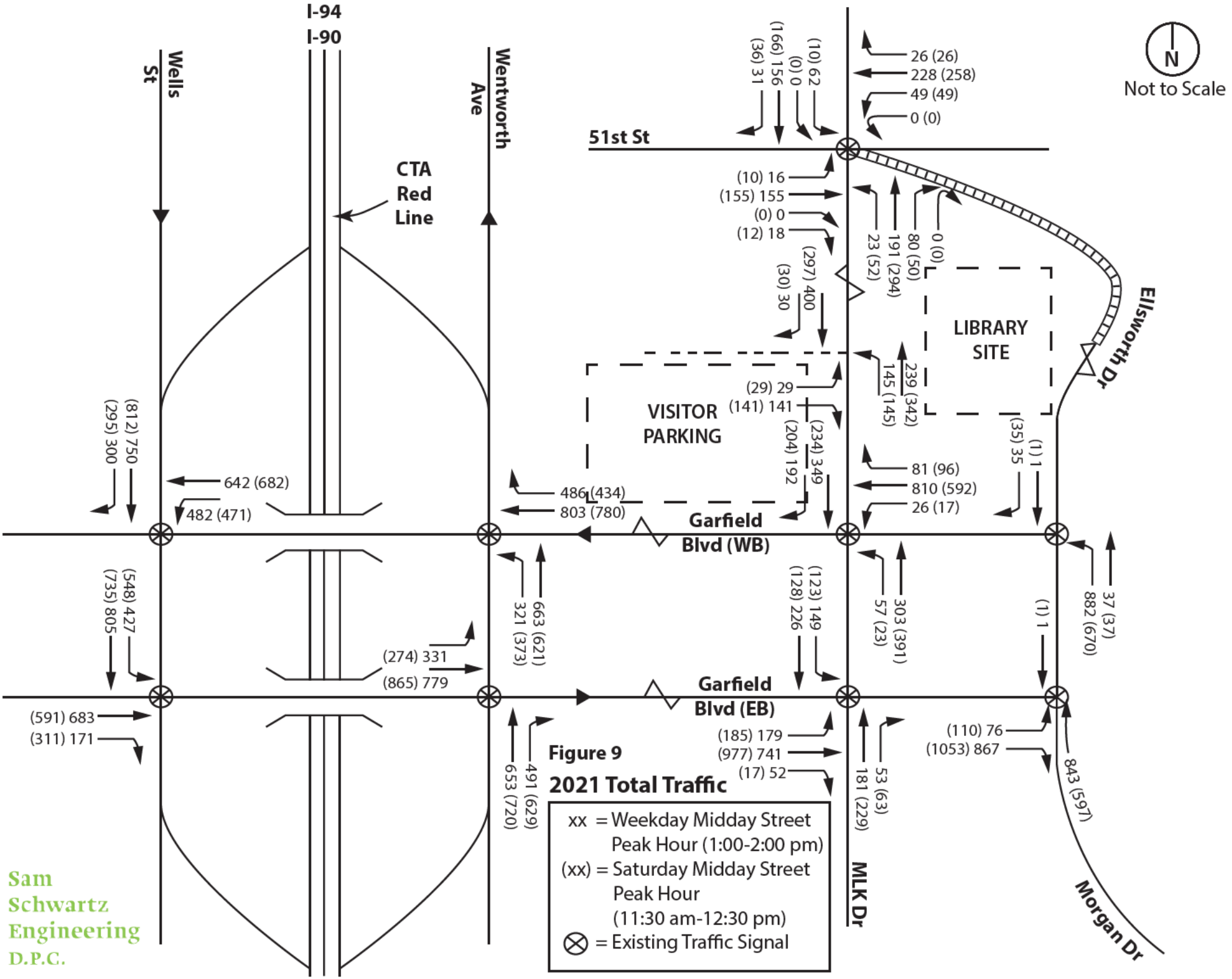

I-94
I-90
Wells St
Wentworth Ave
CTA Red Line
51st St
Garfield Blvd (WB)
Garfield Blvd (EB)
VISITOR PARKING
LIBRARY SITE
Ellsworth Dr
MLK Dr
Morgan Dr
N
Not to Scale
(166) 156
(36) 31
(10) 62
(0) 0
26 (26)
228 (258)
49 (49)
0 (0)
(10) 16
(155) 155
(0) 0
(12) 18
23 (52)
191 (294)
80 (50)
0 (0)
(297) 400
(30) 30
(29) 29
(141) 141
145 (145)
239 (342)
(35) 35
(1) 1
(812) 750
(295) 300
642 (682)
482 (471)
486 (434)
803 (780)
(204) 192
(234) 349
81 (96)
810 (592)
26 (17)
(548) 427
(735) 805
(274) 331
(865) 779
663 (621)
321 (373)
(123) 149
(128) 226
57 (23)
303 (391)
37 (37)
882 (670)
(591) 683
(311) 171
(185) 179
(977) 741
(17) 52
653 (720)
491 (629)
181 (229)
53 (63)
(110) 76
(1053) 867
843 (597)
Figure 9
2021 Total Traffic
xx = Weekday Midday Street Peak Hour (1:00-2:00 pm)
(xx) = Saturday Midday Street Peak Hour (11:30 am-12:30 pm)
⊗ = Existing Traffic Signal
Sam Schwartz Engineering D.P.C.

TRAFFIC ANALYSIS

The following provides a discussion of the evaluation conducted of the weekday midday and Saturday midday peak hours to determine the impact of the proposed Barack Obama Presidential Library on the surrounding roadway system. These analyses include an examination of turn lane needs, traffic control improvements, functional capacity, parking demand, internal circulation, multi-modal assessment, and construction traffic management.

Capacity Analysis

Capacity analyses were conducted for assessing future traffic conditions of the weekday midday and Saturday midday peak hours, again using the methodologies outlined in the *Highway Capacity Manual*, using Synchro software. Summaries of the capacity analysis results indicating the LOS for all study intersections under future conditions are presented in ***Table 5*** and are discussed below.

Table 5: Future Level-of-Service Summary

Intersection/Peak Hour/Lane	2014 Existing		2021 Build (with Library)	
	Delay [A]	LOS [B]	Delay	LOS
Garfield EB at Wentworth Ave				
Weekday Midday Peak Hour				
LT EB approach	7.5	A	7.7	A
TR NB approach	25.7	C	26.8	C
Overall Intersection	**17.3**	**B**	**17.4**	**B**
Saturday Midday Peak Hour				
LT EB approach	7.9	A	9.2	A
TR NB approach	27.7	C	30.5	C
Overall Intersection	**19.3**	**B**	**20.7**	**C**
Garfield WB at Wentworth Ave				
Weekday Midday Peak Hour				
TR WB approach	23.9	C	49.8	D
LT NB approach	1.8	A	2.0	A
Overall Intersection	**13.0**	**B**	**29.1**	**C**
Saturday Midday Peak Hour				
TR WB approach	22.5	C	36.0	D
LT NB approach	1.9	A	2.1	A
Overall Intersection	**11.9**	**B**	**20.8**	**C**
Garfield EB at Wells Street				
Weekday Midday Peak Hour				
TR EB approach	20.0	B	20.8	C
LT SB approach	2.2	A	2.4	A
Overall Intersection	**10.0**	**B**	**9.9**	**A**
Saturday Midday Peak Hour				
TR EB approach	18.7	B	20.0	C
LT SB approach	2.2	A	2.9	A
Overall Intersection	**9.6**	**A**	**10.0**	**A**

Garfield WB at Wells Street				
Weekday Midday Peak Hour				
LT WB approach	7.6	A	7.7	A
TR SB approach	28.8	C	30.8	C
Overall Intersection	**17.7**	**B**	**18.8**	**B**
Saturday Midday Peak Hour				
LT WB approach	7.8	A	7.7	A
TR SB approach	29.1	C	31.6	C
Overall Intersection	**18.0**	**B**	**19.4**	**B**
Garfield EB at MLK Drive				
Weekday Midday Peak Hour				
LTR EB approach	17.9	B	21.7	C
TR NB approach	18.1	B	18.5	B
LT SB approach	6.5	A	6.8	A
Overall Intersection	**15.7**	**B**	**17.7**	**B**
Saturday Midday Peak Hour				
LTR EB approach	20.1	C	51.4	D
TR NB approach	20.9	C	21.3	C
LT SB approach	8.1	A	9.4	A
Overall Intersection	**18.9**	**B**	**40.2**	**D**
Garfield WB at MLK Drive				
Weekday Midday Peak Hour				
LTR WB approach	18.2	B	26.3	C
LT NB approach	6.6	A	23.6	C
TR SB approach	14.6	B	15.0	B
Overall Intersection	**15.4**	**B**	**22.4**	**C**
Saturday Midday Peak Hour				
LTR WB approach	17.5	B	24.2	C
LT NB approach	5.8	A	21.6	C
TR SB approach	11.5	B	10.7	B
Overall Intersection	**13.3**	**B**	**19.7**	**B**
MLK Drive at 51st Street/Ellsworth Drive				
Weekday Midday Peak Hour				
LTR EB approach	24.2	C	22.7	C
LTR WB approach	24.2	C	21.1	C
LTR NB approach	23.7	C	9.1	A
LTR SB approach	31.1	C	10.7	C
LTR NWB approach	29.6	C	-	-
Overall Intersection	**26.3**	**C**	**15.5**	**B**
Saturday Midday Peak Hour				
LTR EB approach	24.7	C	23.0	C
LTR WB approach	25.2	C	21.6	C
LTR NB approach	30.6	C	13.1	B
LTR SB approach	33.5	C	11.1	B
LTR NWB approach	32.6	C	-	-
Overall Intersection	**28.8**	**C**	**16.8**	**B**
Garfield EB at Morgan Drive				
Weekday Midday Peak Hour				
LR EB approach	-	-	11.4	B
TR SB approach	-	-	14.0	B
TR NW approach	-	-	0.5	A
Overall Intersection	**-**	**-**	**6.3**	**A**
Saturday Midday Peak Hour				
LR EB approach	-	-	12.4	B
TR SB approach	-	-	13.0	B
T NWB approach	-	-	0.3	A
Overall Intersection	**-**	**-**	**8.3**	**A**

Garfield WB at Ellsworth Drive				
Weekday Midday Peak Hour				
LR NB approach	-	-	8.4	A
TR SB approach	-	-	9.3	A
Overall Intersection	**-**	**-**	**8.5**	**A**
Saturday Midday Peak Hour				
LR NB approach	-	-	6.4	A
LTR SB approach	-	-	9.8	A
Overall Intersection	**-**	**-**	**6.6**	**A**

[A] Average control delay in seconds per vehicle.
[B] Level of service.

As shown in Table 5, approach and intersection LOS does not degrade below LOS D in the build condition. In the Saturday peak hour, the intersection of Garfield Boulevard eastbound and Martin Luther King Drive degrades from an LOS B to LOS D in the build condition, with the eastbound approach degrading form an LOS C to LOS D. The intersection LOS can be mitigated to an LOS C by shifting two seconds from the north-south clearance phase to the east-west phase, without degradation to the intersection LOS at the coupled intersection at Garfield Boulevard westbound and Martin Luther King Drive. Additionally, it is anticipated that a higher volume of pedestrians will be crossing Martin Luther King Drive at Garfield Boulevard from the Green Line station and the visitor parking. To accommodate this activity and provide greater safety to pedestrians, a three second leading pedestrian interval could be added in advance of the east-west vehicle phase, by removing time from the north-south phase, without degradation of intersection LOS below level of service C.

Intersection Recommendations

Pedestrian conditions at 54th Street and 53rd Street should be evaluated with the parking and OPL site layout. If the desired walking path to the museum crosses either of these intersections, pedestrian upgrades are recommended, including installing an all way stop at 54th Street, bumpouts on the west side of Martin Luther King Drive, and installation of international crosswalks.

It is recommended that the intersections of Garfield Boulevard and Ellsworth Drive and Morgan Drive be upgraded to a signalized intersection for the safety and convenience of all users at the intersection. This also creates a better pedestrian experience for park users. The intersection should have pedestrian signals and crosswalks.

The vacation of Ellsworth Drive will have geometric impacts to the existing intersection of 51st Street and Martin Luther King Drive. It will be necessary to redesign the signals, striping and curbs for this intersection. The conversion of this intersection to a 4-leg intersection from a 5-leg intersection will have significant safety advantages for all intersection users and will improve vehicle capacity.

Access Recommendations

Access to visitor parking should be provided on Prairie Avenue and/or 54th Street. Access should be prohibited on Garfield Boulevard in order to create a direct pedestrian connection between the Garfield Green Line station and the site.

Additional access must be provided for service vehicles and to provide secure access. This can be provided from either Martin Luther King Drive or the vacated Ellsworth Drive, depending on the final design of the building. A transportation security plan will be developed to ensure safe and secure travel for VIPs and to minimize the operations of area traffic.

Wayfinding Recommendations

Due to the expected amount of visitors from outside the Hyde Park neighborhood, a considerable amount of wayfinding should be provided. This includes signs on the Dan Ryan Expressway and Lake Shore Drive, and on local streets directing vehicles to parking. It should be very clear to drivers where they are going. It is suggested that any existing wayfinding signs on the Dan Ryan Expressway and Lake Shore Drive that identify the University of Chicago be modified to include the Library.

VEHICLE AND TOUR BUS PARKING ANALYSIS

Existing Parking Conditions

SSE conducted parking utilization counts on a typical weekday and weekend within the study area to understand the availability of on-street parking. The counts were conducted in the following study area:

- 51st Street, between Michigan Avenue and Martin Luther King Drive
- 53rd Street, between Michigan Avenue and Martin Luther King Drive
- 54th Street, between Indiana Avenue and Martin Luther King Drive
- Garfield Boulevard, between Michigan Avenue and Martin Luther King Drive
- 55th Place, between Indiana Avenue and Martin Luther King Drive
- 56th Street, between Michigan Avenue and Martin Luther King Drive
- 57th Street, between Michigan Avenue and Martin Luther King Drive
- 58th Street, between Michigan Avenue and Martin Luther King Drive
- 59th Street, between Michigan Avenue and Martin Luther King Drive
- 60th Street, between Michigan Avenue and Martin Luther King Drive
- 61st Street, between Michigan Avenue and Martin Luther King Drive
- 63rd Street, between Michigan Avenue and Martin Luther King Drive
- Michigan Avenue, between 51st Street and 63rd Street
- Indiana Avenue, between 51st Street and 63rd Street
- Prairie Avenue, between 51st Street and 63rd Street
- Calumet Avenue, between 51st Street and 63rd Street
- Martin Luther King Drive, between 51st Street and 63rd Street

All of the parking surveyed is free parking. There are approximately 3,725 on-street spaces in this overall area.

Based on the surveys conducted by SSE, the utilization of on-street parking in the study area on a weekday and Saturday is approximately 30%. There is a considerable amount of on-street parking available.

There are a number of off-street parking lots in the area of the site, including:

- University of Chicago Ellis Avenue Garage
- University of Chicago Medicine Main Garage
- Dyett High School

Estimated Parking Demand

In order to estimate the parking demand generated by the site, SSE gathered historical data from other museums in Chicago to understand the modal split and utilized daily and hourly distribution information from traffic studies conducted for the World Trade Center Memorial & Museum and the Chicago Children's Museum.

Parking is typically designed to accommodate the 30th most popular day of a facility and it is our recommendation that the OPL site be designed to accommodate this demand. Designing a parking facility for the peak day means that for 364 days of the year, there will be excess parking that is unused. Designing the parking at the Washington Park site to meet the demand of the 30th most popular day will ensure that visitors have an excellent experience accessing the site and that costs and land are used in the most efficient manner.

SSE used the following assumptions to develop the parking demand:

- 800,000 visitors
- Approximately 4,919 visitors would arrive on the 30th day (design day)
- Approximately 8,694 visitors would arrive on the peak day
- 50% of visitors would travel by car
- The average vehicle occupancy would be 2.5 persons per vehicle
- The average visitor time would be 2.5 hours

Table 6 displays the hourly parking demand for the site. As can be seen below, the peak hour of parking demand occurs between 11:00 AM and 12:00 PM. This would require 404 parking spaces for the design day and 713 parking spaces for the peak day.

Table 6
Parking Utilization Estimates

hr begin	% of visitors in facility	# of visitors		# of visitors in vehicles		# of vehicles	
		30th Day	Peak Day	30th Day	Peak Day	30th Day	Peak Day
9:00 AM	15%	738	1304	369	652	144	255
10:00 AM	35%	1722	3043	861	1522	336	595
11:00 AM	42%	2066	3651	1033	1826	404	713
12:00 PM	36%	1771	3130	886	1565	346	611
1:00 PM	37%	1820	3217	910	1609	355	629
2:00 PM	38%	1869	3304	935	1652	365	645
3:00 PM	28%	1377	2434	689	1217	269	475
4:00 PM	14%	689	1217	345	609	135	238
5:00 PM	4%	197	348	99	174	39	68

Parking Recommendations

It is recommended that the Washington Park site provide enough parking to meet the design day demand, which equates to 404 parking spaces. The parking should be located on the portion of the site on the northwest corner of Garfield Boulevard and Martin Luther King Drive.

There will be days when the parking demand exceeds supply provided by the on-site parking garage. This situation is common for many large generators of visitors, and there are a number of

different strategies to accommodate this overflow demand. As stated earlier, there are 3,725 on-street parking spaces within walking distance of the Library and there is very low utilization by the current residents. The University of Chicago will have three large parking structures, two at the University of Chicago Medicine and one at 5500 S. Ellis, within a five minute drive and a fifteen minute walk of the location that could be used to manage peak parking demands. There are a number of locations that can accommodate this additional demand, including the parking lots and structures on the University of Chicago campus and on-street parking. It is recommended that a staff member be given the responsibility of being the transportation coordinator and that person identify these peak days and either valet service or remote shuttles be provided so that visitors can park easily and access the Library.

It is recommended that 100 bicycle parking spaces be provided (1 bicycle space per 4 vehicle spaces) in a highly visible location that is convenient to the visitor access of the Library.

Estimated Tour Bus Demand and Recommendations

In order to estimate the tour bus demand generated by the site, SSE utilized the same data from the parking demand study.

SSE used the following assumptions to develop the parking demand:

- 800,000 visitors
- Approximately 4,919 visitors would arrive on the 30th day (design day)
- Approximately 8,694 visitors would arrive on the peak day
- 9% of visitors would travel by car
- The average bus occupancy would be 41 persons per vehicle
- The average visitor time would be 2.5 hours

This would require 5 bus parking spaces for the design day and 9 bus parking spaces for the peak day. It is recommended that buses drop-off and pick-up as close to the site as possible, either curbside or to the west of the Green Line station on-site. There is ample space on-street, both on Martin Luther King Drive and Garfield Boulevard, to accomplish this if it cannot be completed on the site itself.

MULTI-MODAL ASSESSMENT AND RECOMMENDATIONS

As discussed earlier, the Washington Park site has excellent transit access. It is located adjacent to the CTA Green Line, which connects to the Loop and all of the CTA rail lines, the Cermak Road corridor (McCormick Place and Chinatown) and the west side of Chicago. The CTA Red Line is located approximately 0.75 miles to the west of the site and two CTA routes (#3 and #55) run adjacent to the site. Sidewalks are provided on Garfield Boulevard and on the west side of Martin Luther King Drive. A cycle track is provided on 55th Street, to the east of Washington Park, and there are a number of shared use paths within Washington Park.

The following recommendations will enhance the multi-modal safety and connectivity for all users and make transit, walking, or biking to the site a much more attractive option, reducing the traffic impact on the adjacent neighborhoods.

Transit Connectivity and Operations

The Garfield Green Line station should be renamed Garfield-Obama Library to make it easy for visitors to identify their stop, similar to the Cermak-Chinatown, Sox-35th, and 35th-Bronzeville-IIT stations. Train arrival information should be provided at street level, and possibly within the Library entrance, for the Garfield Green Line station.

The bus and pedestrian connections should also be improved at the Green Line station. This includes larger and better bus stops and a traffic signal to allow pedestrians to cross the street with protection.

It is recommended that bus shelters be provided for both the northbound and southbound stops at Garfield Boulevard for the #3 bus and all bus shelters should be improved to provide arrival information.

There are plans to provide bus rapid transit on Garfield Boulevard. This would provide additional transit access for residents on the west side of the city and visitors arriving on the Red Line.

The existing Divvy bikeshare station at the Garfield Green Line station should be expanded and relocated to provide more convenient access to both the Library and the Green Line station.

A future Metra station is proposed on Garfield Boulevard for the Metra Rock Island Line. When constructed, it should be clearly named after the Library to make it easy for visitors to identify their stop. The design of the station should make transfers to the CTA bus seamless and also connect with the CTA Red Line.

Pedestrian Safety and Connectivity

It is likely that the amount of pedestrians in the area of the site will increase considerably with the OPL. To accommodate this increased demand, it is recommended that sidewalks around the site should be widened. The sidewalks on the north side of Garfield Boulevard, between Prairie Avenue

and Martin Luther King Drive, and on the west side of Martin Luther King Drive should be widened to at least 18 feet. A 12-foot wide sidewalk should be provided on the east side of Martin Luther King Drive, between 51st Street and Garfield Boulevard. Consideration should be given to developing a streetscape for Martin Luther King Drive and removing the guard rail.

The intersection of Garfield Boulevard and Martin Luther King Drive should be modified to provide safety and priority for pedestrians. This includes wider international crosswalks, reducing the turning radius on to Garfield Boulevard, narrowing the street crossing distance by providing bumpouts, and leading pedestrian intervals.

The streets within Washington Park were originally constructed to allow two horse and buggies to pass one another. With modern automobiles, these wide streets encourage vehicles to speed through the Park and make it difficult for pedestrians to access and traverse different parts of the park. A roundabout should be considered at the intersection of Morgan Drive/Rainey Drive and Payne Drive/Rainey Drive. Additional traffic calming measures, such as speed humps, chicanes, and signage should be installed within the park streets. Safe pedestrian crossings should be installed at Morgan Drive/Rainey Drive and Payne Drive/Rainey Drive if roundabouts are not installed. They may include underpasses, stop control, or speed tables, similar to other pedestrian crossings within the city of Chicago.

Bicycle Safety and Connectivity

The cycle track on 55th Street, east of Washington Park, allows for safe bicycle travel on 55th Street, protected from vehicular traffic. An on-street bike lane connects this facility through Washington Park, requiring bicyclists to ride next to vehicles speeding through the Park.

It is recommended that a shared use path be designated within Washington Park that connects the 55th Street cycle track to the OPL. A shared use path is a trail that is physically separated from vehicular traffic that can be used by pedestrians and bicyclists. This would allow for a safe connection between the 55th Street Cycle Track and the OPL. This path should connect to the future bicycle facility on Garfield Boulevard.

Signage should be provided to direct bicyclists to the park trail and the Library. The crossing at 55th Street/Payne Drive should be improved for bicyclists.

CONSTRUCTION TRAFFIC MANAGEMENT

There are no SRA routes within the project limits. Garfield Boulevard and Martin Luther King Drive should not be used for construction access. Ellsworth Drive should be closed during construction. The construction entrance to the sites should be provided on 54th Street or Ellsworth Drive. Construction employees should use Ellsworth Drive for parking.

CONCLUSION

Analyses have been conducted under existing and future conditions of the intersections in the study area to determine the impact from the proposed Barack Obama Presidential Library (OPL) Washington Park site. The capacity analysis results indicate that the implementation of geometric and signal improvements permits the surrounding roadways to operate at acceptable levels of service under all design hours to accommodate the increase in projected traffic due to the OPL, along with general traffic growth associated with new development in the surrounding area. Overall, vehicles will be able to easily access the site and the OPL will not have a significant impact on the traffic operations in the neighborhoods.

The following details the recommendations for parking, access, and improvements to the safety and operations of multi-modal access.

- Access to visitor parking should be provided on Prairie Avenue and/or 54th Street. Access should be prohibited on Garfield Boulevard in order to create a direct pedestrian connection between the Garfield Green Line Station and the site.
- Service access and secure access can be provided from Martin Luther King Drive or Ellsworth Drive.
- Minor traffic signal timing/phasing modifications should be implemented along Garfield Park, as appropriate, to provide optimal operations and to facilitate traffic to and from the OPL.
- Ellsworth Drive should be vacated, between Garfield Boulevard 51st Street, and be considered as a secondary access for handicap parking, taxis, tour buses and service vehicles. Vacating Ellsworth Drive will not only potentially reduce the amount of asphalt within Washington Park, but it will also significantly improve the safety and operations of the intersections of 51st Street/Martin Luther King Drive/Ellsworth Drive and Garfield Boulevard/Morgan Drive/Ellsworth Drive. Closing Ellsworth Drive at 51st St/Martin Luther King Drive would necessitate a redesign of signals, striping and some curbs at that intersection. It is recommended that pedestrian facilities be updated in the redesign.
- A traffic signal and signalized and marked pedestrian crossings should be installed at the intersection of Garfield Boulevard/Morgan Drive/Ellsworth Drive to improve the safety for all users.
- It is estimated that the site will generate a peak parking demand of 404 parking spaces on the 30th highest visitor day of the year (typical design day). It is recommended that all parking be provided on the portion of the site located on the northwest corner of Garfield Boulevard and Martin Luther King Drive.
- There are a number of options to accommodate any overflow parking for special events and the highest visitor days, including the garages that serve the University of Chicago Medicine

and the University of Chicago at Ellis Avenue. There is also a considerable amount of available on-street parking in the area.

- It is estimated that the site will generate a peak bus demand of 5 buses on the 30th most popular day (typical design day). Special programs and exhibits within the OPL can increase the demand for buses. It is recommended that buses be staged on Ellsworth Drive or on the portion of the site located on the northwest corner of Garfield Boulevard and Martin Luther King Drive.

- A staff member should be given the responsibility of coordinating all transportation, particularly for special events.

- There are plans to provide bus rapid transit on Garfield Boulevard. This would provide additional transit access for residents on the west side of the city and visitors arriving on the Red Line. It is recommended that bus shelter be provided for both the northbound and southbound stops at Garfield Boulevard for the #3 bus. Train arrival information should be provided at street level, and possibly within the Library entrance, for the Garfield Green Line station. The Garfield Green Line station should be renamed Garfield-Obama Library to make it easy for visitors to identify their stop.

- The streets within the park were originally designed to allow horse and buggies to easily traverse through them. This design provided excess space for modern vehicles, which has led to vehicles using these streets to speed through the park. The following are the recommended geometrics for each internal street:

    - Morgan Drive, between Rainey Drive and Payne Drive: Reduce lane width to 10.5 feet and parking lane on the east side to 8 feet. This would reduce the street by 15 feet in width and remove approximately 0.35 acres of asphalt.

    - Payne Drive, between Rainey Drive and Morgan Drive: Reduce lane width to 10.5 feet and the parking lanes to 8 feet. This would reduce the street by 7 feet in width and remove approximately 0.08 acres of asphalt.

    - Rainey Drive, between Payne Drive and Morgan Drive: Reduce lane width to 10.5 feet. This would reduce the street by 19 feet in width and remove approximately 0.35 acres of asphalt.

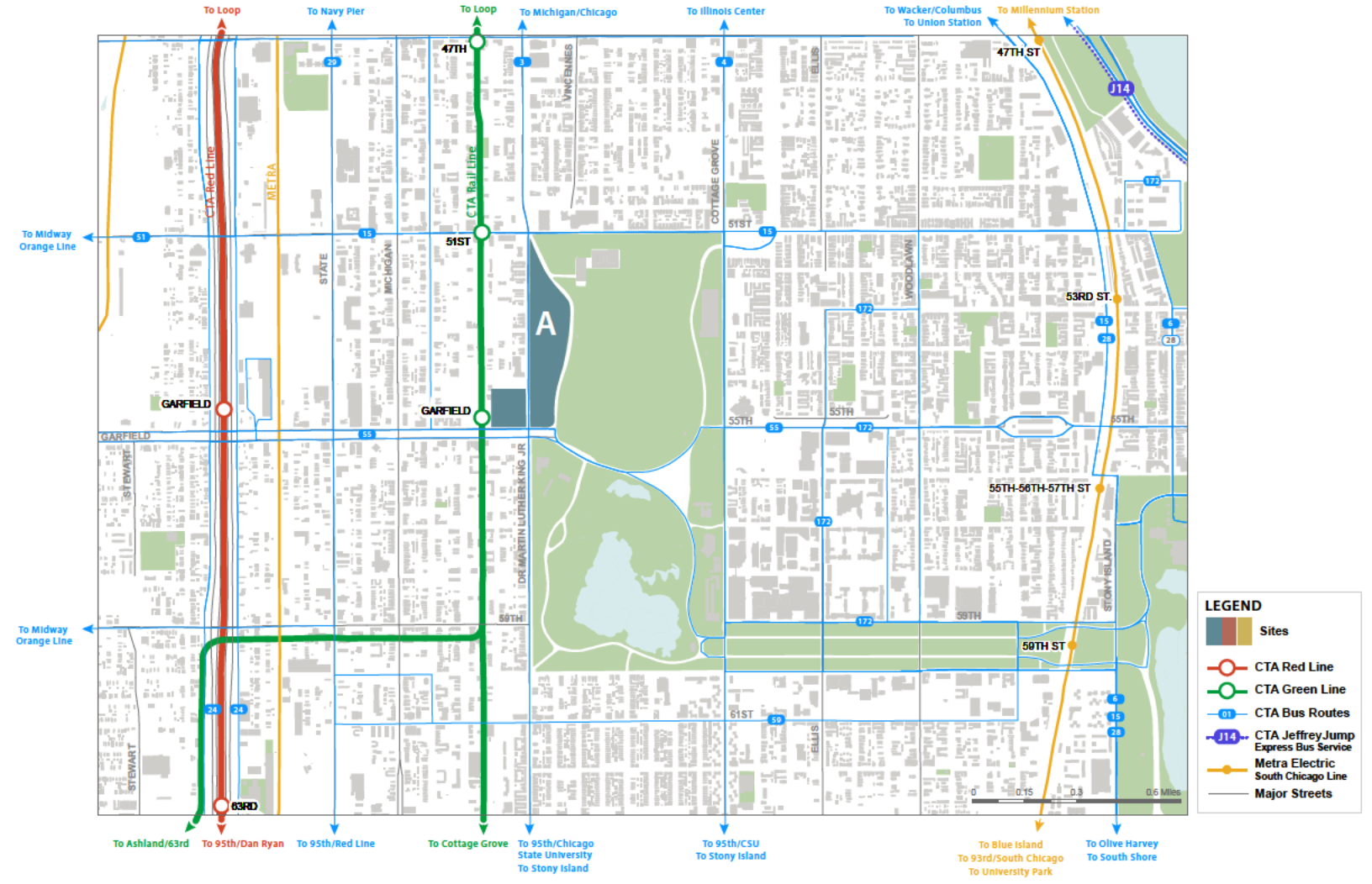
- A roundabout should be considered at the intersection of Morgan Drive/Rainey Drive and Payne Drive/Rainey Drive. Additional traffic calming measures, such as speed humps, chicanes, and signage should be installed within the Park streets.

- Safe pedestrian crossings should be installed at Morgan Drive/Rainey Drive and Payne Drive/Rainey Drive if roundabouts are not installed. They may include underpasses, stop control, or speed tables, similar to other pedestrian crossings within the University of Chicago.

- The sidewalk on the north side of Garfield Boulevard, between Prairie Avenue and Martin Luther King Drive, should be widened to at least 18 feet.
- The sidewalk on the west side of Martin Luther King Drive should be widened to 18 feet.
- A 12-foot wide sidewalk should be provided on the east side of Martin Luther King Drive, between 51st Street and Garfield Boulevard.
- Consideration should be given to developing a streetscape for Martin Luther King Drive and removing the guard rail.
- The intersection of Garfield Boulevard and Martin Luther King Drive should be modified to provide more safety and priority for pedestrians.
- There is currently a cycle track on 55th Street, which allows for safe bicycle travel on 55th Street protected from vehicular traffic. An on-street bike lane connects this facility through Washington Park, requiring bicyclists to ride next to vehicles speeding through the park. It is recommended that a shared use path be designated within Washington Park that connects the 55th Street cycle track to the OPL. This should connect to the future bicycle facility on Garfield Boulevard.

APPENDIX – MULTI-MODAL EXHIBITS

- Existing Transit
- Existing Bicycle Infrastructure
- Travel Times to Site
- Multi-modal Recommendations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GARFIELD
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CTA Rail Line
METRA
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VINCENNES
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To Stony Island
To 95th/CSU
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To Blue Island
To 93rd/South Chicago
To University Park
To Olive Harvey
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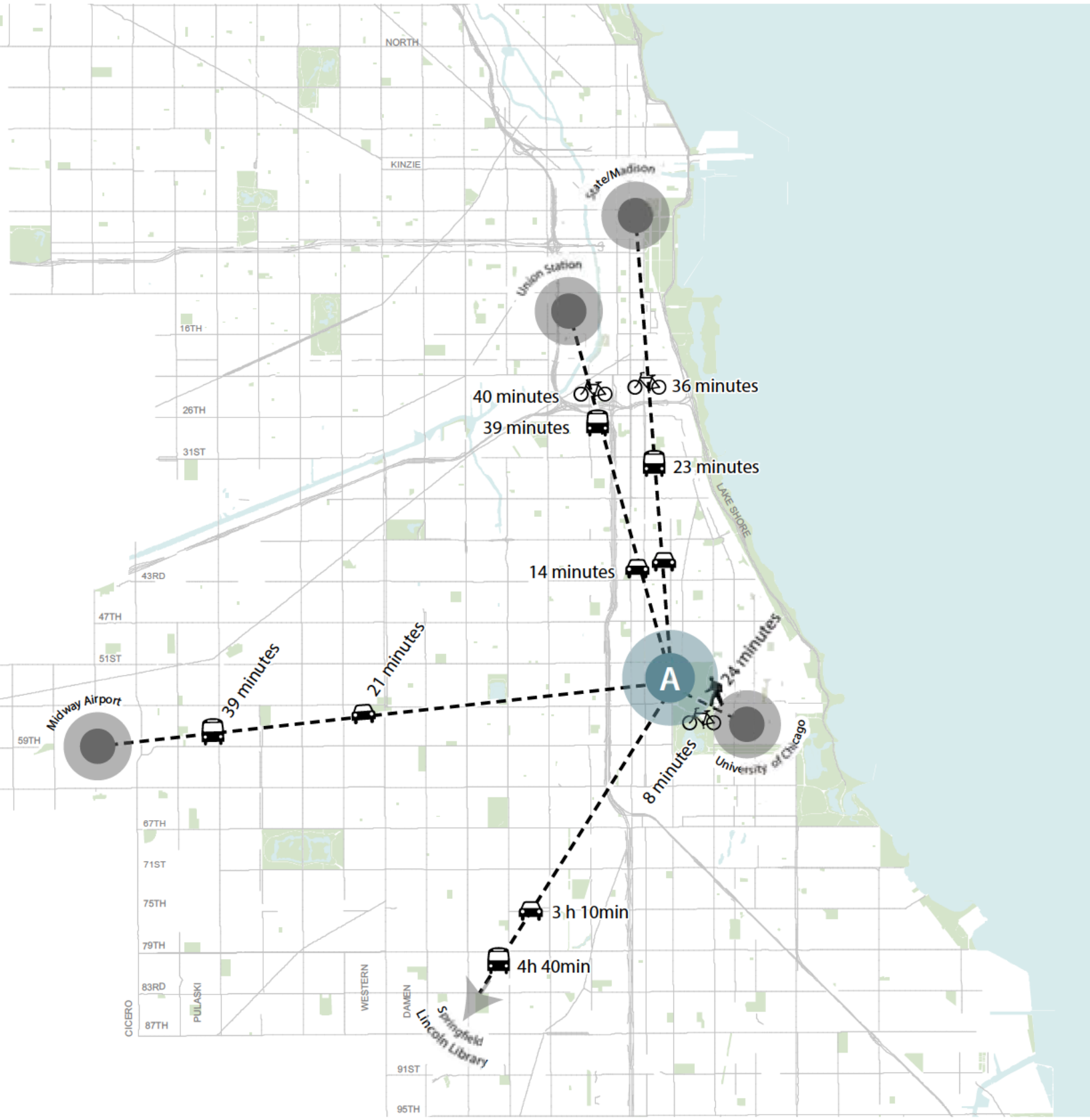
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21 minutes
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24 minutes
Midway Airport
59TH
University of Chicago
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WESTERN
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Springfield
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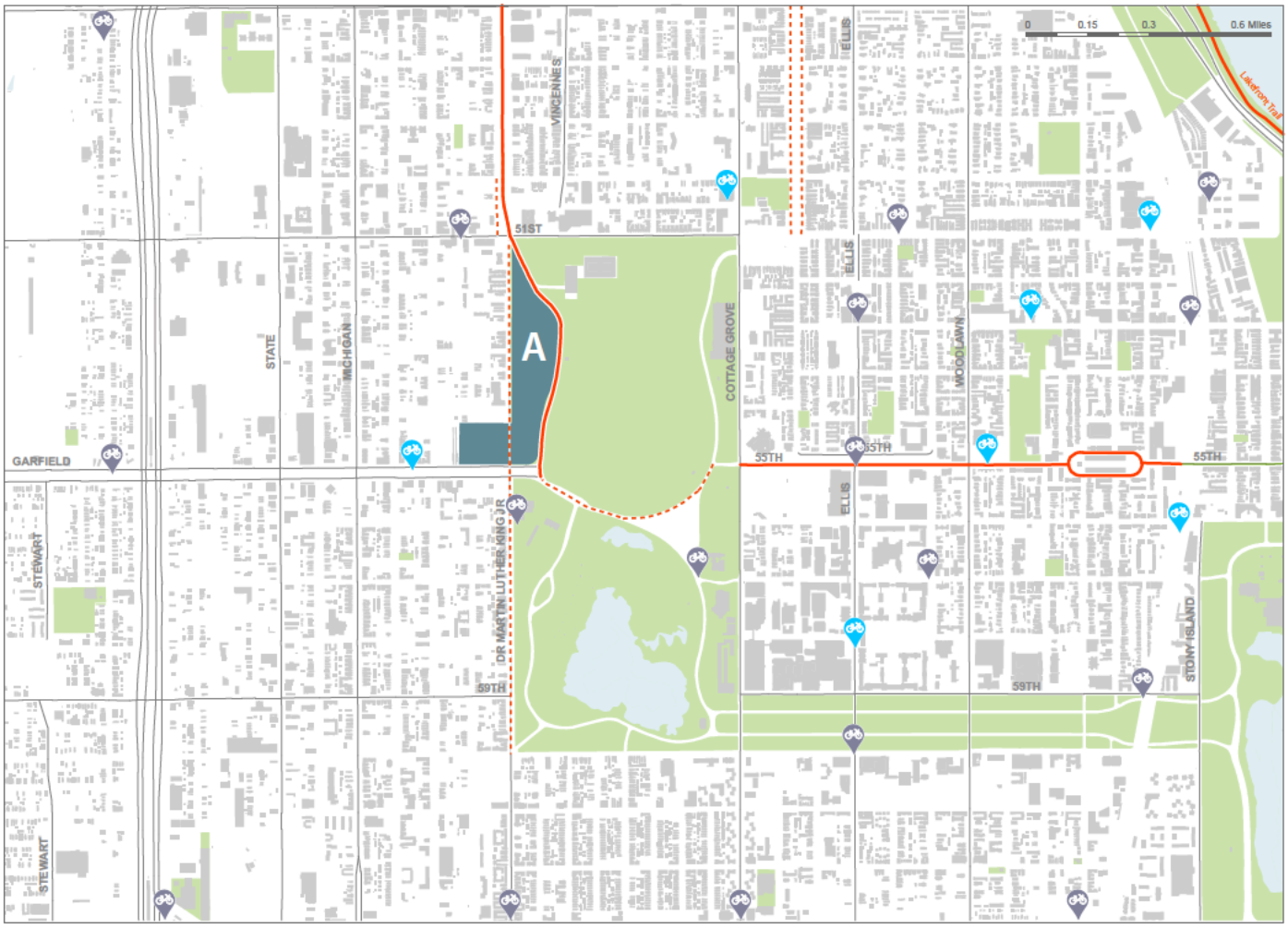
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DR MARTIN LUTHER KING JR
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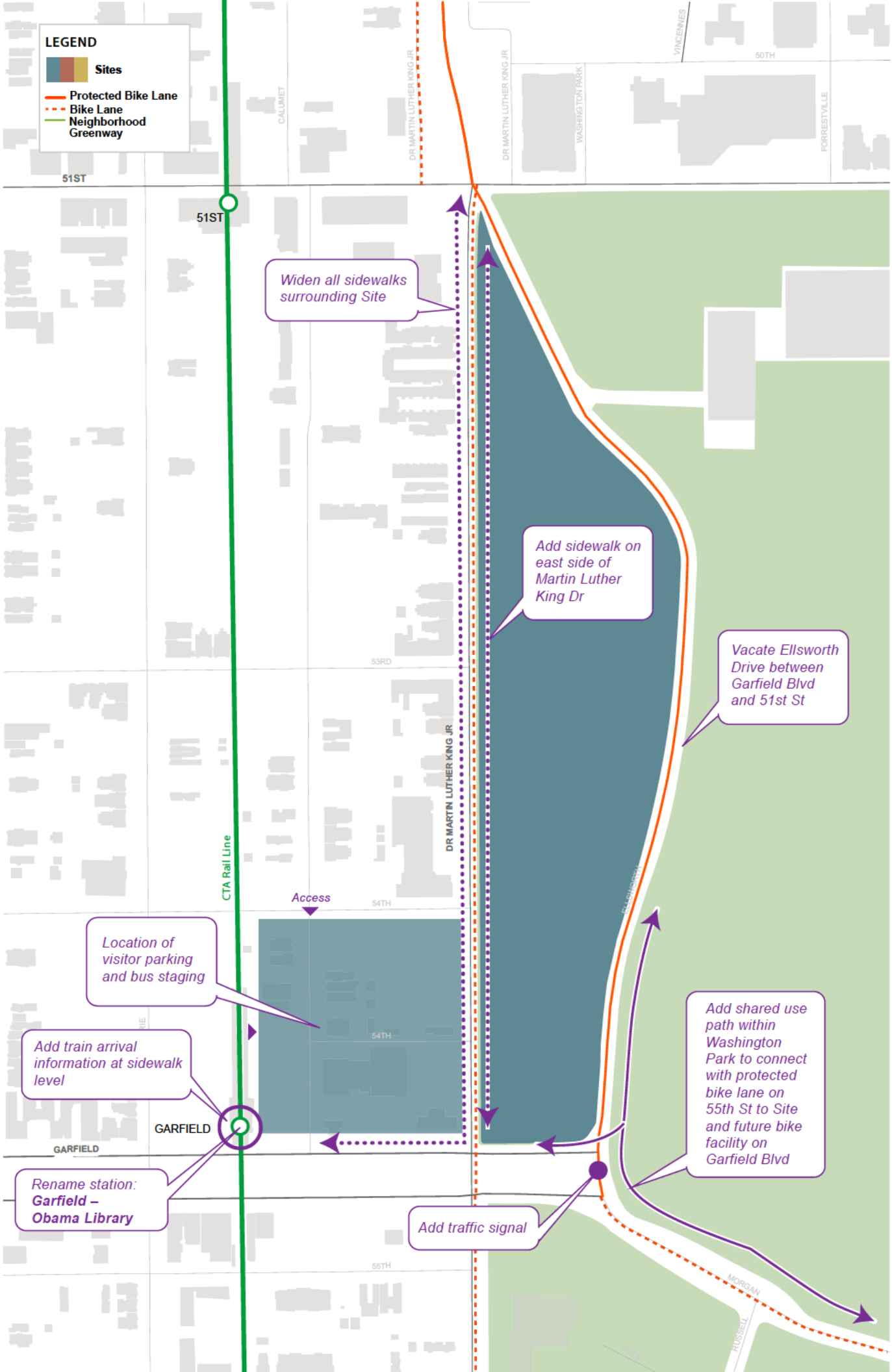
Lakefront Trail
LEGEND
Sites
Protected Bike Lane
Bike Lane
Neighborhood Greenway
Planned Divvy Station
Existing Divvy Station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Sites
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Bike Lane
Neighborhood Greenway
51ST
CALUMET
DR MARTIN LUTHER KING JR
WASHINGTON PARK
FORRESTVILLE
VINCENNES
50TH
Widen all sidewalks surrounding Site
Add sidewalk on east side of Martin Luther King Dr
Vacate Ellsworth Drive between Garfield Blvd and 51st St
53RD
CTA Rail Line
Access
54TH
Location of visitor parking and bus staging
Add train arrival information at sidewalk level
GARFIELD
Rename station: Garfield – Obama Library
Add traffic signal
Add shared use path within Washington Park to connect with protected bike lane on 55th St to Site and future bike facility on Garfield Blvd
55TH
MORGAN
RUSSELL